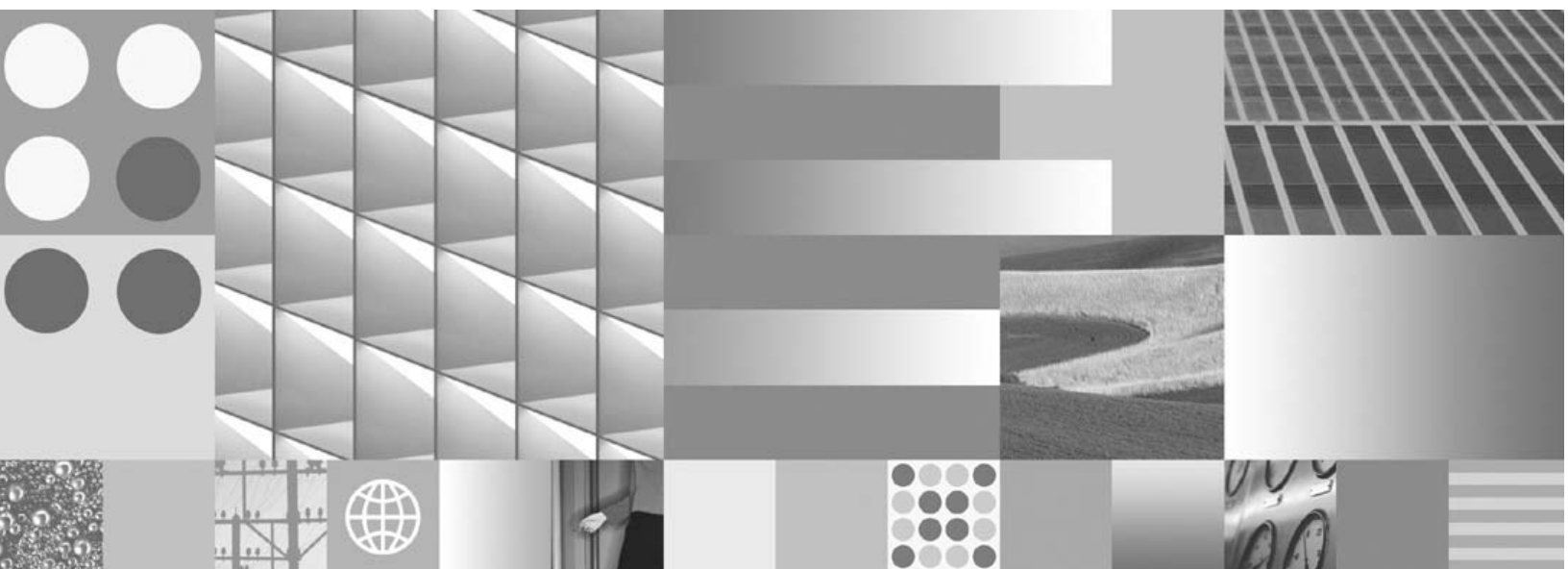


## Installation and Upgrade Guide





## Installation and Upgrade Guide

**Note**

Before using this information and the product it supports, read the information in “Notices” on page 109.

This edition applies to version 1.1.1.0 of IBM FileNet Workplace XT (product number 5724-R81) and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Typographical Conventions

This document uses the conventions in the following table to distinguish elements of text.

Convention	Usage
UPPERCASE	Environment variables, status codes, utility names.
<b>Bold</b>	Program names and selected terms such as command parameters or environment variables that require emphasis.
<b>Bold Gray</b>	Clickable user-interface elements (such as buttons).
<b>Bold Olive</b>	Paths and file names.
<i>Italic</i>	User-supplied variables and new terms introduced in text or names of additional documents.
<italic>	User-supplied variables that replace everything between and including the angle bracket delimiters (< and >).
Monospace	Code samples, examples, display text, and error messages.

**NOTE** Some pathnames in this document that are identical (except for the directory-separator character) on both UNIX® and Windows® platforms are specified in UNIX syntax only (that is, with forward-slash directory separators).

**WARNING** This document contains examples of text to be typed on a command line. Be sure to manually type the command, rather than copying and pasting it from this document. Otherwise, your command line may contain unrecognized characters and will not execute properly.

## Revision Log

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

Date	Revision
11/07	<p>Adds upgrade topics <a href="#">“Upgrade IBM FileNet Workplace XT” on page 93</a> and <a href="#">“Upgrade Multiple Instances of IBM FileNet Workplace XT” on page 96</a>.</p> <p>Adds JBoss application server topics <a href="#">“Configure IBM FileNet Workplace XT (JBoss)” on page 54</a>, <a href="#">“Deploy IBM FileNet Workplace XT (JBoss)” on page 69</a>, and <a href="#">“Remove IBM FileNet Workplace XT (JBoss)” on page 102</a>.</p> <p>Adds procedures for using WebSphere 6.1.x. See <a href="#">“Configure IBM FileNet Workplace XT (WebSphere)” on page 31</a> and <a href="#">“Deploy IBM FileNet Workplace XT (WebSphere)” on page 60</a>.</p> <p>Adds directions for using JAWS screen reader for the setup program in <a href="#">“Install IBM FileNet Workplace XT” on page 23</a>.</p>
10/07	<p>Adds information about moving from WAR file to EAR file deployment in <a href="#">“Installation Checklists” on page 14</a> and <a href="#">Task 3 “Install IBM FileNet Workplace XT” on page 23</a>.</p> <p>Moves the "Set permissions for the user running the application server" to <a href="#">Task 7a “Deploy IBM FileNet Workplace XT (WebSphere)” on page 60</a> and <a href="#">Task 7b “Deploy IBM FileNet Workplace XT (WebLogic)” on page 65</a>.</p> <p>Adds accessibility keyboard tip to <a href="#">Task 12 “Install IBM FileNet Workplace XT Application Integration” on page 82</a>.</p> <p>Corrects a few instances of incorrect references to Workplace instead of Workplace XT.</p>
06/07	Initial release of the <i>IBM FileNet Workplace XT Installation Guide</i> .



## About this Document

Installation by an IBM FileNet Certified Professional (FCP) recommended. For more information on the FCP program, contact your IBM service representative.

Every effort has been made to provide you with complete installation instructions. If information becomes available after the documentation release from which you accessed this guide, we will provide an updated version of the guide on the Information Management support page ([www.ibm.com/software/data/support/](http://www.ibm.com/software/data/support/)). As a general rule, you should refer to the web site to obtain the current version of this guide.

A new version of the guide will be distributed as of the release of any IBM FileNet Workplace XT Service Pack. The version number applied to the cover of this common guide will reflect the most recently released component Service Pack version.

Send your comments by e-mail to [comments@us.ibm.com](mailto:comments@us.ibm.com). Be sure to include the name of the product, the version number of the product, and the name and part number of the book (if applicable). If you are commenting on specific text, include the location of the text (for example, a chapter and section title, a table number, a page number, or a help topic title).

**NOTE** This guide contains links to the IBM FileNet P8 Platform online help system, where you will find important additional information that can help you make decisions about your installation. The ideal way to use this guide is as an online PDF installed within the help system. To take advantage of these links while using this guide, perform the documentation install task ([Task 2 on page 22](#)) before beginning your full IBM FileNet Workplace XT installation.

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

### To access documentation for IBM FileNet products

---

1. Navigate to the Information Management support page ([www.ibm.com/software/data/support/](http://www.ibm.com/software/data/support/)).
2. Select the appropriate IBM FileNet product from the "Select a category" list.
3. From the Product Support page, under Learn, click Product documentation.
4. From the Product Documentation page:
  - a. If necessary, click the Doc. Link for the appropriate component product to display the document list.
  - b. Click the icon in the appropriate release column to access the document you need.

**NOTE** For a complete list of direct links to documentation relevant to this guide, see "[General Requirements for all IBM FileNet P8 Systems](#)" on page 23.

---

**To access compatibility matrices and fix packs for IBM FileNet products**

---

1. Navigate to the Information Management support page ([www.ibm.com/software/data/support/](http://www.ibm.com/software/data/support/)).
2. Select the appropriate IBM FileNet product from the "Select a category" list.
3. From the Product Support page, under Download, click Fix Packs by version.
4. From the Fix Pack page:
  - a. Click Matrix to access the compatibility matrix.
  - b. Click the release number to access the fix pack you need.

# *Installation Planning and Procedures*

This installation section contains the following major topics:

- [“Plan the Installation” on page 13](#)
- [“Prerequisite Tasks” on page 17](#)
- [“Installation Tasks” on page 21](#)
- [“Configuration/Startup Tasks” on page 71](#)
- [“Optional Installation Tasks” on page 81](#)

## Installation Planning Considerations

This section lists details that will help you prepare your environment for the installation of IBM FileNet Workplace XT. In many cases, the items you see listed are linked to more detailed information that will help you plan a system rollout. Review this section thoroughly before you start to set up IBM FileNet Workplace XT or required third-party software.

When you have completed the considerations in this section, see the “[Installation Checklists](#)” on [page 14](#) for a convenient way to track your progress and collect necessary information throughout the prerequisite and installation stages.

### Operating System Considerations

- **Ensure hosts file contents.** On each UNIX-based IBM FileNet P8 server that does not use DNS (Domain Name Service) or NIS (Network Information Service), the **/etc/hosts** file must contain the name and Internet Protocol (IP) address of all servers it will communicate with, including the remote database server, if applicable.
- **Synchronize the time and date on all servers.** System users will experience a variety of problems if one or more servers are not synchronized with the rest of the system.
- **Adjust number of threads per process.** On each HP-UX 11 or HP-UX 11i machine where an associated third-party JVM-based component (such as WebLogic or WebSphere®) will run, increase the values of the kernel parameters *max\_thread\_proc* (maximum number of threads per process) and *nkthread* (maximum number of kernel threads in the system) beyond their default values, which are too small for IBM FileNet applications.

Refer to the HP web page "Programmer's guide for Java® 2 HP-UX configuration for Java support" at [http://www.hp.com/products1/unix/java/infoclibrary/prog\\_guide/java1/configuration.htm](http://www.hp.com/products1/unix/java/infoclibrary/prog_guide/java1/configuration.htm) for tools to determine the values for these two kernel parameters that are sufficient for IBM FileNet applications.

- **Ensure Linux libraries are installed.** To install Workplace XT on Linux®, several legacy libraries are required. You must install the compat-libstdc++ packages on your RedHat system prior to beginning your install of Workplace XT.

### Application Server Considerations

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

### Network Considerations

- **Ensure TCP/IP settings.** Verify TCP/IP configuration settings on your UNIX or Windows® server.
- **Ensure availability of required port numbers.** Several port numbers are required by Workplace XT. For a list, see “[IBM FileNet Workplace XT Port Numbers](#)” on [page 106](#).

# Plan the Installation

Before you begin to install IBM FileNet Workplace XT, do the following:

- Retrieve updates to IBM FileNet documentation and software. See [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).
- Review the [“Installation Planning Considerations” on page 12](#) for a list of tasks you should perform before installing Workplace XT software.
- Use the items in [“Installation Checklists” on page 14](#) to track installation tasks and to record information that will be needed in later tasks.
- Read [“Prerequisite Tasks” on page 17](#), [“Installation Tasks” on page 21](#), [“Configuration/Startup Tasks” on page 71](#), and [“Optional Installation Tasks” on page 81](#) to become familiar with the tasks you will perform when setting up your Workplace XT software.

**CAUTION** IBM recommends you follow the planning, installation, and configuration tasks in the order presented in these topics. If you do otherwise, or you install IBM FileNet Workplace XT on machines containing components for existing IBM FileNet P8 systems, you may encounter unforeseen problems or be required to perform additional setup steps. See the *IBM FileNet P8 Platform Troubleshooting Guide* for details. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).

## Installation Checklists

The following topics provide checklists of items that must be completed for a successful installation of IBM FileNet Workplace XT. The lists are divided by user or role. Note that your organization may have different administrator roles, and that some of the responsibilities of listed roles may vary.

You can print these lists and record the information as you perform the prerequisite and installation tasks. Where applicable, the list items indicate which role will need the information you provide. IBM FileNet recommends coordinating communication among the various roles to facilitate an easier installation process.

### IT Administrator

This role administers hardware and operating systems for your environment, as well as helping to make decisions about machine usage and configurations such as clustering and farming. The information confirmed and collected in this set of checklists should be provided to the Installation Administrator for each component.

- ☐ Determine port requirements for all the servers in your install environment. For details, see ["IBM FileNet Workplace XT Port Numbers" on page 106](#).
- ☐ (WebLogic) Determine the recommended MaxPermSize value for MEM\_ARGS:

**MaxPermSize:** \_\_\_\_\_

### Security Administrator

This role administers authentication, users and groups, passwords, encryption, and general network access considerations for the installation and eventual use of the Workplace XT software. The information confirmed and collected in the following checklist items should be provided to the Installation Administrator, as well as to the Workplace XT administrator (Application Engine Administrator).

- ☐ Specify the users and groups to add to the Application Engine Administrators access role:

Users or groups

- ☐ Specify the users and groups who will be allowed to create subscriptions to add to the PWDesigner access role (not specifically required to complete an install, but required to create subscriptions later in Workplace XT, and can also be added later):

Users or groups

- ☐ For SSO, specify the following:

**SSO proxy host URL:**

**SSO proxy host server name:**

**http port on the SSO proxy host:**

**https port on the SSO proxy host:**


## Installation Administrator

This role will actually perform installation tasks for your IBM FileNet Workplace XT software. This role may also perform initial configuration, setup, and startup tasks, and is typically filled by one or more operating system administrators on the associated computers.

- ☐ Install the IBM FileNet Workplace XT documentation per [Task 2 on page 22](#).
- ☐ Verify that at least one Content Engine object store has been created.
- ☐ (WebSphere) Determine the LTPA connection password, keyfile, time-out length.

**LTPA connection parameters:**

--

- ☐ (WebLogic) Determine the Content Engine application server trust password before you configure your WebLogic application server for IBM FileNet Workplace XT:

In WebLogic, click *your domain* > Security > General > Advanced > Credentials (for this WebLogic domain- between domains).

**Content Engine WebLogic trust password:**

--

- ☐ (JBoss) Determine the <application-policy name="FileNet"> entry in the **login-config.xml** on the Content Engine server.

**Content Engine application-policy name:**

--

- ☐ Configure the application server for IBM FileNet Workplace XT, per one of the following:

- (WebSphere) [Task 1a on page 18](#)

- (WebLogic) [Task 1b on page 19](#)
- (JBoss) [Task 1c on page 20](#)

Provide the application server type and version (this must match the type and version used for Content Engine).

**IBM FileNet Workplace XT Application Server Type:** \_\_\_\_\_

**IBM FileNet Workplace XT Application Server Version:** \_\_\_\_\_

- ☐ (WAR or EAR file deployment) Determine whether you will deploy the Workplace XT web application as a WAR or EAR file.

☐ WAR file.

☐ EAR file.

**CAUTION** If you decide to deploy a WAR file and later decide to redeploy as an EAR file you must uninstall Workplace XT and then reinstall the application, selecting EAR file deployment, to add the required files to your setup. If this change of deployment type seems likely for your setup we suggest that you install Workplace XT as if you would deploy an EAR file, which will create both WAR and EAR files, and then use the WAR file to deploy your web application.

- ☐ Decide on an application name; Workplace XT is the default:

**Application name:** \_\_\_\_\_

- ☐ Install IBM FileNet Workplace XT. See [“Install IBM FileNet Workplace XT” on page 23](#).
- ☐ Set up IBM FileNet Workplace XT per the procedure for your platform:
  - [“Configure IBM FileNet Workplace XT \(WebSphere\)” on page 31](#)
  - [“Configure IBM FileNet Workplace XT \(WebLogic\)” on page 45](#)
  - [“Configure IBM FileNet Workplace XT \(JBoss\)” on page 54](#)
- ☐ Install Workplace XT software updates. See [“Install IBM FileNet Workplace XT Software Updates” on page 58](#).
- ☐ Install Content Engine and Process Engine client file updates. See [“Install the Latest Content Engine and Process Engine Client Files on Workplace XT Servers” on page 59](#).
- ☐ Deploy Workplace XT per the procedure for your platform:
  - [“Deploy IBM FileNet Workplace XT \(WebSphere\)” on page 60](#)
  - [“Deploy IBM FileNet Workplace XT \(WebLogic\)” on page 65](#)
  - [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 69](#)



## Prerequisite Tasks

### To set up and configure prerequisite software for IBM FileNet Workplace XT

---

Configure your application server for IBM FileNet Workplace XT. Do one of the following:

- [Task 1a on page 18](#) (WebSphere)
- [Task 1b on page 19](#) (WebLogic)
- [Task 1c on page 20](#) (JBoss)

## Task 1a: Configure an Application Server for IBM FileNet Workplace XT (WebSphere)

You must install WebSphere Application Server on the machine where you are going to install and deploy IBM FileNet Workplace XT.

Workplace XT can be collocated with Content Engine as long as the server is appropriately sized. However, each instance of Workplace XT and each instance of the Content Engine must run in its own JVM. For assistance in sizing your system, contact your service representative.

You do not need to configure the WebSphere server before you run the IBM FileNet Workplace XT installer software. You will make configuration changes after the installer finishes.

## Task 1b: Configure an Application Server for IBM FileNet Workplace XT (WebLogic)

**NOTE** This task assumes you have already installed WebLogic Server on the machine where you are going to install and deploy IBM FileNet Workplace XT.

Workplace XT can be collocated with Content Engine as long as the server is appropriately sized. However, each instance of Workplace XT and each instance of the Content Engine must run in its own JVM. For assistance in sizing your system, contact your service representative.

Before installing and deploying IBM FileNet Workplace XT on a WebLogic machine, you need to create a WebLogic domain, or have an existing domain in place. Refer to your BEA documentation for detailed instructions. No further configuration of the WebLogic server is needed before you run the Workplace XT installer software. You will make configuration changes after the installer finishes.

## Task 1c: Configure an Application Server for IBM FileNet Workplace XT (JBoss)

You must install JBoss Application Server on the machine where you are going to install and deploy IBM FileNet Workplace XT.

Workplace XT can be collocated with Content Engine as long as the server is appropriately sized. However, each instance of Workplace XT and each instance of the Content Engine must run in its own JVM. For assistance in sizing your system, contact your service representative.

You do not need to configure the JBoss server before you run the IBM FileNet Workplace XT installer software. You will make configuration changes after the installer finishes.

# Installation Tasks

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

---

1. Install the IBM FileNet P8 Platform documentation for your application server. Do [Task 2 on page 22](#).
2. Install IBM FileNet Workplace XT. Do [Task 3 on page 23](#).
3. Configure IBM FileNet Workplace XT. Do one of the following:
  - [Task 4a on page 31](#) (WebSphere)
  - [Task 4b on page 45](#) (WebLogic)
  - [Task 4c on page 54](#) (JBoss)
4. Install any available IBM FileNet Workplace XT software updates. Do [Task 5 on page 58](#).
5. Install any available Content Engine and Process Engine client updates. Do [Task 6 on page 59](#).
6. Deploy IBM FileNet Workplace XT. Do one of the following:
  - [Task 7a on page 60](#) (WebSphere)
  - [Task 7b on page 65](#) (WebLogic)
  - [Task 7c on page 69](#) (JBoss)

## Task 2: Install the IBM FileNet Workplace XT Documentation on the Application Server

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

To update your IBM FileNet P8 Platform documentation, download the zip file from the IBM Information Management support page ([www.ibm.com/software/data/support/](http://www.ibm.com/software/data/support/)). For details on locating the appropriate files, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).

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

### To install Workplace XT documentation

---

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

For details and instructions on installing expansion product documentation, see the *IBM FileNet P8 Platform Installation and Upgrade Guide*. Pay special attention to the *Install Expansion Product Documentation* subtopic in the task *Install IBM FileNet P8 Platform Documentation (<your application server>)*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).

## Task 3: Install IBM FileNet Workplace XT

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

### Before you install IBM FileNet Workplace XT

---

Read “[Installation Planning Considerations](#)” on page 12, and “[Operating System Considerations](#)” on page 12, and make sure your installation location meets the requirements specific for IBM FileNet Workplace XT outlined in the *IBM FileNet P8 Hardware and Software Requirements*. To download this and other IBM FileNet product documentation from the IBM web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on page 9.

### NOTES

- To ensure proper functionality, performance, and ongoing maintenance, IBM FileNet Workplace XT should only be installed once per application server (or virtual machine or WebSphere LPAR). You can, however, deploy multiple instances of a single IBM FileNet Workplace XT version per application server.
- If you plan to use JAWS screen reader for the install tool, you must perform the following tasks before you begin the Workplace XT install:
  - a. Ensure that the Sun Java JRE 1.5.0 or 1.5.x is installed on the system where you will be performing the install.
  - b. Install the Java Access Bridge (available at <http://java.sun.com>).
  - c. Start the JAWS screen reader.
- Before logging on to Workplace XT for the first time, make sure at least one object store has been created on the Content Engine.
- If you plan to set up a web farm or clustered environment, in addition to these instructions, read and follow the instructions in the *IBM FileNet P8 Platform High Availability Technical Notice*. To download this and other IBM FileNet product documentation from the IBM web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on page 9.
- You must have installed and configured a supported application server for IBM FileNet Workplace XT. Refer to the appropriate topic for your server type:
  - “[Configure an Application Server for IBM FileNet Workplace XT \(WebSphere\)](#)” on page 18
  - “[Configure an Application Server for IBM FileNet Workplace XT \(WebLogic\)](#)” on page 19
  - “[Configure an Application Server for IBM FileNet Workplace XT \(JBoss\)](#)” on page 20

### To install the IBM FileNet Workplace XT software

---

1. Log in to the application server:

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

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

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

- To install IBM FileNet Workplace XT interactively:
  - i. Access the IBM FileNet Workplace XT 1.1.1.0 installation software package.
  - ii. Launch the appropriate Setup program (**WorkplaceXT-1.1.1.0-<operating\_system>.bin/.exe**) and follow the prompts, as directed in the subsequent steps in this procedure.
  - iii. Continue with [Step 3 on page 24](#) below.
- To install IBM FileNet Workplace XT silently:
  - i. Access the IBM FileNet Workplace XT installation software package, and copy the **silent\_input.txt** file to a local directory.
  - ii. Follow the instructions in the silent input file to edit the file to reflect the appropriate responses for your installation.
  - iii. From a command prompt, navigate to, and execute the installer, then continue with [Step 4 on page 28](#).

– For UNIX:

```
./WorkplaceXT-1.1.1.0-<operating_system>.bin -options  
<path_to_edited_input_file>/silent_input_UNIX.txt -silent
```

– For Windows:

```
WorkplaceXT-1.1.1.0-Win.exe -options  
"<path_to_edited_input_file>\silent_input.txt" -silent
```

3. Complete the Setup screens as follows:

In this screen...	Perform this action...
License Agreement	Review and accept the license agreement, then click <b>Next</b> .
Specify Installation Location	For the Directory Name field, enter or browse to the location where you want to install the IBM FileNet Workplace XT software (< <b>install_path</b> >), or accept the default location:  UNIX - <b>/opt/FileNet/WebClient</b>  Windows - <b>C:\Program Files\FileNet\WebClient</b>
Choose an Application Server	Select an application server and version from the drop-down lists. You must use the same application server type and version as Content Engine.



In this screen...	Perform this action...
Content Engine API Configuration	<p>Configure the Content Engine API, as follows:</p> <ol style="list-style-type: none"> <li>Transport Method <p>Select Enterprise Java Beans (EJB) from the drop-down list.</p> </li> <li>Content Engine Client Software URL <p>Replace the sample server name and port number (<i>CEserver:2809</i>) with the Content Engine server name and port number for your Content Engine server. For information, see <a href="#">“IBM FileNet Workplace XT Port Numbers” on page 106</a>.</p> <p><b>NOTE</b> To change the Content Engine name later, or to connect to a different Content Engine, edit the <b>WcmApiConfig.properties</b> file. For information, see the IBM FileNet P8 Help topic <a href="#">FileNet P8 Administration &gt; Application Engine Administration &gt; Key configuration files and logs &gt; WcmApiConfig.properties</a>. The Application Engine information is applicable to Workplace XT.</p> </li> <li>Content Engine Upload URL <p>Replace the sample server name and port number (<i>CEserver:2809</i>) with the Content Engine server name and port number to use when uploading document content to the Content Engine server.</p> </li> <li>Content Engine Download URL <p>Replace the sample server name and port number (<i>CEserver:2809</i>) with the Content Engine server name and port number for your Content Engine server from which to download document content.</p> </li> </ol>
Component Manager URL	Enter the URL for the Component Manager on IBM FileNet Workplace XT.

In this screen...	Perform this action...
Choose IBM FileNet Workplace XT Deployment Type	<p>Select the type of deployment supported by your application server.</p> <ul style="list-style-type: none"> <li>Select Deploy as WAR file if your server can deploy a WAR file.</li> <li>Select Deploy as EAR file if your server can deploy an EAR file. Enter an <b>Application Name</b> for the deployed application. The default is Workplace XT.</li> </ul> <p><b>CAUTION</b> If you decide to deploy a WAR file and later decide to redeploy as an EAR file you must uninstall Workplace XT and then reinstall the application, selecting EAR file deployment, to add the required files to your setup. If this change of deployment type seems likely for your setup we suggest that you install Workplace XT as if you would deploy an EAR file, which will create both WAR and EAR files, and then use the WAR file to deploy your web application.</p>
Specify Documentation URL	<p>For the documentation URL, enter the Documentation Server URL, which is where the IBM FileNet P8 Platform Documentation (including the IBM FileNet Workplace XT documentation) is installed.</p> <p>Your entry must be in the following format:</p> <pre>http://&lt;docserver:port#&gt;/&lt;ecm_help&gt;/</pre> <p>where:</p> <ul style="list-style-type: none"> <li><i>docserver</i> is the name of the Java application server.</li> <li><i>port#</i> is the port number.</li> <li><i>ecm_help</i> is the root folder of the documentation website. You can use multi-part root folders (for example, <b>/docs/ecm_help</b>) if your application server supports them.</li> </ul> <p>See <a href="#">“Install the IBM FileNet Workplace XT Documentation on the Application Server” on page 22</a> for more information.</p> <p><b>NOTE</b> For information on how to reconfigure the Documentation URL after installation is completed, look for information on the documentationServer parameter in the IBM FileNet P8 Help topic <a href="#">FileNet P8 Administration &gt; Application Engine Administration &gt; Key configuration files and logs &gt; Bootstrap properties</a>.</p>

In this screen...	Perform this action...
Specify Configuration Directory	<p>Accept the default location or browse to the location where you want to store the configuration files.</p> <p>UNIX - <b>/opt/FileNet/Config/WebClient</b></p> <p>Windows - <b>C:\Program Files\FileNet\Config\WebClient</b></p> <p><b>NOTES</b></p> <ul style="list-style-type: none"> <li>• IBM recommends that you enter the same path that you entered for the initial installation of Workplace XT, in the earlier <a href="#">“Specify Installation Location”</a> panel of the wizard.</li> <li>• The configuration files for an EAR file deployment, a web farm, or a clustered environment must be located in a shared folder that is accessible by all copies of the Workplace XT application. For more information, see the <i>IBM FileNet P8 Platform High Availability Technical Notice</i>. To download this and other IBM FileNet product documentation from the IBM web site, see <a href="#">“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs”</a> on page 9.</li> </ul> <p>The configuration files will be installed to:</p> <p>UNIX - <b>&lt;install_path&gt;/FileNet/Config/WebClient</b></p> <p>Windows - <b>&lt;install_path&gt;\FileNet\Config\WebClient</b></p> <p><b>CAUTION</b> A UNC admin share (for example, <b>\\server\C\$</b>) for a shared location is not supported. You can use an ordinary file share.</p>
Specify Upload Location	<p>The Upload Directory is the directory used by Workplace XT to store temporary copies of files uploaded to Workplace XT.</p> <p>Accept the default option or browse for a directory to hold the temporary upload files.</p> <p><b>CAUTION</b> A UNC admin share (for example, <b>\\server\C\$</b>) for a shared upload directory location is not supported. You can use an ordinary file share.</p>
Specify Download Location	<p>The Download Directory is the directory used by Workplace XT to store temporary copies of files downloaded from Workplace XT.</p> <p>Accept the default option or browse for a directory to hold the temporary download files.</p> <p><b>CAUTION</b> A UNC admin share (for example, <b>\\server\C\$</b>) for a shared download directory is not supported. You can use an ordinary file share.</p>

In this screen...	Perform this action...
Specify Log File Location	Accept the default option or browse for a directory to place the log files.
Configure User Token Security	<p>Configure user token security.</p> <ol style="list-style-type: none"> <li>If needed, select the check box to create maximum strength keys.</li> </ol> <p>By default this option is not selected and Setup creates limited strength (128-bit) keys. If you select this option, the installer creates 448-bit keys.</p> <ol style="list-style-type: none"> <li>Enter the number of keys to use. A large number of keys is more secure.</li> <li>Make a note of the user token crypto key path.</li> </ol> <p>The <b>UTCryptoKeyFile.properties</b> file contains the user token cryptography key used by IBM FileNet P8 applications to launch into each other without the need for additional login.</p> <p>The default User Token Crypto Key file path is:</p> <p>UNIX - <b>&lt;install_path&gt;/FileNet/Authentication/</b></p> <p>Windows - <b>&lt;install_path&gt;\FileNet\Authentication\</b></p> <p><b>CAUTION</b> For multiple applications to pass user tokens to each other, each participating application <b>must</b> use the same encryption key file. Copy the <b>UTCryptoKeyFile.properties</b> file installed with Workplace XT to all servers that are hosting a token-sharing application.</p>
User Selections	<p>Review the list of selections you have made.</p> <p><b>NOTE</b> More than one panel might be needed to display your selections.</p>
Please Read the Summary Information Below	Verify your selections, and click <b>Install</b> .
Completing IBM FileNet Workplace XT Setup	Click <b>Finish</b> to complete the installation.

- (UNIX only) Log out and log in again to set the environment variables.
- View the **web\_client\_install\_log\_1.1.1.0.txt** file located in  
UNIX - **<install\_path>/FileNet/WebClient**

Windows - `<install_path>\FileNet\WebClient`

where `<install_path>` is the location where you installed Workplace XT. The default is `/opt` (UNIX) or `C:\Program Files` (Windows).

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

6. (Solaris only) Set the anon ports.

When Solaris first starts up, it takes the first several ports, called anon ports, for its communication daemons. By default, the maximum `tcp_smallest_anon_port` is 32768. IBM FileNet uses several ports higher than 32768. See [“IBM FileNet Workplace XT Port Numbers” on page 106](#) for details on which ports IBM FileNet uses.

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

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

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

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

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

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

Add the following line:

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

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

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

Add the following line:

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

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

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

7. (UNIX only) Verify that the `P8TASKMAN_HOME` system environment variable is set to the following:

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

8. Follow the instructions for your application server to configure Workplace XT:
  - [Task 4a on page 31](#) (WebSphere)
  - [Task 4b on page 45](#) (WebLogic)
  - [Task 4c on page 54](#) (JBoss)

## Task 4a: Configure IBM FileNet Workplace XT (WebSphere)

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

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

### To configure IBM FileNet Workplace XT

---

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

1. If you are using SSO, edit **web.xml**. See [“To edit web.xml for SSO \(optional\)” on page 31](#).
2. If you plan to use Application Integration or another option that requires user tokens, configure WebSphere to support it. Do one of the following:
  - [“To configure WebSphere to support user tokens for Workplace XT \(including Application Integration\) \(optional\) \(WebSphere 6.0.x\)” on page 33](#)
  - [“To configure WebSphere to support user tokens for Workplace XT \(including Application Integration\) \(optional\) \(6.1.x\)” on page 34](#)
3. Configure Workplace XT. Do one of the following:
  - [“To configure Workplace XT \(WebSphere 6.0.x\)” on page 36](#)
  - [“To configure Workplace XT \(WebSphere 6.1.x\)” on page 39](#)
4. Configure the server ports. See [“To configure the server ports \(optional\)” on page 43](#).

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

---

#### NOTES

- Perform this procedure only if your site uses SSO. This procedure modifies the web.xml to enable SSO.
  - SSO in an IBM Tivoli Access Manager environment may require additional configuration in WebSphere. If you are implementing SSO in an IBM Tivoli Access Manager (TAM) WebSEAL 6.0 environment, the junction you use for Workplace XT must be a transparent junction. For more details, see your IBM product documentation.
1. Make a back-up copy of **web.xml**.  
  
UNIX - **<install\_path>/FileNet/WebClient/WorkplaceXT/WEB-INF/web.xml**  
Windows - **<Workplace\_XT\_path>FileNet\WebClient\WorkplaceXT\WEB-INF\web.xml**
  2. Use a text editor to open and edit **web.xml**.

3. Ensure that the parameter `challengeProxyEnabled` is set to false, as in:

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

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

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

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

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

6. 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 must be configured as follows:

- **ssoProxyContextPath:** Set the value to the context path of the SSO proxy host URL. This is the path portion of the URL that appears after the server name, and which represents top-level access to the Workplace XT application. For example, if the IBM FileNet Workplace XT deploy host URL is `http://deploy_server:2809/WorkplaceXT` and the SSO proxy host URL is `http://sso_proxy_server.domain.com/fn/WorkplaceXT`, then use the following:



## To configure WebSphere to support user tokens for Workplace XT (including Application Integration) (optional)

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

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

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

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

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

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

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

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

## To configure WebSphere to support user tokens for Workplace XT (including Application Integration) (optional) (WebSphere 6.0.x)

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

1. Stop the WebSphere server, if it is running.
2. Copy the **authentication-websphere.jar** file from here:

**<install\_path>/FileNet/WebClient/WorkplaceXT/authenticationFiles**

to here:

**<WAS\_home>/AppServer/lib/ext**

3. 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**

4. Enable JAAS.
  - a. Open the WebSphere Administrative Console.
  - b. Navigate to Servers > Application servers > *server\_name* > Java and Process Management > Process Definition > Java Virtual Machine > Generic JVM Arguments.
  - c. If there is an entry, add a space after it, then add the following (if there is no entry, do not add the space):

To configure WebSphere to support user tokens for Workplace XT (including Application Integration) (option-

UNIX:

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

Windows:

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

- d. Click **Apply**.

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

- e. Navigate to Security > Global Security > JAAS configuration > System logins > WEB\_INBOUND > JAAS login modules.
- f. Click **New** to create a new custom login module.
- g. Enter the following for the Module class name setting:  
com.filenet.ae.authentication.loginmodule.UserTokenWSLoginModule
- h. Click **Apply**, and click **Save** to apply changes to the master configuration. Click **Save**.
5. Enable trust association and specify interceptor setting.
  - a. Navigate to Security > Global security > Authentication mechanisms > LTPA > Trust association.
  - b. Under General Properties, select Enable trust association, then click **Apply**.
  - c. Under Additional Properties, click **Interceptors**.
  - d. Click **New**, and enter the following for the Interceptor class name:  
com.filenet.ae.authentication.tai.UserTokenInterceptor
  - e. Click **Apply**, and click **Save** to apply changes to the master configuration. Click **Save**.
6. Restart WebSphere.

**NOTE** There is a known issue in WebSphere 6.0.2.17 that returns an error at the login page after the trust association is enabled. This issue is fixed in 6.0.2.19.

#### To configure WebSphere to support user tokens for Workplace XT (including Application Integration) (optional) (6.1.x)

---

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

1. Stop the WebSphere server, if it is running.

To configure WebSphere to support user tokens for Workplace XT (including Application Integration) (option-

2. Copy the **authentication-websphere.jar** file from here:

**<install\_path>/FileNet/WebClient/WorkplaceXT/authenticationFiles**

to here:

**<WAS\_home>/AppServer/lib/ext**

3. 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**

4. Enable JAAS.

- a. Open the WebSphere Administrative Console.
- b. Navigate to Servers > Application servers > *server\_name* > Java and Process Management > Process Definition > Java Virtual Machine > Generic JVM Arguments.
- c. If there is an entry, add a space after it, then add the following (if there is no entry, do not add the space):

UNIX:

-Djava.security.auth.login.config=<install\_path>/CE\_API/config/samples/  
jaas.conf.WebSphere

Windows:

-Djava.security.auth.login.config=<install\_path>\CE\_API\config\samples\  
jaas.conf.WebSphere

- d. Click **Apply**.

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

- e. Navigate to Security > Secure administration, applications and infrastructure > Java Authentication and Authorization Service > System logins > WEB\_INBOUND > JAAS login modules.
  - f. Click **New** to create a new custom login module.
  - g. Enter the following for the Module class name setting:  
com.filenet.ae.authentication.loginmodule.UserTokenWSLoginModule
  - h. Click **Apply**, and click **Save** directly to the master configuration.
5. Enable trust association and specify interceptor setting.
    - a. Navigate to Security > Secure administration, applications and infrastructure > Web security > Trust association.
    - b. Under General Properties, select Enable trust association, then click **Apply**.
    - c. Under Additional Properties, click **Interceptors**.

- d. Click **New**, and enter the following for the Interceptor class name:  
`com.filenet.ae.authentication.tai.UserTokenInterceptor`
- e. Click **Apply**, and click **Save** directly to the master configuration.

6. Restart WebSphere.

#### To configure Workplace XT (WebSphere 6.0.x)

---

1. Open the WebSphere Administrative Console.
2. Set JVM settings for memory and UTF-8 encoding.
  - a. Navigate to Servers > Application servers > server\_name > Java and Process Management > Process Definition > Java Virtual Machine.
  - b. Enter the numbers for the Initial and Maximum Heap Size.  
**NOTE** Refer to your application server vendor's recommendation for Initial and Maximum heap size values. For more information on performance tuning, see the *IBM FileNet P8 Platform Performance Tuning Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see ["Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs" on page 9](#).
  - c. Click **Apply** to save your changes.
  - d. Click **Custom Properties**.
  - e. Click **New**.
  - f. In the Name field, enter  
`client.encoding.override`
  - g. In the Value field, enter  
`UTF-8`
  - h. Click **Apply**, click **Save**, and then click **Save changes to the master configuration**.
3. Enable Application Integration installation.
  - a. Navigate to Environment > Virtual Hosts > default\_host (or the host your application is deployed under).
  - b. Click **MIME Types**, then click **New**.
  - c. In the MIME Type field, enter application/octet-stream.
  - d. In the Extension(s) field, enter exe. Click **OK**.
  - e. Click **Apply**, click **Save**, and then click **Save changes to the master configuration**.
4. Configure Lightweight Third Party Authentication (LTPA).  
**NOTE** If you already have Application Engine or Workplace XT in your environment, skip the following step ([Step a](#)).

- a. On the Content Engine WebSphere server, do the following:
  - i. Log in to the Administrative Console.
  - ii. Navigate to Security > Global Security > Authentication > Authentication mechanisms > LTPA
  - iii. Enter and confirm a password. This same password will be used during configuration on the IBM FileNet Workplace XT server, below.
  - iv. Enter a path for the Key File Name. For example, */opt/LTPA/<ltpa\_key\_name>*.
  - v. Click **Generate Keys**.
  - vi. Click **Save**, and then click **Save** changes to the master configuration.
  - vii. Navigate to Security > Global Security.
  - viii. From the right side of the panel, select Authentication > Authentication mechanisms > LTPA.
  - ix. Click **Export Keys**.

**NOTE** If you already have Application Engine or Workplace XT in your environment, skip the following step ([Step b](#)).

- b. On the IBM FileNet Workplace XT server, do the following:
    - i. Copy the key file from the location you specified above to the IBM FileNet Workplace XT server. For example, */opt/LTPA/<ltpa\_key\_name>*.
    - ii. Log in to the WebSphere Administrative Console.
    - iii. Navigate to Security > Global Security.
    - iv. From the right side of the panel, select Authentication > Authentication Mechanisms > LTPA.
    - v. Enter a value for the timeout that is larger than the default. For example, if the timeout value is set to less than 2 hours, end users will not be able to log in to IBM FileNet Workplace XT after 2 hours.
    - vi. Enter the same password that you entered for Content Engine above.
    - vii. Enter the path for the key file that you copied to the IBM FileNet Workplace XT server. For example, */opt/LTPA/<ltpa\_key\_name>*.
    - viii. Click **Import Keys**.
5. Configure Lightweight Directory Access Protocol (LDAP).
    - a. Navigate to Security > Global Security.
    - b. From the right side of the panel, click **LDAP**.
    - c. Configure the LDAP provider settings to exactly match the settings from the Content Engine server.
    - d. Click **Apply**.

- e. Click **Advanced LDAP Settings**.
- f. Configure the settings here to exactly match the settings from the Content Engine server.
- g. Click **Apply**, then **Save**. Click **Save changes to the Master Configuration**.

**NOTE** If you are using Tivoli as your directory server, perform [Step h](#). For all other directory servers, continue with [Step i](#), below.

- h. (Tivoli only) Configure WebSphere security for Tivoli.
  - i. Shut down Websphere.
  - ii. On the Workplace XT application server, back up the **security.xml** file. The file is in the following location:

**<install\_path>/WebSphere/AppServer/profiles/<appserver\_name>/config/cells/  
<ServerName>Node01Cell/**

- iii. On the Content Engine WebSphere server, open the **security.xml** file, located in a path similar to the one in [Step ii](#). Copy the “userRegistries”, “searchFilter”, and “host” entries, as shown in the example below (in bold). Do not use the example settings, as your settings will be different.

```
<userRegistries xmi:type="security:LocalOSUserRegistry"
xmi:id="LocalOSUserRegistry" serverId="" serverPassword="{xor}" realm=""
useRegistryServerId="true" primaryAdminId=""/>

<userRegistries xmi:type="security:CustomUserRegistry"
xmi:id="CustomUserRegistry_1" useRegistryServerId="true" primaryAdminId=""
customRegistryClassName="com.ibm.websphere.security.FileRegistrySample"/>

<userRegistries xmi:type="security:LDAPUserRegistry"
xmi:id="LDAPUserRegistry_1" serverId="CEAdmin"
serverPassword="{xor}Dz4sLCgwLTtu" realm="vauxhall:389" ignoreCase="true"
useRegistryServerId="false" primaryAdminId="CEAdmin"
type="IBM_DIRECTORY_SERVER" sslEnabled="false" sslConfig=""
baseDN="dc=gardens"
bindDN="cn=CEAdmin,ou=Shared,ou=Engineering,ou=FileNet,dc=gardens"
bindPassword="{xor}Dz4sLCgwLTtu" searchTimeout="120" reuseConnection="true">

  <searchFilter xmi:id="LDAPSearchFilter_1"
userFilter="(&(cn=%v)(objectclass=person))"
groupFilter="(&(cn=%v)(|(objectclass=groupOfNames)(objectclass=groupOfUniqueNames)))"
userIdMap="cn" groupIdMap="*:cn"
groupMemberIdMap="memberof:member" certificateMapMode="EXACT_DN"
certificateFilter=""/>

  <hosts xmi:id="EndPoint_1" host="vauxhall" port="389"/>
</userRegistries>

<userRegistries xmi:type="security:WIMUserRegistry"
xmi:id="WIMUserRegistry_1" serverId="" serverPassword="{xor}"
realm="defaultWIMFileBasedRealm" ignoreCase="true"
useRegistryServerId="false" primaryAdminId="administrator"
registryClassName="com.ibm.ws.wim.registry.WIMUserRegistry"/>

<authConfig xmi:id="AuthorizationConfig_1" useJACCProvider="false">
  <authorizationProviders xmi:id="AuthorizationProvider_1"
j2eePolicyImplClassName="com.tivoli.pd.as.jacc.TAMPolicy" name="Tivoli Access
Manager"
policyConfigurationFactoryImplClassName="com.tivoli.pd.as.jacc.TAMPolicyConf
```

```

    igationFactory"
    roleConfigurationFactoryImplClassName="com.tivoli.pd.as.jacc.TAMRoleConfigur
    ationFactory"
    initializeJACCProviderClassName="com.tivoli.pd.as.jacc.cfg.TAMConfigInitiali
    ze" requiresEJBArgumentsPolicyContextHandler="false"
    supportsDynamicModuleUpdates="true"/>

</authConfig>

```

- iv. On the Workplace XT WebSphere server, open the **security.xml** file for editing, and paste in the “userRegistries”, “searchFilter”, and “host” entries you copied from the Content Engine file, in the location shown above.
- v. Save and close the file.
- vi. Restart WebSphere, and log in to the Administrative Console.

**NOTE** If you make any changes to your LDAP server settings in the WebSphere Administrative Console after updating the **security.xml** file, these settings will be overwritten and you will have to add the entries back to the file.

- i. Navigate to Security > Global Security.
- j. Turn on (check) the Enabled flag.
- k. Turn off (uncheck) Enforce Java 2 Security.
- l. From the Active Authentication Mechanism drop down list, select LTPA.

**NOTE** Content Engine must also be set to use LTPA for Active Authentication.

- m. Click **Apply**, and then click **Save changes to the Master Configuration**.

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

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

UNIX - **<install\_path>/FileNet/WebClient**

Windows - **<install\_path>\FileNet\WebClient** (only required for NTFS formatted partitions)

where **<install\_path>** is the location where you installed Workplace XT. The default is **/opt** (UNIX) or **C:\Program Files** (Windows).

7. Stop and restart the application server.
8. Continue with [“To configure the server ports \(optional\)” on page 43](#), or continue with [“Install IBM FileNet Workplace XT Software Updates” on page 58](#).

#### To configure Workplace XT (WebSphere 6.1.x)

---

1. Open the WebSphere Administrative Console.
2. Set JVM settings for memory and UTF-8 encoding.
  - a. Navigate to Servers > Application servers > server\_name > Java and Process Management > Process Definition > Java Virtual Machine.

- b. Enter the numbers for the Initial and Maximum Heap Size.

**NOTE** Refer to your application server vendor's recommendation for Initial and Maximum heap size values. For more information on performance tuning, see the *IBM FileNet P8 Platform Performance Tuning Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9.](#)

- c. Click **Apply** to save your changes.
- d. Click **Custom Properties**.
- e. Click **New**.
- f. In the Name field, enter  
`client.encoding.override`
- g. In the Value field, enter  
`UTF-8`
- h. Click **Apply**, then click **Save**.

### 3. Enable Application Integration installation.

- a. From the Administrative Console, expand **Environment**. Click **Virtual Hosts**.
- b. Click the **default\_host** (or the host your application is deployed under).
- c. Click **MIME Types**, then click **New**.
- d. In the MIME Type field, enter `application/octet-stream`.
- e. In the Extension(s) field, enter `exe`. Click **OK**.
- f. Click **Apply**, then click **Save**.

### 4. Configure Lightweight Third Party Authentication (LTPA).

**NOTE** If you already have Application Engine or Workplace XT in your environment, skip the following step ([Step a](#)).

- a. On the Content Engine WebSphere server, do the following:
  - i. Log in to the Administrative Console.
  - ii. Navigate to Security > Secure administration, applications and infrastructure.
  - iii. Under Authentication, click Authentication mechanisms and expiration.
  - iv. Under Cross-cell single sign-on, enter and confirm a password. This same password will be used during configuration on the IBM FileNet Workplace XT server, below.
  - v. Enter a fully qualified path for the key file name. For example, `/opt/LTPA/<ltpa_key_name>`.
  - vi. Under Key Generation, click **Generate Keys**.
  - vii. Click **Apply**, and then click **Save** directly to the master configuration.



viii. Under Authentication, click **Authentication mechanisms and expiration**.

ix. Click **Export Keys**.

**NOTE** If you already have Application Engine or Workplace XT on this application server (for example, if you are performing this configuration as part of a Workplace XT upgrade), skip the following step ([Step b](#)).

b. On the IBM FileNet Workplace XT WebSphere server, do the following:

- i. Copy the key file from the location you specified above to the IBM FileNet Workplace XT server. For example, `/opt/LTPA/<ltpa_key_name>`.
- ii. Log in to the WebSphere Administrative Console.
- iii. Navigate to Security > Secure administration, applications and infrastructure.
- iv. Under Authentication, click **Authentication mechanisms and expiration**.
- v. Enter a value for the timeout that is larger than the default. For example, if the timeout value is set to less than 2 hours, end users will not be able to log in to IBM FileNet Workplace XT after 2 hours.
- vi. Enter and confirm the same password that you entered for Content Engine above.
- vii. Enter the fully qualified path for the key file that you copied to the IBM FileNet Workplace XT server. For example, `/opt/LTPA/<ltpa_key_name>`.
- viii. Click **Import keys**.
- ix. Click **Apply**, and then click **Save** directly to the master configuration.

5. Configure Lightweight Directory Access Protocol (LDAP).

- a. On the Workplace XT WebSphere Administration Console, navigate to Security > Secure administration, applications and infrastructure.
- b. Under User account repository, in the Available realm definitions dropdown, select Standalone LDAP registry.
- c. Click **Set as current**.
- d. Under Administrative security, clear the Enable administrative security checkbox.
- e. Click **Apply**, and then click **Save** directly to the master configuration.
- f. Under User account repository, click **Configure**.
- g. Configure the settings here to exactly match the settings from the Content Engine server.
- h. Click **Apply**, and then click **Save** directly to the master configuration.

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

**NOTE** If you are using Tivoli as your directory server, perform [Step i](#). For all other directory servers, continue with [Step j](#), below.

- i. (Tivoli only) Configure WebSphere security for Tivoli.
  - i. Shut down Websphere.

- ii. On the Workplace XT application server, back up the **security.xml** file. The file is in the following location:

**<install\_path>/WebSphere/AppServer/profiles/<appserver\_name>/config/cells/  
<ServerName>Node01Cell/**

- iii. On the Content Engine WebSphere server, open the **security.xml** file, located in a path similar to the one in [Step iii](#). Copy the “userRegistries”, “searchFilter”, and “host” entries, as shown in the example below (in bold). Do not use the example settings, as your settings will be different.

```

<userRegistries xmi:type="security:LocalOSUserRegistry"
xmi:id="LocalOSUserRegistry" serverId="" serverPassword="{xor}" realm=""
useRegistryServerId="true" primaryAdminId=""/>

<userRegistries xmi:type="security:CustomUserRegistry"
xmi:id="CustomUserRegistry_1" useRegistryServerId="true" primaryAdminId=""
customRegistryClassName="com.ibm.websphere.security.FileRegistrySample"/>

<userRegistries xmi:type="security:LDAPUserRegistry"
xmi:id="LDAPUserRegistry_1" serverId="CEAdmin"
serverPassword="{xor}Dz4sLCgwLTtu" realm="vauxhall:389" ignoreCase="true"
useRegistryServerId="false" primaryAdminId="CEAdmin"
type="IBM_DIRECTORY_SERVER" sslEnabled="false" sslConfig=""
baseDN="dc=gardens"
bindDN="cn=CEAdmin,ou=Shared,ou=Engineering,ou=FileNet,dc=gardens"
bindPassword="{xor}Dz4sLCgwLTtu" searchTimeout="120" reuseConnection="true">

<searchFilter xmi:id="LDAPSearchFilter_1"
userFilter="(& (cn=%v) (objectclass=person))"
groupFilter="(& (cn=%v) (| (objectclass=groupOfNames) (objectclass=groupOfUniqueNames)))"
userIdMap="cn" groupIdMap="*:cn"
groupMemberIdMap="memberof:member" certificateMapMode="EXACT_DN"
certificateFilter=""/>

<hosts xmi:id="EndPoint_1" host="vauxhall" port="389"/>

</userRegistries>

<userRegistries xmi:type="security:WIMUserRegistry"
xmi:id="WIMUserRegistry_1" serverId="" serverPassword="{xor}"
realm="defaultWIMFileBasedRealm" ignoreCase="true"
useRegistryServerId="false" primaryAdminId="administrator"
registryClassName="com.ibm.ws.wim.registry.WIMUserRegistry"/>

<authConfig xmi:id="AuthorizationConfig_1" useJACCProvider="false">

<authorizationProviders xmi:id="AuthorizationProvider_1"
j2eePolicyImplClassName="com.tivoli.pd.as.jacc.TAMPolicy" name="Tivoli Access
Manager"
policyConfigurationFactoryImplClassName="com.tivoli.pd.as.jacc.TAMPolicyConf
igurationFactory"
roleConfigurationFactoryImplClassName="com.tivoli.pd.as.jacc.TAMRoleConfigur
ationFactory"
initializeJACCProviderClassName="com.tivoli.pd.as.jacc.cfg.TAMConfigInitiali
ze" requiresEJBArgumentsPolicyContextHandler="false"
supportsDynamicModuleUpdates="true"/>

</authConfig>

```

- iv. On the Workplace XT WebSphere server, open the **security.xml** file for editing, and paste in the “userRegistries”, “searchFilter”, and “host” entries you copied from the Content Engine file, in the location shown above.
- v. Save and close the file.

vi. Restart WebSphere, and log in to the Administrative Console.

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

**NOTE** If you make any changes to your LDAP server settings in the WebSphere Administrative Console after updating the **security.xml** file, these settings will be overwritten and you will have to add the entries back to the file.

j. Turn on (check) the Enable administrative security flag.

k. Turn off (uncheck) Use Java 2 security to restrict application access to local resources.

l. Click **Apply**, and then click **Save changes to the Master Configuration**.

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

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

UNIX - **<install\_path>/FileNet/WebClient**

Windows - **<install\_path>\FileNet\WebClient** (only required for NTFS formatted partitions)

where **<install\_path>** is the location where you installed Workplace XT. The default is **/opt** (UNIX) or **C:\Program Files** (Windows).

7. Stop and restart the application server.

8. Continue with [“To configure the server ports \(optional\)” on page 43](#), or continue with [“Install IBM FileNet Workplace XT Software Updates” on page 58](#).

### To configure the server ports (optional)

**NOTE** The following procedure is optional, and applies if you want your LISTENER ADDRESSES to be static.

1. Stop the WebSphere server.

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

**<WAS\_HOME>/profiles/default/config/cells/<machine\_name>Node01Cell/nodes/  
<machine\_name>Node01/serverindex.xml**

3. Use a text editor to open and edit **serverindex.xml**.

4. Locate the **<specialEndpoints>** section, and change the port numbers for the three SSL listener addresses to “0” as shown below:

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

```
<endPoint xmi:id="EndPoint_1155689929074" host="host_name" port="0"/>  
</specialEndpoints>
```

5. Save and close the **serverindex.xml** file.
6. Restart the WebSphere server.
7. Continue with [“Install IBM FileNet Workplace XT Software Updates” on page 58](#).

## Task 4b: Configure IBM FileNet Workplace XT (WebLogic)

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

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

### To configure IBM FileNet Workplace XT

---

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

1. (Optional) If you are using SSO, edit **web.xml**. See [“To edit web.xml for SSO \(optional\)” on page 45](#).
2. Modify the application server startup script. See [“To modify the application server startup script” on page 47](#).
3. (Optional) If you are using Application Integration or another optional product that require user tokens, configure WebLogic to support it. Do one of the following:
  - [“To configure WebLogic 8.1.x to support user tokens for Workplace XT \(including Application Integration\) \(optional\)” on page 50](#)
  - [“To configure WebLogic 9.x to support user tokens for Workplace XT \(including Application Integration\) \(optional\)” on page 51](#)
4. Configure IBM FileNet Workplace XT. Do one of the following:
  - [“To configure IBM FileNet Workplace XT \(WebLogic 8.1.x\)” on page 51](#)
  - [“To configure IBM FileNet Workplace XT \(WebLogic 9.x\)” on page 52](#).

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

---

#### NOTES

- Perform this procedure only if your site uses SSO. This procedure modifies the web.xml to enable SSO.
  - If you are implementing SSO in an IBM Tivoli Access Manager WebSEAL 6.0 environment, the junction you use for Workplace XT must be a transparent junction. For more details, see your IBM product documentation.
1. Make a backup copy of **web.xml**.

UNIX - **<install\_path>/FileNet/WebClient/WorkplaceXT/WEB-INF/web.xml**

Windows - **<install\_path>\FileNet\WebClient\WorkplaceXT\WEB-INF\web.xml**

where `<install_path>` is the location where you installed IBM FileNet Workplace XT. The default is `/opt` (UNIX) or `C:\Program Files` (Windows).

2. Use a text editor to open and edit `web.xml`.
3. Set the parameter `perimeterChallengeMode` to true, as in:

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

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

The default settings are:

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

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

- **ssoProxyContextPath:** Set the value to the context path of the SSO proxy host URL. This is the path portion of the URL that appears after the server name, and which represents top-level access to the Workplace XT application. For example, if the IBM FileNet Workplace XT deploy host URL is `http://deploy_server:2809/WorkplaceXT` and the SSO proxy host URL is `http://sso_proxy_server.domain.com/fn/WorkplaceXT`, then use the following:

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

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

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

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

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

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

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

5. Save your changes to **web.xml** and close the file.

### To modify the application server startup script

---

1. If the WebLogic server is running, stop the server.
2. Make a backup copy of the application server startup script.
  - If you are using a WebLogic domain, modify **startWebLogic.cmd** for Windows or **startWebLogic.sh** for UNIX.
  - If you are not using a WebLogic domain, modify **startWLS.cmd** for Windows or **startWLS.sh** for UNIX.
3. Use a text editor to open and edit the application server startup script.

- a. Do one of the following to edit the MEM\_ARGS settings:

- 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's recommendation for a value for your configuration. For more information on performance tuning, see the *IBM FileNet P8 Platform Performance Tuning Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see ["Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs" on page 9.](#)

- For systems using JRockit JAVA:

Find the MEM\_ARGS variable and append the following to any existing settings:

```
-Xgc:gencon
```

**NOTE** If the MEM\_ARGS variable doesn't exist, add it to the startup script.

- b. Configure JAAS login. Add one of the following right after the classpath entry for WebLogic. Do not enter the line break shown after config=. The set jaas\_login entry should all be on a single line.

- **New install - AIX**

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

where *<install\_path>* is the location where you installed Workplace XT. For example,  
"/opt/FileNet/WebClient/CE\_API/config/jaas.conf.WebLogic".

- **New install - UNIX**

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

where *<install\_path>* is the location where you installed Workplace XT. For example,  
"/opt/FileNet/WebClient/CE\_API/config/jaas.conf.WebLogic".

- **New install - Windows**

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

where *<install\_path>* is the location where you installed Workplace XT. For example,  
"C:\Program Files\FileNet\WebClient\CE\_API\config\jaas.conf.weblogic".

- **Upgrade - AIX**

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

where *<install\_path>* is the location where you installed Workplace XT. For example,  
"/opt/FileNet/WebClient/CE\_API/config/jaas.conf.WebLogic".

- **Upgrade - UNIX**

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

where *<install\_path>* is the location where you installed Workplace XT. For example,  
"/opt/FileNet/WebClient/CE\_API/config/jaas.conf.WebLogic".

- **Upgrade - Windows**

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

where *<install\_path>* is the location where you installed Workplace XT. For example,  
"C:\Program Files\FileNet\WebClient\CE\_API\config\jaas.conf.weblogic".

c. Add %jaas\_login% section as indicated in the examples below in **bold**.

- **WebLogic 8 - UNIX - after the CLASSPATH settings**

```
# JAAS login config file
JAAS_LOGIN="{JAAS_LOGIN} -Djava.security.auth.login.config=/opt/FileNet/Config/
WebClient/jaas.conf.weblogic"

# Call WebLogic Server
echo "."
echo "CLASSPATH=${CLASSPATH}"
echo "."
echo "PATH=${PATH}"
```



```
echo "."
echo "*****"
echo "* To start WebLogic Server, use a username and *"
echo "* password assigned to an admin-level user. For *"
echo "* server administration, use the WebLogic Server *"
echo "* console at http://[hostname]:[port]/console *"
echo "*****"

${JAVA_HOME}/bin/java ${JAVA_VM} ${MEM_ARGS} ${JAVA_OPTIONS} ${JAAS_LOGIN} -
Dweblogic.Name=${SERVER_NAME} -
Dweblogic.ProductionModeEnabled=${PRODUCTION_MODE} -
Djava.security.policy=${WL_HOME}/server/li
b/weblogic.policy" weblogic.Server
```

- **WebLogic 8 - Windows - after the CLASSPATH settings**

```
echo .
echo CLASSPATH=%CLASSPATH%
echo .
echo PATH=%PATH%
echo .
echo *****
echo * To start WebLogic Server, use a username and *
echo * password assigned to an admin-level user. For *
echo * server administration, use the WebLogic Server *
echo * console at http:\[hostname]:[port]\console *
echo *****

%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% -
Dweblogic.ProductionModeEnabled=%PRODUCTION_MODE% -
Djava.security.policy="%WL_HOME%\server\lib\weblogic.policy" weblogic.Server
```

- **WebLogic 9 - UNIX - in the WLS\_REDIRECT\_LOG settings**

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

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

- **WebLogic 9 - Windows - in the WLS\_REDIRECT\_LOG settings**

```
If "%WLS_REDIRECT_LOG%"=="" (
    echo Starting WLS with line:
    echo %JAVA_HOME%\bin\java %JAVA_VM% %MEM_ARGS% %JAVA_OPTIONS% %jaas_login% -
Dweblogic.Name=%SERVER_NAME% -
```

## To configure WebLogic 8.1.x to support user tokens for Workplace XT (including Application Integration) (op-

```

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

```

4. Save and close the application server startup script.

### To configure WebLogic 8.1.x to support user tokens for Workplace XT (including Application Integration) (optional)

---

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

1. Stop the WebLogic server.
2. Copy the **authentication-weblogic-8.jar** file from here:

**<install\_path>/FileNet/WebClient/WorkplaceXT/authenticationFiles**

to here:

**<WL\_home>/server/lib/mbeantypes**

3. 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**

4. Restart the WebLogic server, and log in to the administrative console.
5. Navigate to **<my\_domain> > Domain Wide Security Settings > Realms > myrealm > Authentication Providers**.
6. Click the link **Configure a new User Token Authenticator...** to add a new provider.
7. On the **General** tab, enter the name of the custom provider in the Name field, set the Control Flag to SUFFICIENT, then click **Create**.
8. On the **Details** tab, enter to the path to the IBM FileNet Workplace XT WcmApiConfig.properties file, for example, **<install\_path>/FileNet/WebClient/WorkplaceXT/WEB-INF/WcmApiConfig.properties**, and click **Apply**.
9. Return to the Authentication Providers page.
10. Click **Re-order the Configured Authentication Providers**.

To configure WebLogic 9.x to support user tokens for Workplace XT (including Application Integration) (op-

11. Move the custom provider you created ahead of the LDAP provider, and click **Apply**.
12. Restart the WebLogic server.

### To configure WebLogic 9.x to support user tokens for Workplace XT (including Application Integration) (optional)

---

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

1. Stop the WebLogic server.
2. Copy the **authentication-weblogic-9.jar** file from here:

**<install\_path>/FileNet/WebClient/WorkplaceXT/authenticationFiles**

to here:

**<WL\_home>/server/lib/mbeantypes**

3. 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**

4. Restart the WebLogic server, and log in to the administrative console.
5. Navigate to Home > myrealm > Providers > Authentication.
6. Click on **Lock & Edit**, then **New** to add a new provider.
  - a. In the Name field, enter the name you have chosen for the custom provider.
  - b. In the Type dropdown list, specify UserTokenAuthenticator.
  - c. Click **OK**.
7. Click **Reorder**, and move the new provider ahead of the LDAP provider. Click **OK**.
8. Select the new provider to configure settings.
  - a. On the Configuration tab, set the Control Flag to SUFFICIENT. Click **Save**.
  - b. On the Provider Specific tab, enter the path to the IBM FileNet Workplace XT WcmApiConfig.properties file, for example, **<install\_path>/FileNet/WebClient/WorkplaceXT/WEB-INF/WcmApiConfig.properties**, then click **Save**.
9. Click **Activate Change**.
10. Restart the WebLogic server.

### To configure IBM FileNet Workplace XT (WebLogic 8.1.x)

---

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

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

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

- a. Click **<my\_domain>**.
- b. Click **View Domain-Wide Security Settings**.
- c. Click the **Advanced** tab.
- d. Uncheck (turn off) **Enable Generated Credential**.
- e. Enter a password for the domain in the **Credential** field. You must enter the same password for both Content Engine and IBM FileNet Workplace XT.
- f. Confirm the password by entering it in the **Confirm Credential** field.
- g. Click **Apply**.

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

2. Configure LDAP settings on IBM FileNet Workplace XT to exactly match the Content Engine settings.
  - a. Refer to your Content Engine installation checklists and the WebLogic Administration Console settings for Compatibility Security > Realms for Authentication Provider, users, and groups on Content Engine.
  - b. Configure the same LDAP settings on the IBM FileNet Workplace XT Server.
  - c. Restart the application server.
3. Continue with [“Install IBM FileNet Workplace XT Software Updates” on page 58](#).

#### To configure IBM FileNet Workplace XT (WebLogic 9.x)

---

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

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

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

- a. In the Change Center of the Administration Console, click **Lock & Edit**.
- b. Click the **name** of the domain.
- c. Click the **Security** tab.

- d. Click **General**.
- e. Click **Advanced**.
- f. Enter a password for the domain in the **Credential** field. You must enter the same password for both the Content Engine domain and IBM FileNet Workplace XT domain.
- g. Click **Save**.
- h. Click **Activate Changes**.
- i. Restart the server if needed.
- j. Repeat this procedure in each domain for which you want to enable trust.

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

2. Configure LDAP settings on IBM FileNet Workplace XT to exactly match the Content Engine settings.
  - a. Refer to your Content Engine installation checklists and the WebLogic Administration Console settings for Compatibility Security > Realms for Authentication Provider, users, and groups on Content Engine.
  - b. Configure the same LDAP settings on the IBM FileNet Workplace XT Server.
  - c. Restart the application server.
3. Continue with ["Install IBM FileNet Workplace XT Software Updates" on page 58](#).

## Task 4c: Configure IBM FileNet Workplace XT (JBoss)

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

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

### To configure IBM FileNet Workplace XT

---

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

1. Modify the application server startup script. See [“To modify the application server startup script” on page 54](#).
2. (Optional) If you are using Application Integration or another optional product that require user tokens, configure JBoss to support it. See [“To configure JBoss to support user tokens for Workplace XT \(including Application Integration\) \(optional\)” on page 55](#).
3. Perform additional configuration steps for IBM FileNet Workplace XT. See [“To configure IBM FileNet Workplace XT \(JBoss\)” on page 56](#).

### To modify the application server startup script

---

1. Stop the JBoss application server, if it is running.
2. Make a backup copy of the application server startup script.  
Backup **run.bat** (Windows) or **run.sh** (UNIX).
3. Open the application server startup script for editing.
  - (UNIX) **run.sh**
  - (Windows) **run.bat**
4. Edit the Java settings.
  - a. Add a line to specify the path to the JDK on the machine where JBoss is installed, as shown in the following example (Windows):

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

**NOTE** If your JDK is different from version 1.5.0, substitute your version for the one listed above.
  - 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 `JAVA_OPTS` line, change the `-Xms` and `-Xmx` values (**bold**) for your configuration.

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

Example (Windows):

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

Refer to your application server vendor's recommendation for Initial and Maximum heap size values. For IBM specific recommendations, see the *IBM FileNet P8 Platform Performance Tuning Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).

5. Configure JAAS login. Add one of the following right after the RESTART entry in the startup script.

**CAUTION** Enter the jaas\_login entry (bold below) as a single line without line breaks.

- Windows

```
:RESTART

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

- UNIX

```
:RESTART

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

6. Save and close the application server startup script.

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


---

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

1. Stop the JBoss server, if it is running.
2. Copy the **authentication-utils.jar** file from here:

**<install\_path>/FileNet/WebClient/WorkplaceXT/authenticationFiles**

to here:

**<JBoss\_home>/server/default/lib**

3. Modify the **login-config.xml** file.
  - a. On the Workplace XT server, open **login-config.xml**, located in **<JBoss\_home>/server/default/conf**, for editing.
  - b. Add the following xml element (bold below) to the FileNet domain section:

```
<application-policy name="FileNet">
  <b>authentication</b></application-policy>
```

```

        <login-module
code="org.jboss.security.auth.spi.LdapExtLoginModule" flag="required">
        ...
        </login-module>

        <login-module
code="com.filenet.ae.authentication.loginmodule.UserTokenLoginModule"
flag="optional">
        <module-option name="wcmApiConfigPath"><install_path>/FileNet/
WebClient/WorkplaceXT/WEB-INF/WcmApiConfig.properties
        </module-option>
        <module-option name="multi-threaded">true</module-option>
        </login-module>

    </authentication>
</application-policy>

```

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

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

- c. Save changes to **login-config.xml**.
4. Continue with [“To configure IBM FileNet Workplace XT \(JBoss\)” on page 56](#).

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

---

1. Stop the JBoss application server, if it is running.
2. Configure LDAP settings on the Workplace XT server to exactly match the Content Engine settings.
  - a. On the Workplace XT server, open **login-config.xml**, located in **<JBoss\_home>/server/default/conf**, for editing.
  - b. Set the **<application-policy name="FileNet">** entry identical to the corresponding entry in the **login-config.xml** file on the Content Engine server.
3. Set permissions for the user running the application server.

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

UNIX - **<install\_path>/FileNet/WebClient**

Windows - **<install\_path>\FileNet\WebClient** (only required for NTFS formatted partitions)

where **<install\_path>** is the location where you installed Workplace XT. The default is **/opt** (UNIX) or **C:\Program Files** (Windows).

4. Delete the following directory:  
**<JBoss\_home>/server/default/deploy/jbossweb-tomcat55.sar/jsf-libs**



**NOTE** If there are applications that depend on the default configuration jsf-libs, you can create a new configuration and deploy Workplace XT to it. See the JBOSS server guide for details on setting this up.

5. Clear out temp directories such as **<JBoss\_home>/server/default/tmp** and **<JBoss\_home>/server/default/work**.
6. (Optional) Disable JBoss logging.

In development mode, JBoss creates a large number of HTTP Access, "INFO", "DEBUG" and "TRACE" log messages. This can cause unexpected behavior in the deployed IBM FileNet software. Using the following procedure, you can limit this type of excessive JBoss logging.

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

- a. Edit the **log4j.xml** file (**<JBoss\_home>/server/default/conf/log4j.xml**).
  - i. Change all threshold values and priority values from "INFO", "DEBUG", or "TRACE" to "ERROR".
  - ii. Delete or comment out the "Preserve messages in a local file" to turn off the server log.
- b. To turn off HTTP access logging, open **jboss-service.xml** with a text editor and delete or comment out the "Access logger" section.

Location of jboss-service.xml:

- JBoss 4.0.5 - **<JBoss\_Home>/server/default/deploy/jbossweb-tomcat55.sar/META-INF**

- c. Open **web.xml** and change the logVerbosityLevel to "FATAL".

Location of web.xml:

- JBoss 4.0.5 - **<JBoss\_Home>/server/default/deploy/jbossweb-tomcat55.sar/conf**

7. Start JBoss as follows, and leave the command window open:
  - (UNIX) `./run.sh`
  - (Windows) `run.bat`
8. Continue with ["Install IBM FileNet Workplace XT Software Updates" on page 58](#).

## Task 5: Install IBM FileNet Workplace XT Software Updates

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

### To install the Workplace XT software updates

---

1. To download the latest software updates, and to determine which of these updates may be required for use with other components and expansion products, contact your service representative or see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).
2. Open the readmes for the software updates and perform the installation procedures provided.
3. Install the latest Content Engine and Process Engine client file updates. See [Task 6 on page 59](#).

## Task 6: Install the Latest Content Engine and Process Engine Client Files on Workplace XT Servers

Install any Content Engine or Process Engine client file updates that are available.

### To install the Content Engine and Process Engine client files

---

1. To download the latest software updates, and to determine which of these updates may be required for use with other components and expansion products, contact your service representative or see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).
2. Open the readmes for the Content Engine and Process Engine fix packs or mod releases, and follow the instructions to do the following:
  - Install the updated Content Engine Java client files
  - Run the Process Engine Client Updater

**NOTE** The client files you install must match the version of your Content Engine and Process Engine.

3. Deploy Workplace XT. See the appropriate task according to your application server type:
  - [Task 7a on page 60](#) (WebSphere)
  - [Task 7b on page 65](#) (WebLogic)
  - [Task 7c on page 69](#) (JBoss)

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

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

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

---

**NOTE** If you are using a WAR file or EAR file for deployment, and you made any changes to files in the **/WorkplaceXT** directory, you must recreate the WAR file or WAR and EAR files. If you made changes to **web.xml** for SSO support, or any other edits, recreate the WAR and EAR files.

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

#### UNIX

```
<install_path>/FileNet/WebClient/deploy/create_web_client_war.bat
```

#### Windows

```
<install_path>\FileNet\WebClient\deploy\create_web_client_war.sh
```

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

#### UNIX

```
<install_path>/FileNet/WebClient/deploy/create_web_client_ear.bat
```

#### Windows

```
<install_path>\FileNet\WebClient\deploy\create_web_client_ear.sh
```

**NOTE** You will need to recreate the WAR and EAR files and redeploy the application any time that you make modifications to the contents of the **/FileNet/WebClient/WorkplaceXT** directory.

### To deploy Workplace XT (WebSphere 6.0.x)

---

1. From the WebSphere Administrative Console, expand Applications. Click **Install New Application**. The “Preparing for the application installation” dialog opens.
2. (If the Administrative Console is running *locally*) Select **Local Path** and enter or browse to the location of the **.war** or **.ear** file created by the setup program (see below for the default path). Do not enter the machine name.
3. (If the Administrative Console is *remote*) Select **Remote File System** and enter the fully-qualified path to the **.war** or **.ear** file. Do not enter the machine name.

The default path is:

UNIX - **<install\_path>/FileNet/WebClient/deploy**

Windows - **<install\_path>\FileNet\WebClient\deploy**

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

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

**NOTE** The context root is the name of the application you log in to using the web interface, such as `http://<WorkplaceXTServerName>:<port#>/<Context Root>`.

5. On the “Application Security Warning” screen, click **Continue**.
6. Complete the “Install New Application” screens, as follows.
  - a. At “Install New Application”, Step 1, specify the application name.  
Enter `Workplace XT`, or the name you chose to call the application, click **Next**.
  - b. At “Install New Application”, Step 2, Map modules to servers, specify the **WebServer** you are planning to use. Check **Workplace XT** and click **Next**.
  - c. At “Install New Application”, Step 3, Map virtual hosts for Web Modules, check **Workplace XT** and keep the default virtual host (default\_host), click **Next**.
  - d. At “Install New Application”, Step 4, Map security roles to users/groups:
    - i. In the Select column, select the checkboxes next to the “All authenticated” and “Everyone” roles.
    - ii. For the "All authenticated" role row, verify that only the checkbox in the **All authenticated?** column is selected.
    - iii. For the "Everyone" role row, verify that only the checkbox in the **Everyone?** column is selected.
    - iv. Click **Next**.
  - e. At “Install New Application”, Step 5, verify your configuration and click **Finish**. Once the configuration is saved, click **Save to Master Configuration**.
7. Configure the Classloader settings.
  - a. From the Administrative Console, expand **Applications**. Click **Enterprise Applications**, and click your application (default WorkplaceXT).
  - b. From the **Configuration** tab, set Classloader Mode to **PARENT\_LAST**.
  - c. Verify that the **WAR Classloader Policy** is set to **Module**.  
**NOTE** Do this only for the specific web application. Do not change the similar settings for the entire application server.
  - d. Click **Apply**.
8. Configure the Web Module Classloader setting.
  - a. From the Administrative Console, expand **Applications**.
  - b. Click **Enterprise Applications**, and click your application (default Workplace XT).
  - c. Under Related Items, click **Web Modules**. Click **web\_client.war**.
  - d. From the **Configuration** tab, set Classloader Mode to **PARENT\_LAST**.

**NOTE** Do this only for the specific web application. There are similar settings for the entire application server. Do not change these.

9. Click **Apply**, click **Save**, and then click **Save changes to the Master Configuration**.
10. Set permissions for the user running the application server.

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

UNIX:

**<WAS\_HOME>/profiles/default/installedApps/<node\_name>/WorkplaceXT.ear/  
web\_client.war**

**<install\_path>/FileNet/WebClient**

Windows:

**<WAS\_HOME>\profiles\default\installedApps\<node\_name>\WorkplaceXT.ear\web\_client.war**

**<install\_path>\FileNet\WebClient**

11. Stop and restart the application server.

#### To deploy Workplace XT (WebSphere 6.1.x)

---

1. From the WebSphere Administrative Console, expand Applications. Click **Install New Application**. The “Preparing for the application installation” dialog opens.
2. (If the Administrative Console is running *locally*) Select Local file system and enter or browse to the location of the **.war** or **.ear** file created by the setup program (see below for the default path). Do not enter the machine name.
3. (If the Administrative Console is *remote*) Select Remote file system and enter the fully-qualified path to the **.war** or **.ear** file. Do not enter the machine name.

The default path is:

UNIX - **<install\_path>/FileNet/WebClient/deploy**

Windows - **<install\_path>\FileNet\WebClient\deploy**

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

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

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

5. Select Show me all installation options and parameters., and click **Next**.
6. On the “Choose to generate default bindings and mappings” page, click **Next**.
7. Complete the “Install New Application” screens, as follows:

- a. At “Install New Application, Step 1: Select installation options,” specify the application name. Enter `Workplace XT`, or the name you chose to call the application, click **Next**.
  - b. At “Install New Application, Step 2: Map modules to servers,” specify the WebServer you are planning to use. Check `WorkplaceXT` and click **Next**.
  - c. At “Install New Application, Step 3: Provide JSP reloading options for Web modules,” check `WorkplaceXT`, and click **Next**.
  - d. At “Install New Application, Step 4: Map shared libraries,” check `WorkplaceXT` and click **Next**.
  - e. At “Install New Application, Step 5: Initialize parameters for servlet,” click **Next**.
  - f. At “Install New Application, Step 6: Map virtual hosts for Web modules,” check `WorkplaceXT`, and click **Next**.
  - g. At “Install New Application, Step 7: Map context roots for Web modules,” click **Next**.
  - h. At “Install New Application, Step 8: Map security roles to users or groups”:
    - i. In the Select column, select the checkboxes next to the “All authenticated” and “Everyone” roles.
    - ii. For the "All authenticated" role row, verify that only the checkbox in the All authenticated? column is selected.
    - iii. For the "Everyone" role row, verify that only the checkbox in the Everyone? column is selected.
    - iv. Click **Next**.
  - i. At “Install New Application, Step 9: Summary,” verify your configuration and click **Finish**. A successful install message displays.
8. Once the configuration is saved, click **Save** directly to master configuration.
  9. Configure the Class loader settings.
    - a. From the Administrative Console, expand Applications. Click **Enterprise Applications**, and click your application (default `WorkplaceXT`).
    - b. From the Configuration tab, click **Class loading and update detection**.
    - c. In the Pulling interval for updated files field, type 3.
    - d. Under Class loader order, Select “Classes loaded with parent class loader first”.
 

**NOTE** Do this only for the specific web application. Do not change the similar settings for the entire application server.
    - e. Click **Apply**. Click **Save** directly to the master configuration.
  10. Configure the Web Module Class loader setting.
    - a. From the Administrative Console, expand Applications. Click **Enterprise Applications**, and click your application (default `WorkplaceXT`).

- b. Under Modules, click **Manage Modules**. Click **WorkplaceXT**.
- c. From the **Configuration** tab, under Class loader order, select “Classes loaded with application class loader first”.

**NOTE** Do this only for the specific web application. There are similar settings for the entire application server. Do not change these.

11. Click **Apply**, click **Save** directly to the master configuration.
12. Set permissions for the user running the application server.

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

UNIX:

```
<WAS_HOME>/profiles/default/installedApps/<node_name>/WorkplaceXT.ear/  
web_client.war  
  
<install_path>/FileNet/WebClient
```

Windows:

```
<WAS_HOME>\profiles\default\installedApps\<node_name>\WorkplaceXT.ear\  
web_client.war  
  
<install_path>\FileNet\WebClient
```



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

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

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

---

**NOTE** If you are using a WAR file or EAR file for deployment, and you made any changes to files in the **/WorkplaceXT** directory, you must recreate the WAR file or WAR and EAR files. If you made changes to **web.xml** for SSO support, or any other edits, recreate the WAR and EAR files.

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

#### UNIX

```
<install_path>/FileNet/WebClient/deploy/create_web_client_war.bat
```

#### Windows

```
<install_path>\FileNet\WebClient\deploy\create_web_client_war.sh
```

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

#### UNIX

```
<install_path>/FileNet/WebClient/deploy/create_web_client_ear.bat
```

#### Windows

```
<install_path>\FileNet\WebClient\deploy\create_web_client_ear.sh
```

**NOTE** You will need to recreate the WAR and EAR files and redeploy the application any time that you make modifications to the contents of the **/FileNet/WebClient/WorkplaceXT** directory.

### To rename the WAR file (optional)

---

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

By default, when you deploy from a WAR file, the context root is the first part of the WAR filename. For example, the default **web\_client.war** will generate a context root of **http://<server\_name>:<port#>/webclient**. If you want to use **http://<server\_name>:<port#>/<custom\_name>**, you must rename **web\_client.war** to **<custom\_name>.war**.

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

#### UNIX

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

#### Windows

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

## To deploy Workplace XT (WebLogic 8.1.x)

---

1. Start the application server.
2. **(For WAR file or exploded directory deployment only)** Create a new Web Application for WAR file or exploded directory deployment:
  - a. From the WebLogic Server Console, click **<mydomain>**, click **Deployments**, and then click **Web Application Module**.
  - b. Click **Deploy a new Web Application Module**.
  - c. From the right pane of the WebLogic Administration Console, do one of the following:
    - To deploy from an exploded folder, browse to and select the radio button for the Web-Client folder in  
 UNIX - **<install\_path>/FileNet/WebClient**  
 Windows - **<install\_path>\FileNet\WebClient**
    - To deploy from a WAR file, browse to and select the radio button for the **web\_client.war** file in  
 UNIX - **<install\_path>/FileNet/WebClient/deploy**  
 Windows - **<install\_path>\FileNet\WebClient\deploy**
  - d. Verify that the **Name** field has the default value, or enter your custom application name.
  - e. Click **Deploy**.  
**NOTE** To verify that the deployment was successful, expand **Web Applications**. The web application Workplace XT will be listed.
3. **(For EAR file deployment only)** Create a new application for **EAR file** deployment:
  - a. From the WebLogic Server Console, click **<mydomain>**, click **Deployments**, and then click **Application**.
  - b. Click **Deploy a new Application**.
  - c. From the right pane of the WebLogic Administration Console, select one of the following:
    - UNIX - **<install\_path>/FileNet/WebClient /deploy**
    - Windows - **<install\_path>\FileNet\WebClient \deploy**
  - d. Verify that the **Name** field has the default value, or enter your custom application name.
  - e. Click **Deploy**.  
**NOTE** To verify that the deployment was successful, expand **Applications**. The application Workplace XT will be listed.

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

If the user that will be running the application server is different from the user that installed Application Engine, you must give the user read/write permissions on the following folder:

UNIX - **<install\_path>/FileNet/WebClient**

Windows - **<install\_path>\FileNet\WebClient** (only required for NTFS formatted partitions)

where **<install\_path>** is the location where you installed Workplace XT. The default is **\opt** (UNIX) or **C:\Program Files** (Windows).

---

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

1. Start the application server.
2. From the WebLogic Administration Console, navigate to the domain you created or designated for the IBM FileNet Workplace XT in [“Configure an Application Server for IBM FileNet Workplace XT \(WebLogic\)” on page 19](#).
3. Click **Deployments**.
4. In the Change Center, click **Lock & Edit**.
5. Click **Install**.
6. From the right pane of the WebLogic Administration Console, do one of the following:
  - To deploy from an exploded folder, browse to and select the radio button for the Workplace XT folder in:  
UNIX - **<install\_path>/FileNet/WebClient**  
Windows - **<install\_path>\FileNet\WebClient**
  - To deploy from a WAR or EAR file, browse to and select the radio button for the **web\_client.war** or **web\_client.ear** file in  
UNIX - **<install\_path>/FileNet/WebClient /deploy**  
Windows - **<install\_path>\FileNet\WebClient \deploy**
7. Click **Next**.
8. 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”.
9. Click **Finish**.
10. Click **Activate Changes**.

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

11. After IBM FileNet Workplace XT is deployed, start the application. Navigate to **<your\_domain> > Deployments** and select (check) the box next to Workplace XT. Click **Start**, and then select **Servicing all requests**.
12. Click **Yes** to agree to start the application.

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

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

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

---

**NOTE** If you are using a WAR file or EAR file for deployment, and you made any changes to files in the **/WorkplaceXT** directory, you must recreate the WAR file or WAR and EAR files. If you made changes to **web.xml** for SSO support, or any other edits, recreate the WAR and EAR files.

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

#### UNIX

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

#### Windows

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

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

#### UNIX

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

#### Windows

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

**NOTE** You will need to recreate the WAR and EAR files and redeploy the application any time that you make modifications to the contents of the **/FileNet/WebClient/WorkplaceXT** directory.

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

---

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

By default, when you deploy from a WAR file, the context root is the first part of the WAR filename. For example, the default **web\_client.war** will generate a context root of **http://<server\_name>:<port#>/webclient**. If you want to use **http://<server\_name>:<port#>/<custom\_name>**, you must rename **web\_client.war** to **<custom\_name>.war**.

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

#### UNIX

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

#### Windows

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

**CAUTION** You must rename the WAR file every time you regenerate it. The create\_web\_client\_war.sh/.bat script will by default create a file with the name **web\_client.war**.

### To deploy Workplace XT

---

1. Stop the application server, if it is running.
2. **(For exploded directory deployment only)**
  - a. On the JBoss server, copy the **WorkplaceXT** folder from:  
`<install_path>/FileNet/WebClient/`  
to:  
`<JBOSS_home>/server/default/deploy/`
  - b. Append the extension .war to the WorkplaceXT folder:  
`<JBOSS_home>/server/default/deploy/WorkplaceXT.war`
3. **(For WAR file deployment only)** On the JBoss server, copy the **web\_client.war** (or **custom\_name.war**) file from:  
`<install_path>/FileNet/WebClient/deploy/`  
to:  
`<JBOSS_home>/server/default/deploy/`
- **(For EAR file deployment only)** On the JBoss server, copy the **web\_client.ear** file from:  
`<install_path>/FileNet/WebClient/deploy/`  
to:  
`<JBOSS_home>/server/default/deploy/`
4. Start or restart the JBoss application server.
5. Verify that the application deployed successfully.  
  
Verify that the **server.log** file located in `<JBOSS_home>/server/default/log` lists deployment of the WAR or EAR file you used.

# Configuration/Startup Tasks

## To configure IBM FileNet Workplace XT components

---

1. Set bootstrap preferences. Do [Task 8 on page 72](#).
2. Configure the Process Engine connection point for Workplace XT. Do [Task 9 on page 76](#).
3. Set up Workplace XT SSL security. Do [Task 10 on page 77](#).
4. Perform additional configuration. Do [Task 11 on page 80](#).

## Task 8: Set IBM FileNet Workplace XT Bootstrap Preferences

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

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

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

### NOTES

- By successfully logging in to IBM FileNet Workplace XT and saving the bootstrap preferences, you are verifying IBM FileNet Workplace XT's basic functionality such as user authentication as well as communication and storing of data in Content Engine.
- In addition to the preferences covered in this topic, more preferences can be set for the Workplace XT application using Workplace XT Site Preferences. For more information, see the IBM FileNet P8 Help topic [User Help > Actions, preferences, and tools > Site preferences](#).
- After the initial bootstrap configuration, users with the Application Engine Administrators role can change any of these preferences by signing into IBM FileNet Workplace XT and navigating to **Admin > Site Preferences > Bootstrap**.
- In a web farm/clustering environment, all Workplace XT installations share site preferences by using the same **bootstrap.properties** file. For more information, see the *IBM FileNet P8 Platform High Availability Technical Notice*. To download this and other IBM FileNet product documentation from the IBM web site, see ["Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs" on page 9](#).
- Bootstrap properties are stored in a separate file from other site preferences. The default location for this file, **bootstrap.properties**, is:  
**<install\_path>/FileNet/Config/WebClient**
- To allow users to create workflow subscriptions, you *must* configure the PWDesigner access role. For more information, see ["To enable user access to the Workflow Subscription Wizard" on page 75](#).

---

### To set the bootstrap properties on first login

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



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

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

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

2. (Required only when using Application Integration with SSL) Enter security info.

- a. Enter the **SSL Host** and **Port** information for the SSL server.
- b. Enter the **Java Server HTTP port**.

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

3. Configure user token settings.

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

- a. Select whether or not to create user tokens for IBM FileNet Workplace XT (Default: **Yes**).
- b. Select whether or not the application will pick up generated tokens from other applications (Default: **Yes**).
- c. Specify a Token timeout interval (1 - 15 minutes).

4. (Required) Specify preference settings.

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

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

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

The format of the URL is:

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

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

**NOTE** If no documentation URL is specified, the IBM FileNet Workplace XT Help link will default to  
<http://localhost>.

5. Configure Application Integration.

Select **No** (default) if you do not want users to be prompted to add an email to an object store each time the email is sent.

Select **Yes** if you want users prompted to add an email to an object store when the email is sent.

This preference setting only affects Outlook integration.

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

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

**NOTES**

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

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

**To add a single index for Application Name on the site preferences object store**

---

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

1. On Content Engine, launch the IBM FileNet Enterprise Manager.
2. In the left pane, expand the **Object Stores** folder.
3. Expand the object store node where your preferences are stored. See [“\(Required\) Specify preference settings.” on page 73](#) above.
4. Expand **Other Classes** and then **Custom Object**.
5. Right click **Access Role** and select **Properties**.
6. Select the **Property Definitions** tab.

7. Select **Application Name** and click **Edit**.
8. On the General tab of the Application Name Properties, if the **Indexed** field shows 'not indexed', click **Set/Remove**.
9. Select **Set** and then **Single Indexed**.
10. Click **OK** to set the index.
11. Click **OK** to apply the change and close the Application Name Properties window.
12. Click **OK** to close the Access Role Class Properties window.

---

#### To enable user access to the Workflow Subscription Wizard

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

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

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

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

## Task 9: Configure the Process Engine Connection Point for IBM FileNet Workplace XT

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

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

To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).

### To configure the connection point

---

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

## Task 10: Set up SSL Security for IBM FileNet Workplace XT

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

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

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

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

---

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

```
https://<WorkplaceXTServerName>:<SSL port>/WorkplaceXT
```

The entire log-in process will be handled by the SSL-enabled host.

For more information about SSL port numbers, see [“IBM FileNet Workplace XT Port Numbers” on page 106](#).

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

---

1. Enable SSL on the application server that runs IBM FileNet Workplace XT (see your SSL documentation).
2. Modify the web.xml file in the 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. (If you deployed as a WAR file), In the `<install_path>/FileNet/WebClient/deploy` directory, run `create_web_client_war.bat`.
    - c. (If you deployed as an EAR file), In the `<install_path>/FileNet/WebClient/deploy` directory, run `create_web_client_war.bat`, then `create_web_client_ear.bat`.
    - d. Redeploy the application.
  3. 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](#).
  4. (Applies only when using Application Integration) Set bootstrap preferences:
    - a. Navigate to Admin > Site Preferences > Bootstrap.
    - b. Set the Security info Site Preference **SSL Host:Port** to identify the alias host name and port number.  
  
Use the IP address of the IBM FileNet Workplace XT server for the SSL Host entry.  
  
For more information, see “(Required only when using Application Integration with SSL) Enter security info.” on page 73.
    - c. Click **Apply** to save your bootstrap settings.
  5. Update the base URL:
    - a. Navigate to Admin > Site Preferences > Refresh.
    - b. Enter the Workplace XT Base URL value in the provided field. The URL must contain a valid host name, and not contain “localhost” or an IP number. For example, `http://myserver:7001/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.
  6. Sign out of Workplace XT, and close your browser.
  7. Test the SSL connection by signing into Workplace XT using the following URL:

`http://<WorkplaceXTServerName>:<non-SSL port>/WorkplaceXT`

**NOTE** You will be redirected to the SSL-enabled port for log in, then back to the non-SSL enabled port after log-in is complete. You should receive a warning that you are accessing pages over a secure connection (unless you turned this dialog box off), and then Workplace XT will open.

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

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

## Task 11: Perform Additional Configuration Tasks

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

**<Documentation URL, in the form [http://webserver:port#ecm\\_help](http://webserver:port#ecm_help)>/\_start\_here.htm**

- Set site preferences for the Workplace XT application. Refer to [User Help > Actions, preferences, and tools > Site preferences](#).
- Configure email notification. Refer to [FileNet P8 Administration > Process Engine Administration > Workflow administration tasks > Coordinating workflow design > Email notification](#).
- Enable logging. Refer to [User Help > Using Workplace XT > Configure Workplace XT > Configure Logging](#).
- Perform other configuration tasks as applicable. For a list of tasks that apply to the full IBM FileNet P8 system, see the “Perform Additional Configuration Tasks” in the *IBM FileNet P8 Platform Installation and Upgrade Guide*. To download this and other IBM FileNet product documentation from the IBM web site, see “[Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs](#)” on page 9.



## Optional Installation Tasks

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

---

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

- Install IBM FileNet Workplace XT Application Integration. Do [Task 12 on page 82](#).
- Install IBM FileNet Workplace XT File Tracker. Do [Task 13 on page 86](#).
- Deploy multiple Workplace XT instances. Do [Task 14 on page 88](#).

## Task 12: Install IBM FileNet Workplace XT Application Integration

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

### NOTES

- Verify that the client machine meets the platform requirements documented in the *IBM FileNet P8 Hardware and Software Requirements*. To download this and other IBM FileNet product documentation from the IBM web site, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).
- You cannot collocate IBM FileNet Workplace XT Application Integration with clients running P8 Workplace Application Integration Toolkit.
- If you plan to use Application Integration with Workplace XT, you must configure your application server to support user token settings. See the following procedures for details:
  - [“To configure WebSphere to support user tokens for Workplace XT \(including Application Integration\) \(optional\) \(WebSphere 6.0.x\)” on page 33](#)
  - [“To configure WebSphere to support user tokens for Workplace XT \(including Application Integration\) \(optional\) \(6.1.x\)” on page 34](#)
  - [“To configure WebLogic 8.1.x to support user tokens for Workplace XT \(including Application Integration\) \(optional\)” on page 50](#)
  - [“To configure WebLogic 9.x to support user tokens for Workplace XT \(including Application Integration\) \(optional\)” on page 51](#)
  - [“To configure JBoss to support user tokens for Workplace XT \(including Application Integration\) \(optional\)” on page 55](#)

### To install the Application Integration software interactively

---

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

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

5. Click **Next**.

6. Read and accept the license agreement, and then click **Next**. If you do not accept the license agreement, you cannot continue with the install.
7. Do the following:
  - Select the applications you want to integrate, and then click **Next**.  
**KEYBOARD TIP** Use arrow keys to move up and down the list of applications. Use the space bar to access the context menu for any of the applications, and then use the arrow keys to select a feature and press Enter.  
**NOTE** The Application Integration Toolkit Components option is required to use Application Integration.
  - Under **Install to**, the default installation path is displayed. Click **Change** to specify a different location on the Change Current Destination Folder dialog box, and then click **OK**. Click **Next**.  
**NOTE** You may see two default installation paths - one for Microsoft Office and Outlook, and another for the Toolkit Components. The Toolkit Components path only appears when the system on which you are installing Application Integration has the Toolkit Components currently installed. You cannot modify the Toolkit Components installation path.
8. Enter the server name, port number, and application name that defines the IBM FileNet Workplace XT address. The *Server Name* is the name of the web server running Workplace XT, *Port* is the web server's assigned port, and *Application* is the name of your application, for example, Workplace XT.  
 Check **Server uses secure connection (SSL)** if you are running full SSL to encrypt all communication with Workplace XT.  
**NOTE** You can also leave these fields blank and enter the information when you log in to Workplace XT Application Integration.
9. Click **Next**.
10. Click **Install**.
11. After the install is complete, click **Finish** to complete the setup process.

#### To install the Application Integration software silently

---

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

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

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

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

For example, ApplicationIntegration.exe /s /v"/qn /L\*v C:\temp\ApplntSetup.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's 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.
/L*v C:\temp\ApplntSetup.txt	Verbose installation log and specify log location.

### To verify your Workplace XT Application Integration installation

1. Start Microsoft Word.

2. From the **File** menu, click **IBM FileNet Workplace XT**, click **Open Document**, and then click **Select Item**. The Login dialog box opens.
3. Log in using any valid account. The available object stores in your environment are displayed.

**NOTE** If you didn't enter the Workplace XT Address information in [Step 8](#) above, enter the server name, port number and application name that defines the Workplace XT address. The *Server Name* is the name of the web server running Workplace XT, *Port* is the web server's assigned port, and *Application* is the name of your application, for example, Workplace XT. Check **Server uses secure connection (SSL)** if you use SSL to encrypt all communication with Workplace XT. Do not select this option if you use SSL redirect during login.

4. Close all dialog boxes and close Microsoft Word.

#### **To uninstall or modify Workplace XT Application Integration**

---

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

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

---

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

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

## Task 13: Install IBM FileNet Workplace XT File Tracker

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

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

Verify that the client machine meets the platform requirements documented in the *IBM FileNet P8 Hardware and Software Requirements*. To download this guide from the IBM support page, see [“Access IBM FileNet Documentation, Compatibility Matrices, and Fix Packs” on page 9](#).

### To install the File Tracker software interactively

---

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

The Welcome Wizard dialog box for Workplace XT File Tracker appears. Another Welcome dialog box appears.

4. Click **Next**.
5. Read the license agreement, and then select **I accept the terms to the license agreement**, and then click **Next**. If you do not accept the license agreement, you cannot continue with the install.
6. Do one of the following:
  - Click **Change** if you want to install Workplace XT File Tracker to a different location. Specify the location to which you want to install File Tracker, and then click **OK**. Click **Next**.
  - Click **Next** to accept the default location.
7. Click **Install**.
8. After the install is complete, click **Finish** to complete the setup process.

### To install the File Tracker software silently

---

1. Log onto the client machine using an account that has Administrator privileges and log into Workplace XT.
2. Click **Tools > Downloads > Download File Tracker...**
3. Click **Save**. In the Save As dialog box, find a location on your machine in which to download and save the **FileTrackerXT.exe** file locally, and then click **Save**.

- Open a DOS command window and change the current directory to the one where **FileTrackerXT.exe** resides.
- Type the following at the command line:

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

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

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

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

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

### To uninstall IBM FileNet Workplace XT File Tracker

- From the **Start** menu, click **Settings**, and then click **Control Panel**.
- Click **Add/Remove Programs**, and then click **IBM FileNet Workplace XT File Tracker <version>**.
- Click **Remove**, and then click **Yes** to confirm you want to uninstall IBM FileNet Workplace XT File Tracker.

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

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

## Task 14: Deploy Multiple IBM FileNet Workplace XT Instances

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

### NOTES

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

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

---

1. Copy the Workplace XT configuration folder.

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

**<install\_path>/FileNet/Config/WebClient**

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

2. Copy the **deploy** folder.

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

**<install\_path>/FileNet/WebClient/deploy**

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

3. Delete the .war file and the .ear file from the **deploy2** directory.
4. In the **<install\_path>/FileNet/WebClient/deploy2** directory, edit the create\_web\_client\_war.bat or .sh file.
  - a. Make a backup of the file.
  - b. Change the following lines:

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

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



```
rem Add P8 eForms if installed.

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

to this:

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

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

rem Add P8 eForms if installed.

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

to include the modified folder name and the new name for the WAR file, such as web\_client2.war.

5. If you want to deploy as an EAR file, modify the create\_web\_client\_ear.bat or .sh file in the **<install\_path>/FileNet/WebClient/deploy2** directory to point to the modified folder names and to rename the EAR file.
  - a. Make a backup of the create\_web\_client\_ear.bat or .sh file.
  - b. Edit the create\_ear.bat or .sh file to change these lines:

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

to this:

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

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

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

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

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

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

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

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

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

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

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

The `bootstrap.properties` file is located in:

**<install\_path>/FileNet/Config/WebClient2**

Edit the `bootstrap.properties` file:

- Remove the value entered for the `prefName` setting - This entry contains the name of the site preferences file stored on the object store.
  - Remove the value entered for the `objectStoreId` - This entry contains the object store name where your site preferences will be stored.
  - Remove or edit any of the other values as needed.
11. In the relevant configuration files in the new **FileNet/Config/WebClient2** directory, remove any comments and custom changes that should not apply to the second Workplace XT instance.

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

12. Deploy the second Workplace XT instance.

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

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

**<deploy2>/web\_client2.war** or **<deploy2>/web\_client2.ear**

- WebSphere - See “[Deploy IBM FileNet Workplace XT \(WebSphere\)](#)” on page 60.

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

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

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

- JBoss - See [“Deploy IBM FileNet Workplace XT \(JBoss\)” on page 69](#).

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

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

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

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

## ***Upgrade Procedures***

This upgrade section contains the following major topics:

- [“Upgrade IBM FileNet Workplace XT” on page 93](#)
- [“Upgrade Multiple Instances of IBM FileNet Workplace XT” on page 96](#)

## Task 1: Upgrade IBM FileNet Workplace XT

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

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

---

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

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

### To upgrade the IBM FileNet Workplace XT software

---

1. Log in to the application server:
 

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

Windows - Log in as a member of the local Administrators group or a user with equivalent permissions.
2. From Process Task Manager, stop Component Manager (if running), then exit the Process Task Manager application.
3. (Windows only) From the Windows Services console, stop the Process WP XT Services Manager service.
4. (Windows only) Using the Windows Task Manager, verify that no javaw.exe processes are running.

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

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

#### WebSphere 6.x

- a. Backup the deployed Workplace directory:

**<WAS\_HOME>/profiles/default/installedApps/<node\_name>/WorkplaceXT.ear/  
web\_client.war**

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

**<WAS\_HOME>/profiles/default/temp/<node\_name>/<instance>/**

#### **WebLogic 8.x and 9.x**

- a. From the WebLogic administration console stop the Workplace XT Web Application Module.
- b. Make a backup copy of the Workplace XT folder or of the deployed Workplace XT directory:
  - **<install\_path>/WorkplaceXT**
  - **<install\_path>/deploy/<application\_name>.war**
  - **<install\_path>/deploy/web\_client.ear**

- c. Delete the Workplace XT Web Application Module.
- d. Stop the WebLogic server.

#### **6. (Optional) Copy existing configuration files.**

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

Copy the following files:

- WcmApiConfig.properties
- web.xml

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

**<install\_path>/WorkplaceXT/WEB-INF/**

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

- To upgrade IBM FileNet Workplace XT interactively:
  - i. Access the IBM FileNet Workplace XT 1.1.1.0 installation software package.
  - ii. Launch the appropriate Setup program (**WorkplaceXT-1.1.1.0-<operating\_system>.bin/.exe**) and follow the prompts in the wizard screens. The installer detects and copies settings from the previous Workplace XT installation.
  - iii. Continue with [Step 8 on page 95](#) below.

- To upgrade IBM FileNet Workplace XT silently:

From a command prompt, navigate to, and execute the installer:

- For UNIX:

```
./WorkplaceXT-1.1.1.0-<operating_system>.bin -silent
```

- For Windows:

```
WorkplaceXT-1.1.1.0-WIN.exe -silent
```

8. When the upgrade program is complete, view the **web\_client\_install\_log\_1.1.1.0.txt** file located in

UNIX - **<install\_path>/FileNet/WebClient**

Windows - **<install\_path>\FileNet\WebClient**

where **<install\_path>** is the location where you installed Workplace XT. The default is **/opt** (UNIX) or **C:\Program Files** (Windows).

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

9. Restart any services you stopped before you began the upgrade.
10. Redeploy Workplace XT. Do one of the following:
  - [“Deploy IBM FileNet Workplace XT \(WebSphere\)” on page 60](#)
  - [“Deploy IBM FileNet Workplace XT \(WebLogic\)” on page 65](#)

## Task 2: Upgrade Multiple Instances of IBM FileNet Workplace XT

If you are upgrading Workplace XT in an environment where you have multiple instances of Workplace XT on a single application server, use the procedure in [“Upgrade IBM FileNet Workplace XT” on page 93](#) with the following modifications:

- In [Step 5 on page 93](#) (Back up, undeploy, and remove the Workplace XT web application from the J2EE application server):
  - Make backup copies of all deployed instances of Workplace XT.
  - Uninstall all deployed instances of Workplace XT.
  - Delete the temp directory for all instances of Workplace XT.
- In [Step 6 on page 94](#) (Copy existing configuration files), you must copy the web.xml files for each deployed instance of Workplace XT, and give the copy a descriptive name (such as web.xml.2).
- After [Step 7 on page 94](#) (Start the upgrade process), do the following:
  - a. Back up the existing configuration files in **<install\_path>/FileNet/Config/WebClient2** (and all other instances).
  - b. For each instance, copy the updated configuration files in **<install\_path>/FileNet/Config/WebClient** to **<install\_path>/FileNet/Config/WebClient2** (and so forth) and manually edit in any custom changes from the old configuration files to the new updated files.
- In [Step 9 on page 95](#) (Redeploy Workplace XT), you must repackage the WAR/EAR files for the additional instances of Workplace XT using the modified web.xml files mentioned above. For information, see [“Deploy Multiple IBM FileNet Workplace XT Instances” on page 88](#).



## ***Remove IBM FileNet Workplace XT Software***

### **To remove IBM FileNet Workplace XT software**

---

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

- [“Remove IBM FileNet Workplace XT \(WebSphere\)” on page 98.](#)
- [“Remove IBM FileNet Workplace XT \(WebLogic\)” on page 100.](#)
- [“Remove IBM FileNet Workplace XT \(JBoss\)” on page 102](#)

## Remove IBM FileNet Workplace XT (WebSphere)

This task includes IBM FileNet Workplace XT removal instructions for WebSphere on UNIX and Windows platforms.

**NOTE** If you are using Workplace XT with any IBM FileNet add on products, such as IBM FileNet eForms, uninstall the add-on products before you uninstall Workplace XT.

### To remove the IBM FileNet Workplace XT software

---

1. Log in to the application server.
  - UNIX - Log in as a user with write access to the **/bin** directory and the directory where IBM FileNet Workplace XT is installed.
  - Windows - Log in as a user with Administrative rights.
2. If you're running the Component Manager, stop the instances and exit the Process Task Manager.
3. Log in to the WebSphere Administrative Console.
4. Uninstall the IBM FileNet Workplace XT application.
  - a. Stop the IBM FileNet Workplace XT process in the admin console.
  - b. Uninstall the IBM FileNet Workplace XT application from **Enterprise Applications**.
5. Navigate to the **/\_WCuninst** folder under the IBM FileNet Workplace XT installation location. The default location is:
  - UNIX - **/opt/FileNet/WebClient/\_WCuninst**
  - Windows - **C:\Program Files\FileNet\WebClient\\_WCuninst**
6. Run the uninstall program:
  - UNIX - **uninstaller.bin**
  - Windows - **uninstaller.exe**

**NOTE** For Windows, you can also use **Add/Remove Programs** from the Control Panel to remove IBM FileNet Workplace XT.

On Windows, when you click **Next** on the IBM FileNet Workplace XT Uninstaller Welcome screen, the second screen asks you to wait while Windows Task Manager service shuts down before continuing the uninstall. This can take a few moments. Wait for the shutdown to complete, then complete the uninstall wizard from the next screen.

7. Delete the temporary working directory for Workplace XT on the application server:
 

**<WAS\_HOME>/temp/<node\_name>/<application\_server\_name>/WorkplaceXT**
8. (If IBM FileNet Workplace XT is the only FileNet P8 application installed on the server) Delete the **<install\_path>/FileNet** directory.

9. (If IBM FileNet Workplace XT is *not* the only FileNet P8 application installed on the server)  
Delete the following directories:

**<install\_path>/FileNet/WebClient**

**<install\_path>/FileNet/Config/WebClient**

10. (UNIX) Remove the P8TASKMAN\_HOME system environment variable.

If IBM FileNet Workplace XT is the *only* FileNet P8 application running on the server you must remove the P8TASKMAN\_HOME system environment variable to complete the application removal.

**WARNING** Do *not* remove the system environment variable if any other IBM FileNet P8 application is installed on the server.

11. (UNIX only) Delete the following Install Shield directory, which can cause errors when you re-install IBM FileNet Workplace XT:

**/InstallShield/Universal/FileNet/WebClient**

## Remove IBM FileNet Workplace XT (WebLogic)

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

**NOTE** If you are using Workplace XT with any IBM FileNet add on products, such as IBM FileNet eForms, uninstall the add-on products before you uninstall Workplace XT.

### To remove the IBM FileNet Workplace XT software

---

1. Log in to the application server.
  - UNIX - Log in as a user with write access to the **/bin** directory and the directory where IBM FileNet Workplace XT is installed.
  - Windows - Log in as a user with Administrative rights.
2. If you're running the Component Manager, stop the instances and exit the Process Task Manager.
3. Undeploy the IBM FileNet Workplace XT application.
  - a. Stop the IBM FileNet Workplace XT Web Application Module.
  - b. Delete the IBM FileNet Workplace XT Web Application Module.
4. Navigate to the **/\_uninst** folder under the IBM FileNet Workplace XT installation location. The default location is:
  - UNIX - **/opt/FileNet/WebClient/\_WCuninst**
  - Windows - **C:\Program Files\FileNet\WebClient\\_WCuninst**
5. Run the uninstall program:
  - UNIX - **uninstaller.bin**
  - Windows - **uninstaller.exe**

**NOTE** For Windows, you can also use **Add/Remove Programs** from the Control Panel to remove IBM FileNet Workplace XT.

On Windows, when you click **Next** on the IBM FileNet Workplace XT Uninstaller Welcome screen, the second screen asks you to wait while Windows Task Manager service shuts down before continuing the uninstall. This can take a few moments. Wait for the shutdown to complete, then complete the uninstall wizard from the next screen.

6. Delete the temporary working directory for Workplace XT on the application server:
 

**<WAS\_HOME>/temp/<node\_name>/<application\_server\_name>/WorkplaceXT**
7. (If IBM FileNet Workplace XT is the only FileNet P8 application installed on the server) Delete the **<install\_path>/FileNet** directory.
8. (If IBM FileNet Workplace XT is *not* the only FileNet P8 application installed on the server) Delete the following directories:

**<install\_path>/FileNet/WebClient**

**<install\_path>/FileNet/Config/WebClient**

9. (UNIX) Remove the P8TASKMAN\_HOME system environment variable.

If IBM FileNet Workplace XT is the *only* IBM FileNet P8 application running on the server you must remove the P8TASKMAN\_HOME system environment variable to complete the uninstallation.

**WARNING** Do *not* remove the system environment variable if any other IBM FileNet P8 application is installed on the server.

10. (UNIX only) Delete the following Install Shield directory, which can cause errors when you re-install IBM FileNet Workplace XT:

**/InstallShield/Universal/FileNet/WebClient**

## Remove IBM FileNet Workplace XT (JBoss)

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

**NOTE** If you are using Workplace XT with any IBM FileNet add on products, such as IBM FileNet eForms, uninstall the add-on products before you uninstall Workplace XT.

### To remove the IBM FileNet Workplace XT software

---

1. Log on to the application server:
  - UNIX - logon as a user with write access to the **/bin** directory.
  - Windows - Log on as a member of the local Administrators group or a user with equivalent permissions.
2. If you're running the Component Manager, stop the instances and exit the Process Task Manager.
3. Shut down JBoss.
4. Navigate to the **\_WCuninst** folder under the IBM FileNet Workplace XT installation location. The default location is:
  - UNIX - **/opt/FileNet/WebClient/**
  - Windows - **C:\Program Files\FileNet\WebClient\**
5. Run the uninstall program:
  - UNIX - **uninstaller.bin**
  - Windows - **uninstaller.exe**

**NOTE** For Windows, you can also use **Add/Remove Programs** from the Control Panel to remove IBM FileNet Workplace XT.

On Windows, when you click **Next** on the IBM FileNet Workplace XT Uninstaller Welcome screen, the second screen asks you to wait while Windows Task Manager service shuts down before continuing the uninstall. This can take a few moments. Wait for the shutdown to complete, then complete the uninstall wizard from the next screen.

6. (If IBM FileNet Workplace XT is the only FileNet P8 application installed on the server) Search for the **vpd.properties** file. If it exists, delete it.
7. (UNIX and Linux) Remove the P8TASKMAN\_HOME system environment variable.

If Workplace XT is the *only* IBM FileNet P8 application running on the server you must remove the P8TASKMAN\_HOME system environment variable to complete the uninstallation.

**WARNING** Do *not* remove the system environment variable if any other IBM FileNet P8 application is installed on the server.

8. Remove temporary files and directories.

- a. Remove the **web\_client.war** (or **custom\_name.war**) folder from **<JBoss\_HOME>/server/default/deploy/**.
  - b. Remove the Temp working directory for Workplace from **<JBoss\_HOME>/server/default/work/MainEngine/localhost/**
9. Delete the **<install\_path>** directory.
  10. (UNIX only) Delete the following Install Shield directory, which can cause errors when you re-install IBM FileNet Workplace XT:  
**/InstallShield/Universal/FileNet/WebClient**

## *Appendixes*

This appendixes section contains the following major topics:

- [“Encrypt Passwords for Silent Installation and Upgrades” on page 105](#)
- [“IBM FileNet Workplace XT Port Numbers” on page 106](#)



# Encrypt Passwords for Silent Installation and Upgrades

Several passwords are required to silently install IBM FileNet P8 components. These passwords should be encrypted before you enter them in the silent installation resource files.

## To encrypt a password

---

1. The encryption tool is located on the installation media for Process Engine or Content Engine software, in the Tools directory. Copy the following files from the Tools directory to a local drive:
  - fnencryptutils - an executable .jar file
  - RunEncryptApp - a batch file
2. Run RunEncryptApp.bat to invoke the application.
3. Enter the appropriate values for the user name and password.
4. Reenter the password to confirm it.
5. Click **Generate**.
6. An encrypted password will be generated and displayed in the encrypted password field.
7. Copy and paste this password into the appropriate silent installation resource file.

## IBM FileNet Workplace XT Port Numbers

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

| IBM FileNet Workplace XT Ports                                                                                                                                          |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| WebSphere / WebSphere SSL                                                                                                                                               | 9080 / 9443 |
| WebLogic / WebLogic SSL                                                                                                                                                 | 7001 / 7002 |
| JBoss / JBoss SSL                                                                                                                                                       | 8080 / 8443 |
| Process Engine (RMI)                                                                                                                                                    | 32771       |
| Component Manager (Event Port)<br><b>NOTE</b> Ensure that this port number is open if you are using Component Manager. On UNIX systems, this port is closed by default. | 32776       |
| Web Services Reliable Messaging Client Port                                                                                                                             | 32777       |

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