



IBM Software Group

# WebSphere® Message Broker Version 6

## *Runtime Installation*



@business on demand.

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This presentation will examine the Runtime installation process referred to in the Launchpad presentation. It will not cover the Toolkit installation.

## Goals

- Runtime installation
  - ▶ Basic process
  - ▶ Problem determination
  - ▶ Rational agent controller considerations



This session will discuss the installation of the Message Broker Runtime components on Windows® and Distributed platforms. Installation on z/OS® uses SMPE; z/OS installation and configuration processes are discussed in the Configuration section.

## Installation overview

- Printed installation manual
- Installation location
- Configuration Manager
  - ▶ All platforms
  - ▶ DB2® prerequisite removed



Message Broker Version 6 comes with a hardcopy Product Installation manual. This manual should tell you everything you need to know to install the product.

The runtime can now be installed anywhere on every platform, rather than just the Windows platform as with Version 5.

Default installation locations are intended to be as short as possible and follow IBM guidelines.

There is a key change with the Configuration Manager, which can now be installed on all platforms, not just Windows. And the Configuration Manager does not need DB2 to be installed.

## Installation overview (cont.)

- Message Broker command console
- Single runtime installer
- Separate toolkit installation
- ISMP V5



- The Command Console is the Windows way of running the “mqsiprofile”, which can be optionally launched at the end of the installation process.
- There is now a single installer for the runtime. This does not make a huge difference at installation time, other than a single progress bar for the whole installation, but does mean that separate DistHub, Event and Message Broker uninstalls are no longer required.
- The tool installation option has been removed from the feature panel. The toolkit now has its own, entirely separate, installation process.
- We now use InstallShield Multi-Platform version 5.03 to package the product. This gives better accessibility features.

## Details – Destination panel

- Intended to minimize the number of installations
- Different Version.Release installations always coexist
- Identical Version.Release installations upgrade by default
- Shown during Typical installation if necessary

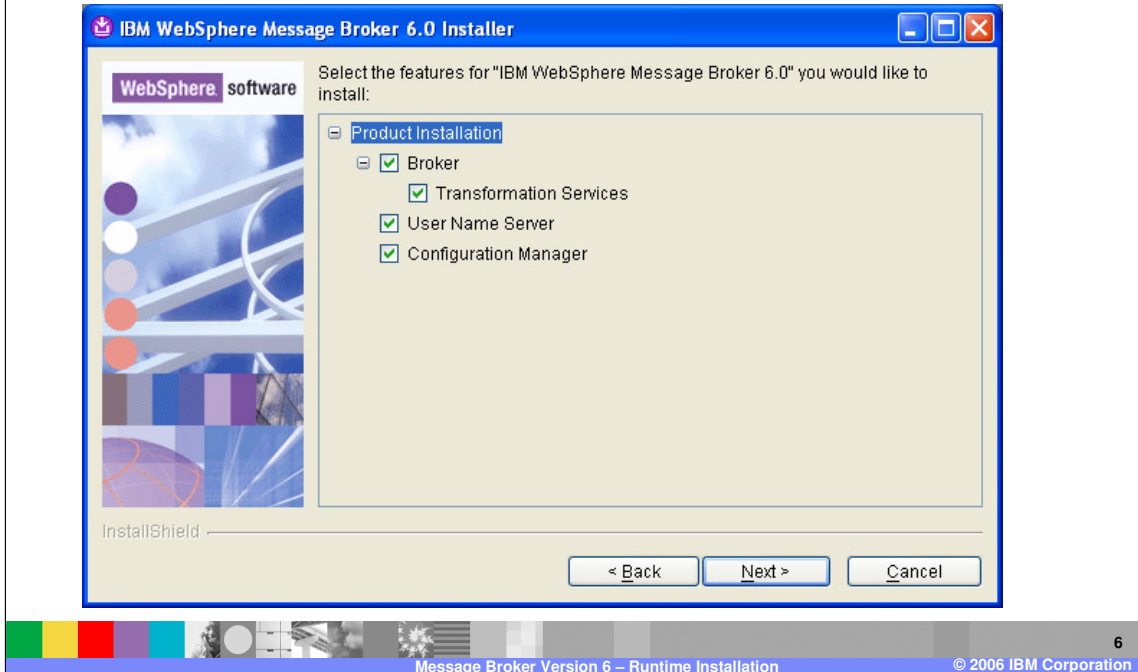


The installation process checks that...

- There is no ISMP installation in the same directory (including any Version 5 installation)
- There is no natively installed product in the same directory on UNIX® (including any Version 2.1 installation)
- Version 2.1 is not installed in the same directory on Windows
- There are any files in the requested installation directory

Note that the installation process does not check for running Message Broker components. It also does not provide the option to stop any such components during the installation process, should any be encountered. Prior to starting the installation, or reinstallation, or upgrade, you should make sure that all running processes are stopped.

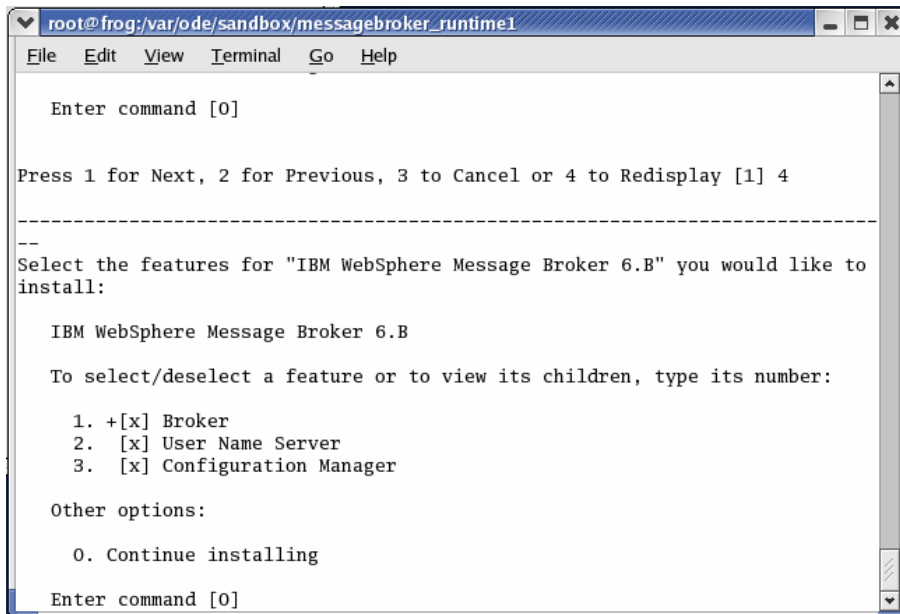
## Installation feature selection screen



This slide shows the GUI feature selection screen. If you only want to install the Configuration Manager, clear the Broker and User Name Server boxes.

This panel was captured on Windows but looks the same on all distributed platforms.

## Installation feature selection – Console mode



```
root@frog:/var/ode/sandbox/messagebroker_runtime1
File Edit View Terminal Go Help

Enter command [0]

Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay [1] 4

-----
--
Select the features for "IBM WebSphere Message Broker 6.B" you would like to
install:

IBM WebSphere Message Broker 6.B

To select/deselect a feature or to view its children, type its number:

  1. +[x] Broker
  2.  [x] User Name Server
  3.  [x] Configuration Manager

Other options:

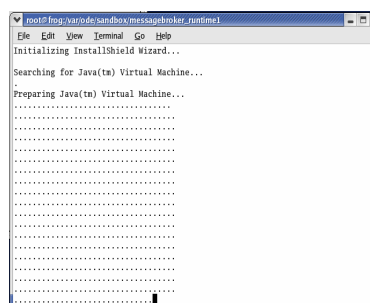
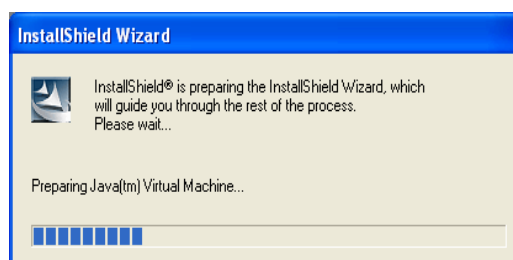
  0. Continue installing

Enter command [0]
```

This screen capture shows the same feature selection process, but using the Console Mode. This screen was captured on Linux<sup>®</sup> but looks the same on all distributed platforms.

## Debugging – Relevant documentation

- install.properties
- level.txt
- mqsi6\_install.log
- vpd.properties
- Launcher log
  - ▶ -is:log <logname>
- Launcher Problems?
  - ▶ Try -is:tempdir option, or
  - ▶ -is:javahome option



This slide shows the various log files that may be useful in diagnosing problems with installation. The two screen captures show the Windows InstallShield preparation, and the equivalent function on a UNIX platform.

- The workpath/install.properties file shows a list of version 6+ installs in the format install\_dir = version
- The install\_dir/readmes/level.txt file in each installation shows the CMVC level and package time/date. This is also shown when running the “mqsiservice -v” command)
- The main installation log for version 6 is home/mqsi6\_install.log on all platforms.
- vpd.properties is ISMP’s record for what has been installed. Its exact location varies by platform, for example in the system root on Windows and the ODM on AIX®. **WARNING:** this file is shared by all products installed with ISMP!
- If a problem occurs before the installation wizard has started, for example when there are problems with the bundled JVM, use the -is:log logname option to produce a log for the launcher.
- The -is:tempdir and -is:javahome options should get around any launcher problems if necessary.



## Debugging – How to interpret the documentation

- Good indications that the installation succeeded
  - ▶ Uninstaller exists (binary, .jar and .dat)
  - ▶ Log contains no errors
  - ▶ Wizard Action Successful debug messages in log

```
(15-Sep-2005 10:47:48), mqsi.Setup,  
com.ibm.ismp.beans.wizard.conditions.WizardActionSuccessfulWizardBeanCondition,  
dbg, Checking status of install  
(15-Sep-2005 10:47:48), mqsi.Setup,  
com.ibm.ismp.beans.wizard.conditions.WizardActionSuccessfulWizardBeanCondition,  
dbg, install not cancelled  
(15-Sep-2005 10:48:20), mqsi.Setup,  
com.ibm.ismp.beans.wizard.conditions.WizardActionSuccessfulWizardBeanCondition,  
dbg, (Install status = 3)
```



Check the “mqsi6\_install.log” for errors if there are any problems.

The text in the box shows a sample of the installation log file.

## Debugging – Example

- User and Group checking
  - ▶ Can be reported missing when they exist
  - ▶ Check space in temp directory

```
(05-Aug-2005 19:23:57), mqsi.Setup,
com.ibm.ismp.beans.wizard.conditions.UserGroupExistenceWizardBeanCondition, dbg,
System OS Name: Linux

(05-Aug-2005 19:23:57), mqsi.Setup,
com.ibm.ismp.beans.wizard.conditions.UserGroupExistenceWizardBeanCondition, dbg,
Temporary file created: /tmp/ismp001/3145763.tmp

(05-Aug-2005 19:23:57), mqsi.Setup,
com.ibm.ismp.beans.wizard.conditions.UserGroupExistenceWizardBeanCondition, dbg,
Owner set to mqm.

(05-Aug-2005 19:23:57), mqsi.Setup,
com.ibm.ismp.beans.wizard.conditions.UserGroupExistenceWizardBeanCondition, dbg,
Group checking complete. OK now equals: true

(05-Aug-2005 19:23:57), mqsi.Setup,
com.ibm.ismp.beans.wizard.conditions.UserGroupExistenceWizardBeanCondition, dbg,
Returning from evaluateTrueCondition() with: true
```



On this screen, the sample log entries show a successful check.

If the owner or group is not set correctly, errors will be seen in this log.

## Rational Agent Controller considerations

- Required to use the flow debugger
  - ▶ Needed on all systems where you run brokers you want to debug
  - ▶ Need TCP/IP connectivity to Broker Toolkit
- Rational Agent Controller V6.0.1 and 5.0.2.1 supported by WebSphere Message Broker V6
- Rational Agent Controller V5.0.2.1 only supported by Version 5 brokers



Before you can use the flow debugger, install the Rational Agent Controller on all systems where you run the brokers in which you want to debug message flows. Also, check that the agent controller component installed on the broker has TCP/IP connectivity to the system on which the Message Brokers Toolkit is running. This will enable it to communicate with the agent controller client that is embedded in the Message Brokers Toolkit.

Rational Agent Controller Versions 6.0.1 and 5.0.2.1 are supported for use with WebSphere Message Broker Version 6.0. Version 5 brokers can only use Rational Agent Controller Version 5.0.2.1. If you do not have brokers from previous versions, or if you have them but do not need to use an agent controller with them, then you should use Rational Agent Controller Version 6.0.1. It is supplied with WebSphere Message Broker V6 on a supplemental CD or DVD.

## Rational Agent Controller in broker domain with V5 and V6 brokers

	Version 5 Fix Pack 3 Broker and beyond with RAC 5.0.2.1	Version 5 Fix Pack 2 Broker and below with RAC 5.0.2.1	Version 5 Fix Pack 2 Broker and below with RAC 5.0.1
<b>Windows</b>	Yes	Yes	Yes
<b>AIX</b>	Yes	Yes	Yes
<b>Solaris</b>	Yes	Yes	No
<b>HP-UX</b>	Yes	No	No
<b>z/OS</b>	Yes	No	No
<b>Linux</b>	Yes	No	No



If you have previous versions of WebSphere Message Broker installed, and have a domain that includes Version 5 brokers in addition to Version 6 brokers, you must use Rational Agent Controller Version 5.0.2.1. Rational Agent Controller Version 6.0.1 cannot be used with Version 5 brokers. Do not update to Rational Agent Controller Version 6.0.1 if you want to continue to use Rational Agent Controller with your Version 5 brokers. Version 2.1 brokers do not use Rational Agent Controller.

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