

TIBCO Foresight® Archive and Retrieval System

Systems Guide

*Software Release 5.2
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Two-second advantage®



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1 Introduction

Document Purpose

This document describes how to manage and troubleshoot the TIBCO Foresight® Archive and Retrieval System from a systems perspective.

It assumes the reader is familiar with the architecture and components of Foresight® Archive and Retrieval System.

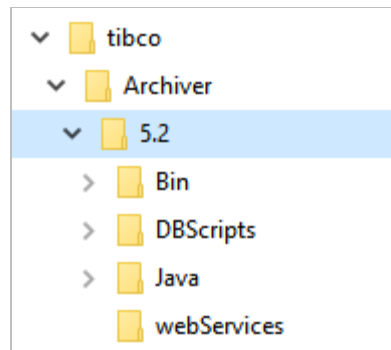
Please see:

- **TIB_fsp_archive_*n.n*_archiveadmin.pdf** for information about using TIBCO Foresight® Transaction Insight® for Foresight Archive and Retrieval System administration.
- **TIB_transactioninsight_*n.n*_installation.pdf** for information about installing Foresight Archive and Retrieval System along with other Transaction Insight® applications.

2 Important Files

Definitions

archive_root refers to the directory where this version of Foresight Archive and Retrieval System is installed. A typical installation directory in Windows would be:

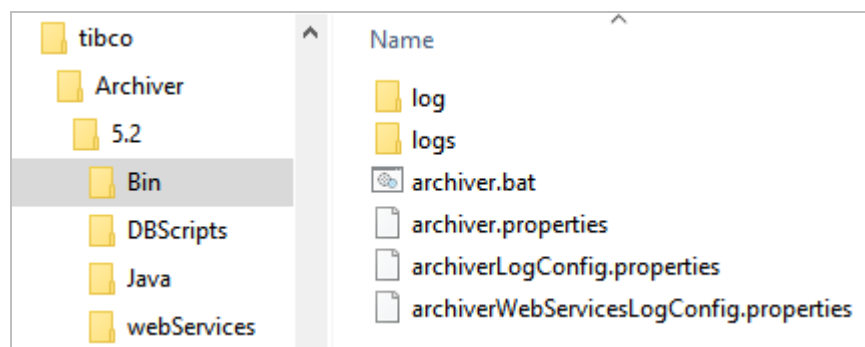


This structure also applies to AIX.

Bin Directory

Foresight Archive and Retrieval System's Bin directory contains the properties files and the scripts used to run Foresight Archive and Retrieval System's importer.

On Windows, it looks like this:



On AIX, the layout is the same except:

- The DBScripts directory does not exist
- webServices becomes WebServices
- archiver.bat becomes archiver.sh.
- archiver.log is in the Bin/log directory

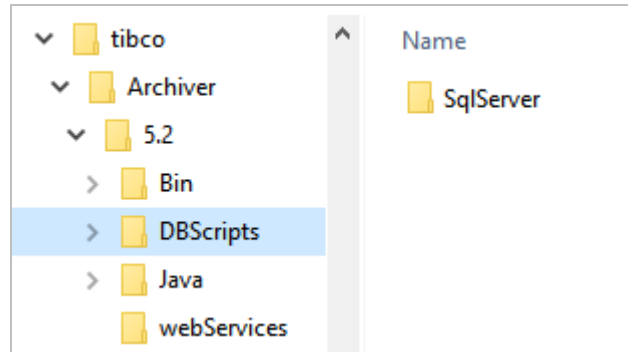
Name	Description
log and logs directory	Directories where Foresight Archive and Retrieval System stores its log files.
archiver.bat (Windows) archiver.sh (AIX)	In an Automator workflow that imports files into the archive, the Foresight Archive and Retrieval System component invokes this file, which runs Archiver.jar.
archiver.log	Contains a one line summary for each invocation of archiver.bat/sh. It will indicate SUCCESS or FAILURE and the command line arguments.
archiver.properties	Contains properties that Foresight Archive and Retrieval System and the Web Services use. The primary ones are the database type and connection string.
archiveLogConfig.properties	Contains properties for configuring log4j. Its log4j.appender.filelog.file property is overridden by the applications. This is used by the Foresight Archive and Retrieval System to determine the contents of the log files in the Bin\log directory.
archiverWebServicesLogConfig.properties	Contains properties for configuring log4j. Its log4j.appender.filelog.file property is overridden by the applications. This is used by the Foresight Archive and Retrieval System web services such as the one in the Archiver_UI_Importer workflow.

DBScripts Directory

Note: On AIX, the DBScripts directory does not exist.

Location is Foresight Archive and Retrieval System's **DBScripts** directory.

This contains the main Jar file and the other Jars it depends on.

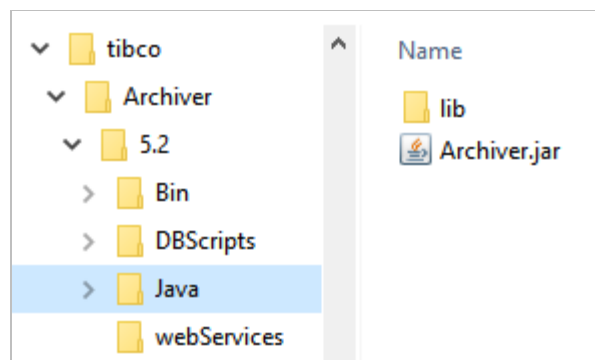


Name	Description
SqlServer	Directory database scripts that may be needed for SqlServer databases.

Java Directory

Location is Foresight Archive and Retrieval System's **Java** directory.

This contains the main Jar file and the other Jars it depends on.

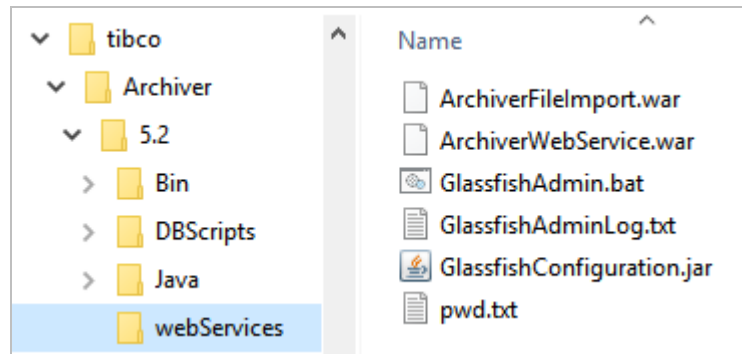


Name	Description
lib	Directory for the Jar files used by Foresight Archive and Retrieval System.
Archiver.jar	Contains the application code for Foresight Archive and Retrieval System. This is called by archiver.bat/sh.

webServices Directory

Location is Foresight Archive and Retrieval System's webServices directory.

This contains the files used to deploy the web services to Payara (Glassfish) and to configure it at installation.



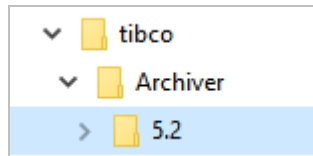
Name	Description
ArchiverFileImport.war	Contains the File import services. These are used by external clients to "import" files into Foresight Archive and Retrieval System outside of the normal Instream/workflow model.
ArchiverWebService.war	Contains the Foresight Archive and Retrieval System Web Service. This is used by the UI to create views of transmissions and documents.
GlassfishAdmin.bat	Windows only. Used to configure Payara (Glassfish) during installation.
GlassfishAdminLog.txt	Log file created by Payara (Glassfish).
GlassfishConfiguration.jar	Used during installation to set up Payara (Glassfish) properties. Users do not use it.
pwd.txt	Used to configure Payara (Glassfish) during installation.
endorsed directory	AIX only. This contains several JAR files that need to be added to the endorsed directory under Java during installation.

3 Command Line

Command Line Directories

The directory to which Foresight Archive and Retrieval System is installed will be referred to as ***\$ArchiverRoot***. This is the directory where Foresight Archive and Retrieval System was originally installed.

In this example, ArchiverRoot is C:\TIBCO\Archiver\5.2:



Directories of interest for running the Foresight Archive and Retrieval System include:

- **Foresight Archive and Retrieval System's Bin directory**
Contains bat and sh files and configuration files. This is referred to as *\$ArchiveBin* in this document.
- **Foresight Archive and Retrieval System's Java directory**
Contains the Archiver.jar file and its associated lib directory where its dependent jar files reside. This is referred to as *\$ArchiveJava* in this document.

Command Line Interface

The recommended usage of the Foresight Archive and Retrieval System Command Line Interface is through archiver.bat or archiver.sh.

archiver.bat or archiver.sh

This file is in Foresight Archive and Retrieval System's Bin directory. It will be archiver.bat for Windows and archiver.sh for Unix.

To execute this file:

```
archiver.bat jarfile configuration_directory -edifile "edi_file_path"  
-detailfile "detail_file_path" -description "description_string" -logdir "logdirectory"  
-importdocuments "yes"
```

Where:

<i>jarfile</i>	(optional) The path and filename of the Archiver.jar file. If omitted, the bat file will use the default installation directory, Archiver.jar in Foresight Archive and Retrieval System's Java directory.
<i>configuration_directory</i>	(required) The directory where the various configuration files for Foresight Archive and Retrieval System reside. This is normally the Bin directory.
<i>detail_file_path</i>	(required) The path and filename for the detail file you are archiving, surrounded by double quotes.
<i>edi_file_path</i>	(required) The path and filename for the EDI file you are archiving, surrounded by double quotes.
<i>logdirectory</i>	(optional) The path to a directory to hold Foresight Archive and Retrieval System log files. Default is the Bin\logs directory.
<i>description_string</i>	(optional) A string that describes this instance of Foresight Archive and Retrieval System. This appears on the portal's Foresight Archive and Retrieval System Action page in the Imported By column. It is useful if you have multiple instances of Foresight Archive and Retrieval System and want the user to be able to see which one archived a file.
<i>importdocuments</i>	Yes for EDIFACT. Otherwise, do not use.

All parameters that describe files and directories should include a complete path.

Archiver.jar

Foresight Archive and Retrieval System can be run directly from the command line with this syntax:

```
java -Dcom.foresightcorp.archiver.config="configuration_dir" -jar "jarfile"  
-edifile "edi_file_path" -detailfile "detail_file_path" -logdir "logdirectory"  
-description "description_string"
```

Where:

<i>jar_file</i>	(required) Path and filename for Archiver.jar. Directory is typically Foresight Archive and Retrieval System's Java directory.
<i>configuration_dir</i>	(required) Directory where the various configuration files for Foresight Archive and Retrieval System reside. This is typically Foresight Archive and Retrieval System's Bin directory.
<i>detail_file_path</i>	(required) Path to the detail file you are archiving. The name must match that of the EDI file. It should have the complete path to the file and be enclosed in quotes.
<i>edi_file_path</i>	(required) Path to the EDI file you are archiving. The name must match that of the detail file. It should have the complete path to the file and be enclosed in quotes.
<i>description_string</i>	(optional) A string that describes which instance of Foresight Archive and Retrieval System was used to archive the file. The user can see this description in the Imported By column on the Foresight Archive and Retrieval System Action page. It should be enclosed in quotes.
<i>logdirectory</i>	(optional) Path to a directory to hold Foresight Archive and Retrieval System log files. Default is the Bin\logs directory.

All parameters that describe files and directories should include a complete path.

Example (run on one line):

```
java -Dcom.foresightcorp.archiver.config="C:\TIBCO\Archiver\5.1\Bin"  
-jar "C:\Foresight\Archiver\5.1\Java\Archiver.jar"  
-detailfile "C:\dtl\Win-837P.dtl" -edifile "C:\EDI\Win-837P.edi"  
-description "Archive1_Search"
```

Configuration Files

Foresight Archive and Retrieval System provides these configuration files in Foresight Archive and Retrieval System's Bin directory. All have been preconfigured by the installation program.

- **archiver.properties** - see below
- **archiverLogConfig.properties** - see page [18](#)
- **archiverWebServiceLogConfig.properties** - used for web service logging. Do not edit this one unless told to do so by TIBCO Foresight.

This default location can be overridden on Foresight Archive and Retrieval System's command line.

archiver.properties

archiver.properties lets you specify the database settings that Foresight Archive and Retrieval System will use. There are two configuration lines, one for the database connection string and one for the database type.

The connection string should point to the Foresight Archive and Retrieval System database.

SQL Server Example

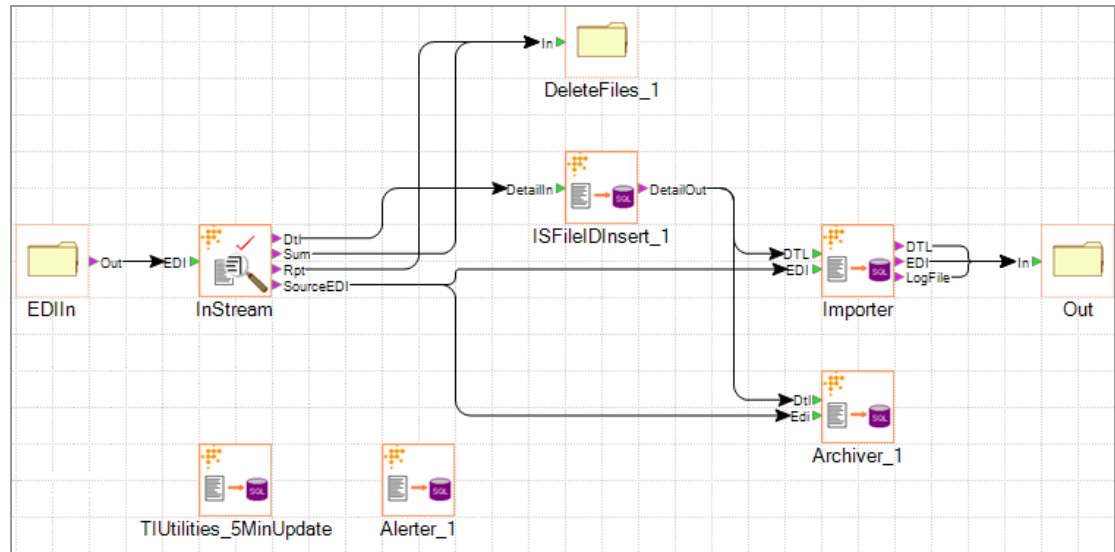
```
foresight.archiver.connectionString=jdbc:sqlserver://na-dub-bigdserver;  
databaseName=ArchiveDemoDB;user=sa;password=rYwhs7738;  
foresight.archiver.databaseType=SQLSERVER
```

Oracle Example

```
foresight.archiver.connectionString=jdbc:oracle:thin:TI430INT_ARCHIVE/  
TI430INT_ARCHIVE@//na-dub-ora10:1521/or10  
foresight.archiver.databaseType=ORACLE
```

4 Workflow

This simple workflow will load files into Transaction Insight and Foresight Archive and Retrieval System and have links between the two. It will work for X12-based and EDIFACT-based data.



- EDIIn** A file starts here. Automator automatically assigns it a Job ID, which follows the file through the workflow in a TRK file.
- Instream** Instream validates it and creates a DTL file that contains a file-level FSUID. See **FSUID_and_AppDocs.pdf**.
- ISFileIDInsert** This modifies the DTL file by replacing the FSUID with the Job ID.
- Importer** This imports the original EDI and the modified DTL file into the Transaction Insight database.
- Archiver** This archives the original EDI and the original or modified DTL file.

This workflow needs the Foresight Operational Monitor “eyeball” icon or the -o command line option.

5 Web Services

Web Services

You have two web services created by the installation program:

- `ArchiverImporterService` - used by external HTTP clients to import files to the Foresight Archive and Retrieval System.
- `ArchiverWebService` - used primarily by the Foresight Archive and Retrieval System Portal. Web Service Locations

The Foresight Archive and Retrieval System web services are Java-based. During installation, the WAR files are copied to Foresight Archive and Retrieval System's `webService` folder and then are deployed to Payara (Glassfish) by the installer. You can also do this from the Payara (Glassfish) console, if needed.

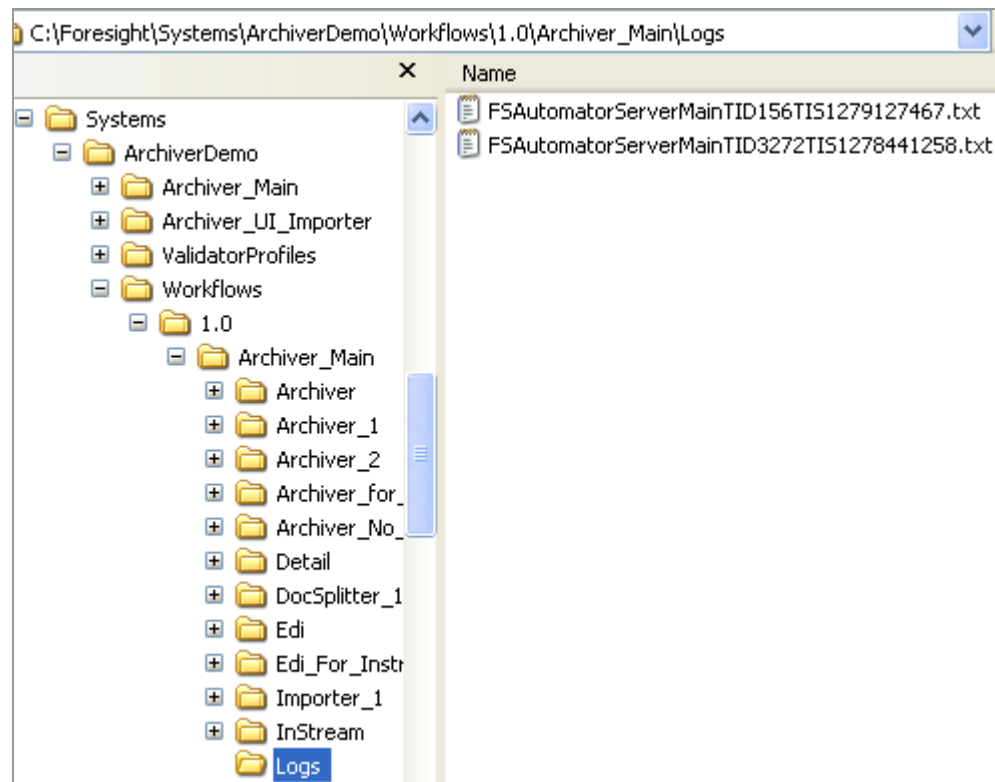
Refer to **Webservices_at_Foresight.pdf** for information about the Foresight Archive and Retrieval System web services.

6 Logging

Automator and Workflow Logging

When using the Foresight Archive and Retrieval System component in a workflow, look in the workflow's **Logs** directory for the log files. This will be at *ForesightRoot\SystemName\SystemName\Workflows\versionNumber\ workflowName\Logs*.

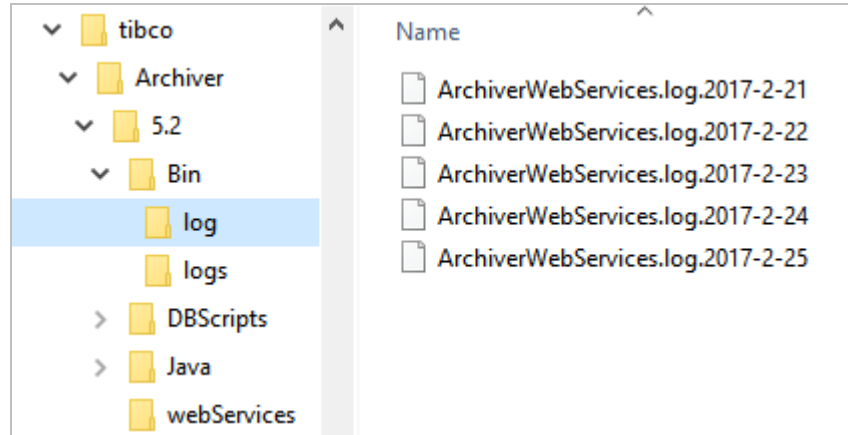
Example:



Each time the workflow starts, a new log is created. It contains information about all components in the workflow. The logging level can be set in TIBCO Foresight® Studio®, if it is used to start the workflow, or from Automator's **L** command line parameter.

Archiver.log

Each time archiver.bat/sh is invoked, a line is appended to the file indicating the outcome of the operation and the exact command line used for Archiver.jar with its parameters.



A typical success entry looks like:

```
Tue 10/06/2015 17:46:51.66 SUCCESS java
-Dcom.foresightcorp.archiver.config="C:\TIBCO\Archiver\5.1\Bin"
-jar "C:\TIBCO\Archiver\5.1\java\Archiver.jar"
-detailfile "C:\Foresight\System\ArchiverDemo\Workflows\
1.0\Archiver_Main\Archiver_1\Process\Tutorial-A.dtl"
-edifile "C:\Foresight\System\ArchiverDemo\Workflows\1.0\
Archiver_Main\Archiver_1\Process\Tutorial-A.edi"
-description ""
```

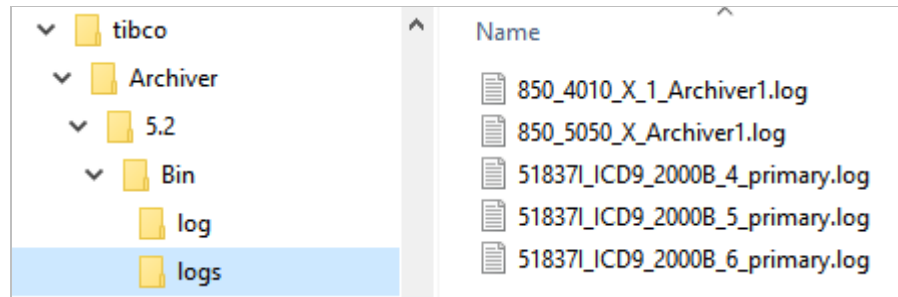
A typical failure entry looks like:

```
Tue 10/06/2015 17:24:57.11 FAILURE ReturnCode=1 java
-Dcom.foresightcorp.archiver.config=C:\TIBCO\Archiver\5.1\bin\
-jar C:\TIBCO\Archiver\5.1\java\Archiver.jar
-detailfile S:\Dev\Steve\test.dtl -edi S:\Dev\Steve\test.edi
-description ""
```

To further investigate the cause of the failure, look at the log file in the Foresight Archive and Retrieval System's Bin\Logs directory with the same name as the input file.

Application Logging

Foresight Archive and Retrieval System creates a log file for each fileset that it processes via archiver.bat/sh or Archiver.jar. By default, these logs are in Foresight Archive and Retrieval System's **Bin\logs** directory, and have the same name as the input file.



The command-line parameter **-logdir** might have been used to direct them elsewhere.

The amount of information in a log depends on the settings in **archiverLogConfig.properties** in Foresight Archive and Retrieval System's Bin directory (see page 18).

Foresight Archive and Retrieval System creates the logs folder on the fly. It does not need to create them at install time.

Web Services Logs

Each web service maintains a single log file per day, usually in Foresight Archive and Retrieval System's Bin\log directory. (The directory is actually the **log** directory beneath the directory defined by the System property com.foresightcorp.archiver.config in Payara [Glassfish].)

At INFO level, it will use the same types of messages as Foresight Archive and Retrieval System. The ArchiverWebService log file is named **ArchiverWebServices.log** and the File Import web service log file is named **FileImporter.log**.

For more details, set the logging level to DEBUG in archiverLogConfig.properties:

```
log4j.rootLogger=DEBUG, filelog
```

Foresight Archive and Retrieval System creates the log folder on the fly. It does not need to create them at install time.

archiverLogConfig.properties

archiverLogConfig.properties is a Log4J properties file in Foresight Archive and Retrieval System's Bin directory. It lets you change some of Foresight Archive and Retrieval System's logging properties. This includes the level of logging, date/time stamp format, and other advanced settings.

This logging goes in the individual log files created for each input fileset in the Bin\log directory, and also in the web services logs in that directory.

As installed, you get messages at the INFO level. For an operation, this will produce a few lines indicating the Job Type, Job Status, Job Data, and Job Duration.

To change the level of logging, locate the line that is similar to:

```
log4j.rootLogger=INFO,filelog
```

To change the value, replace INFO in the above line to the level you need. This can be ERROR, WARN, INFO, or DEBUG; where ERROR provides the least amount of logging information and DEBUG the most.

Portal Event Logging

Portal events are logged to Transaction Insight Common Administration's **Settings | Event** log.

7 AIX File and Folder Permissions

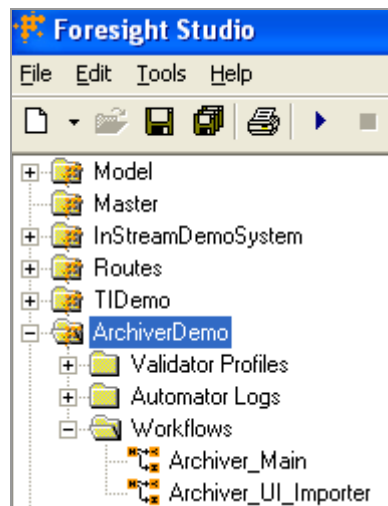
	archiver.sh archiver.bat	Repository	Web Services	Property Files	Log files / folders	Database	Trans / Doc View WF Dir	Custom Action Dir	Archiver Demo WF Dir
archiver.sh archiver.bat		R / W / MKDIR		R	W	R / W			
Web Services		R / W / MKDIR		R	W	R / W	W	W	
External Client			HTTP / HTTPS						
Portal			HTTP / HTTPS						
Archiver UI Importer WF							R / W		
Archiver Demo WF (opt)									R / W
Custom Action App								TBD	
archiver.sh driver archiver.bat driver	X								

8 Workflows, Filesets, and FSUIDs

Default Workflows

Foresight® Studio workflows installed with Foresight Archive and Retrieval System include:

- **Archiver_Main** - simple workflow that validates and imports an EDI file.
- **Archiver_UI_Importer** - runs when a Foresight Archive and Retrieval System user requests a transmission view. This workflow, and Payara (Glassfish), should be running whenever the Foresight Archive and Retrieval System portal is available.



The two Foresight Archive and Retrieval System components are:

- Archiver - Archives data and accompanying DTL file
- ArchiverNoFilter - Archives a file without an accompanying DTL file

Please see **ForesightStudio.pdf** for details.

Filesets

A fileset is a set of files that Foresight Archive and Retrieval System considers related and shows together in search results. Because this EDI and DTL file are in the same fileset, the search results show them both:

File Search Results	
File Name ^	
5010_850_1.dtl	
5010_850_1.edi	

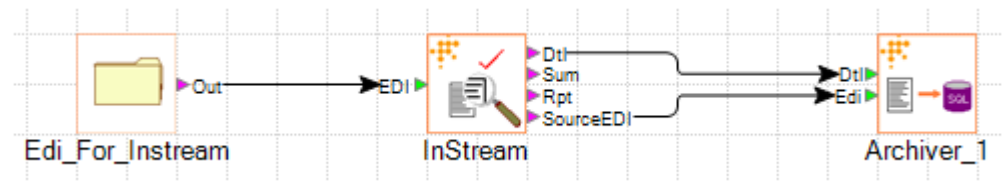
Creating Filesets

The workflow controls which files are in an Foresight Archive and Retrieval System fileset.

Any files that result from one input file will automatically be in the same Foresight Archive and Retrieval System fileset if they are archived by the same component.

Workflows with one Foresight Archive and Retrieval System Component

For workflows with only one Foresight Archive and Retrieval System component, any files resulting from the input file will automatically be in one fileset. If we send File837P.EDI into this workflow, its DTL and data files will be in the same Foresight Archive and Retrieval System fileset:

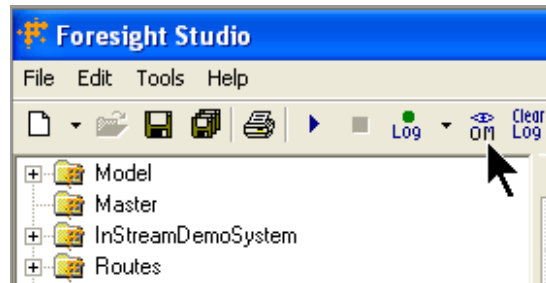


Workflows with Multiple Foresight Archive and Retrieval System Components

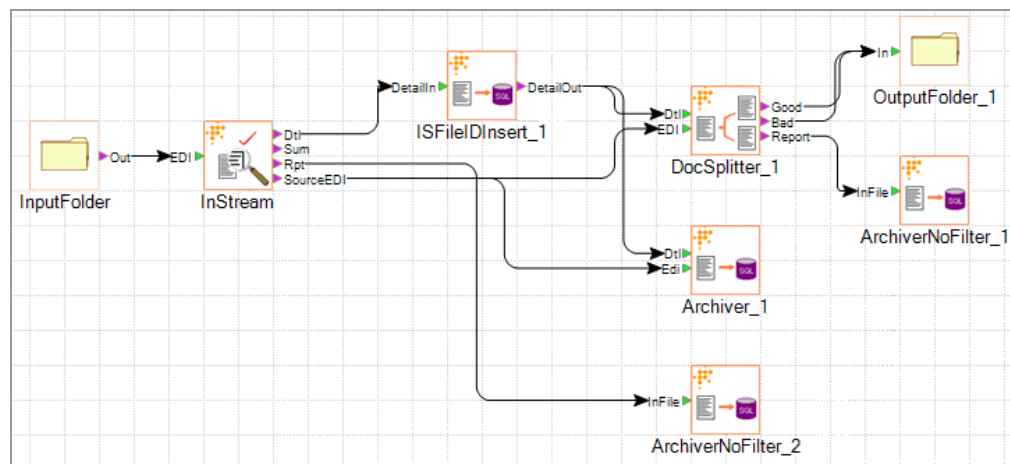
If there is more than one Foresight Archive and Retrieval System component in a workflow and the intent is to have all of the files that get archived in the same fileset:

- TIBCO Foresight® Operational Monitor has to be running when the workflow runs. This causes Automator to create a JobID when a file arrives in the input folder in a workflow. All workflow components have this ID available to them.
- The TIBCO Foresight® Instream® DTL file can be immediately sent to ISFileIdInsert. This will replace its FSUID with the JobID.

Turn on Foresight® Operational Monitor with the “eye” toolbar button in Foresight Studio:



In this simple workflow, the data, DTL, Instream® report, and DocSplitter report will all be in a single fileset if Foresight Operational Monitor is turned on. Otherwise, they will be in three filesets - one for each Foresight Archive and Retrieval System component.



Steps:

1. File arrives in Input folder and is assigned a JobID by Foresight Operational Monitor.
2. File goes to Instream, which creates DTL file and report.
3. DTL file is sent to ISFileIDInsert, which replaces its FSUID by the JobID.
4. DTL and EDI files are archived together under the JobID.
5. Validation report is archived under the JobID.
6. Updated DTL file plus EDI file go to DocSplitter, which produces a report that is archived under the JobID.

FSUIDs

If set up as shown above, Foresight Archive and Retrieval System users will be able to:

- Search for a particular FSUID on the Action page’s Quick Search.
- Link from the Transaction Insight Transmissions page to Foresight Archive and Retrieval System’s Quick Search, where the FSUID will display.
- Look at a DTL file and see a FSUID that will let them retrieve a fileset of all files that resulted from a single input file into a workflow.
- In search results, see all files that resulted from a single input file into a workflow.

Please see **FSUID_and_AppDocs.pdf** for an overview of FSUIDs.

9 Typical TroubleShooting Scenarios

Files don't Appear in the Portal (from Workflow)

A workflow uses the Foresight Archive and Retrieval System component. Files are going to the inbound directories for the component, but they are not showing up in Foresight Archive and Retrieval System portal, even after waiting a considerable amount of time.

To troubleshoot the Portal

1. Does the user have permission to search and view files?
Under **Common Administration**, check **Admin | Roles**.
2. Did the user enter good search data?
3. Was the file imported into TI? Look for it under **Statistics | Transmission Volumes** and then try to link to it in Foresight Archive and Retrieval System.
4. Has the user tried to retrieve the file using Foresight Archive and Retrieval System's File Search (name and date)?
If the file is found via this method, it might indicate that the data that the user entered in the search screen is not good.
If it is not found this way, it might indicate that the file never made it to Foresight Archive and Retrieval System. Inspect the workflow logs.

To troubleshoot the workflow

1. Are the workflow globals for Foresight Archive and Retrieval System defined correctly?
Search WorkflowGlobals.xml for these: FS_OSD_ARCHVRBAT_W, FS_OSD_ARCHVRBAT_U, FS_OSD_ARCHVRBAT, FSARCHIVERCONFIGDIR, FSARCHIVERBINDIR, FSARCHIVERJAVADIR, and FSARCHIVER_IMPORTER_DBCONN.
2. Are the EDI and Detail files in Foresight Archive and Retrieval System component's Error directory? Look for a log file there, and check the validation DTL file for clues.
3. Look in the workflow's Automator log for the string **archiver.bat** or **archiver.sh**. Is there an error associated with it? If archiver.bat or archiver.sh doesn't show up, is there an error higher up in the log that would be relevant?
On AIX: are the permissions of the entity running archiver.sh sufficient to read the property files and write the files to be archived to the Repository ?

To troubleshoot Foresight Archive and Retrieval System

1. In Foresight Archive and Retrieval System's Bin directory, look in **archiver.log** for an entry for the files. If they are not there, then the files never made it out of the workflow.
2. Look in the **log** and **logs** directories under Foresight Archive and Retrieval System's Bin directory.
3. Look at the **archiver.properties** file in Foresight Archive and Retrieval System's Bin directory and confirm that the database information is correct.

To troubleshoot the database side

If it is possible to do so, run the SQL statement:

```
SELECT * FROM archiveFileInfo WHERE (filename LIKE '%fileName%')
```

For *fileName* use the base of the files that were being imported.

Files don't Appear in the Portal (from custom script)

Foresight Archive and Retrieval System's Bin is running from a custom-defined set of scripts. The steps for troubleshooting this are the same as in the Workflow scenario except that there are no Automator logs or workflow globals to inspect.

Transmission View doesn't Work

Users are trying to view transmissions in Foresight Archive and Retrieval System's Bin Portal but are getting exceptions and/or the views never appear.

Verify that the web services in Payara (Glassfish) are functioning (see Checking Payara (Glassfish) on page 35).

If Archiver_UI_Importer workflow is running, suspect an error in the workflow and follow the steps below.

The Transmission View is only available for X12-based documents.

Windows

1. Is the workflow Archiver_UI_Importer installed under the Systems directory?
2. Is the workflow Archiver_UI_Importer configured in FSService.ini in ForesightService's Bin directory?
3. Is ForesightService running?

4. Is the Archiver_UI_Importer workflow running? There will be an instance of ForesightAutomator.exe in Task Manager for each workflow in FSService.ini. Count them and see if the counts match.

You can also look for evidence in the log file for the Archiver_UI_Importer workflow. This log will be in TIBCO Foresight's Systems directory under the Archiver_UI_Importer workflow.

Does the log file contain any errors? Look in it for the Instream, Importer, and Transaction Insight Utilities executables.

5. For the TIUtilities component, are the database Connection String and Database Type properties correct?

Examine the TIUtilities trace logs for errors, if they haven't been deleted by the workflow.

6. For the Importer component, is the Connection Strings correct?

Examine Importer's log file for errors, if it hasn't been deleted by the workflow.

7. Are there files in any of the workflow's Error directories?

8. Is Payara (Glassfish) running?

AIX

1. Is the Archiver_UI_Importer workflow installed under the Systems directory?
2. Is there an instance of Foresight Automator running that represents this workflow?
From the command line, enter the command `ps -e`. If there is more than one instance, you will need to figure out which one is which. You can also look in the log file for this workflow to see if there is any evidence of Archiver_UI_Importer.
3. Are there any log files for this workflow and, if so, are there any errors? Look in the logs for the Instream, Importer, and TIUtilities executables.
4. For the TIUtilities workflow component, are the database Connection String and Database Type properties correct?
5. Examine the TIUtilities component's trace logs for errors, if they haven't been deleted by the workflow.
6. For the Importer workflow component, is the Connection String correct?
7. Examine the Importer component's log file for errors, if it hasn't been deleted by the workflow.
8. Are there any files in the workflow's Error directories?
9. Is Payara (Glassfish) running?

Both

If the transmission view was for documents, also check the log files associated with the DocSplitter component for errors.

Web Services Not Importing

1. Check Payara (Glassfish) (see page 35).
2. Try the **available** method for Foresight Archive and Retrieval System File Importer (see page 36).
3. Look in the log file for this service. It is in *archive_root*\Bin\log\FileImporter.log. or ArchiveWebServices.log. There might be several log files.

Foresight Archive and Retrieval System's Bin Portal Link is not Available

After the user logs in to the TIBCO Foresight Portal Platform, the Foresight Archive and Retrieval System icon is not available. If the user logs into another portal application, Foresight Archive and Retrieval System is not available on the toolbar.

1. **Is Foresight Archive and Retrieval System configured to appear?** Check Web.config under the Transaction Insight environment. Look for **DisplayArchivePortal** in the **appSettings** section. For Foresight Archive and Retrieval System to be available, this must have a value of "true."
2. **Does the user have the appropriate permissions?** Go to Common Administration and check the user's role. This role must grant at least one permission under Archive User.

Search Doesn't Work as Expected

Search not Available

The user has successfully logged into the portal and entered Foresight Archive and Retrieval System but the **Archive | Search** link is not present in the top menu.

Does the user have the appropriate permissions? Go to Common Administration and check the user's role. This role must grant the Search permission under Archive User.

No Document-Specific Filters for a Certain Document Type

On the main Search page, the Foresight Archive and Retrieval System user selects an Archive Type from the drop-down menu. No Document Level filters appear on the search screen.

Has the appropriate filter been created? By default, Foresight Archive and Retrieval System does not have any document level filters; these need to be added after installation. Before it can be displayed, the filter must first be set up using the **MakeFilter** database stored procedure. This may require a database administrator.

No Filters in Search Preferences

The user wishes to configure search results for a certain document type. When the user gets to the **Search Preferences** page and selects their Standard Type and Archive Type from the drop down list, no filters are shown in the **Available Filter** or **Selected Filters** lists.

Has the filter been created? In order for a value to be added to a search result, it must first be created as a filter. See above to resolve the issue.

Can't Find File Using Search

A user is searching for a file or document that has been archived. The user performs the search with the appropriate search data, but the file they are looking for is not in the search results.

1. **Is the search data correct?** If the search data entered by the user is not correct, the appropriate file(s) will not be found.
2. **Is the root directory configured correctly?** If the root directory isn't set up correctly, files will not be archived. To check this, go to **Admin | Root Folders**. Look at the value for **Active Root Folder**.

Action Problems

An Action is Unavailable

A user has selected a fileset or document and wishes to take Action on it, but it is not in the Actions drop-down list.

1. **Has the Action been created?** In Foresight Archive and Retrieval System, go to **Archive | Admin | Actions** to view a list of all actions that have been created. If the Action the user wishes to use is not in this list, it will need to be created.
2. **Has the Action been configured correctly?** If the user wants to take the Action on a file(s) in a fileset, the Action must have **File Action** checked on the Admin Actions page. If the user wishes to use this Action on a document, **Document Action** must be checked.
3. **Has the user been given permission?** Go to Common Administration and check the user's role. This role must grant permission under Archive Action. Each Action has its own permission. Users without permissions for an Action will not see it in their Actions drop-down list.

Error Message about Web Service

A user submits a file(s) or document to an Action. Instead of being redirected to the Pending Action screen, this error message displays:

An error was generated while trying to communicate with the Foresight Archive and Retrieval System Web Service

Is the Foresight Archive and Retrieval System Web Service running? In order to take any Action on a file or document, the Web Service must be running. See Checking Payara (Glassfish) on page 35 to determine if the service is running correctly.

Are the file(s) selected the ones needed by the Action?

A Transmission View Action Didn't Complete

A user submits a file or document to one of the **Transmission View** Actions. After waiting at the **Pending Actions** page, the user never sees the **View** link to view the transmission.

1. **Has the action completed?** In some cases, especially when an abnormally large file or document is requested, the View Transmission Actions can take a long time to complete. In this case, the user may only need to wait longer for the Action to complete.
2. **Is the drop directory correct?** Go to **Admin | Actions** and check the Action's **Workflow Directory**. It should match the input directory for the process or workflow that is receiving the file.
3. **Are the Archiver_UI_Importer workflow components running?** In order to complete the Action, all workflow components must be running.
4. **Are the Archiver_UI_Importer workflow components working correctly?** If the Action doesn't complete, it is possible that the workflow generated an error was processing the file.

A User-Created Action Didn't Complete

A user submits a file or document to a custom Action. The Action is submitted without errors and the user is taken to the Pending Action screen. After what would be considered a normal amount of time for the Action they set up, the user has not seen the result they are looking for.

Example: The user requests a custom Action called “send to print” that sends a file to be printed; however, nothing is ever printed.

1. **Is the directory correct?** Go to **Admin | Actions** and look at the Action's **Workflow Directory**. It should match the input directory for the process or workflow that is receiving the file.
2. **Is the workflow or process running?** Check the workflow or process to make sure that it is actively running. The particular method for doing this depends on the action.

View Link doesn't Work

When the user clicks the **View** link they receive an error.

1. **Is the ArchiverWebService URL set up correctly?** Check the Metadata table in the database for MetadataValue when Metadata key is ARCHIVER_WS_URL. Compare it to the value under **Admin | Settings** in the Archive portal.

2. **Is the ArchiverWebService running?** Viewing an image file requires the **web service** to be running. See Checking Payara (Glassfish) on page 35 to determine if the service is running correctly.
3. **Is the file a supported format?** Not all types of files can be viewed in Foresight Archive and Retrieval System. If the file the user is attempting to view is not supported, they will receive an error.
Supported text file types: .edi, .dtl, .txt, .xml
Supported image file types: .jpg, .jpeg, .bmp, .gif, .tiff, .tif, .png

Unable to Retrieve a Fileset by FSUID or Fileset ID

When using the Action page's Quick Search, expected files or documents are not found.

1. Examine the log file in Archive's **Bin\log** directory to find the relevant fileset ID and/or FSUID. Look for the log item that has the text **Job Data State**. It will contain the strings **Filesetid=***filesetId* and **file level id=***fsuid*, like this example:
[Jul 14 16:45:56] INFO (InstreamArchiver.java:136) [main] - Job Data: **Filesetid=10**, SqlInterface=OK, Properties ... file level id=**ca0b174d-8f88-11df-b922-25ba7153f266**, ...

If you can't find these, then it's possible the FSUID or fileset ID the user has entered is incorrect. Another possibility is that the Foresight Archive and Retrieval System operation failed and the files were not actually archived.

2. If possible, run this query against the Foresight Archive and Retrieval System database:

```
SELECT * FROM Fileset WHERE filesetid=filesetId
```

3. If possible, query the database for the FSUID's:

SQL Server:

```
SELECT * FROM FileSet WHERE FSUID = 'fsuid';
```

Oracle:

```
SELECT * FROM FILESET WHERE FSUID = REPLACE('fsuid', '-', '');
```

The alphabetic characters in the *fsuid* must be in uppercase.

The FSUID in the detail file is accurate for a fileset if there is only one Foresight Archive and Retrieval System component in the workflow. If there are multiple components, the user can search on the JobID generated by Foresight Operational Monitor. See Workflows, Filesets, and FSUIDs on page 21.

Expected Image File doesn't show up in Fileset

1. Check the log files for the File Import web service to determine if the file was imported. Make sure that it was imported as a binary file and not a text file.
2. The file might have been imported but not associated with the fileset the user thought it should have been. If possible, run the query:

```
SELECT * FROM archiverFileInfo WHERE filename LIKE '%filename%'
```


10 Checking Payara (Glassfish)

You will probably need the help of a system administrator for this.

1. Is Payara (Glassfish) actually installed?
Ask the system administrator to confirm this.
2. Is Payara (Glassfish) running?
Open a browser on the Payara host system and go to the Payara Administration Console at **http://localhost:4848/** (or whatever the port is for the Payara console.) If you can't connect, ask the system administrator to start Payara (see below for details).
3. Is the URL in Foresight Archive and Retrieval System's database? (check the Metadata table where MetadataKey == ARCHIVER_WS_URL).
4. Is the URL valid?
Try this in the browser *url?wsdl*, where *url* is the value from the Metadata table.
5. Are the Web services installed?

Windows

In the Payara Administration Console, click on **Applications** to ensure that ArchiverWebService and ArchiverFileImport have been deployed.

AIX

In the Payara Administrative Console, click on **Applications | Web Applications** to check that ArchiverWebService and ArchiverFileImport have been deployed.

6. Is the System property **com.foresightcorp.archiver.config** defined in Payara (Glassfish) and pointing to the directory where Foresight Archive and Retrieval System properties files are stored?

Windows

In the Payara Administration Console, click on **Enterprise Server | System Properties**.

AIX

In the Payara Administration Console, click on **Configuration | System Properties**.

Ways to start Payara (Glassfish)

Payara is a 3rd party application, and as such it is managed outside of the TIBCO Foresight suite of applications. Starting and stopping it are up to the system administrators. Here are a few approaches.

- **Windows Start Application Server**

Click **Start | All Programs | Payara <Version> | Start Application Server**.

This will start Payara. However, it will stop running when the person who started it logs off.

- **Payara as part of Foresight Service**

To get around the problem of Payara stopping when you logoff, run it as a process spawned by Foresight Service. This is described in the **Starting Foresight Archive and Retrieval System** section of **TIB_transactioninsight_n.n_installation.pdf**.

Trying the Available Method

Windows

In the Payara Administration Console, click on **Applications | Archiver File Import | View Endpoint | Tester** *link*. In the parameter box for the **available** method, enter some characters and click the available button. The response should include your input plus the fully expanded paths of the configuration files as well as some properties.

AIX

Open a browser and use this URL:

`http://server:8080/ArchiverFileImport/ArchiverFileImportService?Tester`

8080 is the default port, although your site might have changed it. In the parameter box for the **available** method, enter some data and click the **available** button. The response should include your input plus the directory path to the property files.

AIX Payara (Glassfish) Permissions

- Under which account was Payara started?
- What group does it belong to?
- Does it have the necessary permissions to read/write files to the Repository? This includes creating directories.
- Does it have the necessary permissions to write files to the various directories associated with Transmission/Document viewing in Foresight Archive and Retrieval System portal and any other directories associated with user-defined actions in Foresight Archive and Retrieval System Portal?
- Does it have permissions to read the property files from the configuration directory and to write to the log files for the web services?