FileNet Workplace XT
Version 1.1.4.0

Installation and Upgrade Guide

IBM ®

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IBM®

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.

Contents

ibm.com and related resources

Product support and documentation are available from ibm.com.

Support and assistance

Product support is available on the Web. Click Support from the product Web site at:

FileNet Content Manager Support

> http://www.ibm.com/software/data/content-management/filenet-content-manager/support.html

Information center

You can view the product documentation in an Eclipse-based information center that you can install when you install the product. By default, the information center runs in a Web server mode that other Web browsers can access. You can also run it locally on your workstation. See the information center at http://publib.boulder.ibm.com/infocenter/p8docs/v4r5m1/index.jsp.

PDF publications

You can view the PDF files online using the Adobe Acrobat Reader for your operating system. If you do not have the Acrobat Reader installed, you can download it from the Adobe Web site at http://www.adobe.com.

See the following PDF publications Web sites:

Product	Web site
Product Documentation for FileNet P8 Platform	http://www.ibm.com/support/docview.wss?rs=3278 &uid=swg27010422

"How to send your comments"
Your feedback is important in helping to provide the most accurate and highest quality information.

"Contacting IBM" on page vi
To contact IBM customer service in the United States or Canada, call 1-800-IBM-SERV (1-800-426-7378).

How to send your comments

Your feedback is important in helping to provide the most accurate and highest quality information.

Send your comments by using the online reader comment form at https://www14.software.ibm.com/webapp/iwm/web/signup.do?lang=en_US &source=swg-rcf.

Consumability survey

You are invited to tell IBM how to improve the consumability of software products. If you want to help IBM make IBM® FileNet® P8 easier to use, take the Consumability Survey at http://www.ibm.com/software/data/info/consumability-survey/.

Contacting IBM

To contact IBM customer service in the United States or Canada, call 1-800-IBM-SERV (1-800-426-7378).

To learn about available service options, call one of the following numbers:
- In the United States: 1-888-426-4343
- In Canada: 1-800-465-9600

For more information about how to contact IBM, see the Contact IBM Web site at http://www.ibm.com/contact/us/.

Installing IBM FileNet Workplace XT

You must install Workplace XT on a Web application server. After you install the software, you must also configure the Web application server to work with Workplace XT. You can then deploy and use the Workplace XT application.

"Planning and preparing for the IBM FileNet Workplace XT installation"
Planning and preparation tasks for IBM FileNet Workplace XT are required before installation. Complete these preparation tasks and capture IBM FileNet P8 environment installation values in the Installation and Upgrade Worksheet before you begin to install IBM FileNet Workplace XT. You can then use the worksheet to complete your installation.

"Installing and configuring IBM FileNet Workplace XT" on page 5
You can install IBM FileNet Workplace XT on a Web application server in your IBM FileNet P8 environment. After you install, you must also install client software for other IBM FileNet P8 components. You can then configure the application server and deploy the Workplace XT application.

"Configuration and startup tasks" on page 51
After you install Workplace XT, you must also configure settings for the FileNet P8 environment. Some of these configuration settings are required, and some are optional.

"Installing optional components" on page 60
Workplace XT provides additional components that you can install and use. You can also deploy multiple Workplace XT instances.

Planning and preparing for the IBM FileNet Workplace XT installation

Planning and preparation tasks for IBM FileNet Workplace XT are required before installation. Complete these preparation tasks and capture IBM FileNet P8 environment installation values in the Installation and Upgrade Worksheet before you begin to install IBM FileNet Workplace XT. You can then use the worksheet to complete your installation.

The planning information and preparation tasks for IBM FileNet Workplace XT are located in the *Plan and Prepare Your Environment for IBM FileNet P8* Guide.

"Definition of installation roles" on page 2
The tasks in this guide and the rows in the Installation and Upgrade Worksheet are organized by administrative roles. Your organization might have different roles, and some of the responsibilities of listed roles will vary from those assigned by default in this documentation.

"Using the installation and upgrade worksheet" on page 3
The Installation and Upgrade Worksheet is a Microsoft® Excel spreadsheet (p8_worksheet.xls). The worksheet describes the properties and parameters required to complete IBM FileNet P8 installation, upgrade, and configuration programs, and provides a way to record the values you assign to these properties and parameters.

"IBM FileNet Workplace XT port numbers" on page 5
IBM FileNet Workplace XT requires various ports to communicate with the other components in the FileNet P8 Platform environment. You can review your requirements and check the availability of the ports.

Definition of installation roles

The tasks in this guide and the rows in the Installation and Upgrade Worksheet are organized by administrative roles. Your organization might have different roles, and some of the responsibilities of listed roles will vary from those assigned by default in this documentation.

Installation administrator

- Runs IBM FileNet P8 installers during initial setup.
- Runs the Configuration Manager tool during initial setup, followed by starting IBM FileNet Enterprise Manager.
- Runs IBM FileNet P8 Upgrade programs during upgrades.
- Abbreviated as IA. Responsible for coordinating the information described in this worksheet. The information itself will require the input from the other roles.

The role of IA is usually filled by an IBM FileNet Certified Professional (FCP).

Information technology administrator

- Responsible for the networking and operating systems settings required by IBM FileNet P8.
- Responsible for performing certain security configurations.
- Abbreviated as ITA. Responsible for providing the information in the rows in the *Installation and Upgrade Worksheet* with a value of ITA in the **Role** column.

Security administrator

- Responsible for configuring the directory servers required by IBM FileNet P8 components, including Content Engine and Application Engine.
- Creates and maintains directory server user and group accounts.
- Abbreviated as SA. Responsible for providing the information in the rows in the *Installation and Upgrade Worksheet* with a value of SA in the **Role** column.

Database administrator

- Creates, configures, maintains database installations and database or table spaces.
- Responsible for creating database accounts needed by IBM FileNet P8.
- For purposes of this documentation, the database administrator is expected to have responsibilities regarding the JDBC data sources.
- Abbreviated as DBA. Responsible for providing the information in the rows in the *Installation and Upgrade Worksheet* with a value of DBA in the **Role** column.

Application server administrator

- Responsible for providing the application servers required by IBM FileNet P8.
- Responsible for application server administrative accounts.
- Abbreviated as ASA. Responsible for providing the information in the rows in the *Installation and Upgrade Worksheet* with a value of ASA in the **Role** column.

IBM FileNet P8 administrator

- This role designation actually refers to the administrator or administrators who perform regular maintenance of Content Engine, Process Engine Application Engine, Workplace or Workplace XT.

- The administrator who logs on to Enterprise Manager by using the gcd_admin account or an object_store_admin account is considered an IBM FileNet P8 administrator.
- Abbreviated as P8A. Responsible for providing the information in the rows of the *Installation and Upgrade Worksheet* with a value of P8A in the **Role** column.

E-mail Administrator

- Creates an e-mail account that will be used to configure the Notification Tab of the Process Task Manager so that Process Engine can send e-mail notifications to end users. (Required only if you use this feature.)
- Abbreviated as EA.

Using the installation and upgrade worksheet

The Installation and Upgrade Worksheet is a Microsoft Excel spreadsheet (p8_worksheet.xls). The worksheet describes the properties and parameters required to complete IBM FileNet P8 installation, upgrade, and configuration programs, and provides a way to record the values you assign to these properties and parameters.

Administrators who are preparing the environment for installation or upgrade of IBM FileNet P8 components must use the worksheet during their preparation tasks to record the appropriate values and provide them to the Installation Administrator who runs the installation or upgrade programs.

Some of the features of the Installation and Upgrade Worksheet are:
- **Instructions**: describes the worksheet and includes a button that runs the Customize Worksheet macro.
- The two highlighted columns, **Property or Parameter** and **ENTER YOUR VALUE HERE**, provide the simplest view of the requirement. The others add identifying information and help you sort and filter the rows usefully.
- The **Role** column assigns each row to an administrator and uses the following acronyms:
  - ITA: Information Technology Administrator
  - ASA: Application Server Administrator
  - DBA: Database Administrator
  - SA: Security Administrator
  - P8A: IBM FileNet P8 Administrator
- Property definitions are contained in the column titled **Description**.
- Some rows, though not all, contain a hyperlink in the **IC help link** column. Click this hyperlink to run a query against the IBM Information Center, which opens with the Search Results pane showing the topics that contain the words in the query phrase. Browse the search results until you have enough information to be able to enter a value in the Worksheet row.

  "Running the Customize Worksheet macro" on page 4
  The Customize Worksheet macro lets you extract only those rows that describe your environment.

  "Autofiltering and sorting the Worksheet" on page 4
  There are several ways to organize the Worksheet to make finding properties and entering values easier.

Running the Customize Worksheet macro

The Customize Worksheet macro lets you extract only those rows that describe your environment.

Important: For support of the full range of built-in filter and macro features, use Microsoft Excel to view the Installation and Upgrade Worksheet file. You can use other spreadsheet programs to view the file; however, filter and macro support can vary. For example, in Calc from OpenOffice.Org, the column filters work as expected, but the Customize Worksheet button does not.

To run the Customize Worksheet macro:

1. Open the Installation and Upgrade Worksheet (`p8_worksheet.xls`) and click the **Instructions** worksheet (also called a tab).

2. Scroll down until you see the button representing the Customize Worksheet macro. Click the button.

3. Select the components and options that describe the environment you are preparing for IBM FileNet P8.
   * Installation or Upgrade
   * FileNet P8 Components
   * Application Server type
   * Operating system
   * Database type
   * Directory Server type
   * Number of object stores (adds new sets of rows for creating additional data sources)
   * Name of customized sheet

4. Click **OK**. The macro copies the rows that fulfill your selection criteria into a new worksheet with the name you entered. Enter the values for your environment into this new worksheet.

5. Click the name of the new worksheet at the bottom of the Excel window. Add your preparation values into this new worksheet.

6. Notice that the new worksheet has buttons at the top titled **Show Installer View** and **Show Full View**, depending on its state. The **Show Installer View** displays only those columns that you need while running installation or configuration programs.

Autofiltering and sorting the Worksheet

There are several ways to organize the Worksheet to make finding properties and entering values easier.

AutoFiltering is a quick way to display only those rows that meet a certain criteria. To use AutoFilter:

1. Make sure AutoFiltering is enabled. (Select the entire row with the column headers, then click **Data** → **Filter** → **Autofilter**.) AutoFilter arrows will appear to the right of the column labels.

2. Click the **AutoFilter** arrow in the **Installation or Configuration Program** column header and select the program you are interested in (for example, PE installer).

3. Click the **AutoFilter** arrow in the **Setup Type** column header, select **Custom**, and specify **Setup Type contains Installation**.

4. For a custom AutoFilter, click the **AutoFilter** in any column header, select **Custom**, and specify Setup Type contains "Installation".

5. To turn off AutoFiltering in a column, click the column **AutoFilter** arrow and select **(All)**.
6. To reorder rows alphabetically, do a Sort:
   a. Click anywhere in a column, for example, Column A Role.

      The only possible values in the Role column are ASA, SA, DBA, ITA, and P8A. Sorting on Role therefore groups the rows by this attribute, in alphabetic order. Several other columns also have a limited number of possible values which means they can be usefully sorted.
   b. Click the **Sort Ascending** icon in the Excel toolbar, or use the **Data → Sort** menu command. The rows sort on Role.

      Sorting the Worksheet reassigns row numbers. If you refer to rows by number, be aware that row numbers change if you change the sort order.

IBM FileNet Workplace XT port numbers

IBM FileNet Workplace XT requires various ports to communicate with the other components in the FileNet P8 Platform environment. You can review your requirements and check the availability of the ports.

The table below lists the default port numbers used by IBM FileNet Workplace XT.

WebSphere® Application Server	9080
WebSphere Application Server SSL	9443
WebLogic Server	7001
WebLogic Server SSL	7002
JBoss Application Server	8080
JBoss Application Server SSL	8443
Process Engine (RMI)	32771
Component Manager (Event Port) **Remember:** Ensure that this port number is open if you are using Component Manager. On UNIX systems, this port is closed by default.	32773
Web Services Reliable Messaging Client Port	32767

Installing and configuring IBM FileNet Workplace XT

You can install IBM FileNet Workplace XT on a Web application server in your IBM FileNet P8 environment. After you install, you must also install client software for other IBM FileNet P8 components. You can then configure the application server and deploy the Workplace XT application.

"Installing the IBM FileNet Workplace XT documentation" on page 6
Before you install and configure IBM FileNet Workplace XT, you can install the documentation so that it will be available during the process. Install the documentation on the same Web application server where the main FileNet P8 Platform documentation is installed.

"Installing IBM FileNet Workplace XT" on page 7
You can choose to install Workplace XT interactively, with the installation program, or silently using a response file with installation parameters.

"Installing IBM FileNet Workplace XT software updates" on page 13
After you install the IBM FileNet Workplace XT software, you must install any
service packs, fix packs, and interim fixes required for Workplace XT.

"Installing the latest Content Engine Client files on Workplace XT servers" on
page 13
The Content Engine Client software enables communication between the
Workplace XT and the Content Engine. Install the latest release or fix pack
version of the Content Engine Client files on all Workplace XT servers.

"Installing the latest Process Engine Client files on Workplace XT servers" on
page 15
The Process Engine Client software enables communication between the
Workplace XT and the Process Engine. Install the Process Engine Client files on
all Workplace XT servers.

"Configuring Workplace XT on the Web application server" on page 18
After you install Workplace XT and any necessary software updates, you must
configure your Web application server to work with the application. You can
choose the appropriate configuration tasks for your application server type and
environment. Workplace XT can only be deployed in a container-managed
application server environment.

"Deploying Workplace XT on the Web application server" on page 44
After you install and configure Workplace XT, you must deploy the application
on the Web application server. You can recreate the WAR or EAR files before
you deploy to capture any configuration changes from software updates.

Installing the IBM FileNet Workplace XT documentation

Before you install and configure IBM FileNet Workplace XT, you can install the
documentation so that it will be available during the process. Install the
documentation on the same Web application server where the main FileNet P8
Platform documentation is installed.

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 documentation
server. Version information is available in the FileNet P8 Platform help topic **Help
Directory → About the documentation - IBM FileNet P8 4.5 → Documentation
version and build information**.

To update your FileNet P8 Platform documentation, download the zip file from the
IBM Information Management support page (http://www.ibm.com/software/
data/support/).

Copy the PDF of this guide into the `ecm_help/installation/WorkplaceXT`
installation directory on the documentation server before you re-index for the
search function. This ensures that the guide is available for future use and is
searchable from the FileNet P8 Platform Documentation online help.

To install Workplace XT documentation:

Because Workplace XT is an expansion product for FileNet P8 Platform, you must
add the associated Workplace XT documentation to an existing installation of the
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

topic Installing and re-indexing expansion-products, custom, and auxiliary documentation in the task Installing IBM FileNet P8 Platform documentation.

Installing IBM FileNet Workplace XT

You can choose to install Workplace XT interactively, with the installation program, or silently using a response file with installation parameters.

"Installing IBM FileNet Workplace XT interactively"
The installation program 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.

"Installing IBM FileNet Workplace XT silently" on page 9
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.

Installing IBM FileNet Workplace XT interactively

The installation program 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.

Before you install IBM FileNet Workplace XT:

- Make sure your installation location meets the requirements specific to IBM FileNet Workplace XT outlined in the *IBM FileNet P8 Hardware and Software Requirements*.
- You must have installed and configured a supported Web 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.
- For an accessible install process of Workplace XT, follow the procedures provided for the silent install method, "Running the Workplace XT installation silently" on page 12.
- 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:
  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.
- 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 High Availability Technical Notice*.
- In the installation 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 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:

Option	Description
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:

   a. Run the appropriate installation program for your operating system.

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`

   b. 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`

   (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`.

For more information about response files, see "Generating the silent installation response files" on page 10.

5. Complete the Workplace XT installation program screens.
6. View the `web_client_install_log_1.1.4.0.txt` file located in *install_path*/IBM/FileNet/WebClient.

   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.

Installing 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:

• Make sure your installation location meets the requirements specific for IBM FileNet Workplace XT outlined in the *IBM FileNet P8 Hardware and Software Requirements*.

• You must have installed and configured a supported Web 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.

• 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 High Availability Technical Notice*.

  "Encrypting passwords for silent installation and upgrades"
  Several passwords are required to silently install Workplace XT. You can encrypt these passwords using a tool provided with Process Engine before you enter them into the silent installation resource files.

  "Generating the silent installation response files" on page 10
  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.

  "Running the Workplace XT installation silently" on page 12
  You can use a command-line option with a response file to install Workplace XT silently.

Encrypting passwords for silent installation and upgrades:

Several passwords are required to silently install Workplace XT. You can encrypt these passwords using a tool provided with Process Engine before you enter them into the silent installation resource files.

To encrypt a password:

1. Locate the encryption tool on the installation media for Process Engine software, in the `Tools` directory.
2. Copy the following files from the `Tools` directory to a local drive:
   • `fnencryptutils` - an executable .jar file

- RunEncryptApp - a batch file
3. Run RunEncryptApp.bat to invoke the application.
4. Enter the appropriate values for the user name and password.
5. Reenter the password to confirm it.
6. Click **Generate**.
7. An encrypted password will be generated and displayed in the encrypted password field.
8. Copy and paste this password into the appropriate silent installation resource file.

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.

The response file generated from the installation program can generate a full response file recorded from an actual install, or 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.

"Creating a response file by editing the silent input file"
The Workplace XT installation software package includes a silent installation input file that you can edit with your environment values. The installation program can use the values specified in the file to complete the installation.

"Creating a response file by recording an installation" on page 11
You can 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.

"Creating a response file from a template" on page 11
You can 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.

Creating a response file by editing the silent input file:

The Workplace XT installation software package includes a silent installation input file that you can edit with your environment values. The installation program can use the values specified in the file to complete the installation.

To create a response file:
1. Locate the 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").

Creating a response file by recording an installation:

You can 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.

To create a response file:
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.

Creating a response file from a template:

You can 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.

To create a response file:
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.

Running the Workplace XT installation silently:

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

To install the 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:

Option	Description
UNIX	Log in as a user with read, write, and execute access to the directory where you plan to install 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.

Option	Description
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.

Option	Description
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`.

   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.

Installing IBM FileNet Workplace XT software updates

After you install the IBM FileNet Workplace XT software, you must 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, see the *IBM FileNet P8 Compatibility Matrix*.
2. Open the readmes for the software updates and perform the installation procedures provided.

Installing the latest Content Engine Client files on Workplace XT servers

The Content Engine Client software enables communication between the Workplace XT and the Content Engine. Install the latest release or fix pack version of the Content Engine Client files on all Workplace XT servers.

"Installing the latest Content Engine Client files on Workplace XT servers interactively"
The installation wizard provides an interactive way to install the Content Engine Client files. You can use the values from your worksheet to fill in the required value for each field on the wizard screens.

"Installing the latest Content Engine Client files on Workplace XT servers silently" on page 14
The command-line method provides a way to silently install the Content Engine Client files. You can use the values in your installation worksheet to edit the silent input text file before you run the installation.

Installing the latest Content Engine Client files on Workplace XT servers interactively

The installation wizard provides an interactive way to install the Content Engine Client files. You can use the values from your worksheet to fill in the required value for each field on the wizard screens.

To install the Content Engine Client files:

1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data** → **Filter** → **AutoFilter** command is enabled. To view only Content Engine Client values, filter by **CE Client Installer** in the **Installation or Configuration Program** column.

2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.

3. 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` for Windows or `tmp` UNIX, on the machine where Workplace XT is installed.
   - Execute permission on the Content Engine Client install software.

4. Copy the Content Engine Client installation software from the Content Engine installation directory to the temporary directory. The version of the installation software must match the version of Content Engine.

5. Expand the TAR or ZIP of the Content Engine Client installation software within the temporary directory.

6. Access the Content Engine client installation software.

7. Run the command for your operating system. *CE_version* is the version of your Content Engine, for example, 4.5.1.

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`
Linux on System z	`P8CE-CLIENT-`*CE_version*`-ZLINUX.BIN`

8. Complete the installation program screens using the parameters you collected in the Installation and Upgrade Worksheet.

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

   You can also choose to have the installation program 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.

Installing the latest Content Engine Client files on Workplace XT servers silently

The command-line method provides a way to silently install the Content Engine Client files. You can use the values in your installation worksheet to edit the silent input text file before you run the installation.

To install the Content Engine Client files:

1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data → Filter → AutoFilter** command is enabled. To view only Content Engine Client values, filter by **CE Client Installer** in the **Installation or Configuration Program** column.

2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.

3. 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` for Windows or `tmp` for UNIX, on the machine where Workplace XT is installed.
   - Execute permission on the Content Engine Client install software.
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 of the Content Engine Client install software within the temporary directory.
6. Make a backup copy of the input file:
   `CEClient_silent_install.txt`
7. Edit the silent input file to reflect the appropriate responses for your update. The silent input file provides instructions for editing the values. Use the parameters recorded in the Installation and Upgrade Worksheet for your installation.
8. Navigate to the path containing the Content Engine Client installation program.
9. Run one of the commands in the following table to perform the silent install. In the commands,

   CE_version is the version of your Content Engine, for example, 4.5.1.

   path is the path that contains the installation program.

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

Installing the latest Process Engine Client files on Workplace XT servers

The Process Engine Client software enables communication between the Workplace XT and the Process Engine. Install the Process Engine Client files on all Workplace XT servers.

"Installing the latest Process Engine Client files on Workplace XT servers interactively" on page 16
The installation wizard provides an interactive way to install the Process Engine Client files. You can use the values you collected on your worksheet to fill in the required value for each field on the wizard screens.

"Installing the latest Process Engine Client files on Workplace XT servers silently" on page 17
You can install the Process Engine Client software on the Workplace XT server by using a silent input text file and running the installation program from the command line. Use the values in your installation worksheet to edit the silent input text file before you run the installation.

Installing the latest Process Engine Client files on Workplace XT servers interactively

The installation wizard provides an interactive way to install the Process Engine Client files. You can use the values you collected on your worksheet to fill in the required value for each field on the wizard screens.

To install the Process Engine Client files:

1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data → Filter → AutoFilter** command is enabled. To view only Process Engine Client values, filter by **PE Client Installer** in the **Installation or Configuration Program** column.

2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.

3. 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` for Windows or `tmp` UNIX, on the machine where Workplace XT is installed.
   - Execute permission on the Process Engine Client install software.

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 of the 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 installation program when the program is run.

6. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.

7. Access the Process Engine Client software.

8. Run the appropriate installation program for your operating system.

   In the program command, *version* is the version of your Process Engine client and server installation.

Operating System	Installation Program
AIX	P8PE-CLIENT-*version*-AIX.BIN
HPUX	P8PE-CLIENT-*version*-HPUX.BIN
HPUXi	P8PE-CLIENT-*version*-HPUXI.BIN
Linux	P8PE-CLIENT-*version*-LINUX.BIN
Solaris	P8PE-CLIENT-*version*-SOL.BIN
Windows	P8PE-CLIENT-*version*-WIN.EXE
Linux on System z	P8PE-CLIENT-*version*-ZLINUX.BIN

9. Use the parameters you gathered in the Installation and Upgrade Worksheet to complete the program panels and run the installation.

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

   You can also choose to have the installation program 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.

Installing the latest Process Engine Client files on Workplace XT servers silently

You can install the Process Engine Client software on the Workplace XT server by using a silent input text file and running the installation program from the command line. Use the values in your installation worksheet to edit the silent input text file before you run the installation.

To install the Process Engine Client files:

1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data** ￫ **Filter** ￫ **AutoFilter** command is enabled. To view only Process Engine Client values, filter by **PE Client Installer** in the **Installation or Configuration Program** column.

2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.

3. 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` for Windows or `tmp` UNIX, on the machine where Workplace XT is installed.

   - Execute permission on the Process Engine Client install software.

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 of the 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 installation program when the program is run.

6. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.

7. Access the Process Engine Client software.

8. Copy the `PEClient_silent_input.txt` file to a local directory.

9. Edit the file to reflect the appropriate responses for your installation. The silent input file provides instructions for editing the values. Use the parameters recorded in the Installation and Upgrade Worksheet for your installation.

10. Change the `Variable_CheckboxXT` line to the following:

    `-V Variable_CheckboxXT="true"`

11. Run the Process Engine Client installer with the command for your operating system.

    In the command, *version* is the version of your Process Engine Client and server installation, for example, 4.5.1.

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

Configuring Workplace XT on the Web application server

After you install Workplace XT and any necessary software updates, you must configure your Web application server to work with the application. You can choose the appropriate configuration tasks for your application server type and environment. Workplace XT can only be deployed in a container-managed application server environment.

"Configuring Workplace XT on WebSphere Application Server"
After you install the Workplace XT software, you must configure WebSphere Application Server to work with Workplace XT. You can also configure changes for optional modes like SSO.

"Configuring IBM FileNet Workplace XT on WebLogic Server" on page 27
After you install Workplace XT, you must configure WebLogic Server to work with Workplace XT. You can also configure changes for optional modes like SSO.

"Configuring Workplace XT on JBoss Application Server" on page 37
Before you can use the Workplace XT Web application, you must first configure the application to work with your application server. You can also configure changes for optional modes like SSO.

Configuring Workplace XT on WebSphere Application Server

After you install the Workplace XT software, you must configure WebSphere Application Server to work with Workplace XT. You can also configure changes for optional modes like SSO.

"Editing web.xml for Single Sign On (SSO) on WebSphere Application Server" on page 19
If you plan to use Workplace XT in an SSO environment, you must edit the web.xml file to create the appropriate settings.

"Configuring WebSphere Application Server to support user tokens and WebDAV connections for Workplace XT" on page 21
Some applications that work with Workplace XT, such as Application Integration, eForms, and Records Manager, require that you enable the generation and acceptance of user tokens on the Workplace XT server. This configuration is also required to enable WebDAV connections. You can verify these settings in the Bootstrap Settings in the Site Preferences.

"Configuring Java Virtual Machine settings for memory on WebSphere Application Server" on page 23
You can use the Java Virtual Machine settings in the WebSphere Application Server to configure memory settings for resource usage.

"Configuring Lightweight Third Party Authentication (LTPA) on WebSphere Application Server" on page 23
To set up LTPA security, you must configure settings to match on both the Content Engine Web application server and the Workplace XT Web application server. If your Workplace XT and Content Engine are on the same WebSphere Application Server, you do not need to configure LTPA.

"Configuring stand-alone Lightweight Directory Access Protocol (LDAP)" on page 25
In order to enable communication between WebSphere and Content Engine, you must configure LDAP settings on the WebSphere Application Server.

"Configuring Lightweight Directory Access Protocol (LDAP) for federated repositories" on page 26
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.

Editing web.xml for Single Sign On (SSO) on WebSphere Application Server:

If you plan to use Workplace XT in an SSO environment, you must edit the `web.xml` file to create the appropriate settings.

SSO in an IBM Tivoli Access Manager environment might require additional configuration in WebSphere Application Server. For more details, see your IBM product documentation.

To edit `web.xml` for SSO:

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

4. Set the **perimeterChallengeMode** parameter to true, as in the following example:
   ```
   <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 following settings are an example of the default settings:

```
<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 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></param-value>
  ```

- **ssoProxyHost**: Set the value to the SSO proxy host server name. Typically, this will be a full domain-qualified hostname. For example, if the host URL where Workplace XT is deployed is

```
http://deploy_server/WorkplaceXT
```

and the corresponding SSO proxy host URL is

```
http://sso_proxy_server/WorkplaceXT
```

then use the following:

```
<param-name>ssoProxyHost</param-name>
<param-value>sso_proxy_server</param-value>
```
- **ssoProxyPort**: Set the value to the HTTP port on the SSO proxy host. For example:
```
<param-name>ssoProxyPort</param-name>
<param-value>80</param-value>
```
- **ssoProxySSLPort**: Set the value to the HTTP port on the SSO proxy host, if defined 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.

Configuring WebSphere Application Server to support user tokens and WebDAV connections for Workplace XT:

Some applications that work with Workplace XT, such as Application Integration, eForms, and Records Manager, require that you enable the generation and acceptance of user tokens on the Workplace XT server. This configuration is also required to enable WebDAV connections. You can verify these settings in the Bootstrap Settings in the Site Preferences.

To configure WebSphere Application Server to support user tokens and WebDAV connections:

1. Stop WebSphere Application Server, if it is running.
2. (For installations with Content Engine at 4.5.0 or 4.5.1) 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.) 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

b. If there is an entry in the **Generic JVM arguments**, 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 installation path of 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, this path might include a `samples` directory under the `config` directory. Verify the location of the file before you enter the path.

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.

On WebSphere Application Server 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.

Important: Do not create a custom module if you are enabling JAAS for any component using SSO. Creating the custom module makes SSO unusable.

1) Navigate to the JAAS login module settings in the Security area of the administration console.

WebSphere Application Server 6.1
> Navigate to **Security → Secure administration, applications, and infrastructure → JAVA Authentication and Authorization Service → System logins → WEB_INBOUND → JAAS login modules**.

WebSphere Application Server 7.0
> Navigate to **Security → Global security → JAVA Authentication and Authorization Service → System logins → WEB_INBOUND**.

2) Click **New** to create a new custom login module.

3) Enter the following with no spaces for the **Module class name** setting:
   `com.filenet.ae.authentication.`
     `loginmodule.UserTokenWSLoginModule`

4) Apply and save your changes to the master configuration.

6. Enable trust association and specify the interceptor setting.

a. Navigate to the trust association settings in the Security area of the administration console.

   WebSphere Application Server 6.1
   Navigate to **Security** → **Secure administration, applications, and infrastructure** → **Web security** → **Trust association**.

   WebSphere Application Server 7.0
   Navigate to **Security** → **Global security** → **Web and SIP security** → **Trust association**.

b. In the Trust associations settings, set **Enable trust association**.

c. Under **Additional Properties**, click **Interceptors**.

d. Add a new Interceptor, and enter the following for the **Interceptor class name**: `com.filenet.ae.authentication.tai.UserTokenInterceptor`

e. Apply and save your changes to the master configuration.

7. Restart WebSphere Application Server.

Configuring Java Virtual Machine settings for memory on WebSphere Application Server:

You can use the Java Virtual Machine settings in the WebSphere Application Server to configure memory settings for resource usage.

To configure Java Virtual Machine settings:

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

Option	Description
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**

3. Set the **Initial heap size** and **Maximum heap size**.

   Refer to your application server vendor recommendation for Initial and Maximum heap size values. For more information on performance tuning, see the *IBM FileNet P8 Performance Tuning Guide*.

4. Save your changes.

Configuring Lightweight Third Party Authentication (LTPA) on WebSphere Application Server:

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

Attention: If you already have Application Engine or Workplace XT in your environment, you do not need to create the LTPA settings on the Content Engine. Skip to the step for creating the settings on the Workplace XT server.

To configure LTPA:

1. Create the LTPA settings on the Content Engine WebSphere Application Server.

   a. On the Content Engine server, 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 that is larger than the default for the **Timeout value for forwarded credentials between servers** setting on WebSphere Application Server 6.1 or the **LTPA timeout** setting on WebSphere Application Server 7.0. 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 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**.

   i. Verify that a message similar to the following message is displayed: The keys were successfully exported to the file `ltpa_key_name`.

   j. Click **Import keys**.

   k. Click **OK**, then click **Save changes directly to the master configuration**.

   l. Stop and restart WebSphere Application Server.

   m. 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. Create the LTPA settings on the Workplace XT WebSphere Application Server server.

   a. On the Workplace XT server, 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.

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.

Configuring stand-alone Lightweight Directory Access Protocol (LDAP):

In order to enable communication between WebSphere and Content Engine, you must configure LDAP settings on the WebSphere Application Server.

To configure stand-alone LDAP:

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 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 **Use Java 2 security to restrict application access to local resources** 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**
   - **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 (clear) the **Use Java 2 security to restrict application access to local resources** flag.

   The IBM FileNet P8 Platform uses 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.

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

12. Stop and restart the application server.

Configuring 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.

To configure LDAP for federated repositories:

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 **Use Java 2 security to restrict application access to local resources** 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**
   - **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 (clear) the **Use Java 2 security to restrict application access to local resources** flag.

   The IBM FileNet P8 Platform uses 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.

Configuring IBM FileNet Workplace XT on WebLogic Server

After you install Workplace XT, you must configure WebLogic Server to work with Workplace XT. You can also configure changes for optional modes like SSO.

"Editing web.xml for SSO (WebLogic)" on page 28
If you plan to use Workplace XT in an SSO environment, you must edit the web.xml file to create the appropriate settings.

"Setting up JAAS login information for authentication and memory settings for resource usage on WebLogic Server for UNIX" on page 30
You can set up JAAS login information and configure memory settings by editing WebLogic Server files.

"Enabling trust between the Content Engine domain and the Workplace XT domain" on page 35
In order to enable Workplace XT to communicate with the Content Engine, you must enable trust between the Content Engine domain and the Workplace XT domain. This configuration applies only if Workplace XT and Content Engine are in different domains.

"Configuring Lightweight Directory Access Protocol (LDAP)" on page 35
To enable communication between Content Engine and Workplace XT, you

must configure the LDAP settings on the Workplace XT server to match the settings on the Content Engine server. You can create these settings with an Authentication Provider in WebLogic Server.

"Configuring WebLogic Server to support user tokens and WebDAV connections for Workplace XT used with other applications" on page 36 If you are using Workplace XT with other applications, such as Application Integration, eForms, or Records Manager, you must enable support for user tokens and WebDAV connections. You can verify these settings in the Bootstrap Settings in the Site Preferences.

Editing web.xml for SSO (WebLogic):

If you plan to use Workplace XT in an SSO environment, you must edit the `web.xml` file to create the appropriate settings.

SSO in an IBM Tivoli Access Manager environment might require additional configuration. For more details, see your IBM product documentation.

To edit `web.xml` for SSO:

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

   The file is in the following path: *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 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 value:

```
<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 value:

```
<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 it is defined or used to access Workplace XT pages. For example:

```
<param-name>ssoProxySSLPort</param-name>
ram-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 the following sample exclude list:

```
<filter>
<filter-name>AE PreprocessorFilter</filter-name>
<filter-class>
com.filenet.ae.toolkit.server.servlet.filter.PreprocessorFilter
</filter-class>
<init-param>
<param-name>challenge</param-name>
<param-value>false</param-value>
</init-param>
<init-param>
<param-name>exclude</param-name>
<param-value>
/css/*,
/download/*,
/FnJavaV1Files/*,
/images/*,
/js/*,
/scripts/*,
/Samples*,
/Source*,
/UI-INF/*,
/integrationCommand*,
/integrationResponse*,
/transport*,
/ContainerError.jsp,
/ContainerLogin.jsp,
/ContainerSignout.jsp,
```

```
/ServerErrorDisplay.jsp,
/containerSecured/*,
/WcmError.jsp,
/WcmSignIn.jsp,
/GetUserToken.jsp,
/GetTokenSignIn.jsp,
/GetUserInformation.jsp,
/axis,
/axis/services/*,
/servlet/AdminServlet,
/setCredentials,
/SOAPMonitor,
/webdav*,
/P8BPMWSBroker/*,
*j_security_check*,
/bootstraptransport,
/pingSession,
/unitTests*,
/NoContent.jsf,
/ServerErrorDisplay.jsf,
/LoadJSResources.jsf,
/SessionError.jsf
</param-value>
</init-param>
</filter>
```

6. (For SSO with Kerberos only) In the `security-constraint` section, 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>
```

as shown in the following sample:

```
<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.

Setting up JAAS login information for authentication and memory settings for resource usage on WebLogic Server for UNIX:

You can set up JAAS login information and configure memory settings by editing WebLogic Server files.

"Setting up JAAS login information for authentication and memory settings for resource usage on WebLogic Server for UNIX" on page 31
You can set up JAAS login information and configure memory settings for UNIX by editing WebLogic Server files.

"Setting up JAAS login information for authentication and memory settings for resource usage on WebLogic Server for Windows" on page 33
You can set up JAAS login information and configure memory settings for Windows by editing WebLogic Server files.

Setting up JAAS login information for authentication and memory settings for resource usage on WebLogic Server for UNIX:

You can set up JAAS login information and configure memory settings for UNIX by editing WebLogic Server files.

To set up JAAS LOGIN information:
1. Stop WebLogic Server, if it is running.
2. Make a backup copy of the `setDomainEnv.sh` file.
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* m

     where *size* is the value, in MB, of the MaxPermSize. Refer to your application server vendor recommendation for a value for your configuration. For more information about performance tuning, see the *IBM FileNet P8 Performance Tuning Guide*.
   - For systems using JRockit Java:

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

     -Xgc:gencon

   If the MEM_ARGS variable does not exist, add it to the `setDomainEnv.sh` file.
4. If your application server uses the IBM JVM, edit the JAVA_OPTIONS variable to improve performance.

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

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.

Important: 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, this path might include a samples directory under the config directory. Verify the location of the file before you enter the path.

Option	Description

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"`

6. Save and close the `setDomainEnv.sh` file.
7. Make a backup copy of the application server startup script.
   - If you are using a WebLogic Server domain, modify `startWebLogic.sh`.
   - If you are not using a WebLogic Server domain, modify `startWLS.sh`.
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.

```
${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} ${JAAS_LOGIN}
-Dweblogic.Name=${SERVER_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}
${JAAS_LOGIN}
-Dweblogic.Name=${SERVER_NAME}
-Djava.security.policy=
${WL_HOME}
/server/lib/weblogic.policy
${PROXY_SETTINGS}
${SERVER_CLASS}
>"${WLS_REDIRECT_LOG}" 2>&1
fi
```

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

Setting up JAAS login information for authentication and memory settings for resource usage on WebLogic Server for Windows:

You can set up JAAS login information and configure memory settings for Windows by editing WebLogic Server files.

To set up JAAS LOGIN information:

1. Stop WebLogic Server, if it is running.
2. Make a backup copy of the setDomainEnv.cmd file.
3. Do one of the following to edit the MEM_ARGS variable in the setDomainEnv.cmd 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* m
     where *size* is the value, in MB, of the MaxPermSize. Refer to your application server vendor recommendation for a value for your configuration. For more information about performance tuning, see the *IBM FileNet P8 Performance Tuning Guide*.
   - For systems using JRockit Java:
     Find the MEM_ARGS variable and append the following to any existing settings:
     -Xgc:gencon
   If the MEM_ARGS variable does not exist, add it to the startup script.
4. If your application server uses the IBM JVM, edit the JAVA_OPTIONS variable to improve performance.
   Modify the following line in the setDomainEnv.cmd 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 Server.

   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.

   Important: 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, this path
   might include a samples directory under the config directory. Verify the
   location of the file before you enter the path.

   ```
   @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.cmd` file.

7. Make a backup copy of the application server startup script.
   - If you are using a WebLogic Server domain, modify `startWebLogic.cmd`.
   - If you are not using a WebLogic Server domain, modify `startWLS.cmd`.

8. Use a text editor to open and edit the application server startup script.

9. Add JAAS_LOGIN section as indicated in the example below.

   ```
   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.

Enabling trust between the Content Engine domain and the Workplace XT domain:

In order to enable Workplace XT to communicate with the Content Engine, you must enable trust between the Content Engine domain and the Workplace XT domain. This configuration applies only if Workplace XT and Content Engine are in different domains.

To enable trust between the WebLogic Server domains:

1. On the Content Engine server, prepare the WebLogic Server Administration Console for editing.

   Remember: 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.

2. In the advanced security settings for your domain, enter a password for the domain.

3. Save and activate your changes.

4. Restart the WebLogic Server if needed.

5. On the Workplace XT server, prepare the WebLogic Server Administration Console for editing.

6. 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 Workplace XT domain.

7. Repeat this procedure in each domain for which you want to enable trust.

Configuring Lightweight Directory Access Protocol (LDAP):

To enable communication between Content Engine and Workplace XT, you must configure the LDAP settings on the Workplace XT server to match the settings on the Content Engine server. You can create these settings with an Authentication Provider in WebLogic Server.

To configure Workplace XT:

1. Refer to your Content Engine installation worksheet and the WebLogic Server Administration Console settings for **Compatibility Security → Realms for Authentication Provider, users, and groups** on your Content Engine.

2. On the Workplace XT WebLogic Server, create a new Authentication Provider of the same type as the LDAP Authentication Provider on the Content Engine.

3. Configure the new Authentication Provider to have the same Provider Specific LDAP settings as the Content Engine provider.
   - **Group Base DN**
   - **User Name Attribute**
   - **Port**
   - **User Base DN**
   - **Principal**
   - **Credential**
   - **Confirm Credential**
   - **Host**
   - **User From Name Filter**
   - **Group From Name Filter**

4. For both the default and the new Authentication Provider, under **Common Settings for DefaultAuthenticator**, ensure that the **Control Flag** is set to SUFFICIENT.

5. Save your changes.

6. Restart the application server.

Configuring WebLogic Server to support user tokens and WebDAV connections for Workplace XT used with other applications:

If you are using Workplace XT with other applications, such as Application Integration, eForms, or Records Manager, you must enable support for user tokens and WebDAV connections. You can verify these settings in the Bootstrap Settings in the Site Preferences.

To configure WebLogic Server to support user tokens and WebDAV connections:

1. Stop WebLogic Server, if it is running.

2. (For installations with Content Engine at 4.5) 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) 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 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.

Configuring Workplace XT on JBoss Application Server

Before you can use the Workplace XT Web application, you must first configure the application to work with your application server. You can also configure changes for optional modes like SSO.

"Configuring Java and JAAS settings"
The Workplace XT Web application on JBoss Application Server requires certain JAVA and JAAS settings to work within the IBM FileNet P8 environment. These settings enable authentication and regulate memory resource usage.

"Configuring JBoss Application Server for Workplace XT" on page 39
Before you can use the Workplace XT Web application, you must first configure the application to work with JBoss Application Server.

"Configuring JBoss Application Server to support user tokens and WebDAV connections for Workplace XT used with other applications" on page 43
If you are using Workplace XT with other applications, such as Application Integration, eForms, or Records Manager, you must enable support for user tokens and WebDAV connections. You can verify these settings in the Bootstrap Settings in the Site Preferences.

Configuring Java and JAAS settings:

The Workplace XT Web application on JBoss Application Server requires certain JAVA and JAAS settings to work within the IBM FileNet P8 environment. These settings enable authentication and regulate memory resource usage.

"Configuring Java and JAAS settings for UNIX"
You can use settings in the JBoss Application Server on UNIX to set up JAVA and memory settings, and JAAS login information for authentication for your Workplace XT Web application.

"Configuring Java and JAAS settings for Windows" on page 38
You can use settings in the JBoss Application Server on Windows to set up JAVA and memory settings, and JAAS login information for authentication for your Workplace XT Web application.

Configuring Java and JAAS settings for UNIX:

You can use settings in the JBoss Application Server on UNIX to set up JAVA and memory settings, and JAAS login information for authentication for your Workplace XT Web application.

To configure Java and JAAS settings:

1. Stop JBoss Application Server, if it is running.

2. Make a backup copy of the JBoss Application Server 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 Application Server is installed, as shown in the following example:

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

      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 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 Performance Tuning Guide*.

   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.

Configuring Java and JAAS settings for Windows:

You can use settings in the JBoss Application Server on Windows to set up JAVA and memory settings, and JAAS login information for authentication for your Workplace XT Web application.

To configure Java and JAAS settings:

1. Stop JBoss Application Server, 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 Application Server is installed, as shown in the following example:

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

      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 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 Performance Tuning Guide*.

    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, 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.

Configuring JBoss Application Server for Workplace XT:

Before you can use the Workplace XT Web application, you must first configure the application to work with JBoss Application Server.

To configure JBoss Application Server:

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

   Tip: 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>
   ```

   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 Workplace XT, you must give the user read/write permissions on the following folder:

   install_path/IBM/FileNet/WebClient

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

4. (JBoss Application Server 4.0.5 only) Delete the following directory:

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

   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 your JBoss Application Server documentation for details.

5. (JBoss Application Server 5.0.1 only) Remove the JSF 1.2 that is part of the JBoss Application Server 5.0.1 installation.

Removing the files and the references to the files in the `web.xml` file enables JBoss Application Server 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.
JBossDelegatingInjectionProvider</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 Application Server logging to prevent unexpected behavior in the deployed IBM FileNet software.

When logging is disabled, error messages will still be displayed in the JBoss Application Server 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>
```

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 Application Server as follows, to verify that configuration
changes were successful:

Option	Description
UNIX	./run.sh
Windows	run.bat

Configuring JBoss Application Server to support user tokens and WebDAV connections for Workplace XT used with other applications:

If you are using Workplace XT with other applications, such as Application Integration, eForms, or Records Manager, you must enable support for user tokens and WebDAV connections. You can verify these settings in the Bootstrap Settings in the Site Preferences.

To configure JBoss Application Server to support user tokens and WebDAV connections:

1. Stop JBoss Application Server, 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.

   Tip: 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>
   <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>
   ```

On Windows, use double back slash (\\) in place of the forward slash in the wcmApiConfigPath entry, as shown in the following example:

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

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`.

Deploying Workplace XT on the Web application server

After you install and configure Workplace XT, you must deploy the application on the Web application server. You can recreate the WAR or EAR files before you deploy to capture any configuration changes from software updates.

"Re-creating the WAR and EAR files"
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, you must re-create the WAR and EAR files.

"Deploying IBM FileNet Workplace XT on WebSphere Application Server" on page 45
After you install and configure Workplace XT, you must deploy the Web application on your WebSphere Application Server.

"Deploying Workplace XT on WebLogic Server" on page 48
After you install and configure Workplace XT, you must deploy the client application on your WebLogic Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

"Deploying Workplace XT on JBoss Application Server" on page 49
After you install and configure Workplace XT, you must deploy your client application on your JBoss Application Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

Re-creating the WAR and EAR files

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, you must re-create the WAR and EAR files.

To 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:

Option	Description
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:

Option	Description
UNIX	*install_path*/IBM/FileNet/WebClient/ deploy/create_web_client_ear.sh
Windows	*install_path*\IBM\FileNet\WebClient\ deploy\create_web_client_ear.bat

Deploying IBM FileNet Workplace XT on WebSphere Application Server

After you install and configure Workplace XT, you must deploy the Web application on your WebSphere Application Server.

"Deploying Workplace XT on WebSphere Application Server 6.1"
Deploy Workplace XT as an application in the WebSphere 6.1 administrative console. You can specify the context root for the application URL during the deployment.

"Deploying Workplace XT on WebSphere Application Server 7.0" on page 46
Deploy Workplace XT as an application in the WebSphere administrative console. You can specify the context root for the application URL during the deployment.

Deploying Workplace XT on WebSphere Application Server 6.1:

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

To deploy Workplace XT:
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 path name 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**.

   Tip: The context root is the name of the application you log in to using the web interface. Do not include spaces. If you enter `WorkplaceXT`, the application URL will be http://*server_name*:*port#*/WorkplaceXT.
5. Click **Prompt me only when additional information is required**, and click **Next** to proceed to deploying a new application.
6. Complete the dialogs for installing a new application, using the following settings:

- On the Select installation options page, for **Application name**, enter **Workplace XT**, or the name you chose to call the application.
- On the Map modules to servers page, for **Clusters and Servers**, specify the server you are planning to use. Verify that your application name is selected and associated with the correct server and nodes, if applicable.
- On the Map virtual hosts for Web modules page, for **virtual host**, choose the default_host.

7. Save your configuration.
8. Navigate to **Applications** ˃ **Enterprise Applications** ˃ **Workplace XT** ˃ **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 XT** ˃ **Manage Modules**.
13. Click **Workplace XT**.
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 XT** ˃ **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

Deploying Workplace XT on WebSphere Application Server 7.0:

Deploy Workplace XT as an application in the WebSphere administrative console. You can specify the context root for the application URL during the deployment.

To deploy Workplace XT:
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 path name 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. Click **Fast Path**, and click **Next**. Complete the dialogs for installing a new application, using the following settings:

- On the Select installation options page, for **Application name**, enter **Workplace XT**, or the name you chose to call the application.

- On the Map modules to servers page, for **Clusters and Servers**, specify the server you are planning to use. Verify that your application name is selected and associated with the correct server and nodes, if applicable.

- On the Map virtual hosts for Web modules page, for **virtual host**, choose the default_host.

- (WAR file deployment only) On the Map context roots for Web modules page, for **Context root**, specify `WorkplaceXT`, or whatever you want to call the application.

  Tip: The context root is the name of the application you log in to using the Web interface. If you enter `WorkplaceXT`, the application URL will be http://*server_name*:*port#*/WorkplaceXT.

5. Save your configuration.

6. Navigate to **Applications** → **Enterprise Applications** → **Workplace XT** → **Class loading and update detection**.

7. Set the polling interval for updated files with a number appropriate for your environment, for example, 3 seconds.

8. Change the **Class loader order** to **Classes loaded with local class loader first (parent last)**.

9. Click **Apply**.

10. Click **Workplace XT** → **Manage Modules**.

11. In the **Modules** column, click **Workplace XT**.

12. 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.

13. Navigate to **Enterprise Applications** → **Workplace XT** → **Security role to user/group mapping**.

14. Select the **All Authenticated role** and click **Map Special Subjects**.

15. Map the **All Authenticated** role to the **All Authenticated in Applications** realm.

16. Select the **Everyone** role and click **Map Special Subjects**.

17. Map the **Everyone** role to **Everyone**.

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

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.

Deploying Workplace XT on WebLogic Server

After you install and configure Workplace XT, you must deploy the client application on your WebLogic Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

"Renaming the WAR file"
You can rename the WAR file 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.

"Deploying Workplace XT on WebLogic Server 9.2"
To use Workplace XT as a Web application, you must deploy it as an application in the WebLogic Server Administration Console. You can specify the context root for the application URL during the deployment.

Renaming the WAR file:

You can rename the WAR file 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.

To rename the WAR file:

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

Option	Description
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

Where *custom_name* is the context root or custom application name you choose.

Deploying Workplace XT on WebLogic Server 9.2:

To use Workplace XT as a Web application, you must deploy it as an application in the WebLogic Server Administration Console. You can specify the context root for the application URL during the deployment.

To deploy Workplace XT:
1. From the WebLogic Server Administration Console, navigate to the domain you initially created for the Application Engine.
2. Prepare the WebLogic Server Administration Console to deploy the application.
3. Choose whether to deploy from an exploded folder, *install_path*/IBM/ FileNet/WebClient, or from the WAR or EAR file, such as web_client.war or web_client.ear in *install_path*/deploy.
4. 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.
5. Finish the deployment, and save and activate your changes.

   Tip: To verify that the deployment was successful, expand **Web Applications**. The web application Workplace XT is listed.

   Tip: To troubleshoot the deployment, check the following log:

   WLS_install_path/user_projects/domains/*domain_name*/servers/*server_name*/ logs/*server_name*.log
6. After deployment is complete, start Workplace XT (or your custom application name) in the WebLogic Server Administration Console.
7. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
8. Restart Process Task Manager and Component Manager.
9. 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.

Deploying Workplace XT on JBoss Application Server
After you install and configure Workplace XT, you must deploy your client application on your JBoss Application Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

"Deploying as Workplace XT or custom name using a WAR file"
You can rename the WAR file if you are using a WAR file for deployment, and you want to use WorkplaceXT 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.

"Deploying Workplace XT" on page 50
After you install and configure Workplace XT, you must deploy the Workplace XT application on your JBoss Application Server.

Deploying as Workplace XT or custom name using a WAR file:

You can rename the WAR file if you are using a WAR file for deployment, and you want to use WorkplaceXT 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`.

Important: 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 as a custom name:

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

Option	Description
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

Deploying Workplace XT:

After you install and configure Workplace XT, you must deploy the Workplace XT application on your JBoss Application Server.

To deploy Workplace XT:
1. Stop JBoss Application Server, if it is running.
2. Deploy Workplace XT according to your deployment type.

Option	Description
For exploded directory deployment only	1. On the JBoss Application Server, copy the `WorkplaceXT` folder from: *install_path*/IBM/FileNet/WebClient/ to: *JBOSS_home*/server/*server_name*/deploy/ 2. Append the extension .war to the `WorkplaceXT` folder: *JBOSS_home*/server/*server_name*/deploy/ `WorkplaceXT.war` 3. (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.

Option	Description
For WAR file deployment only	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	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.

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 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

After you install Workplace XT, you must also configure settings for the FileNet P8 environment. Some of these configuration settings are required, and some are optional.

"Setting Workplace XT bootstrap preferences" on page 52
By successfully signing in to Workplace XT and saving the bootstrap preferences, you verify basic Workplace XT functionality such as user authentication as well as communication and storing of data in Content Engine.

"Configuring folder preferences" on page 55
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.

"Configuring the Process Engine Connection Point for Workplace XT" on page 56
Before users can access tasks and work items from Workplace XT, you must configure the Connection Point on the Workplace XT server.

"Setting up SSL security for Workplace XT" on page 56
After you complete your installation, you can configure Workplace XT to direct sign-ins through a Secure Socket Layer (SSL) HTTPS connection.

"Perform additional configuration tasks" on page 59
After you have completed the installation and configuration tasks, your Workplace XT Web application is functional. There are additional tasks that you can complete or review to prepare the system for general use.

Setting Workplace XT bootstrap preferences

By successfully signing in to Workplace XT and saving the bootstrap preferences, you verify basic Workplace XT functionality such as user authentication as well as communication and storing of data in Content Engine.

"Setting the bootstrap properties on first login"
Six bootstrap preference groups are available for configuring the first time you sign in to Workplace XT.

"Verifying that a single index has been added for Application Name on the site preferences object store" on page 54
To properly index access roles and improve login performance on Workplace XT, an index is created for Application Name on the object store that contains the Workplace XT site preferences. Verify this index setting after you have successfully configured the bootstrap preferences.

"Enabling user access to the Workflow Subscription Wizard" on page 54
To allow users to create workflow subscriptions, you must configure the PWDesigner access role using the Workplace XT 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.

Setting the bootstrap properties on first login

Six bootstrap preference groups are available for configuring the first time you sign in to Workplace XT.

To set the bootstrap properties:

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

      http://*WorkplaceXTServerName*:*port*#/WorkplaceXT

      Important: *WorkplaceXTServerName* cannot be localhost or an IP address.
   b. Enter a user name and password, and then click **Log in**. The Bootstrap Preferences page opens.

      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. Enter security info (required for SSL only).
   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 "Setting up SSL security for Workplace XT" on page 56 for instructions on setting up SSL security for one or more Workplace XT installations.

Important: After you have configured SSL, the Site Preferences application also runs under SSL to protect the guest account's user ID and password. This means that when you run Site Preferences on an unsecured server that redirects sign-ins to an SSL server, you will be editing the Bootstrap preferences of the SSL server (stored in the `bootstrap.properties` file). This does not affect the General, Object Store, and Shortcut preferences, which are retrieved from the preferences file saved in the object store.

3. Configure user token settings.

   User Tokens are used by IBM FileNet P8 applications to launch into each other without the need for an additional login.

   You can specify a Token timeout interval (1 - 15 minutes) for Workplace XT.

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 on to 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**.

   The bootstrap preferences are saved in the `bootstrap.properties` file, and not in the site preferences file. The default location for this file is `AE_install_path/FileNet/Config/AE`.

   a. Select an object store from the **Object store location** choice list. The preferences file will be saved in this object store. Workplace 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.

      If no documentation URL is specified, the Workplace XT Help link will default to http://localhost.

5. Add Application Engine Administrators (*ae_admin_user*). Add the users and groups that will perform Workplace XT administration tasks to the Application Engine Administrators role.

   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 Workplace Site Preferences. Launch Workplace XT and navigate to **Admin → Site Preferences → Access Roles**.

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

After the initial bootstrap configuration, users with the Application Engine Administrators (*ae_admin_user*) role can change any of these preferences by signing into Workplace XT and navigating to **Admin** → **Site Preferences** → **Bootstrap**.

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`.

In a web farm or clustered environment, all Workplace XT installations share site preferences by using the same `bootstrap.properties` file. For more information, see the *IBM FileNet P8 High Availability Technical Notice*.

Verifying 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 Workplace XT, an index is created for Application Name on the object store that contains the Workplace XT site preferences. Verify this index setting after you have successfully configured the bootstrap preferences.

To verify the index setting:
1. Start Enterprise Manager.
2. In the left pane, expand the **Object Stores** folder.
3. Expand the object store node where your site preferences are stored.
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, click **OK**. The verification is complete. Skip the remaining steps in this procedure.
   - If the **Indexed** field shows Not indexed, continue with the following steps to change the setting.
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.

Enabling user access to the Workflow Subscription Wizard

To allow users to create workflow subscriptions, you must configure the PWDesigner access role using the Workplace XT 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.

To enable user access:

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 with the `workplacescript.xml` file to add accounts to the Workflow Designer role. In Enterprise Manager, right-click the domain root node or the object store node and select **All tasks** → **Run Security Script Wizard**

   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**.

Configuring 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.

Configuring folder preferences applies only to systems where the Content Engine component is at version 4.0 or 4.5.

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 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 *install_path*`/WebClient/WorkplaceXT/ addons folder` and the files it contains 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.
10. Select the file `WorkplaceXTFolderPreferencesSecurity.vbs`.
11. Click **OK**.
12. Click **Import**.
13. When the status message displays, click **OK**.

14. Repeat this procedure on all object stores where you want to enable folder preferences.

Configuring the Process Engine Connection Point for Workplace XT

Before users can access tasks and work items from Workplace XT, you must configure the Connection Point on the Workplace XT server.

Make sure that you have already completed the tasks in the *IBM FileNet P8 Platform Installation and Upgrade Guide* for creating a Process Engine Isolated Region and creating a Process Engine Connection Point.

To configure the connection point:

1. Log into 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**.
6. (For new environments only) Initialize the isolated region.

   Important: Performing this step in an existing environment will destroy all data in the existing 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.
   g. Close the Process Configuration Console.
7. In Workplace XT, click **Tasks** to confirm that Workplace XT is communicating with Process Engine.
8. Sign out of Workplace XT.

Setting up SSL security for Workplace XT

After you complete your installation, you can configure Workplace XT to direct sign-ins through a Secure Socket Layer (SSL) HTTPS connection.

Workplace XT supports the following methods of configuring an SSL environment:
- Full SSL support - A single Workplace XT server, where all of the software is running under SSL.
- One server SSL redirect - One Workplace XT server set up to redirect logon attempts on the non-SSL port to the SSL port.

  "Setting up full SSL support on a single Workplace XT server" on page 57
  To set up full SSL support, enable SSL on the preferred application server.

"Setting up SSL redirect on a single Workplace XT server"
To set up SSL redirect, enable SSL on the Web application server, set your bootstrap preferences, update the base URL, and sign out.

"Using Java applets in an SSL Environment" on page 59
Java applets in an SSL environment can create SSLHandshakeException issues.

Setting up full SSL support on a single Workplace XT server

To set up full SSL support, enable SSL on the preferred application server.

To set up full SSL support:

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

Setting up SSL redirect on a single Workplace XT server

To set up SSL redirect, enable SSL on the Web application server, set your bootstrap preferences, update the base URL, and sign out.

To set up SSL redirect:

1. Enable SSL on the application server that runs Workplace XT. See your SSL documentation for details.

2. Optional: (WebSphere Application Server and JBoss Application Server only) If you have made custom changes to your `web.xml` file, copy the `web.xml` file from the deploy location back into the install location, *install_path*/IBM/ FileNet/WebClient/WorkplaceXT/WEB_INF, before editing for SSL redirect.

Option	Description
WebSphere Application Server	*WAS_HOME*/profiles/default/ installedApps/*node_name*/WorkplaceXT.ear/ web_client.war
JBoss Application Server	*JBOSS_HOME*/server/*server_name*/deploy/ *application_name*.war or .ear

3. Create a backup copy of your `web.xml` file.

4. (WebSphere Application Server 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) 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>
```

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 Server and JBoss Application Server 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 Workplace XT server for the SSL Host entry.

For more information, see "Setting the bootstrap properties on first login" on page 52.

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://*WorkplaceXTServerName: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-SSLport*#/WorkplaceXT

The login is redirected to the SSL-enabled port, then back to the non-SSL enabled port after login is complete. A warning displays 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

Java applets in an SSL environment can create SSLHandshakeException issues.

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 server. 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

After you have completed the installation and configuration tasks, your Workplace XT Web application is functional. There are additional tasks that you can complete or 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*.

Installing optional components

Workplace XT provides additional components that you can install and use. You can also deploy multiple Workplace XT instances.

"Installing Workplace XT Application Integration"
You can install Application Integration if you want to integrate Workplace XT with your Microsoft Office applications and Outlook. The Application Integration software must be installed on each system that will use Workplace XT Application Integration.

"Deploying multiple Workplace XT instances" on page 63
You can deploy 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.

Installing Workplace XT Application Integration

You can install Application Integration if you want to integrate Workplace XT with your Microsoft Office applications and Outlook. The Application Integration software must be installed on each system that will use Workplace XT Application Integration.

Verify that the client machine meets the platform requirements documented in the *IBM FileNet P8 Hardware and Software Requirements*.

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

To use Application Integration with Workplace XT, you must configure your application server to support user token settings.

"Installing the Application Integration software interactively"
You can use the installation program to run an interactive installation for the Application Integration software.

"Installing the Application Integration software silently" on page 61
To install the Application Integration software silently, save the
ApplicationIntegration.exe file locally and then run the file at the command line using the /s switch.

"Verifying your Workplace XT Application Integration installation" on page 62
You can verify your Workplace XT Application Integration installation using Microsoft Word.

Installing the Application Integration software interactively
You can use the installation program to run an interactive installation for the Application Integration software.

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 box, find a location on your system in which to download and save the `ApplicationIntegration.exe` file locally, and then click **Save**. After the file is saved to your hard drive, double-click the file to run the installation program.

   A setup preparation dialog displays momentarily, followed by the Welcome dialog for Workplace XT Application Integration.
5. Click **Next**.
6. Read and accept the license agreement, and click **Next**. If you do not accept the license agreement, you cannot continue with the install.
7. Select the applications you want to integrate, and then click **Next**.

   Tip: You can use the keyboard to select applications. Use the 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.

   Tip: The Application Integration Toolkit Components option is required to use Application Integration.
8. Under **Install to**, the default installation path is displayed. Click **Change** to specify a different location on the Change Current Destination Folder dialog, and then click **OK**.
9. Click **Next**.

   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.
10. 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 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.

    Tip: You can also leave these fields blank and enter the information when you log in to Workplace XT Application Integration.
11. Click **Next**.
12. Click **Install**.
13. After the install is complete, click **Finish** to complete the setup process.

Installing the Application Integration software silently

To install the Application Integration software silently, save the `ApplicationIntegration.exe` file locally and then run the file at the command line using the /s switch.

To install the Application Integration software silently:
1. Log in to the client machine using an account that has Administrator privileges.
2. Sign in to Workplace XT.
3. Click **Author**, and then click **General Tools**.

4. Scroll down and click **Download Application Integration for Microsoft Office,** and then click **Save**.

5. In the Save As dialog, find a location on your machine in which to download and save the `ApplicationIntegration.exe` file locally, and then click **Save**.

6. Open a DOS command window and change the current directory to the one where `ApplicationIntegration.exe` resides.

7. Type the following at the command line:

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

Use the /s switch to launch the execution silently and include the /qn switch in the msi string to make msi run silently.

See the following optional command line values you can also use. Append the values within the string containing the msi 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=*host name*	Enter the name of the web server running Workplace XT.
PORT=*port number*	Enter the Web server assigned port number.
APPLICATION=*application name*	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=0	Set Application Integration to not use single sign-on (SSO).
SINGLE_SIGNON=1	Set Application Integration to use single sign-on (SSO).
/L*v C:\temp\AppIntSetup.txt	Verbose installation log and specify log location.

Verifying your Workplace XT Application Integration installation

You can verify your Workplace XT Application Integration installation using Microsoft Word.

To verify your installation:

1. Start Microsoft Word.

2. Click **File** → **IBM FileNet Workplace XT** → **Open Document** → **Select Item**. The Login dialog box opens.

   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.

   If you did not enter the Workplace XT Address information during the installation, you can enter the server name, port number, and application name that define the Workplace XT address. The server name is the name of the web server running Workplace XT, the port number is the assigned port of the Web server, and the application is the directory where you installed the Workplace XT application files.

4. Close all dialog boxes and close Microsoft Word.

Deploying multiple Workplace XT instances

You can deploy 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.

Note:

- 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 installation 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, for example, *install_path*/IBM/FileNet/Config/WebClient2

Remember: 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, WorkplaceXT2.

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`.

    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.

    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:

    a. Remove the value entered for the `prefName` setting. This entry contains the name of the site preferences file stored on the object store.

    b. Remove the value entered for the `objectStoreId`. This entry contains the object store name where your site preferences will be stored.

    c. Remove or edit any of the other values as needed.

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

    If you have not 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 to deploy your second instance of Workplace XT using a unique name, such as Workplace XT2.

    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`

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`

    You must specify a unique name for the Preference name for each deployment.

Upgrading Workplace XT

You can upgrade your existing Workplace XT installation to the most recent version. You will likely also need to upgrade the FileNet P8 component client software and redeploy the Workplace XT application. You can also upgrade optional components.

"Upgrading the Workplace XT software"
Updating the Workplace XT software is the first step in the application upgrade process. The upgrade installer re-creates the Workplace XT folder structure and files needed for Workplace XT.

"Installing IBM FileNet Workplace XT software updates" on page 72
After you install the IBM FileNet Workplace XT software, you must install any service packs, fix packs, and interim fixes required for Workplace XT.

"Installing the latest Content Engine Client files on Workplace XT servers" on page 72
The Content Engine Client software enables communication between the Workplace XT and the Content Engine. Your Content Engine Client version on each Workplace XT server must match the version of your Content Engine server installation.

"Installing the latest Process Engine Client files on Workplace XT servers" on page 76
The Process Engine Client software enables communication between the Workplace XT and the Process Engine. You must install the Process Engine Client files on all Workplace XT servers.

"Deploying Workplace XT after upgrading" on page 82
After you upgrade the Workplace XT software and install any additional software updates, you must redeploy the application on the Web application server. You can re-create the WAR or EAR file before you deploy to include changes from software updates.

"Migrating folder preferences" on page 90
If you defined folder preferences in your previous Workplace XT version, you must migrate the folder preferences after you upgrade your software. You cannot use Workplace XT until you migrate the folder preferences.

"Upgrading optional components" on page 90
You can upgrade the additional or optional components that you installed to work with Workplace XT.

Upgrading the Workplace XT software

Updating the Workplace XT software is the first step in the application upgrade process. The upgrade installer re-creates the Workplace XT folder structure and files needed for Workplace XT.

"Enabling screen reader assistive technology for the upgrade tool" on page 68
If you plan to use JAWS screen reader for the upgrade program, you must perform the following tasks before you begin the upgrade.

"Upgrading the Workplace XT software" on page 68
As part of the Workplace XT software upgrade, you must back up and undeploy your existing installation. You can then run the setup program to upgrade the software.

"Configuring folder preferences" on page 71
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. Folder preferences do not apply if your Content Engine is at version 3.5.

Enabling screen reader assistive technology for the upgrade tool

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

To enable screen reader assistive technology:
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.

Upgrading the Workplace XT software

As part of the Workplace XT software upgrade, you must back up and undeploy your existing installation. You can then run the setup program to upgrade the software.

To upgrade the Workplace XT software:
1. Log in to the application server where Workplace XT is installed.

Option	Description
UNIX	Log in as a user with read, write, and execute access to the directory where you plan to upgrade Workplace XT.
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 WPXT Services Manager service.
4. (Windows only) Using the Windows Task Manager, verify that no `javaw.exe` processes are running.

   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.

Option	Description
WebSphere Application Server	1. Back up the deployed Workplace XT directory: *WAS_HOME*/profiles/default/ installedApps/*node_name*/ WorkplaceXT.ear/web_client.war 2. Stop the Workplace XT application from the WebSphere administration console. 3. Uninstall the Workplace XT application from **Enterprise Applications**. 4. Save the changes and stop the WebSphere server. 5. Delete the temporary Workplace XT directory (default: WorkplaceXT) from: *WAS_HOME*/profiles/default/temp/ *node_name*/instance/
WebLogic Server	1. From the WebLogic Server administration console, stop the Workplace XT Web Application Module. 2. Make a backup copy of the Workplace XT folder: *install_path*/WorkplaceXT 3. Delete the Workplace XT Web Application Module. 4. Stop the WebLogic Server.
JBoss Application Server 4.0.x	1. Stop the JBoss Application Server server. 2. Back up the deployed Workplace XT application: *JBOSS_HOME*/server/*server_name*/deploy/ *application_name*.war or .ear 3. Delete the Workplace XT application from the deployed location. 4. 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:

Option	Description
To upgrade Workplace XT interactively:	1. Access the Workplace XT installation software package. 2. Launch the appropriate Setup program (`WorkplaceXT-1.1.4.0-operating_system`.bin or `.exe`) and follow the prompts in the wizard screens. The installer detects and copies settings from the previous Workplace XT installation.
To upgrade Workplace XT silently:	1. Access the Workplace XT installation software package, and copy the `XT_silent_upgrade.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. 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"`). 3. 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.

    If you are upgrading Workplace XT to 1.1.4.0, but your Content Engine is still
    at 4.0, the following step does not apply.

Option	Description
WebSphere	1. Copy the `authentication-websphere.jar` file from here: *install_path*/FileNet/WebClient/ WorkplaceXT/authenticationFiles to here: *WAS_home*/AppServer/lib/ext 2. 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	1. Copy the `authentication-weblogic.jar` file from here: *install_path*/FileNet/WebClient/ WorkplaceXT/authenticationFiles to here: WL_home/server/lib/mbeantypes 2. 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	Copy the `authentication-utils.jar` file from here: *install_path*/FileNet/WebClient/ WorkplaceXT/authenticationFiles to here: *JBOSS_home*/server/*server_name*/lib

Configuring 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. Folder preferences do not apply if your Content
Engine is at version 3.5.

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

For more information on using folder preferences, see the IBM FileNet Workplace XT help topic **User help** › **Actions, preferences, and tools** › **Actions** › **Manage folders**.

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 Enterprise Manager.

3. Right click on an object store where you want to enable folder preferences.

4. Select **All Tasks** › **Import All**.

5. Click the **Import Options** tab.

6. For the **Import Manifest** File field, click **Browse**.

7. 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.

8. Click **OK**.

9. Click the **Scripts** tab.

10. In the **Run-Type** dropdown list, choose **Post import**.

11. 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.

12. Click OK.

13. Click **Import**.

14. When the status message displays, click **OK**.

15. Repeat this procedure on all object stores where you want to enable folder preferences.

Installing IBM FileNet Workplace XT software updates

After you install the IBM FileNet Workplace XT software, you must 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, see the *IBM FileNet P8 Compatibility Matrix*.

2. Open the readmes for the software updates and perform the installation procedures provided.

Installing the latest Content Engine Client files on Workplace XT servers

The Content Engine Client software enables communication between the Workplace XT and the Content Engine. Your Content Engine Client version on each Workplace XT server must match the version of your Content Engine server installation.

"Installing the latest Content Engine Client files on Workplace XT servers interactively" on page 73

The installation wizard provides an interactive way to install the Content Engine Client files. You can use the values from your worksheet to fill in the required value for each field on the wizard screens.

"Installing the latest Content Engine Client files on Workplace XT servers silently" on page 74
The command-line method provides a way to silently install the Content Engine Client files. You can use the values in your installation worksheet to edit the silent input text file before you run the installation.

Installing the latest Content Engine Client files on Workplace XT servers interactively

The installation wizard provides an interactive way to install the Content Engine Client files. You can use the values from your worksheet to fill in the required value for each field on the wizard screens.

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

To install the Content Engine Client files:

1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data** ⟩ **Filter** ⟩ **AutoFilter** command is enabled. To view only Content Engine Client values, filter by **CE Client Installer** in the **Installation or Configuration Program** column.

2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.

3. 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` for Windows or `tmp` for UNIX, on the machine where Workplace XT is installed.

   - Execute permission on the Content Engine Client install software.

4. Verify that there is a current backup of Workplace XT.

5. 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.

6. Expand the TAR or ZIP of the Content Engine Client install software within the temporary directory.

7. Close all instances of Workplace XT and any other client applications. From the application server administrative console, stop and undeploy Workplace XT.

Option	Description
WebSphere Application Server	Stop and undeploy the Workplace XT application.
WebLogic Server	Stop and undeploy the Workplace XT application.
JBoss Application Server	Run the shutdown command.

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

Option	Description

WebLogic Server 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 Server 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`

9. Access the Content Engine Client update software.
10. Run the command for your operating system. *CE_version* is the version of your Content Engine, for example, 4.5.1.

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`
Linux on System z	`P8CE-CLIENT-`*CE_version*`-ZLINUX.BIN`

11. Complete the installation program screens using the parameters you collected in the Installation and Upgrade Worksheet.

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

    You can also choose to have the installation program 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.

Installing the latest Content Engine Client files on Workplace XT servers silently

The command-line method provides a way to silently install the Content Engine Client files. You can use the values in your installation worksheet to edit the silent input text file before you run the installation.

Important: 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:

1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data** → **Filter** → **AutoFilter** command is enabled. To view only Content Engine Client values, filter by **CE Client Installer** in the **Installation or Configuration Program** column.

2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.

3. 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` for Windows or `tmp` for UNIX, on the machine where Workplace XT is installed.

   • Execute permission on the Content Engine Client install software.

4. Verify that there is a current backup of Workplace XT.

5. Close all instances of Workplace XT and any other client applications. From the application server administrative console, stop and undeploy Workplace XT.

Option	Description
WebSphere Application Server	Stop and undeploy the Workplace XT application.
WebLogic Server	Stop and undeploy the Workplace XT application.
JBoss Application Server	Run the shutdown command.

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

Option	Description

WebLogic Server 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`

Option	Description

WebLogic Server 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`

7. 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.

8. Expand the TAR or ZIP of the Content Engine Client install software within the temporary directory.

9. Make a backup copy of the input file, `CEClient_silent_install.txt`.

10. Edit the silent input file to reflect the appropriate responses for your update. The silent input file provides instructions for editing the values. Use the parameters recorded in the Installation and Upgrade Worksheet for your installation.

11. Navigate to the path containing the Content Engine Client installation program.

12. Run one of the commands in the following table to perform the silent install. In the commands,

    CE_version is the version of your Content Engine, for example, 4.5.1.

    path is the path that contains the installation program.

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

Installing the latest Process Engine Client files on Workplace XT servers

The Process Engine Client software enables communication between the Workplace XT and the Process Engine. You must install the Process Engine Client files on all Workplace XT servers.

"Installing the latest Process Engine Client files on Workplace XT servers interactively"
The installation wizard provides an interactive way to install the Process Engine Client files. You can use the values you collected on your worksheet to fill in the required value for each field on the wizard screens.

"Installing the latest Process Engine Client files on Workplace XT servers silently" on page 79

Installing the latest Process Engine Client files on Workplace XT servers interactively

The installation wizard provides an interactive way to install the Process Engine Client files. You can use the values you collected on your worksheet to fill in the required value for each field on the wizard screens.

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

To install the Process Engine Client files:
1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data** → **Filter** → **AutoFilter** command is enabled. To view only Process Engine Client values, filter by **PE Client Installer** in the **Installation or Configuration Program** column.
2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.
3. 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` for Windows or `tmp` for UNIX, on the machine where Workplace XT is installed.
   - Execute permission on the Process Engine Client install software.
4. Back up the deployed Web application directory.
5. 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.
6. Expand the TAR or ZIP of the 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 installation program when the program is run.
7. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.
8. 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.

   Important: You must do this before you apply the fix pack to the existing installation.

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 you created, copy these files:

`WcmApiConfig.properties`

`web.xml`

to here

`XT_install_path/WorkplaceXT/WEB-INF/`

9. Close all instances of Workplace XT and any other client applications. From the application server administrative console, stop and undeploy Workplace XT.

Option	Description
WebSphere Application Server	Stop and undeploy the Workplace XT application.
WebLogic Server	Stop and undeploy the Workplace XT application.
JBoss Application Server	Run the shutdown command.

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

Option	Description

WebLogic Server 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 Server 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`

11. (JBoss Application Server only) Delete the deployed Web application directory, or WAR or EAR file.

12. Access the Process Engine Client software.

13. Run the appropriate installation program for your operating system.

In the program command, *version* is the version of your Process Engine client and server installation.

Operating System	Installation Program
AIX	P8PE-CLIENT-*version*-AIX.BIN
HPUX	P8PE-CLIENT-*version*-HPUX.BIN
HPUXi	P8PE-CLIENT-*version*-HPUXI.BIN
Linux	P8PE-CLIENT-*version*-LINUX.BIN
Solaris	P8PE-CLIENT-*version*-SOL.BIN
Windows	P8PE-CLIENT-*version*-WIN.EXE
Linux on System z	P8PE-CLIENT-*version*-ZLINUX.BIN

14. Use the parameters you gathered in the Installation and Upgrade Worksheet to complete the program panels and run the installation.

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

   You can also choose to have the installation program 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.

15. (For upgrades from Process Engine 4.0 to 4.5 only) Add required JAR files to the Component Manager library.

   a. Start 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

Installing the latest Process Engine Client files on Workplace XT servers silently

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

To install the Process Engine Client files:

 1. Open your completed Installation and Upgrade Worksheet file.

   Tip: In the worksheet file, verify that the **Data** ⇒ **Filter** ⇒ **AutoFilter** command is enabled. To view only Process Engine Client values, filter by **PE Client Installer** in the **Installation or Configuration Program** column.

2. To download the latest software updates, and to determine which of these updates might be required for use with other components and expansion products, see the *IBM FileNet P8 Compatibility Matrix*.

3. 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` for Windows or `tmp` UNIX, on the machine where Workplace XT is installed.
   - Execute permission on the Process Engine Client install software.

4. Back up the deployed Web application directory.

5. 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.

6. Expand the TAR or ZIP of the 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 installation program when the program is run.

7. From Process Task Manager, stop the Component Manager(s) (if running), then exit the Process Task Manager application.

8. 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.

   Important: You must do this before you apply the fix pack to the existing installation.

   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 you created, copy these files:

   `WcmApiConfig.properties`

   `web.xml`

   to here

   `XT_install_path/WorkplaceXT/WEB-INF/`

9. Close all instances of Workplace XT and any other client applications. From the application server administrative console, stop and undeploy Workplace XT.

Option	Description
WebSphere Application Server	Stop and undeploy the Workplace XT application.
WebLogic Server	Stop and undeploy the Workplace XT application.
JBoss Application Server	Run the shutdown command.

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

Option	Description
WebLogic Server 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 Server 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

11. (JBoss Application Server only) Delete the deployed Web application directory, or WAR or EAR file.
12. Access the Process Engine Client software.
13. Copy the PEClient_silent_input.txt file to a local directory.
14. Edit the file to reflect the appropriate responses for your installation. The silent input file provides instructions for editing the values. Use the parameters recorded in the Installation and Upgrade Worksheet for your installation.
15. Change the Variable_CheckboxXT line to the following:

    -V Variable_CheckboxXT="true"

16. Run the Process Engine Client installer with the command for your operating system.

    In the command, *version* is the version of your Process Engine Client and server installation, for example, 4.5.1.

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

17. (For upgrades from Process Engine 4.0 to 4.5 only) Add required JAR files to the Component Manager library.

   a. Start 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`

Deploying Workplace XT after upgrading

After you upgrade the Workplace XT software and install any additional software updates, you must redeploy the application on the Web application server. You can re-create the WAR or EAR file before you deploy to include changes from software updates.

"Re-creating the WAR and EAR files"
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, you must re-create the WAR and EAR files.

After you install and configure Workplace XT, you must deploy the Web application on your WebSphere Application Server.

After you install and configure Workplace XT, you must deploy the client application on your WebLogic Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

After you install and configure Workplace XT, you must deploy your client application on your JBoss Application Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

Re-creating the WAR and EAR files

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, you must re-create the WAR and EAR files.

To 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:

Option	Description
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:

Option	Description
UNIX	*install_path*/IBM/FileNet/WebClient/ deploy/create_web_client_ear.sh
Windows	*install_path*\IBM\FileNet\WebClient\ deploy\create_web_client_ear.bat

Deploying IBM FileNet Workplace XT on WebSphere Application Server

After you install and configure Workplace XT, you must deploy the Web application on your WebSphere Application Server.

"Deploying Workplace XT on WebSphere Application Server 6.1"
Deploy Workplace XT as an application in the WebSphere 6.1 administrative console. You can specify the context root for the application URL during the deployment.

"Deploying Workplace XT on WebSphere Application Server 7.0" on page 85
Deploy Workplace XT as an application in the WebSphere administrative console. You can specify the context root for the application URL during the deployment.

Deploying Workplace XT on WebSphere Application Server 6.1

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

To deploy Workplace XT:

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 path name 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#*/WorklaceXT. Do not include a space.

6. Click **Prompt me only when additional information is required**, and click **Next** to proceed to deploying a new application.

7. Complete the dialogs for installing a new application, using the following settings:
   - On the Select installation options page, for **Application name**, enter **Workplace XT**, or the name you chose to call the application.
   - On the Map modules to servers page, for **Clusters and Servers**, specify the server you are planning to use. Verify that your application name is selected and associated with the correct server and nodes, if applicable.
   - On the Map virtual hosts for Web modules page, for **virtual host**, choose the default_host.

8. Save your configuration.

9. Navigate to **Applications → Enterprise Applications → Workplace → Class loading and update detection**.

10. Set the polling interval for updated files with a number appropriate for your environment, for example, 3 seconds.

11. Change the **Class loader order** to **Classes loaded with application class loader first**.

12. Click **Apply**.

13. Click **Workplace → Manage Modules**.

14. Click **Workplace**.

15. 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.

16. Navigate to **Enterprise Applications → Workplace → Security role to user/group mapping**.

17. Verify that the **All Authenticated** column is checked for the **"All Authenticated"** role.

18. Verify that the **Everyone?** column is checked for the **Everyone** role.

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`

Deploying Workplace XT on WebSphere Application Server 7.0

Deploy Workplace XT as an application in the WebSphere administrative console. You can specify the context root for the application URL during the deployment.

To deploy Workplace XT:

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 path name 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. Click **Fast Path**, and click **Next**. Complete the dialogs for installing a new application, using the following settings:
   - On the Select installation options page, for **Application name**, enter **Workplace XT**, or the name you chose to call the application.
   - On the Map modules to servers page, for **Clusters and Servers**, specify the server you are planning to use. Verify that your application name is selected and associated with the correct server and nodes, if applicable.
   - On the Map virtual hosts for Web modules page, for **virtual host**, choose the default_host.
   - (WAR file deployment only) On the Map context roots for Web modules page, for **Context root**, specify WorkplaceXT, or whatever you want to call the application.

     Tip: The context root is the name of the application you log in to using the Web interface. If you enter WorkplaceXT, the application URL will be http://*server_name*:*port*#/WorkplaceXT.
5. Save your configuration.
6. Navigate to **Applications › Enterprise Applications › Workplace › Class loading and update detection**.
7. Set the polling interval for updated files with a number appropriate for your environment, for example, 3 seconds.
8. Change the **Class loader order** to **Classes loaded with local class loader first (parent last)**.
9. Click **Apply**.
10. Click **Workplace › Manage Modules**.
11. In the **Modules** column, click **Workplace XT**.
12. 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.
13. Navigate to **Enterprise Applications › Workplace › Security role to user/group mapping**.

14. Select the **All Authenticated role** and click **Map Special Subjects**.
15. Map the **All Authenticated** role to the **All Authenticated in Applications** realm.
16. Select the **Everyone** role and click **Map Special Subjects**.
17. Map the **Everyone** role to **Everyone**.
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

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.

Deploying Workplace XT on WebLogic Server

After you install and configure Workplace XT, you must deploy the client application on your WebLogic Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

"Renaming the WAR file"
You can rename the WAR file 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.

"Deploying Workplace XT on WebLogic Server 9.2" on page 87
To use Workplace XT as a Web application, you must deploy it as an application in the WebLogic Server Administration Console. You can specify the context root for the application URL during the deployment.

Renaming the WAR file

You can rename the WAR file 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.

To rename the WAR file:

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

Option	Description
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

Deploying Workplace XT on WebLogic Server 9.2

To use Workplace XT as a Web application, you must deploy it as an application in the WebLogic Server Administration Console. You can specify the context root for the application URL during the deployment.

To deploy Workplace XT:

1. From the WebLogic Server Administration Console, navigate to the domain you initially created for the Application Engine.
2. Prepare the WebLogic Server Administration Console to deploy the application.
3. Choose whether to deploy from an exploded folder, *install_path*/IBM/ FileNet/WebClient, or from the WAR or EAR file, such as web_client.war or web_client.ear in *install_path*/deploy).
4. 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".
5. Finish the deployment, and save and activate your changes.

   Tip: To verify that the deployment was successful, expand **Web Applications**. The web application Workplace XT is listed.

   Tip: To troubleshoot the deployment, check the following log:

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

6. After deployment is complete, start Workplace XT (or your custom application name) in the WebLogic Server Administration Console.
7. (Windows only) From the Windows Services Console, restart the Process Workplace XT Services Manager service.
8. Restart Process Task Manager and Component Manager.
9. 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.

Deploying Workplace XT on JBoss Application Server

After you install and configure Workplace XT, you must deploy your client application on your JBoss Application Server. You might be required to re-create the WAR or WAR and EAR files before you deploy.

"Deploying as Workplace XT or custom name using a WAR file"
You can rename the WAR file 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.

"Deploying Workplace XT"
After you install and configure Workplace XT, you must deploy the Workplace XT application on your JBoss Application Server.

Deploying as Workplace XT or custom name using a WAR file

You can rename the WAR file 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`.

Important: 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 as a custom name:

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

Option	Description
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`

Deploying Workplace XT

After you install and configure Workplace XT, you must deploy the Workplace XT application on your JBoss Application Server.

To deploy Workplace XT:

1. Stop JBoss Application Server, if it is running.
2. Deploy Workplace XT according to your deployment type.

Option	Description
For exploded directory deployment only	1. On the JBoss Application Server, copy the `WorkplaceXT` folder from: `install_path`/IBM/FileNet/WebClient/ to: `JBOSS_home`/server/`server_name`/deploy/ 2. Append the extension .war to the `WorkplaceXT` folder: `JBOSS_home`/server/`server_name`/deploy/ 3. (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	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	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.

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 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.

Migrating folder preferences

If you defined folder preferences in your previous Workplace XT version, you must migrate the folder preferences after you upgrade your software. You cannot use Workplace XT until you migrate the folder preferences.

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 or 4.5, 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 "Configuring folder preferences" on page 71.
- 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.

To migrate folder preferences:

1. Log in to Workplace XT as an Application Engine Administrator role 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.

Upgrading optional components

You can upgrade the additional or optional components that you installed to work with Workplace XT.

"Upgrading Workplace XT Application Integration"
Upgrading Workplace XT Application Integration is very similar to doing a new installation. You can upgrade Workplace XT Application Integration interactively or silently.

"Upgrading multiple instances of Workplace XT" on page 93

Upgrading Workplace XT Application Integration

Upgrading Workplace XT Application Integration is very similar to doing a new installation. You can upgrade Workplace XT Application Integration interactively or silently.

"Upgrading the Application Integration software interactively" on page 91
You can use the Application Integration installation program to upgrade the software interactively.

"Upgrading the Application Integration software silently" on page 92
To upgrade the Application Integration software silently, save the ApplicationIntegration.exe file locally and then run it at the command line using the /s switch.

"Verifying your Workplace XT Application Integration installation" on page 93
After you install Workplace XT Application Integration, you can test the application by using the new menu items in your Office applications.

Upgrading the Application Integration software interactively

You can use the Application Integration installation program to upgrade the software interactively.

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

To upgrade the software interactively:

1. Log in to the client system 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, specify 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 for Workplace XT Application Integration.
5. Click **Next**.
6.
7.
8. Select the applications you want to integrate, and then click **Next**.

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

   Tip: You can use the keyboard 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.
9. If necesssary, click **Change** to specify an installation location different from the one specified in the **Install to** field. 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.
10. Click **OK**, and **Next**.
11. Verify the server name, port number, and application name that defines the Workplace XT address.

    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.

    You can also leave these fields blank and enter the information when you log in to Workplace XT Application Integration.
12. Click **Next**.
13. Click **Install**.
14. After the install is complete, click **Finish** to complete the setup process.

Upgrading the Application Integration software silently

To upgrade the Application Integration software silently, save the
`ApplicationIntegration.exe` file locally and then run it at the command line using
the /s switch.

To upgrade the software silently:

1. Log in to the client machine using an account that has Administrator privileges.
2. Sign in to Workplace XT.
3. Click **Author**, and then click **General Tools**.
4. Scroll down and click **Download Application Integration for Microsoft Office,**
   and then click **Save**.
5. 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.
6. Open a DOS command window and change the current directory to the one
   where `ApplicationIntegration.exe` resides.
7. Type the following at the command line:

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

   Use the /s switch to launch the execution silently and include the /qn switch
   in the msi string to make msi run silently.

   See the following optional command line values you can also use. Append the
   values within the string containing the msi 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=*host name*	Enter the name of the web server running Workplace XT.
PORT=*port number*	Enter the Web server assigned port number.
APPLICATION=*application name*	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.

Command Line Values	Settings
SINGLE_SIGNON=0	Set Application Integration to not use single sign-on (SSO).
SINGLE_SIGNON=1	Set Application Integration to use single sign-on (SSO).
/L*v C:\temp\AppIntSetup.txt	Verbose installation log and specify log location.

Verifying your Workplace XT Application Integration installation

After you install Workplace XT Application Integration, you can test the application by using the new menu items in your Office applications.

To verify your installation:

1. Start Microsoft Word.

2. From the **File** menu, click **IBM FileNet Workplace XT** → **Open Document** → **Select Item**. The Login dialog opens.

   If you are using SSO and you set the Workplace XT address during installation, the action will perform without the Login dialog. 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.

   If you didn't enter the Workplace XT Address information when you ran the upgrade program, you can 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 and close Microsoft Word.

Upgrading multiple instances of 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 "Upgrading the Workplace XT software" on page 67 with the following modifications:

- In the step "Back up, undeploy, and remove the Workplace XT web application from the J2EE application server":
  1. Make backup copies of all deployed instances of Workplace XT.
  2. Uninstall all deployed instances of Workplace XT.
  3. Delete the temp directory for all instances of Workplace XT.
- In the step "Copy existing configuration files", 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 the step "Start the upgrade process," do the following:

1. Back up the existing configuration files in *install_path*/FileNet/Config/
WebClient2 and all other instances.
2. For each instance, copy the updated configuration files in
install_path/FileNet/Config/WebClient to *install_path*/FileNet/Config/
WebClient2 and any additional WebClient instances, and manually add 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 "Deploying multiple
Workplace XT instances" on page 63.

Removing Workplace XT software

You can remove Workplace XT if you do not need it anymore or if you want to do a completely new installation. You can also remove the additional optional components.

"Removing Workplace XT on WebSphere Application Server"
To remove Workplace XT on WebSphere Application Server, you must first undeploy the Web application, then remove the software files. You must also remove any add-on products that work with Workplace XT before you remove the Workplace XT files.

"Removing Workplace XT on WebLogic Server" on page 97
To remove Workplace XT on WebLogic Server, you must first undeploy the Web application, then remove the software files. You must also remove any add-on products that work with Workplace XT before you remove the Workplace XT files.

"Removing Workplace XT on JBoss Application Server" on page 98
To remove Workplace XT on JBoss Application Server, you must first undeploy the Web application, then remove the software files. You must also remove any add-on products that work with Workplace XT before you remove the Workplace XT files.

"Removing Workplace XT Application Integration" on page 100
You can remove Workplace XT Application Integration by using Windows tools. You can remove the software interactively by using the **Add/Remove Programs** tool, or silently with the `MsiExec.exe` tool.

Removing Workplace XT on WebSphere Application Server

To remove Workplace XT on WebSphere Application Server, you must first undeploy the Web application, then remove the software files. You must also remove any add-on products that work with Workplace XT before you remove the Workplace XT files.

This task includes Workplace XT removal instructions for WebSphere Application Server on UNIX and Windows platforms.

If you are using an add-on product with Workplace XT, you must remove that product before you remove Workplace XT. You might also be removing the Content Engine client as part of the Workplace XT removal. Collect any additional installation and upgrade documentation, including the Content Engine readme, before beginning this procedure.

To remove the Workplace XT software:

1. Log in to the server.

Option	Description
UNIX	Log in as a user with write access the directory where Workplace XT is installed.
Windows	Log in as a user with Administrative rights.

2. Log in to the WebSphere administrative console.
3. Undeploy the Workplace XT application.

    a. Stop the Workplace XT Web application in the administrative console.

    b. Uninstall the Workplace XT Web 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. Remove any IBM FileNet P8 add-on products, such as IBM FileNet eForms for P8, that you are using with Workplace XT.

   For details, see the installation and upgrade documentation for each product.

7. Navigate to the /_WCuninst folder under the IBM FileNet Workplace XT installation location. The default location is:

Option	Description
UNIX	/opt/IBM/FileNet/WebClient/_WCuninst
Windows	C:\Program Files\IBM\FileNet\WebClient\ _WCuninst

8. Run the Workplace XT uninstaller program:

Option	Description
UNIX	uninstaller.bin
Windows	uninstaller.exe Reboot or log out as prompted during the removal process. **Tip:** For Windows, you can also use **Add/Remove Programs** from the Control Panel to remove Workplace XT. On Windows, when you click **Next** on the 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.

   Attention: Do not uninstall the Content Engine client if Workplace XT is collocated with some other application, such as Application Engine, that requires a Content Engine client installation.

9. Remove the Content Engine client. See the readme file associated with the version of your Content Engine client.

10. Delete the temporary working directory for Workplace XT on the application server: *WAS_HOME*/temp/*node_name*/*application_server_name*/WorkplaceXT

11. (If Workplace XT is the only FileNet P8 application installed on the server) Delete the *install_path*/IBM/FileNet directory.

12. (If 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 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.

Important: Do not remove the system environment variable if any other FileNet P8 application is installed on the server.

14. (UNIX only) Delete the following Install Shield directory, which can cause errors when you reinstall Workplace XT:

    `/InstallShield/Universal/IBM/FileNet/WebClient`

    For AIX, the path is as follows:

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

Removing Workplace XT on WebLogic Server

To remove Workplace XT on WebLogic Server, you must first undeploy the Web application, then remove the software files. You must also remove any add-on products that work with Workplace XT before you remove the Workplace XT files.

This task includes Workplace XT removal instructions for WebLogic Server on UNIX and Windows platforms.

You might also be removing 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 Workplace XT software:

1. Log in to the application server.

Option	Description
UNIX	Log in as a user with write access to the directory where Workplace XT is installed.
Windows	Log in as a user with Administrative rights.

2. Undeploy the Workplace XT application.
   a. Stop the Workplace XT Web Application Module.
   b. Delete the Workplace XT Web Application Module.
3. Shut down WebLogic Server.
4. If you're running the Component Manager, stop the instances and exit the Process Task Manager.
5. Remove any IBM FileNet P8 add-on products, such as IBM FileNet eForms for P8, that you are using with Workplace XT.

   For details, see the installation and upgrade documentation for each product.
6. Navigate to the /_WCuninst folder under the IBM FileNet Workplace XT installation location. The default location is:

Option	Description
UNIX	`/opt/IBM/FileNet/WebClient/_WCuninst`
Windows	`C:\Program Files\IBM\FileNet\WebClient\` `_WCuninst`

7. Run the Workplace XT uninstaller program:

Option	Description
UNIX	`uninstaller.bin`
Windows	`uninstaller.exe` Reboot or log out as prompted during the removal process. **Tip:** For Windows, you can also use **Add/Remove Programs** from the Control Panel to remove Workplace XT. On Windows, when you click **Next** on the 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.

> **Attention:** Do not uninstall the Content Engine client if Workplace XT is collocated with some other application, such as Application Engine, that requires a Content Engine client installation.

8. Remove the Content Engine client. See the readme file associated with the version of your Content Engine client.

9. Delete the contents of the temporary working directory for Workplace XT on the Web application server:

   weblogic_install_path/*project_name*/domains/*domain_name*/servers/
   AdminServer/tmp/_WL_internal

10. (If Workplace XT is the only FileNet P8 application installed on the server) Delete the *install_path*/IBM/FileNet directory.

11. (If 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

12. (UNIX) Remove the P8TASKMAN_HOME system environment variable.

    If 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.

    > **Important:** Do not remove the system environment variable if any other FileNet P8 application is installed on the server.

13. (UNIX only) Delete the following Install Shield directory, which can cause errors when you reinstall Workplace XT:

    /InstallShield/Universal/IBM/FileNet/WebClient

    For AIX, the path is as follows:

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

Removing Workplace XT on JBoss Application Server

To remove Workplace XT on JBoss Application Server, you must first undeploy the Web application, then remove the software files. You must also remove any add-on products that work with Workplace XT before you remove the Workplace XT files.

This task includes Workplace XT removal instructions for JBoss Application Server on UNIX and Windows platforms.

If you are using an add-on product with Workplace XT, you must remove that product before you remove Workplace XT. You might also be removing the Content Engine client as part of the Workplace XT removal. 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:

Option	Description
UNIX	Log in as a user with write access to the directory where IBM FileNet Workplace XT is installed.
Windows	Log in as a user with Administrative rights.

2. Shut down JBoss Application Server.
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're running the Component Manager, stop the instances and exit the Process Task Manager.
5. Remove any IBM FileNet P8 add-on products, such as IBM FileNet eForms for P8, that you are using with Workplace XT.

   For details, see the installation and upgrade documentation for each product.
6. Navigate to the /_WCuninst folder under the IBM FileNet Workplace XT installation location. The default location is:

Option	Description
UNIX	`/opt/IBM/FileNet/WebClient/_WCuninst`
Windows	`C:\Program Files\IBM\FileNet\WebClient\_WCuninst`

7. Run the Workplace XT uninstaller program:

Option	Description
UNIX	`uninstaller.bin`

Option	Description
Windows	`uninstaller.exe` Reboot or log out as prompted during the removal process. **Tip:** For Windows, you can also use **Add/Remove Programs** from the Control Panel to remove Workplace XT. On Windows, when you click **Next** on the 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.

> **Attention:** Do not uninstall the Content Engine client if Workplace XT is collocated with some other application, such as Application Engine, that requires a Content Engine client installation.

8. Remove the Content Engine client. See the readme file associated with the version of your Content Engine client.

9. (If Workplace XT is the only FileNet P8 application installed on the server) Search for the `vpd.properties` file. If it exists, delete it.

10. (If Workplace XT is the only FileNet P8 application installed on the server) Delete the `install_path/IBM/FileNet` directory.

11. (If 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`

12. (UNIX) Remove the P8TASKMAN_HOME system environment variable.

    If 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.

    > **Important:** Do not remove the system environment variable if any other FileNet P8 application is installed on the server.

13. (UNIX only) Delete the following Install Shield directory, which can cause errors when you reinstall Workplace XT:

    `/InstallShield/Universal/IBM/FileNet/WebClient`

    For AIX, the path is as follows:

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

Removing Workplace XT Application Integration

You can remove Workplace XT Application Integration by using Windows tools. You can remove the software interactively by using the **Add/Remove Programs** tool, or silently with the `MsiExec.exe` tool.

"Removing or modifying Workplace XT Application Integration" on page 101 You can use the **Add/Remove Programs** tool in the Windows Control Panel to remove or modify Workplace XT Application Integration interactively.

"Silently removing Workplace XT Application Integration"
You can remove Workplace XT Application Integration by using a Windows command line tool.

Removing or modifying Workplace XT Application Integration

You can use the **Add/Remove Programs** tool in the Windows Control Panel to remove or modify Workplace XT Application Integration interactively.

To remove or modify Workplace XT Application Integration:
1. Click **Start** → **Settings** → **Control Panel**.
2. Click **Add/Remove Programs**, and then click **IBM FileNet Workplace XT Application Integration**.
3. Do one of the following:
   - Click **Remove**, then click **Yes** to confirm you want to uninstall 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 installation. 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 appears, where you can 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 reinstall 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 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.

Silently removing Workplace XT Application Integration

You can remove Workplace XT Application Integration by using a Windows command line tool.

To silently remove Workplace XT Application Integration:
1. Open a command prompt.
2. Enter the following command to remove Workplace XT Application Integration:
   ```
   MsiExec.exe /X{9E96D48D-7A66-484F-B06E-77DA36790468} /qn
   ```

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