



MQSeries Everyplace for Multiplatforms

Read Me First

Version 1.2.7



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Version 1.2.7

Eighth Edition (March 2002)

This edition applies to MQSeries Everyplace for Multiplatforms Version 1.2.7 and to all subsequent releases and modifications until otherwise indicated in new editions.

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Please read

This document contains the installation instructions for MQSeries Everyplace for Multiplatforms Version 1.2.7 (generally referred to as MQSeries Everyplace in this document), and other important information that you should read before trying to use this toolkit.

License warning

MQSeries Everyplace for Multiplatforms Version 1.2.7 is a toolkit that enables developers to write MQSeries Everyplace applications and to create an environment in which to run them.

Before deploying this product and applications that use it in a production environment, please make sure that you have the necessary licenses.

To use MQSeries Everyplace on specified server platforms (other than for purposes of code development and test), *capacity-unit use authorizations* (which are recorded on Proof of Entitlement documents and valid to support use of MQSeries Everyplace according to published capacity unit and pricing group tables) must be obtained in order to be licensed to use the program on each machine and machine upgrade.

Device platform use authorizations (which are recorded on Proof of Entitlement documents and valid to support the use of MQSeries Everyplace) are required to use the product (other than for purposes of code development and test) on specified client platforms. These licenses do not entitle the user to use the MQSeries Everyplace Bridge, or to run on the server platforms specified in the MQSeries Everyplace pricing group lists published by IBM and also available on the Web via the URL mentioned below.

Please refer to <http://www.ibm.com/software/mqseries/> for details of these restrictions.

Summary of changes

This section describes changes to this edition of *MQSeries Everyplace for Multiplatforms Read Me First*. Changes since the previous edition of the book are marked by vertical lines to the left of the changes.

Changes for this edition (SC34-6182–00)

In addition to editorial corrections and improvements to the text, the following information has been modified or added:

- Product version number
- Migration notes updated

changes

Chapter 1. Installation Procedures

These procedures enable you to install MQSeries Everyplace on machines that are to be used for developing MQSeries Everyplace applications. In this release, the application and solution provider is responsible for deploying MQSeries Everyplace to pervasive devices.

The MQSeries Everyplace installation program is a Java jar file that has platform specific launchers that you can run from the product CD. The installation program extracts the working files to a temporary directory, copies the MQSeries Everyplace files onto your computer, and cleans up the working files.

Migration notes

This section contains information that you might need to consider when migrating from one version or release of MQSeries Everyplace to a higher version or release.

Migrating from version 1.2.5 or lower to version 1.2.7 or higher

If you are migrating to a higher version or release of MQSeries Everyplace from version 1.2.5 or lower, delete the following files:

- com.ibm.mqe.MQeFilter
- com.ibm.mqe.MQeVector
- com.ibm.mqe.MQeVectorElement

Deleting these files from your upgraded system avoids unnecessary footprint being consumed.

Software environments

This section describes the software that you need to have installed to be able to create and run MQSeries Everyplace applications.

Supported platforms

You can only install MQSeries Everyplace on certain server platforms. To transfer programs and Java classes to other platforms, you must use an appropriate download or file transfer program (not supplied).

Note: You can only install the C Bindings and Palm support on platforms marked * in the following lists.

Directly supported platforms with installation support

You can install the product using the built-in tools on the following supported platforms:

- Windows NT® v4 *
- Windows® 2000 *
- Windows 95/98/ME *

- AIX Version 4.3
- Solaris Versions 7 and 8
- Linux Intel Kernel 2.2 (installed using a zip file)
- Linux Redhat 6.2 (Kernel 2.2)
- HP-UX 11.0 (installed using a zip file)

Directly supported platforms without installation support

The following platforms are supported for the testing and deployment of MQSeries Everyplace, but only support installation by file transfer from another platform:

- WinCE 2.1 running on HP Jornada devices (Models 680 or 820)
- EPOC 32 bit Release 5 running on Psion devices (5MX Pro or NetBook)
- PalmOS, V3.0 or higher running on Palm V and IBM Workpad C3
- IBM 4690 OS with Java

Indirectly supported platforms

You can use the following platforms, but IBM will only investigate problems if the problem can be reproduced on one of the directly supported platforms listed above:

- Linux on zSeries® running Kernel 2.2
- iSeries®
- OS/2
- EPOC (on devices other than those listed above)
- WinCE (on devices other than those listed above)
- QNX Neutrino
- Pocket PC
- PalmOS (on devices other than those listed above)
- Any other platform running one of the Java environments listed in “Java environment”

Java environment

Running the Java APIs requires one of the following Java runtime environments:

- IBM Java runtime (JVM V1.1 or later)
- Any Java which is Sun Java (V1.1 or later) certified
- IBM VisualAge Micro Edition *
- Personal Java *

* These items are discussed in more detail below.

WebSphere MQ-bridge operation requires MQSeries Classes for Java. You can download the MQSeries Classes for Java as SupportPac ma88 from the IBM WebSphere MQ Web site at <http://www.ibm.com/software/mqseries/everyplace/>. You should check the level of Java that is required to run the version of MQSeries Classes for Java that you are using.

Personal Java

You can use Personal Java instead of other Java runtimes on device platforms.

Using MQSeries Everyplace requires the following optional classes of Personal Java:

- To use MQSeries Everyplace base classes:
 - `java.io.FileInputStream`
 - `java.io.FileOutputStream`
 - `java.io.File`
- To use the MQeGZIPCompressor:
 - `java.util.zip.GZIPOutputStream`
- To use any encryption:
 - `java.math.BigInteger`

The MQSeries Everyplace examples require some of the optional classes in packages `java.io` and `java.awt`.

VisualAge Micro Edition

VisualAge Micro Edition provides a Java IDE together with runtime environments for many different device platforms. A set of class libraries that solutions can choose from, depending on the device and applications requirements, accommodate the varying resource constraints on different devices. You can develop applications using MQSeries Everyplace in the VisualAge Micro Edition IDE and deploy those applications using the runtime environments. MQSeries Everyplace requires the use of the `jcIMax` class library (or higher).

Note: The VisualAge Micro Edition class libraries that are currently available on Palm do not support the running of MQSeries Everyplace.

C Bindings environment

The C Bindings APIs require:

- IBM Java runtime (JVM V1.2.2 or later)
- Any Java which is Sun Java (V1.2.2 or later) certified

You cannot use the C Bindings with Personal Java or VisualAge Micro Edition.

Storage requirements

The following table shows the storage you need to perform the installation of all the available options of MQSeries Everyplace:

Table 1. Storage required to perform installation

Operating system	Storage required
Windows NT (file system = NTFS)	23Mb
AIX	22Mb
Solaris	21Mb
Linux	22Mb

The following table shows the storage you need for the MQSeries Everyplace files after installation:

Table 2. Storage required for MQSeries Everyplace

Operating system	Storage required
Windows NT (file system = NTFS)	18Mb
AIX	15Mb
Solaris	14Mb
Linux	15Mb

Installation steps on Windows, AIX, Linux, and Solaris

Note: We strongly recommend that you uninstall any previous versions of MQSeries Everyplace before installing or reinstalling this new version (see “Uninstalling MQSeries Everyplace” on page 10). The installation program does not detect versions of the product prior to 1.2.4, and does not display any warnings.

At any time during the installation, click the **Back** button on a screen to take you back to previous screens and review or change information. To exit the install procedure and cancel the installation, click the **Cancel** button on any screen.

Notes:

1. On Windows NT/2000 your user id must have administrator access, otherwise the Start Menu icons for IBM MQSeries Everyplace may not appear.
2. On AIX you must be the root user to run the install successfully.

To install MQSeries Everyplace:

1. Insert the product CD into your CD-ROM drive.
2. Start the installation in one of the following ways:
 - a. From the platform specific launcher.

The launchers are held in the platform named subdirectories on the product CD. Double click on or run the correct launcher for your platform from the command line.

Notes:

- 1) If you copy the launcher to your local target machine, the setup.jar file must be copied into the parent directory of the directory in to which the launcher was copied. The launcher cannot be run from a root directory.
 - 2) If you run the install from a launcher and you see a message box with the text “No matching JVM was found” the installer was unable to find a Java environment to use. If you see this message you should use the setup.jar file for installation.
- b. From the setup.jar file :

Change to the product CD directory where the setup.jar is stored and run the installation program using the Java command on your computer. This command is typically java, jre, or jview. For example:

On Windows

```
set classpath=.\setup.jar;%classpath%
jview run
```

(If you use JVM 1.2.2 or higher, you can execute the jar file by double-clicking it.)

On Linux, AIX, and Solaris

```
CLASSPATH=./setup.jar:$CLASSPATH
export CLASSPATH
java run
```

3. On the Welcome screen, confirm that you want to install the MQSeries Everyplace program by clicking the **Next** button and then follow the prompts to complete your installation.

Note: If you wish to reinstall the product we strongly recommend that you remove any existing installations (see “Uninstalling MQSeries Everyplace” on page 10).

Silent Installation

You can also run the installer in silent mode. This means that no panels are displayed during the install and there are no prompts for input. As when running the install in graphical mode, there are two ways to run the install silently.

From the jar file

Run the install in the same way as previously described, but append the -silent flag. For example:

On Windows

```
set classpath=.\setup.jar;%classpath%
jview run -silent
```

On Linux, AIX, and Solaris

```
CLASSPATH=./setup.jar:$CLASSPATH
export CLASSPATH
java run -silent
```

From a platform specific launcher

Add the -is:silent -silent flags. For example:

On windows

```
setup.exe -is:silent -silent
```

On AIX

```
Setupaix.bin -is:silent -silent
```

On Linux

```
Setuplinux.bin -is:silent -silent
```

On Solaris

```
Setupsolaris.bin -is:silent -silent
```

By default the installer installs MQSeries Everyplace in the following directories on each platform:

Platform	Default installation directory
AIX	/opt/MQe
Linux	/opt/MQe
Solaris	/opt/MQe
Win32	\Program Files\MQe

To set a different installation directory for a silent install, append the `-P MQe.installLocation` flag to the install command as follows:

From the jar file

```
java run -silent -P MQe.installLocation="C:\my new install directory"
```

From a platform specific launcher

```
setup.exe -is:silent -silent -P MQe.installLocation=  
"C:\my new install directory"
```

Note: When using the `-P MQe.installLocation` parameter to override the install location during silent install, ensure that you specify the full path of the new destination.

Using Options Files with Silent Installs

When running the install silently you can specify an options file. The options file allows you to:

- Set the install to silent
- Change the install location
- Select which features to install

Use the following example options file run the install silently, set the install location to "C:\MQe", and install all features except the Palm feature:

```
# specify silent install  
-silent  
# set features to active  
-P MQSeriesEveryplace.active=true  
-P Documentation.active=true  
-P CBindings.active=true  
-P Palm.active=false  
# Set the install location  
-P MQe.installLocation="C:\MQe"
```

Notes:

1. Include the `"-is:silent"` flag in the options file if running the install from a launcher.
2. Do not leave any blank lines in the options.txt file.

3. Start all lines with `"#"` or a valid command.
4. You can have multiple commands on a single line.

The following examples show how to run the installer with an options file:

From the jar file

```
java -cp setup.jar run -options C:\options.txt
```

From a launcher

```
setup.exe -options C:\options.txt
```

Alternative installation steps

The MQSeries Everyplace classes are also provided as a zip file. You can use this file to install MQSeries Everyplace on devices where the graphical installer is not suitable or not supported. On a UNIX based system (such as Linux and HP-UX) you need to create a folder, copy the appropriate zip file into it, and then use an unzip utility to extract the class files. For example:

```
mkdir mqe
cp /cdrom/unixinst.zip mqe
cd mqe
unzip unixinst.zip
chmod -R +x *
```

Once the class files have been extracted, configure your environment to run MQSeries Everyplace programs. Please see the *MQSeries Everyplace for Multiplatforms Programming Guide* for more information.

Installed components

You can select various features during the installation of MQSeries Everyplace. These features are shown below, along with the components that are installed if the feature is selected.

MQSeries Everyplace

MQSeries Everyplace Java classes

A set of classes that implement all of the MQSeries Everyplace function. Subsets of these classes can be used to provide different MQSeries Everyplace configurations such as a subset for a device , or a subset for a server.

Helper classes

A set of classes derived from the base classes that implement some commonly used functions.

Example classes

A set of classes that demonstrate how to use many of the features of MQSeries Everyplace. The source code for these classes is also provided.

Utilities

Tools to assist with the programming and administration of MQSeries Everywhere.

MQSeries Everywhere C Bindings

C Bindings specific classes

Includes the package `com.ibm.mqe.bindings`. These are only required for the C Bindings and do not affect existing functionality.

Header and binary files

CBindings adds in extra binary files, and header files. These files are fully documented in the *MQSeries Everywhere for Multiplatforms C Programming Guide*

MQSeries Everywhere for Multiplatforms C Programming Guide SC34-6186-00

This book contains guidance and procedural information for writing MQSeries Everywhere C applications and administering your systems. The filename is `hmq9a103_MQSeriesEveryplace_C_ProgrammingGuide.pdf`.

MQSeries Everywhere for Palm

MQSeries Everywhere for Palm Device Code

This is the Palm SupportPac (eap1.zip). The installer unzips and installs the code.

MQSeries Everywhere for Multiplatforms Native Client Information SC34-6187-00

This book contains guidance and reference information for using MQSeries Everywhere on the Palm operating system. The filename is `eap1.pdf`.

Documentation

English language versions of the following books are provided in Adobe Acrobat readable format:

MQSeries Everywhere for Multiplatforms Introduction SC34-6183-00

This book provides a general introduction to MQSeries Everywhere, covering the product concepts and the relationship between MQSeries Everywhere and other WebSphere MQ products. The filename is `hmq8ac07_MQSeriesEveryplace_Introduction.pdf`.

MQSeries Everywhere for Multiplatforms Programming Guide SC34-6184-00

This book contains guidance and procedural information for writing MQSeries Everywhere Java applications and administering your systems. The filename is `hmq8a107_MQSeriesEveryplace_ProgrammingGuide.pdf`.

MQSeries Everywhere for Multiplatforms Programming Reference SC34-6185-00

This book contains detailed descriptions of the MQSeries Everywhere Java Application Programming Interface (API). The filename is `hmq8az07_MQSeriesEveryplace_ProgrammingReference.pdf`.

Notes:

1. The latest versions of these documents are available from the book section of the WebSphere MQ library Web site at: <http://www.ibm.com/software/mqseries/library/>.
2. If you need to obtain the Adobe Acrobat Reader, or would like up-to-date information about the platforms on which the Acrobat Reader is supported, visit the Adobe Systems Inc. Web site at: <http://www.adobe.com/>

Documentation in HTML

The product CD also supplies the MQSeries Everyplace documentation in HTML format. These files are not included in the product installation.

The following information is also provided in HTML but is not available in Adobe Acrobat readable format:

MQSeries Everyplace for Multiplatforms C Programming Reference

This book contains detailed descriptions of the MQSeries Everyplace C Application Programming Interface (API).

To view the HTML files, open the `index.html` file from the `html` subdirectory on the product CD. This opens a page that contains links to all the MQSeries Everyplace documents.

Note: You can access the latest versions of these documents from the book section of the WebSphere MQ library Web site at:

<http://www.ibm.com/software/mqseries/library/>.

MQSeries Everyplace components on the Web

The product CD does not supply the following MQSeries Everyplace components. However, these components are available as SupportPacs that can be freely downloaded from the MQSeries Everyplace Web site at <http://www.ibm.com/software/mqseries/everyplace/>. These are essential supplements to the licensed product and include:

EAP1: MQSeries Everyplace - Device code for the Palm OS

C programming language support for MQSeries Everyplace application development on the Palm OS

Note: This code is also included on the MQSeries Everyplace for Multiplatforms Version 1.2.7 product CD.

EP01: MQSeries Everyplace - Performance Report

Analyses MQSeries Everyplace performance on a variety of client platforms

ES01: MQSeries Everyplace - Administration Tool (MQExplorer v1.0)

A generic tool for all Java platforms that enables easy graphical administration of MQSeries Everyplace queue managers

ES02: MQSeries Everyplace - Explorer (MQe_Explorer v1.2)

An MQSeries Everyplace administration tool developed exclusively to support the Microsoft Windows range of operating systems

Note: Version 1.0 of MQe_Explorer is not compatible with MQSeries Everyplace Version 1.2.7.

The MQSeries Everyplace Web pages provide full details on how to download each SupportPac.

Uninstalling MQSeries Everyplace

The removal of MQSeries Everyplace from your computer depends on the operating system that you are running. Follow the instructions that relate to your operating system.

On Windows

You can uninstall MQSeries Everyplace from your Windows system in any of the following ways:

Using the Windows Control Panel

You can uninstall MQSeries Everyplace using the standard Windows Control Panel.

1. Open the "Control Panel" window by clicking on **Start->Settings->Control Panel**.
2. Double-click on the **Add/Remove Programs** icon.
3. Scroll through the list of programs in the resulting "Add/Remove Programs" dialog box and click on "IBM MQSeries Everyplace Version 1.2.7".
4. Click the **Add/Remove...** button to start the uninstall program.

Follow the on screen prompts or instructions until the program indicates that the uninstall is complete.

Using uninstall.exe

When installed on your computer, MQSeries Everyplace includes a program called uninstall.exe that you can use to uninstall it. To uninstall MQSeries Everyplace, double-click the uninstall.exe or use the Command:

```
<MQe directory>\Uninst\uninstall.exe
```

<MQe directory> is the directory where you installed MQSeries Everyplace. This launches the Uninstall program. Follow the screen prompts or instructions until the program indicates that the uninstall is complete.

Using uninstall.jar

Use the uninstall.jar file as follows:

```
set classpath=<MQe directory>\Uninst\uninstall.jar;%classpath%
jview run
```

On AIX, Solaris, and Linux

You can uninstall MQSeries Everyplace from your computer in any of the following ways:

Note: On AIX always use the uninstall launcher or jar file, *do not use SMIT*.

Using uninstall.bin

When installed on your computer, MQSeries Everyplace includes a program called `uninstall.bin` that you can use to uninstall it. To uninstall MQSeries Everyplace, use the Command:

```
<MQe directory>/Uninst/uninstall.bin
```

<MQe directory> is the directory where you installed MQSeries Everyplace. This defaults to `/opt/MQe`, but you can change this during the installation procedure. This command launches the Uninstall program. Follow the screen prompts or instructions until the program indicates that the uninstall is complete.

Using uninstall.jar

Use the `uninstall.jar` file as follows:

```
CLASSPATH=<MQe directory>/Uninst/uninstall.jar:$CLASSPATH
export CLASSPATH
java run
```

This command launches the Uninstall program. Follow the screen prompts or instructions until the program indicates that the uninstall is complete.

Note: Do not try to uninstall using SMIT on AIX or `pkgm` on Solaris as this will not remove the product correctly.

Silent Uninstall

You can run the uninstaller in silent mode. This means that no panels are displayed during the uninstall and there are no prompts for input. There are two ways to run a silent uninstall:

From the jar file

Run the uninstall in the same way as previously described, but append the `-silent` flag. For example:

On Windows

```
set classpath=<MQe directory>\Uninst \uninstall.jar;%classpath%
Jview run -silent
```

On AIX, Solaris, and Linux

```
CLASSPATH=<MQe directory>/Uninst/uninstall.jar:$CLASSPATH
export CLASSPATH
java run -silent
```

From a platform specific launcher

Add the `-is:silent` `-silent` flags. For example:

On Windows

```
uninstall.exe -is:silent -silent
```

On Linux/Solaris/AIX

```
uninstall.bin -is:silent -silent
```

Using Options Files with Silent Uninstall

You can specify an options file when running the uninstall silently. The options file allows you to:

- Set the uninstall to silent
- Select which features to uninstall

The following example options file sets the uninstall to run silently, and chooses to uninstall all the features except the Documentation feature.

```
#specify silent uninstall
-silent
#set features to active
-P MQSeriesEveryplace.active=true
-P Documentation.active=false
-P CBindings.active=true
-P Palm.active=true
```

Notes:

1. Include the `.-is:silent....` flag in the options file if running the uninstall from a launcher.
2. Do not leave any blank lines in the options.txt file.
3. Start all lines with `.#...`, or a valid command.
4. You can have multiple commands on a single line.

The following examples show how to run the uninstaller with an options file:

From the jar file

```
java -cp uninstall.jar run -options C:\options.txt
```

From a launcher

```
uninstall.exe -options C:\options.txt
```

Applying maintenance to MQSeries Everyplace

Maintenance updates for MQSeries Everyplace are always shipped as a complete new release. There are two options when upgrading from one release to another:

Completely uninstall the current level, and install the new level in the same directory

We recommend that you keep the install package for the current level to allow it to be restored later if necessary.

Keep the existing level and install the new level into a new directory

After installation, check your classpath to ensure that the latest level of

MQSeries Everyplace is being invoked. If installing on Windows, make sure that you give the shortcuts folder for the new install a different name to the existing one.

For more general information on maintenance updates and their availability see the WebSphere MQ family Web page at <http://www.software.ibm.com/mqseries/>.

Chapter 2. Getting started

This chapter provides information to enable you to start using the MQSeries Everyplace toolkit.

Readme file

Before proceeding, ensure you have read the Readme file, which contains last minute information about the MQSeries Everyplace files that you have copied from the product CD. Carry out any extra installation procedures that might be described in the Readme.

Getting started with the Java API

Creating an initial system

The *MQSeries Everyplace for Multiplatforms Introduction* manual contains a chapter headed 'Getting started with MQSeries Everyplace'. The 'Using MQSeries Everyplace' section of this chapter describes the different stages of use of the product, and the 'Gaining experience' section provides information on how to get an MQSeries Everyplace system up and running.

Writing your own programs

When you are ready to modify your initial system and to write your own programs, use the information provided in the *MQSeries Everyplace for Multiplatforms Programming Guide* and *MQSeries Everyplace for Multiplatforms Programming Reference*.

Getting started with the C Bindings

To use the C Bindings, install the Java code, and C Bindings option, using the installer.

For guidance on how to get started with the C Bindings please see the first three chapters of the *MQSeries Everyplace for Multiplatforms C Programming Guide*

Chapter 3. Translation

In Version 1.2.7 the following components of MQSeries Everyplace have been translated into languages other than English:

- Graphical user interface for the mini-certificate server
- Example trace graphical user interface

Other components such as the trace messages are NLS enabled, but have not been translated.

Translated documentation

The *MQSeries Everyplace for Multiplatforms Introduction* has been translated into languages other than English. These translated documents are available for download from the WebSphere MQ library Web site at www.ibm.com/software/mqseries/library/.

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