



**Tungsten Export Connector
2025.4 for IBM FileNet Content
Manager
Administrator's Guide**

TUNGSTEN
AUTOMATION

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Table of Contents

Preface	5
Product Documentation.....	5
Offline documentation.....	5
Training.....	7
Getting help with Tungsten Automation products.....	7
System Requirements.....	8
Modifying the Source Code.....	8
Chapter 1: Overview	9
Features.....	9
Tungsten Values / IBM FileNet Content Manager Properties.....	9
Tungsten Values {Document GUID}.....	9
Document Storage.....	9
Folder Creation.....	9
Tungsten Capture Supported Features.....	10
IBM FileNet Content Manager Object Store.....	10
Choice List Properties Supported.....	10
Duplicate Documents.....	10
Export Working Folder.....	10
Export to 'Unfiled Documents' Folder.....	11
Multiple Export.....	11
Multiple Values.....	11
Online help for Export Setup.....	11
Image Support.....	11
Viewing Content Elements.....	12
Viewing Duplicate Documents.....	12
Data Type Compatibility.....	13
Valid Boolean Formats.....	13
Tungsten Value Data Types.....	13
Tungsten Values.....	14
Text Constants.....	15
Chapter 2: Install the Export Connector	16
Install Export Connector with Tungsten Capture or Tungsten Express.....	16
Register the Export Connector manually.....	17
Select the language.....	17
Install Export Connector with Tungsten TotalAgility.....	17

Select the language.....	18
Remove the export connector.....	19
Remove the export connector from Tungsten Capture.....	19
Remove the export connector from Tungsten Express.....	19
Remove the export connector from Tungsten TotalAgility.....	20
Remove the Export Connector from the computer.....	20
Repair the export connector.....	20
Chapter 3: Export Connector Setup.....	21
Use Tungsten Capture to Set up the Export Connector.....	21
Use Tungsten Express to Set up the Export Connector.....	22
Use Tungsten TotalAgility to Set up the Export Connector.....	23
Viewing IBM FileNet Content Manager Data in Export Setup.....	24
IBM FileNet Content Manager Permissions.....	24
Adding Access Permissions to the IBM FileNet Content Manager Domain.....	25
Recommended Permissions.....	25
Export Connector Behavior.....	26
Chapter 4: Information for Export Connector users.....	27
Binary and Object Properties Not Supported.....	27
File Name Retention Feature.....	27
Behavior of the Original file name support Property.....	28
File Name Considerations.....	29
OCR Full Text Options (Tungsten Capture only).....	31

Preface

This guide includes the information you need to successfully install and configure Tungsten Export Connector for IBM FileNet Content Manager. This Export Connector copies document images, OCR full text files, Tungsten PDF documents, and eDocuments to a permanent storage and writes data from Tungsten Capture, Tungsten TotalAgility, or Tungsten Express into the IBM FileNet Content Manager repository.

Product Documentation

The Tungsten Export Connector for IBM FileNet Content Manager documentation set is available online at the following URL:

https://docshield.tungstenautomation.com/Portal/Products/EC_IBMFileNetCM/2025.4-anv40ktb6o/IBMFileNetCM.htm

You must be connected to the Internet to access the full documentation set online. For access without an Internet connection, see [Offline documentation](#).

The full documentation set includes the following items.

Tungsten Export Connector for IBM FileNet Content Manager Release Notes

Contains late-breaking product information that may not be available in other product documentation.

Tungsten Export Connector for IBM FileNet Content Manager Technical Specifications

Contains information on supported operating systems and other system requirements.

Tungsten Export Connector for IBM FileNet Content Manager Administrator's Guide

Contains information for administrators who are responsible for configuring and maintaining the Export Connector.

Tungsten Export Connector for IBM FileNet Content Manager Help

Describes the configuration settings required to set up the Tungsten Export Connector for IBM FileNet Content Manager application.

Offline documentation


To make the documentation available for use in offline mode, obtain the documentation files from the Tungsten Export Connector 2025.4 for IBM FileNet Content Manager product package that

you downloaded from the [Tungsten Fulfillment Site](#). The product package includes the following documentation files for offline use:

- `TungstenExportConnectorDocumentation_2025.4_ForIBMFileNetContentManager_EN.zip`
Contains the entire product documentation set in English.
- `TungstenExportConnectorDocumentation_2025.4_ForIBMFileNetContentManager_JA.zip`
Contains the entire product documentation set in Japanese.

For each language, the .zip file includes two folders:

- The **print** folder: Contains the *Tungsten Export Connector for IBM FileNet Content Manager Administrator's Guide*
 - The **help** folder: Contains the *Tungsten Export Connector for IBM FileNet Content Manager Help*
1. After you install Tungsten Export Connector 2025.4 for IBM FileNet Content Manager, in the product installation folder, create the folder named **Documentation**.
 2. In the newly created **Documentation** folder, create the language code folders for the required languages:
 - For English, create the folder named **EN**
 - For Japanese, create the folder named **JA**
 3. Extract the contents of the documentation compressed file for the language you require to the following location:
 - For Tungsten Capture:
`[drive:]\Program Files (x86)\Tungsten\Capture\ServLib\Bin
\Tungsten.IBM.FN.CM\Documentation\<<language code folder>`
or
`[drive:]\Program Files (x86)\Tungsten\CaptureSS\ServLib\Bin
\Tungsten.IBM.FN.CM\Documentation\<<language code folder>`
 - For Tungsten Express (formerly Kofax Express):
`[drive:]\Program Files (x86)\Kofax\Kofax Express\bin\Tungsten.IBM.FN.CM
\Documentation\<<language code folder>`
 - For Tungsten TotalAgility:
`[drive:]\Program Files (x86)\Tungsten\TotalAgility\ExportConnectors\bin
\Tungsten.IBM.FN.CM\Documentation\<<language code folder>`

 The Documentation folder is not removed automatically in case the product is uninstalled, and you need to delete it manually.

4. Start the Tungsten Export Connector for IBM FileNet Content Manager application and click the Help icon to open the help in a separate browser window.

To use the PDF documentation offline, you can keep it in the **Documentation** folder or a different location on your computer. The **help** folder should always remain in the **Documentation** folder. When the offline documentation is installed according to these instructions, the product will use the offline version of the documentation by default, even if an active Internet connection exists.

Training


Tungsten Automation offers both on-demand and instructor-led training to help you make the most of your product. To learn more about training courses and schedules, visit the [Tungsten Automation Learning Cloud](#).

Getting help with Tungsten Automation products

The Tungsten Automation Knowledge Portal repository contains articles that are updated on a regular basis to keep you informed about Tungsten Automation products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

To access the Tungsten Automation Knowledge Portal, go to:

<https://knowledge.tungstenautomation.com/>

 The Knowledge Portal is optimized for use with Google Chrome, Mozilla Firefox, or Microsoft Edge.

The Knowledge Portal provides:

- Powerful search capabilities to help you quickly locate the information you need.
Type your search terms or phrase into the **Search** box, and then select the search icon.
- Product information, configuration details and documentation, including release news.
To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or select the View All Products button.

From the Knowledge Portal home page, you can:

- Access the Tungsten Automation Community (for all customers).
On the Tungsten Automation Resources menu, select the **Community** link.
- Access the Tungsten Automation Customer Portal (for eligible customers).
Go to the [Support Portal Information](#) page and select **Log in to the Tungsten Automation Customer Portal**.
- Access the Tungsten Automation Partner Portal (for eligible partners).
Go to the [Support Portal Information](#) page and select **Log in to the Tungsten Automation Partner Portal**.
- Access support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.
Go to the [Support Details](#) page and select the appropriate article.

System Requirements

Most software requirements for Tungsten Export Connector for IBM FileNet Content Manager, including the supported versions of Tungsten Capture, Tungsten TotalAgility, and Tungsten Express (formerly Kofax Express), are listed in the [Technical Specifications](#) document, which is available from the [Tungsten Export Connector for IBM Content Manager Product Documentation](#) page. The Technical Specifications document is updated regularly, and we recommend that you review it carefully to ensure success with your export connector product.

Modifying the Source Code

The source code for this export connector is provided in the product files. The source code can be opened, edited, and compiled in Microsoft Visual Studio.

You will need to repeat this procedure on each workstation where you plan to use the IBM FileNet Content Manager export connector.

i To successfully modify and compile the export connector, development must occur on a workstation with the appropriate versions of Tungsten Capture, Tungsten Express, or Tungsten TotalAgility.

1. Install the Tungsten Export Connector for IBM FileNet Content Manager export connector. Refer to [Installing the Export Connector](#) for the installation instructions. When you install the export connector, you also install the required components referenced in the source code.
2. Open the IBM FileNet Content Manager export connector project in Microsoft Visual Studio.
3. Modify the source code.
4. Compile the project.

i You must close Tungsten Capture, Tungsten Express, or Tungsten TotalAgility Export Connector Utility before attempting to compile the export connector source code. Otherwise, an error may occur.

5. Copy the new .dll to the Tungsten.IBM.FN.CM folder in the `Bin` folder of your Tungsten Capture, Tungsten Express, or Tungsten TotalAgility installation.

Chapter 1

Overview

This export connector copies document images, OCR text files, Tungsten PDF documents, eDocuments, and writes data from Tungsten Capture, Tungsten Express, or Tungsten TotalAgility into IBM FileNet Content Manager.

Features

This section contains information about features provided with Tungsten Export Connector for IBM FileNet Content Manager.

Tungsten Values / IBM FileNet Content Manager Properties

You can link Tungsten Values to IBM FileNet Content Manager document properties and folder properties. Examples of Tungsten Values include Document index fields, Folder index fields, Batch fields, Tungsten Values, and Text Constants. If the IBM FileNet Content Manager properties are required, the names of the required properties within a document class or folder class are marked with an asterisk (*) on the Export Connector setup form, giving you a visual indicator that certain fields must be linked.

Tungsten Values {Document GUID}

The {Document GUID} is a value that can be used for index fields and export values. It is a type of document ID that is unique across the central site and all remote sites that comprise a Tungsten Capture installation. This Document GUID is the concatenation of the Batch GUID and the document ID number. For example, a Batch GUID of {D3C58EE2-5627-443b-BBFA-EE7A5790482A} and a document ID of 123 will yield {D3C58EE2-5627-443b-BBFA-EE7A5790482A} 123 as the Document GUID.

Document Storage

You can specify new or existing folders for storing documents in the IBM FileNet Content Manager object store for export. You can use Tungsten Values to specify a document name or folder name.

Folder Creation

When exporting to user-defined folders, the export connector searches the IBM FileNet Content Manager object store to locate a folder based on the Folder Name property and the location of the object store.

If the folder is found, this folder is used for export. The existing properties of the folder do not change, even if Tungsten Values are linked to the properties for the folder.

If the folder is not found, a new folder is created in IBM FileNet Content Manager using the values specified at export setup.

Tungsten Capture Supported Features

This section gives you information about the Tungsten Capture features supported by this export connector.

SecurityBoost

The Tungsten Export Connector for IBM FileNet Content Manager supports the Tungsten Capture SecurityBoost feature. Refer to the *Tungsten Capture Help* for more information about the SecurityBoost feature.

IBM FileNet Content Manager Object Store

When setting up the export connector, you can easily select the IBM FileNet Content Manager object store to use for exported documents.

Choice List Properties Supported

IBM FileNet Content Manager Choice List properties are supported. To export to the object store, you must know the choice list values and link appropriate Tungsten Values to the Choice List properties. Note that Choice List properties are not visually different from non-choice list properties.

For more information about the Choice List properties, refer to the documentation for your IBM FileNet Content Manager product.

Duplicate Documents

Use the export connector to select the behavior to occur at export time when an exported document has the same Document Title property as another document that exists in the same folder location within the object store. You can specify that the duplicate document be exported to the object store or, if applicable, rejected.

Export Working Folder

The export connector requires that you set up a temporary storage location to copy document images at export time. Your images reside in this location temporarily as they are transferred from Tungsten Capture, Tungsten Express, or Tungsten TotalAgility to the object store.

If the export working folder does not exist at export setup, you are given the option to create the specified folder or select a different folder. If the folder does not exist at export time, the folder is automatically created.

Export to 'Unfiled Documents' Folder


On the Destination Settings tab, select the "Unfile documents" check box to export documents to the Unfiled Documents folder in IBM FileNet Content Manager.

Multiple Export

The export connector supports the Multiple Export feature, which is used to assign multiple export connectors to a document class.

In addition, you can provide a unique name for the export connector at export setup time. The name is used to refer to your export connector in the Export Connectors window. This field is not required, but may help you track export connectors when using the Multiple Export feature.

Refer to the *Tungsten Capture Help* for more information about the Multiple Export feature.

 This feature is not currently supported in Tungsten Express.

Multiple Values

This export connector supports properties that contain multiple values. You can specify the delimiter to separate the values when entering multiple values for your document and folder class properties using the "Multi-value separator" option on the General Settings tab. For example, if you specified a single semicolon (;) delimiter for the multi-value separator, you would enter the following:

apple;orange;pear

For more information, see the [General Settings Tab](#) help topic.

Online help for Export Setup

Online help is available from the export connector setup window. You can click the Help button to get information about individual settings on each tab on the setup window.

Image Support


This export connector supports the following file formats / compression formats:

- Multipage TIFF - G4
- Multipage TIFF - G3
- Multipage TIFF - G3/2D
- Multipage TIFF - Uncompressed
- Multipage TIFF - JPEG Compression
- TIFF - G4
- TIFF - G3
- TIFF - Uncompressed

- TIFF - G3/2D
- TIFF - JPEG Compression
- PCX - PackBytes
- JPG - JPEG Compression
- Tungsten PDF

Tungsten PDF Support

You can export Tungsten PDF documents into the IBM FileNet Content Manager object store. Tungsten PDF is included with Tungsten Capture, Tungsten Express, and Tungsten TotalAgility and does not require additional software implementation.

 To use Tungsten PDF in Tungsten Express, select PDF - Portable Document Format on the Job Setup tab, in the Export group.

You can save Tungsten PDF documents in the following output types:

- PDF Image Only
- PDF Image + Text

OCR Full Text Support

You can export documents processed through the Tungsten Capture OCR Full Text module into the object store.

Refer to [OCR Full Text Options](#) for more information.

eDocument Support

Tungsten Capture, Tungsten Express, and Tungsten TotalAgility eDocuments are supported for export into IBM FileNet Content Manager.

Viewing Content Elements

In IBM FileNet Content Manager, if you attempt to view the content elements of an exported document, you are able only to directly view the first content element in the list. To view the remaining content elements, you must open the properties of the exported document and select the Content Element tab. Then, double-click any one of the content elements on the list.

Viewing Duplicate Documents

Use the "Export duplicate document" setting on the Document Settings tab to export a duplicate document to the IBM FileNet Content Manager object store with the same document name. However, in the Administrative Tools component (also known as the IBM FileNet Content Manager Enterprise Manager), documents are displayed as new documents. No document versioning occurs. All duplicate documents are exported with a sequential whole number. Note that this export connector does not append a number to the end of the Document Title property.

To illustrate, consider an object store that already contains the following exported documents:

TapDoc

Guide(3)

If you export two more documents to the same IBM FileNet Content Manager object store with identical file names as the preceding exported documents, the file names appear in the Administrative Tools component as:

TapDoc(1)

Guide(4)

When exporting documents that already exist with the same file name in the Administrative Tools component, the first duplicate document is always assigned with the number 1. Each additional duplicate document increases the number by one whole number (for example: 2, 3, 4).

This behavior does not occur in the IBM FileNet Content Manager Workplace Thin Client. For more information, refer to the documentation for your IBM FileNet Content Manager product.


Data Type Compatibility

The tables in this section map Tungsten data types to IBM FileNet Content Manager data types, and indicate which combinations are valid.

Valid Boolean Formats

The valid Boolean formats include the following:

- Any non-zero number and "TRUE"
- "0" and "FALSE"

 The Boolean values (TRUE or FALSE) are not case-sensitive.

Tungsten Value Data Types

When Tungsten Value fields are copied to IBM FileNet Content Manager properties, their data types are converted to IBM FileNet Content Manager data types. The following figure lists the supported IBM FileNet Content Manager data types for Tungsten batch fields and index fields.

Data Type	FileNet Content Manager Data Types								
	FileNet Binary	FileNet Boolean	FileNet DateTime	FileNet Float	FileNet ID	FileNet Integer	FileNet Object	FileNet String	
CHAR	NS	√ ₁	√ ₁	√ ₁	√ ₁	√ ₁	NS	√	
DATE	NS		√				NS	√	
DECIMAL	NS	√		√		√ ₂	NS	√	
DOUBLE	NS	√		√		√ ₂	NS	√	
FLOAT	NS	√		√		√ ₂	NS	√	
INTEGER	NS	√		√		√	NS	√	
NUMERIC	NS	√		√		√ ₂	NS	√	
REAL	NS	√		√		√ ₂	NS	√	
SMALLINT	NS	√		√		√	NS	√	
TIME	NS		√				NS	√	
VARCHAR	NS	√ ₁	√ ₁	√ ₁	√ ₁	√ ₁	NS	√	

Legend

- √ Supported
- √₁ Depends on the value entered
- √₂ Rounded to the nearest integer
- NS Not supported

Tungsten Values

The following figure lists the Tungsten Values for IBM FileNet Content Manager data types.

Tungsten Values	FileNet Content Manager Data Types							
	FileNet Binary	FileNet Boolean	FileNet DateTime	FileNet Float	FileNet ID	FileNet Integer	FileNet Object	FileNet String
{Batch Creation Date}	NS		√				NS	√
{Batch Creation Time}	NS		√				NS	√
{Current Date}	NS		√				NS	√
{Document Count}	NS			√		√	NS	√
{Current Time}	NS		√				NS	√
{First Page Roll Number}	NS			√		√	NS	√
All other Values	NS	√ ₁	√ ₁	√ ₁	√ ₁	√ ₁	NS	√ ₁

Legend

- √ Supported
- √₁ Depends on the value entered
- NS Not supported

Text Constants

The following figure lists the supported IBM FileNet Content Manager data types for Tungsten Capture, Tungsten Express, and Tungsten TotalAgility text constants.

Text Constants	FileNet Content Manager Data Types							
	FileNet Binary	FileNet Boolean	FileNet DateTime	FileNet Float	FileNet ID	FileNet Integer	FileNet Object	FileNet String
Text Constants	NS	√ ₁	√ ₁	√ ₁	√ ₁	√ ₁	NS	√

Legend

- √ Supported
- √₁ Depends on the value entered
- NS Not supported

Chapter 2

Install the Export Connector

You can install the Tungsten Export Connector for IBM FileNet Content Manager on a client or standalone workstation. If you have an existing version of this Export Connector, you can upgrade it to this version.

i To install the Export Connector, you must have Windows administrator privileges. If you do not have administrator privileges and install this Export Connector, error messages may occur.

Install Export Connector with Tungsten Capture or Tungsten Express

Use this procedure to install or upgrade the Export Connector for use with Tungsten Capture or Tungsten Express.

1. Copy the product files from the installation media to the Administration or Export workstations where you plan to use the Export Connector.
2. Verify that Tungsten Capture or Tungsten Express is already installed. Otherwise, an error will occur if you attempt to install the Export Connector.
3. On the installation media, locate and run **Setup.msi**.
4. Follow the instructions on the screen to install the Export Connector. Note the following options:
 - If Tungsten Export Connector 8.3 for IBM FileNet Content Manager is detected, you are prompted to upgrade to the latest version. After you click **OK**, the upgrade is performed by the installer. In this case, all instances of Export Connector will be replaced by one instance of Tungsten Export Connector 2025.4 for IBM FileNet Content Manager and all settings will be retained for use with the new version.
 - If Tungsten Export Connector 8.3 for IBM FileNet Content Manager is detected, but you do not want to upgrade directly with the installer, you can cancel the setup, remove the old versions, and then run **Setup.msi** again to start a new installation.
5. Click **Next** and follow the instructions on the screen to install the Export Connector.

i The Export Connector is automatically registered with Tungsten Capture or Tungsten Express. In case the Export Connector is not registered automatically, you can [register it manually](#).

6. Repeat the installation procedure on all Administration or Export workstations where you plan to use the Export Connector.

The Export Connector is automatically registered with Tungsten Capture or Tungsten Express.

i If you plan to use Tungsten Capture and Tungsten Express on the same workstation, see the *Tungsten Express Installation Guide* for more information.

7. Restart all of the Tungsten applications and services for Tungsten Capture or Tungsten Express.
8. Configure settings for the Export Connector. See [Export Connector Setup](#).

i For Tungsten Capture, when you upgrade the Export Connector, you have to republish the batch class to update the Export Connector version and finalize the upgrade.

Register the Export Connector manually

The Export Connector is automatically registered for use with Tungsten Capture 11.1 or later after you complete the installation procedure. However, to use the Export Connector with Tungsten Express, you must use the procedure in this section to register the connector.

1. Verify that .NET Framework 4.8 or later is installed.
2. Navigate to the `bin` folder in your Tungsten Express installation.
3. In the `bin` folder, add the following setting before the closing `</configuration>` tag in `RegAscSc.exe.config`:

```
<startup useLegacyV2RuntimeActivationPolicy="true">
  <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.0"/>
  <supportedRuntime version="v2.0.50727"/>
</startup>
```

4. Open a Command Prompt window, navigate to the `Tungsten.FileNet.2025.4` folder, and execute the following command:

```
RegAscSc /f Kofax.FileNet.Export.inf
```

i If the registration fails for Tungsten Capture 11.1 or later, turn off UAC and run the Windows Command Prompt as administrator, or log in to Windows as administrator.

Select the language

Use one of the following procedures to select the export connector language. Your selection goes into effect after you restart Tungsten Capture or Tungsten Express.

- In Tungsten Capture, open the **Administration** or **Batch Manager** module, select **Options > Language**.
- In Tungsten Express, select **Options > General > Tungsten Express Language**.

Install Export Connector with Tungsten TotalAgility

Use this procedure to install or upgrade your Export Connector for use with Tungsten TotalAgility.

i Before starting the procedure, make sure that you have created a process with an Export activity in Tungsten TotalAgility. The Export Connector will be associated with a document type within the process.

1. Copy the product files from the installation media to the Administration or Export workstations where you plan to use the Export Connector.
2. In the **Tungsten TotalAgility** program folder, select **Tungsten Export Connector**. The Tungsten TotalAgility Export Connector Configuration utility appears.
3. On the **Export Connector Configuration** screen, click **Manage**.
4. On the **Export Connectors - Manage** screen, click the **Add** icon to add a new Export Connector. The **Export Connectors - Add** window appears.
5. Navigate to your Export Connector installation files, select **setup.msi**, and then click **Open**. Note the following options:
 - If Tungsten Export Connector 8.3 for IBM FileNet Content Manager is detected, you are prompted to upgrade to the latest version. After you click **OK**, the upgrade is performed by the installer. In this case, all instances of Export Connector will be replaced by one instance of Tungsten Export Connector 2025.4 for IBM FileNet Content Manager and all settings will be retained for use with the new version.
 - If Tungsten Export Connector 8.3 for IBM FileNet Content Manager is detected, but you do not want to upgrade directly with the installer, you can cancel the setup, remove the old versions, and then run **Setup.msi** again to start a new installation.
6. Run the installer.
7. Click **Next** and follow the instructions on the screen to install the Export Connector.
8. Verify that **IBM FileNet Content Manager** is listed on the **Export Connectors - Manage** screen, and click **Close**.
9. Restart all of the Tungsten applications and services for Tungsten TotalAgility.
10. Configure settings for the Export Connector. See [Set up the export connector](#).

Select the language

To change the language for Tungsten Export Connector for IBM FileNet Content Manager, update the operating system language. The change goes into effect after you restart both Tungsten TotalAgility and the export connector. For details on changing the operating system language, refer to your Microsoft documentation.

i If the selected language is not supported for Tungsten Export Connector for IBM FileNet Content Manager, English is used.

Remove the export connector

Use the following procedures to remove the export connector from [Tungsten Capture](#), [Tungsten TotalAgility](#), or [Tungsten Express](#), and then from your computer. You can also [repair](#) the export connector if necessary.

Remove the export connector from Tungsten Capture

Before removing the export connector from your computer, remove it from Tungsten Capture.

Remove the export connector from a batch class

1. In the Tungsten Capture Administration module, on the Batch tab, expand the batch class to view associated document classes.
2. Right-click the applicable document class, and select **Export Connectors**.
3. On the **Assigned Export Connectors** list, select the export connector and click **Remove**.

Remove the export connector from the Export Connector Manager

1. In the Tungsten Capture Administration module, on the Tools tab, in the **System** group, click **Export Connectors**.
2. On the Export Connector Manager window, select the export connector, and click **Remove**.

Remove the export connector from Tungsten Express

Before removing the export connector from your computer, remove it from Tungsten Express.

Remove the export connector from a job

1. On the **Job Setup** tab, in the **Export** group, verify that the connector is not associated with any unprocessed jobs.
2. If necessary, assign another connector to any unprocessed jobs.

Remove the export connector registration

1. Verify that you have completed processing for all jobs that require the export connector. You cannot unregister a connector that is assigned to an existing job.
2. On the menu, click **Options**.
The **Options** window appears.
3. On the **Options** window, click **Export Connectors**.
4. On the **Export Connectors** list, select the name of the connector to unregister, and click **Remove**.
The **Export Connectors** list is refreshed, and the export connector is no longer available for use.

Remove the export connector from Tungsten TotalAgility

Before removing the export connector from your computer, use the Tungsten TotalAgility Export Connector Configuration utility to unassign it from the associated document type and process.

1. In the Tungsten TotalAgility program folder, select **Tungsten Export Connector**.
The Tungsten TotalAgility Export Connector Configuration utility appears.
2. On the **Export Connector Configuration** screen, click **Setup**.
3. On the next screen, on the **Assigned Export Connectors** list, select the export connector name, click **Remove**, and click **Save**.
The document type is unassigned from the export connector.
4. On the **Export Connectors - Setup** screen, on the **Select Process** list, select the process associated with the document type that was exported with the connector.
5. On the **Assigned Document Types** list, select the document type assigned to the selected process, click **Remove**, click **Save**, and then click **Close**.
The process is unassigned from the document type.
6. On the **Export Connector Configuration** screen, click **Manage**.
7. Select the export connector name, click the **Delete** button, and then click **Close**.

Remove the Export Connector from the computer

Before removing the Export Connector from your computer, remember to remove it from [Tungsten Capture](#), [Tungsten Express](#), and [Tungsten TotalAgility](#), as applicable.

You can use the **Control Panel** options to remove the Export Connector, or you can follow these instructions:

1. Run the .msi file that you used to install the Export Connector.
When the existing installation is detected, the **Program Maintenance** window appears.
2. Select **Remove**, and then click **Next**.
3. Follow the on-screen instructions to remove the Export Connector.
When the removal is complete, a message appears to indicate the Export Connector was successfully removed.

Repair the export connector


You can use the repair process to replace missing, renamed, or deleted export connector files.

1. Run the .msi file that you used to install the export connector.
When the existing installation is detected, the **Program Maintenance** window appears.
2. Select **Repair**, and then click **Next**.
3. Follow the on-screen instructions to repair the export connector.
When complete, a message appears to indicate the export connector was successfully repaired.

Chapter 3

Export Connector Setup

This chapter gives you instructions for accessing the export connector setup window for Tungsten Capture, Tungsten Express, or Tungsten TotalAgility. Use the setup window to specify export settings to control how documents, folders, and other information are exported to the IBM FileNet Content Manager object store.

 For more details about the setup options, refer to the online Help available from the Tungsten Export Connector for IBM FileNet Content Manager Export Setup window.

Use Tungsten Capture to Set up the Export Connector

Once you have associated a document class with a batch class in Tungsten Capture, set up the export connector for exporting your images, OCR full text files, Tungsten AutomationTungsten PDF documents, eDocuments, and index data.

To export to IBM FileNet Content Manager, the logged-in user must have the following:

- Valid IBM FileNet Content Manager user name and password
- Permissions to create new objects and modify existing objects
- Permissions to connect to the IBM FileNet Content Manager object store

Contact your IBM FileNet Content Manager administrator for assistance.

1. Start the Tungsten Capture Administration module.
2. On the **Definitions** panel, click the **Batch** tab.
A context menu appears.
3. Select a batch class and expand it to view the associated document classes.
4. Right-click the applicable document class to open a context menu, and click **Export Connectors**.
The **Export Connectors** window appears.
5. On the Available **Export Connectors** list, select **IBM FileNet Content Manager** and click **Add**.
The **IBM FileNet Content Manager Login Information** window appears.
6. Enter your IBM FileNet Content Manager user name and password.
7. Enter your IBM FileNet Content Manager site URL. The Export Connector supports the following format:

```
http(s)://<Server name>:<Port number>/wsi/<Folder containing FileNet Web Service>
```

Example:

`http://MyServerName:9080/wsi/FNCEWS40MTOM/`

`https://MyServerName.MyDomainName.com:9443/wsi/FNCEWS40MTOM/`



- If you plan to connect via HTTPS, make sure a trusted certificate is installed.
- The Tungsten Export Connector for IBM FileNet Content Manager supports the MTOM Web service, which is compatible with .NET 4.8.

The server name is not case-sensitive. The segment after the port number is case-sensitive.

The login information is used to log on to the IBM FileNet Content Manager object store. This information is saved and used during export.

- To prompt for a user ID and password if the export connector is not able to log on to IBM FileNet Content Manager at export time, select the **If unable to log in during export, prompt for valid login information** check box.
 - If selected, and a problem with logging on to the export connector occurs, the IBM FileNet Content Manager Login Information window appears during export. The user may then enter a valid user name and password, and click **OK**. However, if the user clicks **Cancel**, the export fails and the batch is routed to the Tungsten Capture Quality Control module.
 - If not selected, and problems occur when logging on to the export connector, the IBM FileNet Content Manager Login Information window does not display during export. Export fails and the batch is routed to the Tungsten Capture Quality Control module.
- Click **OK**.
The setup window appears.
- On the setup window, configure the settings on each tab. Click **Help** on any tab for details about individual settings.
- When you finish with the setup window, click **OK**.

Use Tungsten Express to Set up the Export Connector

- Start Tungsten Express.
- On the **Job Setup** tab, in the **Export** group, in the **Connector** list, click **IBM FileNet Content Manager**.
- Click the setup tool.
The **IBM FileNet Content Manager Login Information** window appears.
- Enter your IBM FileNet Content Manager user name and password.
- Enter your IBM FileNet Content Manager site URL. The Export Connector supports the following format:

`http(s)://<Server name>:<Port number>/wsi/<Folder containing FileNet Web Service>`

Example:

`http://MyServerName:9080/wsi/FNCEWS40MTOM/`

`https://MyServerName.MyDomainName.com:9443/wsi/FNCEWS40MTOM/`



- If you plan to connect via HTTPS, make sure a trusted certificate is installed.
- The Tungsten Export Connector for IBM FileNet Content Manager supports the MTOM Web service, which is compatible with .NET 4.8.

The server name is not case-sensitive. The segment after the port number is case-sensitive.

The login information is used to log on to the IBM FileNet Content Manager object store. This information is saved and used during export.

6. To prompt for a user ID and password if the Export Connector is not able to log in to IBM FileNet Content Manager at export time, select **If unable to log in during export, prompt for valid login information**.
 - If selected, and a login issue occurs, the IBM FileNet Content Manager Login Information window appears during export. The user may then enter a valid user name and password, and click **OK**. However, if the user clicks **Cancel**, the export process is aborted.
 - If not selected, and a login issue occurs, the IBM FileNet Content Manager Login Information window does not appear during export, and the export process is aborted.
7. In the setup window, configure the settings on each tab. Click **Help** on any tab for details about individual settings.
8. When you finish with the setup window, click **OK**.

Use Tungsten TotalAgility to Set up the Export Connector

1. On the **Export Connector Configuration** screen, click **Setup**.
2. On the **Export Connectors - Setup** screen, select the process to use for exporting document types to IBM FileNet Content Manager.
3. Select a document type to associate with the selected process, and click **Add**.
4. Click **Connectors**.

A new screen appears.
5. On the **Available Export Connectors** list, select **IBM FileNet Content Manager** and click **Add**.

Your selection is moved to the **Assigned Export Connectors** list, and the Export connector setup window appears.

The **IBM FileNet Content Manager Login Information** window appears.
6. Enter your IBM FileNet Content Manager user name and password, which are case-sensitive.
7. Enter your IBM FileNet Content Manager site URL. The Export Connector supports the following format.

```
http(s)://<Server name>:<Port number>/wsi/<Folder containing FileNet WebService>
```

Example:

```
http://MyServerName:9080/wsi/FNCEWS40MTOM/
```

```
https://MyServerName.MyDomainName.com:9443/wsi/FNCEWS40MTOM/
```



- If you plan to connect via HTTPS, make sure a trusted certificate is installed.
- The Tungsten Export Connector for IBM FileNet Content Manager supports the MTOM Web service, which is compatible with .NET 4.8. The server name is not case-sensitive. The segment after the port number is case-sensitive. The login information is used to log in to the IBM FileNet Content Manager object store. This information is saved and used during export.

8. To prompt for a user ID and password if the export connector is not able to log in to IBM FileNet Content Manager at export time, select **If unable to log in during export, prompt for valid login information**.
 - If selected, and a login issue occurs, the **IBM FileNet Content Manager Login Information** window appears during export. The user may then enter a valid user name and password, and click **OK**. However, if the user clicks **Cancel**, the export process is aborted.
 - If not selected, and a login issue occurs, the **IBM FileNet Content Manager Login Information** window does not appear during export, and the export process is aborted.



Do not select this check box if you plan to run **Export** as a service, or if you plan to run the **Export** process during off-hours. The **IBM FileNet Content Manager Login Information** window requires a user response (or operator intervention).

9. In the setup window, configure the settings on each tab. Click **Help** on any tab for details about individual settings.
10. When you finish with the setup window, click **OK**.
11. Save the Export Connector mappings to the document type and the process.

Viewing IBM FileNet Content Manager Data in Export Setup

All IBM FileNet Content Manager information is refreshed in export setup when you log in to the export connector. This includes the available object stores, document classes, document properties, folder classes, folder properties, and existing folders. Also, whenever you select an object store in export setup, available document classes, folder classes, and existing folders are refreshed. In addition, whenever you select a class in export setup, the document and folder properties are refreshed. However, if document or folder properties are modified in IBM FileNet Content Manager after the first time a class is selected, you must log out of the export connector and log back in to see the latest properties.

IBM FileNet Content Manager Permissions

This section gives you a quick reference for setting up permissions in IBM FileNet Content Manager.

Refer to the documentation that came with your IBM FileNet Content Manager product for more details about permissions.


Adding Access Permissions to the IBM FileNet Content Manager Domain

You can easily allow or deny access permissions to the IBM FileNet Content Manager domain. The instructions are simply the security permissions that you can add to a particular node. The "P8Users" accounts indicate the users/groups that have been granted the appropriate permissions to access a particular node in the IBM FileNet Content Manager domain.

Recommended Permissions

To use IBM FileNet Content Manager and this export connector, we recommend that the logged-in users have the following permissions to the IBM FileNet Content Manager object store. If the user does not have the appropriate permissions assigned, an error is logged at export and the documents are rejected.

Refer to the documentation that came with your IBM FileNet Content Manager product for more details about permissions.

 IBM FileNet Content Manager group permissions override individual user permissions. In addition, documents do not inherit permissions from their parents when using the export connector.

FileNet Content Manager Domain

To log on to the export connector, the logged-in user must be a member of the IBM FileNet Content Manager domain.

FileNet Content Manager Object Store

To access a IBM FileNet Content Manager object store in export setup, you must select an object store to which the logged-in user has the appropriate authorization to connect. If you select an object without proper authorization, you receive an error message prompting you to select an object store that you have the appropriate permissions to access.

Create Folders

To create folders, you must have permission to access the IBM FileNet Content Manager object store. In addition, you must have permissions to create new objects and modify existing objects on the object store. This allows new folders to be created to organize the objects in the object store. If you do not have the necessary permissions, an error is logged at export and the documents are rejected. No validation is performed during export setup, to ensure that you have the appropriate permissions to create folders on the selected object store.

You must also have the following security rights to use the folder class:

- View all properties
- Modify all properties
- Create instance
- Read permission

Export Documents

To export documents, you must have permission to access the IBM FileNet Content Manager object store. In addition, you must have permissions to create new objects and modify existing objects on the object store to allow documents to be exported to IBM FileNet Content Manager. If you

do not have the necessary permissions, an error is logged at export time and the documents are rejected. No validation is performed during export setup, to ensure that you have the appropriate permissions to export documents to the selected object store.


You must also have the following security rights to use the FileNet Document Class:

- View all properties
- Modify all properties
- Create instance
- Read permission

Export Connector Behavior

The IBM FileNet Content Manager permissions may behave differently in this export connector than in the IBM FileNet Content Manager Workplace Thin Client. For example, if you give access permissions to the User-defined Document Class node and do not give access to the Document Class node (also known as the system class node in IBM FileNet Content Manager), the export fails with an error.

When permissions are denied to the Document Class node, the IBM FileNet Content Manager system denies access to all the subclasses below the Document Class node in the hierarchy. This problem occurs because the export connector uses a different API set than IBM FileNet Content Manager. Notice that you do not see this behavior in the IBM FileNet Content Manager Workplace Thin Client.

 If information is changed in IBM FileNet Content Manager while export setup is open, the export connector does not reflect the latest changes. Therefore, you must log out of the export connector and log back in for the changes to take effect. When adding and/or removing domain users, you may need to stop and restart the Content Engine Object Store service on the Content Engine Server to see the latest changes.

Chapter 4

Information for Export Connector users

This chapter contains additional information that applies when you use the Tungsten Export Connector for IBM FileNet Content Manager.

Binary and Object Properties Not Supported

This export connector does not support IBM FileNet Content Manager document classes or folder classes that contain the Binary or Object properties. Note the following:

- If Binary and/or Object properties are not required and are part of the selected document or folder class, the properties are hidden.
- If Binary and/or Object properties are required and are part of the selected document or folder class, you receive an error message at export setup when you attempt to select the document or folder class. In addition, you are not able to select the document or folder class.

File Name Retention Feature

The File Name Retention feature is used to retain the original imported file name. This feature is supported in both Tungsten Capture and Tungsten TotalAgility.

To use the File Name Retention feature with Tungsten Capture, you must do the following:

- Set the Original file name support property to True in the export connector (`SupportsOriginalFileName=TRUE`). This is the default setting.


This property is defined in `Tungsten.FileNet.Export.inf` in your Tungsten Capture installation (for example, `C:\Program Files\Tungsten\CaptureSS\ServLib\Bin\Tungsten.IBM.FN.CM\Kofax.FileNet.Export.inf`).

- Select the **Use the original file name of image and eDocument files** check box on the Export Properties window in the Tungsten Capture Export module.

For more information about the Export Properties window, refer to *Tungsten Capture Help*.

To use the File Name Retention feature with Tungsten TotalAgility, you only need to ensure that the Original file name support property is set to True in the `Kofax.FileNet.Export.inf` configuration file. This is enabled by default.

When the preceding properties are set correctly, all the files retain their original file name upon export.

 This feature is not currently supported in Tungsten Express.

Behavior of the Original file name support Property

This section describes how pages in a document are exported to IBM FileNet Content Manager.

For demonstration, let's say that you are exporting the following four–page document:

Document1

Page 1: EngDoc.xml

Page 2: <unnamed> TIF

Page 3: PubDoc.pdf

Page 4: SQADoc.tif

The following table illustrates how the pages are exported to IBM FileNet Content Manager.

Supports Original File Name Property	Multipage Image Type		Single Page Image Type		Tungsten PDF Image Type	
	OCR	No OCR	OCR	No OCR	OCR	No OCR
TRUE	{Doc ID}.tif* EngDoc.xml PubDoc.pdf 1.txt	{Doc ID}.tif* EngDoc.xml PubDoc.pdf	EngDoc.xml 1.tif PubDoc.pdf SQADoc.tif 1.txt	EngDoc.xml 1.tif PubDoc.pdf SQADoc.tif	{Doc ID}.pdf* EngDoc.xml PubDoc.pdf 1.txt	{Doc ID}.pdf* EngDoc.xml PubDoc.pdf
FALSE	{Doc ID}.tif* 1.xml 2.pdf 1.txt	{Doc ID}.tif* 1.xml 2.pdf	1.xml 2.tif 3.pdf 4.tif 1.txt	1.xml 2.tif 3.pdf 4.tif	{Doc ID}.pdf* 1.xml 2.pdf 1.txt	{Doc ID}.pdf* 1.xml 2.pdf

Legend

* {Doc ID} is an abbreviation for document ID.

When exporting documents to the IBM FileNet Content Manager object store, there is a one-to-one correspondence between the document's pages and the content elements. Therefore, one document is exported that contains content elements for each image, OCR Full Text file, Tungsten PDF document, and/or eDocument.

The following applies when the document is exported with the SupportsOriginalFileName property set to TRUE:

- If the content element has been scanned (such as the <unnamed> TIFF image in the 4–page document), the content element is exported with the appropriate file extension as specified

by the image type. However, the content element file name uses the {Document ID} value. The {Document ID} is a unique, sequential number associated with the page and assigned by Tungsten Capture.

- If the content element has been imported, the content element retains the original file name and file extension.

If the document is exported with the Original file name support property set to FALSE, each content element contained within the document is exported with the file name assigned by Tungsten Capture.

Notice that when the INF setting or the Tungsten Capture Export module is not set, the export connector does not use the File Name Retention feature. In addition, OCR full text files and Tungsten PDF documents exported from Tungsten Capture do not use the File Name Retention feature, regardless of the configuration.

 The SupportsOriginalFileName property is not case-sensitive.

File Name Considerations

If the File Name Retention feature is enabled, problems may develop when a new input file has the same name as a pre-existing file.

When exporting new input files with the File Name Retention feature enabled, the Export module checks the batch to see if pre-existing image files (including eDocuments) have the same name as the new input file. Each document in the batch is checked to avoid duplicate file names. If a match is found, the new input file is rejected and the following error message may appear:

```
A duplicate file name was encountered: <FileName>.
```

Duplicate File Names

The following case scenarios explain how a new image file may have the same name as a pre-existing file when the File Name Retention feature is enabled.

Case 1

When pages in an image file have been scanned, the file is named with a sequential number that is assigned by Tungsten Capture, Tungsten Express, or Tungsten TotalAgility. However, if the document already contains an imported file that used a similar file naming scheme (for example, 1.tif or 2.tif), the new scanned image file may match the name of the imported file.

To illustrate, suppose that you scanned the following pages into a document:

- 1.tif
- 2.tif
- 3.tif
- 4.tif
- 5.tif

The document already contains the following imported files:

- 1.tif

- 2.tif
- 3.tif

Now, the document contains the following:

- 1.tif
- 2.tif
- 3.tif
- 1.tif
- 2.tif
- 3.tif
- 4.tif
- 5.tif

At export time, the Export module checks the document for duplicate file names. The Export module finds 1.tif, 2.tif, and 3.tif as duplicate files and the document is rejected.

Case 2

When a multi-page image file has been imported and you are exporting single page image types, all of the pages in the document have the same file name.

To explain, suppose that you import the following multi-page image document:

1.tif

At export setup, you choose to export the document as a single page image type. The multi-page image document contains four pages. At export time, Tungsten Capture, Tungsten Express, or Tungsten TotalAgility processes each page in the document as a single page image type. Notice that each page within the document has the same file name.

1.tif

1.tif

1.tif

1.tif

The Export module checks the document for duplicate file names and the document is rejected.

Case 3

If the same file is imported more than once, then the files have the same file name.

For example, suppose that you imported the same file three times. The document contains the following:

1.tif

1.tif

1.tif

At export time, the Export module checks the document for duplicate file names and the document is rejected.

To resolve the problem, delete the rejected documents and rescan and/or reimport the files and export with a different file name.

OCR Full Text Options (Tungsten Capture only)

The table below provides a reference for exporting images when using OCR full text files. Note the following:

- One document is exported that contains content elements for each image, eDocument, PDF document, and/or OCR full text file.
- The OCR full text file is always the last content element exported.
- All images are listed in the order that they are scanned or imported from Tungsten Capture.
- To export eDocuments, you must select the **Allow import of eDocument files** setting on the Batch Class Properties window.
- To export OCR full text files, you must select the **Export OCR file with document** option on the Image Settings tab. In addition, you must enable OCR full text processing in your applicable document class and add the OCR Full Text module to your applicable batch class.

Image Type	eDocument	Export Result
Multi-page image	No	Exports one document that contains a content element for the multipage image and a content element for the OCR full text file.
	Yes	Exports one document that contains a content element for the multipage image, a content element for each of the eDocuments, and then the OCR full text file is the last content element. All images are listed in the order that they are scanned or imported. The OCR full text file is always the last content element exported.
Single page image	No	Exports one document that contains a content element for each single page image and a content element for the OCR full text file.

Image Type	eDocument	Export Result
	Yes	Exports one document that contains a content element for each single page image, a content element for each of the eDocuments, and then the OCR full text file is the last content element. All images are listed in the order that they are scanned or imported. The OCR full text file is always the last content element exported.
PDF image	No	Exports one document that contains a content element for the PDF image and a content element for the OCR full text file.
	Yes	Exports one document that contains a content element for the PDF image, a content element for each of the eDocuments, and then the OCR full text file is the last content element. All images are listed in the order that they are scanned or imported. The OCR full text file is always the last content element exported.