IBM Software Group

IBM WebSphere Application Server v6

Web Server Definition and Plug-in

e(business on demand.

IBM Confidential

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Agenda

- Web Server Definition
- Managed and Unmanaged node
- Web Server definition for Express or Network Deployment Stand-alone Server
- WebSphere Deployment Manager Admin Console UI manages Web Servers and the plug-in files

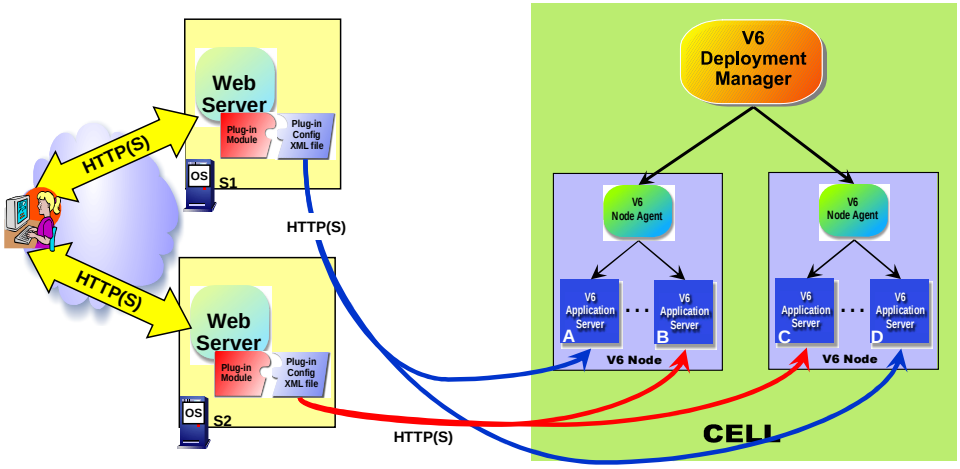
Section

Web Server Definition

Web Server Definition

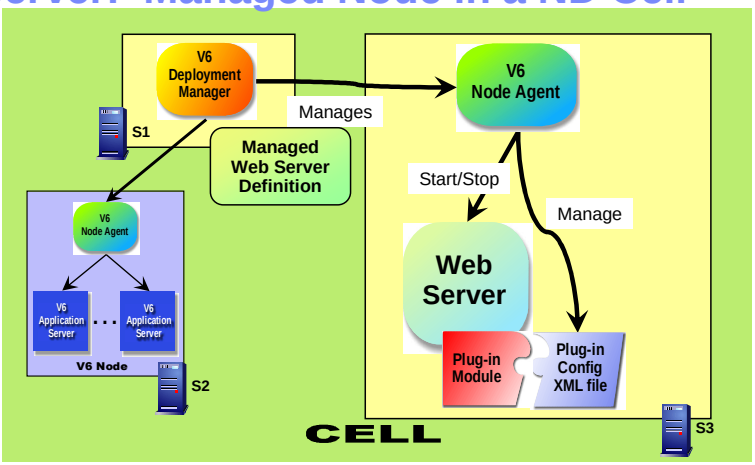
- Web Server can now be defined in WebSphere cell topology as a Web Server node
  - Managed or unmanaged
  - Managed nodes contain a node agent
- Association of an application to one or more Web Servers
- Generation of custom plug-in configuration files (plugin-cfg.xml) for a specific Web Server
  - Web Servers target specific applications running in a Cell
  - Automatically generated by the Deployment Manager

Network Deployment Cell: Web Server Topology



- **Web Server, S1, sends requests to applications running on Application Server A & D**
- **Web Server, S2, sends requests to applications running on Application Server B & C**
- **Web Server uses plug-in configuration file (plugin-cfg.xml) to determine which requests to forward and where**

Web Server: Managed Node in a ND Cell



- Install Web Server on a Node
- Create a Web Server definition within the Dmgr
  - map the applications
- Node Agent receives commands from DMgr to administer the Web Server

Web server has to be installed to a federated Node or managed Node (we have option to create managed node with out application server.

Managed by WebSphere Deployment Manager through Node Agent

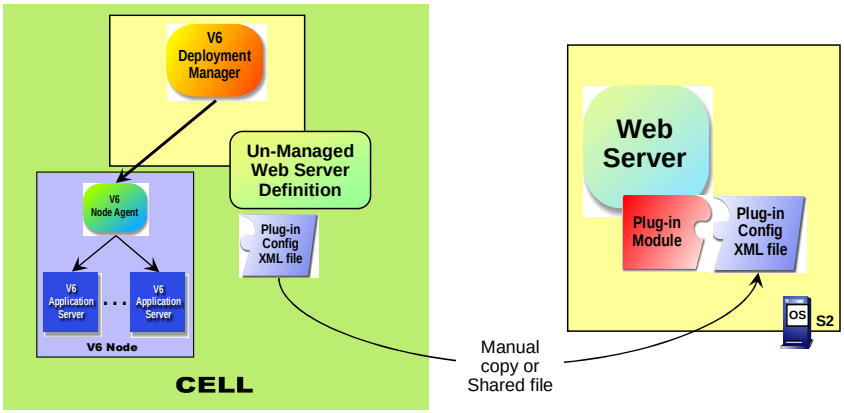
Provides ability to start, stop the Web Server and automatically push the plug-in configuration file to the Web Server

Requires WebSphere Node Agent to be installed on the Web Server machine

Used when web servers is on the same machine where Application Server is installed.

Common for behind a firewall where a WebSphere Node can be installed

Web Server: Unmanaged Node in a ND Cell



- Web Server not managed by WebSphere – same as v5.x
- Manually ftp/copy the plug-in configuration file from the DMgr machine to the Web Server machine
- Allows WebSphere System Administrator to create custom plug-in files for a specific Web Server

Web Server is registered as Unmanaged Node in WebSphere configuration. Common for Web servers installed outside firewall or in DMZ, where no WebSphere Node Agent is installed

Section

WebSphere v6

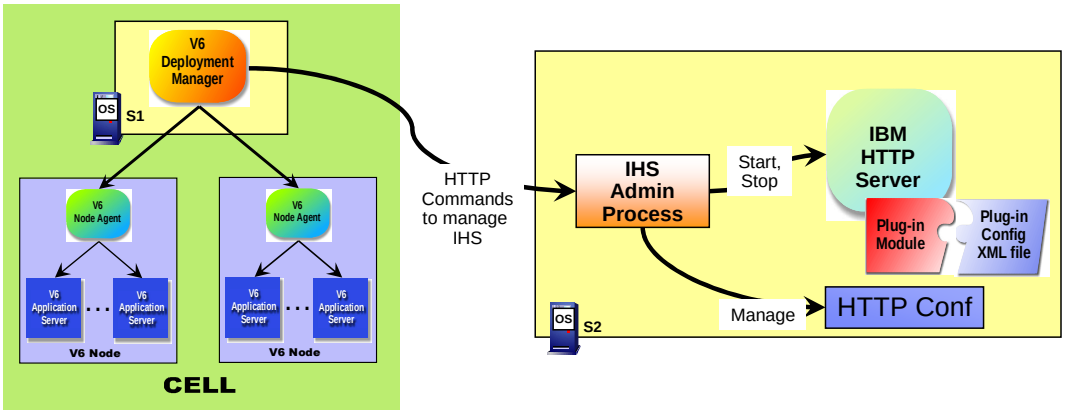
and

IBM HTTP Server (IHS) v6

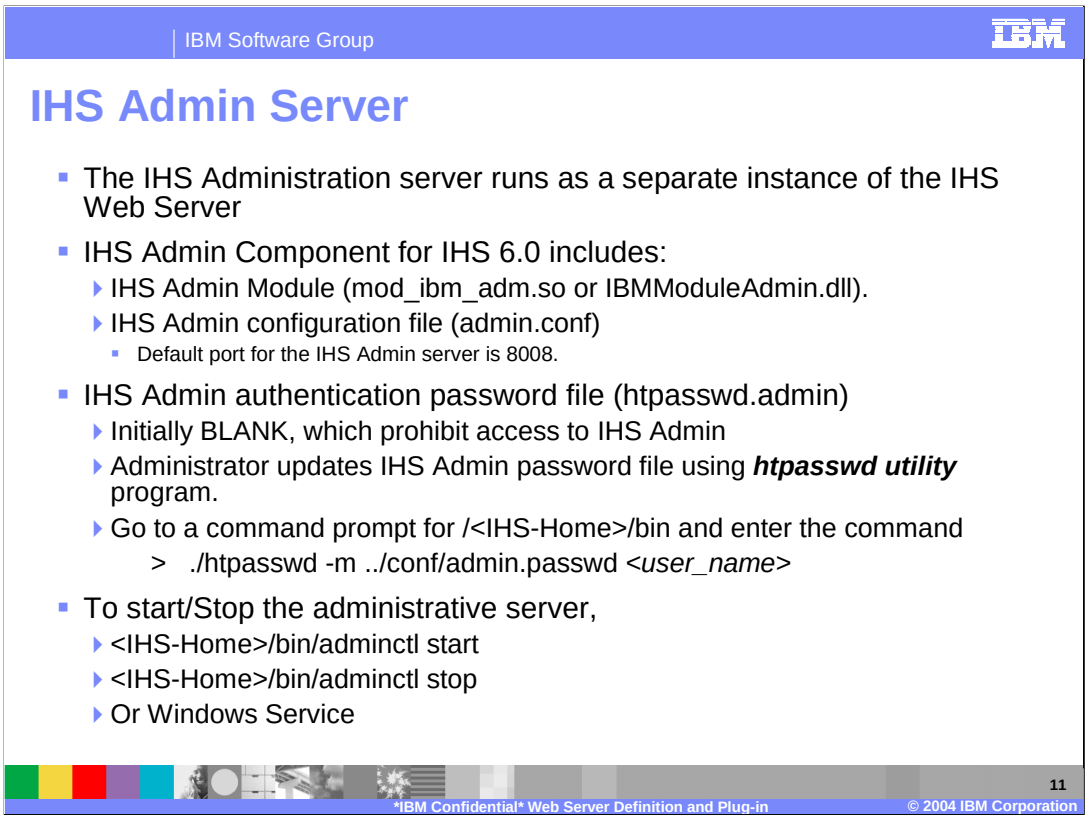
IHS Administration Overview

- IBM HTTP Server (IHS) v6 bundled with WebSphere v6
  - Based on Apache 2.0.47
  - Administration functionality is integrated into WebSphere v6 Admin-Console
    - IHS administrative process communicates with the Deployment Manager
- Administration of IHS 2.0.X is done from the command line

IHS as Unmanaged (Remote) Node: Special Case



- WebSphere v6 and IHS has special enhancements
  - IHS admin process provides administrative functions for IHS within WebSphere
  - Provides ability to start, stop IHS, make config. changes to httpd.conf and automatically push the plug-in configuration file to IHS machine
  - Does not need Node Agent on the Web Server machine



The configuration files are owned by *root* after install. If you have created a separate user for administration of IBM HTTP Server, you must give write permission to the user designated for Web administration:

Become user *root* in the /opt/HTTPServer/conf directory.

Change ownership of the configuration files to the user designated for administration of IBM HTTP Server: # chown *<IHS_admin_user_name>:<IHS_admin_group_name>* admin.conf httpd.conf admin.passwd # chmod 640 admin.conf httpd.conf admin.passwd

Open an editor on the files admin.conf and httpd.conf. Change the **User** so it specifies the user designated for administration of IBM HTTP Server. Similarly, change the **Group** so it specifies the group designated for administration of IBM HTTP Server.

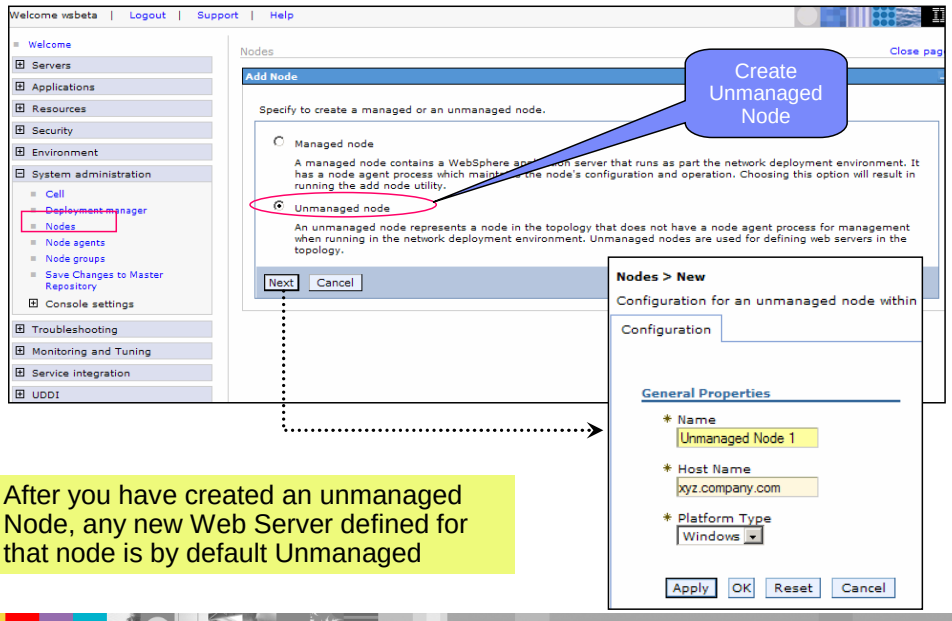
Section

Managing Web Server Definitions and Plug-ins

Web Server Administrative Functions

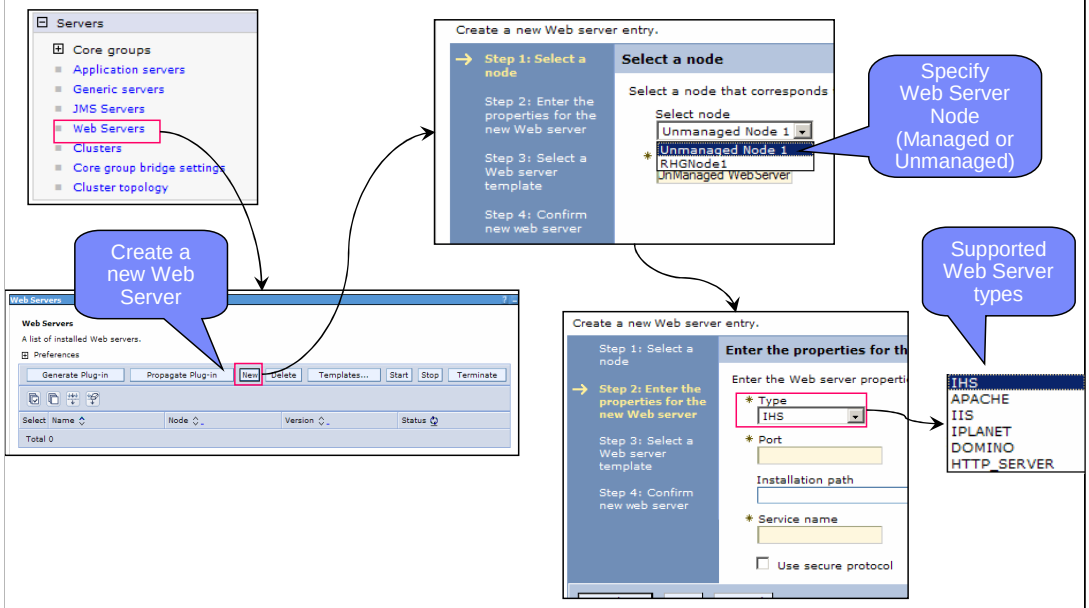
- Creating new Web Server definitions from pre-defined templates for supported Web Servers
  - Node must be created prior to creating the new Web Server definition
    - For Unmanaged Web Server definition, you will need to create an Unmanaged Node
- Creating new Web Server definition templates
- Managing and administration of defined Web Servers
  - Start, Stop, Delete, Modify Web server configuration
- Managing Plug-in configuration files
  - Mapping applications to Web Servers
  - Generating and propagating Plug-in configuration files for the Web Servers
  - Configuring Plug-in configuration properties (like Error level, etc.)

Creating Unmanaged Node for Web Server



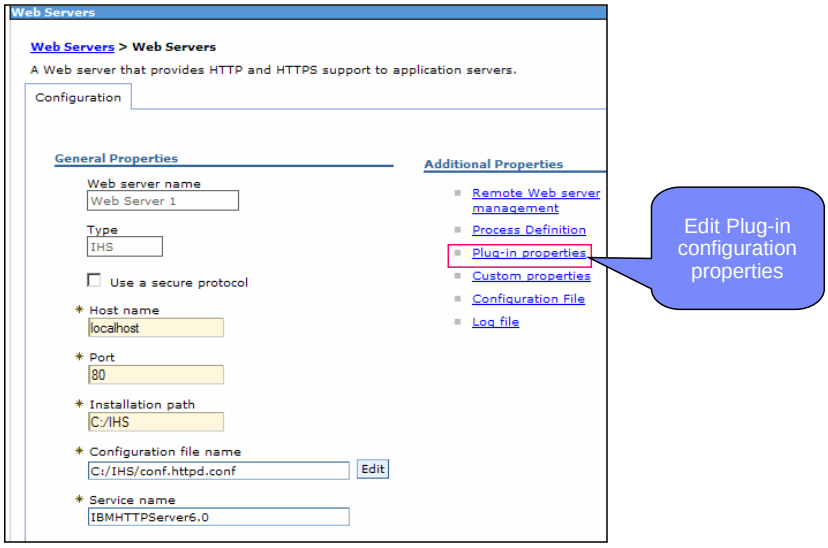
After you have created an unmanaged Node, any new Web Server defined for that node is by default Unmanaged

Create/Manage New Web Server Definition



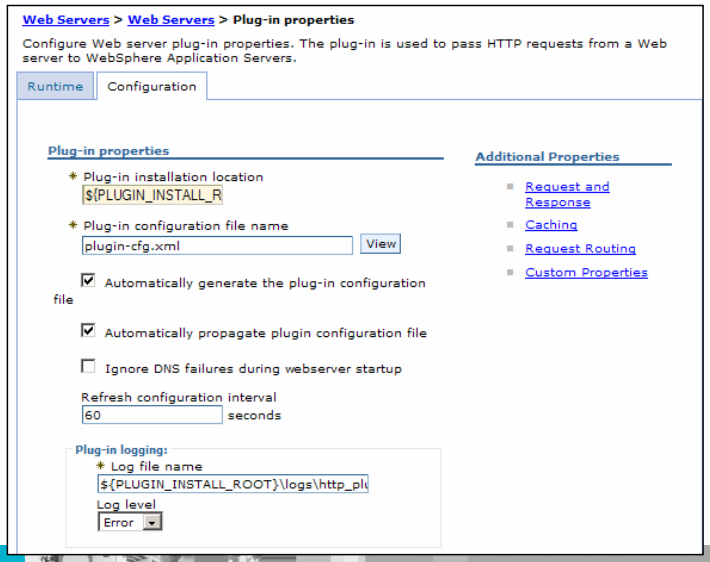
Managing Defined Web Server

- Select Web Server to configure the Web Server and its plug-in config. file



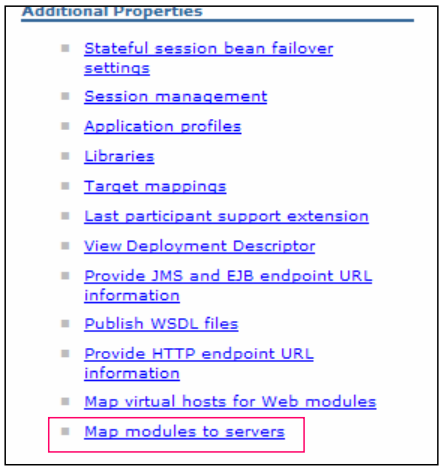
Managing Web Server Plug-in Properties

- Select a Web Server to configure its plug-in config. file



Mapping Applications to Web Server

- Select application and the mapping of modules to servers
- Then select the Application Server and one or more Web Servers



Section

Summary and Reference

Summary

- WebSphere v6 allow defining Web Servers in the Cell topology and administer them
- Allows creating custom plug-in configuration files

Web Server Definition – At a Glance

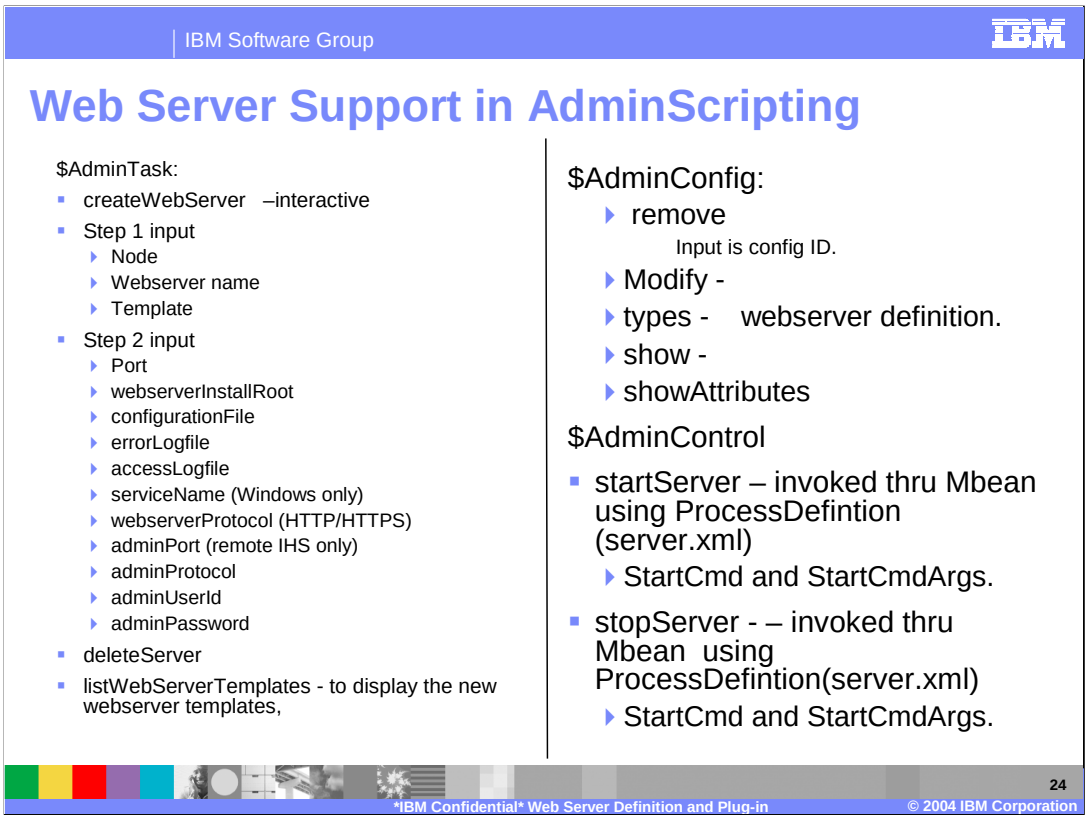
Topology	Topology Applicability	Requirement	Web Server Administration Capability
Managed Web Server Node	ND Cell	Requires Node Agent running on the Web Server machine	Start, Stop Web Server, Manage (push) Plug-in config. file to Web Server machine
Un-managed Web Server Node – same as WebSphere v5.x	All packages - Standalone Node Profile (ND or Express) or ND Cell	None	None
IHS as a special case of Unmanaged Node	ND Cell	None	Start, Stop Web Server, Manage (push) Plug-in config. file to Web Server machine

Reference

- IBM HTTP Server
  - http://www-306.ibm.com/software/webservers/httpservers/library/
- Understanding the WebSphere Application Server Web server plug-in
  - http://www-106.ibm.com/developerworks/websphere/library/techarticles/0310_cocasse/cocasse.html

Section

Appendix



listWebServerTemplates - to display the new webserver templates, once templates are created and located in the proper directory off the config\templates directory, it should show up in wsadmin with no additional work.

Location of WebServer templates

config/templates/servertypes/WEB_SERVER

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