Rules and Formatter Extension for IBM WebSphere Message Broker for Multiplatforms and z/OS V6.0

Welcome to the Rules and Formatter Extension for IBM WebSphere Message Broker. This README file contains information that you need to complete installation for multiplatforms and z/OS.

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Installing Rules and Formatter Extension for WebSphere Message Broker

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Note: For all installation instructions, <install_dir> refers to the default installation directory.

Prerequisites

IBM WebSphere Message Broker for Multiplatforms V6.0 DBMS listed in supported platforms

Server Installation

Note: z/OS installation instructions can be found at the end of this document.

Server

Operating System	DBMS	Compiler
Windows 2000 (Service Pack 4)	Microsoft SQL Server 2000 (SP3a)	Microsoft Visual C++ .NET 2003
Windows 2003	Oracle 9i r.2 (Patch Set 4 / 3501955) Oracle 10g	JDK 1.4.2

	Sybase ASE 12.5	
	DB2 UDB 8.2	
Solaris 8	Oracle 9i r.2 (Patch Set 4 / 3501955)	Sun One Studio 7 EE for Solaris
Solaris 9	Oracle 10g	Sun One Studio 8 Compiler
	Sybase ASE 12.5	LDK 1 4 2
	DB2 UDB 8.2	JDIX 1.7.2
HP-UX 11	Oracle 9i r.2 (Patch Set 4 / 3501955)	HP11aC++
HP-UP 11.11	Oracle 10g	Version A.03.52
	Sybase ASE 12.5	JDK 1.4.2
	DB2 UDB 8 2	
AIX5.2 (plus Maintenance Level 3)	Oracle 9i r.2 (Patch Set 4 / 3501955)	VisualAge C++ Professional for AIX Version 6.0
AIX5.3 (plus Maintenance Level 1)	Oracle 10g	JDK 1.4.2
	Sybase ASE 12.5	
	DB2 UDB 8.2	
Z/OS 1.5 / 1.6	DB2 7.1	z/OS C/C++ Compiler 1.4 or above
		JDK 1.4.2
Linux	DB2 UDB 8.2	JDK 1.4.2 JDK 1.4.2
Linux Linux Intel (IA32) Kernel Version 2.4	DB2 UDB 8.2 Oracle 9i Release 2 Patch Set 4 (9.2.0.5) – Oracle Patch	JDK 1.4.2 JDK 1.4.2 gcc Compiler 3.2
Linux Linux Intel (IA32) Kernel Version 2.4 Linux Intel (IA32) Kernel Version 2.6	DB2 UDB 8.2 Oracle 9i Release 2 Patch Set 4 (9.2.0.5) – Oracle Patch 3501955 Oracle 10g	JDK 1.4.2 JDK 1.4.2 gcc Compiler 3.2 gcc Compiler 3.4
Linux Linux Intel (IA32) Kernel Version 2.4 Linux Intel (IA32) Kernel Version 2.6	DB2 UDB 8.2 Oracle 9i Release 2 Patch Set 4 (9.2.0.5) – Oracle Patch 3501955 Oracle 10g Sybase Adaptive Server Enterprise (ASE) 12.5	JDK 1.4.2 JDK 1.4.2 gcc Compiler 3.2 gcc Compiler 3.4
Linux Linux Intel (IA32) Kernel Version 2.4 Linux Intel (IA32) Kernel Version 2.6 Linux zSeries (31-bit) Kernel Version 2.4	DB2 UDB 8.2 Oracle 9i Release 2 Patch Set 4 (9.2.0.5) – Oracle Patch 3501955 Oracle 10g Sybase Adaptive Server Enterprise (ASE) 12.5	JDK 1.4.2 JDK 1.4.2 gcc Compiler 3.2 gcc Compiler 3.4

Disk Space and Memory Requirements

Installation Media: CD-ROM

Disk Space: 140 MB for Rules and Formatter Client; 140 MB for temporary directory used during installation.

Memory: 512 MB for product files

Install Rules and Formatter Runtime Engine

The following installation instructions assume you are logged onto the server with administrative rights. When installing on UNIX, it is best to perform the install directly on the target machine in the Common Desktop Environment (CDE) single window mode and as root. Use the CD-ROM to install the Rules and Formatter Runtime Engine.

- 1. Insert the CD-ROM and go to the setup for your operating system.
- 2. Start the installer
 - a. On Windows 2000 and XP

If your machine is configured to autorun from the CD-ROM, the InstallShield Wizard automatically starts.

If your machine is not configured to autorun from the CD-ROM, do the following:

1. Select Start > Run from the Windows Start menu.

2. In the Run dialog box, browse to locate the setup file: <CD-ROM drive>:\setup.exe

3. Click OK. The Installer Welcome window appears. b. On Solaris:

Note: The repository file containing installation information is created under the home directory of the person installing the product. Therefore only the person who installs the product can uninstall it.

1. Mount the CD-ROM. For example: pfs_mount <CD DEVICE> /mnt_point

2. Set the IP address: export DISPLAY=<IP address:0:0>

3. To change to the /mnt_point directory, enter: %cd mnt_point

4. To start the installer, enter:\$./setupThe Installer Welcome window appears.

c. On AIX:

1. Mount the CD-ROM. For example: pfs_mount <CD DEVICE> /mnt_point

2. Set the IP address: export DISPLAY=<IP address:0.0>

3. To change to the /mnt_point directory, enter: %cd mnt_point

4. To start the installer, enter:% ./setupThe Installer Welcome window appears.

Note: You might get a NULL error message at the end of the installation. Ignore the message.

d. On HP-UX:

1. Mount the CD-ROM.

Some of the files that are being installed might have names longer than 31 characters or have mixed-case file and directory names, so you must enter the following mount commands.

nohup pfs_mountd &
nohup pfsd &
pfs_mount <cd device> /mnt_point

2. Set the IP address;:
export DISPLAY = <IP address:0.0>

3. To change to the /mnt_point directory, enter: %cd mnt_point

4. To start the installer, enter %./setup

The Installer Welcome window appears.

- 3. To initiate the installation process, click Next on the Installer Welcome window. The License Agreement window appears.
- 4. Click the radio button for I accept the terms of the license agreement.

Note: If you do not have IBM WebSphere Message Broker components installed, follow the instructions on the InstallShield Wizard screen.

5. Click Next.

The Installation Directory Window appears.

- 6. To specify an installation directory, select one of the following:
 - 1. To accept the default directory, click Next.
 - 2. To use a different directory, enter the directory name or click Browse, select a directory, and click Next.
 - 3. If WebSphere Message Broker is installed, but InstallShield is not detecting it, enter the location (default is C:\Program Files\IBM\rf41).
- 7. The Installation Summary window displays the products to be installed and the approximate required disk space.
 - 8. Click Next.
 - The Installation Summary window displays installation progress.
- 9. Click Finish and reboot the machine.

The Rules and Formatter Runtime Engine is located in the specified installation directory.

Note: Documentation files are installed under <install_dir>\eclipse. You can view them through the main WebSphere help browser.

The Windows server sets the PATH environment variable to <install_dir>\rfrt\bin.

The installation places an uninstall program in the <install_dir>_uninst.

Client Installation

This section describes how to install the components required to run Rules and Formatter design-time tooling.

Client

Operating System	DBMS
Windows 2000 (Service Pack 4)	Microsoft SQL Server 2000 (SP3a)
Windows XP Pro (Service Pack 1)	Oracle 9i r.2 (Patch Set 4 / 3501955)
	Oracle 10g
	Sybase ASE 12.5
	DB2 UDB 8.2

Disk Space and Memory Requirements

Installation Media: CD-ROM

Disk Space: 140 MB for Rules and Formatter Client; 140 MB for temporary directory used during installation.

Memory: 512 MB for product files

Verifying Connectivity

Use the following database checklists to verify connectivity to the new database.

To a Sybase ASE Database

Have the following information available:

• Database name

- Server name
- Name of Sybase ASE user created during the database installation
- Password of Sybase ASE user created during the database installation

Verify the following:

- Database software installation was successfully completed.
- Database server is running in the target environment.
- Connection to the target database server using a Sybase ASE interactive tool (isql) and the account is established.

To an Oracle Database

Have the following information available:

- Service name
- Name of Oracle user created during the database installation
- Password of Oracle user created during the database installation

Verify the following:

- Database software installation was successfully completed.
- Database server is running in the target environment.
- ORACLE_HOME environment variable is set to the root directory of the Oracle installation.
- PATH environment variable points to the \$ORACLE_HOME/bin.
- Connection to the target database server using an interactive query tool (sqlplus) and the account is established.

To a Microsoft SQL Server Database

Have the following information available:

- Database name
- Server name
- User name created during the database installation
- Password for user created during the database installation

Verify the following:

- Database software installation was successfully completed.
- Database server is running in the target environment.
- The PATH environment variable includes:
 - For MSSQL2000: \Microsoft SQL Server\80\tools\binn
- Connection to the target database server using an interactive SQL tool (ISQL) and the account is established.

To a DB2 Database

Have the following information available:

- Database name
- Database owner name
- Database owner password

Verify the following:

- Database software installation was successfully completed.
- Database server is running in the target environment.
- PATH environment variable includes the lib directory for DB2.
- User account that owns objects in the new DB2 database added.
- Connection to the database using the DB2 CLP program is established.

Preparing the Installation Environment

Temporary Installation Directory

The installer uses a temporary location during the installation process. The default temporary location on Windows is defined in the system environment variables and is usually set to C:\temp.

If enough space is not available in the default temporary location, the installer might not start, or it might start, but notify you that sufficient space is not available. Either case requires providing sufficient space in the temporary directory. You can do one of the following:

- Move or delete files to provide space on the default temporary directory.
- Launch the installer using a different temporary directory.

To install on a temporary directory other than the default directory:

• For Windows, enter the following

```
setup -is:tempdir <full path to alternate temp
directory>
```

Administrative Rights on Client Machine

When installing on Rules and Formatter Extension for WebSphere Message Broker on a workstation, the user performing the install must have administrator privileges. These privileges are specifically required to properly install the Rules GUI. If the user does not have administrator privileges, the registry is not updated and the Rules GUI will not run.

Install Rules and Formatter Design-Time Tooling

Rules and Formatter design-time tooling can be installed only on a Windows workstation. These instructions assume you are logged on to the client workstation with administrative rights.

To install Rules and Formatter design-time tooling using the InstallShield Wizard

- 1. Insert the CD-ROM.
- 2. Choose Start>Run from the Windows Start menu.
- 3. In the Run dialog box, browse to locate the following file: <CD-ROM drive>:\setup.exe
- 4. Click OK.

The Installer Welcome window appears.

- 5. To initiate the installation process, click Next on the Installer Welcome window. The License Agreement window appears.
- 6. Click the radio button for I accept the terms of the license agreement.

Note: If you do not have IBM WebSphere Message Broker components installed, follow the instructions on the InstallShield Wizard screen.

7. Click Next.

The Installation Directory Window appears.

- 8. To specify an installation directory, select one of the following:
 - 1. To accept the default directory, click Next.
 - 2. To use a different directory, enter the directory name or click Browse, select a directory, and click Next.
 - 3. If WebSphere Message Broker is installed, but InstallShield is not detecting it, enter the location (default is C:\Program Files\IBM\rf41).
- 9. The Installation Summary window displays the products to be installed and the approximate required disk space.
- 10. Click Next.
 - The Installation Summary window displays installation progress.
- 11. Click Finish and reboot the machine.

The subdirectories added to the <install_dir>\rfdt\gui for the client installation are:

Subdirectory	Description
examples	Contains example files.
NNSYCatalogues	Contains catalogue files for language support.

Note: Documentation files are installed under <install_dir>\eclipse. You can view them through the main WebSphere help browser.

The installation places an uninstall program in the <install_dir>_uninst.

z/OS Installation

This section describes how to install Rules and Formatter Extension for WebSphere Message Broker for Multiplatforms on the z/OS platform.

- To create two PDS data sets, do the following: PDSs should be FB 80. If you use half-track blocking, 120 blocks and 10 directory blocks are sufficient.
 - Create the same HighLevelQualifiers for both PDS data sets.
 - Create a LowLevelQualifier of SBIPJCL for one PDS.
 - Create another LowLevelQualifier of SBIPSQL for the other PDS.

For example, if you create a HighLevelQualifier of IBM.NEWERA, the LowLevelQualifiers would be IBM.NEWERA.SBIPJCL and IBM.NEWERA.SBIPSQL.

- 2. In the installation directory /usr/lpp/wmqi/nnsy/install.sql/scripts/db250, copy NnsyConfigFile.MSTR to a new data set named NnsyConfigFile.in.
- 3. In the NnsyConfigFile.in, locate the following tokens. Tokens are enclosed in angle brackets "<>":

Token	Description
<auth-id></auth-id>	SQLID database owner.
<database-name></database-name>	Database in which all table spaces are created.
<storage-group-name></storage-group-name>	DB2 storage group in which databases are created.
<vcat-dataset-name-prefix></vcat-dataset-name-prefix>	Storage group IntegratedCatalogFacility.
<volume-list></volume-list>	Storage group volumes.
<db2smprl></db2smprl>	Library that contains DB2 sample program.
<db2mpdl></db2mpdl>	Library in which the sample program is located.
<db2inhlq></db2inhlq>	High-level DB2 library qualifiers.
<db2ssysn></db2ssysn>	DB2 subsystem name.
<db2locan></db2locan>	DB2 location name.
<pgmname></pgmname>	DB2 sample program name.
<planname></planname>	DB2 sample plan name.
<nnhlq></nnhlq>	Data set High Level Qualifiers created in step 1

of this procedure.

- 4. Replace all tokens with parameters and enclose them in single quotation marks.
- 5. From the installation directory, run the script NNInstallDriver.sh.

Notes: If you install the NnsyConfigFile.in file in a directory other than /usr/lpp/wmqi/nnsy/install.sql/scripts/db250, you must specify the -c parameter followed by the directory which contains the NnsyConfigFile.in file to ensure that the install script searches the proper directory.

If you installed the product under a directory other than /usr/lpp/wmqi/nnsy/install.sql/scripts/db250, you must specify the -i parameter followed by the high-level directory of your installation to ensure that the install script searches the proper directory.

- 6. To set the environment variables, choose one of the following:
 - 1. Add each variable to your profile using the command syntax in the following table.
 - 2. Enter the command syntax on the command line each time you start an executable.

Variable	Command Syntax
DSNAOINI	export DSNAOINI= <path dsnaoini="" file="" to=""></path>
LIBPATH	export LIBPATH= /usr/lpp/ <rules formatter<br="">install directory>/nnsy/ lib:\$LIBPATH</rules>
NNSY_CATALOGUES	export NNSY_CATALOGUES= /usr/lpp/ <rules formatter="" install<br="">directory>/nnsy/ NNSYCatalogues/<locale name=""></locale></rules>
NNSY_ROOT	export NNSY_ROOT= /usr/lpp/ <rules formatter="" install<br="">directory>/nnsy</rules>
РАТН	export PATH= /usr/lpp/ <rules formatter<br="">install directory>/nnsy/bin:\$PATH</rules>

New Era of Networks Product Environment Variables

Warning: When you are making changes to the paths, type the following to prevent overwriting all data currently in the path:

For LIB_PATH: export LIBPATH=\$NNSY_ROOT/lib:\$LIBPATH

For PATH: export PATH=\$NNSY_ROOT/bin:\$PATH

- 7. From the JCL PDS created in step 1 of this procedure, run the following jobs:
 - CRSTOGRP
 - CRDB
 - CRTSPACE
 - CRTABS
 - GRANTS
 - META

If these jobs run successfully, the New Era of Networks Rules and Formatter database is installed.

Executable and Catalogue File Location

To ensure the best performance, the executable and catalogue files of the New Era of Networks product should be placed on your local HFS drive.

If you place the product on a NFS drive, you must also mount these drives as binary. Failure to mount NFS drives as binary may result in unexpected product behavior as NFS attempts to translate the data.

Execute Rules and Formatter Extension for WebSphere Message Broker GUIs

From the Message Broker Perspective menu bar, select NNSY Menu > Formatter or NNSY Menu > Rules. Alternatively, you can open the Formatter or Rules GUIs using the toolbar buttons.