WebSphere / IBM MQ for z/OS migration



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

Updated March 2017. Find the most current version of the document here.

Planning your migration

Check Pre-reqs for your planned target version to ensure capability (click on buttons below)

IBM MQ pre-regs

Other IBM products
pre-regs

Task 1 – Determine your migration path

Task 2 - Prepare for your migration

Executing your migration

Task 1 – Purchase the product from Shopz or a sales rep

Task 2 – Install/Migrate

Supplemental resources

Reference links and self-study

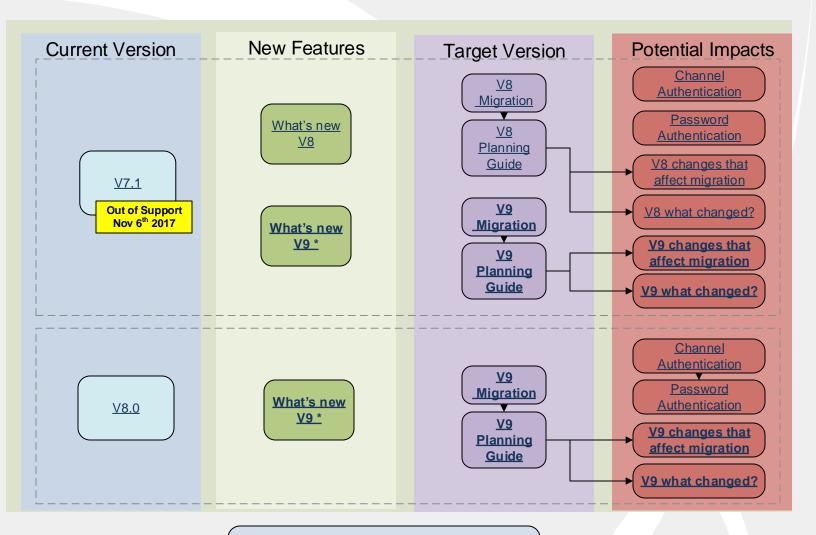
Case studies

Case 1 – Queue Sharing Group migration

Case 2 - Cluster migration

Task 1 – Determine your migration path





MQ for z/OS Product Lifecycle information

Special considerations

*Starting with IBM MQ Version 9.0 there are two types of release: a Long Term Suppport (LTS) 9.0.0 release and a Continuous Delivery (CD release or CDR) 9.0.x release. For further information see

(IBM MQ V9 release types

(IBM MQ FAQ for Long Term Support and Continuous Delivery releases

Backwards migration is not supported for a Continuous Delivery (CD) release.

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 to v9) ensure you look at the What's New and What's Changed information for each release you skip to ensure you know all the new features you will gain.

Migration from older unsupported releases may require migration to an intermediate release. See

V8.0: Migration paths

V9.0.x: Migration paths



Planning

Task 2 – Preparing for your migration



Target version

V8 Migration Order of tasks

V9 Migration
Order of
tasks

General migration considerations

Migration-related PTFs

Preventive Service Planning (PSP) buckets

V8: Problems and solutions when migrating to IBM MQ for z/OS

IBM MQ FAQ for Long Term Support and Continuous Delivery releases

Migration coexistence, compatibility and interoperability considerations

V8 Introduction to coexistence, compatibility, and interoperability V8 coexistence including ISPF panels, clusters, QSGs

V9 Introduction
to coexistence,
compatibility,
and
interoperability

V9 coexistence including ISPF panels, clusters, QSGs

Notes

To be able to migrate back to the prior version, you must apply the migration-related PTFs to the old release, and you must start the new version with OPMODE=(COMPAT,nnn). Backward migration is not possible after OPMODE=(NEWFUNC,nnn) has been used and is not supported for a Continuous Delivery (CD) release.

If you want to be able to fall back to the old release but do not have the required maintenance applied, take a full backup of the page sets, BSDSs and active recovery logs at the old release level (prior to migration) after the queue manager is shut down cleanly. Any new messages put to the queues at the new release will not be available, and you may experience channel sequence errors, but this back-up will give you a "point in time" to return to.

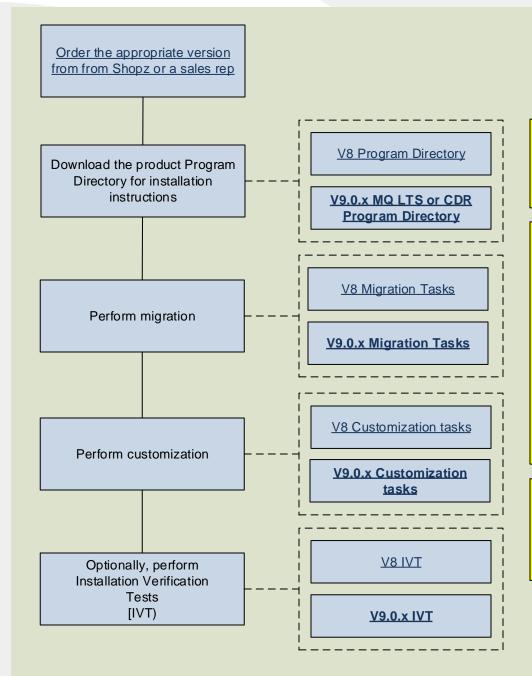
The migration-related PTFs also provide toleration code to allow the new version to coexist in a Queue Sharing Group with queue managers at previous releases. See Case Study 1 for more details.



Home

Task 2 – Install/Migrate





Notes

During installation, follow instructions that accompany the installation media, which also refer to the MQ Program Directory

Notes

If the SMP/E APPLY CHECK has errors in the CAUSER section for APARs that do not have PTFs yet, you may:

- Review the APAR to see if it applies to your environment (replace the "A" in the number with a "P" to get the APAR number). If not, you can bypass the HOLD ERROR for that fix.
- Request a ++APAR from the Support Center if one is available.

Be sure to use the SMP/E
GROUPTEXEND option as advised in the
Program Directory.

Notes

A common step missed during migration or customization is to check for new or updated JCL or CSQINxx initialization input data sets in SCSQPROC.

Case Study

Migration to IBM MQ V8 in a Queue Sharing Group environment



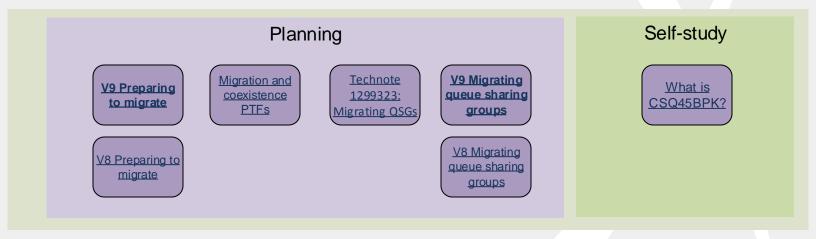
Use Case

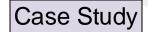
MGR Financial is tasked with migrating off of WebSphere MQ for z/OS V7.1.0 as it will no longer be supported by IBM as of November 6, 2017. There are three queue managers that are part of a Queue Sharing Group (QSG).

Migration Path

See the links below for details. A few highlights are:

- You will need to apply coexistence PTFs for the current release. Follow instructions in the PTF hold data to run CSQ45xxx jobs. Start every queue manager in the QSG at the old release with this maintenance level before migrating any of the queue managers to the new version.
- You will run CSQ45xxT, CSQ45BPL, and CSQ45GEX jobs from SCSQPROC for the new release to migrate the DB2 tables.
- You can migrate the queue managers to the new release one at a time. An outage of the entire QSG is not required.
- If you need to set OPMODE with NEWFUNC to take advantage of a new function controlled by this parm, each queue manager in the QSG will need NEWFUNC set and will need to be restarted. All but the last queue manager started in this mode will need to be restarted a second time for NEWFUNC to take effect.





Migration to IBM MQ V8 or v9 in an MQ queue manager cluster



Use Case

Hydra Pharmacology is tasked with migrating from WebSphere MQ V7.1.0, because it is going out of support on November 6, 2017. These older queue managers are in an MQ cluster and are responsible for processing prescriptions for 200+ satellite pharmacies.

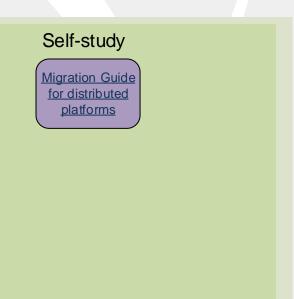
Migration Path

Migrate to a supported release of V8 or V9.

IBM recommends migrating all Full Repositories before migrating any Partial Repositories. Also, migrate all Full repositories at the same time.

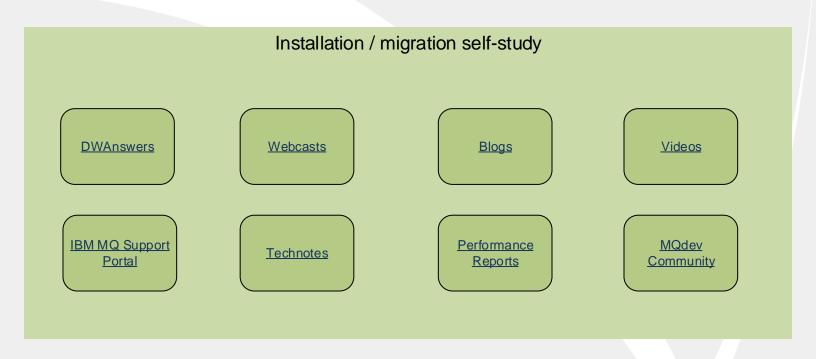
If some members of the cluster are on distributed platforms, review the migration guide for those platforms using the link below.

Planning V8 Queue V9 Queue manager cluster manager cluster migration <u>migration</u> V9 Clustering: V8 Migrating a Migration and queue manager modification <u>cluster</u> best practices V8 Clustering: Migration and modification best practices



Supplemental resources





Link reference

