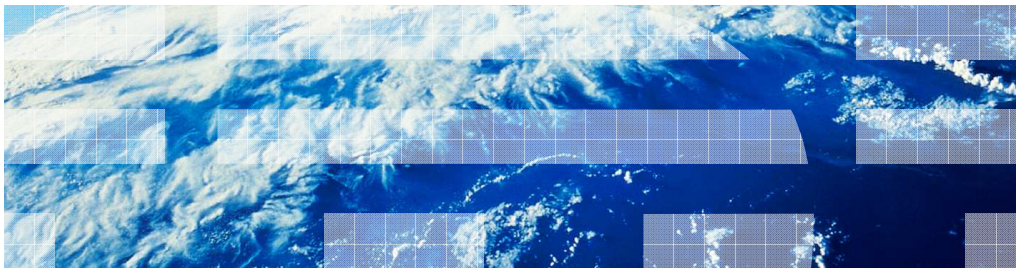
WebSphere Partner Gateway V6.2.0

Migrating previous releases to V6.2.0

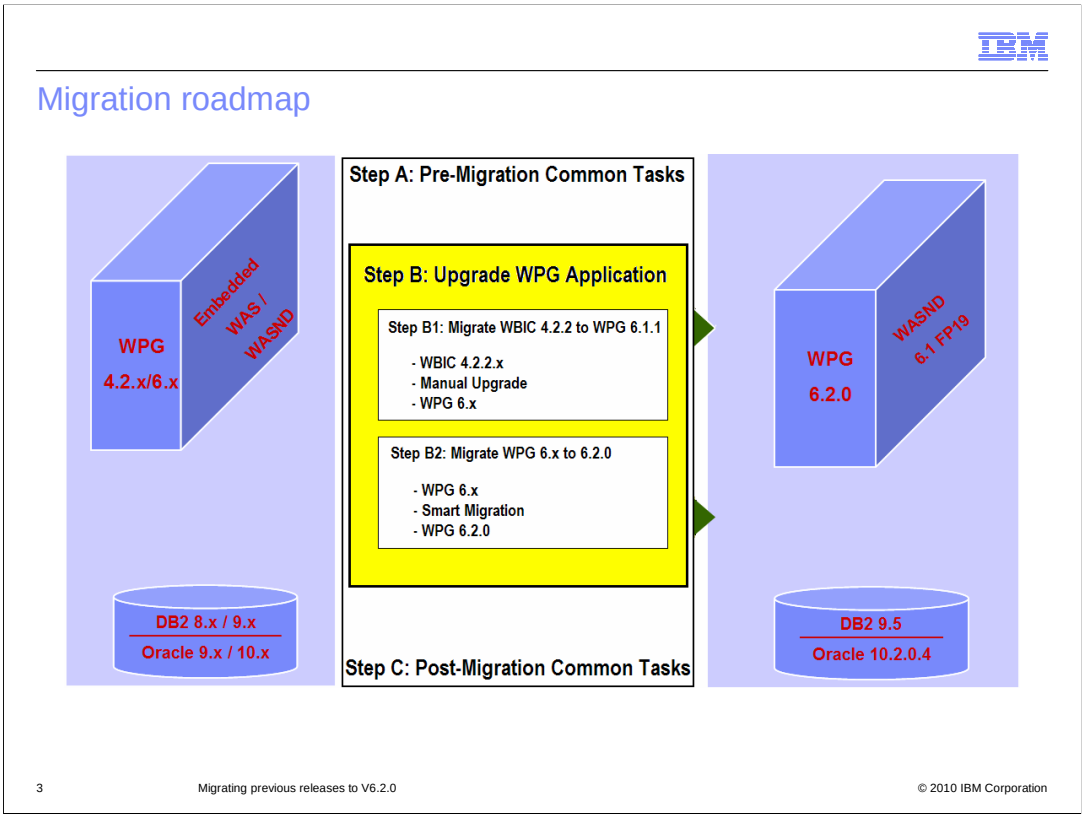


WebSphere. software

This presentation is a quick reference to the WebSphere Business Integration Connect or WebSphere Partner Gateway user who plans to migrate from the previous V4.2.2, V6.0.0, V6.1.0 or V6.1.1 releases to the current WebSphere Partner Gateway version V6.2.0.

Table of contents

In this presentation, Step A contains the pre-migration tasks that need to be performed. Step B covers the actual migration steps to be performed and Step C contains the post-migration tasks. The presentation ends with an appendix section, reporting the actual screen captures of some key points in the migration process.



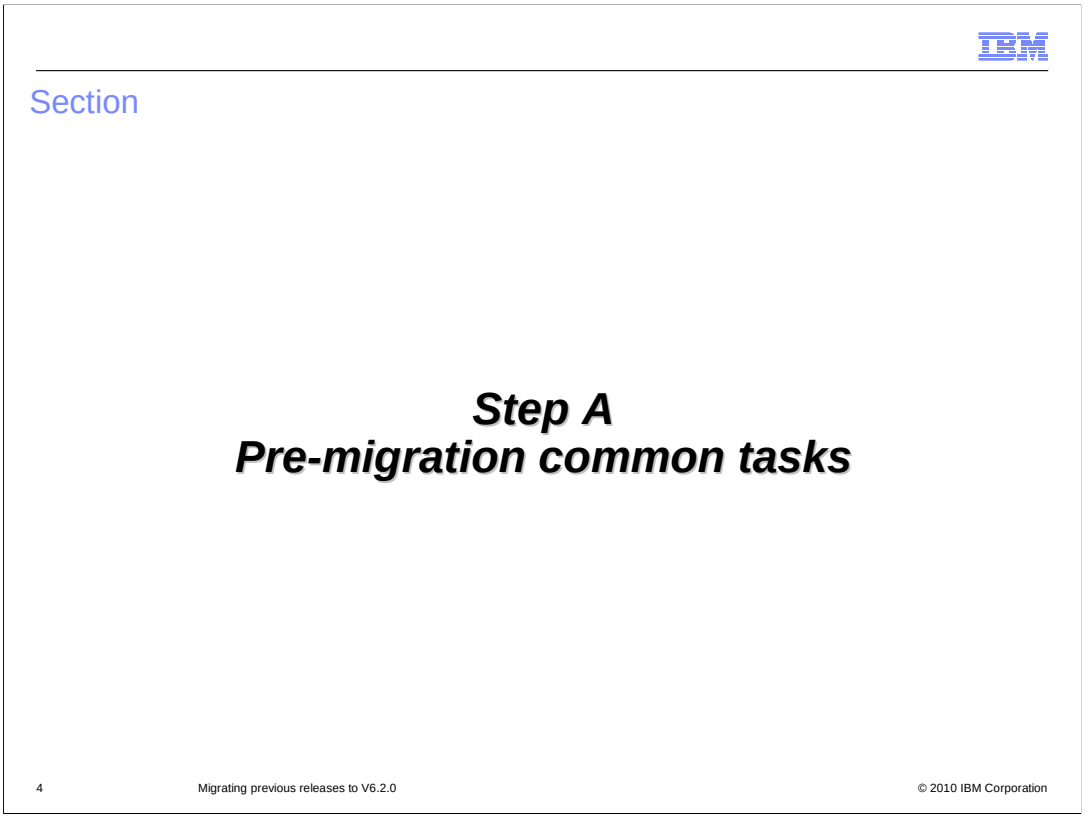
Here is the "migration roadmap" slide. It contains an overview of the steps necessary to perform the migration from the various releases and will help you navigate the subsequent charts in this presentation, which will drill-down on each step.

Step A begins with the pre-migration common tasks that are necessary, regardless of the starting release you want to migrate from.

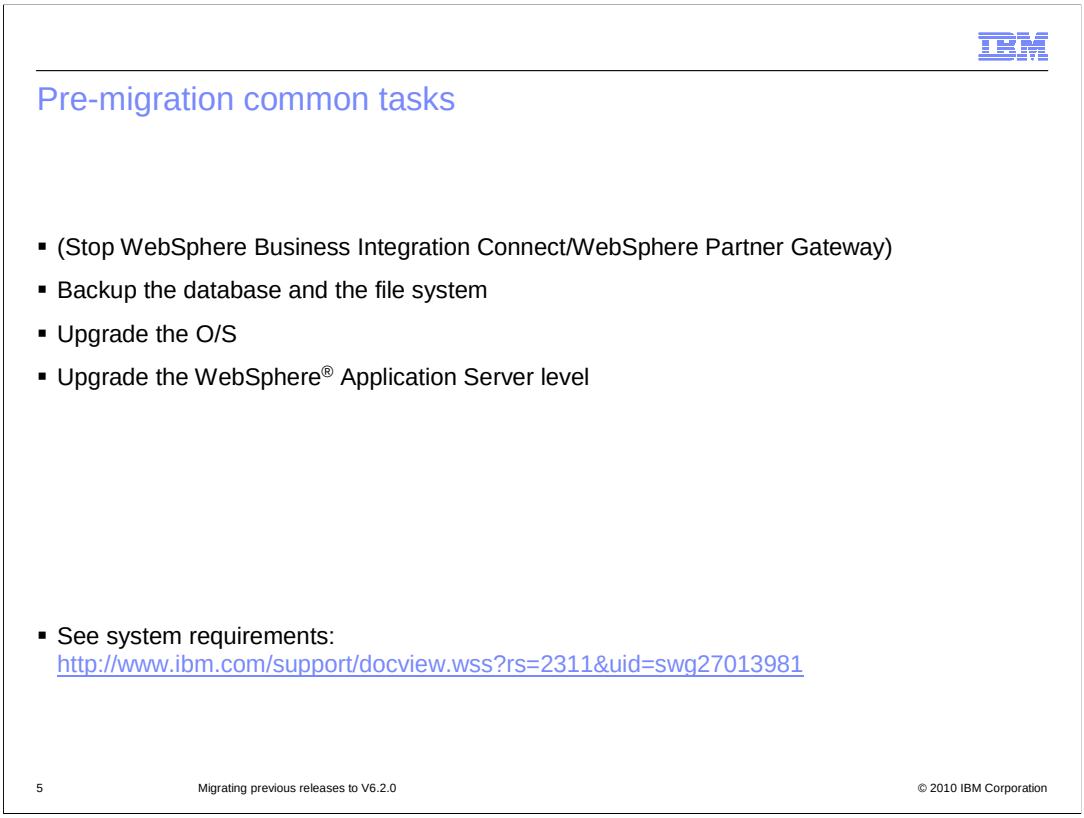
In “Step B" you will see how the migration to V6.2.0 requires different approaches depending on the release you start from. That is, if you want to migrate from any of the V6 releases, the process can take advantage of the automation provided by the "smart migration" feature, whereas manual tasks are necessary when WebSphere Business Integration Connect V4.2.2 is the starting release.

> In "step B1" you will see the specifics of the WebSphere Business Integration Connect migration, which is going to involve some manual tasks to reach an intermediate V6.1 stage, from where you can take advantage of the smart migration feature to complete the migration to V6.2.0.
>
> The "Step B2" section deals with migrating WebSphere Partner Gateway V6 to V6.2.0, using the already mentioned "smart migration" feature.

Once the actual migration is completed, Step C outlines post-migration tasks that are needed, some of them common, other steps specifics to the release that you migrate from.



Step A details the pre-migration common tasks.



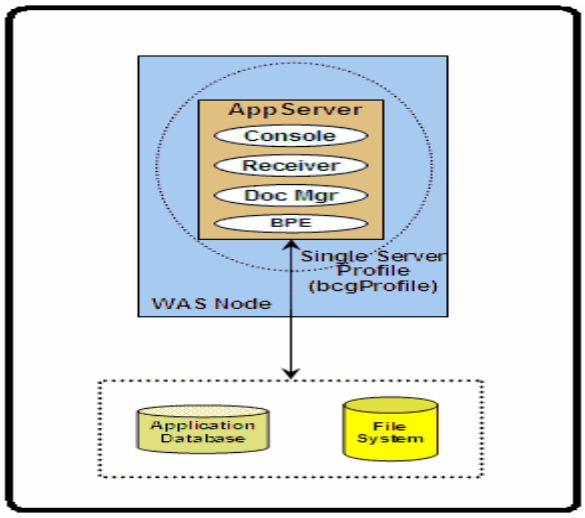
When you are ready to migrate, stop the WebSphere Business Integration Connect or WebSphere Partner Gateway system.

Then make a backup of all key elements, such as the Database and the file system.

Then upgrade the operating system and WebSphere Application Server.

At the bottom, there is a "system requirements" link for a complete reference on the hardware and software needed with WebSphere Partner Gateway V6.2.0.

Migration topologies: Simple mode



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The next three charts go in more details on the various modes, because this is a decision that you must make before starting the actual migration.

In this slide, you have the simple mode, where all WebSphere Partner Gateway components (Receiver, Document Manager and Console) are installed in a single WebSphere Application Server base server.

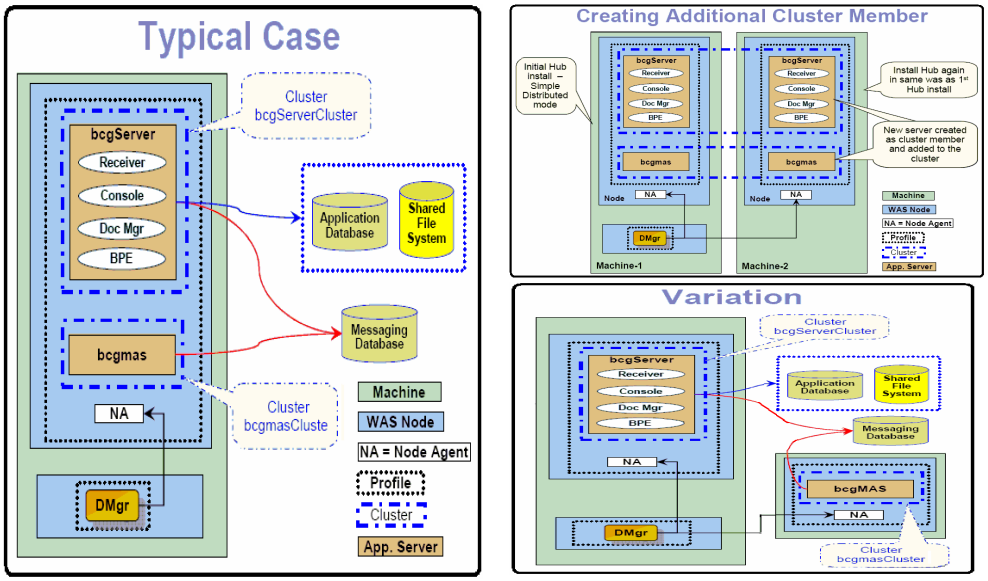
In this case, there is no Network Deployment cell topology and consequently no clustering, work load management, or high availability.

As a comparison to the previous WebSphere Business Integration Connect and WebSphere Partner Gateway versions installed in a single server, WebSphere Partner Gateway V6.2.0 Simple mode only has one server, which means only one JVM, compared to three JVMs in V6.0 and V4.2.2.

In simple mode, no messaging application server is needed because the messaging between components is handled by the single application server that runs the WebSphere Partner Gateway applications.

The database and common file system can be either in the same or different machines.

Migration topologies: Simple distributed mode



With Simple Distributed mode, the WebSphere Partner Gateway hub application components can be installed in different machines (within a WebSphere Application Server Network Deployment cell).

In the distributed setup, WebSphere Application Server Network Deployment is required because the Network Deployment cell provides scalability and high availability features.

The Network Deployment cell includes the deployment manager, which manages all the nodes in the cell.

The WebSphere Partner Gateway applications are installed in an application server, which becomes a member of a cluster within the Network Deployment cell.

At any time the need arises, additional members can be added in the cluster.

To create a new cluster member on a separate machine, you have to install the same WebSphere Partner Gateway application server on that machine and the new member will be added to the existing cluster.

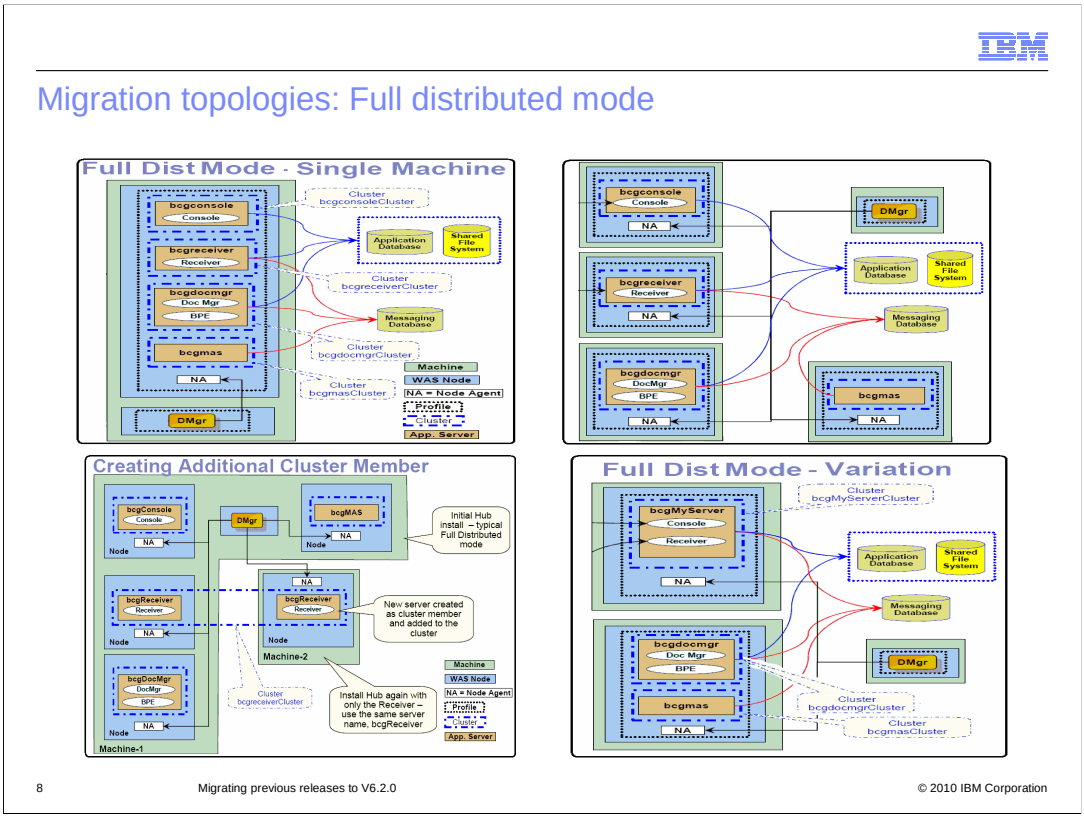
A messaging application server is needed to handle the messaging between the WebSphere Partner Gateway components. This was handled by WebSphere MQ in releases before V6.1.

Similar to the WebSphere Partner Gateway application servers, a cluster is also created for the messaging application server and additional members can be added if and when needed.

Depending on the configuration chosen, simple distributed mode can provide the high performance and scalability features typical of the distributed mode installations.

In this slide there is a sample of three configurations to give you an idea of the possible combinations. You can have the three WebSphere Partner Gateway applications installed in the same application server and then have the bcgmas application server in the same node.

Workload management and high availability can be provided installing the same configuration on a different machine.



When Full Distributed Mode is used, the WebSphere Partner Gateway applications are each defined in their own WebSphere Application Server and they can be on the same node or different nodes.

Since this is the most flexible mode, the WebSphere Partner Gateway applications can also be selectively included in the same application server, as shown in the "Variation" picture.

Each application server is in its own cluster and, again as mentioned earlier, new cluster members can be added if needed, to provide scalability and high availability.

A couple more considerations, as a final note for the "distributed environment":

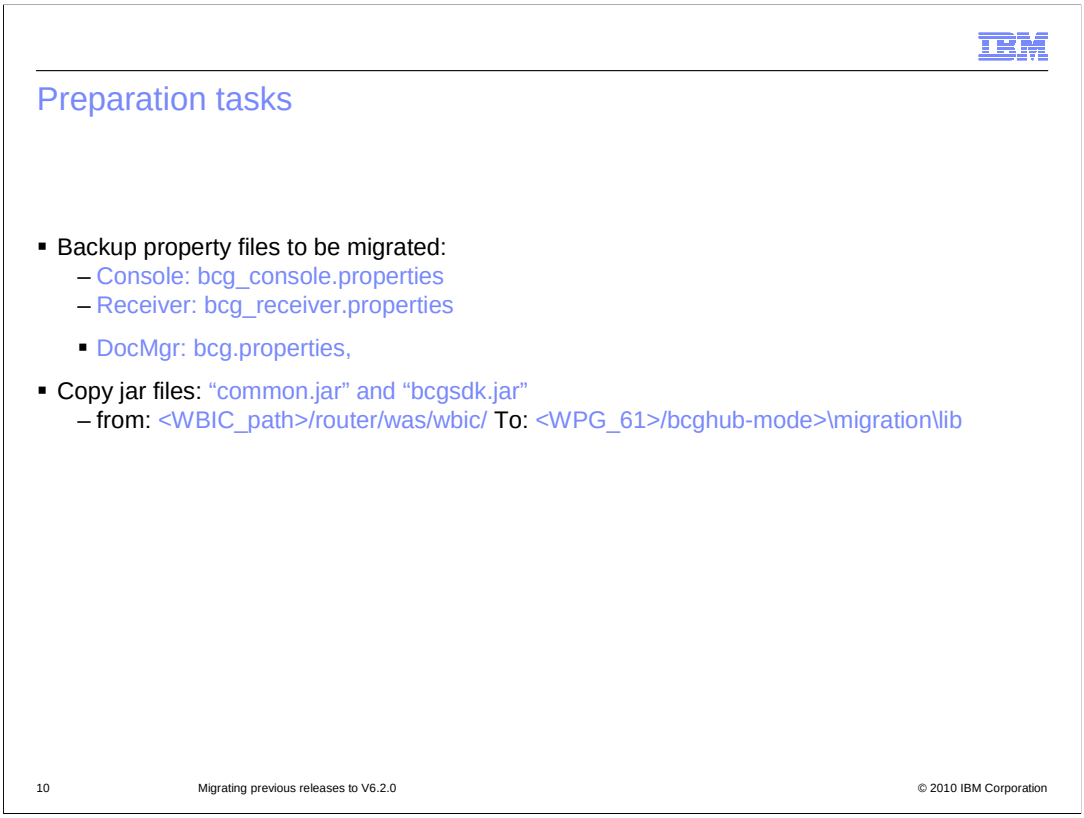
a) Each of the application servers is a member of the WebSphere Partner Gateway systems integration bus, which is called bcgBus

b) When an MAS cluster contains more than one MAS server, only one message engine will be active at one time and all WebSphere Partner Gateway components will communicate with the active MAS messaging engine. If the active MAS messaging engine goes down, then the other MAS messaging engine takes over.

Section

Step B1
Migrating WebSphere Business Integration Connect V4.2.2 to WebSphere Partner Gateway V6.1.1

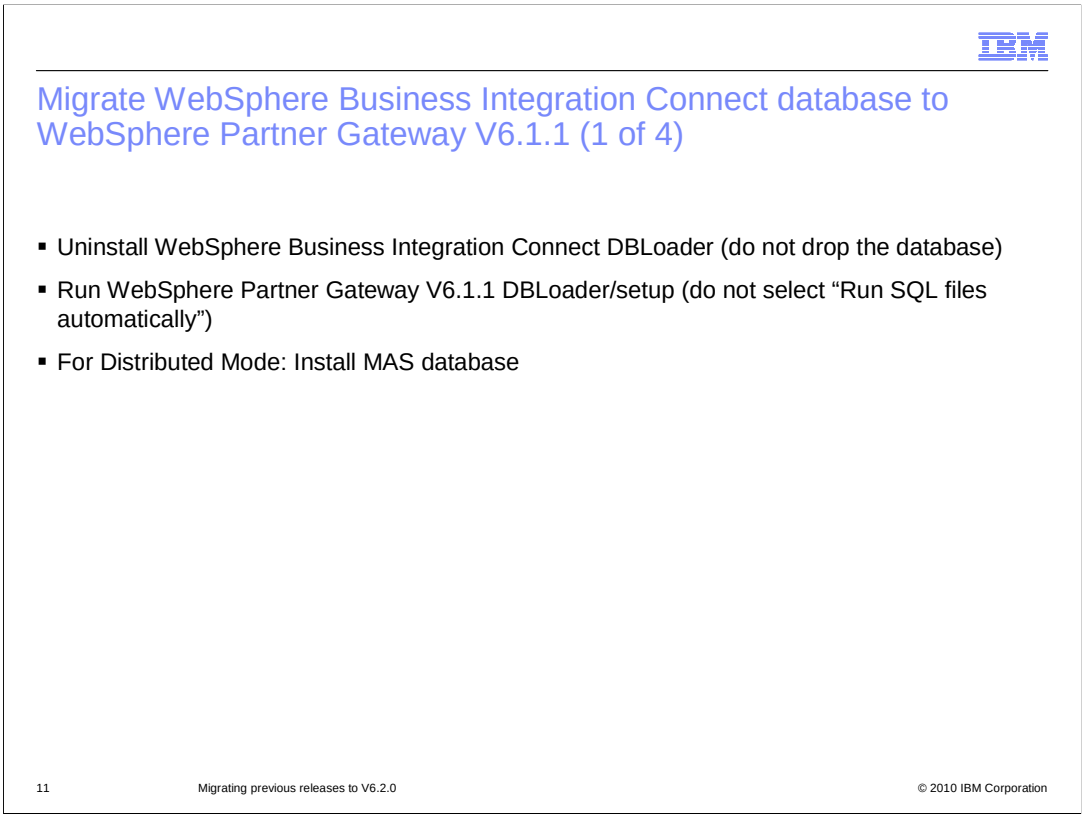
This section covers the manual steps necessary to migrate WebSphere Business Integration Connect V4.2.2 to the intermediate step of V6.1.1.



This slide details the actions needed before you start the actual migration.

You need to copy the property files of the WebSphere Business Integration Connect components. These files will then be used to migrate attribute values into their new V6.1.1 location, that is in the database, and make them accessible through the console.

Same thing for a couple of jars, the "common" and "bcgsdk". They also need to be saved in the file system, but this time in a specific location that you have to create, which is folder: "migration\lib" under the V6.1.1 bcghub folder



This is the first of four slides dedicated to the WebSphere Business Integration Connect database migration to WebSphere Partner Gateway V6.1.1.

You start with uninstalling the WebSphere Business Integration Connect DBLoader, but make sure not to drop the database because you need to migrate that onto the WebSphere Partner Gateway V6.1.1 database.

After uninstalling the WebSphere Business Integration Connect dbloader, you can install the V6.1.1 version, but do not select the box to "run the SQL files automatically".

And, about databases, if your choice is to install using one of the distributed modes, then go ahead and install the MAS database as well.

Migrate WebSphere Business Integration Connect database to WebSphere Partner Gateway V6.1.1 (2 of 4)

- Oracle (run migration scripts from /bcgdbloader/scripts/oracle):
  - 1. Reset database permissions for user ID WebSphere Partner Gateway uses to connect to the database, using script:

    sqlplus -L "sys/password as sysdba" @bcgChangeSchema.sql > /tmp/bcgdbloader/logs/bcgChangeSchema.log
  - 2. Execute the database migration scripts:

    sqlplus -L "bcgapps/password" <BCGUpgradeScript>/tmp/bcgdbloader/logs/<BCGUpgradeScript>.log
- DB2® (run migration scripts from /bcgdbloader/scripts/db2):
  - 1. Connect to DB: db2 connect to bcgapps user <usr> using <pwd>
  - 2. Execute the database migration scripts:

    db2 -td! –f <bcgappsdb\scripts\DB2\BCGUpgradeScript> -z /tmp/bcgdbloader/logs/<BCGUpgradeScript>

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Depending on the database type you are using, before running the actual migration script, you need to perform some preliminary steps.

For Oracle, you need to reset the database permissions for the user ID that WebSphere Partner Gateway uses to connect to the database.

For DB2, just connect to the saved WebSphere Business Integration Connect database.

Next, run the migration scripts, depending on the maintenance level of your current WebSphere Business Integration Connect product.

Migrate WebSphere Business Integration Connect database to WebSphere Partner Gateway V6.1.1 (3 of 4)

- Database migration scripts are not cumulative. Depending on your WebSphere Business Integration Connect level, run scripts in sequence up to V6.1.1
- From WebSphere Business Integration Connect V4.2.1 to V4.2.2.0: run bcgUpgrade_421FP1_422.sql
- From WebSphere Business Integration Connect V4.2.2.0 to V4.2.2.1: run BcgUpgrade_422_422FP1
- From WebSphere Business Integration Connect V4.2.2.1 to V4.2.2.2: run BcgUpgrade_422FP1_422FP2
- From WebSphere Business Integration Connect V4.2.2.2 to V4.2.2.3: run BcgUpgrade_422FP2_422FP3
- From WebSphere Business Integration Connect V4.2.2.3 to V4.2.2.4: run BcgUpgrade_422FP3_422FP4
- From WebSphere Business Integration Connect V4.2.2.4 and higher: run BCGUpgrade_422FP4_600
- From WebSphere Partner Gateway V6.0.0.0 to V6.0.0.1: run BcgUpgrade_600_600FP1
- From WebSphere Partner Gateway V6.0.0.1 to V6.0.0.2: run BcgUpgrade_600FP1_600FP2
- From WebSphere Partner Gateway V6.0.0.2 to V6.0.0.3: run BcgUpgrade_600FP2_600FP3
- From WebSphere Partner Gateway V6.0.0.3 to V6.0.0.4: run BcgUpgrade_600FP3_600FP4
- From WebSphere Partner Gateway V6.0.0.4 to V6.0.0.5: run BcgUpgrade_600FP4_600FP5
- From WebSphere Partner Gateway V6.0.0.5 and higher to V6.1.0: run BcgUpgrade_600FP5_610
- From WebSphere Partner Gateway V6.1.0 to V6.1.0.1: run BCGUpgrade_610_610FP1
- From WebSphere Partner Gateway V6.1.0.1 to V6.1.0.2: run BCGUpgrade_610FP1_610FP2
- From WebSphere Partner Gateway V6.1.0.2 and higher to V6.1.1: run BCGUpgrade_610FP2_611

If you have WebSphere Business Integration Connect at a level lower than FP4, you need to install the maintenance up to FP4 and then run the migration script (the first one in blue), that will migrate the database to the V6.0.0 version.

Next, it will be like installing the V6 maintenance until you get to FP5 level. Once there, the second script in blue will complete the migration to the V6.1.0 version.

And then again, apply the V6.1.0 maintenance up to FP2 in order to run the migration script to V6.1.1, which is the last entry in blue.

Migrate WebSphere Business Integration Connect database to WebSphere Partner Gateway V6.1.1 (4 of 4)

- Login to Oracle SQLPlus as the schema owner and run:
  run Grants_Syns.sql

  sqlplus -L "sys/password as sysdba" @bcgChangeSchema.sql >
  /tmp/bcgdbloader/logs/bcgChangeSchema.log
- Connect to DB2 as the schema owner and run:
  db2 - v -td! –f bcgappsdb\scripts\DB2\Set_Grants.sql

In this slide there is a reminder that after completing the migration scripts you need to run the set_grants.sql script to grant permissions to the users.

Correct CF_GuidelineMap table corruption (DB2 only)

- Run BCGDBLoader611_pre.sql BEFORE running the BCGUpgrade_610FP2_611.sql script (table backup)
- Run BCGUpgrade_610FP2_611.sql to migrate WebSphere Partner Gateway database to V6.1.1
- Run BCGDBLoader611_Post.sql AFTER running the BCGUpgrade_610FP2_611.sql script (table restore)
- Scripts available at:

http://www-01.ibm.com/support/docview.wss?rs=2310&context=SSDKJ8&context=SSDKKW&q1=migration&uid=swg21303494&loc=en_US&cs=utf-8&lang=en

Here you have a step that applies when you are migrating to V6.1.1.

The V6.1.1 migration corrupts one of the application database tables, specifically the "CF_GuidelinesMap" table. So you must:

1 - Backup that table before running the V6.1.1 migrate script

2 - Run the V6.1.1 migrate script

3 - Then replace the corrupted table with the one you saved in step 1.

The pre- and post- SQL scripts are made available through a Technote in the Web site at the address on the bottom of this slide.

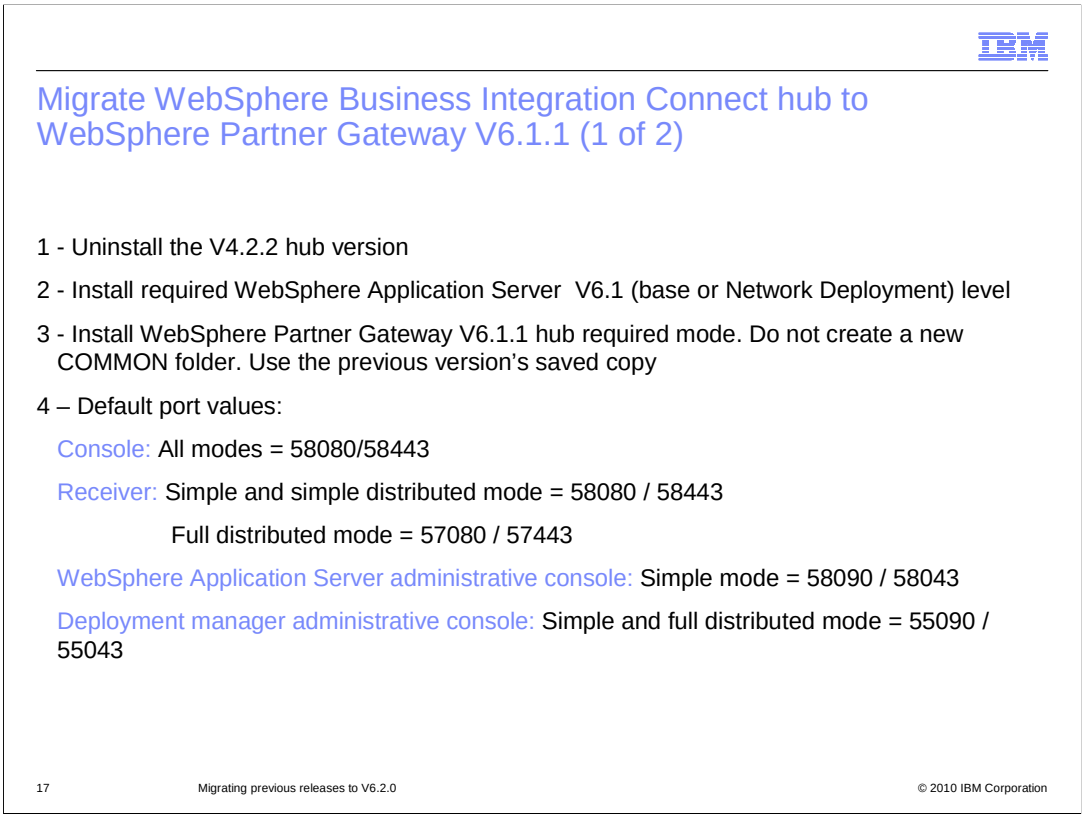
LG_MSG_ARCHIVE database table partition (optional)

- Not available on DB2 version 8
- Organizes data in non-rep table (LG_MSG_ARCHIVE) by partitions using message date (yyyymmdd format)
- Follow the steps, and use sample sql statements, in bcgappsdb\scripts\<DB2>\Instructions.txt

This is an optional step - partitioning the LG_MSG_ARCHIVE table.

The detailed steps to perform this optional task are written in the "instructions.txt" file located in the dbloader folder.

And this completes the database migration, so you can proceed next with the installation of the hub components.



Before installing the new hub, you should uninstall the WebSphere Business Integration Connect hub first, then install the WebSphere Application Server V6.1 platform, which depending on the chosen mode, can be "Base" or "Network Deployment".

Next, install the WebSphere Partner Gateway V6.1.1 mode that you determined is best for your environment.

During the installation, remember not to create a new common folder but use the one saved from the previous version.

It is very important to notice the port change, which is different depending on the mode used. This is especially important for the Receiver in Simple or Simple Distributed mode because the default port is changed from 57080 to 58080. So you need to notify the partners about the change or correct the load balancer configuration, if such configuration is used between WebSphere Partner Gateway and the trading partners world.

Migrate WebSphere Business Integration Connect hub to WebSphere Partner Gateway V6.1.1 (2 of 2)

1 – Simple mode:
- 1a - Select “install simple mode” from launch pad.
- 1b - Choose the migrated database and the saved “common” file system.

2 – Simple distributed mode:
- 2a - MAS database and WebSphere Application Server Network Deployment are installed (from the previous steps)
- 2b - Select “Install deployment manager” from installation launchpad (1)
- 2c - Select “Install simple distributed mode” from launchpad (2)
- 2d - Choose the migrated database and the saved “common” file system.

3 – Full distributed mode:
- 3a - MAS database and WebSphere Application Server Network Deployment are installed (from the previous steps)
- 3b - Select “Install deployment manager” from installation launchpad (1)
- 3c - Select “Install full distributed mode” from launchpad (3)
- 3d - Choose the migrated database and the saved “common” file system.

(1) After completing this step, verify the WebSphere Application Server deployment manager successful installation login to the WebSphere Application Server administrative console http://localhost:55090/ibm/console

(2) Choose common shared files, community console, receiver, document manager and messaging application server.

(3) Choose the components you want to install in this specific machine

Here you have the layout of how to proceed with the hub installation, which varies, depending on the mode.

The main difference is that you need to install the deployment manager and the MAS for the distributed modes.

As mentioned earlier, remember to select the common folder from the previous installation and the migrated database.

Migrate property files content and documents metadata

- Move property files content into database: (bcgPropMigrate)
  - /bcghub/bin/bcgPropMigrate/BcgPropMigrate <schema_owner> <password>
    c:\SavedPropertiesFilesFolder
- Move existing documents metadata: (bcgBDOMigrate)
  - 1 - Create directory "migration/lib" under the "bcghub" folder
  - 2 - Copy saved "common" and “bcgsdk” jar files in “bcghub-<mode>/migration/lib” folder
  - 3 - Run utility “bcghub/bin/bcgBDOMigrate <schema_owner> <password>”

Note: if "NoClassDefFoundError“ occurs during bcgBDOMigrate, see Technote:

http://www-01.ibm.com/support/docview.wss?rs=2310&context=SSDKJ8&context=SSDKKW&q1=migration&uid=swg21302894&loc=en_US&cs=utf-8&lang=en

WebSphere Partner Gateway V6.1 components do not maintain property files, like in the previous versions. Now the properties can be accessed from one central place, which is the WebSphere Partner Gateway Console.

But you can migrate the current attribute values running the "bcgPropMigrate" script and passing the location of the saved properties files as one of the script input parameters.

Also, in V6.1.1 the BDO is serialized in the database, so if you want to be able to resend the older transactions, using V6.1.1 Console, you need to run the "bcgBDOMigrate" script to take the old BDO files from the file system and copy them in the database. When you do this step, you have to make sure that the "common" and "bcgsdk" jars, from the previous installation, are copied into folder "migrate/lib" under the V6.1.1 "bcghub" folder.

The footnote in this slide reports the link to the URL detailing the problem and solution of a "NoClassDefFoundError" that may occur when running the bcgBDOMigrate script.

This section deals with the migration from the V6 release to V6.2.0.

Preparation tasks for WebSphere Partner Gateway V6.0.0

- Backup property files to be migrated :
  - Console: bcg_console.properties
  - Receiver: bcg_receiver.properties
  - DocMgr: bcg.properties, ediparms.properties and ediconfig.properties
- Copy jar files: “common.jar” and “bcgsdk.jar”
  - from: <WPG_path>/router/lib/ To: <WPG_61>/bcghub-<mode>\migration\lib
- Create bcgdb and bcgmas users (add to bcggroup)
- For Distributed mode: Install MAS

Before you start migrating, there are some actions you need to do that vary depending on the release you want to migrate from.

This slide specifies the actions needed for the V6.0.0 release, which like WebSphere Business Integration Connect, keeps the components attribute values in some property files. You need to save these files in some backup directory because you will use them to load the attribute values into the V6.1 database location. You will then be able to manage them with the community console.

The "common" and "bcgsdk" jars need also to be saved in the file system, and precisely, in the user-created folder: "migration\lib" under the V6.1 bcghub folder.

The application and MAS database users also need to be created and added into the bcggroup.

Finally, if you chose a distributed topology, then you have to install the MAS database.

Preparation tasks for WebSphere Partner Gateway V6.1 (1 of 2)

- If the database is on Oracle and was migrated from V4.2.2:
  - Before running the “Smart Migration”, login sqlplus as wpg_owner and delete the following packages:
    - Drop package DB_General_pkg
    - Drop package DB_GenProc_DB2Code
    - Drop package DB_GenProc
    - Drop package body DB_Case_pkg
    - Drop package body DB_lengthCheck
    - Drop package body DB_Metadata
    - Drop package body VC_App
  - Verify that there are no other INVALID objects as follows:
  - Log into the sqlplus as wbicnt_owner
  - Run <DBLoader>/scripts/Oracle/Recompile.sql
  - Select object_name from user_objects where status =’INVALID’

If the V6.1.1 database is Oracle and is the result of an earlier WebSphere Business Integration Connect migration, then before running the "Smart Migration", you have to drop some packages that are not valid by logging in to sqlplus as wpg_owner.

Preparation tasks for WebSphere Partner Gateway V6.1 (2 of 2)

- Backup the security files:
  - common/security/keystore/bcgSecurity.jks
  - common/security/keystore/bcgSecurityTrust.jks
  - Note: MAS databases do not need to be migrated

One more item needed before starting the WebSphere Partner Gateway V6.1 migration is to backup the security files. That is, the product key store and trust store.

The reason being is that these files are created when you install the hub, so if you leave them in the common file system, they will be replaced and lost.

By making a backup, you make sure that the original ones can be restored after the hub migration.

Migrate the V6 database to WebSphere Partner Gateway V6.2.0

- Use WebSphere Partner Gateway V6.2.0 “Smart Migration” feature to migrate the V6 database to WebSphere Partner Gateway V6.2.0 level
  - Run WebSphere Partner Gateway V6.2.0 DBLoader install and select “Migrate the existing instance”
  - Verify logs in <tmp>/bcgdbloader/appslogs for successful migration completion

Now you are ready to move on to migrating the V6 database to the V6.2.0 level, which is a fairly easy task using the "smart migration feature.

When running the DBLoader, like you would when installing the database, you will be prompted with the option of "Migrate the existing instance". Select that to proceed with the automated database migration.

After the task is completed, the logs in the usual system temp folder can be reviewed for successful completion.

Migrate the V6 hub to WebSphere Partner Gateway V6.2.0 (1 of 2)

- Migrate to the default “wpgCell” (WebSphere Partner Gateway deployment manager):
  - Run WebSphere Partner Gateway V6.2.0 hub installer and select “Migrate the existing instance”
  - Choose the migrated database and the saved “common” file system
  - Repeat the above on all other WebSphere Partner Gateway V6 machines

After database migration completion, you can move on to perform the same task for the hub.

There are a couple of options you can choose from here; migrate to the default "wpgCell“ or migrate to an already existing cell.

In the first case you run the WebSphere Partner Gateway hub installer and select the "Migrate the existing instance" option. When prompted to enter the database and common file system specifics, choose the database migrated in the previous step and point to the saved common file system.

For distributed mode this operation has to be repeated for all other hub boxes.

Migrate the V6 hub to WebSphere Partner Gateway V6.2.0 (2 of 2)

- Migrate to an exiting WebSphere Application Server cell (other deployment manager):
  - Uninstall WebSphere Partner Gateway V6 hub, do not select to uninstall the “Common” file system
  - Uninstall the V6.1 deployment manager
  - Uninstall V6.1 MAS database
  - Install V6.2.0 MAS database
  - Install WebSphere Partner Gateway V6.2.0 hub as new instance, referencing the existing deployment manager cell
  - Choose the migrated database and the saved “common” file system

- Note: If the deployment manager does not exist, a new profile/cell can be created under WebSphere Application Server:
  - Open the command prompt to <Appserver_home>/bin and create deployment manager profile: ./manageprofiles.sh -create -profileName DepMgr -profilePath /<AppServer_home>/profiles/DMgr_profile_name -templatePath /<AppServer_home>/profileTemplates/dmgr -cellName DMgr_cell_name

If you want to migrate on to an existing cell, then things get a bit more complicated.

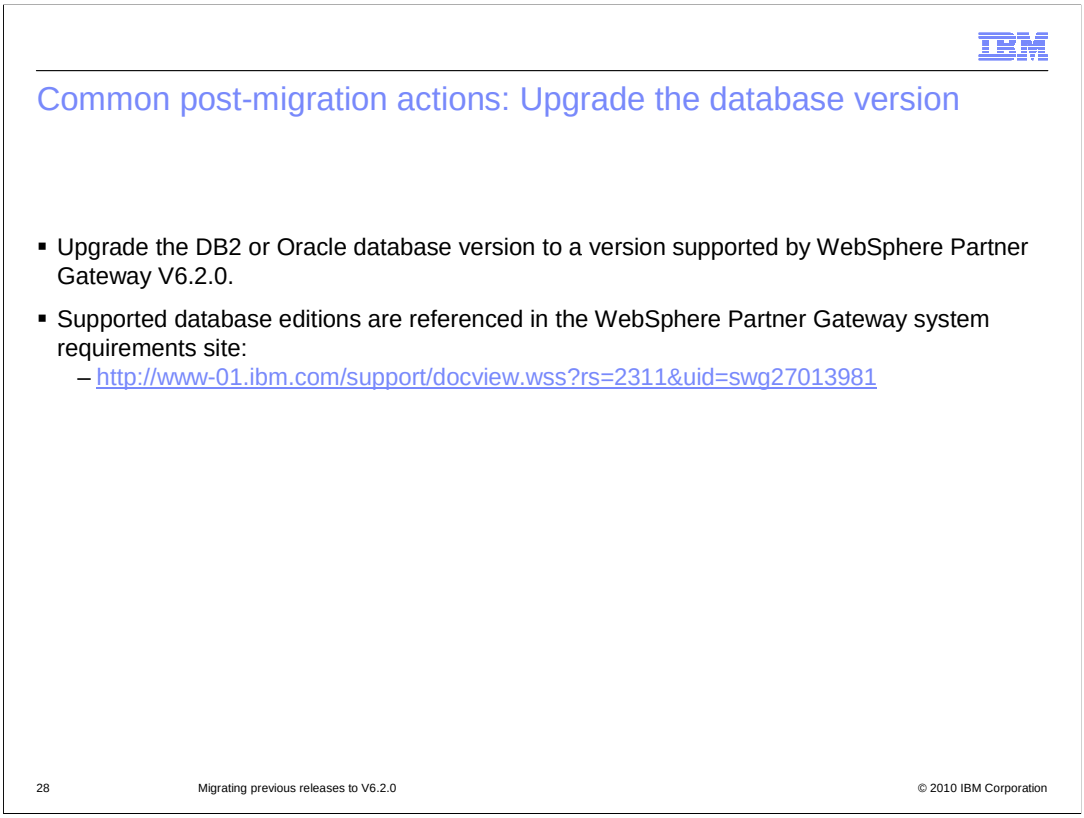
In this situation you will have to uninstall the existing WebSphere Partner Gateway V6 hub. While doing this, make sure not to select to uninstall the "Common" file system.

Then, uninstall the V6.1 deployment manager and MAS database.

Install the V6.2.0 MAS and finally install WebSphere Partner Gateway V6.2.0 hub as a new instance, pointing to the existing deployment manager cell.

Proceed with the installation, and when prompted, select the migrated database and saved common file system.

At this stage the actual migration is completed. Section C deals with the post-migration actions.



Common actions include upgrading the database to a WebSphere Partner Gateway V6.2.0 supported version.

The link to the "system requirement" site, at the bottom of this slide, can be referenced to check the various supported database versions and editions.

Common post-migration actions: Select the appropriate trust manager

- If V1 root certificates are used, switch trust manager from ibmX509 (default), to ibmPKIX (Appendix D)
  - In WebSphere Application Server console select: Security>SSL certificate and key management>[Node Name]>SSL Configuration>Trust and Key Manager, then select ibmPKIX as the default trust manager

If x.509 V1 root certificates are used, then choose the ibmPKIX trust manager instead of the default ibmx509.

Common post-migration actions: Enable support of multiple internal partners (optional)

- If multiple internal partners are needed, do as follows:
  - 1 - In WebSphere Partner Gateway Console “System Administrator > Common Properties”, change the value of "allow.partner.type.edit" property from "false" to "true“
  - 2 - Navigate to “Account Admin > Profiles > Partners”, then edit the profiles and change the “Partner Type” of the chosen partners, from “External” to “Internal”
  - 3 - When done, switch the value of "allow.partner.type.edit" property back to “false”
- Note: Use this feature only during migration, or else the configuration might become inconsistent and hard to recover

If you have the need for more than one internal partner, then you can tweak the value of "allow.partner.type.edit" property in the console “System Administrator > Common Properties”, from “false” to “true”, as indicated here in step1.

That will enable the attribute "partner type“, in the partner profile, to switch value from "internal" to "external“.

Use this feature only during the migration process and do not touch it once you start running the product.

Common post-migration actions: Apply recommended fixes

- APAR JR31639 mandatory iFix from Fix Central
  - http://www-933.ibm.com/support/fixcentral/
- APAR JR32607 and JR33176 SQL injection vulnerability
  - http://www-01.ibm.com/support/docview.wss?uid=swg21382117

There are a couple of recommended APAR fixes that need to be applied.

iFix JR31639 provides important SFTP fixes and support for SSL authentication at the Internal Partner level.

APAR fixes JR32607 and JR33176 address database vulnerability to SQL injections.

Migrating from WebSphere Partner Gateway V6.1 actions: Security configuration migration

- Delete default security files and copy the saved ones in:
  - common/security/keystore/bcgSecurity.jks
  - common/security/keystore/bcgSecurityTrust.jks

For actions related to the specific releases, if the starting release was V6.1, you need to replace the trust store and key store with the ones you saved, as mentioned in the pre-migration section.

Migrating from WebSphere Business Integration Connect V4.2.2 or WebSphere Partner Gateway V6.0.0 actions: Security configuration migration

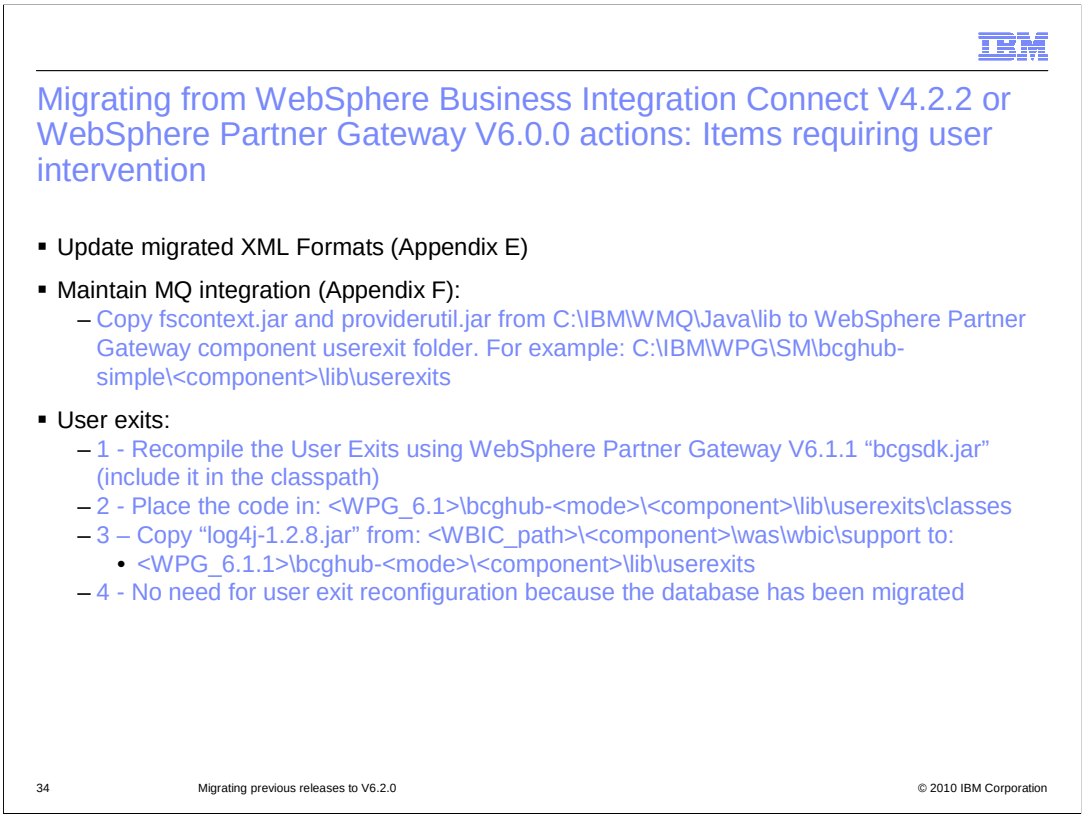
- Migrate and integrate keystores and truststores
  - Copy/overwrite existing receiver.jks and receiverTrust.jks from common/security/keystore to WebSphere Partner Gateway V6.1.1 bcgSecurity.jks and bcgSecurityTrust.jks (Appendix A)
  - WebSphere Partner Gateway V6.1.1 does not support migration of console.jks and consoleTrust.jks key stores. If you want to do this, use ikeyman to export certificates out the key stores and then import them into bcgSecurity.jks and bcgSecurityTrust.jks, respectively (Appendix B)
- Client Authentication “true” setting needs to be manually restored running bcgClientAuth.jacl script (Appendix C)

The same thing applies for WebSphere Business Integration Connect or WebSphere Partner Gateway V6.0.0, with three main differences from what you saw previously for the V6.1 release:

The file names are different, so you have to rename them.

Perform export and import operations using ikeyman if you want to use some of the certificates in the old console trust store and key store.

Finally, if client authentication was set to "true", then you need to manually restore it using a script.



Still referencing the actions necessary when the original release was V4.2.2 or V6.0.0, if you have items like "XML Formats", "External JMS integration“ and "User exits", then you need to perform some additional steps to make them work on WebSphere Partner Gateway V6.2.0.

In this case you need to use the console to edit the XML format and make it compatible with the new structure used in V6.2.0.

Maintaining MQ integration is quite easy and consists on copying two jar files "fscontext" and "providerutil“, from the MQ folder, to the "userexits" folder of the WebSphere Partner Gateway affected component.

Concerning the user exits, no code or configuration change is required, but they need to be recompiled using the V6.2.0 "bcgsdk.jar“ file in the class path.

Migrating from WebSphere Business Integration Connect V4.2.2 or WebSphere Partner Gateway V6.0.0 actions: Things to be aware of

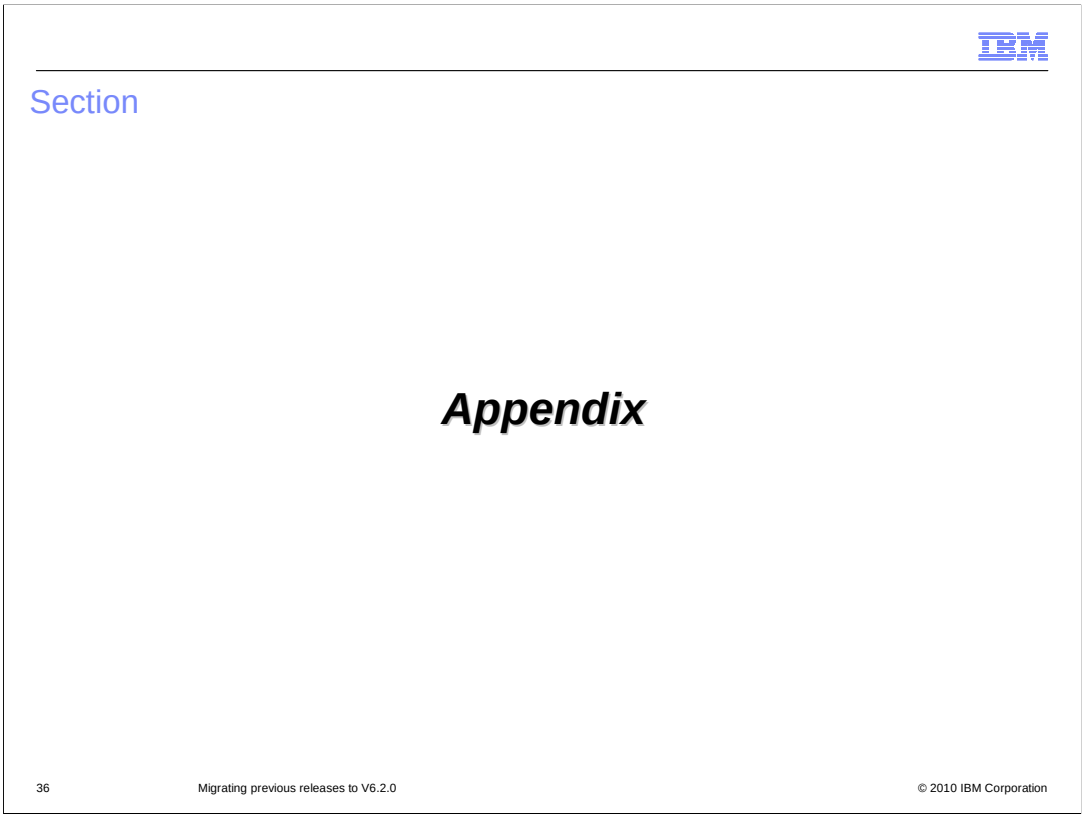
- Console AS Viewer will show MDN “unknown” state for transactions occurred before the upgrade (Appendix G)
- Database collating sequence: (applies only if migrating from V4.2.2)
  - Oracle: Dynamically changed by BCGUpgrade_422FP4_600.sql script
  - DB2: User needs to change it manually as follows:
    - 1 - Back up the migrated WebSphere Partner Gateway database and then drop it
    - 2 - Run “db2 -td! -f Create_db2.sql -z Create_db2.log” to create new DB
    - 3 - Restore back-up into new DB using the “Restore to Existing Database” option.
- Logging and tracing: use the WebSphere Application Server administrative console (Appendix H)

This is the last slide concerning the post-migration actions and is specific to migrations coming from V4.2.2 and V6.0.0 releases:

For one, in the AS1/AS2 viewer, the MDN state for the migrated transactions will show an "unknown" icon.

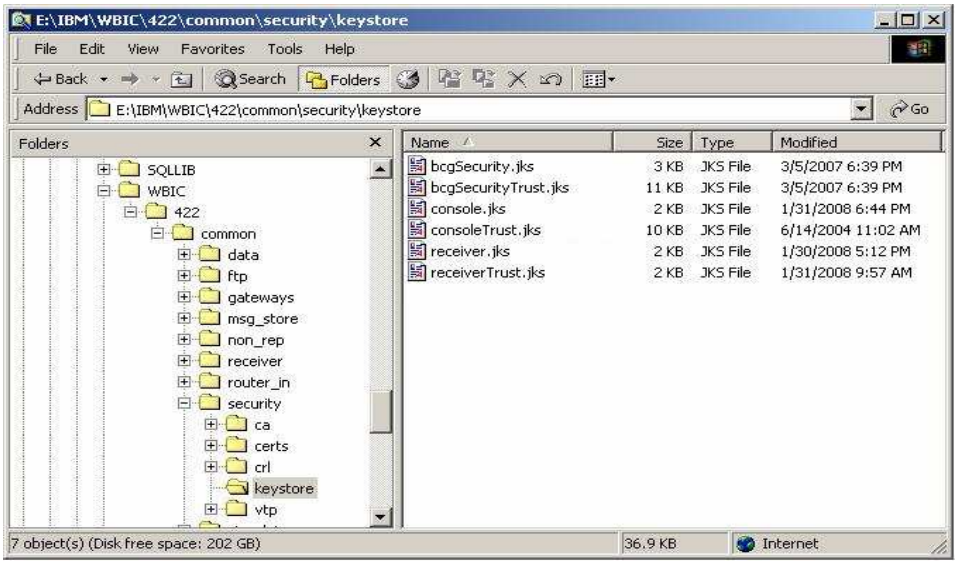
WebSphere Partner Gateway V6.2.0 uses an improved collating sequence to sort the Unicode data. If you have Oracle, the update is performed dynamically by the upgrade script. For DB2 you have to do a little more work because the update cannot be done on existing databases. Backup the migrated WebSphere Partner Gateway database, delete the database, create a new one and then restore the backed-up database into the newly created database.

The last thing to note is that V6.1 logging and tracing is now handled through the WebSphere Application Server administrative console.



This final section of the presentation is an appendix dedicated to the highlights and visualization, through screen captures, of some key points of the migration process.

Appendix A: Key stores migration



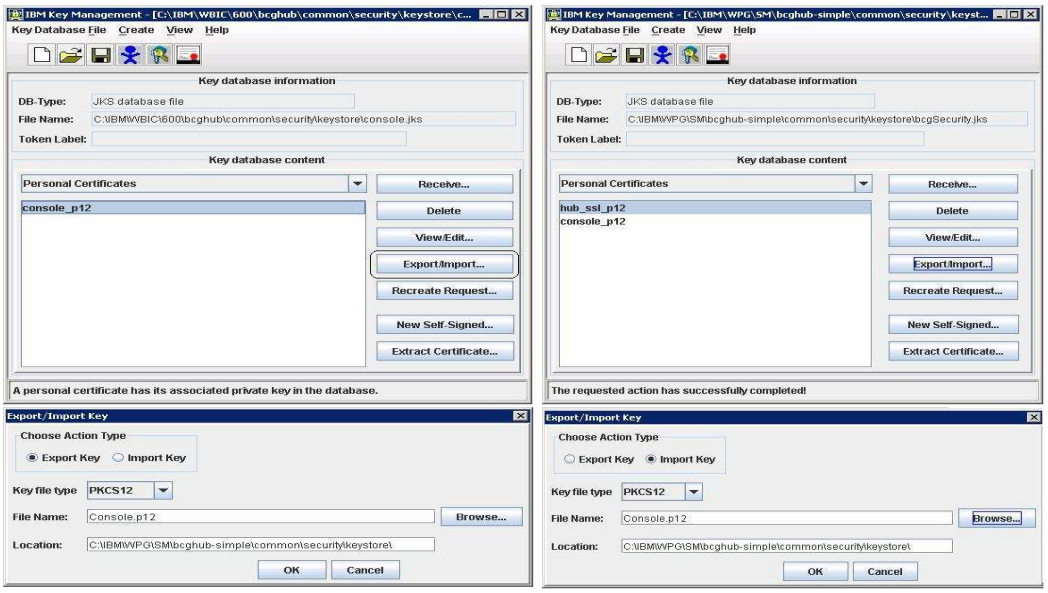
Here is the screen capture showing what the key store folder looks like after the new hub has been installed.

The new “bcgSecurity” and “bcgSecurityTrust” jks files are installed during the hub migration process in the same folder where the V4.2.2 or V6.0.0 "console" and "receiver" key store and trust store are located.

If the migration came from the V6.1 release, then you will have the “bcgSecurity” and “bcgSecurityTrust” jks files only. This is the reason for backing them up before performing the migration - because the new installation overwrites them.

After the hub migration competes, you need to restore them.

Appendix B: Add certificates to JKS



This is an example of a console key pair that was used in the V4.2.2 or V6.0.0 release. If there is a need to keep them, then you need to export them from the console.jks file and then import into the bcgSecurity.jks file to be used in the V6.2.0 console.

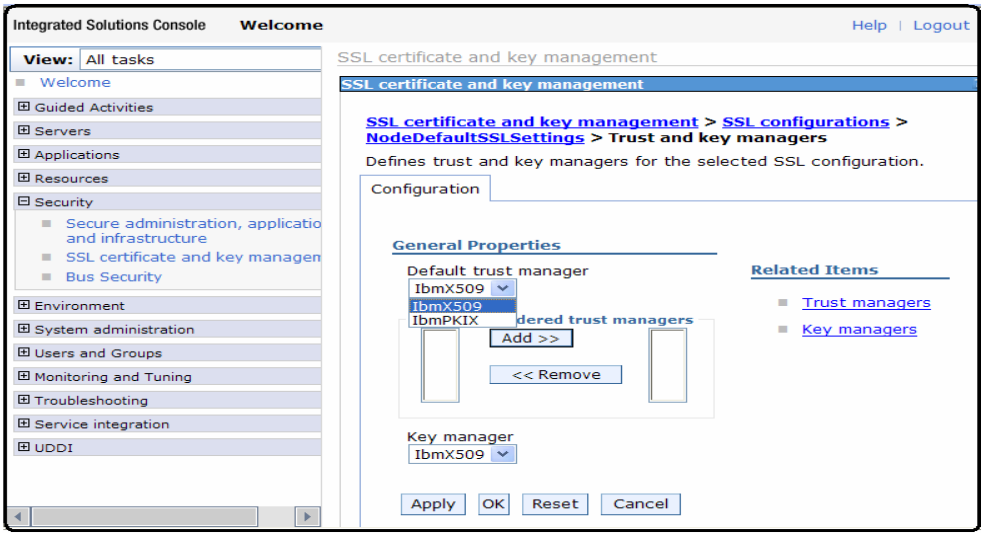
Appendix C: Client auth flag set

If the system pre-migration had Client Authentication turned on, be aware that the migration process does not carry it into the migrated system.

In this slide, the left screen capture shows client authentication being "True" in the system before migration, whereas the query that was run after the migration shows the setting as "false".

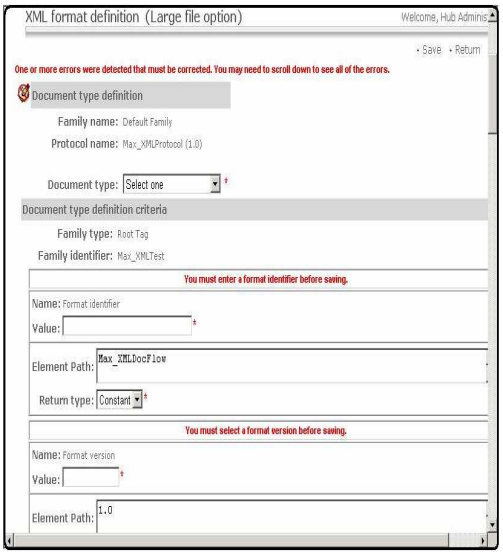
You will need to manually run the script to restore this setting to its original value.

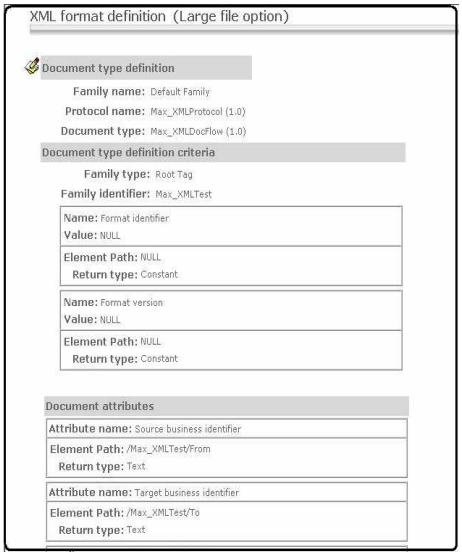
Appendix D: V1 root certificates trust manager



This slide shows the panel in the WebSphere Application Server console where you need to switch the trustManager being used from the default “IbmX509" to "IbmPKIX,“ in case you have V1 Root certificates.

Appendix E: Adjust XML formats



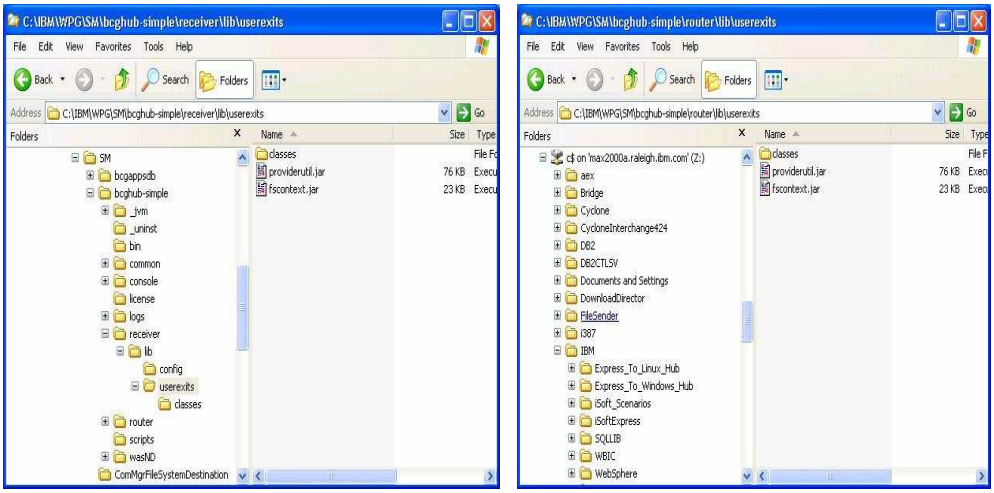


If the migration is from V4.2.2 or V6.0.0, when you open your XML format the first time after migration, an error message in red, like the one in the screen capture on the left side, will notify you that the XML format has errors that need to be corrected.

You need to enter the additional information needed to make this work on V6.2 as well.

As shown in this slide, you need to select the document type from the pull-down, and then enter the "Family identifier" missing information.

Appendix F: Maintain MQ integration



Starting from WebSphere Partner Gateway V6.1.0, WebSphere MQ is no longer needed to allow WebSphere Partner Gateway components' internal communication.

However, if you want to keep using it for JMS integration, a very simple operation is required.

Copy the "fscontext" and "providerutil" jar files from the MQ "java\lib" folder to the "lib\userexits" folder of the WebSphere Partner Gateway component.

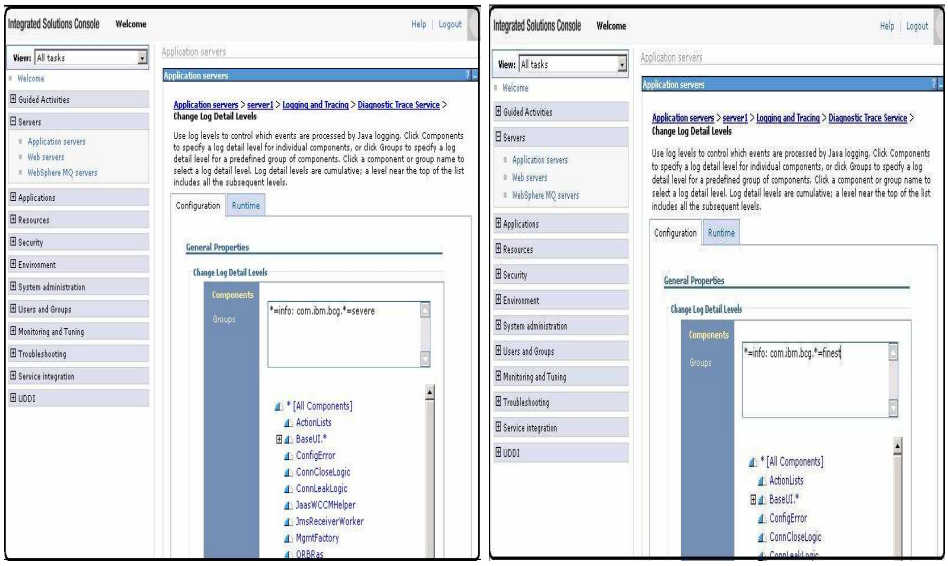
If you want to keep using your JMS receiver, then you need to copy these jar files into the "receiver\lib\userexits" folder.

Likewise, if you want to keep using your JMS destination, then you have to copy these jar files into the "router\lib\userexits" folder.

Appendix G: AS1/AS2 Viewer

This slide shows the Console AS1/AS2 Viewer, where the V4.2.2, or V6.0.0, transactions that were run before the migration are reported with the "unknown" icon.

Appendix H: Logging and tracing



Logging and tracing no longer use the log4j format and are not handled in the component's property files.

With WebSphere Partner Gateway V6.2.0, logging and tracing needs to be handled in the WebSphere Application Server console.

The example in the slide shows in the left screen capture the default setting whereas in the right screen capture is the setting used to capture in the log the more detailed debugging information.

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