IBM Software Group

IBM® WebSphere® Application Server V6

Web Server Plug-in Install

Distributed Platform

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This presentation will focus on the Web Server Plug-in install process.

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Goals

- The goal of this presentation is to understand the WebSphere Application Server V6 Web Server Plug-in install process

- Prerequisite:
  - ▶ WebSphere Application Server V6 Install Overview

The goals for the lecture are to understand the install procedure for the Web Server Plug-In. This would follow the normal install process for WebSphere Application Server.

Agenda

- Web Server Plug-in install overview

- Install Plug-in where Web Server is on a remote machine (from Application Server)

- Install Plug-in where Web Server is on a local (same) machine as the Application Server

- Demonstration

- Problem Determination and Logs

- Incremental Install

- Uninstall

The agenda for this presentation includes covering the steps for install, including the differences with installing the Plug-in on a local or remote system. There is a demonstration available showing the install process. There is also a topic on the logs associated with the Plug-in install which can be used for problem determination.

Section

Web Server Plug-in install

This section discusses the Web Server Plug-in install.
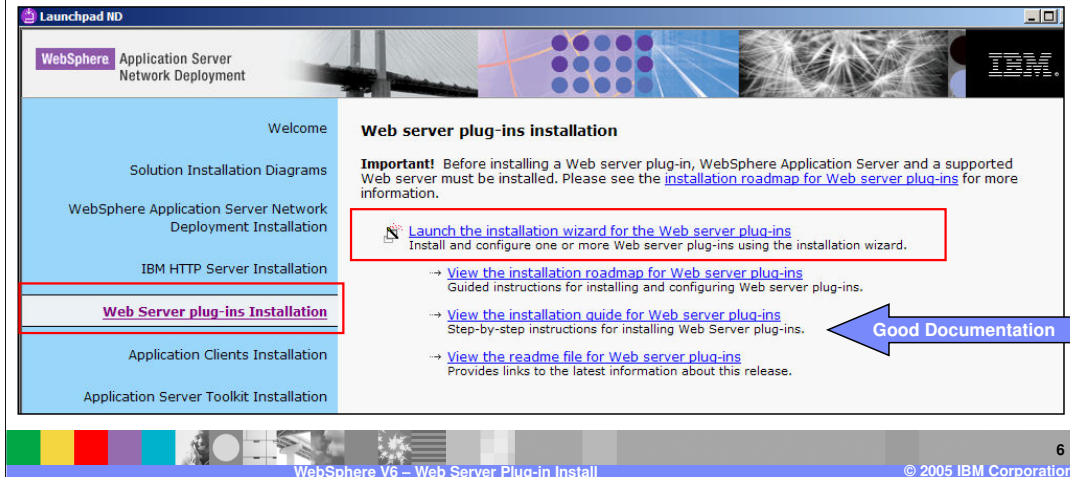
Web Server Plug-in Install - Overview

- Web Server Plug-ins are installed on the same machine where your Web Servers are installed. There are 2 options
  - ▶ Local – The Web Server and the Plug-in are on the same machine as the WebSphere Application Server
  - ▶ Remote - The Web Server and the Plug-in are on a different machine from the WebSphere Application Server

- Global Security Kit (GSKit) installed during the Web Server Plug-in install

- Scripts are generated that allow you to create Web Server definition with the Application Server configuration - The installer will only create the definition in the Local scenario where a default Stand-alone Application Server profile exists

- Entries in vpd.properties (Windows®, AIX®, Linux®) are added during install

The Plug-in install is a separate install process that is initiated from the Launch pad tool. In WebSphere Application Server V5.x or earlier, the Plug-in install was part of the actual install process for WebSphere Application Server, so this is a moderate change. The Global Security Kit for Web Server Plug-ins will be installed as part of this process.
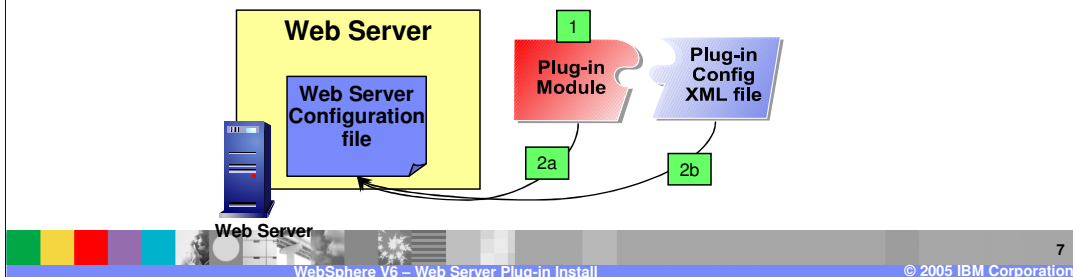
Web Server Plug-in Install – Launch pad

- Web Server Plug-ins installer is initiated from Launch pad
  - Unlike WebSphere Application Server V5, where Web Server Plug-ins install was from Application Server install wizards

Web server plug-ins installation

Important! Before installing a Web server plug-in, WebSphere Application Server and a supported Web server must be installed. Please see the installation roadmap for Web server plug-ins for more information.

Launch the installation wizard for the Web server plug-ins
Install and configure one or more Web server plug-ins using the installation wizard.

→ View the installation roadmap for Web server plug-ins
Guided instructions for installing and configuring Web server plug-ins.

→ View the installation guide for Web server plug-ins
Step-by-step instructions for installing Web server plug-ins.

→ View the readme file for Web server plug-ins
Provides links to the latest information about this release.

Good Documentation

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The Plug-in install is a separate install process that is initiated from the Launch pad tool. In WebSphere Application Server V5 or earlier, the Plug-in install was part of the install process for WebSphere Application Server, so this is a moderate change. The Global Security Kit for Web Server Plug-ins will be installed as part of this process.
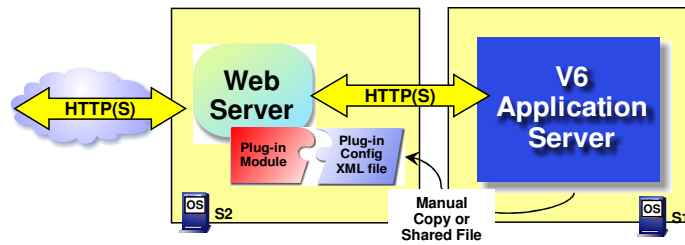
Web Server Plug-in Installer

- There are 2 types of install – Local or Remote

- Typical Plug-in Install Action
  1. Installs the Web Server plug-in binaries
  2. Updates the Web Server configuration file (ex: httpd.conf) with:
     a. location of the plug-in module
     b. location of plug-in configuration file (plugin-config.xml)
  3. Creates the Web Server definition in the Application Server configuration or creates a script that you use later to create the Web Server definition

Web Server

Web Server Configuration file

1

Plug-in Module

Plug-in Config XML file

2a   2b

Web Server

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The install of the Web Server Plug-in is now a separate process from the install of WebSphere Application Server V6. In a normal Plug-in install a number of steps will occur. First, the binaries for the Plug-in will be installed to the system. Next updates will be made to the Web Server configuration file that is specified during the Plug-in install. This will update the configuration file with information about the location of the Plug-in module and the location of the Plug-in's configuration file. The last step is to create a Web server definition in the Application Server configuration, this can be done through the administrative console or wsadmin capabilities.

Case 1: Plug-in Install on remote Web Server

- Web Server is not on the same machine as the Application Server
- Following information needs to be specified:
  - Install directory for Web Server Plug-in binaries
    - Should not be same as WebSphere install directories for V5.x or V6
  - Web Server type (IHS, IIS, Apache, etc.)
  - Location of the Web Server configuration file
    - If not specified, only plug-in binaries are laid down
  - Location of plugin-config.xml
    - Default - <PLUGIN_INSTALL>/config/<webserver-definition-name>/plugin-cfg.xml, where webserver-definition-name is the name of web server definition
  - Host name of the Application Server – this is only used in the generated default plug-in configuration file
- Installer generates a default plugin-cfg.xml file for a typical default WebSphere Application Server install

The install of the Plug-in differs slightly depending on whether the Plug-in is will installed on the same local system as the WebSphere Application Server, or if it will be installed on a separate system. When installing on a separate system, you must specify the install location for the binaries, the type of Web Server the Plug-in will be associated with, and the location of a number of configuration files.

The default generated plug-in configuration file is configured for ports 9080 and 80 containing URLs for default applications (e.g. snoop servlet).

Click on the Show Me button to view a demonstration of the remote Plug-in install process.

Case 2: Plug-in Install on local Web Server
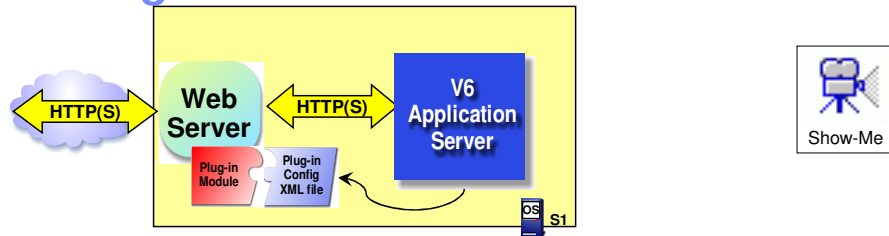
- **Web Server is on the same machine as the Application Server**

- **Following information needs to be specified:**
  - ▶ Install directory for Web Server Plug-in binaries
    - ▪ Should not be same as WebSphere install directories for V5.x or V6
  - ▶ Web Server type (IHS, IIS, Apache, etc.)
  - ▶ Location of the Web Server configuration file
    - ▪ None specified, if you only want to lay down the plug-in binaries without updating the Web Server configuration file
  - ▶ Location of an existing WebSphere Application Server V6
    - ▪ Depending on the default profile, this installer will automatically create the Web Server definition in the Application Server configuration or create a script file that you later use to create the Web Server definition – this is explained in detail in the next page

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When installing the Plug-in on the same server on which WebSphere Application Server is installed, the primary difference is that you will associate the Plug-in to an existing profile on the system. As part of the install process a web server definition can be created for the profile.

Click on the Show Me button to view a demonstration of the local Plug-in install process.

Creating Web Server definition in the Application Server configuration

- Remote Web Server Plug-in install
  - ▸ The Plug-in install will create a jacl script that can be copied to the Application Server machine and used to define the Web Server definition

- Local Web Server Plug-in install
  - ▸ If the default profile is a Stand-alone Application Server profile, then Plug-in install will automatically create a Web Server definition within the Application Server configuration
  - ▸ If not, then the Plug-in install will create a jacl script similar to Remote Plug-in install – you use the script to create the Web Server definition within the configuration

- If you want to control the creation of the Web Server definition, use the Remote Web Server Plug-in install option

WebSphere V6 – Web Server Plug-in Install

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During a local Plug-in install, the install process will create a web server definition in the Application Server configuration, if the default profile is Stand-alone Application Server.

When the Plug-in is installed remotely, the process will create a JACL script that can be used to create a web server definition on an Application Server. This script will be created on the same system as the Plug-in, so it will have to be manually copied to the system that contains the Application Server.

GSKit Install

- Previous releases:
  - ▸ GSKit was installed as part of Web Server Plug-in and IBM Http Server install within the WebSphere Application Server install wizard

- In WebSphere Application Server V6:
  - ▸ WebSphere Application Server install wizard will no longer install GSKit.
  - ▸ Web Server Plug-in and IBM Http Server installer will install GSKit, if one does not exist
  - ▸ GSKit v7 will be installed, if the supplied user id has the administrator (root) privileges

As was mentioned earlier, during the Plug-in install, the Global Security Kit for Web Servers will be installed. In previous versions of WebSphere Application Server this was part of the Application Server install process. The GSKit version 7 will be installed so long as appropriate permissions are possessed by the user.

Install Log Files for Problem Determination

- **Main Log file:**
  - ▸ **<PLUGIN_HOME>/logs/install/log.txt**

- Look at main log file to determine install status, and look for word:
  - ▸ **INSTCONFSUCCESS** for success
    - All configuration actions must execute successfully
    - All files must be laid down correctly
  - ▸ **INSTCONFPARTIALSUCCESS** for partial success
    - Implies some non-terminating configuration actions failed
    - See the **cmtlog.txt** in the same directory for further details
  - ▸ **INSTCONFFAILED** for total failure
    - See the **cmtlog.txt** in the same directory for further details

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A log file is created during the Plug-in install. After install is complete, this log file should be examined to ensure that the install was a success. An install status of partial success is often enough to have the Plug-in work correctly. If the install ends with the INSTCONFFAILED message, then problem resolution must be done, and the Plug-in will need to be successfully reinstalled.

Install Logs

Log Files	Description
log.txt	Records all of the ISMP events that occur during the install. The log also describes whether the install was local or remote. Messages at the end of the file indicate whether manual configuration steps are required to complete the install
masterConfigurationLog.txt	Records all the configuration events that occur during the install
install<WebServer>Plugin.log	Records events that occur during the configuration of the Web Server (adding the entries for Plug-in module and plugin-cfg.xml file) - file name is based on the Web Server
configure_<WebServer>_webserver.log	Records events that occur during the configuration of a Web server definition within the WebSphere Application Server - file name is based on the Web Server
installGSKit.log	Records events that occur during the install of the GSKit code

Log files are found in **<INSTALL>**/**logs**/**install** directory, by default

This slide is a reference listing the different log files that can contain information obtained from the Plug-in install process.

Web Server Plug-in - Uninstall

- Uninstall uses the InstallShield™ Multi Platform (ISMP) uninstaller
  - ▸ Entries in vpd.properties (Windows, AIX, Linux) are removed by ISMP

- Located in the Web Server Plug-in "_uninstPlugin"directory
  - ▸ Command : **Uninstall.exe(.bin)**

- Always use the uninstaller to remove Web Server Plug-in and not any OS services to remove it

- Silent Uninstall is supported
  - ▸ Command: **Uninstall.exe(.bin) –silent**

- After uninstall, only the log directory and files remain

During the Plug-in install, an InstallShield uninstaller will be created for the Plug-in. This is no different than the uninstaller created for WebSphere Application Server during its install. This uninstaller is what should be used to remove the Plug-in, with one of the options shown on this page. Any other process used is not guaranteed to remove all of the components created during the install process.

Using Web Server for WebSphere V5.1 and V6

- Plug-in binaries are compatible with previous versions

- Use the Web Server Plug-in V6 binaries to target both V5.1 and V6 WebSphere Application Servers

- Manually merge the two plugin-cfg.xml files

  http://publib.boulder.ibm.com/infocenter/ws51help/topic/com.ibm.websphere.nd.doc/info/ae/ae/tins_coexist2.html

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The V6 Plug-in is compatible with earlier versions of WebSphere Application Server. This was needed to provide support for mixed nodes in V6, more details on this feature can be found in the system management presentations. There are steps explaining how to manually merge two different versions of the Plug-in configuration at the URL link shown.

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Section

Summary and Reference

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Now for the summary and reference section.

Summary and References

- Easier to install Web Server Plug-in on remote machine
  - ▶ Does not require WebSphere Application Server wizards as did V5

- References
  - ▶ WebSphere V6 Information Center

In summary, this presentation explained the process for installing Web Server Plug-ins for WebSphere Application Server V6. It detailed the new, easier process for installing Plug-ins on remote systems.

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