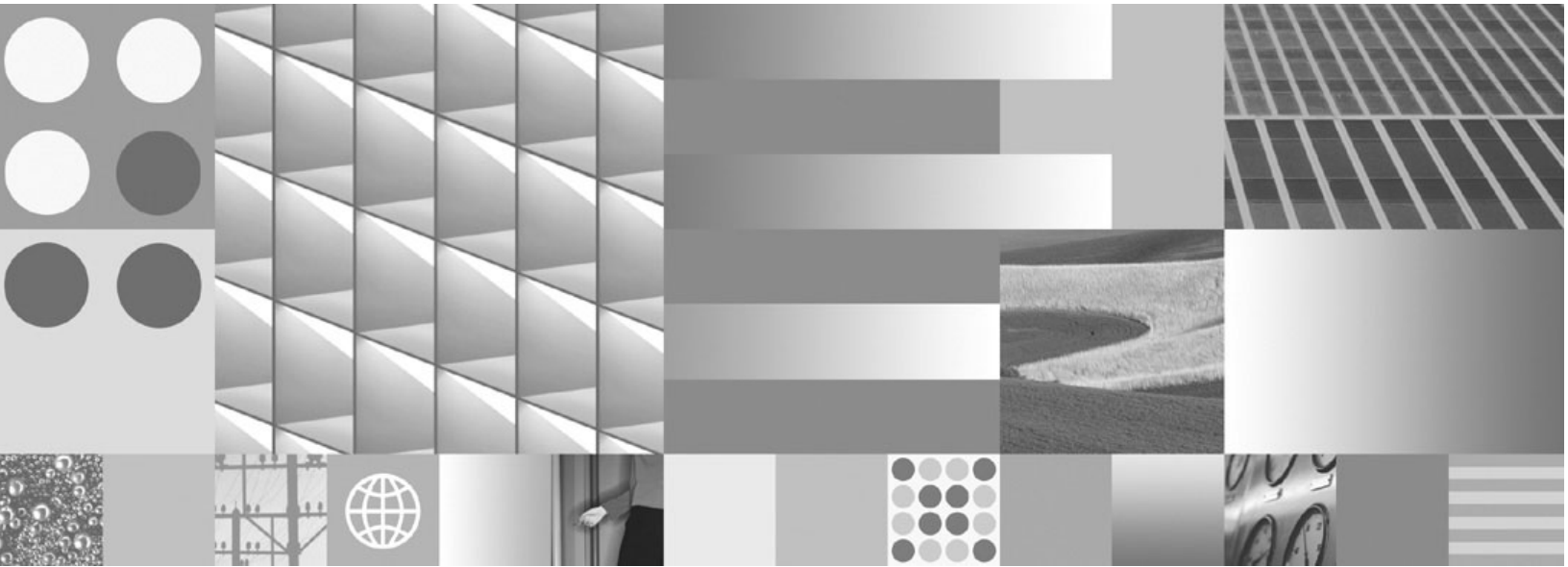


## Installation and Upgrade Guide





## Installation and Upgrade Guide

**Note**

Before using this information and the product it supports, read the information in "Notices" on page 137.

This edition applies to version 1.1.3.0 of IBM FileNet Workplace XT (product number 5724-R76) and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Revision Log

The following table identifies changes made to this document since the IBM® FileNet® Workplace XT initial release.

Date	Revision
07/09	<p>Adds Process Engine REST services information.</p> <p>Corrects deployment procedures on WebSphere Application Server.</p> <p>Updates for documentation defects.</p>
12/08	<p>Updates for documentation defects.</p>
11/08	<p>Documentation updates for the IBM FileNet Workplace XT 1.1.3 release.</p> <p>Removes Installation Planning sections. These topics and tasks have been added to the <i>Plan and Prepare your Environment for IBM FileNet P8</i> guide.</p> <p>Adds procedures for installing the Content Engine Client file updates. See <a href="#">“Install the latest Content Engine Client files on Workplace XT servers” on page 33</a>.</p> <p>Adds the topic <a href="#">“Install Application Integration BCS for Microsoft Office (Workplace XT)” on page 91</a>.</p> <p>Expands the upgrade section to include all applicable topics inline.</p>
06/08	<p>Adds the following subtopics to the topic <a href="#">“Review the installation considerations” on page 18</a>:</p> <ul style="list-style-type: none"> <li>• <a href="#">“Security considerations” on page 18</a></li> <li>• <a href="#">“Accessibility considerations” on page 18</a></li> <li>• <a href="#">“Non-English considerations” on page 18</a></li> </ul> <p>Adds procedure for installing Process Engine Client file updates. See <a href="#">“Install the latest Process Engine Client files on Workplace XT servers” on page 36</a>.</p> <p>Adds procedures for upgrading Workplace XT on JBoss. See <a href="#">“Upgrade IBM FileNet Workplace XT” on page 103</a>.</p>

Date	Revision
11/07	<p>Adds upgrade topics <a href="#">“Upgrade IBM FileNet Workplace XT” on page 103</a> and <a href="#">“Upgrade multiple instances of IBM FileNet Workplace XT” on page 123</a>.</p> <p>Adds JBoss application server topics <a href="#">“Configure IBM FileNet Workplace XT (JBoss)” on page 55</a>, <a href="#">“Deploy IBM FileNet Workplace XT (JBoss)” on page 67</a>, and <a href="#">“Remove IBM FileNet Workplace XT (JBoss)” on page 129</a>.</p> <p>Adds procedures for using WebSphere 6.1.x. See <a href="#">“Configure IBM FileNet Workplace XT (WebSphere)” on page 39</a> and <a href="#">“Deploy IBM FileNet Workplace XT (WebSphere)” on page 62</a>.</p> <p>Adds directions for using JAWS screen reader for the setup program in <a href="#">“Install IBM FileNet Workplace XT” on page 21</a>.</p>
10/07	<p>Adds information about moving from WAR file to EAR file deployment in <a href="#">“Installation Checklists” on page 16</a> and <a href="#">Task 3 “Install IBM FileNet Workplace XT” on page 21</a>.</p> <p>Moves the "Set permissions for the user running the application server" to <a href="#">Task 8a “Deploy IBM FileNet Workplace XT (WebSphere)” on page 62</a> and <a href="#">Task 8b “Deploy IBM FileNet Workplace XT (WebLogic)” on page 65</a>.</p> <p>Adds accessibility keyboard tip to <a href="#">Task “Install IBM FileNet Workplace XT Application Integration” on page 83</a>.</p> <p>Corrects a few instances of incorrect references to Workplace instead of Workplace XT.</p>
06/07	Initial release of the <i>IBM FileNet Workplace XT Installation Guide</i> .



## About this document

This document provides installation and upgrade information about IBM FileNet Workplace XT.

Topics in this document apply specifically to IBM FileNet Workplace XT installation tasks. Information about preparing the FileNet P8 Platform environment before you start these installation tasks is in the *Plan and Prepare Your Environment for IBM FileNet P8* document.

To download these documents from the IBM FileNet support Web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).

## Intended audience

This document is intended for software professionals who install IBM FileNet P8 Platform. IBM recommends that an IBM FileNet Certified Professional (FCP) perform the installation. For more information about the FCP program, contact your IBM service representative.

## Typographical conventions

This document uses the following typographical conventions:

Convention	Usage	Example
<b>Bold</b>	Platform-specific headings	Start the application server. <b>WebSphere</b> Refer to IBM WebSphere documentation for more information. <b>WebLogic</b> Refer to BEA WebLogic documentation for more information.
<b>Gray bold</b>	Clickable items, such buttons, and tabs.	Click <b>OK</b> .
	Menu paths or breadcrumb trails.	Select <b>Start &gt; Settings &gt; Control Panels &gt; Display &gt; Screen Saver</b> .
<i>Italics</i>	Variables that require user-supplied values	The calculation is: <i>number of object stores * 16 + number of concurrent users</i> .
	Document titles	You are reading the <i>IBM FileNet P8 Platform Installation and Upgrade Guide</i> .
Monospace	Text that has to be typed by the user	Copy the file by entering the following command:  <code>COPY filename</code>
	Code samples	Find the following text in the web.xml file:  <code>&lt;context-param&gt;&lt;param-name&gt;uploadDir&lt;/param-name&gt;&lt;param-value&gt;/opt/FileNet/AE/Upload1&lt;/param-value&gt; &lt;/context-param&gt;</code>
	Display text, such as prompts and error messages	Are you sure you want to delete this object? You do not have permission to delete this object.
	Elements such as filenames, properties, classes and so on, whose meaning might get confused in regular text.	Open the <code>filed</code> file. Enter a value for the <code>new</code> property. Select the <code>senior</code> class.

Convention	Usage	Example
“Text with quotation marks”	User-interface fields that do not use initial capitalization and document headings referenced within a document	See the “Part number” field for the part number.  For more information, see <a href="#">“Typographical conventions” on page 10</a> .
UPPERCASE	Case-sensitive text, where uppercase text is required.	Copy the file by entering the following command:  <code>COPY filename</code>

## Acronyms

This document uses the following IBM FileNet product names and acronyms.

Product Name	Acronyms
Application Engine	AE
Content Engine	CE
Content Search Engine	CSE
Enterprise Manager	EM
Global Configuration Data	GCD
Process Engine	PE

## About IBM FileNet documentation

By default, this document is distributed as part of the *IBM FileNet P8* help system, but it is also available as a downloadable document from the IBM support Web site. Newer versions of *IBM FileNet P8* documentation are sometimes re-released with other events, such as fix pack releases or documentation refreshes. To ensure that you have the latest revision of a document, compare the document part number of your document to the document part number of the document that is posted on the support Web site:

[www.ibm.com/support/docview.wss?rs=3278&uid=swg27010422](http://www.ibm.com/support/docview.wss?rs=3278&uid=swg27010422)

For example, the last two digits of “GC31-5585-05” indicate that the specified document has been revised five times after the original publishing, which is designated by 00.

### ***Copy Web documents into the help system and make them searchable***

The IBM FileNet P8 help system is designed so that you can download updated copies of this document and copies of other IBM FileNet documents into the *IBM FileNet P8* help system and index them so that they can be retrieved by a search in the help system. However, to search the *IBM FileNet P8* help system, it must be installed as a Web site on a Web server that supports Java™ applications.

For more information, see:

- [“Other available documentation” on page 14](#)
- [“Install the IBM FileNet Workplace XT documentation on the application server” on page 20](#)

### ***Links to additional information***

To help you locate additional information about a topic, this document includes links to:

- Other locations in this document
- External Web sites
- Topics in the FileNet P8 help system

Because this document is included in the default FileNet P8 help system, the links to the FileNet P8 help topics work only when you view this document from within the help system. If you view this document from outside of the help system, the links to FileNet P8 help topics do not work.

## Gather reference documentation

Following are two tables with information about the IBM FileNet P8 documents that are available as part of the FileNet P8 release. To download these documents from the IBM FileNet support Web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14.](#)

### Installation reference documents

Consider having one or more of the following documents (or help topics) nearby for reference purposes during the installation of IBM FileNet P8 Platform.

Document or help topic name...	Refer to this document...
<i>Plan and Prepare Your Environment for IBM FileNet P8</i>	To confirm the target environment is ready for a FileNet P8 installation or upgrade.
<i>Hardware and Software Requirements</i>	To confirm that the target environment has at least the minimum supported levels of software from independent software providers.
<i>Compatibility Matrix</i>	To confirm that the version of FileNet P8 to be installed is compatible with at least the minimum supported levels of other FileNet products that are or will be used with FileNet P8.
<i>Release Notes</i>	To familiarize yourself with the new features and known issues associated with the FileNet P8 release.
<i>Installing in Non-English Environment Technical Notice</i>	For information about how FileNet P8 supports non-English environments.
<i>High Availability Technical Notice</i>	For information about how to set up FileNet P8 using clusters, farms and other high-availability software and hardware.
<i>Planning and Deployment Guide</i>	For information about deploying a FileNet P8 system from one environment to another.
<i>Performance Tuning Guide</i>	For tuning tips that might affect a FileNet P8 installation.
<i>Troubleshooting Guide</i>	For troubleshooting tips associated with a FileNet P8 Installation.
<i>IBM FileNet P8 help topic:</i> <b>Administration &gt; Enterprise-wide Administration &gt; FileNet P8 Security &gt; Users and Groups</b>	For a complete list of the user and group roles, accounts, and responsibilities required to install, configure, and maintain a FileNet P8 system.
<i>IBM FileNet P8 help topic:</i> <b>Administration &gt; Enterprise-wide Administration &gt; Shutdown and Startup</b>	For information about how to shut down and start up FileNet P8 and any expansion products.

### Other available documentation

Review the list of remaining FileNet P8 documents that you can download from the FileNet support Web site.

Document name	Refer to this document...
<i>System Overview</i>	For a technical summary of the FileNet P8 architecture, including a overview of features and capabilities.
<i>Planning and Deployment Guide</i>	For information about how to move FileNet P8 from one environment to another.
<i>Disaster Recovery Technical Notice</i>	For information about potential options and solutions involved in a FileNet P8 disaster recovery plan.
<i>Process Task Manager Advanced Usage Technical Notice</i>	For information about properties found under the <b>Advanced</b> tab in Process Task Manager.
<i>Version Tools Technical Notice</i>	For information about the set of versions tools that are installed with FileNet P8 Platform and that identify the levels of AE, CE, and PE in a FileNet P8 environment.
<i>Security Help Extract</i>	For security-related information from the FileNet P8 help system in PDF format.
<i>Rendition Engine Installation and Upgrade documents</i>	For information about how to install RE in a FileNet P8 environment.

### Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs

To access documentation, compatibility matrices, and fix packs for IBM FileNet products:

1. Navigate to the Product Documentation for FileNet P8 Platform support page. (<http://www.ibm.com/support/docview.wss?rs=3247&uid=swg27010422>).
2. Select a PDF or a Doc Link, whichever is appropriate.

## Customer support

For information about contacting customer support:

1. Navigate to the FileNet Product Family support page:  
(<http://www-01.ibm.com/software/data/content-management/filenet-product-family/support.html>).
2. Click **IBM FileNet Support Communications**, or search for a particular support topic under “Enter search terms”.

### *Feedback*

Your feedback helps us to provide quality information. Send your comments about this publication or any other IBM FileNet documentation by e-mail to [comments@us.ibm.com](mailto:comments@us.ibm.com). Be sure to include the name of the product, the version number of the product, and the name and part number of the book (if applicable). If you are commenting on specific text, include the location of the text (for example, a chapter and section title, a table number, a page number, or a help topic title).

## *Installation procedures*

This installation section contains the following major topics:

- [“Installation tasks” on page 17](#)
- [“Configuration and startup tasks” on page 70](#)
- [“Optional installation tasks” on page 82](#)



# Installation tasks

## To install, configure, and deploy IBM FileNet Workplace XT

---

1. Review the installation considerations for IBM FileNet Workplace XT. Do [Task 1 on page 18](#).
2. Install the IBM FileNet P8 Platform documentation for your application server. Do [Task 2 on page 20](#).
3. Install IBM FileNet Workplace XT. Do [Task 3 on page 21](#).
4. Install any available IBM FileNet Workplace XT software updates. Do [Task 4 on page 32](#).
5. Install any available Content Engine Client updates. Do [Task 5 on page 33](#).
6. Install any available Process Engine Client updates. Do [Task 6 on page 36](#).
7. Configure IBM FileNet Workplace XT. Do one of the following:
  - [Task 7a on page 39](#) (WebSphere)
  - [Task 7b on page 47](#) (WebLogic)
  - [Task 7c on page 55](#) (JBoss)
8. Deploy IBM FileNet Workplace XT. Do one of the following:
  - [Task 8a on page 62](#) (WebSphere)
  - [Task 8b on page 65](#) (WebLogic)
  - [Task 8c on page 67](#) (JBoss)

## Task 1: Review the installation considerations

This section lists considerations to keep in mind for the installation of IBM FileNet Workplace XT. Review this section thoroughly before you start to set up IBM FileNet Workplace XT.

### *Planning considerations*

The planning and preparation tasks required for the installation of IBM FileNet Workplace XT are included in the *Plan and Prepare your Environment for IBM FileNet P8* guide. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).

### *Security considerations*

If you are using Federal Desktop Core Configuration (FDCC) security settings on Vista, and you plan to use File Tracker, the security administrator must specify the Workplace XT application server as a trusted site in the group policy.

### *Application server considerations*

Workplace XT supports container-managed environments only. Follow the instructions in this guide to install Workplace XT in a container-managed environment.

### *Accessibility considerations*

For an accessible install process of IBM FileNet Workplace XT, follow the procedures provided for the silent install method, [“To install IBM FileNet Workplace XT silently:” on page 22](#).

Silent installation is also available for Application Integration and File Tracker. See the following for details:

- [“To install the Application Integration software silently” on page 84](#)
- [“To install the File Tracker software silently” on page 89](#)

If you plan to use the JAWS screen reader for the IBM FileNet Workplace XT setup program, see the **“NOTES”** at the beginning of the topic [“Install IBM FileNet Workplace XT” on page 21](#) for necessary configuration steps.

In addition, the topic [“Install IBM FileNet Workplace XT Application Integration” on page 83](#) provides a Keyboard Tip for alternative navigation in the interface.

### *Non-English considerations*

Releases prior to IBM FileNet Workplace XT 1.1.2.0 required language packs to provide a translated user interface. Workplace XT 1.1.3.0 does not require language packs and includes the multilingual user interface files, so a separate installation step is not required to install the translated version.

For more information about available languages, translated user interface, display settings, and functionality related to localized components, see the *IBM FileNet P8 Non-English Support Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).

## Task 2: Install the IBM FileNet Workplace XT documentation on the application server

Before you install IBM FileNet Workplace XT, ensure that at least version 4.0.2-001 of the IBM FileNet P8 Platform documentation is installed on your IBM FileNet P8 documentation server. Version information is available in the IBM FileNet P8 help topic [Help Directory > About the documentation - IBM FileNet P8 4.0](#). Click the **Documentation version and build information** link for details.

To update your IBM FileNet P8 Platform documentation, download the zip file from the IBM Information Management support page ([www.ibm.com/software/data/support/](http://www.ibm.com/software/data/support/)). For details on locating the appropriate files, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on [page 14](#).

IBM recommends that you copy the PDF of this guide into the `ecm_help/installation/WorkplaceXT` install directory on the documentation server before you re-index for the search function. That way, the guide is available for future use and is searchable from the IBM FileNet P8 Documentation online help.

### To install Workplace XT documentation

---

Because IBM FileNet Workplace XT is an expansion product for IBM FileNet P8 Platform, you must add the associated Workplace XT documentation to an existing installation of the *IBM FileNet P8 Platform Help*. This action makes Workplace XT help available to your users and enables context-sensitive help from the product user interface.

For details and instructions on installing expansion product documentation, see the *IBM FileNet P8 Platform Installation and Upgrade Guide*. Pay special attention to the *Install Expansion Product Documentation* subtopic in the task *Install IBM FileNet P8 Platform Documentation (your application server)*. To download this and other IBM FileNet product documentation from the IBM web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on [page 14](#).

## Task 3: Install IBM FileNet Workplace XT

This task includes IBM FileNet Workplace XT installation instructions for all supported application servers, for UNIX and Windows platforms. The installer creates the IBM FileNet Workplace XT folder structure and files needed for Workplace XT. After installing the files, and any necessary updates, you must also configure and deploy the Workplace XT application. These procedures are available in subsequent topics.

### Before you install IBM FileNet Workplace XT

---

Read “[Review the installation considerations](#)” on page 18, and “[Security considerations](#)” on page 18, and make sure your installation location meets the requirements specific for IBM FileNet Workplace XT outlined in the *IBM FileNet P8 Hardware and Software Requirements*. To download this and other IBM FileNet product documentation from the IBM web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on page 14.

### NOTES

- To ensure proper functionality, performance, and ongoing maintenance, IBM FileNet Workplace XT should only be installed once per application server (or virtual machine or AIX LPAR). You can, however, deploy multiple instances of a single IBM FileNet Workplace XT version per application server.
- If you plan to use JAWS screen reader for the setup program, you must perform the following tasks before you begin the Workplace XT install:
  - a. Ensure that the Sun Java JRE 1.5.0 or 1.5.x is installed on the system where you will be performing the install.
  - b. Install the Java Access Bridge (available at <http://java.sun.com>).
  - c. Start the JAWS screen reader.
- Before logging on to Workplace XT for the first time, make sure at least one object store has been created on the Content Engine.
- If you plan to set up a web farm or clustered environment, in addition to these instructions, read and follow the instructions in the *IBM FileNet P8 Platform High Availability Technical Notice*. To download this and other IBM FileNet product documentation from the IBM web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on page 14.
- You must have installed and configured a supported application server for IBM FileNet Workplace XT.
- In the setup program, the version list for application servers includes versions that may no longer be supported. To confirm supported versions, check the *IBM FileNet P8 Hardware and Software Requirements*. To download this and other IBM FileNet product documentation from the IBM web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on page 14.

### To install the IBM FileNet Workplace XT software

---

1. Log in to the application server:

UNIX

Log in as a user with read, write, and execute access to the directory where you plan to install IBM FileNet Workplace XT.

**Windows**

Log in as a member of the local Administrators group or a user with equivalent permissions.

2. Start the installation process in one of the following ways, depending on whether you want to run in interactive or silent mode:
  - To install IBM FileNet Workplace XT interactively:
    - i. Access the IBM FileNet Workplace XT 1.1.3.0 installation software package.
    - i. Launch the appropriate Setup program and follow the prompts, as directed in the subsequent steps in this procedure:

Platform	Command
AIX	WorkplaceXT-1.1.3.2-AIX.bin
HPUX	WorkplaceXT-1.1.3.2-HPUX.bin
HPUXi	WorkplaceXT-1.1.3.2-HPUXi.bin
Linux	WorkplaceXT-1.1.3.2-LINUX.bin
Solaris	WorkplaceXT-1.1.3.2-SOL.bin
Windows	WorkplaceXT-1.1.3.2-WIN.exe
zLinux	WorkplaceXT-1.1.3.2-ZLINUX.bin

- ii. Continue with [Step 3 on page 23](#) below.
- To install IBM FileNet Workplace XT silently:
  - i. Access the IBM FileNet Workplace XT installation software package, and copy the `XT_silent_install.txt` file to a local directory.
  - ii. Follow the instructions in the silent input file to edit the values to reflect the appropriate responses for your installation.
 

**NOTE** Even if you accept all defaults in the `XT_silent_install.txt` file, you must edit the file to accept the license agreement (`-V licenseAccepted="true"`).
  - iii. From a command prompt, navigate to and run the installer, then continue with [Step 4 on page 30](#).

UNIX

```
./WorkplaceXT-1.1.3.0-operating_system.bin -options
"path_to_edited_input_file/XT_silent_install.txt" -silent
```

Windows

```
WorkplaceXT-1.1.3.0-Win.exe -options
"path_to_edited_input_file\XT_silent_install.txt" -silent
```

3. Complete the Workplace XT Installer screens. For information on parameter values, see ["Installation and upgrade worksheet"](#) on page 17 in *Plan and Prepare Your Environment for IBM FileNet P8*.

**HINT** With the Data > Filter > AutoFilter command enabled, as it is by default in the shipping worksheet file (`p8_worksheet.xls`), perform the following actions to quickly see only the installation properties you must specify for the Workplace XT installation program:

- Click the AutoFilter drop-down arrow in the "Installation or Configuration Program" column header and select WPXT installer.
- Click the AutoFilter drop-down arrow in the "Setup Type" column header, select Custom, and specify: Setup Type contains "Installation."
- Click the AutoFilter drop-down arrow in all other column headers and select (All).

Use the parameters from your installation preparation tasks to complete the installer screens, as follows:

In the screen for...	Perform this action...
----------------------	------------------------

Reading the license agreement

Review and accept the license agreement.

**NOTE** This screen appears only when you use the installer to perform a fresh install.

In the screen for...	Perform this action...
Specifying the installation path	<p>For the Installation path field, enter or browse to the location where you want to install the Workplace XT software &lt;install_path&gt;, or accept the default location:</p> <p>UNIX</p> <p>/opt/FileNet/WebClient/</p> <p>Windows</p> <p>C:\Program Files\FileNet\WebClient\</p> <p>The installation program installs the Workplace XT software in this path.</p> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• The installer will use the &lt;install_path&gt; to place a number of other files in default locations. See:             <ul style="list-style-type: none"> <li>– “Specifying the configuration directory” on page 27</li> <li>– “Specifying the log file location” on page 28.</li> <li>– “Configuring user token security” on page 29</li> </ul> </li> <li>• If you select a custom install path, follow the same directory structure as seen in a typical install and retain the /FileNet/WebClient part of the path.</li> </ul>
Verifying upgrade  <b>NOTE</b> This screen appears only when you use the installer to perform an upgrade.	<p>The installation program detects supported older versions of Workplace XT.</p> <p>If the installer reports that no supported version of Workplace XT exists on your server or if you don't want to upgrade your Workplace XT at this time, click <b>Cancel</b> to exit the installation program.</p>
Choosing an application server	<p>Select the application server and version from the drop-down lists. These choices must match your Content Engine application server.</p>



In the screen for...	Perform this action...
Configuring Content Engine API settings	<p>Configure the Content Engine API settings, as follows:</p> <ol style="list-style-type: none"> <li>a. Transport method           <p>Select EJB (Enterprise Java Beans) from the drop down list.</p> </li> <li>b. Content Engine Client software URL:           <p>Replace the sample server name and port number (<i>CEserver:2809</i>) with the Content Engine server name and port number for your Content Engine server.</p> <p><b>NOTE</b> To verify the correct port to use, navigate to the ports section on the application server where Content Engine is deployed and check the <code>BOOTSTRAP_ADDRESS</code> port.</p> <p><b>NOTE</b> To change the Content Engine name later, or to connect to a different Content Engine, edit the <code>WcmApiConfig.properties</code> file. For information, see the IBM FileNet P8 help topic <a href="#">FileNet P8 Administration &gt; Application Engine Administration &gt; Key configuration files and logs</a>.</p> </li> <li>c. Content Engine upload URL           <p>Replace the sample server name and port number (<i>CEserver:2809</i>) with the Content Engine server name and port number to use when uploading document content to the Content Engine server.</p> </li> <li>d. Content Engine download URL           <p>Replace the sample server name and port number (<i>CEserver:2809</i>) with the Content Engine server name and port number for your Content Engine server from which to download document content.</p> </li> </ol>

In the screen for...	Perform this action...
Choosing deployment file type and creation time	<p>Choose to have the wizard create the WAR or EAR file during the installation process, or to wait until later.</p> <ul style="list-style-type: none"> <li>Choose Generate a .ear file for deployment if your server can deploy a WAR file. Specify an application name for the EAR file deployment. The default is WorkplaceXT.</li> <li>Choose Generate a .war file for deployment if your server can deploy an WAR file.</li> <li>Choose Do not generate a deployment file at this time if you have additional installation and configuration to perform (such as installing Content Engine and Process Engine client files and configuring the application server) that will require another generation of the WAR or EAR file.</li> </ul> <p><b>NOTE</b> If you decide to deploy Workplace XT as a WAR file and later decide to redeploy as an EAR file you must uninstall Workplace XT and then reinstall the application, selecting EAR file deployment.</p>
Specifying the documentation URL	<p>Enter the documentation server URL, which is where the IBM FileNet P8 Platform Documentation is installed.</p> <p>Your entry must be in the following format:</p> <pre>http://&lt;docserver:port#&gt;/&lt;ecm_help&gt;/</pre> <p>where:</p> <p><i>docserver</i> is the name of the Java application server.</p> <p><i>port#</i> is the port number.</p> <p><i>ecm_help</i> is the root folder of the documentation website. You can use multi-part root folders (for example, /docs/ecm_help) if your application server supports them.</p> <p>See <a href="#">New Ref To DOC INSTALL</a> for more information.</p> <p><b>NOTE</b> For information on how to reconfigure the documentation URL after installation is completed, see the IBM FileNet P8 help topic <a href="#">FileNet P8 Administration &gt; Application Engine Administration &gt; Key configuration files and logs &gt; Bootstrap properties</a>.</p>

In the screen for...	Perform this action...
Specifying the configuration directory	<p>Accept the default location or browse to the location where you want to store the configuration files.</p> <p>The default location for the configuration files is in a separate <code>Config/WebClient</code> directory one level up from the <code>&lt;install_path&gt;</code> directory selected earlier.</p> <p>Default location of the configuration directory:</p> <p>UNIX</p> <pre>/opt/FileNet/Config/WebClient/</pre> <p>Windows</p> <pre>C:\Program Files\FileNet\Config\WebClient\</pre> <p><b>CAUTION</b> A UNC admin share (for example, <code>\\server\C\$</code>) for a shared location is not supported. You can use an ordinary file share.</p> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• If you select a custom install location, follow the same directory structure as seen in a typical install and retain the <code>/FileNet/Config/WebClient</code> part of the path.</li> <li>• The configuration files for an EAR file deployment, a web farm, or a clustered environment must be located in a shared folder that is accessible by all copies of the Workplace application. For more information, see the <i>IBM FileNet P8 Platform High Availability Technical Notice</i>. To download this guide from the IBM support page, see <a href="#">“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14.</a></li> </ul>
Specifying the upload location	<p>Provide the upload directory path.</p> <p>The upload directory is the directory used by Workplace XT to store temporary copies of files uploaded to Workplace.</p> <p>Accept the default option or browse for a directory to hold the temporary upload files.</p> <p><b>CAUTION</b> A UNC admin share (for example, <code>\\server\C\$</code>) for a shared upload directory location is not supported. You can use an ordinary file share.</p>

In the screen for...	Perform this action...
Specifying the download location	<p>Provide the download directory path.</p> <p>The download directory is the directory used by Workplace XT to store temporary copies of files downloaded from Workplace XT.</p> <p>Accept the default option or browse for a directory to hold the temporary download files.</p> <p><b>CAUTION</b> A UNC admin share (for example, \\server\C\$) for a shared download directory is not supported. You can use an ordinary file share.</p>
Specifying the log file location	<p>Provide the Log files directory path.</p> <p>The Log file path is the directory used by the installer to store the <code>web_client_install_log_1.1.3.0.txt</code> log file.</p> <p>Accept the default option or browse for a directory.</p> <p>The default location for the log files is in a separate <code>Logs</code> directory one level up from the <code>&lt;install_path&gt;</code> directory selected earlier.</p> <p>Default location of the logs directory:</p> <p>UNIX</p> <pre>/opt/FileNet/Logs/</pre> <p>Windows</p> <pre>C:\Program Files\FileNet\Logs\</pre> <p><b>NOTE</b> If you select a custom install location, follow the same directory structure as seen in a typical install and retain the <code>/FileNet/Logs</code> part of the path.</p>

In the screen for...	Perform this action...
Configuring user token security	<p>Configure user token security.</p> <ol style="list-style-type: none"> <li>If needed, select the check box to create maximum strength keys.  By default the installer creates limited strength keys.</li> <li>Enter the number of keys to use, from 1-100.  <b>NOTE</b> Security generally increases with the number of keys used.</li> <li>Make a note of the user token crypto key path.  The <code>UTCryptoKeyFile.properties</code> file contains the user token cryptography key used by IBM FileNet P8 applications to launch into each other without the need for additional login.  The default location for the User Token Crypto Key file is in a separate <code>Authentication</code> directory one level up from the <code>&lt;install_path&gt;</code> directory selected earlier.  Default location of the Authentication directory:  UNIX  <code>/opt/FileNet/Authentication/</code>  Windows  <code>C:\Program Files\FileNet\Authentication\</code>  <b>NOTE</b> If you select a custom install location it is recommended to follow the same directory structure as seen in a typical install and retain the <code>/FileNet/Authentication</code> part of the path.  <b>CAUTION</b> For multiple applications to pass user tokens to each other, each participating application <b>must</b> use the same encryption key file. Copy the <code>UTCryptoKeyFile.properties</code> file installed with Workplace XT to all servers that are hosting a token-sharing application.  For information, see the IBM FileNet P8 Developer Help topic <a href="#">Developer Help &gt; Workplace Integration and Customization Introduction &gt; User Tokens &gt; Configuring Applications to Use Tokens</a>.</li> </ol>
Verifying your installation selections	Review the list of selections you have made. You may need to scroll to see all selections.
Starting the installation	Review the installation summary, and click <b>Install</b> .

In the screen for...	Perform this action...
Completing Workplace XT setup	Click <b>Finish</b> to complete the installation.

- View the `web_client_install_log_1.1.3.0.txt` file located in `install_path/FileNet/WebClient`.

Verify that no errors or failures were logged. Correct any errors before you proceed.

- (Solaris only) Set the anon ports.

When Solaris first starts up, it takes the first several ports, called anon ports, for its communication daemons. By default, the maximum `tcp_smallest_anon_port` is 32768. IBM FileNet uses several ports higher than 32768. See [“IBM FileNet Workplace XT port numbers” on page 133](#) for details on which ports IBM FileNet uses.

To use these IBM FileNet ports on Solaris-based systems, you must first enable the ports by setting the smallest anon port to 32778. When you do this, the ports used by Solaris communication daemons will be 32778 or greater, leaving port 32777 available for IBM FileNet use.

The Solaris platform provides several different tools, such as the `netstat` command, to determine if a port is in use.

- To determine the current `tcp_smallest_anon_port` setting, enter the following at the command prompt:

```
ndd -get /dev/tcp tcp_smallest_anon_port
```

If the port is less than 32778, you must enable port 32777.

- To enable port 32777 on Solaris9, use a text editor to edit the `/etc/rc2.d/S69inet` file.

Add the following line:

```
ndd -set /dev/tcp tcp_smallest_anon_port 32778
```

**NOTE** Put this entry in the file before the exit 0 entry at the bottom of the file.

- To enable port 32777 on Solaris10, use a text editor to edit the `/lib/svc/method/net-init` file.

Add the following line:

```
ndd -set /dev/tcp tcp_smallest_anon_port 32778
```

**NOTE** Put this entry in the file before the exit 0 entry at the bottom of the file.

- Reboot the IBM FileNet Workplace XT server to force the release of ports required by Workplace XT that may be in use by the operating system. Failure to reboot after these changes are made can result in the port being unavailable, generating OpenSocket errors.

- (Optional) (UNIX only) Set the the `P8TASKMAN_HOME` system environment variable.

The Process Engine Client installer will set this variable for you. If you want to specify a different location for the client files, you can do so by setting the P8TASKMAN\_HOME system variable. The default value set by the PE Client installer is:

```
P8TASKMAN_HOME=install_path/FileNet/WebClient/CommonFiles
```

7. Continue with the task [“Install IBM FileNet Workplace XT software updates”](#) on page 32.

## Task 4: Install IBM FileNet Workplace XT software updates

Install any service packs, fix packs, and interim fixes required for Workplace XT.

### **To install the Workplace XT software updates**

---

1. To download the latest software updates, and to determine which of these updates may be required for use with other components and expansion products, contact your service representative or see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).
2. Open the readmes for the software updates and perform the installation procedures provided.
3. Install the latest Content Engine and Process Engine client file updates. See [Task 5 on page 33](#) and [Task 6 on page 36](#).



## Task 5: Install the latest Content Engine Client files on Workplace XT servers

Install the Content Engine Client files and any updates that are available.

### **To install the Content Engine Client files**

---

Refer to the appropriate information from your installation worksheet while performing the following steps.

1. To download the latest software updates, and to determine which of these updates may be required for use with other components and expansion products, contact your service representative.
2. On the machine where Workplace XT is installed, log on as any user who has the following permissions:
  - Read and write permission to a temporary directory, such as `temp` (Windows) or `tmp` (UNIX), on the machine where Workplace XT is installed.
  - Execute permission on the Content Engine Client install software.
3. (For updates only) Verify that there is a current backup of Workplace XT.
4. Copy the Content Engine Client install software from the Content Engine installation software to the temporary directory. The version of the install software must match the version of Content Engine.
5. Expand the (TAR or ZIP) Content Engine Client install software within the temporary directory.
6. Close all instances of Workplace XT and any other Application Engine client applications. From the application server administrative console, stop and un-deploy Workplace XT.

**WebSphere** Stop and un-deploy Workplace XT.

**WebLogic** Stop and un-deploy Workplace XT.

**JBoss** Run the shutdown command.

7. (WebLogic only) Manually delete the following application server cache directories, substituting your domain name in place of *mydomain*:

#### **WebLogic UNIX**

```
/opt/BEA/user_projects/domains/mydomain/servers/AdminServer/tmp/_WL_user/  
web_client
```

```
/opt/BEA/user_projects/domains/mydomain/servers/.wlnotdelete
```

```
/opt/BEA/user_projects/domains/mydomain/servers/AdminServer/cache/  
EJBCompilerCache
```

#### **WebLogic Windows**

```
C:\BEA\user_projects\domains\mydomain\servers\AdminServer\tmp\_WL_user\web_  
client
```

C:\bea\user\_projects\domains\mydomain\servers\.wlnotdelete

C:\bea\user\_projects\domains\mydomain\servers\AdminServer\cache\EJBCompiler  
 Cache

8. Start the Content Engine client install process.

- To install the Content Engine client interactively:
  - i. Access the IBM FileNet Content Engine client update software.
  - ii. Run one of the commands in the table below, *CE\_version* is the version of Content Engine you intend to run, for example, 4.5.0..

Operating System	Install Program
AIX	P8CE-CLIENT- <i>CE_version</i> -AIX.BIN
HPUX	P8CE-CLIENT- <i>CE_version</i> -HPUX.BIN
HPUXi	P8CE-CLIENT- <i>CE_version</i> -HPUXI.BIN
Linux	P8CE-CLIENT- <i>CE_version</i> -LINUX.BIN
Solaris	P8CE-CLIENT- <i>CE_version</i> -SOL.BIN
Windows	P8CE-CLIENT- <i>CE_version</i> -WIN.EXE
zLinux	P8CE-CLIENT- <i>CE_version</i> -ZLINUX.BIN

iii. Complete the installation program wizard.

You can specify on the installer which applications you want to update. If the installer does not automatically detect Workplace XT, select it on the appropriate panel.

You can also choose to have the installer create the deployment file, or create the file later. If you have additional configuration to perform, you can defer the file creation to avoid running multiple processes to create the same file.

- To install the Content Engine client files silently:
  - i. Make a backup copy of the input file:
 

```
CEclient_silent_install.txt
```
  - ii. Open the silent input file in a text editor. Follow the instructions in the silent input file to edit the file to reflect the appropriate responses for your update.
  - iii. Navigate to the path containing the Content Engine Client installation program, and run one of the commands in the following table to perform the silent install, where:
 

*CE\_version* is the version of Content Engine you intend to run, for example, 4.5.0.

*path* is the path that contains the installation program.

Operating System	Install Program
AIX	P8CE-CLIENT-CE_version-AIX.BIN -f <i>path</i> /CECLIENT.AIX/ CEClient_silent_install.txt -i silent
HPUX	P8CE-CLIENT-CE_version-HPUX.BIN -f <i>path</i> /CEClient.HPUX/ CEClient_silent_install.txt -i silent
HPUXi	P8CE-CLIENT-CE_version-HPUXI.BIN -f <i>path</i> /CEClient.HPUXI/ CEClient_silent_install.txt -i silent
Linux	P8CE-CLIENT-CE_version-LINUX.BIN -f <i>path</i> /CEClient.Linux/ CEClient_silent_install.txt -i silent
Solaris	P8CE-CLIENT-CE_version-SOL.BIN -f <i>path</i> /CEClient.Solaris/ CEClient_silent_install.txt -i silent
Windows	P8CE-CLIENT-CE_version-WIN.EXE -f <i>path</i> \CEClient.Windows\ CEClient_silent_install.txt -i silent
zLinux	P8CE-CLIENT-CE_version-ZLINUX.BIN -f <i>path</i> / CEClient.zLinux/CEClient_silent_install.txt -i silent

Continue with [“Install the latest Process Engine Client files on Workplace XT servers”](#) on page 36.

## Task 6: Install the latest Process Engine Client files on Workplace XT servers

Most steps apply to both new installations and updates. However, some noted steps apply only to updates of the Process Engine Client files to a previously configured Workplace XT installation.

Install any Process Engine Client files or updates that are available. These steps apply to WebSphere, WebLogic, and JBoss (except where noted). Perform the following steps on all Workplace XT servers.

### To install the Process Engine Client files

---

1. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, contact your service representative.
2. Log on to the server as a user who has permission to install software and read and write permission to a local temp directory.
3. (Update installations only) Ensure that there is a backup of the deployed web application directory.
4. Download and expand the appropriate tar or zip file for Process Engine Client installation to the server and extract the contents to the local temp directory.
5. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.
6. (Update installations only) If you wish to retain your existing configurations, copy the following configuration files from the backup copy of your deployed application to the /WEB-INF folder in the installed directory on your application server, overwriting the existing installed files.

The backup of these files is to ensure the files are still available in case there is any reason to go back to the previous versions. When redeploying after installing the fix pack, any custom settings will be added back to the deployed working directory.

From the /WEB-INF folder in the backed-up Workplace XT directory created in [Step 3 on page 36](#) above, copy these files:

```
WcmApiConfig.properties
```

```
web.xml
```

to here

```
<XT_install_path>/WorkplaceXT/WEB-INF/
```

**NOTE** You must do this before you apply the fix pack to the existing installation.

7. (Update installations only) (WebSphere and WebLogic Only) Stop and undeploy any instances of Workplace XT.
8. (Update installations only) (JBoss Only) Run the shutdown command.

9. (Update installations only) Manually delete the web application temporary directories associated with Workplace XT.
10. (Update installations only) (JBoss only) Delete the deployed Web application directory, or WAR or EAR file.
11. Start the Process Engine Client install process.
  - To install the Process Engine Client interactively:

- i. Access the IBM FileNet Process Engine Client update software.

Launch the appropriate install program, as shown in the following table:

Operating System	Install Program
AIX	P8PE-CLIENT-4.5.0-AIX.BIN
HPUX	P8PE-CLIENT-4.5.0-HPUX.BIN
HPUXi	P8PE-CLIENT-4.5.0-HPUXI.BIN
Linux	P8PE-CLIENT-4.5.0-LINUX.BIN
Solaris	P8PE-CLIENT-4.5.0-SOL.BIN
Windows	P8PE-CLIENT-4.5.0-WIN.EXE
zLinux	P8PE-CLIENT-4.5.0-ZLINUX.BIN

- ii. Complete the installer panels and run the installation.

You can specify on the installer which applications you want to update. If the installer does not automatically detect Workplace XT, select it on the appropriate panel.

If you plan to use the ECM Widgets component, or want to use Process Engine REST services directly, select Add the REST service on that panel.

You can also choose whether to have the installer create the deployment file for you. If you have additional configuration to perform, you can defer the file creation to avoid running multiple processes to create the same file.

- To install the Process Engine Client silently:
  - i. Access the IBM FileNet Process Engine Client update software package, and copy the PEClient\_silent\_input.txt file to a local directory.
  - ii. Follow the instructions in the silent input file to edit the file to reflect the appropriate responses for your update.

Change the Variable\_CheckboxXT line to the following:

```
-V Variable_CheckboxXT="true"
```

iii. Run the PE Client installer with one of the following commands::

Operating System	Install Program
AIX	P8PE-CLIENT-4.5.0-AIX.BIN -options "PEClient_silent_install.txt" -silent
HPUX	P8PE-CLIENT-4.5.0-HPUX.BIN -options "PEClient_silent_install.txt" -silent
HPUXi	P8PE-CLIENT-4.5.0-HPUXI.BIN -options "PEClient_silent_install.txt" -silent
Linux	P8PE-CLIENT-4.5.0-LINUX.BIN -options "PEClient_silent_install.txt" -silent
Solaris	P8PE-CLIENT-4.5.0-SOL.BIN -options "PEClient_silent_install.txt" -silent
Windows	P8PE-CLIENT-4.5.0-WIN.EXE -options "PEClient_silent_install.txt" -silent
zLinux	P8PE-CLIENT-4.5.0-ZLINUX.BIN -options "PEClient_silent_install.txt" -silent

Configure Workplace XT. See the appropriate task according to your application server type:

- [“Configure IBM FileNet Workplace XT \(WebSphere\)” on page 39](#)
- [“Configure IBM FileNet Workplace XT \(WebLogic\)” on page 47](#)
- [“Configure IBM FileNet Workplace XT \(JBoss\)” on page 55](#)

## Task 7a: Configure IBM FileNet Workplace XT (WebSphere)

This topic covers the configuration of your IBM FileNet Workplace XT application on WebSphere.

**NOTE** IBM FileNet Workplace XT uses cookie names for passing session information between Workplace XT and the client browser. This session information affects how Workplace XT interacts with several applets, such as Process Designer, Search Designer, and Process Simulator. To avoid forcing end users to log in individually to each applet, do not configure the application server to use application-unique cookie names for the deployed Workplace XT. For best results, use JSESSIONID for the cookie name.

### To configure IBM FileNet Workplace XT on WebSphere

---

Perform the following high-level steps in the order listed, using the referenced detailed procedures for each step.

1. If you are using Single Sign On (SSO), edit `web.xml`. See [“\(optional\) To edit web.xml for SSO” on page 39](#).
2. If you plan to use Application Integration or another option that requires user tokens, configure WebSphere to support it. See [“\(optional\) To configure WebSphere to support user tokens for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)” on page 41](#).
3. Configure IBM FileNet Workplace XT. See [“To configure Workplace XT” on page 43](#).
4. Configure the server ports. See [“To configure the server ports \(optional\)” on page 45](#).

### (optional) To edit web.xml for SSO

---

**NOTE** SSO in an IBM Tivoli Access Manager environment may require additional configuration in WebSphere. If you are implementing SSO in an IBM Tivoli Access Manager (TAM) WebSEAL 6.0 environment, the junction you use for Workplace XT must be a transparent junction. For more details, see your IBM product documentation.

1. Make a backup copy of `web.xml`.

```
install_path/FileNet/WebClient//WorkplaceXT/WEB-INF/web.xml
```

2. Open `web.xml` for editing.
3. Ensure that the parameter `challengeProxyEnabled` is set to `false`, as in:

```
<init-param>
    <!--
        Set this parameter to false if deployment is on WebSphere 6, and
        see the commented out
        sections at the bottom of this file for additional configuration
        adjustments.
    -->
    <param-name>challengeProxyEnabled</param-name>
    <param-value>>false</param-value>
</init-param>
```

4. Set the parameter `perimeterChallengeMode` to `true`, as in:

```
<init-param>
```

```

    <param-name>perimeterChallengeMode</param-name>
    <param-value>>true</param-value>
  </init-param>

```

5. Add the following security role element just after the security-constraint section:

```

</security-constraint>
  - <!-- add login-config element
    -->
  <security-role>
    <description>everyone</description>
    <role-name>everyone</role-name>
  </security-role>

```

6. At the end of web.xml, comment out the <login-config> element, as follows:

```

<!--
<login-config>
  <auth-method>FORM</auth-method>
  <realm-name>AE Workplace</realm-name>
  <form-login-config>
    <form-login-page>/ContainerLogin.jsp</form-login-page>
    <form-error-page>/ContainerError.jsp</form-error-page>
  </form-login-config>
</login-config>
-->

```

7. Add the following entry:

```

<login-config>
  <auth-method>CLIENT-CERT</auth-method>
</login-config>

```

8. As needed, set the ssoProxyContextPath, ssoProxyHost, ssoProxyPort, and ssoProxySSLPort parameters. These parameter values are used to modify one or more elements of the native URL that Workplace XT sees on a request. Wherever the value of an SSO proxy host element in the URL request is different from the equivalent information for the host where Workplace XT is deployed, then you must set the corresponding sso\* parameter for that element in the URL to the value for the SSO proxy host in your environment.

The default settings are:

```

<init-param>
  <param-name>ssoProxyContextPath</param-name>
  <param-value></param-value>
</init-param>
<init-param>
  <param-name>ssoProxyHost</param-name>
  <param-value></param-value>
</init-param>
<init-param>
  <param-name>ssoProxyPort</param-name>
  <param-value></param-value>
</init-param>
<init-param>
  <param-name>ssoProxySSLPort</param-name>
  <param-value></param-value>
</init-param>

```

In general, the init parameters above must be configured as follows:

- **ssoProxyContextPath:** Set the value to the context path of the SSO proxy host URL. This is the path portion of the URL that appears after the server name, and which represents top-level access to the Workplace XT application. For example, if the IBM FileNet Workplace XT deploy host URL is



(optional) To configure WebSphere to support user tokens for Workplace XT (including Application Integra-

`http://deploy_server:2809/WorkplaceXT` and the SSO proxy host URL is `http://sso_proxy_server.domain.com/WorkplaceXT`, then use the following:

```
<param-name>ssoProxyContextPath</param-name>
<param-value>WorkplaceXT</param-value>
```

For SiteMinder only, use the following:

```
<param-name>ssoProxyContextPath</param-name>
<param-value></param-value>
```

- **ssoProxyHost:** Set the value to the SSO proxy host server name. Typically, this will be a full domain-qualified hostname. For example, if the host URL where Workplace XT is deployed is `http://deploy_server/WorkplaceXT` and the corresponding SSO proxy host URL is `http://sso_proxy_server/WorkplaceXT`, then use the following:

```
<param-name>ssoProxyHost</param-name>
<param-value>sso_proxy_server</param-value>
```

- **ssoProxyPort:** Set the value to the http port on the SSO proxy host. For example:

```
<param-name>ssoProxyPort</param-name>
<param-value>80</param-value>
```

- **ssoProxySSLPort:** Set the value to the https port on the SSO proxy host, if defined and/or used to access Workplace XT pages. For example:

```
<param-name>ssoProxySSLPort</param-name>
<param-value>443</param-value>
```

9. Save your changes to `web.xml` and close the file.

**(optional) To configure WebSphere to support user tokens for Workplace XT (including Application Integration, eForms, Records Manager, and others)**

---

The configuration steps that follow enable the generation and acceptance of user tokens on the server. Verify these settings in the Bootstrap Settings in the Site Preferences.

1. Stop WebSphere, if it is running.
2. **(For installations with Content Engine at 4.5.x)** Copy the `authentication-websphere.jar` file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles
```

to here:

```
WAS_home/AppServer/lib/ext
```

3. **(For installations with Content Engine at 4.0.x)** Copy the `authentication-websphere.jar` file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles/1.1.2
```

to here:

```
WAS_home/AppServer/lib/ext
```

4. Copy the `log4j-1.2.13.jar` file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/WEB-INF/lib
```

(optional) To configure WebSphere to support user tokens for Workplace XT (including Application Integra-

to here:

```
WAS_home/AppServer/lib/ext
```

#### 5. Enable JAAS.

- a. In the WebSphere administrative console, navigate to the Java Virtual Machine > Generic JVM Arguments.
- b. If there is an entry, add a space after it, then add the following entry and apply your changes. (If there is no entry, do not add the space.)

**NOTE** Your path may be slightly different depending on the version of your client installations, or whether you have chosen a custom path for installation. For example, if your Content Engine Client is at 4.0.x, this path may include a samples directory under the config directory. Verify the location of the file before you enter the path.

**CAUTION** Do not copy and paste the text from this guide because hidden formatting can cause problems with the entry. Instead, type the entry into the field.

**CAUTION** (Windows only) On WebSphere for Windows the path cannot contain a space. You must use 8.3-notation for the install path information.

If *install\_path* is:

```
C:\Program Files\FileNet\WebClient
```

use:

```
C:\Progra~1\FileNet\WebClient
```

#### UNIX

```
-Djava.security.auth.login.config=install_path/CE_API/config/  
jaas.conf.WebSphere
```

#### Windows

```
-Djava.security.auth.login.config=install_path\CE_API\config\  
jaas.conf.WebSphere
```

where *install\_path* is the install path of IBM FileNet Workplace XT.

- c. (For components *not* using SSO only) Create a custom module.

**NOTE** Do not perform [Step i](#) through [Step iv](#) if you are enabling JAAS for any component using SSO. Creating the custom module makes SSO unusable.

- i. In the Security area of the administration console, navigate to the JAAS login modules.
- ii. Click **New** to create a new custom login module.
- iii. Enter the following for the Module class name setting:
 

```
com.filenet.ae.authentication.loginmodule.UserTokenWSLoginModule
```
- iv. Apply and save your changes to the master configuration.

#### 6. Enable trust association and specify the interceptor setting.

- a. In the Security area of the administration console, navigate to the Trust association setting, and set Enable trust association.
- b. Under Additional Properties, click **Interceptors**.
- c. Add a new Interceptor, and enter the following for the Interceptor class name:  
`com.filenet.ae.authentication.tai.UserTokenInterceptor`
- d. Apply and save your changes to the master configuration.

7. Restart WebSphere.

### **To configure Workplace XT**

---

1. Open the WebSphere administrative console.
2. Set JVM settings for memory.
  - a. Navigate to Java Virtual Machine.
  - b. Enter the numbers for the Initial and Maximum Heap Size.
 

**NOTE** Refer to your application server vendor's recommendation for Initial and Maximum heap size values. For more information on performance tuning, see the *IBM FileNet P8 Platform Performance Tuning Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).
  - c. Save your changes.
3. Enable Application Integration installation.
  - a. In the administrative console Environment area, in the Virtual Hosts area, navigate to the **default\_host** (or the host your application is deployed under).
  - b. Add a new **MIME Type**, application/octet-stream, with .exe for the Extension.
  - c. Save your changes.
4. Configure Lightweight Third Party Authentication (LTPA).
 

**NOTE** If you already have Application Engine or Workplace XT in your environment, skip the following step ([Step a](#)) and continue to [Step 5 on page 44](#).

  - a. On the Content Engine WebSphere server, do the following:
    - i. Log in to the administrative console.
    - ii. If LTPA is not already configured for Content Engine, create an LTPA password, specify the location for the Key file on the Content Engine server, and export and import the keys.
 

**NOTE** For password restrictions and detailed instructions on configuring LTPA and security, see the WebSphere documentation. If you have already configured Content Engine for LTPA, use the existing password in the Workplace XT configuration below.

**NOTE** If you already have Application Engine or Workplace XT installed and configured on the current application server, skip the following step ([Step b](#)), and continue with [Step 5 on page 44](#).

- b. On the IBM FileNet Workplace XT server, do the following:
  - i. Copy the key file from the location you specified above to the IBM FileNet Workplace XT server. For example, `/opt/LTPA/ltpa_key_name`.
  - ii. Log in to the WebSphere administrative console.
  - iii. Create an LTPA password, using the same password as the Content Engine.
  - iv. Set the timeout value for LTPA authentication to a value that is larger than the default.  
 For example, if the timeout value is set to 2 hours, the LTPA key expires and end users will not be able to log in to Workplace after having been logged in for 2 hours.
  - v. Specify the path for the key file that you copied to the IBM FileNet Workplace XT server. For example, `/opt/LTPA/ltpa_key_name`.
  - vi. Import the keys from the key file.
  - vii. Save your changes to the master configuration.
5. Configure Lightweight Directory Access Protocol (LDAP).
  - a. Navigate to Security > Secure administration, applications, and infrastructure.
  - b. Disable security using the following Security settings:
    - Turn off (clear) **Enable Administrative Security** flag.
    - Turn off (clear) **Enable application security** flag.
    - Turn off (clear) **Java 2 Security**.
  - c. Save your changes to the master configuration.
  - d. Under User account repository, click **Configure**.
  - e. From the bottom of the panel, in the box titled "available realm definitions," select **Standalone LDAP registry** and click **Configure**.
  - f. Configure the LDAP provider to exactly match the corresponding settings on the Content Engine application server.
    - Primary administrative user name
    - Select "Automatically generated server identity."
    - Type
    - Host
    - Port
    - Base distinguished name (DN)
    - Bind distinguished name (DN)
    - Bind password

- g. Configure the Advanced Lightweight Directory Access Protocol (LDAP) user registry settings to exactly match the corresponding settings from the Content Engine application server.
  - User filter
  - Group Filter
  - User ID map
  - Group member ID map
  - Certificate map mode
  - Certificate filter
- h. Save these settings.
- i. Next to "Available realm definitions," make sure "Standalone LDAP registry" is still selected, and click Set as current. Save this change.
- j. Re-enable the following Security settings:
  - Turn on (check) **Enable Administrative Security flag**.
  - Turn on (check) **Enable application security flag**.
  - Turn off (clear) **Java 2 Security**.
- k. Save your changes to the master configuration.
- l. Test the connection on the Standalone LDAP registry page. If the test fails, correct the error before proceeding. If it passes, click **OK** to return to the previous page.

**NOTE** The IBM FileNet P8 Platform uses LDAP-based security, and does not support Java 2 security. Enabling Java 2 security can cause unexpected behavior.

**NOTE** If you see a message about the ID not existing in the user repository, ignore it.

- 6. Set permissions for the user running the application server.

If the user who will be running the application server is different from the user that installed IBM FileNet Workplace XT, you must give the user read/write permissions on the following folder:

`install_path/FileNet/WebClient`

- 7. Stop and restart the application server.
- 8. Continue with [“To configure the server ports \(optional\)” on page 45](#), or continue with [“Deploy IBM FileNet Workplace XT \(WebSphere\)” on page 62](#).

**To configure the server ports (optional)**

---

The following procedure applies if you want your LISTENER ADDRESSES to be static.

- 1. Stop WebSphere, if it is running.

2. Make a backup copy of `serverindex.xml` located in:

```
WAS_HOME/profiles/default/config/cells/machine_nameNode01Cell/nodes/
machine_nameNode01/serverindex.xml
```

3. Edit `serverindex.xml`.
4. Locate the `<specialEndpoints>` section, and change the port numbers for the three SSL listener addresses to "0" as shown below:

```
<specialEndpoints xmi:id="NamedEndPoint_1155689929072"
endPointName="SAS_SSL_SERVERAUTH_LISTENER_ADDRESS">
  <endPoint xmi:id="EndPoint_1155689929072" host="host_name" port="0"/>
</specialEndpoints>
<specialEndpoints xmi:id="NamedEndPoint_1155689929073"
endPointName="CSIV2_SSL_SERVERAUTH_LISTENER_ADDRESS">
  <endPoint xmi:id="EndPoint_1155689929073" host="host_name" port="0"/>
</specialEndpoints>
<specialEndpoints xmi:id="NamedEndPoint_1155689929074"
endPointName="CSIV2_SSL_MUTUALAUTH_LISTENER_ADDRESS">
  <endPoint xmi:id="EndPoint_1155689929074" host="host_name" port="0"/>
</specialEndpoints>
```

5. Save and close the `serverindex.xml` file.
6. Restart WebSphere.

Deploy the Workplace XT application. See [“Deploy IBM FileNet Workplace XT \(WebSphere\)” on page 62](#).

## Task 7b: Configure IBM FileNet Workplace XT (WebLogic)

This topic covers the configuration of your IBM FileNet Workplace XT application on WebLogic.

**NOTE** Workplace XT uses cookie names for passing session information between Workplace XT and the client browser. This session information affects how Workplace XT interacts with several applets, such as Process Designer, Search Designer, and Process Simulator. To avoid forcing end users to log in individually to each applet, do not configure the application server to use application-unique cookie names for the deployed Workplace XT. For best results, use JSESSIONID for the cookie name.

### To configure IBM FileNet Workplace XT

---

Perform the following high-level steps in the order listed, using the referenced detailed procedures for each step.

1. (Optional) If you are using SSO, edit `web.xml`. See [“To edit web.xml for SSO \(optional\)” on page 47](#).
2. Modify the application server startup script. See [“To modify the application server startup script” on page 50](#).
3. Configure IBM FileNet Workplace XT. See [“To configure IBM FileNet Workplace XT” on page 52](#).
4. (Optional) If you are using Application Integration or another optional product that require user tokens, configure WebLogic to support it. See [“\(optional\) To configure WebLogic to support user tokens for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)” on page 53](#).

### To edit web.xml for SSO (optional)

---

**NOTE** If you are implementing SSO in an IBM Tivoli Access Manager WebSEAL 6.0 environment, the junction you use for Workplace XT must be a transparent junction. For more details, see your IBM product documentation.

1. Make a backup copy of `web.xml`.

```
install_path/FileNet/WebClient/WorkplaceXT/WEB-INF/web.xml
```

2. Edit `web.xml`.
3. Set the parameter `perimeterChallengeMode` to `true`, as in:

```
<init-param>  
  <param-name>perimeterChallengeMode</param-name>  
  <param-value>true</param-value>  
</init-param>
```

4. As needed, set the `ssoProxyContextPath`, `ssoProxyHost`, `ssoProxyPort`, and `ssoProxySSLPort`. These parameter values are used to modify one or more elements of the native URL that Workplace XT sees on a request. Wherever the value of an SSO proxy host element in the URL request is different from the equivalent information for the host where

Workplace XT is deployed, then you must set the corresponding `sso*` parameter for that element in the URL to the value for the SSO proxy host.

The default settings are:

```
<init-param>
  <param-name>ssoProxyContextPath</param-name>
  <param-value></param-value>
</init-param>
<init-param>
  <param-name>ssoProxyHost</param-name>
  <param-value></param-value>
</init-param>
<init-param>
  <param-name>ssoProxyPort</param-name>
  <param-value></param-value>
</init-param>
<init-param>
  <param-name>ssoProxySSLPort</param-name>
  <param-value></param-value>
</init-param>
```

In general, the init parameters above should be configured as follows:

- **ssoProxyContextPath:** Set the value to the context path of the SSO proxy host URL. This is the path portion of the URL that appears after the server name, and which represents top-level access to the Workplace XT application. For example, if the IBM FileNet Workplace XT deploy host URL is `http://deploy_server:7001/WorkplaceXT` and the SSO proxy host URL is `http://sso_proxy_server.domain.com/WorkplaceXT`, then use the following:

```
<param-name>ssoProxyContextPath</param-name>
<param-value>/WorkplaceXT</param-value>
```

For SiteMinder only, use the following:

```
<param-name>ssoProxyContextPath</param-name>
<param-value></param-value>
```

- **ssoProxyHost:** Set the value to the SSO proxy host server name. Typically, this will be a full domain-qualified hostname. For example, if the host URL where IBM FileNet Workplace XT is deployed is `http://deploy_server/WorkplaceXT` and the corresponding SSO proxy host URL is `http://sso_proxy_server/WorkplaceXT`, then use the following:

```
<param-name>ssoProxyHost</param-name>
<param-value>sso_proxy_server</param-value>
```

- **ssoProxyPort:** Set the value to the http port on the SSO proxy host. For example:

```
<param-name>ssoProxyPort</param-name>
<param-value>80</param-value>
```

- **ssoProxySSLPort:** Set the value to the https port on the SSO proxy host, if defined and/or used to access IBM FileNet Workplace XT pages. For example:

```
<param-name>ssoProxySSLPort</param-name>
<param-value>443</param-value>
```

5. **(For SSO with Kerberos only)** In the exclude list of the AE PreprocessorFilter section, remove the following entries:

```
/integrationCommand*
```



```
/transport*
/bootstraptransport
```

as shown in **bold**, below.

```
<filter>
  <filter-name>AE PreprocessorFilter</filter-name>
  <filter-class>
    com.filenet.ae.toolkit.server.servlet.filter.PreprocessorFilter
  </filter-class>
  <init-param>
    <param-name>challenge</param-name>
    <param-value>>false</param-value>
  </init-param>
  <init-param>
    <param-name>exclude</param-name>
    <param-value>
      /css/*,
      /download/*,
      /FnJavaV1Files/*,
      /images/*,
      /js/*,
      /scripts/*,
      /Samples*,
      /Source*,
      /UI-INF/*,
      /integrationCommand*,
      /integrationResponse*,
      /transport*,
      /ContainerError.jsp,
      /ContainerLogin.jsp,
      /ContainerSignout.jsp,
      /ServerErrorDisplay.jsp,
      /containerSecured/*,
      /WcmError.jsp,
      /WcmSignIn.jsp,
      /GetUserToken.jsp,
      /GetTokenSignIn.jsp,
      /GetUserInformation.jsp,
      /axis,
      /axis/services/*,
      /servlet/AdminServlet,
      /setCredentials,
      /SOAPMonitor,
      /webdav*,
      /P8BPMWSBroker/*,
      *j_security_check*,
      /bootstraptransport,
      /pingSession,
      /unitTests*,
      /NoContent.jsf,
      /ServerErrorDisplay.jsf,
      /LoadJSResources.jsf,
      /SessionError.jsf
    </param-value>
  </init-param>
</filter>
```

6. (For SSO with Kerberos only) Add the following URL patterns:

```
<url-pattern>/integrationCommand</url-pattern>
<url-pattern>/transport</url-pattern>
<url-pattern>/bootstraptransport</url-pattern>
<url-pattern>/getContent</url-pattern>
```

to the security-constraint section, as shown in bold below:

```
<security-constraint>
  <web-resource-collection>
    <web-resource-name>action</web-resource-name>
    <description>Define the container secured resource</description>
    <url-pattern>/containerSecured/*</url-pattern>
    <url-pattern>/integrationCommand</url-pattern>
    <url-pattern>/transport</url-pattern>
    <url-pattern>/bootstraptransport</url-pattern>
    <url-pattern>/getContent</url-pattern>
  </web-resource-collection>
  <auth-constraint>
    <role-name>*</role-name>
  </auth-constraint>
  <user-data-constraint>
    <description>User data constraints</description>
    <transport-guarantee>NONE</transport-guarantee>
  </user-data-constraint>
</security-constraint>
```

7. Save your changes to `web.xml` and close the file.

### To modify the application server startup script

---

1. Stop WebLogic, if it is running.
2. Make a backup copy of the application server startup script.
  - If you are using a WebLogic domain, modify `startWebLogic.cmd` for Windows or `startWebLogic.sh` for UNIX.
  - If you are not using a WebLogic domain, modify `startWLS.cmd` for Windows or `startWLS.sh` for UNIX.
3. Use a text editor to open and edit the application server startup script.
  - a. Do one of the following to edit the `MEM_ARGS` variable:
    - For all systems except those using JRockit JAVA:
 

Find the `MEM_ARGS` variable and append the following to any existing settings:

```
–XX:MaxPermSize=sizeM
```

where *size* is the value, in MB, of the `MaxPermSize`. Refer to your application server vendor's recommendation for a value for your configuration. For more information on performance tuning, see the *IBM FileNet P8 Platform Performance Tuning Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).
    - For systems using JRockit JAVA:
 

Find the `MEM_ARGS` variable and append the following to any existing settings:

```
–Xgc:gencon
```

**NOTE** If the `MEM_ARGS` variable doesn't exist, add it to the startup script.
  - b. Configure JAAS login. Add one of the following right after the classpath entry for WebLogic.

**CAUTION** Enter the `jaas_login` entry (bold below) as a single line without line breaks. Do not copy and paste the text from this guide because hidden formatting can cause problems with the entry. Instead, type the entry into the script.

**NOTE** Your path may be slightly different depending on the version of your client installations, or whether you have chosen a custom path for installation. For example, if your Content Engine Client is at 4.0.x, this path may include a samples directory under the config directory. Verify the location of the file before you enter the path.

### AIX

```
# Jaas Login configuration setting
jaas_login="`${jaas_login}`" -Djava.security.auth.login.config=
"install_path/FileNet/WebClient/CE_API/config/jaas.conf.WebLogic"
jaas_login="`${jaas_login}`" -
Dlogin.configuration.provider=com.ibm.security.auth.login.ConfigFile

where install_path is the location where you installed Workplace XT. For example,
"/opt/FileNet/WebClient/CE_API/config/jaas.conf.WebLogic"
```

### UNIX

```
# Jaas Login configuration setting
jaas_login="`${jaas_login}`" -Djava.security.auth.login.config=
"install_path/FileNet/WebClient/CE_API/config/jaas.conf.WebLogic"

where install_path is the location where you installed Workplace XT. For example,
"/opt/FileNet/WebClient/CE_API/config/jaas.conf.WebLogic"
```

### Windows

```
@REM Jaas Login configuration setting
set jaas_login=%jaas_login% -Djava.security.auth.login.config=
"install_path\FileNet\WebClient\CE_API\config\jaas.conf.WebLogic"

where install_path is the location where you installed Workplace XT. For example,
"C:\Program Files\FileNet\WebClient\CE_API\config\jaas.conf.weblogic".
```

- c. Add `%jaas_login%` section as indicated in the examples below in **bold**.

### UNIX - in the WLS\_REDIRECT\_LOG settings

```
${JAVA_HOME}/bin/java ${JAVA_VM} -version

if [ "${WLS_REDIRECT_LOG}" = "" ] ; then
    echo "Starting WLS with line:"
    echo "${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS} -
Dweblogic.Name=${SERVER_
NAME} -Djava.security.policy=${WL_HOME}/server/lib/weblogic.policy
${PROXY_SETTINGS} ${SERVER_CLASS
}"
    `${JAAS_LOGIN}` -Dweblogic.Name=${S
ERVER_NAME} -Djava.security.policy=${WL_HOME}/server/lib/weblogic.policy
${PROXY_SETTINGS} ${SERVER_
CLASS}
else
    echo "Redirecting output from WLS window to ${WLS_REDIRECT_LOG}"
    `${JAAS_LOGIN}` -Dweblogic.Name=${S
ERVER_NAME} -Djava.security.policy=${WL_HOME}/server/lib/weblogic.policy
${PROXY_SETTINGS} ${SERVER_
CLASS} >"${WLS_REDIRECT_LOG}" 2>&1
```

```
fi
```

#### Windows - in the WLS\_REDIRECT\_LOG settings

```
If "%WLS_REDIRECT_LOG%"==" " (
    echo Starting WLS with line:
    echo %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS% %JAAS_LOGIN% -
    -Dweblogic.Name=%SERVER_NAME% -
    Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy %PROXY_SETTINGS%
    %SERVER_CLASS%
    %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS% %JAAS_LOGIN% -
    Dweblogic.Name=%SERVER_NAME% -Dweblogic.management.username=%WLS_USER% -
    Dweblogic.management.password=%WLS_PW% -
    Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy %PROXY_SETTINGS%
    %SERVER_CLASS%
) else (
    echo Redirecting output from WLS window to %WLS_REDIRECT_LOG%
    %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS% %JAAS_LOGIN% -
    Dweblogic.Name=%SERVER_NAME% -Dweblogic.management.username=%WLS_USER% -
    Dweblogic.management.password=%WLS_PW% -
    Djava.security.policy=%WL_HOME%\server\lib\weblogic.policy %PROXY_SETTINGS%
    %SERVER_CLASS% >"%WLS_REDIRECT_LOG%" 2>&1
)
```

4. Save and close the application server startup script.

#### To configure IBM FileNet Workplace XT

---

1. Enable trust between Content Engine WebLogic domain and the IBM FileNet Workplace XT WebLogic domain.

**NOTE** If you have already configured a trust on the Content Engine, perform these steps only on the Workplace XT server. You will need to use the same password as the one used on the Content Engine.

Do the following on both the Content Engine application server and the IBM FileNet Workplace XT application server:

- a. Prepare the WebLogic Administration Console for editing.
- b. In the advanced security settings for your domain, enter a password for the domain. You must enter the same password for both the Content Engine domain and the IBM FileNet Workplace XT domain.
- c. Save and activate your changes.
- d. Restart the server if needed.
- e. Repeat this procedure in each domain for which you want to enable trust.

**CAUTION** If you are enabling this feature in a managed server environment, you must stop the Administration server and all the Managed Servers in both domains and then restart them. If this step is not performed, servers that were not rebooted will not trust the servers that were rebooted. Refer to your BEA documentation for more information.

(optional) To configure WebLogic to support user tokens for Workplace XT (including Application Integration,

2. Configure LDAP settings on IBM FileNet Workplace XT to exactly match the Content Engine settings.
  - a. Refer to your Content Engine installation worksheet and the WebLogic Administration Console settings for Compatibility Security > Realms for Authentication Provider, users, and groups on Content Engine.
  - b. Configure the same LDAP settings on the IBM FileNet Workplace XT Server.
  - c. Restart the application server.
3. If you plan to use user tokens (optional), continue with [“\(optional\) To configure WebLogic to support user tokens for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)”](#) on page 53.
4. If you do not plan to use user tokens, continue with [“Deploy IBM FileNet Workplace XT \(WebLogic\)”](#) on page 65.

**(optional) To configure WebLogic to support user tokens for Workplace XT (including Application Integration, eForms, Records Manager, and others)**

---

**NOTE** The configuration steps that follow enable the generation and acceptance of user tokens on the server. These settings can be verified in the Bootstrap Settings in the Site Preferences.

1. Stop WebLogic, if it is running.
2. **(For installations with Content Engine at 4.5.x)** Copy the `authentication-weblogic.jar` file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles
```

to here:

```
WL_home/server/lib/mbeantypes
```

3. **(For installations with Content Engine at 4.0.x)** Copy the `authentication-weblogic.jar` file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles/1.1.2
```

to here:

```
WL_home/server/lib/mbeantypes
```

4. Copy the `log4j-1.2.13.jar` file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/WEB-INF/lib
```

to here:

```
WL_home/server/lib/mbeantypes
```

5. Restart the WebLogic server, and log in to the Administration Console.
6. Add a new authentication provider, with a name you choose, and set the type to `UserTokenAuthenticator`.
7. Move the new provider ahead of the LDAP provider in the order.

(optional) To configure WebLogic to support user tokens for Workplace XT (including Application Integration,

8. Configure settings for the new provider:
  - a. On the Configuration tab, set the Control Flag to SUFFICIENT. Click **Save**.
  - b. On the Provider Specific tab, enter the path to the IBM FileNet Workplace XT `WcmApiConfig.properties` file, for example, `<install_path>/FileNet/WebClient/WorkplaceXT/WEB-INF/WcmApiConfig.properties`, then click **Save**.
9. Save and activate changes.
10. Restart the WebLogic server.

Deploy the Workplace XT application. See [“Deploy IBM FileNet Workplace XT \(WebLogic\)”](#) on page 65.

## Task 7c: Configure IBM FileNet Workplace XT (JBoss)

This topic covers the configuration of IBM FileNet Workplace XT on JBoss.

**NOTE** IBM FileNet Workplace XT uses cookie names for passing session information between Workplace XT and the client browser. This session information affects how Workplace XT interacts with several applets, such as Process Designer, Search Designer, and Process Simulator. To avoid forcing end users to log in individually to each applet, do not configure the application server to use application-unique cookie names for the deployed Workplace XT. For best results, use JSESSIONID for the cookie name.

### To configure IBM FileNet Workplace XT

---

Perform the following high-level steps in the order listed, using the referenced detailed procedures for each step.

1. Modify the application server startup script. See [“To modify the application server startup script” on page 55](#).
2. Perform additional configuration steps for IBM FileNet Workplace XT. See [“To configure IBM FileNet Workplace XT \(JBoss\)” on page 57](#).
3. (Optional) If you are using Application Integration or another optional product that require user tokens, configure JBoss to support it. See [“To configure IBM FileNet Workplace XT \(JBoss\)” on page 57](#).

### To modify the application server startup script

---

1. Stop JBoss, if it is running.
2. Make a backup copy of the application server startup script.

#### UNIX

```
run.sh
```

#### Windows

```
run.bat
```

3. Open the application server startup script for editing.
4. Edit the Java settings.
  - a. Add a line to specify the path to the JDK on the machine where JBoss is installed, as shown in the following example:

#### UNIX

```
JAVA_HOME=/export/home/apps/jboss/jdk1.5.0_06
```

#### Windows

```
set JAVA_HOME=C:\Program Files\Java\jdk1.5.0_06
```

**NOTE** If your JDK 1.5.0 version is different, substitute your version for the one listed above (\_06).

- b. Update the JAVA\_OPTS memory settings.

Adjusting this setting prevents the application server from running out of memory, a condition in which users would not be able to log in to Workplace XT.

In the first JAVA\_OPTS entry, as per the examples below, change the -Xms and -Xmx values (bold) for your configuration.

#### UNIX

```
JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx512m
```

#### Windows

```
set JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx512m
```

Refer to your application server vendor's recommendation for Initial and Maximum heap size values. For IBM specific recommendations, see the *IBM FileNet P8 Platform Performance Tuning Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see ["Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs" on page 14.](#)

- c. (Sun JVM users only) Set the value of MaxpermSize in JAVA\_OPTS to 128m, as follows:

#### UNIX

```
JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx512m -XX:MaxpermSize=128m
```

#### Windows

```
set JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx512m -XX:MaxpermSize=128m
```

**NOTE** This increased value prevents out of memory errors that can stop JBoss.

5. Configure JAAS login. Add the JAAS login entry for your platform, below in bold, to the existing entry immediately following the : RESTART in the startup script.

**NOTE** Replace the *install\_path* variable in the line you add with the install path for Workplace XT. The default location for UNIX is /opt, and for Windows is C:\Progra~1.

**NOTE** Your path may be slightly different depending on the version of your client installations, or whether you have chosen a custom path for installation. For example, if your Content Engine Client is at 4.0.x, this path may include a samples directory under the config directory. Verify the location of the `jaas.conf.JBoss` file before you enter the path.

**CAUTION** Enter the JAAS login entry (bold below) as a single line without line breaks. Do not copy and paste the text from this guide because hidden formatting can cause problems with the entry. Instead, type the entry into the script.

#### UNIX

```
:RESTART
```

```
"%JAVA%" %JAVA_OPTS% -Djava.security.auth.login.config="/install_path/FileNet/  
WebClient/CE_API/config/jaas.conf.JBoss" "-  
Djava.endorsed.dirs=%JBASS_ENDORSED_DIRS%" -classpath "%JBASS_CLASSPATH%"  
org.jboss.Main %*
```



## Windows

:RESTART

```
"%JAVA%" %JAVA_OPTS% -Djava.security.auth.login.config=install_path\
FileNet\WebClient\CE_API\config\jaas.conf.JBoss "-
Djava.endorsed.dirs=%JBOSS_ENDORSED_DIRS%" -classpath "%JBOSS_CLASSPATH%"
org.jboss.Main %*
```

6. Save and close the application server startup script.

### To configure IBM FileNet Workplace XT (JBoss)

---

1. Stop JBoss, if it is running.
2. Configure LDAP settings on the Workplace XT server to exactly match the Content Engine settings.

**NOTE** Create a backup of the `login-config.xml` file before making changes.

- a. On the Workplace XT server, open `login-config.xml`, located in `JBoss_home/server/server_name/conf`, for editing.
- b. Add an identical `<application-policy name="FileNet">` entry to match the corresponding entry in the `login-config.xml` file on the Content Engine server. This should be added at the end of the file before the final `</policy>` line.

```
<authentication>
  <login-module code="org.jboss.security.auth.spi.UsersRolesLoginModule"
    flag="required"/>
</authentication>
</application-policy>

<application-policy name="FileNet">
  <authentication>
    <login-module code="org.jboss.security.auth.spi.LdapExtLoginModule"
      flag="sufficient">
      <module-option name="java.naming.provider.url">ldap://cm-nihuevm9:389/<
module-option>
      <module-option name="java.naming.security.authentication">simple</module-
option>
      <module-option name="allowEmptyPasswords">>false</module-option>
      <module-option
name="bindDN">cn=ceadmin,ou=shared,ou=engineering,ou=filenet,dc=apple</
module-option>
      <module-option name="bindCredential">>Password1</module-option>
      <module-option name="baseCtxDN">dc=apple</module-option>
      <module-option name="baseFilter">(cn={0})</module-option>
      <module-option name="rolesCtxDN">dc=apple</module-option>
      <module-option name="roleFilter">(cn={0})</module-option>
      <module-option name="roleAttributeID">memberOf</module-option>
      <module-option name="roleAttributeIsDN">>true</module-option>
      <module-option name="roleRecursion">-1</module-option>
    </login-module>
  </authentication>
</application-policy>
</policy>
```

**NOTE** You can copy this entry from the Content Engine `login-config.xml` file. If you have no custom entries in the file on your Workplace XT server, you can copy the entire file from the Content Engine, and overwrite the `login-config.xml` file on the Workplace XT server.

3. Set permissions for the user running the application server.

If the user who will be running the application server is different from the user that installed IBM FileNet Workplace XT, you must give the user read/write permissions on the following folder:

```
install_path/FileNet/WebClient
```

**NOTE** For Windows, this is only required for NTFS formatted partitions.

4. Delete the following directory:

```
JBoss_home/server/server_name/deploy/jbossweb-tomcat55.sar/jsf-libs
```

**NOTE** If you have applications that depend on the default configuration `jsf-libs`, you can create a new configuration and deploy Workplace XT to it. See the *JBoss Application Server Guide* (search for this guide at (<http://docs.jboss.org>) for details.

5. Clear out all files and folders within the following temp directories:

```
JBoss_home/server/server_name/tmp/deploy  
JBoss_home/server/server_name/work/jboss.web/localhost
```

6. Disable JBoss logging to prevent unexpected behavior in the deployed IBM FileNet software.

**NOTE** When logging is disabled, error messages will still be displayed in the JBoss console.

- a. Open the `log4j.xml` file (`JBoss_home/server/server_name/conf/log4j.xml`) for editing.
- b. Add the following line (in **bold**) for the FILE appender, under the section "Preserve messages in a local file":

```
<!-- A time/date based rolling appender -->  
<appender name="FILE" class=  
"org.jboss.logging.appender.DailyRollingFileAppender">  
  <errorHandler class="org.jboss.logging.util.OnlyOnceErrorHandler"/>  
  <param name="File" value="{jboss.server.log.dir}/server.log"/>  
  <param name="Append" value="false"/>  
  <param name="Threshold" value="ERROR"/>
```

- c. Change all threshold values and priority values from

"INFO"

"DEBUG"

"TRACE"

to

"ERROR"

except for the CONSOLE appender threshold value, which should be set to "INFO", as shown in **bold** below:

```
<appender name="CONSOLE" class="org.apache.log4j.ConsoleAppender">  
  <errorHandler class="org.jboss.logging.util.OnlyOnceErrorHandler"/>  
  <param name="Target" value="System.out"/>  
  <param name="Threshold" value="INFO"/>
```

- d. Add IBM FileNet-specific categories to avoid excessive tracing messages in the console, which can impact performance. Add the following at the end of the “Limit categories” section, just before the “Setup the Root category” section:

```
<category name="filenet_error.api">
  <priority value="ERROR"/>
</category>

<category name="filenet_tracing.api">
  <priority value="OFF"/>
</category>

<category name="com.filenet.wcm.api">
  <priority value="ERROR"/>
</category>

<category name="com.filenet-trace">
  <priority value="OFF"/>
</category>

<category name="com.filenet-debug">
  <priority value="ERROR"/>
</category>
```

**NOTE** If other IBM FileNet-specific tracing message in the command console affect performance, add additional categories for those messages.

- e. Remove the Root category priority value, if any, as shown in **bold** below:

```
<!-- ===== -->
<!-- Setup the Root category -->
<!-- ===== -->

<root>
  <priority value="ERROR"/>
  <appender-ref ref="CONSOLE"/>
  <appender-ref ref="FILE"/>
</root>
```

- f. Save and close the `log4j.xml` file.

7. (optional) Start JBoss as follows, to verify that configuration changes were successful:

#### UNIX

```
./run.sh
```

#### Windows

```
run.bat
```

8. If you plan to use user tokens (optional), continue with [“\(optional\) To configure JBoss to support user tokens for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)”](#) on page 60.
9. If you do not plan to use user tokens, continue with [“Deploy IBM FileNet Workplace XT \(JBoss\)”](#) on page 67.

(optional) To configure JBoss to support user tokens for Workplace XT (including Application Integration,

**(optional) To configure JBoss to support user tokens for Workplace XT (including Application Integration, eForms, Records Manager, and others)**

---

The configuration steps that follow enable the generation and acceptance of user tokens on the server. These settings can be verified in the Bootstrap Settings in the Site Preferences.

1. Stop JBoss, if it is running.
2. **(For installations with Content Engine at 4.5.x)** Copy the authentication-utils.jar file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles
```

to here:

```
JBOSS_home/server/server_name/default/lib
```

3. **(For installations with Content Engine at 4.0.x)** Copy the authentication-utils1.1.2.jar file from here:

```
install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles/1.1.2
```

to here:

```
JBOSS_home/server/server_name/default/lib
```

4. Modify the login-config.xml file.

**NOTE** Create a backup of the file before making changes.

- a. On the Workplace XT server, open login-config.xml in *JBoss\_home/server/server\_name/conf* for editing.
- b. Add the following xml element (bold below) as the first entry in the FileNet domain section, and set the flag to "optional":

```
<application-policy name="FileNet">
  <authentication>
    <login-module code=
      "com.filenet.ae.authentication.loginmodule.UserTokenLoginModule"
      flag="optional">
      <module-option name="wcmApiConfigPath"><install_path>/FileNet/
        WebClient/WorkplaceXT/WEB-INF/WcmApiConfig.properties
      </module-option>
      <module-option name="multi-threaded">true</module-option>
    </login-module>
    <login-module code="org.jboss.security.auth.spi.LdapExtLoginModule"
      flag="required">
      <module-option name="java.naming.provider.url">ldap://
        copenhagen:389</module-option>
      <module-option name="java.naming.security.authentication">simple</
        module-option>
      <module-option name="allowEmptyPasswords">false</module-option>
      <module-option
        name="bindDN">CN=CEAdmin,OU=Shared,OU=Engineering,OU=FileNet,DC=FileNet,D
        C=Com</module-option>
      <module-option name="bindCredential">MyPassword</module-option>
      <module-option name="baseCtxDN">DC=FileNet,DC=Com</module-option>
      <module-option name="baseFilter">(cn={0})</module-option>
```

(optional) To configure JBoss to support user tokens for Workplace XT (including Application Integration,

```
<module-option name="rolesCtxDN">DC=FileNet,DC=Com</module-option>
<module-option name="roleFilter">(cn={0})</module-option>
<module-option name="roleAttributeID">memberOf</module-option>
<module-option name="roleAttributeIsDN">>true</module-option>
<module-option name="roleRecursion">-1</module-option>
</login-module>
```

```
</authentication>
```

```
</application-policy>
```

**NOTE** On Windows, use double back slash (\\) in place of the forward slash in the `wcmApiConfigPath` entry, as shown below:

```
<module-option name="wcmApiConfigPath">
<install_path>\\FileNet\\WebClient\\WorkplaceXT\\WEB-
INF\\WcmApiConfig.properties</module-option>
```

**NOTE** When deploying as an EAR or WAR file, the `wcmApiConfigPath` value must be a valid folder path, such as the install location. It cannot point to a folder within the EAR or WAR file.

- c. Save changes to `login-config.xml`.

Deploy the Workplace XT application. See [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 67](#).

## Task 8a: Deploy IBM FileNet Workplace XT (WebSphere)

This topic covers the deployment and start of the IBM FileNet Workplace XT application on WebSphere.

### To recreate the WAR and EAR files

---

**NOTE** If you are using a WAR file or EAR file for deployment, you must recreate the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `/FileNet/WebClient/WorkplaceXT` directory. If you chose not to have the Content Engine or Process Engine Client installers create your deployment file, or if you made changes to `web.xml` for SSO support, or any other edits, recreate the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To recreate the WAR file, run one of the following commands:

UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_war.sh
```

Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_war.bat
```

2. If you will be deploying from an EAR file, verify that both `web_client.war` and `web_client.ear` exist. To recreate the EAR file, first recreate the WAR file, and then run the following command to recreate the EAR file:

UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_ear.sh
```

Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_ear.bat
```

### To deploy Workplace XT

---

1. From the WebSphere administrative console, navigate to the dialog for installing a new application.
2. Select the file to deploy:
  - (If the administrative console is running *locally*) Select Local file system and enter or browse to the location of the `.war` or `.ear` file created by the setup program (see below for the default path). Do not enter the machine name.
  - (If the administrative console is *remote*) Select Remote file system and enter the fully-qualified path to the `.war` or `.ear` file. Do not enter the machine name.

The default path is `install_path/FileNet/WebClient/deploy`

3. If you are deploying a WAR file, enter the context root:

Enter `workplaceXT` and click **Next** to proceed to deploying a new application.

**NOTE** The context root is the name of the application you log in to using the web interface, such as `http://WorkplaceXTServerName:port#/Context_Root`. Do not include any spaces in the context root.

4. Complete the dialog boxes for installing a new application, using the following settings:

**NOTE** For any settings not specified here, accept the defaults.

- Show me all installation options and parameters: selected
- Application name: Workplace XT, or the name you chose to call the application.
- WebServer: The server you are planning to use. Verify that your application name is selected and associated with the correct WebServer.
- Map virtual hosts for Web modules: select WorkplaceXT or the name you chose to call the application

5. Finish the install and save it to the master configuration.

**NOTE** Do [Step 6](#) to [Step 8](#) for each specific web application deployment only. Do not change the similar settings for the entire application server.

6. Configure the Class loader setting so that the parent class loader is loaded last.
7. Update the polling interval to a number appropriate for your environment.
8. For the Workplace XT (or the name of your application) web module, configure the Class loader setting so that the parent class loader is loaded last.
9. Save your changes to the master configuration.
10. Navigate to Enterprise Applications > Workplace > Map security roles to users/groups, and verify that the **All Authenticated** column is checked for the "All Authenticated" role, and that the Everyone? column is checked for the "Everyone" role.
11. Set permissions for the user running the application server.

If the local user who will be running the application server is different from the user who installed IBM FileNet Workplace XT, you must give the user read/write permissions on the following (default) folders:

```
WAS_HOME/profiles/default/installedApps/node_name/WorkplaceXT.ear/  
web_client.war
```

```
install_path/FileNet/WebClient
```

12. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
13. Restart Process Task Manager and Component Manager.

14. Exit the Process Task Manager application.
15. Start Workplace XT from the administrative console.

**NOTE** To troubleshoot the deployment, check the following log:

```
WAS_install_path/AppServer/profiles/profile_name/logs/server_name/  
SystemOut.log
```



## Task 8b: Deploy IBM FileNet Workplace XT (WebLogic)

This topic covers the deployment of your IBM FileNet Workplace XT application on WebLogic.

### To recreate the WAR and EAR files (optional)

---

**NOTE** If you are using a WAR file or EAR file for deployment, you must recreate the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `/FileNet/WebClient/WorkplaceXT` directory. If you chose not to have the Content Engine or Process Engine Client installers create your deployment file, or if you made changes to `web.xml` for SSO support, or any other edits, recreate the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To recreate the WAR file, run one of the following commands:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_war.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_war.bat
```

2. If you will be deploying from an EAR file, verify that both `web_client.war` and `web_client.ear` exist. To recreate the EAR file, first recreate the WAR file, and then run the following command to recreate the EAR file:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_ear.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_ear.bat
```

### To rename the WAR file (optional)

---

**NOTE** This step is optional. Perform this step only if you are using a WAR file for deployment, and you want to use “Workplace XT” or a custom name for the context root of the application. The context root is part of the URI that end users type to access Workplace XT.

By default, when you deploy from a WAR file, the context root is the first part of the WAR filename. For example, the default `web_client.war` will generate a context root of `http://server_name:port#/webclient`. If you want to use `http://server_name:port#/custom_name`, you must rename `web_client.war` to `custom_name.war`.

1. Use the rename command to rename the WAR file. Enter the command without the line break.

#### UNIX

```
rename install_path/FileNet/WebClient/deploy/web_client.war  
install_path/FileNet/WebClient/deploy/custom_name.war
```

#### Windows

```
rename install_path\FileNet\WebClient\deploy\web_client.war  
install_path\FileNet\WebClient\deploy\custom_name.war
```

### To deploy IBM FileNet Workplace XT (WebLogic 9.2)

---

1. Use the WebLogic Administration Console to deploy Workplace XT.

You can deploy the application in one of the following ways:

- To deploy from an exploded folder, choose the Workplace XT folder in *install\_path/FileNet/WebClient*
- To deploy from a WAR or EAR file, choose the *web\_client.war* or *web\_client.ear* file in *install\_path/FileNet/WebClient /deploy*

2. Accept the defaults for the deployment, except for the name for the deployment. Use “Workplace XT” or the custom name you have chosen instead of “web\_client”.

3. Finish and save your changes.

**NOTE** To verify that the deployment was successful, expand **Web Applications**. The web application name you specified for Workplace XT will be listed.

4. After IBM FileNet Workplace XT is deployed, start the application from the WebLogic Administration Console.
5. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
6. Restart Process Task Manager and Component Manager.
7. Exit the Process Task Manager application.

**NOTE** To troubleshoot the deployment, check the following log:

`WLS_install_path/user_projects/domains/domain_name/servers/server_name/logs/server_name.log`

## Task 8c: Deploy IBM FileNet Workplace XT (JBoss)

This topic covers the deployment and start of Workplace XT on JBoss.

### To recreate the WAR or EAR files (optional)

---

**NOTE** If you are using a WAR file or EAR file for deployment, you must recreate the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `install_path/FileNet/WebClient/WorkplaceXT` directory. If you chose not to have the Content Engine or Process Engine Client installers create your deployment file, or if you made changes to `web.xml` for SSO support, or any other edits, recreate the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To recreate the WAR file, run one of the following commands:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_war.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_war.bat
```

2. If you will be deploying from an EAR file, verify that both `web_client.war` and `web_client.ear` exist. To recreate the EAR file, first recreate the WAR file, and then run the following command to recreate the EAR file:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_ear.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_ear.bat
```

### To deploy as “Workplace XT” or custom name using a WAR file (optional)

---

**NOTE** This step is optional. Perform this step only if you are using a WAR file for deployment, and you want to use “Workplace XT” or a custom name for the context root of the application. The context root is part of the URI that end users type to access Workplace XT.

By default, when you deploy from a WAR file, the context root is the first part of the WAR filename. For example, the default `web_client.war` will generate a context root of `http://<server_name>:<port#>/webclient`. If you want to use `http://server_name:port#/custom_name`, you must rename `web_client.war` to `custom_name.war`.

1. Use the rename command to rename the WAR file. Enter the command without the line break.

#### UNIX

```
rename install_path/FileNet/WebClient/deploy/web_client.war  
install_path/FileNet/WebClient/deploy/custom_name.war
```

#### Windows

```
rename install_path\FileNet\WebClient\deploy\web_client.war  
install_path\FileNet\WebClient\deploy\custom_name.war
```

**CAUTION** You must rename the WAR file every time you regenerate it. The `create_web_client_war.sh/.bat` script will by default create a file with the name `web_client.war`.

### To deploy Workplace XT

---

1. Stop JBoss, if it is running.
2. Deploy Workplace XT
  - (For exploded directory deployment only)
    - i. On the JBoss server, copy the `WorkplaceXT` folder from:  

```
install_path/FileNet/WebClient/
```

to:  

```
JBOSS_home/server/server_name/deploy/
```
    - ii. Append the extension `.war` to the `WorkplaceXT` folder:  

```
JBOSS_home/server/server_name/deploy/WorkplaceXT.war
```
    - iii. (optional) For a custom name for the context root (and the application), rename the `WorkplaceXT.war` folder to `custom_name.war`, where `custom_name` is the name you choose for your application.
  - (For WAR file deployment only)
    - i. On the JBoss server, copy the `web_client.war` (or `custom_name.war`) file from:  

```
install_path/FileNet/WebClient/deploy/
```

to:  

```
JBOSS_home/server/server_name/deploy/
```
  - (For EAR file deployment only)
    - i. On the JBoss server, copy the `web_client.ear` file from:  

```
install_path/FileNet/WebClient/deploy/
```

to:  

```
JBOSS_home/server/server_name/deploy/
```
3. Start or restart the JBoss application server.
4. Verify that the application deployed successfully.

Verify that the `server.log` file located in `JBOSS_home/server/server_name/log` lists deployment of the WAR or EAR file you used.
5. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.

6. Restart Process Task Manager and Component Manager.
7. Exit the Process Task Manager application.

## Configuration and startup tasks

To configure IBM FileNet Workplace XT components, perform the following tasks:

- [“Set IBM FileNet Workplace XT bootstrap preferences” on page 71.](#)
- [“Configure the Process Engine Connection Point for IBM FileNet Workplace XT” on page 75.](#)
- [“Configure the Process Engine REST services connection” on page 76](#)
- [“Set up SSL security for IBM FileNet Workplace XT” on page 77.](#)
- [“Perform additional configuration tasks” on page 81.](#)

## Set IBM FileNet Workplace XT bootstrap preferences

Bootstrap preferences are a category of site preferences. The first time you log into IBM FileNet Workplace XT, the `Bootstrap Preferences` page opens, displaying the following five bootstrap preference groups:

- Security Info (required only when using Application Integration with SSL)
- User Token Settings
- Preference Settings (required)
- Application Integration
- Administrator Access Role

For more information, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Bootstrap preferences](#).

### NOTES

- By successfully logging in to IBM FileNet Workplace XT and saving the bootstrap preferences, you are verifying IBM FileNet Workplace XT basic functionality such as user authentication, communication, and storing of data in Content Engine.
- In addition to the preferences covered in this topic, more preferences can be set for the Workplace XT application using Workplace XT Site Preferences. For more information, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences](#).
- After the initial bootstrap configuration, users with the Application Engine Administrators role can change any of these preferences by signing into IBM FileNet Workplace XT and navigating to **Admin > Site Preferences > Bootstrap**.
- In a web farm/clustered environment, all Workplace XT installations share site preferences by using the same `bootstrap.properties` file. For more information, see the *IBM FileNet P8 Platform High Availability Technical Notice*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).
- Bootstrap properties are stored in a separate file from other site preferences. The default location for this file, `bootstrap.properties`, is:  

```
install_path/FileNet/Config/WebClient
```
- To allow users to create workflow subscriptions, you *must* configure the PWDesigner access role. For more information, see [“To enable user access to the Workflow Subscription Wizard” on page 74](#).

### To set the bootstrap properties on first login

---

1. Log in to Workplace XT:
  - a. On any computer, open a browser and type:  

```
http://WorkplaceXTServerName:port#/WorkplaceXT
```

- b. Enter a user name and password, and then click **Log in**. The Bootstrap Preferences page opens.

**NOTE** The user who initially logs in and sets the bootstrap preferences is automatically added to the Application Engine Administrators role. For more information, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Access Roles preferences](#).

2. (Required only when using Application Integration with SSL) Enter security info.
  - a. Enter the **SSL Host** and **Port** information for the SSL server.
  - b. Enter the **Java Server HTTP port**.

Use the Security info preference to redirect Application Integration log-ins through a Secure Socket Layer (SSL) server and to identify a remote Java server. This encrypts the user IDs and passwords when they travel over the network. See [“Set up SSL security for IBM FileNet Workplace XT” on page 77](#) for instructions on setting up SSL security for one or more IBM FileNet Workplace XT installations.

3. Configure user token settings.

For Workplace XT, you can change the Token timeout interval (1-15).

4. (Required) Specify preference settings.

Preference settings specify the name of the site preference file, its storage location (object store), and the documentation server URL (if installed). The site preferences file is checked into the object store the first time you log in to IBM FileNet Workplace XT. The site preferences are stored as XML data in this file, *Site Preferences for Preferences name.xml*. Use Enterprise Manager to access this file, and navigate to Object Stores > Object Store location > Root Folder > Preferences.

**NOTE** The bootstrap preferences are saved in the `bootstrap.properties` file, and not in the site preferences file.

- a. Select an object store from the Object store location choice list. The preferences file will be saved in this object store. Workplace XT users must have access to this object store.
- b. Enter a preference file name in the Preferences name field.
- c. Enter the documentation server URL in the Documentation server field.

The format of the URL is:

```
http://DocServerName:port#/ecm_help
```

where *DocServerName* is the name of your Java application server where the documentation is installed,  
*port#* is the port number,  
and *ecm\_help* is the root directory of the documentation web site.

**NOTE** If no documentation URL is specified, the IBM FileNet Workplace XT Help link will default to

```
http://localhost.
```

5. Add IBM FileNet Workplace XT Administrators (Application Engine Administrators).



To verify that a single index has been added for Application Name on the site preferences object store

Add the users and groups that will perform IBM FileNet Workplace XT administration tasks to the Application Engine Administrators role.

#### NOTES

- The user who initially signs in and sets the bootstrap preferences is automatically added to the Application Engine Administrators role. For more information, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Access Roles preferences](#).
- To modify the access roles after the initial bootstrap configuration, users with the Application Engine Administrators role can use the access roles section of the IBM FileNet Workplace XT Site Preferences. Launch IBM FileNet Workplace XT and navigate to Admin > Site Preferences > Access Roles.

6. Click **Apply** to save your bootstrap settings.

**To verify that a single index has been added for Application Name on the site preferences object store**

---

To properly index access roles and improve login performance on IBM FileNet Workplace XT, an index is created for Application Name on the object store that contains the Workplace site preferences. Verify this index setting after you have successfully configured the bootstrap preferences.

1. Launch the IBM FileNet Enterprise Manager.
2. In the left pane, expand the **Object Stores** folder.
3. Expand the object store node where your preferences are stored. See [“\(Required\) Specify preference settings.” on page 72](#) above.
4. Expand **Other Classes** and then **Custom Object**.
5. Right click **Access Role** and select **Properties**.
6. Select the **Property Definitions** tab.
7. Select **Application Name** and click **Edit**.
8. On the **General** tab of the Application Name Properties, verify that the **Indexed** field shows **Single Indexed**.
  - If the **Indexed** field shows **Single Indexed.**, continue at [Step 13](#).
  - If the **Indexed** field shows 'not indexed', continue at [Step 9](#).
9. Click **Set/Remove**.
10. Select **Set** and then **Single Indexed**.
11. Click **OK** to set the index.
12. Click **OK** to apply the change and close the Application Name Properties window.
13. Click **OK** to close the Access Role Class Properties window.

## To enable user access to the Workflow Subscription Wizard

---

To allow users to create workflows subscriptions, you must configure the PWDesigner access role using the Workplace Site Preferences, and give the users appropriate access rights to the workflow subscriptions classes. You can perform these steps in any order, and you must perform both steps any time you need to add or remove users.

1. Assign users as members of the PWDesigner access role. See the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Access Roles preferences](#).
2. Run the security script wizard and load the `workplacescript.xml` file, located on the Content Engine at `install_path/FileNet/ContentEngine/Scripts/WorkplaceScript.xml`, to add accounts to the Workflow Designer role.

For more information about how to use the Security Script wizard to assign the Workflow Designer role to user or group accounts, see the IBM FileNet P8 Help topic [FileNet P8 Administration > Content Engine Administration > Content Engine Wizard Help > Security Script](#).

For more information about the `workplacescript.xml` file and how roles are defined in the Enterprise Manager, see the IBM FileNet P8 Help topic [FileNet P8 Administration > Content Engine Administration > Managing Security > Security Script Wizard](#).

## Configure the Process Engine Connection Point for IBM FileNet Workplace XT

Before users can access tasks and work items from IBM FileNet Workplace XT, you must configure the Connection Point on the Workplace XT server. Make sure that you have already completed the following tasks in the *IBM FileNet P8 Platform Installation and Upgrade Guide*:

- Create a Process Engine Isolated Region
- Create a Process Engine Connection Point

To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).

### To configure the connection point

---

1. Log into IBM FileNet Workplace XT:
    - a. On any computer, open a browser and navigate to:
 

```
http://WorkplaceXTServerName:port#/WorkplaceXT
```
    - b. Sign in using the same account that you used to set the bootstrap preferences.
  2. Click **Admin**.
  3. Click **Site Preferences**.
  4. On the General Settings page, under Tasks, select a **Process Engine Connection Point** from the drop down list.
  5. Click **Apply**, then click **Exit**.
- CAUTION** Performing Step 6 in an existing environment will destroy all data in the existing region.
6. (For new environments only) Initialize the isolated region.
    - a. Click **Admin**.
    - b. Click **Process Configuration Console**.
    - c. Right-click the icon or name of the isolated region you want to initialize, and select **Connect** from the context menu.
    - d. Click **Action**.
    - e. Click **Initialize Isolated Region**.
    - f. Click **Yes** at the prompt asking if you want to continue.
      - a. Close the Process Configuration Console.
  7. In IBM FileNet Workplace XT, click **Tasks** to confirm that IBM FileNet Workplace XT is communicating with Process Engine.
  8. Sign out of Workplace XT.

## Configure the Process Engine REST services connection

If you plan to use the ECM Widgets component, or want to use Process Engine REST services directly, configure the Process Engine REST services connection by editing the `P8BPMRESTConfig.xml` file.

### **(Optional) To configure the Process Engine REST services connection**

---

1. Navigate to `install_path/FileNet/WebClient/WorkplaceXT/WEB-INF`.
2. Open `P8BPMRESTConfig.xml` for editing.
3. Locate the entries for the Content Engine Bootstrap URI and the connection point, near the top of the file:

```
<perest:filenet.pe.bootstrap.ceuri value="iiop://cm-peru:2809/FileNet/Engine"/>  
<perest:connection.point value="RESTCP"/>
```

4. Replace these entries with the values for your environment:
  - Replace `cm-peru:2809` with your Content Engine server name and port number.
  - Replace `RESTCP` with the name of your connection point.  
Do not change the name if you have created a connection point for REST services that is called `RESTCP`.
5. Save your changes and close the file.

## Set up SSL security for IBM FileNet Workplace XT

This topic describes how to configure IBM FileNet Workplace XT to direct sign-ins through a Secure Socket Layer (SSL) https connection. It assumes that Workplace XT has already been installed.

Workplace XT supports the following methods of configuring an SSL environment:

- Full SSL support - A single IBM FileNet Workplace XT server, where all of the software is running under SSL.
- One server SSL redirect - One IBM FileNet Workplace XT server set up to redirect logon attempts on the non-SSL port to the SSL port.

### To set up full SSL support on a single IBM FileNet Workplace XT Server

1. Enable SSL on the application server that runs Workplace XT (see your SSL documentation).
2. Test the SSL connection by logging into Workplace XT using the following URL:

`https://WorkplaceXTServerName:SSL_port/WorkplaceXT`

**NOTE** The entire log-in process will be handled by the SSL-enabled host. Under full SSL, after login, all pages and information will be handled in SSL.

For more information about SSL port numbers, see [“IBM FileNet Workplace XT port numbers” on page 133](#).

### To set up SSL redirect on a single IBM FileNet Workplace XT server

1. Enable SSL on the application server that runs IBM FileNet Workplace XT (see your SSL documentation).
2. (optional) (WebSphere and WebLogic only) If you have made custom changes to your `web.xml` file, copy the `web.xml` file from the deploy location:

- WebSphere:

`WAS_HOME/profiles/default/installedApps/node_name/WorkplaceXT.ear/  
web_client.war`

- JBoss

`JBOSS_HOME/server/server_name/deploy/application_name.war or .ear`

back into the install location (`install_path/FileNet/WebClient/WorkplaceXT/WEB_INF`) before editing for SSL redirect.

3. Create a backup copy of your `web.xml` file.
4. (WebSphere only) Modify the `web.xml` file in the `install_path/FileNet/WebClient/WorkplaceXT/WEB_INF` directory:
  - a. Copy the `<security_constraint>` section from your file (not from this document), as shown in [Step b](#) below, and paste the new copied section directly after the original.

- b. Make changes to the newly inserted `<security_constraint>` section as follows (changes in bold):

Change from

```
<security-constraint>
  <web-resource-collection>
    <web-resource-name>action</web-resource-name>
    <description>Define the container secured resource</description>
    <url-pattern>/</url-pattern>
    <url-pattern>/*</url-pattern>
  </web-resource-collection>
  <auth-constraint>
    <role-name>All Authenticated</role-name>
  </auth-constraint>
  <user-data-constraint>
    <description>User data constraints</description>
    <transport-guarantee>NONE</transport-guarantee>
  </user-data-constraint>
</security-constraint>
```

to

```
<security-constraint>
  <web-resource-collection>
    <web-resource-name>action</web-resource-name>
    <description>Define the container secured resource</description>
    <url-pattern>/ContainerLogin.jsp</url-pattern>
  </web-resource-collection>
  <auth-constraint>
    <role-name>All Authenticated</role-name>
  </auth-constraint>
  <user-data-constraint>
    <description>User data constraints</description>
    <transport-guarantee>CONFIDENTIAL</transport-guarantee>
  </user-data-constraint>
</security-constraint>
```

**NOTE** The change also removes the second occurrence of this line:

```
<url-pattern>/*</url-pattern>
```

- c. Save your changes to the `web.xml` file.
5. (WebLogic and JBoss only) Modify the `web.xml` file in the `<install_path>/FileNet/WebClient/WorkplaceXT/WEB_INF` directory:

- a. In the `<security_constraint>` section, change the parameter, as follows, from

```
<user-data-constraint>
  <description>User data constraints</description>
  <transport-guarantee>NONE</transport-guarantee>
</user-data-constraint>
```

to

```
<user-data-constraint>
  <description>User data constraints</description>
  <transport-guarantee>CONFIDENTIAL</transport-guarantee>
</user-data-constraint>
```

- b. Save your changes to the `web.xml` file.

6. Create your deployment files.
  - (If you deployed as a WAR file only), In the *install\_path/FileNet/WebClient/deploy* directory, run `create_web_client_war.sh` or `.bat` file.
  - (If you deployed as an EAR file only), In the *install\_path/FileNet/WebClient/deploy* directory, run `create_web_client_war.sh` or `.bat` file, then `create_web_client_ear.sh` or `.bat` file.
7. Redeploy the application.
8. Sign in to Workplace XT:
  - a. On any computer, open a browser and type the following URL address:  
`http://WorkplaceXTServerName:port#/WorkplaceXT`
  - b. Sign in as a user with Application Engine Administrator access role privileges. For more information, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Access Roles preferences](#).
9. (Applies only when using Application Integration) Set bootstrap preferences:
  - a. Navigate to Tools > Administration > Site Preferences > Bootstrap.
  - b. Set the Security info Site Preference **SSL Host:Port** to identify the alias host name and port number.  
  
 Use the IP address of the IBM FileNet Workplace XT server for the SSL Host entry.  
  
 For more information, see “(Required only when using Application Integration with SSL) Enter security info.” on page 72.
  - c. Click **Apply** to save your bootstrap settings.
10. Update the base URL:
  - a. Navigate to Tools > Administration > Site Preferences > Refresh .
  - b. Enter the Workplace XT Base URL value in the provided field. The URL must contain a valid host name, and not contain “localhost” or an IP number. For example, `http://myserver:port/WorkplaceXT`.  
  
 For more information, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Refresh preferences](#).
  - c. Click **Refresh** to update the base URL.
  - d. Click **Exit** to close Site Preferences.
11. Sign out of Workplace XT, and close your browser.
12. Test the SSL connection by signing into Workplace XT using the following URL:  
  
`http://WorkplaceXTServerName:non-SSL port/WorkplaceXT`  
  
**NOTE** You will be redirected to the SSL-enabled port for log in, then back to the non-SSL enabled port after log-in is complete. You should receive a warning that you are accessing

pages over a secure connection (unless you turned this dialog box off), then Workplace XT will open.

### ***Using Java Applets in an SSL Environment***

If you are using a Java applet in an SSL environment, you may experience an `SSLHandshakeException` because the appropriate certificate does not exist on your computer. Follow the instructions in the IBM FileNet P8 Help topic [User Help > Using Workplace > Basics > Use Java Applets](#) to resolve this issue.



## Perform additional configuration tasks

Once you have completed the installation and configuration tasks, your Workplace XT application will be up and running. Below is a list of additional configuration tasks you can complete (or at least review) to prepare the system for general use. Except where noted, the links go to the IBM FileNet P8 Help, and start from the Contents panel in:

`http://webserver:port#/ecm_help/_start_here.htm`

where `webserver:port` are the application server and port for your IBM FileNet P8 help.

- Set site preferences for the Workplace XT application. Refer to [User Help > Actions, preferences, and tools > Site preferences](#).
- Configure email notification. Refer to [FileNet P8 Administration > Process Engine Administration > Workflow administration tasks > Coordinating workflow design > Email notification](#).
- Enable logging. Refer to [User Help > Using Workplace XT > Configure Workplace XT > Configure Logging](#).
- Perform other configuration tasks as applicable. For a list of tasks that apply to the full IBM FileNet P8 system, see the “Perform Additional Configuration Tasks” in the *IBM FileNet P8 Platform Installation and Upgrade Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs”](#) on page 14.

## Optional installation tasks

### To perform optional IBM FileNet Workplace XT installation tasks

---

**NOTE** You can install the additional or optional IBM FileNet Workplace XT components listed below in any order.

- [“Install IBM FileNet Workplace XT Application Integration” on page 83.](#)
- [“Install IBM FileNet Workplace XT File Tracker” on page 88.](#)
- [“Install Application Integration BCS for Microsoft Office \(Workplace XT\)” on page 91](#)
- [“Deploy multiple IBM FileNet Workplace XT instances” on page 98.](#)

# Install IBM FileNet Workplace XT Application Integration

Install Application Integration if you want to integrate IBM FileNet Workplace XT with your Microsoft® Office applications and Outlook. Complete the following procedure on each machine that will use Workplace XT Application Integration.

## NOTES

- Verify that the client machine meets the platform requirements documented in the *IBM FileNet P8 Hardware and Software Requirements*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).
- You cannot collocate IBM FileNet Workplace XT Application Integration with clients running P8 Workplace Application Integration Toolkit.
- If you plan to use Application Integration with Workplace XT, you must configure your application server to support user token settings. See the following procedures for details:
  - [“\(optional\) To configure WebSphere to support user tokens for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)” on page 41](#)
  - [“\(optional\) To configure WebLogic to support user tokens for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)” on page 53](#)
  - [“\(optional\) To configure JBoss to support user tokens for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)” on page 60](#)

## **To install the Application Integration software interactively**

---

1. Log in to the client machine using an account that has Administrator privileges.
2. Log in to Workplace XT.
3. Click Tools > Downloads > Download Application Integration for Microsoft(R) Office....
4. In the dialog, do one of the following:
  - Click **Run** to run the program from its current location.
  - Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the ApplicationIntegration.exe file locally, and then click **Save**. Once the file is saved to your hard drive, double-click the file to run the installer.

A setup preparation dialog appears momentarily, followed by the Welcome dialog box for Workplace XT Application Integration.

5. Click **Next**.
6. Read and accept the license agreement, and then click **Next**. If you do not accept the license agreement, you cannot continue with the install.
7. Do the following:

- Select the applications you want to integrate, and then click **Next**.

**KEYBOARD TIP** Use arrow keys to move up and down the list of applications. Use the space bar to access the context menu for any of the applications, and then use the arrow keys to select a feature and press Enter.

**NOTE** The Application Integration Toolkit Components option is required to use Application Integration.

- Under **Install to**, the default installation path is displayed. Click **Change** to specify a different location on the Change Current Destination Folder dialog box, and then click **OK**. Click **Next**.

**NOTE** You may see two default installation paths - one for Microsoft Office and Outlook, and another for the Toolkit Components. The Toolkit Components path only appears when the system on which you are installing Application Integration has the Toolkit Components currently installed. You cannot modify the Toolkit Components installation path.

8. Enter the server name, port number, and application name that defines the IBM FileNet Workplace XT address. The *Server Name* is the name of the web server running Workplace XT, *Port* is the web server's assigned port, and *Application* is the name of your application, for example, Workplace XT.

Check **Server uses secure connection (SSL)** if you are running full SSL to encrypt all communication with Workplace XT.

Check **Server uses single sign-on (SSO)** if you are using Application Integration in an SSO environment.

**NOTE** You can also leave these fields blank and enter the information when you log in to Workplace XT Application Integration.

9. Click **Next**.
10. Click **Install**.
11. After the install is complete, click **Finish** to complete the setup process.

### **To install the Application Integration software silently**

---

1. Log onto the client machine using an account that has Administrator privileges.
2. Log in to Workplace XT.
3. Click **Tools > Downloads > Download Application Integration for Microsoft(R) Office...**
4. Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the `ApplicationIntegration.exe` file locally, and then click **Save**.
5. Open a DOS command window and change the current directory to the one where `ApplicationIntegration.exe` resides.
6. Type (do not copy and paste) the following at the command line:

```
ApplicationIntegration.exe /s /v"/qn <additional arguments included in string>  
LICENSE_ACCEPTED=true"
```

Use the `/s` switch and include the `/qn` switch to launch the install silently.

Refer to the following optional command line values you can also use. Append the values within the string containing the arguments.

For example, `ApplicationIntegration.exe /s /v"/qn /L*v C:\temp\AppIntSetup.txt LICENSE_ACCEPTED=true"`

Command Line Values	Installs
ADDLOCAL=ALL	All Features
ADDLOCAL=ALL REMOVE=OutlookIntegrationFeature	Office Only
ADDLOCAL=ALL REMOVE=OfficeIntegrationFeature	Outlook Only
ADDLOCAL=ALL REMOVE=OutlookIntegrationFeature, OfficeIntegrationFeature	Core Only

Command Line Values	Settings
HOST= <i>host name</i>	Enter the name of the web server running Workplace XT.
PORT= <i>port number</i>	Enter the web server's assigned port number.
APPLICATION= <i>application name</i>	Enter the directory in which you installed the Workplace XT application files.
SERVER_CONNECTION=1	Set Application Integration to use an https connection
SERVER_CONNECTION=0	Set Application Integration to use http connection. This is the default if this parameter is not passed.
SINGLE_SIGNON	Set this to true to use Application Integration in a single sign-on environment. The default is false if the parameter is not passed.
/L*v C:\temp\AppIntSetup.txt	Verbose installation log and specify log location.

### To verify your Workplace XT Application Integration installation

---

1. Start Microsoft Word.
2. From the **File** menu, click **IBM FileNet Workplace XT**, click **Open Document**, and then click **Select Item**. The Login dialog box opens.

**NOTE** If you are using SSO and you set the Workplace XT address during installation, the action will perform without the Login dialog box. If you did not set the Workplace XT address, select **IBM FileNet Workplace XT > Set Workplace XT address for SSO** to complete the dialog (in Office 2003, the **IBM FileNet Workplace XT** choice displays under the **File** menu).

3. Log in using any valid account. The available object stores in your environment are displayed.

**NOTE** If you didn't enter the Workplace XT Address information in [Step 8](#) above, enter the server name, port number and application name that defines the Workplace XT address.

- The *Server Name* is the name of the web server running Workplace XT
- *Port* is the web server's assigned port.
- *Application* is the name of your application, for example, Workplace XT.
- Check **Server uses secure connection (SSL)** if you use SSL to encrypt all communication with Workplace XT. Do not select this option if you use SSL redirect during login.

4. Close all dialog boxes and close Microsoft Word.

### To uninstall or modify Workplace XT Application Integration

---

1. From the **Start** menu, click **Settings**, and then click **Control Panel**.
2. Click **Add/Remove Programs**, and then click **IBM FileNet Workplace XT Application Integration <version>**.
3. Do one of the following:
  - Click **Remove**, and then click **Yes** to confirm you want to uninstall IBM FileNet Workplace XT Application Integration.
  - Click **Change** to access maintenance wizard, and then click **Next**. You can modify, repair, or remove Application Integration using the maintenance wizard.
    - Select **Modify** to add or remove integration with Microsoft applications from your previous install. For example, if you have both Microsoft Office and Outlook installed, you can remove one of the applications using this option. The Custom Setup dialog box appears, where you highlight the option you want to add or remove. Click **Next**, and then click **Install**. Click **Finish** to complete the process.
    - Select **Repair** if you want to re-install IBM FileNet Workplace XT Application Integration in order to repair installation errors. Click **Next**. Click **Install** to start the repair process. Click **Finish** to complete the process.
    - Select **Remove** to remove IBM FileNet Workplace XT Application Integration from your system, and then click **Next**. Click **Remove**. Once the application is removed from your system, click **Finish** to complete the process.

### **To silently uninstall Workplace XT Application Integration**

---

1. Open a command prompt.
2. Enter the following command to uninstall Workplace XT Application Integration:

```
MsiExec.exe /X{995FB60D-DC35-48BB-B451-681830AEEA9F} /qn
```

## Install IBM FileNet Workplace XT File Tracker

Install File Tracker if you want to use the Workplace XT file tracking feature without installing Application Integration. Installing Workplace XT Application Integration also installs Workplace XT File Tracker. Complete the following procedure on each machine that will use Workplace XT File Tracker.

**NOTE** You cannot collocate Workplace XT File Tracker with clients running Workplace File Tracker.

Verify that the client machine meets the platform requirements documented in the *IBM FileNet P8 Hardware and Software Requirements*. To download this guide from the IBM support page, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).

### To install the File Tracker software interactively

---

1. Log into the client machine using an account that has Administrator privileges.
2. Log into Workplace XT.
3. Click **Tools > Downloads > Download File Tracker...**, and do one of the following:
  - Click **Open** to run the program from its current location.
  - Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the `FileTrackerXT.exe` file locally, and then click **Save**. Once the file is saved to your hard drive, double-click the file to run the installer.

The Welcome Wizard dialog box for Workplace XT File Tracker appears. Another Welcome dialog box appears.
4. Click **Next**.
5. Read the license agreement, and then select **I accept the terms to the license agreement**, and then click **Next**. If you do not accept the license agreement, you cannot continue with the install.
6. Do one of the following:
  - Click **Change** if you want to install Workplace XT File Tracker to a different location. Specify the location to which you want to install File Tracker, and then click **OK**. Click **Next**.
  - Click **Next** to accept the default location.
7. Click **Install**.
8. After the install is complete, click **Finish** to complete the setup process.
9. (On Vista using Internet Explorer 7.0 only) Add the Workplace XT URL to the browser security tab.
  - a. In the Internet Explorer 7.0 browser, click **Tools > Internet Options**. Click the **Security** tab.
  - b. Select **Trusted Sites**, and click the **Sites** button.
  - c. Add the Workplace XT URL and click **Add**.
  - d. Click **OK**, and **OK** again to save changes.



**To install the File Tracker software silently**

---

1. Log onto the client machine using an account that has Administrator privileges and log into Workplace XT.
2. Click Tools > Downloads > Download File Tracker...
3. Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the FileTrackerXT.exe file locally, and then click **Save**.
4. Open a DOS command window and change the current directory to the one where FileTrackerXT.exe resides.
5. Type the following at the command line:

```
FileTrackerXT.exe /s /v"/qn <additional msi arguments included in string>
LICENSE_ACCEPTED=true"
```

**NOTE** Use the /s switch to launch the execution silently and include the /qn switch in the msi string to make msi run silently. In addition, be aware of spaces specified between switches in the above example. Using the correct spacing ensures a successful silent install.

Refer to the following optional command line values you can also use. Append the values within the string containing the msi arguments.

```
For example, FileTrackerXT.exe /s /v"/qn /L*v C:\temp\FileTrackerSetup.txt
LICENSE_ACCEPTED=true"
```

Command Line Values	Settings
/L*v C:\temp\FileTrackerSetup.txt	Verbose installation log and specific log location.  <b>NOTE</b> If you intend to specify a log location, create the directory before running the silent install. If the directory is not created ahead of time, the install will fail.

6. (On Vista using Internet Explorer 7.0 only) Add the Workplace XT URL to the browser security tab.
  - a. In the Internet Explorer 7.0 browser, click **Tools > Internet Options**. Click the **Security** tab.
  - b. Select **Trusted Sites**, and click the **Sites** button.
  - c. Add the Workplace XT URL and click **Add**.
  - d. Click **OK**, and **OK** again to save changes.

**To uninstall IBM FileNet Workplace XT File Tracker**

---

1. From the Start menu, click **Settings**, and then click **Control Panel**.
2. Click **Add/Remove Programs**, and then click **IBM FileNet Workplace XT File Tracker <version>**.

3. Click **Remove**, and then click **Yes** to confirm you want to uninstall IBM FileNet Workplace XT File Tracker.

**To uninstall IBM FileNet Workplace XT File Tracker silently**

---

1. Open a command prompt.
2. Enter the following command to uninstall IBM FileNet Workplace XT File Tracker:  
`msiexec.exe /X{8D746557-5081-4A62-951C-14B7F1CD6C52} /qn`

## Install Application Integration BCS for Microsoft Office (Workplace XT)

Before you can access FileNet P8 documents from within Microsoft® Office 2007 applications or Outlook, you must download Application Integration BCS.

If you do not want users to download Application Integration BCS directly from Workplace XT, you can suppress the Download Application Integration BCS for Microsoft® Office 2007 Tools menu option. See *Customize Workplace XT actions (System Administration > Application Engine and Workplace XT Administration > Workplace XT Administration > Customize Workplace XT actions)* for more information.

### **To install Application Integration BCS interactively**

---

1. Log onto the client machine using an account that has Administrator privileges.
2. Log in to Workplace XT.
3. From the Workplace XT Tools menu, click Downloads > Download Application Integration BCS.
4. In the dialog, do one of the following:
  - Click **Run** to run the program from its current location.
  - Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the ApplicationIntegrationBCS.exe file locally, and then click **Save**. Once the file is saved to your hard drive, double-click the file to run the installer.

If the installer detects that you do not have all the necessary prerequisites installed, it will prompt you to perform those installations at this point. When you return to the installer, click **Next** to continue.

A setup preparation dialog appears momentarily, followed by the Welcome dialog box for Application Integration BCS. Click **Next**.

5. If you do not accept the license agreement, you cannot continue with the installation. Accept the terms of the license agreement, and click **Next**.
6. Enter the name of the object store and the object store's preference name.
 

The object store name and preference name are defined under Preference Settings in the Bootstrap settings site preference. See the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Bootstrap preferences](#).
7. Enter the Web addresses for the Content Engine server, Workplace XT server, and the help server.
8. Specify a tab label in the IBM ECM Tab Label field. This is the name that will appear on tabs or menus for this application.
9. Choose one of the following options:
  - Install for everyone
  - Install for just me

Click **Next**.

10. Select the location in which you want to install the application. You can click **Change** to specify a different installation path location.
11. Choose your setup type preference. Choose Custom to select which Office applications will be integrated with IBM FileNet P8. You can select Word, Excel, Powerpoint, and Outlook.
12. Click Install and complete the installation process.

**NOTE** InstallShield® provides a list of errors that might occur while you are installing Application Integration BCS. The list includes descriptions and resolutions for each error. Access the list in Acresto(TM) Software's user documentation Acresto HelpNet > InstallShield 12 Help Library > Reference > Errors and Warnings > Setup.exe Return Values and Run-Time Errors (Basic MSI and InstallScript MSI Projects).

[http://helpnet.acresso.com/robo/projects/installshield12help/lib/HelpSetup\\_EXEErrors.htm](http://helpnet.acresso.com/robo/projects/installshield12help/lib/HelpSetup_EXEErrors.htm)

### **To install the Application Integration BCS software silently**

---

1. Log onto the client machine using an account that has Administrator privileges.
2. Log in to Workplace XT.
3. Click **Tools > Downloads > Download Application Integration BCS...**
4. Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the ApplicationIntegrationBCS.exe file locally, and then click **Save**.
5. Open a DOS command window and change the current directory to the one where ApplicationIntegrationBCS.exe resides.
6. Type (do not copy and paste) the following at the command line:

```
ApplicationIntegrationBCS.exe /s /v"/qn <additional arguments included in string>
LICENSE_ACCEPTED=true"
```

Use the /s switch and include the /qn switch to launch the install silently.

Refer to the following optional command line values you can also use. Append the values within the string containing the arguments.

**NOTE** When there are spaces in the property values, the entire value must be surrounded by quotes ("). The quote must be prepended with a slash because the entire value of the /v argument, which includes the property values, is also surrounded by quotes.

For example:

```
ApplicationIntegrationBCS.exe /s /v"/qn /L*v C:\AppIntSetup.txt CEURL="http://CE
Server Name:port/wsi/FNCEWS40MTOM/" WORKPLACEXTURL="http://Workplace XT Server
Name:port/WorkplaceXT/" HELPURL="http://Help Server Name:port/ecm_help/"
PREFERENCESNAME=PreferenceName PREFERENCESOBJECTSTORE="Preference ObjectStore"
LICENSE_ACCEPTED=true"
```

Command Line Values	Settings
CEURL	The URL of the CE server, for example:  <i>http://Server Name:port/wsi/ FNCEWS40MTOM/</i>
WORKPLACEXTURL	The URL of the Workplace XT server, for example:  <i>http://Server Name:port/WorkplaceXT/</i>
HELPURL	The URL of the help server.
PREFERENCESNAME	The name of the preferences file on the Workplace XT server to use.
PREFERENCESOBJECTSTORE	The name of the object store that contains the preferences file.
LICENSE_ACCEPTED	Required to be passed when installing silently. Value=true.
ADDLOCAL	Used to control what add ins are installed. Omit to add all of them. Other possible values:  <ul style="list-style-type: none"> <li>• Excel</li> <li>• Outlook</li> <li>• Powerpoint</li> <li>• Word</li> </ul> (Can be combined, separated by commas)
SAVE_SETTINGS_FOR_ALL	Used to control if add ins are installed for all users of the computer, or just the current user. Can be omitted to use the default.  Values: 1 - for all users 2 - current user (default)
IBMECMTAB	Used to control the text of the tab in the office ribbon bar. If omitted, the default value used is "IBM ECM"
/L*v C:\temp\ApplntBCSSetup.txt	Verbose installation log and specify log location.

### To upgrade Application Integration BCS interactively

---

1. Log onto the upgrade Workplace XT client machine using an account that has Administrator privileges.
2. Close all Office applications.
3. Log in to Workplace XT.
4. From the Workplace XT Tools menu, click Downloads > Download Application Integration BCS.
5. In the dialog, do one of the following:
  - Click **Run** to run the program from its current location.
  - Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the ApplicationIntegrationBCS.exe file locally, and then click **Save**. Once the file is saved to your hard drive, double-click the file to run the installer.

A setup preparation dialog appears momentarily, followed by the message "This setup will perform an upgrade of IBM FileNet Application Integration BCS. Do you want to continue?" Y N.

6. Choose Yes to begin the upgrade process.
7. Click **Next** on the "Resuming the InstallShield Wizard..." panel.
8. Click **Finish**.

### To upgrade Application Integration BCS silently

---

1. Log onto the client machine using an account that has Administrator privileges.
2. Log in to Workplace XT.
3. Click **Tools > Downloads > Download Application Integration BCS...**
4. Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the ApplicationIntegrationBCS.exe file locally, and then click **Save**.
5. Open a DOS command window and change the current directory to the one where ApplicationIntegrationBCS.exe resides.
6. Type (do not copy and paste) the following at the command line:

```
ApplicationIntegrationBCS.exe /s /v"/qn /L*v C:\AppIntSetup.txt"
```

Use the /s switch and include the /qn switch to launch the upgrade silently.

### To uninstall or modify Application Integration BCS

---

1. From the **Start** menu, click **Settings**, and then click **Control Panel**.
2. Click **Add/Remove Programs**, and then click **IBM FileNet Workplace XT Application Integration BCS <version>**.
3. Do one of the following:

- Click **Remove**, and then click **Yes** to confirm you want to uninstall IBM FileNet Workplace XT Application Integration BCS.
- Click **Change** to access maintenance wizard, and then click **Next**. You can modify, repair, or remove Application Integration BCS using the maintenance wizard.
  - Select **Modify** to add or remove integration with Microsoft applications from your previous install. For example, if you have both Microsoft Office and Outlook installed, you can remove one of the applications using this option. The Custom Setup dialog box appears, where you highlight the option you want to add or remove. Click **Next**, and then click **Install**. Click **Finish** to complete the process.
  - Select **Repair** if you want to re-install IBM FileNet Workplace XT Application Integration BCS in order to repair installation errors. Click **Next**. Click **Install** to start the repair process. Click **Finish** to complete the process.
  - Select **Remove** to remove IBM FileNet Workplace XT Application Integration BCS from your system, and then click **Next**. Click **Remove**. Once the application is removed from your system, click **Finish** to complete the process.

### **To silently uninstall Workplace XT Application Integration BCS**

---

1. Open a command prompt.
2. Enter the following command to uninstall Workplace XT Application Integration BCS and create a log file called AppIntBCSUninstall.txt:

```
msiexec.exe /X {6987BFD1-995E-4D8E-AD3A-8F3292EF1C09} /qn /L*v
C:\temp\AppIntBCSUninstall.txt
```

## **Configuration Options**

The `configuration.ini` file is similar to the bootstrap properties. The file contains Web addresses for the Content Engine, Workplace XT, and documentation servers, and the location of the site preferences file defined in the Bootstrap settings site preference. For details, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences > Bootstrap preferences](#). This information cannot be stored in a site preference file because it is needed prior to users logging into Application Integration BCS. You can update this file when you modify the Web addresses and site preferences file location, and then send the updated information to each client machine.

The `configuration.ini` file is created on the system in which Application Integration BCS is installed. It resides in either of the locations included in the table below. You determine the location when you choose to make Application Integration BCS available to all users with an

account on the system or to the user logged into the current system during the installation process.

Location of configuration.ini file	Created for...
\Documents and Settings\All Users\Application Data\IBM\Application Integration BCS	All users with an account on the system.
\Documents and Settings\[Username]\Application Data\IBM\Application Integration BCS	Current user logged into the system.

### Configuration.ini settings

Use the following table to identify the settings and their definitions.

Settings	Definitions
PreferencesObjectStore	This name and preference name identify where the site preferences file is located. It is defined in the Bootstrap settings site preference.
PreferencesName	This name and object store name identify where the site preferences file is located. It is defined in the Bootstrap settings site preference.
CEURL	This Web address Identifies the object stores accessed by users.



Settings	Definitions
WorkplaceXTURL	This Web address is used when you include links to FileNet P8 documents from an integrated application.
HelpURL	This Web address used for accessing the help documentation supporting Application Integration BCS.
IBMECMTabLabel	This name appears on the IBM ECM tab on the Microsoft Office 2007 Ribbon and on the IBM ECM menu and option in Outlook.
LoggingLevel	<p>The following settings are used to control the errors that are logged in the Microsoft Windows event log:</p> <ul style="list-style-type: none"> <li>• NONE - No errors logged</li> <li>• ERROR - Only error messages are logged</li> <li>• WARNING - Warning and error messages are logged</li> <li>• no value (default) – All messages are logged</li> </ul>
ShowStackTrace	This controls whether the stack trace is available on error message dialog boxes. Values (case sensitive) are true or false (default).

## Deploy multiple IBM FileNet Workplace XT instances

This topic covers deployment of multiple instances of Workplace XT on a single application server. Each deployment of Workplace XT must use the same Content Engine, Process Engine, and connection point. Each deployment of Workplace XT may use different Site Preference files and may provide access to different object stores.

### NOTES

- The procedure below assumes that you have already installed Workplace XT and deployed one instance of the Workplace XT application. You may or may not have signed in and configured your bootstrap preferences.
- For more information on how to deploy and manage multiple identical applications, see your application server documentation.
- For WebLogic, deployment using a flat directory is not recommended when there will be multiple deployments.

### To deploy a second instance of the Workplace XT application

---

1. Copy the Workplace XT configuration folder.

On the Workplace XT server, make a copy (*WebClient2*) of the Workplace XT configuration folder found at:

```
install_path/FileNet/Config/WebClient
```

and place it in the same directory to create *install\_path*/FileNet/Config/WebClient2

2. Copy the `deploy` folder.

On the Workplace XT server, make a copy (*deploy2*) of the Workplace XT deploy folder found at:

```
install_path/FileNet/WebClient/deploy
```

and place it in the same directory to create *install\_path*/FileNet/WebClient/*deploy2*

3. Delete the `.war` file and the `.ear` file from the *deploy2* directory.
4. In the *install\_path*/FileNet/WebClient/*deploy2* directory, edit the `create_web_client_war.bat` or `.sh` file.

- a. Make a backup of the file.

- b. Change the following lines:

```
cd /D "%WEB_HOME%\WorkplaceXT"

"%WEB_HOME%\_AEjvm\bin\jar" -cf "%WEB_HOME%\deploy\web_client.war" author
containerSecured css download eprocess FnJavaV1Files images include is js
operations portlets properties redirect regions scripts select UI-INF utils
WEB-INF wizards *.jsp

rem Add P8 eForms if installed.
```

```
if exist "%WEB_HOME%\deploy\eforms_add_to_war.bat" call
"%WEB_HOME%\deploy\eforms_add_to_war.bat"
```

to this:

```
cd /D "%WEB_HOME%\WorkplaceXT"

"%WEB_HOME%\_AEjvm\bin\jar" -cf "%WEB_HOME%\deploy2\web_client2.war" author
containerSecured css download eprocess FnJavaV1Files images include is js
operations portlets properties redirect regions scripts select UI-INF utils
WEB-INF wizards *.jsp

rem Add P8 eForms if installed.

if exist "%WEB_HOME%\deploy2\eforms_add_to_war.bat" call
"%WEB_HOME%\deploy2\eforms_add_to_war.bat"
```

to include the modified folder name and the new name for the WAR file, such as `web_client2.war`.

5. If you want to deploy as an EAR file, modify the `create_web_client_ear.bat` or `.sh` file in the `install_path/FileNet/WebClient/deploy2` directory to point to the modified folder names and to rename the EAR file.
  - a. Make a backup of the `create_web_client_ear.bat` or `.sh` file.
  - b. Edit the `create_ear.bat` or `.sh` file to change these lines:

```
cd /D "%WEB_HOME%\deploy"
"%WEB_HOME%\_AEjvm\bin\jar" -cvf "%WEB_HOME%\deploy\web_client.ear" META-INF
*.war
```

to this:

```
cd /D "%WEB_HOME%\deploy2"
"%WEB_HOME%\_AEjvm\bin\jar" -cvf "%WEB_HOME%\deploy2\web_client2.ear" META-
INF *.war
```

6. In the Workplace XT install directory, edit the `web.xml` file.
  - a. In `FileNet\WebClient\WorkplaceXT\WEB-INF`, rename `web.xml` to `web.xml.1`.
  - b. Create a copy of `web.xml.1`, and name it `web.xml`.
  - c. In the new `web.xml`, change the following parameter value:

```
<param-name>configurationDirectory</param-name>
<param-value>C:/Program Files/FileNet/Config/WebClient</param-value>
```

to set the path to the new configuration folder copy you created in [Step 1](#), for example, `<install_path>/FileNet/Config/WebClient2`

**NOTE** On Windows, use double back slash (`\\`) in place of the forward slash in the `configurationDirectory`.

- d. (For deployments using the EAR file only) Change the value of the context root to the custom name you have chosen for the new application instance, for example, `Workplace XT2`.

7. Recreate the WAR file by running `create_web_client_war.bat` or `.sh`.
8. (For EAR file deployments only) Recreate the EAR file by running `create_web_client_ear.bat` or `.sh`.
9. Rename the `web.xml` files.
  - a. Rename the `web.xml` file (that applies to the second instance) to `web.xml.2`.
  - b. Rename the original file, now called `web.xml.1`, back to `web.xml`.

**NOTE** The original `web.xml` file is for the original application instance, and `web.xml.2` is for the new instance. If you need to do further configuration for either instance, you must rename the appropriate version of the file to “web.xml” during the configuration.

10. Clean up the `bootstrap.properties` file.

**NOTE** If you haven't yet signed in to the Workplace XT application as part of your first Workplace XT installation there is no need to clean up the file.

When you first sign in to Workplace XT certain values in the `bootstrap.properties` file, such as the name and location of the site preferences file, are set. To use different settings for your new Workplace XT application you must remove the existing entries from the copied file.

The `bootstrap.properties` file is located in:

```
install_path/FileNet/Config/WebClient2
```

Edit the `bootstrap.properties` file:

- Remove the value entered for the `prefName` setting - This entry contains the name of the site preferences file stored on the object store.
- Remove the value entered for the `objectStoreId` - This entry contains the object store name where your site preferences will be stored.
- Remove or edit any of the other values as needed.

11. In the relevant configuration files in the new `FileNet/Config/WebClient2` directory, remove any comments and custom changes that should not apply to the second Workplace XT instance.

**NOTE** If you haven't yet signed in to the Workplace XT application as part of your first Workplace XT installation there is no need to clean up the files.

12. Deploy the second Workplace XT instance.

Follow the application server specific procedures below to deploy your second instance of Workplace XT using a unique name (*WorkplaceXT2* in the procedure below).

When deploying the second instance, use the newly created `web_client2.war` or `web_client2.ear` file (depending on which method you choose) to deploy the application:

```
deploy2/web_client2.war or deploy2/web_client2.ear
```

- WebSphere - See [“Deploy IBM FileNet Workplace XT \(WebSphere\)” on page 62](#).

**CAUTION** Deploy the WAR file with a different Context Root name, *WorkplaceXT2*.

- WebLogic - See [“Deploy IBM FileNet Workplace XT \(WebLogic\)” on page 65](#).

**CAUTION** The new application will deploy using the name specified in the context root or the name of the WAR file.

- JBoss - See [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 67](#).

**CAUTION** Deploy the WAR file with a different Context Root name, *WorkplaceXT2*.

13. Sign in and set bootstrap preferences for the new application.

Use the following URL when signing in to set the bootstrap preferences for your new Workplace XT instance.

`http://WorkplaceXTServerName:port#/WorkplaceXT2`

NOTE You must specify a unique name for the Preference name for each deployment. For details, see [“Set IBM FileNet Workplace XT bootstrap preferences” on page 71](#).

## Upgrade tasks

### To upgrade IBM FileNet Workplace XT

---

1. Upgrade the IBM FileNet XT software. Perform [Task 1 on page 103](#).
2. Install software updates. Perform [Task 2 on page 107](#).
3. Update the Content Engine Client files on the Workplace XT server. Perform [Task 3 on page 108](#).
4. Update the Process Engine Client files on the Workplace XT server. Perform [Task 4 on page 111](#).
5. Deploy IBM FileNet Workplace XT according to your application server type:
  - Websphere: [Task 5a on page 115](#)
  - WebLogic: [Task 5b on page 118](#)
  - JBoss: [Task 5c on page 120](#)
6. Upgrade multiple instances of IBM FileNet Workplace XT. Perform [Task 6 on page 123](#).

## Task 1: Upgrade IBM FileNet Workplace XT

This task includes IBM FileNet Workplace XT upgrade instructions for all supported application servers, for UNIX and Windows platforms. The upgrade installer recreates the IBM FileNet Workplace XT folder structure and files needed for Workplace XT. After upgrading the files, and any necessary updates, you must also re-deploy the Workplace XT application.

### To enable screen reader assistive technology for the upgrade tool

---

If you plan to use JAWS screen reader for the upgrade tool, you must perform the following tasks before you begin the upgrade:

1. Ensure that the Sun Java JRE 1.5.0 or 1.5.x is installed on the system where you will be performing the install.
2. Install the Java Access Bridge (available at <http://java.sun.com>).
3. Start the JAWS screen reader.

### To upgrade the IBM FileNet Workplace XT software

---

1. Log in to the application server:

#### UNIX

Log in as a user with write access to the `/bin` directory and read, write, and execute access to the directory where you plan to install IBM FileNet Workplace XT. The user should also be a member of the `bin` group.

#### Windows

Log in as a member of the local Administrators group or a user with equivalent permissions.

2. From Process Task Manager, stop Component Manager (if running), then exit the Process Task Manager application.
3. (Windows only) From the Windows Services console, stop the Process WP XT Services Manager service.
4. (Windows only) Using the Windows Task Manager, verify that no `javaw.exe` processes are running.

**NOTE** If the applications in the preceding steps stopped correctly, no Workplace XT-related `javaw.exe` processes should be running. If needed, use Windows Task Manager or some other process management tool to stop all `javaw.exe` processes that are in the directory path `install_path\WCjvm\bin`.

5. Back up, undeploy, and remove the Workplace XT (`web_client`) web application from the J2EE application server.

#### WebSphere

- a. Back up the deployed Workplace directory:

```
WAS_HOME/profiles/default/installedApps/node_name/WorkplaceXT.ear/  
web_client.war
```

- b. Stop the Workplace XT application from the WebSphere administration console.
- c. Uninstall the Workplace XT application from Enterprise Applications.
- d. Save the changes and stop the WebSphere server.
- e. Delete the temporary Workplace XT directory (default: WorkplaceXT) from:

```
WAS_HOME/profiles/default/temp/node_name/instance/
```

### WebLogic

- a. From the WebLogic administration console stop the Workplace XT Web Application Module.
- b. Make a backup copy of the Workplace XT folder:
 

```
- install_path/WorkplaceXT
```
- c. Delete the Workplace XT Web Application Module.
- d. Stop the WebLogic server.

### JBoss 4.0.x

- a. Stop the JBoss server.
- b. Back up the deployed Workplace XT application:
 

```
JBOSS_HOME/server/<server_name>/deploy/application_name.war or .ear
```
- c. Delete the Workplace XT application from the deployed location.
- d. Clear out all files and folders within the following temp directories:

```
JBoss_home/server/server_name/tmp/deploy  
JBoss_home/server/server_name/work/jboss.web/localhost
```

6. (Optional) Copy existing configuration files.

If you have made custom changes to your configuration files in the deployed location, do the following *before* you upgrade the existing Workplace XT installation.

Copy the following files:

- WcmApiConfig.properties
- web.xml

from the /WEB-INF folder in the backed-up Workplace XT directory created in the previous step to the following directory:

```
install_path/WorkplaceXT/WEB-INF/
```

7. Start the upgrade process in one of the following ways, depending on whether you want to upgrade in interactive or silent mode:

- To upgrade IBM FileNet Workplace XT interactively:



- i. Access the IBM FileNet Workplace XT 1.1.3.0 installation software package.
  - ii. Launch the appropriate Setup program (`WorkplaceXT-1.1.3.0-operating_system.bin/.exe`) and follow the prompts in the wizard screens. The installer detects and copies settings from the previous Workplace XT installation.
  - iii. Continue with [Step 8 on page 105](#) below.
- To upgrade IBM FileNet Workplace XT silently:
    - i. Access the IBM FileNet Workplace XT installation software package, and copy the `XT_silent_upgrade.txt` file to a local directory.
    - ii. Follow the instructions in the silent input file to edit the values to reflect the appropriate responses for your installation.
 

**NOTE** Even if you accept all defaults in the `XT_silent_upgrade.txt` file, you must edit the file to accept the license agreement (`-V licenseAccepted="true"`).
    - iii. From a command prompt, navigate to and run the installer:

**UNIX**

```
./WorkplaceXT-1.1.3.0-<operating_system>.bin -options
"path_to_edited_input_file/XT_silent_upgrade.txt" -silent
```

**Windows**

```
WorkplaceXT-1.1.3.0-Win.exe -options
"path_to_edited_input_file\XT_silent_upgrade.txt" -silent
```

- 8. When the upgrade program is complete, view the `web_client_install_log_1.1.3.0.txt` file located in: `install_path/FileNet/WebClient` .

Verify that no errors or failures were logged. Correct any errors before you proceed.

- 9. (optional) Update files to support user tokens for Workplace XT.

**NOTE** If you are upgrading Workplace XT to 1.1.3, but your Content Engine is still at 4.0.x, the following step does not apply.

**WebSphere**

- a. Copy the `authentication-websphere.jar` file from here:

`install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles`  
 to here:

`WAS_home/AppServer/lib/ext`

- b. Copy the `log4j-1.2.13.jar` file from here:

`install_path/FileNet/WebClient/WorkplaceXT/WEB-INF/lib`  
 to here:

`WAS_home/AppServer/lib/ext`

**WebLogic**

- a. Copy the `authentication-weblogic.jar` file from here:  
`install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles`  
to here:  
`WL_home/server/lib/mbeantypes`
- b. Copy the `log4j-1.2.13.jar` file from here:  
`install_path/FileNet/WebClient/WorkplaceXT/WEB-INF/lib`  
to here:  
`WL_home/server/lib/mbeantypes`

### **JBoss**

- a. Copy the `authentication-utils.jar` file from here:  
`install_path/FileNet/WebClient/WorkplaceXT/authenticationFiles`  
to here:  
`JBOSS_home/server/server_name/lib`
10. Continue with the task [“Install the latest Content Engine Client files on Workplace XT servers”](#) on [page 33](#).

## Task 2: Install IBM FileNet Workplace XT software updates

Install any service packs, fix packs, and interim fixes required for Workplace XT.

### **To install the Workplace XT software updates**

---

1. To download the latest software updates, and to determine which of these updates may be required for use with other components and expansion products, contact your service representative or see ["Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs"](#) on [page 14](#).
2. Open the readmes for the software updates and perform the installation procedures provided.
3. Install the latest Content Engine and Process Engine client file updates, as described in the subsequent tasks.

## Task 3: Install the latest Content Engine Client files on Workplace XT servers

**CAUTION** If you are performing a staged upgrade, and are upgrading Workplace XT before you upgrade the Content Engine server to 4.5, do not perform this task. You will return to update the Content Engine Client files after you upgrade Content Engine to version 4.5.

Install the Content Engine Client files and any updates that are available.

### To install the Content Engine Client files

---

Refer to the appropriate information from your installation worksheet while performing the following steps.

1. To download the latest software updates, and to determine which of these updates may be required for use with other components and expansion products, contact your service representative.
2. On the machine where Workplace XT is installed, log on as any user who has the following permissions:
  - Read and write permission to a temporary directory, such as `temp` (Windows) or `tmp` (UNIX), on the machine where Workplace XT is installed.
  - Execute permission on the Content Engine Client install software.
3. (For updates only) Verify that there is a current backup of Workplace XT.
4. Copy the Content Engine Client install software from the Content Engine installation software to the temporary directory. The version of the install software must match the version of Content Engine.
5. Expand the (TAR or ZIP) Content Engine Client install software within the temporary directory.
6. Close all instances of Workplace XT and any other Application Engine client applications. From the application server administrative console, stop and un-deploy Workplace XT.

**WebSphere** Stop and un-deploy Workplace XT.

**WebLogic** Stop and un-deploy Workplace XT.

**JBoss** Run the shutdown command.

7. (WebLogic only) Manually delete the following application server cache directories, substituting your domain name in place of *mydomain*:

#### WebLogic UNIX

```
/opt/bean_projects/domains/mydomain/servers/AdminServer/tmp/_WL_user/  
web_client
```

```
/opt/bean_projects/domains/mydomain/servers/.wlnotdelete
```

```
/opt/bean_projects/domains/mydomain/servers/AdminServer/cache/  
EJBCompilerCache
```

**WebLogic Windows**

C:\bea\user\_projects\domains\mydomain\servers\AdminServer\tmp\\_WL\_user\web\_client

C:\bea\user\_projects\domains\mydomain\servers\.wlnotdelete

C:\bea\user\_projects\domains\mydomain\servers\AdminServer\cache\EJBCompilerCache

8. Start the Content Engine client install process.

- To install the Content Engine client interactively:
  - i. Access the IBM FileNet Content Engine client update software.
  - ii. Run one of the commands in the table below, *CE\_version* is the version of Content Engine you intend to run, for example, 4.5.0..

Operating System	Install Program
AIX	P8CE-CLIENT-CE_version-AIX.BIN
HPUX	P8CE-CLIENT-CE_version-HPUX.BIN
HPUXi	P8CE-CLIENT-CE_version-HPUXI.BIN
Linux	P8CE-CLIENT-CE_version-LINUX.BIN
Solaris	P8CE-CLIENT-CE_version-SOL.BIN
Windows	P8CE-CLIENT-CE_version-WIN.EXE
zLinux	P8CE-CLIENT-CE_version-ZLINUX.BIN

iii. Complete the installation program wizard.

You can specify on the installer which applications you want to update. If the installer does not automatically detect Workplace XT, select it on the appropriate panel.

You can also choose to have the installer create the deployment file, or create the file later. If you have additional configuration to perform, you can defer the file creation to avoid running multiple processes to create the same file.

- To install the Content Engine client files silently:
  - i. Make a backup copy of the input file:
 

```
CEclient_silent_install.txt
```
  - ii. Open the silent input file in a text editor. Follow the instructions in the silent input file to edit the file to reflect the appropriate responses for your update.
  - iii. Navigate to the path containing the Content Engine Client installation program, and run one of the commands in the following table to perform the silent install, where:

*CE\_version* is the version of Content Engine you intend to run, for example, 4.5.0.

*path* is the path that contains the installation program.

Operating System	Install Program
AIX	P8CE-CLIENT-CE_version-AIX.BIN -f path/CECLIENT.AIX/CEClient_silent_install.txt -i silent
HPUX	P8CE-CLIENT-CE_version-HPUX.BIN -f path/CEClient.HPUX/CEClient_silent_install.txt -i silent
HPUXi	P8CE-CLIENT-CE_version-HPUXI.BIN -f path/CEClient.HPUXI/CEClient_silent_install.txt -i silent
Linux	P8CE-CLIENT-CE_version-LINUX.BIN -f path/CEClient.Linux/CEClient_silent_install.txt -i silent
Solaris	P8CE-CLIENT-CE_version-SOL.BIN -f path/CEClient.Solaris/CEClient_silent_install.txt -i silent
Windows	P8CE-CLIENT-CE_version-WIN.EXE -f path\CEClient.Windows\CEClient_silent_install.txt -i silent
zLinux	P8CE-CLIENT-CE_version-ZLINUX.BIN -f path/CEClient.zLinux/CEClient_silent_install.txt -i silent

9. Install Process Engine Client updates. Do ["Install the latest Process Engine Client files on Workplace XT servers"](#) on page 111.

## Task 4: Install the latest Process Engine Client files on Workplace XT servers

**IMPORTANT** If you are performing a staged upgrade, and are upgrading Workplace XT before you upgrade the Process Engine server to version 4.5, do *not* perform this task. You will return to update the Process Engine Client files after you upgrade Process Engine to version 4.5.

Install any Process Engine Client files or updates that are available. These steps apply to WebSphere, WebLogic, and JBoss (except where noted). Perform the following steps on all Workplace XT servers.

### To install the Process Engine Client files

---

1. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, contact your service representative.
2. Log on to the server as a user who has permission to install software and read and write permission to a local temp directory.
3. (Update installations only) Ensure that there is a backup of the deployed web application directory.
4. Download and expand the appropriate tar or zip file for Process Engine Client installation to the server and extract the contents to the local temp directory.
5. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.
6. (Update installations only) If you wish to retain your existing configurations, copy the following configuration files from the backup copy of your deployed application to the /WEB-INF folder in the installed directory on your application server, overwriting the existing installed files.

The backup of these files is to ensure the files are still available in case there is any reason to go back to the previous versions. When redeploying after installing the fix pack, any custom settings will be added back to the deployed working directory.

From the /WEB-INF folder in the backed-up Workplace XT directory created in [Step 3 on page 111](#) above, copy these files:

```
WcmApiConfig.properties  
web.xml
```

to here

```
<XT_install_path>/WorkplaceXT/WEB-INF/
```

**NOTE** You must do this before you apply the fix pack to the existing installation.

7. (Update installations only) (WebSphere and WebLogic Only) Stop and undeploy any instances of Workplace XT.
8. (Update installations only) (JBoss Only) Run the shutdown command.

9. (Update installations only) Manually delete the web application temporary directories associated with Workplace XT.
10. (Update installations only) (JBoss only) Delete the deployed Web application directory, or WAR or EAR file.
11. Start the Process Engine Client install process.
  - To install the Process Engine Client interactively:

- i. Access the IBM FileNet Process Engine Client update software.

Launch the appropriate install program, as shown in the following table:

Operating System	Install Program
AIX	P8PE-CLIENT-4.5.0-AIX.BIN
HPUX	P8PE-CLIENT-4.5.0-HPUX.BIN
HPUXi	P8PE-CLIENT-4.5.0-HPUXI.BIN
Linux	P8PE-CLIENT-4.5.0-LINUX.BIN
Solaris	P8PE-CLIENT-4.5.0-SOL.BIN
Windows	P8PE-CLIENT-4.5.0-WIN.EXE
zLinux	P8PE-CLIENT-4.5.0-ZLINUX.BIN

- ii. Complete the installer panels and run the installation.

You can specify on the installer which applications you want to update. If the installer does not automatically detect Workplace XT, select it on the appropriate panel.

If you plan to use the ECM Widgets component, or want to use Process Engine REST services directly, select Add the REST service on that panel.

You can also choose whether to have the installer create the deployment file for you. If you have additional configuration to perform, you can defer the file creation to avoid running multiple processes to create the same file.

- To install the Process Engine Client silently:
  - i. Access the IBM FileNet Process Engine Client update software package, and copy the PEClient\_silent\_input.txt file to a local directory.
  - ii. Follow the instructions in the silent input file to edit the file to reflect the appropriate responses for your update.

Change the Variable\_CheckboxXT line to the following:

```
-V Variable_CheckboxXT="true"
```



- iii. Run the PE Client installer with one of the following commands::

Operating System	Install Program
AIX	P8PE-CLIENT-4.5.0-AIX.BIN -options "PEClient_silent_install.txt" -silent
HPUX	P8PE-CLIENT-4.5.0-HPUX.BIN -options "PEClient_silent_install.txt" -silent
HPUXi	P8PE-CLIENT-4.5.0-HPUXI.BIN -options "PEClient_silent_install.txt" -silent
Linux	P8PE-CLIENT-4.5.0-LINUX.BIN -options "PEClient_silent_install.txt" -silent
Solaris	P8PE-CLIENT-4.5.0-SOL.BIN -options "PEClient_silent_install.txt" -silent
Windows	P8PE-CLIENT-4.5.0-WIN.EXE -options "PEClient_silent_install.txt" -silent
zLinux	P8PE-CLIENT-4.5.0-ZLINUX.BIN -options "PEClient_silent_install.txt" -silent

12. (For upgrades from PE 4.0.x to 4.5 only) Add required JAR files to the Component Manager library.

- a. Launch the Process Task Manager by running one of the following command files from the *install\_path/FileNet/WebClient/Router* directory, depending on your operating system:

**UNIX**

routercmd.sh

**Windows**

routercmd.bat

- b. In the Process Task Manager console, under Workplace XT, Component manager node, select your connection point.
- c. Stop the connection point instance.
- d. Click the Required libraries tab.
- e. Click Add, and browse to /Router/lib.
- f. Select the following files to add:

ContentExtendedOps.jar

smtp.jar

### **(Optional) To configure the Process Engine REST services connection**

---

If you plan to use the ECM Widgets component, or want to use Process Engine REST services directly, configure the Process Engine Rest service connection by editing the P8BPMRESTConfig.xml file.

1. Navigate to *install\_path/FileNet/WebClient/WorkplaceXT/WEB-INF*.
2. Open P8BPMRESTConfig.xml for editing.
3. Locate the entries for the Content Engine Bootstrap URI and the connection point, near the top of the file:

```
<perest:filenet.pe.bootstrap.ceuri value="iiop://cm-peru:2809/FileNet/Engine"/>
<perest:connection.point value="RESTTCP"/>
```

4. Replace these entries with the values for your environment:
  - Replace *my\_server:2809* with your Content Engine server name and port number.
  - Replace *RESTTCP* with the name of your connection point.
5. Save your changes and close the file.

Continue with deploying Workplace XT. See the appropriate task according to your application server type:

- [“Deploy IBM FileNet Workplace XT \(WebSphere\)” on page 115](#)
- [“Deploy IBM FileNet Workplace XT \(WebLogic\)” on page 118](#)
- [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 120](#)

## Task 5a: Deploy IBM FileNet Workplace XT (WebSphere)

This topic covers the deployment and start of the IBM FileNet Workplace XT application on WebSphere.

### To recreate the WAR and EAR files

---

**NOTE** If you are using a WAR file or EAR file for deployment, you must recreate the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `/FileNet/WebClient/WorkplaceXT` directory. If you chose not to have the Content Engine or Process Engine Client installers create your deployment file, or if you made changes to `web.xml` for SSO support, or any other edits, recreate the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To recreate the WAR file, run one of the following commands:

UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_war.sh
```

Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_war.bat
```

2. If you will be deploying from an EAR file, verify that both `web_client.war` and `web_client.ear` exist. To recreate the EAR file, first recreate the WAR file, and then run the following command to recreate the EAR file:

UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_ear.sh
```

Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_ear.bat
```

### To deploy Workplace XT

---

1. From the WebSphere administrative console, navigate to the dialog for installing a new application.
2. Select the file to deploy:
  - (If the administrative console is running *locally*) Select Local file system and enter or browse to the location of the `.war` or `.ear` file created by the setup program (see below for the default path). Do not enter the machine name.
  - (If the administrative console is *remote*) Select Remote file system and enter the fully-qualified path to the `.war` or `.ear` file. Do not enter the machine name.

The default path is `install_path/FileNet/WebClient/deploy`

3. If you are deploying a WAR file, enter the context root:  
Enter `workplaceXT` and click **Next** to proceed to deploying a new application.

**NOTE** The context root is the name of the application you log in to using the web interface, such as `http://WorkplaceXTServerName:port#/Context_Root`. Do not include any spaces in the context root.

4. Complete the dialog boxes for installing a new application, using the following settings:

**NOTE** For any settings not specified here, accept the defaults.

- Show me all installation options and parameters: selected
- Application name: Workplace XT, or the name you chose to call the application.
- WebServer: The server you are planning to use. Verify that your application name is selected and associated with the correct WebServer.
- Map virtual hosts for Web modules: select WorkplaceXT or the name you chose to call the application

5. Finish the install and save it to the master configuration.

**NOTE** Do [Step 6](#) to [Step 8](#) for each specific web application deployment only. Do not change the similar settings for the entire application server.

6. Configure the Class loader setting so that the parent class loader is loaded last.
7. Update the polling interval to a number appropriate for your environment.
8. For the Workplace XT (or the name of your application) web module, configure the Class loader setting so that the parent class loader is loaded last.
9. Save your changes to the master configuration.
10. Navigate to Enterprise Applications > Workplace > Map security roles to users/groups, and verify that the **All Authenticated** column is checked for the "All Authenticated" role, and that the Everyone? column is checked for the "Everyone" role.
11. Set permissions for the user running the application server.

If the local user who will be running the application server is different from the user who installed IBM FileNet Workplace XT, you must give the user read/write permissions on the following (default) folders:

```
WAS_HOME/profiles/default/installedApps/node_name/WorkplaceXT.ear/  
web_client.war
```

```
install_path/FileNet/WebClient
```

12. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
13. Restart Process Task Manager and Component Manager.

14. Exit the Process Task Manager application.
15. Start Workplace XT from the administrative console.

**NOTE** To troubleshoot the deployment, check the following log:

```
WAS_install_path/AppServer/profiles/profile_name/logs/server_name/  
SystemOut.log
```

**NOTE** Each new version of Workplace XT can add new actions or modify existing actions. When you have completed the upgrade and deployment steps, review the new and modified actions in your upgraded Workplace XT environment and apply whatever access roles are appropriate for your site. For details, see the IBM FileNet Workplace XT help topic [User Help > Actions, preferences, and tools > Site preferences > Actions preferences](#).

## Task 5b: Deploy IBM FileNet Workplace XT (WebLogic)

This topic covers the deployment of your IBM FileNet Workplace XT application on WebLogic.

### To recreate the WAR and EAR files (optional)

---

**NOTE** If you are using a WAR file or EAR file for deployment, you must recreate the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the /FileNet/WebClient/WorkplaceXT directory. If you chose not to have the Content Engine or Process Engine Client installers create your deployment file, or if you made changes to `web.xml` for SSO support, or any other edits, recreate the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To recreate the WAR file, run one of the following commands:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_war.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_war.bat
```

2. If you will be deploying from an EAR file, verify that both `web_client.war` and `web_client.ear` exist. To recreate the EAR file, first recreate the WAR file, and then run the following command to recreate the EAR file:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_ear.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_ear.bat
```

### To rename the WAR file (optional)

---

**NOTE** This step is optional. Perform this step only if you are using a WAR file for deployment, and you want to use “Workplace XT” or a custom name for the context root of the application. The context root is part of the URI that end users type to access Workplace XT.

By default, when you deploy from a WAR file, the context root is the first part of the WAR filename. For example, the default `web_client.war` will generate a context root of `http://server_name:port#/webclient`. If you want to use `http://server_name:port#/custom_name`, you must rename `web_client.war` to `custom_name.war`.

1. Use the rename command to rename the WAR file. Enter the command without the line break.

#### UNIX

```
rename install_path/FileNet/WebClient/deploy/web_client.war  
install_path/FileNet/WebClient/deploy/custom_name.war
```

#### Windows

```
rename install_path\FileNet\WebClient\deploy\web_client.war  
install_path\FileNet\WebClient\deploy\custom_name.war
```

## To deploy IBM FileNet Workplace XT (WebLogic 9.2)

---

1. Use the WebLogic Administration Console to deploy Workplace XT.

You can deploy the application in one of the following ways:

- To deploy from an exploded folder, choose the Workplace XT folder in *install\_path/FileNet/WebClient*
- To deploy from a WAR or EAR file, choose the *web\_client.war* or *web\_client.ear* file in *install\_path/FileNet/WebClient /deploy*

2. Accept the defaults for the deployment, except for the name for the deployment. Use “Workplace XT” or the custom name you have chosen instead of “web\_client”.

3. Finish and save your changes.

**NOTE** To verify that the deployment was successful, expand **Web Applications**. The web application name you specified for Workplace XT will be listed.

4. After IBM FileNet Workplace XT is deployed, start the application from the WebLogic Administration Console.
5. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
6. Restart Process Task Manager and Component Manager.
7. Exit the Process Task Manager application.

**NOTE** To troubleshoot the deployment, check the following log:

`WLS_install_path/user_projects/domains/domain_name/servers/server_name/logs/server_name.log`

**NOTE** Each new version of Workplace XT can add new actions or modify existing actions. When you have completed the upgrade and deployment steps, review the new and modified actions in your upgraded Workplace XT environment and apply whatever access roles are appropriate for your site. For details, see the IBM FileNet Workplace XT help topic [User Help > Actions, preferences, and tools > Site preferences > Actions preferences](#).

## Task 5c: Deploy IBM FileNet Workplace XT (JBoss)

This topic covers the deployment and start of Workplace XT on JBoss.

### To recreate the WAR or EAR files (optional)

---

**NOTE** If you are using a WAR file or EAR file for deployment, you must recreate the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `install_path/FileNet/WebClient/WorkplaceXT` directory. If you chose not to have the Content Engine or Process Engine Client installers create your deployment file, or if you made changes to `web.xml` for SSO support, or any other edits, recreate the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To recreate the WAR file, run one of the following commands:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_war.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_war.bat
```

2. If you will be deploying from an EAR file, verify that both `web_client.war` and `web_client.ear` exist. To recreate the EAR file, first recreate the WAR file, and then run the following command to recreate the EAR file:

#### UNIX

```
install_path/FileNet/WebClient/deploy/create_web_client_ear.sh
```

#### Windows

```
install_path\FileNet\WebClient\deploy\create_web_client_ear.bat
```

### To deploy as “Workplace XT” or custom name using a WAR file (optional)

---

**NOTE** This step is optional. Perform this step only if you are using a WAR file for deployment, and you want to use “Workplace XT” or a custom name for the context root of the application. The context root is part of the URI that end users type to access Workplace XT.

By default, when you deploy from a WAR file, the context root is the first part of the WAR filename. For example, the default `web_client.war` will generate a context root of `http://<server_name>:<port#>/webclient`. If you want to use `http://server_name:port#/custom_name`, you must rename `web_client.war` to `custom_name.war`.

1. Use the rename command to rename the WAR file. Enter the command without the line break.

#### UNIX

```
rename install_path/FileNet/WebClient/deploy/web_client.war  
install_path/FileNet/WebClient/deploy/custom_name.war
```

#### Windows

```
rename install_path\FileNet\WebClient\deploy\web_client.war  
install_path\FileNet\WebClient\deploy\custom_name.war
```



**CAUTION** You must rename the WAR file every time you regenerate it. The `create_web_client_war.sh/.bat` script will by default create a file with the name `web_client.war`.

### To deploy Workplace XT

---

1. Stop JBoss, if it is running.
2. Deploy Workplace XT
  - (For exploded directory deployment only)
    - i. On the JBoss server, copy the `WorkplaceXT` folder from:  

```
install_path/FileNet/WebClient/
```

to:  

```
JBOSS_home/server/server_name/deploy/
```
    - ii. Append the extension `.war` to the `WorkplaceXT` folder:  

```
JBOSS_home/server/server_name/deploy/WorkplaceXT.war
```
    - iii. (optional) For a custom name for the context root (and the application), rename the `WorkplaceXT.war` folder to `custom_name.war`, where `custom_name` is the name you choose for your application.
  - (For WAR file deployment only)
    - i. On the JBoss server, copy the `web_client.war` (or `custom_name.war`) file from:  

```
install_path/FileNet/WebClient/deploy/
```

to:  

```
JBOSS_home/server/server_name/deploy/
```
  - (For EAR file deployment only)
    - i. On the JBoss server, copy the `web_client.ear` file from:  

```
install_path/FileNet/WebClient/deploy/
```

to:  

```
JBOSS_home/server/server_name/deploy/
```
3. Start or restart the JBoss application server.
4. Verify that the application deployed successfully.

Verify that the `server.log` file located in `JBOSS_home/server/server_name/log` lists deployment of the WAR or EAR file you used.
5. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.

6. Restart Process Task Manager and Component Manager.
7. Exit the Process Task Manager application.

**NOTE** Each new version of Workplace XT can add new actions or modify existing actions. When you have completed the upgrade and deployment steps, review the new and modified actions in your upgraded Workplace XT environment and apply whatever access roles are appropriate for your site. For details, see the IBM FileNet Workplace XT help topic [User Help > Actions, preferences, and tools > Site preferences > Actions preferences](#).

## Task 6: Upgrade multiple instances of IBM FileNet Workplace XT

If you are upgrading Workplace XT in an environment where you have multiple instances of Workplace XT on a single application server, use the procedure in [“Upgrade IBM FileNet Workplace XT” on page 103](#) with the following modifications:

- In [Step 5 on page 103](#) (Back up, undeploy, and remove the Workplace XT web application from the J2EE application server):
  - Make backup copies of all deployed instances of Workplace XT.
  - Uninstall all deployed instances of Workplace XT.
  - Delete the temp directory for all instances of Workplace XT.
- In [Step 6 on page 104](#) (Copy existing configuration files), you must copy the web.xml files for each deployed instance of Workplace XT, and give the copy a descriptive name (such as web.xml.2).
- After [Step 7 on page 104](#) (Start the upgrade process), do the following:
  - a. Back up the existing configuration files in `install_path/FileNet/Config/WebClient2` (and all other instances).
  - b. For each instance, copy the updated configuration files in `install_path/FileNet/Config/WebClient` to `install_path/FileNet/Config/WebClient2` (and so forth) and manually edit in any custom changes from the old configuration files to the new updated files.
- When you redeploy Workplace XT, using the Deploy IBM FileNet Workplace XT topic appropriate for your application server type, you must repackage the WAR/EAR files for the additional instances of Workplace XT using the modified web.xml files mentioned above. For information, see [“Deploy multiple IBM FileNet Workplace XT instances” on page 98](#).

## ***Remove IBM FileNet Workplace XT software***

### **To remove IBM FileNet Workplace XT software**

---

Use the topics below to remove IBM FileNet Workplace XT according to your application server type.

- [“Remove IBM FileNet Workplace XT \(WebSphere\)” on page 125.](#)
- [“Remove IBM FileNet Workplace XT \(WebLogic\)” on page 127.](#)
- [“Remove IBM FileNet Workplace XT \(JBoss\)” on page 129](#)

## Remove IBM FileNet Workplace XT (WebSphere)

This task includes IBM FileNet Workplace XT removal instructions for WebSphere on UNIX and Windows platforms.

**NOTE** If you are using an add-on product with Workplace XT, you must uninstall that product before you uninstall Workplace XT. You may also be uninstalling the Content Engine client as part of the Workplace XT uninstall procedure. Collect any additional installation and upgrade documentation, including the Content Engine readme, before beginning this procedure.

### To remove the IBM FileNet Workplace XT software

---

1. Log in to the server.

#### UNIX

Log in as a user with write access to the `/bin` directory and the directory where IBM FileNet Workplace XT is installed.

#### Windows

Log in as a user with Administrative rights.

2. Log in to the WebSphere Administrative Console.
3. Undeploy the IBM FileNet Workplace XT application.
  - a. Stop the IBM FileNet Workplace XT web app in the Administrative Console.
  - b. Uninstall the IBM FileNet Workplace XT application from **Enterprise Applications**.
  - c. Save changes to the master configuration.
4. Shut down WebSphere.
5. If you're running the Component Manager, stop the instances and exit the Process Task Manager.
6. Uninstall any IBM FileNet add on products, such as IBM FileNet eForms, that you are using with Workplace XT.

For details, see the installation and upgrade documentation for the add-on products. To download these and other IBM FileNet product documentation from the IBM web site, see ["Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs" on page 14](#)

7. Navigate to the `/_WCuninst` folder under the IBM FileNet Workplace XT installation location. The default location is:

#### UNIX

```
/opt/FileNet/WebClient/_WCuninst
```

#### Windows

```
C:\Program Files\FileNet\WebClient\_WCuninst
```

8. Run the Workplace XT uninstall program:

## UNIX

`uninstaller.bin`

## Windows

`uninstaller.exe`

Reboot or log out as prompted during the uninstall.

**NOTE** For Windows, you can also use Add/Remove Programs from the Control Panel to remove IBM FileNet Workplace XT.

On Windows, when you click **Next** on the IBM FileNet Workplace XT Uninstaller Welcome screen, the second screen asks you to wait while Windows Task Manager service shuts down before continuing the uninstall. This can take a few moments. Wait for the shutdown to complete, then complete the uninstall wizard from the next screen.

**CAUTION** Do not uninstall the Content Engine client in [Step 9](#) if Workplace XT is collocated with some other application, such as Application Engine, that requires a Content Engine client installation.

9. Uninstall the Content Engine client. See the readme file associated with the version of your Content Engine client. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14.](#)

10. Delete the temporary working directory for Workplace XT on the application server:

```
WAS_HOME/temp/node_name/application_server_name/WorkplaceXT
```

11. (If IBM FileNet Workplace XT is the only FileNet P8 application installed on the server) Delete the `install_path/FileNet` directory.

12. (If IBM FileNet Workplace XT is *not* the only FileNet P8 application installed on the server) Delete the `WebClient` directories in the following locations:

```
install_path/FileNet/WebClient
```

```
install_path/FileNet/Config/WebClient
```

13. (UNIX) Remove the `P8TASKMAN_HOME` system environment variable.

If IBM FileNet Workplace XT is the *only* FileNet P8 application running on the server you must remove the `P8TASKMAN_HOME` system environment variable to complete the application removal.

**WARNING** Do *not* remove the system environment variable if any other IBM FileNet P8 application is installed on the server.

14. (UNIX only) Delete the following Install Shield directory, which can cause errors when you re-install IBM FileNet Workplace XT:

```
/InstallShield/Universal/FileNet/WebClient
```

For AIX, the path is as follows:

**`/usr/lib/objrepos/InstallShield/Universal/FileNet/WebClient`**

## Remove IBM FileNet Workplace XT (WebLogic)

This task includes IBM FileNet Workplace XT removal instructions for WebLogic on UNIX and Windows platforms.

**NOTE** If you are using an add-on product with Workplace XT, you must uninstall that product before you uninstall Workplace XT. You may also be uninstalling the Content Engine client as part of the Workplace XT uninstall procedure. Collect any additional installation and upgrade documentation, including the Content Engine readme, before beginning this procedure.

### To remove the IBM FileNet Workplace XT software

---

1. Log in to the application server.

#### UNIX

Log in as a user with write access to the `/bin` directory and the directory where IBM FileNet Workplace XT is installed.

#### Windows

Log in as a user with Administrative rights.

2. Undeploy the IBM FileNet Workplace XT application.
  - a. Stop the IBM FileNet Workplace XT Web Application Module.
  - b. Delete the IBM FileNet Workplace XT Web Application Module.
3. Shut down WebLogic.
4. If you're running the Component Manager, stop the instances and exit the Process Task Manager.
5. Uninstall any IBM FileNet add on products, such as IBM FileNet eForms, that you are using with Workplace XT.

For details, see the installation and upgrade documentation for the add-on products. To download these and other IBM FileNet product documentation from the IBM web site, see ["Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs" on page 14](#)

6. Navigate to the `/_WCuninst` folder under the IBM FileNet Workplace XT installation location. The default location is:

#### UNIX

```
/opt/FileNet/WebClient/_WCuninst
```

#### Windows

```
C:\Program Files\FileNet\WebClient\_WCuninst
```

7. Run the uninstall program:

#### UNIX

```
uninstaller.bin
```

## Windows

`uninstaller.exe`

Reboot or log out as prompted during the uninstall.

**NOTE** For Windows, you can also use `Add/Remove Programs` from the Control Panel to remove IBM FileNet Workplace XT.

On Windows, when you click **Next** on the IBM FileNet Workplace XT Uninstaller Welcome screen, the second screen asks you to wait while Windows Task Manager service shuts down before continuing the uninstall. This can take a few moments. Wait for the shutdown to complete, then complete the uninstall wizard from the next screen.

**CAUTION** Do not uninstall the Content Engine client in [Step 8](#) if Workplace XT is collocated with some other application, such as Application Engine, that requires a Content Engine client installation.

8. Uninstall the Content Engine client. See the readme file associated with the version of your Content Engine client. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).
9. Delete the contents of the temporary working directory for Workplace XT on the application server:

```
weblogic_install_path/project_name/domains/domain_name/servers/  
AdminServer/tmp/_WL_internal
```

10. (If IBM FileNet Workplace XT is the only FileNet P8 application installed on the server) Delete the `install_path/FileNet` directory.
11. (If IBM FileNet Workplace XT is *not* the only FileNet P8 application installed on the server) Delete the `WebClient` directories in `install_path/FileNet/WebClient`.
12. (UNIX) Remove the `P8TASKMAN_HOME` system environment variable.

If IBM FileNet Workplace XT is the *only* IBM FileNet P8 application running on the server you must remove the `P8TASKMAN_HOME` system environment variable to complete the uninstallation.

**WARNING** Do *not* remove the system environment variable if any other IBM FileNet P8 application is installed on the server.

13. (UNIX only) Delete the following Install Shield directory, which can cause errors when you re-install IBM FileNet Workplace XT:

```
/InstallShield/Universal/FileNet/WebClient
```

For AIX, the path is as follows:

```
/usr/lib/objrepos/InstallShield/Universal/FileNet/WebClient
```



## Remove IBM FileNet Workplace XT (JBoss)

This task includes Workplace XT removal instructions for JBoss on UNIX and Windows platforms.

**NOTE** If you are using an add-on product with Workplace XT, you must uninstall that product before you uninstall Workplace XT. You may also be uninstalling the Content Engine client as part of the Workplace XT uninstall procedure. Collect any additional installation and upgrade documentation, including the Content Engine readme, before beginning this procedure.

### To remove the IBM FileNet Workplace XT software

---

1. Log on to the application server:

#### UNIX

Log in as a user with write access to the `/bin` directory and the directory where IBM FileNet Workplace XT is installed.

#### Windows

Log in as a user with Administrative rights.

2. Shut down JBoss.
3. Remove deployment and temporary files and directories:
  - a. Remove the `web_client.war` (or `custom_name.war`) folder from `JBoss_HOME/server/server_name/deploy/`.
  - b. Clear out all files and folders within the following temp directories:

```
JBoss_home/server/server_name/tmp/deploy
JBoss_home/server/server_name/work/jboss.web/localhost
```
4. If you are running the Component Manager, stop the instances and exit the Process Task Manager.
5. Uninstall any IBM FileNet add on products, such as IBM FileNet eForms, that you are using with Workplace XT.

For details, see the installation and upgrade documentation for the add-on products. To download these and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#)

6. Navigate to the `_WCuninst` folder under the IBM FileNet Workplace XT installation location. The default location is:

#### UNIX

```
/opt/FileNet/WebClient/_WCuninst
```

#### Windows

```
C:\Program Files\FileNet\WebClient\_WCuninst
```

7. Run the uninstall program:

## UNIX

`uninstaller.bin`

## Windows

`uninstaller.exe`

Reboot and log out as prompted during the uninstall.

**NOTE** For Windows, you can also use Add/Remove Programs from the Control Panel to remove IBM FileNet Workplace XT.

On Windows, when you click **Next** on the IBM FileNet Workplace XT Uninstaller Welcome screen, the second screen asks you to wait while Windows Task Manager service shuts down before continuing the uninstall. This can take a few moments. Wait for the shutdown to complete, then complete the uninstall wizard from the next screen.

**CAUTION** Do not uninstall the Content Engine client in [Step 8](#) if Workplace XT is collocated with some other application, such as Application Engine, that requires a Content Engine client installation.

8. Uninstall the Content Engine client. See the readme file associated with the version of your Content Engine client. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14](#).
9. (If IBM FileNet Workplace XT is the only FileNet P8 application installed on the server) Search for the `vpd.properties` file. If it exists, delete it.
10. (UNIX and Linux) Remove the `P8TASKMAN_HOME` system environment variable.

If Workplace XT is the *only* IBM FileNet P8 application running on the server you must remove the `P8TASKMAN_HOME` system environment variable to complete the uninstallation.

**WARNING** Do *not* remove the system environment variable if any other IBM FileNet P8 application is installed on the server.

11. (If IBM FileNet Workplace XT is the only FileNet P8 application installed on the server) Delete the `install_path/FileNet` directory.
12. (If IBM FileNet Workplace XT is *not* the only FileNet P8 application installed on the server) Delete the `WebClient` directories in the following locations:

`install_path/FileNet/WebClient`

`install_path/FileNet/Config/WebClient`

13. (UNIX only) Delete the following Install Shield directory, which can cause errors when you re-install IBM FileNet Workplace XT:

`/InstallShield/Universal/FileNet/WebClient`

For AIX, the path is as follows:

**`/usr/lib/objrepos/InstallShield/Universal/FileNet/WebClient`**

## *Appendixes*

This appendixes section contains the following major topics:

- [“Encrypt passwords for silent installation and upgrades” on page 132](#)
- [“IBM FileNet Workplace XT port numbers” on page 133](#)

## Encrypt passwords for silent installation and upgrades

Several passwords are required to silently install IBM FileNet P8 components. These passwords should be encrypted before you enter them in the silent installation resource files.

### To encrypt a password

---

1. The encryption tool is located on the installation media for Process Engine software, in the Tools directory. Copy the following files from the Tools directory to a local drive:
  - `fnencryptutils` - an executable .jar file
  - `RunEncryptApp` - a batch file
2. Run `RunEncryptApp.bat` to invoke the application.
3. Enter the appropriate values for the user name and password.
4. Reenter the password to confirm it.
5. Click **Generate**.
6. An encrypted password will be generated and displayed in the encrypted password field.
7. Copy and paste this password into the appropriate silent installation resource file.

## IBM FileNet Workplace XT port numbers

The table below lists the default port numbers used by IBM FileNet Workplace XT.

IBM FileNet Workplace XT Ports	
WebSphere / WebSphere SSL	9080 / 9443
WebLogic / WebLogic SSL	7001 / 7002
JBoss / JBoss SSL	8080 / 8443
Process Engine (RMI)	32771
Component Manager (Event Port) <b>NOTE</b> Ensure that this port number is open if you are using Component Manager. On UNIX systems, this port is closed by default.	32776
Web Services Reliable Messaging Client Port	32777

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