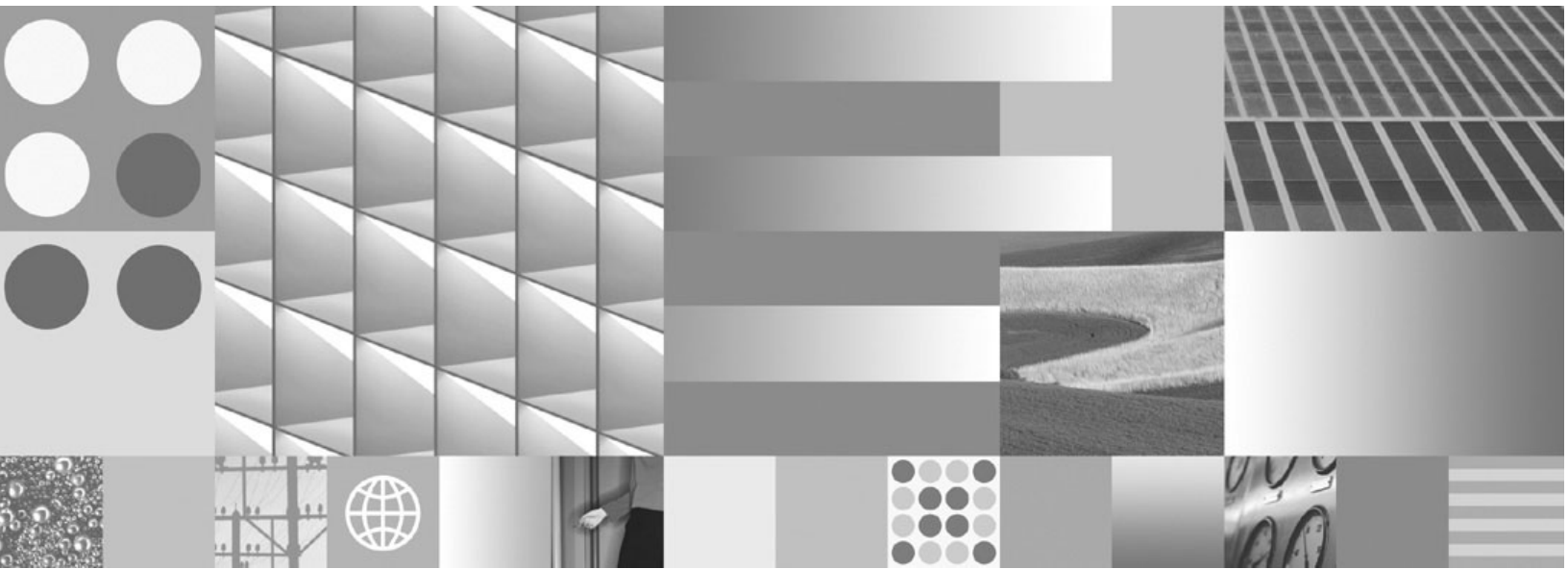


Installation and Upgrade Guide



Installation and Upgrade Guide

Note

Before using this information and the product it supports, read the information in "Notices" on page 149.

This edition applies to version 1.1.4.0 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
08/09	Updates for 1.1.4.1-WPXT-FP001, which introduces support for JBoss 5.0.1. Updates for documentation defects.
08/09	Updates for documentation defects.
08/09	Documentation for the IBM FileNet Workplace XT 1.1.4 release.
12/08	Updates for documentation defects.
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 “Install the latest Content Engine Client files on Workplace XT servers” on page 35.</p> <p>Adds the topic “Install Application Integration BCS for Microsoft Office (FileNet Workplace XT)” on page 93.</p> <p>Expands the upgrade section to include all applicable topics inline.</p>
06/08	<p>Adds the following subtopics to the topic “Review the installation considerations” on page 18:</p> <ul style="list-style-type: none"> • “Security considerations” on page 18 • “Accessibility considerations” on page 18 • “Non-English considerations” on page 18 <p>Adds procedure for installing Process Engine Client file updates. See “Install the latest Process Engine Client files on Workplace XT servers” on page 38.</p> <p>Adds procedures for upgrading Workplace XT on JBoss. See “Upgrade IBM FileNet Workplace XT” on page 103.</p>

Date	Revision
11/07	<p>Adds upgrade topics.</p> <p>Adds JBoss application server topics “Configure IBM FileNet Workplace XT (JBoss)” on page 59, “Deploy IBM FileNet Workplace XT (JBoss)” on page 73, and “Remove IBM FileNet Workplace XT (JBoss)” on page 140.</p> <p>Adds procedures for using WebSphere 6.1.x. See “Configure IBM FileNet Workplace XT (WebSphere)” on page 41 and “Deploy IBM FileNet Workplace XT (WebSphere)” on page 67.</p> <p>Adds directions for using JAWS screen reader for the setup program in “Install IBM FileNet Workplace XT” on page 21.</p>
10/07	<p>Adds information about moving from WAR file to EAR file deployment in “Installation Checklists” on page 16 and Task 3 “Install IBM FileNet Workplace XT” on page 21.</p> <p>Moves the “Set permissions for the user running the application server” to Task 9a “Deploy IBM FileNet Workplace XT (WebSphere)” on page 67 and Task 9b “Deploy IBM FileNet Workplace XT (WebLogic)” on page 71.</p> <p>Adds accessibility keyboard tip to Task “Install IBM FileNet Workplace XT Application Integration” on page 89.</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
Bold	Platform-specific headings	Start the application server. WebSphere Refer to IBM WebSphere documentation for more information. WebLogic Refer to BEA WebLogic documentation for more information.
Gray bold	Clickable items, such buttons, and tabs.	Click OK .
	Menu paths or breadcrumb trails.	Select Start > Settings > Control Panels > Display > Screen Saver .
<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><context-param><param-name>uploadDir</param-name><param-value>/opt/FileNet/AE/Upload1</param-value> </context-param></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 “Typographical conventions” on page 10.
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

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> Administration > Enterprise-wide Administration > FileNet P8 Security > Users and Groups	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> Administration > Enterprise-wide Administration > Shutdown and Startup	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 Advanced 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. 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 76](#)
- [“Optional installation tasks” on page 88](#)

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.
 - For an interactive installation, do [Task 3 on page 21](#).
 - For a silent installation, do [Task 4 on page 30](#).
4. Install any available IBM FileNet Workplace XT software updates. Do [Task 5 on page 34](#).
5. Install any available Content Engine Client updates. Do [Task 6 on page 35](#).
6. Install any available Process Engine Client updates. Do [Task 7 on page 38](#).
7. Configure IBM FileNet Workplace XT. Do one of the following:
 - [Task 8a on page 41](#) (WebSphere)
 - [Task 8b on page 51](#) (WebLogic)
 - [Task 8c on page 59](#) (JBoss)
8. Deploy IBM FileNet Workplace XT. Do one of the following:
 - [Task 9a on page 67](#) (WebSphere)
 - [Task 9b on page 71](#) (WebLogic)
 - [Task 9c on page 73](#) (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 the IBM FileNet Workplace XT software silently” on page 32](#).

Silent installation is also available for Application Integration. See [“To install the Application Integration software silently” on page 90](#) for details.

If you plan to use the JAWS screen reader for the IBM FileNet Workplace XT setup program, see the [“Before you install IBM FileNet Workplace XT”](#) 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 89](#) provides a Keyboard Tip for alternative navigation in the interface.

An accessible HTML version of this installation and upgrade guide is available on the [IBM FileNet P8 documentation](#) Web site at www.ibm.com.

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/). 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

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.
- You must have installed and configured a supported application server for IBM FileNet Workplace XT.
- 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 in 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.
- In the setup program, the version list for application servers includes versions that might 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 IBM FileNet Workplace XT software

1. Collect the parameters needed to complete your installation. For information on parameter values, see “Installation and upgrade worksheet” 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).

2. Log in to the server where you want to install Workplace XT:

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.

3. Locate the IBM FileNet Workplace XT 1.1.4.0 installation software package.
4. Start the installation program in one of the following ways:
 - Run the appropriate installation program for your operating system and follow the prompts, as directed in the subsequent steps in this procedure:

Platform	Command
AIX	WorkplaceXT-1.1.4.0-AIX.bin
HPUX	WorkplaceXT-1.1.4.0-HPUX.bin
HPUXi	WorkplaceXT-1.1.4.0-HPUXi.bin
Linux	WorkplaceXT-1.1.4.0-LINUX.bin
Solaris	WorkplaceXT-1.1.4.0-SOL.bin
Windows	WorkplaceXT-1.1.4.0-WIN.exe
Linux for System z	WorkplaceXT-1.1.4.0-ZLINUX.bin

- (Optional) Run the installation program for your operating system, and have the program record your installation choices in a response file.

Enter the following command:

```
workplaceXT-1.1.4.0-operating_system.bin -options-record record_file_name
where
```

operating_system is the platform where you are installing Workplace XT, for example:

AIX, HPUX, HPUXi, LINUX, SOL, WIN, or ZLINUX

(For Windows, the file extension is .exe.)

record_file_name is the name of the response file to be generated, for example, *xt_record.txt*.

For more information about response files, see [“Generating the silent installation response files” on page 30](#).

5. Complete the Workplace XT installation program screens.

Use the parameters from your installation preparation tasks as recorded on the *Installation and Upgrade Worksheet* to complete the installation program screens, as follows:

In the screen for...	Perform this action...
Reading the license agreement NOTE This screen does not appear during a re-install or upgrade.	Review and accept the license agreement.
Specifying the installation path	For the Installation path field, enter or browse to the location where you want to install the Workplace XT software <i>install_path</i> , or accept the default location: UNIX /opt/IBM/FileNet/WebClient/ Windows C:\Program Files\IBM\FileNet\WebClient\ The installation program installs the Workplace XT software in this path. NOTES <ul style="list-style-type: none"> • The installer will use the <i>install_path</i> to place a number of other files in default locations. See: <ul style="list-style-type: none"> – “Specifying the configuration directory” on page 26 – “Specifying the log file location” on page 27. – “Configuring user token security” on page 28 • If you select a custom install path, follow the same directory structure as seen in a typical install and retain the /IBM/FileNet/WebClient part of the path.

In the screen for...	Perform this action...
<p>Verifying upgrade</p> <p>NOTE This screen appears only during an upgrade.</p>	<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 do not want to upgrade your Workplace XT at this time, click Cancel to exit the installation program.</p>
<p>Choosing an application server</p>	<p>Select the application server and version from the drop-down lists. These choices must match your Content Engine application server.</p>
<p>Configuring Content Engine API settings</p>	<p>Configure the Content Engine API settings, as follows:</p> <ol style="list-style-type: none"> a. Transport method <ul style="list-style-type: none"> Select EJB (Enterprise Java Beans) from the drop down list. b. Content Engine Client software URL: <ul style="list-style-type: none"> Replace the sample server name and port number (<i>CEserver:port</i>) with the Content Engine server name and port number for your Content Engine server. NOTE 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. NOTE 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 FileNet P8 Administration > Application Engine Administration > Key configuration files and logs. c. Content Engine upload URL <ul style="list-style-type: none"> Replace the sample server name and port number (<i>CEserver:port</i>) with the Content Engine server name and port number to use when uploading document content to the Content Engine server. d. Content Engine download URL <ul style="list-style-type: none"> Replace the sample server name and port number (<i>CEserver:port</i>) with the Content Engine server name and port number for your Content Engine server from which to download document content.

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"> Choose Generate a .ear file for deployment if your server can deploy an EAR file. Specify an application name for the EAR file deployment. The default is WorkplaceXT. Choose Generate a .war file for deployment if your server can deploy an WAR file. 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. <p>NOTE 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 URL where the IBM FileNet P8 Platform Documentation is installed.</p> <p>Your entry must be in the following format:</p> <pre>http://docserver:port#/ecm_help/</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 “Install the IBM FileNet Workplace XT documentation on the application server” on page 20 for more information.</p> <p>NOTE For information on how to reconfigure the documentation URL after installation is completed, see the IBM FileNet P8 help topic FileNet P8 Administration > Application Engine Administration > Key configuration files and logs > Bootstrap properties.</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>install_path</code> directory selected earlier.</p> <p>Default location of the configuration directory:</p> <p>UNIX</p> <pre>/opt/IBM/FileNet/Config/WebClient/</pre> <p>Windows</p> <pre>C:\Program Files\IBM\FileNet\Config\WebClient\</pre> <p>IMPORTANT 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>NOTES</p> <ul style="list-style-type: none"> • If you select a custom install location, follow the same directory structure as seen in a typical install and retain the <code>/IBM/FileNet/Config/WebClient</code> part of the path. • 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 “Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 14.
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>IMPORTANT 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>IMPORTANT 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_1.1.4.0.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>install_path</code> directory selected earlier.</p> <p>Default location of the logs directory:</p> <p>UNIX</p> <pre>/opt/IBM/FileNet/WebClient/LogFiles</pre> <p>Windows</p> <pre>C:\Program Files\IBM\FileNet\WebClient\LogFiles</pre> <p>NOTE If you select a custom install location, follow the same directory structure as seen in a typical install and retain the <code>IBM/FileNet/WebClient/LogFiles</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"> If needed, select the check box to create maximum strength keys. By default the installer creates limited strength keys. Enter the number of keys to use, from 1-100. NOTE Security generally increases with the number of keys used. 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>install_path</code> directory selected earlier. Default location of the Authentication directory: UNIX <code>/opt/IBM/FileNet/Authentication/</code> Windows <code>C:\Program Files\IBM\FileNet\Authentication\</code> NOTE 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>/IBM/FileNet/Authentication</code> part of the path. CAUTION For multiple applications to pass user tokens to each other, each participating application must 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 Developer Help > Workplace Integration and Customization Introduction > User Tokens > Configuring Applications to Use Tokens.
Verifying your installation selections	Review the list of selections you have made. You might need to scroll to see all selections.
Starting the installation	Review the installation summary, and click Install .

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

6. View the `web_client_install_log_1.1.4.0.txt` file located in `install_path/IBM/FileNet/WebClient/LogFiles`.

Verify that no errors or failures were logged. Look for the ERROR designation at the start of a line. Correct any errors before you proceed.

7. Continue with the task [“Install IBM FileNet Workplace XT software updates”](#) on page 34.

Task 4: Install IBM FileNet Workplace XT silently

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. Make sure that 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.
- You must have installed and configured a supported application server for IBM FileNet Workplace XT.
- To ensure proper functionality, performance, and ongoing maintenance, IBM FileNet Workplace XT must 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 perform the install.
 - b. Install the Java Access Bridge (available at <http://java.sun.com>).
 - c. Start the JAWS screen reader.
- Before logging in to Workplace XT for the first time, make sure that 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, follow the instructions in the *IBM FileNet P8 Platform High Availability Technical Notice*. To download this guide and other IBM FileNet product documentation from the IBM Web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on page 14.

Generating the silent installation response files

The Workplace XT installation files include a `XT_silent_install.txt` file that contains default values for an installation. You can edit the values in this file as needed, and use the file to run a silent installation. You can also use the Workplace XT installation program to generate a response file. This method has two options, a full response file recorded from an actual install, and a response file template that requires further editing.

You can reuse response files to create similar installations of Workplace XT. However, remember to edit the files for significant differences such as path names for different platforms.

To create a response file by editing the silent input file

1. Locate the IBM FileNet Workplace XT installation software package, and copy the `XT_silent_install.txt` file to a local directory.
2. Follow the instructions in the silent input file to edit the values to reflect the appropriate responses for your installation.

IMPORTANT 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"`).

To create a response file by recording an installation

Use the record option to create a response file based on the choices you specify in the Workplace XT installation program screens. You can keep this file as a record of the installation, or edit a copy of it to use as a response file for similar installations.

1. From a command line, navigate to the path of the Workplace XT installation program.
2. Enter the following command:

```
WorkplaceXT-1.1.4.0-operating_system.bin -options-record record_file_name  
(with no space between -options-record)
```

where

operating_system is the platform where you are installing Workplace XT, for example:

AIX, HPUX, HPUXi, LINUX, SOL, WIN, or ZLINUX

(For Windows, the file extension is `.exe`.)

record_file_name is the name of the response file to be generated, for example, `xt_record.txt`.

3. Complete the Workplace XT installation program screens, and click **Finish**.

The installation program installs Workplace XT. The program creates the response file with the name that you specified in the same path as the installation program.

To create a response file from a template

Use the template option to create a response file that you can edit to create a customized input file for silent installations. With the template option, the installation program generates a sample response file without installing Workplace XT.

1. From a command line, navigate to the path of the Workplace XT installation program.
2. Enter the following command:

```
WorkplaceXT-1.1.4.0-operating_system.bin -options-template template_file_name  
(with no space between -options-template)
```

where

operating_system is the OS where you are installing Workplace XT, for example:

AIX, HPUX, HPUXi, LINUX, SOL, WIN, or ZLINUX

(For Windows, the file extension is `.exe`.)

template_file_name is the name of the response file to be generated, for example, `xt_template.txt`.

The installer runs in initialize mode and generates the response file template with the name that you specified in the same path as the installation program.

3. Open the template file for editing.
4. Remove the three comment characters (`###`) before each option.
5. Replace the sample value with the appropriate value for your installation.
6. Save the changes made to the response file.

Installing Workplace XT silently

You can use a command-line option with a response file to install Workplace XT silently.

To install the IBM FileNet Workplace XT software silently

1. Collect the parameters needed to complete your installation. For information about parameter values, see "Installation and upgrade worksheet" 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).
2. Edit your response file to reflect the options you collected.
 3. Log in to the server where you want to install Workplace XT:

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.

4. From a command prompt, navigate to and run the installation program.

UNIX

```
./WorkplaceXT-1.1.4.0-operating_system.bin -options "path_to_edited_input_file/  
input_file.txt" -silent
```

where

operating_system is the platform where you are installing Workplace XT, for example:

AIX, HPUX, HPUXi, LINUX, SOL, or ZLINUX

input_file.txt is the response file you created or the silent input file you edited for the installation.

Windows

```
WorkplaceXT-1.1.4.0-WIN.exe -options "path_to_edited_input_file\input_file.txt"  
-silent
```

where *input_file.txt* is the response file you created or the silent input file you edited for the installation.

5. View the `web_client_install_log_1.1.4.0.txt` file located in `install_path/IBM/FileNet/WebClient/LogFiles`.

Verify that no errors or failures were logged. Look for the ERROR designation at the start of a line. Correct any errors before you proceed.

6. Continue with the task ["Install IBM FileNet Workplace XT software updates"](#) on page 34.

Task 5: 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 might 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 6 on page 35](#) and [Task 7 on page 38](#).

Task 6: 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. For information on the Content Engine parameter values, see "Installation and Upgrade Worksheet" 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 steps to quickly see only the installation properties you must specify for the Content Engine Client installation program:

- Click the **AutoFilter** drop-down arrow in the "Installation or Configuration Program" column header and select CE Client 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).
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. Log on to the server where Workplace XT is installed 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. (For updates only) 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 the Workplace XT application.

WebLogic Stop and un-deploy the Workplace XT application.

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\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 the command for your operating system. *CE_version* is the version of your Content Engine, 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 screens using the parameters you collected in the Installation and Upgrade Worksheet.

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. Using the parameters from the Installation and Upgrade Worksheet, 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 your Content Engine, for example, 4.5.0.

path is the path that contains the installation program.

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

- 9. Continue with [“Install the latest Process Engine Client files on Workplace XT servers”](#) on page 38.

Task 7: Install the latest Process Engine Client files on Workplace XT servers

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

To install the Process Engine Client files

For both interactive and silent installs, refer to the appropriate information from your installation worksheet while performing the following steps. For information on the Process Engine parameter values, see "Installation and upgrade worksheet" 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 steps to quickly see only the installation properties you must specify for the Process Engine client installation program:

- Click the **AutoFilter** drop-down arrow in the "Installation or Configuration Program" column header and select PE Client 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).
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. On the machine where Workplace XT is to be deployed, 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 Process Engine Client install software
 3. (For updates only) Back up the deployed web application directory.
 4. Copy the Process Engine Client install software from the Process Engine installation software to the temporary directory. The version of the install software must match the version of Process Engine.
 5. Expand the (TAR or ZIP) Process Engine Client install software within the temporary directory. The `jre.tar` file that is packaged with the Process Engine Client installer must be in the same directory as the Process Engine Client installer when the installer is run.
 6. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.
 7. 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 38](#) 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.

8. (WebSphere and WebLogic Only) Stop and undeploy any instances of Workplace XT.
9. (JBoss Only) Run the shutdown command.
10. Manually delete the web application temporary directories associated with Workplace XT.
11. (JBoss only) Delete the deployed Web application directory, or WAR or EAR file.
12. Start the Process Engine Client install process.
 - To install the Process Engine Client interactively:
 - i. Access the IBM FileNet Process Engine Client update software.

Run the appropriate install program for your operating system.

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. Use the parameters you gathered in the Installation and Upgrade Worksheet to 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.

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 Process Engine Client silently:

- i. Locate the IBM FileNet Process Engine Client update software package, and copy the PEClient_silent_input.txt file to a local directory.
- ii. Use the parameters you gathered in the Installation and Upgrade Worksheet and 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 Process Engine Client installer with the command for your operating system:

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

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

- [“Configure IBM FileNet Workplace XT \(WebSphere\)” on page 41](#)
- [“Configure IBM FileNet Workplace XT \(WebLogic\)” on page 51](#)
- [“Configure IBM FileNet Workplace XT \(JBoss\)” on page 59](#)

Task 8a: Configure IBM FileNet Workplace XT (WebSphere)

Before you can use the Workplace XT web application, you must first configure the application to work with your application server. Use the following procedures to configure Workplace XT. Not all procedures will apply to all installations, but you should do the procedures that apply to your installation in the order presented here.

(optional) To edit web.xml for SSO

NOTE SSO in an IBM Tivoli Access Manager environment might require additional configuration in WebSphere. If you are implementing SSO in an IBM Tivoli Access Manager (TAM) WebSEAL 6.x 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/IBM/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
        adjustments.
        sections at the bottom of this file for additional configuration
    -->
    <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 `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:

(optional) To configure WebSphere to support user tokens and WebDAV connections for Workplace XT (for

```
<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 and WebDAV connections for Workplace XT (for Application Integration, eForms, Records Manager, and others)

The configuration steps that follow enable the generation and acceptance of user tokens on the server. This configuration is also required to enable WebDAV connections. 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/IBM/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/IBM/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/IBM/FileNet/WebClient/WorkplaceXT/WEB-INF/lib
```

to here:

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

5. Enable JAAS.

- a. Navigate to the Java Virtual Machine.

WebSphere Application Server 6.1

Servers > Application Servers > server_name > Java & Process Management > Process Definition > Java Virtual Machine

WebSphere Application Server 7.0

Servers > Server Types > WebSphere application servers > server_name > Java & Process Management > Process Definition > Java Virtual Machine

(optional) To configure WebSphere to support user tokens and WebDAV connections for Workplace XT (for

- 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.)

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.

Your path might 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 might include a samples directory under the config directory. Verify the location of the file before you enter the path.

IMPORTANT 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.

IMPORTANT (Windows only) On WebSphere for Windows the path cannot contain a space. You must use 8.3-notation for the install path portion of the djava argument.

If *install_path* is:

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

use:

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

- 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.

- Restart WebSphere.

To configure Java Virtual Machine settings for JAAS login and memory

Use the Java Virtual Machine settings in the WebSphere® Application Server to set up JAAS login information and memory settings.

- Log in to the WebSphere administrative console.
- Navigate to the Java Virtual Machine.

WebSphere Application Server 6.1

Servers > Application Servers > server_name > Java & Process Management > Process Definition > Java Virtual Machine

WebSphere Application Server 7.0

Servers > Server Types > WebSphere application servers > server_name > Java & Process Management > Process Definition > Java Virtual Machine

- In the Generic JVM arguments field, add the following entry:

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

Replace *WPXT_install_path* in the entry above with your actual installation path, such as:

UNIX

```
/opt/IBM/FileNet/WebClient
```

Windows

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

Your path may be slightly different based on the version of your client installations, or whether you have chosen a custom path for the installation. Verify the location of this file and specify the install path location before you enter the path.

IMPORTANT: Do not copy and paste the text from this guide into the field in the console because hidden formatting can cause problems with the entry. Use a paste special option in a text editor to remove formatting first, or type the entry into the field.

IMPORTANT: (Windows only) The path cannot contain a space. You must use 8.3-notation for the install path portion of the full JAAS login entry described above.

If *WPXT_install_path* is:

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

use:

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

- Set the Initial heap size and Maximum heap size.

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.](#)

5. Save your changes.

To Configure Lightweight Third Party Authentication (LTPA)

To set up LTPA security, configure settings to match on both the Content Engine application server and the Workplace XT application server. If your Workplace XT and Content Engine are on the same WebSphere Application Server, you do not need to configure LTPA.

NOTE If you already have Application Engine or Workplace XT in your environment, skip the following step ([Step 1](#)) and continue to [Step 2](#).

1. On the Content Engine WebSphere server, do the following:
 - a. Log in to the WebSphere administrative console.
 - b. Navigate to the LTPA settings page:

WebSphere Application Server 6.1

Navigate to Security > Secure administration, applications, and infrastructure.
From the right side of the panel, select Authentication Mechanisms and expiration.

WebSphere Application Server 7.0

Navigate to Security > Global security.
From the right side of the panel, select LTPA.
 - c. Enter a value for the LTPA timeout that is larger than the default. For example, if the timeout value is left at the default value of 120 minutes, the LTPA key expires after 2 hours. Users will not be able to log in to Workplace™ after being logged in for 2 hours.
 - d. Save your changes.
 - e. In the box for Cross-cell single sign-on, type a password to create the LTPA password.
 - f. For password restrictions, see the WebSphere Application Server documentation. If you have already configured Content Engine for LTPA, use the existing password in the Workplace XT configuration below.
 - g. Enter the fully qualified path for the Key File Name. For example, /opt/LTPA/ltpa_key_name.
 - h. Click **Export keys**. Verify that a message similar to the following message is displayed: The keys were successfully exported to the file ltpa_key_name.
 - i. Click **Import keys**.
 - j. Click **OK**, then click **Save changes directly to the master configuration**.
 - k. Stop and restart WebSphere Application Server.
 - l. Copy the key file from the Content Engine server location you specified above to a directory on the Workplace XT server. For example, /opt/LTPA/ltpa_key_name.

2. On the Workplace XT WebSphere server, do the following:

a. Log in to the WebSphere administrative console.

b. Navigate to the LTPA settings page:

WebSphere Application Server 6.1

Navigate to Security > Secure administration, applications, and infrastructure.

From the right side of the panel, select Authentication Mechanisms and expiration.

WebSphere Application Server 7.0

Navigate to Security > Global security.

From the right side of the panel, select LTPA.

c. Enter a value for the LTPA timeout that is larger than the default. For example, if the timeout value is left at the default value of 120 minutes, the LTPA key expires after 2 hours. Users will not be able to log in to Workplace XT after being logged in for 2 hours.

d. Save your changes.

e. In the box for Cross-cell single sign-on, type and confirm the LTPA password you created for Content Engine.

For password restrictions, see the WebSphere Application Server documentation. If you have already configured Content Engine for LTPA, use the existing password in the Workplace XT configuration below.

f. Specify the path for the key file that you copied to the Workplace XT server. For example, /opt/LTPA/ltpa_key_name.

g. Click **Import keys**. Verify that a message similar to the following one is displayed: The keys were successfully imported from the file ltpa_key_name.

h. Save your changes to the master configuration.

To configure standalone Lightweight Directory Access Protocol (LDAP)

Configure settings on the WebSphere Application Server to enable LDAP communication between Workplace XT and Content Engine.

1. Open the WebSphere administrative console.

2. Navigate to Security > Secure administration, applications, and infrastructure.

3. Disable security using the following Security settings:

- Turn off (clear) the Enable Administrative Security flag.
- Turn off (clear) the Enable application security flag.
- Turn off (clear) the Java 2 security flag.

4. From the bottom of the panel, in the dropdown list called Available realm definitions, select Standalone LDAP registry and click Configure.

5. Configure the LDAP provider to exactly match the corresponding settings on the Content Engine application server.

TIP: Open the WebSphere administrative console for Content Engine to the same panels to see and copy all settings.

- Primary administrative user name
- Select Automatically generated server identity.
- Type
- Host
- Port
- Base distinguished name (DN)
- Bind distinguished name (DN)
- Bind password

6. Configure the LDAP user registry settings to exactly match the corresponding settings on the Content Engine application server.

TIP: Open the WebSphere administrative console for Content Engine to the same panel to see and copy all settings.

- User filter
- Group filter
- User ID map
- Group member ID map
- Certificate map mode
- Certificate filter

7. Save these settings.

8. Next to Available realm definitions, ensure that Standalone LDAP registry is still selected, and click Set as current.

9. Re-enable the following Security settings:

- Turn on (select) the Enable Administrative Security flag.
- Turn on (select) the Enable application security flag.
- Turn off (select) the Java 2 security flag.

The IBM® FileNet® P8 Platform utilizes LDAP-based security, and does not support Java 2 security. Enabling Java 2 security will cause unexpected behavior.

10. Save your changes to the master configuration.

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

12. Stop and restart the application server.
13. Continue with [“Deploy IBM FileNet Workplace XT \(WebSphere\)”](#) on page 67.

To configure Lightweight Directory Access Protocol (LDAP) for federated repositories

If you have a multiple domain environment, configure LDAP settings for federated repositories on the WebSphere Application Server to enable LDAP communication between Workplace XT and Content Engine.

IMPORTANT: If you are using federated repositories, your WebSphere administrative console user cannot have the same username or ID as a user in the LDAP repository.

1. Open the WebSphere administrative console.
2. Navigate to the security settings page. Option Description

WebSphere Application Server 6.1

Navigate to Security > Secure administration, applications, and infrastructure.

WebSphere Application Server 7.0

Navigate to Security > Global security.

3. Disable the following Security settings:
 - Turn off (clear) the Enable Administrative Security flag.
 - Turn off (clear) the Enable application security flag.
 - Turn off (clear) the Java 2 security flag.
4. From the bottom of the panel, in the dropdown list called Available realm definitions, select Federated Repositories and click Configure.
5. Configure the LDAP provider to exactly match the corresponding General Properties on the Content Engine application server.

TIP: Open the WebSphere administrative console for Content Engine to the same panels to see and copy all settings.

 - Realm name
 - Primary administrative user name
 - Select Automatically generated server identity.
 - Ignore case for authorization
 - Repositories in the realm
6. Save these settings.
7. Next to Available realm definitions, ensure that Federated repositories is still selected, and click Set as current.

8. Re-enable the following Security settings:

- Turn on (select) the Enable Administrative Security flag.
- Turn on (select) the Enable application security flag.
- Turn off (select) the Java 2 security flag.

The IBM® FileNet® P8 Platform utilizes LDAP-based security, and does not support Java 2 security. Enabling Java 2 security will cause unexpected behavior.

9. Save your changes to the master configuration.

10. Test the connection on the Federated repositories page. If the test fails, correct the error before proceeding. If it passes, click OK to return to the previous page.

Task 8b: Configure IBM FileNet Workplace XT (WebLogic)

Before you can use the Workplace XT web application, you must first configure the application to work with your application server. Use the following procedures to configure Workplace XT. Not all procedures will apply to all installations, but you should do the procedures that apply to your installation in the order presented here.

To edit web.xml for SSO (optional)

NOTE If you are implementing SSO in an IBM Tivoli Access Manager (TAM) WebSEAL 6.x 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/IBM/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/*,
    </param-value>
  </init-param>
</filter>
```

```

        /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 set up JAAS LOGIN information for authentication and memory settings for resource usage

1. Stop WebLogic, if it is running.
2. Make a backup copy of the `setDomainEnv` file.
 - For Windows, back up `setDomainEnv.cmd`.
 - For UNIX, back up `setDomainEnv.sh`.
3. Do one of the following to edit the `MEM_ARGS` variable in the `setDomainEnv` file:
 - For all systems except those using JRockit JAVA:
 Find the `MEM_ARGS` variable and append the following to any existing settings:
`-XX:MaxPermSize=size`
 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`
4. If your application server uses the IBM JVM, edit the `JAVA_OPTIONS` variable to improve performance.

UNIX

Modify the following line in the `setDomainEnv` file:

```
JAVA_OPTIONS="${JAVA_OPTIONS} ${JAVA_PROPERTIES} -
Dwlw.iterativeDev=${iterativeDevFlag} -Dwlw.testConsole=${testConsoleFlag} -
Dwlw.logErrorsToConsole=${logErrorsToConsoleFlag}"
export JAVA_OPTIONS
```

insert these entries (without a carriage return) before the `export JAVA_OPTIONS` line:

```
-Dprogram.name=${PROGNAME} -Dfilenet.pe.peorb.pool.min=2
-Dfilenet.pe.peorb.pool.max=5"
```

Result:

```
JAVA_OPTIONS="${JAVA_OPTIONS} ${JAVA_PROPERTIES} -
Dwlw.iterativeDev=${iterativeDevFlag} -Dwlw.testConsole=${testConsoleFlag} -
Dwlw.logErrorsToConsole=${logErrorsToConsoleFlag} -
Dprogram.name=${PROGNAME} -Dfilenet.pe.peorb.pool.min=2 -
Dfilenet.pe.peorb.pool.max=5"
export JAVA_OPTIONS
```

To set up JAAS LOGIN information for authentication and memory settings for resource usage

Windows

Modify the following line in the setDomainEnv file:

```
set JAVA_OPTIONS=%JAVA_OPTIONS% %JAVA_PROPERTIES% -
Dwlw.iterativeDev=%iterativeDevFlag% -Dwlw.testConsole=%testConsoleFlag% -
Dwlw.logErrorsToConsole=%logErrorsToConsoleFlag%
```

insert these entries (without a carriage return) after the %JAVA_PROPERTIES%:

```
-Dprogram.name=%PROGNAME% -Dfilenet.pe.peorb.pool.min=2 -
Dfilenet.pe.peorb.pool.max=5Result:
```

Result:

```
set JAVA_OPTIONS=%JAVA_OPTIONS% %JAVA_PROPERTIES% -Dprogram.name=%PROGNAME% -
Dfilenet.pe.peorb.pool.min=2 -Dfilenet.pe.peorb.pool.max=5 -
Dwlw.iterativeDev=%iterativeDevFlag% -Dwlw.testConsole=%testConsoleFlag% -
Dwlw.logErrorsToConsole=%logErrorsToConsoleFlag%
```

5. Configure JAAS login. Add one of the following right after the classpath entry for WebLogic.

IMPORTANT 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 might 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 might 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/IBM/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/IBM/FileNet/WebClient/CE_API/config/jaas.conf.WebLogic"

UNIX

```
# JAAS LOGIN configuration setting
JAAS_LOGIN="{JAAS_LOGIN}" -Djava.security.auth.login.config=
"install_path/IBM/FileNet/WebClient/CE_API/config/jaas.conf.WebLogic"
```

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

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

6. Save and close the setDomainEnv file.
7. 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.
8. Use a text editor to open and edit the application server startup script.
 9. 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
}"
    ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}  ${JAAS_LOGIN}
-Dweblogic.Name=${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}"
    ${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS}  ${JAAS_LOGIN}
-Dweblogic.Name=${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
)
    
```

10. Save and close the application server startup script file.

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.

IMPORTANT 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.

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. Create a new Authentication Provider of the same type as the LDAP Authentication Provider on the Content Engine.
 - c. Configure the new Authentication Provider to have the same Provider Specific LDAP settings as the Content Engine provider.
 - d. For both the default and the new Authentication Provider, under Common Settings for DefaultAuthenticator, ensure that the Control Flag is set to SUFFICIENT.
 - e. Save your changes.
 - f. Restart the application server.
3. If you plan to use user tokens (optional), continue with [“\(optional\) To configure WebLogic to support user tokens and WebDAV connections for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)”](#) on page 58.
4. If you do not plan to use user tokens, continue with [“Deploy IBM FileNet Workplace XT \(WebLogic\)”](#) on page 71.

(optional) To configure WebLogic to support user tokens and WebDAV connections for Workplace XT (includ-

(optional) To configure WebLogic to support user tokens and WebDAV connections 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. This configuration is also required to enable WebDAV connections. Verify these settings 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/IBM/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/IBM/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/IBM/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.
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/IBM/FileNet/WebClient/WorkplaceXT/WEB-INF/wcmApiConfig.properties
```

, then click **Save**.
9. Save and activate changes.
10. Restart the WebLogic server.
11. Deploy the Workplace XT application. See [“Deploy IBM FileNet Workplace XT \(WebLogic\)” on page 71](#).

Task 8c: Configure IBM FileNet Workplace XT (JBoss)

Before you can use the Workplace XT web application, you must first configure the application to work with your application server. Use the following procedures to configure Workplace XT. Not all procedures will apply to all installations, but you should do the procedures that apply to your installation in the order presented here.

To configure Java and JAAS settings for UNIX

1. Stop JBoss, if it is running.
2. Make a backup copy of the JBoss configuration file `run.conf`.
3. Open `run.conf` 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:

```
JAVA_HOME=/export/home/apps/jboss/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.

```
JAVA_OPTS=$JAVA_OPTS -Xms128m -Xmx512m
```

See your application server vendor 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. If your application server uses the IBM JVM, edit the `JAVA_OPTS` variable in the `run.conf` file immediately after the line in the previous substep. This `JAVA_OPTS` edit improves performance.

Find the following line in the `run.conf` file:

```
JAVA_OPTS="$JAVA_OPTS -Dprogram.name=$PROGNAME"
```

and change it to this (without a carriage return):

```
JAVA_OPTS="$JAVA_OPTS -Dprogram.name=$PROGNAME -Dfilenet.pe.peorb.pool.min=2 -  
Dfilenet.pe.peorb.pool.max=5"
```

- d. Save your changes .

5. Configure JAAS login by adding an entry to the `run.conf` file.

The path for your entry might 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 might include a `samples` directory under the `config` directory. Verify the location of the `jaas.conf.JBoss` file before you enter the path.

IMPORTANT Enter the JAAS login entry 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.

- Add this entry to the end of the `run.conf` file:

```
JAVA_OPTS="$JAVA_OPTS -Djava.security.auth.login.config=/opt/FileNet/WebClient/  
CE_API/config/jaas.conf.JBoss"
```

6. Save and close the `run.conf` file.

To configure Java and JAAS settings for Windows

1. Stop JBoss, if it is running.
2. Make a backup copy of the JBoss application server startup script, `run.bat`.
3. Open the `run.bat` 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:

```
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.

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

Refer to your application server vendor 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. If your application server uses the IBM JVM, edit the `JAVA_OPTS` variable in the `run.bat` file immediately after the line in the previous substep. This `JAVA_OPTS` edit improves performance.

Find the following line in the `run.bat` file:

```
set JAVA_OPTS=%JAVA_OPTS% -Dprogram.name=%PROGNAME%
```

and change it to this (without a carriage return):

```
set JAVA_OPTS=%JAVA_OPTS% -Dprogram.name=%PROGNAME% -
Dfilenet.pe.peorb.pool.min=2 -Dfilenet.pe.peorb.pool.max=5
```

d. Save your edits.

5. Configure JAAS login.

Add the following JAAS login entry right after the "%JAVA%" %JAVA_OPTS entry in the run.bat file.

IMPORTANT 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.

Your path might 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 might include a samples directory under the config directory. Verify the location of the jaas.conf.JBoss file before you enter the path.

```
"%JAVA%" %JAVA_OPTS% -Djava.security.auth.login.config=install_path\IBM\
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 run.bat application server startup script.

To configure JBoss for IBM FileNet Workplace XT

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/IBM/FileNet/WebClient
```

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

4. (JBoss 4.0.5 only) 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. (JBoss 5.0.1 only) Remove the JSF 1.2 that is part of the JBoss 5.0.1 installation.

Removing the files and the references to the files in the `web.xml` file enables JBoss to use the JSF 1.1 provided by Workplace XT.

- a. Delete all jar files found under the `jsf-libs` folder of the web server, but do not delete the `jsf-libs` folder:

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

- b. Open the `web.xml` file (`JBOSS_HOME/server/default/deployers/jbossweb.deployer/web.xml`) for editing.
- c. Modify the `web.xml` file to comment out the references to the JSF 1.2 implementation, as shown in the following sample.

```

<!--
<context-param>
  <param-name>com.sun.faces.injectionProvider</param-name>
  <param-
value>org.jboss.web.jsf.integration.injection.JBossDelegatingInjectionProvid
er</param-value>
</context-param>

```

```

-->

<!--
<listener>
  <listener-
    class>org.jboss.web.jsf.integration.config.JBossJSFConfigureListener</
    listener-class>
  </listener>
-->

<!--
<listener>
  <listener-class>com.sun.faces.application.WebappLifecycleListener</listener-
    class>
  </listener>
-->

<!--
<init-param>
  <description>JSF standard tlds</description>
  <param-name>tagLibJar0</param-name>
  <param-value>jsf-libs/jsf-impl.jar</param-value>
</init-param>
<init-param>
  <description>JSTL standard tlds</description>
  <param-name>tagLibJar1</param-name>
  <param-value>jstl.jar</param-value>
</init-param>
-->

```

6. 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

```

7. 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 or jboss-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.

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

UNIX

```
./run.sh
```

Windows

```
run.bat
```

9. If you plan to use user tokens (optional), continue with [“\(optional\) To configure JBoss to support user tokens and WebDAV connections for Workplace XT \(for Application Integration, eForms, Records Manager, and others\)” on page 65.](#)

(optional) To configure JBoss to support user tokens and WebDAV connections for Workplace XT (for Appli-

10. If you do not plan to use user tokens, continue with [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 73](#).

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

The configuration steps that follow enable the generation and acceptance of user tokens on the server. This configuration is also required to enable WebDAV connections. Verify these settings 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/IBM/FileNet/WebClient/WorkplaceXT/authenticationFiles
```

to here:

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

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

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

to here:

```
JBOSS_home/server/server_name/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>/IBM/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>
    </login-module>
  </authentication>
</application-policy>
```

(optional) To configure JBoss to support user tokens and WebDAV connections for Workplace XT (for Appli-

```

        <module-option
name="bindDN">CN=CEAdmin,OU=Shared,OU=Engineering,OU=FileNet,DC=FileNet,DC=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>
        <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>\\IBM\\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`.
5. Deploy the Workplace XT application. See [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 73](#).

Task 9a: Deploy IBM FileNet Workplace XT (WebSphere)

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

To re-create the WAR and EAR files

NOTE If you are using a WAR file or EAR file for deployment, you must re-create the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `install_path/IBM/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, re-create the WAR and EAR files.

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

UNIX

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

Windows

```
install_path\IBM\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 re-create the EAR file, first re-create the WAR file, and then run the following command to re-create the EAR file:

UNIX

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

Windows

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

To deploy Workplace XT (WebSphere Application Server 6.1)

Deploy Application Engine as an application in the WebSphere 6.1 administrative console. You can specify the context root for the application URL during the deployment.

1. Log on to the WebSphere administrative console.
2. Navigate to Applications > Enterprise Applications > Install
3. 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 `web_client.war` or `web_client.ear` file created by the installation program. For example, `install_path/deploy/web_client.war` or `install_path/deploy/web_client.ear`. Do not enter the machine name.
 - (If the administrative console is remote) Select Remote file system and enter the fully-qualified pathname to the `web_client.war` or `web_client.ear` file. For example,

install_path/deploy/web_client.war or *install_path/deploy/web_client.ear*.
 Do not enter the machine name.

4. If you are deploying a WAR file, enter the context root.
5. Enter WorkplaceXT and click **Next** to proceed to deploying a new application.

TIP: The context root is the name of the application you log in to using the web interface, such as:

```
http://server_name:port#/WorkplaceXT
```
6. Click **Show me all installation options and parameters**, and click **Next**. Complete the dialogs for installing a new application, using the following settings:
 - For Application name, enter Workplace XT, or the name you chose to call the application.
 - For WebServer, specify the server you are planning to use. Verify that your application name is selected and associated with the correct WebServer.
 - For Map virtual hosts for Web modules, for virtual host, choose the default_host.
 - (WAR file deployment only) For Context root, specify WorkplaceXT, or whatever you want to call the application.
7. Save your configuration.
8. Navigate to Applications > Enterprise Applications > Workplace > Class loading and update detection.
9. Set the polling interval for updated files with a number appropriate for your environment, for example, 3 seconds.
10. Change the Class loader order to Classes loaded with application class loader first.
11. Click **Apply**.
12. Click **Workplace > Manage Modules**.
13. Click **Workplace**.
14. Change the Class loader order to Classes loaded with application class loader first.

IMPORTANT: Do this only for the specific web application. Do not change the similar settings for the entire application server.
15. Navigate to Enterprise Applications > Workplace > Security role to user/group mapping.
16. Verify that the All Authenticated column is checked for the "All Authenticated" role.
17. Verify that the Everyone? column is checked for the Everyone role.
18. Save all your changes to the master configuration.
19. Stop and restart WebSphere Application Server.
20. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
21. Restart Process Task Manager and Component Manager.

22. Exit the Process Task Manager application.
23. Start Workplace XT from the administrative console.
24. To troubleshoot the deployment, check the following log:

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

To deploy Workplace XT (WebSphere Application Server 7.0)

Deploy Application Engine as an application in the WebSphere® 7.0 administrative console. You can specify the context root for the application URL during the deployment.

1. Log on to the WebSphere administrative console.
2. Navigate to Applications > WebSphere Enterprise Applications > New Enterprise Applications > Install
3. 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 `web_client.war` or `web_client.ear` file created by the installation program. For example, `install_path/deploy/web_client.war` or `install_path/deploy/web_client.ear`. Do not enter the machine name.
 - (If the administrative console is remote) Select Remote file system and enter the fully-qualified pathname to the `web_client.war` or `web_client.ear` file. For example, `install_path/deploy/web_client.war` or `install_path/deploy/web_client.ear`. Do not enter the machine name.
4. If you are deploying a WAR file, enter the context root.
 Enter Workplace XT and click **Next** to proceed to deploying a new application.
TIP: The context root is the name of the application you log in to using the web interface, such as:
`http://Server_Name:port#/Context_Root`
5. Click **Detailed**, and click **Next**. Complete the dialogs for installing a new application, using the following settings:
 - For Application name, enter Workplace, or the name you chose to call the application.
 - For WebServer, specify the server you are planning to use. Verify that your application name is selected and associated with the correct WebServer.
 - For Map virtual hosts for Web modules, for virtual host, choose the `default_host`.
 - (WAR file deployment only) For Context root, specify Workplace XT, or whatever you want to call the application.
6. Save your configuration.
7. Navigate to Applications > Enterprise Applications > Workplace > Class loading and update detection.

8. Set the polling interval for updated files with a number appropriate for your environment, for example, 3 seconds.
9. Change the Class loader order to Classes loaded with local class loader first (parent last).
10. Click **Apply**.
11. Click Workplace > Manage Modules.
12. In the Modules column, click **Workplace XT**.
13. Change the Class loader order to Classes loaded with local class loader first (parent last).
IMPORTANT: Do this only for the specific web application. Do not change the similar settings for the entire application server.
14. Navigate to Enterprise Applications > Workplace > Security role to user/group mapping.
15. Select the All Authenticated role and click **Map Special Subjects**.
16. Map the All Authenticated role and to All Authenticated in Applications realm.
17. Select the Everyone role and click **Map Special Subjects**.
18. Map the Everyone role to Everyone.
19. Save all your changes to the master configuration.
20. Stop and restart WebSphere Application Server.
21. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
22. Restart Process Task Manager and Component Manager.
23. Exit the Process Task Manager application.
24. Start Workplace XT from the administrative console.
25. To troubleshoot the deployment, check the following log:

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

Workplace XT requires that the client operating system has the Java Runtime Environment (JRE) downloaded and installed. If JRE is not installed, users will be prompted to install the JRE on first login.

Task 9b: Deploy IBM FileNet Workplace XT (WebLogic)

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

To re-create the WAR and EAR files (optional)

NOTE If you are using a WAR file or EAR file for deployment, you must re-create the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `install_path/IBM/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, re-create the WAR and EAR files.

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

UNIX

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

Windows

```
install_path\IBM\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 re-create the EAR file, first re-create the WAR file, and then run the following command to re-create the EAR file:

UNIX

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

Windows

```
install_path\IBM\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

```
mv install_path/IBM/FileNet/WebClient/deploy/web_client.war  
install_path/IBM/FileNet/WebClient/deploy/custom_name.war
```

Windows

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

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

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/IBM/FileNet/WebClient`
 - To deploy from a WAR or EAR file, choose the `web_client.war` or `web_client.ear` file in `install_path/IBM/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.

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.

To troubleshoot the deployment, check the following log:

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

Workplace XT requires that the client operating system has the Java Runtime Environment (JRE) downloaded and installed. If JRE is not installed, users will be prompted to install the JRE on first login.

Task 9c: Deploy IBM FileNet Workplace XT (JBoss)

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

To re-create the WAR or EAR files (optional)

NOTE If you are using a WAR file or EAR file for deployment, you must re-create the WAR file or WAR and EAR files and redeploy the application each time you make changes to files in the `install_path/IBM/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, re-create the WAR and EAR files.

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

UNIX

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

Windows

```
install_path\IBM\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 re-create the EAR file, first re-create the WAR file, and then run the following command to re-create the EAR file:

UNIX

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

Windows

```
install_path\IBM\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

```
mv install_path/IBM/FileNet/WebClient/deploy/web_client.war  
install_path/IBM/FileNet/WebClient/deploy/custom_name.war
```

Windows

```
rename install_path\IBM\FileNet\WebClient\deploy\web_client.war  
install_path\IBM\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/IBM/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/IBM/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/IBM/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](#).

Workplace XT requires that the client operating system has the Java Runtime Environment (JRE) downloaded and installed. If JRE is not installed, users will be prompted to install the JRE on first login.

Configuration and startup tasks

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

- [“Set IBM FileNet Workplace XT bootstrap preferences” on page 77.](#)
- [“Configure folder preferences” on page 81](#)
- [“Configure the Process Engine Connection Point for IBM FileNet Workplace XT” on page 82.](#)
- [“Set up SSL security for IBM FileNet Workplace XT” on page 83.](#)
- [“Perform additional configuration tasks” on page 87.](#)

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/IBM/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 80](#).

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 83](#) 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 78](#) 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/IBM/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 folder preferences

If you plan to use folder preferences, which enable users to associate folders with entry templates and customize columns, you must first configure the annotations class on your Enterprise Manager. For more information on using folder preferences, see the IBM FileNet Workplace XT help topic [User help > Actions, preferences, and tools > Actions > Manage folders](#).

The steps in this task apply *only* to systems where the Content Engine component is at version 4.0.x and 4.5.0.

The procedure adds an annotation class called “Folder Preferences” to the annotation list under Other Classes.

To configure folder preferences

1. On the Workplace XT server, copy the following folder and the files it contains:
`install_path/WebClient/WorkplaceXT/addons`
to a temp location on the Content Engine server.
2. Log into IBM FileNet Enterprise Manager.
3. Right click on an object store where you want to enable folder preferences.
4. Select All Tasks > Import All. Click the Import Options tab.
5. For the Import Manifest File field, click **Browse**.
6. Browse to the `addons` folder that you copied from the Workplace XT server to the Content Engine temp location, and select the file `WorkplaceXTExtensions.xml`. Click **OK**.
7. Click the Scripts tab.
8. In the Run-Type dropdown list, choose Post import.
9. Browse to the `addons` folder that you copied from the Workplace XT server to the Content Engine temp location, and select the file `WorkplaceXTFolderPreferencesSecurity.vbs`. Click **OK**.
10. Click **Import**.
11. When the status message displays, click **OK**.
12. Repeat this procedure on all object stores where you want to enable folder preferences.

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.

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 146](#).

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 JBoss 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/IBM/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/IBM/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>/IBM/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/IBM/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/IBM/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 78.
 - 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 might 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 89.](#)
- [“Install Application Integration BCS for Microsoft Office \(FileNet Workplace XT\)” on page 93](#)
- [“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.
- 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 and WebDAV connections for Workplace XT \(for Application Integration, eForms, Records Manager, and others\)” on page 43](#)
 - [“\(optional\) To configure WebLogic to support user tokens and WebDAV connections for Workplace XT \(including Application Integration, eForms, Records Manager, and others\)” on page 58](#)
 - [“\(optional\) To configure JBoss to support user tokens and WebDAV connections for Workplace XT \(for Application Integration, eForms, Records Manager, and others\)” on page 65](#)

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 might 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.

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

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

If you are installing on Vista, you must first turn off the User Account Control setting before you install Application Integration BCS.

(Vista only) To turn off User Account Control

1. Navigate to Start > Control Panel > User Accounts > User Accounts > Turn User Account Control on or off.
2. Clear the checkbox called **Use User Account Control (UAC) to help protect your computer**.
3. Click **OK**.

To install Application Integration BCS interactively

1. Log in to the client machine using an account that has Administrator privileges. You do not need to log in to the Workplace XT application.
2. Locate the Application Integration BCS 1.1.4.0 installation software package.
3. Run the installation program `ApplicationIntegrationBCS.exe`.

If the installer detects that you do not have all the necessary prerequisites installed, it prompts you to perform those installations. If a reboot is required, you can accept the reboot from the installer, or reboot manually. The installation program continues automatically. Do not try to restart the installation program, because this can cause problems with the installation.

4. 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 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 label is the name that appears on tabs or menus for this application.
9. Choose one of the following options:
 - Install for everyone

- Install for just me

10. Click **Next**.

11. Select the location where you want to install the application. You can click **Change** to specify a different installation path location.

12. Choose your setup type preference. Choose Custom to select which Office applications integrate with IBM FileNet P8. You can select Word, Excel, PowerPoint, and Outlook.

13. Click Install and complete the installation process.

NOTE The installation program 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 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/installshield12helplib/HelpSetup_EXEErrors.htm

To install the Application Integration BCS software silently

1. Log in to the Workplace XT server using an account that has Administrator privileges. You do not need to log in to the Workplace XT application.
2. Locate the Application Integration BCS 1.1.4.0 installation software package.
3. Open a DOS command window and change the current directory to the one where ApplicationIntegrationBCS.exe resides.
4. 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.

If the installer detects that you do not have all the necessary prerequisites installed, it prompts you to perform those installations. If the installation program requires a reboot, it is done automatically. After the reboot, you must restart the installation with the command line entry.

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 preceded 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
INSTALLDIR	<p>This is set by default to</p> <p>C:\Program Files\IBM\Application Integration BCS</p> <p>You do not need to set this for the silent installation unless you want an installation path other than the default.</p>
CEURL	<p>The URL of the Content Engine server, for example:</p> <p><i>http://Server Name:port/wsi/FNCEWS40MTOM/</i></p>
WORKPLACEXTURL	<p>The URL of the Workplace XT server, for example:</p> <p><i>http://Server Name:port/WorkplaceXT/</i></p>
HELPURL	<p>The URL of the IBM FileNet P8 documentation server.</p>
PREFERENCESNAME	<p>The name of the preferences file on the Workplace XT server to use.</p>
PREFERENCESOBJECTSTORE	<p>The name of the object store that contains the preferences file.</p>
LICENSE_ACCEPTED	<p>Required to be passed when installing silently. Value=true.</p>
ADDLOCAL	<p>Used to control what add-ins are installed. Omit to add all of them. Other possible values:</p> <ul style="list-style-type: none"> • Excel • Outlook • PowerPoint • Word <p>(Can be combined, separated by commas)</p>

Command Line Values	Settings
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\ApplIntBCSSetup.txt	Verbose installation log and specify log location.

Configuration Options

The `configuration.ini` file is like the bootstrap properties. The file contains Web addresses for the Content Engine, Workplace XT, and documentation servers. The file also contains 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 before users log in to 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 following table. 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 in to 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 in to 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.
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	The following settings are used to control the errors that are logged in the Microsoft Windows event log: <ul style="list-style-type: none"> • NONE - No errors logged • ERROR - Only error messages are logged • WARNING - Warning and error messages are logged • INFO - All messages are logged • no value (default) - Only error messages are logged
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 might use different Site Preference files and might 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 might or might 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/IBM/FileNet/Config/WebClient
```

and place it in the same directory to create *install_path*/IBM/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/IBM/FileNet/WebClient/deploy
```

and place it in the same directory to create *install_path*/IBM/FileNet/WebClient/*deploy2*

3. Delete the `.war` file and the `.ear` file from the *deploy2* directory.
4. In the *install_path*/IBM/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/IBM/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/IBM/FileNet/Config/WebClient</param-value>
```

to set the path to the new configuration folder copy you created in [Step 1](#), for example, `install_path/IBM/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. Re-create the WAR file by running `create_web_client_war.bat` or `.sh`.
8. (For EAR file deployments only) Re-create 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/IBM/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 67](#).

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

- WebLogic - See [“Deploy IBM FileNet Workplace XT \(WebLogic\)” on page 71](#).

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 73](#).

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 77](#).

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 108](#).
3. Update the Content Engine Client files on the Workplace XT server. Perform [Task 3 on page 109](#).
4. Update the Process Engine Client files on the Workplace XT server. Perform [Task 4 on page 112](#).
5. Deploy IBM FileNet Workplace XT according to your application server type:
 - Websphere: [Task 5a on page 116](#)
 - WebLogic: [Task 5b on page 120](#)
 - JBoss: [Task 5c on page 122](#)
6. Migrate folder preferences. Perform [Task 6 on page 125](#).

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 re-creates 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.

Perform the following upgrade tasks:

1. If you plan to use a screen reader for the upgrade process, start with “[To enable screen reader assistive technology for the upgrade tool](#)” on page 103.
2. Upgrade the software with the procedure “[To upgrade the IBM FileNet Workplace XT software](#)” on page 103.
3. If you want to enable folder preferences, do the steps in “[Configure folder preferences](#)” on page 107.

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. (For systems with the IBM Content Manager OnDemand (CMOD) site preference configured) Move the CMOD key store and change the keyStorePath context parameter in the web.xml file.
 - a. Copy the CMOD key store file, *cmodKeyStore*. The default location is in the following path:


```
install_path/WorkplaceXT/WEB-INF
```
 - b. Place the copy of the *cmodKeyStore* file into the *Config/WebClient* directory, in the following path:

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


- c. Change the value for the `keyStorePath` parameter in the `web.xml` file to match the new location of the key store file:

```
<context-param>
  <param-name>keyStorePath</param-name>
  <param-value>install_path/FileNet/Config/WebClient/cmodKeyStore</param-
  value>
</context-param>
```

- 7. (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/
```

- 8. 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 1.1.4.0 installation software package.
 - ii. Launch the appropriate Setup program (`WorkplaceXT-1.1.4.0-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 9 on page 106](#) 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-1.1.4.0-<operating_system>.bin -options
"path_to_edited_input_file/XT_silent_upgrade.txt" -silent
```

Windows

```
WorkplaceXT-1.1.4.0-Win.exe -options
"path_to_edited_input_file\XT_silent_upgrade.txt" -silent
```

9. When the upgrade program is complete, view the `web_client_install_log_1.1.4.0.txt` file located in: `install_path/FileNet/WebClient`.

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

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

NOTE If you are upgrading Workplace XT to 1.1.4.0, 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`

11. If you want to enable folder preferences, continue with [“Configure folder preferences” on page 107](#).

Otherwise, continue with the task [“Install IBM FileNet Workplace XT software updates” on page 108](#).

Configure folder preferences

If you plan to use folder preferences, which enable users to associate folders with entry templates and customize columns, you must first configure the annotations class on your Enterprise Manager. For more information on using folder preferences, see the IBM FileNet Workplace XT help topic [User help > Actions, preferences, and tools > Actions > Manage folders](#).

The steps in this task apply *only* to systems where the Content Engine component is at version 4.0.x and 4.5.0.

The procedure adds an annotation class called “Folder Preferences” to the annotation list under Other Classes.

To configure folder preferences

1. On the Workplace XT server, copy the following folder and the files it contains:
`install_path/WebClient/WorkplaceXT/addons`
to a temp location on the Content Engine server.
2. Log into IBM FileNet Enterprise Manager.
3. Right click on an object store where you want to enable folder preferences.
4. Select All Tasks > Import All. Click the Import Options tab.
5. For the Import Manifest File field, click **Browse**.
6. Browse to the `addons` folder that you copied from the Workplace XT server to the Content Engine temp location, and select the file `WorkplaceXTExtensions.xml`. Click **OK**.
7. Click the Scripts tab.
8. In the Run-Type dropdown list, choose Post import.
9. Browse to the `addons` folder that you copied from the Workplace XT server to the Content Engine temp location, and select the file `WorkplaceXTFolderPreferencesSecurity.vbs`. Click **OK**.
10. Click **Import**.
11. When the status message displays, click **OK**.
12. Repeat this procedure on all object stores where you want to enable folder preferences.
13. Continue with the task [“Install IBM FileNet Workplace XT software updates” on page 108](#).

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 might 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. For information on the Content Engine parameter values, see "Installation and Upgrade Worksheet" 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 steps to quickly see only the installation properties you must specify for the Content Engine Client installation program:

- Click the **AutoFilter** drop-down arrow in the "Installation or Configuration Program" column header and select CE Client 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).
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. Log on to the server where Workplace XT is installed 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. (For updates only) 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 the Workplace XT application.

WebLogic Stop and un-deploy the Workplace XT application.

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\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 the command for your operating system. *CE_version* is the version of your Content Engine, 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 screens using the parameters you collected in the Installation and Upgrade Worksheet.

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:

- Make a backup copy of the input file:

`CEClient_silent_install.txt`

- Open the silent input file in a text editor. Using the parameters from the Installation and Upgrade Worksheet, follow the instructions in the silent input file to edit the file to reflect the appropriate responses for your update.
- 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 your Content Engine, for example, 4.5.0.

path is the path that contains the installation program.

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

- Install Process Engine Client updates. Do [“Install the latest Process Engine Client files on Workplace XT servers”](#) on page 112.

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

CAUTION 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 on all Workplace XT servers. These steps apply to WebSphere, WebLogic, and JBoss (except where noted).

To install the Process Engine Client files

For both interactive and silent installs, refer to the appropriate information from your installation worksheet while performing the following steps. For information on the Process Engine parameter values, see "Installation and upgrade worksheet" 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 steps to quickly see only the installation properties you must specify for the Process Engine client installation program:

- Click the **AutoFilter** drop-down arrow in the "Installation or Configuration Program" column header and select PE Client 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).
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. On the machine where Workplace XT is to be deployed, 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 Process Engine Client install software
 3. (For updates only) Back up the deployed web application directory.
 4. Copy the Process Engine Client install software from the Process Engine installation software to the temporary directory. The version of the install software must match the version of Process Engine.
 5. Expand the (TAR or ZIP) Process Engine Client install software within the temporary directory. The `jre.tar` file that is packaged with the Process Engine Client installer must be in the same directory as the Process Engine Client installer when the installer is run.
 6. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.

7. 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 112](#) 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.

8. (WebSphere and WebLogic Only) Stop and undeploy any instances of Workplace XT.
9. (JBoss Only) Run the shutdown command.
10. Manually delete the web application temporary directories associated with Workplace XT.
11. (JBoss only) Delete the deployed Web application directory, or WAR or EAR file.
12. Start the Process Engine Client install process.
 - To install the Process Engine Client interactively:

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

Run the appropriate install program for your operating system.

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. Use the parameters you gathered in the Installation and Upgrade Worksheet to 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.

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 Process Engine Client silently:
 - i. Locate the IBM FileNet Process Engine Client update software package, and copy the PEClient_silent_input.txt file to a local directory.
 - ii. Use the parameters you gathered in the Installation and Upgrade Worksheet and 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 Process Engine Client installer with the command for your operating system:

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

- 13. (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

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

- [“Deploy IBM FileNet Workplace XT \(WebSphere\)” on page 116](#)
- [“Deploy IBM FileNet Workplace XT \(WebLogic\)” on page 120](#)
- [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 122](#)

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 re-create the WAR and EAR files

NOTE If you are using a WAR file or EAR file for deployment, you must re-create 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, re-create the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To re-create 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 re-create the EAR file, first re-create the WAR file, and then run the following command to re-create 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 (WebSphere Application Server 6.1)

Deploy Application Engine as an application in the WebSphere 6.1 administrative console. You can specify the context root for the application URL during the deployment.

1. Log on to the WebSphere administrative console.
2. Navigate to Applications > Enterprise Applications > Install
3. 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 `web_client.war` or `web_client.ear` file created by the installation program. For example, `install_path/deploy/web_client.war` or `install_path/deploy/web_client.ear`. Do not enter the machine name.
 - (If the administrative console is remote) Select Remote file system and enter the fully-qualified pathname to the `web_client.war` or `web_client.ear` file. For example,

install_path/deploy/web_client.war or *install_path*/deploy/web_client.ear.
 Do not enter the machine name.

4. If you are deploying a WAR file, enter the context root.
5. Enter WorkplaceXT and click **Next** to proceed to deploying a new application.

TIP: The context root is the name of the application you log in to using the web interface, such as:

```
http://server_name:port#/WorkplaceXT
```
6. Click **Show me all installation options and parameters**, and click **Next**. Complete the dialogs for installing a new application, using the following settings:
 - For Application name, enter Workplace XT, or the name you chose to call the application.
 - For WebServer, specify the server you are planning to use. Verify that your application name is selected and associated with the correct WebServer.
 - For Map virtual hosts for Web modules, for virtual host, choose the default_host.
 - (WAR file deployment only) For Context root, specify WorkplaceXT, or whatever you want to call the application.
7. Save your configuration.
8. Navigate to Applications > Enterprise Applications > Workplace > Class loading and update detection.
9. Set the polling interval for updated files with a number appropriate for your environment, for example, 3 seconds.
10. Change the Class loader order to Classes loaded with application class loader first.
11. Click **Apply**.
12. Click **Workplace > Manage Modules**.
13. Click **Workplace**.
14. Change the Class loader order to Classes loaded with application class loader first.

IMPORTANT: Do this only for the specific web application. Do not change the similar settings for the entire application server.
15. Navigate to Enterprise Applications > Workplace > Security role to user/group mapping.
16. Verify that the All Authenticated column is checked for the "All Authenticated" role.
17. Verify that the Everyone? column is checked for the Everyone role.
18. Save all your changes to the master configuration.
19. Stop and restart WebSphere Application Server.
20. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
21. Restart Process Task Manager and Component Manager.

22. Exit the Process Task Manager application.
23. Start Workplace XT from the administrative console.
24. To troubleshoot the deployment, check the following log:

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

To deploy Workplace XT (WebSphere Application Server 7.0)

Deploy Application Engine as an application in the WebSphere® 7.0 administrative console. You can specify the context root for the application URL during the deployment.

1. Log on to the WebSphere administrative console.
2. Navigate to Applications > WebSphere Enterprise Applications > New Enterprise Applications > Install
3. 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 `web_client.war` or `web_client.ear` file created by the installation program. For example, `install_path/deploy/web_client.war` or `install_path/deploy/web_client.ear`. Do not enter the machine name.
 - (If the administrative console is remote) Select Remote file system and enter the fully-qualified pathname to the `web_client.war` or `web_client.ear` file. For example, `install_path/deploy/web_client.war` or `install_path/deploy/web_client.ear`. Do not enter the machine name.
4. If you are deploying a WAR file, enter the context root.
 Enter Workplace XT and click **Next** to proceed to deploying a new application.
TIP: The context root is the name of the application you log in to using the web interface, such as:
`http://Server_Name:port#/Context_Root`
5. Click **Detailed**, and click **Next**. Complete the dialogs for installing a new application, using the following settings:
 - For Application name, enter Workplace, or the name you chose to call the application.
 - For WebServer, specify the server you are planning to use. Verify that your application name is selected and associated with the correct WebServer.
 - For Map virtual hosts for Web modules, for virtual host, choose the `default_host`.
 - (WAR file deployment only) For Context root, specify Workplace XT, or whatever you want to call the application.
6. Save your configuration.
7. Navigate to Applications > Enterprise Applications > Workplace > Class loading and update detection.

8. Set the polling interval for updated files with a number appropriate for your environment, for example, 3 seconds.
9. Change the Class loader order to Classes loaded with local class loader first (parent last).
10. Click **Apply**.
11. Click Workplace > Manage Modules.
12. In the Modules column, click **Workplace XT**.
13. Change the Class loader order to Classes loaded with local class loader first (parent last).

IMPORTANT: Do this only for the specific web application. Do not change the similar settings for the entire application server.

14. Navigate to Enterprise Applications > Workplace > Security role to user/group mapping.
15. Select the All Authenticated role and click **Map Special Subjects**.
16. Map the All Authenticated role and to All Authenticated in Applications realm.
17. Select the Everyone role and click **Map Special Subjects**.
18. Map the Everyone role to Everyone.
19. Save all your changes to the master configuration.
20. Stop and restart WebSphere Application Server.
21. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
22. Restart Process Task Manager and Component Manager.
23. Exit the Process Task Manager application.
24. Start Workplace XT from the administrative console.
25. 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 re-create the WAR and EAR files (optional)

NOTE If you are using a WAR file or EAR file for deployment, you must re-create 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, re-create the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To re-create 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 re-create the EAR file, first re-create the WAR file, and then run the following command to re-create 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.

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.

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 re-create the WAR or EAR files (optional)

NOTE If you are using a WAR file or EAR file for deployment, you must re-create 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, re-create the WAR and EAR files.

1. If you will be deploying from a WAR file, verify that `web_client.war` exists. To re-create 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 re-create the EAR file, first re-create the WAR file, and then run the following command to re-create 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.

Task 6: Migrate folder preferences

This upgrade task is applicable if you defined folder preferences in your previous IBM FileNet Workplace XT version.

Although Workplace XT migrates the folder preferences automatically the first time you log in after an upgrade, you must be aware of the following requirements:

- For environments with a Content Engine at version 4.0.x or 4.5.0, you must configure the Folder Preferences annotation class in Enterprise Manager before you log into Workplace XT for the first time. Ensure that you have done the steps in [“To configure folder preferences” on page 107](#).
- Your first login to Workplace XT after the upgrade must be as a user with the Application Engine administrator role.
- The Application Engine administrator user must also have annotate permissions on the folders where the preferences are to be migrated.
- You cannot use Workplace XT until the folder preferences have been migrated.

To migrate folder preferences

1. Log in to Workplace XT as an Application Engine administrator with annotate permissions on all folders that have previously set preferences.
2. Review the list of object stores, and click **Migrate**.
3. If any permission errors are displayed, click the **Help** link for information on the required permissions to complete the migration step. Correct any permissions issues and repeat the steps until all preferences have been migrated.

Optional upgrade tasks

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

- [“Upgrade IBM FileNet Workplace XT Application Integration” on page 127](#)
- [“Upgrade Application Integration BCS for Microsoft Office \(Workplace XT\)” on page 131](#)
- [“Upgrade multiple instances of IBM FileNet Workplace XT” on page 134](#)

Upgrade IBM FileNet Workplace XT Application Integration

The upgrade for Application Integration is very similar to a new installation. Complete the following procedure on each machine that will use Workplace XT Application Integration.

You cannot collocate IBM FileNet Workplace XT Application Integration with clients running P8 Workplace Application Integration Toolkit.

To upgrade 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 might 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. Verify 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.

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

Verify the setting for **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 upgrade 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\ApplntSetup.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.

Upgrade Application Integration BCS for Microsoft Office (Workplace XT)

To upgrade Application Integration BCS interactively

1. Log onto the upgraded 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.

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...
<code>\Documents and Settings\All Users\Application Data\IBM\Application Integration BCS</code>	All users with an account on the system.
<code>\Documents and Settings\[Username]\Application Data\IBM\Application Integration BCS</code>	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"> • NONE - No errors logged • ERROR - Only error messages are logged • WARNING - Warning and error messages are logged • INFO - All messages are logged • no value (default) - Only error messages are logged
ShowStackTrace	This controls whether the stack trace is available on error message dialog boxes. Values (case sensitive) are true or false (default).

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 104](#) (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 7 on page 105](#) (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 8 on page 105](#) (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

Use the following topics to remove IBM FileNet Workplace XT according to your application server type.

- [“Remove IBM FileNet Workplace XT \(WebSphere\)” on page 136.](#)
- [“Remove IBM FileNet Workplace XT \(WebLogic\)” on page 138.](#)
- [“Remove IBM FileNet Workplace XT \(JBoss\)” on page 140](#)

Use the following topics to remove optional IBM FileNet Workplace XT component software:

- [“Remove IBM FileNet Workplace XT Application Integration” on page 142](#)
- [“Remove Application Integration BCS for Microsoft Office \(Workplace XT\)” on page 143](#)

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 might 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/IBM/FileNet/WebClient/_WCuninst
```

Windows

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

```
install_path/IBM/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/IBM/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 might 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/IBM/FileNet/WebClient/_WCuninst
```

Windows

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

For AIX, the path is as follows:

```
/usr/lib/objrepos/InstallShield/Universal/IBM/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 might 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/IBM/FileNet/WebClient/_WCuninst`

Windows

`C:\Program Files\IBM\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.

IMPORTANT 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/IBM/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/IBM/FileNet/WebClient`

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

For AIX, the path is as follows:

`/usr/lib/objrepos/InstallShield/Universal/IBM/FileNet/WebClient`

Remove IBM FileNet Workplace XT Application Integration

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{9E96D48D-7A66-484F-B06E-77DA36790468} /qn
```

Remove Application Integration BCS for Microsoft Office (Workplace XT)

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
```

Appendixes

This appendixes section contains the following major topics:

- [“Encrypt passwords for silent installation and upgrades” on page 145](#)
- [“IBM FileNet Workplace XT port numbers” on page 146](#)

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) NOTE 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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Program Number: 5724-R76

Printed in USA

GC19-2783-02

