



| IBM Software Group

Discovering business application services, featuring
IBM WebSphere Application Server ND V7.0

Installation

An IBM Proof of Technology



Agenda

- Install overview and enhancements
- Runtime installation
- Uninstallation
- Problem determination
- Summary and references

Section

Installation overview

Installation overview

- WebSphere Application Server (WAS) V7 is a full installation
- Installer uses InstallShield® Multi-platform technology
- All packages support graphical and silent installation
 - ▶ Can be invoked from the Launchpad or from the *install.bin/.sh* in the <install_image>/WAS directory
 - ▶ Silent installation uses a response file as input
 - ▶ Checks for other local V7 runtime installations
- Common logging and tracing strategy is used across all installers

Installation enhancements

- Installation with previous installed version running
- Enhanced support for non-root installation
 - ▶ Global Security Kit (GSKit) can be installed by a non-root user
 - ▶ Verify and set permissions options
- Optional language pack installation
 - ▶ Shrinks install foot print
- Incremental update support for language packs and samples

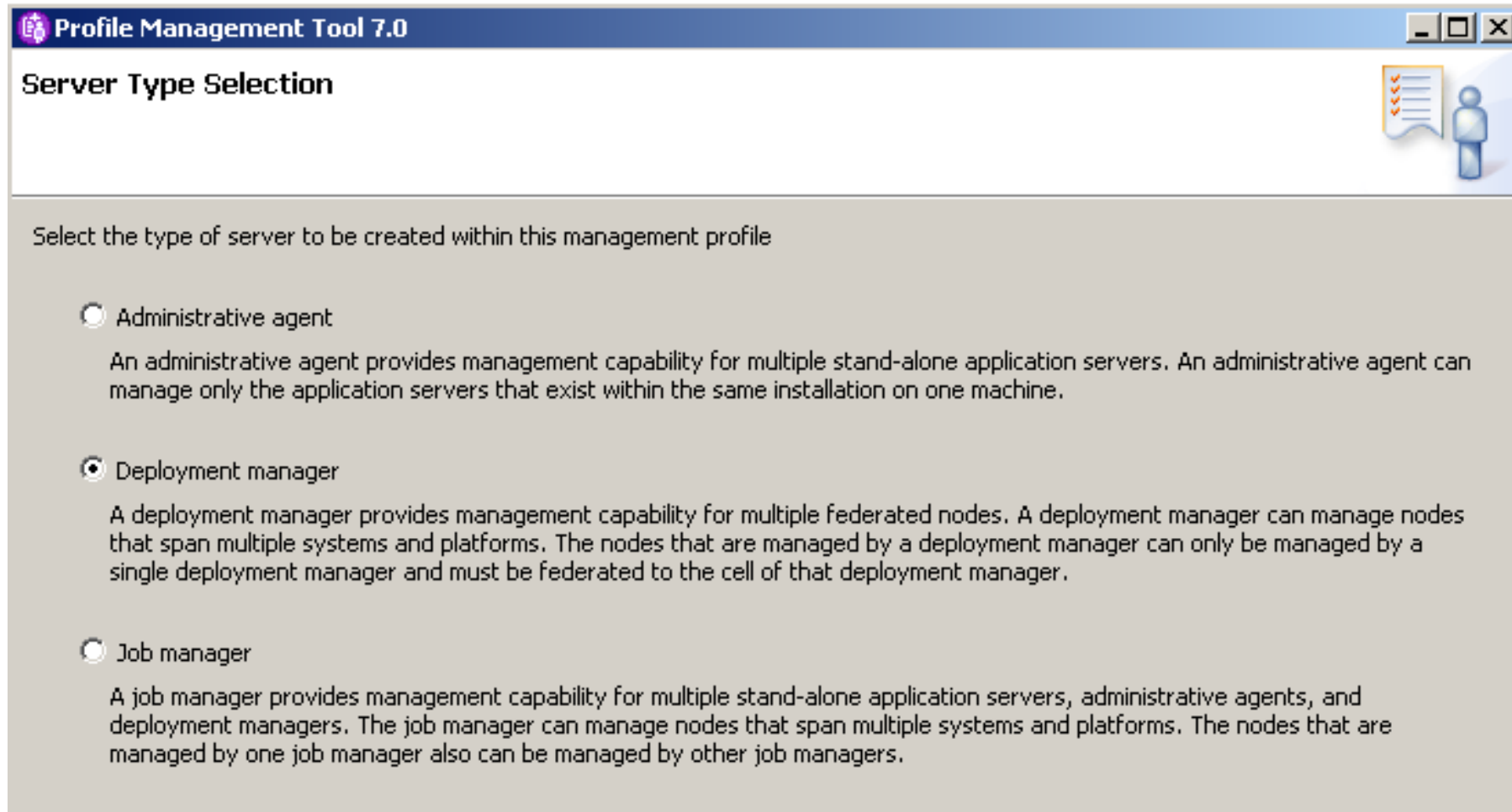
Optional features



Profile creation enhancements

- Faster profile creation
- Set server name during profile creation
- Secure Proxy profile
 - ▶ For nodes that are placed in a DMZ (Demilitarized Zone)
- Administrative Agent and Job Manager
 - ▶ Under “Management” option
- Certificate creation or import options are available in Profile Management Tool (PMT)
 - ▶ Under “Advanced profile creation” option

Management Profiles



The screenshot shows a window titled "Profile Management Tool 7.0" with a subtitle "Server Type Selection". The window contains a list of three radio button options for selecting a server type. The "Deployment manager" option is selected. Each option includes a brief description of its capabilities.

Select the type of server to be created within this management profile

- Administrative agent
An administrative agent provides management capability for multiple stand-alone application servers. An administrative agent can manage only the application servers that exist within the same installation on one machine.
- Deployment manager
A deployment manager provides management capability for multiple federated nodes. A deployment manager can manage nodes that span multiple systems and platforms. The nodes that are managed by a deployment manager can only be managed by a single deployment manager and must be federated to the cell of that deployment manager.
- Job manager
A job manager provides management capability for multiple stand-alone application servers, administrative agents, and deployment managers. The job manager can manage nodes that span multiple systems and platforms. The nodes that are managed by one job manager also can be managed by other job managers.

Security certificate

Profile Management Tool 7.0

Security Certificate (Part 1)

Choose whether to create a default personal certificate and root signing certificate, or import them from keystores. To create new certificates, proceed to Part 2 and provide the certificate information. To import existing certificates from keystores, locate the certificates then proceed to Part 2 and verify the certificate information.

Create a new default personal certificate
 Import an existing default personal certificate

Default personal certificate

Path:

Password:

Keystore type:

Keystore alias:

Create a new root signing certificate
 Import an existing root signing certificate

Root signing certificate

Path:

< Back Next > Finish Cancel

Security certificate

Profile Management Tool 7.0

Security Certificate (Part 2)

Modify the certificate information to create new certificates during profile creation. If importing existing certificates from keystores, use the information to verify whether the selected certificates contain the appropriate information. If not, click **Back** to import different certificates.

Default personal certificate (a personal certificate for this profile, public and private key):

Issued to distinguished name:

Issued by distinguished name:

Expiration period:

Root signing certificate (personal certificate for signing other certificates, public and private key):

Expiration period:

Default keystore password:

Packaging

Platform	CD Image	Includes
Distributed	Primary	<ul style="list-style-type: none"> WebSphere Application Server
	Supplement CD Images 1 and 2	<ul style="list-style-type: none"> IBM HTTP Server Web server plug-ins Application Client Update Installer Migration tools
	DMZ Secure Proxy Server	<ul style="list-style-type: none"> Secure Proxy Server

Section

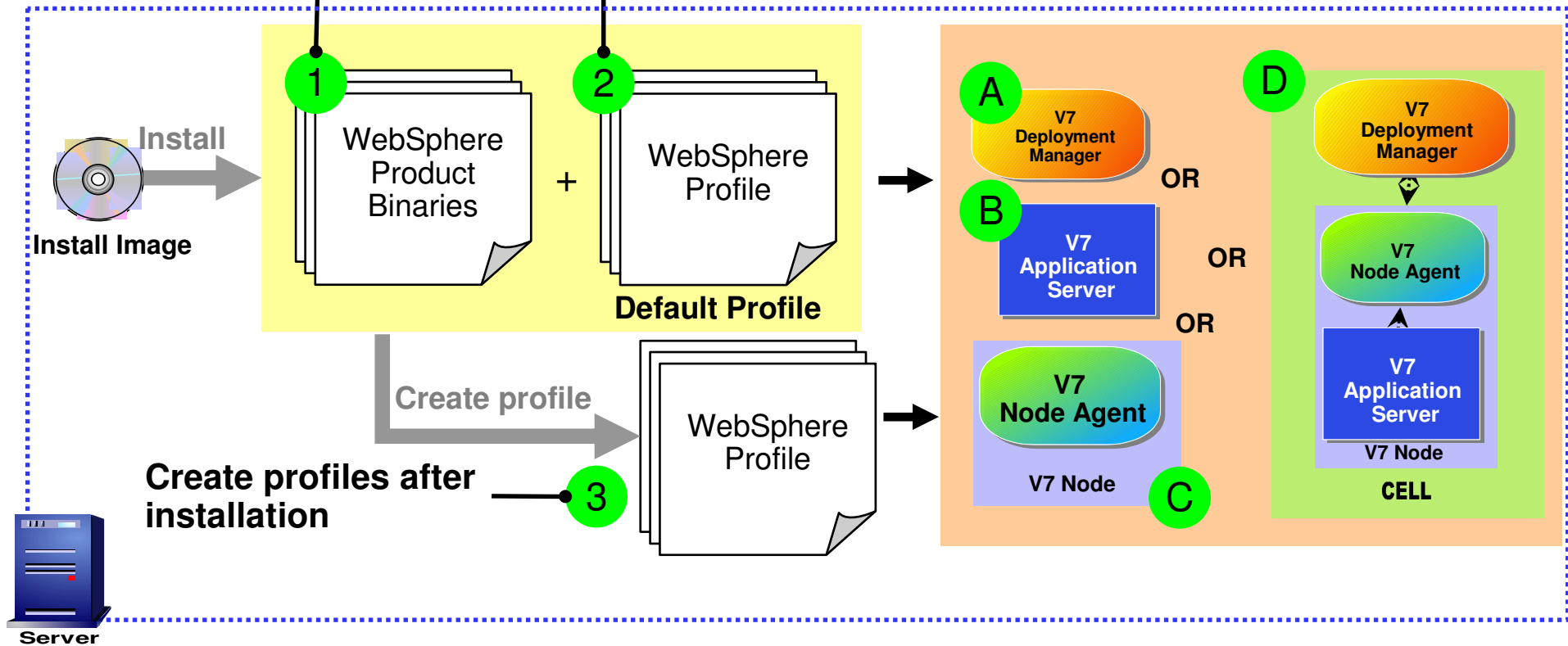
Runtime Installation

Installation options

Optionally create a default WebSphere Profile

- A. Deployment Manager
- B. Application server
- C. Custom profile (managed node)
- D. Cell
- E. Secure proxy
- F. Job Manager
- G. Administrative Agent

Install product binaries and option to install WebSphere Samples or Language Packs



Command-line installation

- Installer binary location:
 - ▶ `<IMAGE_DIR>\WAS\install.exe` **Windows®**
 - ▶ `<IMAGE_DIR>/WAS/install` **LINUX® / UNIX®**
- Silent installation option uses a single file to specify various product install options and to create a profile
 - ▶ `<IMAGE_DIR>/WAS/install -options "response_file_name" -silent`
 - ▶ Sample file: `<IMAGE_DIR>/WAS/responsefile.nd.txt`
 - ▶ License acceptance must be changed to "true"

Prerequisite checking

- The installer checks these prerequisites
 - ▶ Operating system level
 - ▶ Sufficient disk space
 - ▶ User authority (permissions)
- Users can choose to ignore warnings and continue
- Silent installation will stop if the check fails
 - ▶ Use `-OPT disableOSPrereqChecking="true"` to override

Default installation location

- Default location starts with "IBM/WebSphere/" for all installations
- Non-root installation is installed under user's home directory

Operating System	User	Default Install Location
AIX®	Root	/usr/IBM/WebSphere/AppServer
	Non-Root	~/IBM/WebSphere/AppServer
Solaris™/Linux	Root	/opt/IBM/WebSphere/AppServer
	Non-Root	~/IBM/WebSphere/AppServer
Windows	Root	C:\Program Files\IBM\WebSphere\AppServer
	Non-Root	C:\IBM\WebSphere\AppServer
i5/OS	N/A	/QIBM/IBM/WebSphere/AppServer/V7/<edition>
z/OS	N/A	/usr/lpp/zWebSphere/V7R0
		/usr/lpp/zWebSphere_OM/V7R0
		/usr/lpp/zWebSphere_SPS/V7R0

WAS V7.0 System prerequisites

Best Practice: As part of your planning process, consult the **actual online** Document „System Requirements for WebSphere Application Server V7.0“. <http://www-01.ibm.com/support/docview.wss?rs=180&uid=swg27012284>

The following operating systems are supported:

- [AIX®](#)
- [HP-UX on PA-RISC](#)
- [HP-UX on Itanium](#)
- [Linux® on x86](#)
- [Linux on x86-64](#)
- [Linux on System z9 and zSeries®](#)
- [Linux on POWER](#)
- [IBM i™](#)
- [Solaris SPARC](#)
- [Solaris x64](#)
- [Windows®](#)
- [z/OS®](#)

Section

Uninstallation

Uninstallation overview

- Uninstallation uses InstallShield™ Multi Platform
- Located under “uninstall” directory
 - ▶ <Install_root>/uninstall/uninstall.exe
- Silent uninstallation is supported
 - ▶ <Install_root>/uninstall/uninstall –silent

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Problem determination

Exit codes

- All V7 installers, including IHS and plug-in installers use a common logging strategy, including exit codes
- Linux / UNIX Platforms echo “\$?” command after install completion will display
 - 0 – Success, 1 – Failed, 2 – Partial Success
- Exit codes are not set on Windows platforms due to an Install Shield limitation
 - ▶ Consult **log.txt** for information on success or failure
 - INSTCONFSUCCESS implies successful install and profile creation
 - INSTCONFFAILED implies a failed install
 - INSTCONFPARTIALSUCCESS usually implies a successful install, but some configuration action failed

Log files

- Log files for installation and uninstallation for all packages can be found under the directory: <install_root>/logs/
- If the logs directory cannot be accessed during installation, the logs are saved under <user home>/<productID>logs
 - ▶ Application Server: <user home>/waslogs
 - ▶ IBM HTTP Server: <user home>/ihslogs
 - ▶ Plug-ins: <user home>/plglogs
 - ▶ Application Client: <user home>/cltlogs
- If there is a Java Development Kit (JDK) related problem and if you can not find the logs look under <OS temp directory>/niflogs
 - ▶ /tmp/niflogs on UNIX and %TEMP%/niflogs on Windows
- If you see “*A suitable JVM™ could not be found*”, the following command will help diagnose the problem by catching the errors:
 - ▶ `install.exe -is:log catchinstallerlogs.txt`

Section

Summary

Summary

■ Installation

- ▶ WebSphere Application Server V7 is a full installation
 - Both wizard and command line installation options
- ▶ Installation enhancements include the ability to
 - Create a Secure proxy profile
 - Create or import security certificates during profile creation

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