



IBM Systems

Ask the Experts

Understanding IBM HTTP Server (IHS) Administration
using the WebSphere Admin console

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WebSphere® Support Technical Exchange



Agenda

- Introduce the panel of experts
- Introduce **Understanding IBM HTTP Server (IHS) Administration using the WebSphere Admin console**
Topics
- Answer pre-submitted questions
- Open telephone lines for questions
- Summarize highlights

Panel of Experts

Panelist	Role at IBM
Bob Richter brichter@us.ibm.com	WebSphere Level 2 support for IHS and Plugin Support Engineer
Harold Fanning hfanning@us.ibm.com	WebSphere Level 2 support for WebSphere Edge Support Engineer

Introduction

We will be covering questions related to Web Server Administration on all Distributed Platforms. We will not be including OS/400[®] or z/OS[®]

Web Server Administration

What is 'Web Server Administration'?



What is 'Web Server Administration'?

- a) Plug-in Propagation (plugin-cfg.xml, plugin-key.kdb and httpd.conf)
- b) Start/Stop Web Server
- c) View and Edit the httpd.conf
- d) Web Server status

NOTE: Some of the above function for IHS only?

- Some functions for non IHS Web Servers depend on the configured Node

Components of the web server admin

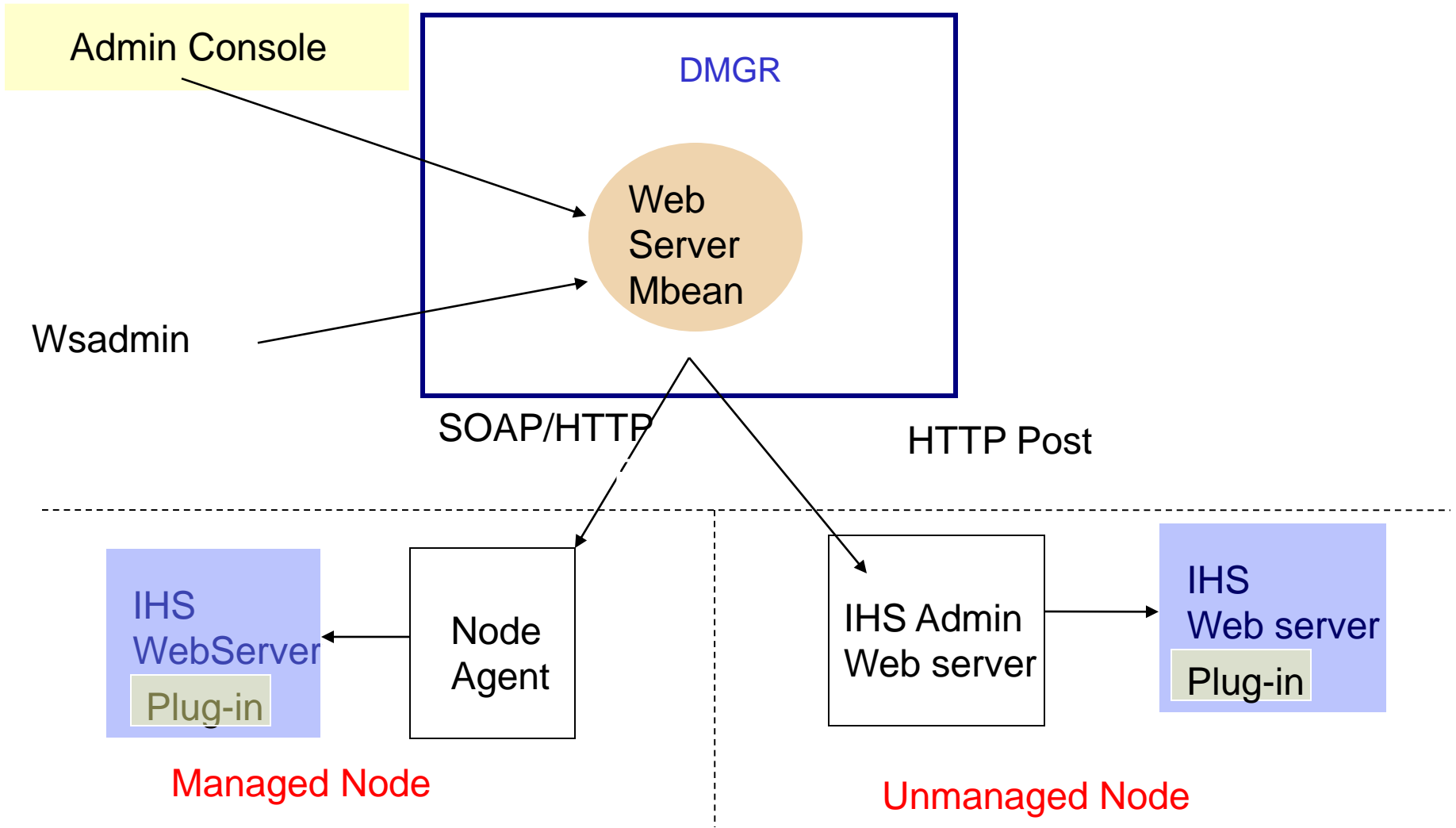
What are the components of the web server admin?

Components of the web server admin

- Node Agent - Running on any Managed Node. Web Server defined to a Managed node will be Administered by the Node Agent
- IBM Administration Server - Web Server defined to an Unmanaged node will be administered by the IBM Administration Server
 - ▶ This is same executable as IBM HTTP Server with special module and configurations
 - ibm_admin_module
 - admin.conf

Components of the web server admin

- DMGR or Base Application Server Admin Console
- Node Agent is started the same as node agent for Application Server. Same Node Agent.
- IBM Administration Server is started:
 - ▶ Windows[®] Service
 - ▶ UNIX[®] adminctl script



DMGR console and standalone WAS console

What is the difference between DMGR console and standalone WAS console?

DMGR console and standalone WAS console

- Deployment Manager Administration Console allows administration of all the Application Servers, Applications, Web Server and other resources across multiple nodes using the node agent.
- Base or Standalone Administration console allows administration for Management of a single Application Server, Web Server and Applications deployed to single Application Server.

WCT

How does the WebSphere Customization Toolbox (WCT) affect the configuration of the web server admin?

Plug-in Configuration Tool (PCT)

- PCT replaces configuration previously performed during the IBM HTTP Server and Plug-in Install.
 - ▶ a) Creates configure<webservername> script for Web Server definition
 - Port to DMGR or Base Application Server
 - ▶ b) Configure httpd.conf
 - For IHS Web server Type
 - Location of the Plugin-cfg.xml (WebSpherePluginConfig)
 - Location of the Plug-in module (LoadModule)

Plug-in Configuration Tool (PCT)

- ▶ c) Established Authentication User And Password for access to IBM Administration Server
 - Add user/password to the Authentication file for IBM Administration Server – admin.passwd
 - Add user/password to the WebSphere Repository Web Server definition
- ▶ d) **Windows Only:** Create IBMAdministrationServer Service (needed to start IBM Administration Server)



Plug-in Configuration Tool (PCT)

▶ e) **UNIX Only:**

- Create UNIX user and group, requires PCT run as root.
 - User and Group are recommended to be unique to IBM Administration Server
- Configure admin.conf with update to User and Group IBM HTTP Server Directive with User and Group created above
- Change Permissions for files to allow IBM Administration Server write access to files:
 - httpd.conf and plugin-cfg.xml
 - Specifically change the UNIX “Group” name associated with these files and directories and give write permissions to the Group created above

WCT

- More details about Plug-in configuration ToolBox is available in following Links:
 - ▶ WebSphere Technical Exchange
 - <http://www.ibm.com/support/docview.wss?uid=swg27036087>

Common Problems

What are the common problems?

Common problems – Propagate Fails

- **Propagate fails Connection Failure:** Admin console can not connect to IBM Administration Server Hostname and port as defined in serverIndex.xml
 - ▶ Firewall access (hostname and port) for IBM Administration Server from Administration Console.
 - ▶ In some cases the Web Server machine has multiple network IP Addresses and the hostname for the Administration Server does not resolve to hostname in admin.conf.
 - ▶ Issue “nslookup” of Web Server hostname
 - Servers -> Web Server -> Ports-> WEBSERVER_ADMIN_ADDRESS
 - ▶ Try the IP Address rather than hostname



Common problems- Propagate Fails (cont)

- **Propagate Fails Permissions Problems:** The Node agent or IBM Administration Server must have write permissions to the plugin-cfg.xml for propagation.
 - ▶ Check UNIX Group permissions for Plugin-cfg.xml and httpd.conf
 - ls -al
 - ▶ Check process ID for Node Agent and IBM Administration Server
 - ps -ef | grep admin.conf
 - ps -ef | grep java (node Agent process)
 - groups <username>

Common problems- Authentication failure

- **Authentication Failure on connect to Administration Server:**

- ▶ The User and password in admin.passwd do not match the “User and password being sent by the administration console in the authentication header
- ▶ Update user/password in Administration Console Servers => web Servers => “Remote Web Server Management
- ▶ Update user/password in admin.passwd using htpasswd utility

Common problems - Web Server Status incorrect

- **Web Server Status incorrect:** Web Server status on Administration console is not consistent with actual Remote Web Server state (Running/Stopped):
 - ▶ Web Server Ports must be open between Administration console and Web Server
 - ▶ Web Server status is determine by a successful socket connection to web Server from Administration Console.

Common problems - Start/Stop from Admin console fails

■ Start/Stop of IBM HTTP Server from Administration Console fails:

- ▶ IBM Administration Server is not started as “root” and IBM HTTP Server is attempting to bind to Port less than 1024.
 - IBM HTTP Server must be started as root to Bind to Port less than 1024, so IBM Admin Server must be started as root to “Fork” a “root” process.

Open Lines for Questions



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Summary



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