TIBCO WebFOCUS®

ReportCaster Guide

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Contents

Introducing ReportCaster

ReportCaster is a scheduling and distribution application that centralizes the execution and distribution of TIBCO WebFOCUS® reports, the contents of URLs, and files. ReportCaster supports multiple administrators and provides a single point of control for managing information distribution within an organization.

The ReportCaster tools are web-based Rich Internet Application facilities, through which you manage the ReportCaster Configuration and the ability to create and access schedules, distribution lists, access lists and log reports, and Report Library reports. Access to each ReportCaster tool is controlled by the TIBCO WebFOCUS® Client security authorization model.

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About ReportCaster

Through ReportCaster, you can schedule a report to run at specific times or intervals, which can then be distributed through email or FTP servers, to printers, or to the WebFOCUS® Repository that stores Report Library and Managed Reporting reports. Reports distributed to the Report Library or the WebFOCUS Repository are stored in a database and can only be accessed by authorized users. You have the option to distribute the report to a single address or to a group of recipients using the distribution list, distribution file, or dynamic list options.

You can distribute an entire report or you can break a report into sections using the ReportCaster burst feature. When you burst a report, you send only the relevant report sections specified.

Access to each of the ReportCaster tools is controlled by a WebFOCUS security operation. This enables administrators to control the users who are authorized to access ReportCaster to perform the following operations.

❏ Create and maintain a Distribution List.

❏ Create and maintain a schedule.

❏ Create and maintain Library Access Lists for Report Library reports.

❏ Track the status of a schedule.

❏ View and delete schedule log information.

❏ Manage the ReportCaster configuration.

Report Library. The Report Library enables you to store and manage content distributed by ReportCaster for rapid retrieval and future use.

ReportCaster API. There is a full ReportCaster API that employs both Java® technology and Web Services.

ReportCaster Overview

The following ReportCaster tools can be accessed by authorized users from the Resources tree in the Business Intelligence Portal. In WebFOCUS 8, the WebFOCUS® Client security authorization model controls whether users are authorized to access the Scheduling tools. For information on the Client authorization security model and ReportCaster operations, see the *TIBCO WebFOCUS® Security and Administration* technical content.

❏ **Schedule Tool.** The ReportCaster Basic Scheduling tool and Advanced Scheduling tool provide the options to define the parameters of a schedule, such as when a report procedure (FEX) will run, what format the output will take, and where the output will be distributed. For more information about the Basic Scheduling tool, see *Creating Schedules* on page 173.

❏ **Distribution List.** A list stored in the Repository that allows you to specify multiple recipients to whom the report output of a schedule will be distributed. For more information, see *Creating and Maintaining Distribution Lists* on page 149.

❏ **Access List.** A list that defines the groups and users that can view the output of specified schedules distributed to the Report Library. After you create the Access List, it can be used as often as needed.

❑ **Log Report.** This report enables you to view information about a distributed job, such as whether or not the job executed successfully, when the report output was distributed, in what format the report output was sent, and the method of distribution. For more information about Log Reports, see *Tracking Schedules* on page 331.

❑ **ReportCaster Explorer.** The Explorer interface enables users to list and review all ReportCaster items of a specific type at once. Each item type (schedules and distribution lists, access lists, library, and watch list reports) lists column information specific to the selected item type.

❑ **ReportCaster Status.** The Console is the interface that provides access to the ReportCaster administration tools (Server Status, Job Status, Configuration, and Global Update) and schedule management tools (Job Logs, Blackout Dates, and Execution Ids) for ReportCaster.

The Resources tree contains all of the folders, reports, and schedules for your environment. When scheduling content from the Resources tree, there are two properties, located in the Properties dialog box, that are related to scheduling:

❑ **Schedule Only.** Indicates that the report can only be scheduled using ReportCaster when the user does not have write access.

❑ **Restrict Schedule to Library Only.** Allows you to restrict a report for distribution, through scheduling, to the Report Library only.

For more information, see *Restricting Distribution of Reports to the Report Library* on page 260.

Creating a Schedule in a Self-Service Installation

With a Self-Service installation in WebFOCUS 8, the schedules and distribution lists, access lists, and library content created by users are stored in the WebFOCUS repository. They are displayed in folders in the Resources tree when you sign in to WebFOCUS. The folders in the Resources tree are real folders that must be created before you can store content in them.

Once a folder is created, you can launch the Advanced Scheduling tool by right-clicking on the folder. Point to the *New* option and then click *Schedule* to launch the tool. Another way to launch the scheduler is through a schedule button on a report launch page.

The purpose of the following process is to define the steps that you will need to follow in order to create a schedule in a Self-Service installation.

Note: You will need access to a number of manuals to complete this process. These manuals include *TIBCO WebFOCUS® Security and Administration* and *Business Intelligence Portal*.

Procedure: **How to Create a Schedule in a Self-Service Installation**

1. Sign in to WebFOCUS with an account that is authorized to create folders and schedules. For more information, see the *TIBCO WebFOCUS® Security and Administration* manual.

2. Create a folder using the following steps:

   a. From the left navigation pane in the Resources tree, right-click *Domains*.

   b. Click *New* and then click *Folder*.

   c. Enter a *Title* and optionally a *Summary*.

3. Right-click on the folder, click *New*, and then click *Schedule*.

   Note: The tools options on the context menu and the file types that can be created are based on the WebFOCUS Client license. The report development tool that is available from the context menu for a ReportCaster Self-Service license code is the Text Editor, which allows only the .HTM file type.

   Note: For customers using legacy licenses, the tools options on the context menu and the file types that can be created are based on the WebFOCUS Client license. For customers using the Golden Key license, all of the tools options on the context menu and file types that can be created are available. The report development tool that is available from the context menu for a ReportCaster Self-Service license code is the Text Editor, which allows only the .HTM file type.

   The Advanced Scheduling tool displays.

   Authorized users will be able to launch the scheduling tool from a folder to create a schedule. For more information on security, see the *TIBCO WebFOCUS® Security and Administration* manual.

Procedure: **How to Save a Schedule Created From the Launch Page**

1. Launch the scheduling tool from your launch page or access the scheduling functionality in the Advanced Scheduling tool.

2. Once you have defined the criteria for the schedule, click *Save & Close* to navigate to the folder where you would like to keep the schedule. If a folder does not exist, refer to Step 1 in *Creating a Schedule in a Self-Service Installation* on page 15.

Section 508 Compliance

For information on specific accessibility requirements for ReportCaster, see the *WebFOCUS Release Guide*.

ReportCaster Processing

The following image shows the ReportCaster components and the processing that takes place when ReportCaster accesses an SQL repository to create, execute, and distribute a scheduled job.
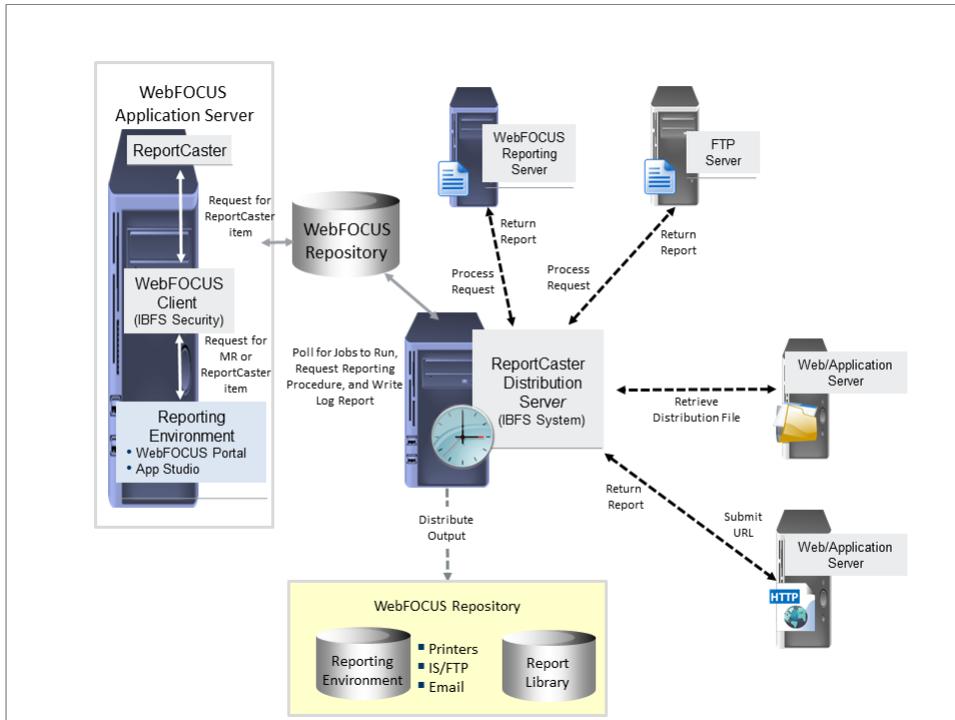
The Distribution Server is a Java application that governs the process of submitting and distributing a scheduled job. You can install the Distribution Server on the same platform as the TIBCO WebFOCUS® Reporting Server and the components (which reside on the web or application server), or it can be installed on a different platform.

The WebFOCUS® Reporting Server processes a scheduled request, retrieves the data, and returns the report to the Distribution Server, which distributes the output. ReportCaster supports multiple Reporting Servers (specified in the ReportCaster Configuration tool), and one Repository (specified in the Application Settings folder within the Repository).

When you create a ReportCaster schedule, one of the properties of the schedule set by ReportCaster is the next run time (NEXTRUNTIME) for that schedule. The Distribution Server checks for schedules in the Repository that have a next run time less than or equal to the current time. Once the scheduled job runs, the NEXTRUNTIME is updated to the next instance that the schedule is set to run.

Reference: **ReportCaster Processing of a Scheduled Job**

The following steps describe what happens when the Distribution Server identifies a schedule to run.

1. The Distribution Server prioritizes the scheduled job with other schedules in the Distribution Server queue. When creating a schedule, there is a Priority parameter where you can specify a priority value from 1 to 5, where 1 is the highest priority and 5 is the lowest priority. The default priority value is 3. The Distribution Server queue sorts scheduled jobs by priority and then by time. If during a schedule cycle one or more jobs remain in the queue when the next schedule cycle begins, these jobs are reprioritized to include new jobs entering the queue.

2. When a session (thread) to the Reporting Server is available, the Distribution Server dynamically retrieves schedule, parameter, and alert information from the WebFOCUS Repository. The number of concurrent threads available for job dispatching is controlled by the Maximum Thread parameter setting in the ReportCaster Console Configuration tool. Each Reporting Server that is configured in ReportCaster has its own thread allocation. In addition, threads can be allocated for jobs that do not use a Reporting Server. The maximum number of threads is the total of these separate thread settings. Additionally, reports (WebFOCUS Reporting Server Procedures, Standard Reports, and My Reports) are packaged for submission to the IBFS system for security and WF Client configuration processing. The IBFS system submits the scheduled job to the Reporting Server.

3. When the scheduled job is a:

❏ **Procedure (WebFOCUS Server Procedure or Managed Reporting procedure).** The retrieved reports are packaged for submission to a Reporting Server. When ReportCaster prepares and submits a scheduled job for WebFOCUS Server Procedures or WebFOCUS reports (Managed Reporting), it sends commands to the IBFS system to submit to the Reporting Server. Resource Analyzer, which is used to track and monitor requests submitted to the Reporting Server and resources used to create the report that will be distributed, then retrieves these commands for the purpose of monitoring the resources used to create the report. The Reporting Server runs the procedure, retrieves the data, creates the report, and returns the report to the IBFS system which returns it to the Distribution Server. The Distribution Server then processes the distribution information and distributes the report. For graph requests, the data is returned to the Distribution Server, which creates the graph image and distributes it.

Note: You can specify that certain commands are to be run prior to the execution of a scheduled job by using the Universal Profile setting in the WebFOCUS Administration Console.

❏ **URL.** The Distribution Server submits the URL to a web server, which runs the URL. The content is then sent back to the Distribution Server, which distributes it.

❏ **File.** The Distribution Server accesses its mapped drives to retrieve the file, which it then distributes.

❏ **FTP.** The Distribution Server accesses an FTP server and retrieves the report output, which it then distributes.

❏ **WebFOCUS Schedule.** Based on the option the user has selected, the Distribution Server either runs the called schedule immediately before any other queued jobs, or adds the called schedule to the queue in respect to its priority.

4. The Distribution Server distributes scheduled output as an email message, through FTP or SFTP, to a printer, as a report in a Managed Reporting (WebFOCUS Repository) folder, or to the Report Library. You can also distribute the scheduled output to a fax machine using a third-party email to fax provider.

WebFOCUS Server Procedures and Managed Reporting support bursting, which enables you to send portions of a report to specific recipients. If you are distributing a burst tabular report, the burst value is determined by the first BY field. If you are distributing a burst graph report, the burst value is determined by the second BY field. The burst value is automatically determined by the internal matrix. The internal matrix is a memory area that stores each database field value and calculates values referenced by the TABLE or GRAPH request.

5. When the Distribution Server has distributed the output (or is unable to distribute the output), it then processes the log information and writes job information to the log tables in the WebFOCUS Repository.

   Note: The logging process has been modified so that messages are written to the WebFOCUS Repository as they are available, rather than all at once at the end of a schedule. ReportCaster log information is written to the log tables as the schedule progresses. As a result, you can run a log report while a schedule is running to determine how far a schedule has progressed.

   Error conditions in log reports appear in red text and warnings appear in orange text.

6. If notification is requested, the Distribution Server sends an email notification. The name of the mail server that processes the notification email is specified in the Notify Mailhost setting in the Configuration tool. If mail server is blank, ReportCaster uses the default mail server used to distribute an email schedule, which is specified by the Mailhost setting in the Configuration tool.

   Error conditions occur for log reports or notification when:

   ❏ A FOC error message is returned to the Distribution Server.

   ❏ There is no report to distribute.

   ❏ There was an error when communicating to services (Email, FTP, SFTP, printer, Managed Reporting, Repository, Report Library).

   Tip: We recommend using different mail servers for notification and email distribution. Using separate mail servers ensures that you will still receive notifications if the default mail server falters.

Example: Executing a Scheduled Job

In this example, the Distribution Server polls the BOTSCHED table every minute looking for scheduled jobs. However, note that ReportCaster enables authorized users to change the polling interval for the Distribution Server using the Reader Interval setting in the Configuration tool. You can specify an interval from 1 to 999999 minutes.

1. At 9:01 AM, you schedule a job with a start date/start time of today at 12:00 PM and an end date/end time of tomorrow at 3:00 PM. The job is scheduled to run every two hours.

2. At 9:02 AM, the Distribution Server reads all records from the BOTSCHED table with a NEXTRUNTIME equal to the current time. The job does not qualify since it has a start time of 12:00 PM.

3. The Distribution Server polls the BOTSCHED table every minute thereafter, looking for jobs with a NEXTRUNTIME less than or equal to the current time.

4. At 12:00 PM, the Distribution Server reads the BOTSCHED table. The job qualifies since its NEXTRUNTIME is equal to the current time. The job is put in the Distribution Server queue and the Distribution Server updates its NEXTRUNTIME by two hours so that the NEXTRUNTIME is 2:00 PM.

5. The Distribution Server polls the BOTSCHED table every minute thereafter, looking for jobs with a NEXTRUNTIME less than or equal to the current time.

6. At 2:00 PM, the Distribution Server reads the BOTSCHED table. The job qualifies since its NEXTRUNTIME is equal to the current time. The job is put in the Distribution Server queue and the Distribution Server updates its NEXTRUNTIME by two hours so that the NEXTRUNTIME is 4:00 PM.

7. This process repeats itself. The job will run every two hours until 3:00 PM tomorrow. The last time the job will be put in the run queue is tomorrow at 2:00 PM.

Note: For additional schedule considerations, see *Time Zone Considerations*

Time Zone Considerations

All times that are displayed in a job schedule are defined in terms of the time zones assigned to them. The time zone defined within a schedule enables the Distribution Server to run scheduled distributions at the appropriate local time, regardless of the time zone in which the Distribution Server is located.

During product installation, the time zone assigned to the operating system of the server on which WebFOCUS is installed is added to the ReportCaster configuration. This time zone appears in all new schedules, by default. However, if the recipients of scheduled distribution content are located outside of that time zone, schedule times must be adjusted to ensure that scheduled content arrives at the appropriate time. In order to make this adjustment, we recommend that you replace the default time zone with the time zone of the recipients of your content.

By selecting a time zone, you can easily schedule a distribution for a local time that is most convenient to the recipients of the distributed content, without having to factor the time difference into the values you assign to the times in the schedule. For example, if you are working in New York with a default time zone of EST and want to start the distribution of content at 9:00 AM in London, you only need to select the *(UTC) Dublin, Edinburgh, Lisbon, London* time zone entry and set the Start Time to *9:00 AM*. Without this ability, you would be required to calculate the equivalent time in New York, 4:00 AM, and use that value as the Start Time.

Time zones are identified in terms of their offset from Coordinated Universal Time (UTC). These offsets identify the number of hours that a local time zone is ahead of or behind the time zone located at zero degrees longitude. Time zone entries are also identified by time zone name or by cities within the zone. For example, (UTC – 5:00) is identified in one entry as Eastern Time (US & Canada) and in another entry by the South American cities that fall within it, Bogota, Lima, and Quito. Because both entries use the same offset, the same number of hours is used for both entries when converting time values.

ReportCaster uses Java technology, which always adjusts for Daylight Saving Time, regardless of Windows® settings. If you are in an area that does not observe Daylight Saving Time, scheduled jobs will run at the correct time. However, some internal files will add an hour to time stamps during this period. These files include the following:

❑ Distribution Server log and trace files.

❑ Report time information in the log report.

❑ Programs running on the Servlet Engine including servlet trace files.

Daylight Saving Time Considerations

When considering the effect of Daylight Saving Time (DST) for jobs scheduled by ReportCaster, the main thing to remember is that 1:59:59 AM is when the time change occurs. As a result, the clock time is set to either 3 AM (when DST begins) or 1 AM (when DST ends).

A simple rule to remember is that regardless of the time change, the schedule interval stays the same. This is because the schedule run time is based on elapsed time rather than the actual clock time.

The following table lists and describes the expected behavior for jobs scheduled by ReportCaster when Daylight Saving Time is in effect.

Interval	Description	For example:
Schedule is set to run once at a specific time, or to run every day, week, month, or year.	The schedule runs at that time, regardless of the time change.	A 9:15 AM schedule will still run at 9:15 AM.

Interval	Description	For example:
Schedule is set to run every minute or hour when DST begins.	The schedule is advanced by 1 hour.	A schedule that runs every 2 hours: 12:00 AM, 2:00 AM, 4:00 AM, and so on. Will run at the following times: 12:00 AM, 3:00 AM, 5:00 AM, and so on. This occurs because at 1:59:59 AM, the clock is set ahead to 3:00 AM.
Schedule is set to run every minute or hour when DST ends.	The schedule is set back 1 hour.	A schedule that runs every 2 hours: 12:00 AM, 2:00 AM, 4:00 AM, and so on. Will run at the following times: 12:00 AM, 1:00 AM, 3:00 AM, and so on. This occurs because at 1:59:59 AM, the clock is set back to 1:00 AM.

Establishing a Location for the ReportCaster temp Directory

The ReportCaster temp directory is a staging area for reports. The location of the temp directory is not configurable using the ReportCaster tools. However, you can issue commands to point to a different location, if the default location does not provide enough space to stage your reports.

Procedure: **How to Point to a Location for the ReportCaster temp Directory**

In these directions, the new location of the temp directory will be on a drive named D on Windows, or a new directory on Unix/Linux.

1. Create a new path for the new temp directory.

   On Windows, the new path can be:

   `D:\ReportCaster\temp`

   On UNIX or Linux, the new path will be referred to as:

   `path_to_newdir/ReportCaster/temp`

The DOS commands for creating this directory are:

```
D:
mkdir ReportCaster\temp
```

The UNIX or Linux commands for creating this directory are:

```
cd path_to_newdir
mkdir /ReportCaster/temp
```

2. Delete the original ReportCaster temp directory.

   On Windows, the default original location is:

   ```
   C:\ibi\WebFOCUS82\ReportCaster\temp
   ```

   On UNIX or Linux, the default original location is:

   ```
   /home/user/ibi/WebFOCUS82/ReportCaster/temp
   ```

   The DOS commands for removing this are:

   ```
   cd C: \ibi\WebFOCUS82\ReportCaster
   rmdir temp /s /q
   ```

   The UNIX or Linux commands for removing this are:

   ```
   cd /home/user/ibi/WebFOCUS82/ReportCaster
   rm -r temp
   ```

3. Create a virtual directory called *temp* in its place, pointing to the new directory on the D drive:

   The DOS command for creating this link is:

   ```
   mklink /D C:\ibi\WebFOCUS82\ReportCaster\temp D:\ReportCaster\temp
   ```

   The UNIX or Linux command for creating this link is:

   ```
   ln -s path_to_newdir/ReportCaster/temp /home/user/ibi/WebFOCUS82/
   ReportCaster/temp
   ```

   This will create the configuration change needed.

Distribution Server Features

Authorized users should be aware of the following Distribution Server activities and features:

❑ *Distribution Server Startup* on page 25.

❑ *Recovery* on page 26.

❏ *Scanback* on page 27.

❏ *ReportCaster Server Configuration Tool* on page 28.

❏ *Distribution Server Failover and Workload Distribution* on page 28.

Distribution Server Startup

During startup, the Distribution Server calls the IBFS system to obtain information about how to communicate with the WebFOCUS Repository. During the WebFOCUS Client installation, you can specify an existing SQL data source or choose to have WebFOCUS install and configure the Apache Derby SQL data source. If the Distribution Server cannot communicate with the Repository, it will not start. If the Distribution Server does not start, check the Distribution Server startup trace and log files for error messages.

Upon successful initialization, the Distribution Server checks for jobs that need to be recovered, as specified by the Recovery and Scanback parameters and jobs that need to run as specified by the NEXTRUNTIME value of each schedule.

Configuration Considerations When the Distribution Server is Installed Separately From the TIBCO WebFOCUS Client

When the ReportCaster Distribution Server is installed as a stand-alone server, on a machine that is separate from the WebFOCUS Client, you must perform additional manual steps to ensure that configuration changes made through the WebFOCUS Administration Console are available to ReportCaster. This is because the stand-alone Distribution Server does not have access to the WebFOCUS configuration files being updated by the console. This is especially important when configuring external security for WebFOCUS, since your ReportCaster jobs may not run properly if the Distribution Server is not using the same security settings as the WebFOCUS Client.

The recommended procedure is to make changes to WebFOCUS, as per the documentation, and then test them with a web browser. When the settings are verified, perform the following steps to ensure that the configuration is available to ReportCaster:

1. Copy the webfocus.cfg file and the install.cfg file from the ..\ibi\WebFOCUS90\config/ibi/ WebFOCUS90/config directory to the ..\ibi\WebFOCUS90\config/ibi/WebFOCUS90/config directory on the stand-alone Distribution Server machine.

2. Copy the odin.cfg file from the ..\ibi\WebFOCUS90\client\wfc\etc/ibi/WebFOCUS90/ client/wfc/etc directory to the ..\ibi\WebFOCUS90\client\wfc\etc/ibi/WebFOCUS90/ client/wfc/etc directory on the stand-alone Distribution Server machine.

3. Copy the cgivars1.wfs file from the ..\ibi\WebFOCUS90\client\wfc\etc/ibi/WebFOCUS90/ client/wfc/etc directory to the ..\ibi\WebFOCUS90\client\wfc\etc/ibi/WebFOCUS90/ client/wfc/etc directory on the stand-alone Distribution Server machine.

4. Restart the Distribution Server and test the scheduled job behavior.

Recovery

The purpose of the Recovery parameter in the ReportCaster Server Configuration tool is to recover jobs that were placed in the Distribution Server queue, but did not complete schedule execution processing. This could be due to the Distribution Server or Reporting Server being stopped. You can activate the recovery feature by setting Recovery to ON in the ReportCaster Server Configuration tool.

When you create a schedule and the Recovery parameter is set to ON, the RECOVERY field for the schedule is set to N in the BOTSCHED repository table. When the schedule is placed in the run queue, the RECOVERY field is set to Y. This means that if the Distribution Server becomes unavailable while the job is still in the queue, ReportCaster will recover the job when the Distribution Server becomes available, even if the Recovery parameter is set to OFF in the ReportCaster Server Configuration tool. After the job is run and all log records have been written, the RECOVERY field is set back to N.

Any job that is running because the Recovery parameter is set to ON runs only once. After the job is placed in the run queue, its NEXTRUNTIME is updated to the next time it should run after the current time. For example, if a job is scheduled to run hourly and the Distribution Server is unavailable for four hours, when the Distribution Server becomes available, the job will run only once and will resume running on an hourly basis thereafter.

Note:

❏ The Recovery option works independently of the Scanback option. For more information about the Scanback option, see *Scanback* on page 27.

❏ Only scheduled jobs can be recovered. Jobs that were submitted on demand cannot be recovered.

Reference: How Jobs Are Recovered

Scheduled jobs are recovered as follows:

1. When you start the Distribution Server, it checks for Recovery ON in the ReportCaster configuration.

2. If Recovery is set to ON, the Distribution Server reads all records from the BOTSCHED table whose RECOVERY field is set to Y and places them in the run queue, regardless of schedule information and NEXTRUNTIME value.

3. The Distribution Server begins the process of polling and looking for jobs to run after having queued all the jobs whose RECOVERY field is set to Y.

4. After the scheduled job is placed on the Distribution Server queue, its NEXTRUNTIME is updated to the next time it should run after the current time.

Note:

❏ If the Recovery parameter is set to OFF, the Distribution Server modifies all jobs in the BOTSCHED table with a RECOVERY field value of Y to N. This turns recovery off for all jobs.

❏ If the Recovery parameter is set back to ON, it is only activated for jobs whose NEXTRUNTIME is later than the time at which the Recovery parameter was set back to ON.

Scanback

In certain instances, the Distribution Server may be unavailable for a period of time. During this time, no scheduled jobs can run. By default, when the Distribution Server becomes available again, it searches for and runs all jobs with a next run time less than the current time and resets the next run time according to the next scheduled run time of the job. If the Distribution Server is unavailable for a long time, you may want to adjust this behavior. Using the Scanback parameter, you can run only those jobs found in a specified time period of the outage, or just reset the next run time of all unexecuted jobs without running them.

There are two Scanback parameters:

❏ Scanback Type (On, Off, or Reset Next Run Time)

❏ Scanback Interval (number of days)

The Scanback Interval is active only when the Scanback Type is On. For more information, see *Distribution Server Settings* on page 45.

The Scanback Type parameter can have the following settings:

❏ **On, when Scanback interval is an integer value greater than zero.** Represents the number of 24-hour periods (beginning with the Distribution Server restart time) that the Distribution Server will scan back to look for and run jobs with a next run time less than the current time.

For example, if the Distribution Server is unavailable for three days and Scanback is set to 2, then the Distribution Server will only run those jobs it finds with a next run time within the previous 48 hours of the server restart time.

A valid value is any integer from 1 to 365. The default value is 15 days.

❏ **Reset Next Run Time.** Looks for all jobs with a next run time less than the current time and resets the next run time to the next scheduled run time of the job.

❏ **Off.** Disables Scanback. This means the Distribution Server follows its default behavior to find, run, and reset all jobs with a next run time that is less than the current time.

Note:

❏ The Scanback option works independently of the Recovery option. For more information about the Recovery option, see *Recovery* on page 26.

❏ Consider Daylight Saving Time when setting the Scanback parameter. For more information, see *http://webexhibits.org/daylightsaving/b.html*.

ReportCaster Server Configuration Tool

The ReportCaster Server Configuration tool is an administration tool that allows authorized users the ability to navigate through and change the various settings that define the ReportCaster configuration. For example, the polling interval for the Distribution Server can be changed and the Maximum Threads to control the number of connections available for each Reporting Server can be defined. The configuration settings are accessed from the Configuration tab in the ReportCaster Console.

For more information about ReportCaster configuration settings, see *ReportCaster Configuration* on page 40.

Distribution Server Failover and Workload Distribution

ReportCaster provides the ability to incorporate a backup Distribution Server, and to configure two or more Distribution Servers to share the work of executing scheduled jobs.

❏ The Distribution Server Failover feature enables you to configure a backup Distribution Server that can resume ReportCaster operations when there is an interruption (planned or unplanned) in the primary Distribution Server service. A synchronized service monitors the primary server to verify that it is operational. If there is an interruption in service, the monitor triggers the failover server to take over the role of the primary server. For details on setting up a failover Distribution Server, see the *WebFOCUS ReportCaster Post-Installation Tasks* chapter in the TIBCO WebFOCUS® Installation and Configuration for Windows manual for your platform.

The ReportCaster Console provides information, such as mode and status, on the primary and failover servers. From the ReportCaster Console, you can suspend, start, and stop the Distribution Servers.

Note: If you have the ReportCaster Server Configuration Recovery option set to On, the Distribution Server recovers scheduled jobs that were processed but not completed.

❏ The Workload Distribution feature enables ReportCaster to distribute the scheduled jobs across multiple Distribution Servers, providing an efficient and fast way to process large numbers of ReportCaster schedules.

Multiple Distribution Server instances can be installed on one or more hosts. One instance is designated as the Workload Manager, while the others are designated as Workers. The WebFOCUS Repository will be shared by the Workload Manager and the Workers.

Note: To configure for Workload Distribution, use the ReportCaster Configuration tool settings under the Distribution Servers folder. All servers will share one set of configuration information. The Workload Manager will push any configuration changes to the Workers.

The Workload Manager will poll the WebFOCUS repository to retrieve jobs scheduled for execution and place the jobs in its queue. It will then dispatch individual jobs to the next available Worker.

The Workers will queue the jobs sent by the Workload Manager and dispatch the jobs for execution. The Workers will distribute output from the executed jobs and update the ReportCaster Log files.

The following diagram illustrates the processing and relationship between the Workload Manager and its Workers.
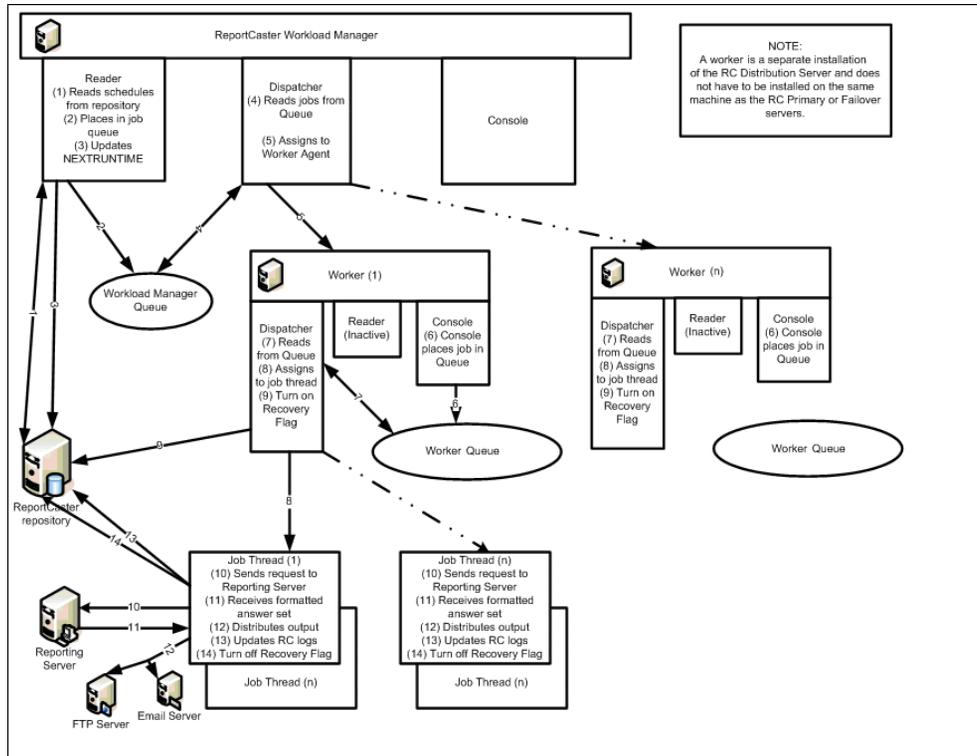
Distribution Server Failover can apply to the Workload Manager, which is the primary Distribution Server, but not to the Workers.

You can monitor and manage the Workload Manager and Workers through the ReportCaster Console, Server Status window.

Using the ReportCaster Console

The ReportCaster Console is the interface that provides access to the tools that administer the Distribution Server and manage schedule job logs, blackout dates, and execution Ids.

Note: Throughout this section, the ReportCaster Console will be referred to as the Console.

In this chapter:

Using the ReportCaster Console

The following tools are accessible from the Console.

❑ Server Status

❑ Server Performance

❑ Job Status

❑ Job Log

❑ Configuration

❑ Blackout Periods

❑ Execution IDs

❑ Global Updates

❏ Purge Job Logs

❏ Purge Library

❏ Unsubscribe Watch List Users

❏ Refresh

Access to each tool is controlled by the WebFOCUS Client security authorization model. For information on the operations that control access to the ReportCaster tools, see the TIBCO WebFOCUS® Security and Administration technical content.

You can access the ReportCaster Console from any of the following locations. On the Hub, select the *Main Menu* and then select *ReportCaster Status* under the Quick Access section. On the WebFOCUS Home Page, select *Utilities* and then select *ReportCaster Status*. From the Administration Console, select the *ReportCaster* tab. The ReportCaster Console opens and displays the Server Status tab, by default.

The Console intuitive ribbon displays in a new browser window. The ribbon displays buttons for each of the tools the user is authorized to access.

Server Status

The Server Status tool allows Managers to select a Distribution Server to restart, suspend, or stop. The tool also enables Managers to switch servers, view traces, or refresh data.

Viewing the Distribution Server Status

The Server Status tool, accessed by selecting the Server Status tab in the Console, enables you to view the status of the Distribution Server. When you configure ReportCaster with a failover Distribution Server or Workload Distribution, the status of all servers is provided and you can perform basic tasks, such as switching the primary and failover server roles. The Server Status tool also provides details about the Distribution Server, such as the host name and port number, the status, and the number of jobs that are running and in the queue. The Distribution Server information includes:

❏ **Distribution Server.** The name used to identify the server in the Console. Primary is the name given to the server listed in the ReportCaster Configuration tool setting (*Primary Distribution Server*). Failover is the name given to the server listed in the ReportCaster Configuration tool setting, *Failover Console Host*. For more information on Distribution Server Settings and Configuring failover and Workload Distribution, see *Failover Distribution Server Status and Tasks* on page 36.

Note: When the Distribution Server attempts to make an SMTP connection to a mail server, the connection will timeout after five minutes.

❏ **Host** and **Port.** The host name and port number where the Distribution Server is installed.

❏ **Mode.** The state and function of the Distribution Server. Options include:

Manager. When a Distribution Server operates as a Manager, the server listens for requests for on-demand jobs and polls the repository for scheduled jobs. Scheduled and on-demand jobs are dispatched by the Manager to a Distribution Server operating as a Worker. The Manager does not execute jobs. The Manager monitors jobs running on the Worker and communicates job status information to the Client and the ReportCaster API.

Worker. When a Distribution Server operates as a Worker, it receives a job from a Manager and executes the job. The Worker communicates with the Client to retrieve procedures stored in the Repository and with the Reporting Server to run schedule job procedures. The Worker also dispatches HTTP requests and communicates with the file system or FTP servers to retrieve files for distribution. The Worker distributes the results returned from either the Reporting Server, HTTP, or file requests by Email, FTP, Printer, to the Repository, or to the Report Library as specified in the schedule. The Worker also updates the ReportCaster logs with job information and updates the schedule with the next run time.

❏ **Full Function.** Indicates that the Distribution Server is up and functioning. When you configure ReportCaster with a secondary Distribution Server, this indicates that the server is acting as the primary Distribution Server.

❏ **Failover.** When you configure ReportCaster with a failover Distribution Server, this indicates that the server is acting as the failover Distribution Server. For more information, see *Failover Distribution Server Status and Tasks* on page 36.

❏ **Down.** Indicates that the Distribution Server is stopped.

❏ **Running.** The number of scheduled and on demand jobs that are currently running.

❏ **Queued.** The number of scheduled and on demand jobs that are in the Distribution Server queue.

❏ **Services.** The services currently running on the Distribution Server. Options include:

❏ **Cache Cleaner.** The Distribution Server uses this service to refresh the IBFS Cache. The frequency at which the cache is refreshed is controlled by the setting IBI_Repository_Sync_Interval in the Administration Console. For more information, see the *TIBCO WebFOCUS® Security and Administration* manual.

❏ **Console.** The Distribution Server uses this service to listen for communication from the ReportCaster application or API.

❏ **Dispatcher.** The Distribution Server uses this service to execute scheduled jobs.

> **Note:** Depending on your server configuration, you may have one or more additional Dispatchers listed in the Server Status dialog box.

❏ **Failover Monitor/Synchronizer.** This service is used by the secondary Distribution Server to determine if it needs to take over as the primary server. The Failover/Synchronizer service is used by the primary and secondary Distribution Servers to monitor their respective statuses.

❏ **Reader.** The Distribution Server uses this service to poll the Repository.

❏ **Status.** The status of each service currently running on the Distribution Server. Options include:

   ❏ **Ready.** The service is available.

   ❏ **Standing By.** The service is standing by.

   ❏ **Suspend.** The service is suspended.

   ❏ **Listening.** The Console service is actively listening.

   ❏ **Polling.** The Reader service is active.

   ❏ **Monitoring.** The Repository Monitor is active.

   ❏ **Waiting.** Displayed when a job in the running queue is waiting for a connection to the Reporting Server. Occurs when a multi-task schedule is started because a connection is available to the Reporting Server in the first task but then waits because a connection is not available to the reporting server in the second task.

From the Server Status interface, you can perform the following tasks:

❏ **Refresh.** Retrieves the most current information and refreshes the Distribution Server status with this information.

❏ **Switch.** This option is only available when a failover Distribution Server is configured. Changes the current roles of the servers, so that the primary server becomes the failover server and the failover server becomes the primary server.

❏ **Restart.** Recycles the Distribution Server and the Application Server.

❏ **Suspend.** This option is always available, regardless of whether a failover Distribution Server is configured or not. Suspends the Distribution Server services, but the server remains running. When you suspend a server, the Suspend button label will change to Resume.

❏ **Stop.** Brings the Distribution Server completely down.

> **Note:** When you stop the Distribution Server using this option, you must restart it from the machine where it resides. You cannot restart the Distribution Server remotely.

❏ **View Trace.** Allows you to view trace information for the scheduler.log, main.trc, reader.trc, console.trc, and dispatcher.trc files. You can also turn the Distribution Server traces on or off. For more information, see *How to Turn Distribution Server Traces On or Off* on page 35.

> **Note:** Distribution Server traces are tracked separately from job traces using this functionality. You do not need to turn on job traces to see Distribution Server traces.

❏ **Help.** Opens the Server Status online documentation.

Procedure: **How to Turn Distribution Server Traces On or Off**

1. From the ReportCaster Console, select *Server Status*.

2. From the Distribution Server list, select a server.

3. On the toolbar, click the down arrow on the Server Log button.

4. Click *Turn On Server Traces* to turn the Distribution Server traces on.

   To disable the Distribution Server traces, follow steps 1 and 2, hover over *Turn On Server Traces*, and click *Turn Off Server Traces*.

Separate Job Queues for Each Data Server

The Distribution Server has separate job queues for each Reporting Server, as well as an additional queue for tasks that do not require a Reporting Server. Therefore, there will always be at least one job thread available for each Reporting Server, in addition to at least one thread for non-server based jobs. No one Reporting Server can have all of the available job threads consumed by jobs associated with that server.

Note: This feature is available as of Release 8.0 Version 02 and higher.

Each Reporting Server is allocated job threads equal to the total number of connections available for that Reporting Server. The Maximum Threads setting is now the total number of threads for each Reporting Server, in addition to the number of threads allocated for remaining tasks.

Server Performance

The Server Performance tab displays graphs that provide a one hour performance history of memory usage, active jobs, and CPU usage for the Distribution Server that you select. You can also see a one day history of active jobs.

The following image shows an example of the Server Performance tab.

Using the Java Heap Dump Feature

The heap dump feature enables you to generate a Java heap dump file directly from the ReportCaster Console, which streamlines the troubleshooting process for certain types of software issues.

When you click the *Server Performance* button, the Heap Dump button displays. Clicking the Heap Dump drop-down list button gives you the option to create a new heap dump file, or to delete all previous heap dump files.

When you create a heap dump file, a log file is generated, which shows that the heap dump file has been saved to your WebFOCUS software directory. To view this log file, click the *Job Log* button on the ReportCaster Console ribbon. In the Job Logs panel, click the *system* folder to display the Java Heap Dump log folder.

Failover Distribution Server Status and Tasks

When you configure a failover Distribution Server for ReportCaster, the Server Status window lists the status of the primary and secondary servers.

The primary Distribution Server is in Full Function mode. The Console service is listening for communication from ReportCaster, the Reader service is polling the repository, and the Dispatcher service is ready to trigger the execution of ReportCaster jobs. The Secondary Server is in Failover Mode, monitoring the Primary Server. The Failover Monitor service monitors the Primary Server to verify that it remains active and, if it is not active, to signal the failover server to take over the role of the Primary Server. The Suspend option, which puts the Primary Server services on hold, is available for selection when a failover Distribution Server has been configured and the Primary Distribution Server is selected.

From the Server Status interface, you can perform the following failover tasks, which are described below:

❏ Restart the Full Function or Failover Distribution Server.

❏ Suspend the Full Function Distribution Server.

❏ Stop the Full Function or Failover Distribution Server.

❏ Put the Failover Distribution server on Stand By.

❏ Switch server roles so that the Failover Distribution server becomes the Full Function server and vice versa. For more information, see *How to Switch Server Roles* on page 38.

Procedure: **How to Restart a Server**

1. Select a server that is running.

2. From the toolbar, in the Manage Server group, click *Restart* to restart the server.

   A window opens, asking you to confirm that you want to restart the server.

3. Click *Yes*.

Procedure: **How to Suspend a Server**

1. Select the server in Full Function mode.

2. On the toolbar, in the Manage Server group, click *Suspend*.

   A window opens, asking you to confirm that you want to suspend the server.

3. Click *Yes*.

Procedure: **How to Set the Failover Server to Stand By Mode**

Note: You must have multiple servers, one of which is in Failover Mode, to perform this procedure.

1. Select the server in Failover Mode.
2. On the toolbar, in the Manage Server group, click *Stand By*.

   A window opens, asking you to confirm that you want to set the Failover server to Stand By Mode.

3. Click *Yes*.

Procedure: **How to Stop a Server**

1. Select a running server and click *Stop*.

   A window opens, asking you to confirm that you want to stop the server.

2. Click *Yes*.

Procedure: **How to Switch Server Roles**

1. Select the server in Full Function Mode.
2. On the toolbar, click *Suspend*.

   A window opens, asking you to confirm that you want to suspend the server.

3. Click *Yes*.
4. On the toolbar, in the Manage Server group, click *Switch*.

   A window opens, asking you to confirm that you want to switch the roles of the servers.

5. Click *Yes*.
6. Click the *Refresh* icon to update the server status.

   Note: You may need to wait for 1 to 2 minutes for the switch to complete.

Job Status

Another resource for tracking schedules is the schedule job status. The schedule status provides a list of scheduled jobs that are in the Distribution Server queue. Status information includes the Schedule ID, the time it started running, and the status of the job.

The schedule information includes:

❏ **Job Id.** The ID assigned to the job.

❑ **Schedule ID.** A unique ReportCaster generated key assigned to the job when it was scheduled.

❑ **Description.** The description provided when the schedule was created.

❑ **Priority.** The priority level of the schedule. 1 is the highest and 4 is the lowest priority.

❑ **Start Time.** The time that the schedule run began.

❑ **Owner.** The name of the user who owns the schedule.

❑ **Status.** The status of the scheduled job. It contains one of the following values:

  ❑ **Running.** The scheduled job is currently running.

  ❑ **Queued.** The scheduled job is waiting for a thread to become available to run the request.

❑ **Server Name.** The Reporting Server to which the job has been submitted.

❑ **Dispatcher Name.** The Distribution Server Dispatcher that submitted the job.

❑ **Full Path.** The full path the Schedule in the WebFOCUS repository.

Job Log

The Job Log tab enables you to view the logs of executed jobs belonging to you or to users whose job logs you are authorized to see. You can view log and trace information, download trace files, open job logs, delete job logs, refresh job logs, or access related help for job logs on the Job Log tab. You can also view log and trace information for the daily and on-demand Log Purge, Schedule Purge, and Library Expiration jobs. The Log Purge, Schedule Purge, and Library Expiration logs can be accessed from the system folder. The logs for other jobs can be accessed under the folder of the user to whom the job belongs.

Note: The Job Log tab supports the functionality of a multiple selection, whereby you can open or delete multiple files simultaneously.

The job logs information includes:

❑ **Job Id.** The ID assigned to the job.

❑ **Start Time.** The time that the schedule was run.

❑ **Job Duration(seconds).** The amount of time needed to complete a job.

❏ **Job Status.** The status of the job when it completed processing.

    ❏ **Success.** No errors occurred during the scheduled job processing.

    ❏ **Error.** One or more errors occurred during the scheduled job processing. No report was generated or distributed.

    ❏ **Warning.** One or more warnings occurred during the scheduled job processing. A report was generated and distributed.

For information about downloading ReportCaster job trace files, see *How to Download ReportCaster Job Trace Files* on page 386.

ReportCaster Configuration

The Configuration tool enables Managers to view and manage the configuration of the Distribution Server, Servlet (deployed in ReportCaster web application) interfaces and tools. Options that Managers can modify include Distribution Servers, General Preferences, Email Distribution, Notification, and other options.

Note: When you change a configuration setting, the event is logged in the audit log file located in the Administration Console. Configuration events are logged, by default. For more information, see the *TIBCO WebFOCUS°® Security and Administration* technical content.

Configuration Icons

In the Configuration tab on the ReportCaster Console ribbon, a series of icons enable you to perform the following tasks.

Note: When you select *Configuration* in the ReportCaster Console ribbon, the Manage Configuration group displays on the left-hand side. Clicking *Server Status*, *Server Performance*, *Job Status*, *Job Log*, *Blackout Periods*, or *Execution IDs* will change the name and functionality of this group, depending where you are in the interface. These options all appear in the Show group of the ribbon.

❏ **Manage Configuration group**

    ❏ **Save.** Saves any changes made to the configuration. You will receive a message asking you to confirm the save. You must save the changes to the configuration settings as part of the process to implement the change. For details, see *Changing Configuration Settings* on page 44.

    ❏ **New.** Creates a new Reporting Server connection. This option is only active when working in the Data Servers folder.

❏ **Remove.** Deletes a Reporting Server from the ReportCaster configuration. You will receive a message asking you to confirm the deletion. This option is only active when working in the Data Servers folder.

❏ **Test.** Tests the connection to the selected server or repository. This option is only active when working in the Data Servers and LDAP Settings folders. You may be prompted for a user ID and password to connect to a specified server. You will receive a message describing whether the test succeeded or failed.

❏ **Restart.** Restarts the Distribution Server and ReportCaster to implement changes to the server configuration. You can also select *Restart* from the Action menu. For more information, see *Changing Configuration Settings* on page 44.

❏ **Configuration Files.** Provides options to view and download the ReportCaster configuration files. Click the arrow to access the following individual files.

 ❏ **dserver.xml**. Contains a record of current ReportCaster configuration settings.

 ❏ **sendmodes.xml**. Contains information about MIME output file formats.

 ❏ **rc_preference.xml**. Contains information about the display of options in the UI.

 Clicking one of these file options displays the file information in a browser window. Click *Download Configuration Files* to download all files as a single zip file.

❏ **Tools group**

 ❏ **Global Updates.** Authorized users can make global updates for the values stored in schedules and distribution lists. using the Global Updates interface, the following settings can be updated:

 ❏ Mail Server

 ❏ FTP Server

 ❏ Printer

 ❏ Email Address

 ❏ Email From

 ❏ Library URL

 ❏ Data Server

 ❏ Notification Type

❏ Notification Reply Address

❏ Notification Subject

❏ Notification Brief Message To

❏ Notification Full Message To

❏ First Pre-processing Procedure

❏ Second Pre-processing Procedure

❏ First Post-processing Procedure

❏ Second Post-processing Procedure

For more information, see *Global Updates* on page 142.

❏ **Purge Job Logs.** Provides on-demand capability for purging logs. You can also specify a number of days (past) for which to purge job logs. For example, if you want to purge job logs for the past month, you would use the default number of days, which is 30. You can also specify an option for traces: Default Traces, No Traces, or Trace On. For more information, see *How to Purge Job Logs on Demand* on page 146.

❏ **Purge Library.** Provides the on-demand capability for deleting expired library reports. You can accept the default, which is to purge expired library reports, or select the option to *Delete Library Reports Older Than*, which allows you to specify a date for which all reports prior to this date will be deleted. You can use the drop-down menu to enable a calendar, or enter the date manually. You can also specify an option for traces: Default Traces, No Traces, or Trace On. For more information, see *How to Delete Expired Library Reports* on page 43.

❏ **Delete Schedules.** The Delete Schedules functionality provides on-demand options for deleting all inactive or nonrecurring schedules. You can also specify an option for traces: Default Traces, No Traces, or Trace On. For more information, see *Delete Schedules* on page 147.

❏ **Unsubscribe Watch List Users.** Allows authorized users to cancel notifications for any users subscribed to a Library Watch List.

❏ **Actions group**

❏ **Refresh.** Refreshes the settings to reflect the last saved configuration settings.

❏ **Help.** Opens the online Help file. This option is only available when accessing the configuration tool through the WebFOCUS web application. It is not available when accessing the tool from the Windows Programs menu or by running editit.bat or the UNIX editit script file from the /utilities directory within the WebFOCUS Distribution Server installation.

Procedure: ## How to Delete Expired Library Reports

1. From the Tools group in the ReportCaster Console, click *Purge Library*.

   The Delete Library Reports dialog box displays.

2. Accept the default, *Delete Expired Library Reports*, or select *Delete Library Reports Older Than*, for which you can specify a date using the drop-down menu to enable a calendar control, where you can select a date.

3. Under Trace Options, you can accept the default of *Default Traces*, or select *No Traces* or *Trace On*.

4. Click *OK*.

Configuration Tab Folders

The Configuration tab provides access to configuration settings through the following folders:

❏ **Distribution Servers.** Defines and configures the Distribution Server. This folder provides settings to define a failover Distribution Server to act as a backup, and configure two or more Distribution Servers to share the workload. This folder also contains the Additional Settings folder. For details on these settings, see *Distribution Server Settings* on page 45.

❏ **General Preferences.** Specifies which distribution formats, and methods will be available to a user creating a schedule. In this folder, you can also specify blackout period settings, and if ReportCaster scheduling options will include the ability to distribute a PDF file directly to a printer. For details on these settings, see *General Preferences* on page 58.

❏ **Email Distribution.** Configures email settings, such as the default email host, number of attempts to distribute to an email host, and security information. For details on these settings, see *Email Distribution* on page 62.

❏ **Notification.** Configures notification settings, such as the notification email host and default notification type. For details on these settings, see *Notification* on page 76.

❏ **FTP Settings.** Allows you to specify the default FTP and user ID, and security plug-in. You can also indicate whether the server requires a secure SFTP connection and specify the authentication method. For details on these settings, see *How to Configure FTP Settings* on page 92.

❏ **Zip Settings.** Provides settings to configure how Zip files will be created and named. For details on these settings, see *Zip Settings* on page 95.

❏ **Other Schedule Defaults.** Defines the default end date and time of a ReportCaster schedule. For details on these settings, see *Other Schedule Defaults* on page 101.

❏ **Log Purge and Library Expiration.** Allows you to specify the time and period that log files will be automatically purged. For details on these settings, see *Log Purge and Library Expiration* on page 101.

❏ **LDAP Setting.** Allows you to configure ReportCaster self-service users to be authenticated and authorized against an LDAP data source rather than the WebFOCUS Repository. You can also configure ReportCaster to retrieve email address information from an LDAP data source. For details on these settings, see *LDAP Setting* on page 102.

❏ **Data Servers.** Allows you to configure multiple Reporting Servers, including cluster servers. For details on these settings, see *Data Servers Settings* on page 104.

❏ **Report Library.** Allows you to specify Report Library settings, such as the default URL to access content in the Library, and whether to compress files stored in the Library. This folder also contains the Additional Library Settings and Watch List Settings folders. For details on these settings, see *Report Library Settings* on page 109.

Changing Configuration Settings

To implement changes to the ReportCaster server configuration settings, you must save the changes, and then restart the Distribution Server and the ReportCaster web application. Use the following steps to save any configuration changes.

1. After you make changes to any of the configuration settings within a Configuration folder, click the *Save* icon in the Manage Configuration group toolbar.

   A window opens, asking you to confirm the save.

2. Click *OK*.

   A window opens, explaining that you must restart the Distribution Server and the ReportCaster web application in order for the changes that you saved to take effect.

3. Click *OK*.

4. Click the *Restart* icon in the Manage Configuration group toolbar.

   A window opens, asking you to confirm that you want to stop all running jobs and restart.

5. Click *Yes*.

   Note: If failover or workload distribution is configured, all Distribution Servers are started.

6. Notify all users that are currently logged that they must restart their sessions to obtain the new configuration information. This is required because user sessions have information cached pertaining to the ReportCaster configuration. The user interfaces must be restarted to obtain any updated configuration information.

Changing Default User IDs

Several of the Configuration tab folders provide the option to change the default user ID

and/or password. To change default user ID settings, click the [icon] icon that appears to the right of the setting field. This opens the User dialog box, where you can type a new user ID and password. When your changes are complete, click *OK* to exit the User dialog box. Remember to save your changes and restart the Distribution Server to implement any changes.

Distribution Server Settings

The Distribution Servers folder contains the settings that define and configure the Distribution Server. You can also define a secondary failover Distribution Server to act as a backup, and configure two or more Distribution Servers to share the workload. The Server Status option, located on the ribbon, provides the ability to restart the Distribution Server, suspend distribution, stop distribution, switch servers, and refresh data. For more information, see *Server Status* on page 32 and *Configuring ReportCaster Failover and Workload Distribution* on page 55.

The Distribution Servers folder contains the following configuration settings.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Primary Distribution Server section		
Host	Required.	Host name of the primary Distribution Server.
Port	Required.	Port number of the primary Distribution Server.

Secondary Distribution Server

Displays the host name and port number of the secondary failover server. Select the icon to the right of the Secondary Distribution Server field to access the following settings.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Enabled	Required for Failover. Default is not enabled.	Enables or disables the Distribution Server failover function.
Host	Required if Failover is enabled.	Host name of the failover Distribution Server.
Port	Required if Failover is enabled.	Port number to access the failover Distribution Server.
Failover Interval	Required if Failover is enabled. Default value is 1.	Frequency (in minutes) at which the failover Distribution Server checks the primary Distribution Server to verify it is running.
Use repository to synchronize Primary and Failover servers	Default is not selected.	**Selected.** The Primary and Secondary servers monitor the status of each other by reading and updating a server status record in the WebFOCUS repository. **Not Selected.** The Primary and Secondary servers communicate to each other through the network. If network communication between the servers is disrupted, the Secondary server may promote itself to Full Function status if does not receive a response from the Primary server even if the Primary server is in Full Function mode.

Workload Distribution

Displays whether Workload Distribution is in effect. Select the icon to the right of the Workload Distribution field to access the following failover settings.

Add	Required to add new entry.	Enables you to add another server for Workload Distribution.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Delete	Optional.	Enables you to delete a Workload Distribution Server.
Enabled	Required for Workload Distribution. Default is not enabled.	Enables or disables the distribution of ReportCaster jobs among Distribution Servers.
Worker Name	Required if Workload Distribution is enabled.	Name to identify the worker Distribution Server.
Worker Distribution Server Host	Required if Workload Distribution is enabled.	Host name of the worker Distribution Server.
Worker Distribution Server Port	Required if Workload Distribution is enabled. The default value is 8200.	Port number of the worker Distribution Server.
Restrict to IP Address	Optional.	Restricts Distribution Server Console access to one or more IP Addresses. For more information, see *Restricting Distribution Server Console Access to an IP Address List* on page 56.

Maximum Threads

Controls how many simultaneous connections (threads) the ReportCaster Distribution Server can utilize to process scheduled jobs. The default value is 3. This setting is also available in the Administration Console. You can specify any maximum that can be supported by your hardware and memory.

Server Name	Required if one or more servers are listed.	Displays the name of the server.
Threads (Connections)	Required. The Default Value is 3.	Displays the simultaneous connections (threads) for each server.
Other Task		Non server-based tasks.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Reader Interval, Recovery, Processing for No Report to Distribute, , and Max Messages per Task from Data Server options:		
Reader Interval	Required. Default value is 1 minute.	Polling interval (in minutes) for the ReportCaster Distribution Server to check for scheduled jobs. An acceptable value is any positive integer from 1 to 999999. Negative numbers and zero are not allowed. **Note:** This setting is also available in the Administration Console.
Recovery	Default value is Off.	**On.** During startup, the ReportCaster Distribution Server recovers scheduled jobs that were processed but not completed. **Off (Default).** During startup, the ReportCaster Distribution Server does not recover any scheduled jobs. **Note:** This setting is also available in the Administration Console.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Processing for No Report to Distribute	Required. Default value is Error.	Specifies whether the *No Report to Distribute* message from the Reporting Server is categorized as an error or a warning. This is a global setting, relevant to all schedules. Possible values are: ❏ **Error.** The *No Report to Distribute* message is categorized as an error and the message is written to the ReportCaster log report in red. When the schedule has the Notification option set to Error, the Notification is sent. ❏ **Warning.** The *No Report to Distribute* message is categorized as a warning and the message is written to the log report (in orange) as an informational message. When the schedule has the Notification option set to Warning, no error notification is sent. These settings also apply to burst reports when there is a *No Report to Distribute* message for an individual burst value. If a schedule contains multiple tasks, the *No Report to Distribute* processing only applies if all tasks that are part of the schedule produce the *No Report to Distribute* message. If one task in the schedule produces a report, then the value of this setting does not affect log messaging or notification.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Processing for Blackout Period Job Termination	Required. Default value is Error.	If a scheduled report distribution is terminated due to a previously set blackout period, this option specifies whether or not an error notification will be sent via email. ❏ **Error.** An error notification will be sent to the designated email recipient. ❏ **Warning.** An error notification will not be sent to the designated email recipient. For more information, see *Using Blackout Periods* on page 117.
Max Messages per Task from Data Server	Required. Default value is 1000.	Controls the number of messages for each task from the Data Server written to the ReportCaster log file.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Scan-back section		
Scan-back Type	Required. Default value is On.	Possible values are: ❏ On ❏ Off ❏ Reset Next Run Time

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Scan-back Interval	Default value is 15, 24 hour periods.	If the Distribution Server is unavailable for a period of time, this is the number of 24 hour periods (beginning with the Distribution Server restart time) that you want the Distribution Server to scan for jobs not yet run and run them. **Note:** This setting is also available in the Administration Console.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Settings for the Additional Settings folder:		
The Console Requires Secure SSL Connection	Optional.	Select this check box to encrypt the communication between the ReportCaster application and the ReportCaster Distribution Server. After enabling secure communication and saving the changes, you must manually restart the ReportCaster application and the ReportCaster Distribution Server.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
SSL Certificate	Required if *The Console Requires Secure SSL Connection* check box is selected.	A default SSL Certificate is supplied by the installation procedure. You can optionally replace the default certificate with your own certificate to activate secure communication. To do this, you must import your signed server certificate from a CA or self-signed certificate to the distribution server keystore, and then export an SSL certificate from the keystore. Once you have exported the SSL certificate, you must paste this certificate to the SSL Certificate setting, save the configuration changes, and manually restart the ReportCaster application and the ReportCaster Distribution Server.
Days Until Traces are Deleted	Optional. The default value is 10.	Files and folders in the trc, log, and temp directories that are older than the specified number of days are automatically deleted by the Distribution Server. They are deleted at the same time as the daily Job Log purge and deletion of expired Library versions.
Schedule Job Traces	Optional. The default value is Off.	Enables Distribution Server Traces. ❑ **Off.** Trace is disabled. ❑ **Schedule.** Schedule job processing information. ❑ **Schedule and Report.** Scheduled job processing information and report output is returned to the Distribution Server to be distributed.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Job Status Notification Plug-in	Optional.	Name of a custom written Java class that implements the ReportCaster Job Status Notification interface and instructs the Distribution Server to perform some action (such as notifying a Web Service or other listener) that a scheduled job has started and ended. For more information, see *How to Configure the Job Status Notification Plug-in* on page 54.
Provide Metrics Information from Resource Analyzer	Optional.	This functionality enables the collection of RA DBMS statistics from the Reporting Server for display in the schedule log. **Note:** If you do not have Resource Analyzer on the Reporting Server, this functionality will not work. When the check box is selected, the RC log displays messages containing RA DBMS information. When the check box is not selected, messages are not displayed.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Hold Repository Connection	Required. By default, this option is selected.	**Selected.** The database connection is kept open throughout the execution of the schedule, including obtaining Address Book information, and writing information to the log files. **Not selected.** The database connection is dropped before executing the schedule. A new connection is made after the schedule is executed to obtain Address Book information and write information to the log files.

Procedure: **How to Configure the Job Status Notification Plug-in**

1. From the Tools menu, click *ReportCaster Status*.

2. Click the *Configuration* button.

3. In the left pane, expand the *Distribution Servers* folder, then click the *Additional Settings* folder.

4. Populate the Distribution Servers fields using the information provided in the preceding tables.

5. In the Job Status Notification Plug-in field, enter the name of the program that implements the Job Listener interface.

6. Click *Save*.

   Your program will be called at the start and end of each schedule to perform the customized actions it has been designed to do. For more information, refer to the ibi.broker.scheduler.plugin package found in the Java documentation.

   Your program will be called at the start and end of each schedule to perform the customized actions it has been designed to do.

   For more information about the Job Status Notification plug-in, refer to the ibi.broker.api.data.console package description found in the ReportCaster API Specifications document, located at *https://webfocusinfocenter.informationbuilders.com/ javadoc/rcaster/index.html*.

Configuring ReportCaster Failover and Workload Distribution

The Distribution Server Failover feature allows you to configure a secondary Distribution Server that can resume ReportCaster operations when there is an interruption (planned or unplanned) in the primary Distribution Server service. The primary Distribution Server is monitored to verify it is operational. If there is an interruption in service, the failover Distribution Server is triggered to take over the role of the primary server.

The Workload Distribution feature allows ReportCaster to distribute scheduled jobs across multiple Distribution Servers, providing an efficient and fast way to process large numbers of schedules. Multiple Distribution Servers can be installed on one or more hosts. One instance is designated as the Workload Manager, while the other are designated as Workers. The WebFOCUS Repository will be shared by the Workload Manager and the Workers. Workload Distribution is set up through the ReportCaster Configuration tool. All servers will share one set of configuration information, and the Workload Manager will push any configuration changes to the Workers.

For your application of ReportCaster, you can configure either or both Failover and Workload Distribution. The following procedure includes instructions to configure both, but notes when to skip to the appropriate steps if you are only configuring one or the other.

Procedure: **How to Configure Distribution Server Failover**

To configure Distribution Server failover:

1. From the Tools menu, click *ReportCaster Status*.

   The ReportCaster Console opens.

2. Click the *Configuration* tab.

3. Click the *Distribution Servers* folder in the left pane.

4. Click the button to the right of the Secondary Distribution Server field.

   The Secondary Distribution Server dialog box opens.

5. Select the *Enabled* check box.

6. Enter the hostname, port number, and failover interval of the Secondary server.

7. Optionally, select the *Use Repository to Synchronize Primary and Failover Servers* check box.

8. Click *OK*.

9. Click *Save* and then *OK* when you are prompted to save.

10. Install the Distribution Server on the specified host with the specified port number for that host.

Procedure: **How to Configure Workload Distribution**

1. Open the ReportCaster Console and click *Configuration* in the top pane.

2. Click the *Distribution Servers* folder in the left pane.

3. Click the button to the right of the Workload Distribution field.

    The Workload Distribution dialog box opens.

4. Select the *Enabled* check box.

5. Click *Add*.

6. Enter the name, hostname, and port number of the Worker Distribution Server.

    Repeat this step for each Worker Distribution Server instance that you want to add.

7. Click *OK*.

8. Click *Save* and then *OK* when you are prompted to save.

9. Install the Distribution Server on each of the specified hosts with the specified port number for that host.

Restricting Distribution Server Console Access to an IP Address List

Limiting Distribution Server access to a preselected IP address helps prevent denial of service (DoS) attacks against your server. A DoS attack is a malicious cyber-attack that overloads a server with requests from multiple IP addresses, which blocks legitimate IP addresses from accessing the server. You can use the Restrict to IP Addresses option in the ReportCaster Console to enhance the security of your network. If you populate the Restrict to IP Addresses field with one or more IP addresses, the Distribution Server only accepts TCP/IP requests from the addresses listed. This setting is blank by default.

Procedure: **How to Configure IP Address Restrictions**

1. Open the ReportCaster Console.

2. On the ribbon, in the Show group, click *Configuration*.

3. In the Configuration pane, click *Distribution Servers*.

    The Primary Distribution Server options display.

4. Click the *Restrict to IP Addresses* open folder button.

    The Allowed IP Addresses dialog box opens.

5. Click *Add*.

The Add IP Address dialog box opens, as shown in the following image.
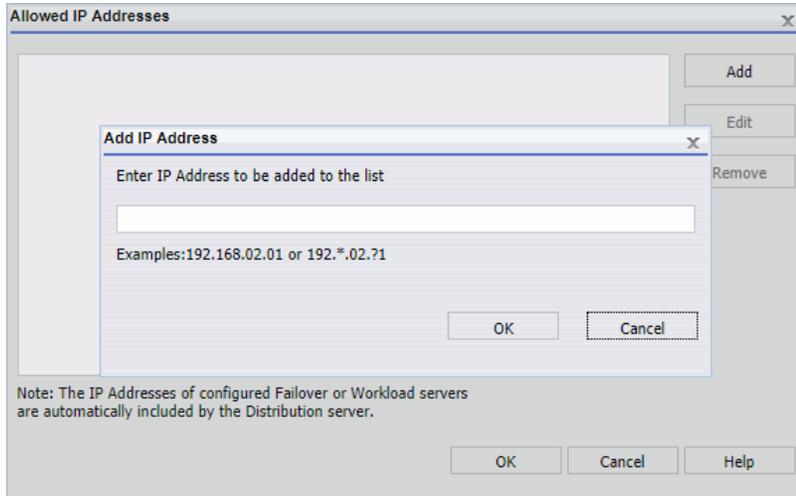
6. Type an IP address and click *OK*. This adds the IP address to the Allowed IP Address list.

7. Repeat steps 5-6 to add any additional IP addresses.

8. Click *OK* to save the Allowed IP Address list and return to the ReportCaster Console.

9. On the ribbon, in the *Manage Configuration* group, click *Save* to keep your allowed IP address changes.

10. On the ribbon, in the *Manage Configuration* group, click *Restart* to apply your changes.

Procedure: **How to Edit an IP Address**

1. Click the Restrict to IP Addresses open folder button.

   The Allowed IP Addresses dialog box opens.

2. Click the IP address that you want to modify, and then click *Edit*.

   The Edit IP Addresses dialog box opens.

3. Modify the IP address, and then click *OK*.

4. On the ribbon, in the *Manage Configuration* group, click *Save* to keep your allowed IP address changes.

5. On the ribbon, in the *Manage Configuration* group, click *Restart* to apply your changes.

Procedure: **How to Delete an IP Address**

1. Click the *Restrict to IP Addresses* open folder button.

The Allowed IP Addresses dialog box opens.

2. Click the IP address that you want to delete, and then click *Remove*.

   The selected IP address is deleted.

3. Click *OK*.

4. On the ribbon, in the *Manage Configuration* group, click *Save* to keep your allowed IP address changes.

5. On the ribbon, in the *Manage Configuration* group, click *Restart* to apply your changes.

General Preferences

The General Preferences folder in the Configuration tab contains settings that determine which schedule tasks, distribution formats and methods will be available to a user.

The General Preferences folder contains the following configuration settings.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Allow Group Blackout Periods	Required. By default, this option is selected.	Specifies whether or not schedule blackout periods can be defined at the group level, in addition to being globally defined for all users. This option must be selected to view group blackout periods that have been defined.
Set Next Run Time to Day After Blackout Period End	Optional. By default, this option is not selected.	When selected, if a recurring scheduled distribution is cancelled due to the schedule being run on a blackout period date, the schedule will run at the same time the following day. For more information, see *Controlling When Schedules Run After Blackout Periods* on page 138.
Allow PDF Distribution Directly to a Printer	Required. By default, this option is selected.	When selected, PDF is a selectable format for the Printer distribution method. This enables a PDF file to be distributed directly to a printer. The printer must have the appropriate driver to print PDF files.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Use Legacy Behavior for Parameterized Schedule Settings	Optional. By default, this option is not selected.	Restores the legacy behavior for the use of amper variables in schedule settings. When selected, amper variables can only be used in the Email Subject. The value of an amper variable is set to the value stored with the schedule in the ReportCaster parameters table. Runtime values are not available.
Schedule Tasks	Optional. All Task Types are enabled, by default.	Specifies what Task Types are available to users. The default Schedule task for all Advanced Schedules is WebFOCUS Report. When you are creating a task in the Advanced Scheduling tool, clicking the *New* button displays the dialog box for the selected default task. For more information, see *Specifying Schedule Task Settings* on page 59.
Distribution Formats	Optional. All formats are enabled, by default.	Specifies what report and graph formats are available to users.
Distribution Methods	Optional. All distribution methods are enabled, by default.	Specifies what distribution methods are available to users.

Specifying Schedule Task Settings

The Schedule Tasks setting in the General Preferences folder enables authorized users to specify what Task Types are available to users and groups.

By default, all Task Types are enabled (selected). A minimum of one Task Type must be selected.

Note:

❏ If a task is cleared after a schedule using that task has been created, the schedule will fail when it is run. A message in the log will indicate how to fix the problem.

❏ The burst setting of a schedule with distribution to the Library cannot be changed from burst to non-burst. Similarly, it cannot be changed from non-burst to burst. This limitation is due to the association of version numbers with individual library items. The version number would have to be reset to 1 when the burst setting is changed.

Procedure: ## How to Specify Schedule Task Settings

1. In the General Preferences folder, click the icon to the right of the *Schedule Tasks* field. The ReportCaster - Schedule Tasks dialog box opens.

2. To enable or disable specific Task Types, select or clear the check box for the following options:

   ❏ WebFOCUS Report

   ❏ WebFOCUS Server Procedure

   ❏ File

   ❏ URL

   ❏ FTP

   ❏ WebFOCUS Schedule

3. Optionally, choose a default Schedule task for the Advanced Scheduling tool. *WebFOCUS Report* is selected, by default.

4. Optionally, if you want the ReportCaster Distribution Server to not run scheduled jobs for the task types that have been cleared, select the *Only run schedules for selected Tasks* check box.

5. When your selections are complete in the Schedule Tasks dialog box, click *OK*.

   The changes are saved and the Schedule Tasks dialog box closes.

6. To implement the configuration changes, restart the Distribution Server and ReportCaster web application.

Specifying Schedule Format Settings

The Distribution Formats setting in the General Preferences folder enables users to specify what report and graph formats are available to users and groups.

This setting only applies to ReportCaster (Repository) procedures. By default, all report and graph formats are enabled (selected). A minimum of one report or graph format must be selected.

Note: If a format is cleared after a schedule using that format has been created, the schedule will fail when it is run. A message in the log will indicate how to fix the problem.

Procedure: **How to Specify Schedule Format Settings**

1. In the General Preferences folder, click the icon to the right of the *Distribution Formats* field.

   The ReportCaster - Report/Graph Formats dialog box opens.

2. Using the Styled Formats drop-down list, you can select *Specialized Formats*, *Non-styled Formats*, or *Graph Images*. Optionally, you can keep the default, *Styled Formats*.

   By default, Styled Formats are displayed with each format type selected.

3. To enable or disable styled formats, select or clear the check box for one of the listed formats.

4. To enable or disable Non-styled Formats, which do not support styling using ReportCaster StyleSheet commands, select *Non-styled Formats* from the drop-down list. By default, the Non-styled Formats are displayed with each format type enabled.

5. To enable or disable graph images, select *Graph Images* from the drop-down list. By default, the graph image formats are displayed with each format type enabled.

6. When your selections are complete in the Report/Graph Formats dialog box, click *OK*.

   The changes are saved and the Report/Graph Formats dialog box closes.

7. To implement the configuration changes, restart the Distribution Server and ReportCaster.

Specifying Schedule Distribution Method Settings

The Distribution Methods setting, in the General Preferences folder, enables authorized users to specify the distribution methods that are available to users and groups. If a method is cleared after a schedule using that method has been created, and *Only run schedules for selected Distribution Method* is selected, the schedule processing will not run the scheduled tasks. A message in the log will indicate that the distribution method is not configured for use. In addition, a schedule that has multiple distributions will not run if one of the distribution methods is cleared in the Distribution Methods drop-down menu, in the General Preferences folder, of the Configuration tab.

By default, all distribution methods are enabled (selected).

Note: A minimum of one distribution method must be selected.

The Repository option only appears if these products are enabled. Repository is an optional product component that is installed with the ReportCaster Client.

Procedure: How to Specify Schedule Distribution Method Settings

1. In the General Preferences folder, click the icon to the right of the *Distribution Methods* field.

   The ReportCaster - Schedule Distribution Methods dialog box opens.

2. To enable or disable specific distribution methods, select or clear the check box for one of the listed options.

   Note: At least one schedule distribution method must be selected.

3. Optionally, select the *Only run schedules for selected Distribution Methods* check box to limit the schedules running to those that have at least one of the Distribution Methods selected.

4. When your selections are complete in the Schedule Distribution Methods dialog box, click *OK*.

   The changes are saved and the Schedule Distribution Methods dialog box closes.

5. To implement the configuration changes, restart the Distribution Server and ReportCaster web application.

Email Distribution

The Email Distribution folder in the Configuration tab contains default email settings, email retry options, and email security.

The Email Distribution folder contains the following configuration settings.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Inline Report Distribution	Required. The default value is Allowed.	Specifies whether the Schedule tool will enable the email distribution option to send a report in the body of the email (inline). **Note:** If this option is cleared after a schedule using this option has been created, the schedule will fail when it is run. A message in the log will indicate how to fix the problem.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Packet Email	Required. The default value is Yes.	Controls how task output and burst content are distributed through email. Valid values are: ❏ **No.** Each burst value or task output is distributed in a separate email. ❏ **Yes.** People receiving burst values or output from tasks will receive a single email with multiple attachments. ❏ **Burst.** Each burst value in a distribution list will generate a separate email for a given email address. There may be one or more attachments in the email, depending on the number of tasks in the schedule.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Allowed Email Domains and Addresses	The default value is off.	Contains the email domains and addresses that are authorized to be used in a distribution. Select the *Restrict user input with this list* check box to restrict user input of email addresses and domains to the allowed addresses saved in your list. For more information, see *Validating Allowed Email Domains and Addresses* on page 70. **Note:** ❏ If this list has changed before you attempt to edit email addresses for a previously saved Basic Schedule, Advanced Schedule, Distribution List, Distribution File, or Dynamic Distribution List, the system checks if your new email addresses and domains are still valid. If you enter an invalid email address or domain, you will be prompted to change the email address or domain before saving. ❏ Files containing email addresses intended for distribution are also verified for valid domains at schedule execution time. If it contains a restricted address, then no delivery is made to that address and an error message is written to the log file.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Restrict Email Distribution to the Email Address of the Schedule Owner	Optional.	Check this box if you want to restrict email distribution to the email address of the schedule owner. **Note:** If no email address is specified for the schedule owner in the Security Center, the schedule cannot be saved.
Always Compress and Password Protect Distributed Report	Optional.	Select this box to have any distributed reports converted into a password-protected Zip file. Passwords can be provided in a distribution file, a dynamic distribution list, or by way of the zip encryption plug-in. If no password is created, the report will not be distributed. The distribution server will enforce this rule on all schedules, including schedules created prior to selecting the check box. **Note:** When this check box is selected, Inline Report Distribution will be disabled. If Inline Email is enabled, the Always Compress and Password Protect Distributed Report check box will be cleared. Also, if the Always Compress and Password Protect Distributed Report check box is selected, then the Add Report to Zip File check box in the Distribution tabs of schedules created from both the Basic and Advanced scheduling tools is selected, by default.
Customize Attachment Message	Optional.	Provides the ability to specify a custom message.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Default Attachment Message	Required.	Defines the default message used in your Email Distribution. The message that you define here displays in the Basic Scheduling Tool. **Note:** If you customize the default message, this new message will be the default message for new schedules.
Mail Server Defaults section		
Mail Server	Required.	Name of the default mail server used to distribute an email schedule. You can also specify a port for Mail Host using *hostname*:*port*. If you do not specify a port or the port you specify is not present, the default port is used.
This Server Requires a Secure SSL Connection	Optional.	Select this check box if the specified mail server uses SSL.
This Server Requires a Secure TLS Connection	Optional.	Select this check box if the specified mail server uses TLS.
This Server Requires Authentication	Optional.	Select this check box if the specified mail server requires authentication with a user ID and password.
SMTP User Id/ Password	Required if the mailhost is using SMTP Authorization. No default value.	User ID and password used to connect to the mailhost.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
SMTP Security Plug-in	Optional.	Name of a custom written Java class that implements the ReportCaster SMTP security interface to dynamically retrieve the user ID and password needed to connect to an SMTP server. For more information, see *How to Configure Email Distribution* on page 68.

Email Reply Defaults section

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Mail From	Optional.	Default value for the email From field. This can be any value.
Mail Reply Address	Optional.	Default email reply address when creating an email schedule. **Note:** If you do not provide a Mail Reply Address, the default Reply Address used in the Basic and Advanced Scheduling tools will be the email address of the user that is signed in to WebFOCUS. ReportCaster obtains the email address of the user from the WebFOCUS security system.

Email Retries section

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Email Retries	The default value is 1.	Number of times the Distribution Server will try to connect to the email server to deliver report output. If the Distribution Server is unable to connect to the email server on the first try, it will attempt to connect again after the specified Email Retry Interval has passed. A message for each attempt is written to the log file. Valid values are 0 through 9.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Email Retry Interval (seconds)	The default value is 60 seconds.	Amount of time that the Distribution Server will wait between retries. Valid values are 1 through 999.
Email Reconnection		
Reconnect if SMTP Server Disconnects	The default value is Yes.	If the value in this setting is Yes, the distribution server performs three attempts to reconnect to the SMTP server and resume sending email. If all three attempts are unsuccessful, the distribution server stops processing and writes an error message to the log. If the value is No, no attempts to reconnect are made.
Number of messages per connection	The default value is 0.	If the value in this setting is zero (0), there will be no limits on the number of messages that can be sent over a single connection. If a non-zero value appears in this setting, the distribution server will be able to send that many emails over a single connection. It can then make a new connection to send any remaining emails, making as many new connections as necessary.

Procedure: **How to Configure Email Distribution**

1. From the Tools menu, click *ReportCaster Status*.

2. Click the *Configuration* button.

   Note: Authorized users can also access the ReportCaster Configuration tool from the Administration Console.

3. In the left pane, select the *Email Distribution* folder.

4. Populate the email distribution fields. You can:

   ❏ Make changes to the current email settings. For more information, refer to the preceding table.

   ❏ Supply any default values that you would like to be available at schedule creation time.

5. If your mail server(s) require authentication or SSL or TLS, check the appropriate boxes and enter the required credentials. To use the default implementation, see *How to Use the Default Implementation for the SMTP Security Plug-in* on page 69.

6. Click *Save*.

Procedure: **How to Use the Default Implementation for the SMTP Security Plug-in**

Note: In WebFOCUS 8, the functionality provided by the default implementation of the SMTP Security Plug-in can be accomplished within a schedule using the Email Server options in the scheduling tool.

1. From the Tools menu, click *ReportCaster Status*.

2. Click the *Configuration* button.

3. In the left pane, select the *Email Distribution* folder.

4. Enter the following value in the SMTP Security Plug-in field.

   ```
   ibi.broker.scheduler.plugin.DefaultSMTPSecurityExit
   ```

   For more information about the Default SMTP Security Exit Interface, refer to the ibi.broker.scheduler.plugin package description found in the ReportCaster API Specifications document, located at *https://webfocusinfocenter.informationbuilders.com/ javadoc/rcaster/index.html*.

5. Click *Save*.

6. Create a file called smtp_security_exit.txt using the following format:

   ```
   HOSTNAME, AUTHORIZATION
   REQUIRED(Y,N),USERNAME,PASSWORD,SSL(Y,N),TLS(Y,N)
   ```

7. Copy the smtp_security_exit.txt file to the .../ReportCaster/cfg directory.

8. Restart the Distribution Server.

If the mail server (hostname) is found in the smtp_security_exit.txt file and the authorization required flag is Y, the user and password in the file will be used to authenticate the mail server. If the SSL flag is Y, then SSL will be used. If the TLS flag is Y, TLS will be used.

Validating Allowed Email Domains and Addresses

When sending reports by email, you can restrict user selection of email domains and addresses from a pre-defined list.

The following image shows the Allowed Email Domains and Addresses dialog box in the ReportCaster Console, where this option is available.
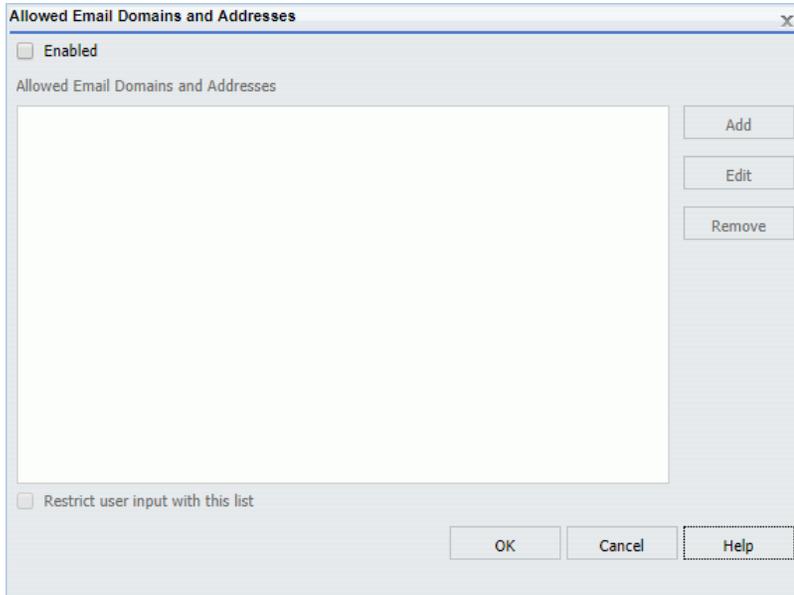
Select the *Enabled* check box to restrict email distribution to a list of valid email domains and addresses. When the list is enabled, and a user enters an email address that is not on this list, the ReportCaster job cannot be saved.

If you select the *Restrict user input with this list* check box, users will only be able to use email domains and addresses selected from this list, applying another layer of email distribution restriction for other users.

Note: You must select the Enabled check box in order to select the Restrict user input with this list check box.

Examples of Invalid Email Addresses and Domains

In this example, an Administrator added the following email addresses and email domains to the Allowed Email Domains and Addresses list:

❏ john@tibco.com

❑ roger@tibco.com

❑ @gmail.com

❑ @yahoo.com

These additions to the list define what is valid and what is invalid for user input.

Invalid Email Addresses

For example, since john@tibco.com was added to the list, if a user types in John@tibco.com, with an upper case J, the email address is valid. This is because the Allowed Email Domains and Addresses feature is not case sensitive.

However, if a user types johnroger@tibco.com, which is a combination of two email addresses that were added to the list, the email address would be invalid, because this specific email address was not added to the list.

Invalid Email Domains

When entering domain addresses, if a user types in any email address with the email domain @gmail.com, it is valid, because @gmail.com is one of the domains added to the list.

However, if a user types in any email address with the email domain @outlook.com, it is not valid, because @outlook.com is not one of the domains added to the list.

Email Domain and Address Restrictions

Restrictions apply during the following situations:

❑ Editing Email Distribution options in the Basic and Advanced Scheduling tools.

The following image shows the Email Distribution options in the Basic and Advanced Scheduling tools. If you select the *Restrict user input with this list* check box, you can click the *To*, *From*, and *Reply Address* fields to select or create email addresses.

❏ Editing Notification Email options in the Basic and Advanced Scheduling tools.

The following image shows the Notification Email options in the Basic and Advanced Scheduling tools. If you select the *Restrict user input with this list* check box, you can click the *Reply Address*, *Brief Message To*, and *Full Message To* fields to select or create email addresses.

Notification Email	
Notification Type:	Always
Reply Address...	
Subject:	
Brief Message To...	
Full Message To...	
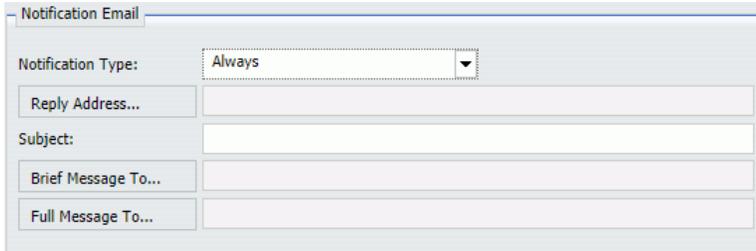
❏ Adding new members to a Distribution List

The following image shows the Distribution List Add New Member dialog box. If you select the *Restrict user input with this list* check box, you can click the *ellipsis* button next to the E-mail address field to select or create email addresses.

Add New Member

Burst value: Pattern:

Wildcard

(* = any thing, ? = any character, \ = escape for literals:*?\)

E-mail address:

[...]

✓ OK   ⊘ Cancel

Restrictions also apply to the following file types:

❏ **Distribution Files**. If you import an external distribution file, the emails listed in the file are validated against the list of allowed email addresses and domains.

❏ **Dynamic Distribution Lists**. If you create a Dynamic Distribution List, the emails selected for use are validated against the list of allowed email addresses and domains.

The Email Selection Dialog Box

When the Restrict user input with this list check box has been selected, you can click a *To*, *From*, *Cc*, *Bcc*, *Reply*, *Reply Address*, *Brief Message To*, *Full Message To*, or *ellipsis* button to display one of three dialog boxes. The dialog box that displays is based on the type of email domain and address information contained in the Allowed Email Domains and Addresses list.

Note:

❏ You can enter multiple email addresses into the To, From, Cc, Bcc, Reply, Reply Address, Brief Message To, and Full Message To fields.

❏ To cancel the selection of an email address in the Select Email Addresses dialog box, hold the Crtl key and select the email address.

A List of Only Email Addresses

If the Allowed Email Domains and Addresses list contains only email addresses, the Select Email Addresses dialog box allows you to select an email address for the *To*, *Cc*, *Bcc*, or *Reply* fields, as shown in the following image.
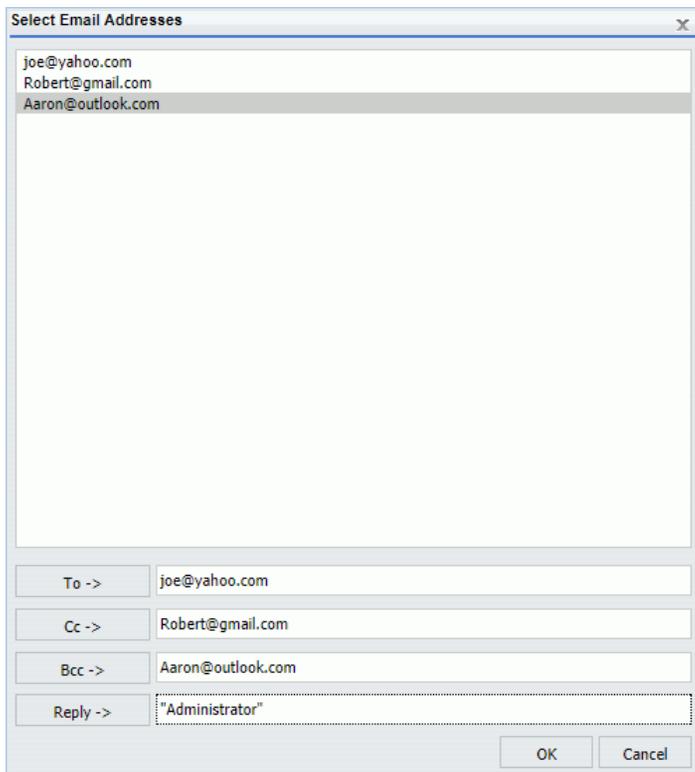
After you select an email address, click the To, Cc, Bcc, or Reply button to assign the email address to the respective field.

A List of Email Domains and Addresses

If the Allowed Email Domains and Addresses list contains both email domains and addresses, the Select or Enter Email Addresses dialog box lets you select from a list of email address. The dialog box also lets you create an email address for specific domains, as shown in the following image.
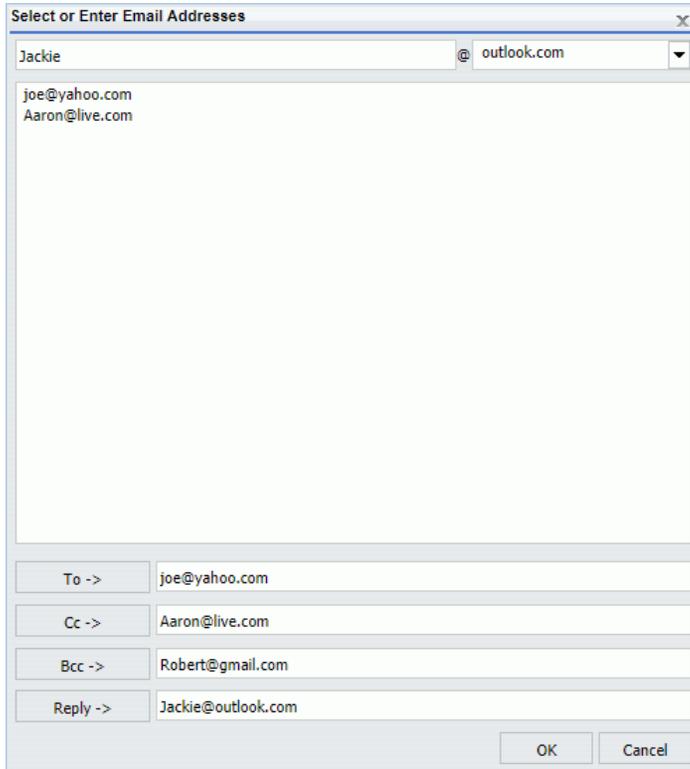
After you select an email address, or enter an email address and choose a domain, click the *To*, *Cc*, *Bcc*, or *Reply* button to assign the email address to the respective field.

A List of Only Email Domains

If the Allowed Email Domains and Addresses list contains only email domains, the input dialog box lets you select an email domain and enter the name of an email address, as shown in the following image.
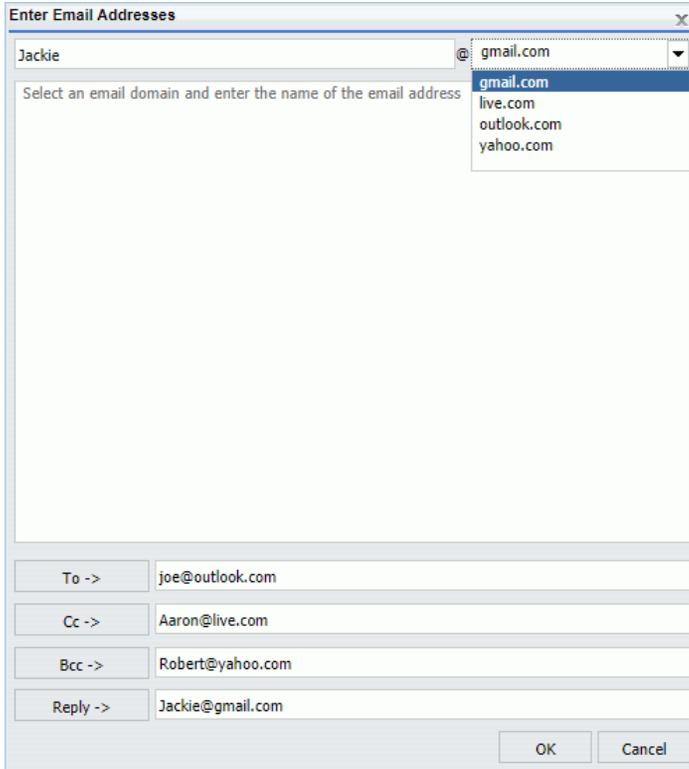
After you enter an email address and choose a domain, click the *To*, *Cc*, *Bcc*, or *Reply* button to assign the email address to the respective field.

Notification

The Notification folder in the Configuration tab contains default notification settings.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Notification Defaults section		

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Notify Mail Server	Optional.	Name of the mail server that distributes the notification email. If blank, ReportCaster uses the Mailhost setting as the notification mail server.
		Tip: We recommend using different mail servers for notification and email distribution. This way, if there is a problem with your Mailhost, notification will still be sent. Having separate mail servers ensures that you will be informed when the default mail server falters.
		You can also specify a port for the Notify Mailhost using *hostname:port*. If you do not specify a port or the port you specify is not present, the default port is used.
Default Notify Type	The default value is Never.	Specifies whether to send notification of the schedule status to a specified email address. Possible values are:
		❏ **Never.** This is the default value. ReportCaster does not send notification of the schedule status under any circumstance.
		❏ **On Error.** The specified users are notified when errors are encountered while running the schedule. We recommend using the On Error notification option.
		❏ **Always.** The specified user is always notified when the schedule runs.
		Note: This setting is also available in the Administration Console.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Enable Brief Notification Only	Optional.	Controls whether Full Notification is available as a scheduling option. When this check box is selected, you can only select the Brief Notification option when you schedule a report. Full Notification is not available. **Note:** Messages are displayed in the log when Full Notification is disabled. If a schedule is created before Full Notification is disabled, when the schedule executes, a Brief Notification will be sent, and a warning will be displayed in the schedule log.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Enable system notifications	Optional.	Controls whether a notification is sent to a designated administrator when a Failover event occurs, when a Distribution Server changes from Failover Mode to Full Function mode, or when a Distribution Server is stopped.
		When this option is selected, the fields within the System Notifications section must be filled out before this configuration can be saved.
		When a Distribution Server changes from Failover to Full Function mode, the body of the email will display as follows:
		The Distribution Server at *<Host>*:*<Port>* has changed from Failover to Full Function mode.
		When a Distribution Server has stopped, the body of the email will display as follows:
		The Distribution Server at *<Host>*:*<Port>* is going to stop.

System Notifications section

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Administrative Email Address	Required.	Enter the default Administrative Email Address to which you want the system notification to be sent. This value is required.
From	Optional.	Enter the default address from which you want the system notification to be sent. This value is not required.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Reply Email Address	Required.	Enter the default Reply Email Address to which you want the user receiving the email address to reply. This value is required.
Email Subject	Optional.	Enter the default Email Subject line. This value is not required.

Procedure: **How to Configure Notification**

1. From the Tools menu, click *ReportCaster Status*.

2. Click the *Configuration* button.

   Note: Authorized users can also access the ReportCaster Configuration tool from the Administration Console.

3. In the left pane, select the *Notification* folder.

4. Populate the notification fields. You can:

   ❏ Make changes to the current notification settings. For more information, refer to the preceding table.

   ❏ Supply any default values that you would like to be available at schedule creation time.

5. Click *Save*.

FTP Settings

The FTP Settings folder in the Configuration tab contains a list of FTP server configurations that ReportCaster can use for FTP distribution schedules and for Repository distribution schedules that target distribution directory nodes linked to an FTP Server. FTP Settings include details that identify the name and network location of an FTP Server. They also identify the name of the user who can gain access to the FTP Server, and additional details about the way in which the connection to that server is secured.

Predefined FTP setting configurations can be made available to basic or advanced distribution schedules. They can also be assigned to a distribution directory node designed to transfer scheduled report content to an FTP server for distribution.

The ability to transfer scheduled ReportCaster output to FTP servers enables organizations to take advantage of fast and efficient file transfer operations made possible by the less cumbersome FTP protocol, while maintaining user ID and password protected security over file transfer operations.

Understanding the FTP Settings User Interface

When no FTP Server configurations are defined, the FTP Settings folder contains a single folder that is identified as the (Default Setting), as shown in the following image.
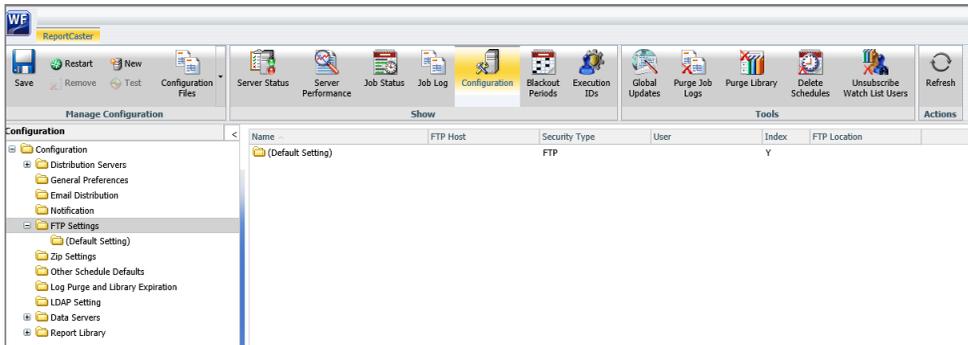
ReportCaster can direct report output to more than one FTP server, but if user-defined FTP setting configurations are created, an administrator must designate one of them as the default server for use with the basic and advanced scheduling tools. If your organization uses a single FTP server and chooses to limit the selection of FTP Servers to predefined FTP Settings, this is the only required FTP setting configuration. When additional FTP Server configurations are defined, individual folders for each one appear under the FTP Settings folder, as shown in the following image. You can add configurations for other FTP servers, but the default configuration is always defined in the (Default Setting) folder.
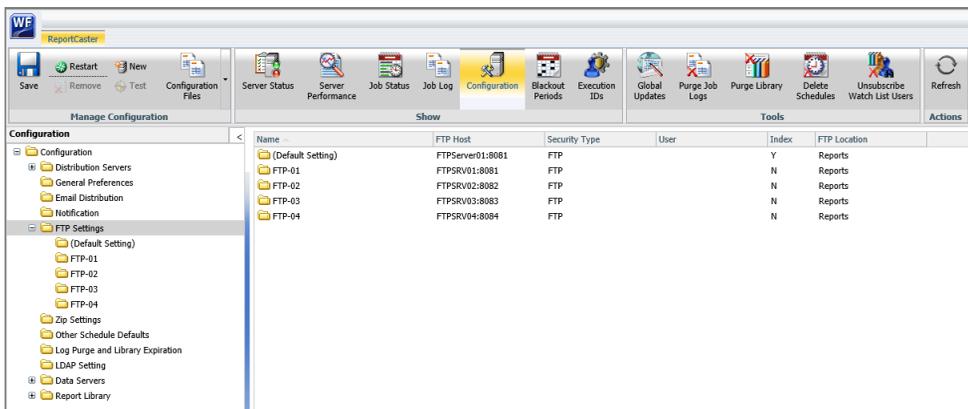
Use the options on the Configuration tab, in the Manage Configuration group, to create, update, or remove FTP Setting configuration folders, as shown in the following image.
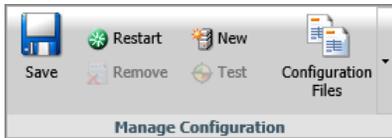
❏ **New.** Opens the FTP Settings dialog box that contains the options that define a new FTP Setting configuration.

❏ **Save.** Saves new and updated FTP Setting configurations.

❏ **Remove.** Deletes FTP Setting configurations.

❏ **Restart.** Completes the registration of each change to the FTP Setting configurations by automatically stopping and restarting the Distribution Server.

❏ **Test.** Tests the connection to a selected server or repository. This option is not relevant to FTP Configurations.

❏ **Configuration Files.** Provides options to view and download ReportCaster configuration files. This option is not relevant to FTP Configurations.

As a reminder, after making any changes to an FTP Setting configuration, you must also exit ReportCaster and WebFOCUS and stop and restart the WebFOCUS Application Server in order to see the changes on the ReportCaster Configuration tab.

The options in the Manage Configuration group are context-sensitive, meaning that they become available for selection only when the action they represent is relevant. For example, when you click an FTP Server folder in the left pane, the Remove, Restart, and Save options, which are all appropriate actions for existing FTP Setting configurations, are displayed in full color and become available for use.

Understanding FTP Configuration Details

When you click an individual FTP setting folder in the left pane, the right pane displays the details for that FTP Setting configuration.

An FTP setting configuration defines the name and location of a server that is equipped with an FTP client that can send and receive files using the FTP protocol. The configuration also includes the user ID and password required to access the FTP client on that server and the security protocol it requires.

The following table lists and describes the configuration settings that are available in an individual FTP Settings folder.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Name	Required	The name of the folder that identifies this FTP setting configuration in the Configuration tree.
		This value appears only within ReportCaster. You can use the actual name of the FTP Server or a different value that uniquely identifies a server configuration.
		The name of each FTP Setting configuration must be unique.
FTP Host	Required	The name of the FTP server used when creating an FTP schedule.
		If you want to designate a port number other than the default port number, use the following format: *hostname*:*port*.
FTP Location	Optional	The name of the FTP location (directory) used when creating an FTP schedule.
User	Optional	The ID and password of the user authorized to perform FTP file transfers.
		To access the User settings, click the icon to the right of the User field. The User dialog box opens, where you can type the user Name and Password.
		Note: The Name and Password you assign to this field must also be defined in the FTP Server identified by this configuration.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
SFTP Security Plug-in	Optional	The name of a custom-written Java class that implements the ReportCaster SFTP security interface that dynamically retrieves the value of a public key needed to connect to a secure FTP server. For configuration information, see *How to Configure FTP Settings* on page 92.
Create Index File with Burst Distribution	Required This option is selected, by default.	For an FTP distribution of burst reports, this option determines whether or not to create an index file when the schedule runs.

FTP Server Information

This server requires a File Transfer Protocol (FTP).	Optional This option is selected, by default.	This option specifies that the default setting in the schedule tool is to use FTP. When this option is selected, no additional security configuration is required.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
This server requires a secure File Transfer Protocol over TLS/SSL (FTPS).	Optional	When this option is selected, FTPS is the default value in the FTP distribution schedule tool, eliminating the need to select this option each time you use the schedule tool. If you need to override this default value, you can clear the FTPS check box in the FTP Distribution Options dialog box when you create a schedule for an FTP Server distribution. When this option is cleared, FTPS is not the default value, but you can still select it in the FTP Distribution Options dialog box when you create a schedule for an FTP Server distribution.
This server requires a secure SSH File Transfer Protocol (SFTP).	Optional	When this option is selected, SFTP is the default value for FTP distributions, eliminating the need to select this option each time you use the schedule tool. If you need to override this default value, you can clear the SFTP check box in the FTP Distribution Options dialog box when you create a schedule for an FTP Server distribution. When this option is cleared, SFTP is not the default value, but you can still select it in the FTP Distribution Options dialog box when you create a schedule for an FTP Server distribution.
Additional Check Boxes		

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Don't allow user defined FTP in Schedule	Optional	If this check box is selected, the range of available selections in the FTP Server Name field in the FTP Distribution Options dialog box for basic and advanced FTP schedules is limited to a list of predefined FTP Settings. Users are unable to type values directly into this dialog box in order to assign an FTP Server Setting configuration to an individual schedule. If this check box is cleared, the FTP Server Name field in the FTP Distribution Options dialog box for basic and advanced FTP schedules displays the value (Customized FTP) and users can type values directly into this dialog box in order to assign an FTP Server Setting configuration to an individual schedule. If more than one FTP setting configuration is created, a list of predefined FTP settings is also available in the FTP Server Name field, and users can select from those settings as well as type their own FTP setting configuration in the schedule itself. **Note:** This check box appears only on the (Default Settings) page.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Don't show in Schedule FTP list	Optional	The value in this check box is only relevant when the Don't allow user defined FTP in Schedule check box is selected in the (Default Settings) page.
		If this check box is selected, this FTP setting configuration does not appear in the FTP Server Name list of the FTP Distribution Options dialog box for FTP Schedules or in the list of available FTP Servers for distribution directory nodes defined in the WebFOCUS Administration Console.
		If this check box is cleared, this FTP setting configuration does appear in the FTP Server Name list of the FTP Distribution Options dialog box for FTP Schedules and in the list of available FTP Servers for distribution directory nodes defined in the WebFOCUS Administration Console.
		Note: This check box only appears on additional individual FTP Settings configuration pages. It does not appear on the Default Settings page.

Deploying FTP Setting Configurations

FTP Setting configurations can be used in Basic and Advanced schedules that use the FTP or Repository distribution method. Organizations can choose to limit the selection of available FTP servers to a list of predefined configurations or to accommodate a broader range of FTP servers created for individual FTP distribution schedules by selecting or clearing the Don't allow user defined FTP in Schedule check box that appears on the (Default Settings) page.

When this check box is selected, the range of FTP Setting configurations available for FTP distributions is strictly limited to a set of predefined FTP Settings as defined under the FTP Settings folder. Users cannot define a new FTP Setting configuration for an individual FTP schedule.

When this check box is cleared, individual users can select a predefined FTP Setting configuration *or* accept the (Customized FTP) option displayed, by default, and then define a new FTP Setting configuration in the FTP Distribution Options dialog box attached to individual FTP schedules. These two options are not mutually exclusive.

The range of FTP settings available for Repository distributions using a distribution directory node is always limited to the list of predefined FTP Settings. Users cannot create an FTP setting configuration for an individual distribution directory.

When one or more additional FTP setting configurations are available, the Type option appears on the Network Location page of the Administration Console, and administrators can create distribution directory nodes that can be mapped to one of the predefined FTP Setting configurations.

However, if no additional FTP setting configurations are available, the Type option does not appear on the Network Location page of the Administration Console, and users cannot create distribution directory nodes that can be mapped to a predefined FTP Setting configuration.

The FTP configuration that appears on the (Default Setting) page is not a true IBFS node. Therefore, the presence of a configuration on this page does not make the Type option appear on the Network Location page. In order to use the FTP Configuration assigned to the (Default Setting) page with distribution directories, you must create a copy of it as an additional FTP setting configuration so that it will appear in the list of predefined FTP configurations in the FTP Distribution Options dialog box for basic and advanced schedules.

Even though the ability to create FTP setting configurations for individual FTP distributions empowers users to set up FTP distribution schedules as new FTP servers become available, this capability also permits the creation and maintenance of connections to FTP servers without the benefit of a centralized management or oversight, Therefore, to maintain full control over the list of available FTP setting configurations, we recommend that administrators select the Don't allow user defined FTP in Schedule check box and limit the configuration of FTP Setting Configurations to the Configuration page list.

The creation and deployment of predefined FTP Setting configurations is a multi-stage process that uses the following sequence:

1. Identify the FTP Server clients that can be made available in predefined FTP Setting configurations and identify full details of their location, user ID, password. and security protocol, FTP, FTPS, or SFTP.

2. Create an FTP Setting configuration that can be used, by default, in FTP distributions on the (Default Setting) page.

3. To prevent users from creating their own FTP setting Configurations on FTP schedules, select the Don't allow user defined FTP in Schedule check box on the (Default Setting) page.

4. To allow users to create their own FTP setting configurations on FTP schedules, clear the Don't allow user defined FTP in Schedule check box on the (Default Setting) page.

5. Create FTP Setting configurations for each additional FTP Server client.

6. Create FTP Distribution Schedules and assign the predefined FTP Setting configurations to them.

7. Create distribution directory nodes on the WebFOCUS Administration Console Configuration tab and assign the predefined FTP Setting configurations to them.

8. Create Repository Distribution Schedules and assign the distribution directories that target the predefined FTP Setting configurations to them.

9. Test the FTP and Repository distribution schedules that use the predefined FTP configurations and adjust them as necessary.

Establishing a Default FTP Setting Configuration

The (Default Setting) configuration identifies the FTP server that will be used, by default, whenever you create a new FTP distribution schedule and must select from a list of predefined FTP setting configurations. If your organization chooses to use predefined FTP setting configurations, this is the first FTP setting configuration you should create, and it should remain available as long as you choose to use predefined FTP setting configurations.

You can override this default with other FTP setting configurations by selecting them from the FTP Server Name field in the FTP Distribution dialog box when you create or run an FTP distribution schedule. However, because this configuration does not define a true IBFS system node, it does not appear in the list of FTP setting configurations that can be assigned to a distribution directory node in the WebFOCUS Administration Console, making it unavailable for Repository distribution schedules.

To create or update the default FTP setting configuration, type and select new values directly into the (Default Setting) configuration page. The presence of an FTP configuration in the (Default Setting) folder automatically identifies it as the default configuration. There is no additional check box or feature on the FTP Settings configuration page that identifies this configuration as the default configuration. If you need to update the details of the default FTP setting configuration or replace it with the details of a different server, you must type the new values directly over the existing values from the old configuration on this page.

Procedure: **How to Create or Update the Default Settings Configuration**

The FTP Settings configuration defined in the (Default Setting) folder is automatically identified as the default FTP setting configuration. Use this procedure and the page that opens when you click the (Default Setting) folder to create or update this default configuration.

1. On the start page, select the *Main Menu*, and then select *ReportCaster Status*under the Quick Access section.

   or

   On the WebFOCUS Home Page, select *Utilities*, and then select *ReportCaster Status*.

   or

   On the Legacy home page, click *Tools*, and then click *ReportCaster Status*.

2. On the ribbon, in the Show group, click *Configuration*.

3. In the left pane, expand the *FTP Settings* folder, and then click the *(Default Setting)* folder.

4. Configure the FTP Settings in the right pane as described in *How to Configure FTP Settings* on page 92.

5. Perform the following steps to configure the range of FTP Setting configurations available for basic and advanced FTP schedules:

   a. To limit the range of available FTP setting configurations to a list of predefined configurations, select the *Don't allow user defined FTP in Schedule* check box.

   b. To allow users to create their own FTP setting configurations in addition to the list of predefined configurations, clear the *Don't allow user defined FTP in Schedule* check box.

6. When your configuration is complete, click *OK* to save your settings.

7. When you receive a message asking if you want to save the changes that you made to the ReportCaster configuration, click *OK*.

8. When you receive a message reminding you to restart the Distribution Server and reload the ReportCaster Web Application for these changes to take effect, click *OK*.

9. On the ribbon, in the Manage Configuration group, click *Restart* to apply your changes.

10. Close ReportCaster and sign out of WebFOCUS.

11. Stop and restart the WebFOCUS Application Server.

12. Sign in to WebFOCUS again and reopen ReportCaster as described in steps 1 through 4 in order to review and confirm your changes.

Procedure: **How to Create an Additional FTP Setting Configuration**

You must use the FTP Settings dialog box to create additional FTP Setting configurations, as described in this procedure. The FTP setting configurations you create using this feature are available to FTP Distribution schedules and to distribution directory nodes.

1. On the start page, select the *Main Menu*, and then select *ReportCaster Status* under the Quick Access section.

   or

   On the WebFOCUS Home Page, select *Utilities*, and then select *ReportCaster Status*.

   or

   On the Legacy home page, click *Tools*, and then click *ReportCaster Status*.

2. On the ribbon, in the Show group, click *Configuration*.

3. In the left pane, click the *FTP Settings* folder.

4. On the ribbon, in the Manage Configuration group, click *New* to open the FTP Settings dialog box.

5. Configure the FTP Settings as described in *How to Configure FTP Settings* on page 92.

6. When your configuration is complete, click *OK* to save your settings.

7. When you receive a message asking if you want to save the changes that you made to the ReportCaster configuration, click *OK*.

8. When you receive a message reminding you to restart the Distribution Server and reload the ReportCaster Web Application for these changes to take effect, click *OK*.

9. On the ribbon, in the Manage Configuration group, click *Restart* to apply your changes.

10. Close ReportCaster and sign out of WebFOCUS.

11. Stop and restart the WebFOCUS Application Server.

12. Sign in to WebFOCUS again and reopen ReportCaster as described in steps 1 through 4 in order to review and confirm your changes.

Procedure: **How to Edit an FTP Setting Configuration**

1. On the start page, select the *Main Menu*, and then select *ReportCaster Status* under the Quick Access section.

   or

   On the WebFOCUS Home Page, select *Utilities*, and then select *ReportCaster Status*.

   or

On the Legacy home page, click *Tools*, and then click *ReportCaster Status*.

2. On the ribbon, in the Show group, click *Configuration*.

3. In the left pane, expand the *FTP Settings* folder, and click the folder you want to update.

4. Configure the FTP Settings in the right pane as described in *How to Configure FTP Settings* on page 92.

5. When your edits are complete, on the ribbon in the Manage Configuration group, click *Save* to save your settings.

6. When you receive a message asking if you want to save the changes that you made to the ReportCaster configuration, click *OK*.

7. When you receive a message reminding you to restart the Distribution Server and reload the ReportCaster Web Application for these changes to take effect, click *OK*.

8. On the ribbon, in the Manage Configuration group, click *Restart* to apply your changes.

9. Close ReportCaster and sign out of WebFOCUS.

10. Stop and restart the WebFOCUS Application Server.

11. Sign in to WebFOCUS again and reopen ReportCaster as described in steps 1 through 4 in order to review and confirm your changes.

Procedure: **How to Configure FTP Settings**

1. In the FTP Settings dialog box, or on the FTP Settings page, populate the FTP Settings fields, using the following information as a guideline:

   ❑ **Name.** Type a unique name to identify the folder for this FTP Server configuration. This name will not be used when creating an FTP schedule. Each name must be unique.

   ❑ **FTP Host.** Type the name of the FTP Server that is targeted by this connection. This name will be used when creating an FTP Schedule.

   ❑ **FTP Location.** Type the name of the directory on the FTP server that is targeted by this connection. This name will be used when creating an FTP schedule.

   ❑ **User.** Type the ID and password of the user that will be used to perform file transfers to this FTP server.

   ❑ **SFTP Security Plug-in.** If your SFTP Server uses encryption keys, you can use the SFTP Security Plug-in to provide these values. To use this plug-in, type the name of the custom-written Java class that implements the SFTP Security interface to dynamically retrieve the value of a public key needed to connect to a secure FTP server. To use the default implementation, see *How to Use the Default Implementation for the SMTP Security Plug-in* on page 69.

2. If this FTP Server should generate an index file when used in an FTP schedule, select the *Create Index File with Burst Distribution* check box.

3. In the FTP Server Information section, click one of the following options:

   ❏ **This server requires a File Transfer Protocol (FTP).** This is the default selection. Accept this selection if the FTP server does not require SFTP or FTPS.

   ❏ **This server requires a secure File Transfer Protocol over TLS/SSL (FTPS).** Click this option if the FTP Server requires a secure file transfer protocol, and select the Security Mode, Protocol, and Data Connection Security settings that identify the relevant characteristics of the FTPS server connection.

   ❏ **This server requires a secure SSH File Transfer Protocol (SFTP).** Click this option if the FTP server requires FTPS, and select the type of authentication you want for the server.

Procedure: **How to Use the Default Implementation for the SFTP Security Plug-in**

1. On the ReportCaster Console ribbon, in the Show group, select *Configuration*.

2. In the left pane, expand the *FTP Settings* folder and select the FTP Setting configuration folder that requires an SFTP Security Plug-in.

   The right pane displays the FTP Settings and values for your selected configuration.

3. Enter the name of the SFTP Security Plug-in program in the SFTP Security Plug-in field. The default program name is:

   ```
   ibi.broker.scheduler.plugin.DefaultSFTPSecurityExit
   ```

   For more information about the default SFTP Plug-in, refer to the ibi.broker.scheduler.plugin package description found in the ReportCaster API Specifications document, located at *https://webfocusinfocenter.informationbuilders.com/ javadoc/rcaster/index.html*.

4. On the ribbon, in the Manage Configuration group, select *Save*.

5. When you receive a message asking you to confirm your decision to save changes, click *OK*.

6. When you receive a message reminding you to restart the distribution server and reload the web application, click *OK*.

   Note: You will reload the web application and restart the distribution server later in this procedure.

7. Stop the WebFOCUS Application Server.

8. Open a text editor and create a file called sftp_private_key.txt.

9. Generate an encrypted private key using the ssh-keygen tool.

    For more information about the ssh-keygen tool, see the online OpenBSD manual at: *http://man.openbsd.org/OpenBSD-current/man1/ssh-keygen.1#NAME*

10. Copy and paste the text of the private key generated by the ssh-keygen tool to the sftp_private_key.txt file.

11. In your file system, navigate to the ...ibi\WebFOCUS*nn*\ReportCaster\cfg directory, where *nn* is the release number of your WebFOCUS software.

    If you are using a UNIX environment, the correct file path is ../ReportCaster/cfg.

12. Save the sftp_private_key.txt file to the cfg directory.

    The following image shows the sftp_private_key.txt file saved to the cfg directory.

Name	Date modified	Type	Size
dsKeystore.jks	3/8/2018 5:13 PM	JKS File	3 KB
log4j	3/8/2018 5:16 PM	XML Document	3 KB
log4j_stop	3/8/2018 5:16 PM	XML Document	2 KB
log4jUtil	3/8/2018 5:16 PM	XML Document	2 KB
rametrics	3/8/2018 5:16 PM	FEX File	1 KB
Readme	3/8/2018 5:16 PM	Text Document	1 KB
zipencrypt	3/8/2018 5:16 PM	Text Document	1 KB
log4j2	5/13/2018 10:39 PM	XML Document	10 KB
log4j2_stop	5/13/2018 10:39 PM	XML Document	2 KB
log4j2_util	5/13/2018 10:39 PM	XML Document	2 KB
sftp_private_key	6/1/2018 3:54 PM	Text Document	1 KB

13. Restart the WebFOCUS Application Server.

14. Sign in to WebFOCUS again and open the ReportCaster Console.

15. On the ReportCaster Console ribbon, in the Manage Configuration group, select *Restart* In order to restart the Distribution Server.

    If the default SFTP Plug-in is in use, the Distribution Server will attempt to authenticate to the SFTP Server using the private key found in the sftp_private_key.txt file for any scheduled distribution directed to an FTP server that uses SFTP authentication.

Procedure: **How to Remove an FTP Setting Configuration**

1. On the start page, select the *Main Menu*, and then select *ReportCaster Status* under the Quick Access section.

    or

    On the WebFOCUS Home Page, select *Utilities*, and then select *ReportCaster Status*.

    or

On the Legacy home page, click *Tools*, and then click *ReportCaster Status*.

2. On the ribbon, in the Show group, click *Configuration*.

3. In the left pane, expand the *FTP Settings* folder, and click the folder you want to remove.

4. On the ribbon, in the Manage Configuration group, click *Remove*.

5. When you receive a message asking if you want to save the changes that you made to the ReportCaster configuration, click *OK*.

6. When you receive a message reminding you to restart the Distribution Server and reload the ReportCaster Web Application for these changes to take effect, click *OK*.

7. On the ribbon, in the Manage Configuration group, click *Restart* to apply your changes.

8. Close ReportCaster and sign out of WebFOCUS.

9. Stop and restart the WebFOCUS Application Server.

10. Sign in to WebFOCUS again and reopen ReportCaster as described in steps 1 through 4 in order to review and confirm your changes.

The folder for the FTP Settings configuration no longer appears in the left pane.

Zip Settings

The Zip Settings folder in the Configuration tab contains settings for adding an extension to a distributed Zip file, the Zip encryption to use for distribution, and defining a Zip encryption password plug-in.

The Zip Settings folder contains the following configuration settings.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Add Zip Extension to Filename if Not Specified	Required. By default, this option is selected.	Controls whether or not the .zip file extension will be automatically appended to the Zip file name entered by the user in a schedule distributed by email or FTP. Select this option if you want to automatically append .zip to the entered file name. Do not select this option if you want to use the file name as entered by the user and not have .zip automatically appended to the file name.
Zip Minimum with Email Distribution	Required. The default size is in KB and set to 0.	Select either MB or KB and customize the size of your file using the up and down arrows. .

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Zip Encryption Password Plug-in	Required. Default value is None.	Global setting that enables you to password protect and encrypt scheduled output distributed in a Zip file. This setting controls how passwords are obtained by the Distribution Server. The zip encryption is AES 256. For more information, see *How to Configure the Default Zip Encryption Password Plug-in* on page 100. Possible values are: ❏ **None.** Do not use a plug-in to return the password for Zip protection. When set to None, you have the option to use the Zip encryption password feature by embedding the password in either a Dynamic Distribution List or a Distribution File rather than using a plug-in. ❏ **Default.** Use the provided default plug-in to return a password for the Zip encryption password feature. ❏ **Custom.** Use the provided custom plug-in named in the Zip Encryption Pwd Plug-in Name setting.
Zip Encryption Password Plug-in Name	Required when Zip Encryption Password Plug-in setting is Custom.	Type the name of a custom written plug-in that will return passwords. This plug-in must be available to the Distribution Server.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Zip Encoding	Optional.	Specifies an encoding other than the default encoding of the ReportCaster Distribution Server platform. The encoding specified must match the encoding used by WinZip or any other Zip utility installed on the Distribution Server. **Note:** This setting is also available in the Administration Console.
Maximum Concurrent Compressions	Optional The default value is zero (0).	The total number of compression operations that the Distribution Server will perform simultaneously. If many running jobs include a compression operation (for example, zipping the output before sending), the compression operations could consume all of the available resources on the Distribution Server. You can lower this number to prevent this from occurring.
Use Distributed Filename for FTP Archive Filename if Archive Filename not Specified in Schedule	Optional.	If this box is checked, then when a schedule is created that uses FTP as the distribution method and the archive file name is left blank, the Distribution Server will use the name found in the FTP Distribution List as the name of the archive file to be distributed.

Using the Zip Encryption Protection Default Plug-in

The default plug-in provided with ReportCaster enables the encryption password to be associated with the Managed Reporting Domain where the scheduled report resides. Therefore, the default plug-in can only be used to password protect reports stored in the ReportCaster Repository in the Domains folder path. For information on customizing a Zip Encryption Protection Plug-in, see *How to Configure the Default Zip Encryption Password Plug-in* on page 100.

For more information about the Zip Encryption Password plugin, see the ibi.broker.scheduler.plugin description found in the ReportCaster API Specifications document, located at *https://webfocusinfocenter.informationbuilders.com/javadoc/rcaster/index.html*.

The plug-in delivers the password to the Distribution Server at schedule execution time, where the output is then encrypted and zipped. To use the default plug-in, choose *Default* for the Zip Encryption Password Plug-in setting. The default plug-in references the password file, zipencrypt.txt, for the domain and password. During installation, an empty version of this file is included in the .../ReportCaster/cfg directory.

The password statement in this file must be in the following format:

```
domain, domainhref, password,$
```

where:

domainhref

Is the location of the HTML page (for example, untitled/untitled.htm) that contains the ReportCaster Repository folder.

password

Is the password to open content from the associated domain.

Note: The ReportCaster log will indicate that encryption was used.

The guidelines for using the default plug-in are:

❏ The zipencrypt.txt file must be in the .../ReportCaster/cfg directory.

❏ The zipencrypt.txt file must contain the ReportCaster Repository folder of the ReportCaster Repository report.

   Note: Since a ReportCaster Repository folder is required to use the Zip Encryption Password Plug-in, attempting to enter a task other than a ReportCaster Repository report will result in a failure to distribute the output of that task.

❏ If the zipencrypt.txt file contains an entry with the Managed Reporting Domain, but no password, then the output is not encrypted and will be zipped or not zipped according to the Zip option selected in the schedule when it was created.

❏ If both the Managed Reporting Domain and a password are in the password file, then the output is zipped regardless of the Zip option selected in the schedule when it was created.

To edit the zipencrypt.txt password file:

1. From the bin directory on the Distribution Server, run the decode utility, *decdpwds*.

Note: Once the decdpwds utility is run, a log file named decdpwds.log will be created in the ...ibi/WebFOCUS8x/ReportCaster/log directory.

2. Make the necessary additions or edits, such as adding a domain or changing the password.

3. Run the encode utility, *encdpwds*, to encrypt the file.

Note: Once the encdpwds utility is run, a log file named encdpwds.log will be created in the ...ibi/WebFOCUS8x/ReportCaster/log directory.

For more information about the Zip Encryption Password plugin, see the ibi.broker.scheduler.plugin description found in the ReportCaster API Specifications document, located at *https://webfocusinfocenter.informationbuilders.com/javadoc/rcaster/index.html*.

Procedure: How to Configure Zip Settings

1. From the Tools menu, click *ReportCaster Status*.

2. Click the *Configuration* button.

   Note: Authorized users can also access the ReportCaster Configuration tool from the Administration Console.

3. In the left pane, select the *Zip Settings* folder.

4. Populate the Zip Settings fields using the information provided in the preceding tables.

5. If you want to produce zipped output that is encrypted and password protected, you can use the Zip Encryption Password Plug-in. To use your own program to supply the password, select *Custom* from the drop-down list and enter the name of the program in the Zip Encryption Password Plug-in Name field. To use the default, select *Default*. For more information, see *How to Configure the Default Zip Encryption Password Plug-in* on page 100.

6. Click *Save*.

Procedure: How to Configure the Default Zip Encryption Password Plug-in

1. From the Tools menu, click *ReportCaster Status*.

2. Click the *Configuration* button.

3. In the left pane, select the *Zip Settings* folder.

4. From the Zip Encryption Password Plug-in drop-down list, select *Default*.

   The default implementation requires that Inline Email be disabled.

   If you click *OK*, Inline Email is automatically disabled.

5. Click *Save*.

6. In the .../ReportCaster/cfg directory, create the zipencrypt.txt file that contains the passwords used by the Zip Encryption Password Plug-in.

   This file has the following structure:

   ```
   Domain, domainhref, Password,$
   ```

   where the first column is the word Domain, the second column identifies the folder containing the report to be scheduled, and the third column is the password.

   Note: Only ReportCaster procedures can be scheduled when this plug-in is configured. If a password is found, the output is encrypted. If a password is not found, the output is zipped but not encrypted.

7. Restart the Distribution Server.

Other Schedule Defaults

The Other Schedule Defaults folder in the Configuration tab contains settings for Schedule End Date and Schedule End Time.

Note: Depending on your time zone, the default Schedule End Date may be set to Jan 1, 2100.

The following table lists and describes the configuration settings available in the Other Schedule Defaults folder.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Schedule End Date	Required.	Clicking the drop-down menu displays a calendar where you can select the schedule end date.
Schedule End Time	Required.	Manually, you can enter an end time for the schedule. Alternatively, use the arrows to assign a schedule end time.

Log Purge and Library Expiration

The Log Purge and Library Expiration folder in the Configuration tab contains settings for purging log files, log purge periods, and log purge times.

The Log Purge and Library Expiration folder contains the following configuration settings.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Purge Log at Distribution Server Start	Optional. By default, the check box is unchecked.	When selected, log reports are automatically purged each time the Distribution Server starts. This is in addition to the scheduled log purging that is set using the Log Purge Period and Log Purge Time options.
Daily Scheduled Log Purge and Library Expiration section:		
Log Purge Period (Days)	Optional.	Automatically purges individual log reports when they are older than a set number of days. To disable daily scheduled log purges, set the Log Purge Period (Days) value to 0. **Note:** This setting is also available in the Administration Console.
Log Purge Time	Optional.	Time at which log purging occurs. **Note:** This setting is also available in the Administration Console.

LDAP Setting

ReportCaster can be configured to retrieve email address information from an LDAP data source. The leading mail server software vendors use LDAP for storage of email information. This includes Active Directory on Windows platforms.

The LDAP Setting folder in the Configuration tab contains settings to define LDAP server connection and security, as well as LDAP email settings.

The LDAP Settings folder contains the following configuration settings.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
General Setting section		
Active Directory	By default, this option is not selected.	Select if you are using the Active Directory technology for LDAP. Do not select if you are using any other technology for LDAP.
Secure Connection (SSL)	By default, this option is not selected.	Indicates whether or not SSL (Secure Sockets Layer) is used to communicate with the LDAP server.
LDAP Host	There is no default value.	Host name or IP address of your LDAP directory server.
LDAP Port	Default value is 389.	Port on which the directory server listens.
LDAP Search Base	There is no default value.	Filter for LDAP searches. Only the subtree below the search base is available for LDAP queries. For example, dc=tibco, dc=com.
Search Time Out	Default value is 120.	Time, in seconds, that ReportCaster can search an LDAP data source before timing out.
Security Principal	No default value.	Service account of the user performing authentication. The user must have sufficient access rights to locate user entries in the directory. Select the icon to the right of this option to open the User dialog box, where you can type a user name and password.
LDAP Email Setting section		

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Email LDAP Enabled	By default, this option is not selected.	Indicates whether ReportCaster is enabled to retrieve email address information from an LDAP data source.
Email Map	Default value is mail.	Attribute type for email entries.

Email User Filter	Default value provided is dependent on the LDAP Type selected.	Filter for email entries to be retrieved. For example:
		
		`(& (mailnickname=*)`
		`(|(&(objectCategory=person)`
		`(objectClass=user)(!(homeMDB=*))`
		`(!(msExchHomeServerName=*)))`
		`(&(objectCategory=person)`
		`(objectClass=user)(|(homeMDB=*)`
		`(msExchHomeServerName=*)))`
		`(&(objectCategory=person)`
		`(objectClass=contact))`
		`(objectCategory=group)`
		`(objectCategory=publicFolder)))`

First Name Map	Default value is givenName.	Attribute for first name entries.
Last Name Map	Default value is sn.	Attribute for last name entries.

Data Servers Settings

The Data Servers folder in the Configuration tab contains settings to configure the Reporting Servers associated with ReportCaster. Using the configuration settings in this folder, you can also configure multiple Reporting Servers with ReportCaster.

Note: Data Server connection information is stored in the WebFOCUS Client, and not in ReportCaster. ReportCaster runs scheduled procedures through the WebFOCUS Client which is installed with the Distribution Server. When a ReportCaster job is executed by the WebFOCUS Client, the alternate deferred server is used if an alternate deferred server is defined. For more information about configuring alternate deferred servers, see the *TIBCO WebFOCUS® Security and Administration* technical content.

The Data Servers folder contains the following configuration settings.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Settings for the Data Servers folder:		
Graph Agents	The default value is 1.	Optimizes the processing of graphs. Due to performance considerations, we recommend configuring this setting to 1 Graph Agent for each concurrent graph report. However, your own internal testing should determine the Graph Agent value that best suits the business needs of your organization.
Graph Servlet URL	Optional. There is no default.	Overrides the default graph server setting and configures graph image files to be created on the Application Server. Type the following value `http://hostname/context_root/ IBIGraphServlet` where: `hostname` Is the host name of the Application Server where the WebFOCUS Client is installed. `context_root` Is the site-customized context root for the WebFOCUS web application deployed on your Application Server. The default is ibi_apps. This setting is available for Reporting Server and WebFOCUS procedures. This setting should not be used when web server security is enabled. This includes Basic authentication, IWA, SSL, and third-party security products (such as SiteMinder). In these cases, the web server security settings can prevent WebFOCUS from creating the graph.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values

Excel Servlet URL	Optional.	Specifies the application server to be used to zip the file components that comprise an EXCEL® 2007 file (.xlsx) as follows:
		
		`&URL_PROTOCOL`://*servername*/*alias*/`IBIEXCELSERVURL`
		
		where:
		
		`URL_Protocol`
		
		    Is HTTP.
		
		servername
		
		    Is the name of the application server where the WebFOCUS Client is installed.
		
		alias
		
		    Is the context root of the WebFOCUS application. The default is ibi_apps.
		
		This setting is available for the Reporting Server and WebFOCUS procedures. This setting should not be used when web server security is enabled. This includes Basic authentication, IWA, SSL, and third-party security products (such as SiteMinder). In these cases, the web server security settings can prevent WebFOCUS from creating the Excel 2007/2010 file.

FOCEXURL/ FOCHTMLURL	Default value is `http://localhost:8080`	Specifies the fully-qualified URL, including host name and port of the FOCEXURL/FOCHTMLURL. If running with SSL security, update the URL to specify https.

Settings for an individual Data Server:

Name	Required.	Name of the selected Data Server. **Note:** Data Server names are case-sensitive. Data Servers are defined in the WebFOCUS Client as uppercase so you should also define Data Servers as uppercase in ReportCaster.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Default	Required.	This option is selected by default.
Set FOCEXURL/ FOCHTMLURL in the scheduled procedure	Required.	This setting is selected, by default. If this setting is not selected, the Distribution Server will not set the value of FOCEXURL or FOCHTMLURL for a scheduled procedure. Therefore, when cleared, if FOCEXURL or FOCHTMLURL is already set in the edasprof.prf file, this setting remains in effect, unless it is overridden in the scheduled procedure.
Security section		
Security Type	By default, this option is set to User.	**Static.** A valid Execution Id and password is supplied in the User setting. When creating a schedule, you cannot specify an Execution Id and password.
		User. A valid Execution Id and password must be specified when creating a schedule.
		Shared. When creating a schedule, the user ID and password is internally assigned as the Execution Id and password.
		Note: Since the actual password is not stored in the WebFOCUS repository, the Shared configuration can only be used when a password is not required to connect to the Reporting Server.
		Trusted. The Execution Id is the schedule owner and no password is sent to the Reporting Server when schedules run.
		Note: The Reporting Server must be a configured to accept a Trusted connection when the Trusted option is selected.
User	Required if Security Type is set to Static.	Default Execution Id and password.
		To access the ID and password, select the icon to the right of the User field. The User dialog box opens, where you can type the user name and password.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Graph section		
Graph Engine	Required. The value is GRAPH53.	Controls which graph engine to use for server-side graphics. By default, this specifies the GRAPH53 setting.
Headless	By default, this option is not selected.	Determines whether a graphics card exists on the Reporting Server. When not selected (the default), a graphics card exists on the server. When selected, no graphics card exists on the server.
Maximum Connection/Threads	Required. The default connection is 3.	Maximum number of connections available to the Reporting Server. You can specify any maximum that can be supported by your hardware and memory.

Configuring Reporting Servers With ReportCaster

You can configure multiple Reporting Servers with ReportCaster through the Data Server folder in the ReportCaster Configuration tab. Although the installation program automatically populates values for the default EDASERVE server, all additional Reporting Servers must be added to the configuration manually.

Note: If the default Reporting Server is changed on the Client, then the change will not be effective until the period specified by the IBFS Cache Cleaner service or until the Distribution Server is restarted. If the Distribution Server is installed on another machine with a separate copy of the Client, then a change to the default Reporting Server will not be effective until the same change is made on the Client installed on the same machine as the Distribution Server.

Procedure: **How to Add a Reporting Server**

1. In the left panel of the Configuration tab, select the *Data Servers* folder, then select *New* in the toolbar.

   Note: The default Data Server names are SERVER, SERVER 2, SERVER 3, and so on.

2. From the Available Data Servers dialog box, select one or more Data Servers, and click *OK*. You can optionally select the *Select All* check box.

3. Double-click the new server node in either the Data Servers folder in the left panel or the server list in the right panel.

   The right panel displays the default properties for the selected server .

4. Provide values for the appropriate settings.

   In the Name field, verify the name of the server you want to add to the ReportCaster configuration is the same as the NODE setting for that server specified in the WebFOCUS Client Server Connections configuration. You can review the WebFOCUS Client Server Connections by accessing the Administration Console and selecting Reporting Servers within the Configuration tab.

   Optionally, provide values for the Security Type and Maximum Connections settings or leave the default values in place.

   You can also optionally set the Data Server being added to be the default Data Server when new schedules are created, specify not to have the FOCEXURL and FOCHTMLURL settings automatically added when scheduled jobs run, and specify that the Data Server does not have a graphics card, is Headless.

5. To implement the changes in Report Broker, in the Configuration tab toolbar, select *Save*, then *Restart*.

Caution: We recommend that you avoid changing the name of a Reporting Server, since all existing jobs on that server will no longer run.

Report Library Settings

The Report Library folder in the Configuration tab contains settings for Library distribution. The Report Library folder also contains the Additional Library Settings and Watch List Settings folders. You can specify the Library Access Option in the Additional Library Settings folder, and set library watch list options in the Watch List Settings folder.

The Report Library folder contains the following configuration settings. In addition, the Report Library version expiration processing occurs one hour after the time specified by the *Log Purge Time* setting located in the settings folder.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Settings for the Report Library Folder:		
Library Distribution Options	Required.	Provide the ability to restrict the Access Options or Email for Library option that appear in WebFOCUS when distributing scheduled output to the Report Library.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Default Library URL for Email Notification	Required. Configured during the Distribution Server installation. Default value is http://*hostname*:*port*/ibi_apps/library/libreport.jsp (where *hostname* is the host name of the ReportCaster web application. Specify the *port* only if it is not the default value of 8080).	URL included in the email notification that enables you to access specific content in the Report Library. This is the Library URL value in the Distribution tab of the Basic Scheduling Tool and the Advanced Scheduling Tool when the distribution method is Library and the Send an Email after Report saved to Library option is selected. **Note:** If this field is blank, then no report ID or burst values are sent with the email notification.
Use Default Library URL for Email Notification	Required.	**Selected.** The Distribution Server will always use the URL in the WebFOCUS configuration file when sending notifications. **Not selected.** The Distribution Server will not automatically use the URL in the WebFOCUS configuration file when sending notifications. The URL value that is specified in the schedule is used. **Note:** Javascript in the output of a URL task distributed to the Report Library may cause a script error when the report is opened from a Library notification email.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Send Report Id And Version With Notification Email	Required.	**Selected.** Report ID and burst values are sent with the email notification of the distribution. **Not selected.** Report ID and burst values are not sent with the email notification of the distribution.
Select Compression Option in Schedule by Default	By default, this option is not selected.	**Selected.** WebFOCUS will compress files stored in the Report Library. **Not selected.** WebFOCUS will not compress files stored in the Report Library.

Settings For The Additional Library Settings folder:

Library Expiration section

Version	Selected by default.	The Report Library stores the output for the most recent number of versions specified. You can indicate a numeric value up to 9999. Use the up and down arrows to select the number of versions.
Day	Optional. Version is the default Library Expiration option.	The Report Library stores the report for the number of day(s) specified. You can indicate a numeric value up to 9999. Use the up and down arrows to select the number of days.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Week	Optional. Version is the default Library Expiration option.	The Report Library stores the report for the number of week(s) specified. A numeric value up to 9999. Use the up and down arrows to select the number of weeks.
Month	Optional. Version is the default Library Expiration option.	The Report Library stores the report for the number of month(s) specified. A numeric value up to 9999. Use the up and down arrows to select the number of months.
Year	Optional. Version is the default Library Expiration option.	The Report Library stores the report for the number of year(s) specified. A numeric value up to 9999. Use the up and down arrows to select the number of years.
Never Expire	Optional.	The Never Expire option is enabled by default. Click the Enabled checkbox to disable this option. This option controls the option to select *Never Expire* when scheduling a report to run using the Report Library option.

Library Access Option section

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Private (Accessible only to the owner)	Optional.	Only the Owner of the schedule is authorized to access the Library report. This is the default value.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Published (Accessible according to ReportCaster security policy)	Optional.	All users that are authorized to view the Library report in the folder location it is stored in can access the report. The destination folder of the Library report must be a published folder and the schedule owner must be authorized to publish content in this folder.
Shared (Appears under Shared Content Folder)	Optional.	All users that are authorized to view the Library report in the folder location it is stored in can access the report. The report appears under a Shared Content folder.
Shared with (Appears under Shared Content folder according to Library Access List)	Optional.	Only the groups or users defined in the Access List, and the owner of the schedule, are authorized to access the report. The report appears under a Shared Content folder.

InfoSearch section

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Index Library Output	Optional. By default, this check box is not selected.	Select this check box if you want future Report Library distributions to be added to a searchable index. If this option is enabled, all future Report Library distributions will be searchable using InfoSearch. When a schedule distributes a report to a Report Library while this option is selected, the log report of the schedule will indicate that the Library output was fed to Magnify, a WebFOCUS search software. For more information, see the *Understanding InfoSearch* technical content.

Settings for the Watch List Settings folder:

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Enable Library Watch List	This check box is selected by default.	**Enabled**. When the user right-clicks a Library Report in the Repository, the Subscribe option is made available, allowing a user to subscribe to the Library Report. **Not Enabled**. When the a user right-clicks a Library Report in the Repository, the Subscribe option is hidden.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Email From	Optional.	Name of either the person, department, group, and so on, that is sending the Watch List email notification. This notification informs the recipient that a new version of a report procedure (FEX) on the Watch List has been sent to the library. The notification includes the report job description and a link to the report procedure (FEX).
Email Message	Optional.	Message in the body of the Watch List notification email.
Email Reply Address	Optional.	Email address that will receive any reply responses from the Watch List notification email.
Email Subject	Optional.	Text that will appear in the Watch List notification email subject line.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Notify Mode	Optional. The default value is Watch List Notification Only.	If the report schedule is set to send an email notification when the report procedure (FEX) is saved to the library and the report procedure (FEX) is subscribed to the Watch List, then: ❏ **Watch List Notification Only.** You will only receive the Watch List notification email. ❏ **Watch List and Schedule Notification.** You will receive both the schedule library notification email and the Watch List notification email. ❏ **No Watch List Email Notification.** You will receive no Watch List email notifications.

Restricting Library Distribution Options

The Library Distribution Options enable you to select the Library Access options and Email for Library options available to users in the Basic Scheduling tool and Advanced Scheduling tool when distributing scheduled output to the Report Library.

Procedure: **How to Restrict Library Distribution Options**

1. In the WebFOCUS Configuration tab, select the Report Library folder.

2. Click the icon to the right of the Library Distribution Options field.

   The Library Distribution Options dialog box opens.

   The following Library Distribution Options are available.

   Library Access. Designates the options that appear in the Access Type drop-down menu in the Basic Scheduling tool. The available options are:

   ❏ **Owner (Private).** When selected, the Owner (Private) option appears.

❏ **Share to Everyone.** When selected, the Share to Everyone option appears.

❏ **Access List (Share Advanced).** When selected, the Access List (Share Advanced) option appears.

❏ **Published.** When selected, the Published option appears.

Note: An authorized user can change the Shared or Published status of a Library item from the right-click menu of the item in the Resources tree. If a Library item is originally created with a status of Private and is subsequently changed to Shared or Published from the Resources tree, the Access Option Private in the schedule will not be applied at schedule execution time. This only occurs in cases where the schedule that creates subsequent versions of the Library report is not changed to reflect this updated status. The Library item will retain the updated Shared or Published status and a warning message will be displayed in the schedule log indicating this fact.

Library Email. Designates who has access to the email notification option, Send an Email after report procedure (FEX) saved to Library, in the Basic Scheduling tool. The available options are:

❏ **Owner (Private).** When selected, the email notification option is available when the Access Type, Owner (Private) is selected.

❏ **Share to Everyone.** Disabled. Library email notification is not available when the Access Type, Share to Everyone is selected.

❏ **Access List (Share Advanced).** When selected, the email notification option is available when the Access Type, Access List (Share Advanced) is selected.

❏ **Published.** Disabled. Library email notification is not available when the Access Type, Published is selected.

Note: The Library Email option is available only when the corresponding Library Access option is selected.

3. Click *OK* to save the changes and exit the Library Distribution Options dialog box. You can also click *Cancel* to cancel the changes and exit the dialog box.

Using Blackout Periods

Blackout Periods are those dates and times on which schedules will not run and cannot be set to run. A user authorized to access the Blackout Periods tool can view, define, update, import, extract, and delete blackout periods.

To view schedule blackout periods, select *Blackout Periods* from the Show group in the Console. The Blackout Periods interface provides a calendar in the left panel and the right panel lists the blackout dates you are authorized to manage.

Users authorized to manage blackout periods can add new blackout periods, delete blackout periods, replace the description of existing blackout periods, import blackout period information defined within a file, and extract existing blackout period information to a file for future use. In the ReportCaster Blackout Periods interface, these tasks can be completed using the following features:

❏ The Blackout Date and Time dialog box, accessed from the New and Edit buttons in the Manage Blackout Periods group.

❏ The Import Dates dialog box, accessed from the Import button in the Manage Blackout Periods group.

❏ The Extract Blackout Dates dialog box, accessed from the Manage Blackout Periods group.

You can change the month or year using the arrows at the top of the calendar. Dates only appear as available or unavailable. You can show or hide the left panel by clicking the arrow in the top-right corner of the left panel.

Reference: Blackout Period Configurations

Every type of Blackout Period profile shares the same basic settings: Group Assignment, Name, Description, Details, and Blackout Time. Within that basic configuration, there are four types of Blackout Periods that accommodate differing scheduling requirements. These include:

❏ **Weekly Blackout Periods.** Recur on a specified day or days of the week.

❏ **Monthly Blackout Periods.** Recur on a specified monthly date or dates.

❏ **Single Day Blackout Periods.** Occur only once on a specified date.

❏ **Every Day Blackout Periods.** Recur at a specified time every day.

This variety of profiles enables you to build blackout periods into your reporting schedule that accommodate those regularly recurring and special one-day events that would cause you to suspend reporting.

Reference: Basic Blackout Period Settings

The Blackout Date and Time dialog box contains settings that define the timing and frequency of a scheduled Blackout Period. There are four variations of this dialog box to accommodate the Weekly, Monthly, Single Day, and Every Day frequency options.

The following table describes settings in the Global Blackout Date and Times profile.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Group	Displays the name (Global).	Displays the name (Global).
Name	Optional. By default displays the name: Blackout-[Current Date] [Current Time] For example: Blackout-Jun 26 2015 10:27 AM	A descriptive name for the Blackout Date and Time profile. You can modify the default name by clicking within the Name field.
Description	Optional.	A detailed description of the Blackout Date and Time profile.
Details Label	Assigned to the profile after creation.	A summary of the detailed times and frequency of the Blackout Period. This is a narrative description of the selections you make in the Weeks, Days, Months, and Blackout Time fields. ReportCaster creates this description automatically when you save the profile, and updates it when you save changes to it. You cannot create, edit, or delete it directly.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Blackout Time check box	By default this check box is cleared.	**Selected.** The Blackout Period covers the hours specified in the Start (Time) and End (Time) fields. **Not Selected.** The Blackout Period covers the entire day. **Note:** If you change a profile from Single Date to any other frequency setting, you must clear this check box if the blackout period is to cover the entire day.
Start (Time)	Optional. By default, displays the current hour and minute.	The Hour and Minute in which a Blackout Period is to begin. This value is relevant only if the Blackout Time check box is selected.
End (Time)	Optional. By default, displays the time two hours *after* the current hour and minute.	The Hour and Minute in which a Blackout Period is to end. This value is relevant only if the Blackout Time check box is selected.
Frequency	Required. By default, the Weekly option is selected.	**Weekly.** Blackout periods that recur on a specified day of the week. **Monthly.** Blackout periods that recur on a specified monthly date. **Single Day.** Blackout periods that occur once on a specified date. **Every Day.** Blackout periods that recur at a specified time every day.

Procedure: **How to Configure a Blackout Period**

To configure a blackout period:

1. From the Manage Blackout Periods group on the ribbon, click *New*.

   The Blackout Date and Time dialog box opens.

2. Accept the default Name assigned to the Blackout Period profile or enter a new value for Name.

3. Type a description for the Blackout Period profile in the Description field.

4. If this blackout period must cover the entire day, leave the Blackout Time check box cleared and skip to step 7.

5. If this blackout period must be limited to a range of hours within a day, select the Blackout Time check box and configure the start and end time for the Blackout Period.

   For more information, see *How to Configure a Start Time and End Time for a Blackout Period* on page 128.

6. Click the appropriate frequency option:

   ❑ **Weekly.** Establish the frequency for the blackout period. For configuration information, see *Configuring Weekly Blackout Periods* on page 122.

   ❑ **Monthly.** Establish the frequency for the blackout period. For configuration information, see *Configuring Monthly Blackout Periods* on page 124.

   ❑ **Single Day.** Select the date for the blackout period. For configuration information, see *Configuring Single Day Blackout Periods* on page 126.

   ❑ **Every Day.** Establish the hours for the daily blackout period. For configuration information, see *Configuring Every Day Blackout Periods* on page 127.

7. Review your configuration.

   ❑ If your configuration of dates and hours is unacceptable, the OK button will not respond when you attempt to click OK. Adjust your configuration and refresh the profile by clearing and reselecting the recurring check boxes.

   ❑ If your configuration is acceptable, the OK button will be available, and the Details label will include a description summarizing your selections.

8. When your configuration is complete, click *OK*.

   An entry for the Blackout Profile appears in the right pane of the Blackout Dates window and the Blackout Date Calendar in the left pane highlights the new blackout dates.

Configuring Weekly Blackout Periods

The Weekly Blackout Period configuration bases its recurrence on a specified day of the week. It suits events that recur as part of a weekly schedule, regardless of the date on which that day falls.

Even though the name implies that this Blackout Period occurs only once a week, Blackout Periods using the weekly configuration can occur more or less frequently.

The tools in this configuration enable you to specify:

❏ The day, or days, of the week on which the blackout period will occur.

❏ The week, or weeks, of the month in which the blackout period will occur.

❏ The month, or months, of the year in which the blackout period will occur.

Instead of requiring you to enforce blackout periods on the same day each and every week, this flexible configuration enables you to schedule Blackout Periods that occur more than once a week. It also enables you to configure Blackout Periods that skip one or more weeks in a month or skip one or more months in a year.

Weekly Blackout Period Settings

If you select the Weekly option, the Blackout Date and Time dialog box displays a unique set of options that enables you to schedule Blackout Periods for specified days of the week.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
On Week of the Month Check Boxes (Left Column)	Required (At least one selection from this column.)	The week of the month check boxes list ordinal weeks of the month. When you select one, you define the week of the month in which this blackout period is to occur. That is, the first week of the month, the second week, and so on. You can select one or more individual weeks. The Select All check box automatically selects every week of the month, establishing a blackout period that takes place every week in a month.
On Days of the Week check boxes (Right Column)	Required (At least one selection from this column).	The day of the week check boxes list the days of the week. When you select one, you define the day of the week in which this blackout period will occur. That is, on Monday, Tuesday, and so on. You can select one or more individual days. The Select All check box automatically selects every day of the week, establishing a blackout period that takes place every day of your selected weeks in the month.

Setting	Optional or Required/ Default Value	Descriptions and Possible Values
Months	Required (At least one selection from this group).	The Month check boxes list the months of the year. When you select one, you define the month of the year in which this weekly black out period will occur. That is, in January, February, and so on.
		You can select one or more individual months.
		The Select All check box automatically selects every month of the year, establishing a blackout period that takes place during every month on your selected week and day.

Procedure: **How to Configure Weekly Blackout Period Settings**

To configure weekly blackout period settings:

1. From the Blackout Date and Time dialog box, click *Weekly*.

   The dialog box displays check boxes that support the Weekly frequency schedule.

   Note: In order to enable the *OK* button and save the profile, you must select at least one week, day, and month check box.

2. Select the check boxes for the week or weeks of the month in which the Blackout Period is to occur, or click *Select All* to select every week automatically.

3. Select the check boxes for the day or days of the week on which the Blackout Period is to occur, or click *Select All* to select every day of the week automatically.

4. Select the check boxes for the month or months in which the Blackout Period is to occur, or click *Select All* to select every month automatically.

Configuring Monthly Blackout Periods

The Monthly Blackout Period configuration bases its recurrence on a specified monthly date. It suits events that recur on the same date, regardless of the day of the week on which that date falls.

Even though the name implies that this Blackout Period occurs only once a month, Blackout Periods using this configuration can occur more or less frequently. They can occupy the entire day, or they can be limited to a range of hours within a single day.

The tools in this configuration enable you to specify:

❑ The day, or days, of the month on which the blackout period will occur.

❑ The month, or months, of the year in which the blackout period will occur.

Instead of requiring you to enforce blackout periods on the same day of the month, each and every month, this flexible configuration enables you to schedule Blackout Periods that occur more than once a month. It also enables you to configure Blackout Periods that skip one or more months.

Monthly Blackout Period Settings

If you select the *Monthly* option, the Blackout Date and Time dialog box displays a unique set of options that enables you to schedule Blackout Periods for specified dates of the month.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Days	Required.	The Days check boxes list the dates within a month. When you select one, you define the day of the month on which this blackout period will occur. That is, on the first day of the month, the second, the third, and so on.
		You can select one or more individual dates.
		The Select All option automatically selects every day of the month, establishing a blackout period that takes place every day during your selected months.

Setting	Optional or Required/Default Value	Descriptions and Possible Values
Months	Required.	The Months check boxes list the months of the year. When you select one, you define the month in which this black out period will occur. That is, in January, February, and so on. You can select one or more individual months. The Select All option automatically selects every month of the year, establishing a blackout period that takes place during every month on your selected day or days.

Procedure: How to Configure Monthly Blackout Period Settings

To configure monthly blackout period settings:

1. From the Blackout Date and Time dialog box, click *Monthly*.

   The Blackout Date and Time dialog box displays the check boxes that support the Monthly frequency.

   Note: At a minimum, you must select a check box for one day and a check box for one month. Until you do, the OK button will be unavailable, and you will be unable to save the profile.

2. Select the check boxes for the day or days of the month on which the Blackout Period is to occur, or click *Select All* to select every date in the month automatically.

3. Select the check boxes for the month or months in which the Blackout Period is to occur, or click *Select All* to select every month automatically.

Configuring Single Day Blackout Periods

Single Day Blackout Periods occur once, on a single, specified date. They can occupy the entire day, or they can be limited to a range of hours within a single day.

Single Day Blackout Period Settings

If you select the *Single Day* option, the Blackout Date and Time dialog box displays a copy of the Blackout Dates calendar, which enables you to select a single date for a scheduled Blackout Period.

Procedure: **How to Configure Single Day Blackout Period Settings**

1. From the Blackout Date and Time dialog box, click *Single Day*.

   The dialog box appears, displaying the calendar automatically set to the current date.

2. Click the single arrows to change the month and click the double arrows to change the year.

3. When you have found the month and year for the scheduled single day blackout period, click on the date on which you want the Blackout Period to occur.

   The calendar highlights the new date.

Configuring Every Day Blackout Periods

Every Day Blackout Periods recur every day. To prevent Every Day Blackout Periods from blocking the release of any reports, you must limit them to a range of hours within the day.

Every Day Blackout Period Settings

If you select the *Every Day* option, the Blackout Date and Time dialog box limits its display to the Beginning and End time for the Blackout Period. No other options are relevant.

Procedure: **How to Configure Every Day Blackout Period Settings**

1. From the Blackout Date and Time dialog box, click *Every Day*.

   The Blackout Time check box is selected automatically, and the dialog box displays a note reminding you to select the start and end time.

   The Start time is automatically set to the current time, and the End time is automatically set to a value two hours later.

2. To change the Start or End Time values, see *How to Configure a Start Time and End Time for a Blackout Period* on page 128.

Procedure: How to Configure a Start Time and End Time for a Blackout Period

From the Blackout Date and Time dialog box:

1. To change the hour of the start time, click in the *Hour* section of the Start field.

   a. Click the up or down arrow to move the value ahead one hour or back one hour, respectively.

   b. You can also type the hour in this section, but be careful to stay within the twelve hour range. If you enter a value outside of this range, the dialog box will automatically recalculate your value in terms of a twelve hour clock. For example, 44 hours would become 8. (44-(12X3))=(44-36)=8

   c. Ensure that the start time is earlier than the end time.

2. To change the minutes of the start time, click in the *Minutes* section of the Start field.

   a. Click the up or down arrow to move the value ahead one minute or back one minute, respectively.

   b. You can also type the minutes in this section, but be careful to stay within the sixty minute range. If you enter a value outside of this range, the dialog box will automatically recalculate your value in terms of the number of minutes within an hour. For example, 88 minutes would become 28. (88-60 = 28).

   c. Ensure that the start time is earlier than the end time.

3. To change the start time from AM to PM, click in the AM/PM section of the Start field.

   a. Click the up arrow to move from AM to PM.

   b. Click the down arrow to move from PM to AM.

   c. You can also type AM or PM directly into this section.

4. To change the hour of the end time, click in the *Hour* section of the End field.

   a. Click the up or down arrow to move the value ahead one hour or back one hour, respectively.

   b. You can also type the hour in this section, but be careful to stay within the twelve hour range. If you enter a value outside of this range, the dialog box will automatically recalculate your value in terms of a twelve hour clock. For example, 44 hours would become 8. (44-(12X3))=(44-36)=8.

   c. Ensure that the end time is later than the start time.

5. To change the minute of the end time, click in the *Minutes* section of the End field.

   a. Click the up or down arrow to move the value ahead one minute or back one minute, respectively.

b.   You can also type the minute in this section, but be careful to stay within the sixty minute range. If you enter a value outside of this range, the dialog box will automatically recalculate your value in terms of the number of minutes within an hour. For example, 88 minutes would become 28. (88-60 = 28).

c.   Ensure that the end time is later than the start time.

6.   To change the end time from AM to PM, click in the *AM/PM* section of the End field.

a.   Click the up arrow to move from AM to PM.

b.   Click the down arrow to move from PM to AM.

c.   You can also type AM or PM directly into this section.

Important: You must use the right or left arrow keys to move between the Hour, Minutes, and AM/PM sections of the Start and End fields.

If you try to use the Tab key to move between sections, you will move down to the next option instead of across to the next section of the Start or End field.

For example, if you use the Tab key to move from the Hours section of the Start field, you will move down to the Hours section of the End field, not over to the Minutes section of the Start field. To move right, you must use the right direction key instead.

Similarly, the Shift+Tab key combination will move you to the previous option, not back to a previous section within the Start or End field. To move left, you must use the left direction key instead.

Procedure: **How to Delete a Blackout Period Profile**

1.   In the left pane of the Blackout Dates dialog box, click the folder for the Group to which the Blackout Period profile you want to delete is assigned.

2.   In the right pane, click the entry for Blackout Period profile you want to delete.

3.   On the ribbon, in the Manage Blackout Periods group, click *Delete*.

4.   When you receive a confirmation message, click *Yes*.

Your newly deleted entry disappears from the right pane and the dates assigned to that entry are no longer highlighted on the Blackout Dates calendar in the left pane.

Importing Blackout Periods

You can use the Blackout Period Import operation to automate Blackout Period management tasks. Using a properly formatted import file with this tool, you can:

❏   Create new Blackout Period profiles.

❏ Remove Blackout Period profiles.

❏ Replace Blackout Period information.

❏ Perform the actions specified in an uploaded file.

The source file for the import contains the following information about a Blackout Period Profile:

❏ **Date.** The date on which the Blackout Period profile becomes effective. This date can be omitted for Every Day Blackout Period profiles.

❏ **Start Hour.** The time (HH:MM:SS) at which the Blackout Period becomes effective. This value is optional for all but Every Day Blackout Period profiles.

❏ **End Hour.** The time (HH:MM:SS) at which the Blackout Period ceases to be effective. This value is optional for all but Every Day Blackout Period profiles.

❏ **Description.** A detailed description of the Blackout Period profile.

❏ **Name.** The unique name assigned to a Blackout Period profile.

Note: Additional Codes precede entries for Weekly or Monthly Blackout Period profiles. For more information, see *Weekly Blackout Period Import File Entry Layout* on page 131 and *Monthly Blackout Period Import File Entry Layout* on page 132.

The task you select when you run an import operation determines the way in which ReportCaster uses the information in the source file for the Import.

If you select:

❏ *Add*, the import creates new Blackout Period profiles from the records in the import source file.

❏ *Remove*, the import compares date and additional information in import file records to that of existing Blackout Period profiles and removes those profiles that match the file records.

❏ *Replace*, the import compares date information in import file records to that of existing Blackout Period profiles and adds Name and Description information to them.

❏ *Use the actions specified in the file*, the import runs the add, remove, and replace operations as required by commands included in the Import file along with entries for the Blackout Period profiles affected by them.

The automation of these tasks frees you from manually creating, updating, or deleting Blackout Period profiles when operational changes, such as monthly, quarterly, or annual operation schedule updates, require a sweeping review and revision of your reporting schedule.

For example, at the start of the year, you have a file containing the dates and names of all scheduled holidays that must be incorporated into your reporting schedule. The Blackout Period Import enables you to import that file and establish the holiday blackout schedule for an entire year in a single operation. Without the import you would have to create a Single Date Blackout Date and Time profile for each holiday in the coming year.

Viewing Blackout Period Import File Format

Even though entries in the Import File format for Blackout Period records use the same basic structure, each profile type contains minor variations that identify the type of Blackout Period profile ReportCaster must create from the entry details.

Single Date Blackout Period Import File Entry Layout

You can import Single Date Blackout Date and Time profiles from a flat file that lists the information for each profile on a separate line. Each line must follow the following layout:

For example:

```
#Schedule Blackout Date Extract created 161004 102629 by admin
#for date range:(All)
#Dates Extracted from Group: administrators
##BLACKOUT DATE: yyyyMMdd/HH:mm:ss|HH:mm:ss description|name
##BLACKOUT TIME: /HH:mm:ss|HH:mm:ss description|name
##BLACKOUT PATTERN: [101000000000/00000000000000000000000000000001]/
HH:mm:ss|HH:mm:ss description|name
##BLACKOUT PATTERN: [101000000000/00001:0001000]/HH:mm:ss|HH:mm:ss
description|name
[000001000000/01000:0000100]/11:44:00|15:44:00 Administrators February 4,
2016|Blackout-Feb 4 2016 11:25 AM
```

❏ Dates use the format YYYYMMDD

❏ Hours use the format HH:MM:SS

❏ You can omit the hours to schedule an all day blackout.

The Weekly, Monthly, and Every Day Blackout Date and Time profiles use a variation of this format.

Weekly Blackout Period Import File Entry Layout

You can import Weekly Blackout Date and Time profiles from a flat file that lists the information for each profile on a separate line. Each line must follow the following layout:

```
[Blackout Pattern] [Description]|[Name]
```

For example:

```
[111111111111/10000:0000010]/17:00:00|23:59:00 Report Blackout First Friday
of Every Month 5:00 PM to 11:59 PM|First Friday Afternoons
```

This information identifies the entry as a Weekly Blackout Period, and includes its Description and Name. The Blackout Pattern indicates the selected Month(s) and Selected Day(s) of the Week. A '1' means that a month or day is selected. A '0' means that a month or day is not selected.

Monthly Blackout Period Import File Entry Layout

You can import Monthly Blackout Date and Time profiles from a flat file that lists the information for each profile on a separate line. Each line must follow the following layout:

```
[Blackout Pattern]/[Start Hour]|[End Hour] [Description]|[Name]
```

For example:

```
[111111111111/10000:0000010]/17:00:00|23:59:00 Report Blackout First Friday
of Every Month 5:00 PM to 11:59 PM|First Friday Afternoons
```

This information identifies the entry as a Monthly Blackout Period, and includes its Description and Name. The Blackout Pattern indicates the selected Month(s) and Selected Day(s) of the Month. A '1' means that a month or day is selected. A '0' means that a month or day is not selected.

Every Day Blackout Period Import File Entry Layout

You can import Every Day Blackout Date and Time profiles from a flat file that lists the information for each profile on a separate line. Each line must follow the following layout:

```
/[Start Hour]|[End Hour] [Description]|[Name]
```

For example:

```
/21:04:00|23:04:00 Every Day Blackout between 3:00 PM and Midnight|Daily
Afternoon Blackout
```

This information identifies the entry as an Every Day Blackout Period and includes its Description and Name.

Procedure: How to Add Blackout Period Profiles Using an Import File

To add a Blackout Period profile through the import utility is to create a new Blackout Period profile from information in the import file. Your Import file must therefore contain records for all Blackout Period profiles you want to add to ReportCaster through this import operation.

1. In the Blackout Dates pane, click the folder of the group for which you are importing Blackout Period profiles.

2. On the ribbon, in the Manage Blackout Periods group, click *Import*.

   The Import Dates dialog box opens.

3. In the File Name field, type the full path to the file, or click *Browse* or *Choose File* and navigate to the file you want to import.

   Note: When viewed in Internet Explorer, the dialog box displays a Browse button to the right side of this field, and the field displays no text. When viewed in Google Chrome, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file chosen. When viewed in Firefox, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file selected.

4. In the File Name field, type the full path to the file, or click *Choose File* and navigate to the file you want to import.

5. Click *Add*, and click *OK*.

   The Import Blackout Data dialog box opens, listing details of the new Blackout Profiles based on each entry in the Import file.

6. Click *Add* to add the new Blackout Period profiles listed in the Import Blackout Data dialog box to the Blackout Dates Calendar and Group entries.

   A message displays, informing you that the blackout dates have been successfully imported.

7. Click *OK*.

   The Blackout Dates calendar highlights the newly imported Blackout Period Dates in the left pane of the Blackout Dates window, and entries for the new Blackout Period profiles appear in the right pane.

Procedure: **How to Replace Blackout Periods Using an Import File**

To replace a Blackout Period profile through the import utility is to add updated information to its Name and Description fields. To ensure that the import-based update affects the proper profiles, your import file must contain records whose dates match those of the existing Blackout Period profiles that must be enriched by this Import operation.

1. In the right pane of the Blackout Dates dialog box, select the group for which you are importing Blackout Period profiles.

2. On the ribbon, in the Manage Blackout Periods group, click *Import*.

   The Import Dates dialog box opens.

3. In the File Name field, type the full path to the file, or click *Browse* or *Choose File* and navigate to the file you want to import.

   Note: When viewed in Internet Explorer, the dialog box displays a Browse button to the right side of this field, and the field displays no text. When viewed in Google Chrome, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file chosen. When viewed in Firefox, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file selected.

4. Click *Replace*, and then click *OK*.

   The Import Blackout Data dialog box opens, listing the details from each entry in the Import file that will be added to their corresponding Blackout Period profiles.

5. Click *Replace* to add new the information listed in the Import Blackout Data dialog box to the designated Blackout Period profiles.

   A message displays, informing you that the blackout dates have been successfully imported.

6. Click *OK*.

   Enriched entries for the updated Blackout Period profiles appear in the right pane.

Procedure: **How to Remove Blackout Periods Using an Import File**

Removing a Blackout Period profile through the import utility deletes it. To ensure that the import-based deletion affects the proper profiles, your import file must contain records whose dates match those of the existing Blackout Period profiles that are to be deleted by this Import operation.

1. In the Blackout Dates tab pane, select the group containing blackout period profiles that must be removed.

2. On the ribbon, in the Manage Blackout Periods group, click *Import*.

   The Import Dates dialog box opens.

3. In the File Name field, type the full path to the file, or click *Browse* or *Choose File* and navigate to the file you want to import.

   Note: When viewed in Internet Explorer, the dialog box displays a Browse button to the right side of this field, and the field displays no text. When viewed in Google Chrome, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file chosen. When viewed in Firefox, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file selected.

4. Click *Remove*, and then click *OK*.

   The Import Blackout Data dialog box opens, listing details from each entry in the import file that successfully matched an existing Blackout Period profile.

5. Click *Remove* to delete those Blackout Period profiles listed in the Import Blackout Data dialog box.

   A window opens, informing you that the blackout dates have been successfully imported.

6. Click *OK*.

   Blackout Period profiles removed by this operation are no longer highlighted in the left pane of the Blackout Dates window or as entries for the new Blackout Period profiles in the right pane.

Procedure: **How to Manage Multiple Blackout Period Updates Using an Import File**

The *Use the actions specified in the file* option allows the import process to add, remove, and replace multiple Blackout Period profiles in a single operation. Your Import file must therefore contain the all necessary commands followed by entries representing Blackout Period profiles that must be added, removed, or replaced by the import operation.

1. In the right pane of the Blackout Dates dialog box, select the group for which you are managing Blackout Period profiles.

2. On the ribbon, in the Manage Blackout Periods group, click *Import*.

   The Import Dates dialog box opens.

3. In the File Name field, type the full path to the file, or click *Browse* or *Choose File* and navigate to the file you want to import.

   Note: When viewed in Internet Explorer, the dialog box displays a Browse button to the right side of this field, and the field displays no text. When viewed in Google Chrome, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file chosen. When viewed in Firefox, the dialog box displays a Browse button to the left side of this field, and the field contains the text, No file selected.

4. Click *Use the actions specified in the file*, and then click *OK*.

    The Import Blackout Data dialog box opens, listing details from each entry in the Import file and a note about its proposed update.

5. Click *OK*.

6. When you receive the *Blackout Dates have been successfully imported* message, click *OK*.

    The Blackout Dates calendar highlights the dates of the newly imported Blackout Periods in the left pane of the Blackout Dates window. Entries for the new and enriched Blackout Period profiles appear in the right pane. Calendar highlights and entries for profiles removed by the Import no longer appear.

    Note: You will be unable to use the Edit command to update Blackout Period profiles created from a direct file import. You will be required to update these profiles using the Replace option in the Import operation.

Extracting Blackout Period Profiles

You can extract existing blackout period profile information from the ReportCaster Development Interface to a .txt file.

A direct file extract minimizes the time it would take to transfer information about multiple Blackout Periods to a text file that can serve as a backup of your Blackout Calendar configuration or as the source of an import to an external system for reporting or auditing purposes.

For example, if your group is required to maintain a backup copy of blackout dates for the coming six months, the extract operation enables you to transfer the Description, Date, and Name of all scheduled blackout periods during that time. You can recreate basic information about these profiles from the backup file in an emergency, shortening the time required to reconstruct your reporting schedule.

Extracting File Formats

The Import and Extract file operations use the same layout and format conventions. The Extract file contains additional comments that document the range of dates selected for the extract and templates for the format of the entries it contains.

For more information about each entry type layout, see *Viewing Blackout Period Import File Format* on page 131.

Procedure: **How to Extract Schedule Blackout Period Profiles to a File**

To extract schedule blackout period profiles:

1. In the Blackout Dates pane, select the group from which you are extracting blackout period profiles.

2. In the Manage Blackout Periods Toolbar group, click *Extract*.

   The Extract Blackout Dates dialog box opens. The Group Name from which you are extracting the blackout dates appears at the top of the dialog box.

3. Select one of the following from the Date Range Options:

   ❏ *All* to extract all currently saved blackout period profiles.

   ❏ *Date Range* to specify the range of dates containing scheduled blackout period profiles that you want to extract.

   If you select Date Range, type or select the Start Date and End Date. To select a date, click the down arrow next to the field. A calendar opens, from which you can choose a date.

4. Click *OK*.

5. To open the file, click the *Open* button when your browser presents it.

   A window opens, displaying the contents of the extracted content profiles.

   You can save and close the file using the commands in the File menu.

6. To accept an automatic download of the extract file, click the *Save* button (users of Google Chrome need only close the page displaying the new file name).

   You can later retrieve the file from the Downloads folder of your computer, rename it if necessary, and save a copy of it in another folder for archival or other purposes.

7. To rename and save the file in a different location, click the *Open* or *Open With* button, and select the *Save As* command from the program that opens the file.

8. From the Save As window, navigate to the folder in which you want to save the file, rename the file if necessary, and click *Save*.

   You can close any additional web pages that may remain open after you save the file.

   Note: The default extract file name is *rcbdextract_GroupName_YYMMDD_HHMMSS.txt*, where *GroupName* is the name of the group from which the blackout dates are extracted, YYMMDD and HHMMSS are the date (year, month, day) and time (hour, minute, second) that the file was created.

Controlling When Schedules Run After Blackout Periods

You can now use the *Set Next Run Time to Day After Blackout Period End* option, to ensure that your schedules will run automatically the day after a Blackout Period ends, rather than waiting for the next scheduled recurrence.

Using the ReportCaster scheduling tools you can specify when a report or other type of task is run, the format in which to create the output, how it will be distributed, and how often the report should be run. However, if an authorized user in your organization defines a Blackout period that occurs at the same time as your report is scheduled to run, by default, your schedule will terminate, and will run again according to the recurrence settings you configured for the schedule.

For example, you have created a schedule that distributes reports every Wednesday, while another user in your organization has configured Blackout Periods that correspond to all holidays. By default, if a holiday occurs on a Wednesday, when your reports are scheduled to run, they will terminate for that week, and run again the next Wednesday, unless you use the *Set Next Run Time to Day After Blackout Period End* option to automatically run the reports at the same time the following day.

Once you select this option, it immediately applies to any schedules that run during a blackout period.

To access the *Set Next Run Time to Day After Blackout Period End* option, navigate to the ReportCaster Console. On the ribbon, in the Show group, click the *Configuration* button to display the Configuration options for the Console. In the side panel, click the *General Preferences* folder to display this check box, as shown in the following image.
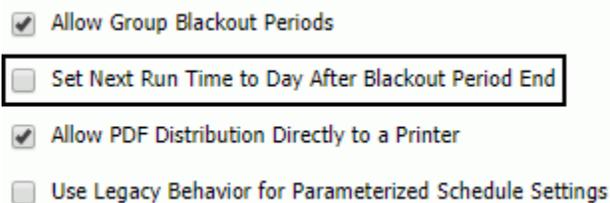
To enable this option, select the *Set Next Run Time to Day After Blackout Period End* check box. Then save and restart ReportCaster from the Manage Configuration group on the ribbon. This option is disabled, by default.

Procedure: **How to Verify the Next Run Time of Your Schedule**

You can verify that your schedule will run the day after a Blackout Period in the ReportCaster Explorer. Here, you can view the run time information for your schedule.

1. Launch the ReportCaster Explorer.

2. On the Explorer toolbar, click the *Change your filter* button and click *Schedule* to only view schedules saved in the Repository.

3. In the side panel, select the folder or subfolder that contains your schedule to display all saved schedules contained in the folder.

   In the Next Run Time column, the next run time of your schedule displays.

   Note: If the schedule has just been run, you may need to refresh your view. Wait a few minutes, and click the *Refresh* button to display the updated next run time of the schedule.

   The following image shows an example of run time information for a schedule that was due to run during a blackout period.

Last Time Executed	Last Job Status	Next Run Time
6/13/18 11:33 AM	Error	6/14/18 11:33 AM

   Since the schedule was terminated, this event is recorded as an error in the Last Job Status column. However, since the *Set Next Run Time to Day After Blackout Period End* option was set before the schedule ran, the next run time for the schedule shows as the next day, at the same time.

   Related Resources:

   ❑ **Using Blackout Periods**

   ❑ **Using the ReportCaster Console**

Execution IDs

An Execution ID is a valid user ID that is used to connect to the Reporting Server, FTP server, or web server to run a schedule task. When an Execution ID is created, changed, or deleted on a server, it must also be created, changed, or deleted in the Repository table that stores Execution ID credentials. Similarly, when the password for an Execution ID is changed on the server, the password for that Execution Id must also be changed in the Repository tables. Exceptions are when Execution credentials are Trusted.

Note:

❏ If an Execution ID is required, the Execution ID password is validated when a schedule is created, and when the task of an existing schedule is edited. If the task of an edited schedule is not opened and the password is incorrect, the schedule fails during execution. This failure is recorded in the schedule job log.

❏ Execution IDs and passwords cannot be imported or exported through the Change Management utility. A new Execution ID and password must be created on the selected system.

❏ Changing the password of an FTP user applies to all schedules that use that user ID for that FTP server and schedule owner.

To view a list of Execution Ids in the ReportCaster Development interface, click the *Execution IDs* tab.

From this tab, you can:

❏ Create a new Execution ID.

❏ Open an existing Execution ID to view its properties.

❏ Delete an Execution ID.

❏ Refresh the list of Execution IDs.

Note: When you create, change, or delete an Execution ID, the Repository tables are updated so that they are synchronized with the specified server. However, the credentials of the user ID on the server itself remain unchanged.

Procedure: **How to Create a New Execution Id**

To create a new Execution ID:

1. Select the user folder in the Resources tree for which you are creating the Execution ID or select the Execution ID folder to be able to select the user from within the Execution ID Editor.

2. On the toolbar of the Manage Execution Ids tab, click *New*.

   The Execution Id Editor opens.

3. Specify the following parameters:

   a. **Owner List.** Select the user by whom the Execution Id will be owned.

      Note: This option is disabled and displays the owner when a user folder was selected prior to selecting *New*.

b. **Execution Id.** Type a valid Execution Id.

c. **Server Type.** Select the type of server from the drop-down list. Selections are TIBCO Reporting Server, FTP, or WEB.

d. **Server Name.** From the Server Name drop-down list, enter or select the name of a Reporting Server with which the credentials will be associated or enter the FTP or web server name.

Note: The Reporting Servers are defined in the ReportCaster configuration.

e. **Password.** Type the password for the user ID. Note that you are not creating this password on the specified server; you are entering the existing password into the Repository table that stores Execution Id information.

f. **Confirm Password.** Retype the password.

4. Click *OK* to create the Execution Id in the Repository table or click *Cancel* to cancel the request.

Procedure: **How to Change an Execution Id Password**

To change an Execution Id password:

1. From the list of Execution Ids, select the Execution Id whose properties you want to change (for example, admin).

2. In the right pane, double-click on the Execution Id or click *Edit*.

   The Execution Id Editor opens.

3. Specify the following information:

   a. **Password.** Enter the password for the Execution Id. This password must match the current password for this user ID on the server that appears in the Server Name field.

   b. **Confirm Password.** Reenter the password.

   Changing the password using ReportCaster does not change the password on the specified server.

4. Click *OK* to change the Execution Id or password values in the Repository tables. A message appears confirming that the values have been changed.

Procedure: **How to Delete an Execution Id**

To delete an Execution Id:

1. Select the Execution Id you want to delete.

2. Click *Delete*. A message appears asking for confirmation to delete the selected Execution Id.

3. Click *OK*.

After the Execution Id is deleted, a scheduled job that requires this Execution Id on the specified server will not run unless the schedule is modified to use a valid Execution Id. If you modify the Execution credentials for a single schedule that specifies the deleted Execution Id, ReportCaster makes this modification for all schedules that specify the deleted Execution Id.

Global Updates

Authorized users can make global updates for the values stored in schedules and Distribution Lists. Using the Global Updates interface, the following settings can be updated:

❏ Mail Server

❏ FTP Server

❏ Printer

❏ Email Address

❏ Email From

❏ Library URL

❏ Data Server

❏ Notification Type

❏ Notification Reply Address

❏ Notification Subject

❏ Notification Brief Message To

❏ Notification Full Message To

❏ First Pre-Processing Procedure

❏ Second Pre-processing Procedure

❏ First Post-processing Procedure

❏ Second Post-processing Procedure

Global Updates are logged in the globalUpdates log file located in the Administration Console. Global Updates are logged, by default. For more information, see the *TIBCO WebFOCUS*® *Security and Administration* technical content.

Procedure: **How to Make a Global Update for a Mail Server**

1. In the Global Updates interface, click the *Setting* drop-down list and select *Mail Server* (the default).

2. Type the existing Mail Server in the *Old Value* box.

3. Type the new Mail Server in the *New Value* box.

4. Click *Update* to update the new Mail Server value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for an FTP Server**

1. In the Global Updates interface, click the *Setting* drop-down list and select *FTP Server*.

2. Type the existing FTP Server in the *Old Value* box.

3. Type the new FTP Server in the *New Value* box.

4. Click *Update* to update the new FTP Server value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for a Printer**

1. In the Global Update interface, click the *Setting* drop-down list and select *Printer*.

2. Type the existing Printer in the *Old Value* box.

3. Type the new Printer in the *New Value* box.

4. Click *Update* to update the new Printer value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for an Email Address**

1. In the Global Update interface, click the *Setting* drop-down list and select *Email Address*.

2. Type the existing Email address in the *Old Value* box.

3. Type the new Email address in the *New Value* box.

4. Click *Update* to update the new Email address value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for an Email From**

1. In the Global Update interface, click the *Setting* drop-down list and select *Email from*.

2. Type the existing Email from in the *Old Value* box.

3. Type the new Email from in the *New Value* box.

4. Click *Update* to update the new Email from value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for a Library URL**

1. In the Global Update interface, click the *Setting* drop-down list and select *Library URL*.

2. Type the existing Library URL in the *Old Value* box.

3. Type the new Library URL in the *New Value* box.

4. Click *Update* to update the new Library URL value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for a Data Server**

1. In the Global Update interface, click the *Setting* drop-down list and select *Data Server*.

2. Type the existing Data Server in the *Old Value* box.

3. Type the new Data Server in the *New Value* box.

4. Click *Update* to update the new Data Server value in schedules and distribution lists.

Procedure: **How to Make a Global Update for a Notification Type**

1. In the Global Updates interface, click the *Setting* drop-down list and select *Notification Type*.

   The notification options are:

   ❏ **Never**. ReportCaster will not send a notification of the schedule status under any circumstances. This is the default value.

   ❏ **Always**. Send a notification each time the schedule runs.

   ❏ **On Error**. Only send a notification when there is an error running the schedule.

   For more information, see *Notification Options in the Basic Scheduling Tool* on page 253

2. Select the existing value in the Old Value box.

3. Select the new value in the New Value box.

   If the Old Value is Never, then the Reply Address, Subject, Brief Message To, and Full Message To fields will display. Provide each field with the necessary information.

4. Click *Update* to update the new Notification Type value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for a Notification Reply Address**

1. In the Global Updates interface, click the *Setting* drop-down list and select *Notification Reply Address*.

2. Type the existing Notification Reply Address in the *Old Value* box.

2. Using the ReportCaster Console

3. Type the new Notification Reply Address in the *New Value* box.

4. Click *Update* to update the new Notification Reply Address value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for a Notification Subject**

1. In the Global Updates interface, click the *Setting* drop-down list and select *Notification Subject*.

2. Type the existing Notification Subject in the *Old Value* box.

3. Type the new Notification Subject in the *New Value* box.

4. Click *Update* to update the new Notification Subject value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for a Notification Brief Message To**

1. In the Global Updates interface, click the *Setting* drop-down list and select *Notification Brief Message To*.

2. Type the existing Notification Brief Message To in the *Old Value* box.

3. Type the new Notification Brief Message To in the *New Value* box.

4. Click *Update* to update the new Notification Brief Message To value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for a Notification Full Message To**

1. In the Global Updates interface, click the *Setting* drop-down list and select *Notification Full Message To*.

2. Type the existing Notification Full Message To in the *Old Value* box.

3. Type the new Notification Full Message To in the *New Value* box.

4. Click *Update* to update the new Notification Full Message To value in schedules and Distribution Lists.

Procedure: **How to Make a Global Update for the First Pre-Processing Procedure**

1. In the Global Updates dialog box, click the *Setting* drop-down list and select *First Pre-processing Procedure*.

2. Type the existing First Pre-processing procedure in the *Old Value* box.

3. Type the new First Pre-processing procedure in the *New Value* box.

4. Click *Update* to update the new First Pre-processing Procedure value in all schedules.

Procedure: **How to Make a Global Update for the Second Pre-Processing Procedure**

1. In the Global Updates dialog box, click the *Setting* drop-down list and select *Second Pre-processing Procedure*.

2. Type the existing Second Pre-processing Procedure in the *Old Value* box.

3. Type the new Second Pre-processing Procedure in the *New Value* box.

4. Click *Update* to update the new Second Pre-processing Procedure value in all schedules.

Procedure: **How to Make a Global Update for the First Post-Processing Procedure**

1. In the Global Updates dialog box, click the *Setting* drop-down list and select *First Post-processing Procedure*.

2. Type the existing First Post-processing Procedure in the *Old Value* box.

3. Type the new First Post-processing Procedure in the *New Value* box.

4. Click *Update* to update the new First Post-processing Procedure value in all schedules.

Procedure: **How to Make a Global Update for the Second Post-Processing Procedure**

1. In the Global Updates dialog box, click the *Setting* drop-down list and select *Second Post-processing Procedure*.

2. Type the existing Second Post-processing Procedure in the *Old Value* box.

3. Type the new Second Post-processing Procedure in the *New Value* box.

4. Click *Update* to update the new Second Post-processing Procedure value in all schedules.

Purge Job Logs

The Purge Job Logs functionality provides on-demand options for purging logs, including the ability to specify a number of days (past) for which to purge job logs. For example, if you want to purge job logs for the past month, you would use the default number of days, which is 30. You can also specify an option for traces: Default Traces, No Traces, or Trace On.

Procedure: **How to Purge Job Logs on Demand**

1. From the Tools group in the ReportCaster Console, click *Purge Job Logs*.

    The Purge Job Logs dialog box displays.

2. In the *Purge Job Logs older than (days)* field, accept the default number of days or specify another value. The default number of days is 30.

3. Under Trace Options, you can accept the default of *Default Traces,* or select *No Traces* or *Trace On*.

4. Click *OK*.

Delete Schedules

The Delete Schedules functionality provides on-demand options for deleting all inactive or nonrecurring schedules. You can also specify an option for traces: Default Traces, No Traces, or Trace On.

Note: You must be authorized to delete inactive or nonrecurring schedules on-demand. For more information, see the *TIBCO WebFOCUS® Security and Administration* technical content.

Procedure: **How to Delete Inactive and Nonrecurring Schedules on Demand**

1. From the Tools group, in the ReportCaster Console, click *Delete Schedules*.

    The Delete Inactive and/or Nonrecurring Schedules dialog box displays.

2. In the Delete Inactive and/or Nonrecurring Schedules dialog box, you can choose to delete inactive schedules, nonrecurring schedules, or both inactive and nonrecurring schedules.

3. Under Trace Options, you can keep the default of *Default Traces*, or select *No Traces* or *Trace On*.

4. Click *OK*.

Using the Command Prompt Interface to Delete Schedules

Optionally, you can delete inactive or nonrecurring schedules using the Windows command prompt *purgesched* utility. This utility is also available on UNIX.

Procedure: **How to Run the Delete Inactive and Nonrecurring Schedules Utility**

1. On a Windows system, open the command prompt and navigate to the directory *drive:*\ibi \WebFOCUS*nn*\ReportCaster\bin, where *drive* is the drive that your WebFOCUS software is saved on, and *nn* is the version number of your WebFOCUS software.

2. Type *purgesched*.

3. Press the Enter key.

    The ReportCaster Schedule Purge Utility Operation displays.

4. Type a valid Administrator ID and password.

5. Press the Enter key.

    The delete all inactive schedules prompt displays.

6. If you want to delete all inactive schedules, type *Y*. If not, type *N*.

7. Press the Enter key.

The delete all non-recurring schedules prompt displays.

8. If you want to delete all nonrecurring schedules, type *Y*. If not, type *N*.

9. Press the Enter key.

   The confirmation prompt displays.

10. To confirm your schedule deletion choices, type *Y* to continue, or type *N* to decline.

11. Press the Enter key.

   If you typed *Y*, the utility will proceed to delete your selected schedules, and processing is logged to the file purgesched.log in the ...ReportCaster\log directory. If you typed *N*, the selected schedules will not be deleted.

Creating and Maintaining Distribution Lists

A Distribution List is an easy way to distribute content to multiple recipients by specifying the name of a list stored in the Repository that contains the individual recipients rather than entering each recipient separately into a schedule. A Distribution List can be made available to other users by sharing it or changing its ownership to be managed or published.

In this chapter:

Creating a Distribution List

A Distribution List is an easy way to distribute content to multiple recipients by selecting a list that contains the individual recipients rather than entering each recipient separately into a schedule.

If you have an LDAP data source, you can access Email information that is stored in it by configuring the LDAP Email Setting in the ReportCaster Console Configuration tool. Once configured, you can select email addresses from within the email address book of your company, eliminating the need to type them in manually.

For more information on using this feature, see *LDAP Setting* on page 102.

Before creating a Distribution List, understand what groups or individual users require access to it to determine the folder in which to create it.

Procedure: **How to Create a Distribution List**

1. Open the Workspaces area of the start page or the WebFOCUS Home page and choose the workspace in which you want to create the Distribution List.

2. On the Actions bar, click *Schedule*, and then click *Distribution List*.

   The Distribution List window opens, as shown in the following image.
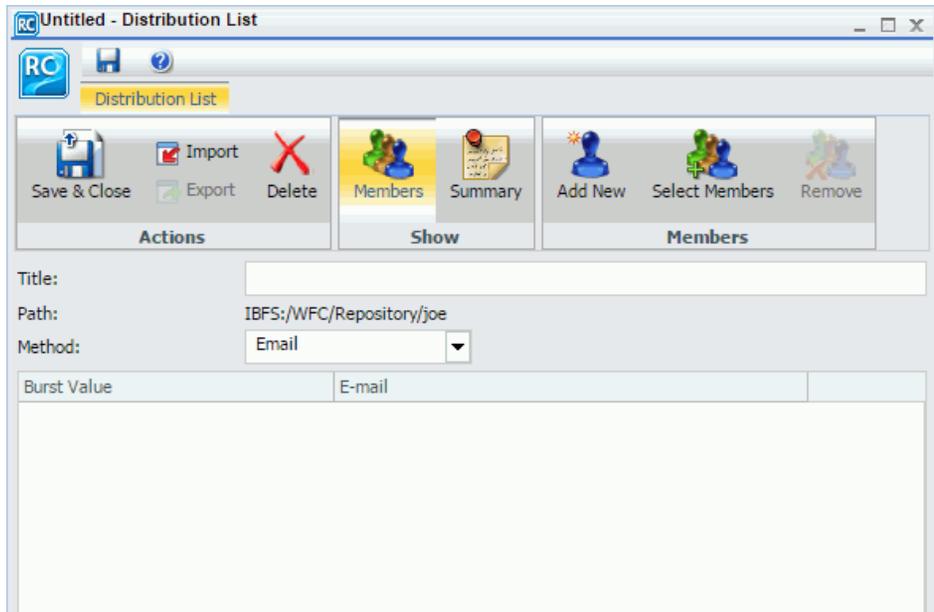
3. In the *Title* box, type a descriptive name for the Distribution List.

4. From the Method drop-down list, select the distribution method for the Distribution List. Email is the default distribution method.

   ❑ **If you select Email,** you must provide a list of email addresses and can optionally burst values associated with an address. For details on entering burst values, see *Bursting a Report* on page 157.

   In the *Address* box, specify the email addresses of the recipients (for example, *chuck_hill@tibco.com* for an individual user or *#sales@tibco.com* for an email server list that contains multiple email addresses). Be careful typing this information because there is no edit checking. The maximum number of email addresses you can specify in a Distribution List is 9999. You can specify a maximum of 800 characters within a single Address line.

You can specify multiple email addresses within a single Address field. For more information, see *Specifying Multiple Email Addresses* on page 169.

If the Email Delivery, Restrict Email Domains option is set to yes in the Server Configuration tool, then only those email domains (the portion of the email address following the at (@) symbol) listed in Allowed Email Domains (also in the Server Configuration tool) are valid email recipients.

❏ **If you select FTP,** you must specify the names of the FTP files that will hold the report (including the extension) and, optionally, burst values associated with FTP file.

The extension specified here should be appropriate for the format selected when creating the schedule. For example, if you selected Excel or EXL2K on a Windows platform, the file should be *drive:\directory\filename.xls*. The maximum number of FTP files you can specify in a Distribution List is 9999.

When using FTP to transfer cascading style sheet (CSS) files from any platform to z/OS UNIX and the z/OS UNIX httpd.conf file contains the default MIME type of 8-bit for CSS files, then the CSS files must be transferred in binary mode.

❏ **If you select Print,** you must specify the printers that will receive the distribution and, optionally, burst values associated with the printer. For details on entering burst values, see *Bursting a Report* on page 157.

In the Printer input field, specify the printer using the following format:

`queue@printserver`

where:

`queue`

Is the name of the printer queue.

`printserver`

Is the host name or IP address of the printer.

Although ReportCaster supports specifying only the print server (host name or IP address), we recommend that you specify both the print queue and print server. (ReportCaster differentiates between the printer queue and the printer server by detecting the presence of the '@' separator.)

5. Click the *Add New* button.

The Add New Member dialog box displays.

6. Complete the Burst Value, Pattern, name of the Printer, FTP Location, and Email fields.

7. Optionally, you can click the *Select Members* button to add members from an address book.

8. If you are finished creating a Distribution List, click *Save & Close*.

   Note:

   ❏ The maximum length of a title value for a file is 256 characters.

   ❏ If the title of your file has the same name of an existing file in the folder, you will receive a message asking if you wish to replace the file.

Editing and Deleting a Distribution List

If you are authorized to access the Distribution List tool, you can view and edit the Distribution Lists of which you are the owner. If the Distribution List is owned by a group or is published, you have to be authorized to edit it.

Procedure: How to Edit a Distribution List

1. Open the Workspaces area of the start page or the WebFOCUS Home Page, right-click the *Distribution List* you want to edit, and select *Edit* or double-click the list.

   The properties of the selected Distribution List display, as shown in the following image.
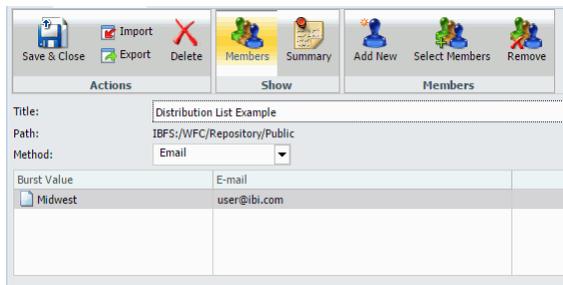
2. From this window, you can perform the following:

   ❏ Change the name of the Distribution List by typing a new name in the *Title* field.

   ❏ Change the value of the existing Distribution List entries. For example, you can change the Distribution Method.

❏ Click *Add New* or double-click within the area below the Burst Value or E-mail column to add a new member to the Distribution List. The Add New Member dialog box appears, as shown in the following image.

❏ Delete a Distribution List entry by selecting the item to be deleted, then click *Delete*.

Note: In the Allowed Email Addresses and Domains dialog box in the ReportCaster Console, if the *Restrict user input with this list* check box has been selected, user input of email addresses is restricted to a list of allowed email domains and addresses. For more information, see *Validating Allowed Email Domains and Addresses* on page 70

3. When you have completed your changes, click *Save & Close*.

Note: If the title of your file has the same name of an existing file in the folder, you will receive a message asking if you wish to replace the file.

To exit the editing window without making changes, click *Close*.

Accessing Distribution Lists

Sharing your private Distribution Lists allows you to permit groups and users to see its content and use it in schedules while you retain ownership. Authorized users can share their private Distribution Lists with groups and users with whom they are permitted to share. The Distribution List can be accessed by users authorized to access the folder in which the shared Distribution Lists are located.

Authorized users can publish and unpublish Distribution Lists to make them available to users authorized to access the folder in which they are located. Publishing requires the folder the item is located in to be published. If the folder is subsequently unpublished, all items in that folder are unpublished. See the *TIBCO WebFOCUS* ®*Security and Administration* manual for additional information on publishing and sharing folders and items.

Procedure: **How to Share a Distribution List**

From the Hub or the WebFOCUS Home Page, if you are authorized to share your private content saved in a My Content folder, you can share a Distribution List with users authorized to access the folder in which the Distribution List is located by right-clicking the folder or Distribution List and clicking *Share*.

If you are authorized for advanced sharing, you can share your private content saved in a My Content folder with specific groups and users with whom you are authorized to share by performing the following steps.

1. Right-click the Distribution List that you want to share and click *Share With*.

   The Share with others dialog box displays, as shown in the following image.
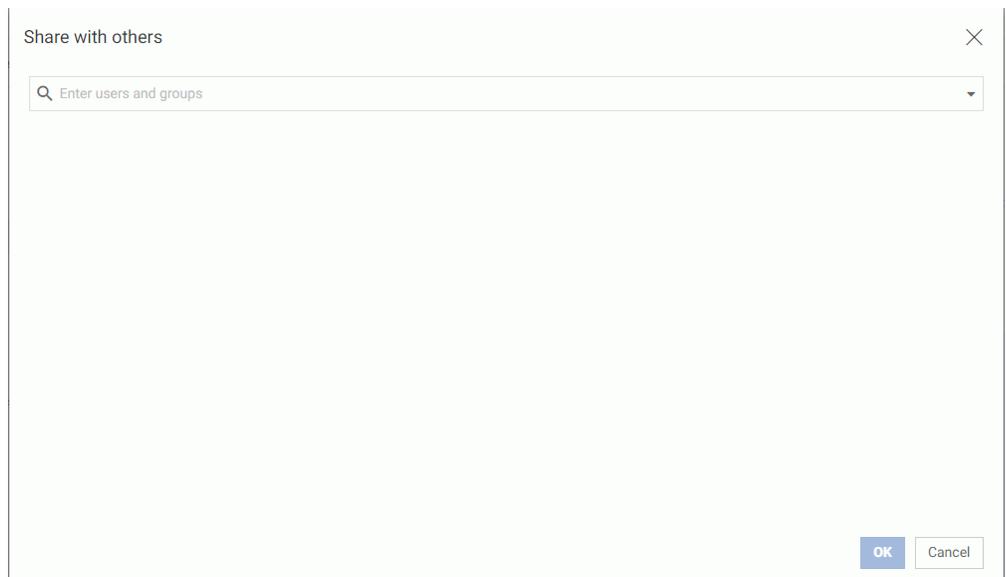
2. Click the drop-down arrow on the search box to display the filters for the users or groups that you want the option to select. You can filter your search results by Users or by Groups.

3. After you select a filter, begin typing in the search box to display the users or groups that are available for selection. Click a user or group to add it to the list of users or groups that can view the Distribution List. Optionally, click the *X* on a User or Group tile to remove it from the list.

4. When you are finished selecting users or groups to share your Distribution List with, click *OK*.

Publishing Distribution Lists

A domain must be published in order to publish items within the domain, including Distribution Lists. Published items or folders display in color, while unpublished items or folders display in black and white.

From the start page or the WebFOCUS Home Page, right-click the workspace that contains the Distribution List that you want to publish and click *Publish*. To unpublish the workspace, and in effect the Distribution List, click *Unpublish*.

Procedure: How to Set Security Rules on a Distribution List

Authorized users can set security for unpublished Distribution Lists, allowing other groups or individual users to access and manage the lists. For more information, see the *TIBCO WebFOCUS* [®]*Security and Administration* technical content.

Note: Authorized users can review the Security Policy by right-clicking the Distribution List, selecting *Security*, and then selecting *Effective Policy*.

1. Select the workspacecontaining the Distribution List, or the unpublished Distribution List itself for which you want to set security.

2. Right-click and point to *Security* and then click *Rules*.

The Access Rules dialog box displays, as shown in the following image.
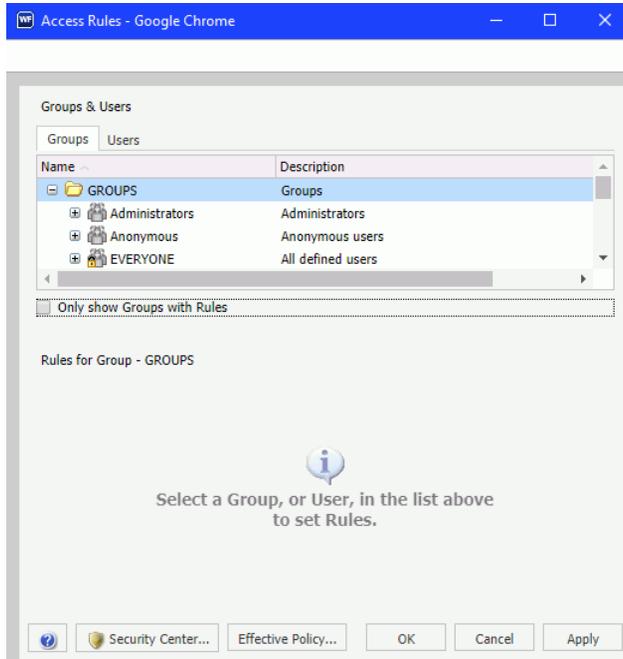
3. In the Groups tab, click the group or individual users to whom you would like to grant access to the Distribution List. Optionally, click the *Only show Groups with Rules* check box to only display groups that have rules that have already been set.

    The Roles for a selected group appear in the Rules for Group section.

4. Optionally, in the Rules for Group section, click the *Roles:* drop-down list to only display specific Roles.

5. Optionally, click the *Only show Rules that have been set* check box to filter the list of available roles even further.

6. Select the Role that defines the functional capabilities for which to set the access level.

7. Choose the access level in the Access drop-down list.

    Options include:

    ❏ **Not Set.** Access is not specifically set. Access is determined by inherited rules.

    ❏ **Permitted.** Allows the functionality of the selected role as specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

    ❏ **Denied.** Denies the functionality of the selected role at the level specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

❏ **Over Permitted.** Overrides a Denied access level to allow the functionality of the selected Role at the level as specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

❏ **Clear Inheritance.** Erases all previously defined rules for the selected Role at the level specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

8. Click the *Users* tab to display the list of individual users to whom you would like to grant access to the item. Optionally, click the *Only show Users with Rules* check box to only display users that have rules that have already been set.

   The Roles for a selected user appear in the Rules for User section.

9. Optionally, in the Rules for User section, click the *Roles:* drop-down list to only display specific roles.

10. Optionally, click the *Only show Rules that have been set* check box to filter the list of available roles even further.

11. Select the Role that defines the functional capabilities for which to set the access level.

12. Choose the access level in the Access drop-down list, as described in Step 7.

13. Click *Apply*.

14. Click *OK*.

   Your security setting updates are now saved for your Distribution List.

Bursting a Report

Instead of distributing an entire report from a scheduled report procedure (FEX), you can use the ReportCaster burst feature to break the report into sections to be distributed separately to the same or different destinations. Bursting enables you to target relevant sections of a report to individual users. Each report section is saved to a separate file.

If you are distributing a burst tabular report, the burst value is determined by the first BY field. If you are distributing a burst graph report, the burst value is determined by the second BY field. The burst value is automatically determined by the internal matrix, which is a memory area that stores each database field value and calculates values referenced by the TABLE or GRAPH request.

You can send several report sections to one recipient by specifying the destination of that recipient (email addresses, FTP server locations, and files or printers) for each section you want to send. You can also send several report sections to one destination. The burst values you specify in the Distribution List must exist in the data source you are reporting against.

Note:

❑ If you want to burst a report, you must enable the bursting option within the Task for a schedule. The burst values specified in the Burst Value column in the Distribution List are ignored unless the Task specifies to burst the report.

❑ Report names containing more than 60 National Language Support (NLS) characters are truncated to 60 characters prior to distribution. This prevents a report name from becoming corrupted when the report is emailed.

❑ Before distributing a coordinated Infographic procedure as an inline email message, you must select the *Burst Report* check box in the scheduling tool. Infographic procedures that are not coordinated cannot be burst. For more information, see the *TIBCO WebFOCUS*® *Creating WebFOCUS Infographics* technical content.

❑ If you choose to distribute your reports as inline email messages, when an email recipient receives a chart or infographic distribution that contains more than one burst value, the multiple charts or infographics will display inline. For more information, see the *TIBCO WebFOCUS*® *Creating WebFOCUS Infographics* technical content.

Example: Specifying Burst Values in a Distribution List

You can specify sort field burst values and destinations (email addresses, FTP, or printers) when creating or editing a Distribution List.

Using the primary sort field values (Northeast Sales, South Sales, and Midwest Sales), the email address of each representative is associated with the relevant sales report data. Since Chuck Hill needs only the data for the Northeast branch, the sort value Northeast is listed in the Burst Value column and is associated with his email address in the E-mail column.

However, Tom Gregory works in both the Midwest and South regions. Since he requires data for both regions, his email address is listed in the E-mail column twice, next to a Burst Value column entry for each region.

Note: You can click on a column heading to sort the data in that column.

Tip: You can specify multiple email addresses on a single Address line. For details, see

Reference: Considerations When Distributing a Burst Report Using FTP

When distributing a burst report using FTP, consider the following:

❑ When using a format of HTML, PDF, or EXL2K, an index page for the burst report output is generated.

❏ The index page for FTP distribution will only contain the burst values specified in the Distribution List. The report output is distributed only for the specified burst values.

❏ The index page links for burst report output distributed using FTP are incorrect when specifying BASEURL in the scheduled procedure. This is because ReportCaster does not parse and evaluate the procedure code of the scheduled job. To resolve this, move the distributed files to the BASEURL directory or specify the fully qualified directory path of the distributed output in the index page.

❏ On z/OS, burst report output distributed using FTP is created in sequential data sets having the following qualifiers:

  ❏ **High-level Qualifier:** User ID specified for the FTP Server.

  ❏ **Additional Qualifiers:** Location value in the Distribution tab and file(s) supplied in a Distribution List.

  To send burst output to a partitioned data set, specify an existing partitioned data set as Location and specify member names, without extensions, in the Distribution List File column. For example, *highlevelqualilfier.location.file*.

❏ On z/OS, do not use an index name that is the same as the data (input) file from which you are reporting. If you specify an index name that is the same as the DDNAME in the DYNAM for your data file, the data file is overwritten with the report output.

❏ On z/OS, the index page is generated with extra characters preceding the burst values. The links on the page to the report sections are correct.

Bursting Guidelines and Limitations

This section provides detailed information to assist you in defining burst values.

When a schedule task specifies to burst a report procedure (FEX), all data values generated for each burst section are returned to the Distribution Server.

❏ For the Repository and Report Library distribution methods, each burst section is distributed to the repository. The owner of the schedule must have write access to the repository folder specified in the schedule when the scheduled job runs for the report output to be successfully distributed. Access to the report sections is controlled by the repository security rules that are created when the report is distributed.

❏ For the email and printer distribution methods, specific burst sections are distributed based on the burst values specified when creating the Distribution List or Single Address used by the schedule.

The following are guidelines and limitations that apply to the burst feature:

❏ **Case.** Burst values are case-sensitive.

❏ **Keywords.** Burst values can contain the following keywords:

  ❏ **Wildcard Characters.** Use an asterisk (*) and a question mark (?) as wildcards to represent characters at the beginning, end, or middle of the burst values. The asterisk represents one or more characters, while the question mark represents any single character. Precede each instance of a burst value using a wildcard with the wildcard keyword enclosed in brackets followed by a colon, [wildcard]:, as shown in the following examples.

  [wildcard]:abc* = all values that start with 'abc'.

  [wildcard]:a?c = all three-character values that start with 'a' and end with 'c'.

  [wildcard]:a?c* = all values that start with 'a' and have a 'c' as the third character.

  Note: Wildcards in a distribution list are not supported with FTP.

  ❏ **Java Regular Expressions.** Use to identify strings of text. Precede each instance of a burst value using a Java regular expression with the regular expression keyword enclosed in brackets followed by a colon, [regexp]:, as shown in the following examples.

  [regexp]:[bcr]at = values that are bat, cat, or rat.

  [regexp]:[^bcr]at = any value that is not bat, cat, or rat.

  ❏ **Default Distribution.** You can provide a default destination for burst values that are not specified in the Distribution List. To do this, enter the following in the burst value column of the Distribution List.

  [elsesend] = reports for burst values not contained in the Distribution List will be sent to the named recipient.

  ❏ **'%BURST' Syntax.** You can include a burst value in the name of a distributed file by using the '%BURST' syntax in the name. The use of '%BURST' is not supported in a zip file name when the Packet email setting is Yes.

The following are example entries in an email Distribution List that illustrate the use of the wildcard and default distribution keywords in burst values.

Burst Value	Address
[wildcard]:*an*	sml@company.com

Burst Value	Address
England	ray@company.com
[elsesend]:	jt@company.com

Using a scenario where the report output from a scheduled report procedure (FEX) is burst on the Country field that contains values of Germany, USA, France, Canada, Italy, Chile, England, and Japan, then:

❏ Report information for Germany, France, Canada, England, and Japan will be delivered to sml@company.com.

❏ Report information for England will be delivered to ray@company.com.

❏ Report information for USA, Italy, and Chile will be delivered to jt@company.com.

You must not leave the burst value blank. This value is used to name the report file, and if no value is assigned to this parameter, you will receive an error and terminate the distribution.

If you assign a value that includes a keyword or wildcard character that might result in a blank value in one or more instances, code the procedure to assign a special value as a substitute to ensure that all instances of the burst value will not be blank.

❏ **Formats.** All formats support bursting except XML and EXCEL. Each burst section of the report output from a scheduled report procedure (FEX) will be named *burstvalue_filename.format* (for example, Northeast_Sales.pdf).

❏ **ACROSS command.** This command is not evaluated as a primary sort field. To burst report output from a scheduled report procedure (FEX), you must also include a BY field. Bursting occurs on the BY field.

❏ **TABLEF.** No internal sort processing is performed. The specification of a BY field requires that the data already be sorted in the data source.

❏ **ON TABLE SUBHEAD/ON TABLE SUBFOOT.** Creates a SUBHEAD for only the first page of the report output from a scheduled report procedure (FEX), and a SUBFOOT for only the last page of the report output from a scheduled report procedure (FEX). When bursting report output from a scheduled report procedure (FEX), the SUBHEAD and SUBFOOT should occur for each sort break. Therefore, specify the primary sort field in place of TABLE in the ON command. For example:

```
ON primarysortfield SUBHEAD
```

❏ **A*n*V field types.** Bursting is not supported on a field with the A*n*V (where *n* is an integer value) field type.

Creating an External Distribution File

When creating a schedule, you can distribute scheduled output to a single recipient, or to several recipients. If you are creating a schedule to be distributed to several recipients, you may want to create an external distribution file consisting of multiple recipients. The external distribution file can then be assigned to any schedule. An external distribution file is functionally similar to a Distribution List except it is created outside of ReportCaster.

In addition, you can include a password in a Distribution File. If you include a password in a Distribution File, the distribution output is encrypted in a password-protected Zip file if the Zip option is selected. This option is only available if the ReportCaster Server Configuration option, Zip Encryption Password Plug-in, is set to None. When the ReportCaster Server Configuration option, Zip Encryption Password Plug-in, is set to Default or to a custom value, passwords in a Distribution File are ignored because the plug-in provides passwords.

Syntax: **How to Create an External Distribution File**

The external distribution file must contain comma-delimited records, where the maximum length of each record is 800 characters. Records must end with a comma followed by a dollar sign (,$). Each record must be typed on a separate line in the file.

To specify a record for a non-burst procedure, use the following format:

```
distributiondestination,,$
```

where:

distributiondestination

Is a valid email address, FTP file name, or printer.

To specify a record for a burst procedure, use the following format:

```
distributiondestination,burstvalue,$
```

where:

distributiondestination

Is a valid email address, FTP file name, or printer.

burstvalue

Is a valid burst value for the report being scheduled.

You must not leave the burst value blank. This value is used to name the report file, and if no value is assigned to this parameter, you will receive an error and terminate the distribution.

If you assign a value that includes a keyword or wildcard character that might result in a blank value in one or more instances, code the procedure to assign a special value as a substitute to ensure that all instances of the burst value will not be blank.

Tip: You can specify multiple email addresses within a single record of an external distribution file. For details, see *Specifying Multiple Email Addresses* on page 169.

To specify a password for Zip output distribution, include the following statement to enable encryption and record format:

```
#encryption enabled
 distributiondestination,burstvalue,password,$
```

where:

password

Is the value to be used as the password to access the Zip file.

Note:

❏ The encryption enabled statement is not case-sensitive.

❏ If you include the encryption enabled statement in your Distribution File, then burst values in the Distribution File cannot contain commas.

❏ If you include the encryption enabled statement in your Distribution File, do not use commas in passwords.

❏ The burst value is optional. If you are not including a burst value, be sure to add two commas between the distribution method and password value. For example:

```
mcr@company.com,,XTG2,$
```

The following is an example of a distribution file that contains the encryption enabled statement and several records that include password values to be passed to the Distribution Server:

```
#encryption enabled
mcr@company.com,England,abcd,$
jsmith@company.com,Australia,rrrAx,$
rable@company.com,France,UtLRzet,$
tom@gadgetco.com,Italy,mOmPP,$
```

Note: In the Allowed Email Addresses and Domains dialog box in the ReportCaster Console, if the *Restrict user input with this list* check box has been selected, user input of email addresses is restricted to a list of allowed email domains and addresses. For more information, see *Validating Allowed Email Domains and Addresses* on page 70.

Procedure: **How to Automatically Delete an External Distribution File**

You can configure ReportCaster to automatically delete external distribution files after a schedule runs.

1. Create a blank text file named fileaddr.txt in the cfg directory under the ReportCaster installation directory (for example, C:\ibi\WebFOCUS82\ReportCaster\cfg).

2. Create a directory named addrpath on the same machine as the Distribution Server (for example, C:\ibi\WebFOCUS82\ReportCaster\addrpath) that will hold the deleted distribution files.

3. Edit the fileaddr.txt file to include the fully qualified directory path to the external distribution files to be deleted (for example, C:\ibi\WebFOCUS82\ReportCaster \addrpath). A slash at the end of the directory path is optional. If an invalid directory path is specified in fileaddr.txt, no external distribution files will be deleted.

4. Place the external distribution files you want automatically deleted when a schedule runs in the directory created in step 2 (for example, the C:\ibi\WebFOCUS82\ReportCaster \addrpath directory).

5. Modify your schedules so that the external distribution file(s) are retrieved from the directory created in step 2 (for example, the C:\ibi\WebFOCUS82\ReportCaster\addrpath directory).

Importing a List of Members to Create Distribution Lists

You can create new Distribution Lists by importing members from an existing Distribution List file without entering individual members manually. Before you import a list, confirm that it meets the requirements for a Distribution List, such as comma-delimited records. This ensures that the list will import successfully.

The Import option is available on the Distribution List tab, in the Actions group, as shown in the following image.
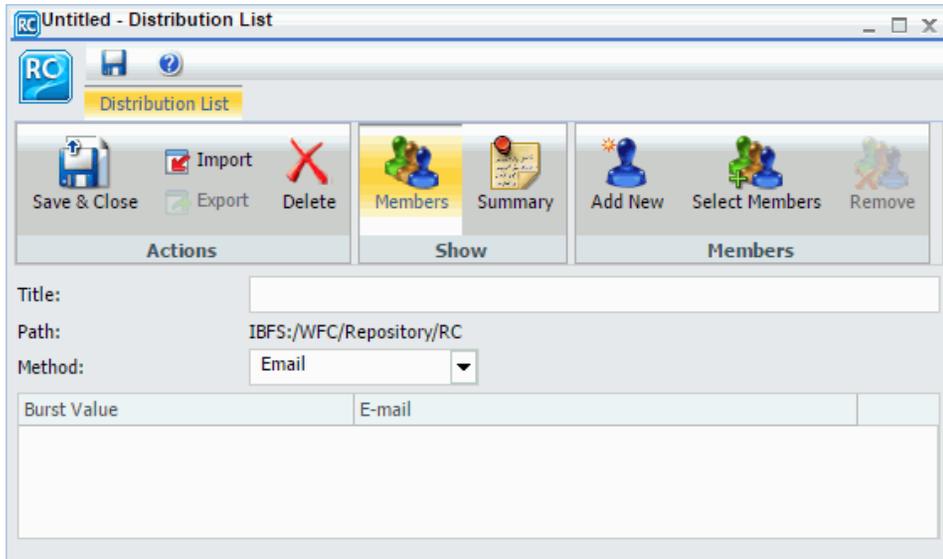
In addition to the minimum Distribution List requirements, your file can contain other information, such as descriptions, summaries, and types of Distribution Lists. This information can be used to populate any respective fields when you import the file. For more information on how to configure a Distribution List file, see *Creating an External Distribution File* on page 162.

Note: A Distribution List file containing special characters must be encoded in UTF-8 before it is imported.

Procedure: **How to Import an Existing Distribution List**

1. From the WebFOCUS Home page, choose the domain in which you want to create the Distribution List.

2. On the Actions bar, click *Schedule*, and then click *Distribution List*.

   The Distribution List dialog box opens.

3. Click *Import*.

   The Import Distribution File dialog box opens.

4. Click *Choose File*, and select your distribution file from your file system.

5. Click *Open*.

   The file you chose appears in the Import Distribution File dialog box, as shown in the following image.
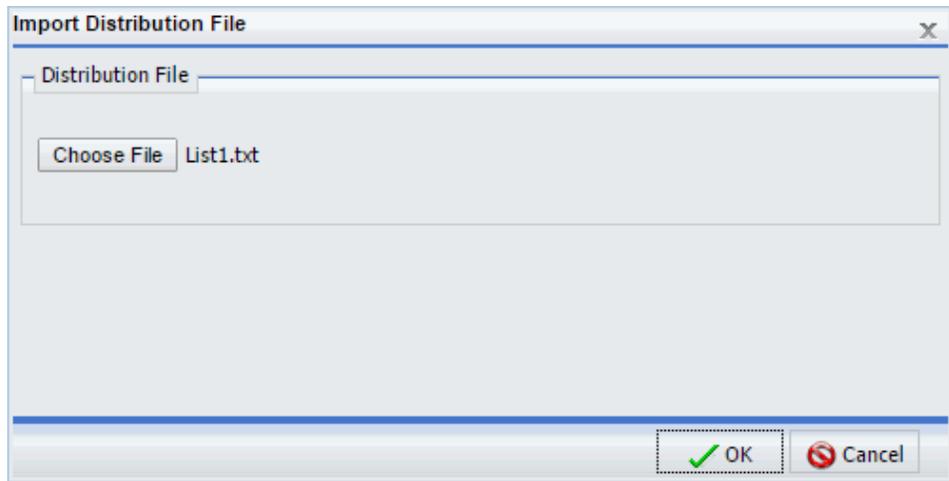
6. Click *OK* to import the members of the file into the new Distribution List.

   Now you can distribute content to members listed in your imported Distribution List.

7. Optionally, modify the imported Distribution List.

8. Click *Save & Close*.

Creating a Dynamic Distribution List

A Dynamic Distribution List enables you to return in memory either a list of burst values and destinations, or only a list of destinations from a data source (for example, a flat file, SQL database, TIBCO FOCUS® data source, or LDAP). You must code a WebFOCUS procedure (FOCEXEC) that is available to the path of the server defined in either the server profile (edasprof.prf) or the user profile. The procedure must return the distribution information (using the PCHOLD command) with the data in a specific layout that you define. This layout must contain specific values and destinations so that ReportCaster can identify and process the information returned.

As an option, you can include a password in a Dynamic Distribution List. If you include a password in a Dynamic Distribution List, it is used to encrypt the distribution output in a password protected Zip file if the Zip option is selected. This option is only available if the ReportCaster Server Configuration option, Zip Encryption Password Plug-in, is set to None. When the ReportCaster Server Configuration option, Zip Encryption Password Plugin, is set to Default or to a custom value, then passwords in a Dynamic Distribution List are ignored because the plug-in provides passwords.

Note: There is no limit on the number of burst values you can specify in a Dynamic Distribution List.

Example: **Creating a Dynamic Distribution List**

The following is a sample Master File for email distribution information located in a text file.

```
FILE=MYADDR,SUFFIX=FIX
SEGNAME=SEG01,SEGTYPE=S02
FIELDNAME=BURST_VALUE,BURST,A50,A50,$
FIELDNAME=EMAIL_ADDRESS,EMAIL,A40,A40,$
```

The following is a sample procedure for bursting. The column names and the order in which they are returned must be 'VALUE' and then 'DEST'.

```
SET ASNAMES=ON
TABLE FILE MYADDR
PRINT BURST_VALUE AS 'VALUE'
EMAIL_ADDRESS AS 'DEST'
ON TABLE PCHOLD
END
```

The following is a sample procedure for non-bursting. In this case, the 'VALUE' column does not need to be provided since a burst value is not required.

```
SET ASNAMES=ON
TABLE FILE MYADDR
PRINT EMAIL_ADDRESS AS 'DEST'
ON TABLE PCHOLD
END
```

Note: If the column names are not VALUE and DEST in the Master File, you must add a SET ASNAMES=ON qualifier before the TABLE FILE statement in the procedure.

The following is an example of how you can implement password protection of zipped distribution. The following Master File contains a password for zipped distribution.

```
FILE=MYADDR,SUFFIX=FIX
SEGNAME=SEG01,SEGTYPE=S02
FIELDNAME=BURST_VALUE,BURST,A50,A50,$
FIELDNAME=EMAIL_ADDRESS,EMAIL,A40,A40,$
FIELDNAME=PASSWORD,PWD,A12,A12,$
```

The following sample procedure includes a password column along with the destination and burst value columns.

```
SET ASNAMES=ON
TABLE FILE MYADDR
PRINT BURST_VALUE AS 'VALUE'
EMAIL_ADDRESS AS 'DEST'
PASSWORD AS 'PASS'
ON TABLE PCHOLD
END
```

Note: In the Allowed Email Domains and Addresses dialog box in the ReportCaster Console, if the *Restrict user input with thi*s *list* check box has been selected, user input of email addresses is restricted to a list of allowed email domains and addresses. For more information, see *Validating Allowed Email Domains and Addresses* on page 70.

Generating a Dynamic Distribution List From WebFOCUS Repository Procedures

You can create Dynamic Distribution List procedures using your personal text editor, or using the text editor available in the WebFOCUS user interface. When assigning the Email Distribution option to a schedule, select the *Dynamic Distribution List from Repository Procedure* option to choose a Dynamic Distribution List procedure stored in the Repository. While not all users may have access to the Reporting Server, where Dynamic Distribution List procedures can also be stored, most users are allowed to access the Repository.

Procedure: **How to How to Select a Dynamic Distribution List Procedure form the Repository**

1. Begin creating a schedule that will use email distribution. When you are on the Distribution interface, navigate to the Distribution Information section and click the *Type:* drop-down list to display all email distribution options.

2. Click the *Dynamic Distribution List from Repository Procedure* option, as shown in the following image.
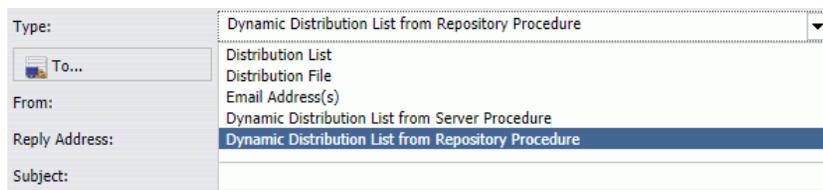
3. Click the *To* button to display the Dynamic Distribution List from Repository Procedure dialog box.

4. Click the *Browse* button to search for a Dynamic Distribution List saved in your Repository. When you find your list, select it and click Open.

   The file path of your list is added to the Procedure Name field. The Server Name field is filled out by default, which displays the server for the list you select.

5. In the Execution ID field, enter the Execution ID to use for this procedure.

6. Click the *Password* button to enter a password for the Execution ID.

7. When you are done entering your settings, click *OK*.

8. Complete the remaining settings required for your schedule. For more information, see *Creating Schedules* on page 173 and *Creating a ReportCaster Schedule in the Advanced Scheduling Tool* on page 263.

   When the schedule runs, the schedule distributes information to the users listed on the chosen Dynamic Distribution List.

   Related Resources:

   ❏ **Creating Schedules**

   ❏ **Creating Schedules in the Advanced Scheduling Tool**

Specifying Multiple Email Addresses

When creating a schedule or Distribution List, you can specify multiple email addresses within a single field, row, or record.

When creating a schedule or Distribution List, you can separate each email address with a comma (,) or a semicolon (;).

The multiple email addresses will appear in the To line of a single email when the scheduled output is distributed.

Note:

❏ To distribute separate emails for each address, specify the email addresses on separate lines within the Distribution List.

❏ In the Allowed Email Domains and Addresses dialog box in the ReportCaster Console, if the Restrict user input with this list check box has been selected, user input of email addresses is restricted to a list of allowed email domans and addresses. For more information, see *Validating Allowed Email Domains and Addresses* on page 70.

Example: ## Specifying Multiple Burst Email Addresses

If you are using the default configuration (Packet Email = YES), one email is distributed for multiple burst values specified for the same email address. The email address values specified on each row are treated as a string that is a key. If there are multiple rows with the same address value (key), one email is distributed with all the burst values. For example, consider the following Distribution List:

Burst Value Address

```
A               user1@abcd.com;user2@abcd.com
B               user1@abcd.com
C               user1@abcd.com
```

In this example, user1@abcd.com receives two emails when the scheduled output is distributed. In the first email, user1@abcd.com; user2@abcd.com appears in the email To line and one attachment is distributed for burst value A. In the second email, user1@abcd.com appears in the To line and two attachments are distributed, one for burst value B and one for burst value C.

If you are using the configuration that specifies to distribute a single email for each row (Packet Email = NO), then the following behavior occurs for our example. Three separate emails are distributed. In the first email, user1@abcd.com; user2@abcd.com appears on the To line and one attachment is distributed for burst value A. The second email is sent to user1@abcd.com with one attachment for burst value B. The third email is sent to user1@abcd.com with one attachment for burst value C.

If a schedule has multiple tasks and Packet Email = BURST, then for each burst value the output of all of the tasks is combined and distributed. In our example, three separate emails are distributed. In the first email, user1@abcd.com; user2@abcd.com appears on the To line and all output from the multiple tasks for burst value A are distributed. The second email is sent to user1@abcd.com with all output from all tasks for burst value B. The third email is sent to user1@abcd.com with all output from all tasks for burst value C.

Another consideration is when using the default configuration (Packet Email = YES) and the same burst value is specified multiple times for the same Address (key) value. For example, consider the following Distribution List:

Burst Value Address

```
A               user1@abcd.com;user2@abcd.com
B               user1@abcd.com
B               user1@abcd.com
```

In this Distribution List, only two emails are distributed for user1@abcd.com. In the first email, user1@abcd.com; user2@abcd.com appears in the To line and the attachment is for burst value A. In the second email, user1@abcd.com appears in the To line and the attachment is for burst value B. The third row in the Distribution List is ignored since it contains the same key and the same burst value, B, as the second row.

As a best practice, be sure to review your distribution information to make sure you have not duplicated the same burst and address value pairs.

Example: **Specifying Multiple Non-Burst Email Addresses**

Consider the following sample Distribution List, which does not contain burst values:

Address

user1@abcd.com;user2@abcd.com

user1@abcd.com

user2@abcd.com

user3@abcd.com

user1@abcd.com;user2@abcd.com;user3@abcd.com

In this Distribution List, an email is distributed for each address line regardless of whether Packet Email is set to YES or NO. This is because each address value is unique. For the first email, user1@abcd.com; user2@abcd.com appears in the To line and the attachment is for the full report output from a scheduled report procedure (FEX). The second email is distributed to user1@abcd.com, and so on.

If one of the address lines is repeated in the Distribution List (for example, if user3@abcd.com is added as the sixth line in the example Distribution List), the behavior would work as follows. If Packet Email = YES, only one email is distributed for user3@abcd.com. However, if Packet Email = NO, two separate emails are distributed to user3@abcd.com.

Chapter 4

Creating Schedules

A schedule allows you to specify when to run a report, the format in which to create the output, and how it will be distributed. Schedules are created with the Basic Scheduling tool or the Advanced Scheduling tool.

This topic describes the basic scheduling tool. For information about the Advanced Scheduling Tool, see *About the Advanced Scheduling Tool* on page 264.

Note: You cannot schedule chart requests that require an online connection, such as Esri map charts.

In this chapter:

About the Basic Scheduling Tool

The Basic Scheduling tool provides the ability to create a schedule for a procedure (FEX) when a report procedure (FEX) is selected. The WebFOCUS Client security authorization model controls whether users are authorized to access the application content stored in the Repository and the Scheduling tools.

To create a new schedule for a report procedure (FEX), select a domain in which your procedures have been created. Right-click the report procedure (FEX) you want to schedule, point to *Schedule*, and then select the method to distribute the report procedure (FEX). You can distribute the report procedure (FEX) by Email, FTP, Printer, Report Library, or Repository.

Basic Scheduling Tool Quick Access Toolbar

The Quick Access Toolbar, located at the top of the Basic Scheduling tool, is always visible no matter which options are selected. It provides access to the most commonly used functions. From the Quick Access Toolbar, you can select the ReportCaster button to access the New Distribution List, Save, Save As, Delete, and Close options. You can also access the Save, Run, and Help options from the toolbar.

Run options are available for selection from the Run drop-down list.

Note: The schedule must be saved for Run options to be available or enabled.

The Run options you can select include: Run with default traces, Run with no traces, Run with Schedule traces, and Run with Schedule and Report traces .

Note:

❏ If you have the Session Traces privilege, you will have the Run with Traces options in the schedule tools. If you are not authorized to run with traces, these options will not display.

❏ Online help is available by clicking the online help icon.

Basic Scheduling Tool Ribbon

The Basic Scheduling tool ribbon partitions the scheduling options into the following categories:

❏ **Actions**

　❏ **Save & Close.** Saves and closes the schedule.

　❏ **Delete.** Deletes the schedule and closes the Scheduling tool.

❏ **Show**

❏ **Properties.** Provides a Title, Path where the schedule will be created or was opened from, Summary, Job Priority Level, No Report to Distribute, and other settings for the schedule. The *Delete this schedule if it is not scheduled to run again* check box specifies to delete the schedule if, after it is run, it is not scheduled to run again. The *Enabled (Scheduled job runs at specified time)* check box specifies to run the schedule as specified by the Recurrence settings within the schedule. The *No Report to Distribute* drop-down list box specifies whether to process a No Report to Distribute result as an Error or a Warning.

❏ **Recurrence.** Provides run-time intervals for distribution and repeat options. Provides the facility to Manage Recurrences (New, Edit, and Remove).

❏ **Task.** Provides information on the report procedure (FEX) that is being scheduled. The Advanced Scheduling tool also provides options to create and delete tasks. Provides the facility to Manage Tasks (New, Edit, and Remove).

❏ **Distribution.** Provides options to specify the recipients or location to which the report will be distributed. It also provides the ability to create, edit, and remove distributions.

❏ **Notification.** Provides the options to set up notification of the schedule status.

❏ **Log Reports.** Shows the Number of Jobs and the Log Report for individual jobs.

❏ **Options**

❏ **Parameters.** Specifies values for parameters that are required at run time by the report procedure (FEX) being scheduled.

❏ **Pre/Post-RPC.** Allows you to specify that a WebFOCUS Server Procedure should be run before or after the scheduled task is run.

❏ **Advanced Task Settings.** Allows you to input the report language and additional FOC Errors to be processed as warnings.

❏ **Email Server.** Allows you to adjust the Mail Server settings. The default Mail Server displays in the Mail Server Name field. If the *This server requires authentication* checkbox is selected, you will be required to type an account name and password.

Creating a Schedule in the Basic Scheduling Tool

This section provides the overall procedure to create a new schedule for a report procedure (FEX). Some steps in the procedure contain details on the associated options, while other steps direct you to a separate section that contains detailed descriptions of the options and additional information, such as tips in making a selection.

To save a schedule, the required information in the Properties, Recurrence, Distribution and Notification tabs must be provided. If required schedule information is missing when you save the schedule, a message will display informing you of the schedule information that needs to be entered.

Procedure: **How to Create a Schedule**

1. Open the Basic Scheduling tool, as described earlier in this section. For more information, see *About the Basic Scheduling Tool* on page 173.

2. In the Properties tab, you can edit the name for the schedule in the *Title* box.

   This is a required field and a default name is provided.

3. Type a descriptive summary in the *Summary* box.

   Note: This is an optional field.

4. Select a Job Priority Level.

   Normal - 3 Job Priority Level is the default.

5. Check the *Delete this schedule if it is not scheduled to run again* check box if you do not want this schedule to be stored in the Repository if it will not run again as specified in the Schedule recurrence settings.

6. Leave the *Enabled (Scheduled job runs at specified time)* check box checked if you want scheduled jobs to run as specified in the recurrence settings.

7. Select the *Recurrence* tab and make the following selections.

   a. From the Settings radio button list, select a time interval that the schedule will use to run the report procedure (FEX).

      You can set the interval to Run Once, Minutes, Hourly, Daily, Weekly, Monthly, Yearly, or at Custom intervals.

   b. From the Time Zone list, select the time zone of the recipients of the scheduled content, if they are not located in the default time zone.

   c. From the Start Schedule options, select the date (from the drop-down calendar) and time you want the schedule to begin running.

      Note: To change the time setting, select either the hour or minutes and use the arrows to increase or decrease the value.

d. If applicable to the Run Interval selection, from the End Schedule options, select the date and time you want the schedule to stop running.

e. If applicable to the Run Interval selection, from the Advanced settings, click the *Repeat schedule every:* check box to enable custom intervals.

   Note: This option is disabled for the Run Once, Minutes, and Hourly settings options.

8. Select the *Task* tab. The Path, Procedure, Server Name, and Save Report As fields are populated according to the report procedure (FEX) you selected to schedule. For a description of the Task tab, see *About Tasks in the Basic Scheduling Tool* on page 178.

9. Select the *Distributions* tab and specify the recipients or location to which the report will be distributed.

10. Select the *Distributions* tab and specify the information for the distribution method you selected.

11. Select the *Notification* tab and specify whether or not you want to send a notification when the schedule runs and under what conditions to send it. The notification options are:

   ❏ **Never.** ReportCaster will not send a notification of the schedule status under any circumstances. This is the default value.

   ❏ **Always.** Send a notification each time the schedule runs.

   ❏ **On Error.** Only send a notification when there is an error running the schedule.

   For more information, see *Notification Options in the Basic Scheduling Tool* on page 253.

12. In the Log Reports tab, you can view log and manage log reports for the schedule.

13. To save the schedule, click *Save & Close* on the ribbon.

   Note: You can optionally click *Save* on the toolbar to remain in the scheduling tool.

14. Select the folder that will contain the schedule.

   Note:

   ❏ You must be authorized to create content in this folder.

   ❏ The default location for saving a schedule is dependent upon your privileges. If you can create content in the folder where the scheduling tool is launched, the Save dialog will be positioned in that folder. If you are not allowed to create content in that folder, the Save dialog will be positioned in the My Content folder located under that folder. If a My Content folder is not available, the Save dialog will be positioned in the first writable folder found.

15. Enter a name for the schedule and click *Save*.

Note:

❑ If the WFDescribe process, which checks for parameters, has not completed before the schedule is saved, you will be prompted to either allow the process to continue or to save the schedule without checking for parameters. For more information on the WFDescribe setting, see the *TIBCO WebFOCUS® Security and Administration* manual.

❑ The maximum length of a title value for a file is 256 characters.

❑ If the title of your file has the same name of an existing file in the folder, you will receive a message asking if you wish to replace the file.

About Tasks in the Basic Scheduling Tool

When you access the Basic Scheduling tool, the information for the Task tab options is predefined with the selected report procedure (FEX) information. You can complete the available task options, such as specifying parameter values, as well as select whether or not to burst the report.

Note:

❑ You can use parameters (amper variables) when specifying a value in the Save Report As field of a schedule. These parameters can be system variables, such as &YYMD or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable, terminate the variable with the '|' character, for example, &YYMD|.htm. Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value in the Save Report As field.

❑ The WebFOCUS Client Universal Profile is executed by ReportCaster when a WebFOCUS Repository procedure or WebFOCUS Reporting Server procedure is run. For more information, see the *TIBCO WebFOCUS® Security and Administration* manual.

Task Options in the Basic Scheduling Tool

The options available when you select the Task tab are:

❑ **Path.** Shows the report path in the Repository or on the Reporting Server.

❑ **Procedure.** The name of the procedure you are scheduling.

❏ **Server Name.** The Reporting Server to which the report procedure (FEX) will be submitted.

❏ **Execution ID.** The user ID running the report procedure (FEX) on the Reporting Server. Click on the *Password* button to the right of this field to set the password.

❏ **Password.** Enter a password for the Execution ID.

❏ **Alert.** Specifies how to reactivate the alert or to deactivate the alert condition when it is triggered. Click *Alert* to specify the alert options.

Select one of the following options from the Alert Options dialog box.

❏ **Automatically Reset.** After the alert is triggered, reactivate the alert when the condition is no longer true. The system will keep checking the condition after the alert has been triggered. As soon as the condition is no longer true, it will reactivate the alert. This is the default value.

❏ **Continue After Alert.** After the alert is triggered, reactivate the alert immediately.

❏ **Deactivate Schedule After Alert.** Deactivate the schedule after the alert is triggered.

❏ **Delay.** Restart the alert after a specified period. You can specify to restart the alert after a maximum of 99 hour(s), day(s), week(s), month(s), or year(s). For more information, see *Setting a Delay for an Alert Schedule* on page 181.

Caution: Be sure that you set the schedule interval to a time period greater than the time it takes to run the scheduled procedure. When the schedule interval is less than the time it takes to run the procedure and the Delay option is selected, an alert schedule will distribute (based on the distribution option that you selected) more frequently than expected. For email distribution, this can result in unnecessary distribution of emails which can impact the business or operational goals of the alert report distribution.

❏ **Enabled.** Selected by default, this option allows you to disable a task.

Report Properties

❏ **Burst Report.** If you want to burst the report, select the *Burst Report* check box. The burst feature enables you to instruct the Reporting Server to create the report in sections so that they can be distributed separately. For more information, see *Bursting a Report* on page 157.

❏ **Override the Format Specified in the Procedure.** Select this check box to indicate a format other than the one specified in the procedure.

Note:

❏ If the scheduled report is a compound report that uses the stabilized SET COMPOUND OPEN syntax, you must select the *Override the Format Specified in the Procedure* check box and specify the format in the schedule when scheduling this report. Otherwise, the report will not be distributed. Compound reports produced by the WebFOCUS and TIBCO WebFOCUS® App Studio reporting tools such as InfoAssist and the WebFOCUS® App Studio Document canvas do not require that the *Override the Format Specified in the Procedure* check box be checked.

❏ FLEX, VISDIS, and VISDISAE report output formats are no longer supported. If you are editing a task that uses one of these formats within a schedule, you can change the output format in the dialog box that opens.

 ❏ If you click *OK*, and the output format of the report is set to FLEX, the task output is saved as AHTML.

 ❏ If you click *OK*, and the output format of the report is set to VISDIS or VISDISAE, the task output is saved as HTML.

 ❏ If you click *Exit*, the output format will not be changed, and any changes that you made to the task will not be saved.

❏ When an existing schedule is opened in the Basic Scheduling tool, if the *Override the Format Specified in the Procedure* check box was selected, the list of formats displays. If you clear the *Override the Format Specified in the Procedure* check box, the list of formats does not display.

❏ When an existing schedule is opened in the Basic Scheduling tool, if the *Override the Format Specified in the Procedure* check box was not selected, the list of formats does not display. If you select the *Override the Format Specified in the Procedure* check box, the list of formats displays.

❏ **Save Report As.** Allows you to specify a different name for the report, which defaults to the name of the report that you selected to schedule.

Note: When the Save Report As field contains an amper variable followed by a file extension, the separating characters between the amper variable and the file extension must be either two additional period (.) characters, or a single vertical bar (|) character, as shown in the following examples.

❏ **The file extension is preceded by two additional period characters.** For example, car_&YYMD...csv.

❑ **The file extension is preceded by a vertical bar character.** For example, car_&YYMD|.csv.

Setting a Delay for an Alert Schedule

When an alert has been triggered, you can set the alert schedule to deactivate under certain conditions.

When a recurring alert schedule is configured to have a delay, the alert schedule runs repeatedly throughout the secondary run interval until the alert is triggered, and then does not run again until the next primary run interval. This delay will only happen if the alert is triggered.

The Alert Options dialog box is shown in the following image.
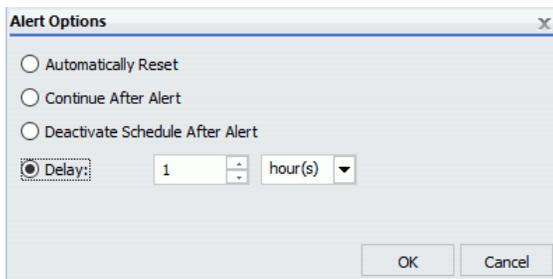
For example, an alert schedule is set to run daily at 9:00 AM and has a secondary run interval that occurs every five minutes, lasting for a total of 15 minutes. This alert schedule runs four times per day, at 9:00 AM, 9:05 AM, 9:10 AM, and 9:15 AM. These recurrence settings are shown in the following image.
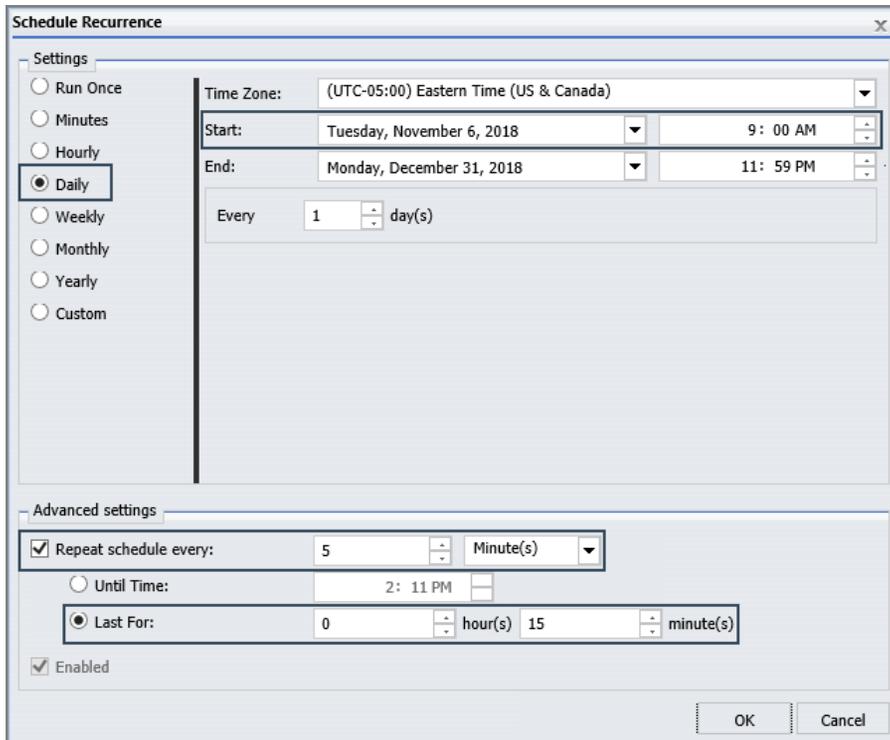
If the alert is triggered at 9:00 AM, an alert result report distributes at 9:00 AM. Once the alert has been triggered, if you do not want to repeatedly receive the same report at 9:05 AM, 9:10 AM, and 9:15 AM, but you do not want to deactivate the alert schedule, you can use the Delay option to reschedule the alert schedule to run on the next primary interval.

This means that if the alert is triggered at 9:00 AM on Tuesday, the alert schedule will not continue to run at 9:05 AM, 9:10 AM, and 9:15 AM. All remaining scheduled runs that are planned to occur during the secondary run interval are cancelled. However, the delayed alert schedule is rescheduled to run at the next primary run interval, which is Wednesday at 9:00 AM.

For example, if we add a delay of one hour to the alert schedule before the alert is triggered at 9:00 AM on Tuesday, the next run time of the alert schedule would be 10:00 AM. However, since 10:00 AM is past the duration of the secondary run interval, which is only from 9:00 AM to 9:15 AM, the alert schedule is delayed to run the next day at 9:00 AM on Wednesday.

Specifying Parameter Values

You can customize a report and control its execution with parameters. When scheduling a report procedure (FEX), the schedule Task Parameters section allows you to supply a value for parameters referenced in the report procedure or add a parameter to the schedule by creating a new parameter and specifying the parameter name and value.

If your Server Procedure contains Pre/Post Procedures, see *Schedule Pre-Processing and Post-Processing Procedures* on page 213.

Procedure: How to Specify Parameter Values

If the scheduled procedure contains parameters for which values must be supplied at run time, these parameters are displayed in the parameters section of the scheduling tool.

In the Basic Scheduling tool, click the *Parameters* tab to open the Task Parameters dialog box, shown in the following image.
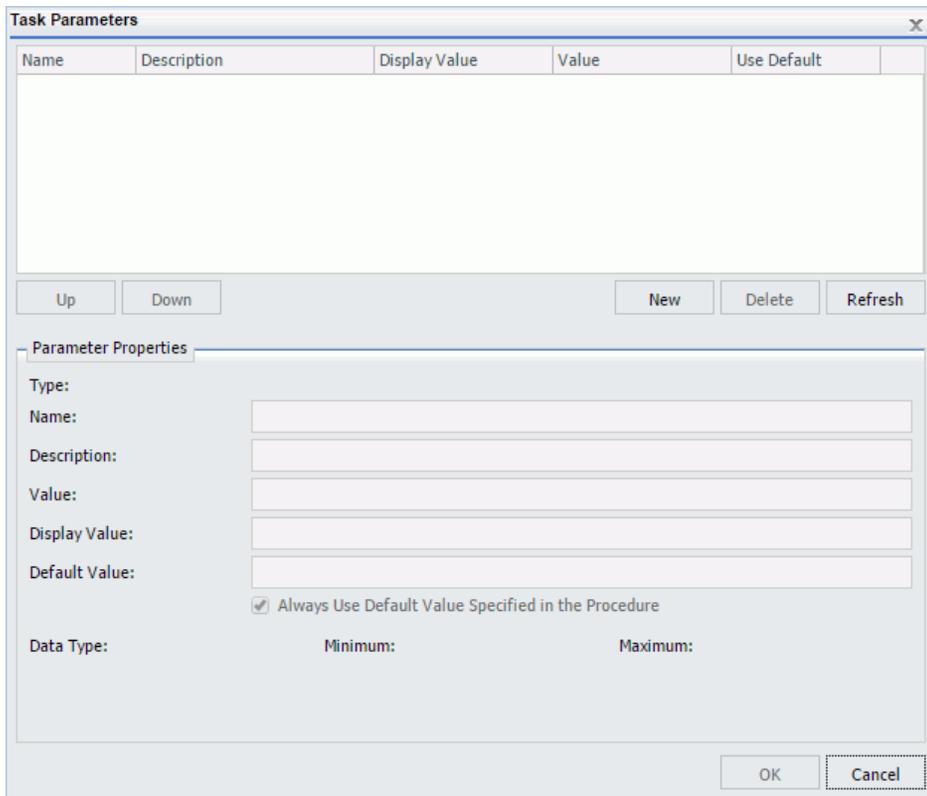
Parameters may have default values and may have values that can be selected from a static or dynamic list. For more information about selecting parameters in the Scheduling Task Parameters dialog box, see the examples provided in this chapter.

Reference: Considerations When Specifying Parameter Values

The following are considerations when specifying parameter values for a procedure:

❏ The maximum number of characters for each individual parameter value is 3200. You can store multiple values for a single parameter. Multiple values for a parameter are stored as one entry, which must not exceed the 3200 maximum character limit.

❏ ReportCaster displays the description for the parameter when it is specified in the procedure. Otherwise, ReportCaster displays the parameter name.

❑ ReportCaster displays default variable values, as well as static or dynamic single-select and multiselect lists.

Note:

❑ The No Selection option is displayed for dynamic multiselect lists. When selected, this option does not perform any data selection test on that field.

❑ ReportCaster does not support using the -HTMLFORM command to create a dynamic selectable list of parameter values.

❑ ReportCaster displays global variables that are used in FILTERS defined in Master Files and referenced by a procedure. For example, if a Master File contains

```
FILENAME=CAR,SUFFIX=FOC
VARIABLE NAME=&&COUNTRY1, USAGE=A10, DEFAULT=ENGLAND,$
FILTER FILTER1=COUNTRY EQ '&&COUNTRY1'; $
```

and the procedure being scheduled contains

```
WHERE FILTER1
```

then ReportCaster displays COUNTRY1 in the Parameters window.

❑ ReportCaster will not prompt for variables with defaults set by the -DEFAULTH command. The purpose of the -DEFAULTH command is to assign a default value to amper variables and not be dynamically prompted for that variable.

❑ ReportCaster does not prompt for the value of its internal variables that are set by the Distribution Server at schedule execution time. For example, &DSTOWNER is the user ID of the schedule owner. If this parameter is referenced in a scheduled procedure, the value will be available because the Distribution Server sets the value to the owner of the schedule at schedule execution time. However, the scheduling tool will not prompt for this value in the Task Parameters dialog box.

❏ When specifying parameters with special characters (for example, %, &, |):

❏ If you are specifying the entire WHERE condition as the parameter value, you must enclose the value within two single quotation marks rather than a double quotation mark. For example, ''WHERE CAR NOT LIKE MOTO%''.

❏ If you are only specifying a value as the parameter value, you do not need to enclose the parameter value within quotation marks. For example, O&DINFO.

❏ If you want to specify parameter values in a pre-processing or post-processing procedure, these must be typed in by selecting the Pre/Post-RPC tab. See *Schedule Pre-Processing and Post-Processing Procedures* on page 213 for information about schedule pre-processing and post-processing procedures.

❏ Once a parameter is stored for a schedule, ReportCaster will continue to display that parameter in the Parameter list and submit the parameter to the Reporting Server when the schedule is run even if the parameter is removed from the underlying report. To remove the parameter from the schedule information, edit the schedule and delete the parameter. For information on how to delete a parameter from a schedule, see *Deleting a Parameter* on page 210.

❏ A parameter value that contains special characters should not be used in a schedule setting that refers to an output file name, since file names cannot contain special characters. Examples of affected schedule settings include the Save Report As value, the Report Name value for single-file FTP distribution, and the Zip File Name.

❏ A FEX can be coded to set the Display Value for any value. For example, if a value is named ENGLAND, the Display Value can be set to display as England.

Example: **Specifying a Default Parameter Value in the Report Procedure (FEX)**

Specifying default parameter values can be done with the -DEFAULT or -DEFAULTH command or within the WHERE statement. Default values specified with the -DEFAULTH command are not prompted for.

The following procedure sets a default value of NY for the STATE (2-3 letters for US State) parameter.

```
-DEFAULT &STATE=NY
TABLE FILE GGSALES
SUM DOLLARS UNITS
BY ST
BY CATEGORY
BY PRODUCT
ON TABLE SUBHEAD
"Product Sales Report"
WHERE ST EQ '&STATE.2-3 letters for US State.'
END
```

The parameters that have default values defined in the report procedure (FEX) are listed within the Parameters tab with the default value in the Value column. When parameters are stored in a schedule, ReportCaster adds a -SET for the parameter to the schedule procedure sent to the Reporting Server to be run. A -SET command overrides a value specified in a -DEFAULT command.

The following image shows the Task Parameters dialog box displaying the STATE parameter. In the Use Default column, the State parameter shows a value of Yes. In the Parameter Properties section, NY is shown in the Value and Default Value fields. This is the default parameter value.
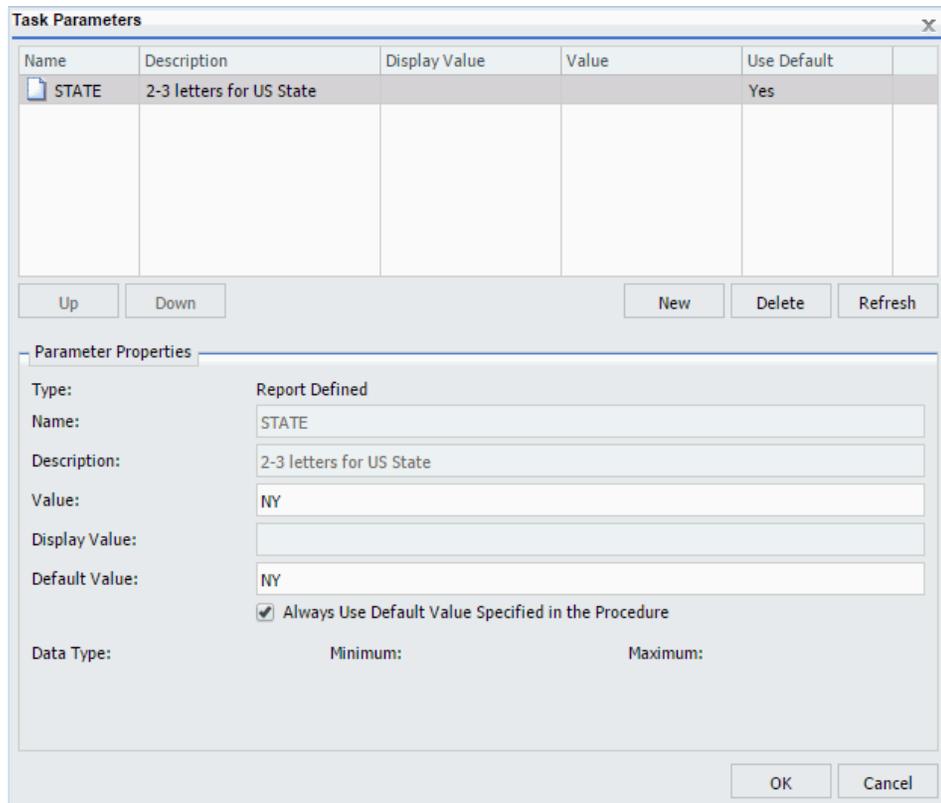
To use a value other than the default value at schedule execution time, so that it will be used even if the procedure is changed, click the parameter and change the parameter value within the Parameter Properties section. Values for simple parameters are specified by entering a value for the parameter in the Value field. There are also static and dynamic parameter types that allow selection of a single or multiple values, which are explained in the following examples.

When parameters are stored in a schedule, ReportCaster adds a -SET for the parameter to the schedule procedure sent to the Reporting Server to be run. A -SET command overrides a default value specified in a -DEFAULT command.

Example: **Adding a Static Single-Select List of Parameter Values**

The following procedure provides a list of static values that are valid for the CATEGORY (Category) parameter.

```
-DEFAULT &STATE=NY
TABLE FILE GGSALES
SUM DOLLARS UNITS
BY ST
BY CATEGORY
BY PRODUCT
ON TABLE SUBHEAD
"Product Sales Report"
WHERE ST EQ '&STATE.2-3 letters for US State.'
WHERE CATEGORY EQ '&CATEGORY.(Coffee,Food,Gifts).Category.'
END
```

The following image shows the Task Parameters dialog box displaying the CATEGORY parameter. In the Value column, the CATEGORY parameter has a value of Coffee. Since this CATEGORY parameter has a list of possible parameter values, there is no default value specified. Therefore, the Use Default column is blank.
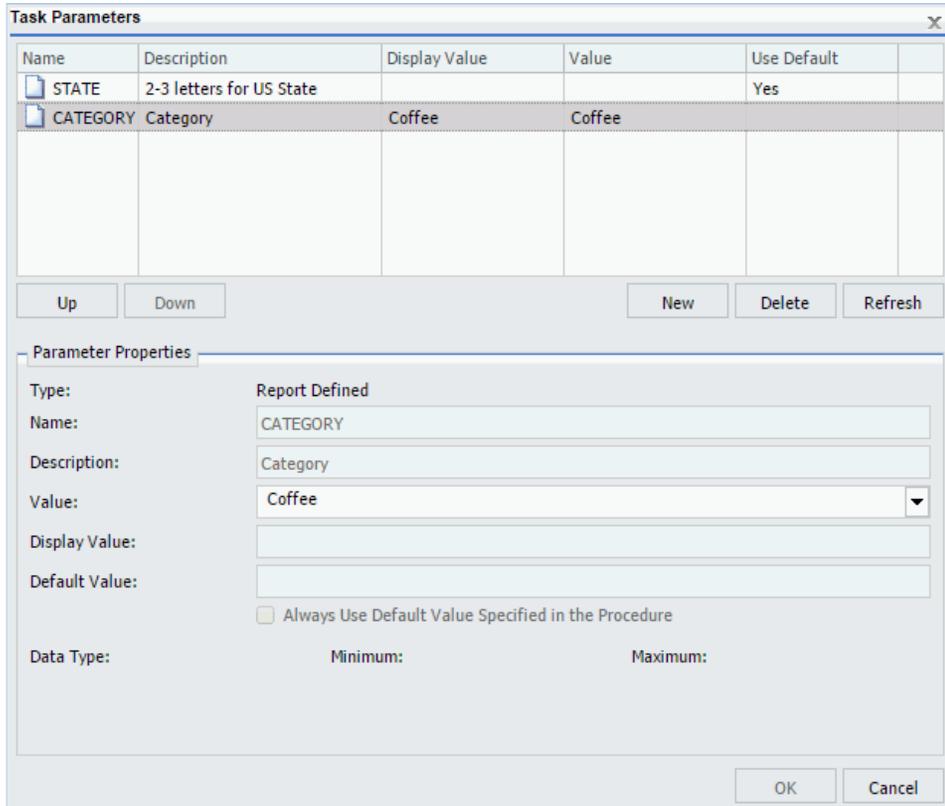
To supply a value for a single select parameter, select the parameter in the Task Parameters table and enter a value in the Value field in the Parameter Properties section. From the list of the values, select a value to assign to the parameter. You can select only one value for a static single-select parameter.

Example: Adding a Dynamic Single-Select List of Parameter Values

The following procedure provides a single select list of values that are valid for the PRODUCT (Product Name) field. This list is dynamically populated with values from the GGSALES data source.

```
-DEFAULT &STATE=NY;
TABLE FILE GGSALES
SUM DOLLARS UNITS
BY ST
BY CATEGORY
BY PRODUCT
ON TABLE SUBHEAD
"Product Sales Report"
WHERE ST EQ '&STATE.2-3 letters for US State.'
WHERE PRODUCT EQ '&PRODUCT.(FIND PRODUCT IN GGSALES).Product Name.'
END
```

The following image shows the Task Parameters dialog box displaying the PRODUCT parameter. In the value column, the PRODUCT parameter has a value of Espresso. Since the PRODUCT parameter has a list of possible parameter values, there is no default value specified. Therefore, the Use Default column is blank.

To supply a different value, click the *PRODUCT* parameter in the table and change the parameter value within the Parameter Properties section. You can select only one value from the dynamic single-select list.

Example: Adding a Static Multiselect List of Parameter Values

The following procedure provides a static multiselect list of values that are valid for the CATEGORY (Category) field.

```
-DEFAULT &STATE=NY
TABLE FILE GGSALES
SUM DOLLARS UNITS
BY ST
BY CATEGORY
BY PRODUCT
ON TABLE SUBHEAD
"Product Sales Report"
WHERE ST EQ '&STATE.2-3 letters for US State.'
WHERE CATEGORY EQ '&CATEGORY.(OR(Coffee,Food,Gifts)).Category.'
END
```

The following image shows the Task Parameters dialog box displaying the CATEGORY parameter. The CATEGORY parameter has been encoded to only use the values Coffee, Food or Gifts. The selected values will show in the Value column. Since the CATEGORY parameter has a list of possible parameter values, there is no default value specified. Therefore, the Use Default column is blank.

When the Value button is selected in the Parameter Properties section, a list of available values displays, as shown in the following image. Using the Ctrl key, you can select more than one value from the static multiselect list.
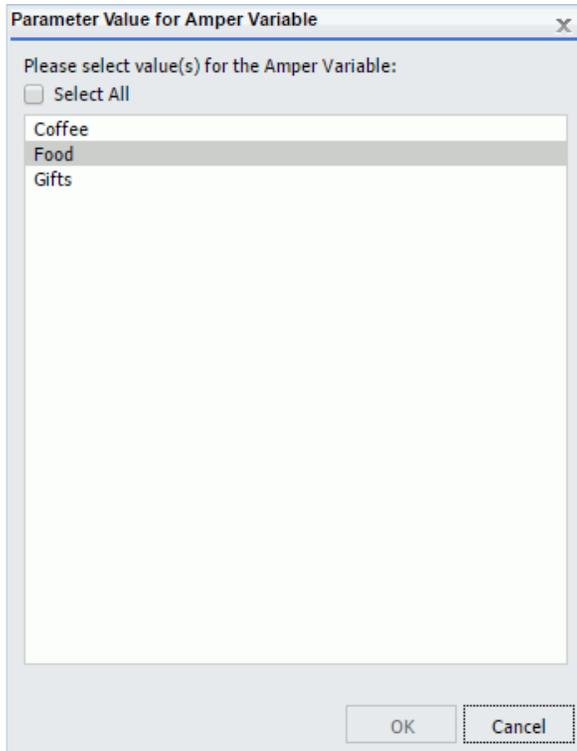
Example: **Adding a Dynamic Multiselect List of Parameter Values**

The following procedure provides a dynamic multiselect list of values that are valid for the PRODUCT field. This list is dynamically populated with values from the GGSALES data source.

```
-DEFAULT &STATE=NY;
TABLE FILE GGSALES
SUM DOLLARS UNITS
BY ST
BY CATEGORY
BY PRODUCT
ON TABLE SUBHEAD
"Product Sales Report"
WHERE ST EQ '&STATE.2-3 letters for US State.'
WHERE PRODUCT EQ '&PRODUCT.(OR(FIND PRODUCT IN GGSALES)).Product Name.'
END
```

The following image shows the Task Parameters dialog box displaying the CATEGORY parameter. The CATEGORY parameter has been encoded to use any value found in the GGSALES data source. The selected values will show in the Value column. Since the CATEGORY parameter has a list of possible parameter values, there is no default value specified. Therefore, the Use Default column is blank.

When the Value button is selected in the Parameter Properties section, a list of available values displays, as shown in the following image. Using the Ctrl key, you can select more than one value from the dynamic multiselect list.
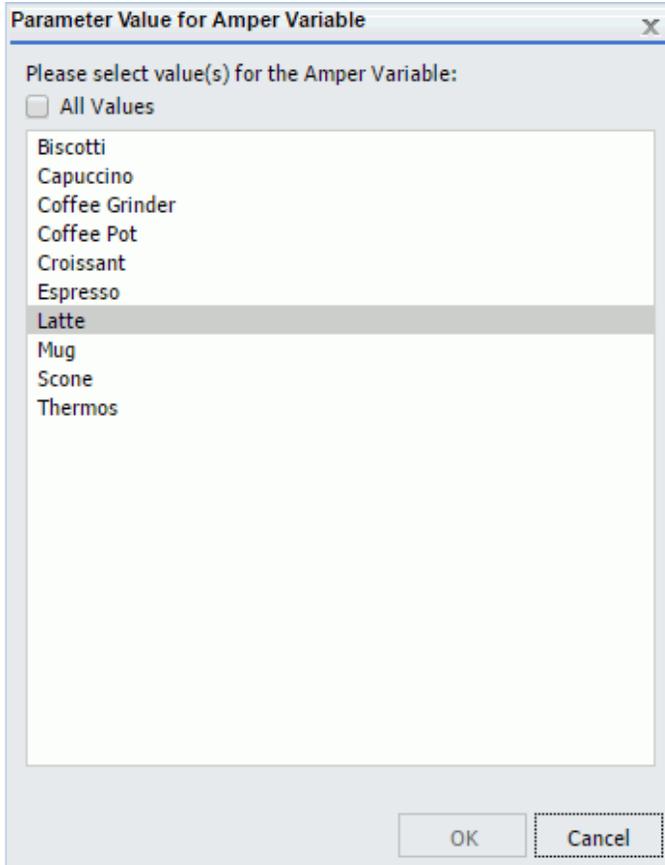
Using Parameter Values to Burst Analytic Documents and Compound Reports

In addition to the ability to distribute sections of a single report to individual users using standard bursting, you can distribute sections of reports by using a filter with a static or dynamic multi-select parameter.

Analytic documents, which are compound reports that contain interactive reports, and reports that use an Excel format output, can be burst by using the parameter values saved in these reports. You can also burst Excel reports that contain a table of contents. You can burst these reports using a field other than the first BY field.

The Repeat Task for Each Selected Value check box must be selected in order to burst each parameter separately. In both the Basic and Advanced Scheduling tools, the Repeat Task for Each Selected Value check box is found in the Parameter Value for Amper Variable dialog box, as shown in the following image.

Note:

❏ This check box is cleared by default.

❏ The Repeat Task for Each Selected Value check box only displays for static or dynamic multiselect parameters.

❏ At least one parameter value must be selected.

❏ If the All Values check box is selected, the term _FOC_NULL appears in the Value field of the Task Parameters dialog box. The server then performs a WFDescribe at run time to generate the list of values for the parameter.

❏ The Repeat Task for Selected Parameter Value feature can only be applied to one parameter at a time.

❏ If the Burst Report check box within the Task tab is selected first, then the Repeat Task for Each Selected Value check box will be disabled and cannot be selected. The two bursting methods cannot be combined in one schedule.

❏ If the Repeat Task for Each Selected Value check box is selected on the Parameter Value dialog box, then the Burst Report check box within the Task tab becomes the Burst Report by Parameterized Report Filter check box. This check box will now be automatically selected and cannot be cleared unless the Repeat Task for Each Selected Value check box is cleared.

The values you choose are shown in the Task Parameters dialog box and placed between square brackets in the Value column to indicate their selection, as shown in the following image.
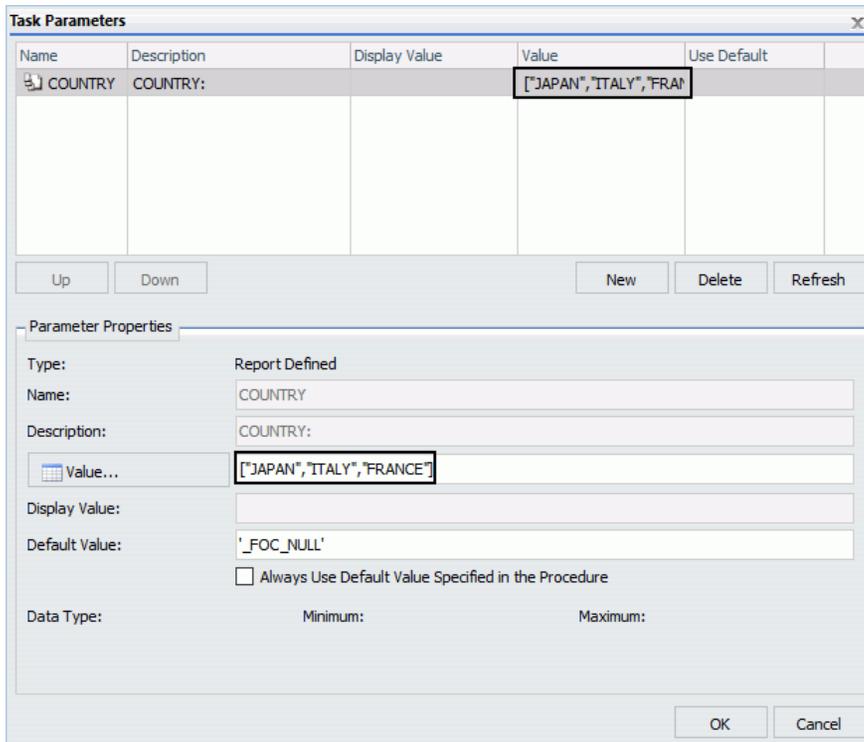
Once the schedule is run, the Distribution Server repeats the execution of the task for each parameter selected. For example, since the parameter values Japan, Italy, and France are selected, and the Repeat Task for Each Selected Parameter check box is selected, the schedule bursts the report information into three separate reports. Each report shows information related to one of the three selected parameters, as shown in the following image.

Running Pre and Post-Processing Procedures for Each Parameter Value

Selecting the *Repeat Task for Each Selected Value* check box allows you to select the *Run Pre/Post-RPC Every Time* check box, as shown in the following image.

The Run Pre/Post-RPC Every Time check box enables the Distribution Server to run pre-processing and post-processing procedures with each task repetition.

For example, if three parameter values are selected, and the Run Pre/Post-RPC Every Time check box is selected, pre-processing procedures run before each selected value, and post-processing procedures run after each selected value.

If you do not select this check box, pre-processing procedures execute only once before the first task is executed, and post-processing procedures execute only once after the last task is executed. This check box is cleared by default.

Note: The Run Pre/Post-RPC Every Time check box cannot be selected unless the Repeat Task for Each Selected Value check box is selected first.

Procedure: How to Burst a Filtered Analytic Document or Excel Compound Report Using the Basic Scheduling Tool

1. Create an analytic document or Excel compound report that contains at least one static or dynamic multiselect parameter. For more information, see the *TIBCO WebFOCUS®️ InfoAssist User's Manual*.

2. Right-click the report, point to *Schedule*, and select a distribution method to begin a new Basic Schedule.

3. In the Options group, click *Parameters*.

   The Task Parameters dialog box opens.

4. Choose the parameter you wish to edit.

   Once the parameter is chosen, the Parameter Properties section is populated with information about the selected parameter.

5. In the Parameters Properties section, click the *Value* button.

   Note: For the Value button to be able to be selected, the chosen parameter must be a multiselect parameter.

   The Parameter Value for Amper Variable dialog box opens.

6. Choose the values that you want the schedule to burst. While holding the Ctrl key, use your mouse to select more than one value. To choose all values, select the *All Values* check box.

7. Select the *Repeat Task for Each Selected Value* check box.

8. Optionally, select the *Run Pre/Post-RPC Every Time* check box. For more information, see *Running Pre and Post-Processing Procedures for Each Parameter Value* on page 199.

9. Click *OK*.

The selected parameter values now appear in square brackets in the Task Parameters dialog box in the Value column, as shown in the following image.
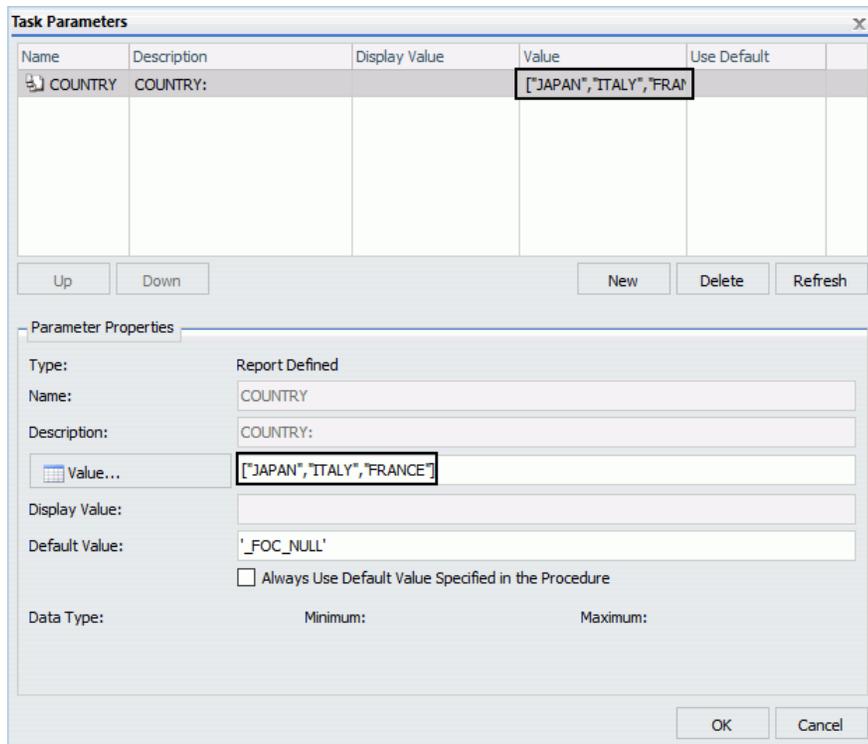
10. Click *OK*.

11. Input all other necessary options and settings for your schedule, then save the schedule. For more information, see *Creating a Schedule in the Basic Scheduling Tool* on page 176.

12. Run the schedule.

    When the schedule is run, it distributes a report for every burst parameter that you selected, as shown in the following image.
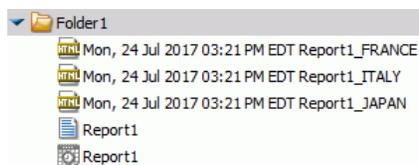
Procedure: **How to Burst a Filtered Analytic Document or Excel Compound Report Using the Advanced Scheduling Tool**

1. Create an analytic document or Excel compound report that contains at least one static or dynamic multiselect parameter. For more information, see the *TIBCO WebFOCUS®️ InfoAssist User's Manual*.

2. On the start page or the WebFOCUS Home Page, select the workspace in which you want to create a new schedule.

3. On the Actions bar, click *Schedule*, and then click the *Schedule* button.

   The Advanced Scheduling tool displays.

4. Click the *Tasks* tab.

5. Click the arrow next to the *New* button to select a task type and create a new task.

6. Click the *Parameters* tab.

   Note: The Parameters tab is available only when WebFOCUS Server Procedure or WebFOCUS Report is selected.

7. Choose the Parameter you wish to edit.

   Once the parameter is chosen, the Parameter Properties section is populated with information about the selected parameter.

8. In the Parameters Properties section, click the *Value* button.

   Note: For the Value button to be able to be selected, the chosen parameter must be a multiselect parameter.

   The Parameter Value for Amper Variable dialog box opens.

9. Choose the values that you want the schedule to burst. While holding the Ctrl key, use your mouse to select more than one value. To choose all values, select the *All Values* check box.

10. Select the *Repeat Task for Each Selected Value* check box.

11. Optionally, select the *Run Pre/Post-RPC Every Time* check box. For more information, see

12. Click *OK*.

The selected parameter values now appear in square brackets in the Task Parameters dialog box in the Value column, as shown in the following image.
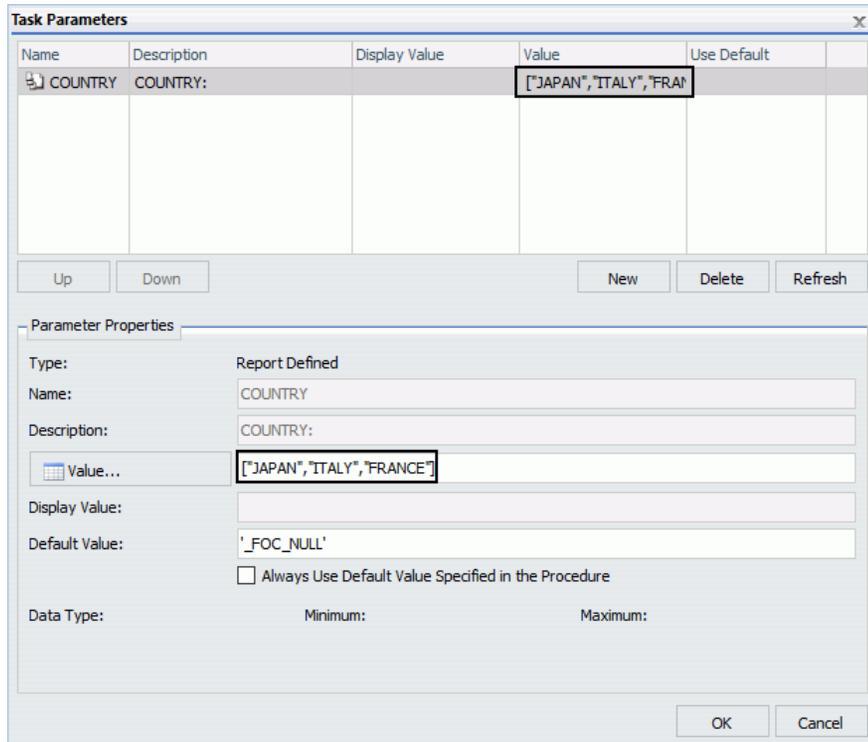
13. Click *OK*.

14. Input all other necessary options and settings for your schedule, then save the schedule. For more information, see *Creating a Schedule in the Basic Scheduling Tool* on page 176.

15. Run the schedule.

    When the schedule is run, it distributes a report for every burst parameter that you selected, as shown in the following image.
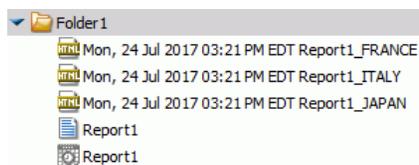
Bursting an Analytic Document or Excel Compound Report That Contains Filtered and Unfiltered Reports

When you create an analytic document or Excel compound report that contains filtered and unfiltered reports, only the filtered reports can be configured for bursting.

The following image shows two reports created in InfoAssist on one dashboard. The report showing MODEL, CAR, COUNTRY, and DEALER COST data has a COUNTRY filter applied, which allows the user to filter report results by country. The report showing MODEL and RETAIL_COST data does not have a filter.

When you access Task Parameters for this compound report through the scheduling tool, any edits you make to the parameter will only apply to the filtered report. Meaning, you will only be able to assign values to a parameter in the filtered report. An example of this is shown in the following image, where you can see the values that were assigned to the COUNTRY parameter.

When you schedule a compound report to be burst, and the Repeat Task for Each Selected Value check box is selected, the reports that contain filters will burst based on the parameter values selected. In the following image, the compound report is distributed into three separate burst reports, which show filtered data about W GERMANY, FRANCE, and JAPAN, respectively.

For each burst report, the first chart shows data for the selected COUNTRY value.

The following image shows the W GERMANY burst compound report.

MODEL ▼	CAR ▼	COUNTRY ▼	DEALER_COST ▼
100 LS 2 DOOR AUTO	AUDI	W GERMANY	5,063
2002 2 DOOR	BMW	W GERMANY	5,800
2002 2 DOOR AUTO	BMW	W GERMANY	6,000
3.0 SI 4 DOOR	BMW	W GERMANY	10,000
3.0 SI 4 DOOR AUTO	BMW	W GERMANY	11,000
530I 4 DOOR	BMW	W GERMANY	8,300
530I 4 DOOR AUTO	BMW	W GERMANY	8,400

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MODEL ▼	RETAIL_COST ▼
100 LS 2 DOOR AUTO	5,970
2000 4 DOOR BERLINA	5,925
2000 GT VELOCE	6,820
2000 SPIDER VELOCE	6,820
2002 2 DOOR	5,940
2002 2 DOOR AUTO	6,355
3.0 SI 4 DOOR	13,752
3.0 SI 4 DOOR AUTO	14,123
504 4 DOOR	5,610
530I 4 DOOR	9,097
530I 4 DOOR AUTO	9,495
B210 2 DOOR AUTO	3,139
COROLLA 4 DOOR DIX AUTO	3,339
DORA 2 DOOR	31,500
INTERCEPTOR III	17,850
TR7	5,100
V12XKE AUTO	8,878
XJ12L AUTO	13,491

18 of 18 records, Page 1 of 1

Because no filters have been applied to the second report, the results of the second report are the same for each burst compound report. Only the report that uses the COUNTRY filter changes.

Bursting an Analytic Document or Excel Compound Report That Contains Only Filtered Reports

If you attempt to burst an analytic document or Excel compound report that contains only filtered reports, all reports will be compatible with bursting.

The following images show two reports created in InfoAssist on one dashboard. Both reports use the same filter for the MODEL data.

When Task Parameters are accessed through the scheduling tool for this compound report, you can specify the MODEL values for both reports.

As shown in the following image, the MODEL parameter has the filter values 3.0 SI 4 DOOR, 100 LS 2 DOOR AUTO, XJ12L AUTO, B210 2 DOOR AUTO, and 2000 SPIDER VELOCE selected.
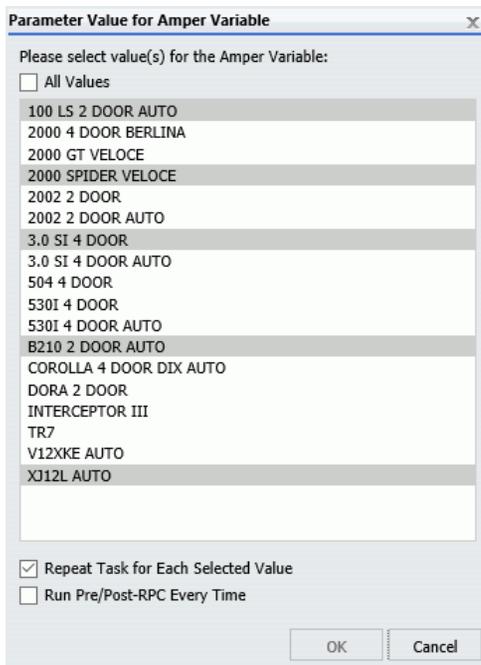
The selected values appear in brackets in the Task Parameters dialog box, as shown in the following image.

When you schedule a compound report to be burst, and the Repeat Task for Each Selected Value check box is selected, burst reports are created based on the parameter values selected. In the following image, the compound report is distributed and burst into five separate compound reports, which show filtered data about each selected car model.
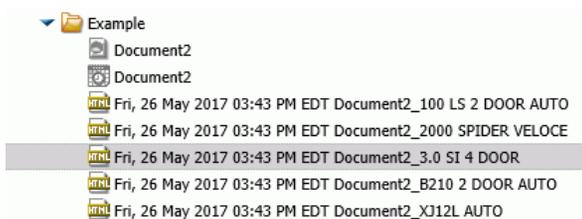
For each burst compound report, both reports show data for the selected car model. In the following image, the burst compound report showing information about the 3.0 SI 4 DOOR car model is selected. Both reports in the burst compound report only show information about the selected model.

MODEL	▼	CAR	▼	COUNTRY	▼	DEALER_COST	▼
3.0 SI 4 DOOR		BMW		W GERMANY		10,000	

≡ 1 of 1 records, Page 1 of 1

MODEL	▼	RETAIL_COST	▼
3.0 SI 4 DOOR		13,752	

≡ 1 of 1 records, Page 1 of 1

Deleting a Parameter

It is important to verify that the parameters you delete when scheduling a report procedure (FEX) will be handled, as follows, so that the scheduled job will run successfully:

❏ A default value is specified in the report procedure (FEX) being scheduled.

❏ A value will be dynamically assigned to the parameter by the report procedure (FEX) processing when the scheduled job runs on the Reporting Server.

❏ The parameter will not be referenced when the report procedure (FEX) is processed by the Reporting Server.

To delete a parameter so that it is not stored with the schedule information, highlight the parameter in the parameter table you want to delete, and click the *Delete* button.

Creating a New Parameter

If you need to have the schedule job send a parameter and value that is not defined in the report procedure being scheduled, you can create a new parameter in the Task Parameters dialog box. Parameters referenced during processing by the Reporting Server must be assigned a value for the scheduled job to run successfully. The schedule job log report will contain information when required parameter values were not provided.

Procedure: **How to Create a New Parameter**

You can create parameters for a task as follows:

1. Click *Parameters* on the ribbon to display the Task Parameters dialog box, which is shown in the following image.

2. Click the *New* button located above the Parameter Properties section.

The Task Parameter dialog box displays, as shown in the following image.
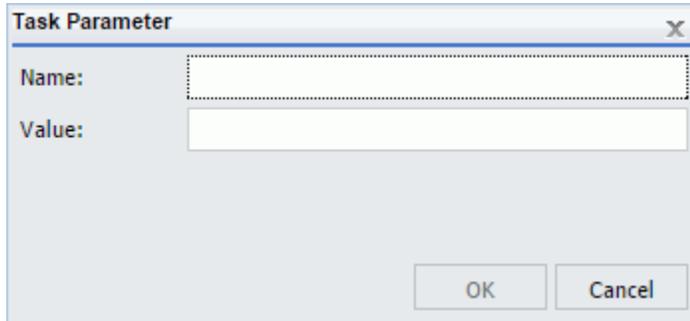
3. Enter a value in the *Name* and *Value* boxes.

4. Click *OK*.

The *Name* and *Value* boxes are populated in the Task Parameters dialog box Parameters table.

5. If you would like to change the parameter value, select the parameter in the Parameters table and specify the values in the *Value* field located in the Parameter Properties section.

6. Click *OK* when you have completed entering parameter settings for the task.

Selecting a Report Format

Use the following guidelines when selecting a format:

❑ The formats that support bursting are AHTML (except for FML reports), ALPHA, COM, COMMA, COMT, DHTML (except for FML reports), DFIX, DOC, EXL07, EXL2K, EXL2K FORMULA, EXL2K TEMPLATE, EXL97, GIF, HTML and HTML ODP (except for FML reports), JPEG, PDF, PNG, PPT, PS, SVG, TAB, TABT, and WP. Coordinated compound reports can only be burst with DHTML, PDF, and PPT formats.

❑ When a format is selected, ReportCaster automatically adds an appropriate file extension to the output file name in the Save As field. In certain cases, you must manually change the extension added by ReportCaster. For example, if you select format DHTML in the schedule and the report output is not a web archive file, you must change the extension to .htm. If you select format HTML in the schedule and the report output is a web archive file, you must change the extension to .mht. If you select format EXL07 TEMPLATE in the schedule and the specified template is a macro-enabled template, you must change the extension to .xlsm. For more information about DHTML and EXL07 TEMPLATE formats, see *ReportCaster Formats for Scheduled Output* on page 423.

❏ The WP, DOC, and PS formats support printing. The PDF format supports printing when ReportCaster is configured to enable PDF to print and the printer is configured with the appropriate driver. For more information, see *ReportCaster Configuration* on page 40.

❏ When a format is selected using the *Override the Format Specified in the Procedure* option, only the formats can be distributed as an inline email message. When the *Override the Format Specified in the Procedure* option is not used and inline is selected, the output will be distributed as an attachment if the format does not support inline distribution. Additionally, when distributing a report inline, the appearance of the report can be affected by the email server, or potentially blocked. Review the restrictions for your mail server provider before utilizing reporting formats and options that utilize JavaScript™, embedded images, and referenced CSS.

Schedule Pre-Processing and Post-Processing Procedures

If you are scheduling a Server Procedure or report procedure (FEX), you can schedule a maximum of two pre-processing and post-processing procedures. The pre-processing and post-processing procedures that you schedule can reside on the Reporting Server or in the WebFOCUS Repository, as shown in the following image.
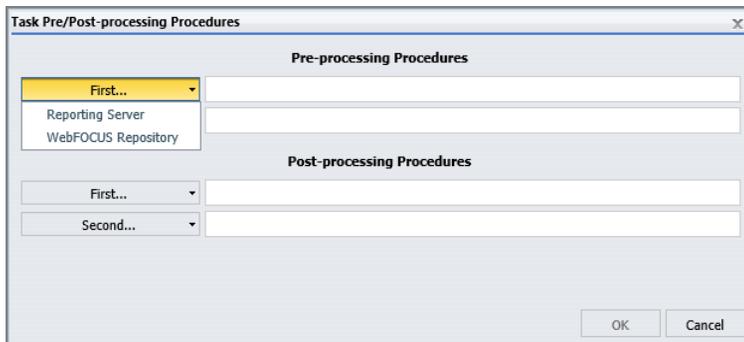
Note: All ReportCaster internal variables, which start with &DST, are passed to pre-processing and post-processing procedures so that they are available for application specific logic. For more information, see *ReportCaster Variables* on page 447.

Procedure: **How to Attach Pre-Processing Procedures or Post-Processing Procedures to a Schedule**

1. On the Schedule ribbon, in the Options group, select *Pre/Post-RPC* to open the Task Pre/Post-processing Procedures dialog box.

2. To select a procedure, perform the following steps:

   a. Under the Pre-Processing Procedures label, select *First* and then select *WebFOCUS Repository* or *Reporting Server*, depending upon where the procedure is located.

b.   In the Open dialog box, navigate to the folder that contains the procedure you wish to add and open it.

c.   Select the procedure you wish to add, and then select *Open* to close the dialog box and add the path to your selected procedure.

d.   Repeat substeps a through c for each additional pre-processing or post-processing procedure you want to add to the schedule.

3.   To enter a procedure, perform the following steps:

a.   Enter the full path or the procedure name directly into the appropriate entry in the Task Pre/Post-processing Procedures dialog box.

   Note: If you do not specify an application path, the default search path for the Reporting Server is used to locate the specified procedure.

b.   If necessary, you can also enter one or more parameter values after the procedure name, using a name and value pair configuration. Multiple parameter value pairs must be separated by commas, as shown in the following example:

```
procedurename name=value, name=value
```

   You do not need to enter the pairs in the order in which they are encountered in the procedure.

   For additional information on supplying parameter values for a procedure, see the *Supplying Variable Values From Another Procedure* topic in the *Developing Reporting Applications* manual.

4.   Select *OK* to save the new configuration.

Advanced Task Settings

The Advanced Options tab provides access to the Additional FOC Errors to be Processed as Warnings dialog box, where you can specify one or more FOCUS® error message numbers, separated by a comma. If one of these FOCUS error numbers is encountered during schedule execution, ReportCaster will process it as a warning rather than an error. For example, if a FOC1517 error is generated by the procedure, add 1517 to the text box to convert this error to a warning. This means that if a report is produced, it will be distributed in spite of the FOCUS error number. It also means that this FOCUS error number will not trigger error notification if the schedule is configured to notify on error.

The Advanced Task Settings dialog box is shown in the following image.
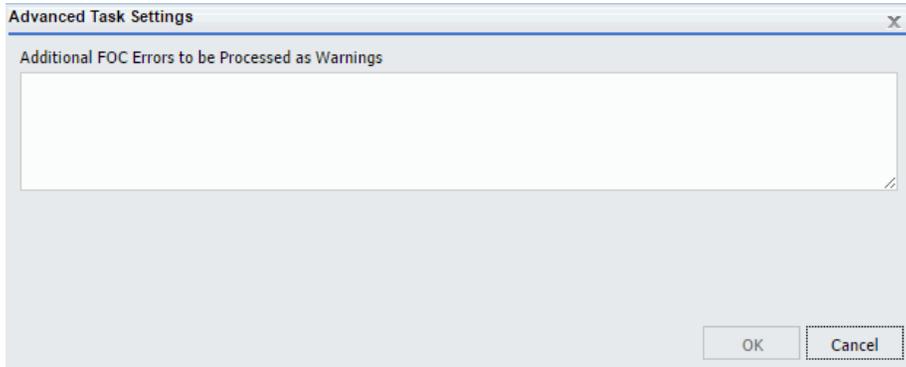
Using Amper Variables as Parameter Values

When a parameterized report is scheduled, you can set the value of a parameter to a variable, rather than a literal value. This ability reduces the need for a schedule to be updated before it is run. For example, instead of editing a schedule daily in order to display up-to-date information, a report can be scheduled to always display the date of the day that it is running. This is done by setting the value of the parameter as &YYMD. In the Task Parameters dialog box, there is a check box labeled *The value contains a system variable*, as shown in the following image.
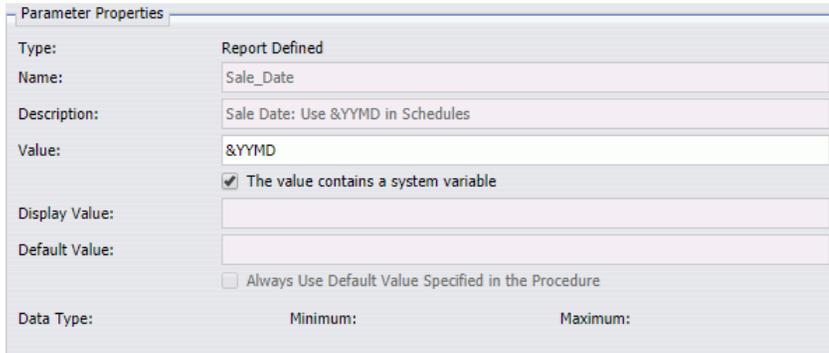
This check box is cleared by default. When this check box is selected, a string beginning with the ampersand character is processed as a variable. When this check box is cleared, the ampersand character is then processed as a literal value. This feature works with both system variables, and global variables that have been set in the Reporting Server global profile edasprof.prf.

Example: **Using the &YYMD Variable as a Parameter Value**

The following syntax is a sample report procedure (FEX) that contains date parameter values that can be used with the &YYMD Variable.

```
-*COMPONENT=Define_wf_retail
DEFINE FILE retail_samples/wf_retail
Sale_Date/YYMD='&Sale_Date.Sale Date: Use &|YYMD in Schedules.' ;
 Last_Year/YYMD=Sale_Date - 365 ;
 Two_Years_Ago/YYMD=Last_Year - 365 ;
 Quantity/D12.2=IF WF_RETAIL.WF_RETAIL_TIME_SALES.TIME_DATE EQ Sale_Date THEN
WF_RETAIL.WF_RETAIL_SALES.QUANTITY_SOLD ELSE 0 ;
 Prior_Year/D12.2=IF WF_RETAIL.WF_RETAIL_TIME_SALES.TIME_DATE EQ Last_Year THEN
WF_RETAIL.WF_RETAIL_SALES.QUANTITY_SOLD ELSE 0 ;
 Two_Years_Past/D12.2=IF WF_RETAIL.WF_RETAIL_TIME_SALES.TIME_DATE EQ Two_Years_Ago
THEN WF_RETAIL.WF_RETAIL_SALES.QUANTITY_SOLD ELSE 0 ;
END
ENGINE INT CACHE SET ON
SET PAGE-NUM=NOLEAD
SET SQUEEZE=ON
-DEFAULTH &WF_HTMLENCODE=ON;
SET HTMLENCODE=&WF_HTMLENCODE

SET HTMLCSS=ON
-DEFAULTH &WF_EMPTYREPORT=ON;
SET EMPTYREPORT=&WF_EMPTYREPORT

-DEFAULTH &WF_SUMMARY='Summary';
-DEFAULTH &WF_TITLE='WebFOCUS Report';
TABLE FILE retail_samples/wf_retail
SUM Sale_Date AS 'Sale,Date'
Quantity AS 'Quantity Sold'
Last_Year AS 'Last,Year'
Prior_Year AS 'Quantity Sold,Last Year'
Two_Years_Ago AS 'Two,Years,Ago'
Two_Years_Past AS 'Quantity Sold,Two Years Ago'
BY WF_RETAIL.WF_RETAIL_GEOGRAPHY_STORE.BUSINESS_REGION
WHERE (WF_RETAIL.WF_RETAIL_TIME_SALES.TIME_DATE EQ Sale_Date) OR
(WF_RETAIL.WF_RETAIL_TIME_SALES.TIME_DATE EQ Last_Year) OR
(WF_RETAIL.WF_RETAIL_TIME_SALES.TIME_DATE EQ Two_Years_Ago);
ON TABLE SUBHEAD
"&Company.Company Name: Use Widgets&|More in Schedules."
ON TABLE PCHOLD FORMAT HTML
ON TABLE NOTOTAL
ON TABLE SET CACHELINES 100
ON TABLE SET GRWIDTH 1
ON TABLE SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/javaassist/intl/EN/combine_templates/
ENIADefault_combine.sty,$
TYPE=REPORT, TITLETEXT=&WF_TITLE.QUOTEDSTRING, SUMMARY=&WF_SUMMARY.QUOTEDSTRING,
ORIENTATION=LANDSCAPE, HFREEZE=OFF, $
TYPE=TABHEADING, LINE=1, JUSTIFY=CENTER, $
TYPE=TABHEADING, LINE=1, ITEM=1, OBJECT=TEXT, SIZE=14, STYLE=BOLD+ITALIC, $
ENDSTYLE
END
```

1. Open a domain or folder in your WebFOCUS Repository. In the Create New pane, click *More*, and then click *Text Editor*.

Copy and paste the syntax example above into the text editor and save the file.

2. Right-click the report procedure (FEX), point to *Schedule*, and then click *Repository* to open the Scheduling tool. When you save this schedule, a report will be distributed back to your folder.

3. On the ribbon, in the Options group, click the *Parameters* tab to display the Task Parameters dialog box.

4. Select the *Sale_Date* parameter. In the Parameter Properties section, type *&YYMD* in the Value field.

5. Select the *The value contains a system variable* check box.

6. Select the Company parameter. In the Parameter Properties section, type *Widgets&More* in the Value field. Make sure the *The value contains a system variable* check box is cleared for this parameter.

7. Click *OK* to close the Task Parameters dialog box.

8. On the Ribbon, in the Actions group, click *Save and Close* to save this schedule to your Repository folder.

9. Navigate to the folder in which your schedule is saved to see your distributed report. Optionally, right-click the schedule and click *Run* to distribute additional reports.

10. Double-click your distributed report to open it.

As shown in the following image, the Widgets&More company report distributed on March 27th, 2018 shows the number of items sold on March 27th, 2018, 2017, and 2016.

Tue, 27 Mar 2018 02:04 PM EDT Daily_Quantity_Sold

Widgets&More

Store Business Region	Sale Date	Quantity Sold	Last Year	Quantity Sold Last Year	Two Years Ago	Quantity Sold Two Years Ago
EMEA	2018/03/27	1,199.00	2017/03/27	858.00	2016/03/27	590.00
North America	2018/03/27	2,813.00	2017/03/27	1,546.00	2016/03/27	525.00
Oceania	2018/03/27	13.00	2017/03/27	.00	2016/03/27	.00
South America	2018/03/27	89.00	2017/03/27	55.00	2016/03/27	35.00

Distribution Options in the Basic Scheduling Tool

The Distribution tab in the Basic Scheduling tool provides the options available for distributing the report output for the scheduled report procedure (FEX). After selecting the option from the shortcut menu of a procedure, you can distribute a report output using one of the following methods.

❏ Email

❏ FTP

❏ Printer

❏ Report Library

❏ Repository

Note:

❏ Distribution methods can be limited globally (for all users) in ReportCaster configuration and for groups or individual users by security operations.

❏ Distribution of a WebFOCUS Repository report can be limited to the Report Library by selecting the Restrict Schedule to Library Only property. For more information, see *Restricting Distribution of Reports to the Report Library* on page 260.

❏ Maps can be distributed to the Library and Repository only. Maps distributed by Email or FTP do not open correctly.

❏ If you want to remove trailing spaces from reports distributed in text format, your administrator needs to add the following setting to the Administration Console Custom Settings text box: IBIWF_trimreport=YES. You can also apply this setting to affect specific report formats, for example, IBIWF_trimreport=WP.

Using the Email Distribution Option in the Basic Scheduling Tool

When you distribute a report through email, you can include the report in the body of the email (known as an inline email message) or send it as an attachment. Only the DHTML, DOC, GIF, HTML, JPG, PNG, SVG, and WP formats can be distributed as an inline email message.

Note: You must be authorized to distribute by Email in order to create a schedule that uses Email distribution.

Distributing a report as an inline email message is particularly useful when the report is distributed to mobile devices or through email systems that do not support attachments.

You can also distribute a report to a fax machine, as explained later in this section.

Note:

❏ The availability of the inline message option when you create a schedule depends on the *Inline Report Distribution* setting in the WebFOCUS Configuration tool accessible from the ReportCaster Console.

❏ The display of a report that is distributed as an inline email message can be affected by settings and restrictions of your email server or email client.

❏ Before distributing a coordinated Infographic procedure as an inline email message, you must select the *Burst Report* check box in the scheduling tool. Infographic procedures that are not coordinated cannot be burst. For more information, see the *TIBCO WebFOCUS*® *Creating WebFOCUS Infographic*s technical content.

❏ When distributing HTML reports by email, the scheduled report (.fex) must set a fully qualified FOCEXURL and FOCHTMLURL for the report styling options defined below. These reference the JavaScript components located on the web or application server where the Client is configured. The Distribution Server will set a fully qualified FOCEXURL and FOCHTMLURL for email distribution using the host name and port provided at installation time. This can be overridden by setting these values in the scheduled procedure. For example:

```
SET FOCEXURL='hostname:port/ibi_apps/'
```

```
SET FOCHTMLURL='hostname:port/ibi_apps/ibi_html'
```

Styling options include:

❏ Accordion reports

❏ Table of Contents (TOC) reports

❏ Peer Graphics/Data Visualization graphical reporting

❏ Multi-drill reports

❏ FREEZE options

If using SSL security, edit the URL to specify https.

❏ In the Allowed Email Addresses and Domains dialog box in the ReportCaster Console, if the *Restrict user input with this list* check box has been selected, user input of email addresses is restricted to a list of allowed email domains and addresses. For more information, see *Validating Allowed Email Domains and Addresses* on page 70

Reference: **Considerations When Sending a Report to Multiple Email Addresses**

When you create a schedule that uses email distribution, you can type email addresses in the To field, as shown in the following image.

If you type multiple email addresses in the To field, you can use a semi-colon or comma symbol between each email address, to designate how the Distribution Server delivers information.

Example: **Using a Comma to Separate Email Addresses in the To Field**

If you use the comma symbol to separate email addresses, all email addresses are visible to every email recipient.

The schedule will distribute a report named Sales_Metrics_YTD.htm to these email addresses. When you run the schedule, the log report states that one report named Sales_Metrics_YTD.htm has been distributed to both email addresses through a single email.

Example: **Using a Semi-Colon to Separate Email Addresses in the To Field**

If you use the semi-colon symbol to separate email addresses, each recipient only sees their own email address.

The schedule will distribute a report named Sales_Metrics_YTD.htm to these email addresses. When you run the schedule, the log report states that two reports named Sales_Metrics_YTD.htm have been distributed to EmailA@tibco.com and EmailB@tibco.com through separate emails.

Reference: **Using the Cc and Bcc Email Options**

You can use the Cc and Bcc options for all types of email schedules. These options allow you to send copies of an email distribution to additional recipients, simplifying the creation of scheduled email distributions.

Individuals in the Cc list receive a copy of emails sent to each party, and their names are visible in the Cc list box included in the email, identifying them as recipients of a copy of the email created by the distribution.

Individuals in the Bcc list also receive a copy of each email sent to each part, but their names are not visible to any other recipient. The Bcc list box is not included in the email when delivered to its recipient. This list is visible only to the sender.

To access this feature in the Basic Scheduling tool, right-click a report, chart, document, visualization, or portal, select *Schedule*, and then select the Email distribution option to open the Distribution: Email tab, a portion of which is shown in the following image.
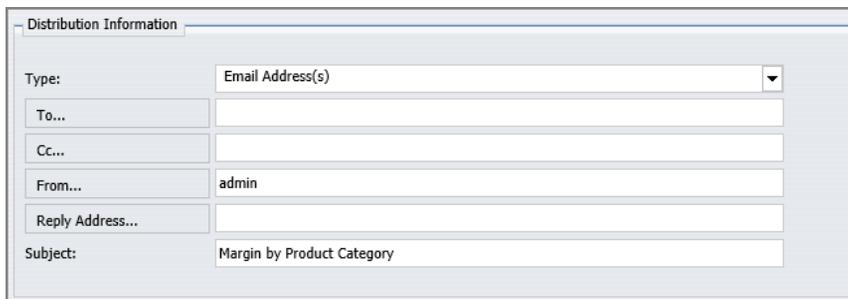
After you select one of the distribution options in the Type box, or enter one or more email addresses in the To box, you can add recipients to the Cc and Bcc boxes. You can select the *Cc* button in the Type column or select any of the other buttons in the Type column to open the Enter Email Addresses dialog box, as shown in the following image.

You can then enter individual email addresses for each party that is to receive a copy of the scheduled output in the Cc box or Bcc box, as shown in the following image.

Email addresses entered in the Cc box are visible to other recipients of the email. Email addresses entered in the Bcc box are not visible to anyone. Unlike the To box, you can separate individual email addresses with commas or semicolons in these two boxes without affecting the way in which copies are distributed to parties in the either list.

When your input is complete, select *OK* and review the addresses as they appear in the main Distribution: Email tab, as shown in the following image.

In order to access this feature in the Advanced Scheduling tool, navigate to the Action bar and select *Schedule*. On the Schedule tool bar, select *Schedule*. On the Advanced Scheduling tool ribbon, in the Show group, select *Distributions*. On the Distributions tab ribbon, in the Manage Distributions group, click the *New* arrow, and then select *Email*. The Distribution dialog box opens, a portion of which as shown in the following image.

After you select a distribution option in the Type box and add email addresses or a distribution file or list to the To box, you can add recipients to the Cc and Bcc boxes as described in the previous paragraphs.

Procedure: **How to Use the Email Distribution Option**

You can use parameters (amper variables) when specifying values in the Email settings of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable, terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value. If the Packet Email setting is Yes, the burst value will not be substituted in the Zip filename.

Note: Variables cannot be used for a Watch List email because a Watch List email is not distributed from a schedule. It is a separate process that has no connection to the WebFOCUS Server.

1.   Right-click a report procedure (FEX), point to *Schedule*, and then click *Email*.

The Basic Scheduling tool appears.

2. Select the *Distribution* tab.

3. Accept the Email Address(s) method that appears, by default, in the Type box or select one of the following methods from the list in order to provide the email addresses that will receive the distribution.

   ❏ Distribution List

   ❏ Distribution File

   ❏ Email Address(s)

   ❏ Dynamic Distribution List from Server Procedure

   ❏ Dynamic Distribution List from Repository Procedure

4. In the To box perform one of the following tasks:

   a. If you selected Email Address(s) in the Type box, enter the email address or addresses of the recipients of the distribution directly into the To box.

      Or

      Click *To* in order to open the Enter Email Addresses dialog box and enter email addresses for the recipients. You can use this feature if you must also add email addresses to the Cc or Bcc fields. When your updates are complete select *OK*.

      You can specify multiple email addresses in an email address field. Separate each email address with a comma (,) or a semicolon (;). If you separate multiple addresses by comma, the email addresses will appear in the To line of a single email when the scheduled output is distributed. If you separate multiple addresses by semicolons, the single email address of the recipient will appear in the To line of each of the multiple emails sent when the scheduled output is distributed.

      Each individual email address can contain a maximum of 130 characters, according to the SMTP specification. The total maximum length of this field is 800 characters. For more information, see *Specifying Multiple Email Addresses* on page 169.

      Note: You can also use group mail lists (defined on your mail server) with the Email Address(es) option. You can use group mail lists to distribute a report or notification to multiple recipients without having to maintain multiple email addresses in the Repository. The format of the group mail list depends on the mail server being used. For example, if you are using a Microsoft Exchange Server and your group mail list is defined as #group1, you would enter group1@listdomain in the Email Address(es) field. If the group mail list contains a space within its name, enclose the space with double quotation marks ('' ''). For more information, see your mail server administrator.

b. If you selected Distribution List in the Type box, click *To* and select a previously configured Distribution List from the Open dialog box. For more information, see *Creating and Maintaining Distribution Lists* on page 149

c. If you selected Distribution File in the Type box, type the full path and file name of the external distribution file you want to use for this schedule. The path and file must be accessible to the WebFOCUS Distribution Server. For more information, see *How to Create an External Distribution File* on page 162.

d. If you selected Dynamic Distribution List from Server Procedure or Dynamic Distribution List from Repository Procedure in the Type box, click *To* and select the Name of the procedure that contains the dynamic distribution list.

    A Dynamic Distribution List enables you to return in memory, either a list of burst values and destinations, or only a list of destinations from a data source (for example, a flat file, SQL database, FOCUS data source, or LDAP).

    When *Dynamic Distribution List* is selected, the To field is enabled to facilitate the selection of the Procedure Name. Once a procedure is selected, you can pass a parameter on the command line of the fex, as shown in the following image.

    For more information, see *Creating a Dynamic Distribution List* on page 166 and *Generating a Dynamic Distribution List From WebFOCUS Repository Procedures* on page 168.

5. In the Cc box, perform one of the following tasks:

    a. Enter email addresses directly into the Cc box, separating them with commas or semicolons.

        Both of these separators cause the distribution server to send the same copy to all parties in the Cc list or the Bcc list.

        Or

b. Click *Cc* to open the Enter Email Addresses dialog box and enter email addresses for the recipients in the To, Cc, Bcc, and Reply boxes. You can separate multiple addresses by comma or by semicolon. When your updates are complete click *OK*.

Use this method if you wish to add a Bcc list. The Bcc list does not appear on the Distribution: Email tab until you enter values in it using the Enter Email Addresses dialog box.

Note:

❏ You can create a schedule that bursts sections of a report to different email recipients. However, if you type an email address in the Cc or Bcc box, every section of a burst report will distribute to the same Cc or Bcc email address.

❏ If you type multiple email addresses in the Cc and Bcc boxes, Cc and Bcc emails are always sent to each email address individually, regardless of whether a comma or semi-colon is used to separate addresses.

6. In the From box, your user ID appears, by default. You can replace it with another value.

ReportCaster does not require a value for this field, but your email system may require one.

7. In the Reply Address box, type a valid email address. If recipients reply to the email, their messages will be sent to this address. If your email system is unable to deliver the content, the undeliverable output message is also returned to this address. ReportCaster requires this field.

8. In the Subject box, type the text that you want to appear in the email subject line. ReportCaster may not require this information, but it may be needed by your email system. The value you entered in the schedule Title field for the schedule is the default Subject value.

9. Specify whether you want to send the report as an email attachment, or within the body of the email inline by selecting or clearing the *Send all reports as attachments* option. For more information, see *Using the Email Distribution Option in the Basic Scheduling Tool* on page 219.

10. You can type a message to appear in the email body to replace the default message, *Please see attachment(s)*.

Note: You can also provide a custom default distribution message using the Email Distribution and Notification settings in the ReportCaster Configuration tool in the ReportCaster Console. This allows you to override the default message, *Please see attachment(s)*, by enabling you to create a custom message specific to your organization. The message displays when creating a schedule using Email distribution. The new message will not affect existing schedules.

11. You can select a file from the WebFOCUS Repository that contains the message you want to distribute with your Email distribution.

    Note: When you use the file option, the information can be maintained in one common place. It can also be revised among multiple schedules. There is no size limit to the contents of the file, other than what the email client and server support.

12. You can specify a value for the Packet Email or accept the default value. The Packet Email option is set to the default value configured by the Manager. For a schedule that has a task that is burst, you can decide how many emails to send to each recipient. Options include:

    ❑ **No.** Sends each attachment in a separate email.

    ❑ **Yes.** Sends one email that contains all attachments.

    ❑ **By Burst Values.** Sends one email with multiple attachments for each burst value.

13. Specify whether to send the report as a compressed (.zip) file by selecting or clearing the *Add Report to Zip File* check box.

    You have the option of converting your distributed report into a password-protected compressed file. By default, the Add Report to Zip File check box is not selected and the report will not be compressed. You can optionally password protect a zipped file by including a password in a Distribution File or Dynamic Distribution List.

14. If the *Add Report to Zip File* check box is selected, enter the name of the Zip file in the *Zip File Name* box.

    Note: Support of Unicode characters in a Zip file name and content within a Zip file on Windows 7 and Windows 2008 Server R2 requires the following hotfix from Microsoft: *http://support.microsoft.com/kb/2704299/en-us*. Without this hotfix, file names are corrupted after you decompress a .zip file in Windows 7 or in Windows Server 2008 R2.

15. Additionally, you can override the default minimum size (in KBs) a file must exceed before it is automatically added to a Zip file. The Zip minimum size is set to the default value configured by the administrator. To automatically zip an attachment that exceeds a certain size that is different from the default, set this value to the desired size.

16. Select the *Notification* tab to specify whether to send an email notification of the schedule job status. If you select Always or On Error, then you have to specify the Reply Address, Subject, Brief Message To, and Full Message To.

17. Select the *Properties* tab to specify the Title, Priority, whether to delete the schedule if it will not run again, and whether the schedule is enabled to run. For more information, see *About Properties in the Basic Scheduling Tool* on page 255.

18. Select the *Recurrence* tab to specify how often to run the schedule. If you want the schedule to run on the current day, set the Start Date and Start Time to values later than the current time. For more information, see *About Recurrence in the Basic Scheduling Tool* on page 256.

19. Click *Save & Close* to save the schedule.

Considerations When Distributing DHTML Reports as an Inline Email Message

Typically, a DHTML report distributed as an inline email message will not render correctly. For example, the following image shows a compound report in DHTML format.

The following image shows the previous report sent as an inline email message. The email client does not render the report correctly.

As an alternative, you can use the -HTMLFORM command to distribute a report with multiple table requests as an inline email message.

The following procedure will produce a report that contains two table requests. The procedure is coded with -HTMLFORM

```
-INCLUDE IBFS:/WFC/Repository/Folder1/car_table1_hold.fex
-INCLUDE IBFS:/WFC/Repository/Folder1/car_table2_hold.fex
-HTMLFORM BEGIN
!IBI.FIL.HOLD2;
!IBI.FIL.HOLD1;
-HTMLFORM END
```

The following image shows the result of the -HTMLFORM procedure after it has been distributed by email in HTML format.

For more information about -HTMLFORM, see the *TIBCO WebFOCUS® Developing Reporting Applications* technical content.

Specifying Email Server Options

The Email Distribution Options dialog box enables you to view and assign the Mail Server Name, select an SSL connection for the server, select a TLS connection for the server, require authentication for the server, and assign Account Name and Password. Click the *Email Server* icon to access Email Distribution Options.

Mail Server Name. The name of the mail server to be used by this schedule. The default value is set in the WebFOCUS configuration tool.

❏ **This server requires a secure SSL connection.** Check this box if the specified mail server uses SSL.

❏ **This server requires a secure TLS connection.** Check this box if the specified mail server uses TLS.

❏ **This server requires Authentication.** Check this box if the specified mail server requires authentication with a user ID and password.

    ❏ **Account Name.** A valid user ID for the specified mail server.

    ❏ **Password.** The password for the specified user ID.

Using the FTP Distribution Option in the Basic Scheduling Tool

This section provides information about distributing scheduled output using File Transfer Protocol (FTP). FTP distribution options can be accessed by clicking the FTP Server button in the Options group on the ribbon. The FTP Distribution Options dialog box is shown in the following image.

❏ You must be authorized to distribute by FTP in order to create a schedule that uses FTP distribution.

❏ If your organization limits the range of available FTP server configurations to a list of predefined FTP servers, the FTP Server Name field is the only available field. When you select a value from the FTP Server Name list, the remaining fields in the dialog box are populated with the values from the predefined FTP Settings configuration.

❏ If you do not select an FTP Server Name, and your FTP Settings configuration includes a (Default Settings) configuration, the server and location identified in the (Default Settings) configuration will be used for the distribution, by default. However, if your FTP Settings configuration does not include a (Default Settings) configuration, no FTP Server connection is defined and your distribution will not be able to complete the connection.

❏ If your organization does not limit the range of available FTP server configurations to a list of predefined FTP servers, fields in the FTP Distribution Options dialog box remain available as long as the (Customized FTP) value appears in the FTP Server Name field.

    ❏ If you leave the (Customized FTP) value in place, you can add the values that establish an FTP server configuration for this schedule in the FTP Distribution Options dialog box. The values you assign in this way are available only in this schedule.

    ❏ If you leave the (Customized FTP) value in place but do not add values that establish an FTP server configuration, the server and location identified in the (Default Settings) configuration will be used for the distribution, by default. However, if your FTP Settings configuration does not include a (Default Settings) configuration, no FTP Server connection is defined and your distribution will not be able to complete the connection.

    ❏ If you select a predefined FTP Setting configuration from the FTP Server Name list, the remaining settings in the FTP Distribution Options dialog box are populated with the values from your selected predefined FTP Settings configuration and are unavailable for further updates.

❏ Credentials for FTP servers are stored on a user level when a schedule is created in the same way that Reporting Server credentials are stored. The user needs to enter credentials only once for each FTP server. Those credentials will be available in the Basic Scheduling tool each subsequent time that the user creates a new schedule that utilizes that FTP server for distribution.

If the FTP Server requires SFTP, select the *This server requires a secure SSH File Transfer Protocol (SFTP)* check box. Select one of the following options to specify an authentication method:

❏ Select *Password* if the server requires authentication with a user ID and password.

❏ Select *Public Key* to authenticate against the server using Public Key Authentication.

❏ Select *Public Key and Password (Multi-factor)* to authenticate using Public Key Authentication and indicate that the server requires authentication with a user ID and password.

Note:

    ❏ There is more than one format for the Public and Private key pair used for authentication to an SFTP Server. If the Public and Private key pair used by your SFTP server is in a format that is not recognized by the Distribution server, you can generate keys in the appropriate format with the sshkeygen utility on the Distribution server.

❏ The Private Key for the server using Public Key Authentication must be added to the sftp_private_key.txt file, which is located in the \cfg directory on the Distribution Server.

❏ If the FTP Server requires FTPS, select the *This server requires a secure File Transfer Protocol over TLS/SSL (FTPS)* check box. Options include:

❏ **Security Mode.** Options include Explicit and Implicit mode.

❏ **Protocol.** Options include Transport Layer Security (TLS) and Secure Socket Layer (SSL).

❏ **Data Connection Security.** Options include Clear security (neither Integrity nor Privacy) and Private security (Integrity and Privacy).

❏ When distributing HTML reports by FTP, the scheduled report (.fex) must set a fully qualified FOCEXURL and FOCHTMLURL for the report styling options defined below. These reference the JavaScript components located on the web or application server where the Client is configured. The Distribution server will set a fully qualified FOCEXURL and FOCHTMLURL for FTP distribution using the host name and port provided at installation time. This can be overridden by setting these values in the scheduled procedure. For example:

```
SET FOCEXURL='hostname:port/ibi_apps/'
```

```
SET FOCHTMLURL='hostname:port/ibi_apps/ibi_html'
```

Styling options include:

❏ Accordion reports

❏ Table of Contents (TOC) reports

❏ Peer Graphics/Data Visualization graphical reporting

❏ Multi-drill reports

❏ FREEZE options

If using SSL security, edit the URL to specify https.

Procedure: **How to Use the FTP Distribution Option**

Note: You can use parameters (amper variables) when specifying values in the FTP settings of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable, terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value. If the multiple reports are distributed in one archive file, the burst value will not be substituted in the Zip filename.

1. Right-click a report procedure (FEX), point to *Schedule*, and then click *FTP*.

   The Basic Scheduling tool appears.

2. Click the *Properties* tab.

3. Enter a title in the *Title* box or leave the default. Optionally, enter a summary in the *Summary* box.

4. Click the *Distribution* tab.

5. From the *Type* drop-down menu, select the method in which you will provide the file names to distribute to the FTP server. The options are:

   ❑ **Distribution List.** The report will be sent to all FTP addresses in the selected Distribution List. For more information, see *Creating a Distribution List* on page 149.

   ❑ **Distribution File.** Type the full path and file name of the external distribution file you want to use for this schedule. ReportCaster cannot validate the file existence. The path and file must be accessible to the ReportCaster Distribution Server. For more information, see *How to Create an External Distribution File* on page 162.

   ❑ **Single File.** Type the name and file extension of the file you will distribute. The value contained in the Save Report As field of the schedule will automatically populate the Name field. When you burst the scheduled report, ReportCaster automatically adds the burst value to the end of the file name for each burst file. Optionally, you can add the '%BURST' syntax to the beginning of the file name, add a directory to the beginning of the file name, or both at the same time.

Note:

❑ In order for the report to distribute correctly, you must add a file extension to the Name value. By default, the Single File Name value does not include a file extension. To add a file extension, you can select the *Override the Format Specified in the Procedure* check box and select a report format in the Task tab or type the file extension manually.

❑ ReportCaster does not validate the location of the file path or whether the specified file already exists.

❑ The maximum length of this field is 800 characters.

❑ **Dynamic Distribution List.** A Dynamic Distribution List enables you to return in memory either a list of burst values and destinations, or a list of only destinations from a data source (for example, a flat file, SQL database, FOCUS data source, or LDAP).

6. In the Report Compression section, specify options by which to compress the report. Select *Create an archive file (.zip)*, *Create compressed file(s)(.zip)*, *Create compressed file(s) (.gz)*, or accept the default, *None*.

Note:

❑ The default setting for Report Compression is derived from the configuration settings. For more information, see *Zip Settings* on page 95.

❑ Support of Unicode characters in a Zip file name and content within a Zip file on Windows 7 and Windows 2008 Server R2 requires the following hotfix from Microsoft: *http://support.microsoft.com/kb/2704299/en-us*

Without this hotfix, file names are corrupted after you decompress a .zip file in Windows 7 or in Windows Server 2008 R2.

7. Select the *Notification* tab to specify whether to send an email notification of the schedule job status. If you select Always or On Error, you must specify the Reply Address, Subject, Brief Message To, and Full Message To.

8. Select the *Properties* tab to specify the Title, Priority, whether to delete the schedule if it will not run again, and whether the schedule is enabled to run. For more information, see *About Properties in the Basic Scheduling Tool* on page 255.

9. Select the *Recurrence* tab to specify how often to run the schedule. If you want the schedule to run on the current day, set the Start Date and Start Time to values later than the current time. For more information, see *About Recurrence in the Basic Scheduling Tool* on page 256.

10. Select the *FTP Server* tab to open the FTP Distribution Options dialog box.

11. In the FTP Server Name field, perform one of the following steps:

   a. Accept the default value (Customized FTP) in the Server Name field and leave the remaining fields blank in order to use the default FTP Server configuration defined in the (Default Settings) page of the ReportCaster Configuration tab.

   b. If your organization permits, accept the default value (Customized FTP) in the Server name field and type values in the remaining fields in order to create a new FTP Server configuration that applies to this distribution schedule exclusively. For more information about the FTP Server settings, see *Using the FTP Distribution Option in the Basic Scheduling Tool* on page 233.

   c. Select a predefined FTP Settings configuration from the FTP Server Name list.

12. Click the *Save & Close* button.

Using the Printer Distribution Option in the Basic Scheduling Tool

The report formats that support printing are DOC, PDF (when you configure ReportCaster to enable PDF to print and the printer has the appropriate driver), PS, and WP.

Note:

❏ You must be authorized to distribute to a Printer in order to create a schedule that uses Printer distribution.

❏ Problems may occur in printed output if the distributed reports contain UTF-8 characters.

❏ Since a Printer schedule will not work unless the report output format is a valid print format, ReportCaster always sets the format of a schedule with distribution to a printer to a valid format. If the default configuration of PDF as a valid print format is in place, the override format is set to PDF. Otherwise, the override format is set to DOC. You can change this format on the Task tab.

Procedure: **How to Use the Printer Distribution Option**

Note: You can use parameters (amper variables) when specifying a value for the Printer Name field of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable, terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value.

1. Right-click a report procedure (FEX), point to *Schedule*, and then click *Printer*.

   The Basic Scheduling tool appears.

2. Click the *Distribution* tab.

3. From the Type drop-down menu, select the method in which you will provide the file names to distribute to the printer. The options are:

   ❑ **Distribution List.** The report will be sent to all printers in the selected Distribution List. To select a Distribution List, click the icon next to the Distribution List field.

   ❑ **Distribution File.** Type the full path and file name of the external distribution file you want to use for this schedule. The path and file must be accessible to the ReportCaster Distribution Server. For more information, see *Creating an External Distribution File* on page 162.

   ❑ **Printer Name.** Specify the printer using the following format.

   queue@printserver

   where:

   queue

   Is the name of the printer queue.

   printserver

   Is the host name or IP address of the printer.

   ReportCaster can differentiate between the printer queue and the printer host name or IP address due to the presence of the '@' separator. Although ReportCaster supports specifying only the host name or IP address of the printer, we recommend that you specify both the printer queue and host name or IP address when distributing ReportCaster output to a printer. The maximum length of this field is 800 characters.

❏ **Dynamic Distribution List.** A Dynamic Distribution List enables you to return in memory either a list of burst values and destinations, or only a list of destinations from a data source (for example, a flat file, SQL database, FOCUS data source, or LDAP). For more information, see *Creating a Dynamic Distribution List* on page 166.

4. If you select Distribution List, click the *Name* button, which will display the Open dialog box to allow you to select a Distribution List. If you select *Distribution File*, specify in the Name field the fully qualified path and file name where the external Distribution File is located. If you select Printer, specify the printer name in the Name field.

5. Select the *Notification* tab to specify whether to send an email notification of the schedule job status. If you select Always or On Error, then you must specify the Reply Address, Subject, Brief Message To, and Full Message To.

6. Select the *Properties* tab to specify the Title, Priority, whether to delete the schedule if it will not run again, and whether the schedule is enabled to run. For more information, see *About Properties in the Basic Scheduling Tool* on page 255.

7. Select the *Recurrence* tab to specify how often to run the schedule. If you want the schedule to run on the current day, set the Start Date and Start Time to values later than the current time. For more information, see *About Recurrence in the Basic Scheduling Tool* on page 256.

8. Click *Save & Close* to save your changes.

Using the Report Library Distribution Option in the Basic Scheduling Tool

The Report Library provides secure access to distributed report output stored in the Repository and allows you to save multiple versions of the same report output, set an expiration date, and keep a specified number of versions. The Report Library is only available to users who are authorized to access and view the Library reports in the folder location in which they are stored.

Note:

❏ You must be authorized to distribute to the Report Library in order to create a schedule that uses the Report Library distribution method.

❏ If ownership of a Report Library distribution schedule has changed, you must also change the ownership of any associated Library reports to match the new owner of the schedule.

You can send an email notification informing users authorized to access the Library report of its availability. This will notify these users each time a new version is distributed and provide a URL to directly access the new version.

When creating a schedule for distribution to the Report Library, you select the folder to which the report output will be distributed. Using the Advanced button, you can specify a subfolder to which the output will be distributed. If the subfolder does not exist, it is created dynamically during distribution of the initial schedule execution. During subsequent executions of the schedule, reports are distributed to the existing Library item where it is located. You must specify a pattern to be used for the title of the subfolder when the subfolder is created. The pattern can contain text, parameters (amper variables) and, if the scheduled task is burst, the '%BURST' symbol. If the '%BURST' symbol is used, a new subfolder is created for each burst value. You can also select the option to compress a library report when it is stored in the Repository.

You can also specify a Category value to help you further organize the listing of Library reports within the ReportCaster Explorer. In the ReportCaster Explorer, a Category column is available that can be selected to sort Library reports by the Category values.

Note: A Library report in XML format must be opened in a new window.

When scheduling a report procedure (FEX) stored in the Repository, the default folder location to which the report output will be distributed is the same folder location as that of the scheduled report procedure (FEX). When distributing reports to the Library, it is a best practice to create and specify a different folder location for each Library report. This precaution enables you to define and manage secure access at the folder level for report output. It also helps you avoid name conflicts when creating multiple schedules for the same report procedure (FEX), and when running burst Library reports that assign the burst value to the title of each report section that is distributed. The title value is the value that displays in the Resources tree.

For example, consider a Regional Product Sales (Quarterly) report, located in a folder entitled Product Information, that is scheduled to distribute burst reports by region to the Regional Product Sales (Library Reports) Library folder on a quarterly basis. The Regional Product Sales (Library Reports) folder contains a library report for each region value included in the report request results. When creating additional schedules for the Regional Product Sales report, you would create and specify a different folder location for each schedule because the burst report descriptions will use the same region values.

Reference: **Consideration When Limiting Distribution to Values in an Access List**

When limiting Report Library distribution to values in an Access List, note the following:

❏ All other burst values not specified in the Access List are not distributed to the library.

❏ This option does not alter the running of the procedure or the retrieval of records from the data source, but simply filters the burst report sections returned from the Reporting Server based on the burst values specified in the Access List.

❏ When the *Burst this Report* option is enabled and the *Limit distribution to values in Access List* option is not enabled, ReportCaster continues to distribute all burst report sections returned by the Reporting Server to the Report Library.

❏ Upon saving the schedule, validation is performed to confirm that the schedule has the *Burst this Report* option enabled. If it has not been selected, a message appears reminding you that you must enable the Burst this Report option to limit distribution to values specified in an Access List, and the schedule options are redisplayed.

❏ The log file contains information specifying that the *Limit distribution to values in Access List* option was selected. A separate log entry appears for each Access List burst value specifying whether a report section for that burst value was distributed to the library.

Procedure: How to Use the Report Library Distribution Option

Note: You can use parameters (amper variables) when specifying values for the Library fields of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable, terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value.

1. Right-click a report procedure (FEX), point to *Schedule*, and then click *Report Library* to open the Basic Scheduling tool.

2. In the Show group, select *Properties*, enter a brief description in the Summary field, and accept or update the values assigned to the remaining fields on this tab.

   For more information, see *About Properties in the Basic Scheduling Tool* on page 255.

3. In the Show group, select *Recurrence* and configure the frequency for this distribution.

   For more information, see *About Recurrence in the Basic Scheduling Tool* on page 256.

   Note: The schedule is automatically configured to Run Once on the current date and time within the default time zone. To ensure that the schedule will run on the current day, set the time value in the Start field to a later time.

4. In the Show group, select *Task* and perform the following steps.

   a. In the Scheduling Object group, confirm that the Path, Procedure, and Server Name fields identify the correct location of the procedure within the Repository.

The distribution server uses this information to access the procedure when you run the schedule. For more information about the Task tab, see *About Tasks in the Basic Scheduling Tool* on page 178.

b. If you are distributing content that uses a burst value, select the *Burst Report* check box in the Report Properties group.

Note: Because the Burst Report process creates separate subfolders for each individual report that uses a different burst value, you will be unable to clear this check box after you create and save the Report Library distribution schedule. If you no longer need to burst your selected Report Library distribution content, you must create a new Report Library distribution schedule that does not select the Burst Report check box.

c. If the output stored in the Report Library must use a different format, select the *Override the Format Specified in the Procedure* check box and then select an alternative format code from the accompanying list.

d. Accept or update the Report Title in the Save Report As field.

5. In the Show group, select *Distribution* and perform the following steps.

a. Confirm that the path in the Folder Location field identifies the location to which the report output is to be distributed.

If not, select *Folder Location* to open the Browse for Folder dialog box, navigate to the folder that should receive the report output, and click *OK*.

Note:

❏ You can only select an existing folder from the Browse for Folder dialog box. You cannot create a new folder.

❏ You must be authorized to create content in the selected folder.

❏ The default folder location for Library output is the folder from which the scheduling tool is launched. If you are not authorized to create content in that folder, the My Content folder underneath that folder becomes the default location. If there is no My Content folder, the first writeable folder underneath that folder becomes the default location.

b. Select *Advanced* if you need to set report compression, optional subfolders, version descriptions, and category.

and configure the following options as necessary:

❏ **Compress Stored Report.** Enables you to compress a library report when it is stored in the Repository.

Note: If you distribute a compressed report to the Library, consider that this may impact the response time in viewing the report. A compressed report must first be decompressed before it is sent. You should evaluate the benefits of saving repository space against the impact of the time it takes to retrieve a compressed report from the Library.

❏ **Enable Subfolder.** Can be enabled to indicate a subfolder to which to distribute a report. If Enable Subfolder is selected, a pattern must be indicated. A pattern can contain text, parameters (amper variables), and the %BURST symbol.

❏ **Version Description.** In the Library Advanced Options dialog box, you can provide parameterized descriptive text for each version of a report in the Report Library. The Version Description can include text, amper variables, and the '%BURST' symbol if the report is burst. The Version Description is created by the Distribution Server at the time of schedule execution. The description displays next to the version number in the Report Viewer.

❏ **Category.** An optional value that can be used to sort library reports within the ReportCaster Explorer. For more information, see *Using the ReportCaster Explorer* on page 367.

c. In the Access Options group, select one of the following options to specify the groups and users who are authorized to access the Library report.

❏ **Private (Accessible only to the owner).** Only the Owner of the schedule is authorized to access the Library report. This is the default value.

❏ **Published (Accessible according to ReportCaster security policy).** All users who are authorized to view the Library report in the folder in which it is stored can access the report. The destination folder of the Library report must be a published folder, and the schedule owner must be authorized to publish content within this folder.

❏ **Shared (Appears under Shared Content Folder).** All users who are authorized to view the Library report in the folder in which it is stored can access the report. The report appears under a Shared Content folder.

❏ **Note:** When working with a Library schedule for which the access option check box 'Shared (Appears under Shared Content folder)' and the Send Email after Report Saved to Library check box are selected simultaneously, ReportCaster will only send email messages to the schedule owner.

❑ **Shared with (Appears under Shared Content folder according to Library Access List).** Only the groups or users defined in the Access List, and the owner of the schedule, are authorized to access the report. The report appears under a Shared Content folder.

If you select this option, select *Access List* and then select an Access List that you are authorized to access from the Open dialog box.

When bursting is selected, you can limit distribution of the burst values to the values specified in the Access List by selecting the *Limit distribution to values in Access List* check box.

Note: When the Access Option of an existing schedule is changed, it will be applied to all versions of the private Library report the next time a new version is distributed. Access options specified in the Library schedule are not applied to published Library Reports.

d. In the Expiration of Reports in Library group, accept the *Never Expire* option, which is selected by default, in order to prevent reports from being purged from the Report Library.

Or

Select the *Expire after* option, and then select one of the following options to specify the expiration limit.

❑ **version(s).** The Report Library stores the specified number of the most recent versions of report output. Use the up and down arrows to select the number of versions.

For example, if you specify three versions and the current version is 7, then version 7, 6, and 5 are stored in the library. However, if you delete version 6, then only versions 7 and 5 are stored in the library. If you then distribute version 8 to the library, only version 8 and 7 are stored in the library since you deleted version 6 and version 5 is not among the top three versions.

You can store up to 9,999,999 versions of a report in the library. If you exceed this limit, the new report will not be stored and you will receive a message in the ReportCaster log file.

Note: The actual number of times a report can be run is 2exp(31) -1.

❑ **day(s).** The Report Library stores the report for the specified number of day(s). Use the up and down arrows to select the number of days.

❑ **week(s).** The Report Library stores the report for the specified number of week(s). Use the up and down arrows to select the number of weeks.

❏ **month(s).** The Report Library stores the report for the specified number of month(s). Use the up and down arrows to select the number of months.

❏ **year(s).** The Report Library stores the report for the specified number of year(s). Use the up and down arrows to select the number of years.

Note:

❏ ReportCaster automatically purges expired reports one hour after the scheduled Log Purge Time. The default Log Purge Time is 1:00 AM. Therefore, the default library purge time is 2:00 AM each day. If you are an authorized user, you can also purge expired Library reports on-demand from the ReportCaster Console.

6. In the Show group, select *Notification* and specify whether or not to send an email notification of the scheduled job status.

    If you select *Always* or *On Error*, then you must also specify the Reply Address, Subject, Brief Message To, and Full Message To.

    The Subject field displays the Title of the schedule, by default.

7. If you must send an email notification to users that are authorized to access the Library report each time a new version is distributed, in the Options group, select *Library Notification* to open the Library Distribution Options dialog box, select the *Send an Email after Report saved to Library* check box and configure the following settings.

    a. Accept the default value in the Mail Server Name field or revise it to match the host name and configuration of the email server to which ReportCaster will connect to distribute the Library email notification.

    b. Accept the default value in the Library URL field or revisit to match the URL that must be used to sign in to and open the Report Library. The default value is specified in the ReportCaster configuration. When a user is sent a Library email notification, the email contains a link to the report in the Library about which the user is being notified. That link is created by adding the specific report ID of the notification to the Library URL. When the link is selected, the user is prompted to sign in. ReportCaster security processing determines if the user is authorized to access the Library report.

        Note: You can configure ReportCaster to not send a link containing a URL. For more information, see *ReportCaster Configuration* on page 40.

    c. Enter a value in the From field such as the name of the person creating the schedule. ReportCaster does not require a value for this field, but your email system may require one.

    d. Enter the email address of the sender in the Reply Address field. This is a required field. If report recipients reply to the notification, then their messages are sent to this address.

Note:

❏ If you are authenticating to the mail server with your user ID and password, then the reply address will be the email address associated with that user ID.

❏ If the mail server is configured with authentication and the Reply Address is configured in the ReportCaster Configuration tool, then the Reply Address field in the scheduling tools will be disabled. If a Reply Address is not configured, then the field is enabled to allow a Reply Address to be sent to the email server, however the actual Reply Address of the delivered email will be that of the authenticating account.

e. Enter any text that you want to appear in the email subject line in the Subject field.

f. Enter any optional message you want to appear in the body of the email notification in the Message field.

The email message also contains the URL of the report content in the Library.

The number of users who receive an email notification depends upon the value selected for the Access option. If you selected the Owner, Published, or Shared Access option, the schedule owner will be notified by email when the schedule executes and output is distributed to the Library. If the Access option specifies an Access List (Shared With), then each user on the Access List is notified when the schedule executes and output is distributed to the Library. Groups in the Access List are not used to retrieve email addresses. Only listed users receive an email notification.

8. When your configuration is complete, in the Actions group, select *Save & Close* to save your changes.

Library Bursting To Top-Level Folders Using the Basic Scheduling Tool

When creating a schedule with Report Library distribution, you can select the Domains folder in the as the top-level folder location to which the sub-folders containing library reports will be burst.

You can schedule a library report to be placed in a sub-folder without having to create the sub-folder first. When you schedule a library report to be burst to a top-level folder, the distribution server will automatically create new sub-folders containing the burst library reports.

A library report does not have to be distributed to a single folder. Depending on which sub-folder pattern is used, a user can distribute library reports into multiple sub-folders based on the burst values defined by the chosen variable.

Note: In order to burst library reports to top-level folders, you must be authorized to create new sub-folders in the Domains folder.

Procedure: **How to Burst Library Reports to Top-Level Folders Using the Basic Scheduling Tool**

1. Right-click the procedure you wish to distribute, point to *Schedule*, and then click *Report Library*.

    The Distribution tab within the Basic Scheduling tool opens.

2. Click *Folder Location*.

    The Browse for Folder dialog box opens.

3. Select the *Domains* folder, as shown in the following image.
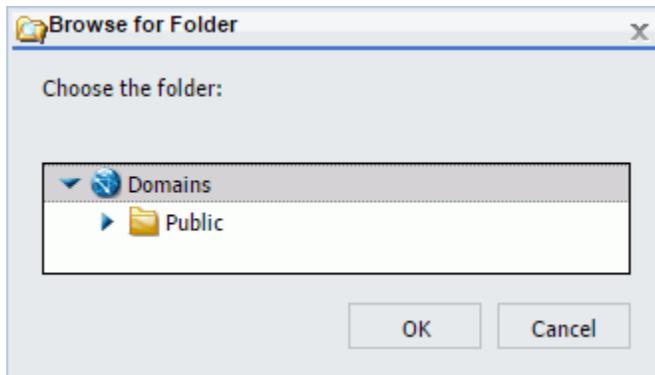
4. Click *OK*.

5. On the Distribution tab, click *Advanced*.

    The Library Advanced Options dialog box opens.

6. Click *Enable Sub-folder* and specify a sub-folder pattern, which will be used to create sub-folder titles. In the following image, the subfolder pattern used is the variable '%BURST'.

For more information on WebFOCUS Variables, see *ReportCaster Internal Variables* on page 447.

7. Click *OK*.

8. Click the *Task* tab and select the *Burst Report* check box.

9. Complete any other items necessary for the schedule to run properly and save the schedule. For more information, see *Creating Schedules* on page 173.

10. From the Workspaces area of the start page or the WebFOCUS Home Page, right-click the schedule you created and click *Run*.

New sub-folders containing your burst library reports are now created in the Domains top-level folder.

Note: The sub-folder structure is contingent on the variable that is used.

Using the Repository Distribution Option in the Basic Scheduling Tool

When distributing scheduled output to Repository in the Basic Scheduling tool, specify the Repository folder location to which to distribute the report output.

Note: You must be authorized to distribute to the Repository in order to create a schedule that uses Repository distribution. You must also be authorized to distribute content to your selected folder. For more information, see the *TIBCO WebFOCUS® Security and Administration* manual.

The best practice for recurring and burst schedules is to create and specify a different folder location for each report being distributed for the same report procedure (FEX). This is important so the security access can be defined and managed at the folder level and when opting to burst the distributed report output because the burst value is assigned as the title value to each report section that is distributed. The title value is the value that displays in the Resources tree.

When the report output is distributed using the Repository distribution option, the Day, Date, and Time information is prepended to the Save Report As value specified in the schedule task information. For example, the Schedule for the Product Packaging & Price report is assigned the default *Save Report As* value 'Product_Packaging_Price.htm' (blanks and special characters are replaced with an underscore character).

The report output distributed to Managed Reporting on Monday December 19, 2011 at 1:35pm EST is assigned the description: Mon, 19 Dec 2011 01:35 PM EST Product Packaging Price.

Procedure: **How to Use the Repository Distribution Option**

1. Right-click a report procedure (FEX), select *Schedule*, and then select Repository.

   The Basic Scheduling tool displays in a new window.

2. Enter or verify task information. For more information, see *About Tasks in the Basic Scheduling Tool* on page 178.

3. Click the *Distribution* tab.

   The Distribution Server adds Day, Date, and Time to the beginning of the *Save Report As* value specified in the Task tab.

Verify that the folder location is the folder to which you want to distribute the report output. The folder location defaults to the same folder as the report procedure (FEX) being scheduled. Users can select a different folder to distribute the report output to by clicking the *Folder Location* button, which will display a dialog box of the Resources tree from which a folder location can be selected, as shown in the following image.
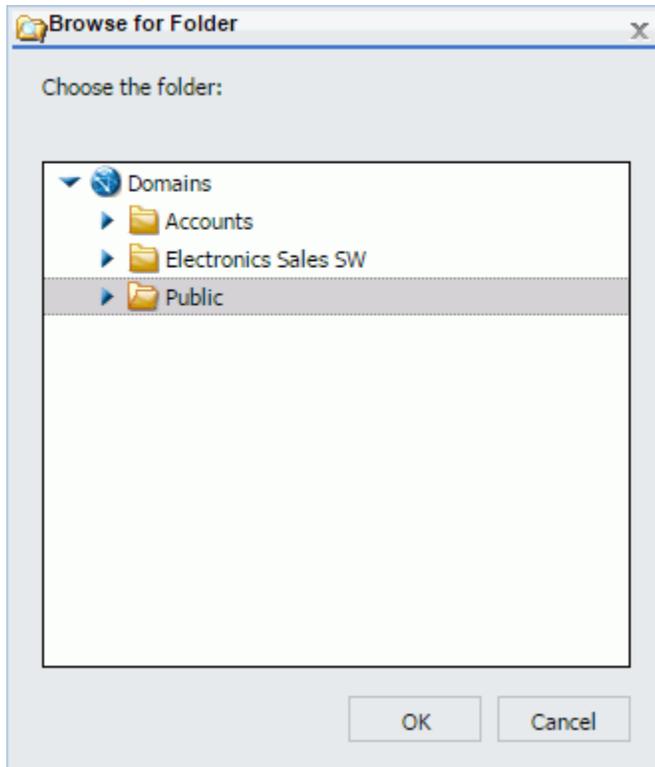
Note: You must also be authorized to distribute content to your selected folder.

4. Select the *Notification* tab to specify whether to send an email notification of the schedule job status. For more information, see *Notification Options in the Basic Scheduling Tool* on page 253. If you select *Always* or *On Error*, then you must specify the Reply Address, Subject, Brief Message To, and Full Message To.

5. Select the *Properties* tab to specify the Title, Priority, whether to delete the schedule if it will not run again, and whether the schedule is enabled to run. For more information, see *About Properties in the Basic Scheduling Tool* on page 255.

6. Select the *Recurrence* tab to specify how often to run the schedule. If you want the schedule to run on the current day, set the Start Date and Start Time to values later than the current time. For more information, see *About Recurrence in the Basic Scheduling Tool* on page 256.

7. Select *Save & Close* to save your changes.

Distributing to the File System Using the Repository Distribution Method in the Basic Scheduling Tool

The Repository File System Distribution function allows you send reports to a directory accessible by the distribution server. When you distribute to the Repository with the File System configured, you can choose a File System folder, as shown in the following image.
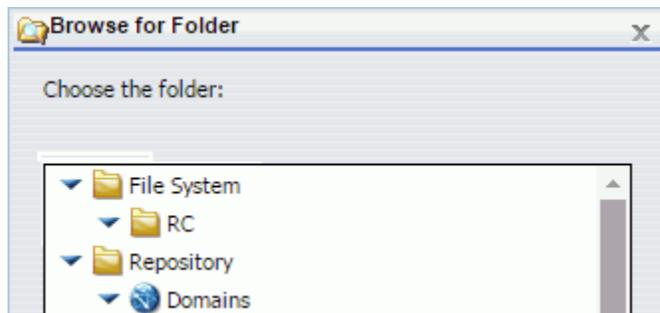
Note:

❑ This method does not require an FTP server.

❑ When the report is distributed, the Distribution Server adds Day, Date, and Time to the beginning of the Save Report As value specified in the Task tab.

A user must be granted the Distribute to File System privilege to use this distribution method. In addition, an administrator must use the WebFOCUS Administration Console to configure file system directories for distribution. Users must be authorized to see these folders, which is done by granting users the list command on the File subsystem. For more information, see the *TIBCO WebFOCUS® Security and Administration* technical content.

Once authorized, a user can schedule content to be distributed to a configured folder.

Auto-Populating the FTP Field for Single File FTP Distributions

When you set a schedule to distribute a report using the FTP distribution method, the file name information contained in the Save Report As field of the schedule will automatically transfer to the name field of your Single File FTP distribution method.

Note: In order for the report to distribute correctly, you must add a file extension to the Name value. By default, the Single File Name value does not include a file extension. To add a file extension, you can select the *Override the Format Specified in the Procedure* check box and select a report format in the Task tab or type the file extension manually. For more information, see *Using the FTP Distribution Option in the Basic Scheduling Tool* on page 233.

Auto-Populating the Title of a Report Library File

When you want to save a Library Report version to your system, the file name information contained in the Save Report As field of the scheduling tool will automatically become the suggested name of your Report Library file. For more information, see *Using the Report Library Distribution Option in the Basic Scheduling Tool* on page 240.

Notification Options in the Basic Scheduling Tool

The Notification tab in the Basic Scheduling tool provides the options to send a notification of the schedule status to specific email recipients.

Note:

❑ Notification will not work unless a mail server is configured. If a mail server is not configured, notification will fail and an error message will be recorded in the schedule job log.

❑ You can use parameters (amper variables) when specifying values for the Notification fields of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable, terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error.

❑ In the Allowed Email Addresses and Domains dialog box in the ReportCaster Console, if the *Restrict user input with this list* check box has been selected, user input of email addresses is restricted to a list of allowed email domains and addresses. For more information, see *Validating Allowed Email Domains and Addresses* on page 70.

The notification options are:

❑ **Never.** ReportCaster will not send a notification of the schedule status under any circumstances. This is the default value.

❏ **Always.** The specified users are always notified when the schedule runs.

❏ **On Error.** The specified users are notified when errors are encountered while running the schedule. We recommend the use of the On Error notification option.

Setting On Error and Always Notification in the Basic Scheduling Tool

When you select the On Error or Always notification option, additional options become available.

The On Error and Always notification options are:

❏ **Reply Address.** Type the email address of the sender. If report recipients reply to the report sender, then their messages are sent to this address. If your email system is unable to deliver a report, then the undeliverable report message is also returned to this address.

Note:

❏ If you are authenticating to the mail server with your user ID and password, then the reply address will be the email address associated with that user ID.

❏ If the mail server is configured with authentication and the Reply Address is configured in the ReportCaster Configuration tool, then the Reply Address field in the scheduling tools will be disabled. If a Reply Address is not configured, then the field is enabled to allow a Reply Address to be sent to the email server, however the actual Reply Address of the delivered email will be that of the authenticating account.

❏ **Subject.** Type the text you want to display in the subject line of the email notification. There is a limit of 255 alphanumeric characters. By default, this field inherits the title of the schedule.

❏ **Brief Message To.** Type the email address where you want a full notification sent. There is no syntax error checking for this field.

Tip: Use the Brief Message To option when you are sending notification to devices that have limited memory, such as pagers and cell phones. If you want to notify multiple recipients, you can use group mail lists defined on your mail server provided that you append an at sign (@) followed by a valid domain.

❏ **Full Message To.** Type the email address to which you want a full notification sent. There is no syntax error checking for this field.

About Properties in the Basic Scheduling Tool

When you access the Basic Scheduling tool, the Title and Path Properties options are predefined for the selected report procedure (FEX).

The options within the Properties tab are:

❑ **Title.** This allows you to provide a brief description of the purpose of the schedule. It is pre-populated with the Title of the report procedure being scheduled when creating schedules with the Basic Scheduling tool. You can edit the Title while creating the schedule or after saving the schedule from within the Schedule tools. You can also edit the title from the Properties option after saving the schedule.

The Title of the schedule is the default name assigned when saving the schedule. If the name value already exists in the selected folder, a message is displayed informing you that the name already exists. You can change the Title field in the Save dialog box, which when saved, will also update the Title field within the schedule information.

❑ **Path.** This is the Repository path of the report procedure (FEX) you selected to schedule.

❑ **Summary.** This allows you to insert a detailed description for the schedule. This is an optional field.

❑ **Job Priority Level.** This specifies the priority the scheduled job will be given when processed by the Distribution Server. The default Job Priority Level is set to Normal - 3. However, you can use the drop-down list to set the priority level.

❑ **No Report to Distribute.** This option is set to the default value configured by the Manager. To trigger error notification if no report is generated, set this value to Error. If you do not want to trigger notification when no report is generated, set this value to Warning.

❑ **Delete this schedule if it is not scheduled to run again.** This check box allows you to specify that the schedule should be deleted after the scheduled job processing is completed if the schedule is not scheduled to run again. Selecting this option for schedules you will not utilize again is recommended as it will improve overall performance within the start page or WebFOCUS Home page when listing folder contents and within the ReportCaster Explorer tool when listing schedules.

❑ **Enabled (Scheduled job runs at specified time).** This check box is selected by default to specify that the schedule should be evaluated by the Distribution Server when polling for scheduled jobs to run. If you do not want to distribute the schedule based on its NEXTRUNTIME value, clear this check box.

About Recurrence in the Basic Scheduling Tool

When you access the Basic Scheduling tool, the Recurrence tab options allow you to define how often to run the schedule.

Options that users must determine include frequency of distribution, time zone, start and end times, and Advanced interval settings. Select one of the following frequency of distribution settings:

❏ Run Once

❏ Minutes

❏ Hourly

❏ Daily

❏ Weekly

❏ Monthly

❏ Yearly

❏ Custom

The default time zone is assigned to a schedule automatically, but you can select a different time zone for schedules that must deliver content to recipients outside of the default time zone.

You can assign start and end times by using the drop-down lists. When you click on the down arrow, a calendar will display that enables an authorized user to set the date for schedule distribution. Use the up and down arrows to set a specific time for schedule distribution. Alternatively, you can enter the time manually.

If the user has the privilege to set Advanced settings, check the *Repeat schedule every* check box to enable Advanced interval setting options. Set how often you want to repeat schedule distribution, when you want to stop distributing the schedule (Until Time), and the duration to distribute the schedule (Last For). Enter this information manually or use the up and down arrows to set parameters.

The Run Once Interval

The Run Once option sets the job to execute immediately. This is the default value. You can modify the date or time if you do not want the schedule to run immediately. You can specify the date and time and time zone in which you want the schedule to run using the Start Schedule options.

To assign a time zone, select a value from the Time Zone list.

To select a date, choose a date from the drop-down date calendar. To select a time, select either the hour or minutes, and use the up and down arrows to increase or decrease the value. You can also enter the time manually.

The Minutes Interval

The Minute(s) option sets the schedule to run every *n* minutes.

In the Every minute(s) field, type or select the minutes interval (1 to 59), check the days of the week on which you want to run the schedule, and select the *Start* and *End* date and time to define the time period in which the schedule will run.

Tip: Selecting this option may affect system performance if you choose to run the schedule every 5 minutes or less. We recommend specifying a minimum of 30 minutes. The minute interval option is primarily for alert schedules.

The Hourly Interval

The Hourly option sets the schedule to run every *n* hours.

In the Every hour(s) field, type or select the hours interval (1 to 24), check the days of the week on which you want to run the schedule, and select the *Start* and *End* date and time to define the time period in which the schedule will run.

The Daily Interval

The Daily option in the Run Interval drop-down list sets the schedule to run every *n* days. In the Every day(s) field, type or select the days interval to run the schedule and select *Start* and *End* date and time to define the period in which the schedule will run.

You can also set a secondary run interval. For information about this setting, see *Advanced Settings* on page 259.

The Weekly Interval

The Weekly option in the Run Interval drop-down list sets the schedule to run every *n* weeks.

In the Every week(s) field, type or select the weekly interval to run the schedule, check the days of the week on which you want to run the schedule, and select the *Start* and *End* date and time to define the time period in which the schedule will run.

Note: When selecting the *Weekly* interval, set the *Start* to the date of the first day (current or future) of the week you want the schedule to run. If you select the current date, then you must make sure that the Start time is later than the current time when you save the schedule. If the Start time is less than or equal to the current time, the calculation for the next run time results in the schedule not running on the current date.

You can also set a secondary run interval. For more information about this settings, see *Advanced Settings* on page 259.

The Monthly Interval

The Monthly option sets the schedule to run every *n* months. You can then refine the monthly interval with one of the following options. Note that these options are mutually exclusive.

❏ Every first, second, third, fourth, or last *n* day of the week (where n is Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, or Sunday) every *n* months.

❏ Specific days every *n* months.

Additionally, select the *Start* and *End* date and time to define the time period in which the schedule will run.

You can also select the *Last Day of the Month* option at the end of the calendar to run the schedule on the last day of the month.

Note: When selecting the *Month(s)* interval, set the *Start* date to the date of the first day (current or future) of the month you want the schedule to run. If you select the current date, then you must make sure that the *Start* time is later than the current time when you save the schedule. If the *Start* time is less than or equal to the current time, the calculation for the next run time results in the schedule not running on the current date.

You can also set a secondary run interval. For information about this setting, see *Advanced Settings* on page 259.

The Yearly Interval

The Yearly option sets the schedule to run every *n* years during a specific time period.

You can also set a secondary run interval. For information about this setting, see *Advanced Settings* on page 259.

The Custom Interval

The Custom option allows you to select a set of dates that do not follow a specific pattern. For example, if you want to run a quarterly report on a different day of each quarter, then you can use the Custom run interval to set the schedule to run on dates, such as March 3 (Saturday), June 4 (Monday), September 7 (Friday), and December 2 (Sunday).

Define the time period in which the schedule will run by selecting the *Start* date and time and the *End* date and time. Select the specific days on which to run the schedule by clicking the day in the calendar. (Use the forward and back buttons at the top of the calendar to move through the months and years.) As you select a date, it appears in the Custom Date List. If it does not already exist, a folder for the year and month of the date you select is automatically created under the Custom Date List node.

To remove a date from the list, click the date in the calendar. The date is no longer highlighted in the calendar and will not appear in the Custom Date List. You can optionally use the left single arrow to remove a date from the list. The double arrow button removes all defined lists.

You can also set secondary run interval. For information about this setting, see *Advanced Settings* on page 259.

Advanced Settings

The Advanced settings option enables you to create a secondary run interval within the day the schedule runs. You can apply the secondary run interval every *n* minutes or hours for a specified number of hours and minutes or until a specified time. This option is available for schedules that run every day(s), week(s), month(s), or year(s).

Note: When a schedule is saved, the hours setting is converted to minutes. When a schedule is edited, this value appears as minutes.

The secondary run interval will not be validated when the schedule is created. Instead, validation is performed every time the next run time of the schedule is calculated when running within the secondary run interval. The secondary run interval cannot exceed the next run time for the primary run interval. For example, a daily schedule cannot have a secondary run interval greater than Every 1 day(s). If you schedule a secondary run interval to run after the next primary run interval of the schedule, the secondary run interval is stopped and an error message appears. This error message is also written to the log file.

The Advanced settings section allows you to specify repeat options, as well as time intervals.

The Apply secondary run interval options are:

❏ **Repeat schedule every.** Applies the secondary run interval every *n* minutes or hours (in this example, every 10 minutes) within the day the schedule runs.

❏ **Until Time.** The time up until which the secondary run interval will be applied. In this example, the schedule will rerun every 10 minutes until 4:10 PM when the Until Time option is selected.

❏ **Last For.** The duration, specified in hours and minutes, during which the secondary run interval will be applied. This option and the Until Time option are mutually exclusive.

Note: When a schedule is updated, the next run time is recalculated based only on the primary run interval. This means that if a schedule that includes a secondary run interval is updated before the secondary schedule is able to run, then the secondary run interval is ignored and the NEXTRUNTIME is calculated based on the primary interval.

For example, a schedule exists that is set to run daily at 2:00 PM with a secondary run interval of every 10 minutes from 2:00 PM to 3:00 PM. When the schedule runs at 2:00 PM, the NEXTRUNTIME resets to run at 2:10, which honors the secondary run interval. If this schedule is updated at 2:03 PM, the NEXTRUNTIME is recalculated to be 2:00 PM the next day, rather than 2:10 PM on the current day.

Restricting Distribution of Reports to the Report Library

You can restrict the distribution of a report (.fex), through scheduling, to the Report Library only. This applies to all reports, including those that may contain sensitive or private data, as well as other items for which you may want to limit distribution.

Restricting the distribution of reports to the Report Library provides you with secure access to distributed report output stored in the Repository. For reports that contain sensitive data, this eliminates the possibility of using ReportCaster to schedule and distribute the information through email or any of the other ReportCaster distribution methods.

In order to use this functionality, you must restrict the distribution of the report to the Library only using the Restrict Schedule to Library Only option on the Properties dialog box for the selected report.

Note: You access the Properties dialog box by right-clicking a report (.fex) in the Resources tree and selecting *Properties*.

After setting the restriction, you can schedule your report using the Basic Scheduling tool. Distribution will be limited to the Report Library only.

You can create and schedule a report (.fex) to run using the Basic or Advanced Scheduling tools. The Distribution server continually evaluates and enforces the distribution restriction to the library (for those reports that are restricted) by not distributing the report. The Distribution server performs this validation every time a schedule is run.

Procedure: **How to Schedule a Restricted Report for Distribution to the Report Library Only Using the Basic Scheduling Tool**

1. Create and save a report.

2. From the Workspaces area on the start page or the WebFOCUS Home Page, right-click the report and click *Properties*.

3. Click the *Advanced* tab.

4. In the Scheduling and Library Content Properties section, select the *Restrict Schedule to Library Only* check box.

5. Click *Save*.

6. From the Workspaces area of the start page or the WebFOCUS Home Page, right-click the report and click *Schedule*.

   Note: With the restriction set, your distribution is limited to the Report Library.

7. Add any additional changes, and then save and run the schedule.

8. Optionally, review the log information in the Job Logs section of the ReportCaster Console, as described in *Log Information* on page 262.

   For more information, see *Using the Report Library Distribution Option in the Basic Scheduling Tool* on page 240.

Procedure: **How to Schedule a Restricted Report for Distribution to the Report Library Only Using the Advanced Scheduling Tool**

You can launch the Advanced Scheduling tool by clicking a Domain in the Resources tree, navigating to the Actions bar, clicking the *Schedule* button, and then clicking *Schedule*. The Advanced Scheduling tool can also be launched by editing an existing schedule.

1. Create and save a report.

2. From the Workspaces area on the start page or the WebFOCUS Home Page, right-click the report and click *Properties*.

3. Click the *Advanced* tab.

4. In the Scheduling and Library Content Properties section, select the *Restrict Schedule to Library Only* check box.

5. Click *Save*.

6. From the Workspaces area on the start page or the WebFOCUS Home Page, click the Schedule button, and then click Schedule.

   The Advanced Scheduling tool displays.

7. Add a task for a WebFOCUS report, selecting the report with the restrictions.

   Note: When you select a WebFOCUS report to include in the schedule that has the Restrict Schedule to Library Only restriction set, you can only distribute to the Report Library. An error message will display if you attempt to select a different distribution method. For more information, see *Restricted Schedule Warning Messages* on page 262.

8. Define the remaining required fields for the schedule, including:

❏ Title

❏ Recurrences

❏ Distributions (Report Library Only)

9. Save the schedule.

Restricted Schedule Warning Messages

If you have a report for which the properties indicate that the schedule should be restricted to Report Library distribution, you may encounter error messages.

If you try to select a different distribution method within an existing schedule, an error displays.

For schedules that have multiple distribution methods specified, an error displays if a report that is restricted to Report Library distribution is added to the schedule.

Log Information

After a schedule has run, you can access the log information from the Job Logs section of the ReportCaster Console. For more information, see *Job Log* on page 39..

Chapter 5

Creating a ReportCaster Schedule in the Advanced Scheduling Tool

The Advanced Scheduling tool has the same Scheduling options as the Basic Scheduling tool for WebFOCUS Repository procedures. In addition, it provides the ability to create schedules for WebFOCUS Reporting Server procedures (FEX), files accessible to the Distribution Server or from an FTP Server, and fully qualified URLs to submit to a web or application server. In addition, the user selects the tasks and distribution destination (Email, FTP, Printer, Report Library, or Repository) for the schedule from within the Advanced Scheduling tool.

In this chapter:

About the Advanced Scheduling Tool

Authorized users can access the Advanced Scheduling tool from the Workspaces area of the start page or the WebFOCUS Home page and when editing an existing schedule. Select a workspace, navigate to the Actions bar, click the *Schedule* button, and then click *Schedule*, as shown in the following image.
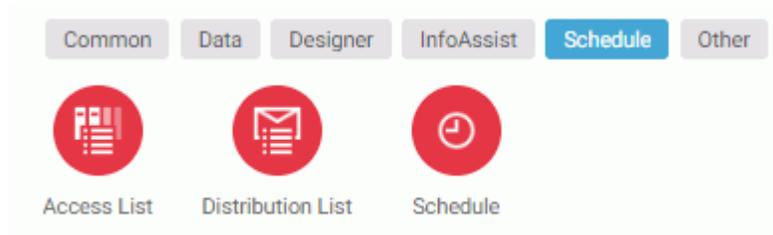
The Advanced Scheduling tool displays, as shown in the following image.
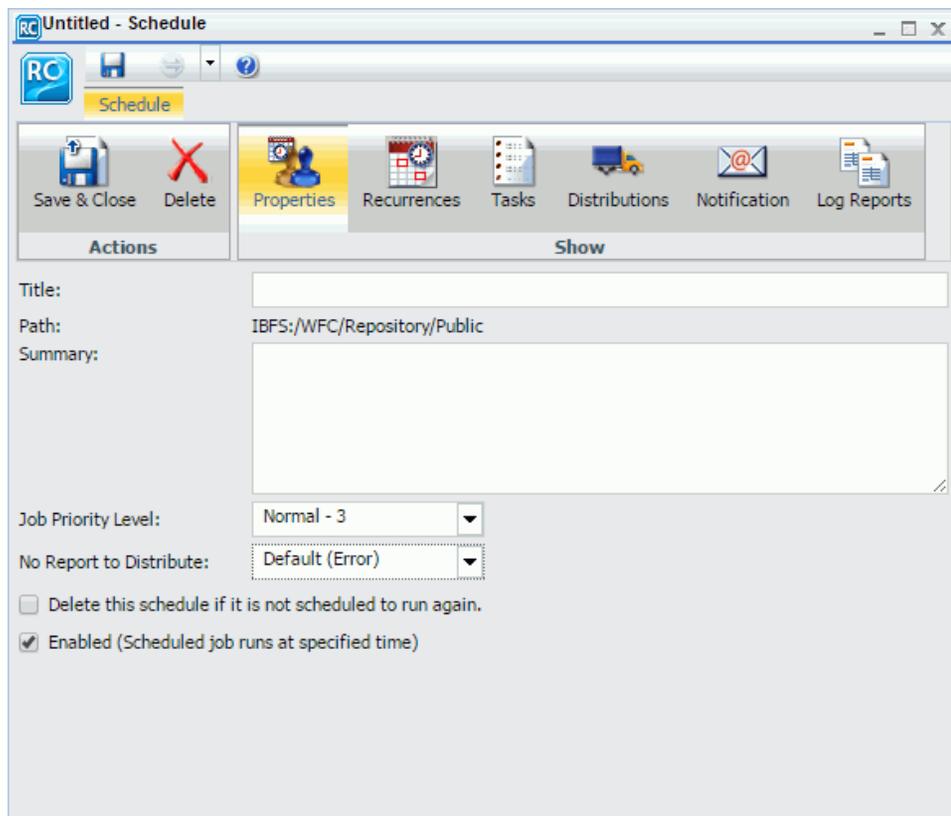
The toolbar in the Advanced Scheduling tool provides the same functionality as the Basic Scheduling tool. For more information, see *About the Basic Scheduling Tool* on page 173. In addition, the Advanced Scheduling tool Recurrences, Tasks, and Distributions ribbon options have a *New* option to allow the user to specify when and how often to run the schedule, the tasks the schedule will run to obtain the reports or files to distribute, and where to distribute them. For more information on the New option within the Recurrences, Tasks, and Distributions Manage options, see *Advanced Scheduling Ribbon* on page 266.

Advanced Scheduling Tool Quick Access Toolbar

The Quick Access Toolbar, located at the top of the Advanced Scheduling tool, is always visible no matter which options are selected. The ReportCaster option provides access to the most commonly used functions. From the Quick Access Toolbar, you can select New Schedule, New Distribution List, New Library Access List, Save, Save As, Delete, Close, and Run. Help options are also available from the toolbar, as shown in the following image.
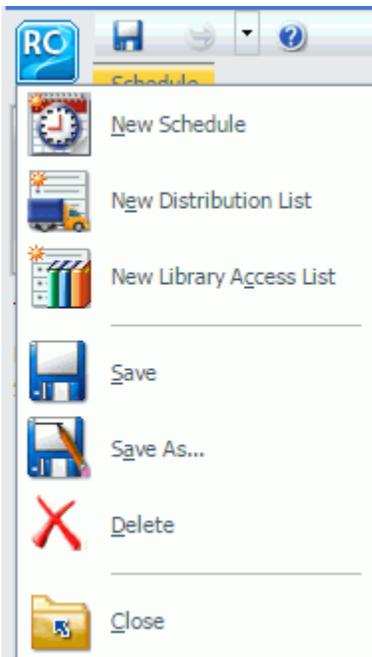
Additional Run options are available for selection from the Run drop-down list. If the schedule has been saved successfully, the Run options you can select include Run with default traces, Run with no traces, Run with Schedule traces, and Run with Schedule and Report traces, as shown in the following image.
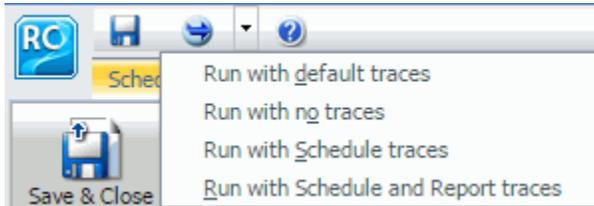
Note:

❏ If you have the Session Traces privilege, you will have the Run with Traces options in the schedule tools. If you are not authorized to run with traces, these options will not display. For more information, see the *TIBCO WebFOCUS® Security and Administration* manual.

❏ Online help is available by clicking the online help icon .

Advanced Scheduling Ribbon

The Scheduling tool ribbon groups the scheduling options into the following categories:

❏ **Actions**
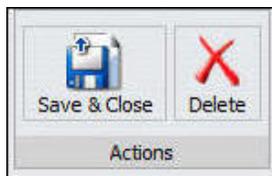
❏ **Save & Close.** Saves and closes the schedule.

❏ **Delete.** Deletes the schedule.

❏ **Show**
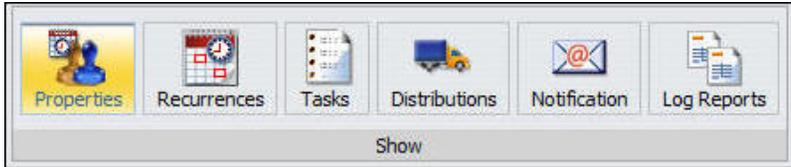
❏ **Properties.** Provides the Title, Path, Summary, Job Priority Level, and No Report to Distribute options for the schedule.

❏ **Recurrences.** Provides run-time intervals for distribution and repeat options.

❏ **Tasks.** Enables you to view the task associated with the schedule.

❏ **Distributions.** Provides a drop-down list of distribution methods and their corresponding distribution options.

❏ **Notification.** Provides the options to set up notification of the schedule status.

❏ **Log Reports.** Shows the log reports available for each time the schedule has run.

❏ **Manage Recurrences**

❏ **New.** Creates a new Recurrence, Task, or Distribution definition for the schedule.

  ❏ Select *Recurrences* and then click *New* to create a recurrence. Only one recurrence is supported.

  ❏ Select *Tasks* and then click the *New* drop-down list. Select *WebFOCUS Report*, *WebFOCUS Server Procedure*, *WebFOCUS Schedule*, *File*, *FTP*, or *URL*, as shown in the following image.
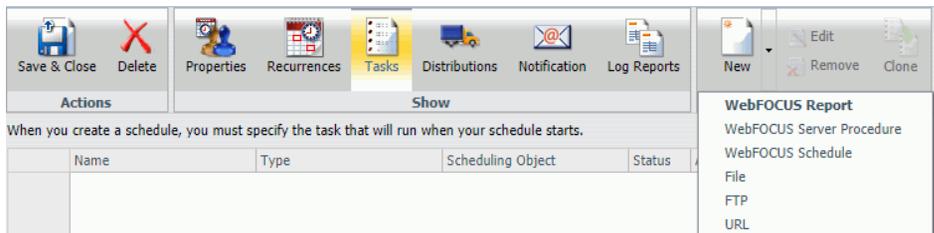
Note: Multiple recurrences are supported for Email and Printer distributions. To be able to create multiple tasks, select the Email or Printer distributions before scheduling tasks. Email is the default distribution method for a new schedule.

❏ Select *Distributions* and then click the *New* drop-down list. Select *Email*, *FTP*, *Printer*, *Report Library*, or *Repository*, as shown in the following image. Only one recurrence is supported.
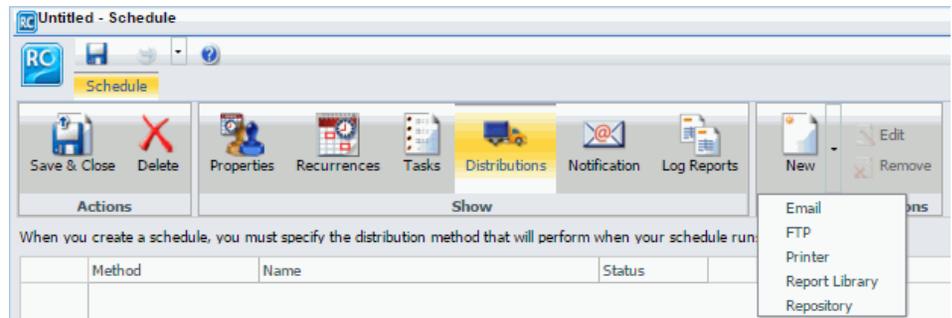
❏ **Edit.** Enables users to edit an existing Recurrence, Task, or Distribution.

❏ **Remove.** Enables users to remove an existing Recurrence, Task, or Distribution.

Creating a Schedule in the Advanced Scheduling Tool

This section provides the overall procedure to create a new schedule for a report procedure (FEX). Some steps in the procedure contain details on the associated options, while other steps direct you to a separate section that contains detailed descriptions of the options and additional information, such as tips in making a selection.

Procedure: **How to Create a Schedule in the Advanced Scheduling Tool**

1. Open the Advanced Scheduling tool, as described earlier in this section.

2. In the Properties tab, you can edit the name for the schedule *Title* box.

   This is a required field and is blank, by default.

3. In the Summary box, type a descriptive summary.

4. Select a Job Priority Level.

   Normal - 3 Job Priority Level is the default.

5. Specify the action that will be performed if there is no report to distribute.

Note: This option is set to the default value configured by the administrator. To trigger error notification if no report is generated, set this value to *Error*. If you do not want to trigger notification when no report is generated, set this value to *Warning*.

6. Select the *Delete this schedule if it is not scheduled to run again* check box if you want this schedule to be deleted if it will not run again based on its Recurrence settings.

   Use this option if you do not plan on using this schedule again.

7. Leave the *Enabled (Scheduled job runs at specified time)* check box selected if you want scheduled jobs to run as you have specified in the Recurrence settings.

8. Make the following selections in the Recurrence tab.

   a. Click *New*.

      The Schedule Recurrence dialog box displays, as shown in the following image.

   b. From the Settings radio button list, select the run interval that the schedule will use to run.

      You can set the interval to *Run Once*, *Minutes*, *Hourly*, *Daily*, *Weekly*, *Monthly*, *Yearly*, or at *Custom intervals*.

     c.   From the Time Zone list, select the time zone of the recipients of the scheduled content if they are not located in the default time zone.

     d.   Select the Start date from the drop-down calendar, and select the time that you want the schedule to begin running.

           Note: To change the time setting, select either the hour or minutes and use the arrows to increase or decrease the value.

     e.   If applicable to the run interval selection, select the End date and time to specify when you want the schedule to stop running.

     f.   If applicable to the run interval selection, from the Advanced settings, click the *Repeat schedule every* check box to enable custom intervals.

9.   In the Tasks tab, the fields are populated according to the Task type you select to schedule. For example, if you select to schedule a WebFOCUS report, the Path and Procedure are populated according to the procedure (FEX) information stored in the WebFOCUS Repository. In this tab, you can add additional tasks, preprocessing and post-processing procedures, and parameters. For more information on the Task tab, see *About Tasks in the Advanced Scheduling Tool* on page 271.

     Note: When a path and FEX name are entered manually into the Procedure field of the Scheduling Tool, the Save As field must also be manually populated. The parameters are populated by clicking the Refresh button in the Task Parameters window. In addition, if you create a schedule with more than one task, you will only be able to specify Email or Printer as your distribution method.

10. In the Distributions tab, select the method to distribute the report from the New drop-down list. The distribution methods are:

❑ *Email* - supports multiple tasks

❑ *FTP*

❑ *Printer* - supports multiple tasks

❑ *Report Library*

❑ *Repository*

     Note: If you are working with a schedule with a single task, you can specify any of the above distribution options. Email and printer are the only options for schedules with more than one task specified.

     Select the appropriate distribution options. For more information, see *Distribution Options in the Advanced Scheduling Tool* on page 284.

11. In the Notification tab, select whether or not you want to send a notification when the schedule runs and under what conditions to send it. The notification options are:

❏ **Never.** ReportCaster will not send a notification of the schedule status under any circumstances. This is the default value.

❏ **Always.** Sends a notification each time the schedule runs. Fill in the Reply Address, Subject, Brief Message To, and Full Message To fields.

❏ **On Error.** Only sends a notification when there is an error running the schedule. Fill in the Reply Address, Subject, Brief Message To, and Full Message To fields.

12. In the Log Reports tab, you can view the log reports available for each time the schedule has run.

13. To save the schedule, click *Save & Close* in the Scheduling tool toolbar.

Note:

❏ The maximum length of a title value for a file is 256 characters.

❏ If the title of your file has the same name of an existing file in the folder, you will receive a message asking if you wish to replace the file.

About Tasks in the Advanced Scheduling Tool

The Tasks option allows you to select what the schedule will run to obtain the report to be distributed and for WebFOCUS procedures (FEXs), such as whether or not to burst the report. In the Advanced Scheduling tool, you can set multiple tasks for the Email and Printer distribution methods. For more information, see *About Tasks in the Basic Scheduling Tool* on page 178.

Note: The WebFOCUS Client Universal Profile is executed by ReportCaster when a WebFOCUS Repository procedure or WebFOCUS Reporting Server procedure is run. For more information, see the *TIBCO WebFOCUS® Security and Administration* manual.

The following image shows the Task tab in the Advanced Scheduling tool. When you click the New tab, the WebFOCUS Report Task Type dialog box displays by default. When you click the drop-down arrow of the New tab, you can select from all Task Types, including WebFOCUS Report, WebFOCUS Server Procedure, File, FTP, and URL.

To create a task, if applicable, verify the Path, Procedure, Server Name, Execution ID, and Password. For Report Properties, indicate if you want to burst the report (FEX) output. Optionally, select the *Override the Format Specified in the Procedure* check box to override the format specified in the procedure with a selection from the drop-down list. The following image shows the Task dialog box for a WebFOCUS Report task.

Note: You can use parameters (amper variables) when specifying a value in the Save Report As field of a schedule. These parameters can be system variables, such as &YYMD or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable terminate the variable with the '|' character, for example, &YYMD|.htm. Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value in the Save Report As field.

The Task dialog box for a WebFOCUS Report and a WebFOCUS Server Report displays three tabs.

❑ **General tab.** Specifies the Path, Procedure, Server Name, Execution ID, and Password. Also allows you to specify Report Properties, including the option to burst the report (FEX) output format. Optionally, select the *Override the Format Specified in the Procedure* check box to override the format specified in the procedure with a selection from the drop-down list.

Note:

❑ If the scheduled report is a compound report that uses the stabilized SET COMPOUND OPEN syntax, you must select the *Override the Format Specified in the Procedure* check box and specify the format in the schedule when scheduling this report. Otherwise, the report will not be distributed. Compound reports produced by the WebFOCUS and App Studio reporting tools do not require that the *Override the Format Specified in the Procedure* check box be checked.

❏ FLEX, VISDIS, and VISDISAE report output formats are no longer supported. If you are editing a task that uses one of these formats within a schedule, you can change the output format in the dialog box that opens.

❏ If you click *OK*, and the output format of the report is set to FLEX, the task output is saved as AHTML.

❏ If you click *OK*, and the output format of the report is set to VISDIS or VISDISAE, the task output is saved as HTML.

❏ If you click *Exit*, the output format will not be changed, and any changes that you made to the task will not be saved.

❏ When an existing WebFOCUS Server Procedure or WebFOCUS Report task is opened in the Advanced Scheduling tool, if the *Override the Format Specified in the Procedure* check box was selected, the list of formats displays. If you clear the *Override the Format Specified in the Procedure* check box, the list of formats does not display.

❏ When an existing WebFOCUS Server Procedure or WebFOCUS Report task is opened in the Advanced Scheduling tool, if the *Override the Format Specified in the Procedure* check box was not selected, the list of formats does not display. If you select the *Override the Format Specified in the Procedure* check box, the list of formats displays.

❏ **Parameters tab.** Specifies values for parameters that are required at run time by the report procedure (FEX) being scheduled. The following image shows the Parameters tab selected and two parameters, STATE and PRODUCT, with values selected that will be saved for the schedule.

The functionality within the Advanced Scheduling tool Task Parameters tab is the same as the Basic Scheduling tool Parameters option that displays in the Task Parameters dialog box. For more information about creating new parameters or specifying parameter values for a simple, static list, or a dynamic list parameter that allows single or multiple values, see *Specifying Parameter Values* on page 183.

For more information about creating a new parameter, see *Creating a New Parameter* on page 210. For more information about deleting a parameter, see *Deleting a Parameter* on page 210.

❑ **Pre/Post-Procedures tab.** Allows you to specify that a WebFOCUS Server Procedure should be run before or after the scheduled task is run.

❑ **Advanced Options tab.** Provides access to the Additional FOC Errors to be Processed as Warnings dialog box, where you can specify one or more FOCUS error message numbers, separated by a comma. If one of these FOCUS error numbers is encountered during schedule execution, ReportCaster will process it as a warning rather than an error. This means that if a report is produced, it will be distributed in spite of the FOCUS error number. It also means that this FOCUS error number will not trigger error notification if the schedule is configured to notify on error.

Disabling Tasks Within a Schedule

When working with an established schedule, you can disable one or more tasks within that schedule. You can also create a new schedule with multiple tasks and then disable one or more of those tasks, as needed. For more information, see *How to Create a Schedule in the Advanced Scheduling Tool* on page 268.

Note: This procedure applies to schedules that have multiple tasks. If you disable all tasks in a schedule, the schedule is disabled.

Procedure: **How to Disable Tasks Within a Schedule**

1. Using the Advanced Scheduling tool, create or open a schedule with multiple tasks.

2. On the ribbon, in the Show group, click *Tasks*.

   a. If you are creating a schedule with new tasks, click *New*. For more information, see *About Tasks in the Advanced Scheduling Tool* on page 271.

   b. If you are editing an existing schedule that already has multiple tasks defined, select a task from the list and click *Edit*.

3.   In the Task dialog box, clear the *Enabled* check box, as shown in the following image.

4.   Click *OK*.

Using the WebFOCUS Schedule Task Type to Schedule Other Schedules

You can use the WebFOCUS Schedule task type to configure a schedule to initiate one or more separate schedules. On the Advanced Scheduling ribbon, in the *Show* group, click the *Tasks* tab, and then click the drop-down arrow on the *New* button to access the WebFOCUS Schedule task type, as shown in the following image.
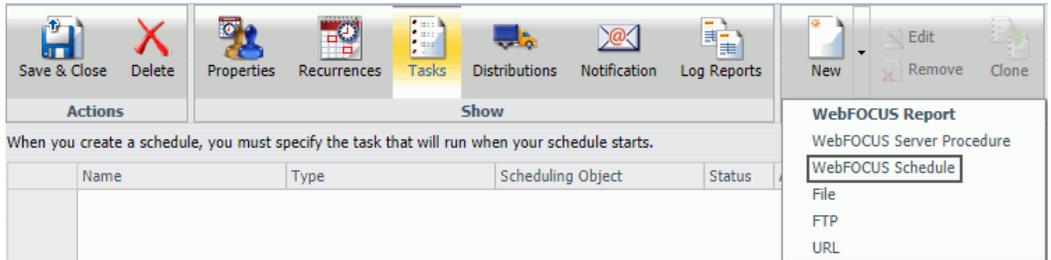
Click *WebFOCUS Schedule* to display the WebFOCUS Schedule Task dialog box, as shown in the following image.

Note: In order to use the WebFOCUS Schedule task type, you must be authorized to schedule other schedules. For more information, see the *WebFOCUS Security and Administration* technical content.

The WebFOCUS Schedule Task dialog box includes the following options:

❏ **Schedule Pathname.** Contains the pathname of the schedule that you select to be called by the task. Click the *Browse* button to select a schedule from the Repository. You will only see schedules that you are authorized to see, such as your own private schedules or any schedules that have been published.

❏ **Priority.** Displays the level of priority the schedule will have when it is processed by the Distribution Server. Priority value 1 is the highest priority and 5 is the lowest priority.

❏ **Running Mode.** Provides options that define how the Distribution Server handles the selected schedule you use in this task. This includes:

❏ **Run immediately and wait for this job to finish.** Schedules the called schedule to run immediately. The Distribution Server runs the called schedule immediately before any other queued jobs. The calling schedule waits for the called schedule to complete before running the next task.

❏ **If this task fails repeat every.** If this check box is selected, when the called schedule encounters an error, the calling schedule will attempt to rerun the called schedule every specified number of seconds, minutes, or hours for the number of times that you define. The highest integer you can use for both numerical options is 999. This option is cleared by default.

❏ **Do not continue with the schedule if this task is unsuccessful.** Select this check box to make the calling schedule stop running if the called schedule encounters an error. This option is selected by default.

❏ **Add this job to the queue.** Schedules the called schedule to run independent of any other schedules. The Distribution Server adds the schedule to the queue, respective of its priority. The calling schedule does not wait for the called schedule to complete before running the next task. If workload distribution is configured, the selected Distribution Server makes a console call to the manager.

❏ **Tasks list.** Shows the tasks saved within the called schedule, including the name, type, scheduling object, status, alert, and burst parameters for each task.

❏ **Enabled.** When selected, enables the task. This is selected by default.

Note:

❏ The Distribution Server verifies that a WebFOCUS Schedule task is not running itself to avoid infinite recursion. If the Distribution Server detects that infinite recursion will occur, it stops the schedule and records the task as an error in the schedule job log.

❏ Although a schedule that contains only WebFOCUS Schedule tasks does not distribute reports, a distribution method must still be selected before the schedule can be saved.

WebFOCUS Schedule tasks that distribute schedules create log reports of the task. These log reports are distributed in HTML format. For each distributed schedule, the job log records the job submission, job name, and a link to the job log. A sample log is shown in the following image.

Running Mode Options for WebFOCUS Schedule Tasks

You can use one of two Running Mode options in a WebFOCUS Schedule task. You can set WebFOCUS Schedule tasks to run immediately before other schedules in the distribution server queue, or run independent of other schedules in the Distribution Server queue

For example, if you select the *Run immediately and wait for this job to finish* running mode, and your schedule is set to call two subsequent schedules, both schedules will run consecutively. Conversely, if you select the *Add this job to the queue* running mode, both schedules will run concurrently.

Overriding Parameter Values Used For Called Schedules

After assigning the file path of a schedule to the Schedule Pathname field, click the *Parameters* tab to display the parameters tool for the WebFOCUS Schedule task.

On this tab, you have the option to override the parameters used by the called schedule. For example, if the called schedule uses a parameter named COUNTRY, with a chosen parameter value of ENGLAND, you can override that same parameter in the calling schedule to use the parameter value FRANCE instead.

Note: The called schedule uses the new parameter value only when the calling schedule runs. Otherwise, the original parameter value stored in the called schedule is applied.

To override an existing parameter, click the *New* button to open the Task Parameter dialog box. In the Name field, type the name of a parameter that exists in the called schedule. In the Value field, type the new parameter value that you want the called schedule to use. Click *OK* to add the updated parameter to the WebFOCUS Schedule task.

When the calling schedule runs, the called schedule distributes a report that utilizes the updated parameter value.

Procedure: **How to Create a WebFOCUS Schedule Task in the Advanced Scheduling Tool**

Note: In order to use the WebFOCUS Schedule task type, you must be authorized to schedule other schedules. For more information, see the *WebFOCUS Security and Administration* technical content.

1. Open the Advanced Scheduling tool. For more information, see *Creating a ReportCaster Schedule in the Advanced Scheduling Tool* on page 263.

2. Click the *Tasks* tab.

3. In the Manage Tasks group, click the *New* drop-down arrow button, and then click *WebFOCUS Schedule*.

The WebFOCUS Schedule Task dialog box opens, as shown in the following image.

4. Specify the path of the schedule that you want to add to the task, or click *Browse* to navigate to the location of the schedule, on your system or in the Repository.

5. Choose the priority for the called schedule. Priority value 1 is the highest priority and 5 is the lowest priority.

6. Select the running mode of the called schedule:

   ❏ **Run immediately and wait for this job to finish.** Schedules the called schedule to run immediately. The calling schedule waits until the called schedule completes before running the next task. Optionally, select the following check boxes:

      ❏ **If this task fails repeat every.** If this check box is selected, when the called schedule encounters an error, the calling schedule will attempt to rerun the called schedule every specified number of seconds, minutes, or hours for the number of times that you define.

❑ **Do not continue with the schedule if this task is unsuccessful.** Select this check box to make the calling schedule stop running if the called schedule encounters an error.

❑ **Add this job to the queue.** Schedules the called schedule to run independent of any other schedules in the Distribution Server queue. The calling schedule does not wait until the called schedule completes before running the next task.

7. Optionally, click the Parameters tab to override existing parameters used by the called schedule. For more information, see *Overriding Parameter Values Used For Called Schedules* on page 281.

8. If you want to disable the task, clear the *Enabled* check box. This option is selected by default.

9. Click *OK*.

   The task now appears in the list of tasks in the schedule.

10. To add another WebFOCUS Schedule task, repeat steps 3 through 9.

    Once you finish creating your tasks, you can modify the Properties, Recurrences, Distributions, and Notifications for the schedule. For more information, see *Creating a Schedule in the Advanced Scheduling Tool* on page 268.

    Note: If the Advanced Schedule contains only WebFOCUS Schedule tasks, a distribution method must still be selected before you can save the schedule.

11. To save the schedule, on the ribbon, in the Actions group, click *Save & Close*.

Distribution Options in the Advanced Scheduling Tool

The Distributions tab in the Advanced Scheduling tool provides the options available for distributing the scheduled report procedure (FEX), as shown in the following image.
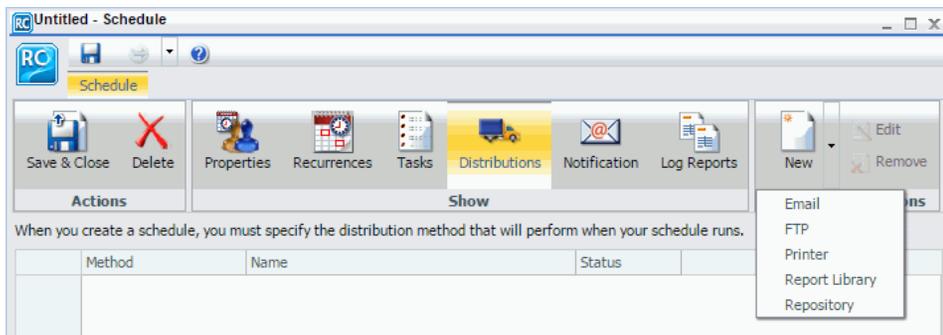
You can distribute a report using one of the following methods.

❏ Email

❏ FTP

❏ Printer

❏ Report Library

❏ Repository

Note:

❏ Distribution methods can be limited globally (for all users) in ReportCaster configuration and for groups or individual users by security privileges. For more information on ReportCaster configuration, see *ReportCaster Configuration* on page 40.

❏ Maps can be distributed to the Library and Repository only. Maps distributed by Email or FTP do not open correctly.

❏ If you want to remove trailing spaces from reports distributed in text format, your administrator needs to add the following setting to the Administration Console Custom Settings text box: IBIWF_trimreport=YES. You can also apply this setting to affect specific report formats, for example, IBIWF_trimreport=WP.

Using the Email Distribution Option in the Advanced Scheduling Tool

When you distribute a report through email, you can include the report in the body of the email (known as an inline email message) or send it as an attachment. Only the DHTML, DOC, GIF, HTML, JPG, PNG, SVG, and WP formats can be distributed as an inline email message.

Distributing a report as an inline email message is particularly useful when the report is distributed to mobile devices, fax machines, or through email systems that do not support attachments.

Note: To send an inline email message to a fax machine, you must register your email address with a third-party email distribution provider. The features offered by providers, such as supported area codes, file formats, and requirements on the structure of email parameter values, may vary. It is important that you select a provider whose features are compatible with ReportCaster.

The following image shows the Distribution dialog box of the Advanced Scheduling tool, which can be accessed by selecting the *Distribution* tab, clicking on the *New* drop-down list, and selecting *Email* as the distribution method.

Note:

❏ The availability of the inline message option when you create a schedule depends on the Inline Report Distribution setting in the ReportCaster Server Configuration tool accessible from the ReportCaster Console.

❏ The display of a report that is distributed as an inline email message can be affected by settings and restrictions of your email server or email client.

❑ Before distributing a coordinated Infographic procedure as an inline email message, you must select the *Burst Report* check box in the scheduling tool. Infographic procedures that are not coordinated cannot be burst. For more information, see the *TIBCO WebFOCUS*® *Creating WebFOCUS Infographics* technical content.

❑ In the Allowed Email Addresses and Domains dialog box in the ReportCaster Console, if the *Restrict user input with this list* check box has been selected, user input of email addresses is restricted to a list of allowed email domains and addresses. For more information, see *Validating Allowed Email Domains and Addresses* on page 70

Reference: Considerations When Sending a Report to Multiple Email Addresses

When you create a schedule that uses email distribution, you can type email addresses in the To field, as shown in the following image.

If you type multiple email addresses in the To field, you can use a semi-colon or comma symbol between each email address, to designate how the Distribution Server delivers information.

Example: Using a Comma to Separate Email Addresses in the To Field

If you use the comma symbol to separate email addresses, all email addresses are visible to every email recipient.

The schedule will distribute a report named Sales_Metrics_YTD.htm to these email addresses. When you run the schedule, the log report states that one report named Sales_Metrics_YTD.htm has been distributed to both email addresses through a single email.

Example: Using a Semi-Colon to Separate Email Addresses in the To Field

If you use the semi-colon symbol to separate email addresses, each recipient only sees their own email address.

The schedule will distribute a report named Sales_Metrics_YTD.htm to these email addresses. When you run the schedule, the log report states that two reports named Sales_Metrics_YTD.htm have been distributed to EmailA@ibi.com and EmailB@ibi.com through separate emails.

Reference: **Using the Cc and Bcc Email Options in the Advanced Scheduling Tool**

You can use the Cc and Bcc options for all types of email schedules. These options allow you to send copies of an email distribution to additional recipients, simplifying the creation of scheduled email distributions. For more information, see *Using the Cc and Bcc Email Options* on page 221.

Procedure: **How to Use the Email Distribution Option in the Advanced Scheduling Tool**

Note:

❏ You can use parameters (amper variables) when specifying values in the Email settings of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value. If the Packet Email setting is Yes, the burst value will not be substituted in the Zip filename.

❏ A DHTML report distributed as an inline email message may not render correctly. For more information, see *Considerations When Distributing DHTML Reports as an Inline Email Message* on page 229.

1.   Open the workspace in which you wish to create the new schedule.

2.   Navigate to the Action bar and select *Schedule*.

3.   On the Schedule tool bar, select *Schedule* to open the Advanced Scheduling tool.

4.   On the Advanced Scheduling tool ribbon, in the Show group, select *Distributions*.

5.   On the Distributions tab ribbon, in the Manage Distributions group, click the *New* arrow, and then select *Email*.

6.   Enter the name for this Distribution definition in the Distribution Name box.

     Email is the default value.

7. Accept the Email Address(es) method that appears, by default, in the Type box or select one of the following methods from the list in order to provide the email addresses that will receive the distribution.

❏ Distribution List

❏ Distribution File

❏ Email Address(s)

❏ Dynamic Distribution List from Server Procedure

❏ Dynamic Distribution List from Repository Procedure

8. In the To box, perform one of the following tasks:

a. If you selected Email Address(s) in the Type box, enter the email address or addresses of the recipients of the distribution directly into the To box.

Or

Click *To* in order to open the Enter Email Addresses dialog box and enter email addresses for the recipients. You can use this feature if you must also add email addresses to the Cc or Bcc fields. When your updates are complete click *OK*.

You can specify multiple email addresses in an email address field. Separate each email address with a comma (,) or a semicolon (;). If you separate multiple addresses by comma, the email addresses will appear in the To line of a single email when the scheduled output is distributed. If you separate multiple addresses by semicolons, the single email address of the recipient will appear in the To line of each of the multiple emails sent when the scheduled output is distributed.

Each individual email address can contain a maximum of 130 characters, according to the SMTP specification. The total maximum length of this field is 800 characters. For more information, see *Specifying Multiple Email Addresses* on page 169

Note: You can also use group mail lists (defined on your mail server) with the Email Address(es) option. You can use group mail lists to distribute a report or notification to multiple recipients without having to maintain multiple email addresses in the Repository. The format of the group mail list depends on the mail server being used. For example, if you are using a Microsoft Exchange Server and your group mail list is defined as #group1, you would enter group1@listdomain in the Email Address(es) field. If the group mail list contains a space within its name, enclose the space with double quotation marks ('' ''). For more information, see your mail server administrator.

b. If you selected Distribution List in the Type box, click *To* and select a previously configured Distribution List from the Open dialog box. For more information, see *Creating a Distribution List* on page 149.

c. If you selected Distribution File in the Type box, type the full path and file name of the external distribution file you want to use for this schedule. The path and file must be accessible to the WebFOCUS Distribution Server. For more information, see *How to Create an External Distribution File* on page 162.

d. If you selected Dynamic Distribution List from Server Procedure or Dynamic Distribution List from Repository Procedure in the Type box, click *To* and select the Name of the procedure that contains the dynamic distribution list.

A Dynamic Distribution List enables you to return in memory, either a list of burst values and destinations, or only a list of destinations from a data source (for example, a flat file, SQL database, FOCUS data source, or LDAP).

When *Dynamic Distribution List* is selected, the To field is enabled to facilitate the selection of the Procedure Name. Once a procedure is selected, you can pass a parameter on the command line of the fex, as shown in the following image.

For more information, see *Creating a Dynamic Distribution List* on page 166 and *Generating a Dynamic Distribution List From WebFOCUS Repository Procedures* on page 168.

9. In the Cc box, perform one of the following tasks:

a. Enter email addresses directly into the Cc box, separating them with commas or semicolons.

Both of these separators cause the distribution server to send the same copy to all parties in the Cc list or the Bcc list.

Or

b. Click *Cc* to open the Enter Email Addresses dialog box and enter email addresses for the recipients in the To, Cc, Bcc, and Reply boxes. You can separate multiple addresses by comma or by semicolon. When your updates are complete click *OK*.

Use this method if you wish to add a Bcc list. The Bcc List does not appear on the Distribution: Email tab until you enter values in it using the Enter Email Addresses dialog box.

Note:

❏ You can create a schedule that bursts sections of a report to different email recipients. However, if you type an email address in the Cc or Bcc box, every section of a burst report will distribute to the same Cc or Bcc email address.

❏ If you type multiple email addresses in the Cc and Bcc boxes, Cc and Bcc emails are always sent to each email address individually, regardless of whether a comma or semi-colon is used to separate addresses.

10. In the From box, your user ID appears, by default. You can replace it with another value.

ReportCaster does not require a value for this field, but your email system may require one.

11. In the Reply Address box, type a valid email address. If recipients reply to the email, their messages are sent to this address. If your email system is unable to deliver the content, the undeliverable output message is also returned to this address. ReportCaster requires this field.

Note: If a default Mail Reply Address was not provided in the ReportCaster Configuration tool, the default Reply Address used for this field is the email address of the user that is signed in to WebFOCUS. ReportCaster obtains the email address of the user from the WebFOCUS security system.

12. In the Subject box, type the text that you want to appear in the email subject line. ReportCaster may not require this information, but it may be needed by your email system. The value you entered in the schedule Title field is the default Subject value.

13. Specify whether you want to send the report as an email attachment or within the body of the email inline by selecting or clearing the *Send all reports as attachments* option. For more information, see *Using the Email Distribution Option in the Advanced Scheduling Tool* on page 285.

14. You can type a message to appear in the email body to replace the default message, *Please see attachment(s)*.

Note: You can also provide a custom default distribution message using the Email Distribution and Notification settings in the ReportCaster Configuration tool in the ReportCaster Console. This allows you to override the default message, *Please see attachment(s)*, by enabling you to create a custom message specific to your organization. The message displays when creating a schedule using Email distribution. The new message will not affect existing schedules.

15. You can select a file from the WebFOCUS Repository that contains the message you want to distribute with your Email distribution.

    Note: When you use the file option, the information can be maintained in one common place. It can also be revised among multiple schedules. There is no size limit to the contents of the file, other than what the email client and server support.

16. You can specify a value for the Packet Email or accept the default value. The Packet Email option is set to the default value configured by the administrator. For a schedule that has multiple tasks or a task that is burst, you can decide how many emails to send to each recipient. Options include:

    ❏ **No.** Sends each attachment in a separate email.

    ❏ **Yes.** Sends one email that contains all attachments.

    ❏ **By Burst Values.** Sends one email with multiple attachments for each burst value.

17. Specify whether to send the report as a compressed (.zip) file by selecting or clearing the *Add Report to Zip File* check box.

    You have the option of converting your distributed report into a password-protected compressed file. By default, the Add Report to Zip File check box is not selected and the Report will not be compressed. You can optionally password protect a zipped file by including a password in a Distribution File or Dynamic Distribution List. For more information, see *Creating an External Distribution File* on page 162 or *Creating a Dynamic Distribution List* on page 166.

    By default, the Add Report to Zip File check box is not selected and the Report will not be compressed.

18. If the *Add Report to Zip File* check box is selected, enter the name of the Zip file in the *Zip File Name* box.

    Note: Support of Unicode characters in a Zip file name and content within a Zip file on Windows 7 and Windows 2008 Server R2 requires the following hotfix from Microsoft: *http://support.microsoft.com/kb/2704299/en-us*. Without this hotfix, file names are corrupted after you decompress a .zip file in Windows 7 or in Windows Server 2008 R2.

19. Additionally, you can override the default minimum size (in KBs) a file must exceed before it is automatically added to a Zip file. The Zip minimum size is set to the default value configured by the administrator. To automatically zip an attachment that exceeds a certain size that is different from the default, set this value to the desired size.

20. Click *OK* to save the Email distribution information.

    The Email distribution is listed in the table within the Distribution tab.

21. Click *Save & Close* to save the schedule.

Procedure: **How to Set Mail Server Information Using Email in the Advanced Scheduling Tool**

After you specify distribution options for Email in the Advanced Scheduling tool, you can customize settings for Mail Server Information.

1. In the Distribution dialog box, click the *Options* tab.

The Options tab displays, as shown in the following image.

The default Mail Server displays in the Mail Server Name field.

2. If you would like to change the Mail Server, enter the name for the new Mail Server in the Mail Server Name field.

3. Select the *This server requires a secure SSL connection* check box if the Mail Server requires an SSL connection.

4. Select the *This server requires a secure TLS connection* check box if the Mail Server requires a TLS connection.

5. Select the *This server requires authentication* check box if the Mail Server requires authentication.

   If you select this check box, the Account Name check box and Password button is enabled, allowing you to set values for these fields.

6. Click *OK* to save the entry or click the *General* tab.

Using the FTP Distribution Option in the Advanced Scheduling Tool

This section provides information about distributing scheduled output using File Transfer Protocol (FTP).

Procedure: **How to Use the FTP Distribution Option in the Advanced Scheduling Tool**

Note: You can use parameters (amper variables) when specifying values in the FTP settings of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable terminate the variable with the '|' character (for example, &YYMD|.htm.) Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value. If the multiple reports are distributed in one archive file, the burst value will not be substituted in the Zip filename.

1. In the Advanced Scheduling tool, select the *Distributions* tab.

2. Click the *New* drop-down list and select *FTP*.

The Distribution dialog box appears, as shown in the following image.
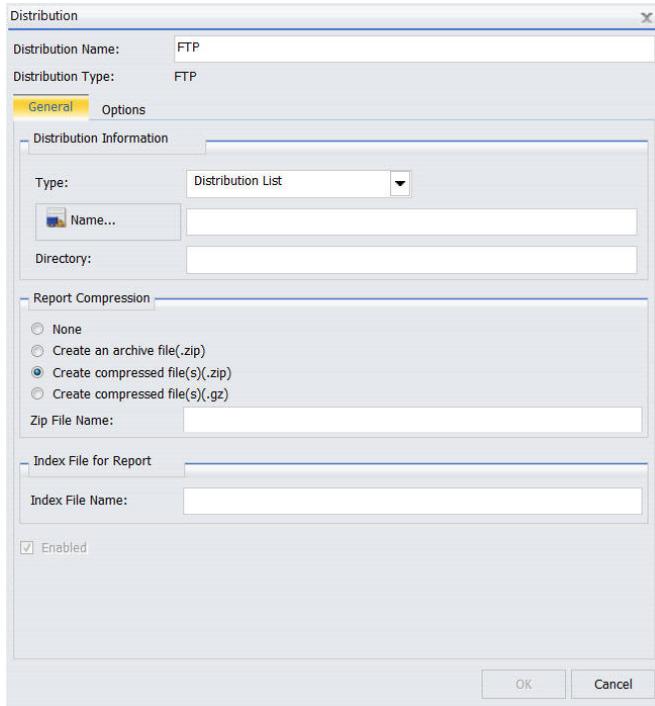
3. In the *Distribution Name* box, enter the name of the Distribution definition.

   FTP is the default value.

4. From the *Type* drop-down list, select the method in which you will provide the FTP, location, and file name or file names the report will be distributed to. The options are:

   ❏ **Distribution List.** Enter the Distribution List Name. The report will be sent to all FTP addresses in the selected Distribution List. For more information, see *Creating a Distribution List* on page 149.

   ❏ **Distribution File.** Type the full path and file name of the external distribution file you want to use for this schedule. The path and file must be accessible to the ReportCaster Distribution Server. ReportCaster does not validate that the file exists. For more information, see *How to Create an External Distribution File* on page 162.

❑ **Single File.** Type the name and file extension of the file you will distribute. The value contained in the Save Report As field of the schedule will automatically populate the Name field. When you burst the scheduled report, ReportCaster automatically adds the burst value to the end of the file name for each burst file. Optionally, you can add the '%BURST' syntax to the beginning of the file name, add a directory to the beginning of the file name, or both at the same time.

Note:

❑ In order for the report to distribute correctly, you must add a file extension to the Name value. By default, the Single File Name value does not include a file extension. To add a file extension, you can select the *Override the Format Specified in the Procedure* check box and select a report format in the Task tab or type the file extension manually.

❑ ReportCaster does not validate the location of the file path or whether the specified file already exists.

❑ The maximum length of this field is 800 characters.

❑ **Dynamic Distribution List.** A Dynamic Distribution List enables you to return in memory either a list of burst values and destinations, or only a list of destinations from a data source (for example, a flat file, SQL database, FOCUS data source, or LDAP). For more information, see *Creating a Dynamic Distribution List* on page 166.

5. In the *Directory* box, type the destination where the output will be sent.

❑ You cannot create new Prepared Reports. However, all previously created Prepared Reports will be supported.

❑ For WebFOCUS Server Procedures and Managed Reporting reports other than Prepared Reports, specify the FTP logon directory and path of the user ID to whose account on the SFTP or FTP server the report will be sent.

❑ If left blank, this specifies that WebFOCUS Server Procedures distributed using FTP will be sent to the home directory of the FTP user.

Note: When scheduling an FTP distribution, the maximum number of characters you can specify for the directory is 255, including the full path name.

6. In the Report Compression section, specify options by which to compress the report. Select *Create an archive file (.zip)*, *Create compressed file(s)(.zip)*, *Create compressed file(s) (.gz)*, or accept the default, *None*. For more information, see *Zip Settings* on page 95.

Note:

❏ The default setting for Report Compression is derived from the configuration settings. For more information, see *Zip Settings* on page 95.

❏ Support of Unicode characters in a Zip file name and content within a Zip file on Windows 7 and Windows 2008 Server R2 requires the following hotfix from Microsoft: *http://support.microsoft.com/kb/2704299/en-us*

Without this hotfix, file names are corrupted after you decompress a .zip file in Windows 7 or in Windows Server 2008 R2.

7. In the optional Index File Name field, specify a name for the index file of the report.

Note: Availability of this option is dependent on your ReportCaster configuration. For more information, see *How to Configure FTP Settings* on page 92. For WebFOCUS Server Procedures, if you are going to specify that the report is to be burst, type the name of the file in which you want the index page to be created.

Important: You must type the name of the index in the case specific to your operating system.

The following table lists the case you should use for a specific operating system.

Case	Operating System
Uppercase	z/OS
Lowercase	Windows
	UNIX

Note: Index pages for burst report output contain only the burst values specified in the Distribution List.

8. Click *OK* to save the distribution.

The schedule to distribute appears in the Advanced Scheduling tool.

Procedure: **How to Configure FTP Server Information Using FTP in the Advanced Scheduling Tool**

After you specify distribution options for FTP in the Advanced Scheduling tool, you can customize settings for FTP server information.

1. In the Distribution dialog box, click the *Options* tab, as shown in the following image.

The current value for FTP Server Name and Account Name display, by default.

2. In the FTP Server Name field, perform one of the following steps:

    ❏ Select a predefined FTP Setting configuration from the FTP Server Name list.

    ❏ Accept the default value (Customized FTP) in the Server Name field and leave the remaining fields blank in order to use the default FTP Server configuration defined in the (Default Settings) page of the ReportCaster Configuration tab.

❏ If your organization permits, accept the default value (Customized FTP) in the Server name field and type values in the remaining fields as described in the remaining steps in order to create a new FTP Server configuration that applies to this distribution schedule exclusively.

3. To change the Account Name, type the new value in the Account Name field.

4. To change the Password, click the password button and type the new password in the password dialog box.

5. Select the *This server requires a secure SSH File Transfer Protocol (SFTP)* check box if the FTP Server requires SFTP. Choose one of the following options:

❏ Click *Password* if the server requires authentication with a user ID and password.

❏ Click *Public Key* to authenticate using Public Key Authentication.

❏ Click *Public Key and Password (Multi-factor)* to authenticate using Public Key Authentication and indicate that the server requires authentication with a user ID and password.

Note:

❏ There is more than one format for the Public and Private Key pair used for authentication to an SFTP Server. If the Public and Private Key pair used by your SFTP Server is in a format that is not recognized by the Distribution Server, you can generate keys in the appropriate format with the sshkeygen utility on the Distribution Server.

❏ The Private Key for the server using Public Key Authentication must be added to the sftp_private_key.txt file, which is located in the \cfg directory on the Distribution Server.

6. Check the *This server requires a secure File Transfer Protocol over TLS/SSL (FTPS)* check box if the FTP Server requires FTPS. Choose the Security Mode, Protocol, and Data Connection Security settings for the server.

7. Click *OK* to save.

Using a Printer Distribution Option in the Advanced Scheduling Tool

The report formats that support printing are DOC, PDF (when you configure ReportCaster to allow print distribution for PDF format and the printer has the appropriate driver), PS, and WP. For more information, see *ReportCaster Configuration* on page 40.

Note: Problems may occur in printed output if the distributed reports contain UTF-8 characters.

Procedure: **How to Use a Printer Distribution Option in the Advanced Scheduling Tool**

Note: You can use parameters (amper variables) when specifying a value for the Printer Name field of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value.

1. In the Advanced Scheduling tool, select the *Distributions* tab.

2. Click the *New* drop-down list and select *Printer*.

3. Select the output type you would like to print.

    The following distribution output types are available for Print in the Advanced Scheduling tool.

    ❑ **Distribution List.** The report will be sent to the printers specified in the selected Distribution List. To select a Distribution List, click the icon next to the Distribution List field. For more information, see *Creating a Distribution List* on page 149.

    ❑ **Distribution File.** Type the full path and file name of the external distribution file you want to use for this schedule. The path and file must be accessible to the ReportCaster Distribution Server. For more information, see *How to Create an External Distribution File* on page 162.

    ❑ **Printer.** Specify the printer name in the *Name* field using the following format.

    `queue@printserver`

    where:

    `queue`

      Is the name of the printer queue.

    `printserver`

      Is the host name or IP address of the printer.

Note: ReportCaster can differentiate between the printer queue and the printer host name or IP address due to the presence of an at sign (@) separator. Although ReportCaster supports specifying only the host name or IP address of the printer, we recommend that you specify both the printer queue and host name or IP address when distributing ReportCaster output to a printer. The maximum length of this field is 800 characters.

❑ **Dynamic Distribution List.** A Dynamic Distribution List enables you to return, in memory, either a list of burst values and destinations or only a list of destinations from a data source (for example, a flat file, SQL database, FOCUS data source, or LDAP). For more information, see *Creating a Dynamic Distribution List* on page 166.

4. If *Distribution File* or *Printer* is selected, type the required information. Optionally, select a distribution file for the Name field.

5. Click *OK* to save the Printer task.

    The schedule task appears in the Advanced Scheduling tool.

Using the Report Library Distribution Option in the Advanced Scheduling Tool

When scheduling a report procedure (FEX) to distribute report output to the Report Library, specify the Distribution information. The best practice when distributing reports to the Library is to create and specify a different folder location for each Library report to avoid name conflicts when creating multiple schedules for the same report procedure (FEX). This includes the WebFOCUS Repository folder to which to distribute the report, as well as Access Options. These include Owner (Private), Share to Everyone, or Access List (Share Advanced). Expiration of Reports in Library and Report Compression can also be specified.

When scheduling a report procedure for distribution to the Report Library, you select the folder to which the report output will be distributed. Using the Advanced button, you can optionally specify a subfolder to which the output will be distributed. If the subfolder does not exist, it is created dynamically during distribution of the initial schedule execution. During subsequent executions of the schedule, reports are distributed to the existing Library item wherever it is located. You must specify a pattern to be used for the title of the subfolder when the subfolder is created. The pattern can contain text, parameters (amper variables) and, if the scheduled task is burst, the '%BURST' symbol. If the '%BURST' symbol is used, a new subfolder is created for each burst value. You can also select the option to compress a library report when it is stored in the Repository.

You also have the option to specify a Category value to help you further organize the listing of Library reports within the ReportCaster Explorer. In the ReportCaster Explorer, a Category column is available that can be selected to sort Library reports by the Category values.

Note:

❏ For an existing schedule that distributes a Library report, if you remove the current task and add a new task, a new Library item will be created in the Repository. When you save the schedule, a warning will notify you about creating a new Library item.

❏ If the ownership of a schedule that uses Report Library distribution has been changed, you must correct the ownership of any associated Library reports to match the new owner of the schedule.

Procedure: **How to Use the Report Library Distribution Option in the Advanced Scheduling Tool**

Note: You can use parameters (amper variables) when specifying values for the Library fields of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error. If the scheduled task is burst, you can also use the '%BURST' symbol to include the burst value.

1. In the Advanced Scheduling tool, select the *Distributions* tab.

2. Click the *New* drop-down list and select *Report Library*.

The Distribution dialog box opens, as shown in the following image.
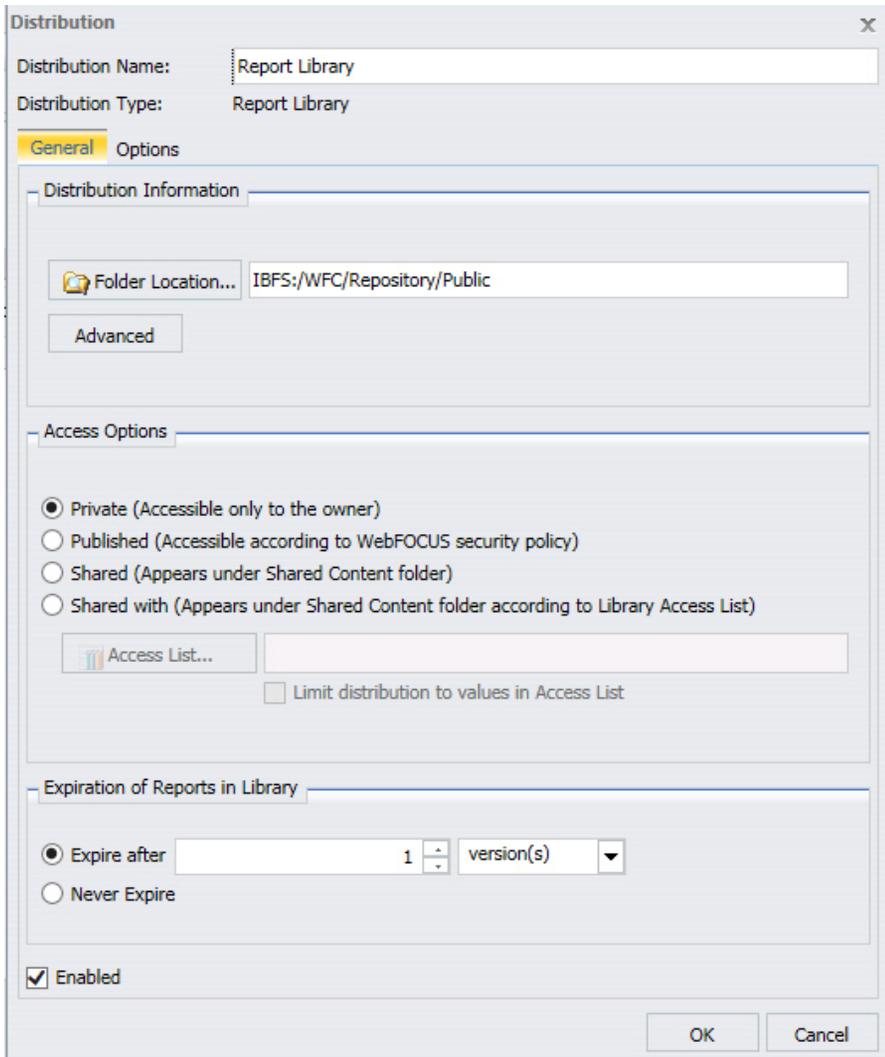
3. In the Distribution Name field, enter the name of the Report Library Distribution definition.

    Report Library is the default value.

4. Verify that the folder location is correct or make manual edits in the Folder Location field.

    The folder location defaults to the same folder as the report procedure (FEX) being scheduled. Users can also select a different folder that they have authority to write to and create content in for the report to be distributed to that location.

Note: As a best practice, create and specify a different folder to which the Library reports will be distributed.

5. Optionally, click *Advanced* to set optional subfolders, category, and report compression, as shown in the following image.

Use the following information to set these options:

❑ **Compress Stored Report.** Enables you to compress a library report when it is stored in the Repository.

❑ **Enable Subfolder.** Can be enabled to indicate a subfolder to which to distribute a report. If Enable Subfolder is selected, a pattern must be indicated. A pattern can contain text, parameters (amper variables), and the %BURST symbol.

❑ **Version Description.** In the Library Advanced Options dialog box, you can provide parameterized, descriptive text for each version of a report in the Report Library. The Version Description can include text, amper variables, and the '%BURST' symbol if the report is burst. The Version Description is created by the Distribution Server at the time of schedule execution. The description displays next to the version number in the Report Viewer.

❑ **Category.** An optional value that can be used to sort library reports within the ReportCaster Explorer. For more information, see *Using the ReportCaster Explorer* on page 367.

6. Select *Private*, *Published*, *Shared,* or *Shared with* in order to determine which groups and users are authorized to access to the Library report.

   If you select *Shared with*, click the *Access List* button to invoke the Open dialog box from which you can select an Access List that you are authorized to access.

7. Select *Expire after* if you would like the Library Report to be deleted after the schedule at a later date. *Never Expire* is the default selection.

8. Click *OK*.

9. Select *Save & Close* to save your changes.

Procedure: **How to Set Report Library Information Using Report Library in the Advanced Scheduling Tool**

After you specify distribution options for the Report Library in the Advanced Scheduling tool, you can customize settings for Mail Server Information.

1. In the Report Library Distribution dialog box, click the *Options* tab.

The Options tab displays, as shown in the following image.

The present value for Distribution Name displays by default.

2. Optionally, select the *Send email after report saved to library* option to send an email notification to users that are authorized to access the Library report each time a new version is distributed. The email message also contains the URL report content in the Library. Depending upon the Access Option selected in the General tab, one or more users will receive a notification email. If the Access Option is Private, Published, or Shared, the schedule owner will be notified by email when the schedule executes and output is distributed to the Library. If the Access Option specifies an Access List (Shared With), then each user on the Access List is notified when the schedule executes and output is distributed to the Library. Groups in the Access List are not used to retrieve email addresses. Only listed users will receive an email notification.

Once the *Send email after report saved to library* check box is selected, you can customize Mail Server Information and Email for Library settings.

3. If you would like to change the Mail Server, type the name for the new Mail Server in the *Mail Server Name* box.

4. Select the *This server requires a secure SSL connection* check box if the Mail Server requires an SSL connection.

5. Select the *This server requires a secure TLS connection* check box if the Mail Server requires a TLS connection.

6. Select the *This server requires authentication* check box if the Mail Server requires authentication.

   If you Select the *This server requires authentication* check box, the *Account Name* and *Password* button are available to set values for these respective fields.

7. In the *From* box, type any value (for example, the name of the person creating the schedule). ReportCaster does not require the field, but your email system may require the field.

8. In the *Reply Address* box, type a valid email address. If recipients reply to the email, their messages are sent to this address. If your email system is unable to deliver the content, the undeliverable output message is also returned to this address. ReportCaster requires this field.

9. In the *Subject* box, type the text you want to appear in the email subject line. ReportCaster may not require this information, but it may be needed by your email system. The value you entered in the schedule Title field is the default Subject value.

10. Optionally, you can type a message to appear in the email body.

11. Click *OK* or click the *General* tab.

Library Bursting to Top-Level Folders Using the Advanced Scheduling Tool

When creating a schedule with Report Library distribution, you can select the Domains folder in the Resources tree as the top-level folder location to which the sub-folders containing library reports will be burst.

You can schedule a library report to be placed in a sub-folder without having to create the sub-folder first. When you schedule a library report to be burst to a top-level folder, the distribution server will automatically create new sub-folders containing the burst library reports.

A library report does not have to be distributed to a single folder. Depending on which sub-folder pattern is used, a user can distribute library reports into multiple sub-folders based on the burst values defined by the chosen variable.

Note: In order to burst library reports to top-level folders, you must be authorized to create new sub-folders in the Domains folder.

Procedure: **How to Burst Library Reports to Top-Level Folders Using the Advanced Scheduling Tool**

1. From the Workspaces area on the start page or the WebFOCUS Home Page, choose the workspace in which you want to create your schedule.

2. On the Actions bar, click *Schedule*, and then click the *Schedule* button.

   The Advanced Scheduling tool displays.

3. Click the *Distribution* tab, click the drop-down arrow on the *New* tab, and then click *Report Library*.

4. Click *Folder Location*.

   The Browse for Folder dialog box opens.

5. Select the *Domains* folder, as shown in the following image.
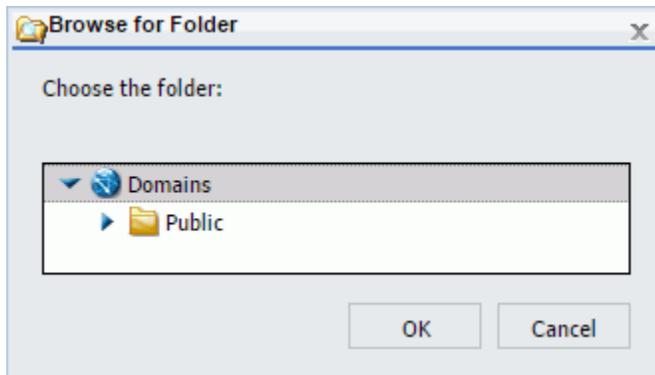
6. Click *OK*.

7. On the Distribution tab, click *Advanced*.

   The Library Advanced Options dialog box opens.

8. Click *Enable Sub-folder* and specify a sub-folder pattern, which will be used to create sub-folder titles. In the following image, the subfolder pattern used is the variable '%BURST'.
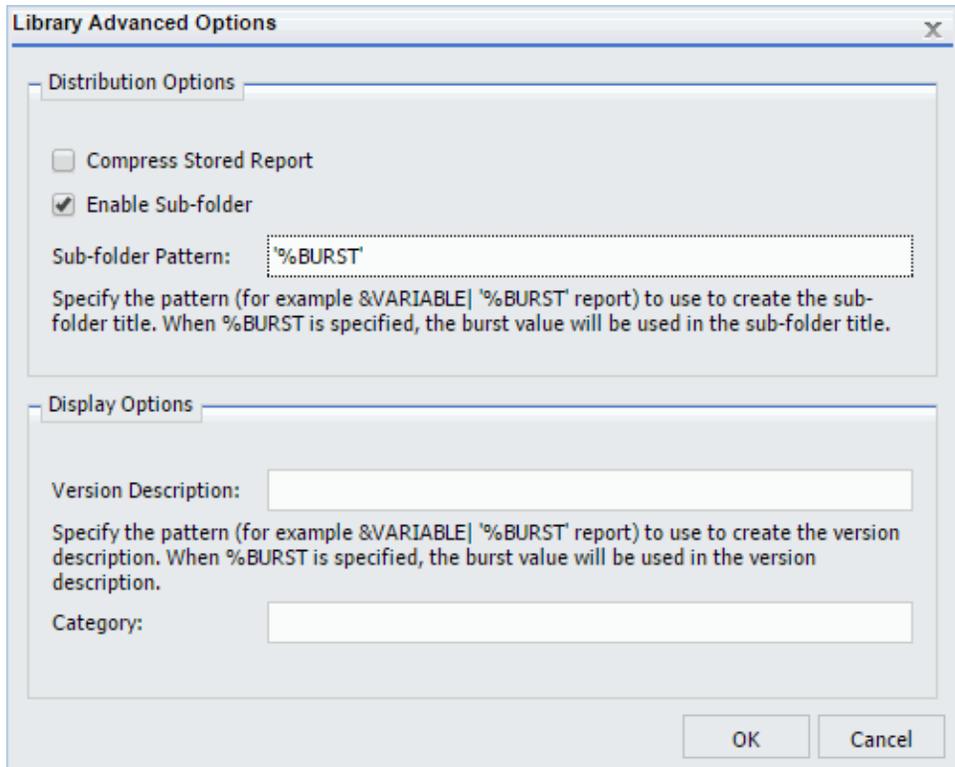
For more information on ReportCaster Variables, see *ReportCaster Internal Variables* on page 447.

9. Click *OK*.

10. Click the *Task* tab and select the *Burst Report* check box.

Note: Because the Burst Report process creates separate subfolders for each individual report that uses a different burst value, you will be unable to clear this check box after you create and save the Report Library distribution schedule. If you no longer need to burst your selected Report Library distribution content, you must create a new Report Library distribution schedule that does not select the Burst Report check box.

11. Complete any other items necessary for the schedule to run properly and save the schedule. For more information, see *Creating Schedules* on page 173.

12. From the Workspaces area on the start page or the WebFOCUS Home Page, right-click the schedule you created and click *Run*.

New sub-folders containing your burst library reports are now created in the top-level folder of the workspace.

Note: The sub-folder structure is contingent on the variable that is used.

Using the Repository Distribution Option in the Advanced Scheduling Tool

When distributing scheduled output to the repository in the Advanced Scheduling tool, specify the folder location.

Procedure: How to Use the Repository Distribution Option in the Advanced Scheduling Tool

1. In the Advanced Scheduling tool, select the *Distributions* tab.

2. Click the *New* drop-down list and select *Repository*.

   The Distribution dialog box appears, as shown in the following image.
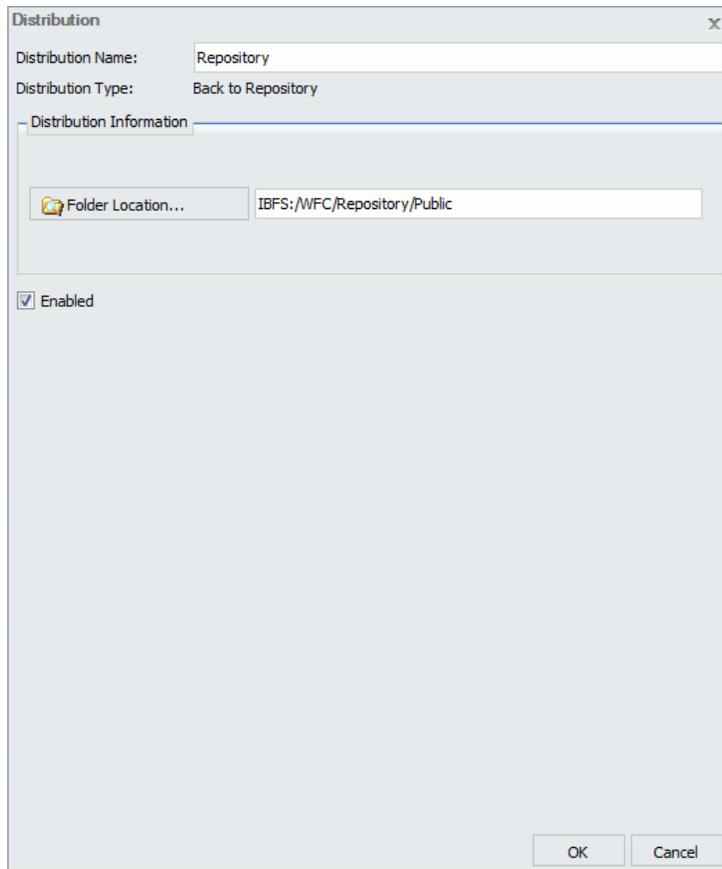
3. In the *Distribution Name* box, enter the name of the schedule.

    Repository is the default value.

4. Verify that the folder location is correct. Use the folder location button to select a folder or make manual edits in the text field.

    The folder location defaults to the same folder as the report procedure (FEX) being scheduled. Users can also select a different folder that they have authority to write to and create content in for the report to be distributed successfully to that location.

5. Click *OK*.

6. Select *Save & Close* to save your changes.

Distributing to the File System Using the Repository Distribution Method in the Advanced Scheduling Tool

The Repository File System Distribution function allows you send reports to a directory accessible by the distribution server. When you distribute to the Repository with the File System configured, you can choose a File System folder, as shown in the following image.
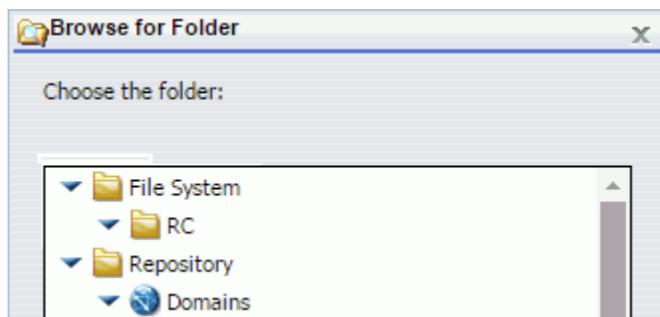
Note:

❏ This method does not require an FTP server.

❏ When the report is distributed, the Distribution Server adds Day, Date, and Time to the beginning of the Save Report As value specified in the Task tab.

A user must be granted the Distribute to File System privilege to use this distribution method. In addition, an administrator must Users must be authorized to see these folders, which is done by granting users the list command on the File subsystem. For more information, see the *TIBCO WebFOCUS® Security and Administration* technical content.

Once authorized, a user can schedule content to be distributed to a configured folder.

Specifying Multiple Distribution Methods and Tasks in a Schedule

In ReportCaster, a single Advanced Schedule can contain multiple tasks and distribution methods. For example, you can create a multi-task schedule that has two or more email distributions. This allows the distribution of a multi-task schedule to be changed by switching which distribution will be enabled for use, rather than deleting the existing distribution and creating a new one.

Note:

❏ Only one enabled distribution method is allowed when a schedule contains more than one enabled task. All other distribution methods must be disabled.

❏ Only one enabled task is allowed when a schedule contains more than one enabled distribution method. All other tasks must be disabled.

Procedure: **How to Add Multiple Distribution Options in a Schedule**

1. In the Advanced Scheduling tool, select the *Distributions* tab.

2. Click the *New* drop-down list and select a distribution method.

   Populate all required fields for the selected method. For specific guidance on using a particular method, see *Using the Email Distribution Option in the Advanced Scheduling Tool* on page 285, *Using the FTP Distribution Option in the Advanced Scheduling Tool* on page 295, *Using a Printer Distribution Option in the Advanced Scheduling Tool* on page 300, *Using the Report Library Distribution Option in the Advanced Scheduling Tool* on page 302, or *Using the Repository Distribution Option in the Advanced Scheduling Tool* on page 311.

3. Click the *New* drop-down list and select another distribution method.

Populate all required fields for the selected method. The multiple distribution methods that you have selected display, as shown in the following image.
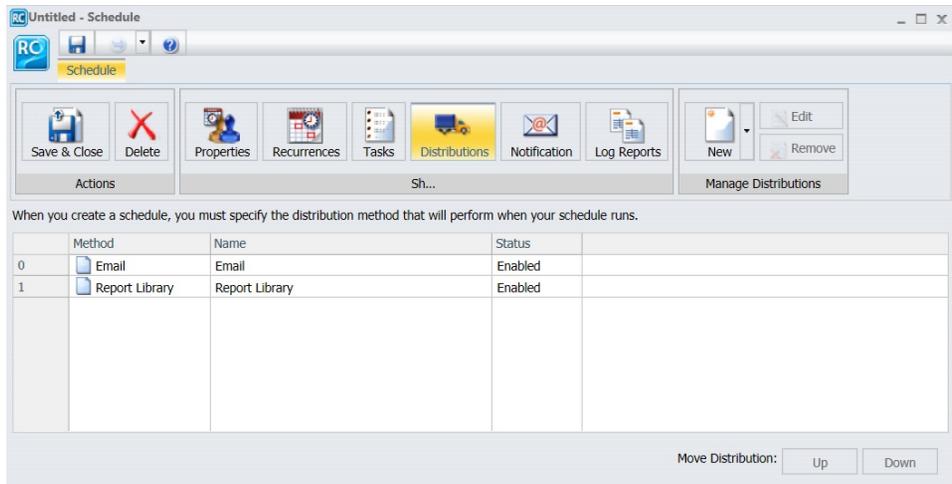
You can select additional methods, or complete your schedule creation process.

Auto-Populating the FTP Field for Single File FTP Distributions in the Advanced Scheduling Tool

When you set a schedule to distribute a report using the FTP distribution method, the file name information contained in the Save Report As field of the schedule will automatically transfer to the name field of your Single File FTP distribution method.

Note: In order for the report to distribute correctly, you must add a file extension to the Name value. By default, the Single File Name value does not include a file extension. To add a file extension, you can select the *Override the Format Specified in the Procedure* check box and select a report format in the Task tab or type the file extension manually. For more information, see *Using the FTP Distribution Option in the Advanced Scheduling Tool* on page 295

Auto-Populating the Title of a Report Library File in the Advanced Scheduling Tool

When you want to save a Library Report version to your system, the file name information contained in the Save Report As field of the scheduling tool will automatically become the suggested name of your Report Library file. For more information, see *Using the Report Library Distribution Option in the Advanced Scheduling Tool* on page 302

Notification Options in the Advanced Scheduling Tool

The Notification tab in the Advanced Scheduling tool, shown in the following image, provides the option to send a notification of the status each time the schedule job runs to specified email recipients.

Note:

❑ You can use parameters (amper variables) when specifying values for the Notification fields of a schedule. These parameters can be system variables, such as &YYMD, or any amper variable for which a value is returned by the Reporting Server when the scheduled procedure is executed. To use the dot file extension separator after a variable, terminate the variable with the '|' character (for example, &YYMD|.htm). Similarly, to use the ampersand character itself, follow the ampersand with the '|' character (for example, Smith&|Jones). If a value for a parameter specified in a schedule is not returned by the Reporting Server when the procedure executes, the schedule will fail with a "No report to distribute" error.

The notification types include:

❑ **Never.** ReportCaster will not send a notification of the schedule status under any circumstances. This is the default value.

❑ **Always.** The specified users are always notified when the schedule runs.

❑ **On Error.** The specified users are notified when errors are encountered while running the schedule. We recommend using the On Error notification option.

Setting On Error and Always Notification in the Advanced Scheduling Tool

When you select the On Error or Always notification option, additional options become available. The On Error and Always notification options are:

❏ **Reply Address.** Type the email address of the sender. If report recipients reply to the report sender, then their messages are sent to this address. If your email system is unable to deliver a report, then the undeliverable report message is also returned to this address.

Note:

❏ If you are authenticating to the mail server with your user ID and password, then the reply address will be the email address associated with that user ID.

❏ If the mail server is configured with authentication and the Reply Address is configured in the ReportCaster Configuration tool, then the Reply Address field in the scheduling tools will be disabled. If a Reply Address is not configured, then the field is enabled to allow a Reply Address to be sent to the email server. The Reply Address of the delivered email will be that of the authenticating account.

❏ **Subject.** Type the text you want to display in the subject line of the email notification. There is a limit of 255 alphanumeric characters. By default, this field contains the report name, date, and time stamp.

❏ **Brief Message To.** Type the email address where you want a full notification sent. There is no syntax error checking for this field.

Tip: Use the Brief Message To option when you are sending notification to devices that have limited memory, such as pagers and cell phones. If you want to notify multiple recipients, you can use group mail lists defined on your mail server provided that you append an at sign (@), followed by a valid domain.

❏ **Full Message To.** Type the email address to which you want a full notification sent. There is no syntax error checking for this field.

About Properties in the Advanced Scheduling Tool

When you access the Advanced Scheduling tool, enter values for the Properties options, including Title, Path, Summary, Job Priority Level, No Report to Distribute, Delete this schedule if it is not scheduled to run again, or Enabled (Scheduled jobs run at a specified time). For more information about these options, see *About Properties in the Basic Scheduling Tool* on page 255. The following image displays the Properties tab in the Advanced Scheduling tool.
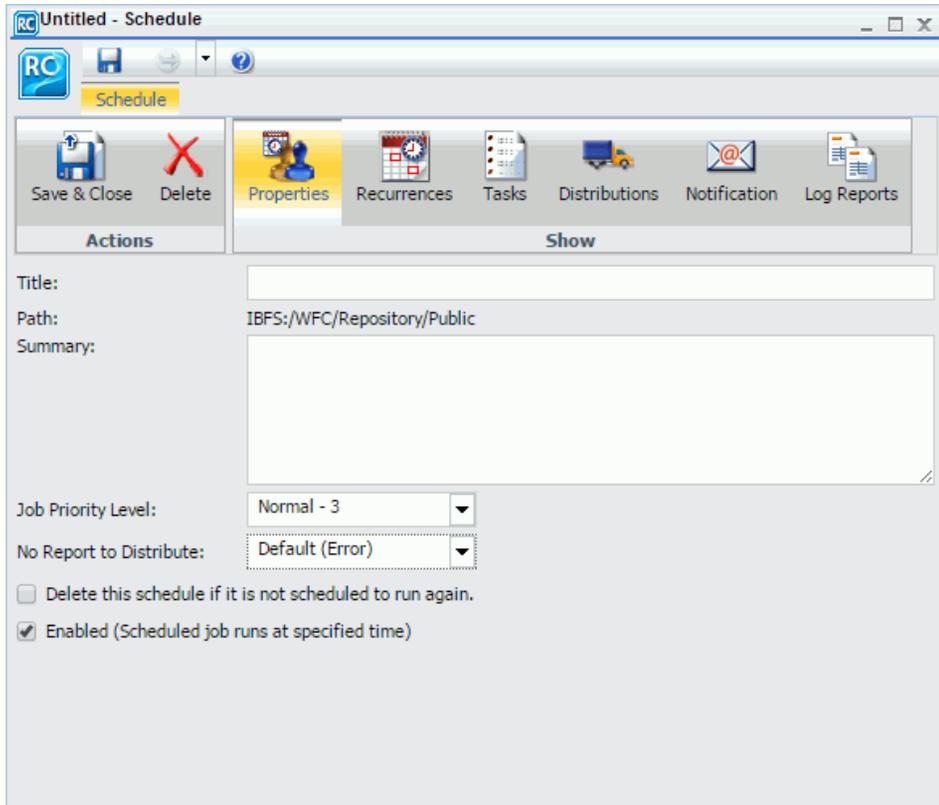
About Recurrences in the Advanced Scheduling Tool

When you access the Advanced Scheduling tool, the Recurrences tab options allow users to define how often to distribute the schedule. The following image displays the Recurrences tab in the Scheduling tool.
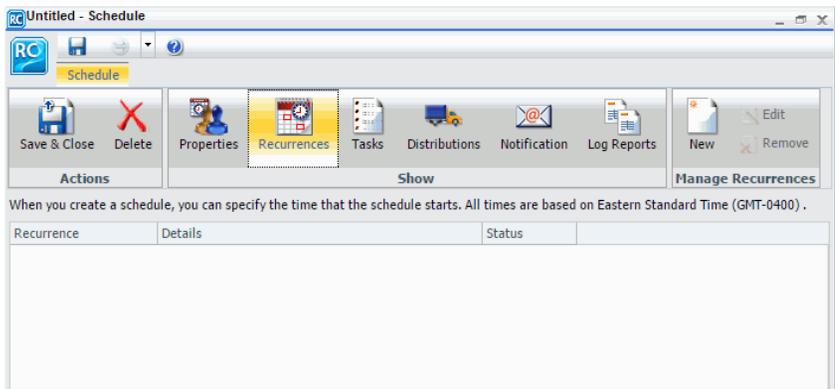
To create a recurrence, select the *New* option on the ribbon. The Schedule Recurrence dialog box displays, as shown in the following image.

Options that users must determine are frequency of distribution, start and end times, and Advanced settings. Select one of the following frequency of distribution settings:

❏ Run Once

❏ Minutes

❏ Hourly

❏ Daily

❏ Weekly

❏ Monthly

❏ Yearly

❑ Custom

For more information about these settings, see *About Recurrence in the Basic Scheduling Tool* on page 256.

The time zone used by the operating system of the server on which WebFOCUS is installed is assigned to a new distribution schedule, by default. However, you can select a different time zone from the Time Zone list if you or the recipients of scheduled content are located in a different time zone.

When you assign a time zone to a schedule, all schedule times are defined in terms of the time zone you specify. The Distribution Server runs the scheduled distribution at the time and time zone specified in the schedule to ensure that content is delivered to recipients as anticipated.

You can assign start and end times by selecting the arrow to the right of the date value. When you click on the arrow, a calendar will display that enables an authorized user to set the date for schedule distribution. Use the up and down arrows to set a specific time for schedule distribution. Alternatively, you can enter the time manually.

To run the schedule within the selected interval, check the *Repeat schedule every* check box to enable Advanced settings options. Set how often you want the schedule to repeat. The Until Time option specifies the time of day to end repeating the schedule. The *Last For* option specifies the amount of time to repeat the schedule. Enter this information manually or use the up and down arrows to set parameters. For more information, see *Advanced Settings* on page 259.

Maintaining Schedules

Maintaining a schedule allows you to edit schedule properties or delete the schedule when it is no longer needed. If a schedule contains properties that you want to use in a new schedule, the duplicate or copy option creates a template with those properties for the new schedule. You can also check the status of a schedule and run a log report to obtain detailed information about the schedule.

In this chapter:

❏ About Maintaining a Schedule in the Basic Scheduling Tool

❏ Editing a Schedule in the Basic Scheduling Tool

❏ Copying a Schedule

❏ Deleting a Schedule in the Basic Scheduling Tool

❏ Sharing Schedules

❏ Publishing Schedules

❏ Enabling or Disabling Schedules Using the Shortcut Menu Option

About Maintaining a Schedule in the Basic Scheduling Tool

As a user with the ability to access the Basic Scheduling tool or ReportCaster Advanced Scheduling tool, you can perform various maintenance functions on the schedules you are authorized to access.

Note: You can invoke the scheduling tool using the following URL:

`{protocol}://{host}[:{port}]/se.rc?ibfsld={Schedule-ID}`

For example:

`http://myhost/ibi_apps/se.rc?ibfsld=S200c3184s6b98s4345saa69s5`

Note: The options shown are dependent on your security effective policy.
Edit
   Allows you to open and edit an existing schedule.
Run
   Runs the schedule.

View Log

Allows you to view a log report for one or more selected schedules.

Enable and Disable

You can enable or disable schedules in the Resources tree. This option is also found in the Properties tab of the Basic and Advanced Scheduling tools.

Duplicate

Creates a new schedule with the same properties in the same folder.

Cut

Allows you to move the schedule from the original folder to a target folder using the paste operation.

Copy

Allows you to create a new schedule by copying an existing schedule.

Copy and update paths

Allows you to copy one or more schedules from one location to another with the internal path references automatically updated to be consistent with the target location. This option is also available for charts, reports, documents, visualizations, pages, workbooks, and HTML files created in App Studio.

This feature is available when the *Enable special copy operations* check box is selected on the *Other* page of the WebFOCUS Administration Console Configuration tab

Note: This feature only works when copying schedules between folders that reside on the same hierarchical level in the repository.

Create Shortcut

Allows you to create a shortcut to the schedule.

Delete

Deletes the existing schedule.

Change Title

Allows you to rename the schedule.

Publish and Unpublish

An owner of a schedule can make a schedule available to other members of the top-level folder in which the schedule resides. The schedule owner remains the execution ID. The following table describes the shortcut menu options for published schedules permitted to the different groups associated with a top-level folder.

	Basic	Advanced	Developer	Group Administrator	Manager
Run	✖	✔	✔	✖	✔
View Log	✖	✔	✔	✖	✔
Edit	✖	✖	✔	✖	✔
Enable/Disable	✖	✖	✔	✖	✔
Publish/Unpublish	✖	✖	✔	✔	✔
Security	✖	✖	✔	✖	✔
Hide/Show	✖	✖	✔	✖	✔
Copy/Duplicate	✖	✔	✔	✖	✔
Properties	✔	✔	✔	✔	✔
Change Title	✖	✖	✔	✖	✔
Delete	✖	✖	✔	✖	✔

Note: The default setting is Unpublish.

Hide and Show

Once an owner publishes a schedule, they can elect to Hide the schedule from groups not authorized to create content in the folder. To hide or show a schedule, right-click on a schedule and select the *Hide* or *Show* option.

Note: The default setting is Show.

Share

Allows you to share the selected schedule. You can subsequently Unshare the schedule via the same menu.

Share with

Allows you to specify the groups and users with whom you want to share the selected schedule.

Unshare

Allows you to remove sharing on a shared schedule. This option only displays if you have previously shared the schedule.

Security

Allows you to view and modify the ownership of the schedule. Options include: Rules, Rules on this Resource, and Effective Policy.

Properties

Allows you to view properties of the schedule, as well as modify title and summary information. You can also change the name of a schedule using the Properties dialog box. In addition, you can access Security features, including Owner and Sharing.

Editing a Schedule in the Basic Scheduling Tool

From the Resources tree, you can edit the schedules you are authorized to access.

Procedure: **How to Edit a Schedule in the Basic Scheduling Tool**

1. Right-click the schedule you want to edit and select *Edit*.

   If the user is authorized to use the Advanced Scheduling tool, the Advanced Scheduling tool is used to edit schedules, as shown in the following image.
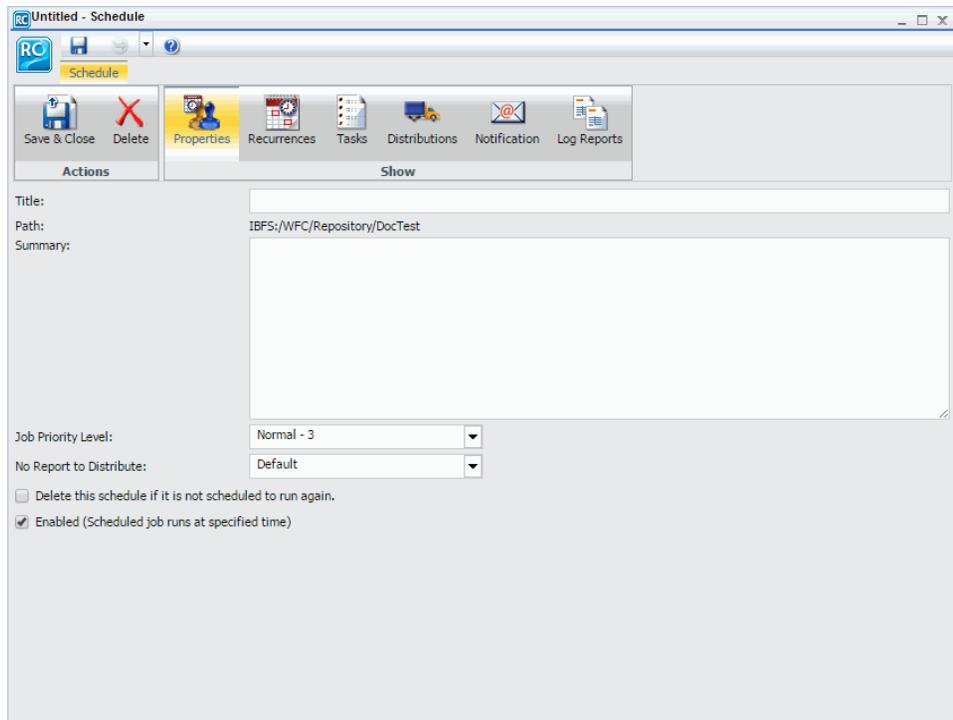
Note: The Email and Print distribution methods support multiple tasks.

2. Make the required changes to the schedule. For details on the Basic Scheduling tool options, see *Creating a Schedule in the Basic Scheduling Tool* on page 176.

3. Click *Save & Close*.

Reference: **Considerations When Editing a Schedule in the Basic Scheduling Tool**

❏ When you open a schedule that uses unavailable options, such as a distribution method, information is displayed that describes the change or changes that you must make for the schedule to use available options. Changes to the schedule cannot be saved until the schedule uses available options.

❏ If you selected *Run once* for the run interval, the schedule runs immediately unless you change the Start Time to a time later than the current time in your selected time zone. All other run intervals run at the next primary run-time interval of the schedule.

❏ You must save your changes in order to be able to run from within the scheduling tool.

❏ If you want your selected schedule or schedules to run immediately, click *Run*.

❏ When an existing schedule is opened in the Basic Scheduling tool, if the *Override the Format Specified in the Procedure* check box was selected, the list of formats displays. If you clear the *Override the Format Specified in the Procedure* check box, the list of formats does not display.

❏ When an existing schedule is opened in the Basic Scheduling tool, if the *Override the Format Specified in the Procedure* check box was not selected, the list of formats does not display. If you select the *Override the Format Specified in the Procedure* check box, the list of formats displays.

Copying a Schedule

For your convenience, you can copy an existing schedule for use as a template to create a new schedule.

Procedure: **How to Copy a Schedule**

Note: The cut, copy, and paste options display when you are authorized to use these options.

1. From the Workspaces are of the start page or the WebFOCUS Home Page, select the workspace or folder that contains the schedule you want to copy.

2. Right-click the schedule you want to copy and select *Copy*.

3. Right-click the domain or folder you wish to copy the schedule into and select *Paste*.

Deleting a Schedule in the Basic Scheduling Tool

From the Resources tree, you can delete schedules using the following procedure.

Procedure: How to Delete a Schedule in the Basic Scheduling Tool

Note that the Delete option displays when you are authorized to delete the selected schedule.

1. Right-click the schedule you want to delete and click *Delete*.

    Note: To select multiple schedules, use the Shift key and Ctrl key as in a standard Windows interface. A message appears asking to confirm if you want to delete the selected schedules.

2. Click *OK* to delete the schedule or schedules.

Sharing Schedules

The owner of a schedule that is located in a My Content folder can share that schedule with other users. You can set security rules only for schedules outside of a My Content folder.

Procedure: How to Share Schedules With Specific Groups or Users

From the Workspaces area of the start page or the WebFOCUS Home Page, if you are authorized to share your private content saved in a My Content folder, you can share a schedule with users authorized to access the folder in which the schedule is located by right-clicking the folder or schedule and clicking *Share*.

If you are authorized for advanced sharing, you can share your private content saved in a My Content folder with specific groups and users with whom you are authorized to share by performing the following steps.

1. Right-click the schedule that you want to share and click *Share With*.

The Share with Others dialog box displays, as shown in the following image.
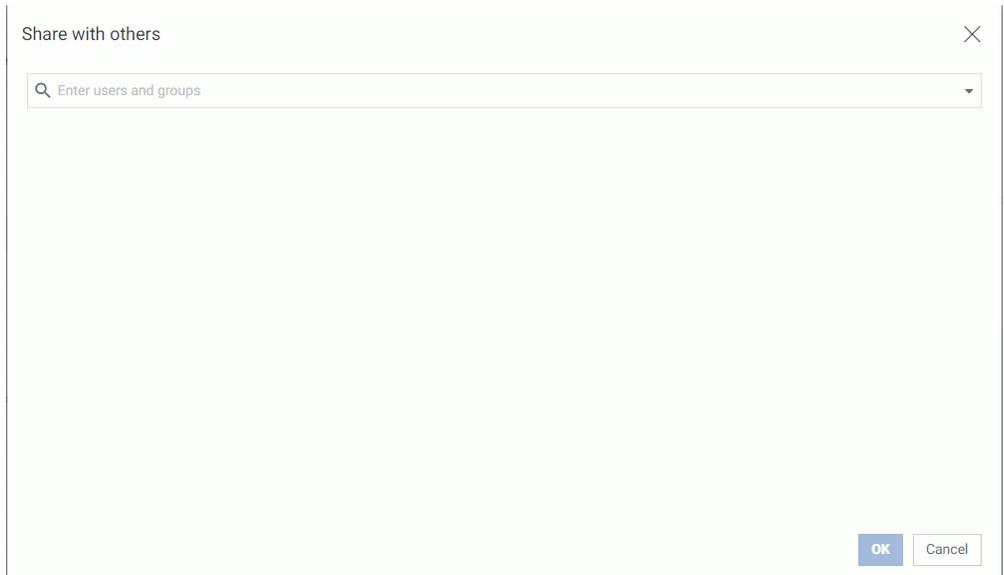
2. Click the drop-down arrow on the search box to display the filters for the users or groups that you want the option to select. You can filter your search results by Users or by Groups.

3. After you select a filter, begin typing in the search box to display the users or groups that are available for selection. Click a user or group to add it to the list of users or groups that can view the schedule. Optionally, click the *X* on a User or Group tile to remove it from the list.

4. When you are finished selecting users or groups to share your schedule with, click *OK*.

Procedure: How to Set Security Rules on a Schedule

Authorized users can set security for unpublished schedules, allowing other groups or individual users to access and manage the lists. For more information, see the *TIBCO WebFOCUS® Security and Administration* technical content.

Note: Authorized users can review the Security Policy by right-clicking the schedule, selecting *Security*, and then selecting *Effective Policy*.

1. Select the domain containing the schedule, or the unpublished schedule itself for which you want to set security.

2. Right-click and point to *Security* and then click *Rules*.

The Access Rules dialog box displays, as shown in the following image.
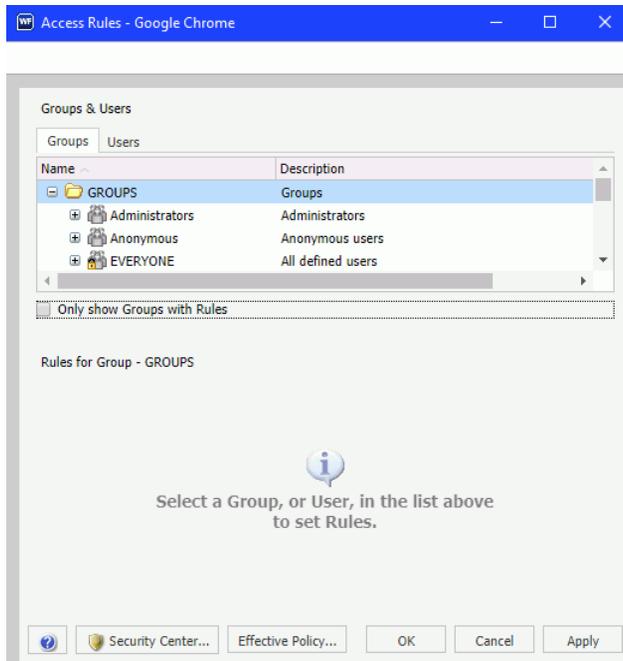
3. In the Groups tab, click the group or individual users to whom you would like to grant access to the schedule. Optionally, click the *Only show Groups with Rules* check box to only display groups that have rules that have already been set.

    The Roles for a selected group appear in the Rules for Group section.

4. Optionally, in the Rules for Group section, click the *Roles:* drop-down list to only display specific Roles.

5. Optionally, click the *Only show Rules that have been set* check box to filter the list of available roles even further.

6. Select the Role that defines the functional capabilities for which to set the access level.

7. Choose the access level in the Access drop-down list.

    Options include:

    ❏ **Not Set.** Access is not specifically set. Access is determined by inherited rules.

    ❏ **Permitted.** Allows the functionality of the selected role as specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

    ❏ **Denied.** Denies the functionality of the selected role at the level specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

❏ **Over Permitted.** Overrides a Denied access level to allow the functionality of the selected Role at the level as specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

❏ **Clear Inheritance.** Erases all previously defined rules for the selected Role at the level specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

8. Click the *Users* tab to display the list of individual users to whom you would like to grant access to the item. Optionally, click the *Only show Users with Rules* check box to only display users that have rules that have already been set.

   The Roles for a selected user appear in the Rules for User section.

9. Optionally, in the Rules for User section, click the *Roles:* drop-down list to only display specific roles.

10. Optionally, click the *Only show Rules that have been set* check box to filter the list of available roles even further.

11. Select the Role that defines the functional capabilities for which to set the access level.

12. Choose the access level in the Access drop-down list, as described in Step 7.

13. Click *Apply*.

14. Click *OK*.

   Your security setting updates are now saved for your schedule.

Publishing Schedules

A published schedule is visible to all users with access to the folder in which it resides. The shortcut menu options that appear on the schedule depend upon the privileges of the user that is signed in. For example, a user with the Run privilege is able to run the published schedule. When a published schedule runs, it runs as the creator of the schedule and not as the signed in user that initiated the run.

Note: A published schedule runs as the creator of the schedule. A user that is allowed to edit a published schedule may make a change to the schedule that the creator of the schedule is not permitted to make. In this case, the schedule will fail at run time. For example, a user may change the Distribution List or Access List used in the schedule to a private Distribution List or Access List that is not available to the creator of the schedule. When the changed schedule runs, it will fail due to inability of the creator to retrieve the Distribution List or Access List from the Repository.

Procedure: **How to Publish a Schedule**

From the Workspaces area of the Hub, you can perform the following steps to publish a schedule. The domain and folder containing the schedule must be published before the schedule can also be published.

1. From the Workspaces area of the Hub or the WebFOCUS Home Page, right-click the workspace that contains the schedule you want to publish, and click *Publish*

2. If the schedule is also stored in a folder, right-click the folder that contains the schedule you want to publish, and click *Publish*

3. Right-click the schedule and click *Publish*.

    The schedule is published.

Enabling or Disabling Schedules Using the Shortcut Menu Option

You can enable and disable schedules in the Resources tree or by using the ReportCaster Explorer. The Enable setting can also be accessed in the Properties tab of the Basic and Advanced Scheduling tools.

Note: You must be authorized to enable or disable schedules.

From the Workspaces area of the Hub or the WebFOCUS Home Page or ReportCaster Explorer, right-click an Enabled schedule and select *Disable* in the shortcut menu. If the schedule is already disabled, the option appears as Enabled.

For more information, see *How to Enable or Disable a Schedule* on page 375 and *How to Enable or Disable Multiple Schedules* on page 376.

Chapter **7**

Tracking Schedules

Information about a schedule, such as date, time, execution status, and recipients of a distributed job, can be accessed by running a log report and checking the job status in the ReportCaster Status. You can also analyze the resource utilization of schedules.

In this chapter:

❑   Log Reports

Log Reports

Log reports are stylized HTML format and appear in a separate browser window. You can search, print, or save the log report. The log report displays information according to your specifications in a separate browser window. One log record is produced for each scheduled job run in the specified time frame.

Tracking Schedules in the Console

Information about a schedule, such as date, time, execution status, and recipients of a distributed job, can be accessed by running a log report and checking the job status. For more information, see *Using the ReportCaster Console* on page 31.

Using Schedule Logs

Log reports enable you to view information about a distributed job, such as whether or not the job executed successfully, when the scheduled output was distributed, in what format the distributed output was sent, and the method of distribution. Log reports are stylized HTML format and display in a separate browser window. You can search, print, or save the log report. Log reports can be accessed within the scheduling tool when editing a schedule or by right-clicking on a schedule from the Resources tree.

The log file accumulates information. You should periodically purge log records to manage the number of log reports stored in the Repository, as well as the performance of log report information that is displayed.

The list in the right panel provides basic information about the job execution, including the job ID, the time the job started running, the amount of time it took to complete the execution of the job, and the general status of the job. To view a full log report for a job, double-click the job in the job list.

&ECHO and -TYPE Support in Log Reports

Values from &ECHO variables and -TYPE commands in procedures appear in log reports. The &ECHO variable displays command lines as they execute in order to test and debug procedures. The -TYPE command enables you to comment and evaluate your code for informational and debugging purposes. For example, if the following procedure is scheduled using ReportCaster, it may produce a log report similar to the example that follows this procedure.

Note: The second -TYPE is on a single line within the report procedure (FEX).

```
-SET &ECHO='ALL';
-TYPE Regional Product Sales Forecast
-TYPE Parameter RATE is passed into report to forecast potential sales
growth
-DEFAULT &RATE = .05;
-DEFAULTH &WF_TITLE='WebFOCUS Report';
TABLE FILE GGSALES
SUM DOLLARS
COMPUTE GROWTH/D12.2= (DOLLARS * &RATE) + DOLLARS; AS 'Sales, Forecast'
BY REGION
BY PRODUCT
ON TABLE PCHOLD FORMAT HTML
ON TABLE NOTOTAL
ON TABLE SET PAGE-NUM NOLEAD
ON TABLE SET SQUEEZE ON
ON TABLE SET EMPTYREPORT ON
ON TABLE SET HTMLCSS ON
ON TABLE SET HTMLENCODE ON
ON TABLE SET STYLE *
TYPE=REPORT, TITLETEXT=&WF_TITLE.QUOTEDSTRING,$
ENDSTYLE
END
```

Checking the Job Status

Another resource for tracking schedules is the schedule job status. The schedule status provides a list of scheduled jobs that are in the Distribution Server queue. Status information includes the schedule ID, the time it started running, and the status of the job.

To access the schedule job status information, see the Job Status tab in the ReportCaster Console. For more information, see *Job Status* on page 38.

Procedure: **How to View a Log Report**

1. From the Workspaces area of the Hub or the WebFOCUS Home Page, right-click the schedule and select *View Log*.

   The Schedule Log Options dialog box appears .

2. Specify which log report you would like to view by selecting *Last Executed*, *All*, or *Date*.

If you select *Date*, you will have the option to specify your search using start date and time and end date and time parameters.

3. Click *OK*.

   The log reports that match your search criteria appear .

   The log report first lists the job description for the record, which is the unique description identifier that you specified when you created the schedule. Underneath the Job Description, the left column of the log report includes the following information:

   ❏ **User.** ReportCaster user ID, indicating the owner of the schedule.

   ❏ **Procedure.** Unique key generated by ReportCaster that identifies a specific execution of a scheduled job.

   ❏ **Schedule ID.** Unique key generated by ReportCaster that was assigned to the job when it was scheduled.

   ❏ **Start Time.** Date and time the job started running.

   ❏ **End Time.** Date and time the job finished running.

   In the second column, the log report specifies messages consisting of the following:

   ❏ General information, such as the method of distribution for a particular job (for example, email distribution).

   ❏ Processing information, indicating that the request started, distribution was successful, and the request was completed. Processing information also includes reasons why a request failed, such as the unavailability of a data source.

Procedure: How to View a Log Report in the Scheduling Tool

1. From the Workspaces area of the Hub or the WebFOCUS Home Page, right-click the schedule for which you want to see the logs, and click *Edit*.

   The Basic Scheduling tool opens.

2. From the Basic Scheduling tool, click the *Log Reports* tab.

   The Log Reports panel appears.

3. Observe the Number of Jobs that have run.

4. Click the Job Number to view the log report information for that job in the panel below the job listing.

Reference: **Considerations When Viewing a Log Report**

When viewing a log report, be aware of the following considerations.

Task and Report Names

The ReportCaster Log references WebFOCUS folders and procedures (FEXs) by their path and file names and not their descriptions.

Email Addresses

ReportCaster cannot validate email addresses since email validation is performed by the mail server. The log report will include any email addresses validated by the mail server and returned to ReportCaster.

Burst Reports

❑ If a valid burst value is omitted in a Distribution List, Distribution File, or Dynamic Distribution List, ReportCaster treats the blank value as if it is a valid burst value and no entries indicating a blank burst value appear in the log file. This will significantly reduce the size of the log file, particularly when the database contains many values for the primary field and only a small subset of those values are burst.

❑ If a burst value is specified in a Distribution List, Distribution File, or Dynamic Distribution List and it is not found in the database, the following message appears in the log file:

```
Burst Value: value is not in the database.
```

❑ When a report procedure (FEX) is successfully burst, the log file will include the following message for each burst value:

```
FILE filename SUCCESSFULLY DISTRIBUTED TO destination FOR burst value.
```

Unavailable Options

❑ When schedules with unavailable task types or distribution methods are not permitted to run, an error notification is triggered. The error is shown in red text within the job process log report. The log report, as well as the full and brief notifications, contains information on the unavailable options that the owner of the schedule must change.

❑ When schedules with unavailable task types or distribution methods are permitted to run, normal job execution occurs and a message appears in the log report indicating that existing schedules using the unavailable task types or distribution methods are able to run. For more information on configuring available task types and distribution methods, see *Configuration Tab Folders* on page 43.

Using the ReportCaster Performance Log to Track Schedule Performance

You can use the performance log to analyze the resource utilization of schedules with ReportCaster. This log records the processing duration of individual schedules and schedule components.

To access the performance log, navigate to the ReportCaster Console. On the ribbon, in the Manage Server group, click the *Server Status* tab. Then click the *Server Log* drop-down arrow to view the Server Log menu.

The performance log feature is turned off by default. To activate performance log recordings, click *Turn On Server Performance Trace*.

The performance.log and Turn On Server Performance Trace options are shown in the following image.
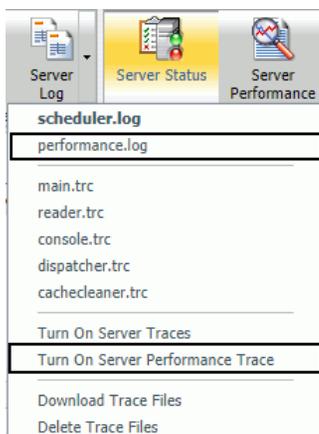
The performance.log records the following information in each record:

❏ Job ID

❏ Schedule ID

❏ Schedule Name

❏ User ID

❏ Time

❏ Type - (Begin, End)

❏ Event - (QUEUED, JOB, WF_REPORTING_SERVER, DESTINATION_MAPPING, COMPRESSION, EMAIL, FTP, LIBRARY, REPOSITORY, PRINT)

❑ Source - (Schedule ID, Task ID, Distribution ID)

❑ Server Name - (EDASERVE, FTP Server Name, Print Name…)

❑ Server User - (Execution ID)

❑ Object - Scheduled fex
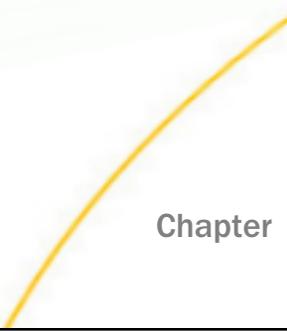
Using the Report Library

The Report Library is a secure report storage and retrieval facility to which reports can be distributed with ReportCaster. To distribute a report to the Report Library, select the Library distribution option when creating a schedule. When you select the Library distribution option, you will choose who is authorized to view the Library report, the folder in the WebFOCUS Repository to distribute the report to, and set an expiration date or specify the number of versions of the report to be kept. You can also choose to send an email notification that includes the URL to the report.

In this chapter:

❏ About the Report Library

❏ Viewing Library Content

❏ Searching in an On-Demand Paging Report

❏ Opening a Version of a Library Report in Excel and Other Documents

❏ Creating and Maintaining Library Access Lists

❏ Accessing Library Access Lists

❏ Viewing Parameter Values for Library Reports

About the Report Library

The Report Library provides secure access to its content, the ability to save multiple versions of the same output, and the ability to set an expiration date and control the number of versions kept in the library. When creating a schedule to distribute report output to the Report Library, the access options allow the user to specify who is authorized to access the report. The access options are the owner of the schedule, all users authorized to access the WebFOCUS Repository folder the report is stored in, or a Library Access List which specifies the groups and users who are authorized to view the report output the schedule will distribute to the Report Library.

Users authorized to view Library reports can view the most recent version or all versions of the Library report from the Resources tree accessible from the BI Portal, Library reports can also be viewed from the ReportCaster Explorer interface by selecting the Library report Filter option, located on the toolbar, to view Library reports.

When authorized with Library Management access or the ability to manage the private content of a user, a user with these privileges can manage, list, and delete Library reports. However, they cannot view Library reports.

Note:

❑ If the ownership of a schedule that uses Report Library distribution has been changed, you must correct the ownership of any associated Library reports to match the new owner of the schedule.

Viewing Library Content

The Resources tree and the ReportCaster Explorer interface provide access to the Report Library reports you are authorized to view. The Report Library reports you are authorized to view are:

❑ Library reports that you own.

❑ Published in a folder from which you are authorized to access and view content.

❑ Shared in a folder from which you are authorized to access and view content.

Note:

❑ To view a Library report within a folder, the policy of the user on the folder or report must include the opLibrary security privilege. For more information, see the *TIBCO WebFOCUS*® *Security and Administration* technical content.

❑ When a Library report is accessed, the event is logged in the libraryAccess log file located in the Administration Console. Library access events are logged, by default. For more information, see the *TIBCO WebFOCUS*® *Security and Administration* technical content.

You may also be authorized to access and manage but not view the content of a Library report when you are authorized to manage the private content owned by other users.

When a Library report is created, it is assigned the same Title as the schedule. When the report is burst, the Library report Title is the burst value. In addition, the access level specified in the schedule is applied to the private Library reports. If the schedule specified a Library Access List, the private Library report will be shared with the groups and users specified in the Library Access List each time the report is distributed.

Note: Even if you are a member of an Access List or the report is published, you can only view the output of a Library report you have been authorized to access as defined by WebFOCUS Client security.

You can view the last, most recent version or view a specific Library report version from the Resources tree or the ReportCaster Explorer. The options available for a Library report are based on the user authorization that is defined by WebFOCUS Client security. Only the owner of the Library report, users authorized to manage the private resources of another user, or users authorized to manage Library reports are authorized to delete the Library report. For additional information on WebFOCUS Client security, see the *TIBCO WebFOCUS® Security and Administration* manual.

Viewing Library Content

The Workspaces area of the Hub or the WebFOCUS Home page provides access to Library reports from a multi-level folder organization. Library reports can be in the same folder as other ReportCaster or Managed Reporting content. However, it is a best practice for burst Library reports to be in their own folder so that all the burst report sections list together in the same folder. In addition, the Title assigned to each burst report is the data value of the burst field for that report section.

When a Library report is selected, the options available are determined by WebFOCUS Client security authorization. Users can be authorized to view, track, cut, delete, share, publish, and manage the security of Library report.

The View options *View Last Version* and *Versions* allow you to view the most recent version of a Library report or to obtain a list of all versions of the Library report. You can change the default View setting for viewing Library reports in the WebFOCUS Administration Console, on the Configuration tab. For more information, see the *TIBCO WebFOCUS® Security and Administration* manual.

The following image shows the list of all versions available for the Product Packaging and Price Library report.

From the Library Versions listing, you can view a Library report in a new window by selecting the version of the report and then selecting the *Open* option from the toolbar or the context menu. You can also view the report in the view pane, displayed to the right of the version listing, by selecting the *Show View Pane* toolbar option. The following image shows the Product Packaging and Price report displayed in the View pane.
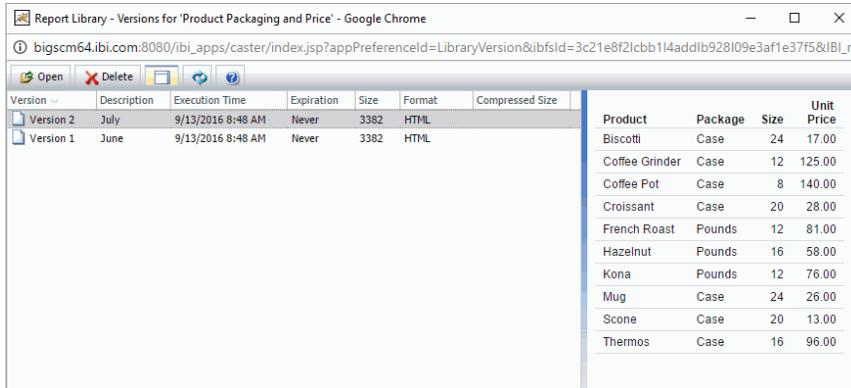
To hide the Library view pane, select the *Hide View Pane* toolbar option. The *Hide View Pane* toolbar option is highlighted when the view pane is displayed.

Viewing Library Content From the ReportCaster Explorer

The ReportCaster Explorer provides access to Library reports you are authorized to access. See the *ReportCaster Explorer* on page 367 for information on the ReportCaster Explorer toolbar *Filter* and *List* folder options to list Library and Watch List reports with columns that provide information specific to Library reports.

When a Library report is selected in the ReportCaster Explorer pane listing, you can click the *Show version list pane* icon to view the available versions of the report at the bottom of the dialog box. The following image shows the ReportCaster Explorer with the versions and options available for the Product Packaging and Price Library report.
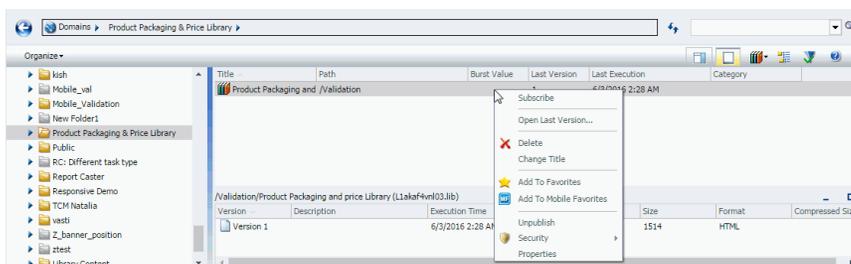
You can view the last, most recent version of the Library report by selecting the *Open Last Version* option, which will display the Library report in a new window.

You can view a specific Library report version by selecting the report version in the pane below the Library report list. When a Library report version is selected, the Library report is displayed in the view pane to the right of the Library report list pane, as shown in the following image.
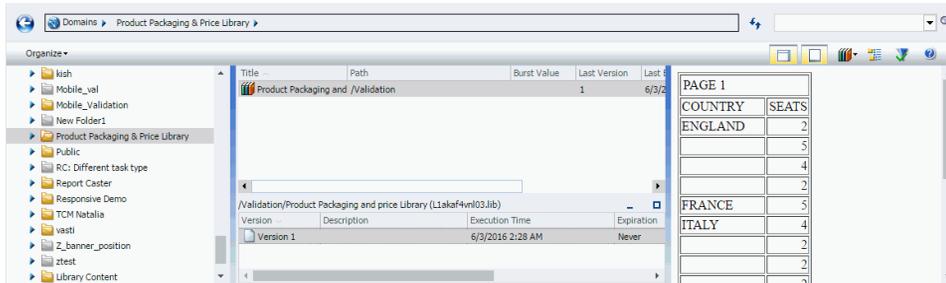
To view a Library report version in a new window, double-click the report version or right-click the report version and select the *Open* option, as shown in the following image.
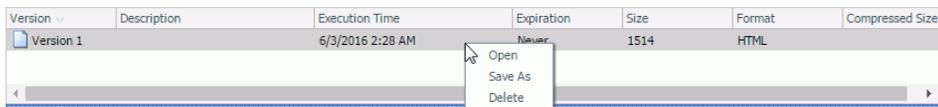
Using the Library Watch List

The Library Watch List provides a quick and easy way to focus on information that is of interest to you by sending you an email when a new Library report version is available. You can add any Library report you are authorized to access to the Watch List, whether or not you own it.

Note: An administrator can unsubscribe another user from a library report on their watch list. If SMTP authentication is enabled, subscribers to the watch list are SMTP authenticated.

❏ For Windows, this feature can be enabled by running the unsubscribe.bat file, located in the \ibi\WebFOCUS82\ReportCaster\bin directory.

❏ For UNIX, this feature can be enabled by running the unsubscribe shell script, located in the /ibi/WebFOCUS82/ReportCaster/bin directory.

The Watch List email notification includes the report Title and a link to the report in the Report Library. Watch List email notification parameters are defined in the ReportCaster Server Console Configuration tab, under the Report Library folder. For more information, see *ReportCaster Configuration* on page 40.

You can add or remove a Library report to the Watch List using the *Subscribe* and *Unsubscribe* options available when a Library report is selected from the Resources tree or ReportCaster Explorer interface.

Note: The Subscribe option is available only if the *Enable Library Watch List* check box within the ReportCaster Console Configuration tab is selected. For more information, see *Report Library Settings* on page 109.

The following examples show how to add a library report to your Watch List from the Resources tree and the ReportCaster Explorer.

❑ In the Resources tree, right-click the Library report that you want to add your Watch List, and select *Subscribe* from the drop-down list. If the report is burst, subscribe to each report section you want to add to your Watch List. The following image shows the *Subscribe* option from the Resources tree, for the Product Packaging report.
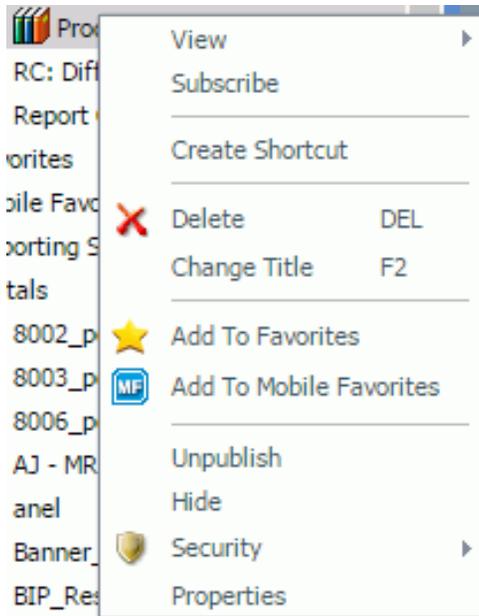
❑ In the ReportCaster Explorer interface, select the *Library Report* Filter option located on the toolbar and the folder in the Resources tree that contains the Library reports or is the folder path that the Library reports you are authorized to access are located in. The ReportCaster Explorer *List Files* options, located on the toolbar, allow you to view Library reports within the selected folder or within the selected folder and its subfolders. For more information on Filter and List Files toolbar options, see *ReportCaster Explorer* on page 367.

Right-click the Library report you want to add to your Watch List and select *Subscribe* from the drop-down list. If the report is burst, subscribe to each report section you want to add to your Watch List. The following image shows the *Subscribe* option from the ReportCaster Explorer Library report list for the Product Packaging and Price Library report.
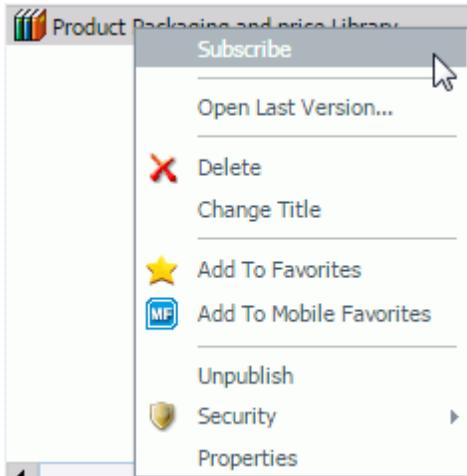
❏ Watch List reports display in the Resources tree and ReportCaster Explorer Library with the following image to identify it as a Watch List report:

The following image shows the Resources tree with a Regional Product Sales (Weekly Reports) folder expanded to list the burst report sections. The Northeast report section is a Watch List report.

The ReportCaster Explorer *Watch List* Filter and *List files* toolbar options allow you to quickly and easily access Watch List reports within a single folder or within a folder path. For more information, see *ReportCaster Explorer* on page 367.

When a Watch List report is selected, the report displays in a view pane to the right of the Watch List report list.

To hide the View pane, select an empty area at the end of the Watch List report listing. You can also open the Watch List report in a separate window by right-clicking the Watch List report and selecting *Open*.

Note: If you need to control when the View pane is displayed, access the Versions dialog box from the Resources tree by right-clicking the Library or Watch List report you want to view and selecting *View*, then *Versions*. Use the *Show View Pane* icon ▣ located on the toolbar of the Versions dialog box to enable the display of the View pane. You can toggle to hide the View pane by clicking the *Hide View Pane* icon ▢ on the toolbar.

To remove a report from the Watch List, do one of the following:

❏ In the Resources tree, right-click the Watch List report and select *Unsubscribe*.

❏ In the ReportCaster Explorer Library or Watch List report listing, right-click the Watch List report and select *Unsubscribe*. Click *Refresh* to clear the Watch List report icon.

Publishing Library Reports

Authorized users can publish and unpublish Library Reports to make them available to users authorized to access the folder in which the Library Report is located. Publishing requires the folder in which the item is located to be published in order to publish an item within the folder. If the folder is subsequently unpublished, all items in that folder are unpublished. For more information on Publishing folders and items, see the *TIBCO WebFOCUS® Security and Administration* manual.

Note: The My Content folder and the content within its folder path cannot be published.

Procedure: How to Publish Library Reports

1. From the Workspaces area of the Hub or the WebFOCUS Home Page or ReportCaster Explorer, select the Library Report or folder that you want to publish.

   Note: A folder must be published in order to publish items within the folder. In addition, published items or folders display in color. Those that are unpublished display in black and white.

2. Right-click the item or folder and select *Publish*.

Procedure: **How to Unpublish Library Reports**

1. From the Resources tree or ReportCaster Explorer, select the Library Report or folder that you want to unpublish.

2. Right-click the published folder or item that you want to unpublish and select *Unpublish*.

Saving a Library Report

You can save a Library report to your machine using the *Save As* context menu option that is available when a Library report is selected from the Report Library Versions dialog box or the ReportCaster Explorer tree. The *Save As* context menu option downloads the Library report file to your machine. When the file is downloaded, the Windows File Download dialog box displays with the options to Open the file, Save the file, or Cancel the file download. The following image shows the file download for a PDF format Library report.
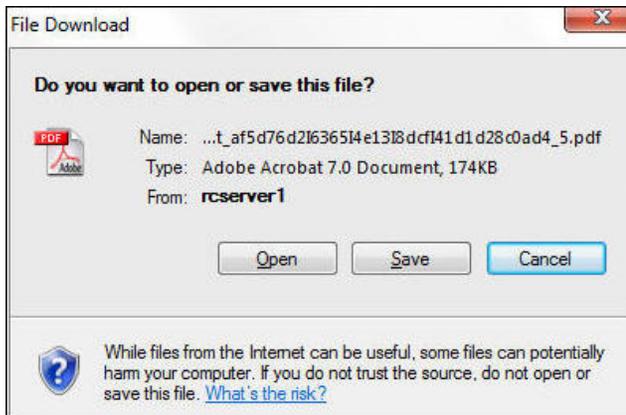
The Name value displayed in the Windows File Download dialog box is the Library report name assigned when the report was distributed to the Report library. You can change the Name value and select the location in which to save the Library report in the Windows Save dialog box that displays when the File Download Save option is selected.

Procedure: **How to Perform a Save As on a Library Report in the Business Intelligence Portal**

1. From the Workspaces area of the Hub or the WebFOCUS Home Page, select the Library report that you want to save to your machine.

2. Right-click the Library report and select *View*, then *Versions*.

3. In the Report Library Versions dialog box, right-click the Library report version you want to save and select *Save As*.

   The Windows File Download dialog box displays.

4. Click *Save*.

The Windows Save dialog box displays, from which you can save the Library report to your machine.

Procedure: **How to Perform a Save As on a Library Report in the ReportCaster Explorer**

1. Open the ReportCaster Explorer.

2. From the toolbar, click the *Change your filter* button and select *Library Report*.

   Note: You can also select *Watch List* if you have previously subscribed the Library report to your Watch List.

3. Select the folder in which the Library report is located or select a folder on the path to the Library report and select the *List files in selected folder and subfolders* toolbar option.

4. In the right pane, select the Library report you want to save to your machine.

5. Select the *show version list pane* toolbar option.

   The versions of the Library report display in the pane below the Library report list.

6. Right-click the report version you want to save to your machine and click *Save As.* The Windows File Download dialog box displays.

7. Click *Save*.

   The Windows Save dialog box displays, from which you can save the Library report to your machine.

Deleting Content From the Library

To delete content from the Library, you must be the owner of the Library report or be authorized to manage Library content or the private content of other users.

Deleting the Library report in the Resources tree does not delete all versions of a Library report. The Library report displayed in the Resources tree or ReportCaster Explorer Library report list is associated with the schedule that created the report or reports to provide you access to the Library report versions. Deleting the Library report in the Resources tree will not allow users to access existing versions of the report or reports from the Resources tree until the Library report associated with the schedule is recreated when the schedule that created the report or reports runs again and successfully distributes a new version of the report or reports.

To delete a specific Library or Watch List report version, obtain a list of the available versions for the Library or Watch List report. A list of Library report versions can be obtained from the Resources tree and the ReportCaster Explorer as follows:

❑ In the Resources tree, right-click the Library or Watch List report and select the *Versions* option.

❑ In the ReportCaster Explorer, select *Library Reports* or *Watch List Reports* from the Filter toolbar option and in the Resources tree, select the folder in which the Library report is located. To list the files within the selected folder path, select the *List files in selected folder and subfolders toolbar* option. In the report list pane, select the report. The versions available for the selected report will display in a pane below the Library report list.

Right-click the Library or Watch List report version you want to delete and click *Delete*.

When you delete a version of a Library report, ReportCaster does not renumber the remaining versions. For example, if there are six versions of a report and you delete versions 1, 2, and 4, the remaining versions are 3, 5, and 6, and the next version of this report to be distributed to the library will be version 7.

When all versions of a Library report are deleted, the Library report will continue to display in the Resources tree, as it is the item associated with the schedule for future distributions of the report.

A Library report remains in the Report Library until all of the following are deleted:

❑ All versions of the Library report (or reports) distributed by the schedule.

❑ Library report listed in the Resources tree folder associated with the schedule.

❑ Delete the schedule associated with the Library report (or reports) if you do not want any future versions of the Library report to be created.

Using Cut and Paste to Move Library Reports

You can use the Cut and Paste options to move Library reports between folders in the Repository. The ability to cut and paste a Library report is determined by your user permissions or privileges for the folders. For more information, see the *TIBCO WebFOCUS® Security and Administration* technical content.

Procedure: **How to Cut and Paste a Library Report**

1. From the Workspaces area of the Hub or the WebFOCUS Home Page, right-click a Library report and click *Cut*.

2. Right-click the new destination folder and click *Paste*.

    The Library report now appears in the new folder.

    Note:

    ❑ The schedule that generates the Library report will continue to run successfully after a Library item has been moved. However, if you edit the schedule from which the Library report was generated, you must update the Library report distribution path before saving the schedule. If the distribution path has not been updated, a warning will be issued. However, if the library report was generated from a burst schedule procedure, a warning will not be issued.

    ❑ You cannot paste a Library report into the same folder from which it was cut.

    You can also move Library reports to new folders using a drag-and-drop operation. For more information, see *Using the Report Library* on page 337.

Viewing On-Demand Paging Reports

The Report Library On-demand Paging feature enables you to view a report one page at a time from the Library while the web application server holds the remaining pages and feeds them at your request. This feature is useful for large reports because it decreases the amount of time you must wait before you can begin viewing the report.

On-demand Paging reports open from the Library inside the WebFOCUS Viewer. This tool provides the framework to view report pages and allows you to search for specific pages or information in the report.

Note: When *Library distribution* is selected, the Distribution Server adds SET WEBVIEWTARG=OFF to the procedure to control the behavior of the frames in the Library.

SET WEBVIEWTARG does not override ON TABLE SET WEBVIEWTARG. Therefore, the scheduled procedure should not contain an ON TABLE SET WEBVIEWTARG statement with a *target_frame* value specified. See the *Developing Reporting Applications* manual for additional information on the WEBVIEWTARG command and other On-demand Paging settings.

As with all Library reports, you can open the On-demand Paging report in a separate window or in the View pane from the Library Versions listing. For more information on viewing Library reports, see *Viewing Library Content* on page 338 or *ReportCaster Explorer* on page 367.

Note: When you double-click an On-demand Paging Library report in the BI Portal tree, the report displays, but is missing the Web Viewer control bar at the bottom. Select the *View* option to view the report. ReportCaster Explorer displays the report in the View pane.

The following image is an example of an On-demand Paging report opened with the Library View pane.

When viewing an On-demand Paging report from the Library Versions View Pane, the Web Viewer control panel is not fully visible and displays with a vertical scroll control. This can be resolved by viewing the On-demand Paging report in a new window by selecting the *Open* option from the toolbar or the context menu for the selected Library report, as shown in the following image.

The WebFOCUS Viewer control panel, shown in the following image, appears at the bottom of the WebFOCUS Viewer.

The controls enable you to display a specific page. To display a specific page, type a page number in the Page field and press Enter, or click the *Go To* icon next to the Page field and type in a page number. The following image shows the Page field and icon in the control panel.

Display the previous or next page in a sequence by clicking the Previous and Next arrows, as shown in the following image.

Display the first or last page of the report by clicking the First Page or Last Page arrows, as shown in the following image.

Download the entire report to the browser as a single document by clicking the *All Pages* icon, as shown in the following image.

Close the WebFOCUS Viewer by clicking the *Close* icon, as shown in the following image.

Searching in an On-Demand Paging Report

The Viewer Control Panel contains controls that offer several ways to search your report. Using the Viewer search controls, you can select a string of information, such as a phrase that occurs in your report or a group of numbers, and search for each occurrence of that string. You can further customize your search by matching capitalization of words exactly (a case-sensitive search) or by controlling the direction of your search (either forward or backward from your starting point in the report). Use these controls to search your report:

❑ To perform a case-sensitive search, click *Match Case*, as shown in the following image.

❑ To search backward in a report, click *Search Backward*, as shown in the following image.

❑ To locate a specific string, type the string you want to search for and click the *Find* icon, as shown in the following image.

Note: The Find functionality will locate the page that the current string is on and underline it. In order to find the string within the page, you must use the Find option in your browser.

Procedure: **How to Search in an On-Demand Paging Report**

1. Enter the string in the *Search* input box.

2. Click *Match Case* if you want to perform a case-sensitive search.

    Notice that the WebFOCUS Viewer displays the Match Case button with a red line across it to indicate that it is active.

3. To begin your search, click:

    a. *Search Backward* to search for the string from the current page back to the first page.

        or

    b. *Find* to search from the current page to the end of your report.

    The WebFOCUS Viewer searches the report and underlines the first occurrence of the string.

    Note: The Find functionality will locate the page that the current string is on and underline it. In order to find the string within the page, you must use the Find option in your browser.

4. Click *Find* again to search for another occurrence of the string.

    Note: If multiple occurrences of the string display on the same page, the Find functionality will underline the next occurrence. When no more occurrences of the string are found, the next page that the string occurs on is displayed with the first occurrence of the string underlined.

Example: Using the Viewer Control Panel to Search

You want to use the Viewer Control Panel to navigate a long report called Inventory Sales within State to find occurrences of the string *Digital*, a type of electronics that you sell. After you run the report, WebFOCUS displays the first page of the report in the Viewer.

1. To search for *Digital* electronics, type *Digital* in the input box and click the *Find* icon, as shown in the following image.

The WebFOCUS Viewer returns your report with the first occurrence of your search string underlined, as shown in the following image.

2. Click *Find* again to locate the next occurrence of Digital.

   Note: If multiple occurrences of the string display on the same page, the Find functionality will underline the next occurrence. When no more occurrences of the string are found, the next page that the string occurs on is displayed with the first occurrence of the string underlined.

Opening a Version of a Library Report in Excel and Other Documents

You can open a version of a library report in Excel using a URL that captures the path from the properties of a library report, as shown in the following image:
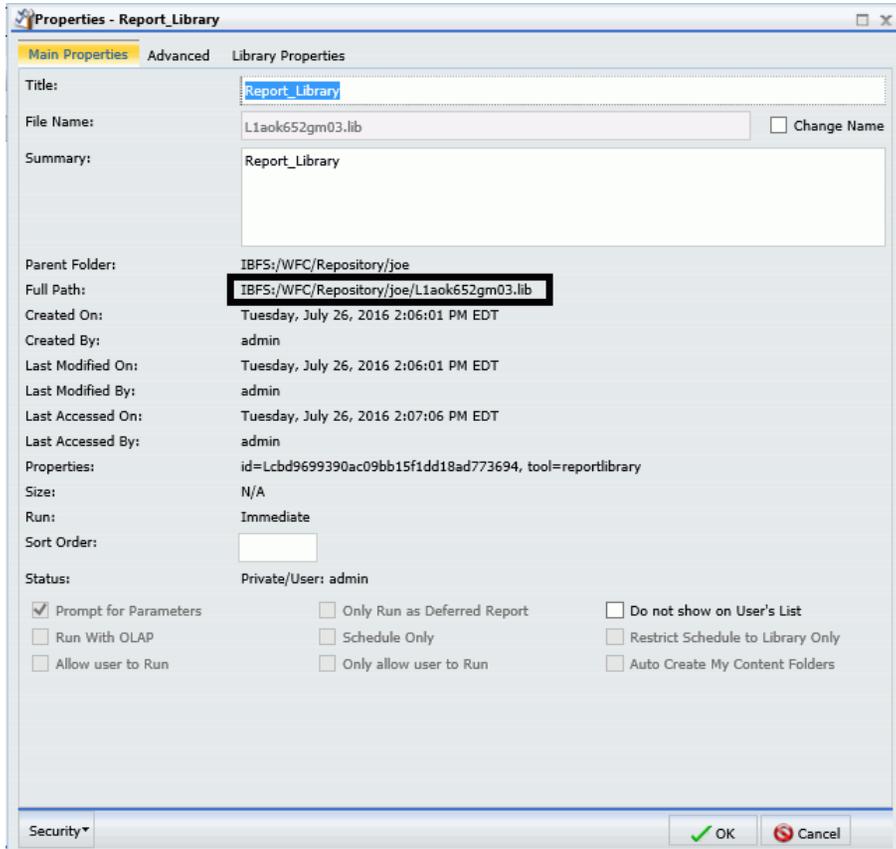
The convention to use this functionality is based on the following URL components:

❏ **Path.** Accessible from the properties dialog box of any library report.

❏ **Library URL.** A standard URL that identifies the report library (http://*host*:*port*/ibi_apps/lib-report.rc).

Using the path information from the image above in combination with the Library URL, the full URL is the following:

http://*host*:*port*/ibi_apps/lib-report.rc?path=IBFS:/WFC/Repository/joe/L1ack652gm03.lib

Note: The ? is a required component of a qualifying URL.

The resulting URL can be used to open the current version of this identified library report in Excel and other types of documents, such as Microsoft Word or an HTML page.

Creating and Maintaining Library Access Lists

A Library Access List defines the groups and users authorized to view report output distributed by a schedule to the Report Library. A Library Access List can be used with single or multiple schedules.

A Library Access List is created as a private item owned by a user and can be shared to authorize other groups and users to select it for their schedules. Users authorized to use a shared Library Access List will be able to share the report distributed to the Report Library by their schedule with the groups and users they are authorized to share with.

Note: Changes to an Access List are applied to a Library report that is protected by the Access List at the next execution of the schedule that creates the Library report.

The following image shows the Library Access List tab.

Users authorized to access the Library Access List tool and save to a folder in the Resources tree can:

❏ Create a new Library Access List.

❏ Add New Members. The *Add New* option allows the user to enter member information. There must be at least one member specified to save a Library Access List.

❏ Select Members. The *Select Members* option allows the user to select members from an existing Library Access List they are authorized to access.

❏ Delete a Library Access List. The owner and users authorized to manage the private content for other users are authorized to delete a Library Access List.

❏ Save and close a Library Access List. The user can save a Library Access List to a folder in the Resources tree to which they are authorized to write.

❏ Refresh the Report Library so that it contains the latest Library Access List information. To refresh the list, click *Refresh*.

❏ Edit Properties. From the Resources tree or the ReportCaster Explorer interface, the owner of the Library Access List and users authorized to manage the private resources of other users can change the Title and Summary information. Multi-lingual support is available.

From the Library Access List toolbar, you can create a New Library Access List or Save, Save As, Delete, or Close the current list. You can also access help information.

From the ribbon, you can save and close the Library Access List, delete the Library Access List, show members, show summary, add new members to the Library Access List, select members to add to the Library Access List, and remove members from the Library Access List. The ribbon displays, as shown in the following image.

Procedure: How to Create a New Library Access List

To create a new Library Access List:

1. From the Workspaces area of the start page or the WebFOCUS Home Page, choose the workspace in which you want to create your Library Access List.

2. On the Actions bar, click *Schedule*, and then click the *Access List* button.

   The Library Access List dialog box opens.

3. In the *Title* field of the Members dialog box, enter a descriptive name for the Library Access List.

4. Click the *Add New* or the *Select Members* tab to add a new member to the Library Access List.

   ❑ *Add New* displays the groups and users with whom you are authorized to share. Adding a group or user to the Library Access List will enable that group or user to see any Library report protected by the Library Access List. These users will also need the Access Library Content privilege to view the contents of a Library report.

   ❑ *Select Members* displays existing Library Access Lists from which you are authorized to access and select members.

5. In the Burst Value column, type an optional burst value to specify the report section to distribute to the group or user. This value is case-sensitive. The schedule for which the Library Access List is specified must have the Burst report option selected to limit the report distribution to the burst value specified in the Library Access List. For more information on burst values, see *Bursting a Report* on page 157.

6. If you would like to provide users with a description to understand the purpose of the Library Access List, click the *Summary* tab and enter a description for the Library Access List.

   Note: To create another Library Access List without leaving the Library Access List tool, select the ReportCaster (RC) button on the toolbar and select *New Library Access List*.

7. Click *Save & Close* to save the Library Access List.
    Note:

    ❏ To create another Library Access List, you must close the current New Library Access List window and return to Step 1. Alternatively, click the ReportCaster (RC) button in the Library Access List toolbar and select *New Library Access List*.

    ❏ The maximum length of a title value for a file is 256 characters.

    ❏ If the title of your file has the same name of an existing file in the folder, you will receive a message asking if you wish to replace the file.

Procedure: How to Edit a Library Access List

You can edit the Library Access Lists you own or are authorized to manage from the Resources tree or the ReportCaster Explorer interface by performing the following steps.

1. Select the Library Access List you want to edit.

2. Right-click the Library Access List and select *Edit*.

    The Library Access List interface displays.

3. Make any necessary changes to the Library Access List and select *Save & Close*. Note that if you change the Title of the Library Access List, the internal name that uniquely identifies the Library Access List is not changed.

4. To remove a member from the Library Access List, select the member and click the *Remove* tab.

5. If you are editing the Library Access List, make the necessary changes and click *Save & Close*.

Procedure: How to Copy a Library Access List

You can create a copy of an existing Library Access List you own or are authorized to manage from the Resources tree or the ReportCaster Explorer interface using the Duplicate or Copy and Paste options.

The following steps allow you to quickly and easily create a copy of an existing Library Access List within the same folder.

1. From the Workspaces area of the Hub, the WebFOCUS Home Page, or the ReportCaster Explorer, with items filtered by Access List, select the Library Access List you want to copy.

2. Right-click the Library Access List and select *Duplicate*. A copy of the Library Access List is created in the same folder with a number sequence appended to the end of the file name.

For example, if you duplicate a Library Access List with the Title value Products, the Title assigned to the duplicate copy and displayed in the Resources tree is Products_1. Alternatively, the Copy and Paste options can be used to make a copy of the Library Access List in the same folder. See *How to Copy an Existing Library Access List in a Different Folder* on page 359 and select the same folder as the Library Access List you selected to copy when selecting the folder in which to create the copy of the Library Access List.

Procedure: **How to Copy an Existing Library Access List in a Different Folder**

The following steps allow you to create a copy of an existing Library Access List in a different folder in which you are authorized to write and create content.

1. From the Workspaces area of the Hub, the WebFOCUS Home Page, or the ReportCaster Explorer, with items filtered by Library Access List, select the Library Access List you want to copy.

2. Right-click the Library Access List and select *Copy*.

3. In the Resources tree, select the folder in which to create the copy of the Library Access List.

4. Right-click and select *Paste*.

Procedure: **How to Move a Library Access List to a Different Folder**

You can move a Library Access List that you own (or are authorized to manage) from the Resources tree or the ReportCaster Explorer interface, to a different folder location by using the Cut and Paste options.

Important: When moving a Library Access List to a different folder, the Library schedules that reference the Library Access List must be updated so that they reference the Library Access List in the folder location to which it has been moved. This is required because the path and name of the Library Access List is stored in the Library schedule information to obtain the Library Access List information when the schedule is run.

The following steps allow you to move a Library Access List to a different folder in which you are authorized to write to and create content.

1. From the Workspaces area of the Hub, the WebFOCUS Home Page, or the ReportCaster Explorer, with items filtered by Library Access List, select the Library Access List you want to move to a different folder.

2. Right-click the Library Access List and select *Cut*.

3. In the Resources tree, select the folder in which to place the moved Library Access List.

4. Right-click and select *Paste*.

   Note: You must be authorized to write to and create content in the folder into which you are pasting the Library Access List. A message will display informing you if the Title of the Library Access List already exists in the selected folder. When the Paste operation is completed, be sure to update the Library schedules that use this Library Access List to reference the new folder location.

Procedure: **How to Delete a Library Access List**

From the Workspaces area of the Hub, the WebFOCUS Home page or the ReportCaster Explorer Interface, you can delete the Library Access Lists you own and those that you are authorized to manage by performing the following steps.

Important: Schedules that reference deleted Library Access Lists will not run successfully. Evaluate whether there are any schedules utilizing the Library Access List prior to deleting it.

1. From the Workspaces area of the Hub or the WebFOCUS Home Page, select the Library Access List you want to delete.

2. Right-click the Library Access List and select *Delete*.

3. If you are deleting the Library Access List, a message appears asking to confirm that you want to delete the Library Access List. Click *OK* to delete the Library Access List.

Procedure: **How to Change the Title or Summary for a Library Access List**

You can change the Title or Summary for a Library Access List you own or are authorized to manage from the Resources tree Properties option or within the Library Access List tool. The following steps explain how to change the Title or Summary using the Properties option.

1. From the Workspaces area of the Hub, the WebFOCUS Home Page or ReportCaster Explorer, right-click the Library Access List you want to change the Title or Summary for and select *Properties*, as shown in the following image.
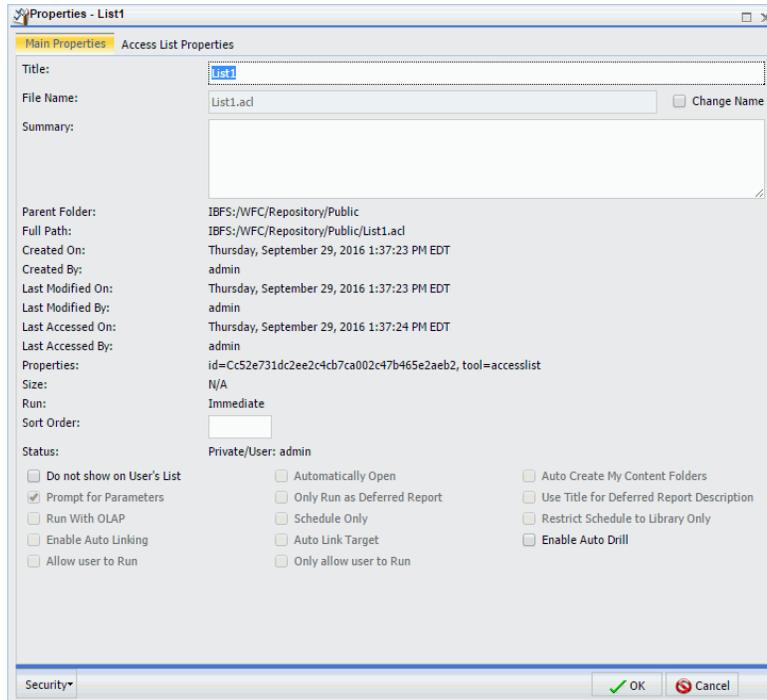
2. Select the *Title* field and enter the new title.

3. Select the *Summary* field and enter the new summary value. This is an optional field.

4. Select *OK* when you have completed entering the Title and Summary values.

Procedure: **How to Change the Title and Summary From the Library Access List Tool**

The following steps allow you to change the Title and Summary of a Library Access List from the Library Access List tool.

1. From the Workspaces area of the start page, the WebFOCUS Home Page or ReportCaster Explorer, right-click the Library Access List you want to change the Title or Summary for and select *Edit*.

2. Select the *Title* field and enter the new title.

3. To enter an optional summary value, click the *Summary* tab and enter the summary value.

4. Click the *Save & Close* tab when you have completed entering the Summary value.

Accessing Library Access Lists

Sharing your private Library Access Lists allows you to permit groups and users to see its content and use it in schedules while you retain ownership. Authorized users can share their private Library Access Lists with groups and users with whom they are permitted to share. The Library Access List can be accessed by users authorized to access the folder in which the shared Library Access Lists are located.

Authorized users can publish and unpublish Library Access Lists to make them available to users authorized to access the folder in which they are located. Publishing requires the folder the item is located in to be published. If the folder is subsequently unpublished, all items in that folder are unpublished. See the *TIBCO WebFOCUS® Security and Administration* manual for additional information on publishing and sharing folders and items.

Procedure: **How to Share a Library Access List**

From Workspaces area of the Hub or the WebFOCUS Home Page, if you are authorized to share your private content saved in a My Content folder, you can share a Library Access List with users authorized to access the folder in which the Library Access List is located by right-clicking the folder or Library Access List and clicking *Share*.

If you are authorized for advanced sharing, you can share your private content saved in a My Content folder with specific groups and users with whom you are authorized to share by performing the following steps.

1. Right-click the Library Access List that you want to share and click *Share With*.

The Share with others dialog box displays, as shown in the following image.
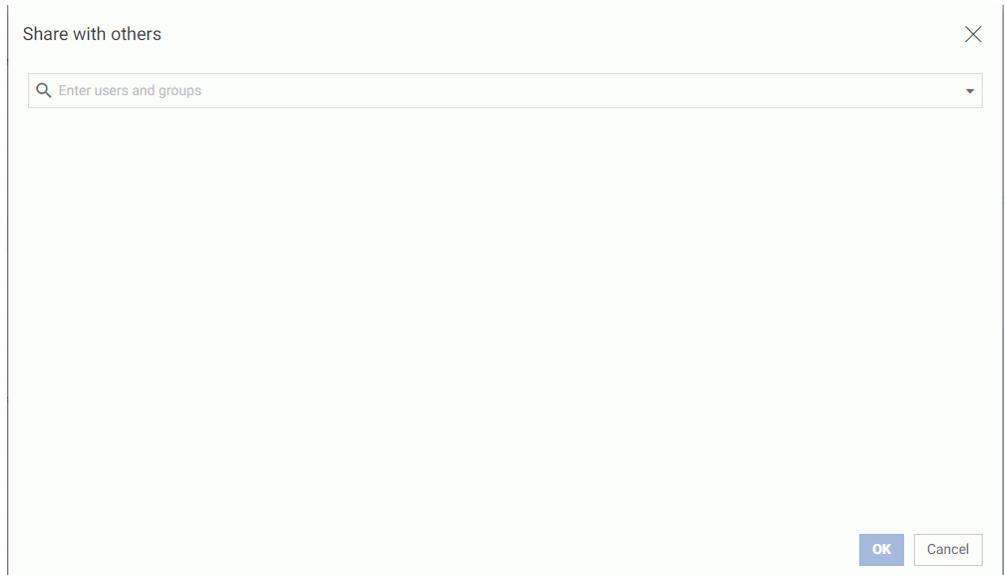
2. Click the drop-down arrow on the search box to display the filters for the users or groups that you want the option to select. You can filter your search results by Users or by Groups.

3. After you select a filter, begin typing in the search box to display the users or groups that are available for selection. Click a user or group to add it to the list of users or groups that can view the Library Access List. Optionally, click the *X* on a User or Group tile to remove it from the list.

4. When you are finished selecting users or groups to share your Library Access List with, click *OK*.

Publishing Library Access Lists

A domain must be published in order to publish items within the domain, including Library Access Lists. Published items or folders display in color, while unpublished items or folders display in black and white.

From the Workspaces area of the Hub or the WebFOCUS Home Page, right click the domain that contains the Library Access List that you want to publish and click *Publish*. To unpublish the domain, and in effect the Library Access List, click *Unpublish*.

Procedure: **How to Set Security Rules on a Library Access List**

Authorized users can set security for unpublished Library Access Lists, allowing other groups or individual users to access and manage the lists. For more information, see the *TIBCO WebFOCUS® Security and Administration* technical content.

Note: Authorized users can review the Security Policy by right-clicking the Library Access List, selecting *Security*, and then selecting *Effective Policy*.

1. Select the workspacecontaining the Library Access List, or the unpublished Library Access List itself for which you want to set security.

2. Right-click and point to *Security* and then click *Rules*.

   The Access Rules dialog box displays, as shown in the following image.

3. In the Groups tab, click the group or individual users to whom you would like to grant access to the Library Access List. Optionally, click the *Only show Groups with Rules* check box to only display groups that have rules that have already been set.

   The Roles for a selected group appear in the Rules for Group section.

4. Optionally, in the Rules for Group section, click the *Roles:* drop-down list to only display specific Roles.

5. Optionally, click the *Only show Rules that have been set* check box to filter the list of available roles even further.

6. Select the Role that defines the functional capabilities for which to set the access level.

7. Choose the access level in the Access drop-down list.

   Options include:

   ❏ **Not Set.** Access is not specifically set. Access is determined by inherited rules.

   ❏ **Permitted.** Allows the functionality of the selected role as specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

   ❏ **Denied.** Denies the functionality of the selected role at the level specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

   ❏ **Over Permitted.** Overrides a Denied access level to allow the functionality of the selected Role at the level as specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

   ❏ **Clear Inheritance.** Erases all previously defined rules for the selected Role at the level specified in the Apply To drop-down list. You can select *Folder and Children*, *Folder Only*, or *Children Only*.

8. Click the *Users* tab to display the list of individual users to whom you would like to grant access to the Library List. Optionally, click the *Only show Users with Rules* check box to only display users that have rules that have already been set.

   The Roles for a selected user appear in the Rules for User section.

9. Optionally, in the Rules for User section, click the *Roles:* drop-down list to only display specific roles.

10. Optionally, click the *Only show Rules that have been set* check box to filter the list of available roles even further.

11. Select the Role that defines the functional capabilities for which to set the access level.

12. Choose the access level in the Access drop-down list, as described in Step 7.

13. Click *Apply*.

14. Click *OK*.

    Your security setting updates are now saved for your Library Access List.

Viewing Parameter Values for Library Reports

When you view a Library Report through the Library Report user interface or the ReportCaster Explorer, the Parameters column displays the parameter value pairs for each version. The following image shows three Library Report versions in the Report Library user interface. Each version uses different parameter values for the same parameter

ReportCaster Explorer

The ReportCaster Explorer interface provides users with the ability to obtain a list of ReportCaster items, by type, displayed with detail column information specific to the item type selected.

Note: Throughout this topic, the term Explorer refers to the ReportCaster Explorer.

In this chapter:

Using the ReportCaster Explorer

The Explorer interface provides users with the ability to obtain a list of ReportCaster items, by type, displayed with detail column information specific to the item type selected. The list can be filtered by Schedules, Distribution Lists, Access Lists and Library Reports, or Watch Lists in the selected folder. It can also include items in subfolders of the selected folder. The View Library Report from the link in the Library notification email will also access the Explorer filtering by the Library Output item type.

Access to the Explorer is controlled by the Client security authorization model. Users can be authorized to access the Explorer at the Repository folder or at specified lower-level folders. For information on the operations that control access to the ReportCaster tools, see the *TIBCO WebFOCUS® Security and Administration* manual.

Authorized users can access the Explorer option from the context menu of a folder. The Explorer option is also available from the *Tools* menu, located on the BI Portal Menu Bar, provided that the user is authorized to access the Explorer from the *Domains* folder.

When ReportCaster Explorer is selected from the Tools menu, the Explorer interface opens in a new tab. The *Domains* folder node is the default folder location and is expanded to list the folders that the user is authorized to access. The following image shows the Explorer with the Domains folder as the selected folder location.
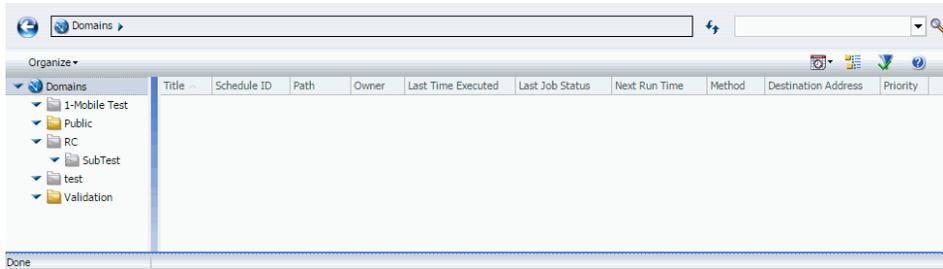
When the Explorer is selected from the context menu of a folder, the selected folder location is passed to Explorer so that the folder is the selected folder in the Explorer tree and schedules the user is permitted to access are listed in the right panel.

Note: Once the ReportCaster Explorer is launched from the BI Portal, logging out of or closing the BI Portal does not close the ReportCaster Explorer. You must manually close the ReportCaster Explorer when you sign out of or close the BI Portal. If you sign back in to the BI Portal with a different user name while the ReportCaster Explorer is open from a previous session, the ReportCaster content from the previous session will be visible and available in the ReportCaster Explorer.

Procedure: How to Access the ReportCaster Explorer Tool From the Start Page

1. Click the Main Menu, in the upper-left corner of the start page to expand the menu options.

2. Under Quick Access, select *ReportCaster Explorer*.
   The ReportCaster Explorer tool opens.

Procedure: **How to Access the ReportCaster Explorer Tool From the WebFOCUS Home Page**

1. Click the User menu, in the upper-right corner of the WebFOCUS Home Page, as shown in the following image.
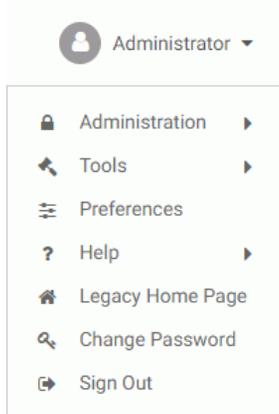
Note: You may need to expand your browser window in order to see the User menu.

2. Point to the *Tools* option to display the Tools menu.

3. In the Tools menu, click *ReportCaster Explorer*.

The ReportCaster Explorer tool displays.

Explorer Schedule Toolbar

The following image shows the Explorer toolbar. This allows the user to quickly access the options available for a selected ReportCaster item. You can specify what ReportCaster item type to list and whether to list the items in the current folder or include subfolders. You can also access online help.

The Organize option displays the options the user is authorized to use for the ReportCaster item selected in the right panel. The following image shows the Organize menu options for a schedule that has been selected in the right panel.

Note: The Organize menu is activated only when you have an item selected in the right panel, as shown in the following image.
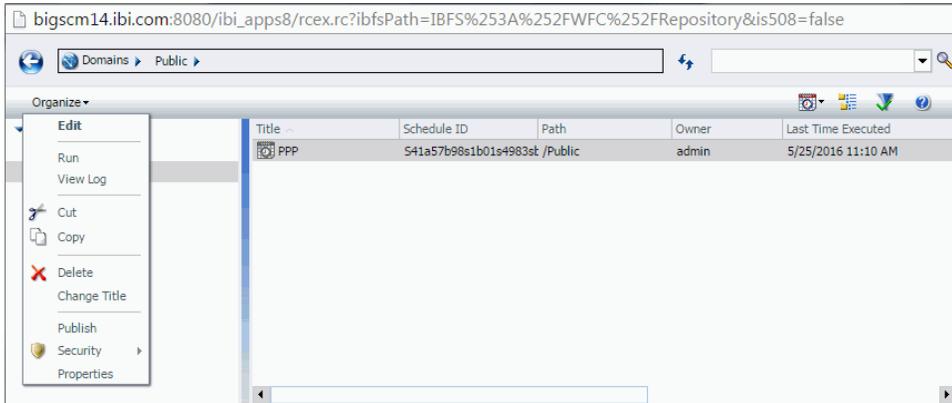
The Change your filter option allows the user to specify whether to list ReportCaster Schedules, Distribution Lists, Access Lists, Library Reports, or Watch List reports. The default filter is Schedule. The following image shows the right side of the Explorer toolbar with the *Change your filter* option expanded.
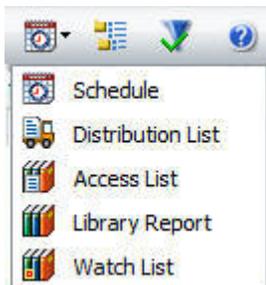
The *List files in selected folder and subfolders* option allows the user to list the ReportCaster items, based on the selected filter, in the current folder or in the current folder and its subfolders. The default is to list files in the current folder.

Note: The *List files in selected folder and subfolders* icon, which is displayed on the toolbar, is a toggle button to allow the user to change the depth of the folder search (that is, between the selected folder or the selected folder and its subfolders). It does not reflect the folder depth of the current list. Review the *Path* column in the right panel to confirm the folder location of the ReportCaster items.

The following image shows the *List files in selected folder and subfolders* option that when selected, will list the ReportCaster items for the selected Filter in the selected folder and its subfolders.

The following image shows the *List files in selected folder* option that when selected, will list the ReportCaster items for the selected Filter in the selected folder.

The following image shows the *Show only folders with content* option that when selected, shows only folders with content.

The following image shows the *Show all folders* option that restores the folder view to show all folders. This option displays only when *Show only folders with content* has been selected.

The following image shows the *Help* option and displays help information for the ReportCaster Explorer interface.

Explorer Tree

The Explorer tree provides the same folder navigation as the Resources tree that is accessible from the BI Portal. Double-click a folder to expand or collapse a folder.

Explorer Item List Panel

The Explorer right panel displays the ReportCaster items as specified by the Change your filter and List files in selected folder and subfolders toolbar options. The columns displayed are specific to each ReportCaster Item type. The options available for a selected ReportCaster item are accessible from the Organize toolbar option and the context menu of the item.

Explorer Schedule List Column Information

In the right panel of the Explorer, users can view the following information about schedules they are authorized to list, as shown in the following image.

❏ **Title.** Displays the descriptive title of the schedule.

❏ **Schedule ID.** Displays the unique identification code for each schedule.

❏ **Path.** Displays the Repository path where the schedule is stored.

❏ **Owner.** Displays the user that owns the schedule.

❏ **Last Time Executed.** Displays the most recent date, time, and time zone on which the schedule ran.

❏ **Last Job Status.** Displays whether the last scheduled job ran with or without an error.

❏ **Next Run Time.** Displays the next date, time, and time zone on which the schedule is set to run.

❏ **Priority.** Displays the level of priority the schedule will have when it is processed by the Distribution Server. Priority value 1 is the highest priority and 5 is the lowest priority.

Explorer Distribution List Column Information

In the right panel of the Explorer, users can view the following information about Distribution Lists they are authorized to list, as shown in the following image.

❏ **Title.** Displays the descriptive title of the Distribution List.

❏ **Path.** Displays the Repository path where the Distribution List is stored.

❏ **Method.** Displays the distribution method (Email, FTP, Print) for which the content within the Distribution List is specified.

❏ **Owner.** Displays the user that owns the Distribution List.

Explorer Access List Column Information

In the right panel of the Explorer, users can view the following information about Access Lists they are authorized to list, as shown in the following image.

❏ **Title.** Displays the descriptive title of the Access List.

❏ **Path.** Displays the Repository path where the Access List is located.

❏ **Owner.** Displays the user that owns the Access List.

Explorer Library and Watch List Report Column Information

In the Explorer, users can view information about Library reports that they are authorized to list. These may or may not include Watch List reports.

Note: The information that displays for the Watch List report is identical to that of the underlying Library report. Since the Watch List report is a Library report to which the user has subscribed, the information that displays in the columns is the same. When a new version of a Library report is available, subscribed users are notified by email.

The column headings that display for Library and Watch List reports are shown in the following image.

❏ **Title.** Displays the descriptive title of the Library report.

❏ **Path.** Displays the Repository path where the Library report is located.

❏ **Burst Value.** Displays the burst value of the Library report.

❏ **Last Version.** Displays the most recent version of the Library report. Selecting the report will display all the versions for the report in a panel below the Library report list.

❏ **Last Execution.** Displays when the Library report was created.

❏ **Category.** Displays the category where the owner has assigned the Library report. You can select the *Category* column title to sort the Library reports by the category value. The Category value is specified in the schedule information.

❏ **Owner.** Displays the user that owns the Library report.

Explorer Item Options

The options available from the Organize menu or the context menu for ReportCaster items (Schedule, Distribution List, Access List, Library Report, and Watch List) allow authorized users to select the following options.

❏ Open a Schedule. For more information, see *How to Open a Schedule* on page 375.

❏ Run a Schedule. For more information, see *How to Run a Schedule* on page 375.

❏ Enable or Disable a Schedule. For more information, see *How to Enable or Disable a Schedule* on page 375.

❏ Enable or Disable Multiple Schedules. For More Information, see *How to Enable or Disable Multiple Schedules* on page 376.

❏ Delete a Schedule. For more information, see *How to Delete a Schedule* on page 376.

❏ Open a Distribution List. For more information, see *How to Open a Distribution List* on page 376.

❏ Delete a Distribution List. For more information, see *How to Delete a Distribution List* on page 376.

❏ Open an Access List. For more information, see *How to Open an Access List* on page 377.

❏ Delete an Access List. For more information, see *How to Delete an Access List* on page 377.

❏ Subscribe to a Library Report. For more information, see *How to Subscribe to a Library Report* on page 377.

❏ Open the last version of a Library Report. For more information, see *How to Open the Last Version of a Library Report* on page 377.

❏ View multiple versions of a Library Report. For more information, see *How to View Multiple Versions of a Library Report* on page 377.

❏ Delete a Library Report. For more information, see *How to Delete a Library Report* on page 378.

❏ Open a Watch List. For more information, see *How to Open a Watch List* on page 379.

❏ Unsubscribe from a Watch List. For more information, see *How to Unsubscribe from a Watch List* on page 379.

Note: In ReportCaster Explorer, you can perform the following operations on multiple files simultaneously: Edit, Run, View Log, Cut, Copy, Delete, and Share.

Procedure: **How to Open a Schedule**

1. Select the folder where the items are that you want to access and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Schedule*. Schedule is the default filter option.

3. Select the Schedule displaying in the Explorer to open.

4. Right-click the selected schedule and click *Edit* on the drop-down list.

Procedure: **How to Run a Schedule**

1. Select the folder where the items are that you want to access and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Schedule*. Schedule is the default filter option.

3. Select the schedule displaying in the Explorer to run.

4. Right-click the schedule and click *Run*.

5. Optionally, if you want to run multiple schedules at the same time, hold the Ctrl key and click each schedule that you want to run. Then, release the key, right-click a selected schedule, and click *Run*.

Procedure: **How to Enable or Disable a Schedule**

1. Select the folder where the items are that you want to access and select the *List files in selected folder* option on the toolbar.

2. In the drop-down list, select *Schedule*. Schedule is the default filter option.

3. Right-click an enabled schedule.

   The shortcut menu opens.

4. Click *Disable*. If the schedule is already disabled, the option will appear as Enable.

Procedure: **How to Enable or Disable Multiple Schedules**

1. Select the folder where the items are that you want to access and select the *List files in selected folder* option on the toolbar.

2. In the drop-down list, select *Schedule*. Schedule is the default filter option.

3. Hold the Ctrl key and select the schedules that you want to enable or disable.

4. Right-click one of the selected schedules.

   The shortcut menu opens.

5. Click *Enable* to enable all selected schedules, or click *Disable* to disable all selected schedules.

Procedure: **How to Delete a Schedule**

1. Select the folder where the items you want to access are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Schedule*. Schedule is the default filter option.

3. Select the schedule displaying in the Explorer to delete.

4. Right-click the schedule and click *Delete*.

Procedure: **How to Open a Distribution List**

1. Select the folder where the items you want to access are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Distribution List*.

3. Select the Distribution List displaying in the Explorer to open.

4. Right-click the Distribution List and click *Edit*.

Procedure: **How to Delete a Distribution List**

1. Select the folder where the items you want to access are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Distribution List*.

3. Select the Distribution List displaying in the Explorer to delete.

4. Right-click the Distribution List and click *Delete*.

Procedure: **How to Open an Access List**

1. Select the folder where the items you want to access are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Access List*.

3. Select the Access List displaying in the Explorer to open.

4. Right-click the Access List and click *Edit*.

Procedure: **How to Delete an Access List**

1. Select the folder where the items you want to access are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Access List*.

3. Select the Access List displaying in the Explorer to delete.

4. Right-click the Access List and click *Delete*.

Procedure: **How to Subscribe to a Library Report**

1. Select the folder where the Library reports you want to subscribe to are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Library Report*.

3. Select the Library Report you want to subscribe to in the Explorer.

4. Right-click the Library Report and click *Subscribe*.

Procedure: **How to Open the Last Version of a Library Report**

1. Select the folder where the Library report you want to access is located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Library Report*.

3. Select the Library Report displaying in the Explorer to open.

4. Right-click the selected Library Report and click *Open Last Version*.

Procedure: **How to View Multiple Versions of a Library Report**

1. Select the folder where the Library reports you want to view are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Library Report*.

3. Select the Library Report displaying in the Explorer for which to view multiple versions.

4. Multiple versions of the Library Report display in the pane below the Library list report based on your selection. This is illustrated in the following image.

Procedure: How to Delete a Library Report

1. Select the folder where the items you want to access are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Library Report*.

3. Select the Library Report displaying in the Explorer to delete.

   Note: This is a Library report associated with the schedule. When it is deleted, you will not have access to any of the Library report versions distributed by the schedule until the schedule runs again.

4. Right-click the selected Library Report and select *Delete*, as shown in the following image.
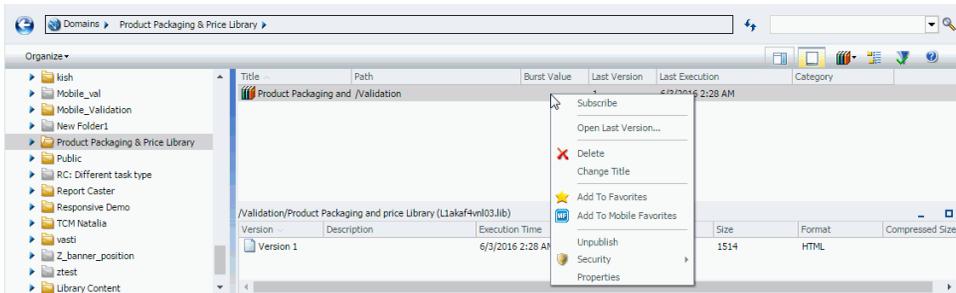
Procedure: How to Delete a Library Report Version

1. Select the folder that contains the items you want to access.

2. In the Change your filter drop-down list, select *Library Report*.

3. Click the Library Report for which you want to delete one or more versions.

4. In the lower pane, right-click the report version and click *Delete*, as shown in the following image.

   Note: You can press the Ctrl key to select multiple report versions for simultaneous deletion.

Procedure: How to Open a Watch List

To view a Library Report in a Watch List, you must Subscribe to a Library Report. For more information, see *How to Subscribe to a Library Report* on page 377.

1. Select the folder where the Watch List reports you want to access are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Watch List*.

3. Select the Watch List displaying in the Explorer to open.

4. Right-click the subscribed item and select *Open*.

Procedure: How to Unsubscribe from a Watch List

To view a Library Report in a Watch List, you must Subscribe to a Library Report. For more information, see *How to Subscribe to a Library Report* on page 377.

1. Select the folder where the Library reports you want to unsubscribe from are located, and select the *List files in selected folder* option on the toolbar.

2. In the Change your filter drop-down list, select *Watch List*.

3. Select the Watch List displaying in the Explorer to unsubscribe from.

4. Right-click the subscribed Library report and select *Unsubscribe*.

Searching Subfolders

Users authorized to access the Explorer can use the *Search* function in the right corner of the Explorer to locate folders and ReportCaster items for the selected ReportCaster item filter, as shown in the following image.

While searching for items in the Repository, the status bar at the bottom of the ReportCaster Explorer window displays an In Progress or Done status. In Progress shows when search items are being retrieved, and Done shows when the search results are available. An example of this is shown in the following image.
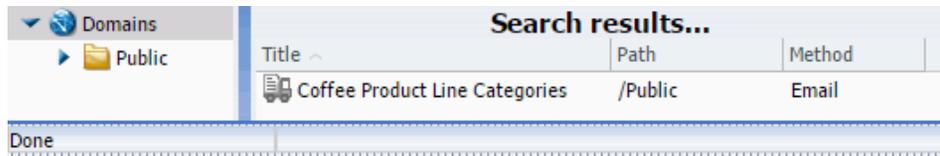
Note:

❑ When searching subfolders, any preset filters (for example, Schedule, Distribution List, Library Report, Access List, or Watch List) will be respected unless you change them prior to running a search. For more information on the use of filters, see *Explorer Schedule Toolbar* on page 369.

❑ If you clear the contents of the search text box after performing a search in the ReportCaster Explorer, the list of items in the right pane of the Explorer is not refreshed. Refresh the browser to restore the Explorer to its original state.

Using Traces

Tracing enables authorized users of ReportCaster to obtain information about the internal operations of ReportCaster components. Tracing a ReportCaster request produces a detailed sequence of statements (stored in trace files) that describe the events as they are executed.

In this chapter:

❏ Enabling Tracing

❏ Servlet Tracing

❏ Distribution Server Startup Trace Files

❏ Schedule and Report Tracing

❏ Distribution Server Initialization Tracing

❏ Reporting Server Tracing

Enabling Tracing

You can enable and disable the Distribution Server Schedule trace by using the Console Configuration tool and the ReportCaster Servlet Trace using the Administration Console.

Servlet Tracing

Servlet tracing enables tracing for all ReportCaster servlets deployed in the web application, including the ReportCaster API. Servlet tracing provides information about queries to, and maintenance of, the Repository. This includes events that occur when a schedule is created.

Note: You should also view the Application Server log files. By default, Apache Tomcat trace files are located in the \logs directory of the Apache Tomcat installation. If Apache Tomcat was installed by the Client, Apache Tomcat is installed under the ibi directory path. If ReportCaster is configured with Managed Reporting, you should also view the Client session trace files. In the Administration Console, you can access these trace files by clicking *Configuration*, *Diagnostics*, and then *Session Monitor*.

Procedure: **How to Access Servlet Tracing**

1. Navigate to the Administration Console.

2. Click the *Diagnostics* tab.

3. On the Diagnostics tab, under the Diagnostics folder, click *Log Files*.

   The list of log files appears, as shown in the following image.
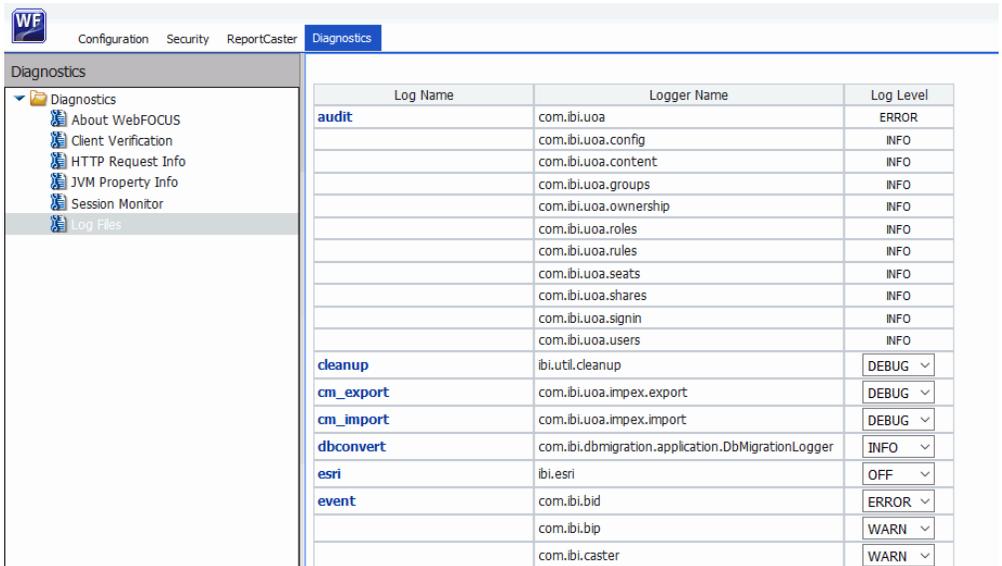
4. In the Log Level column, select the type of information from the log file that you would like to access, as shown in the following image.
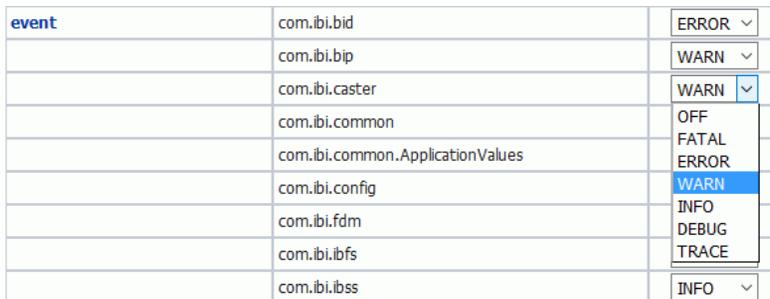
The ReportCaster Log Level option provides the following levels of diagnostics information:

❏ **OFF.** Capture no events.

❏ **FATAL.** Capture only events that disrupt system operations.

❏ **ERROR.** Capture events that generate error messages in addition to fatal events.

❑ **WARN.** Capture events that generate warning messages in addition to fatal and error events.

❑ **INFO.** Capture events that generate informational messages in addition to warning, error, and fatal events.

❑ **DEBUG.** Capture events that generate trace messages in addition to informational, warning, error, and fatal events.

❑ **TRACE.** Capture events that generate trace messages in addition to debug, informational, warning, error, and fatal events.

5. Click the log file for which you would like to view traces.

The following image shows an example where the event.log file is selected.

Distribution Server Startup Trace Files

When you enable schedule tracing, the following core Distribution Server trace files are created in the /ibi/WebFOCUS82/ReportCaster/trc/ directory. When a new instance of the Distribution Server starts, these trace files replace the previous trace files:

❑ **main.trc.** Traces the commands processed by the main Distribution Server thread. These commands include initialization, shutdown, and running a job immediately.

❑ **reader.trc.** Traces when the Distribution Server checks for schedules. The default polling interval is 1 minute.

❏ **disp.trc.** Traces the thread between the Distribution Server and the Reporting Server. The number of threads is defined by the Maximum Thread setting in the ReportCaster Server Configuration tool. The default number of threads is 3.

❏ **console.trc.** Traces all communications between the ReportCaster API and the ReportCaster servlets to the Distribution Server.

Schedule and Report Tracing

The Distribution Server schedule tracing is enabled by setting Schedule Trace to SCHEDULE (or to SCHEDULE & REPORT if you also want to enable report tracing) in the General tab of the Console Configuration tab.

ReportCaster also provides the ability to enable SCHEDULE or SCHEDULE & REPORT tracing on a per schedule basis when dynamically running the schedule on demand. When you run a schedule, the Schedule Trace setting specified in the ReportCaster Configuration tool appears along with options that enable you to change the setting for this particular schedule.

Trace Files Related to Specific Jobs

When the Schedule Trace parameter is set to SCHEDULE, ReportCaster produces trace files containing ReportCaster Distribution Server information related to the specific job or jobs being run. Each job creates the following trace files in the /ibi/WebFOCUS82/ReportCaster/trc/Jobid directory, each with a unique Job Process ID (*Jobid*):

❏ **Jobid.trc** (for example, J0ud2a6kqk01.trc). Contains all information related to the execution of a job. This includes information about the scheduled procedure, distribution information, and the log creation and its contents. When SCHEDULE & REPORT traces is selected, this file also contains the report sent back from the Reporting Server.

❏ **procedure.log** Contains distribution information, report parameters (if any), pre-processing and post-processing steps (if any), procedure code (if Managed Reporting), or an -INCLUDE FOCEXEC (if Server Procedure).

❏ **Jobid.err.** If there is a processing error, ReportCaster generates a *jobid*.err file containing information about why the report was not distributed successfully. We recommend searching for *.err files when viewing trace files.

❏ **DistRun.trace** Contains IBFS trace information.

❏ **DistRun.html** Contains an .html version of the report.

❏ **session.log** Contains information about the IBFS session.

Note: You can identify the Job Process ID of the target job by running a log report. For more information about log reports, see *Tracking Schedules* on page 331 or *Job Log* on page 39. A Job Process ID begins with a J and is followed by a series of random digits and lowercase letters.

Example: ## Using the Schedule Trace File

The following excerpt of a schedule trace file is for job ID reportcaster.log_2011-12-20.log. The reportcaster.log_2011-12-20.log file shows the date and time that the worker thread began, the parameters associated with the scheduled job, and the connection information for the Repository.

Reference: ## Procedure Log File

The following Schedule trace file shows the procedure associated with the procedure log file:

Trace Error Files

When ReportCaster encounters an unexpected error or abend, the following trace error files are created:

❏ **console.err** when the console terminates.

❏ **disp.err** when the dispatcher terminates.

❏ **main.err** when the main thread terminates.

❏ **reader.err** when the reader terminates.

❏ **Jobid.err** when there is a job processing error.

Schedule Trace File Clean Up

When the Schedule Trace setting is turned OFF, the files and folders in the Distribution Server /temp directory, and the schedule trace files J*.* in the /trc directory, are deleted when you start the Distribution Server. Therefore, if you want to keep any of these files, you must either back them up or make sure that schedule tracing is enabled (meaning that Schedule Trace is set to either SCHEDULE or SCHEDULE & REPORT in the ReportCaster Server Configuration tool).

Resource Analyzer Support

ReportCaster supports Resource Analyzer. When ReportCaster runs Server Procedures or a WebFOCUS Report (Managed Reporting), it sends commands to the Reporting Server. Resource Analyzer then retrieves these commands for the purpose of monitoring the resources used to create the output to be distributed by ReportCaster. If you are not using Resource Analyzer, the commands are ignored by the Reporting Server.

You can view these commands in the schedule trace file for the specific job (provided that schedule tracing is enabled in ReportCaster).

Downloading ReportCaster Job Trace Files

After you run a schedule, or use the Purge Job Logs, Purge Library, or Delete Schedules utility, you can select the corresponding job log stored in the ReportCaster Console to download the trace files that were created by the job.

Procedure: How to Download ReportCaster Job Trace Files

1. Run a schedule, or use the Purge Job Logs, Purge Library, or Delete Schedules utility.

    Note: To receive trace files for a ReportCaster job, traces must be enabled for the job.

For more information, see the following topics:

❏ *Basic Scheduling Tool Quick Access Toolbar* on page 174.

❏ *Advanced Scheduling Tool Quick Access Toolbar* on page 265.

❏ *Purge Job Logs* on page 146.

❏ *How to Delete Expired Library Reports* on page 43.

❏ *Delete Schedules* on page 147.

2. Navigate to the ReportCaster Console. On the ribbon, in the Show group, click the *Job Log* button.

3. In the Job Logs panel, choose the folder that contains the job log you wish to select.

   The job logs appear in the right panel.

4. Click a job log.

5. On the ribbon, in the Manage Job Logs group, click the down arrow on the *View Trace* button.

   The Download Trace Files menu option appears.

6. Click the *Download Trace Files* option.

   The Windows Save dialog box displays, from which you can save the trace files to your machine. The Job Id of the log becomes the name of the zip file to be opened or saved.

Distribution Server Initialization Tracing

The scheduler.log trace file is always created in the .../ibi/WebFOCUS82/ReportCaster/log directory. This file traces Distribution Server initialization and indicates the options enabled in the ReportCaster Server Configuration tool. It also shows information that is written to the log file.

The following files are generated when the Distribution Server is installed and started as a Windows service:

❏ **service.log.** Created at service installation time.

❏ **commons-daemon.log.** Tracks the starting and stopping of the service.

❏ **wf80-stdout.log.** Indicates that the various Distribution Server services have started.

❏ **wf80-stderr.log.** Contains information about potential problems with the service.

Note: When multiple scheduler.log files are created on the same day, ReportCaster creates a unique file for each instance, using a date and time stamp. The following format is used: scheduler_DD-MM-YY_HH-MM-SS.

Reference: **Scheduler.log**

The following is an excerpt from the Scheduler.log trace file.

Reporting Server Tracing

Reporting Server tracing provides information about job execution and distribution. To enable server tracing, perform the following steps:

1. Access the Reporting Server Console.

2. Select *Workspace* from the menu bar, then select *Diagnostics*, *Traces*.

3. Click *Enable Traces*.

This chapter provides tips and techniques that enable you to review existing WebFOCUS reports and develop new reports that meet the requirements for scheduling and distribution using ReportCaster.

Among the coding techniques discussed are best practices for coding reports that will be distributed as HTML and graph output, and examples for using WebFOCUS commands, such as -HTMLFORM and GRAPH FILE.

In this chapter:

Editing WebFOCUS Procedures

When editing WebFOCUS procedures to be scheduled using ReportCaster, we recommend using Notepad instead of WordPad. This is because WordPad places blank spaces at the end of lines that WebFOCUS cannot properly parse. This is most likely to happen when using the cut-and-paste technique.

Using an Ampersand or a Single Quotation Mark

In ReportCaster, you can use an ampersand (&) and single quotation mark (') in the following fields:

❏ Title

❏ Email Subject and From values

❏ FTP (scheduled from Managed Reporting) report name

❏ Managed Reporting folder name

❏ Notify subject

The technique for using an Ampersand (&) within an Amper Variable value. Place a concatenation sign after the ampersand (&) and before the next character in the string. For example:

```
-SET &COMPANY='AT&|T';
-TYPE &COMPANY
```

The technique for using a Single quotation mark (') within an Amper Variable value. When a value contains a single quotation mark ('), use two single quotation marks (for example, O"Brien). Within a quoted string, two single quotation marks (") are interpreted as one single quotation mark.

Note: Although we recommend using this technique, you can also use the CTRAN subroutine to change one character to another.

Syntax: How to Use CTRAN to Translate One Character to Another

```
CTRAN (inlen, infield, decfrm, decto, output)
```

where:

inlen

Is the integer that specifies the length in characters of the input string.

infield

Is the alphanumeric input string.

decfrm

Is the decimal value of the character to be translated.

decto

Is the decimal value of the character to be used as a substitute for decfrm.

output

Is the resulting alphanumeric output string.

To use this subroutine, you must know the decimal value of the characters in internal machine representation. Printable EBCDIC or ASCII characters and their decimal values are listed in character charts.

Example: **Using CTRAN to Change a Single Quotation Mark to a Double Quotation Mark**

You can use the following code to change a single quotation mark to a double quotation mark:

```
TABLE FILE TRAIN
PRINT TRAIN AND COMPUTE
ALT_MOD/A20 = CTRAN(20, MODEL, 39, 34, ALT_MOD);
BY COUNTRY
END
```

HTML and Drill-Down Reports

When distributing an HTML or drill-down report that contains reference to content located on a web or application server, you must use the FOCHTMLURL (this must be used for Managed Reporting procedures) or BASEURL command in the scheduled procedure to fully qualify the URL value. A fully qualified URL is needed so that the user viewing the report has access to the content on the web or application server where the WebFOCUS Client is installed or the referenced content is located. This enables the user to run the HTML or drill-down report, view images, resolve hyperlinks, and apply external cascading style sheets (CSS).

Note: External cascading style sheets (CSS) files must be fully qualified and accessible to the user receiving the report.

To run a drill-down report, a user must have access to the web server and the WebFOCUS Reporting Server. If the WebFOCUS Reporting Server is running in secured mode, the user must have a valid Execution ID and password to run the report. If the user does not have a valid user ID and password, an authentication message is displayed.

Do not use localhost as the host name when coding drill downs. When the report gets sent to the user machine, localhost refers to the machine the user is on. To be able to run the drill-down request, the request must be sent to the host name of the application server where the WebFOCUS Client is installed.

Reference: Coding Requirements for Pop-up Field Descriptions

Distributing an HTML report containing pop-up field descriptions with ReportCaster requires the use of JavaScript components located on the WebFOCUS Client. To access these components from a report distributed by ReportCaster, the scheduled procedure must contain the SET FOCHTMLURL command, which must be set to an absolute URL instead of the default value of /ibi_apps/ibi_html.

For example,

```
SET FOCHTMLURL = http://hostname[:port]/ibi_apps/ibi_html
```

where:

hostname[:port]

Is the host name and optional port number (specified only if you are not using the default port number) where the WebFOCUS Web application is deployed.

ibi_apps/ibi_html

Is the site-customized server alias pointing to the WebFOCUS82/ibi_html directory. ibi_apps/ibi_html is the default value.

Using -HTMLFORM

In the deployment environment, the -HTMLFORM command enhances the functionality of your webpage by enabling you to include HTML commands in your procedures. You can use all standard HTML elements in your webpage, including character styling, hyperlinks, graph images, tables, forms, and frames. The content must be self-contained in a single answer set.

Example: Using -HTMLFORM to Display Two Tabular Reports in an HTML Page

```
TABLE FILE CENTORD
SUM
    LINEPRICE
BY
    PRODCAT AS 'Product Category'
HEADING
" "
" "
ON TABLE SET PAGE-NUM OFF
ON TABLE NOTOTAL
ON TABLE SET ONLINE-FMT HTML
ON TABLE SET STYLE *
.....
.....
ENDSTYLE

ON TABLE HOLD AS HOLD1 FORMAT HTMTABLE
END
TABLE FILE CENTORD
SUM LINEPRICE AS 'Sales'
BY STORE_CODE AS 'Store'
BY PRODCAT AS 'Category'
WHERE STORE_CODE EQ '4003NY' OR
STORE_CODE EQ '1003CA'
HEADING
" "
" "
ON TABLE SET PAGE-NUM OFF
ON TABLE NOTOTAL
ON TABLE SET ONLINE-FMT HTML
ON TABLE SET STYLE *
.....
.....
ENDSTYLE

ON TABLE HOLD AS HOLD2 FORMAT HTMTABLE
END
-HTMLFORM SALES
```

The -HTMLFORM command runs the specified .HTM file located on the WebFOCUS Reporting Server path. The following example displays the two tabular reports in an HTML page. The HTML page that will be distributed is shown in the following image.

Distributing a Table of Contents Report Using ReportCaster

You can enhance navigation within a large HTML report by adding a dynamic HTML-based Table of Contents (TOC). To take advantage of this feature, the report must contain at least one vertical sort (BY) field. If you include more than one sort field in a report, the order in which the sort fields are specified in the request determines the hierarchy. To add a TOC for a lower-level sort field, you must also add a TOC for its parent.

The TOC displays, as hyperlinks, all values of the first (highest-level) vertical sort field, as well as the values of any lower level BY fields that TOC option is specified for. Unless otherwise specified in the request, a new page begins when the highest-level sort field changes.

Note:

❑ Bursting a TOC-enabled report using ReportCaster is not supported.

❑ The controlling multiple reports feature, documented in *Controlling Multiple Reports* in the *Creating Reporting Applications* manual, is not supported by ReportCaster.

❏ The size of a TOC-enabled report is limited to the memory available on the WebFOCUS Client.

Syntax: **How to Distribute a TOC Report Using ReportCaster**

To distribute a TOC report using ReportCaster, add the following code in the procedure:

```
SET BASEURL=http://hostname[:port]
```

where:

hostname[:*port*]

    Is the host name and optional port number (specified only if you are not using the default port number) where the WebFOCUS Web application is deployed.

ibi_apps/ibi_html

    Is the site-customized web server alias pointing to the WebFOCUS82/*ibi_apps*/*ibi_html* directory (where *ibi_apps*/*ibi_html* is the default value).

For example:

```
SET BASEURL=http://server1:8080/
TABLE FILE GGSALES
HEADING
"Sales Report"
SUM GGSALES.SALES01.UNITS/I08C
GGSALES.SALES01.DOLLARS/I08M
BY GGSALES.SALES01.REGION
BY GGSALES.SALES01.PRODUCT
ON TABLE PCHOLD FORMAT HTML
ON TABLE NOTOTAL
ON TABLE SET PAGE-NUM NOLEAD
ON TABLE SET SQUEEZE ON
ON TABLE SET EMPTYREPORT ON
ON TABLE SET HTMLCSS ON
ON TABLE SET HTMLENCODE ON
ON TABLE SET STYLE *
TYPE=REPORT, GRID=OFF, FONT=ARIAL, SIZE=12,$
TYPE=HEADING, SIZE=16, $
ENDSTYLE
ON TABLE SET COMPOUND BYTOC
END
```

The following image shows an HTML report containing a dynamic HTML-based TOC in the upper-left corner. After it is created, ReportCaster can distribute this report.

Distributing an EXL2K Table of Contents Report

A report that generates an EXL2K TOC in Managed Reporting only generates the first sheet when distributed by ReportCaster. This is because ReportCaster is not processing the BYTOC request properly. As a workaround, add SET ONLINE-FMT=EXL2K to ensure that the BYTOC request is processed. For example:

```
SET BASEURL=http://server1:8080/
SET COMPOUND=BYTOC
SET ONLINE-FMT=EXL2K
TABLE FILE GGSALES
SUM GGSALES.SALES01.UNITS/I08C
GGSALES.SALES01.DOLLARS/I08M
BY GGSALES.SALES01.REGION
BY GGSALES.SALES01.PRODUCT
ON TABLE SET PAGE-NUM OFF
ON TABLE SET BYDISPLAY ON
ON TABLE NOTOTAL
END
```

The following image shows an EXL2K report containing different tabs for different regions as a result of the SET ONLINE-FMT=EXL2K designation.

	A	B	C	D
1	Region	Product	Unit Sales	Dollar Sales
2	Midwest	Biscotti	86,105	$1,091,727
3	Midwest	Coffee Grinder	50,393	$619,154
4	Midwest	Coffee Pot	47,156	$599,878
5	Midwest	Croissant	139,182	$1,751,124
6	Midwest	Espresso	101,154	$1,294,947
7	Midwest	Latte	231,623	$2,883,566
8	Midwest	Mug	86,718	$1,086,943
9	Midwest	Scone	116,127	$1,495,420
10	Midwest	Thermos	46,587	$577,906
11				
12				

Midwest / Northeast / Southeast / West

Data Visualization

To make your HTML reports more powerful, you can insert visual representations of selected data directly into the report output. These visual representations are in the form of vertical or horizontal bar graphs that make relationships and trends among data more obvious. Data visualization graphs can be used with a WebFOCUS Managed Reporting report or Server Procedure.

For example, the following code retrieves information from the CENTHR data source:

```
SET BASEURL=http://hostname[:port]/
TABLE FILE CENTHR
SUM EMP_COUNT
BY PLANT
ON TABLE SET STYLE * GRAPHTYPE=DATA, FIELD=EMP_COUNT, GRAPHCOLOR=RED,$
END
```

where:

hostname[:port]

Is the host name and optional port number (specified only if you are not using the default port number) where the WebFOCUS Web application is deployed.

ibi_apps/ibi_html

Is the site-customized web server alias pointing to the WebFOCUS82/*ibi_apps/ibi_html* directory (where *ibi_apps/ibi_html* is the default value).

The resulting output, which can be distributed by ReportCaster, appears in graph format, as shown in the following image.

Procedure: How to Use Data Visualization on a Web Server Without WebFOCUS

To use data visualization files on a web server without WebFOCUS installed on it, you must:

1. Create a web server alias for /ibi_html or ibi_apps/ibi_html, based on your ReportCaster configuration, on the web server.

    For more information about creating the WebFOCUS /ibi_html alias, see the *TIBCO WebFOCUS® Installation and Configuration* manual for your platform.

2. Create the vis subdirectory under the /ibi_html directory.

3. Copy the GIF files from the application server on which the WebFOCUS Client is installed onto *outside*/vis/ directory (where *outside* is the name of the web server on which WebFOCUS is not installed).

4. Execute "SET BASEURL=http://*outside*/" in the procedure that produces the report you want to distribute.

Using the GRAPH FILE Command

Most TABLE requests can be converted into GRAPH requests by simply replacing the TABLE FILE command with the GRAPH FILE command. The only limitations are those inherent in the nature of the graph format. When a TABLE request is converted in this manner, the various phrases that make up the body of the request determine the format and layout of the graph. The type of graph produced by a GRAPH FILE request depends on the display command used (SUM or PRINT), and the sort phrase(s) used (ACROSS or BY).

The internal graph engine used by WebFOCUS has been integrated into the ReportCaster Distribution Server. This means that when the data for the GRAPH FILE request is sent back to the ReportCaster Distribution Server, it creates and distributes the graph. When using the GRAPH FILE command, you must include SET GRAPHEDIT=SERVER syntax to return data to the ReportCaster Distribution Server. Bursting is supported and is performed on the second BY field in the GRAPH FILE request. When creating the ReportCaster schedule, you must specify one of the graph image formats (GIF, PNG, or SVG).

Note: If the chart contains a header or footer and you want to distribute an image format (GIF, JPEG, PNG, or SVG), then you must select the InfoAssist option to embed the header and footer in the image. If the embed option is not selected, then the header and footer are not included in the distributed image file. In this case, you must use HTML, HTML5, or PDF to distribute a chart that contains a header or footer.

Example: **Creating a Report That Displays Output as a Pie Graph**

You can use InfoAssist to create a report that displays output as a pie graph:

```
-DEFAULTH &WF_STYLE_UNITS='PIXELS';
-DEFAULTH &WF_STYLE_HEIGHT='405.0';
-DEFAULTH &WF_STYLE_WIDTH='770.0';
-DEFAULTH &WF_TITLE='WebFOCUS Report';
GRAPH FILE CENTHR
-* Created by Info Assist for Graph
SUM CENTHR.EMPSEG.EMP_COUNT
BY CENTHR.EMPSEG.PLANT
ON GRAPH PCHOLD FORMAT HTML
ON GRAPH SET HTMLENCODE ON
ON GRAPH SET GRAPHDEFAULT OFF
ON GRAPH SET ARGRAPHENGIN JSCHART
ON GRAPH SET VZERO OFF
ON GRAPH SET GRMERGE ADVANCED
ON GRAPH SET GRMULTIGRAPH 0
ON GRAPH SET GRLEGEND 0
ON GRAPH SET GRXAXIS 1
ON GRAPH SET UNITS &WF_STYLE_UNITS
ON GRAPH SET HAXIS &WF_STYLE_WIDTH
ON GRAPH SET VAXIS &WF_STYLE_HEIGHT
ON GRAPH SET GRMERGE ADVANCED
ON GRAPH SET GRMULTIGRAPH 0
ON GRAPH SET GRLEGEND 1
ON GRAPH SET GRXAXIS 0
ON GRAPH SET LOOKGRAPH PIEMULTI
ON GRAPH SET GRAPHSTYLE *
setReportParsingErrors(false);
setSelectionEnableMove(false);
setCurveFitEquationDisplay(false);
setPieDepth(0);
setPieTilt(0);
setDepthRadius(0);
setPieFeelerTextDisplay(1);
setPlace(true);
ENDSTYLE
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/javaassist/intl/EN/ENIADefault_combine.sty,$
TYPE=REPORT, TITLETEXT=&WF_TITLE.QUOTEDSTRING, $
ENDSTYLE
END
```

The following image shows an example of the type of multi-colored pie graph output that can be distributed by ReportCaster.
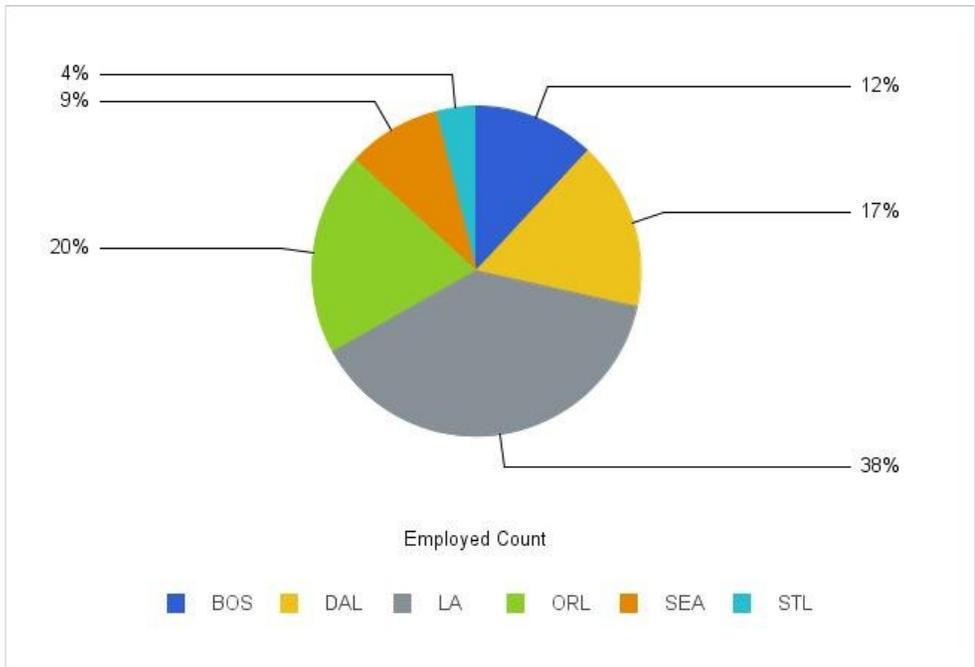
Distributing a Graph Image in a PDF Report

You can distribute a graph image in a PDF report using ReportCaster by performing the following steps:

1. Create the graph image (in a temporary directory on the WebFOCUS Reporting Server) and then insert the image file in the header or body of a PDF report.

2. After you create and embed the graph image into a PDF report, save the PDF procedure (FEX). You can then schedule the procedure (FEX) to distribute the PDF with ReportCaster. Be sure that you select the PDF report format when creating the schedule.

When you enable the JSCOM3 graph option on your WebFOCUS Reporting Server, you do not need to set GRAPHSERVURL, for example:

```
SET GRAPHSERVURL=http://hostname:port/ibi_apps/IBIGraphServlet
```

For configurations that should not be used with GRAPHSERVURL, see the *TIBCO WebFOCUS®* *Security and Administration* manual.

Example: **Creating Multiple Graph Images in a PDF Report**

The following image shows a compound PDF document that contains three reports and includes two GIF images within one of the reports.
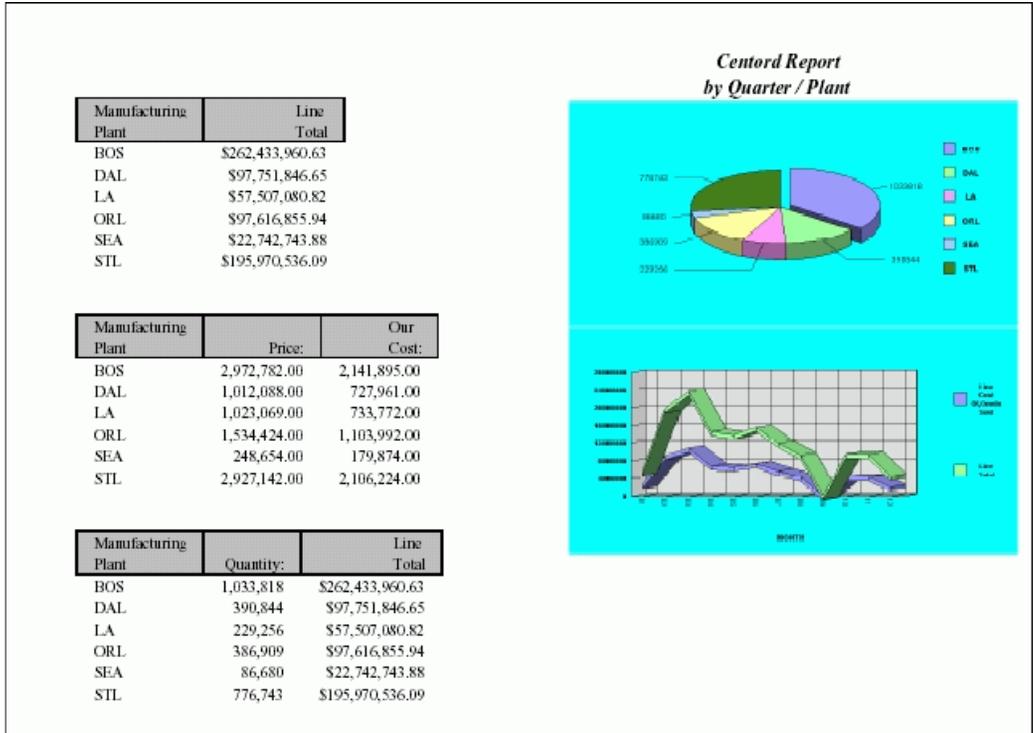
The following code creates the compound PDF document shown in the previous image. To retrieve this procedure, go to:

https://techsupport.informationbuilders.com/tech/wbf/wbf_tcn_088.html

```
SET GRAPHSERVURL=http://hostname:port/ibi_apps/IBIGraphServlet
-* where hostname:port is the host name and port number of your
-* Application Server
GRAPH FILE CENTORD
SUM QUANTITY AS ''
ACROSS PLANT
ON GRAPH SET LOOKGRAPH PIESINGL
ON GRAPH SET GRAPHEDIT SERVER
ON GRAPH SET GRAPHSTYLE *
```

```
setPieDepth(99);
setPieTilt(57);
setAutofit(getLegendText(0),false);
setFontSize(getLegendText(0),14);
setAutofit(getLegendText(1),false);
setFontSize(getLegendText(1),14);
setAutofit(getLegendText(2),false);
setFontSize(getLegendText(2),14);
setAutofit(getLegendText(3),false);
setFontSize(getLegendText(3),14);
setAutofit(getLegendText(4),false);
setFontSize(getLegendText(4),14);
setAutofit(getLegendText(5),false);
setFontSize(getLegendText(5),14);
setFontSizeAbsolute(getPieSliceLabel(),true);
setAutofit(getPieSliceLabel(),false);
setFontSize(getPieSliceLabel(),14);
setFontStyle(getLegendText(0),2);

setBorderColor(getX1MinorGrid(),new Color(133,133,133));
setBorderColor(getY1MinorGrid(),new Color(133,133,133));
setAutofit(getLegendText(0),false);
setFillColor(getChartBackground(),new Color(0,255,255));
setPieSliceDetach(getSeries(0),52);
setFontSizeAbsolute(getO1Label(0),true);
setAutofit(getO1Label(0),false);
setFontSize(getO1Label(0),12);
setMarkerDisplay(true);
setConnectLineMarkers(false);
setConnectScatterMarkers(false);
setO1LabelDisplay(true);
setO1AxisSide(0);
setO1MajorGridDisplay(true);
setO1MajorGridStyle(0);
setO1MinorGridDisplay(false);

setSeriesType(0,0);
setY1LabelDisplay(true);
setY1AxisSide(0);
setY1MajorGridDisplay(true);
setY1MajorGridStyle(0);
setY1MinorGridDisplay(false);
setPieFeelerTextDisplay(1);
setPieLabelDisplay(0);
setTextFormatPreset(getPieSliceLabel(),1);
setTextFormatPreset(getY1Label(),1);
setLegendDisplay(true);
setFontSizeAbsolute(getLegendText(),true);
ENDSTYLE
```

```
ON GRAPH SET BARNUMB OFF
ON GRAPH SET 3D OFF
ON GRAPH SET VZERO ON
ON GRAPH SET GRID ON
ON GRAPH SAVE AS GRAPH1 FORMAT GIF
END

GRAPH FILE CENTORD
SUM LINE_COGS LINEPRICE
ACROSS MONTH
ON GRAPH SET LOOKGRAPH VLINSTK
ON GRAPH SET GRAPHEDIT SERVER
ON GRAPH SET GRAPHSTYLE *

setGridStep(getY1MajorGrid(),1.0E8);
setGridStep(getY2MajorGrid(),4.0E7);
setTextWrap(getLegendText(0),true);
setDisplayBarAsPictograph(true);
setAutofit(getLegendText(0),false);
setFontSize(getLegendText(0),11);
setAutofit(getLegendText(1),false);
setFontSize(getLegendText(1),11);
setAutofit(getY1Label(),false);
setFontStyle(getLegendText(0),2);
setBorderColor(getX1MinorGrid(),new Color(133,133,133));
setBorderColor(getY1MinorGrid(),new Color(133,133,133));
setRect(getLegendArea(),new Rectangle(10901,-9500,4698,20800));
setAutofit(getLegendText(0),false);
setDataLineThickness(39);
setDepthAngle(19);
setDepthRadius(18);

setFillColor(getChartBackground(),new Color(0,255,255));
setFillColor(getFrame(),new Color(223,223,223));
setFillColor(getFrameSide(),new Color(191,191,191));
setFillColor(getFrameBottom(),new Color(179,179,179));
setRiserBarGroupSpacing(52);
setRiserWidth(31);
setScaleMax(getY1Axis(),5.0E8);
setScaleMax(getY2Axis(),2.8E8);
setScaleMin(getY2Axis(),0.0);
setSeriesType(getSeries(0),2);
setSeriesType(getSeries(1),2);
```

```
setFontSizeAbsolute(getO1Label(0),true);
setAutofit(getO1Label(0),false);
setFontSize(getO1Label(0),12);
setFontSizeAbsolute(getO1Label(1),true);
setAutofit(getO1Label(1),false);
setFontSize(getO1Label(1),12);
setFontSizeAbsolute(getO1Label(2),true);
setAutofit(getO1Label(2),false);
setFontSize(getO1Label(2),12);
setFontSizeAbsolute(getO1Label(3),true);
setAutofit(getO1Label(3),false);
setFontSize(getO1Label(3),12);
setFontSizeAbsolute(getO1Label(4),true);
setAutofit(getO1Label(4),false);
setFontSize(getO1Label(4),12);
setFontSizeAbsolute(getO1Label(5),true);
setAutofit(getO1Label(5),false);
setFontSize(getO1Label(5),12);
setFontSizeAbsolute(getO1Label(6),true);
setAutofit(getO1Label(6),false);
setFontSize(getO1Label(6),12);
setFontSizeAbsolute(getO1Label(7),true);
setAutofit(getO1Label(7),false);
setFontSize(getO1Label(7),12);
setFontSizeAbsolute(getO1Label(8),true);
setAutofit(getO1Label(8),false);
setFontSize(getO1Label(8),12);
setFontSizeAbsolute(getO1Label(9),true);
setAutofit(getO1Label(9),false);
setFontSize(getO1Label(9),12);
setFontSizeAbsolute(getO1Label(10),true);
setAutofit(getO1Label(10),false);
setFontSize(getO1Label(10),12);
setFontSizeAbsolute(getO1Label(11),true);
setAutofit(getO1Label(11),false);
setFontSize(getO1Label(11),12);
```

```
                    setMarkerDisplay(false);
                    setConnectLineMarkers(true);
                    setConnectScatterMarkers(true);
                    setO1LabelDisplay(true);
                    setO1AxisSide(0);
                    setO1MajorGridDisplay(true);
                    setO1MajorGridStyle(0);
                    setO1MinorGridDisplay(false);
                    setSeriesType(0,2);
                    setSeriesType(1,2);
                    setY1LabelDisplay(true);
                    setY1AxisSide(0);
                    setY1MajorGridDisplay(true);
                    setY1MajorGridStyle(0);
                    setY1MinorGridDisplay(false);
                    setPieFeelerTextDisplay(0);
                    setTextFormatPreset(getPieSliceLabel(),1);
                    setTextFormatPreset(getY1Label(),1);
                    setLegendDisplay(true);
                    setFontSizeAbsolute(getLegendText(),true);
                    setFontSizeAbsolute(getY1Label(),true);
                    setFontSize(getY1Label(),11);
                    setFontStyle(getY1Label(),2);
                    ENDSTYLE

                    ON GRAPH SET BARNUMB OFF
                    ON GRAPH SET 3D ON
                    ON GRAPH SET VZERO ON
                    ON GRAPH SET GRID ON
                    ON GRAPH SAVE AS GRAPH2 FORMAT GIF
                    END

                    SET COMPOUND  = OPEN NOBREAK
                    TABLE FILE CENTORD
                    SUM
                         LINEPRICE
                    BY
                         PLANT
                    HEADING
                    " <40 "
                    "Centord Report "
                    "by Quarter / Plant "
                    ON TABLE SET PAGE-NUM OFF
                    ON TABLE SET BYDISPLAY OFF
                    ON TABLE NOTOTAL
                    ON TABLE SET ONLINE-FMT PDF
```

```
ON TABLE SET STYLE *
     UNITS=IN,
     PAGESIZE='Letter',
     LEFTMARGIN=0.500000,
     RIGHTMARGIN=0.500000,
     TOPMARGIN=0.000000,
     BOTTOMMARGIN=0.000000,
     SQUEEZE=ON,
     ORIENTATION=LANDSCAPE,
$

TYPE=REPORT,
     FONT='TIMES NEW ROMAN',
     SIZE=8,
     COLOR=BLACK,
     BACKCOLOR=NONE,
     STYLE=NORMAL,
$

TYPE=TITLE,
     GRID=ON,
     BACKCOLOR=SILVER,
$

TYPE=REPORT,
     IMAGE=GRAPH1.gif,
     POSITION=(4.000000 0.700000),
     SIZE=(3.200000 1.600000),
$

TYPE=REPORT,
     IMAGE=GRAPH2.gif,
     POSITION=(4.000000 2.300000),
     SIZE=(3.200000 1.600000),
$

TYPE=HEADING, LINE=2, SIZE=10,STYLE=BOLD+ITALIC, JUSTIFY=CENTER, $
TYPE=HEADING, LINE=3, SIZE=10,STYLE=BOLD+ITALIC, JUSTIFY=CENTER, $
ENDSTYLE
END
```

```
SET COMPOUND  = NOBREAK
TABLE FILE CENTORD
SUM PRICE COST
BY
     PLANT
ON TABLE SET PAGE-NUM OFF
ON TABLE SET BYDISPLAY OFF
ON TABLE NOTOTAL
ON TABLE SET ONLINE-FMT PDF
ON TABLE SET STYLE *
     UNITS=IN,
     PAGESIZE='Letter',
     LEFTMARGIN=0.500000,
     RIGHTMARGIN=0.500000,
     TOPMARGIN=0.000000,
     BOTTOMMARGIN=0.000000,
     SQUEEZE=ON,
     ORIENTATION=LANDSCAPE,
$


TYPE=REPORT,
     FONT='TIMES NEW ROMAN',
     SIZE=8,
     COLOR=BLACK,
     BACKCOLOR=NONE,
     STYLE=NORMAL,
$


TYPE=TITLE, BACKCOLOR=SILVER,
     GRID=ON,$
ENDSTYLE
END
SET COMPOUND  = CLOSE
TABLE FILE CENTORD
SUM
     QUANTITY
     LINEPRICE
BY
     PLANT
ON TABLE SET PAGE-NUM OFF
ON TABLE SET BYDISPLAY OFF
ON TABLE NOTOTAL
ON TABLE SET ONLINE-FMT PDF
ON TABLE SET STYLE *
     UNITS=IN,
     PAGESIZE='Letter',
     LEFTMARGIN=0.500000,
     RIGHTMARGIN=0.500000,
     TOPMARGIN=0.000000,
     BOTTOMMARGIN=0.000000,
     SQUEEZE=ON,
     ORIENTATION=LANDSCAPE,
$
```

```
TYPE=REPORT,
     FONT='TIMES NEW ROMAN',
     SIZE=8,
     COLOR=BLACK,
     BACKCOLOR=NONE,
     STYLE=NORMAL,
$
TYPE=TITLE, BACKCOLOR=SILVER,
     GRID=ON,$
ENDSTYLE
END
```

Financial Modeling Language

The Financial Modeling Language (FML) is used for creating, calculating, and presenting financially-oriented data such as balance sheets, consolidations, or budgets. These reports are distinguished from other reports because calculations are inter-row, as well as inter-column.

Use the following guidelines when scheduling Financial Modeling Language (FML) reports that use the POST and PICKUP commands. Separate the POST and PICKUP steps into two procedures:

❏ **POST** is required to save the results of the FML report. The POST command should be used within a pre-processing step. The ON TABLE HOLD syntax must be included in a POSTed report to not generate a report during pre-processing execution. This procedure must reside on the WebFOCUS Reporting Server.

❏ **PICKUP** is required to retrieve POSTed data. It is the procedure to schedule. This procedure may reside on the WebFOCUS Reporting Server, in a Managed Reporting Repository, or in a local application.

Note: Bursting an FML report is not supported, since there is no BY field.

Example: **Using the POST Command in an FML Request**

The following code creates an FML report and POSTs two tag rows to the LEDGEOUT work file. This procedure must reside on the WebFOCUS Reporting Server.

```
FILEDEF LEDGEOUT DISK D:\IBI\LEDGEOUT.DAT
DEFINE FILE LEDGER
CUR_YR/I5C=AMOUNT;
LAST_YR/I5C=.87 * CUR_YR - 142;
END

TABLE FILE LEDGER
SUM CUR_YR LAST_YR
FOR ACCOUNT
1100 LABEL AR POST TO LEDGEOUT OVER
1200 LABEL INV POST TO LEDGEOUT OVER
RECAP CA=R1 + R2; AS 'ASSETS' ON TABLE HOLD
END
```

Example: Using the PICKUP Command in an FML Request

The following code retrieves the POSTed data from the LEDGEOUT work file and uses it in the RECAP calculation. ReportCaster distributes the output from this procedure.

```
FILEDEF LEDGEOUT DISK D:\IBI\LEDGEOUT.DAT
DEFINE FILE LEDGER
CUR_YR/I5C=AMOUNT;
LAST_YR/I5C=.87 * CUR_YR - 142;
END

TABLE FILE LEDGER
SUM CUR_YR LAST_YR
FOR ACCOUNT
1010 TO 1030 AS 'CASH' LABEL CASH OVER
DATA PICKUP FROM LEDGEOUT AR
AS 'ACCOUNTS RECEIVABLE' LABEL AR     OVER
DATA PICKUP FROM LEDGEOUT INV
AS 'INVENTORY' LABEL INV            OVER
BAR                                OVER
RECAP CUR_ASSET/I5C = CASH + AR + INV;
END
```

Using the &&KILL_RPC Flag

The &&KILL_RPC flag is a ReportCaster amper variable that you can use in a pre-processing procedure when you want to stop ReportCaster processing and not execute the scheduled procedure, based on a condition. The condition may be the existence of a data extract, or a restriction on the days that schedules are allowed to run. The code to evaluate the condition can be a combination of Dialogue Manager commands and FOCUS commands supported by the WebFOCUS Reporting Server. The &&KILL_RPC amper variable must be set using Dialogue Manager.

The following sample code has been configured to run as a pre-processing procedure. It stops a request if the current date is in a list of holiday days.

```
-*
-* TEST CURRENT DATE AGAINST A CALENDAR OF BUSINESS EXCEPTION DAYS
-* The assumption here is that the dates in the data file are in
-* ascending order
FILEDEF HDAYRCLB DISK baseapp/hdayrclb.dat
-RUN
-*
-SET &TDAYX = &YYMD;
-SET &&KILL_RPC = 'N';
-*
-*set PREV_DATE to some value that will cause the first IF to continue
-* the loop
-SET &PREV_DATE = 00000101;
-REPEAT DATELOOP WHILE &&KILL_RPC NE 'Y';
-READ HDAYRCLB &FILEDATE.I8
-SET &&KILL_RPC = IF &TDAYX EQ &FILEDATE THEN 'Y' ELSE 'N';
-IF &PREV_DATE GE &FILEDATE THEN GOTO ENDME;
-SET &PREV_DATE = &FILEDATE;
-DATELOOP
-ENDME
```

The following image shows the information that appears in the log report, including *Executing pre-execution RPC 1* and *User termination via KILL_RPC flag* messages.

When &&KILL_RPC is set to *Y* to stop the execution of a scheduled job, the default behavior is to set the NEXTRUNTIME interval to the next run time value of the schedule stored in the WebFOCUS Repository and to trigger the Notification *On Error* condition when the schedule is stopped. You can control this behavior using the following global variables in the pre-execution procedure:

❏ **&&KILL_RPC_NRT** resets (Y) or does not reset (N) the NEXTRUNTIME interval when the scheduled job is stopped. The default value is *Y*.

❏ **&&KILL_RPC_ERR** triggers an On Error Notification (Y) or does not trigger an On Error Notification (N) when the scheduled job is stopped. The default value is *Y*. When this variable is set to *N*, messages about the &&KILL_RPC set to *Y* are written to the log as non-error messages.

The following sample code takes the previous example and adds the next run time and notification global variables for &&KILL_RPC so that the next run time of the schedule is not reset and the On Error notification is not sent if the schedule is stopped because the current date is in the list of holiday days.

```
-*
-* TEST CURRENT DATE AGAINST A CALENDAR OF BUSINESS EXCEPTION DAYS
-* The assumption here is that the dates in the data file are in
-* ascending order
FILEDEF HDAYRCLB DISK baseapp/hdayrclb.dat
-RUN
-*
-SET &TDAYX = &YYMD;
-SET &&KILL_RPC = 'N';
-SET &&KILL_RPC_NRT = 'N';
-SET &&KILL_RPC_ERR = 'N';
-*
-*set PREV_DATE to some value that will cause the first IF to continue
-* the loop
-SET &PREV_DATE = 00000101;
-REPEAT DATELOOP WHILE &&KILL_RPC NE 'Y';
-READ HDAYRCLB &FILEDATE.I8
-SET &&KILL_RPC = IF &TDAYX EQ &FILEDATE THEN 'Y' ELSE 'N';
-IF &PREV_DATE GE &FILEDATE THEN GOTO ENDME;
-SET &PREV_DATE = &FILEDATE;
-DATELOOP
-ENDME
```

Manually Coded Excel Compound Reports

Excel Compound Reports enable you to generate multiple worksheet reports using the EXL2K output format.

The syntax of Excel Compound Reports is identical to that of PDF Compound Reports. By default, each of the component reports from the compound report is placed in a new Excel worksheet (analogous to a new page in PDF). If the NOBREAK keyword is used, the next report follows the current report on the same worksheet (analogous to starting the report on the same page in PDF).

Output, whether sent to the client using PCHOLD or saved in a file using HOLD, is generated in Microsoft Web Archive format. This format is labeled Single File Web Page in the Excel Save As dialog box. Excel provides the conventionally given file suffixes: .mht or .mhtml. WebFOCUS uses the same .xht suffix that is used for EXL2K reports. Since the output is always a single file, ReportCaster can distribute it.

The components of an Excel compound report can be FORMULA or PIVOT reports. For more information about the Excel Compound Reports feature, see the *Creating Reports With TIBCO® WebFOCUS Language* manual.

Note: When using the EXL2K format, Excel 2002 (Office XP) or higher must be installed. Excel Compound Reports will not work with earlier versions of Excel since they do not support the Web Archive file format. Bursting is not supported with Excel Compound Reports.

Compound Reports and Coordinated Compound Reports

ReportCaster can distribute compound reports developed in AHTML, DHTML, EXL2K, PDF, PPT, and PPTX formats.

ReportCaster can burst and distribute coordinated compound reports developed in DHTML, PDF, PPT, and PPTX formats.

Controlling the Display of Sorted Data With Accordion Reports

Accordion Reports provide a way to control the amount of sorted data that appears on an HTML report page. You can produce reports with expandable views of data for each vertical sort field. When an Accordion Report first appears, only data values of the first (highest-level) vertical sort field are shown, and all other data is hidden. You can manually expand your view to expose data values of lower-level sort fields.

When you create an Accordion Report, a plus sign appears to the left of each data value in the column under the highest-level sort heading. For data associated with lower-level sort fields, a plus sign is to the left of each data value, but the data does not appear unless manually expanded. You cannot expand data values of the lowest-level sort field.

To expand your view of data for any expandable sort field, click a plus sign and all data associated with the next lower-level sort field appears. When you expand a data value under the next to lowest sort heading, all of the remaining associated data values in the report appear.

When using Accordion Reports, you must include two vertical sort fields coded with BY phrases. If the command syntax does not contain at least two BY phrases, the EXPANDABLE command is ignored, no message is generated, and a standard HTML report is created.

You can use horizontal sort fields coded with ACROSS phrases with Accordion Reports. The ACROSS sort headings that appear above vertical sort headings in a standard HTML report do not display in an Accordion Report until at least one sorted data value expands manually in each expandable sort column.

PDF and Excel formats are not supported with Accordion Reports.

Reference: **Requirements for Accordion Reports**

When you create Accordion Reports, consider the following requirements:

❏ When you add a drill-down link to an Accordion Report, you must set the TARGET parameter to a value that specifies a new HTML frame.

❏ Once an Accordion Report is created and delivered to the user, there are no subsequent calls to the WebFOCUS Reporting Server required when the user is interacting with the report. However, the collapsible folder controls on the sort fields require JavaScript that resides on the WebFOCUS Client. The user must be connected to the WebFOCUS Web tier components in order to use this feature. For online, connected users of WebFOCUS, no change is required to the report. However, for distribution of reports using ReportCaster, see *Distributing Accordion Reports With ReportCaster* on page 414 to ensure that the report is delivered correctly as an email attachment or as an archived report in the Report Library.

Reference: **Distributing Accordion Reports With ReportCaster**

Distributing Accordion Reports with ReportCaster requires the use of JavaScript components and images located on the WebFOCUS Client.

To access the JavaScript components and images from a report distributed by ReportCaster, the scheduled procedure must contain the SET FOCHTMLURL command, which must be set to an absolute URL instead of the default value. For example,

```
SET FOCHTMLURL = http://hostname[:port]/ibi_apps/ibi_html
```

where:

hostname[:port]

Is the host name and optional port number (specified only if you are not using the default port number) where the WebFOCUS Web application is deployed.

`ibi_apps/ibi_html`

> Is the site-customized web server alias pointing to the WebFOCUS82/*ibi_apps*/*ibi_html* directory (where *ibi_apps*/*ibi_html* is the default value).

Reference: Support for Accordion Reports

The following commands are not supported in Accordion Reports:

```
BORDER, COLUMN, FOR, IN, OVER, PAGE-NUM, ROW-TOTAL, TOTAL
```

Data Visualization, OLAP, On Demand Paging, and the ReportCaster burst feature are also not supported with Accordion Reports.

Syntax: How to Create Accordion Reports

To enable Accordion Reports, specify the following

```
ON TABLE SET EXPANDABLE = {ON|OFF}
TABLE FILE GGSALES
SUM UNITS DOLLARS
BY REGION BY ST BY CITY BY CATEGORY
ON TABLE SET EXPANDABLE ON
END
```

where:

`ON`

> Enables Accordion Reports.

`OFF`

> Disables Accordion Reports. OFF is the default value.

Example: Creating an Accordion Report

This example shows how to use an EXPANDABLE command to create an Accordion Report.

```
TABLE FILE GGSALES
SUM UNITS DOLLARS
BY REGION BY ST BY CITY BY CATEGORY
ON TABLE SET EXPANDABLE ON
END
```

The following image shows an Accordion Report which displays all data associated with the first-level sort field, Region, by default. The expanded data values you see are the result of a report user clicking plus signs to the left of specific first-level, second-level, and third-level sort fields after the report is generated.

Region	State	City	Category	Unit Sales	Dollar Sales
⊞ Midwest					
⊟ Northeast	⊞ CT				
	⊞ MA				
	⊟ NY	⊟ New York	Coffee	116659	1459160
			Food	125473	1555165
			Gifts	70194	887940
⊞ Southeast					
⊟ West	⊟ CA	⊟ Los Angeles	Coffee	109082	1383924
			Food	110417	1381698
			Gifts	78571	1006381
		⊞ San Francisco			
	⊞ WA				

Limitations for Using WebFOCUS Features

Due to the complex internal processing of ReportCaster, scheduled procedures do not support the following features.

❏ **PCSEND.** WebFOCUS reporting feature to store report sections in different files.

❏ **Multiple TABLE or GRAPH requests with HTML format.** Internally, these are multiple HTML documents. Only the result of the first TABLE or GRAPH request (without a HOLD or SAVE command) is distributed.

❏ To distribute a graph, you must use the GIF, HTML, JPG, PDF, PNG, or SVG format.

The following WebFOCUS features are not available with ReportCaster distribution by email and FTP because they require distributing multiple files, or integrating with web or application server components.

❏ **OLAP.** Only entire reports or burst report sections are distributed. OLAP capability requires authentication and connection to the WebFOCUS components on the web or application server.

❏ **On-demand Paging.** Only entire reports or burst report sections are distributed. The report output is cached, and the first page of the report is sent to the browser along with the WebFOCUS viewer. Do not use the ON TABLE SET WEBVIEWTARG command in a report scheduled for distribution to the Library in the HTML-ODP format.

❏ **Graph Drill Down.** When a GRAPH request is run, ReportCaster creates the graph as an image. When GRAPH requests are run through the WebFOCUS Client, there is an HTML form and the graph image. The HTML form has a reference to display the graph image and any corresponding drill downs.

Using SET Commands to Access Live Links or Drill Downs

When distributing reports that contain live links or links to WebFOCUS reports (drill downs), the URL context must be fully qualified and the user must have connectivity to the web or application server in order to run the report or access the content of the link. You can fully qualify the live link using the SET FOCHTMLURL or SET BASEURL commands. Use SET FOCHTMLURL to access resources that reside under the ibi_apps/ibi_html alias. For non-Managed Reporting procedures, use SET BASEURL to specify a default location for a relative URL that references documents (HTML files and images) created by WebFOCUS. You can fully qualify the drill down using the SET FOCEXURL command. If using SSL security, specify https in the URL. By default, the Distribution Server automatically configures the FOCHTML and FOCEXURL commands using the settings found in the Data Servers folder in the ReportCaster Configuration tool.

Known Issues When Using WebFOCUS Commands

The following table lists, describes, and provides solutions for known issues that occur when using certain commands in procedures scheduled using ReportCaster.

Command	Known Issue	Solution
&DATE	The following message appears in the log file when you have a pre-execution procedure that attempts to set the EDAPATH and perform a computation on a field that originated from &DATE: `No report for ReportCaster to distribute`	Use the &YYMD amper variable instead of &DATE.

Command	Known Issue	Solution
ON TABLE SUMMARIZE	Is ignored when used with ACROSS and COMPUTE in a TABLE request with multiple verbs.	Do not use this syntax with multiple verbs.
TABLE MAINTAIN	In SQL Server, do not use a field named USER. USER is a reserved word. TABLE and MAINTAIN commands fail if a field name of USER is referenced.	Change the database field name to USERID.
FORMAT YYM and FORMAT YM	Do not display values on MVS.	Set DATEDISPLAY=ON.
-INCLUDE	Cannot create report output that would result in more than one report to distribute, as ReportCaster can only accept a single answer set.	Use with procedures that HOLD or SAVE output. You can use StyleSheet (.sty), cascading style sheet (.css), or GIF (.gif) files with -INCLUDE. Use the compound report feature.
-EXIT -QUIT	Do not use these commands within a procedure you schedule because they terminate the internal session that is executing the scheduled job. When the internal session is terminated during the execution of a scheduled job, the report output may be successfully distributed. However, the log information for the execution of the schedule cannot be processed.	Use Dialogue Manager commands to branch to a label located at the end of your procedure. This enables you to implement your application logic, and permit ReportCaster to both run any post-processing procedures specified and process the log information.

Command	Known Issue	Solution
FOC_NONE	ReportCaster does not support Server Procedures that use the FOC_NONE syntax.	Use FOC_NONE only in Managed Reporting procedures that will be scheduled with ReportCaster and the WebFOCUS Client. IBIF_describe_null is set to FOC_NONE. The value is set by clicking *WebFOCUS Administration Console Configuration*, and then *Parameter Prompting*, which is located in the Application Settings folder.

Note: For more information about these commands, see the *Developing Reporting Applications* manual.

Using WebFOCUS Commands With Burst Reports

This section provides considerations when using WebFOCUS commands with burst reports.

Grand Totals Automatically Suppressed for Burst Reports

When the SUBTOTAL, SUB-TOTAL, SUMMARIZE, or RECOMPUTE commands are used with burst reports, the WebFOCUS Reporting Server automatically suppresses the grand total. For example, the following code might produce the Excel report, shown below, for a burst value of PRODCAT (Product Category) shown in the image below.

```
TABLE FILE CENTINV
SUM QTY_IN_STOCK
BY PRODCAT SUBTOTAL
BY PRODTYPE BY PRODNAME
ON TABLE PCHOLD FORMAT EXL2K FORMULA
END
```

The grand total for each product type is suppressed, and the quantity in stock values are totaled only by product category.

Product Category:	Product Type:	Product Name:	Quantity In Stock:
CD Players	Digital	QX Portable CD Player	22000
*TOTAL PRODCAT CD Players			22000
Camcorders	Analog	110 VHS-C Camcorder 20 X	4000
		120 VHS-C Camcorder 40 X	2300
		150 8MM Camcorder 20 X	5961
		250 8MM Camcorder 40 X	60073
	Digital	650DL Digital Camcorder 150 X	2972
		750SL Digital Camcorder 300 X	10758
*TOTAL PRODCAT Camcorders			86064

Showing Column Totals for Burst Reports

When a report with ON TABLE COLUMN-TOTAL is burst, a column total is created for each burst value. For example, the following code might produce the Excel report, shown below, for a burst value of PRODCAT (Product Category) shown in the image below.

```
TABLE FILE CENTINV
SUM QTY_IN_STOCK
BY PRODCAT
BY PRODTYPE SUBTOTAL BY PRODNAME
ON TABLE PCHOLD FORMAT EXL2K FORMULA
ON TABLE COLUMN-TOTAL
END
```

A column total is created for each product type (for example, Analog), and the quantity in stock values are totaled by product category.

Product Category:	Product Type:	Product Name:	Quantity In Stock:
CD Players	Digital	QX Portable CD Player	22000
*TOTAL PRODTYPE Digital			22000
Camcorders	Analog	110 VHS-C Camcorder 20 X	4000
		120 VHS-C Camcorder 40 X	2300
		150 8MM Camcorder 20 X	5961
		250 8MM Camcorder 40 X	60073
*TOTAL PRODTYPE Analog			72334
	Digital	650DL Digital Camcorder 150 X	2972
		750SL Digital Camcorder 300 X	10758
*TOTAL PRODTYPE Digital			13730

Specifying the Language for Scheduled Output

You can specify the language in which ReportCaster displays scheduled output by including the SET LANG parameter in the procedure you are scheduling (for example, SET LANG=ja will display the report in Japanese).

When scheduling a procedure, you can also be prompted to select a language value instead of hard coding the value in the procedure. This can be done using an amper variable within the procedure that provides a drop-down list from which you can select values.

At schedule time, there is no validation of the value the user selected and the set of languages for the ReportCaster Distribution Server code page. If you select a language that is not one of the title language options available in the Master File, then the plain 'title=' values appear instead. If TITLE does not exist, the FIELDNAME value is used.

Note: The Dynamic Language Switch setting in the WebFOCUS Administration Console, which specifies the language of the ReportCaster user interfaces, works independently from this setting. The SET LANG command affects all report output, including log reports. For more information about the SET LANG command, see *Customizing Your Environment* in the *TIBCO WebFOCUS® Developing Reporting Applications* manual.

A ReportCaster Formats for Scheduled Output

When you create a schedule, ReportCaster outputs the report in the format coded in the procedure, or the default format, if no format is specified in the procedure. You can optionally override the format coded in the procedure and specify a particular format in the schedule. This section describes each format available to ReportCaster, and includes suggestions for using the format, as well as considerations that you should be aware of when distributing that format. Some formats cannot be produced by overriding the format in the procedure. The scheduled report must be coded to produce these formats. Formats that cannot be produced through an override are not available for selection in the scheduling tools. For more information, refer to the considerations of each format.

AHTML

Format: AHTML (.htm, .html)

Description: Provides customizable options for creating HTML formatted reports that enable users to experience features normally found in Excel workbooks.

Suggested Uses: Report Library, Email for display in a web browser.

Considerations:

❏ Bursting is supported, except for FML reports and compound reports.

❏ Can only be distributed as an email attachment. Inline email messages are not supported.

ALPHA

Format: ALPHA (.ftm, .txt)

Description: Saves scheduled output as fixed-format character data.

Suggested Uses: For display in a text document, for further reporting in WebFOCUS, and as a transaction file for modifying a data source.

Considerations:

❏ When created as a HOLD file, a corresponding Master File is created.

❏ Bursting is supported.

APDF

Format: APDF (.pdf)

Description: Also known as PDF Analytic Document, it allows a report saved in FLEX format to be embedded in a PDF.

Suggested Uses: For the dynamic display of reports.

COM

Format: Com (.cvs)

Description: Saves scheduled output as a variable-length text file in comma-delimited format with character values enclosed in double quotation marks (" "). Blanks within fields are not retained.

This format is required by certain software packages, such as Microsoft Access.

Suggested Uses: For further processing in a database application. This format type can be imported into applications, such as Excel or Lotus.

Considerations:

❏ This format type does not create a Master File.

❏ Bursting is supported.

❏ Can be opened in the Report Library with Excel.

❏ Smart date fields and dates formatted as I or P fields with date format options are treated as numeric and are not enclosed in double quotation marks (" ") in the output file. Dates formatted as alphanumeric fields with date format options are treated as alphanumeric and enclosed in double quotation marks (" ").

❏ Continental decimal notation (CDN=ON|SPACE|QUOTE) is not supported. A comma within a number is interpreted as two separate columns by a destination application, such as Microsoft Access.

COMMA

Format: COMMA (.csv)

Description: Saves scheduled output as a variable-length text file in comma-delimited format with character values enclosed in double quotation marks (" "). All blanks within fields are retained.

This format is required by certain software packages, such as Microsoft Access.

Suggested Uses: For further processing in a database application. This format type can be imported into applications, such as Excel or Lotus.

Considerations:

❏ This format type does not create a Master File.

❏ Bursting is supported.

❏ Can be opened in the Report Library with Excel, or you can open COMMA reports in Lotus 1-2-3 by right-clicking the report and saving it as a COMMA file outside of the Library.

❏ Smart date fields and dates formatted as I or P fields with date format options are treated as numeric and are not enclosed in double quotation marks (" ") in the output file. Dates formatted as alphanumeric fields with date format options are treated as alphanumeric and enclosed in double quotation marks (" ").

❏ Continental decimal notation (CDN=ON|SPACE|QUOTE) is not supported. A comma within a number is interpreted as two separate columns by a destination application, such as Microsoft Access.

COMT

Format: COMT (.csv)

Description: Adds titles to a COMMA file. Saves scheduled output as a variable-length text file in comma-delimited format with character values enclosed in double quotation marks (" "). All blanks within fields are retained.

This format is required by certain software packages, such as Microsoft Access.

Suggested Uses: For further processing in a database application. This format type can be imported into applications, such as Excel or Lotus.

Considerations:

❏ This format type does not create a Master File.

❏ Bursting is supported.

❏ Cannot be opened in the Report Library with Excel.

❏ Smart date fields and dates formatted as I or P fields with date format options are treated as numeric and are not enclosed in double quotation marks (" ") in the output file. Dates formatted as alphanumeric fields with date format options are treated as alphanumeric and enclosed in double quotation marks (" ").

❏ Continental decimal notation (CDN=ON|SPACE|QUOTE) is not supported. A comma within a number is interpreted as two separate columns by a destination application, such as Microsoft Access.

❏ When creating a ReportCaster schedule using the COMT format, you must check the *Override the Format Specified in the Procedure* check box and select the COMT format. Otherwise, the output may lose the CR/LF (Carriage Return / Line Feed) when producing the .csv file.

DFIX

Format: DFIX (.ftm, .txt)

Description: Enables you to define any character to act as the delimiter (DELIMITER = your choice of character), include quotation marks around alpha fields (ENCLOSURE = "), and include column titles (HEADER = YES/NO).

The following is an example of a PCHOLD statement that specifies the pipe character (|) as the delimiter, adds quotation marks around alpha fields, and does not include column titles or headings.

```
ON TABLE PCHOLD AS OUT1 FORMAT DFIX DELIMITER | ENCLOSURE " HEADER NO
```

Suggested Uses: Use in files that require custom (non-standard) delimiters.

Considerations:

❏ Missing data is indicated by showing no data. If you specified an enclosure, then missing alpha fields are indicated by "". Missing numeric fields are indicated by two delimiters.

❏ Bursting is supported.

DHTML

Format: DHTML (.htm, .mht)

Description: Supports hyperlinks and other World Wide Web features. Retains StyleSheet formatting.

Along with the features of the HTML format, DHTML supports the web archive format (.mht). An .mht file can contain multiple reports and graphs and is utilized for WebFOCUS Coordinated Compound Reports.

Suggested Uses: Report Library, Email for display in a web browser.

Considerations:

❑ The default file type for the DHTML format is .mht. If the output returned from your procedure is HTML, you must manually change the file type to .htm in order for the output file to open correctly.

❑ Bursting is supported, except for FML reports.

❑ DHTML can be distributed inline, provided the Reporting Server is not returning a web archive file (.mht). It cannot be used to distribute inline if the returned file is a web archive file.

❑ DHTML can be distributed as an email attachment and be sent as an inline email message when the output is .htm, but not when the output is .mht.

❑ DHTML will return two possible formats:

❑ The scheduled procedure (FOCEXEC) outputs an HTML file when the request does not contain the SET HTMLARCHIVE=ON command. When distributing by email or FTP, the file type should be .htm.

❑ The scheduled procedure (FOCEXEC) outputs a web archive file (.mht) when the SET HTMLARCHIVE=ON command is specified. When distributing by email or FTP, the file type should be .mht.

DOC

Format: DOC (.txt)

Description: Scheduled output opens as a plain-text word processing document. Text can be opened by any word processing application. Retains ASCII form feed characters to correctly display page output.

Suggested Uses: Word Processing applications, printing unformatted reports, email, Report Library.

Considerations:

❑ Does not retain most formatting. Does not support hyperlinks or alerts.

❑ Can be distributed as an email attachment or as an inline email message.

❑ Bursting is supported.

❑ Must be using Microsoft Office 2000 at a minimum release level of 9.0.3821 SR-1 in order to open in the Report Library.

EXCEL

Format: EXCEL (.xls)

Description: Scheduled output opens as a Microsoft Excel 2000 or 2003 spreadsheet file.

Suggested Uses: Email, Report Library.

Considerations:

❏ Microsoft Excel 2000 or 2003 must be installed.

❏ Cannot use the print distribution method.

❏ Does not support bursting reports or alerts.

❏ Does not retain headings, footings, subheads, or subfoots.

❏ The format is binary.

❏ Must be using Microsoft Office 2000 at a minimum release level of 9.0.3821 SR-1 in order to open in the Report Library.

❏ When ReportCaster distributes EXCEL reports created with a TABLE request containing BY HIGHEST *primarysortfield* syntax, the report contains page breaks on each primary sort field value.

EXL07

Format: EXL07 (.xlsx)

Description: Scheduled output opens within Excel 2007 or 2010.

Supports most StyleSheet attributes, allowing for full report formatting.

Suggested Uses: Email, Report Library.

Considerations:

❏ When scheduling a report to be distributed in this format, ensure that either the FEX or the ReportCaster configuration setting, *Excel server URL*, specifies the application server that will zip the Excel 2007 file components for distribution. The Excel server URL in the FEX will override the value specified in the ReportCaster Configuration.

❏ Bursting is supported, except compound reports.

EXL07 FORMULA

Format: EXL07 FORMULA (.xlsx)

Description: Scheduled output opens within Excel 2007 or 2010.

Contains Excel formulas that calculate and display the results of any type of summed information, such as column totals, row totals, and subtotals.

Suggested Uses: Email, Report Library.

Considerations:

❏ When scheduling a report to be distributed in this format, ensure that either the FEX or the ReportCaster configuration setting, *Excel server URL*, specifies the application server that will zip the Excel 2007 file components for distribution. The Excel server URL in the FEX will override the value specified in the ReportCaster Configuration.

❏ Bursting is supported, except compound reports.

EXL07 TEMPLATE

Format: EXL07 TEMPLATE (.xlsx)

Description: Scheduled output opens within Excel 2007 or 2010.

Suggested Uses: Email, Report Library.

Considerations:

❏ The default file extension for the EXL07 TEMPLATE format is .xlsx. If the template used in the procedure is a macro-enabled template, you must manually change the extension to .xlsm, in order for the output file to open correctly.

❏ The scheduled procedure must contain a PCHOLD statement, such as the following:

```
ON TABLE PCHOLD FORMAT EXL07 TEMPLATE templatename SHEETNUMBER
sheetnumber
```

❏ Must be using Windows XP or Windows 2003 or higher.

❏ Microsoft Excel 2002 or higher must be installed.

❏ The format is ASCII.

❏ Bursting is supported.

EXL2K

Format: EXL2K (.xls)

Description: Scheduled output opens within Excel 2000 or higher.

Supports most StyleSheet attributes, allowing for full report formatting.

Suggested Uses: Email, Report Library.

Considerations:

❏ Microsoft Excel 2000 or higher must be installed.

❏ Must be using Microsoft Office 2000 at a minimum release level of 9.0.3821 SR-1 in order to open in the Report Library.

❏ The format is ASCII.

❏ All EXL2K output with an .xht extension is dynamically changed to .xls for email or FTP distribution. You must edit your web server MIME table so that the .xls extension is ASCII application data, instead of binary.

❏ Bursting is supported, except compound reports.

EXL2K FORMULA

Format: EXL2K FORMULA (.xls)

Description: Scheduled output opens within Excel 2000 or higher.

Contains Excel formulas that calculate and display the results of any type of summed information, such as column totals, row totals, and subtotals.

Suggested Uses: Email, Report Library.

Considerations:

❏ When the format of an EXL2K FORMULA report is not overridden in the schedule, the Report Library will display EXL2K as the format.

❏ Microsoft Excel 2000 or higher must be installed.

❏ Must be using Microsoft Office 2000 at a minimum release level of 9.0.3821 SR-1 in order to open in the Report Library.

❏ The format is ASCII.

❏ All EXL2K output with an .xht extension is dynamically changed to .xls for email or FTP distribution. You must edit your web server MIME table so that the .xls extension is ASCII application data, instead of binary.

❏ Bursting is supported, except compound reports.

EXL2K PIVOT

Format: EXL2K PIVOT (.xls)

Description: Scheduled output opens within Excel 2000 or higher.

Used to analyze complex data much like the OLAP tool in WebFOCUS. It enables you to drag data fields within a PivotTable, providing different views of the data, such as sorting across rows or columns.

Suggested Uses: Email, Report Library.

Considerations:

❏ When the format of an EXL2K PIVOT report is not overridden in the schedule, the Report Library will display EXL2K as the format.

❏ Microsoft Excel 2000 or higher must be installed.

❏ Must be using Microsoft Office 2000 at a minimum release level of 9.0.3821 SR-1 in order to open in the Report Library.

❏ The format is ASCII.

❏ Requires the WEBARCHIVE=ON command so that the Reporting Server creates a single output file, rather than a main file and a cache file. The default Reporting Server configuration is WEBARCHIVE=ON.

❏ All EXL2K output with an .xht extension is dynamically changed to .xls for email or FTP distribution. You must edit your web server MIME table so that the .xls extension is ASCII application data, instead of binary.

❏ Cannot be used to schedule a compound report.

❏ The scheduled procedure must contain a PCHOLD statement, such as the following:

```
ON TABLE PCHOLD FORMAT EXL2K PIVOT
```

❏ Bursting is not supported.

EXL2K TEMPLATE

Format: EXL2K TEMPLATE (.xls)

Description: Scheduled output opens within Excel 2002 or higher.

Excel templates that are populated with data from scheduled output.

Suggested Uses: Email, Report Library.

Considerations:

❏ When the format of an EXL2K TEMPLATE report is not overridden in the schedule, the Report Library will display EXL2K as the format.

❏ The scheduled procedure must contain a PCHOLD statement, such as the following:

```
ON TABLE PCHOLD FORMAT EXL2K TEMPLATE templatename SHEETNUMBER
sheetnumber
```

❏ Must be using Windows XP or Windows 2003 or higher.

❏ Microsoft Excel 2002 or higher must be installed.

❏ The format is ASCII.

❏ All EXL2K output with an .mht extension is dynamically changed to .xls for email or FTP distribution. You must edit your web server MIME table so that the .xls extension is ASCII application data, instead of binary.

❏ Bursting is supported.

EXL97

Format: EXL97 (.xls)

Description: Scheduled output opens as an Excel97 spreadsheet file, an HTML-based display format that supports report formatting and drill downs.

Suggested Uses: Email, Report Library.

Considerations:

❏ Microsoft Excel 97 or higher must be installed.

❏ Must be using Microsoft Office 2000 at a minimum release level of 9.0.3821 SR-1 in order to open in the Report Library.

❏ Bursting is supported.

GIF

Format: GIF (.gif)

Description: Scheduled output opens as a graph image in GIF format.

Suggested Uses: Email, Report Library.

Considerations:

❏ Only works with procedures that contain GRAPH FILE syntax.

❏ Bursting is supported and is performed on the second BY field in the GRAPH FILE request.

❏ Drilldowns are not supported since the GIF format creates a static image.

❏ You cannot distribute multiple images within a single report when using the GIF format. Instead, use the PDF format to distribute multiple images within a single report.

❏ If the chart contains a header or footer and you want to distribute an image format (GIF, JPEG, PNG or SVG), then you must select the InfoAssist option to embed the header and footer in the image. If the embed option is not selected, then the header and footer are not included in the distributed GIF file. In this case, you must use HTML, HTML5, or PDF to distribute a chart that contains a header or footer.

❏ To distribute a GIF report on UNIX or z/OS, edit the schbkr script file and add the following code after the #!/bin/ksh line:

```
DISPLAY=IP_Address export DISPLAY TERM=xterm export TERM
```

where:

 IP_Address

   Is the IP address of the machine that is running the xterm.

Note: This step is necessary only if you are distributing a graph created by a GRAPH FILE request (WebFOCUS Server Procedure, WebFOCUS Report), and is not necessary if you are distributing a file.

❏ Inline email messaging is supported.

HTML

Format: HTML (.htm, .html)

Description: Supports hyperlinks and other web-based features. Retains StyleSheet formatting.

Suggested Uses: Report Library, Email for display in a web browser.

Considerations:

❏ The default file type for the HTML format is .htm. If the output returned from your procedure is an .mht file, you must manually change the file type to .mht, in order for the output file to open correctly.

❏ A chart that is scheduled to be distributed in HTML format cannot be burst. To successfully burst a chart, the following formats can be selected:

    ❏ **The following image formats can be burst:**

        ❏ PNG

        ❏ SVG

        ❏ JPEG

        ❏ GIF

    ❏ **The following file formats can be burst:**

        ❏ PDF

        ❏ PPTX

        ❏ EXL07

❏ In order to output HTML pages with images, normally you would select DHTML as the format and the output is distributed with the extension .mht. You can select HTML as the distribution format. If you select HTML, ReportCaster creates the output with the extension .htm by default.

    Note: In order for an HTML report to display an image, the procedure must specify the command SET BASEURL=''.

    If the scheduled procedure contains the SET WEBARCHIVE = ON command, outputs pages with images, and you select HTML as the format, be sure to change the extension in the Save Report As field from .htm to .mht.

❏ When distributing HTML reports by email or FTP, the scheduled report (.fex) must set a fully qualified FOCEXURL and FOCHTMLURL for the report styling options defined below. These reference the JavaScript components located on the web or application server where the Client is configured. For example:

```
SET FOCEXURL='hostname:port/ibi_apps/'
```

```
SET FOCHTMLURL='hostname:port/ibi_apps/ibi_html'
```

Styling options include:

❏ Accordion reports

❏ Table of Contents (TOC) reports

❏ Peer Graphics/Data Visualization graphical reporting

❏ Multi-drill reports

❏ HFREEZE options

If using SSL security, edit the URL to specify https.

❏ Bursting is supported, except for FML reports.

❏ Can be distributed as an email attachment or as an inline email message.

❏ Works with procedures that contain GRAPH FILE syntax. When used with GRAPH FILE, ReportCaster automatically generates the graph on the reporting server (using JSCOM3) and embeds it into the HTML output using HTMLEMBEDIMG=ON. If the scheduled procedure specifies HTMLARCHIVE=ON, this will override HTMLEMBEDIMG=ON and generate output that can be displayed in older versions of Internet Explorer.

HTML5

Format: HTML5 (.htm)

Description: Scheduled output opens as a graph image. These graph images are bit-mapped and can support 16 million colors. In addition, HMTL5 graphics have lossless compression (data is decompressed 100% back to the original). Therefore, saving, altering, and resaving an HTML5 image does not degrade its overall quality.

Suggested Uses: Report Library, Email, and FTP.

Considerations:

❏ A report distributed in HTML5 may not open correctly in Internet Explorer 8. Internet Explorer 8 does not support HTML5 and will first attempt to render a chart distributed in HTML5 format (JSCHART) using the Adobe Flash Platform. If it is unable to render, the Microsoft VML standard will be used.

❏ Only works with procedures that contain GRAPH FILE syntax.

❏ Bursting is not supported, except for FML reports.

❏ Drill downs are not supported, as this format creates a static image.

❏ A fully qualified FOCEXURL is required for email and FTP distribution. If using SSL security, specify https in the URL.

JPEG

Format: JPEG (.jpg, .jpeg, .jpe, .jfif)

Description: Scheduled output opens as a graph image in JPEG format.

Suggested Uses: Email, Report Library.

Considerations:

❏ Only works with procedures that contain GRAPH FILE syntax.

❏ Bursting is supported and is performed on the second BY field in the GRAPH FILE request.

❏ Drilldowns are not supported since the JPEG format creates a static image.

❏ If the chart contains a header or footer and you want to distribute an image format (GIF, JPEG, PNG or SVG), then you must select the InfoAssist option to embed the header and footer in the image. If the embed option is not selected, then the header and footer are not included in the distributed JPEG file. In this case, you must use HTML, HTML5, or PDF to distribute a chart that contains a header or footer.

❏ Inline email messaging is supported.

PDF

Format: PDF (.pdf)

Description: Appearance of the scheduled output is preserved in an electronic document when printed using Adobe Acrobat or distributed to a printer that has an appropriate driver. Retains all relevant StyleSheet formatting.

Suggested Uses: Email, printing, Report Library.

Considerations:

❏ Does not support hyperlinks in email attachments. Recipient must have an Adobe Acrobat application to view.

❏ Printing is supported when ReportCaster is configured for PDF printing and the printer has the appropriate driver.

❏ Bursting is supported.

❏ When ReportCaster distributes PDF reports created with a TABLE request containing BY HIGHEST *primarysortfield* syntax, the report contains page breaks on each primary sort field value.

❏ The PDF Drill-Through feature is supported.

PNG

Format: PNG (.png)

Description: Scheduled output opens as a graph image. These graph images are bit-mapped and can support 16 million colors. In addition, PNG graphs have lossless compression (data is decompressed 100% back to the original). Therefore, saving, altering, and resaving a PNG does not degrade its overall quality. For these reasons, PNG graphs are superior to GIF graphs.

Suggested Uses: Email, Report Library.

Considerations:

❏ Only works with procedures that contain GRAPH FILE syntax.

❏ Bursting is supported and is performed on the second BY field in the GRAPH FILE request.

❏ Drilldowns are not supported, as this format creates a static image.

❏ If the chart contains a header or footer and you want to distribute an image format (GIF, JPEG, PNG or SVG), then you must select the InfoAssist option to embed the header and footer in the image. If the embed option is not selected, then the header and footer are not included in the distributed PNG file. In this case, you must use HTML, HTML5, or PDF to distribute a chart that contains a header or footer.

❏ Inline email messaging is supported.

PPT

Format: PPT (.ppt)

Description: Generates a new PowerPoint file in the web archive format (.mht).

PPT Templates that are populated with data from scheduled output.

Suggested Uses: Email, Report Library.

Considerations:

❏ Bursting is supported.

❏ PPT can output as a single report and can also include as many graphs as desired embedded in the StyleSheet of the report (TABLE). In addition, a single PPT report can be placed inside an existing PPT Template.

PPT Template

Format: PPT (.ppt)

Description: Generates a new PowerPoint file in the web archive format (.mht).

PPT Templates that are populated with data from scheduled output.

Suggested Uses: Email, Report Library.

Considerations:

❏ Bursting is supported.

❏ The scheduled procedure must contain a PCHOLD statement, such as the following:

```
ON TABLE PCHOLD [AS name] FORMAT PPT TEMPLATE templatename SLIDENUMBER n
```

❏ PPT can output as a single report and can also include as many graphs as desired embedded in the StyleSheet of the report (TABLE). In addition, a single PPT report can be placed inside an existing PPT Template.

PPTX

Format: PPTX (.pptx)

Description: Generates a new PowerPoint file, created using the Open XML format, in the web archive format (.mht).

PPTX Templates that are populated with data from scheduled output.

Suggested Uses: Email, Report Library.

Considerations:

❏ Bursting is supported with the Release 8.1 Version 05 Reporting Server and a procedure that is scheduled 'as is', which means that the ON TABLE PCHOLD FORMAT PPTX must be specified in the procedure and the user must create the schedule without checking the Override option.

❏ If PPTX is selected, then at schedule execution time, add SET DISTRIBUTE=PPTX to the .fex that is run by the Distribution Server.

❏ PPTX can output as a single report and can also include as many graphs as desired embedded in the style sheet of the report (TABLE). In addition, a single PPT report can be placed inside an existing PPT Template.

PPTX Template

Format: PPTX (.pptx)

Description: Generates a new PowerPoint file, created using the Open XML format, in the web archive format (.mht).

PPTX Templates that are populated with data from scheduled output.

Suggested Uses: Email, Report Library.

Considerations:

❏ Bursting is not supported.

❏ The scheduled procedure must contain a PCHOLD statement, such as the following:

```
ON TABLE PCHOLD [AS name] FORMAT PPTX TEMPLATE templatename SLIDENUMBER n
```

❏ If PPTX is selected, then at schedule execution time, add SET DISTRIBUTE=PPTX to the .fex that is run by the Distribution Server.

PS

Format: PS (.ps)

Description: Appearance of the scheduled output is preserved in an electronic document when printed using PostScript. Retains all relevant StyleSheet formatting.

Suggested Uses: Printing.

Considerations:

❏ Does not support hyperlinks.

❏ Printers must support PostScript. Recipient must have an application (for example, GhostView) that supports PostScript.

❏ Bursting is supported.

SVG

Format: SVG (.svg)

Description: Scheduled output opens as a graph image. This file format, based on Extensible Markup Language (XML), presents powerful, interactive images.

Suggested Uses: Email, Report Library.

Considerations:

❏ Only works with procedures that contain GRAPH FILE syntax.

❏ Bursting is supported and is performed on the second BY field in the GRAPH FILE request.

❏ If the chart contains a header or footer and you want to distribute an image format (GIF, JPEG, PNG or SVG), then you must select the InfoAssist option to embed the header and footer in the image. If the embed option is not selected, then the header and footer are not included in the distributed SVG file. In this case, you must use HTML, HTML5, or PDF to distribute a chart that contains a header or footer.

❏ Drilldowns are not supported, as this format creates a static image.

❏ Inline email messaging is supported.

TAB and TABT

Format: TAB (.tab, .tsv, .txt)

Description: Scheduled output opens in tab-delimited format. For TABT, the format includes column headings in the first row.

This format is required by certain software packages, such as Microsoft Access.

Suggested Uses: Email, Report Library.

Considerations: Bursting is supported.

WK1

Format: WK1 (.wk1)

Description: Scheduled output opens within Lotus 1-2-3, Excel.

Suggested Uses: Email.

Considerations:

❏ Lotus 1-2-3 or Excel must be installed.

❏ In the Redirection Settings of the WebFOCUS Client Administration Console, specifically the mime.wfs configuration file:

  ❏ Specify *No* in the Redirect column to launch Lotus 1-2-3.

  ❏ Specify *Yes* in the Redirect column to launch Excel.

  ❏ Note that the format is binary.

❏ Cannot use the print distribution method.

❏ Does not support bursting reports or alerts.

❏ Does not retain headings, footings, subheads, or subfoots.

❏ You can open WK1 reports in Lotus 1-2-3 by right-clicking the report and saving it as a WK1 file outside of the library.

❏ Cannot be opened in the Report Library. However, you can open WK1 reports in Lotus 1-2-3 by right-clicking the report and saving it as a WK1 file outside of the library.

WP

Format: WP (.txt, .wp)

Description: Scheduled output opens as a plain-text word processing document in the web browser. Text can be opened by any word processing application.

Suggested Uses: Word processing applications, printing unformatted reports, email, Report Library.

Considerations:

❏ Does not retain page breaks or most formatting.

❏ Does not support hyperlinks or alerts.

❏ Can be distributed as an email attachment or as an inline email message.

❏ Bursting is supported.

XML

Format: XML (.xml)

Description: Scheduled output opens in XML format, a markup language that is derived from the Standard Generalized Markup Language (SGML).

Suggested Uses: Describing and exchanging data for applications on different systems.

Considerations: Bursting is not supported.

B WebFOCUS Repository Tables for ReportCaster

The following sections describe the contents and primary keys of each WebFOCUS Repository that stores ReportCaster information. You can then use this information to create reports that provide information on how ReportCaster is being used within your organization.

In this appendix:

❏ About Repository Reports

❏ WebFOCUS Repository Tables

About Repository Reports

You can create and run reports against the WebFOCUS Repository by first creating a Synonym for each table in the repository. You must have the WebFOCUS adapter for your database in order to create a Synonym and run the reports.

WebFOCUS Repository Tables

ReportCaster stores distribution and scheduling information in WebFOCUS Repository tables. At installation, an SQL-based repository is created in a selected location.

The following is a list of WebFOCUS Repository tables that store ReportCaster information, their contents, and primary keys.

Table	Contains	Primary Keys
BOTACCES	Access List names. One record per Access List and 1:m with BOTLIST.	Access ID.
BOTADDR	Properties of each Distribution List. For example, its name and whether it is a public or private list. One record per list and 1:m with BOTDEST.	AddressBook ID.

Table	Contains	Primary Keys
BOTCAT	Library catalog table. Includes one record for each report in the Report Library. If the schedule is burst, each bursted report is a record.	Report group ID.
BOTCDATE	Information about the custom run intervals of schedules.	CDate ID.
BOTDEST	Recipients and destinations within a Distribution List. One record per destination.	Distribution List name and a counter from 1 to *n* for each member of a particular Distribution List.
BOTDIST	Distribution information.	Distribution ID.
BOTSIT	Recurrence information.	Interval ID.
BOTLDATA	Report stored in the Report Library, in BLOB format.	Report ID and a counter from 1 to *n* for each report stored in the Library.
BOTLIB	Version and expiration information. One record for each report in the Report Library.	Report group ID, and version.
BOTLIST	User IDs and burst values within each Access List. One record per destination.	Access List name and a counter from 1 to *n* for each member of a particular Access List.
BOTLOG	General log information, such as the start time and end time for each executed job. One record per job run and a 1:m with BOTLOG2.	Process number that is generated when a job is run.
BOTLOG2	Detailed log records for all jobs that have run. One record per job message.	Process number and a counter that runs from 1 to *n* for each detail log record for a particular process number.

Table	Contains	Primary Keys
BOTPACK	Packet ID that uniquely identifies each schedule.	Packet ID.
BOTPARMS	Parameter names and values for each Task. One record per parameter per Task.	Schedule ID, Task ID, parameter name, and a counter from 1 to *n* for each parameter in a Task.
BOTSBDS	Schedule Blackout Dates table. Contains global and group schedule blackout dates and descriptions.	ID.
BOTSCHED	Timing, frequency, and connection information about a particular schedule. Distribution methods (for example, email or FTP), along with supporting information, such as Reply Address and location of recipient. Distribution List (if any). One record per schedule.	Schedule ID.
BOTSCIT	Information about the custom run intervals of schedules.	
BOTSTATE	Failover and Workload Distribution information.	
BOTTASK	Individual Task information. Includes the name of the Task, the Execution ID for the Task, and the WebFOCUS Reporting Server name. For WebFOCUS reports, BOTTASK also lists the full path in the WebFOCUS Repository. There is a BOTTASK record for each Task in a schedule. Since there can be multiple Tasks in a schedule, there is a 1:m relationship with BOTSCHED.	Task ID, Packet ID.

Table	Contains	Primary Keys
BOTTSKEX	ReportCaster user ID. Execution ID and password. Contains execution type (for example, WebFOCUS Server Procedure). Depending on execution type, contains server name (for WebFOCUS Server Procedures and Managed Reporting reports), application name (for files), or server name and port (for URLs, FTP files, and mainframe output). One record per Task.	ReportCaster User ID, Execution ID, server name, server type.
BOTWATCH	Library Watch List information.	

Appendix **C**

ReportCaster Variables

The ReportCaster Distribution Server creates and adds variables, beginning with &DST, to each schedule job FEX. These are reserved variable names for use by ReportCaster and can be referenced in scheduled procedures (FEX), as well as ReportCaster pre-processing and post-processing procedures for custom application logic. Customers should not create variables with the same &DST name, as this can impact the internal processing of ReportCaster.

In this appendix:

❏ ReportCaster Internal Variables

ReportCaster Internal Variables

The following internal variables are created by the ReportCaster Distribution Server:

Variable	Description
DSTJOBID	An ID that identifies a specific execution of a schedule job.
DSTJOBNAME	The name of the schedule job procedure (FEX) created by the Distribution Server that is submitted to the Reporting Server.
DSTSCHEDID	An ID that uniquely identifies the schedule.
DSTSCHEDDESC	The title (description) of the schedule.
DSTOWNER	The User ID that is the owner of the schedule.
DSTPACKETID	An ID that uniquely identifies the task group in a multi-task schedule. For a single task schedule, it is an ID that uniquely identifies the task in each schedule.
DSTTASKID	An ID that identifies a specific task within the schedule. Task information includes the Execution ID for the Task and the WebFOCUS Reporting Server name. For reports stored in the WebFOCUS Repository, the task information also includes the full IBFS path.

Variable	Description
DSTPRERPC1	The procedure (FEX) name of the first pre-processing procedure.
DSTPRERPC2	The procedure (FEX) name of the second pre-processing procedure.
DSTPOSTRPC1	The procedure (FEX) name of the first post-processing procedure.
DSTPOSTRPC2	The procedure (FEX) name of the second-post processing procedure.
DSTDOMAIN	The domain folder name when a scheduled task is a procedure (FEX) stored in the WebFOCUS repository.
DSTFEXNAME	The name of the procedure (FEX).
DSTBURST	The burst the report output (Y/N).
DSTEDAUSER	The User ID used to connect to the Reporting Server.
DSTRPTSERVER	The Reporting Server to which the scheduled procedure (FEX) is submitted.
DSTHOST	The Distribution Server hostname.
DSTPORT	The Distribution Server port number.

Glossary

This is a glossary of key terms and concepts related to WebFOCUS ReportCaster that are found in this manual.

blackout dates	Dates on which schedules cannot be run or set to run.
bursting a report	Used to split the report into sections to be distributed separately to the same or different destinations.
Distribution List	A Distribution List is an easy way to distribute content to multiple recipients or destinations. The list, which is stored in the WebFOCUS repository, contains a previously specified group of individual recipients. The Distribution List automates distribution to this stored list, rather than requiring the entry of each recipient individually into a schedule.
Distribution Server	The WebFOCUS component responsible for submitting scheduled and on-demand jobs for execution, and distributing the output of these jobs.
Distribution Server Failover	Enables you to configure a backup Distribution Server that can assume ReportCaster operations when there is an interruption (planned or unplanned) in the primary Distribution Server.
Distribution Servers folder of the Configuration Tool	The WebFOCUS component that executes jobs and distributes output and log results.
Dynamic Distribution List	Allows you to return in memory either a list of burst values and destinations, or only a list of destinations from a data source (for example, a flat file, SQL database, FOCUS data source, or LDAP).

Email Settings folder of the Configuration Tool	Configures email settings, such as the default email host, the notification email host, number of attempts to distribute to an email host, and security information.
Execution ID	A valid user ID that is used to run a report on a specified WebFOCUS Reporting Server.
External Distribution File	A file consisting of multiple recipients, which can be assigned to any schedule. This distribution file is created outside of ReportCaster.
FEX	A WebFOCUS report procedure.
FTP	File Transfer Protocol. ReportCaster can schedule the retrieval of a file from any FTP server.
FTP Settings	Allows you to specify the default FTP host and user ID, and SFTP security plug-in. You can also indicate whether the server requires a secure SFTP connection and specify the authentication method.
General Preferences folder of the Configuration Tool	Specifies which Address Book access types, schedule tasks, distribution formats, and methods will be available to a user that is creating a schedule.
Global Updates interface	Authorized users can make global updates in the Global Updates interface for the Mail Server, FTP Server, Printer, Email Address, Email from, Library URL, Data Server, Notification Type, Notification Reply Address, Notification Subject, Notification Brief Message To, and Notification Full Message To fields from values stored in schedules and Distribution Lists.

job log	Provides information about a scheduled job that has executed, such as the job ID, start time, execution status, and recipients.
job status	The status of jobs that are executing or that are in the ReportCaster Distribution Server queue.
LDAP Settings folder	Allows you to configure ReportCaster to retrieve email information from an LDAP directory.
Library Access List	A Library Access List defines the groups and users that are authorized to view report output distributed by a schedule to the Report Library. A Library Access List can be used with single or multiple schedules.
Log Settings folder of the Configuration Tool	Allows you to specify log settings, including the number of days after which ReportCaster automatically purges individual log reports, and the time at which purging will occur.
mode	The state and function of the Distribution Server. Options include: Manager, Worker, Full Function, Failover, and Down.
Quick Access Toolbar	A navigation tool, which is always visible, located at the top of the Basic Scheduling tool.
Recovery	A setting that controls whether upon startup, the Distribution Server should re-run jobs that did not complete when the Distribution Server was interrupted.

ReportCaster Console

The user interface that provides access to the tools that administer the Distribution Server and manage schedule job logs, blackout dates, and Execution IDs.

ReportCaster Explorer

The ReportCaster Explorer interface provides users with the ability to obtain a list of ReportCaster items, by type, displayed with columns of detailed information specific to the item type selected.

ReportCaster Configuration Tool

An administration tool that allows authorized users the ability to navigate through and change the various settings that define the ReportCaster configuration.

Scanback

In certain instances, the ReportCaster Distribution Server may be unavailable for a period of time. During this time, no scheduled jobs can run. By default, when the ReportCaster Distribution Server becomes available again, it searches for and runs all jobs with a next run time less than the current time, and resets the next run time according to the next scheduled run time of the job. If the Distribution Server is unavailable for an extended time period, you may want to adjust this behavior. Using the Scanback parameter, you can run only those jobs found in a specified time period of the outage, or just reset the next run time of all unexecuted jobs without running them.

schedule

A ReportCaster schedule allows you to specify when to run a report, the format in which to create the output, and how it will be distributed. ReportCaster schedules are created with the Basic Scheduling tool or the Advanced Scheduling tool.

scheduled jobs

Jobs that are scheduled to run at a specific time.

Server Status	Allows WebFOCUS administrators to select a Distribution Server to restart, suspend, stop distribution, switch servers, or refresh data.
SSL Certificate	A data file that connects a domain name, server name, or host name to the name and location of a company. ReportCaster uses an SSL Certificate to secure the communication between the ReportCaster application and the Distribution Server.
Status	The status of each service currently running on the Distribution Server. Types of status include: Ready, Standing By, Suspend, Listening, Polling, and Monitoring.
Workload Distribution	The Workload Distribution feature enables ReportCaster to distribute the scheduled jobs across multiple Distribution Servers, providing an efficient and fast way to process large numbers of ReportCaster schedules.
Zip Settings	Provides settings to configure how .zip archive files will be created and named.

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