



IBM Software Group

Managing Repositories for Installation of WebSphere Application Server V8

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WebSphere Application Server L2 Support

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WebSphere® Support Technical Exchange



Agenda

- Introduction
- Overview of IBM® Installation Manager and WebSphere Application Server V8.0 offerings
- Repositories concepts
- Overview of IBM Packaging Utility
- Creating an Enterprise Repository
- Creating Platform-Scoped Repositories
- Enterprise Repository Servers
- Tips for Installing Repositories



Overview of IBM Installation Manager and WebSphere Application Server V8.0 offerings



Introduction Installation Manager (IM)

- IBM® Installation Manager (IM) is an application that simplifies downloading, installing, updating, and uninstalling many IBM software products from a single user interface
- A single instance of IBM Installation Manager can manage the product life cycle for any IBM Installation Manager based product from WebSphere, Rational, Lotus and any other brand within IBM
- Provides a full graphical user interface for distributed platforms (excluding z/OS and IBM i systems)
- Provides a utility for all platforms to perform install operations silently, using either command-line options or a response file
- Operates on the local system where IBM products are installed, and can pull repositories from a remote system



Introduction to v8.0 offerings

- IBM WebSphere Application Server V8.0 has multiple product offering packages – Network Deployment, Base, Express, Developer's Edition
- These product packages are available on the IBM Passport Advantage site
- IBM Installation Manager V1.4.3 or later is required to install IBM WebSphere Application Server V8.0 offerings
- Same product offering package can be used to install to any supported distributed platforms

- IBM WebSphere Application Server GUI installation flow example:
 1. Install IBM Installation Manager
 2. Use IM to install WebSphere Application Server Network Deployment
 3. Add or remove optional features, and apply or roll-back fix packs
 4. Uninstall IBM WebSphere Application Server Network Deployment



Repositories concepts



Repositories

- Repositories are collections of files in a directory structure that contain product installation metadata and files
- Server repositories are locations where repositories are stored, remote from the Installation Manager's local system
- Repository topologies can be generalized in three categories:
 - ▶ Public repository (Web Repository) – publicly accessible using a URL, typically on ibm.com
 - ▶ Local repository that is used by a single system and not shared with others
 - ▶ Enterprise repository – created in-house, typically exists behind the firewall and is accessed only by systems within the enterprise intranet
- IBM Packaging Utility is available to copy offerings from one repository to another and retrieve offerings from remote repositories

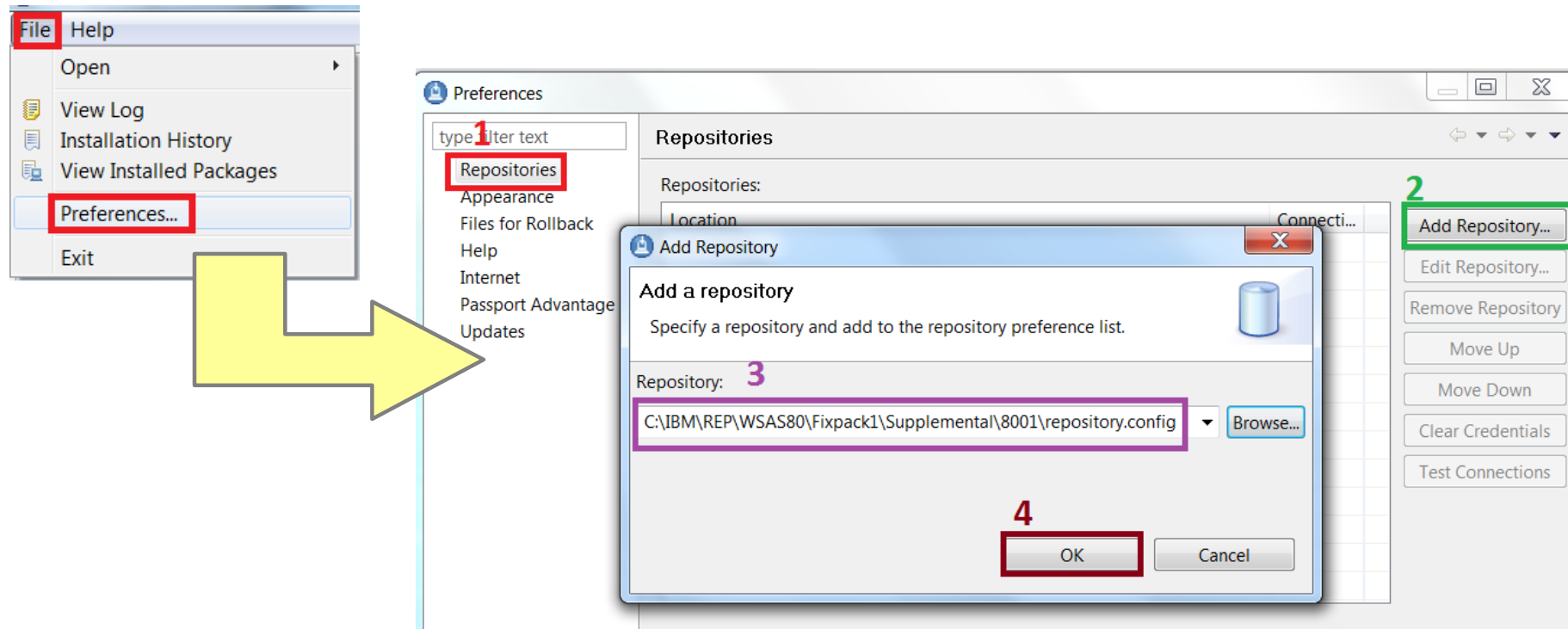


Repositories for V8.0

- Public (Web) repository – Connecting to the public repository allows a product to be downloaded directly from ibm.com using Installation Manager, available for clients entitled with Passport Advantage
 - ▶ Example URLs for different editions of V8.0:
<http://www.ibm.com/software/repositorymanager/com.ibm.websphere.EXPRESS.v80>
<http://www.ibm.com/software/repositorymanager/com.ibm.websphere.BASE.v80>
<http://www.ibm.com/software/repositorymanager/com.ibm.websphere.ND.v80>
- Local – The repository is downloaded locally to the system prior to running Installation Manager. This requires access a Passport Advantage ID with entitlement to V8.0
 - ▶ Unzip the downloaded repository file (or multiple files) to a directory
 - ▶ Add that directory path to the repository list;
e.g., C:\IBM\REP\WSAS80\WASND\80
- This presentation will focus on local repositories and creating Enterprise repositories from them



Add repository to Installation Manager



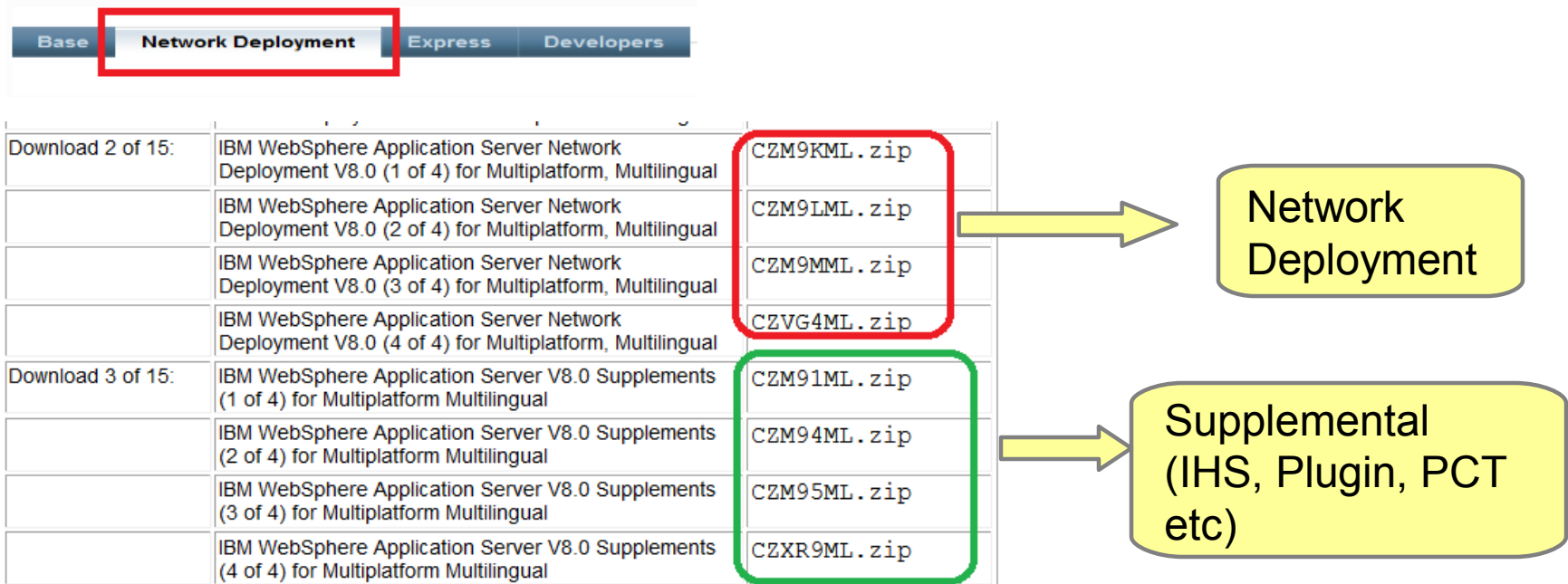
- Alternatively, repositories can be added to response file for silent install mode

```
<server>  
<repository location='/opt/IBM/wasdepot/WAS/WAS8_ND/repository'/>  
<repository location='/opt/IBM/wasdepot/WAS/WAS8_ND/supplements_V8'/>  
</server>
```

Local repositories – WSAS 8.0

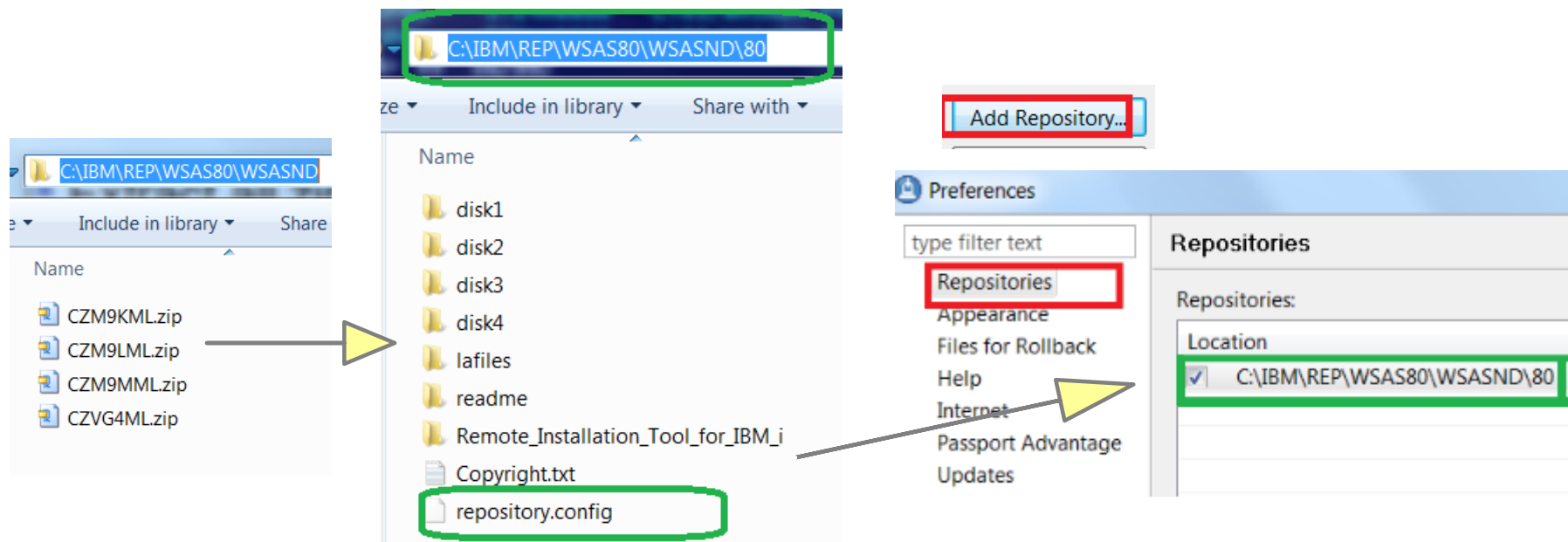
- For guidance on which repositories (“part numbers”) to download, visit:
<http://www.ibm.com/support/docview.wss?uid=swg27021166>
- Download the part numbers grouped together for an offering
- 32-bit and 64-bit editions are included in the same downloads; no longer separate
- AIX, HP-UX, Linux®, Solaris, and Windows® editions are included in same downloads

▶ Example of Network Deployment and Supplemental offerings:



Extracting installation repositories

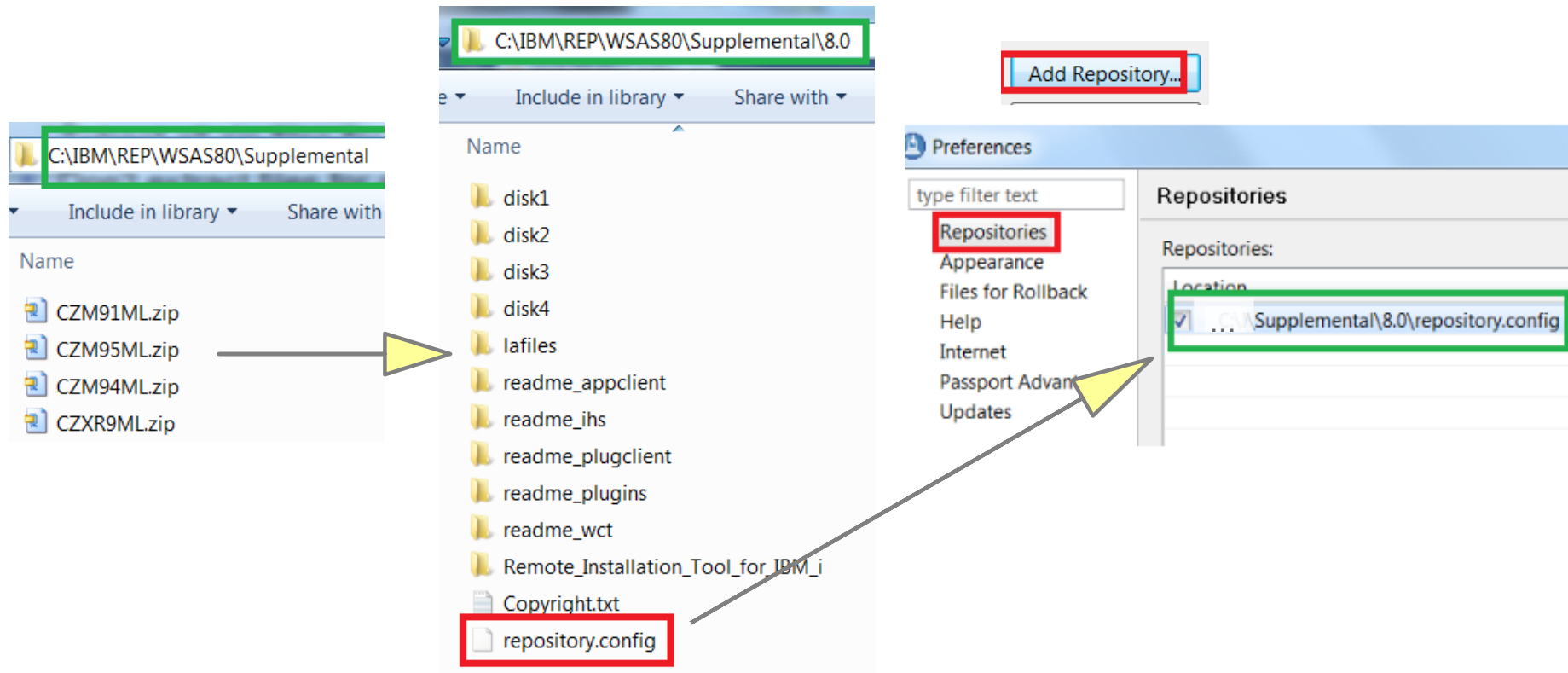
- Extract all zip files for same offering to same directory
- Don't extract files for different offerings to same directory
- Example for extracting and adding Network Deployment to IM:



- It is okay to unzip repository files on one system (such as Windows) and move the files to a different system (such as Linux)
- But Installation Manager's installer files should be extracted directly on the targeted system

Extracting installation repositories

- Example for extracting the Supplemental products and adding them to IM
- Remember: The zip files should be extracted to a **separate** directory from the WebSphere Application Server V8.0 repositories



Download fix pack

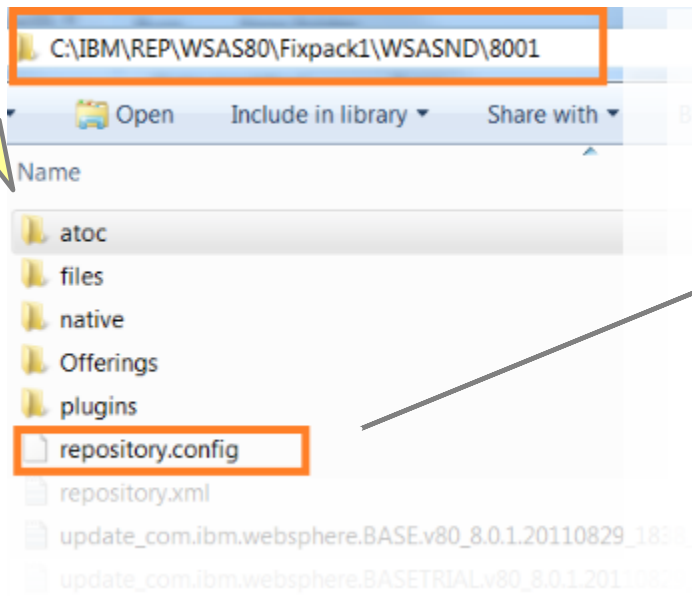
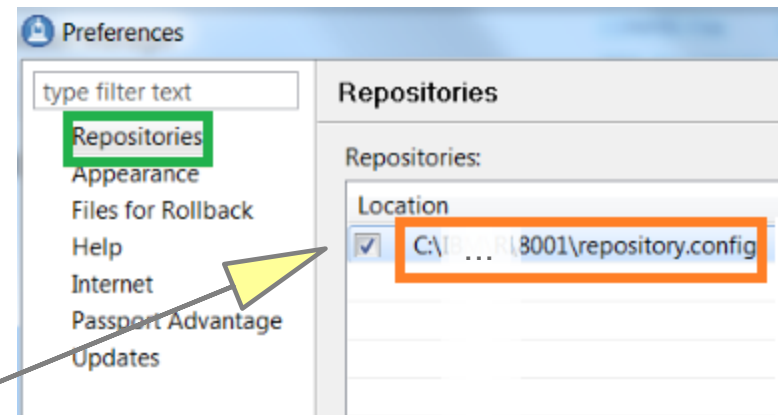
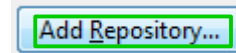
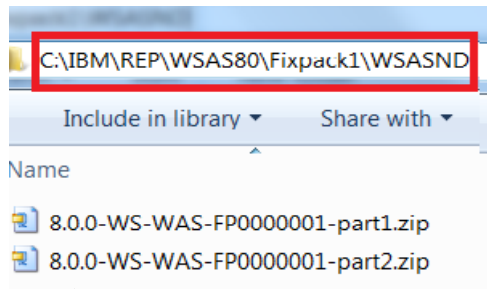
- AppServer and Java™ SDK bundled together into same fix pack; no longer separate as in V7
- Each fix pack includes updates for AIX, HP-UX, Linux, Solaris, and Windows
- Download all parts listed for a fix pack
- Visit this resource: <http://www.ibm.com/support/docview.wss?uid=swg24030916>

Platform	Download	Download Links (Fix Central)
Distributed	Application Server V8.0.0.1 local repository ZIP Files containing Base, Express, ND, Java SDK	8.0.0-WS-WAS-FP0000001-part1.zip 8.0.0-WS-WAS-FP0000001-part2.zip
Distributed	Supplements V8.0.0.1 local repository ZIP Files containing Application Client, Web server plug-ins, Pluggable Application Client, IBM HTTP Server, Java SDK	8.0.0-WS-WASSupplements-FP0000001-part1.zip 8.0.0-WS-WASSupplements-FP0000001-part2.zip
Distributed	WebSphere Customization Toolbox V8.0.0.1 local repository ZIP File	8.0.0-WS-WCT-FP0000001.zip
IBM I	IBM Web Enablement for IBM I V8.0.0.1 local repository ZIP File	8.0.0-WS-WEBENAB-FP0000001.zip

- Red highlight: WSAS fix pack for ND, Base, Express, and Developer's editions Base
- Green highlight: Supplements fix pack for IBM HTTP Server, WebSphere plug-in, AppClient
- Yellow highlight: Fix pack for the WCT tool

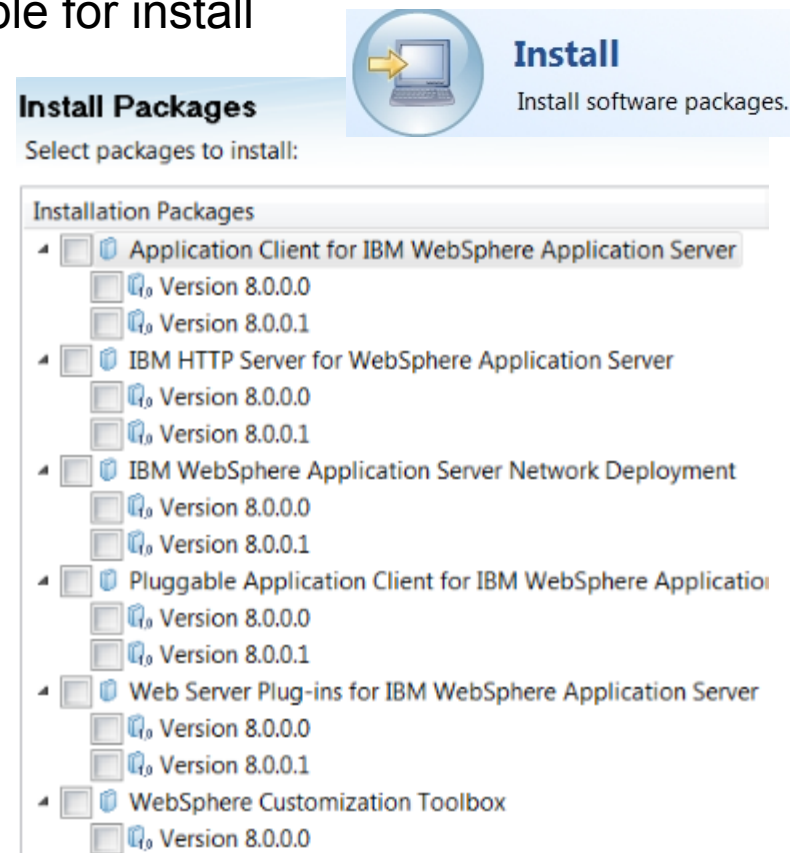
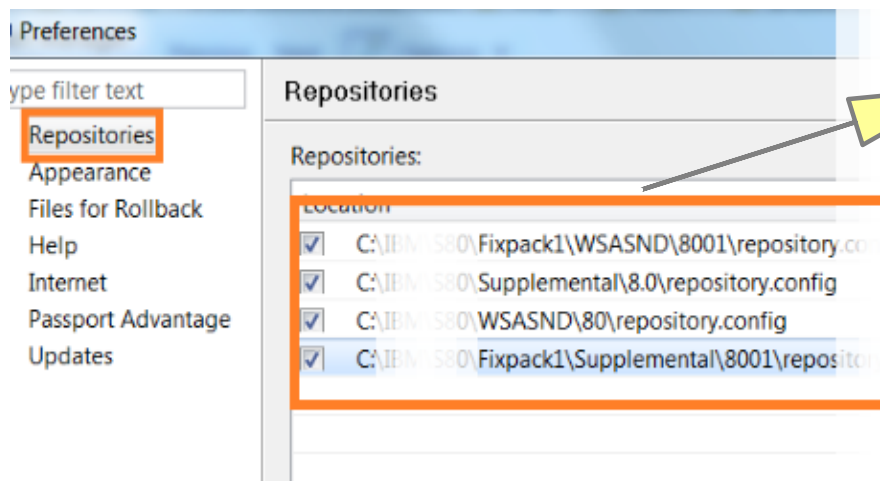
Unzip Fix Pack Local Repositories

- Unzip both parts to same directory
- Add path to “repository.config” to repository list in IM



Multiple repositories in IM preferences

- Put WSAS, Supplemental, and Fix Pack repositories in repository list
- All offerings on the right will become available for install



Overview of IBM Packaging Utility



The IBM Packaging Utility

- The IBM Packaging Utility is a free companion tool to Installation Manager
- IBM Packaging Utility and IBM Installation Manager can be used independently of each other
- IBM Packaging Utility capabilities:
 - ▶ Generate a new repository containing one or more product repositories
 - ▶ Delete packages from an existing repository, such as unneeded fix pack levels
 - ▶ Combine a split repository into a single repository (important for servers)
 - ▶ Can accept web repositories or local repositories as input, and produces a local repository as output
 - ▶ Can extract offerings for a single operating system from a large repository, producing a smaller “platform-scoped” repository



Why process repositories?

- Packaging utility can create your own custom repositories, called Enterprise Repositories
- Combining installation and fix pack repositories into single repository reduces the overall size of the repository
- Repositories can be made available to your own organization using a Web Server or FTP Server
- Hosting a single repository containing multiple packages means fewer repositories need to be added to Installation Manager's preferences



Why process repositories?

- Repositories generated or combined using the IBM Packaging Utility are made suitable for being served from Web or FTP Servers
 - ▶ Repositories downloaded from IBM which are split into multiple “disks” cannot be served from a Web or FTP server
 - ▶ Packaging Utility processes these kinds of repositories so they can be consumed by IM when downloading repositories from server
- Repositories generated using IBM Packaging Utility are always full installation repositories, capable of installing a product from scratch
 - ▶ Generated enterprise repository can have fix pack included
 - ▶ That repository is capable of installing product from scratch, automatically updated to that fix pack level
 - ▶ Same repository can upgrade an existing product installation to that fix pack level



Download and install IBM Packaging Utility

http://www.ibm.com/support/entry/portal/Recommended_fix/Software/Rational/IBM_Installation_Manager

More | Less (detail)

Recommended fixes

▼ IBM Installation Manager

Search within results

Filter your content

Check or uncheck the boxes below to filter your content.

Version

1.5.0.1 (1)

1.5.0 (1)

1.4.4 (1)

1-14 of 14 results (duplicates removed)

Last modified

Filtered content

→ Packaging Utility, Version 1.5 superseded by Version 1.5.0.1
Packaging Utility, version 1.5 has been superseded by Packaging Utility, Version 1.5.0.1.

→ **Packaging Utility, Version 1.5.0.1**
This document describes how to download and install IBM® Packaging Utility, Version 1.5.0.1
Average rating: ★★★★★

→ IBM Packaging Utility, Version 1.4.4
This document describes how to download and install IBM®

Packaging Utility, Version 1.5.0.1

Downloadable files

Download Description

Download Packaging Utility version 1.5.0.1

Packaging Utility downloads

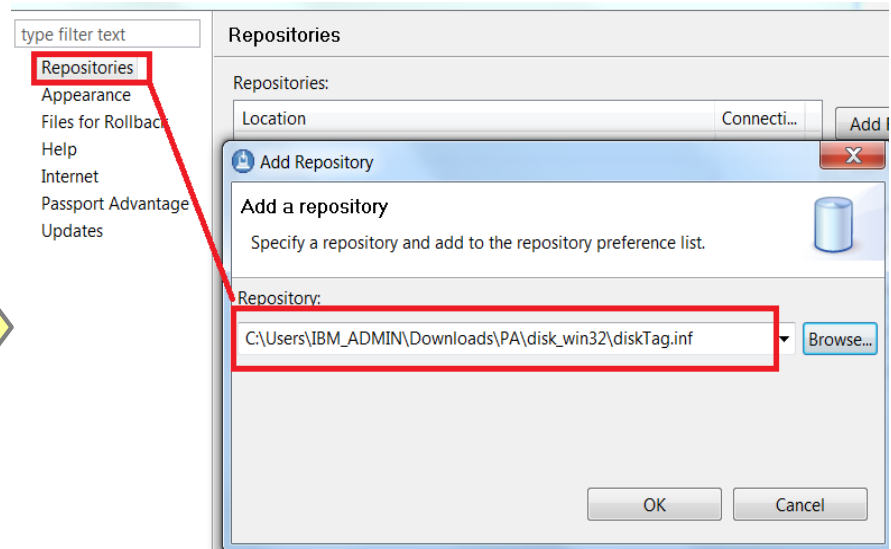
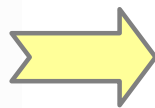
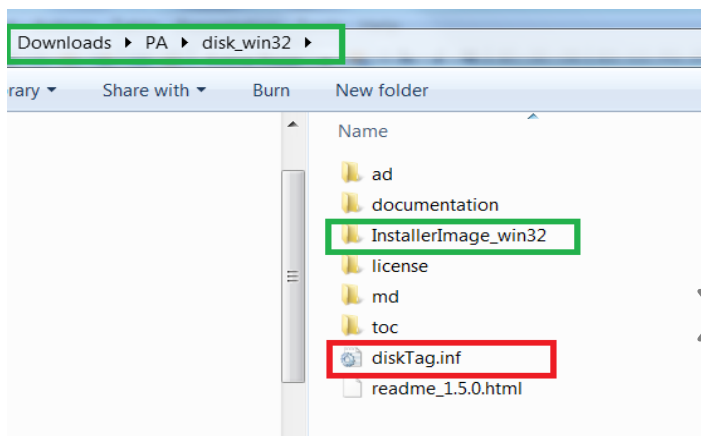
Instructions for installing or updating Packaging Utility

To check for the latest version of Packaging Utility, see http://www.ibm.com/support/entry/portal/Downloads/Software/Rational/IBM_Installation_Manager

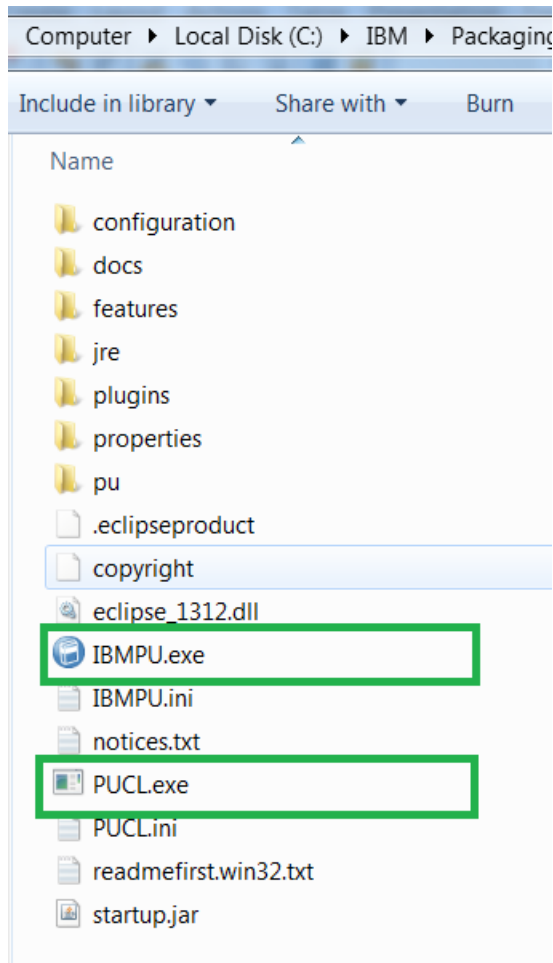
Packaging Utility, version 1.5.0.1 supercedes version 1.5.

Download	RE (Bytes)	Download Options What is Fix Central (FC)?
pu.offering.disk.aix	20 00448	FC HTTP
pu.offering.disk.linux	20 00152	FC HTTP
pu.offering.disk.solaris	20 00072	FC HTTP
pu.offering.disk.win32	20 00808	FC HTTP
pu.offering.disk.zos	20 00008	FC HTTP
pu.update	20 00632	FC HTTP

- Download zip file; e.g., pu.offering.disk.win32_1.5.1000.20111130_0726.zip
- Extract the zip to an empty directory
 - ▶ A self-installation kit is included in the package (highlighted in green)
 - ▶ In this example, the self-installation kit is not needed. We will use an existing IM to install the Packaging Utility
- Use IM to install Packaging Utility in the same way other products are installed
 - ▶ Add the path to the diskTag.inf file of the extracted package (highlighted in red at the left); this is similar to the “repository.config” in other repositories



Running IBM Packaging Utility



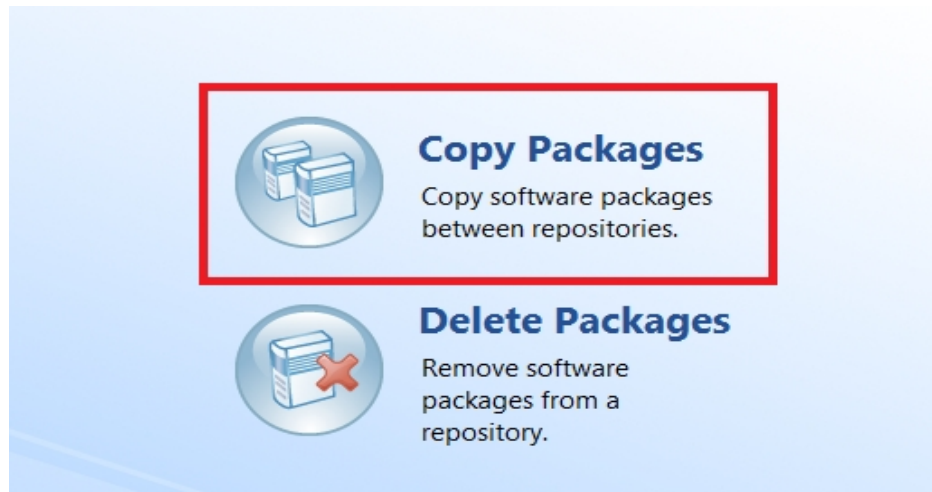
- Start IBM Packaging Utility in graphical mode using IBMPU.exe (or ./IBMPU on UNIX®)
- Alternatively, use PUCL.exe for command-line mode
 - ▶ Command-line mode is necessary for generating platform-scoped repositories

Creating Repositories using Packaging Utility



Create a repository with complete V8.0 offerings

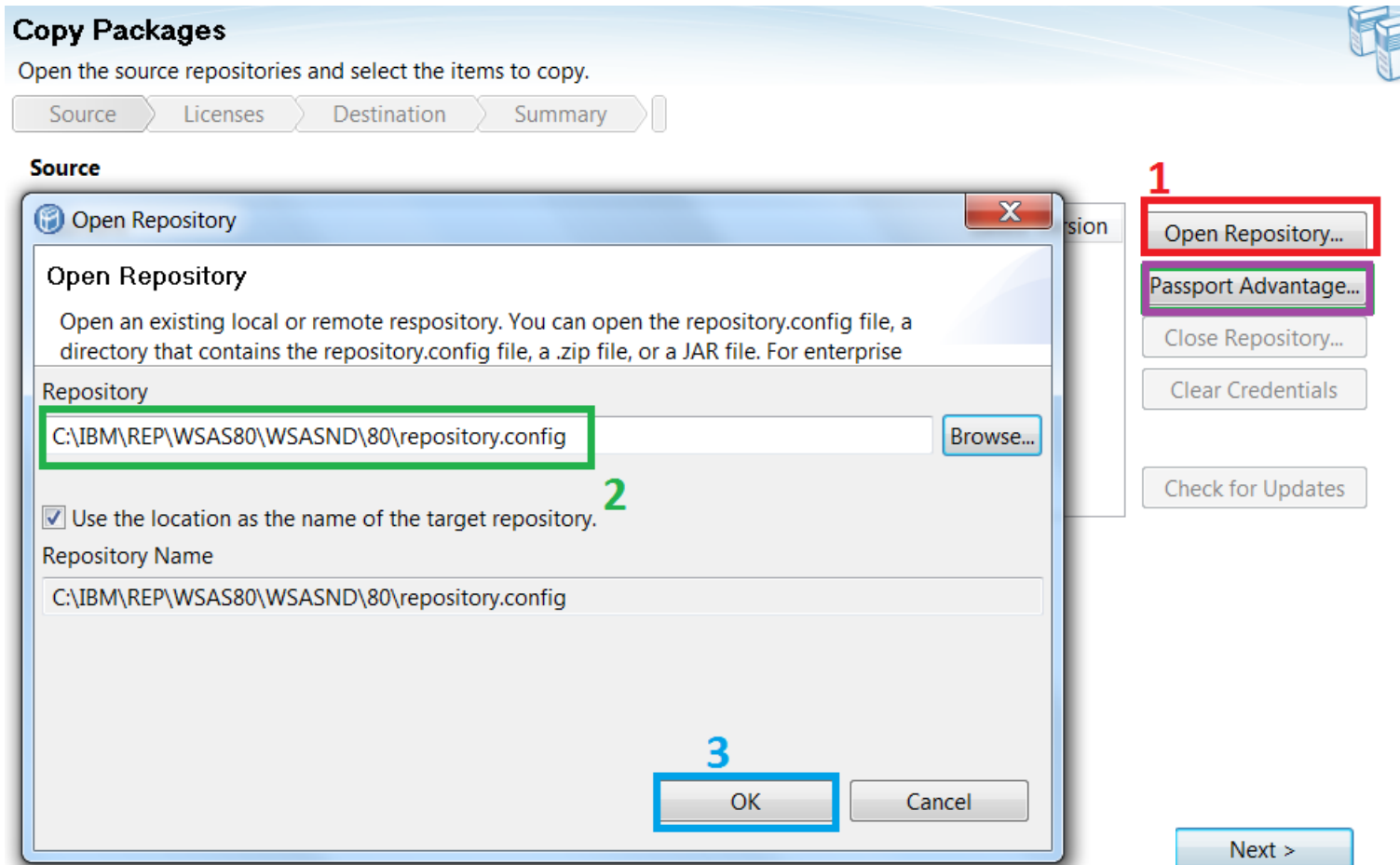
- Download and extract repositories (part numbers) and fix packs as discussed in the “Repositories Concepts” section of this presentation
- Start Packaging Utility and choose the “Copy Packages” option



- NOTE: Examples in this presentation will focus on using local repositories as input. Using web repositories is the same process. Add URLs to the package copy list instead of local repositories.

Select the source repositories

- This is similar to adding repositories to the list in IM



- After adding multiple repositories, select individual offerings from them

Source

Content	Latest Version
<input checked="" type="checkbox"/> C:\IBM\REP\WSAS80\Supplemental\8.0\repository.config	
<input checked="" type="checkbox"/> Application Client for IBM WebSphere Application Server	
<input checked="" type="checkbox"/> IBM HTTP Server for WebSphere Application Server	
<input checked="" type="checkbox"/> Pluggable Application Client for IBM WebSphere Application Server	
<input checked="" type="checkbox"/> Web Server Plug-ins for IBM WebSphere Application Server	
<input checked="" type="checkbox"/> WebSphere Customization Toolbox	
<input checked="" type="checkbox"/> C:\IBM\REP\WSAS80\WSASND\80\repository.config	
<input checked="" type="checkbox"/> IBM WebSphere Application Server Network Deployment	

Next >

- Accept License

Application Client for IBM WebSphere Application Server Software License Agreement	International Program License Agreement
IBM HTTP Server for WebSphere Application Server Software License Agreement	Part 1 - General Terms
	BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, CLICKING ON

☒ I accept the terms in the license agreements
☐ I do not accept the terms in the license agreements

Next >

- Select location to store the repository

Copy Packages

Select the location where you want to store the packages.

Source

Licenses

Destination

Summary

Select an existing repository or select a path for creating a new repository

C:\IBM\REP\WSAS8ENT

Browse...

Next >

- Summary of Package

Content To Copy

- ✓ C:\IBM\REP\WSAS80\Supplemental\8.0\repository.config
 - Application Client for IBM WebSphere Application Server 8.0.0.0
 - IBM HTTP Server for WebSphere Application Server 8.0.0.0
 - Pluggable Application Client for IBM WebSphere Application Server 8.0.0.0
 - Web Server Plug-ins for IBM WebSphere Application Server 8.0.0.0
 - WebSphere Customization Toolbox 8.0.0.0
- ✓ C:\IBM\REP\WSAS80\WSASND\80\repository.config
 - IBM WebSphere Application Server Network Deployment 8.0.0.0

Destination

Location: C:\IBM\REP\WSAS8ENT

A new repository will be created.

Required Space Available Space

4.0 GB 368.0 GB

< Back

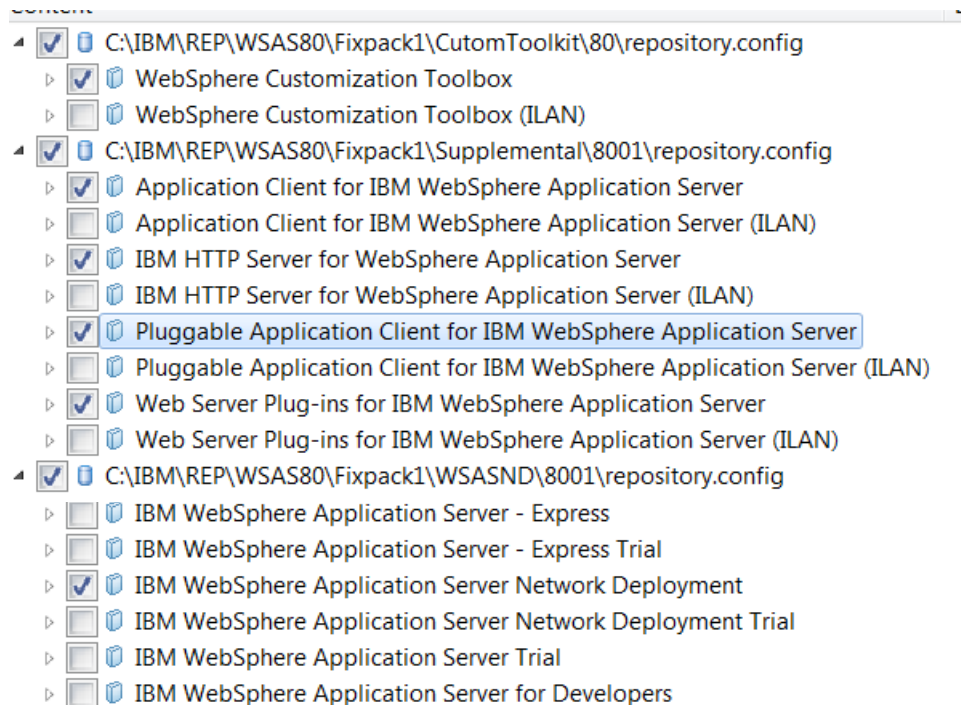
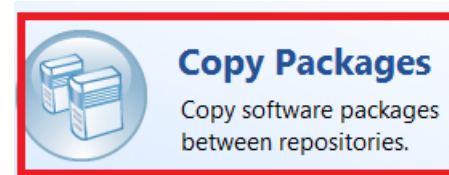
Next >

Copy

Cancel

Adding a fix pack to the repository

- Fix pack can be merged initially, or added later
- In this case, we are adding it to the repository generated in the previous step
- Be careful to only select updates for components in the original repository



- Provide location for existing repository to be updated with new fix packs
- In this example, we are adding fix packs to the repository which was “output” from the previous operation of combining multiple repositories together

Copy Packages

Select the location where you want to store the packages.

Source

Licenses

Destination

Summary

Select an existing repository or select a path for creating a new repository

C:\IBM\REP\WSAS8ENT

- The operation will show this result:



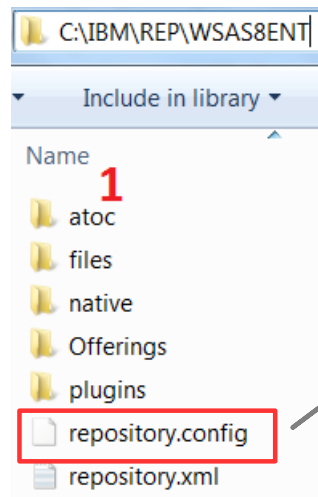
The Copy operation completed successfully.

The com.ibm.websphere.WCT.v80_8.0.1.20110829_1838 package already existed in the destination repository.

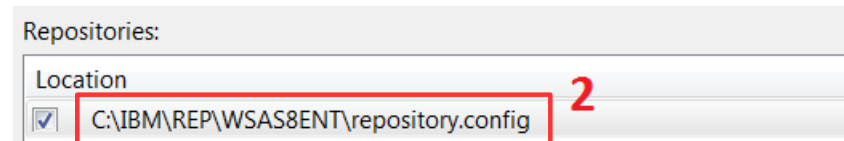
Content	Status
<ul style="list-style-type: none"> C:\IBM\REP\WSAS80\Fixpack1\CutomToolkit\80\repository.config <ul style="list-style-type: none"> WebSphere Customization Toolbox 8.0.0.1 C:\IBM\REP\WSAS80\Fixpack1\Supplemental\8001\repository.config <ul style="list-style-type: none"> Application Client for IBM WebSphere Application Server 8.0.0.1 IBM HTTP Server for WebSphere Application Server 8.0.0.1 Pluggable Application Client for IBM WebSphere Application Server 8.0.0.1 Web Server Plug-ins for IBM WebSphere Application Server 8.0.0.1 C:\IBM\REP\WSAS80\Fixpack1\WSASND\8001\repository.config <ul style="list-style-type: none"> IBM WebSphere Application Server Network Deployment 8.0.0.1 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ ✓

Using the new repository

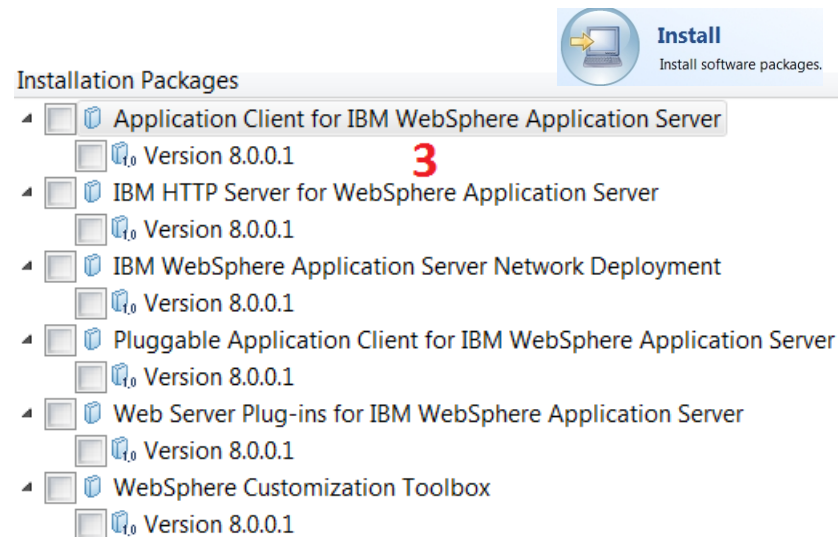
- Locate the “repository.config” file in the main directory



- Add the repository to IM's repository list



- Use Install option to see what's available



Creating Platform-scoped Repositories



Platform-scoped Repositories

- IBM Packaging Utility V1.5.0.1 offers a technology preview feature to create “platform-scoped repositories”
 - ▶ The packages for an offering on a specific operating system and architecture can be extracted from one repository and copied into a different repository
 - ▶ The resulting repository is a “platform-scoped repository”; that is, it contains an offering meant for a specific platform
 - ▶ The feature will be refined in future releases – be aware that some limitations discussed here may change in future versions of Packaging Utility
 - ▶ Please see the WebSphere Install Architect's article for complete details:
http://www.ibm.com/developerworks/websphere/library/techarticles/1201_seelemann/1201_seelemann.html
- WebSphere Application Server V8.0 platform-scoped repositories are significantly smaller than the full standard V8.0 installation repositories



Capabilities and Limitations

- Platform-scoped repositories can be installed by Installation Manager, similarly to web or local repositories
 - ▶ Installation Manager descriptions will not indicate that repository is reduced to a single-platform scope
 - ▶ Recommend storing the platform-scoped repositories in appropriately-named directories
- We recommend performing a platform-scoping step to be the last step in the process of generating a repository
 - ▶ Currently, as part of the technology preview, we do not recommend using a platform-scoped repository as input to merge with another platform-scoped repository
 - ▶ Keep a copy of the complete repositories for product installers and fix packs, and generate platform-scoped repositories from those



PUCL command with -platform parameter

- `pucl copy packageID_version -acceptLicense -repositories SOURCE_PATHS -target TARGET_PATH -platform os=OS_CHOICE,arch=ARCH_CHOICE`
- **packageID_version** – Represents the packageID and version, separated by an underscore character (`_`). The underscore and version is optional; if not specified, the latest available version will be used from the package. Refer to a repository's repository.xml file to find the offeringID and version values.
- **SOURCE_PATHS** – List the paths to the source repositories, separated by comma characters
- **TARGET_PATH** – Specify the destination path for the generated repository
- **-prompt** – Specify this parameter if the repository requires authentication, such as on ibm.com



PUCL command with -platform parameter

- `pucl copy packageID_version -acceptLicense -repositories SOURCE_PATHS -target TARGET_PATH -platform os=OS_CHOICE,arch=ARCH_CHOICE`

- **OS_CHOICE** – Specify which operating system you want to extract from the specified source repositories. Valid values are:

aix	solaris
hpux	win32
linux	os400

- **ARCH_CHOICE** – Specify which architecture (associated with the OS_CHOICE) you want to extract. This is an optional parameter; specify only the `os=OS_CHOICE` parameter if you omit this.

Valid values for `os=linux` are:

x86	ppc	s390
-----	-----	------

Valid values for `os=solaris` are:

x86	sparc
-----	-------

Note that there is only one architecture choice for all other OS options, therefore ARCH_CHOICE can be omitted for other operating systems.



-platform parameter and 32/64-bit repos

- Note that both 64-bit and 32-bit repositories (if available) are both included in the generated platform-scoped repository. In V8.0, the 32-bit and 64-bit packages cannot be separated.
- This statement is also true for the Windows platform, despite the fact that it is referred to as “win32”. The “win32” OS choice encompasses both 32-bit and 64-bit Windows packages.



Example PUCL command for “win32”

- `pucl copy com.ibm.websphere.ND.v80 -acceptLicense
-repositories C:\IBM\REP\WSAS80\WSASND\80
-target C:\IBM\REP\WAS80\WSASND_windows\80
-platform os=win32`
- This generates a V8.0 Network Deployment repository using the highest version available in the `C:\IBM\REP\WSAS80\WSASND\80` location. In this example, that repository only contains V8.0.0.0.
- The repository contains 32-bit and 64-bit packages for Windows (identified here as “win32”), but not other operating systems
- The generated repository is written to `C:\IBM\REP\WAS80\WSASND_windows\80`



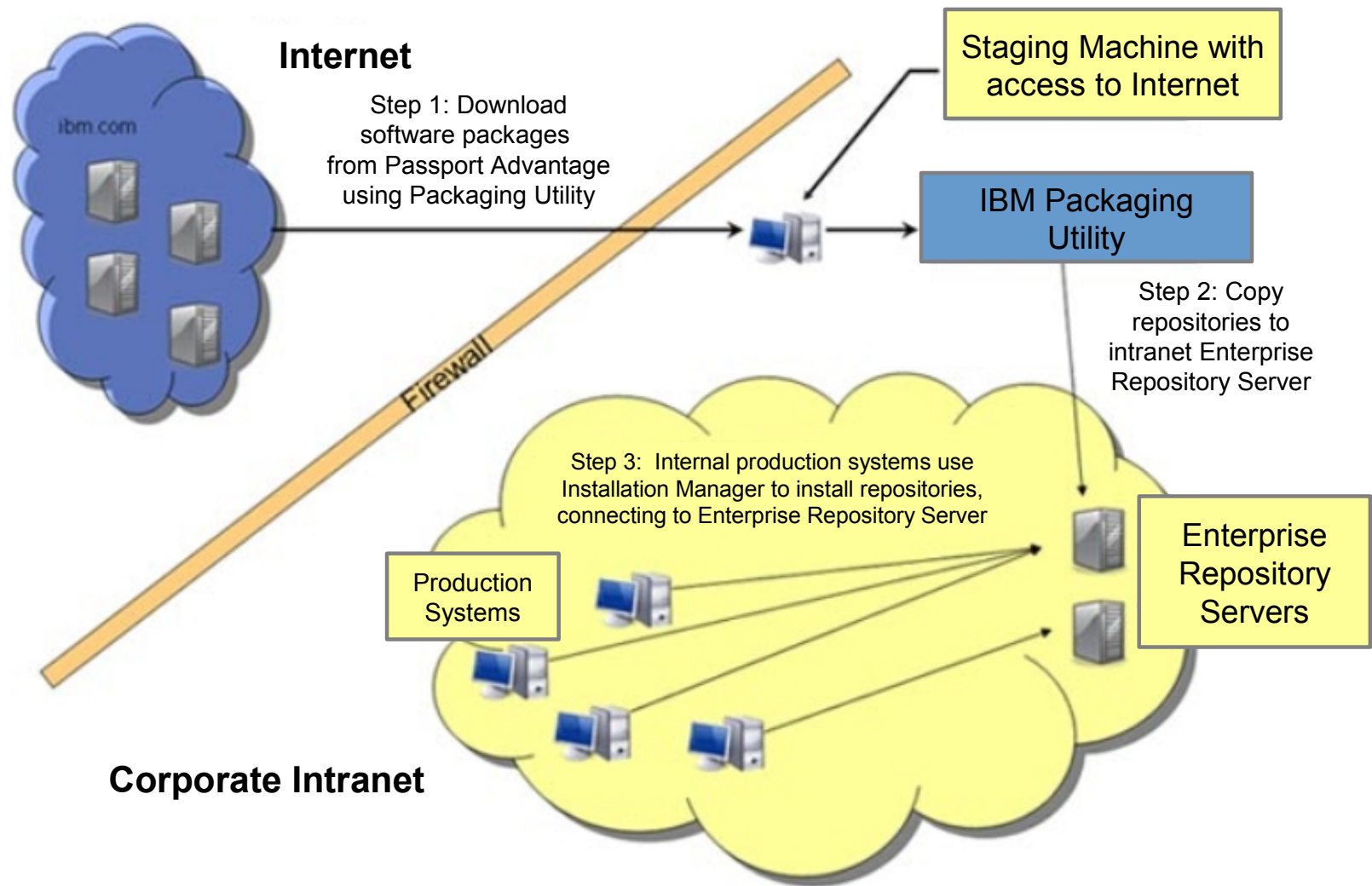
Example PUCL command for “win32”

- `pucl copy com.ibm.websphere.ND.v80 -acceptLicense
-repositories C:\IBM\REP\WSAS80\WSASND\80,
C:\IBM\REP\WSAS80\WSASND\FixPack1
-target C:\IBM\REP\WAS80\WSASND_windows\80
-platform os=win32`
- This follows the previous example. This time, two source repositories are specified: The V8.0.0.0 Network Deployment repository, and the V8.0 Fix Pack 1 repository.
- Again, this generates a V8.0 Network Deployment repository using the highest version available in both repositories. In this example, the result is V8.0.0.1.
- The repository contains 32-bit and 64-bit packages for Windows (identified here as “win32”), but not other operating systems
- The generated repository is merged with the repository at the target location, which had already been generated at V8.0.0.0 per the previous example.

Enterprise Repository Servers



Repositories in Enterprise



Options for serving repositories

- Web Server
 - ▶ Can host repositories via HTTP or HTTPS
- FTP Server
 - ▶ Similar concept to hosting repositories via HTTP
- Networked Filesystem (NFS) / Windows Mapped Network Drive
 - ▶ Similar to using local repositories, except path specified in IM's repository list refers to a remote filesystem
- Manually copy files to local filesystems on targeted systems



Serving repositories via Web server

- Web Server can be used to host repositories via your company intranet
 - ▶ IM can pull repositories from these locations without having to connect to external servers like ibm.com
 - ▶ Repositories are under your control, can populate them with (or exclude) any offerings or fix packs you choose
 - ▶ Do not have to pre-copy repositories to a production system or mount networked filesystems
- Repository data is static content which can be served by simply copying it under the “document root” of a Web server
 - ▶ Web server can be configured to require authentication, and IM will ask for credentials when connecting to that server



Serving repositories via Web server

- Update repositories for Installation Manager itself are available
 - ▶ Can be hosted from an Enterprise Repository Server, allowing individual Installation Managers to use the “automatic update” function without connecting to ibm.com.
- IBM Packaging Utility capabilities are not required for making most repositories available on an Web server, but its ability to combine multiple repositories and pull repositories from ibm.com works well with this concept
 - ▶ Can merge all packages in different repositories into a single repository using Packaging Utility. Packages can be accessed from a single location on the host.
 - ▶ Reminder: Cannot serve “split” repositories (“disk1”, “disk2” ...). These kinds of repositories do need to be copied into a new repository by using the “copy repository” option in Packaging Utility first.



Simple configuration for repository server

- Example: Set the Document Root on IBM HTTP Server to host a repository generated by IBM Packaging Utility
 - ▶ Make changes to httpd.conf as below :
 - DocumentRoot "C:\IBM\REP\WSAS8ENT"
 - <Directory "C:\IBM\REP\WSAS8ENT">
 - DirectoryIndex repository.config
 - ▶ Using "DirectoryIndex repository.config" is optional; it allows you to add URLs without "repository.config" at the end of the URL
 - ▶ Add the URL <http://<HOSTNAME>> to repository list in Installation Manager
- Alternative: Set the document root the same way, but add multiple individual repositories to different paths under the document root
 - ▶ Add URLs using the convention <http://<HOSTNAME>/path> to repository list in Installation Manager



Why use a server instead of NFS?

- Installation Manager supports a “resume” function in case a network disconnection disrupts a download from web servers
- Retrieving a repository from a networked filesystem (NFS) requires the local system to mount the NFS
 - ▶ Web and FTP server connections do not require filesystem mounting
 - ▶ Useful when using the WSAS V8 Job Manager's Centralized Installation feature
 - Job Manager Centralized Installation is capable of installing Installation Manager on remote systems
 - Also capable of instructing remote Installation Manager to install products and updates. This works best if the remote IM can connect to a web or FTP server to pull repositories specified for installation.
- Useful for authentication and audit trail

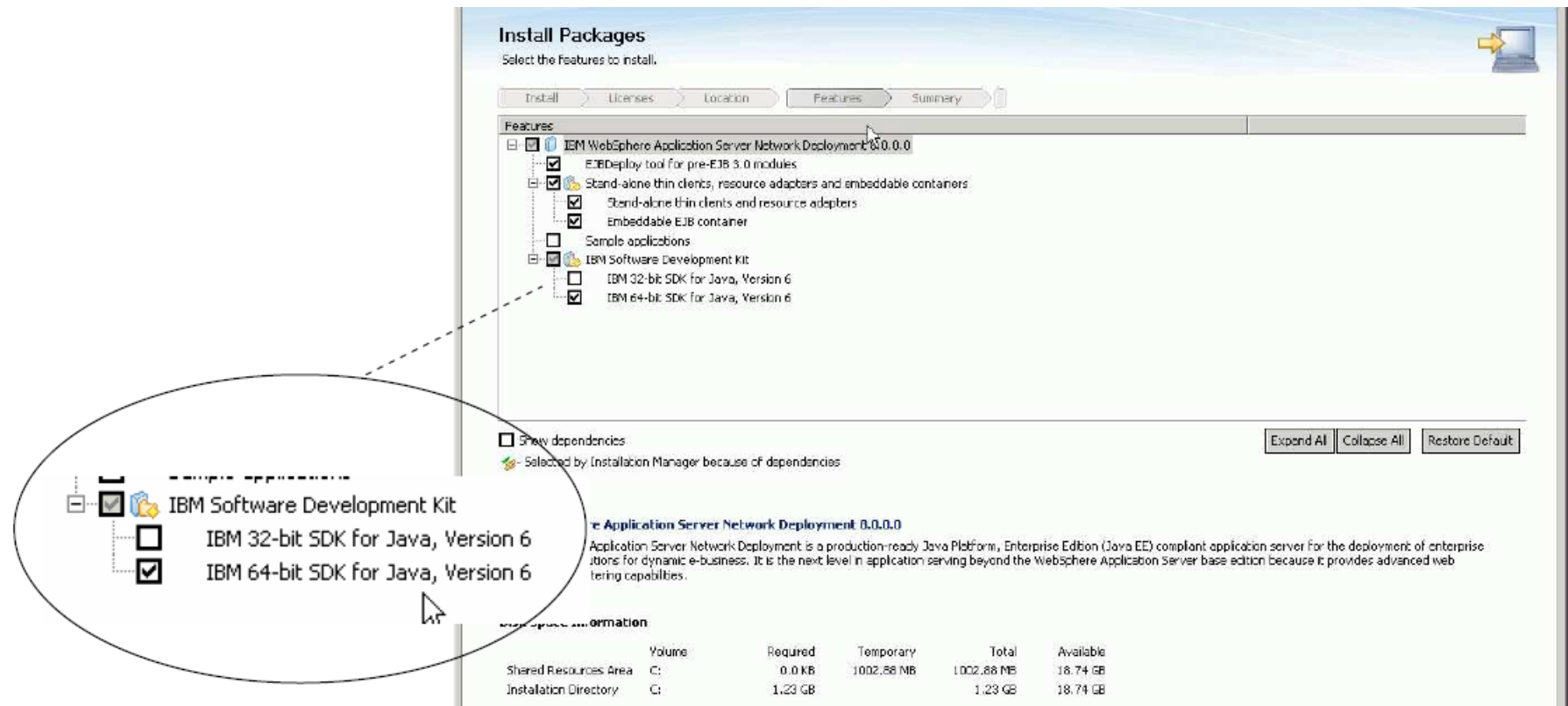


Tips for Installing Repositories



32-bit and 64-bit installations

- V8.0 repositories **always** contain both 32-bit and 64-bit offerings for a product
- IM will only display the option to choose 32-bit or 64-bit install on operating systems capable of supporting either option



32-bit and 64-bit installations

- On a 32-bit system, the option to choose 32-bit versus 64-bit Java SDK is completely omitted



32-bit and 64-bit installations

- Silent mode requires an explicit choice of either the 32-bit or 64-bit Java SDK
- Sample response files are documented in each product's respective section in the Information Center
- WebSphere Application Server V8.0 (Express, Base, ND editions)
32-bit: `Features='core.feature,ejbdeploy,thinclient,com.ibm.sdk.6_32bit'`
64-bit: `Features='core.feature,ejbdeploy,thinclient,com.ibm.sdk.6_64bit'`
- WebSphere Plugin V8.0
32-bit: `features='core.feature,com.ibm.jre.6_32bit'`
64-bit: `features='core.feature,com.ibm.jre.6_64bit'`
- IBM HTTP Server V8.0
32-bit: `features='core.arch.32bit'`
32-bit is available on: AIX, Linux, Solaris on SPARC, Windows
64-bit: `features='core.arch.64bit'`
64-bit is available on: AIX, HP-UX, Linux, Solaris on SPARC, Solaris on x86-64, zOS



The IMCL command-line tool

- Located under “tools” subdirectory of Installation Manager
- Can use command-line options, response file, or interactive mode
- Interactive mode is not **yet** supported by V8.0
- Silent Install (using response file)

```
C:\IBM\Installation Manager\eclipse\tools>imcl -input was8installresponsefile.tx
t -acceptLicense -showProgress
25% 50% 75% 100%
-----|-----|-----|-----|
.....
Installed com.ibm.websphere.ND.v80_8.0.1.20110829_1838 to the C:\IBM\WebSphere\ap
pp80imcl directory.
```

- Command Line option

```
C:\IBM\Installation Manager\eclipse\tools>imcl install com.ibm.websphere.ND.v80,
core.feature,com.ibm.sdk.6_32bit -repositories C:\IBM\REP\WSAS8ENT\repository.co
nfig -installationDirectory C:\IBM\WASimcl8023 -acceptLicense -showProgress -log
C:\logs\WSAS.xml
25% 50% 75% 100%
-----|-----|-----|-----|
.....
Installed com.ibm.websphere.ND.v80_8.0.1.20110829_1838 to the C:\IBM\WASimcl8023
directory.
```

Summary

- Use IBM Installation Manager to install and update WebSphere Application Server V8.0 products
- Use IBM Packaging Utility to retrieve and combine offerings into new Enterprise Repositories
- Use the “-platform” parameter with PUCL command to generate smaller repositories
- Use a Web server (or other remote access method) to allow Installation Manager to retrieve repositories within a corporate intranet



Additional WebSphere Product Resources

- Learn about upcoming WebSphere Support Technical Exchange webcasts, and access previously recorded presentations at:
http://www.ibm.com/software/websphere/support/supp_tech.html
- Discover the latest trends in WebSphere Technology and implementation, participate in technically-focused briefings, webcasts and podcasts at:
<http://www.ibm.com/developerworks/websphere/community/>
- Join the Global WebSphere Community:
<http://www.websphereusergroup.org>
- Access key product show-me demos and tutorials by visiting IBM Education Assistant:
<http://www.ibm.com/software/info/education/assistant>
- View a webcast replay with step-by-step instructions for using the Service Request (SR) tool for submitting problems electronically:
<http://www.ibm.com/software/websphere/support/d2w.html>
- Sign up to receive weekly technical My Notifications emails:
<http://www.ibm.com/software/support/einfo.html>



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Questions and Answers

