IBM Systems MEDIA

z/OS V2.3 Migration Book Is Transformed to a z/OSMF Workflow

Looking for the "z/OS* V2.3 Migration" book? Don't look now, but it's been transformed into an IBM z/OS Management Facility (z/OSMF) workflow.

By Marna Walle
Wayne O'Brien

03/01/2018
Looking for the "z/OS* V2.3 Migration" book? Don't look now, but it's been transformed into an IBM z/OS Management Facility (z/OSMF) workflow. For the past decade, whenever you upgraded to a new release of z/OS, you turned to the venerable migration book. You've come to rely on this critical asset for all the important details.

IBM understands. That's why the z/OS Migration Workflow takes the book's content as its foundation and builds on that with the latest enhancements in z/OSMF. Rest assured, all of the important content remains and the book is still being published, but the z/OS migration process is now easier to perform and manage as a z/OSMF workflow.

What's New in z/OS V2.3

If you've used any of the previous z/OS migration workflows, you're familiar with the concept: Through the z/OSMF Workflows task, you can assign individual work items (the "workflow steps") to various people in your organization (the "step owners") and track their progress.

As handy as that is, the new z/OS V2.3 Migration Workflow goes even farther by using the latest functions in z/OSMF to provide a smoother migration experience, as follows:

- Adds the ability to skip steps for features of z/OS that you aren't using
- Invokes IBM Health Checker for z/OS health checks directly from the applicable steps
- Provides the option to send feedback on your migration experience directly to IBM

Let's take a closer look at these enhancements.

More in Tune With Your Environment

A migration workflow typically includes several hundred migration actions—basically everything that's been documented for a given z/OS release upgrade. However, you probably don't need to do all of them and many are fine to skip over. For instance, do you run JES3? If not, you can skip the JES3 migration actions. The same thing goes for JES2. What about Infoprint Server? And how about the priced features? And zFS?

If you aren't using something, you won't be migrating it. So, why doesn't the z/OS Migration Workflow know enough to skip the migration actions associated with features you're not using? In z/OS V2.3, it does.

The workflow begins by running a discovery step: "Step 1: Discover z/OS features in use." Here, the workflow queries your configuration and determines which priced features are currently in use on your system. Armed with this knowledge, the workflow then automatically skips the associated migration actions for unused functions. In the earlier workflows, you needed to view each step and manually mark it as "skipped."

But what happens if you later decide to enable one of those priced features, thereby making those migration actions now applicable? You can either rerun the discovery step or return to the skipped steps and perform them. The skipped migration actions will be viewable and you can perform them if needed.

More Health Conscious

IBM Health Checker for z/OS has become an essential tool for the z/OS system programmer—not just for maintaining the availability of z/OS, but also for migration.

The z/OS V2.3 Migration Workflow continues in that direction. It runs the appropriate migration health checks for your specific migration path and lets you know if you should perform the associated migration action. For important information about each check, carefully read the instructions on the Perform tab before running the health check.

Of course, running a health check will never change any configuration settings on your system. That responsibility remains in your hands. But IBM can help you identify what needs to be done.

A Good Listener

Previous migration workflows included a feedback form as a companion step for every migration action. This approach was adequate for collecting feedback, but the resulting "doubling" of the perceived number of workflow steps—more than 500—made for a pretty daunting workflow.

z/OSMF Development has provided a better way to collect your feedback. In z/OS V2.3, the z/OSMF team added a function to help workflow step owners give feedback on their experience. The new feedback function

provides a simple way for step owners to give (optional) input to the provider of any workflow that exploits the feedback function.

IBM wants you to have every opportunity to provide specific, timely and insightful information on your migration experience. When you open the z/OS V2.3 Migration Workflow, you see a new folder called "Feedback" on every leaf step. To let us know whether a particular step was easy or hard, or could be improved in some way, simply click on the Feedback folder, answer a couple of easy questions, and save it (see Figure 1). At some point, when the workflow owner is ready to provide some feedback, he or she simply gathers all the feedback into a single file using the Workflows action Generate Feedback Summary. Before sending the file to IBM, the workflow owner can preview the single file to ensure that it's acceptable (and edit it, if necessary).

To use the workflow feedback enhancement, you must install the following PTFs before you create the z/OS V2.3 Migration Workflow in the z/OSMF Workflows task:

- z/OSMF V2.1 PTF UI42016 (APAR PI69103)
- z/OSMF V2.2 PTF UI40923 (APAR PI66845)

Otherwise, your attempt to create the workflow will fail. To check your z/OSMF level, click the "About" button in the upper-right corner of the z/OSMF Welcome page.

Open to Change

To ensure that you have the latest migration information at all times, the z/OS V2.3 Migration Workflow is periodically updated. However, that might not sound like such a good thing if you happen to be midway through the current migration workflow. In previous workflows, there was no way for you to take a partially performed workflow and "merge" it with a newer level of that workflow.

All that changes with the z/OS V2.3 Migration Workflow. It takes advantage of a new z/OSMF enhancement called "Create New Based on Existing," and it provides exactly what you require. To upgrade an existing workflow to a new level of the workflow definition, use the action Create New Based on Existing, which is provided in the Workflows table in z/OSMF. When you upgrade a workflow, you create a new instance of the workflow, while you retain your data from the existing workflow. This action is available to the workflow owner only.

With this function, if IBM releases a newer level of the workflow that you've already started, you can download the newer XML file and create a new workflow based on what you've already performed.

Easy to Get Started

The z/OS V2.3 Migration Workflows are available now in the IBM directory on GitHub (github.com/IBM/IBM-Z-zOS/tree/master/zOS-Workflow (https://github.com/IBM/IBM-Z-zOS/tree/master/zOS-Workflow)). In GitHub, some new workflows and other items of interest are available as they're released (see Figure 2).

Depending on your z/OS V2.3 migration path, download the files you need to your system to create the workflow.

If you're migrating from z/OS V2.2 to V2.3, transfer the following files as binary using FTP and store them in the same z/OS UNIX* directory:

- zOS Migration from V2.2 to V2.3-Level2.0.xml
- HC_rexx.txt
- discovery.txt

If you're migrating from z/OS V2.1 to V2.3, transfer the following files as binary using FTP and store them in the same z/OS UNIX directory:

- zOS Migration from V2.1 to V2.3-Level2.0.xml
- HC_rexx.txt
- discovery.txt

Keep an eye on the GitHub site, as you'll see other interesting workflows appear in the future.

Saved for Future Reference

In z/OSMF, you can archive any workflows that you have completed or no longer need. Doing so removes the workflow from the Workflows table and places it in an archive for reference. An archived workflow is inactive, but its information can be viewed at any time. When you no longer want to retain an archived workflow, you can delete it permanently from z/OSMF.

To archive an active workflow, use the Archive action that is provided in the Workflows table. The archive-related actions are available to the workflow owner only. When a workflow is archived, z/OSMF sends a notification of the archive action to the users who are step owners for the workflow.

More Changes to Come

In keeping with our goal to enhance the z/OS Migration Workflow, some major enhancements have been made for z/OS V2.3. Some take advantage of z/OSMF workflow infrastructure improvements, and others are intended to make it easier to manage your software migration.

For the time being, both the z/OS Migration book and the z/OS Migration Workflow will be produced and kept in sync. However, at some point in the future, when it's clear that most clients are using z/OSMF, IBM plans to provide the z/OS Migration Workflow only and will concentrate further enhancements on that deliverable.

With all the new enhancements in z/OSMF Workflows and in z/OS V2.3 migration, we continue the journey toward an easier migration of the z/OS system.

About the author
Marna Walle is a senior technical staff member within IBM's Systems and Technology Group. She can be reached at mwalle@us.ibm.com.

Wayne O'Brien is a co-author of the textbook "Introduction to the New Mainframe: z/OS Basics," which has been downloaded more than 400,000 times.