

TIBCO WebFOCUS®

Release Notes

Release 9.0.0

November 2022

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Contents

9.0.2 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

For an online version of this document and more information about the release, go to the [TIBCO WebFOCUS Product Documentation site](#), select the Documentation tab, and select the link to your product group.

In this chapter:

- [Release and Gen Information](#)
- [New Features](#)
- [Fixes](#)
- [Upgrade Notes](#)
- [Retirement of Esri Raster Basemaps](#)
- [Known Issues](#)

Release and Gen Information

Release Date	Gen Information	Reporting Server
June 2022	wf060322a Gen 7 wi060322a as060222b	902 Gen 2359

New Features

This section describes new features in this release.

Search Index Feature

The Search Index feature is available from the WebFOCUS Reporting Server browser interface. This feature provides a single, unified search across both the WebFOCUS Client and Reporting Server repositories. This single index of results is governed by the permissions and rights for users leveraging the existing index architecture. Once your content and data are indexed, all subsequent changes to the repository content and data directories that are updated using the WebFOCUS UI or HOLD file processing are indexed automatically by WebFOCUS.

Indexing Options

You have two main options for indexing:

- Indexing all applications.
- Indexing all applications in a path.

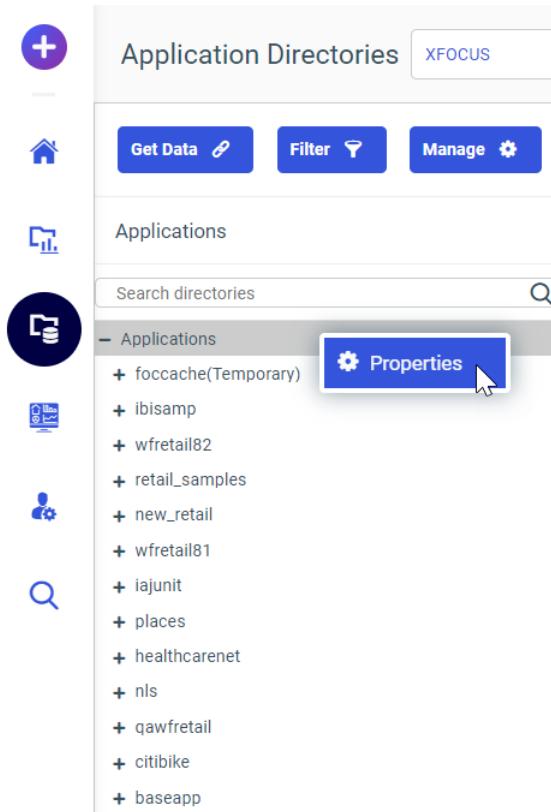
As a filter, you can choose either of these options, in addition to applications already marked as indexed mapped directories or *ALL* mapped directories that are not marked.

In the Application Directories area:

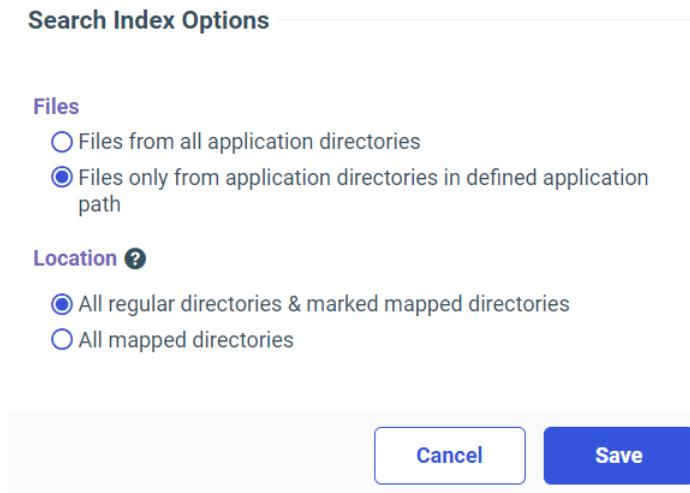
- From the Applications node, you can choose search index options to index all or some of the items from the Reporting Server.
- From the Properties dialog box of a mapped application directory, you can include a mapped directory in the search index using a check box. You can choose this option in addition to choosing search index options.
- From an application directory node, you can create an index, update an index, or delete an index. This option is available only for a mapped application directory.

Procedure: How to Choose Search Index Options for the Applications Node

1. From the Application Directories area, right-click the *Applications* node, and then select *Properties*, as shown in the following image.



The Search Index Options dialog box opens, with options for files and location, as shown in the following image.



2. Select search indexing options.

You can select the following Search Index Options for application directory files:

- Files from all application directories.** Indexes all files on the WebFOCUS Reporting Server.
- Files only from application directories in defined application path.** Indexes only the files that appear in the application directories in the defined application paths.

You can select the following Search Index Options for the application directory location:

- All regular directories & marked mapped directories.** Indexes application directories under the APPROOT and the application directories with the *Include in search index* option enabled.
- All mapped directories.** Indexes every mapped directory regardless of whether it has the *Include in search index* option enabled.

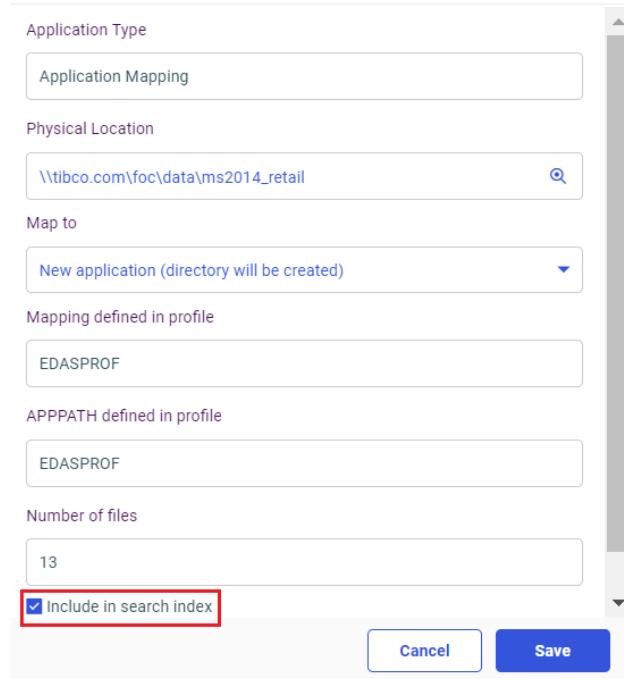
3. Click Save.

Your Reporting Server data is now indexed.

Procedure: How to Include a Mapped Directory in the Search Index Using the Properties Dialog Box

1. From the Application Directories area, under the Applications node, right-click an *Application Directory*, and select *Properties*.

The Properties dialog box opens with the *Include in search index* check box, as shown in the following image.



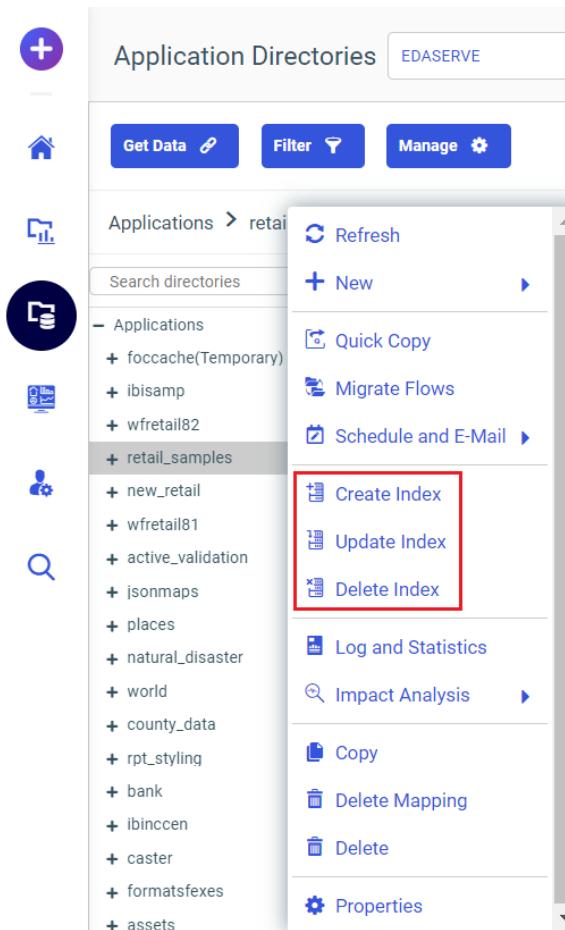
2. Select the *Include in search index* check box.

Procedure: How to Create, Update, or Delete an Index for a Mapped Application Directory

1. From the Application Directories area, under the Applications node, right-click an *Application Directory*.

The Create Index, Update Index, and Delete Index options appear on the right-click menu, as shown in the following image.

Note: These options only appear for mapped application directories.



2. Select a search index option.

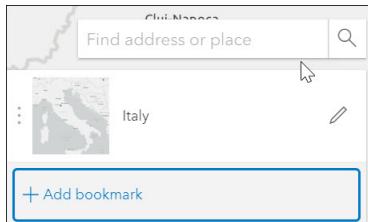
The search index options are:

- Create Index.** Allows you to create an index for the selected mapped application directory.
- Update Index.** Allows you to update an existing index for the selected mapped application directory.
- Delete Index.** Allows you to delete an existing index for the selected mapped application directory.

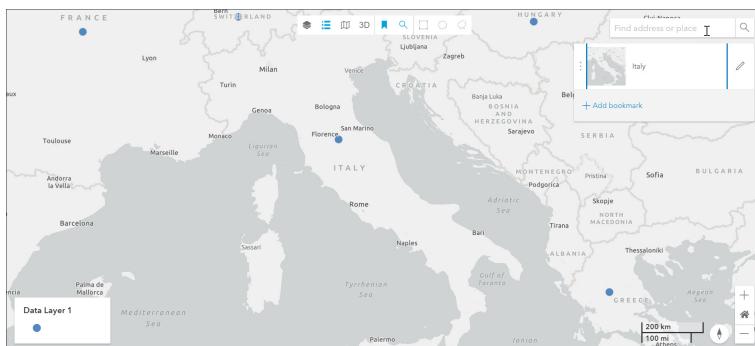
Add Bookmarks to Multilayer Maps

When you change the properties of a multilayer map or map layers, you can now add a bookmark from the toolbar, and automatically save your customized changes.

For example, you can zoom to a specific area of a world map and add that viewpoint as a bookmark within the bookmark widget.

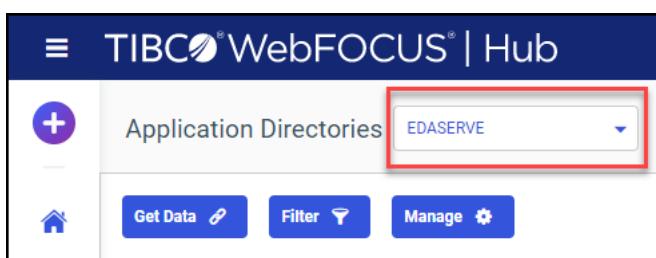


Click the bookmark to return to the customized map viewpoint.

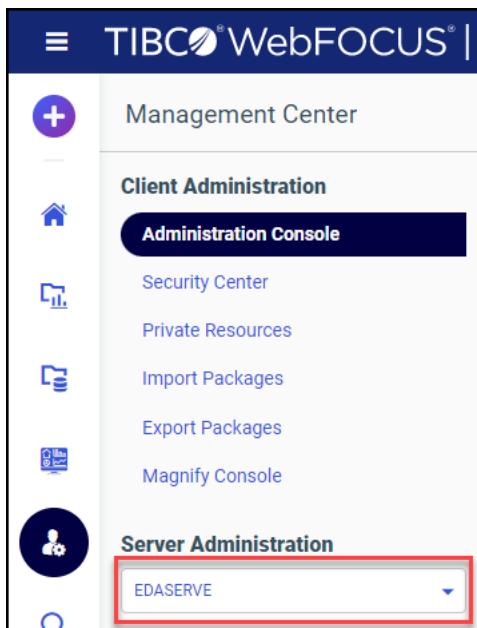


Improved Access From the Hub to Content From Multiple Servers

The new Multiple Servers list contains the names of the TIBCO WebFOCUS® Reporting Server Connection nodes configured for your installation of TIBCO WebFOCUS®. This list is located in two places on the Hub. It appears above the Application Directories tree of the Application Directories area, as shown in the following image.



It also appears in the Server Administration section of the Management Center area menu, as shown in the following image.



The Multiple Servers list contains the names of the Reporting Server Connection nodes configured for your installation of TIBCO WebFOCUS. These nodes appear on the Configuration tab of the WebFOCUS Administration Console. Because items in the Multiple Servers list are based on this configuration, the list changes dynamically whenever you create or delete Reporting Server Connection nodes.

The value you select from this list limits the display of application directories and other server content in the Hub to those assigned to the Reporting Server Connection you select. If your organization maintains multiple servers, you no longer need to open the Web Console and select the server to view resources and configuration settings assigned to an alternate server, you can select it from this list.

Run As FOCUS Functionality From the Reporting Server Browser Interface

As a first phase in providing an upgrade path for existing FOCUS Multi-Session Option (MSO) users or users running older applications in a web-based environment, you can now run interactive FOCUS procedures (FOCEXECs) from the Reporting Server browser interface. This feature supports all FOCUS commands, including MODIFY with CRTFORM and PROMPT, MODIFY DEBUGGER, all TABLE, TABLEF, and GRAPH output, and Dialogue Manager -CRTFORM and -PROMPT.

Note: Compiled MODIFY procedures are not supported. The original FOCEXEC is required. You cannot use the FOCCOMP (.fcm) file.

FOCUS tools, such as the Talk Technologies (TableTalk and ModifyTalk), Terminal Operator Environment (TOE), and FOCUS Main Menu (FMMAIN) will be supported in this environment.

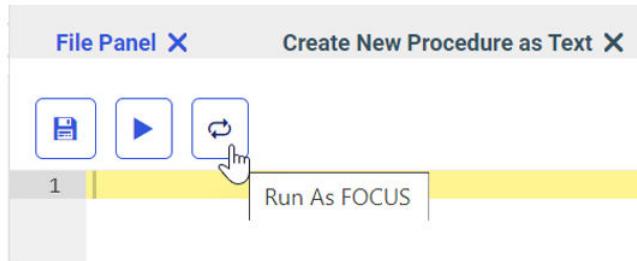
The output will be presented in two side-by-side panels (full screen output and line mode output). This greatly facilitates any debugging required with MODIFY, MODIFY DEBUGGER, or Dialogue Manager. When the full screen is finished, it will indicate that it is.

Running a Procedure Interactively

Using the Reporting Server browser interface, you can select a procedure from an application directory and run interactive FOCUS in one of the following ways:

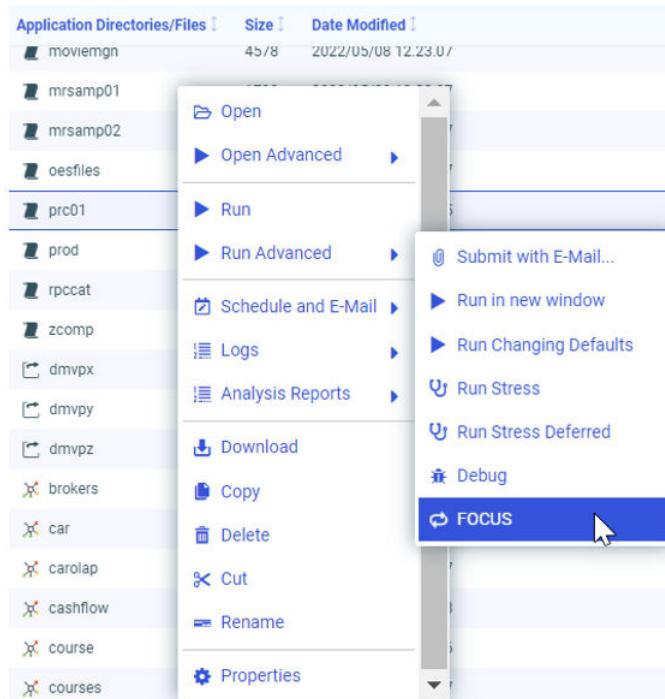
- Using the Run As FOCUS button.
- Using the Run Advanced FOCUS option.

The following image shows the Run As FOCUS button.



Fixes

The following image shows the Run Advanced FOCUS option.



Fixes

- ❑ A filter will not pass in the OData adapter when it contains special characters. (02094282)
- ❑ The AUTOFIT=ON command does not expand the report to use the full width of the page. (02031316, 02063457)
- ❑ Users in WebFOCUS Designer are unable to control the order of the containers when toggling between the mobile dashboards. (02092501)
- ❑ Users are able to move content when running the Portals or Pages at runtime after upgrading. (02092501)
- ❑ ADA compliance issue with Page Designer navigation. (02097178)
- ❑ Calendar filter shows the wrong value on the initial run. (02080119)
- ❑ When exporting a chart with borders from WebFOCUS Designer to PNG format, some of the borders are missing. (02059568)

- Cannot use upper-case letters in the username on the WebFOCUS Login page. (02096134, 02098558)
- The default range displayed in the Paging/Search control in App Studio is different from previous releases. (02097310)
- An error occurs in a container when setSeriesType is applied to the chart created in InfoAssist: TypeError: Cannot set property 'riserShape' of null (02029851, 02076422, 02064696)
- Using subtotals styling in a WebFOCUS Designer standard report results in an error: The Value of this Variables is Invalid! (02060108)
- The LRU Cache fails to capture parameter values from AUTOPROMPT procedures when they are included in a stand-alone or portal page. (02099035)
- Security Center groups fail to be propagated successfully, and user IDs are propagated as Security Center groups from the WebFOCUS Client to a WebFOCUS Reporting Server configured to use Kerberos security. (02099485)
- Using ALLOW-TOOLS=OFF and ARVERSION=1 results in an error in the console: ibiChart is not defined (02057498, 02051914, 02058123, 02069163, 02077085, 02090599, 02097923)
- User receives an error when displaying charts: Failed to load bundled library: ibx (02061668)
- The visualization prompted variable in a WebFOCUS Designer's Master File Description is not keeping the changes to the variable. (02030312, 02030940, 02030512)
- Filter shows the lookup value from ACCEPT=SYNONYM instead of displaying the value in the assembled page. (02030049)
- Users can attempt to save a file to the Server tab when they should not be able to. (02083149)
- When creating a synonym from an SAP source, using the default data type results in a space issue. (02052465)
- Editing a chart after disabling the Galigeo extension results in an error: Error com.ibi.fdmx.error.FdmlInternalException (02051099)
- Prompted variables in Master File is not being kept in WebFOCUS Designer Visualizations. (02030312, 02030940, 02030512)

- User does not have a way to upload data because they are missing the Get Data buttons. (02030365)
- User would like the ability to open an item's location from the Search results. (02030410)
- WebFOCUS Designer page with chained filters and a static filter does not work with a lazy load on the initial load. (02100311)
- Application Cache does not work with WebFOCUS Designer Filters. (02099035)
- User cannot create a new folder under USERS of a private resource management because the OK and Cancel buttons are not displayed. (02096216)
- Adding WebFOCUS Designer privileges to a user enables InfoAssist privileges. (2091130)
- WebFOCUS Designer ignores prompts for variables in the Master File. (02030312, 02030940, 02030512)
- In App Studio, when you click the Reset All button from the Popup Style Double List control, the Document level, Paging Search Control range is no longer ignored. (02055273)
- Get Data option is available from the +Content menu when accessing the Workbench URL. (02030365)
- ON TABLE PCHOLD in a sub-server changes the date usage format from MDYY to YYMD. (02069812, 02095554)
- In an English environment, the runtime prompts and filter parameter dialog match for the BLANK entry, but in a German environment, there is a mismatch between BLANK and LEER. (02030600)
- Calling a Python script as a function in a focexec results in an error message: (FOC31054) PYTHON processing failed for BASEAPP/PYTHON_EXMPL/ARITHMETIC_EXAMPLE_PY (02030621)
- Using the Salesforce Adapter and issuing a request with SUM and no keys causes the iWay Data Migrator agent to crash. (02096822)
- Resource Management configuration with PDS deployment results in an error message: (FOC422) THE FOCUS FILE IS NOT ON A WRITABLE DISK. CANNOT MODIFY (02034573)
- Creating an InfoAssist report from a MVS server results in an error and a blank screen when opening InfoAssist. (02034291)
- High CPU usage and memory alerts for user's WebFOCUS Cloud environment. (02080624)

- ❑ Saved conditions in a selection file created in release 8.1.05 displays incorrect value in release 8207.28 and 9.0. (02099219)
- ❑ Using INPUT HTML tags in a DEFINE or COMPUTE does not work in the AHTM v2 (ARVERSION=2) version, but works in the AHTM v2 (ARVERSION=1) version. (IDA-1292)
- ❑ Using the SET TEMPERASE = ON does not clear the JSCOM3 folders. (02095554)
- ❑ HTML reports do not run if the user creates Saved Parameters. (02098317)
- ❑ In App Studio, after duplicating an HTML file, it no longer downloads the PDF file, instead of rendering in the iframe. (02099010)
- ❑ Creating an InfoAssist report from a MVS server results in an error and a blank screen when opening InfoAssist. (02034291)
- ❑ User is unable to start the WebFOCUS Server after removing the Resource Analyzer configuration. (2102349)
- ❑ Resource Management configuration with PDS deployment results in an error message: (FOC422) THE FOCUS FILE IS NOT ON A WRITABLE DISK. CANNOT MODIFY (02034573)
- ❑ A Data Migrator flow that has a Salesforce Adapter (SFDC) as a source that is migrated from a previous release is failing. (02073641)
- ❑ Calling a Python script as a function in a focexec results in an error message: (FOC31054) PYTHON processing failed for BASEAPP/PYTHON_EXMPL/ARITHMETIC_EXAMPLE_PY (02030621)
- ❑ The Data Migrator agent crashes while running a procedure to query a Salesforce synonym. (02096822)
- ❑ A filter is not passed in the OData adapter when it contains special characters. (02094282)
- ❑ The AUTOFIT=ON command does not expand the report to use the full width of the page. (02031316, 02063457)
- ❑ User cannot save a ReportCaster schedule edit if the *Create Item* permission is not included. (02100063)
- ❑ WebFOCUS filters and pages are not rendering on a mobile browser. (02104485)
- ❑ A Portal page from a drilldown hangs and continues to show the hour glass. (02102297)
- ❑ The *Share With* option does not display items alphabetically. (02028336)

- A JQuery dialog window is missing the close icon image when it is run from a Portal. (02094573)
- A more detailed error message is provided to explain the cause of a Reporting Server Agent crash. (02029533)
- Change Management packages that contain RULES does not import the rules when the import is through the new (default) home page. (02106230)
- When "paging/Search control" is used, the value of the dropdown changes and the alert does not display. (02106752)
- An Internal exception processing IBFSService.putProperties error occurs when trying to disable a built-in template. (02096944)
- Running a guided adhoc portal application does not render. (02099435)
- Running multiple charts in a procedure via Ajax calls in an HTMLFORM procedure does not display all charts. (02089110)
- If the columns in an active report are frozen (FREEZE-COLUMN), the active report loses some of its traffic light conditional styling. (02028383)
- User receives an error parsing a Master File Description after configuring the WebFOCUS REST adapter. (02080626)
- When building a chart in WebFOCUS Designer, measures used in Tooltip calculated fields cause an error during preview. (02090323)
- Traffic light fails when report uses ACROSS and the report type is changed to Active. (02029331)
- Running multiple charts in a procedure via Ajax calls in an HTMLFORM procedure does not display all charts. (02089110)
- Agent crash occurs when using a CNT.DST.fieldname request on a flat file. (02094399)
- In an English environment, the runtime prompts and filter parameter dialog match for the BLANK entry, but in a German environment, there is a mismatch between BLANK and LEER. (02030600)
- ETL jobs result in the following error when using SQLJDBC HPE NonStop source with Tandem Driver and target is Hyperstage: (FOC1500) The message id: invalid_holdability (02093207)

- ❑ Opening synonyms in the synonym editor on the Reporting Server deletes the APPS folder from the file system. (02100509, 02106942)
- ❑ In WebFOCUS Designer, a required filter in a grid panel will not stop the chart or report from loading when executed. (02097587)
- ❑ Username authentication only works in lower case format when signing into WebFOCUS. (02086904)
- ❑ Chain Filter is not initializing correctly when the page loads. (02102518)
- ❑ WebFOCUS Designer template does not populate dropdown with variable from DEFINE. (02095709)
- ❑ When an assemble Visualization has a combo filter with thousands of fields and the Selection Controls is enabled, selecting all fields except one results in an error: The value of an amper variable exceeds the maximum length (02101606)
- ❑ A drilldown value to a WebFOCUS Designer Page with an ACCEPT in the Master File, the filter shows the first available value instead of the selected value. (02064612)
- ❑ The HLISECUR program does not work under 64-bit z/OS with a SUSI exit. (02107554)
- ❑ Using Show MISSING (ALL) on a SUM field creates a line break in the code resulting in an error message at runtime. (02108938)
- ❑ Special characters do not display in InfoAssist or WebFOCUS Designer filters. (02115258, 02119317)
- ❑ When creating a visualization from a Japanese language Master File, field values in the FILTER PANEL appear as question marks. (02119228)
- ❑ Selecting Switch to Remote Branch results in an error: FETCH SCM_COMMAND_BAD_CREDENTIALS: Bad SCM credentials (02034727, 02029473, 02123596, 02125980)

Upgrade Notes

- ❑ The Global Search feature, introduced in Release 9.0.2., includes new search capabilities that were not available in previous releases. To take advantage of these new capabilities, you must reindex all content in the WebFOCUS Client and WebFOCUS Server after upgrading to Release 9.0.2.

You can use the new set of Search Index options in the Properties panel of the Workspaces area of the Hub to reindex WebFOCUS Client content and in the Properties panel of the Applications area of the Hub to reindex the WebFOCUS Server content.

For more information, see the *Indexing Content and Data* topic in the *TIBCO WebFOCUS® User Guide* or in the *TIBCO WebFOCUS® Online Help*.

Retirement of Esri Raster Basemaps

As of June 30th, 2021, many Esri raster basemaps entered mature support.

As a result, starting with WebFOCUS Release 9.0.2, the following raster basemaps, are no longer available on the list of basemaps in WebFOCUS Designer:

- streets
- gray
- dark-gray
- national-geographic
- topo

Except for the national-geographic basemap, the content that previously used the raster basemap will automatically be redirected to use a vector basemap, as follows:

- streets-vector
- gray-vector. This is the default basemap, which has been changed from gray to gray-vector.
- dark-gray-vector
- topo-vector

For more information on basemaps that entered mature support, see <https://www.esri.com/arcgis-blog/products/arcgis-online/announcements/reminder-raster-basemaps-moved-to-mature-support/>.

Known Issues

- Installing a WebFOCUS Reporting Server on a machine running on the IBM i (also known as i5 and OS/400) operating system will return the following error message, in addition to expected installation messages. Note that your library name may differ:

ISETUP: Installation Step completed with errors

inu: CPYF FROMFILE(R729000DTP/CFG) TOFILE(SRV90/CFG) FROMMBR(VERSION)
TOMBR(VERSION) MBROPT(*REPLACE) CRTFILE(*YES)

You can disregard this message. The copy operation completes successfully.

- ❑ Users with Developer Group privileges can see content taken from Application directories to which they are not assigned in their search results. They can view information about these items in the search results list, but they cannot run, copy, or edit them.

Known Issues

9.0.1 Release Notes

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In this chapter:

- [Release and Gen Information](#)
- [New Features](#)
- [Fixes](#)
- [Upgrade Notes](#)

Release and Gen Information

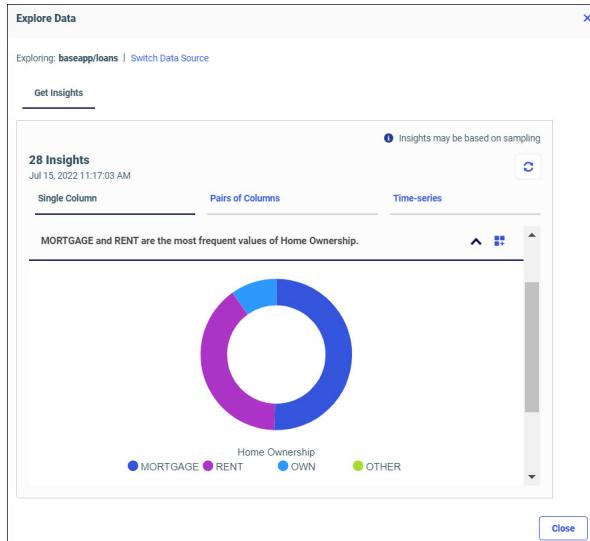
Release Date	Gen Information	Reporting Server
April 2022	wf040422a Gen 5 wi040422a as032222a	901 Gen 2354

New Features

This section describes new features in this release.

Generate Instant Insights in the TIBCO WebFOCUS Hub

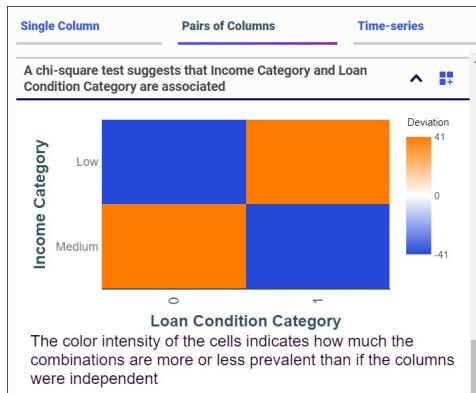
You can now generate Instant Insights directly in the WebFOCUS Hub. Insights display the same as they would within TIBCO WebFOCUS Designer.



You can choose to run your chart in a new window. After saving a chart to your workspace, you can open and edit it in WebFOCUS Designer.

New Instant Insights Charts Indicate Associations

Instant Insights can now analyze data for associations, which identify whether columns are independent of each other. Association insights are generated as chi-square charts, as shown in the following image.

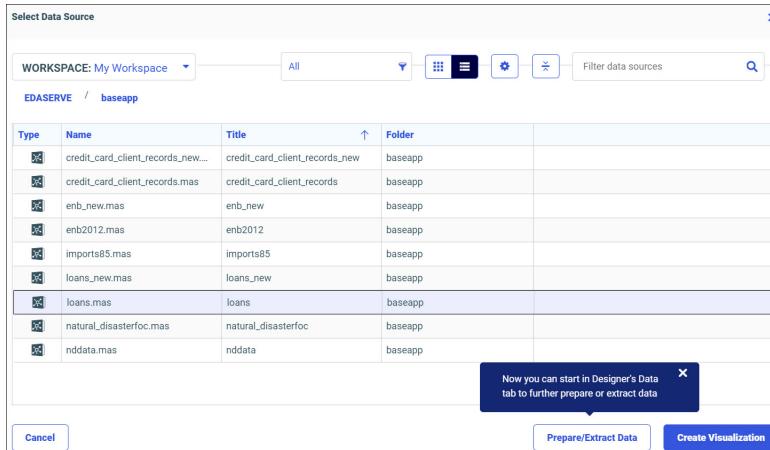


The color intensity of the cells indicates how much the combinations are more or less prevalent than if the columns were independent.

Direct Navigation to TIBCO WebFOCUS Designer's Data Tab

After selecting a data source when creating visualizations, you can now navigate directly to the WebFOCUS Designer Data tab to further prepare or extract data, instead of automatically being taken to the Visualization tab.

In the Select Data Source dialog box, you can click a *Prepare/Extract Data* button that directs you to the WebFOCUS Designer Data tab.



TIBCO WebFOCUS Reporting Server Connection Now Transfers Group Memberships

When the Kerberos security option is selected for a Reporting Server Connection or a Cluster Manager Connection, the Client now transfers the group memberships of the user initiating the connection to the WebFOCUS Reporting Server along with their User ID and Kerberos ticket. The transfer of group memberships ensures that users maintain the same level of access to resources and capabilities on the Reporting Server as they do in the Client. By adding the transfer of group memberships to the Kerberos option, this new feature extends capabilities to it that were previously available only when using the Trusted security option.

Fixes

Linux-Based TIBCO WebFOCUS Reporting Servers Using Kerberos Security No Longer Require Local User IDs

WebFOCUS Reporting Servers running on the Linux operating system can now support the Linux System Security Services Daemon (SSSD) service. With this new capability, Linux-based WebFOCUS Reporting Servers configured to use Kerberos security no longer require a duplicate set of local User IDs defined in Active Directory to complete the impersonation process and authenticate requests from valid WebFOCUS User IDs.

To take advantage of this new feature, the Linux operating system on the WebFOCUS Reporting Server must be configured to use the SSSD service. For more information, see product documentation from your Linux provider.

Fixes

- Traffic light with ACROSS is incorrect when report type is changed to Active. (02029331)
- Clicking between portal pages causes submenu navigation to appear on pages or tabs that do not have them. (02032489)
- Populating a drop-down control with XML data is not working. (02080963)
- Unable to run an HTML page in an offline local installation. (02075145)
- An HTML page may not load after upgrading from WebFOCUS Release 8205 to WebFOCUS Release 8207.28.07.
- Unable to type certain characters in the calendar control. (02063335)
- When an AHTML report is included with an ESRI map in an HTML document, the map stops loading and generates errors in the browser console. (02084818)
- A simple connect or disconnect from the Reporting Server may cause a memory leak.
- The target does not enforce session cookie transmission via SSL data transport by setting the secure attribute on the listed cookies. (02085296)
- InfoAssist generates an error message which prevents users from editing procedures that include DEFINE statements containing Amper(&) variables whose format is alpha with variable length. (02083455)
- Reports in the ReportCaster temp folder are not deleted after a distribution schedule is completed. (02030865 02080320)
- Loading a saved bookmark in a TIBCO WebFOCUS Designer page results in a broken report. (02089329)

- ❑ The *Keep Selected Values* option in the Paging/Search control is not selected after double-clicking the value.
- ❑ Cannot use double amper variable as default value when removing the default value property field. (02087127)
- ❑ Chain filtering on a TIBCO WebFOCUS Designer page does not display defaults for a child filter. (02028496, 02087401)
- ❑ The list of values for a field will float on the page instead of being attached to the drop-down when scrolling on the page. (02016520, 02072416)
- ❑ The View All option on the Home Portal page shows a broken image instead of the assigned image. (02030799)
- ❑ Chain does not work when the control value is blank in WebFOCUS App Studio. (02091077)
- ❑ Some reports that use the HTML Composer continuously loop when executed. (02091582)
- ❑ The Save Selection function is not saving the setting of the lowest level of a chained control. (02032325)
- ❑ There is a difference in behavior of the calendar control value when the reset button is clicked in the save_selection.htm. (02092340)
- ❑ Users no longer receive the (FOC205) THE DESCRIPTION CANNOT BE FOUND FOR FILE NAMED: error message when they attempt to open a previously-saved file in InfoAssist. (02085499)
- ❑ Customers can now use mixed-case User IDs to access WebFOCUS Reporting Servers configured for Kerberos security without receiving an HTML 403 Forbidden error message. (02098558)
- ❑ Cannot use upper-case letters in the username on the WebFOCUS Login page. (02099640, 02096134, 02109910)
- ❑ The LRU Cache no longer fails to capture parameter values from autoprompt procedures when they are included in stand-alone pages or portal pages. (02099035)
- ❑ Security Center groups fails to propagate successfully causing the User IDs to be propagated as Security Center groups from the WebFOCUS Client to a WebFOCUS Reporting Server configured to use Kerberos security. ((02099485)
- ❑ The Reporting Server does not apply a group profile when the combined provider name and group name contains nine or more characters. (02089671)

Upgrade Notes

- ❑ Support for the Adapter for Python and the PYTHON function used in COMPUTE and DEFINE commands on the WebFOCUS Reporting Server is available only on installations of WebFOCUS that run on a Windows or x64-based Linux operating system. On other architectures, these features are either non-functional or are not available.

9.0.0 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

For an online version of this document and more information about the release, go to the [TIBCO WebFOCUS Product Documentation site](#), select the Documentation tab, and select the link to your product group.

In this chapter:

- [Release and Gen Information](#)
- [New Features](#)
- [Fixes](#)
- [Upgrade Notes](#)
- [Retirement and Addition of Esri Demographic Layers](#)
- [Known Issues](#)
- [Browser Information](#)

Release and Gen Information

Release Date	Gen Information	Reporting Server
February 2022	wf021322b Gen 2 wi021322b as021222a	900 Gen 2351

New Features

This section describes new features in this release.

TIBCO WebFOCUS Container Edition

TIBCO WebFOCUS® Container Edition (CE) provides a scalable, microservices-based analytical platform designed for container-based deployments. This new offering packages TIBCO WebFOCUS software components in a container image, including all required OS components and libraries, which can be deployed and run in a Kubernetes cluster.

The following are several benefits and advantages you can leverage using TIBCO WebFOCUS CE:

- Automatic deployments.** Identify which (and how many) WebFOCUS components (for example, Reporting Server) need to be deployed and where (e.g., specific clusters).
- Reduce operational and infrastructure costs.** Add or remove services and resources to the Kubernetes cluster as needed. Data sources can exist in the cloud (private, public), or on-premises.
- Increase adoption and usage.** Develop specific BI applications for targeted users on-premises and deploy to the cloud as needed. When you install WebFOCUS on Kubernetes, development and testing can occur within internal clusters or external clusters.
- Portability.** Fully portable between cloud and on-premises environments.
- Dynamic autoscaling.** Rapidly adjust workload resources to increased (or decreased) user and data demands.
- Efficient upgrades.** In-place upgrades are supported in a Kubernetes cluster, where the configuration and logs from an earlier installation are preserved.

Existing Kubernetes services that are provided by cloud providers can also be leveraged, for example, Amazon® Elastic Kubernetes Service (EKS).

Deploying TIBCO WebFOCUS CE on Kubernetes provides a variety of deployment options in the private cloud, which can be centrally managed and administered based on dynamic workloads.

Docker images enable key components and functionality of the TIBCO WebFOCUS platform to be isolated, packaged into specific containers and run on Kubernetes. As a result, each WebFOCUS component can be scaled independently to accommodate users, data, and data sources on demand.

TIBCO WebFOCUS DSML Services Container Edition

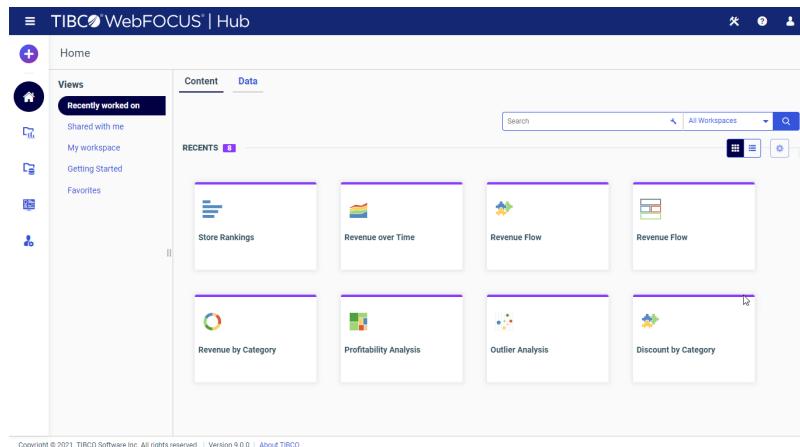
TIBCO WebFOCUS® provides a containerized data science and machine learning (DSML) platform, which can also be deployed and run with TIBCO WebFOCUS® Container Edition (CE) in a Kubernetes cluster.

TIBCO WebFOCUS® DSML CE consists of three services:

- ❑ **Instant Insights (autoanalytics).** Enables you to run advanced analyses and generate visualizations and narratives on your data sets, without manually preparing and analyzing your data, or having prior knowledge of data science or statistics.
- ❑ **Machine Learning Functions (ml-functions).** When creating a Data Flow, you can easily run predictive analytics on your data sets using Machine Learning functions, without prior knowledge of advanced statistics.
- ❑ **Metadata Classification (metadata).** Examines your data and assigns classifications to the columns, which can then be used to match columns from separate data sources. You can classify data that you upload, and use it to match fields in a Union in a Data Flow.

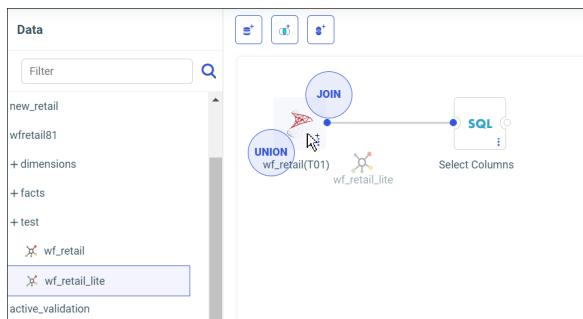
TIBCO WebFOCUS Hub

The new TIBCO WebFOCUS Hub provides navigation to all areas of TIBCO WebFOCUS, serving as a unified tool that offers consolidated authoring capabilities and a seamless administrative experience. In this new version, you can see your recent and favorite items from both the WebFOCUS Client and the Reporting Server straight from the Home view. You can also take a full advantage of the consolidated Page Toolbar, where you can access all your action menus, sort content, toggle between the list and tile views, select columns and more. The new redesigned user interface provides an intuitive way to view and differentiate your content at a glance.



TIBCO WebFOCUS Designer Data Tab Enhancements

When authoring content in WebFOCUS Designer, new options for enhancing and manipulating data are available within the Data tab. Users can now perform joins and unions with other data sources, change the selection of columns, add new calculations, and filter records based on specified criteria. Additionally, users have access to data profiling information to analyze their resulting data based on the actions performed.



TIBCO WebFOCUS Designer Page Container Enhancements

When creating pages in WebFOCUS Designer, you can now combine, separate, and duplicate containers in new ways directly on the page canvas, allowing you to customize the layout of your page and its contents more quickly and easily.

Drag-and-drop capabilities have been extended, providing another option to combine containers. By default, when you drag a container to a new location on the page, it shifts the existing containers out of the way, allowing you to change the order in which the containers are positioned. To prevent the other containers from shifting, hold the Ctrl key as you drag a container to a new location. If you drop it onto another existing container on the page, you are presented with the option to combine them, and choose the type of multi-content container into which they should be combined. You can combine the containers into a tab, accordion, carousel, or panel group container.

If you create a multi-content container, such as a tab, accordion, or carousel container, by combining them or using the options on the Container tab, you can quickly duplicate it and all of its contents. To do so, right-click it and click *Duplicate Container*. This saves you the time required to re-add each item to a new multi-content container.

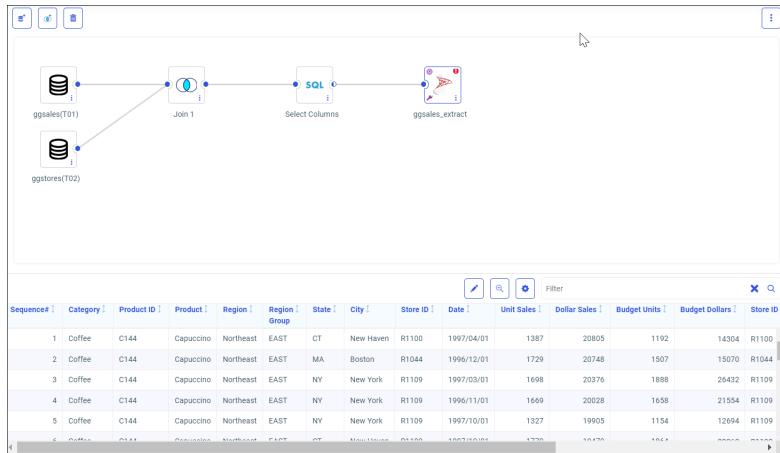
Alternatively, you may have multiple containers within a panel group. Panel groups allow you to keep multiple containers together during responsive folding as the screen size shrinks. If you later decide to remove containers from a panel group, you can do so in a couple of ways. To remove a single container from a panel group, right-click it and click *Move to canvas*. To completely disband the panel group but leave the containers on the page, right-click an empty area of the panel group and click *Remove containers from panel group*. The container or containers are added to an empty area of the page.

For more information, see the *Working With Content Containers* topic on the TIBCO WebFOCUS KnowledgeBase.

Creating Hold Files in TIBCO WebFOCUS Designer

A new workflow for creating staging tables, or hold files, is available in authored content in TIBCO WebFOCUS Designer. When creating a staging table, a user is able to save the actions taken on their data from within the Designer Data tab as a session-based or a permanent file.

This new data source that can be used to create further content. With this functionality, authors have greater flexibility and a broader range of complexity for creating their charts and reports.



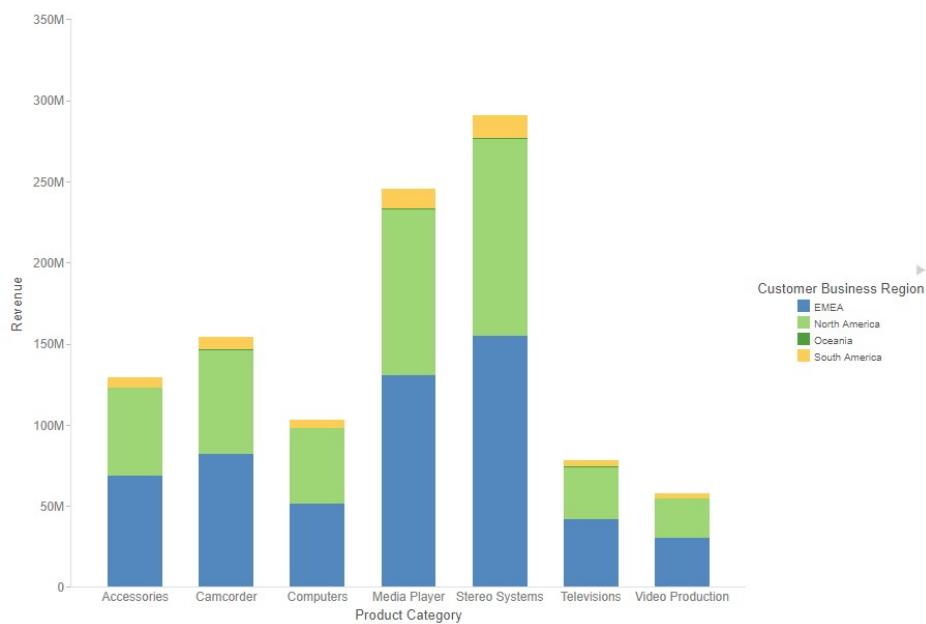
Filtering Auto Drill Results in Charts With Multiple Dimensions

Auto Drill enables you to navigate through different levels within the dimension hierarchy of your data source. This allows you to review underlying data for a particular area, and move through the structure of your data source, based on your informational needs.

When you drill into a report, the result is filtered based on the selected value, and on the related values of any higher level sort fields. All applicable values for lower level fields are shown. Since charts do not have explicit field hierarchies, you can determine how filtering is applied when using Auto Drill in a chart with multiple dimensions, by selecting different options from the run-time menu. This allows you to determine how specific you want your charts to be as you navigate data hierarchies within them, combining the instant usability of Auto Drill with a certain level of user control.

When Auto Drill is enabled for a chart with multiple dimension fields, such as if there is one dimension field in the Horizontal bucket and another in the Color bucket, you can choose whether to apply filters as part of the Auto Drill navigation, based on the run-time option that you select. If you choose to apply filters, then when you drill down into a field hierarchy using Auto Drill, the result drills into the area of the chart that you clicked, and is filtered based on all dimension field values pertinent to that area. If you choose not to apply filters, the dimension that you drill into is replaced with the next field in the hierarchy, filtered for the value of the selected Auto Drill link, and other fields are not filtered. The chart continues to show all applicable values for other dimension fields.

For example, the following image shows a stacked bar chart with the Product Category field in the Horizontal bucket, and the Customer Business Region field in the Color bucket.

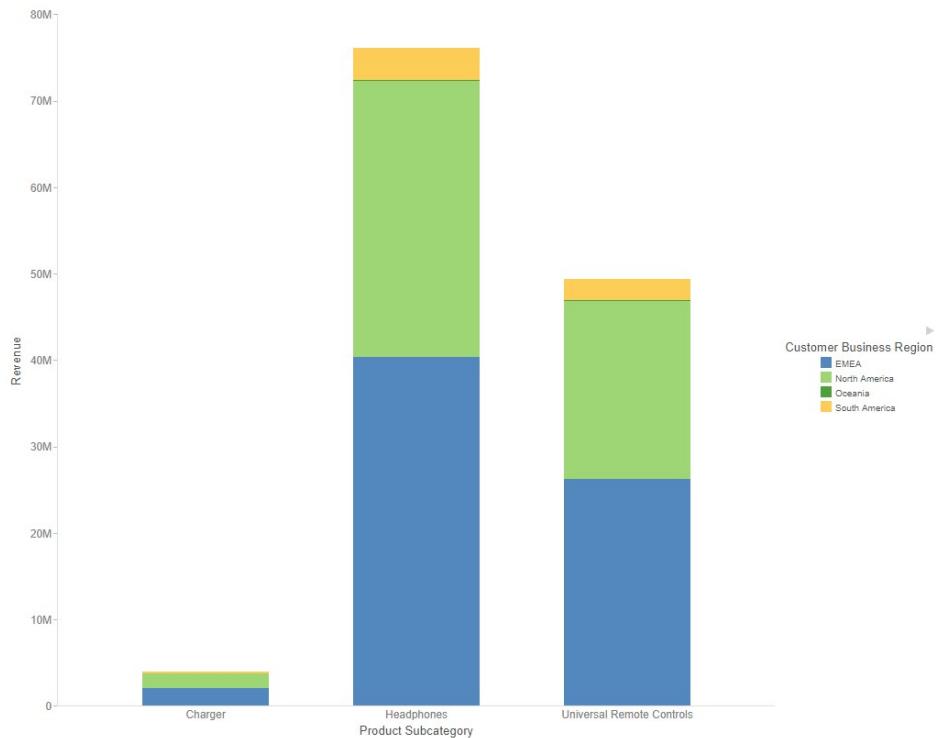


When you run the chart and point to a segment of it, the tooltip shows options to use Auto Drill with or without filters, as shown in the following image.

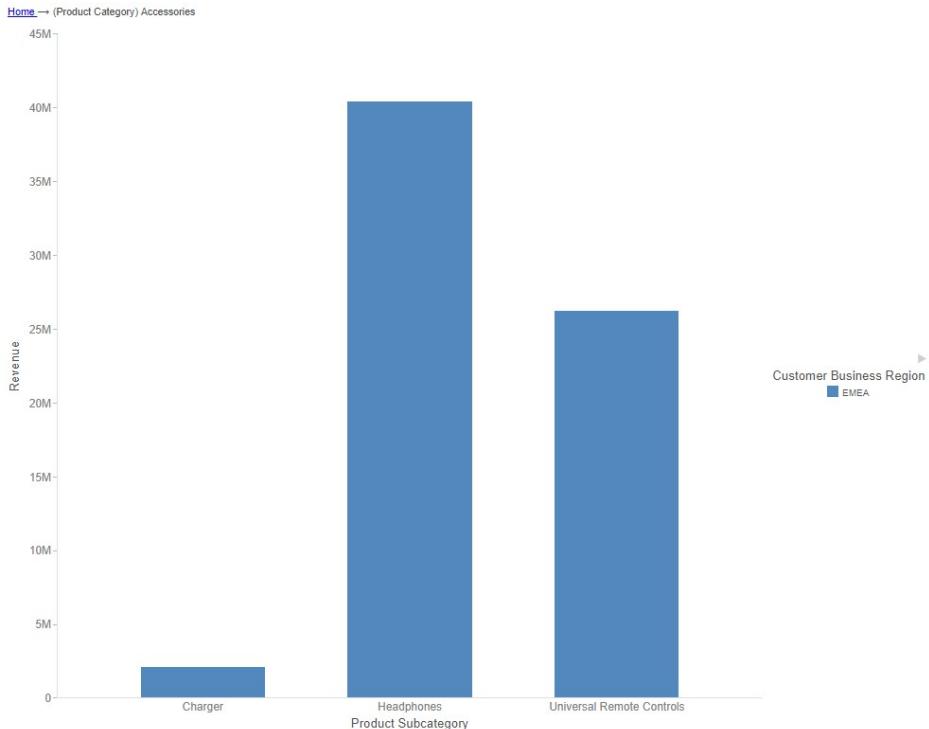


New Features

When you use Auto Drill to drill into the Product Category field from a segment in the Accessories riser, and choose not to apply filters, the resulting chart shows subcategories within Accessories, for all Business Regions, as shown in the following image.



If you drill into Product Category from a segment in the Accessories riser and do apply filters, then the resulting chart only shows the Business Region of the segment that you drilled into, as shown in the following image.



For more information, see the *Enabling Hierarchical Drilling in WebFOCUS Designer With Auto Drill* topic on the TIBCO WebFOCUS KnowledgeBase.

Multilayer Maps in TIBCO WebFOCUS Designer

You can now use the WebFOCUS Designer user interface to create a multi-layer map from a single data source. Multi-layer maps can be created as a stand-alone procedure to show geographic information for multiple geolocation fields and data sources on a single map, for easier comparison. You can then enhance your map with additional data and content layers, created directly within WebFOCUS Designer, or referenced from existing map procedures or configured context layers.

The multi-layer mapping run-time interface also provides navigation features from Esri ArcGIS Online, or an on-premise ArcGIS Server. This allows you to navigate, make selections in, and adjust the view of the map, making it easier to explore and gain insights from the content.

New Features

A data layer can be a choropleth map or a bubble map. Choropleth maps can be used to create geographically-based heat maps. They are useful for visualizing location-based data, trends, and distributions across a geographic area, as shown in the following image.



Bubble maps use symbols of different sizes to represent data associated with different areas or locations within the map, as shown in the following image.



These data layers can be enhanced with content layers referenced from your repository or Esri ArcGIS, to provide additional insight into your data.

Create a Specified Number of Bins

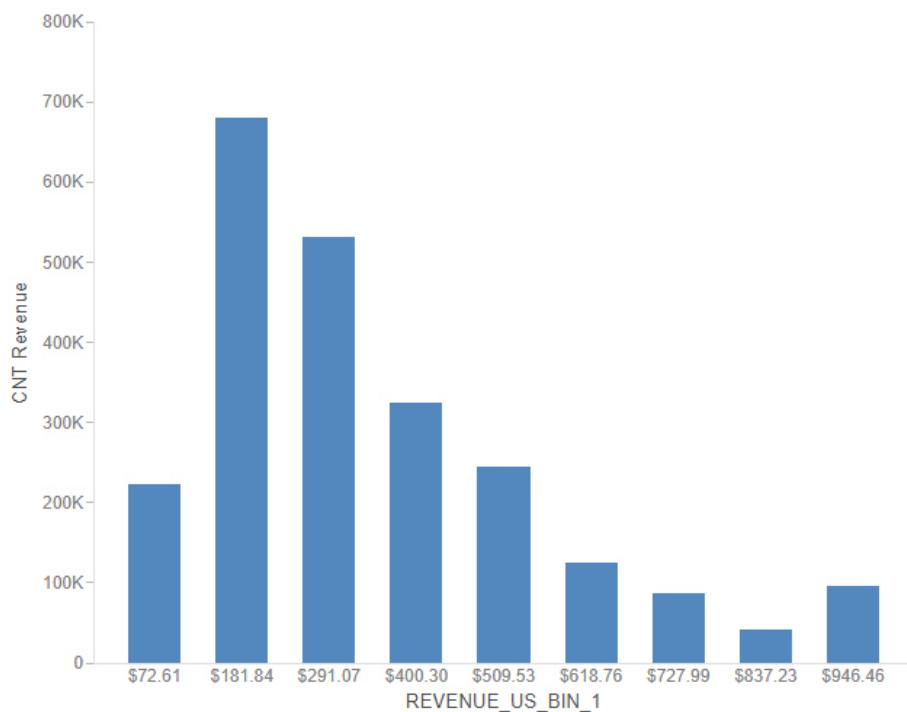
Bins allow you to use ranges of values in measure fields to sort your content, making it easy to see the dispersion and distribution of your data. One common use of bins is in a histogram.

In WebFOCUS Designer, you can create bins in two ways. You can specify a bin width, so that bins of a fixed range are created to encompass all values in the binned measure field, or you can specify the number of bins to create, so that the same number of bins is generated regardless of the total range of values in the measure field, and the size of each bin changes appropriately. By specifying a fixed number of bins, you can control the number of sort values in your chart or report, making it easier to interpret.

To create the preferred number of bins, right-click a measure field and point to *Bin values*. The binning options open, as shown in the following image.



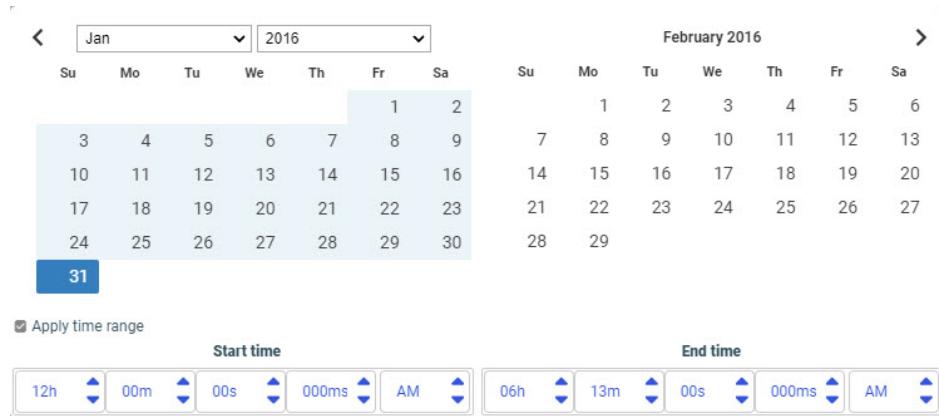
Set the Bin type to *Number* and, in the Bin number text box, type the number of bins that you want to display in your content. This must be a whole number greater than 0. Click *OK* to create the bins. The bins are created as a new field available from the Dimensions are of the Field list, whence you can add them to your content as a sort field. To create a histogram, add the bins to the Horizontal bucket in a bar chart, and add the same field for which you created your bins to the Vertical bucket as a measure field. Finally, apply the Count aggregation to the measure field. The following image shows a histogram with the Bin number set to 8, resulting in 8 bins.



Filtering Date-Time Fields

You can filter date-time fields in WebFOCUS Designer by specifying the date and the time for the start and end points of a date-time range. This allows you to apply more granular filters to date-time fields, as well as providing the ability to filter within a single day.

When you create a prompted or static filter for a date-time field in a chart, report, or page in WebFOCUS Designer, you are presented with the ability to set a time range and change the time zone in addition to the regular date filtering options. When you select ranges for a static filter or use the *Custom* range option for a prompted filter, spinners to set the hour, minute, second, millisecond, and half of the day using a 12-hour system appear below the calendar, as shown in the following image, and you can also type numeric values into them.



The selected start time is applied to the start date in the time range, and the end time is applied to the end date.

The available time components depend on the format of the date-time field being filtered. The following image shows the date-time filter control for a field with a format of HYYMDI, which is precise to the minute level. As a result, only hour and minute time components can be set, and extraneous units of time are not shown.

The screenshot displays a date-time filter interface. At the top, there are dropdown menus for 'Aug' and '2018', and a large calendar for 'September 2018'. The calendar shows the days of the week (Su, Mo, Tu, We, Th, Fr, Sa) and the dates from 1 to 30. The date '13' is highlighted with a blue box. Below the calendar, there is a checkbox labeled 'Apply time range' followed by two sets of time selection controls. Each control consists of a dropdown menu (e.g., '07h', '05m', 'AM') with up and down arrows for adjustment.

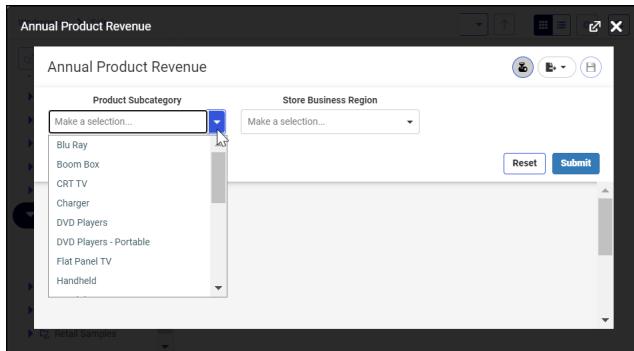
After setting date-time ranges, you can also change the time zone that should be applied to the start and end time, adjusting the filtered data based on the time difference between your location and the location from which the data originated.

For more information, see *Setting Time Ranges in Date-Time Controls* on the WebFOCUS KnowledgeBase.

New Default Autoprompt Template

The Designer Autoprompt template is now the default interface for WebFOCUS Designer content containing selection parameters.

This new default template provides quick and intuitive filtering behavior within a familiar layout that resembles a WebFOCUS Designer page. When running content that includes parameters without default values, the Designer Autoprompt page appears first. Users can then provide values for these parameters using automatically-generated controls that are specific to the format and values available for each one, as shown in the following image.



Instant Insights Time-Series Charts

Instant Insights now allows customers to see trends and seasonality changes over time in any data set. The Time-series feature automatically detects time series in your data. If seasonality or trends are identified in that data, they are displayed as chart visualizations.

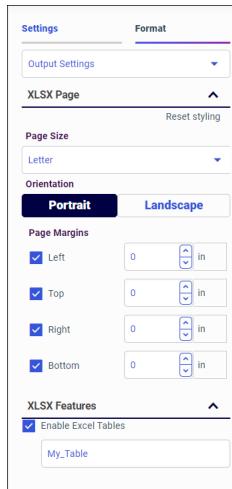


You can add these charts to the WebFOCUS Designer canvas and build a page, or add them to existing pages or dashboards. Then you can save and share your insights with others.

Output Your Data as an Excel Table

In WebFOCUS Designer, you can now create content and output your data as an Excel table. This lets you easily filter and sort the resulting output in Excel.

From the Visualization tab, choose XLSX as the output format of your created content, and then select the *Enable Excel Tables* checkbox within your Output Settings under XLSX Features.



Excel Tables

When using Excel XLSX output format, the new Excel Tables feature enables you to group data in a report into a defined table. Using the IN-XLSXTABLE attribute for the TYPE=DATA declaration within a Stylesheet converts an XLSX tabular report generated with FORMAT XLSX into an Excel Table within a worksheet.

By creating an Excel Table, you are automatically given sorting and filtering options on the data in your Excel worksheet, allowing you to further analyze, manipulate, and style the data being presented directly within Excel, as shown in the following image.

MY SALES REPORT						
Region	Category	Product	Dollar Sales	Unit Sales	Budget Dollars	Budget Units
4 Midwest	Coffee	Espresso	1294947	101154	1258232	101869
5 Midwest	Coffee	Latte	2883566	231623	2827800	233657
6 Midwest	Food	Biscotti	1091727	86105	1067629	85839
7 Midwest	Food	Croissant	1751124	139182	1708733	139548
8 Midwest	Food	Coffee	1465150	118151	1436595	113776
9 Midwest	Gifts	Coffee Grinder	519154	50393	613453	50926
10 Midwest	Gifts	Coffee Pot	598978	47156	614007	47779
11 Midwest	Gifts	Thermos	577906	46587	564010	46819
12 Northeast	Coffee	Capuccino	542095	44785	561491	44432
13 Northeast	Coffee	Espresso	859107	68127	872902	69776
14 Northeast	Coffee	Latte	2771815	222666	2818069	221712
15 Northeast	Food	Biscotti	1802005	145242	1848682	145152
16 Northeast	Food	Croissant	1670818	137394	1739522	137864
17 Northeast	Food	Scone	201111	17132	865700	68415
18 Northeast	Gifts	Coffee Grinder	509200	40977	511242	41207
19 Northeast	Gifts	Coffee Pot	590780	46185	573349	45404
20 Northeast	Gifts	Thermos	604098	48870	615247	49767
21 Southeast	Coffee	Capuccino	944000	73264	956661	75353
22 Southeast	Coffee	Espresso	853572	68030	849465	66785
23 Southeast	Coffee	Latte	2617836	209654	2625303	213555
24 Southeast	Food	Biscotti	1505717	119594	1512019	120549
25 Southeast	Food	Croissant	1902359	156456	1965906	157148
26 Southeast	Food	Scone	900655	73179	927363	73812
27 Southeast	Gifts	Coffee Grinder	80377	47030	567905	46784
28 Southeast	Gifts	Coffee Pot	645303	49922	654579	50637
29 Southeast	Gifts	Thermos	532457	49976	618745	48253
30 West	Coffee	Capuccino	895495	71168	877304	70585
31 West	Coffee	Espresso	907617	71675	923941	72927
32 West	Coffee	Latte	2670405	213920	2722718	215272
33 West	Food	Biscotti	863868	70436	861804	67780
34 West	Food	Croissant	2425601	197022	2406554	195329
35 West	Food	Scone	912868	72776	914866	72252
36 West	Gifts	Coffee Grinder	603435	48909	571316	47397
37 West	Gifts	Coffee Pot	613624	47432	630956	50206
38 West	Gifts	Thermos	571368	45648	575918	46402
39 TOTAL			41633769	3328421	41672933	3333862
40						
41 REPORT FOOTING						
42						
43						
44						

In-Document Analytic Options In Containers on an Assembled Page

In-Document Analytic charts and reports, created using the AHTML output format in WebFOCUS Designer, provide a set of interactive options to users at run-time, allowing them to change their view the data used in your content. For example, In-Document Analytics allows you to change the chart type, export the content item, filter the content on-demand, and much more.

When you add an In-Document Analytic item to a page assembled from existing content, the commands that automatically appear in the Options menu integrated into the container on the page. This provides a streamlined and intuitive user interface in panels containing In-Document Analytic content, and also makes it easy to incorporate additional run-time options into your page by using the AHTML output format in your charts and reports. The run-time Options menu for a In-Document Analytic chart in a basic panel container is shown in the following image.



The following menu items are available from the Options menu for an In-Document Analytic report:

- New.** Launches a chart canvas, where you can place the fields in the original report into different buckets to create a new component.
- Export.** Allows you to export the data in the chart as an Excel spreadsheet or CSV file, or save the current state of the report as a .html file.
- Print.** Allows you to print an image of the report.
- Save Changes.** Saves the In-Document Analytic report, in its current form, as an HTML file.
- Restore Original.** Returns the report to its original form.

And the following menu items are available for an In-Document Analytic chart:

- New.** Launches a chart canvas, where you can place the fields in the original chart into different buckets to create a new component.

- Edit.** Opens the chart in a canvas where you can edit it.
- Duplicate.** Creates a copy of the original chart that you can edit using In-Document Analytic options.
- Export.** Allows you to export the data in the chart as an Excel spreadsheet or CSV file, or save an image of the chart as a .png file.
- Print.** Allows you to print an image of the chart.
- Save Changes.** Saves the In-Document Analytic chart, in its current form, as an HTML file.
- Restore Original.** Returns the chart to its original form.

Note: The Options menu only appears when using the Designer Style version of In-Document Analytics, which is the default. It does not appear in the container toolbar when using the Legacy version of In-Document Analytics, which is only available for content created in InfoAssist.

For more information about In-Document Analytics, see the *TIBCO WebFOCUS® In-Document Analytics User's Guide* technical content.

Displaying Filter Controls in a Vertical Grid

When you add content with dynamic parameter filters to a page assembled from existing content in WebFOCUS Designer, you are automatically prompted to add filter controls for them to the page. By default, these filter controls are arranged in a horizontal filter grid, split into multiple rows, that is located directly below the page toolbar. As an alternative, you can move the filter grid above the page toolbar, into a modal window that you can open and close, or into a scrolling, vertical filter grid that appears on the left side of the page.

The vertical filter grid is a great option when you have a very large number of filter controls, which would take up multiple rows in a horizontal layout, thereby occupying a large amount of space on the page. By using a vertical grid for these controls, they are arranged in a single column within a smaller, fixed area on the left side of the page, where you can use a scrollbar to navigate between them. A basic page with a vertical filter grid is shown in the following image.



To use the vertical filter grid, either before or after adding filter controls to an assembled page, select the entire page by clicking the page toolbar on the canvas, and then click *Left Position* on the Settings tab of the Properties panel. The *Include Page Filters* check box must be selected in order to set the filter grid position.

You can add new cells to the vertical filter grid by right-clicking a cell at design time and clicking *Insert row above* or *Insert row below*. You can then add a Submit and Reset button, a text label, or a filter control for a previously unassigned parameter to the cell. When you run the page, you can adjust the width of the filter grid as needed by pointing to the edge of the grid and dragging it to the left or right.

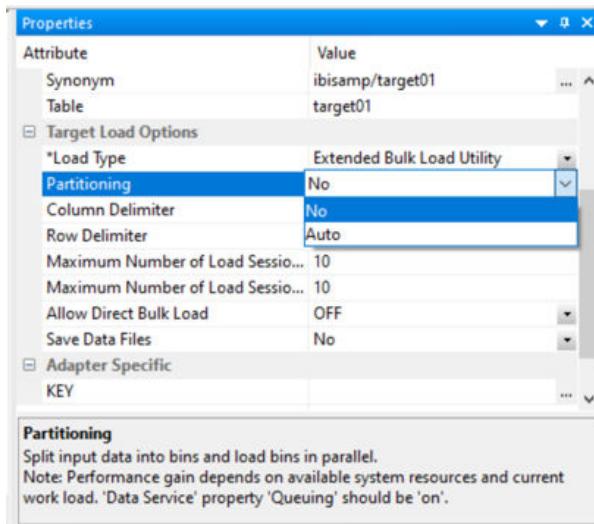
Ability to Copy and Paste Objects Across Data Flows

When a flow is opened in the canvas of a Data Migrator desktop interface workspace, you can copy one or more objects from an existing flow and paste them into another flow. The copy and paste feature is useful if you need to reuse objects between multiple flows, for example, code (SET variables, Selects on Source, and so on). This feature is less error prone and you can save time working on the design of many flows.

Note: The copy and paste feature is also available in the Reporting Server browser interface.

Performance Enhancement to Data Flow

A new Partitioning option, shown in the following image, has been added to the Target Load Options properties for a regular data flow, direct load flow, and DBMS flow. This feature enables you to partition data with automated bin detection, for better performance in the data flow. The Partitioning option is available only for optimized flows.



All bins contain approximately an equal number of rows. The original request is split into multiple requests, each loading data only for the particular bin. The generated requests are run in parallel, which makes the request more efficient and faster.

ESRI Authentication Method for the Cloud Environment

A new authentication string, wappurl, has been added to the Adapter for Esri ArcGIS. The Adapter for Esri ArcGIS is used to report against the information residing in the Esri ArcGIS Online environment or on a locally hosted ArcGIS Server. The wappurl string is the base URL of the client application that will use the Generate Token security method. This is essentially the same as NAMED authentication and is necessary for cloud environments.

Adapter for Google Mail With REST API

The new Adapter for Google Mail (Gmail) enables you to work with Gmail, a free email service provided by Google. It comes with Authorization features and account security options. You can access Gmail in a web browser or the official mobile app. Google supports the use of email clients through POP and IMAP protocols.

The Adapter for Google Mail requires a connection that stores the access and refresh tokens. A valid access token and refresh token are required to issue Google Mail API calls. These tokens are associated with a Google application and a specific Google user.

New Adapter for Apache Parquet

The Adapter for Apache Parquet allows applications to access data from Apache Parquet files stored in various data sources. It is used to generate reports from an Apache Parquet column store, improving analytical performance and reducing time to access data. It is optimized for large and complex data sets. This adapter has read/write capabilities, which enables it to insert data from an application into a column store.

SharePoint Restricted Site Access Support

A Sites.Selected permission is now available for applications under the Microsoft Graph Sites set of permissions. Selecting this permission for your application will, by default, result in your application not having access to any SharePoint site collections. Granting permission for an application to a given site collection can be done by an Administrator. This change enables you to connect from your cloud environment to your on-premise SharePoint.

Using C-based Functionality for gzip Decompression

In Release 9.0.0, the gzip decompression for the Adapter for Google BigQuery and the Adapter for REST uses C-based functionality. In prior releases, gzip decompression uses Java-based functionality.

Fixes

- ReportCaster log and console service REST calls receive http500 Internal Service Error messages. (02057711)
- The cursor is now correctly positioned for Japanese half-width katakana characters appearing in the text editor. (02034777)
- The Broadcast parameter feature broken in 8207.28 was repaired. (02054469)
- JSChart Pie Charts again support otherSliceDrillDown interaction. (02058793)
- Tooltips in charts based on the KPI Trend and Sparkline2 chart extensions can now display a compacted rounded view in dollars instead of the full value. (02030122)
- Headings in Arc Gauge charts no longer fail to appear when displayed by the Google Chrome browser. (02029579)
- The value of the last Vertical Axis field name no longer fails to be displayed in the Bubble charts configured to use Matrix columns. (02028994)
- When data labels are activated in a matrix chart, data values no longer output incorrectly when set as circle markers. (02028914)
- The SQL FETCH FIRST phrase is no longer translated into an IF READLIMIT statement. (02030241)
- Data Migrator Console: Graphics Device Interface leaks due to MFC were resolved. (02048874)
- Data Migrator supports the EXL07 output format. (02034587)
- Data Migrator Console Text Editor ribbon tab HBITMAP leaks have been resolved. (02048874)
- Data Migrator Console GDI leaks have been resolved. (02048874)
- Data Migrator sessions are no longer disrupted sporadically. (02048874)
- The *Proceed to Load* and *Cancel* buttons no longer disappear from the Load Options tab, when the value in the *Key columns derived from* setting is changed. (02046395)
- The join editor in WebFOCUS Designer no longer generates FOC14010 and FOC205 errors when the edit link is selected and DBA is used. (02030901)
- Parquet Files created by External Providers are now supported. (02062763)

- The GIT Adapter now includes the ability to select multiple individual files for a stage, commit, and push operation. (02042128)
- The use of Subtotal SUM with different segment fields in the SUM statement no longer results in a 0 NUMBER OF RECORDS IN TABLE error message. (02034238)
- The use of the Data Profile -> Statistics command on an MSODBC synonym no longer results in an overflow error message. (02033689)
- The Calabrio RESTful API adapter is compatible with the WebFOCUS REST Adaptor. (02031188)
- When creating a DB2 table with a quote in its name ("TEST"TABLE") WebFOCUS no longer returns a "(FOC1500) : [42603] String constant beginning " T1 FOR" not delimited." error message. (02032153)
- Upgrade the Apache Log4j2 Zero-Day to version 2.16.0 to address the CVE-2021-45046 - *Log4j RCE 0-day mitigation* issue. (02070506, 02070556, 02070573, 02070593, 02070668, 02070380, 02070828, 02071227, 02070383)
- The *New PWs don't match* and *Invalid user/pw* messages do not overlap on the Custom Sign-in page. (02041301)
- The *Source Control Commit & Push* operation does not automatically return a Bad SCM Credentials error. (02065958)
- Email Report Distributions no longer fail for all list members when one email address causes an error. (02051278)
- ReportCaster Email distribution schedules using the 'Dynamic Distribution List from Repository Procedure' option no longer returns a (FOC295) A VALUE IS MISSING FOR: &FOCEXURL error message. (02037205)
- Users are no longer unable to save distribution schedules for procedures that include parameters with a FIND clause. (02032979)
- Worker load distributions no longer trigger multiple jobs IDs for a given schedule when using the Job notification plugin. (02033880)
- When displayed on the WebFOCUS Designer Assemble Visualizations page, charts that include multiple filter values and the Search and Selection Controls options no longer fail to display the Page Heading and the filter dialog box no longer obscures the chart display. (02064248)
- The Name column no longer fails to be displayed under the *Choose Columns* option in the Workspaces List View. (02072797)

- The Level 2 Navigation/Sidebar navigation expand icon on the Portal disappears when the panel width is set to auto or max. (02032434)
- When the autoprompt page for a report loads within an extra tall frame, if one of the controls contain enough values to cause paging, the popup for that control no longer opens in a position not immediately visible on the screen. (02043006)
- WebFOCUS Designer now limits the display of data sources to those that are available to the sub-folder selected by the user. (02057415)
- The plus (+) menu on the Welcome page now allows customization. (02052105)
- Application developers can customize the list of available menu options within a portal. (02033332, 02030282)
- Columns no longer fail to appear in the List View of the Workspaces area after the title of a procedure or folder is renamed. (02030067)
- Drilldown is not set when applying conditional styling to reports in WebFOCUS Designer. (02057211)
- The DSML installation no longer fails when Ubuntu 20.04 and kernel 5.11 are installed. (02054089, 02056042, 02063756)
- Pressing the Back button in the Review Parameters page of the WebFOCUS Reporting Server Installation wizard no longer fails to return you to the previous page. (02045740)
- After upgrading to release 8207.28, Tab & Accordion containers on drill-down charts retain their focus after running a drill refresh. (02058142)
- Filter selections defined in Bookmark configurations no longer fail to be applied across multiple portal pages. (02033688)
- When filters included in a saved bookmark configuration are reloaded in one container, they are no longer duplicated to additional open containers. (02067596)
- Parameter prompting no longer fails in a Portal that contain two pages with the same amper variable name. (02053254, 02067587, 02058721)
- Users can run and save visualizations containing double-byte character set data. (02054287)
- Drop-down is not loading values after selecting date in an assembled page filter chain. (02053584)
- The Global Name property is not working between pages within a portal. (02034144)

- Unable to re-order entries in a populate control with values from an external procedure. (02052827, 02030285, 02029400)
- Export is incorrect when the focexec contains both lower and upper case names. (02034720)
- Running an HTML file with a list box control results in a warning message: unresolved parameters with no default value. (02074829)
- Portal does not load in Chrome and results in an error: Reference Error loading HTML page. (02060953)
- In WebFOCUS App Studio, the Calendar Control throws exceptions when clearing. (02074356)
- RESET button does not reset the edit boxes in WebFOCUS App Studio. (02066344)
- When double-clicking a field in a double list control to move to a box, the field remains selected. (02071905, 02072762)
- Unable to enter specific values in the calendar control in WebFOCUS App Studio. (02063335)
- Chaining takes too long to pull data in WebFOCUS App Studio. (02063103)
- The WebFOCUS App Studio Chained Composer list boxes are not working in Apple environments. (02066106)
- Running a report with -REMOTE BEGIN causes the reports to return a FOC205 error when opened in WebFOCUS App Studio. (02040374)
- In WebFOCUS App Studio, after changing the width of a drop-down list, the position of the list changes when scrolling. (02066946)
- Responsive pages show large white space under WebFOCUS App Studio release 8207.28 from previous releases. (02065613)
- Using a HTML filter page in a Business Intelligence Portal results in an error: Uncaught TypeError: Cannot read properties of undefined (reading 'top'). (02060372)
- After upgrading WebFOCUS App Studio, an HTML page does not render resulting in script errors. (02057673)
- In WebFOCUS App Studio, multiselect drop-down parameters do not display correctly when an ampersand (&) is in the value. (02062039)

- ❑ Unable to change the width of the Paging/Search control in WebFOCUS App Studio. (02059220)
- ❑ After expanding popup style control, the control's width is not the same as the drop-down width in WebFOCUS App Studio. (02033681)
- ❑ Font styling does not get applied to Calendar control in WebFOCUS App Studio. (02059168)
- ❑ The Popup Style control and Paging Search control range do not render after reset in WebFOCUS App Studio. (02055273)
- ❑ When using a double list control in WebFOCUS App Studio, the popup style and reset button overlap. (02013223, 02013224, 02029323)
- ❑ In WebFOCUS App Studio, parameters are not passing correctly from HTML page that calls other focexec files. (02057122, 02056364)
- ❑ GroupBox component renders differently in modern browsers in WebFOCUS App Studio. (02056682)
- ❑ Saving a Saved parameter with the same name does not prompt to overwrite in WebFOCUS App Studio. (02052989)
- ❑ In WebFOCUS App Studio, an HTML check box displays an expected value when first run. (02054893)
- ❑ *Loading Screen* continues to display when an HTML page contains a map in WebFOCUS App Studio. (02051784)
- ❑ Paging/Search control renders the wrong range if a control is chained in WebFOCUS App Studio. (02054085, 02060168)
- ❑ Users cannot add a control in a copied panel in WebFOCUS App Studio. (02047403)
- ❑ WebFOCUS App Studio freezes when loading a procedure that contains a custom CSS. (02045089)
- ❑ Update a request based on Map selections does not take multiple parameters in WebFOCUS App Studio. (02054164, 02067477)
- ❑ *Refresh All* removes external CSS properties in WebFOCUS App Studio. (02043478)
- ❑ Unable to change the language of an HTML page in WebFOCUS App Studio. (02039171)
- ❑ The Paging/Search control does not remove the value from the search input after a reset in WebFOCUS App Studio. (02036115)

- The Make Selection is selected instead of the selected value in a drop-down control when set to multiple in WebFOCUS App Studio. (02031836)
- DEFINES are moved when focexec is saved resulting in a Field not found error when editing the saved Focexec. (02078815)
- InfoAssist cannot find some fields when opening an existing report. (02067039)
- Cannot select date function options when creating a *From - To* filter in InfoAssist. (02061920, 02054380)
- DEFINE does not display in the query panel when two-part file name setting is disabled. (02055743, 02053855)
- Joined fields in InfoAssist do not render in the Data pane. (02050826, 02052882)
- Page becomes unresponsive or results in an error when creating a HOLD file and editing the procedure. (02037161)
- Fields do not display in the query panel after a JOIN when two-part file name setting is disabled. (02044569, 02066022)
- InfoAssist stops when two DEFINEs contain the same name. (02045005)
- InfoAssist stops when two HOLD files that are joined are edited to add a COMPUTE. (02044094)
- Inserting a Custom stylesheet in InfoAssist that contains a ROWLIMIT results in the following error : invalid or unknown style id: ROWLIMIT (02041098)
- Cannot edit a chart when created from a HOLD file with format PNG or HTML. (02034803)
- In InfoAssist, when creating a drilldown that passes an amper variable as a constant value, the drill-down target would change to a field in the Drill Down dialog box upon saving and reopening. (02034977, 02089101)
- InfoAssist stops after creating two HOLD files and editing the document. (02034676)
- Deleting a HOLD file from a document will return to the normal report view from layout. (02033503)
- Missing and other operators are not in the List filter after the first filter is set to Parameter in InfoAssist. (02030374)
- An internal exception error occurs when special characters exist in a filename in a Db2 repository. (02031088)

- ❑ InfoAssist filter with a constant value uppercase set to ON results in an error. (02031657)
- ❑ An error occurs when running or reopening a report that was created in Developer Workbench using SQL statements. (02029713 02034098)
- ❑ Populating an HYYMDS date constant filter results in an error. (02030590, 02042404, 02058512, 02054744)
- ❑ Naming a HOLD file the same as the Master File Description will not display the HOLD content. (02030203)
- ❑ The Get Values for a Constant filter type does not display all values. (02028965, 02031506)
- ❑ No option to display file name in List view after upgrade to release. (02072797, 02074284)
- ❑ When right-clicking a menu on a focexec, it only displays three items in the WebFOCUS user interface. (02068151)
- ❑ Deleting a report from Favorites is not deleted and deleting it a second time results in an error. (02069614)
- ❑ Report Title are cuts-off in the Recent or Favorites view when user selects List view. (02044604)
- ❑ The chart's Action Bar is displayed when selecting specific privileges for user. (02035083)
- ❑ Advanced users does not have access to the WebFOCUS Server through a menu on the client. (02034377)
- ❑ Unable to scroll to the top or bottom of long Workspace tree in the Portal using the arrow keys. (02030724)
- ❑ User without WebFOCUS Designer privileges has access from Get Data. (02030556)
- ❑ Duplicate file's XHR response does not contain the file's full path. (02029995)
- ❑ Resizing a Esri map in WebFOCUS Designer removes a layer. (02061367)
- ❑ Unable to translate Esri map controls. (02049366)
- ❑ User sees multiple *My Content* folders for other users after upgrading WebFOCUS to release 8207.28.06. (02075698, 02076109, 02075933, 02076190, 02076226, 02076762, 02076822, 02076542, 02076858, 02077109, 02077112, 02077313, 02077418, 02077423, 02077546, 02077747, 02077671, 02076161, 02081503)

- The Indonesian (IBIWF_language) is not set on the WebFOCUS Reporting Server. (02059063)
- The ./CreateLangRes.sh utility produces an error when used to add a new language. (02057886)
- Receives error running db_replicate from release 8207 to release 8207 of an oracle repository. (02048852, 02055124)
- UOA_CACHECOMS runs many times per day using valuable resources. (02034347)
- Descending order in the WHERE filter is ignored when added to a WebFOCUS Designer page. (02050830, 02054389, 02064690)
- Inserting a custom stylesheet that contains the ROWLIMIT command results in the following error: unknown error message(IA_210805_223710-1). (02041098)
- When WRAP and SQUEEZE are disabled, the display is incorrect. (02040073)
- The escape character displays in report header for variable containing single quotes. (02051954)
- Agent crashes for an Active report with WHEN in used in the stylesheet. (02030962)
- Run With SQL Trace Only Displays in Legacy Homepage. (02078392)
- Next and Last icons are not displayed when search button is clicked in the Paging/Search control.
- Multibyte characters are garbled when procedure uses –HTMLFORM with XLSX format in App Studio. (02034263)
- Changing the title in one of two ACROSS COMPUTE fields effect both in the Report Canvas. (02030854)
- Premium Esri Demographic layer has been added to the MLM Viewer. (02030867)
- An extra Create Report button appears on the InfoAssist ribbon with references to InfoAssist Visualization. (02085761)
- A listbox acts as a multi-select in App Studio after upgrade to Release 8207.28. (02079334, 02081371)
- When using On Demand Paging, drill-down menus are misaligned when the browser is resized to a smaller width. (02030431)

Upgrade Notes

- ❑ As of Release 9.0.0, WebFOCUS imposes more rigorous validation standards for URLs assigned to the HTTP Get message headers. As a result, sign-in requests that do not meet these standards are no longer accepted as valid requests and cause WebFOCUS to generate error messages.

To continue to use this method of submitting sign-in requests through an external proxy server, you must reconfigure the application server that hosts WebFOCUS to allow the URL of the host that originated the sign-in request to remain in the HTTP header of that message instead of replacing it with the URL of the proxy server.

The required configuration updates vary depending upon the application server in use in your installation of WebFOCUS. For more information about the configuration changes required by your application server and proxy server, contact your vendor.

- ❑ As of Release 9.0.0, the TIBCO WebFOCUS system file configuration no longer includes the *ibi_html* directory, located at *drive:\ibi\WebFOCUSrelease\WebFOCUS*, where *release* is the number of your installed release.

If you store customized stylesheet files or other files in the *ibi_html* directory, you must upload them from this directory to the WebFOCUS Repository before installing or upgrading to WebFOCUS Release 9.0.0 or higher. If you do not take this precaution, you will lose customized files stored in the *ibi_html* directory.

In addition, you must revise the link to these customized stylesheet files in existing procedures to properly identify the new location of these files within the WebFOCUS Repository.

For more information about how to upload files to the WebFOCUS Repository, see the *Uploading Files* topic in the *TIBCO WebFOCUS® User's Guide* technical content.

- ❑ In WebFOCUS Release 9.0.0, the default value assigned to the Default Autoprompt Template setting changes from *Responsive* to *Designer*.
 - ❑ If you previously selected an alternative value for this setting, that value remains the same after the upgrade, and no further changes are necessary.
 - ❑ If you previously accepted the default value of *Responsive*, it is changed to *Designer* after the upgrade. If you wish to continue to use the *Responsive* template as your default autoprompt template, you must select *Responsive* again after the upgrade to reestablish it as your default autoprompt template.
- ❑ Upgrades to App Studio Release 9.0.0 from Release 8206 or 8207 are not supported. These upgrades will be available in a future release.

- ❑ The *ibi-protected* folder is not restored from the *backup_files* directory after a WebFOCUS or WebFOCUS Integrated installation upgrade. This folder is not restored by design because the *ibi-protected* folder can be quite large, and the installation program may stop responding during the copy phase. You can restore the *ibi-protected* directory manually from the *backup_files* folder, as needed.

After copying the directory:

- ❑ **For Windows.** Copy the *managed_schema* file from *drive:\ibi\install_directory\features\search\solr\ibi-protected\conf* to *drive:\ibi\install_directory\Solr\solr\server\solr\ibi-protected\conf*, where *install_directory* is the directory where you installed WebFOCUS.
- ❑ **For UNIX.** Copy the *managed_schema* file from *../\ibi/install_directory/features/search/solr/ibi-protected/conf* to *../\ibi/install_directory/Solr/solr/server/solr/ibi-protected/conf*, where *install_directory* is the directory where you installed WebFOCUS.
- ❑ **For the Integrated installation.** Copy the *managed_schema* file from *drive:\ibi\install_directory\WebFOCUS\features\search\solr\ibi-protected\conf* to *drive:\ibi\install_directory\Solr\solr\server\solr\ibi-protected\conf*, where *install_directory* is the directory where you installed WebFOCUS.
- ❑ In Release 9.0.0, the *Add container* option was removed when creating charts and reports in WebFOCUS Designer. Only the *Convert to page* option is available to transform a chart or report into an authored page, while the *Add container* option remains available when using the page canvas.

To transform a chart or report into an authored page and add a second item to it, click *Convert to page* and then add another container by clicking *Add container*, dragging a container from the Container tab, or dragging a field from the field list into an empty area of the page.
- ❑ In Release 9.0.0, App Studio only supports new installations. There is no upgrade support from previous releases. Therefore, any preferences in App Studio must be reapplied in the Release 9.0.0 installation. Upgrade support is planned for Release 9.0.1.

Retirement and Addition of Esri Demographic Layers

As of December 2021, Esri has ended support for select demographic map layers, which are configured as part of the default WebFOCUS installation. The following demographic layers have been retired:

- ❑ USA Median Age 2017

- USA Population Density 2017
- USA Population Growth 2017-2022
- USA Unemployment Rate 2017

The following demographic layers have been added in their place:

- ACS Household Size Variables – Boundaries
- ACS Housing Units Occupancy Variables – Boundaries
- ACS Internet Connectivity Variables
- ACS Labor Force Participation by Age Variables
- ACS Median Age Variables
- ACS Median Household Income Variables – Boundaries
- ACS Vehicle Availability Variables
- 2021 USA Tapestry Segmentation
- 2021 USA Median Age
- 2021 USA Median Home Value
- 2021 USA Median Household Income
- 2021 USA Population Density
- 2021 USA Unemployment Rate
- 2021-2026 USA Population Growth

For more information about the retired layers, see <https://www.esri.com/arcgis-blog/products/esri-demographics/announcements/u-s-and-canada-2017-demographic-maps-to-be-retired/>

Known Issues

- Need marking solution for unclassified material in WebFOCUS. 02030206
- NFR Portal subsequent folder is not showing when you run a portal. 02051677

Browser Information

- ❑ The 900 USS Reporting Server installation on z/OS fails because the value used to set directory names for EDAHOME/EDACONF generates invalid names. As a workaround, in the instructions located in the ireadme.txt file add the instructions to change the version number between steps 1 and 2 as shown in the following revision.

1. download HOME.DATA

Edit HOME.DATA(IWAYREL) and update second line from:

uss,9.,/pgm/edaporte4/M729000D/tape

to

uss,90.,/pgm/edaporte4/M729000D/tape

2. start ISETUP install from HOME.DATA(ISETUP)

Browser Information

This release is certified and has been tested with Google Chrome version 92, Firefox version 90, Microsoft Edge Chromium version 92 (WebFOCUS only), Microsoft Edge version 44 (WebFOCUS only). Internet Explorer Compatibility mode is not supported. For additional browser details, see [Browser Information](#).

For more information on supported clients and more, see [Release Information](#).

Release Information

Use the topics to navigate between relevant information for TIBCO WebFOCUS® 9.0.0.

In this chapter:

- [Browser Information](#)
- [TIBCO WebFOCUS Accessibility Compliance](#)
- [TIBCO WebFOCUS Client Supported Operating Systems](#)
- [TIBCO WebFOCUS Support Statement for Java Platform, Standard Edition \(Java SE\)](#)
- [Supported Web and App Servers](#)
- [Supported RDBMS and Drivers](#)
- [Localization \(NLV\) and NLS Support](#)
- [TIBCO WebFOCUS Reporting and Microsoft Office Support](#)

Browser Information

This topic describes information for the available web browsers for this release of WebFOCUS®.

- We evaluate the browser vendor support policies and certifies new browser versions on an ongoing basis, as new versions are made available.
- We recommend following the usage requirements of the browser vendor to ensure your browser is secure and supports the web standards that power current web-based capabilities.

Supported Web Browsers

Release	Google Chrome™	Firefox®	Microsoft® Edge® (WebFOCUS only)
9.0.4	Version 106	Version 105	Version 106
9.0.3	Version 104	Version 103	Version 104

Browser Information

Release	Google Chrome™	Firefox®	Microsoft® Edge® (WebFOCUS only)
9.0.2	Version 102	Version 100	Version 102
9.0.1	Version 99	Version 98	Version 99
9.0.0	Version 98	Version 96	Version 98
8207.27	Version 92	Version 90	Version 92 (WebFOCUS)
8207.27	Version 89	Version 86	Version 89 (WebFOCUS)
8207.26	Version 88	Version 85	Version 87 (WebFOCUS)
8207.25	Version 87	Version 84	Version 87 (WebFOCUS)
8207.24	Version 87	Version 83	Version 87 (WebFOCUS)
8207.23	Version 87	Version 83	Version 86 (WebFOCUS)
8207.22	Version 87	Version 82	Version 86 (WebFOCUS)
8207.21, 8207.20 and 8207.19	Version 86	Version 81	Version 85 (WebFOCUS)
8207.18 and 8207.17	Version 85	Version 80	Version 85 (WebFOCUS)
8207.16 and 8207.15	Version 84	Version 79	Version 83 (WebFOCUS)
8207.14, 8207.13, and 8207.12	Verison 83	Version 77	Version 83 (WebFOCUS)

Release	Google Chrome™	Firefox®	Microsoft® Edge® (WebFOCUS only)
8207.11	Verison 83	Version 76	Version 81 (WebFOCUS)
8207.10 and 8207.09	Version 81	Version 75	Version 81 (WebFOCUS)
8207.08	Version 81	Version 75	Version 80 (WebFOCUS)
8207.07	Version 80	Version 74	Version 80 (WebFOCUS)
8207.06	Version 80	Version 73	Version 80 (WebFOCUS)
8207.05	Version 80	Version 73	Version 44 (WebFOCUS)
8207.02 to 8207.04	Version 79	Version 73	Version 44 (WebFOCUS)
8207.01	Version 78	Version 70	Version 44 (WebFOCUS)
8207	Version 77	Version 69	Version 44 (WebFOCUS)

- Effective April 1, 2021, all new releases of TIBCO WebFOCUS® following Release 8207.27.0 will no longer support Microsoft Internet Explorer 11 as a certified browser.
- Internet Explorer® Compatibility mode is not supported.
- The Microsoft® Edge® browser is not supported with TIBCO WebFOCUS® App Studio.
- See the following information published by Mozilla® for information on Firefox® browser release management: https://wiki.mozilla.org/Release_Management/ESR_Landing_Process
- Simple HTML reports created with WebFOCUS can be viewed on any browser.

- ❑ Drill-down links do not work when using an embedded PDF viewer available in some browser versions. Refer to the browser's configuration information on how to change the Application Options settings for the relevant content types so that the browser will automatically use Adobe® Reader®.
- ❑ Acrobat® Reader® DC is certified, and Adobe® XI and Adobe® X are supported.
- ❑ For information on certain conditions that can force Microsoft® Internet Explorer® to display pages in a document mode different from the one specified in the webpage, see [Internet Explorer Browser Document Compatibility](#).
- ❑ For information on the expected behavior of Microsoft® Internet Explorer® (32-bit) on a Windows x64 machine, see the Microsoft® TechNet article [Run IE 32bit on Windows 10 X64](#).
- ❑ Support for presenting images and graphs in HTML, DHTML, and DHTML compound reports is provided using an image embedding facility based on the client browser. Output generated by Microsoft® Internet Explorer® browsers or in scenarios where the browser is unknown (such as when distributed by ReportCaster) supports image inclusion through the creation of a web archive file (.mht). For all other browsers, images are base64 encoded within the generated .htm file.
- ❑ If you are using Microsoft® Internet Explorer® 11 on a Windows® 2012 R2 OS and you attempt to run an object (such as a report or chart in InfoAssist), Microsoft® Internet Explorer 11 opens it in a new window instead of targeting the object to a specific frame. For example, in InfoAssist, the New Window Runtime opens a new browser window that shows the running image, which then replaces that page with the output. Since Microsoft® Internet Explorer 11 does not allow the replacement of that window, it opens a new window instead. This browser limitation can be remedied by an [administrator](#).
- ❑ Because certain browsers impose their own character limits on text in a tooltip, longer tooltips may be truncated. For example, in Microsoft® Internet Explorer, this limit is 512 characters, while in Google Chrome™ the limit is 1024.

Supported Mobile Browsers

WebFOCUS Release	iOS Version	Browser	WebFOCUS Mobile App Version
Release 9.0.0 and higher	iOS Version 15	Safari	Version 4.0.4

WebFOCUS Release	iOS Version	Browser	WebFOCUS Mobile App Version
Release 9.0.0 and higher	iOS Version 15	Chrome	Version 4.0.4
Release 9.0.0 and higher	iOS Version 14	Safari	Version 4.0.4
Release 9.0.0 and higher	iOS Version 14	Chrome	Version 4.0.4
Release 9.0.0 and higher	Android Version 11	Chrome	Version 4.0.4
Release 9.0.0 and higher	Android Version 10	Chrome	Version 4.0.4

TIBCO WebFOCUS Accessibility Compliance

TIBCO Software Inc is committed to providing high-quality products and services that are both useful and accessible to all users, including individuals with disabilities.

Measures to Support Accessibility

TIBCO Software Inc takes the following measures to ensure accessibility of WebFOCUS.

Our agile process incorporates accessibility evaluation for the [WCAG 2.1](#) Level AA, [Revised Section 508](#), and [European Standard EN 301 549](#) standard/guidelines in all phases of design, development, and testing. Coding is compliant to W3C standards for HTML, CSS, WAI-ARIA, and JavaScript.

TIBCO Software Inc intends to help organizations meet these objectives by providing software tools that are capable of producing applications that function within the accessibility standard/guidelines. The actual compliance of any given application will be dependent upon the proper use of TIBCO Software Inc' tools as well as the accessibility compliance of the other hardware and software components with which our software interoperates.

For Services, TIBCO Software Inc takes a collaborative approach with the client in addressing the accessibility requirements of a given services engagement. TIBCO Software Inc looks to the client to specify the accessibility requirements in the applicable statement of work that will meet the required accessibility standard/guidelines. TIBCO Software Inc demonstrates its COTS product accessibility functionality specific to the client requirements and obtains client's approval prior to proceeding with development using the demonstrated functionality.

Conformance Status

WebFOCUS Release 8207.26 is partially conformant for the following accessibility standard/guidelines. Partially conformant means that some parts of the content do not fully conform to the accessibility standard. See *Accessible Functional Scope*, *Limitations*, and the [WebFOCUS 8207 Accessibility Conformance Report \(VPAT 2.4 INT\)](#) for additional information.

Standard/Guideline	Included in Report
Web Content Accessibility Guidelines 2.0	Level A Level AA
Web Content Accessibility Guidelines 2.1	Level A Level AA
Revised Section 508 standards published 01/18/2017 and corrected 01/22/2018	
EN 301 549 Accessibility requirements suitable for publish procurement of ICT products and services in Europe - V3.1.1 (2019-11)	

Accessible Functional Scope

WebFOCUS Release 8207.26 gives authors the tools and guidance to create and publish an accessible WebFOCUS two-level top navigation V5 Portal with Designer pages and WebFOCUS generated accessible reports to allow end users to perform their own ad hoc query and reporting activities. Accessible functionality does not include content authoring (development) and administrative interfaces.

The WebFOCUS accessible report formats include the following:

- In-document Analytics (Active Technologies) - AHTML
- Excel - XLSX
- PDF - See the WebFOCUS PDF Report Accessibility Support topic in the [Creating Reports with WebFOCUS Language](#) PDF
- PowerPoint - PPTX
- HTML - [Technical Memo 4505](#) : WebFOCUS HTML Report Accessibility Support

WebFOCUS accessible reports may also be distributed or run from a web page or application. The accessibility compliance of the web page or application is the author's responsibility.

WebFOCUS Release 8207.12 and earlier 8207 releases support the following WebFOCUS accessible report formats:

- PDF - See the WebFOCUS PDF Report Accessibility Support topic in the [Creating Reports with WebFOCUS Language](#) PDF
- HTML - [Technical Memo 4505](#) : WebFOCUS HTML Report Accessibility Support

Compatibility with Browsers and Assistive Technology

Testing was conducted using a variety of operating systems, browsers, automated testing tools, and screen readers including Windows® 10 operating system with the Google Chrome™ browser and NVDA or JAWS® 2020 screen readers.

Google Chrome™, Firefox®, Microsoft® Edge®, and Microsoft® Internet Explorer® browsers are supported to varying degrees dependent upon user's customizations and integration with assistive technology and other 3rd party extensions

For JAWS® browser requirement information, see the [Freedom Scientific](#) website

For more details on browser support, see WebFOCUS 8207 [Browser Information](#).

Technical Specifications

Accessibility of WebFOCUS relies on the following technologies to work with the particular combination of web browser and any assistive technologies or plugins installed on your computer:

- HTML
- WAI-ARIA

- CSS
- JavaScript

These technologies are relied upon for conformance with the accessibility standards used.

Limitations

Despite our best efforts to ensure accessibility of WebFOCUS accessible features, there may be some limitations. Please contact Customer Support Services if you observe an issue using accessible features, see *Accessible Functional Scope*, or to request accessibility compliance for additional functionality.

Known limitations:

- Accessible functionality** scope is as stated in *Conformance Status*.
- Non-text Content: Text Alternatives:** WebFOCUS 8207 provides a way for content authors to include text alternatives and that content will be read by a screen reader; however, it is up to content authors to provide descriptive alternative text.
- Sensory Characteristics:** Visualizations/Charts: It is up to content authors to follow accessibility best practices; however, WebFOCUS 8207 will provide enhanced alternatives for communicating sensory information in visualization and charts in an upcoming release.
- Reflow:** Data tables behave as tables and do not reflow.
- Headings and Labels:** WebFOCUS 8207 provides a way for content authors to include proper headings & labels and that content will be read by a screen reader; however, it is up to content authors to maintain accessibility by implementing best practices.
- Language of Parts:** Language is applied to the document at the meta level.
- Functional Performance Criteria (With Limited Language, Cognitive, and Learning Abilities):** Data tables in WebFOCUS 8207 are complex and offer extended functionality. It is the responsibility of the content authors to identify the functional requirements for the user audience and apply those considerations when creating WebFOCUS report procedures.
- General (informative) List of available action:** In V5 Portal, Designer Pages, and In-document Analytics (AHTML), available actions are accessed by entering CTRL+SHIFT+F10.
- Change Notification:** Will be improved in an upcoming release for the Online Help.

- ❑ **Product Documentation:** The accessibility of the 'Online Help' section will be improved and available in an upcoming release. In the current release, users may experience the following:
 - ❑ Text obstruction on zoom
 - ❑ Difficulty navigating from the left pane to the right pane
 - ❑ Print menu flyout may not close on ESC or by moving focus.

TIBCO WebFOCUS Client Supported Operating Systems

The following table describes the WebFOCUS client supported operating systems.

Vendor (Processor/Architecture)	Operating System Version
Microsoft® Windows® 64-bit	Windows® Server 2019 You must have Oracle® Java® 8 installed on the machine. For more information, see the Installation content for your product.
	Windows® Server 2016, 2012 R2, 2012
	Windows® 10 (limited to development environments only)
IBM® i	V7R1
IBM® (pSeries 64)	AIX 7.2 and AIX 7.1
IBM® (zSeries)	Enterprise Linux® Kernel-3.0.101-glibc-2.11 and up
Oracle® (Sparc 64-bit)	Oracle® Solaris 11
	Oracle® Solaris 10
Oracle® (x86)	Oracle® Solaris 11
	Oracle® Solaris 10

Vendor (Processor/Architecture)	Operating System Version
Red Hat® (x86_64)	Enterprise Linux® 6.1 / Kernel 2.6.32 - glibc-2.6 and up
	Enterprise Linux® Kernel-3.10.0-glibc-2.17 and up
Red Hat® (IBM Power Systems)	Enterprise Linux® 6.1 / Kernel 2.6.32 - glibc-2.6 and up
Hewlett Packard® (Itanium IA64)	HP-UX 11i (11.31)

TIBCO WebFOCUS

Support Statement for Java Platform, Standard Edition (Java SE)

This topic contains information regarding WebFOCUS release support for the different Java® SE versions that WebFOCUS and ReportCaster web applications are deployed on. It is also important to verify the Java® version requirements of the web application server version before installing or upgrading Java® software.

Please note:

- Maintenance updates of Java® SE within the same version level are supported.
- Using earlier versions of WebFOCUS with later JDK versions is supported. However, the solution to some problems might require an upgrade to a later WebFOCUS or JDK service pack.
- Support for later Java® SE major releases requires certification and is not supported unless specified in the following chart.
- When reference is made to certified, it means that the specified release(s) of Java® have been tested within the specified Release QA (Quality Assurance) certification process.

Please report any problems you experience with a certified or supported version of Java® to Customer Support Services for evaluation.

As of WebFOCUS Release 8207, the minimum JVM version requirement for the application server that WebFOCUS and ReportCaster web applications are deployed on is JVM Version 8.

Java SE Release Certification Status. Java 8 and 11 distributions by Oracle® and OpenJDK are certified with this release.

Supported Web and App Servers

Vendor Web Server & Application Server	Version
Apache Software Foundation (Apache Tomcat®)	9
Apache Software Foundation (Apache HTTP®)	2.4 2.2
IBM® HTTP Server	8.5.5
IBM® WebSphere®	9
Microsoft® (IIS)	10 and higher
Oracle® WebLogic	12c (12.2.2.1, 12.1.3.0.0)
Red Hat® (JBoss)	Enterprise Application Platform 7.1.3

Supported RDBMS and Drivers

Vendor (RDBMS)	Version	JDBC Driver
Apache Software Foundation (Apache Derby®)	10.9.1.0	derbyclient.jar

Vendor (RDBMS)	Version	JDBC Driver
Microsoft® (MS SQL Server®)	2019	<p>Microsoft JDBC Driver 8.4 for SQL Server</p> mssql-jdbc-8.4.1.jre14.jar mssql-jdbc-8.4.1.jre11.jar mssql-jdbc-8.4.1.jre8.jar <p>Microsoft JDBC Drive 8.2 for SQL Server</p> mssql-jdbc-8.2.2.jre13.jar mssql-jdbc-8.2.2.jre11.jar mssql-jdbc-8.2.2.jre8.jar <p>Microsoft JDBC Drive 7.4 for SQL Server</p> mssql-jdbc-7.4.1.jre12.jar mssql-jdbc-7.4.1.jre11.jar mssql-jdbc-7.4.1.jre8.jar
	2017	mssql-jdbc-6.2.2.jre8.jar Download available from https://www.microsoft.com/en-us/download/details.aspx?id=55539
	2016 2014 2012 2008	mssql-jdbc-6.2.2.jre8.jar Download available from https://www.microsoft.com/en-us/download/details.aspx?id=55539 sqljdbc42.jar Download available from https://www.microsoft.com/en-us/download/details.aspx?id=54671

Vendor (RDBMS)	Version	JDBC Driver
IBM ® (Db2)	11.5 10.5 9.7 FP4	db2jcc4.jar
Oracle® (Database)	19c 18c 12c Release 2	ojdbc8.jar
	12c Release 1	ojdbc7.jar
	11g Release 2	ojdbc6.jar
	8.0.x 5.7.x 5.6.x	mysql-connector-java-8.0.19.jar
Postgresql	13.6 11.1 10.7 9.6.x 9.5.x	postgresql-42.2.11.jar

Localization (NLV) and NLS Support

TIBCO Software Inc provides National Language Support and Localized Version support for WebFOCUS and App Studio in select languages. Requests for additional languages may be submitted by contacting Customer Support Services and opening a New Feature Request.

National Language Support (NLS)

National Language Support (NLS) involves reading and interpreting data stored in code pages that represent the character sets of various international languages. TIBCO Software Inc's proprietary NLS application programming interface (API) code-page architecture transcodes data between application client and server components and manages all sorting, case conversion, and formatting for dates, currency, and numbers.

Localized Version Support (NLV)

A localized version is a software product in which the user interface (for example, menus and utilities) appears in a particular language. TIBCO Software Inc localized versions are positional. Each button or menu choice is always in the same relative position in the product, and only the text of the labels changes. Therefore, it is easy for anyone who is familiar with an TIBCO Software Inc' product in one language to support that product in another language.

Localized versions have complete National Language Support (NLS) capability. You can access data for any supported language, with all national characters processed, displayed, and printed correctly.

TIBCO WebFOCUS and TIBCO WebFOCUS Reporting Server

TIBCO WebFOCUS Reporting Server Release supports the following code pages for data processing:

ASCII Platforms

137 - U.S. English/Western Europe (Latin 1)	923 - Latin 9 (ISO 8859-15)
437 - U.S. English	942 - Japanese (shift-JIS)
813 - Greek (ISO 8859-7)	946 - Simplified Chinese
850 - Western Europe	949 - Korean
852 - Central Europe	1089 - Arabic (ISO 8859-6)
857 - Turkish	1250 - Central Europe (Latin 2)
860 - Portuguese	1251 - Cyrillic (Windows)
862 - Hebrew	1252 - Windows (Latin 1)

863 - French Canadian	1253 - Greek (Windows)
865 - Nordic	1254 - Turkish (Windows)
866 - Cyrillic II	1255 - Hebrew (Windows)
869 - Greek	1256 - Arabic (windows)
912 - Central Europe (ISO 8859-2)	1257 - Baltic (Windows)
915 - Cyrillic (ISO 8859-5)	10942 - Japanese (EUC)
916 - Hebrew (ISO 8859-8)	10948 - Traditional Chinese
920 - Turkish (ISO 8859-9)	65001 - Unicode (UTF-8)
921 - Baltic (ISO 8859-13)	

EBCDIC Platforms (IBM z/OS and IBM i)

37 - IBM EBCDIC United States	500 - IBM EBCDIC International European
273 - IBM EBCDIC Germany F.R./Austria	870 - IBM EBCDIC Multilingual (Latin 2, Eastern Europe)
277 - IBM EBCDIC Denmark, Norway	871 - IBM EBCDIC Iceland
278 - IBM EBCDIC Finland, Sweden	875 - IBM EBCDIC Greece
280 - IBM EBCDIC Italy	1025 - IBM EBCDIC Cyrillic, Multilingual
284 - IBM EBCDIC Spain/Latin America	1026 - IBM EBCDIC Turkish
285 - IBM EBCDIC United Kingdom	1047 - IBM EBCDIC Open Systems (Latin 1)
297 - IBM EBCDIC France	1112 - IBM EBCDIC Baltic Multilanguage
424 - IBM EBCDIC Israel (Hebrew)	65002 - Unicode (UTF-EBCDIC)

Language

The LANGUAGE parameter specifies the National Language Support (NLS) environment. It sets the language of server error messages and can also be used to set the language of report titles if the Master File contains alternate language TITLE attributes. For more information, see the *Describing Data With TIBCO WebFOCUS® Language* technical content.

The TIBCO WebFOCUS Reporting Server Console, TIBCO® Data Migrator, and the Data Management console support the following languages.

(* Localized versions)

- AMENGLISH
- AUENGLISH*
- ARABIC
- B-PORTUGUESE
- CAENGLISH*
- CROATIAN
- CZECH
- DANISH
- DUTCH
- ENGLISH
- ESTONIAN
- FINNISH
- FRENCH*
- GERMAN*
- GREEK
- HEBREW
- HUNGARIAN
- ITALIAN
- JAPANESE*

- KOREAN
- LATVIAN
- LITHUANIAN
- NORWEGIAN
- POLISH
- PORTUGUESE
- ROMANIAN
- RUSSIAN
- S-CHINESE*
- SLOVAK
- SPANISH*
- SWEDISH
- T-CHINESE*
- THAI
- TURKISH
- UKENGLISH

TIBCO WebFOCUS Client and ReportCaster

The following localized versions are available for the WebFOCUS Client and ReportCaster.

Translation and certification of the following languages is done by TIBCO:

GROUP 1 (Full Translation)

- English (Australian, Canadian, United Kingdom, and United States)
- French (Canadian and Standard)
- German
- Spanish

GROUP 2 (Partial Translation)

Limited areas have been translated and tested by TIBCO Agents and Partners. Strings that translation has not been provided for will display in English.

- Chinese (Simplified)
- Brazilian Portuguese
- Italian
- Japanese

GROUP 3 (Evaluating)

Limited areas have been translated and tested by TIBCO Agents and Partners for demonstration purposes. Strings that translation has not been provided for will display in English. Contact Customer Support for instructions to enable.

- Korean

TIBCO WebFOCUS Reporting and Microsoft Office Support

This topic provides details on the support of WebFOCUS reporting formats that generate output in Microsoft® Office® products. It also provides usage considerations for hyperlinks that execute dynamic drill-down requests to procedures protected by WebFOCUS security.

TIBCO WebFOCUS Reporting Formats and Microsoft Product Association

The following table shows the WebFOCUS formats that create Microsoft® Excel® and PowerPoint® reports, the Microsoft® Office® application associations, and the Windows operating system version availability.

WebFOCUS Formats	Microsoft Office Products	Windows Operating System
XLSX	Microsoft Office 365, Microsoft Office 2016, 2019	Windows 10
	Microsoft Office 2016, 2013, 2010, 2007	Windows 8
	Microsoft Excel Viewer 2007	Windows 7

WebFOCUS Formats	Microsoft Office Products	Windows Operating System
PPTX	Microsoft Office 365, Microsoft Office 2016, 2019 Microsoft Office 2016, 2013, 2010, 2007 Microsoft PowerPoint Viewer 2010	Windows 10 Windows 8 Windows 7
	Windows XP Windows 2000	
	Windows XP Windows 2000	
EXL2K (Functionally stabilized)	Microsoft Office 2003, 2000	Windows XP Windows 2000
	Microsoft Office 2003, 2000	Windows XP Windows 2000

For additional information on Microsoft Office releases compatible with Windows operating systems, see [Get Windows 10 App](#), which has a customized compatibility report for each PC, and provides a unified compatibility view of a PC, its onboard devices, and applications.

TIBCO WebFOCUS

EXL2K and PPT Formats and Microsoft Office Suite Support

Due to file type and content security policy changes implemented by Microsoft, the WebFOCUS EXL2K and PPT formats are not supported with Microsoft Office 2013 and higher. The WebFOCUS XLSX and PPTX formats fully support the Microsoft Excel® XLSX and Microsoft PowerPoint® PPTX file types and content security policies of Office 2013 and higher.

Microsoft

Office 2003 Support

See [Get Windows 10](#), which has a customized compatibility report for each PC, and provides a unified compatibility view of a PC, its onboard devices, and applications. In WebFOCUS products, although you will still be able to start and work in Microsoft Office 2003 applications, Microsoft recommends that you upgrade to a later version of Office in order to continue to receive support and updates. If your organization uses Office 2003 with the Windows® XP operating system, see [Support for Windows XP ended](#) for information on the end of support for Microsoft Office 2003 and Windows XP SP3.

For information on opening, editing, and saving documents, workbooks, and presentations that were created in the later versions of Microsoft Excel and PowerPoint, see [Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint File Formats](#).

TIBCO WebFOCUS

EXL2K and PPT Formats and Microsoft Office Viewer Products Support

Microsoft Excel Viewer and PowerPoint Viewer are read-only products. They permit only the display and printing of Microsoft Excel and PowerPoint data. The WebFOCUS EXL2K and PPT reports are not supported in any release of the Microsoft Excel Viewer and the Microsoft PowerPoint Viewer. The WebFOCUS XLSX and PPTX formatted reports are supported and can be viewed with the Microsoft Excel Viewer and Microsoft PowerPoint Viewer, respectively.

Microsoft has released statements that older releases of the Microsoft Excel and PowerPoint Viewer are no longer supported. For information on the supported versions of Microsoft Office Viewer products, see [Supported versions of the Office viewers](#). The Microsoft Office Viewer is available from the [Microsoft Download Center](#).

Microsoft Office 365 Support

Microsoft Office 365™ offers the local installation of Microsoft Excel and PowerPoint 2013. It works with the Office 2010 release and provides limited functionality with Office 2007.

Microsoft Office 365 also permits uploading Microsoft Excel and PowerPoint files to the cloud, where they can be accessed on most devices using Office Online. For information on the Microsoft Office 365 plans and features, see [Office 365 for business FAQ](#).

You can use Microsoft Office 365 to access WebFOCUS XLSX and PPTX reports. First, create the XLSX and PPTX reports locally as HOLD files, or display the reports on the screen using the PCHOLD command, and then save the reports to a local directory. The saved files can be uploaded and stored in OneDrive® for Business. Once uploaded to the cloud, the files can be accessed using Office Online.

For information on saving WebFOCUS reports, see the *Creating Reports with WebFOCUS Language* manual listed in *Recommended Reading*.

For information on the differences in features available in Excel Online and PowerPoint Online, and in Microsoft Office 2013, see [Office Online Service Description](#).

For more information on working with Office Online and OneDrive for Business, see [Using Office Online in OneDrive](#).

Usage

Consideration When Using Hyperlinks to Run Reports

Selecting a hyperlink in a WebFOCUS report, to execute a drill-down request to run a procedure on a secured WebFOCUS web environment, requires the security context or any session-related cookies to be inherited. Microsoft Office products do not natively inherit the security context or any session-related cookies created by a web-based application.

The following options are available to configure your web environment so that hyperlinks in WebFOCUS reports will be functional within Microsoft Office products.

- Configure WebFOCUS authentication to allow anonymous access. For more information, see the *WebFOCUS Security and Administration* manual.
- Use SSO with IIS/Tomcat Integrated Windows Authentication. Renegotiation occurs automatically and the Excel and PowerPoint reports display correctly.
- As of WebFOCUS Release 8, the Remember Me feature can be enabled on the Sign-in page. If the end user uses the Remember Me feature, a persistent cookie is used. For more information on how Microsoft Office products handle session-related information, see [Error message when clicking hyperlink in Office: "Cannot locate the Internet server or proxy server.](#)

TIBCO WebFOCUS DOC Format

The WebFOCUS standard for styled and printable documents is the Acrobat® PDF format. The WebFOCUS PDF format creates Acrobat PDF documents. The WebFOCUS DOC format produces a character-based file, not a Microsoft Word document.

Recommended Reading

[WebFOCUS EXL07/XLSX Format Supported Features Release Roadmap](#)

[WebFOCUS PPTX Format Supported Features Release Roadmap](#)

[Microsoft Windows Support Statement for WebFOCUS](#)

[Saving Report Output in Excel XLSX Format](#) topic in the *Creating Reports for TIBCO WebFOCUS® Language* manual, available from the [TIBCO WebFOCUS KnowledgeBase](#).

[Saving and Reusing Your Report Output](#) topic in the *Creating Reports for TIBCO WebFOCUS® Language* manual, available from the [TIBCO WebFOCUS KnowledgeBase](#).

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