

# IBM WebSphere Commerce V8.0

## Migration Considerations



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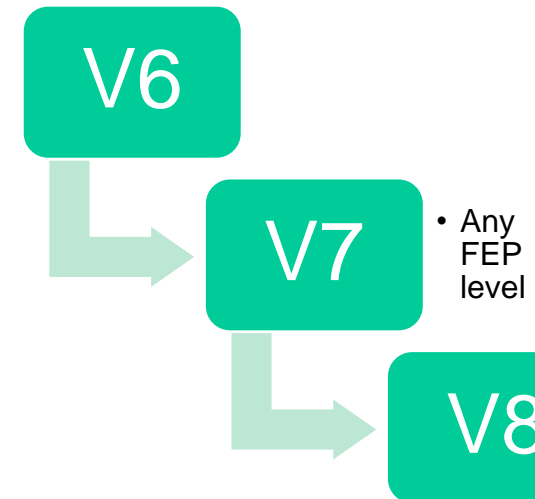
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# Agenda

- Supported migration paths
- Management Center Considerations
- Overall migration process
- Migration tooling

## Supported Migration Paths

- The migration tooling included with V8 supports migration from *any* level of V7 to V8
  - If you are currently using an older version of WebSphere Commerce, you must upgrade to V7 first
  - Note that an upgrade from V7 FEP6 or prior will assume adoption of the FEP7 Search architecture
- If you have customizations to Management Center, see the Management Center Consideration slides for more detail
- If you are on Express Edition, you will need to migrate to Professional or Enterprise
- Migration scripts will migrate as-is
  - New store features will have to be adopted manually through code migration
  - To manage risk, we generally recommend “Lift & Shift” migrations, if possible



## Management Center Considerations

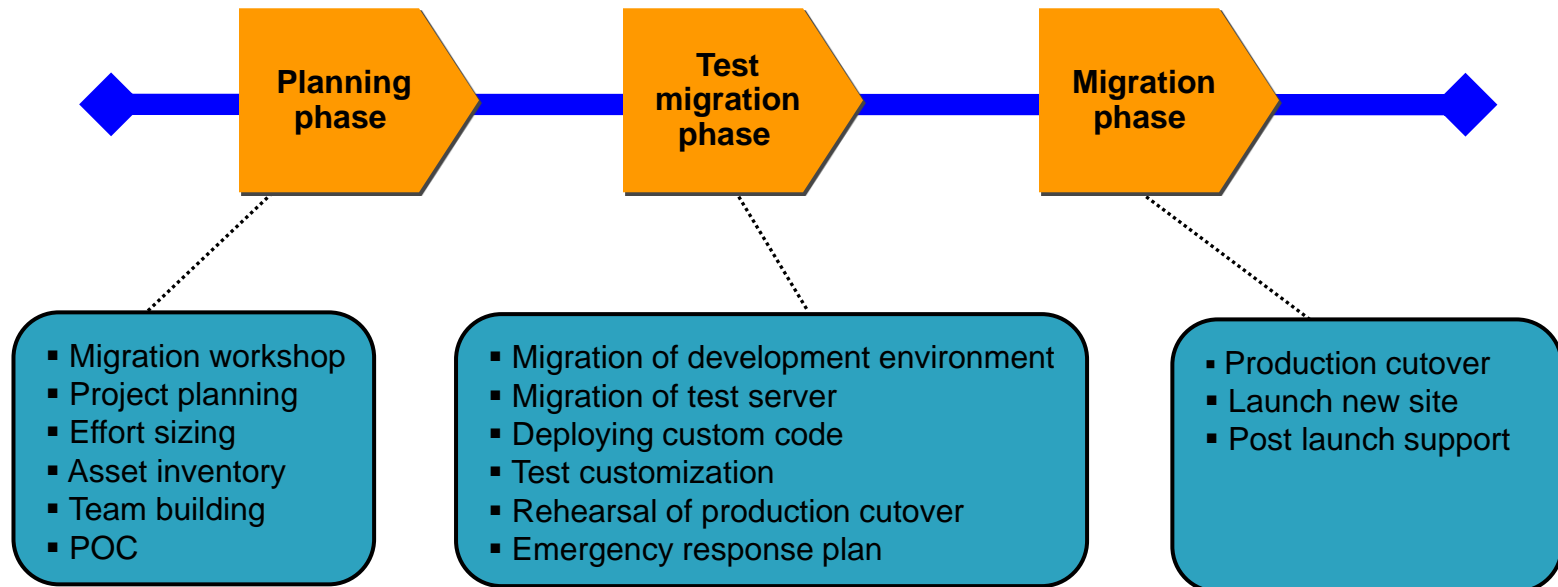
- The Management Center framework has been refreshed from the OpenLaszlo-based Flash client to a DHTML-based
  - In addition, the user interface has been refreshed
- Any existing OpenLaszlo customizations will have to be ported to the new framework manually
  - A tool to aid this migration is in development *to be expected* in 1H2016
- If you have extensive Management Center customizations, you may consider deploying the V7 Flash-based Management Center on V8
  - A **V7 FEP8** version of Management Center is supported for V8 runtime
  - Note that the V8 toolkit does not include an OpenLaszlo compiler, so any maintenance on the V7 Management Center will require a V7 FEP8 level toolkit
    - See next slide for details
  - Since dual toolkits are needed, we recommend that you keep any changes to the Management Center on V8 to a minimum

## Management Center Compatibility Mode

- Since the server-side services guarantee backwards compatibility, a V7 (FEP8) level Management Center client connecting to a V8 server is supported
- You will need to keep at least one V7 FEP8 toolkit around so that you can maintain and compile the OpenLaszlo-based Management Center
- The new Management Center is also using the “LOBTools” Web module name, so the process is:
  - If not already on V7 FEP8, upgrade and regression test Management Center to a V7 FEP8 toolkit
  - Clean the LOBTools project from your V8 toolkits and check in the project to ensure none of the V8 files exist in your source code repository
  - On your V7 FEP8 toolkit, compile Management Center and check in all files, including the compiled ManagementCenter.swf file
  - Check out the LOBTools project on your V8 toolkit and regression test
  - When migrating from wcbd V7 to V8, ensure that the LOBTools project is listed under the `web.modules.list` property and not the V7 setting of `open.laszlo.web.module.list`.
  - Run build and deploy

# Planning Migrations

- Migrations should be approached as a full-sized project
- In the past, version migrations has taken three-six months
  - Given the few framework changes (apart from Management Center) in V8, we expect migrations from V7 to V8 to be smaller
- Careful planning and meticulous scripting are key parts of a successful migration project



# Scripting is not only for computers

- Script **everything**
- Clear instruction on
  - Expected start/completion times
  - Responsible person(s)
  - Backups
  - Details needed to understand steps
- Refine scripts as you move through environments
  - Document issues that you encountered

3.1 Pre Prod Test Preparation (QAP080)										
Complete	No.	Task Name	Planned Start time	Planned End Time	Planned Duration	Actual Start time	Actual End Time	Actual Duration	Who	Link to Instructions
Partial	1.0	Pre Prod Data Cleanup and V5.6.1 Install								
Partial	1.1	Align Pre Prod data on QAP080 / QAP050								
Yes	1.1.1	Review / create enough disc space on QAP080 / QAP050	07/01/09 12:00	09/01/09 12:00	2 days 00:00				Peter	
No	1.1.2	Copy Images,CSS,content,JS for EV,MS,TSUS,TS from app080 to app050.	07/01/09 12:00	09/01/09 12:00	2 days 00:00				Jack Doe	
No	1.1.3	Test file propagation post all content copied	12/01/09 00:00		TBC				Jack Doe	
No	1.1.4	Change content on QAP080 and test propagation again	12/01/09 00:00		TBC				Jack Doe, George	
No	1.1.5	Run Data Propogation and fix issues	13/01/09 00:00		TBC				Jack Doe, Peter	
No	1.1.6	Test full propagation	14/01/09 00:00		TBC				Jack Doe, George	
No	1.1.7	Align data to Back End Systems	TBC		15 days 00:00				ClientName	
No	1.2	Update PP Staging Properties to look like PP Live								
No	1.2.1	Define PP Staging Properties to look like PP Live	15/12/09 00:00	16/12/09 00:00	1 day 00:00				John Jim	
No	1.2.2	Update PP Staging Properties to look like PP Live	16/12/09 00:00	25/12/09 00:00	9 days 00:00				AS Support	
Partial	1.3	Update QAP080 Environment to match production								
Yes	1.3.1	QAP080 at V5.6 APAR level	28/12/09 00:00	29/12/09 00:00	1 day 00:00				AS Support	
No	1.3.2	Upgrade VS HTTP Server	09/01/09 10:00	09/01/09 13:00	03:00				Jim Doe	
No	1.3.3	Check that permissions are updated to WASUSER rather than Root?	11/12/08 00:00						Jim Doe	
No	1.3.4	Regression test V5.6.1	29/12/09 00:00						John, Jack, Jim	
No	1.3.5	Run Netstat (with WC 5.6.1 running) to check ports and services	16/12/08 00:00						John Doe	
No	1.3.6	MO at compatible V5.6.1 and V6 version level	19/01/09 00:00						Pete Doe	
No	2.0	Setup Test Data on QAP080								
No	2.1	Setup test data for migrated data test cases	TBC		3 days 00:00				John, Jack, Jim	
No	2.2	ClientName setup test data on Pre Prod Staging	TBC		3 days 00:00				ClientName	
Yes	3.0	Hardware, Software and Configuration Prereqs on QAP080								
Yes	3.1	Check Hardware prerequisites	17/12/09 10:00	17/12/09 10:30	00:30				Support Team	WC V6 Server Installation Guide, Section 2.1 on TR
Yes	3.2	Check Operating system prerequisites	17/12/09 10:30	17/12/09 11:00	00:30				Support Team	WC V6 Server Installation Guide, Section 2.2 on TR
Yes	3.3	Check Networking prerequisites	17/12/09 11:00	17/12/09 11:30	00:30				Support Team	WC V6 Server Installation Guide, Section 2.3 on TR
Yes	3.4	Review Output from HW, Operating System and NW Prereqs	09/01/09 10:00	09/01/09 12:00	02:00				John Doe	
Yes	3.5	Create the Home Path of the DB2 Instance Owner ID in its own filesystem.	16/12/09 10:00	16/12/09 10:30	00:30				AIX eBH	
Yes	3.6	Create required WebSphere Commerce and DB2 users and groups. - CAB 1012 - Create WCS V6 IDs & Groups on QAP080  Need to ensure wcurser is in group db2adm1, as per PMR28449	16/12/09 10:30	16/12/09 11:00	00:30				AIX eBH	

Complete	No.	Task Name	Planned Start time	Planned End Time	Planned Duration	Actual Start time	Actual End Time	Actual Duration	Who	Link to Instructions	Notes	Problems Encountered
Partial	1.0	Pre Prod Data Cleanup and V5.6.1 Install										
Partial	1.1	Align Pre Prod data on QAP080 / QAP050										
Yes	1.1.1	Review / create enough disc space on QAP080 / QAP050	07/01/09 12:00	09/01/09 12:00	2 days 00:00				Peter			
No	1.1.2	Copy Images,CSS,content,JS for EV,MS,TSUS,TS from app080 to app050.	07/01/09 12:00	09/01/09 12:00	2 days 00:00				Jack Doe			



# Migration Best Practices

- Focus on a “lift and shift” approach
  - Add/adopt new functionality in a subsequent deployment
- Regression test
  - Adopt the test automation framework to do so efficiently
- Move through environments, migrating and testing it fully
  - Don't forget to test staging propagation tasks
- Review deprecation and discontinuation lists to understand required and recommended changes
- Utilize custom task tags in Rational Application Developer (e.g. “//MIGR”) for migration-related Todos
- Manage URL changes with redirects and notification of 3<sup>rd</sup>-parties
- Catalog any configuration changes done in WebSphere Application Server V7 to determine if it applies to V8
- Plan for a code and content freeze period to minimize flux during migration
- Develop a roll-back plan

## Overall Migration Process

- Perform Toolkit Migration
- Perform Build Server Migration
- Perform Runtime Migration
  - Mainly stack installs followed by code deployment and database migration
  - Perform once for each runtime environment
    - Development Test Server
    - QA Server
    - Preproduction servers
    - Production servers
  - Note that staging/authoring should be migrated just like non-staging servers
    - In previous versions, we recommended rebuilding staging/authoring databases using the stagecopy tools

## Toolkit Migration

- If planning to use OpenLaszlo Management Center in V8:
  - If not on V7 FEP8, upgrade (at least one) toolkit to this level
    - Recompile and test Management Center on V7 FEP8
  - Change source control “ignore” files to ensure all LOBTools files gets checked in (specifically ManagementCenter.swf)
  - Since this is now the defect and build environment for Management Center, ensure that you have DR in place for this toolkit
- Install V8 toolkit
- Check out V7 code to V8 toolkit
- Restore and migrate a copy of the toolkit database using the database migration tool
- Resolve any dependencies on deprecated or discontinued features
- Regression test in V8 toolkit
- Check in migrated code
  - Note that since we guarantee binary compatibility, the code migration should be much less involved (assuming no reliance on discontinued features)

## Build Server Migration

- Apply usual approach for upgrading wcbd:
  - Adopt wcbd as though it was the first time
  - Apply any property changes you did to customize wcbd
    - Diversion: if you deploy V7 Management Center on V8, ensure that LOBTools is listed in the `web.modules.list` property, not in the `open.laszlo.web.module.list` property.
- Run a build as usual, checking out the migrated V8 code
- Deploy the code on the V8 runtime, once migrated (see next slide)

## Runtime Migration

- For each runtime environment (dev, qa, pre-prod, prod):
  - Install V8 stack
    - Can be done on same hardware as V7, as long destination paths are different
  - Create new instance on V8
    - There is no instance migration script in V8, so this instance will act as the target for the deployed V8 code
    - Use same parameters as V7 instance
    - Apply any WebSphere Application Server configuration changes from V7 that apply to V8
  - Restore a snapshot of the V7 database
  - Deploy the migrated code
  - Migrate search configuration
  - Run the database migration script to migrate the copy of the V7 database to V8 schema
  - Run regression tests
  - Switch the environment over from V7 to V8
- Note that the database migration script is restartable and supports zero-downtime operation

## Migration tooling

- The core asset to migrate for a WC migration is the database
- To support this, we ship the database migration tool with WC V8
- This tool can be run either as a command-line utility, or as a graphical a wizard
- The tool allows for migrating data while the site is online
- The tool is repeatable
  - In case of an error, you can investigate the issue, solve it (e.g. increase transaction log size) and re-run the utility, without having to restore a previous backup
- Any standard schema customizations are left as-is by the migration script
  - If your customizations require database migration, you should develop and test your own scripts for this

## New Maintenance Strategy

- We are changing the approach to delivering code fixes and additional functionality for WebSphere Commerce, starting in V8
- Code and security fixes (8.0.0.x):
  - Bi-weekly cumulative fix packs
  - Fix packs can be installed without manual steps and with minimal downtime
  - Fix packs are guaranteed to *only* include code fixes, i.e. no new functionality
  - No individual iFixes for APARs, instead APARs are scheduled for next fixpack
- New Functionality (8.0.x.0):
  - Quarterly *mod* releases, no more Feature Packs (FEPs)
  - Installed in the same way as fix packs (i.e. through Update Installer)
  - Guaranteed to be installable without manual steps
    - However, to adopt new function, manual steps *may* be required, e.g. to update store JSPs
- We highly recommend clients to stay current with fix packs and mod releases
  - However, to manage production changes, you can choose a different fix packs application cadence, e.g. every third fix pack

## Other sessions related to WC V8 and Commerce Insights

Date	Time	Session	Topics	Speaker(s)
Mon 30 Nov	10:00-12:00 ET	Overview	Overview session, covering all that is new in WC V8 and CI	Nicolai Nielsen
Tue 01 Dec	10:00-12:00 ET	Commerce Insights	Functionality and on-boarding for Commerce Insights	Katherine Langdon Karson Ng Daisy Tan
Wed 02 Dec	10:00-12:00 ET	Management Center	New framework and UI for IBM Management Center	Bruce Baker Judy Chan
Thu 03 Dec	10:00-12:00 ET	Stack Changes	Changes in the stack, licensing, and removed features in WC V8	Nicolai Nielsen
Fri 04 Dec	10:00-12:00 ET	Migration	Migration approach and tooling in WC V8	Nicolai Nielsen
Mon 07 Dec	10:00-12:00 ET	Customer Service	Overview of the new Aurora Customer Service tools	Guru Shamanna Karson Ng
Tue 08 Dec	10:00-11:00 ET	Social Commerce Accelerators	Coverage for the Social Commerce Accelerators (note: not V8-specific)	Nicolai Nielsen
Tue 08 Dec	11:00-12:00 ET	New Maintenance Strategy		Nicolai Nielsen



Thank You!

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