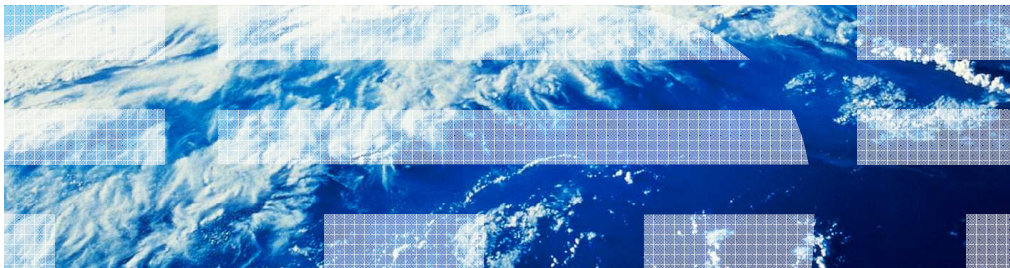


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# IBM WebSphere Application Server

## Plug-ins configuration tool and postinstaller



This presentation describes the plug-ins configuration tool, which is part of the WebSphere customization toolbox.

## Web server plug-ins configuration tool (PCT) V8.0

- Overview of feature
  - Value to customer, key concepts
  - Description of feature and its capabilities
  - History of specification or capability
  - What is new in version 8
- Usage scenarios
  - Configuring with GUI
  - Configuring with command-line
  - Log files
- Demonstrations
  - Configuration demonstration
  - Unconfiguration demonstration
- Additional links

This slide presents the web server plug-ins configuration tool that is a new offering in WebSphere Application Server V8. The motivation for introducing this tool, its features, and typical usage scenarios are discussed.

The usage scenarios for plug-in configuration and plug-in unconfiguration will be demonstrated through two separate modules.

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## Overview of features

This is a new configuration tool added in V8. In WebSphere Application Server V8, installation and configuration have separated out into two different user steps so the IBM HTTP Server and the plug-ins installers do not offer the configuration steps that existed in V7. Instead, you can use this web server plug-in configuration tool to perform configuration for various web server plug-ins. Additionally, you can configure the IBM HTTP Server administration server as well.

The web server plug-ins configuration tool is one of the tools that are incorporated into WCT. The tool facilitates the web server plug-ins configuration and IBM HTTP Server administration server configuration either by command-line or by using GUI. In V8, it supports five different types of web server plug-ins, and its main role is to collect user input data in a well-organized way and pass them to the underlying plug-in runtime components for processing.

## Usage scenarios - Configuration with GUI

- Import Plug-ins installation location into the tool
- Bring up the configuration wizard against the location
- Follow the wizard steps and provide the requested input along the way
- Verify if all the configuration values are correct
- Execute configuration
- Verify the configuration result
- Un-configuration is done by selecting the existing configuration and clicking the Delete button from the web server plug-ins configuration view. Note that the IBM HTTP Server administrative server configuration is left intact during un-configuration

After bringing up the configuration tool, you need to import the plug-ins runtime installation location into the tool. This location is used as the basis for the configuration.

Once the plug-ins location has been imported successfully, the wizard for a configuration is launched.

The wizard steps are self-explanatory. IBM HTTP Server administration server configuration steps might require previous experience and understanding of the V7 IBM HTTP Server installer.

Once all the required input values are entered through the wizard steps, you are presented with the summary panel that shows the major configuration parameter values that the tool has collected. After checking all the values are correct, click Configure to start the configuration process.

At the end of the configuration, the result panel shows whether the configuration was finished successfully. In case of a configuration failure, you can look into the log files generated to find out the problem and take necessary corrective actions.

There is the Response file tab in the tool's view, which can be convenient in a couple of different ways. First, you can look into the content at a later time to see the configuration parameters used for a particular configuration. And, the response file can be also used as the basis for running command-line mode configuration when necessary.

Un-configuration is done by selecting the existing configuration and clicking Delete from the web server plug-ins configuration view. Note that the IBM HTTP Server administration server configuration is left intact during un-configuration.

## Usage scenario - Configuration with command line

- Open a command-line console.
- Go to the WCT commands directory – `<WCT_INSTALL_ROOT>/WCT`
- Check that you can find `wctcmd.bat/sh` and `pct_responsefile.txt`
- Run the configuration command: for example,  

```
>wctcmd.bat -tool pct -defLocPathname "c:\ibm\websphere\plugins"-  
defLocName MyPluginTest -createDefinition webserver1
```
- Verify the configuration result
- Run the un-configuration command: for example,  

```
>wctcmd.bat -tool pct -defLocPathname "c:\ibm\websphere\plugins"-  
defLocName MyPluginTest -deleteDefinition webserver1
```

You can also perform the configuration through command-line.

To use this command-line utility, you need to prepare a response file with all the necessary configuration values filled out. The configuration tool is shipped with a sample response file as a template to start with.

Once the response file is prepared, you can run `wctcmd` script file to do the configuration. The results are shown at the end of the process and the details are found in the log files.

You can also run the same command-line utility program to un-configure any existing plugin configurations, but providing slightly different command-line options. You can see the GUI view updated to reflect the configurations done through command-line the next time the GUI tool is launched.

## Usage scenario - Log files

- Log files are generated after configuration or unconfiguration
- Look for the log files under PLUGINS\_HOME/logs directory
- Used for problem analysis and investigation when configuration or unconfiguration fails

The log files are generated after web server plug-in configuration or unconfiguration. These files are located in the logs directory under the plug-ins installation home. If a problem occurs during configuration or unconfiguration, these files are the first ones that need to be investigated.

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## Demonstration

- Configuration demonstration
- Unconfiguration demonstration

With this material, there are two demonstrations showing the plug-in configuration and unconfiguration scenario.

## Postinstaller

- Runs configuration actions
  - For example to update existing files or call scripts like isc deploy or ejb-clear-cache.
- When?
  - During initial installation and service installation
    - If any configuration action fails, installation will complete with warnings
  - At start server after a fix pack is installed or uninstalled
    - If a unrecoverable configuration action fails the server will not start
    - If a non-fatal configuration action fails, the server will start
- Log locations:
  - Overall log, shows summary
    - PROFILE\_HOME/properties/service/logs/runConfigActions.log
  - WebSphere-specific log
    - PROFILE\_HOME/properties/service/productDir/WebSphere
  - Other product-specific logs
    - PROFILE\_HOME/properties/service/productDir/<otherproducts>

This slide discusses the postinstaller, which is based on the z/OS postinstaller that has existed for several releases.

The postinstaller determines which configuration actions need to run and passes them to configuration manager.

The postinstaller calls configuration actions. The configuration actions are generally ANT files and are used by L3 developers to update existing files on the system or to call scripts. The postinstaller runs at initial installation and service installation time, and also at start server. At initial and service installation time, the postinstaller is called by the Installation Manager during the post-install-configure phase.

Logs are in the WAS\_HOME/logs/postinstall folder. If any configuration action fails, the installation will complete with warnings. You should manually re-run the postinstaller after the IM installation completes. The command and its parameters are in the information center and you can also see the command and its parameters in the IM log.

At start server time, the postinstaller is called by the WsPreLauncher, except on IBM i and z/OS, where it is launched by native code. PROFILE\_HOME/bin/runConfigActions.sh|bat is the script that runs

If any unrecoverable configuration action fails, the server will not start. Examine the logs.



## Postinstaller: z/OS specific information

- Postinstaller on z/OS checks:
  - Change in optional features selected
  - Change in install root version number
- Checks run by scripts in PROFILE\_HOME/properties/service/productDir/PreConfigActions
  - Actions in this directory run before any other products

On server startup, the runConfigActions script will check if the install root has a different version of WebSphere (for instance, if you have applied or removed service), and if the install root contains more or fewer optional features than the last server startup. If either or both of these is true, the WAS\_HOME/bin/zUpdateSymlinks.sh script will run to symlink new files found in the install root and remove dead symlinks.

The runConfigActions.sh script will also check to ensure that the version of the install root is not lower than the version at which the profile was created - the cold start level. For example, it is not valid to create a profile at 8.0.0.5, then roll the install root back to 8.0.0.1. The runConfigActions.sh script will not allow the server to start in this case.

The two checks above are run by scripts shown in the PreConfigActions location. The actions in this directory run before any other products.

## Summary

- Plug-ins configuration tool
  - Part of the WebSphere customization tools group
- Postinstaller

In summary, the plug-ins configuration tool and the postinstaller were described. For the PCT, two scenarios – configuring and unconfiguring – were presented.

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## Additional links

- Installing and using the WebSphere customization toolbox  
[http://publib.boulder.ibm.com/infocenter/wasinfo/v8r0/topic/com.ibm.websphere.installation.nd.doc/info/ae/ae/tins\\_wct.html](http://publib.boulder.ibm.com/infocenter/wasinfo/v8r0/topic/com.ibm.websphere.installation.nd.doc/info/ae/ae/tins_wct.html)
- Installing and configuring web server plug-ins  
[http://publib.boulder.ibm.com/infocenter/wasinfo/v8r0/topic/com.ibm.websphere.base.doc/info/aes/ae/tins\\_webplugins.html](http://publib.boulder.ibm.com/infocenter/wasinfo/v8r0/topic/com.ibm.websphere.base.doc/info/aes/ae/tins_webplugins.html)
- Configuring a web server plug-in using the WCT command-line utility  
[http://publib.boulder.ibm.com/infocenter/wasinfo/v8r0/topic/com.ibm.websphere.base.doc/info/aes/ae/tins\\_pctcl\\_using.html](http://publib.boulder.ibm.com/infocenter/wasinfo/v8r0/topic/com.ibm.websphere.base.doc/info/aes/ae/tins_pctcl_using.html)

Here are some information center links for the WebSphere customization toolbox.



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