

## IBM WEBSPHERE MQ - INSTALLATION (LINUX & WINDOWS)

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## Installing IBM WebSphere MQ V8.0 on LINUX

### Planning your installation

- Software used “mqadv\_dev80\_linux\_x86-64.tar”
- Use the below link to download IBM MQ
- <http://www.ibm.com/developerworks/downloads/ws/wmq/>

Links which can be useful for reference

- [https://www.ibm.com/support/knowledgecenter/SSFKSJ\\_8.0.0/com.ibm.mq.ins.doc/q008640\\_.htm](https://www.ibm.com/support/knowledgecenter/SSFKSJ_8.0.0/com.ibm.mq.ins.doc/q008640_.htm)
- [https://www.ibm.com/support/knowledgecenter/SSFKSJ\\_8.0.0/com.ibm.mq.ins.doc/q008670\\_.htm](https://www.ibm.com/support/knowledgecenter/SSFKSJ_8.0.0/com.ibm.mq.ins.doc/q008670_.htm)
- [https://www.ibm.com/support/knowledgecenter/SSFKSJ\\_8.0.0/com.ibm.mq.ins.doc/q115250\\_.htm](https://www.ibm.com/support/knowledgecenter/SSFKSJ_8.0.0/com.ibm.mq.ins.doc/q115250_.htm)

### 1. Checking the availability of 'rpm' on the Linux Ubuntu distribution

WebSphere MQ for Linux is installed using the package management system 'RPM', which is not installed by default on the Ubuntu distribution. You can use the 'dpkg-query' command in a terminal to determine if RPM is installed on your system as follows:

```
dpkg-query -W --showformat '${Status}\n' rpm
```

If the response from this command is of the form:

```
install ok installed
```

```
user@host: ~  
File Edit View Search Terminal Help  
user@host:~$ dpkg-query -W --showformat '${Status}\n' rpm  
install ok installed  
user@host:~$
```

Then RPM is already installed on your system and no further action on this step is required.

If the 'dpkg' command returns output of the form:

unknown ok not-installed

```
user@host: ~  
File Edit View Search Terminal Help  
user@host:~$ dpkg-query -W --showformat '${Status}\n' rpm  
unknown ok not-installed  
user@host:~$
```

Then RPM is not installed on your system, and you must install the RPM package before attempting to install WebSphere MQ. This can be achieved using the following command, which requires root authority (obtained in this example using the 'sudo' command):

```
sudo apt-get install rpm
```

If this command does not complete successfully, consult your Ubuntu administrator for instructions specific to your system to install the 'rpm' package.

Now that 'rpm' is installed, your system is ready to install WebSphere MQ. This procedure is not identical to that of the RPM based distributions, because the RPM database on your Ubuntu system is empty (or sparsely populated), and the WebSphere MQ package operating system requisite packages are unlikely to be contained within the RPM database, despite the function being available as provided by the packages within the 'dpkg' database.

## 2. Accepting the license

The WebSphere MQ license must be accepted before the packages are installed. To do this, open a shell terminal, and change directory to the location where the downloaded WebSphere MQ packages have been extracted to. All of the following commands require root authority to complete successfully. This can be gained by prepending the 'sudo' text to the following commands, or by changing to the 'root' user in the shell with the 'su' command.

Run the mqlicense.sh script to view the license agreement, using the command:

```
./mqlicense.sh
```

Alternatively you can view a text only version, which can be read by a screen reader, using the command:

```
./mqlicense.sh -text_only
```

If you want to accept the license agreement without it being displayed, you can run the following command:

```
./mqlicense.sh -accept
```

```
File Edit View Search Terminal Help
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$ ls
copyright                               MQSeriesMsg_fr-7.5.0-2.x86_64.rpm
crtmqpkg                               MQSeriesMsg_hu-7.5.0-2.x86_64.rpm
lap                                    MQSeriesMsg_it-7.5.0-2.x86_64.rpm
licenses                               MQSeriesMsg_ja-7.5.0-2.x86_64.rpm
mqlicense.sh                           MQSeriesMsg_ko-7.5.0-2.x86_64.rpm
MQSeriesAMS-7.5.0-2.x86_64.rpm          MQSeriesMsg_pl-7.5.0-2.x86_64.rpm
MQSeriesClient-7.5.0-2.x86_64.rpm       MQSeriesMsg_pt-7.5.0-2.x86_64.rpm
MQSeriesExplorer-7.5.0-2.x86_64.rpm     MQSeriesMsg_ru-7.5.0-2.x86_64.rpm
MQSeriesFTAgent-7.5.0-2.x86_64.rpm      MQSeriesMsg_Zh_CN-7.5.0-2.x86_64.rpm
MQSeriesFTBase-7.5.0-2.x86_64.rpm       MQSeriesMsg_Zh_TW-7.5.0-2.x86_64.rpm
MQSeriesFTLogger-7.5.0-2.x86_64.rpm     MQSeriesRuntime-7.5.0-2.x86_64.rpm
MQSeriesFTService-7.5.0-2.x86_64.rpm    MQSeriesSamples-7.5.0-2.x86_64.rpm
MQSeriesFTTools-7.5.0-2.x86_64.rpm      MQSeriesSDK-7.5.0-2.x86_64.rpm
MQSeriesGSKit-7.5.0-2.x86_64.rpm        MQSeriesServer-7.5.0-2.x86_64.rpm
MQSeriesJava-7.5.0-2.x86_64.rpm         MQSeriesXRClients-7.5.0-2.x86_64.rpm
MQSeriesJRE-7.5.0-2.x86_64.rpm          MQSeriesXRService-7.5.0-2.x86_64.rpm
MQSeriesMan-7.5.0-2.x86_64.rpm          PreReqs
MQSeriesMsg_cs-7.5.0-2.x86_64.rpm       READMEs
MQSeriesMsg_de-7.5.0-2.x86_64.rpm       repack
MQSeriesMsg_es-7.5.0-2.x86_64.rpm
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$ sudo ./mqlicense.sh -accept

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restricted by GSA ADP Schedule Contract with IBM Corp.

Agreement accepted: Proceed with install.

user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$
```

You must accept the license agreement before you can proceed with the installation.

## 3. (Advanced Users) Installing with a non-default package name

If this installation is not the first installation of WebSphere MQ on the system, then you must run the '**crtmqpkg**' command to create a unique set of package names for this installation of WebSphere MQ prior to installing on the system. This step is identical to that used on the RPM based distributions, with one notable exception:

**NOTE:** The code change associated with APAR [IC96336](#) *is required* to be able to install and use WebSphere MQ in a non-default installation location on the Linux Ubuntu distribution. Without this update, 'crtmqpkg' will abort without creating the rebuilt RPM packages.

The following version of the crtmqpkg script is located here, suitable **ONLY** for WebSphere MQ 7.5 installations:



[crtmqpkg](#)

Replace the version of 'crtmqpkg' in your WebSphere MQ 7.5 installation media with this version if you are altering the package name to permit multiple simultaneous installations of the product.

Further details of using this script are available within the Information Center. To create a set of packages with the name extension "\_LOC1", run the script with the syntax:  
./crtmqpkg LOC1

```
File Edit View Search Terminal Help
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$ sudo ./crtmqpkg LOC1
Repackaging WebSphere MQ for "x86_64" using suffix "LOC1"
#####
Repackaging complete - rpms are at "/var/tmp/mq_rpms/LOC1/x86_64"
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$
```

## 4. Installing WebSphere MQ

You are now ready to install WebSphere MQ. The components of WebSphere MQ contained within each .rpm package are described in the generic Linux installation instructions.

Two additional flags are required over the RPM based distribution installations on the Linux Ubuntu distribution:

--nodeps : Required for WebSphere MQ 7.5 because the RPM database on Ubuntu is empty or sparsely populated, which means that the operating system package dependencies requested by the WebSphere MQ packages are not listed within the RPM package database. ***This requirement has been removed in WebSphere MQ v8.0.***

**IMPORTANT: This option disables the safety checks contained within the WebSphere MQ RPM packages to ensure that all WebSphere MQ packages contain their necessary prerequisite packages.** Therefore if you are not installing all the components, you ***must*** ensure that appropriate sets are installed, as listed in the table below.

--force-debian : Required to prevent a protective warning message from Ubuntu's version of 'rpm' that RPM packages are not intended to be directly installed using 'rpm' on Ubuntu.

Because the dependency checking is disabled during the Ubuntu

WebSphere MQ installation, the "MQSeriesRuntime" package must be installed **before** any other packages, which the other packages all depend on:

```
rpm -ivh --nodeps --force-debian MQSeriesRuntime-*.rpm
```

Do not include other packages in the same installation command as the MQSeriesRuntime package, as this may result in your installation failing, dependent upon which order your system installs the packages.

Following the "MQSeriesRuntime" component, choose which components you wish to install and install them. For example, to install the "MQSeriesGSKit" component, consult the table to check the dependencies on this package. For the "MQSeriesGSKit" package, it requires both the "MQSeriesRuntime" and "MQSeriesJRE" packages. As you already have the "MQSeriesRuntime" package installed, you only need to include the "MQSeriesJRE" package. Components other than the "MQSeriesRuntime" can be installed in one command, by ensuring that all their prerequisite packages are either already installed, or included in the install command.

For example:

```
rpm -ivh --nodeps --force-debian MQSeriesGSKit-*.rpm MQSeriesJRE-*.rpm
```



```
File Edit View Search Terminal Help
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$ sudo rpm -ivh --nodeps --force
-debian MQSeriesRuntime-7.5.0-2.x86_64.rpm
Preparing... ##### [100%]
 1:MQSeriesRuntime ##### [100%]
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$ sudo rpm -ivh --nodeps --force
-debian MQSeriesGSKit-7.5.0-2.x86_64.rpm MQSeriesJ
MQSeriesJava-7.5.0-2.x86_64.rpm MQSeriesJRE-7.5.0-2.x86_64.rpm
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$ sudo rpm -ivh --nodeps --force
-debian MQSeriesGSKit-7.5.0-2.x86_64.rpm MQSeriesJRE-7.5.0-2.x86_64.rpm
Preparing... ##### [100%]
 1:MQSeriesJRE ##### [ 50%]
 2:MQSeriesGSKit ##### [100%]
user@host:~/software/WMQ/7.5.0.2/linux_x86-64_MR$
```

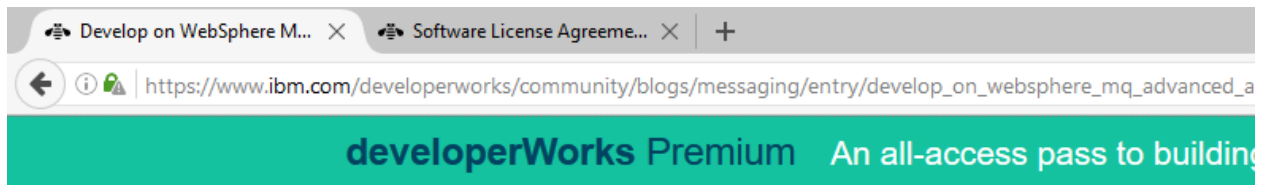
Note that output indicating that the package has only been installed 50% as shown in the above screenshot, is an artifact of the terminal updating from RPM, and does not indicate that only half of the package has been installed.

The following table details the package component dependencies. In order to install and use the package listed in the first column, the components listed in the last column must also be installed on the system.


## Installing IBM WebSphere MQ V8.0 on Windows

- Software Download Link:

“<http://www.ibm.com/developerworks/downloads/ws/wmq/>”



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Once you have downloaded, [install using our guide](#) and join the discussion with other MQ developers on our forum.

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And check out our [podcasts](#) on iTunes, designed to get you up and running with WebSphere MQ quickly and easily.

- Click on “I AGREE” and save the FILE.
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  - ✓ IBM WebSphere MQ Advanced Message Security Component V8.0
  - ✓ IBM WebSphere Managed File Transfer Managed Endpoint V8.0

- ✓ IBM WebSphere Managed File Transfer Service V8.0
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After downloading extract the file and start the installation process by using MQLaunch.exe