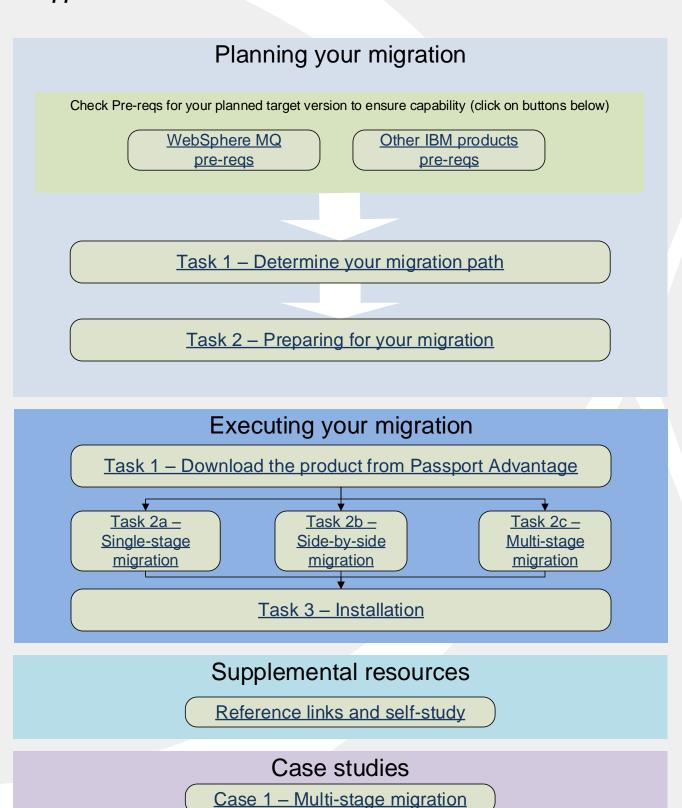
WebSphere / IBM MQ migration



Use this self-help tool to plan and execute your WebSphere MQ migration. Step through the tool by clicking on each of the blocks below as applicable.



Case 2 – Cluster migration

Task 1 – Determine your migration path



Current Version	New Features	Target Version	Potential Impacts
V7.1 Out of Support April 30 th 2017	What's new V8 What's new V8	V7.5 Planning Guide V8 Planning Guide V9 Planning Guide	Channel Authentication Password Authentication Changes that affect migration What changed?
V7.5	What's new V8	V8 Planning Guide V9 Planning Guide	Channel Authentication Password Authentication Changes that affect migration What changed?
V8.0	What's new V9	V9 Planning Guide	Channel Authentication Password Authentication Changes that affect migration What changed?

Special considerations

IBM MQ v9 is the preferred target migration path and should be considered the best option.

When choosing your target version take into account the features included in the new version and weigh the benefits of migrating to the latest version to decrease how often a migration is required.

When skipping versions (for example migrating from v7.1.0 to v9) ensure you look at the What's new for each release you skip to ensure you know all the new features you will gain.

Check the IBM Lifecycle page to see when products will go out of support.



Task 2 – Preparing for your migration



Target version

V7.5 Preparing for migration

V8 Preparing for migration

V9
Preparing for migration

General migration considerations

	V7.1	V7.5	V8
Support length remaining	Short	Medium	Long
In-place migration	32/64bit	32/64bit	64bit
Published performance reports	Yes	Yes	Yes
Single install package	Yes	Yes	Yes
File Authorization	Yes	Yes	Yes

Migration method considerations

Single stage migration	Side-by-side migration	Multi-stage migration
Replaces the only installation of IBM MQ on a server, with a later release	Allows the installation of new version along side the older	Allows the installation of new version along side the older
Potential changes to client configurations	Earlier version and new version clients can coexist	No immediate need to change your client configurations
Preserves existing scripts and procedures for running IBM MQ the most	Existing Qivigr remain associated with the old	QMgrs can remain associated with the earlier version, until such time that you want to migrate them to the new version
QMgrs get migrated to new version immediately		New QMgrs can be created for either installed version

Migration coexistence, compatibility and interoperability considerations

V7.5

V8

۷9





Task 2a – Single-stage migration



V7.5 Single-stage migration

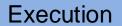
V8 Single-stage migration

V9 Single-stage migration

Single stage migration

Single-stage migration is the term used to describe replacing the only installation of IBM MQ on a server, with a later release.

Until WebSphere® MQ version 7.1, single-stage was the only migration scenario. Single-stage migration preserves existing scripts and procedures for running IBM MQ the most. With other migration scenarios you might change some scripts and procedures, but you can reduce the effect queue manager migration has on users.



Task 2b - Side-by-side migration



V7.5 Side-by-side migration

V8 Side-by-side migration

V9 Side-by-side migration

Side-by-side migration

Side-by-side migration is the term used to describe installing a new version of IBM MQ alongside an older version on the same server.

Queue managers continue running, and remain associated with the older version of IBM MQ, during the installation and verification of the new version of IBM MQ.

When you decide to migrate queue managers to the new version of IBM MQ, you stop all queue managers, migrate them all to the new version, and uninstall the old version of IBM MQ.

The side-by-side migration scenario is less flexible than the multistage migration. The advantage the side-by-side scenario has over the single-stage scenario is that you can install and verify the new IBM MQ installation on the server before switching over to it.

The process is based on the following premise:

Install additional IBM MQ code alongside existing installation while queue managers are still running.

Move queue managers one at a time to the new installation. Migrate and test applications one at a time.

With the side-by-side approach, you can assign a later version of IBM MQ to be the primary installation, whereas, with the multistage approach, you cannot do so, if you have WebSphere MQ version 7.0.1 installed, until you uninstall WebSphere MQ version 7.0.1.

With a later version of IBM MQ set as the primary installation, many applications restart without having to re-configure their environment, and IBM MQ commands work without providing a local search path.





Task 2c - Multi-stage migration



V7.5 Multi-stage migration

V8 Multi-stage migration

V9 Multi-stage migration

Multi-stage migration

Multistage migration is the term used to describe running a new version of IBM MQ alongside an older version on the same server.

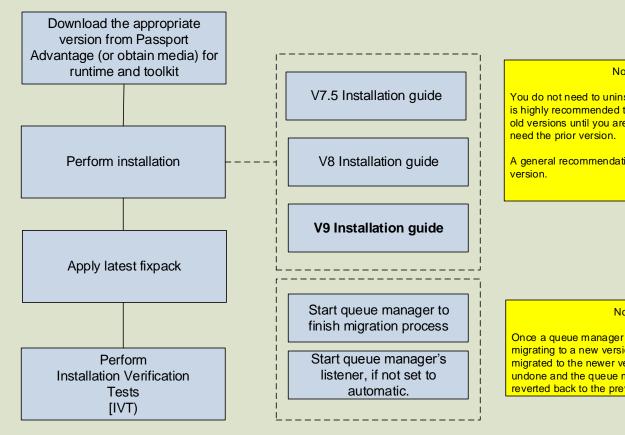
After installing the new version alongside the old, you can create new queue managers to verify the new installation, and develop new applications.

At the same time, you can migrate queue managers and their associated applications from the old version to the new. By migrating queue managers and applications one-by-one, you can reduce the peak workload on your staff managing the migration.



Task 3 – Installation





Notes

You do not need to uninstall a prior version and it is highly recommended that you do not uninstall old versions until you are confident you no longer

A general recommendation is to keep one prior

Notes

Once a queue manager has been started, after migrating to a new version, it will also be migrated to the newer version. This cannot be undone and the queue manager cannot be reverted back to the previous version.

Case Study

Migration to IBM MQ V8 on hub servers



Use Case

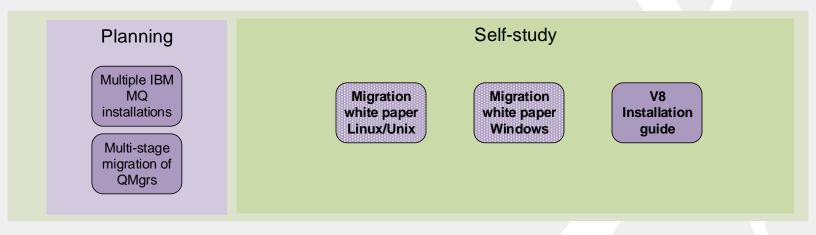
Industrial Design Distributors (IDD) are tasked with migrating off of WebSphere MQ V7.0.1.12 as it is no longer supported by IBM as of September 30th, 2015. Their main concern is with a group of "hub" WebSphere MQ servers that receive high volume inventory orders daily from remote store-front systems.

Migration Path

IBM recommends doing a multi-stage migration to IBM V8. This allows for IBM V8 to be installed along side of WebSphere MQ V7.0.1.12. Testing of the new version can be actioned, before migrating any V7.0.1.12 QMgr(s) to the new version.

It is encouraged that you create a new QMgr for the V8 installation and do testing. Once test verification is completed, promote the production V7.0.1.12 QMgrs to V8 as needed.

Please note that once a QMgr has been migrated, it is not possible to reverse it back to the previous version. For this reason we suggest making a file system backup of all V7.0.1.12 QMgrs as a best practice.



Case Study

Migration to IBM MQ V8 in a cluster of QMgrs



Use Case

Hydra Pharmacology is tasked with migrating WebSphere MQ V7.0.1.2, because it is going out of support on September 30th, 2015. These older QMgrs are in a WMQ cluster and responsible for processing prescriptions for 200+ satellite pharmacies.

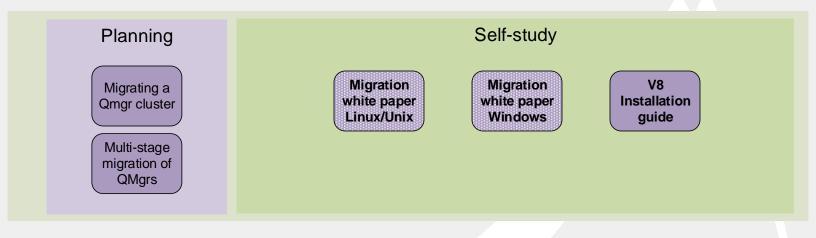
Migration Path

IBM recommends doing a multi-stage migration to IBM V8, but the V7.0.1.2 servers must first be upgraded to V7.0.1.6 or above. In order to install V8 along side of a previous version, that version must be at V7.0.1.6 or greater.

The multiple installation of IBM MQ V8 along side of WebSphere MQ V7.0.1.6+ allows for testing of the new version, before migrating any V7.0.1 QMgr(s) to the new version.

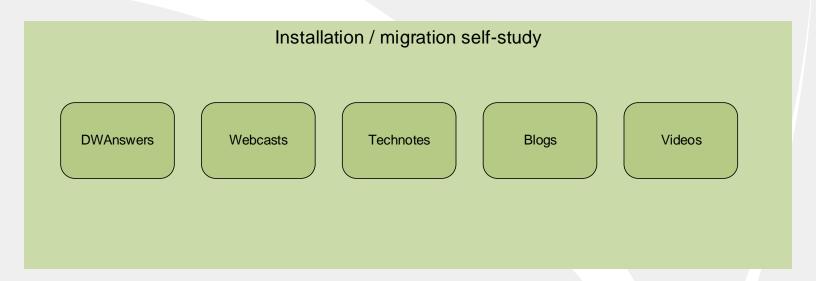
Once test verification is completed, cluster QMgrs can be migrated to V8 as needed. IBM recommends migrating all Full Repositories before migrating any Partial Repositories. Also, migrate all Full repositories at the same time.

Please note that once a QMgr has been migrated, it is not possible to reverse it back to the previous version. For this reason we suggest making a file system backup of all V7.0.1.6+ QMgrs as a best practice.



Supplemental resources





Link reference

