GENESYS™

Workforce Management Administrator's Guide

Installing and Uninstalling WFM Components

12/19/2025

Contents

Installing and Uninstalling WFM Components

This topic provides information and procedures about how to install and uninstall the Workforce Management (WFM) components. All of the component installation are straight forward, but you will need to complete some additional tasks for WFM Web. See Installing WFM Web.

To uninstall any or all WFM components, see Uninstalling Workforce Management.

Installing the Components

Before you begin installing the WFM components, determine whether to install more than one component on a single machine. If you do so, determine which components should be installed together.

See Deploying WFM, for some general deployment guidelines and recommendations. See the Genesys Hardware Sizing Guide for more extensive recommendations.

By default, all the servers are installed as Windows Services. For instructions about how to use Windows services, see the Windows Help file.

This section includes the following procedures:

- Procedure: Installing WFM Server
- Procedure: Installing WFM Builder
- Procedure: Installing WFM Data Aggregator
- Procedure: Installing WFM Configuration Utility
- Procedure: Installing WFM Daemon

See also, Installing WFM Web.

Date and Time Dependencies for WFM Applications

The following are the sources of the date and time setting for WFM applications:

- In WFM Web Supervisor, the date, time, and number formats depend on language preference that is configured in the browser that is being used.
- In WFM Web Agent, the date and time format depends on the locale of Web Server and is identical for all agents connected to the same server.
- In WFM Configuration Utility, the date and time format depends on the locale of the Configuration Utility workstation.

Configuring Multiple WFM Builder Applications

If multiple `WFM Builder Applications` are connected to the WFM Server, you can configure WFM Server to select the `Builder Applications` with the shortest queue.

Go to the `Configuration` > `User Security` > `User_name` > Modules tab and select None (the default) from the WFM Builder drop-down list box. The result:

For each supervisor's request to build a schedule, WFM Web asks WFM Server to locate an instance of WFM Builder. To do so, WFM Web goes to an original locator—although not to the WFM Server in its current session.

WFM Server selects a WFM Builder instance from its Configuration Server Application connection list. (WFM Server periodically polls all of the `Builder Applications` that are specified in its connection list, to get information about their current request queue and to make sure the connections remain active.) In response to the request from WFM Web to locate a WFM Builder instance, WFM Server returns the active `WFM Builder Application` with the shortest queue.

Selecting a Specific Builder Application

For each user that is defined in WFM, you can select a specific WFM Builder Application (one that is installed on a user's workstation or dedicated to a group of users) that would serve all schedule building requests initiated by that user.

Go to the `Configuration` > `User Security` > `User_name` > Modules tab and select an item (not the default None) from the WFM Builder drop-down list box. However, you do not need to select a specific `WFM Builder Application`. If you want all users to share the same WFM Builder server, you can specify None as described above.

Back to Top

Installing WFM Web

Before you install Workforce Management Web, you must consider ensure the prerequisites, and some web tools and applications are installed and configured on the WFM Web host computer. Use the Task Summary in this section to ensure you have adequately prepared the WFM host and your installation goes smoothly.

This section includes the following procedures:

- Procedure: Configuring WebSphere
- Procedure: Installing WFM Web (Windows)
- Procedure: Installing WFM Web (Unix)
- Procedure: Installing WFM Web as a Report Server

Task Summary: Preparing and Installing the WFM Web Host

Task	Description and procedures
Ensure the prerequisites are installed.	Framework 7.2 or higher and Java SDK are required. To learn which version of Java is required, consult the WFM section at the end of the table "Product Prerequisites" in the Genesys Supported Operating Environment Reference Guide.
Install and configure Jakarta Tomcat or IBM WebSphere.	For installation and configuration instructions specific to Genesys Workforce Management: • For Tomcat see, Configuring Tomcat for WFM Web • For WebSphere see, Configuring WebSphere for WFM Web
Install the WFM Web application.	See Choosing the Platform for WFM Web.
Install a supported browser on each workstation that will access WFM Web.	For WFM Web for Supervisors, the browser installation must include the appropriate Java plug-in. If this plug-in was not installed with the browser, download the plug-in from java.sun.com. To learn which version of Java is required, consult the WFM section at the end of the table "Product Prerequisites" in the Genesys Supported Operating Environment Reference Guide. **Important to Note**—If the computers that will be accessing WFM Web for Supervisors have pop-up blockers installed, they must be configured to allow popups from the WFM Web URL. Otherwise, pop-up blockers prevent WFM Web for Supervisors from opening. The version of Java that you install must include the latest time zones update (TZ/Olson database). See java.sun.com for details and use the Java version that is specified there.
Ensure your browser and TCP/IP settings are configured to run WFM Web for Supervisors correctly.	See Browser Security Considerations and TCP/IP Connection Settings
Verify that your window resolution has been set to display WFM Web correctly.	WFM Web is optimized for a window resolution of at least 1024 x 768. At lower resolutions, some elements (such as table headers) might not display correctly.
(Optional) Set up WFM Web as Report server.	See Recommendations for WFM Web as a Report Server.

Back to Top

Browser Security Considerations

WFM Web uses technical approaches that might be affected by web browser security settings, such as:

- WFM Web uses signed Java applets on Supervisors' workstations.

- WFM Web uses Java applets on Supervisors' workstations that are run by Sun's Java Plug-in. On Windows operating systems, the Java Plug-in is running as ActiveX, which means that supervisors must have rights to run ActiveX controls.

- WFM Web uses non-encrypted form data in the login page for all users.

- WFM Web relies on active scripting for all users.

- When running WFM Web in an AIX or Solaris operating system environment, if the X Server software is not installed, reports might not be generated or might be generated incorrectly. In the case of WFM Web, X Server provides fonts and related functionality.

TCP/IP Connection Settings

In environments with higher loads (more than 100 total supervisors or 50+ supervisors running agent real-time adherence views) you might need to change the default TCP settings on computers running the WFM servers: WFM Web, WFM Data Aggregator, and WFM Server. You can determine whether you need to adjust your settings by monitoring the number of TCP sockets in the TIMED_WAIT mode. If the number exceeds 2000 on one computer or if WFM Web with servers start to report TCP socket errors, modify the settings to make TCP release port resources faster.

Important

Genesys has identified this issue on Windows-based machines. Similar changes are probably required for other operating systems. However, Genesys has not determined recommended adjustments to other operating systems.

To resolve this issue, you must make changes to the HKEY_LOCAL_MACHINE\SYSTEM\ CurrentControlSet\Services\Tcpip\Parameters\ section in the registry of the host computers.

You can find a reference for this registry modification in the Microsoft TCP/IP Implementation Details document for the appropriate operating system at www.microsoft.com.

Genesys recommends these values:

- Increase the MaxFreeTcbs configuration option value from 2000 to 9000.

- Increase the MaxFreeTWTcbs option value from 1000 to 8000.

- Increase the MaxHashTableSize option value from 512 to 2048.

- Increase the MaxUserPort option from value 5000 to 65534.

- Reduce the TcpTimedWaitDelay option value from 240 to 60.

Back to Top

Configuring Tomcat for WFM Web

After installing WFM Web, you must manually copy the .war file (by default, located in the WFM8\Web directory) to the Tomcat webapps directory.

> ### Important
>
> Tomcat is available for download at jakarta.apache.org. There is no charge for this program. For basic installation and configuration instructions, see the Tomcat documentation, available at the same website as the program.

> ### Warning
>
> Genesys developed and tested supported servlet containers using the default settings as configured for each particular servlet runner during installation time. Any changes to default settings are described in this document. If you use custom settings for servlet containers and experience issues while configuring and/or running WFM Web, Genesys recommends that you evaluate the impact of those custom settings. You might need to re-adjust them to ensure they do not interfere with the operation of WFM Web.

The following sections describe specific configurations that enable Tomcat to support WFM Web:

Set Environment Variables

When configuring Tomcat, add the variables JAVA_HOME and CATALINA_HOME to the Windows Start > Settings > Control Panel > System > Environment > System Variables list. Enter the full path to each home directory for the values for theses variables. CATALINA_HOME is the folder in which Tomcat is installed.

JVM Command-Line Settings

Tomcat's default settings are not suitable for production sites that experience moderate or heavy load. To support Web Services, you must enter the settings in Table 1 for the Java Virtual Machine (JVM) that runs Tomcat.

> ### Important
>
> You can enter Tomcat settings in different ways, depending on your Tomcat version and configuration. Refer to your Tomcat documentation for details.

Table 1: Tomcat JVM Settings

JVM Setting	Purpose
-Xms256m	Instructs JVM to initially allocate 256 MB of memory for its own needs.
-Xmxnm	Determines the maximum amount of memory the JVM can allocate for its own needs. For example, -Xmx256m would allocate a maximum of 256 MB.

JVM Setting	Purpose
	If you are experiencing OutOfMemory exceptions with Tomcat, increase this setting's n parameter to provide Tomcat more memory. Make sure that enough physical memory is available to support the parameter that you choose.
-XX:MaxPermSize =256m	Sets the size of the Permanent Generation, so Tomcat can run properly. 256 is the mandatory minimum value. (You can use 128m for WFM Web releases earlier than 8.1.2.)

WFM 8.1 requires settings changes to the Apache Tomcat Properties dialog, accessible by opening the file C:\Apache\Tomcat6.0\bintomcat6w.exe (the location on your computer might be different). Select the Java tab. See the following Table 2.

Table 2: Minimum Tomcat Java Settings

Item	Recommended setting
Initial memory pool	256
Maximum memory pool	1024

Back to Top

Configuring WebSphere for WFM Web

> ### Important
> See the Warning, which applies to configuring both Tomcat and WebSphere.

The libraries that WebSphere provides by default for web services are older than, and incompatible with, the libraries that WFM Web requires. If you do not set the Classloader Mode option to PARENT_LAST, the WebSphere libraries are loaded first, causing WFM Web not to run. After you set PARENT_LAST, the WFM Web libraries are loaded first, which enables WFM Web to run correctly.

> ### Important
> Configuring the Classloader Mode option to PARENT_LAST in no way affects other applications running simultaneously in WebSphere.

See also, Procedure: Configuring WebSphere.

Choosing the Platform for WFM Web

Install WFM Web on either a Windows or a Unix-based platform:

- To install on Windows platforms, see Procedure: Installing WFM Web (Windows).

- To install on Unix-based platforms, see Procedure: Installing WFM Web (Unix).

Recommendations for WFM Web as a Report Server

Workforce Management no longer uses the WFM Reports server component found in previous WFM versions to generate reports. Instead, Workforce Management uses the WFM Web component to generate reports.

> ### Important
>
> In addition to functioning as a report server, by default, WFM Web 8.1 continues to perform all its usual WFM Web functions.

Report generation requires the same, and sometimes more hardware requirements than other WFM Web functions, Genesys recommends that medium or large sites (as described in the Genesys Hardware Sizing Guide) install a separate WFM Web Server to function as a report server. If you are upgrading, use the same hardware previously used for the 7.2 WFM Reports component to set up 8.1 WFM Web as the report server.

To install WFM Web as the reports, see Procedure: Installing WFM Web as Report Server server.

Back to Top

Uninstalling Workforce Management

Use the Task Summary in this section to ensure you have completely uninstalled WFM.

Task Summary: Uninstalling WFM Web

Task	Description and procedures
Stop all WFM components, including those running as Windows Services.	See Starting and Stopping WFM Components.
If you are using Tomcat, delete WFM from Tomcat.	For instructions, see Procedure: Deleting WFM Web from Tomcat.
If you are using WebSphere, delete WFM from WebSphere.	For instructions, see Deleting WFM Web from WebSphere and your WebSphere documentation.
Use Add/Remove Programs to uninstall the WFM components from the Windows platform.	For instructions, see Procedure: Using Add/Remove Programs to Uninstall WFM.
If you are using a Unix-based platform, delete all files in the relevant folders.	Be sure to use caution when deleting files.

Deleting WFM Web from WebSphere

Delete WFM Web, by using your WebSphere Administrative Console. For the procedure that describes how to do this, see your WebSphere documentation.

> ### Important
> After completing the uninstall, you can then deploy a new version of WFM Web, by again, using the WebSphere Administrative Console to do so.

Back to Top

Procedures

Procedure: Installing WFM Server

Purpose: To install WFM Server.

Start of Procedure

1. On your Workforce Management release disk, navigate to the `solution_specific\WFMServer\windows` directory.
2. Double-click `Setup.exe`.
   This WFM Server Installation Wizard open.
3. Click Next to begin using the Wizard.
4. Enter your Configuration Server host name, port number, user name, and password, and then, click `Next`.
   A list of `WFM Server Application` objects displays.
5. Select the correct Application object and then click `Next`.
   The properties for each `WFM Server Application` object display in the `Application Properties` list when that `Application` is selected.

> ### Important
> If you are running a Framework 6.x environment, your WFM Server's Application type must be `Third Party Server`.

6. Specify the destination directory into which you want to install WFM Server. Then, click Next.
7. In the `Ready to Install` window, click `Install`.

A progress bar shows the setup status.

> **Important**
>
> You must restart your computer before starting WFM Server. However, if you are installing multiple components on one machine, you can install them all before restarting. However, you cannot install multiple instances of the same component on the same host.

End of Procedure

Procedure: Installing WFM Builder

Purpose: To install WFM Builder.

Start of Procedure

1. On your Workforce Management release disk, navigate to the `solution_specific\WFMBuilder\windows` directory.

2. Double-click `Setup.exe`.
   This WFM Builder Installation Wizard open.

3. Click Next to begin using the Wizard.

4. Enter your Configuration Server host name, port number, user name, and password, and then, click `Next`.
   A list of `WFM Builder Application` objects displays.

5. Select the correct Application object and then click `Next`.
   The properties for each `WFM Builder Application` object display in the `Application Properties` list when that `Application` is selected.

   > **Important**
   >
   > If you are running a Framework 6.x environment, your WFM Builder's Application type must be `Third Party Server`.

6. Specify the destination directory into which you want to install WFM Builder. Then, click Next.

7. In the `Ready to Install` window, click `Install`.
   A progress bar shows the setup status.

8. Click `Finish` to close the Installation Wizard.

End of Procedure

Procedure: Installing WFM Data Aggregator

Purpose: To install WFM Data Aggregator.

> ### Important
> A restriction limits the number of clients to about 8 if WFM Data Aggregator and WFM Web are installed on the same computer. For full details, see TCP/IP Connection Settings.

Start of Procedure

1. On your Workforce Management release disk, navigate to the `solution_specific\` `WFMDataAggregator\windows` directory.

2. Double-click `Setup.exe`.
   This WFM Data Aggregator Installation Wizard open.

3. Click Next to begin using the Wizard.

4. Enter your Configuration Server host name, port number, user name, and password, and then, click Next.
   A list of `WFM Data Aggregator Application` objects displays.

5. Select the correct Application object and then click Next.
   The properties for each `WFM Data Aggregator Application` object display in the `Application` `Properties` list when that `Application` is selected.

> ### Important
> If you are running a Framework 6.x environment, your WFM Data Aggregator's Application type must be `Third Party Server`.

6. Specify the destination directory into which you want to install WFM Data Aggregator. Then, click Next.

7. In the `Ready to Install` window, click `Install`.
   A progress bar shows the setup status.

8. Choose to restart your computer now or later and then, click Finish to close the Installation Wizard.

> **Important**
>
> You must restart your computer before starting WFM Data Aggregator. However, if you are installing multiple components on one machine, you can install them all before restarting. However, you cannot install multiple instances of the same component on the same host.

End of Procedure

Procedure: Installing WFM Configuration Utility

Purpose: To install WFM Configuratin Utility.

Start of Procedure

1. On your Workforce Management release disk, navigate to the `solution_specific\ WFMConfigurationUtility\windows` directory.

2. Double-click `Setup.exe`.
   This WFM Configuratin Utility Installation Wizard open.

3. Click `Next` to begin using the Wizard.

4. Specify the destination directory into which you want to install WFM Configuratin Utility. Then, click `Next`.

5. In the `Ready to Install` window, click `Install`.
   A progress bar shows the setup status.

6. Click `Finish` to close the Installation Wizard.

End of Procedure

Procedure: Installing WFM Daemon

Purpose: To install WFM Daemon.

Prerequisites: Framework 7.2 or higher and Java SDK are installed and configured. To determine which version of Java is required, consult the WFM section at the end of the table "Product Prerequisites" in the Genesys Supported Operating Environment Reference Guide.

> **Important**
>
> You must install a Java version that includes the `<specifier>` time zones update. See details and use the Java version that is specified on the java.sun.com website.

Start of Procedure

1. On your Workforce Management release disk, navigate to the `solution_specific\WFMDaemon\windows` directory.

2. Double-click `Setup.exe`.
   This WFM Daemon Installation Wizard open.

3. Click Next to begin using the Wizard.

4. Enter this information for your Configuration Server: host name, port number, user name, and password. Then click Next.
   A list of `WFM Daemon Application` objects displays.

5. Select the correct `Application` and then click Next.
   The properties for each `WFM Daemon Application` object displays in the `Application Properties` list when that `Application` is selected.

> **Important**
>
> If you are using Genesys Configuration Server releases later than 7.2 but earlier than 7.5, your WFM Daemon's `Application` type must be `Genesys Generic Server`.
>
> If you are using Genesys Configuration Server 7.5 or later, your WFM Daemon's `Application` type must be `WFM Daemon`.

6. Specify the destination directory into which you want to install WFM Daemon. Then, click Next.

7. In the `Ready to Install` window, click `Install`.
   A progress bar shows the setup status.

8. Choose to restart your computer now or later and then, click `Finish` to close the Installation Wizard.

End of Procedure

> **Important**
>
> You must restart your computer before starting WFM Daemon. If you

> are installing multiple components on one machine, you can install them all before restarting. However, you cannot install multiple instances of the same component on the same host.

For more information on the WFM Daemon component, see Notifications.

Procedure: Configuring WebSphere

Purpose: To configure WebSphere for WFM Web.

Start of Procedure

1. Log in to the WebSphere Administration Console.

2. Navigate to `Applications > Enterprise Applications`.

3. Install the WFM `Application` from the `wfm_war` directory and save it to the master configuration.

4. Locate the newly-installed WFM `WebApp` and click its link to drill down into the configuration.

5. On the `Configuration` tab, locate the `Related Items` group. The `Classloader Mode` setting, located on `Configuration` tab, is not the correct place to set the `classloader` option. It will not provide the desired effect if set only in that tab.

6. Click the `Web Modules` link to open the `WebModuleDeployment` page.

7. Click the `*.war` link to open `Web Module` configuration properties.

8. Locate the `Classloader Mode` row and change the control value to PARENT_LAST.

9. Save the changes.

End of Procedure

Next Steps:

- Start the WFM application.

> ### Important
> Genesys recommends that you adjust memory and processing thread settings for WebSphere to similar values as specified for Tomcat (see Table 1). For the exact location of those settings, consult the Websphere documentation.

Procedure: Installing WFM Web (Windows)

Purpose: To install WFM Web on the Windows platform.

Start of Procedure

1. On your Workforce Management release disk, navigate to the windows subdirectory in the `solution_specific\WFMWeb` directory.

2. Double-click `Setup.exe`.
   The WFM Web Installation Wizard opens.

3. Click Next to begin using the Wizard.

4. Enter your Configuration Server host name, port number, user name, and password, and then, click `Next`.
   A list of `WFM Web Application` objects displays.

5. Select the correct Application object and then click `Next`.
   The properties for each `WFM Web Application` object display in the `Application Properties` list when that `Application` is selected.

> ### Important
> If you are running a Framework 6.x environment, your WFM Web's Application type must be `Third Party Server`.

6. Specify the destination directory into which you want to install WFM Web. Then, click `Next`.

7. In the `Ready to Install` window, click `Install`.
   A progress bar shows the setup status.

8. Click `Finish` to close the Installation Wizard.

9. Using the Tomcat or WebSphere Administrative Console, locate the WFM `.war` file and move it to the appropriate directory for the web server you are using.
   For example, if you are using Tomcat, deploy the `.war` file in the webapps directory. For the location if you are using WebSphere, see your WebSphere documentation.

End of Procedure

Procedure: Installing WFM Web (Unix)

Purpose: To install WFM on the Unix platform.

Start of Procedure

1. On your Workforce Management release disk, navigate to the appropriate subdirectory in the `solution_specific\WFMWeb` directory.

Your choice of subdirectory depends on the platform on which you are installing WFM Web. The choices are AIX and Solaris.

2. Launch `install.sh`.

3. Enter this information for your Configuration Server: host name, port number, user name, and password.

4. Enter the name of your `WFM Web Application` object.

5. Specify the destination directory into which you want WFM Web installed.

6. Click `Finish` to close the Installation Wizard.

7. Using the Tomcat or WebSphere Administrative Console, locate the WFM `.war` file and move it to the appropriate directory for the web server you are using.
   For example, if you are using Tomcat, deploy the `.war` file in the webapps directory. For the location if you are using WebSphere, see your WebSphere documentation.

End of Procedure

Procedure: Installing WFM Web as a Report Server

Purpose: To install and configure a separate instance of WFM Web as the reports server.

Start of Procedure

1. Install WFM Web using the steps, as described in Procedure: Installing WFM Web (Windows) or Procedure: Installing WFM Web (Unix). .

2. In the Configuration Manager, in the `WFM Web Application` properties, set the value for option `ServerURL` in the `Reports` section, by entering the complete URL that was used to installed WFM Web. For a complete description of the `ServerURL` option, see WFM Web Options Tab.
   For example: `http://host:port/appname`
   In this example:

   • The `host` and `port` refer to where the servlet container (the one that will function as the report server) for WFM Web is running.

   • The appname is the name that is used while WFM Web is being deployed.

   > ### Important
   > You must be able to use this URL to login to the WFM Web Server that will function as the report server.

3. In the `Connections` tab of the `WFM Web Application` that will perform all the usual WFM Web functions except report generating, include the `Application` name of the `WFM Web Application` that will function as the report server.

End of Procedure

Procedure: Deleting WFM Web from Tomcat

Purpose: To delete WFM Web from Tomcat.

Summary:

- Genesys strongly recommends using Tomcat Manager to correctly deploy/undeploy WFM Web.

- Uninstalling WFM Web does not remove the `.war` file or the WFM directory from the webapps folder. Genesys recommends that you remove the `.war` file and WFM directory prior to reinstalling or updating WFM Web.

- If you reinstall or update WFM Web, before clients can access the software, you must remove the old file and replace the `.war` file with the new version of the file. The default file name is `wfm.war` and the default directory name is `wfm`.

- If you reinstall WFM Web without first manually deleting these files, the files are not updated. WFM Web will not run if you install a later version of WFM Web over an earlier one without first deleting these files.

Start of Procedure

1. Open the >CATALINA_HOME>\webapps directory.
   See Set Environment Variables.

2. Delete the WFM `.war` file and the WFM directory from the webapps folder.

3. Delete the `$CATALINA_BASE\work\Catalina\localhost\wfm` folder.

End of Procedure

Procedure: Using Add/Remove Programs to Uninstall WFM

Purpose: To uninstall WFM components, by using the Add/Remove Programs tool on Windows platforms.

Start of Procedure

1. Select `Start` > `Settings` > `Control Panel` and open Add/Remove `Software`.

2. Scroll through the list of programs to locate the one you intend to uninstall.

3. Click Change/Remove.

4. When the UninstallShield Wizard that opens, follow the prompts.

> ### Important
> Although you might not be prompted to restart your computer

after removing a WFM component, it is recommended.

End of Procedure

Back to Top