SHARE in Orlando 2015

z/OSMF Hands-on Labs – Choose Your Own

z/OSMF Workflows (Using z/OSMF for a z/OS V2.1 Migration)

#SHAREorg

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Introduction:

In this lab, you will learn how to: upload the provided z/OS V2.1 migration workflow, create a workflow, assign steps to different users, read notification messages, accept the assignment of a step, perform or skip a step, and become familiar with workflows in general.

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Exercise instructions

Here is a high level overview of the instructions that we will do in this lab exercise:

__ 1. Download the z/OSMF z/OS V2.1 migration workflow from the web.

__ 2. Logon to z/OSMF. Enter into the Workflow function.

__ 3. Create a z/OS V2.1 migration workflow within z/OSMF.

__ 4. Look at some of the z/OSMF workflow functions.

__ 5. Assign steps (migration actions) to different users.

__ 6. Accept the assignment of a step (migration action).

__ 7. Perform a step (migration action).

__ 8. Skip several steps (migration actions) at once.

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1. Download the z/OSMF z/OS V2.1 migration workflow

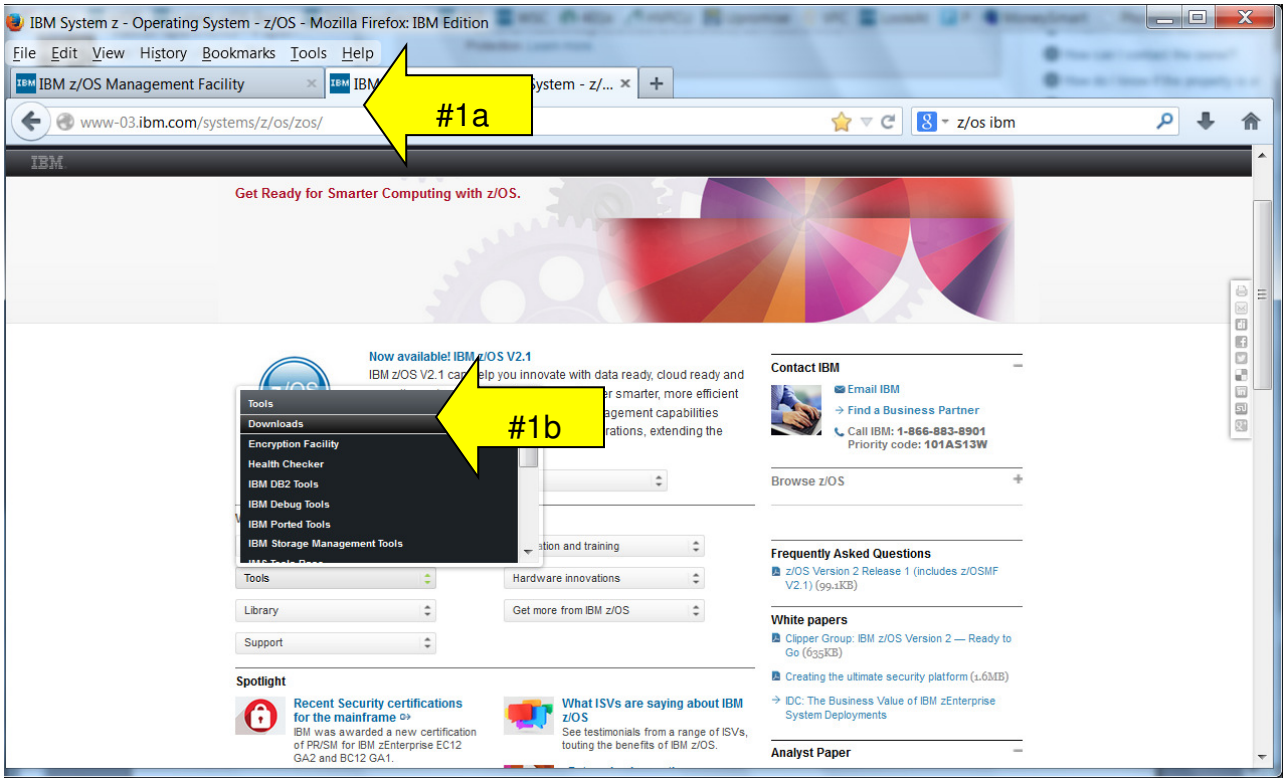
In this step, we will download the “as is” web deliverable from the internet.

a. Go to http://www-03.ibm.com/systems/z/os/zos/ .

b. Under the Tools drop down, click on Downloads.

Note about z/OS V2.2! Although this lab is using the z/OS V2.1 migration workflow, at the time of the lab preparation the z/OS V2.2 migration workflow was not yet available on the web. The z/OS V2.2 migration workflow, however, is planned to be available on the GA announce date for z/OS V2.2. The z/OS V2.2 migration workflow has the same look as the z/OS V2.1 migration workflow, with two new enhancements:

1. the ability to invoke IBM Health Checker for z/OS health checks directly from the migration step to determine migration action applicability, and
2. the ability to optionally provide your feedback to IBM on each part of your z/OS V2.2 migration experience.



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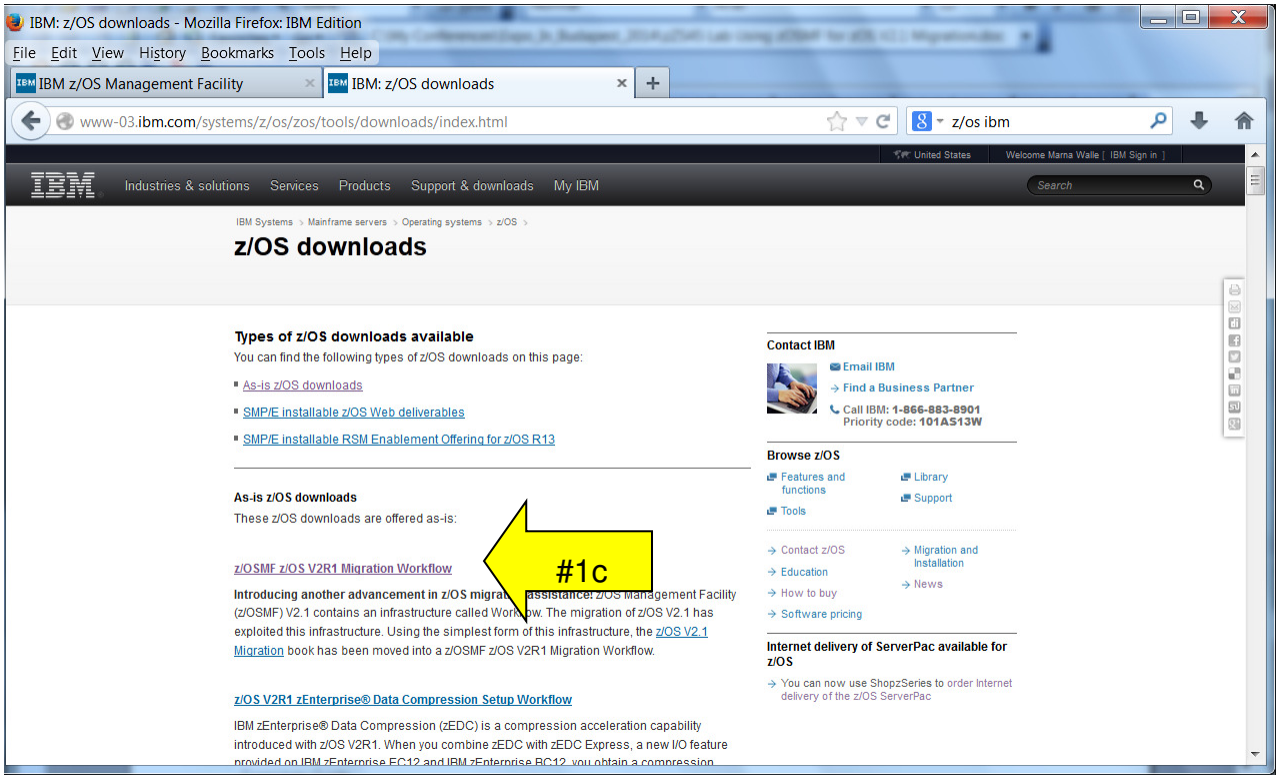
z/OS Downloads web site

Find the “z/OSMF z/OS V2.1 Migration Workflow”, found under “As-is z/OS Downloads”. This workflow is an *exact* port of the z/OS V2.1 Migration book.

c. Click on “z/OSMF z/OS V2.1 Migration Workflow”.



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z/OSMF z/OS V2R1 Migration Workflow web site

On this page, you can read more about the workflow provided. There are some important points to understand on this page, *so please read the entire page*. Notice that there is no support for this workflow, but you are more than welcome to send comments and suggestions to zosmig@us.ibm.com.

Continue reading this web page, scrolling to the bottom

d. Use your left mouse button and click on the download file "zOSR13toV2.1_migration_workflow00.xml" Download now button. This will download the file onto the lab's workstation. We'll be using the z/OS R13 to z/OS V2.1 migration workflow, but notice that there is a workflow for the z/OS R12 to z/OS V2.1 path as well. This is an xml file which contains the z/OSMF workflow we'll use for this lab. (See screen shots below…)

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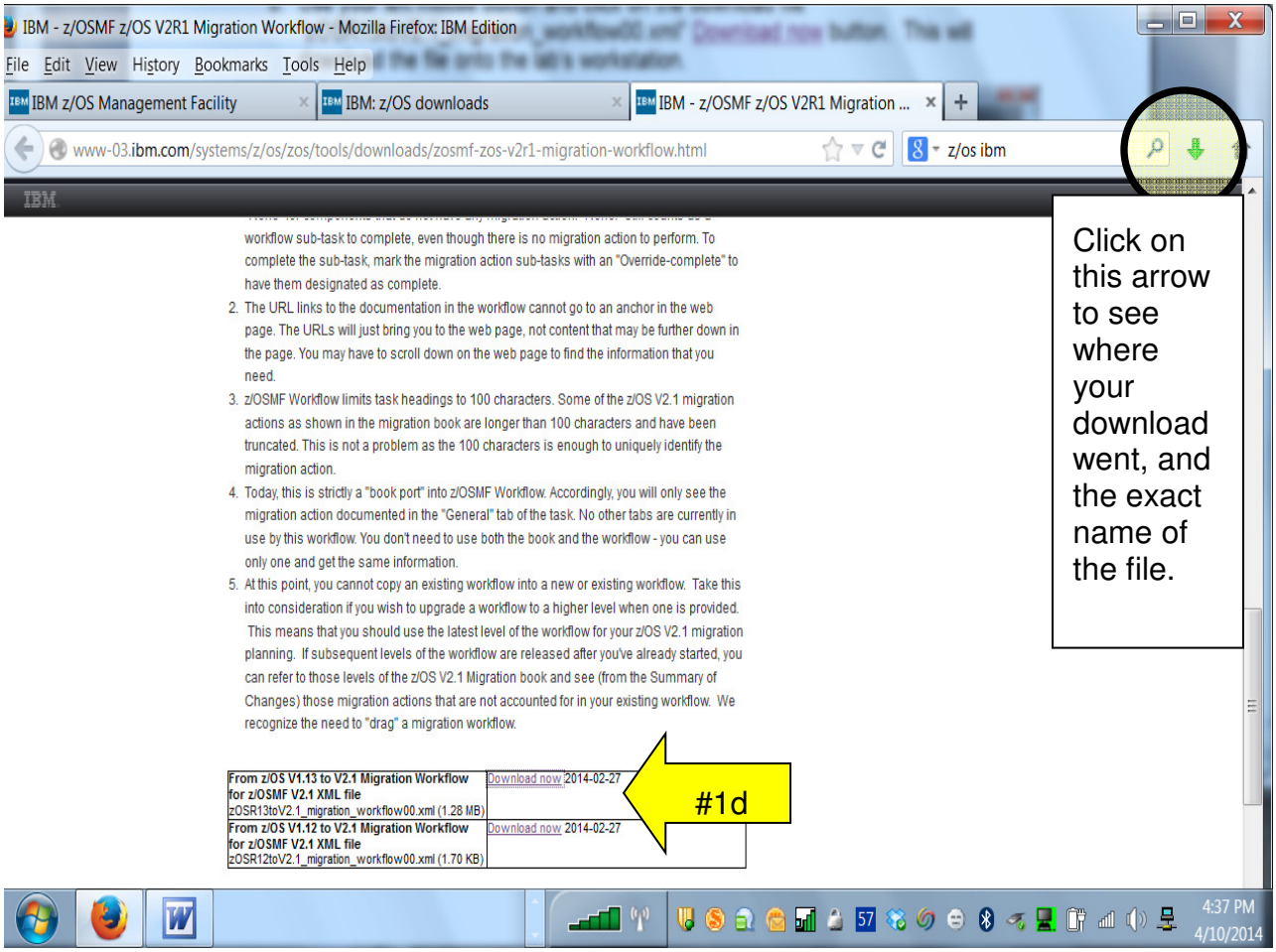
Scroll down, and read this entire web page for some important details…



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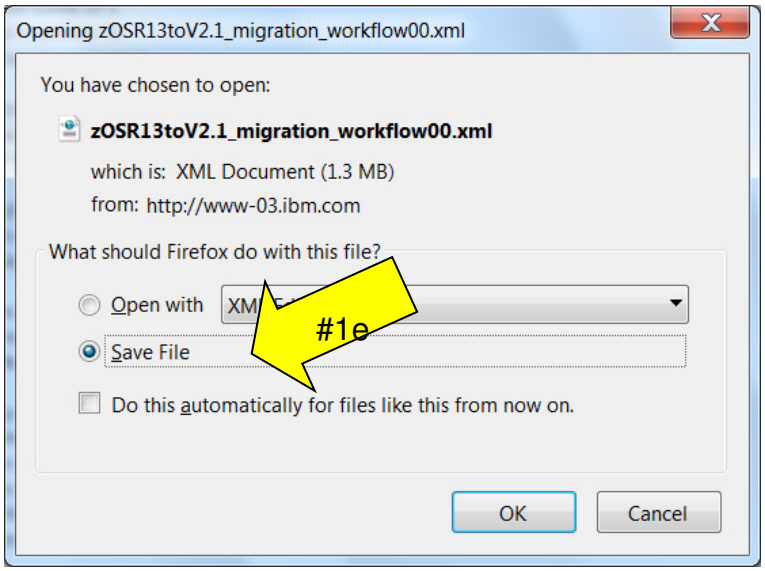
e. Click on “Save File”, “OK”. This will store it wherever your workstation stores downloaded files. Usually that is the “Downloads” folder, or it could be somewhere else. If you click on the Firefox down arrow (circled above), you can see the name of the file, and the location of the file. Remember this location for when you do your own workflow. **We will not need this location for this lab, as we already have this file uploaded to the lab’s z/OSMF system for your convenience**.

- In “real life” at this point you would upload this XML file to your z/OSMF system into a file system location. You can use whatever method you prefer to do the upload from your workflow download location, into your z/OSMF system’s file system (ftp, …). Just remember it **must** be uploaded as BINARY. You will see workflow creation problems if this XML file is not binary in your file system.



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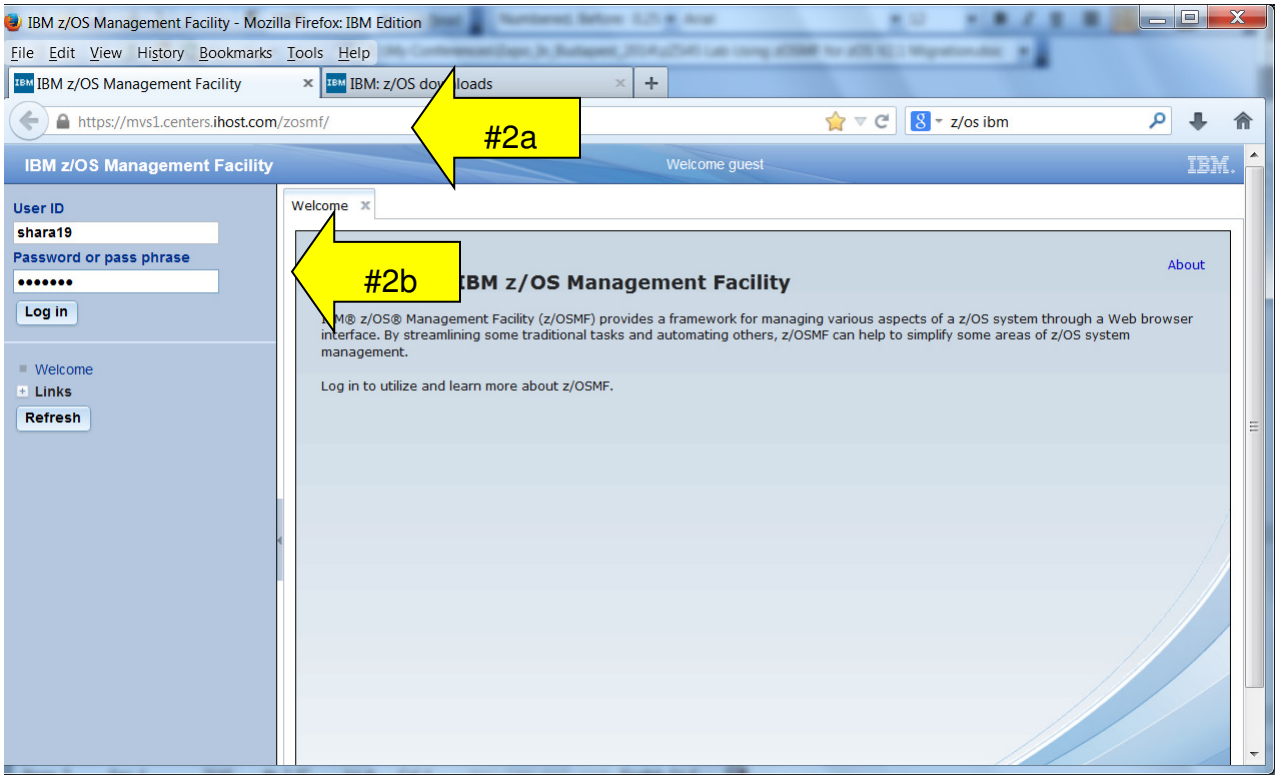
2. Logon to z/OSMF.

In this step, we will now go into z/OSMF to use the Workflow function.

a. Go to https://mvs1.centers.ihost.com/zosmf/ on Firefox.

b. Using the userid you were given (SHARAnn, SHARBnn, or SHARCnn) and the password, logon to z/OSMF. This is a secure connection to a z/OS host. The userid you were given is a regular z/OS userid on this system, and has been given access to z/OSMF. There is *no* z/OSMF code on this workstation (outside of the z/OS V2.1 migration workflow XML file you just downloaded to the workstation).



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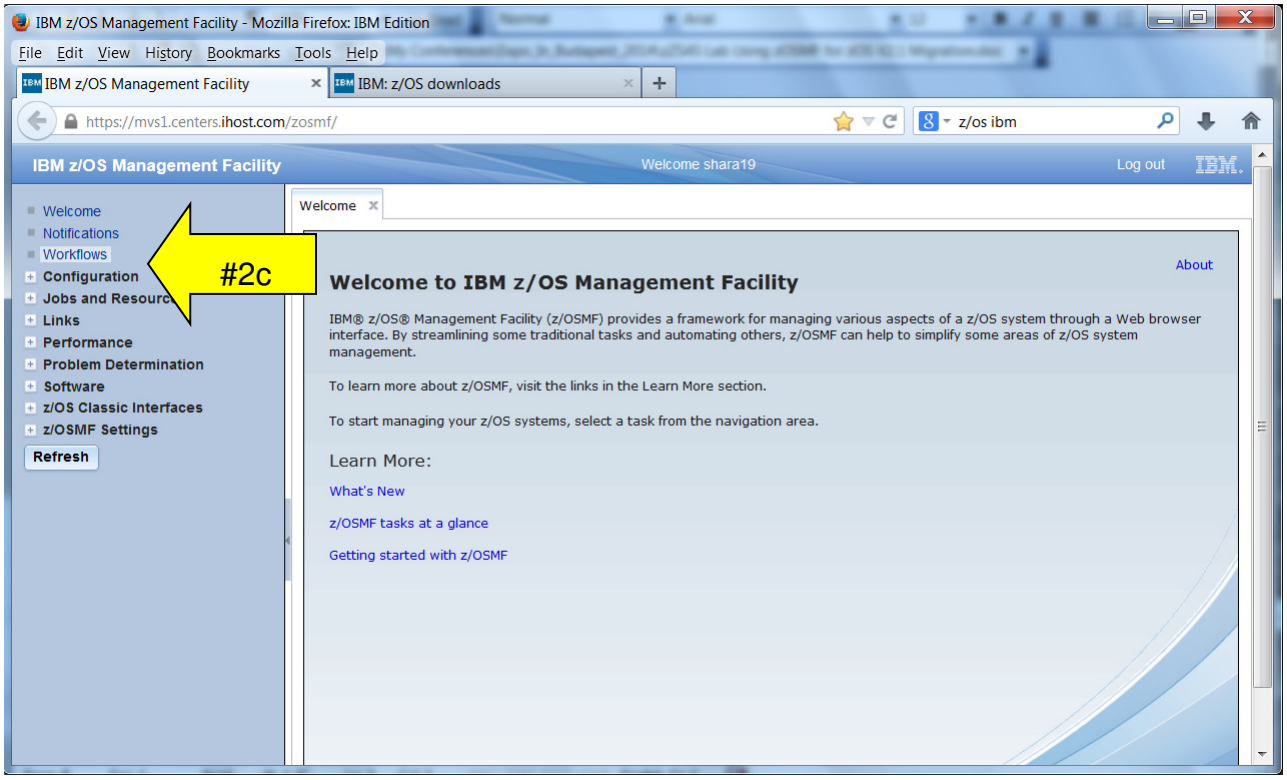
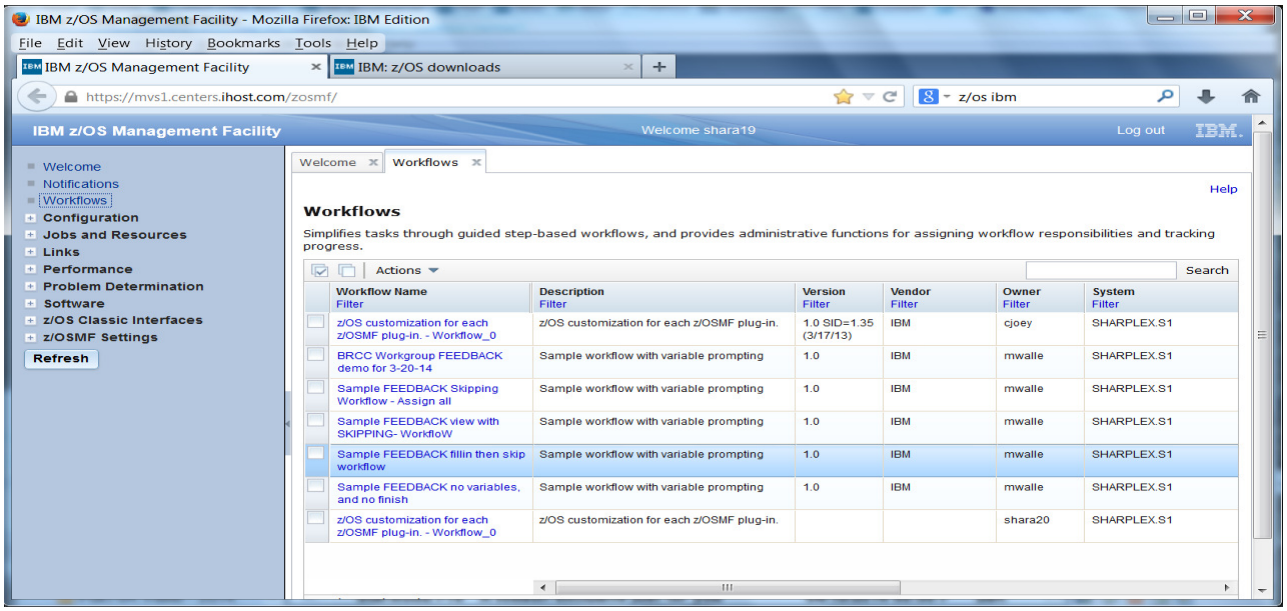
Enter into the Workflow function.

c. Click on “Workflows”.



d. This brings you into the main Workflow screen. You can see there are already some workflows created from this screen.



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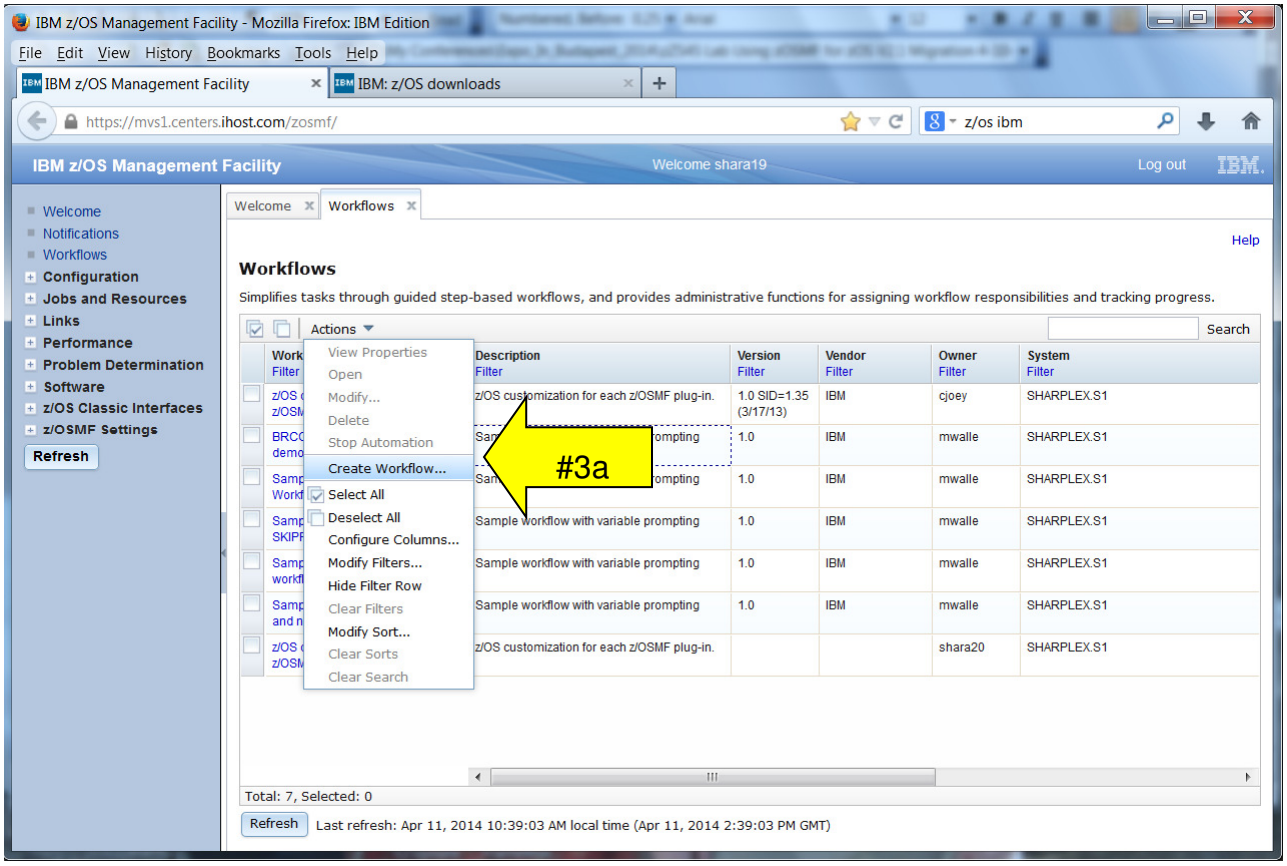
3. Create a z/OS V2.1 migration workflow within z/OSMF.

In this step, we will create a specific workflow based on the supplied workflow

a. Click on the Actions drop-down, then click on “Create Workflow…”



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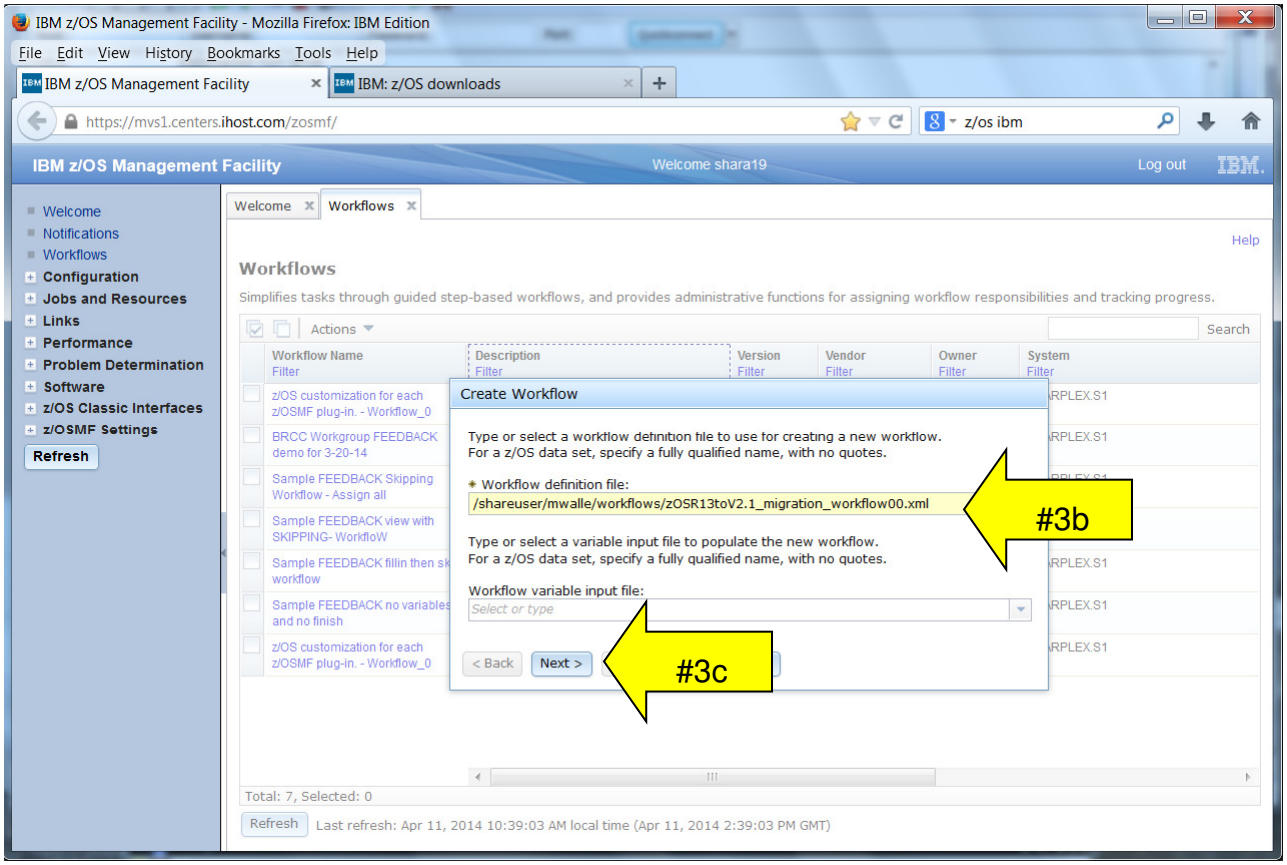
b. Very carefully, enter in the location of the workflow that has been uploaded for you on the z/OSMF system on the “Workflow definition file:” location. The Workflow definition file for this lab is in **/shareuser/mwalle/workflows/zOSR13toV2.1_migration_workflow00.xml**

c. Then click “Next >”. (“Leaving Workflow variable input file” blank.)



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Name the workflow and identify the system.

At this point, we'll provide some information about this workflow.

d. Name your workflow: type a meaningful name under "Workflow name: " of whatever you want, but please put your userid in the name so we know which workflows to remove later. You must name your workflow. (A suggested name: ***SHARAxx* Migration Workflow Lab for z/OS V2.1 ,** where *SHARAxx* is your designated userid.)

e. Decide who you want the owner to be: type the owner's name on "Owner user id:". Usually the owner would be the one that created the workflow, but you can make it some other user if you like. For this lab, keep it your assigned user ID. You must have an owner.

f. System identification: indicate here which system the workflow will apply to. On this lab system, there is only one system to select. When you do this for real, you can have a workflow for every system! You must say which system it is for.

g. Comments: put anything you wish here, or leave it blank.

h. Click "Finish" at this point. Notice that the checkbox indicates that we will go right into the workflow when it is created.

An Advanced Point! See the little checkbox "Assign all steps to owner user ID"? This is a very handy way of assigning all the steps (migration actions) initially to the owner. By doing this you immediately put all the steps into a "Ready" state for performance. Otherwise, you would have to assign steps, and have them accepted, to have them "Ready". We are going to not check this box, so you can see more of the entire process.

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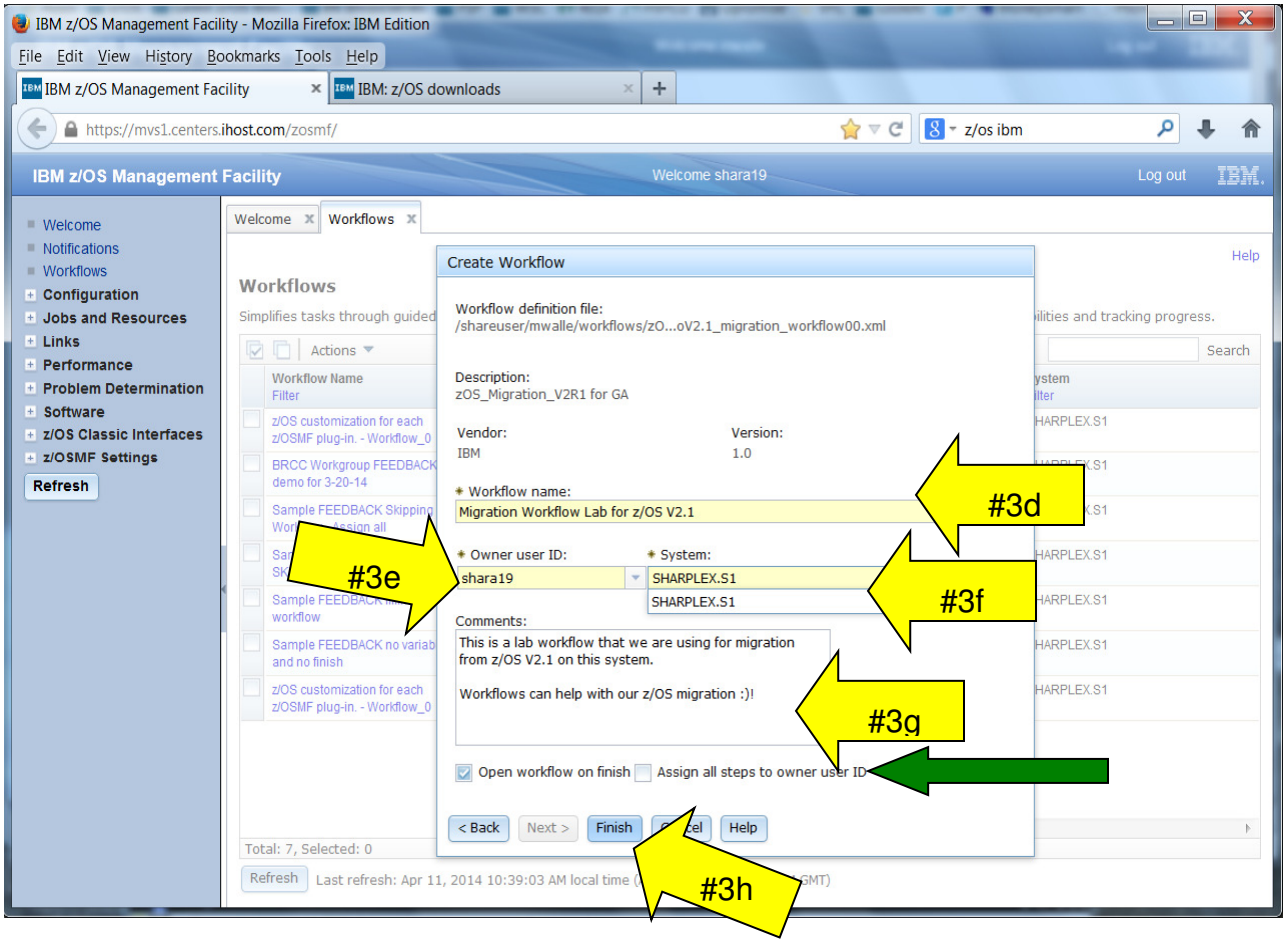

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4. Looking at the workflow overall.

There are some things to notice at this point:

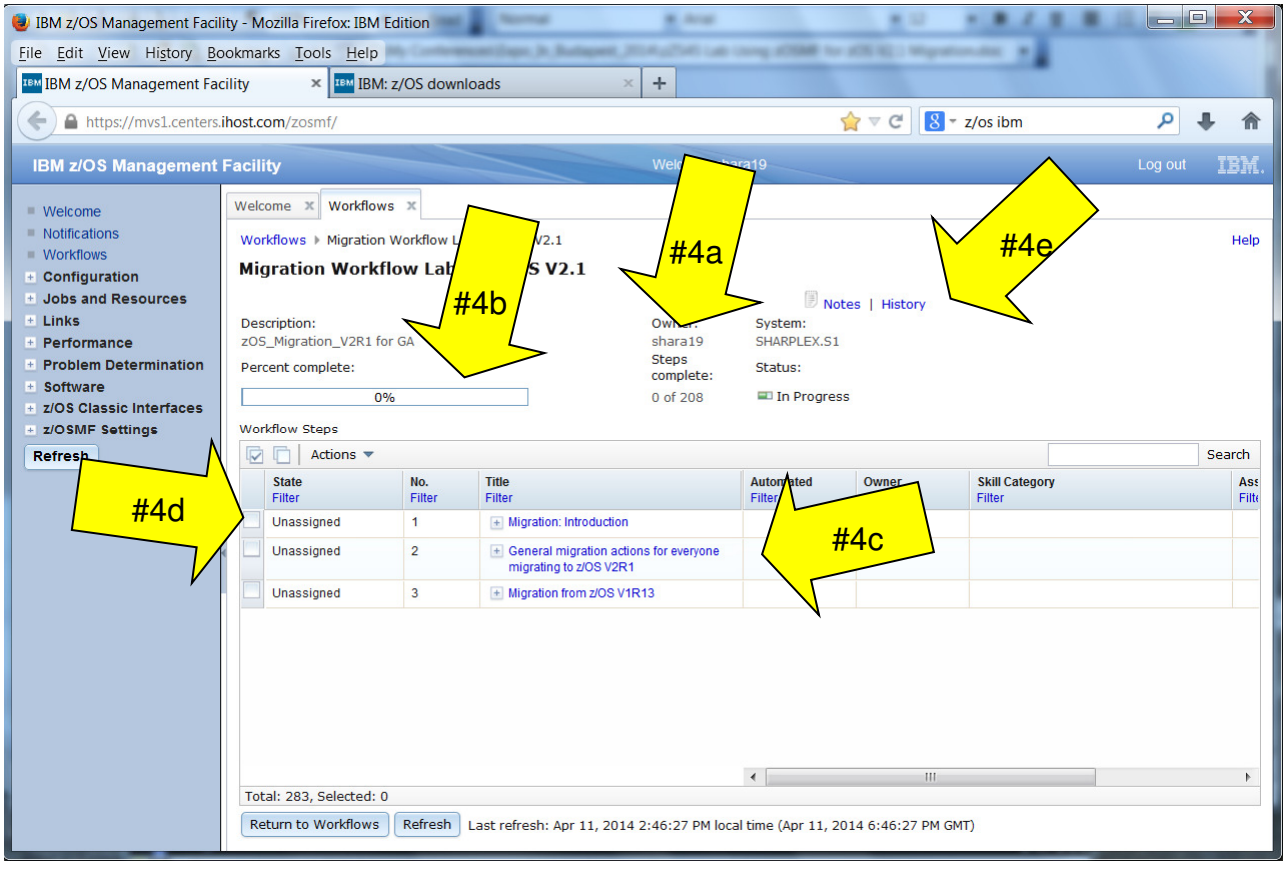
a. There are 208 steps (migration actions) in this workflow.

b. You have completed 0% of them.

c. There are three major steps. This may be confusing, as there are sub-steps that count as steps in that 208 total. (Also, you'll see later that a non-migration action also counts as a step!). These three major steps correspond *exactly* to the three chapters in the z/OS V2.1 Migration book.

d. These three steps are in a state of "Unassigned", meaning that no one has been tasked with doing them yet.

e. Notes and History: you can put any notes on this entire workflow here. Perhaps information on the entire schedule of this migration, or something else that is appropriate to make at the entire workflow level. Under History, you can see the history of this workflow: when it was created, who created it, etc.



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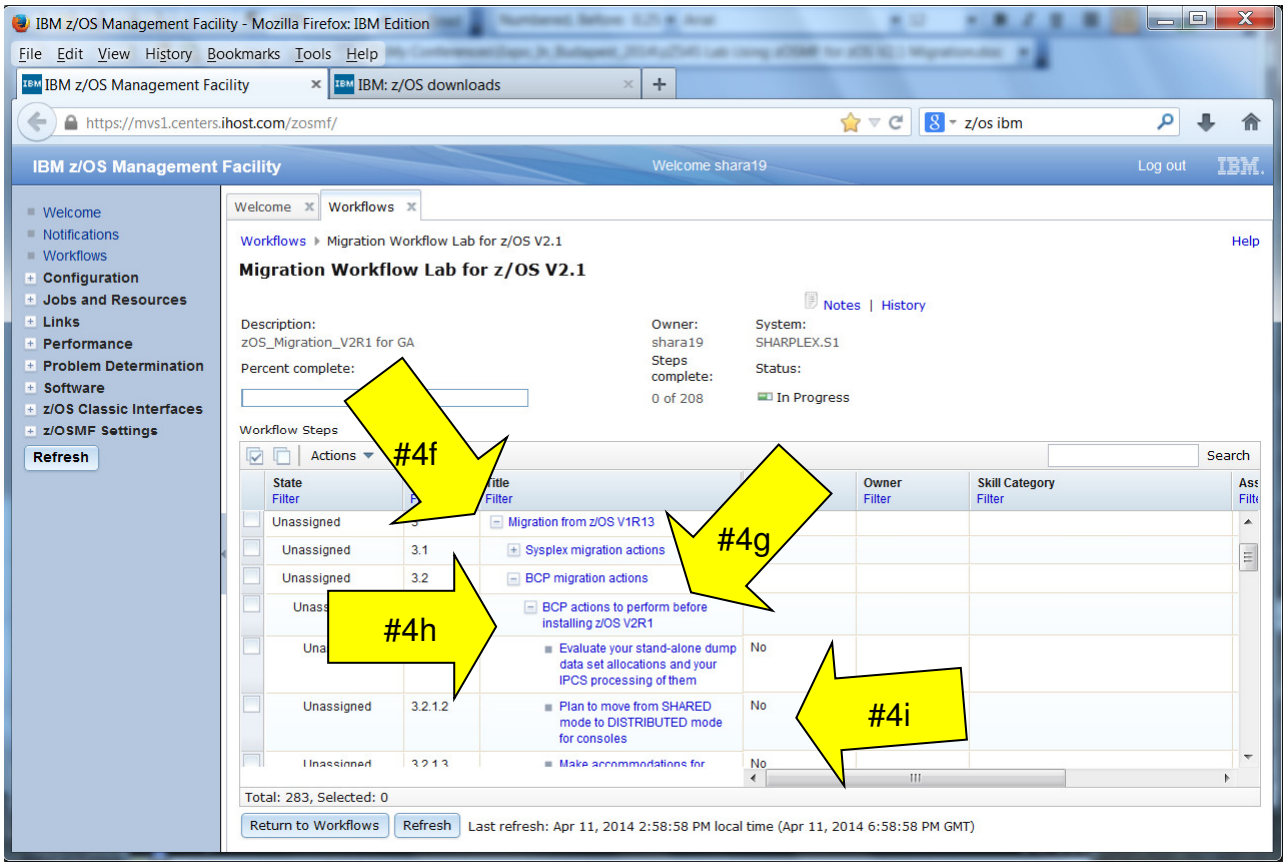
Let's look to see where the actual migration actions are!

f. Untwist (click on the +) for "Migration from z/OS V1R13".

g. Untwist "BCP migration actions".

h. Untwist "BCP actions to perform before installing z/OS V2R1".

i. Notice that there is nothing more to untwist in this section. When you see solid boxes next to a step that means there are no more substeps. For us, that means that this is where the actual migration action is found! Click on "Plan to move from SHARED to DISTRIBUTED mode for consoles".



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Notice the five tabs across the top of this migration action:

j. General: This is where the actual migration documentation can be found. *Exactly* what is in the book for documentation can be found under this tab.

k. Details: that is unused for the z/OS V2.1 migration workflow. If one migration action had a dependency on another migration action, it would be put here. For this workflow, though, no dependencies have been added.

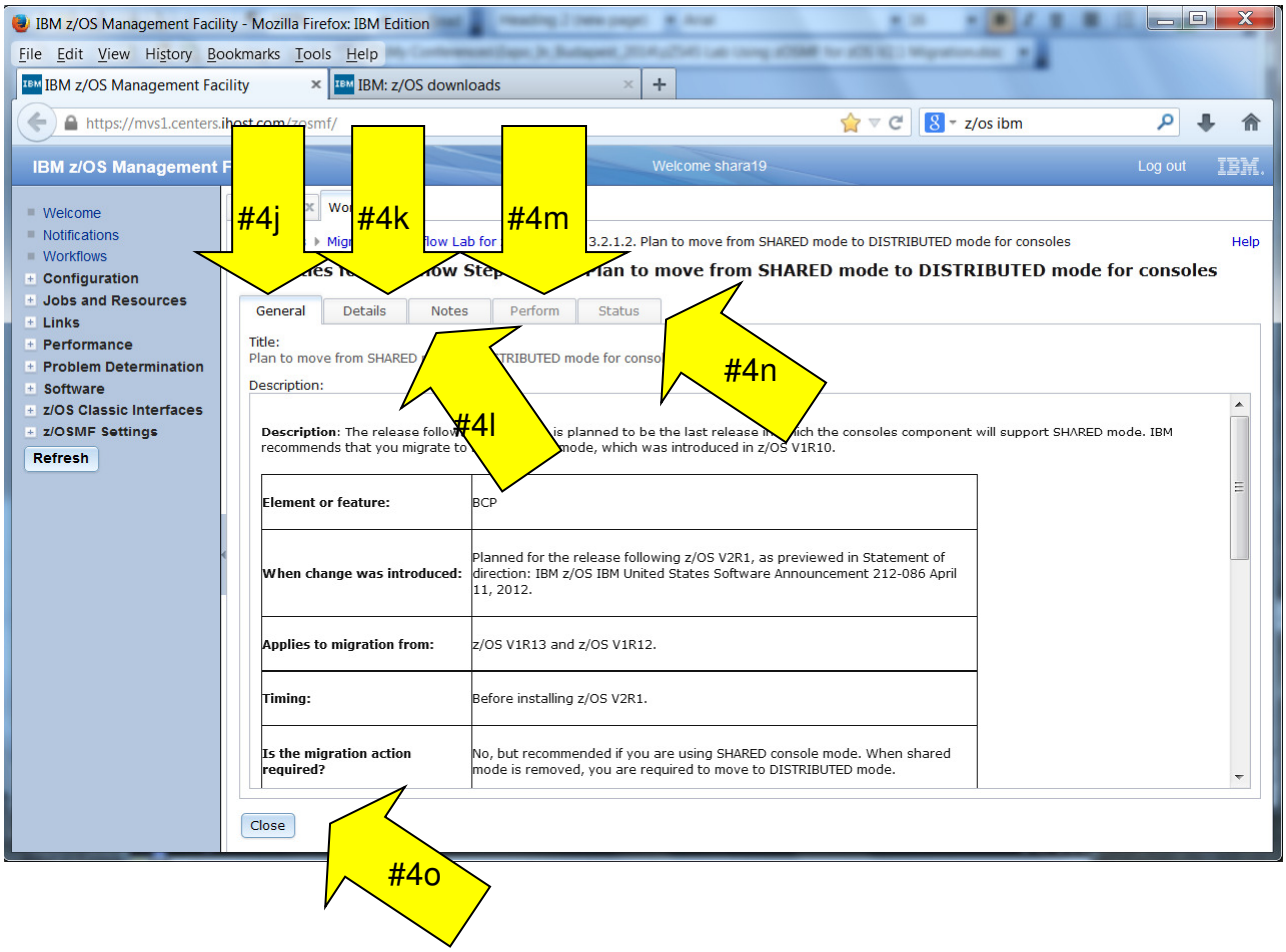
l. Notes: This is where you can put whatever notes you want to about this migration action. Type away, this is your spot!

m. Perform: This is currently grayed out, meaning that we can't Perform the migration action at this time. That is because we haven't assigned it to anyone yet!

n. Status: This is grayed out also, because we aren't using this for migration.

Read what is under the General tab, scrolling to the bottom. You should recognize this format, as it is the *exact* same template that is used in the z/OS V2.1 Migration book.

o. Click on Close.



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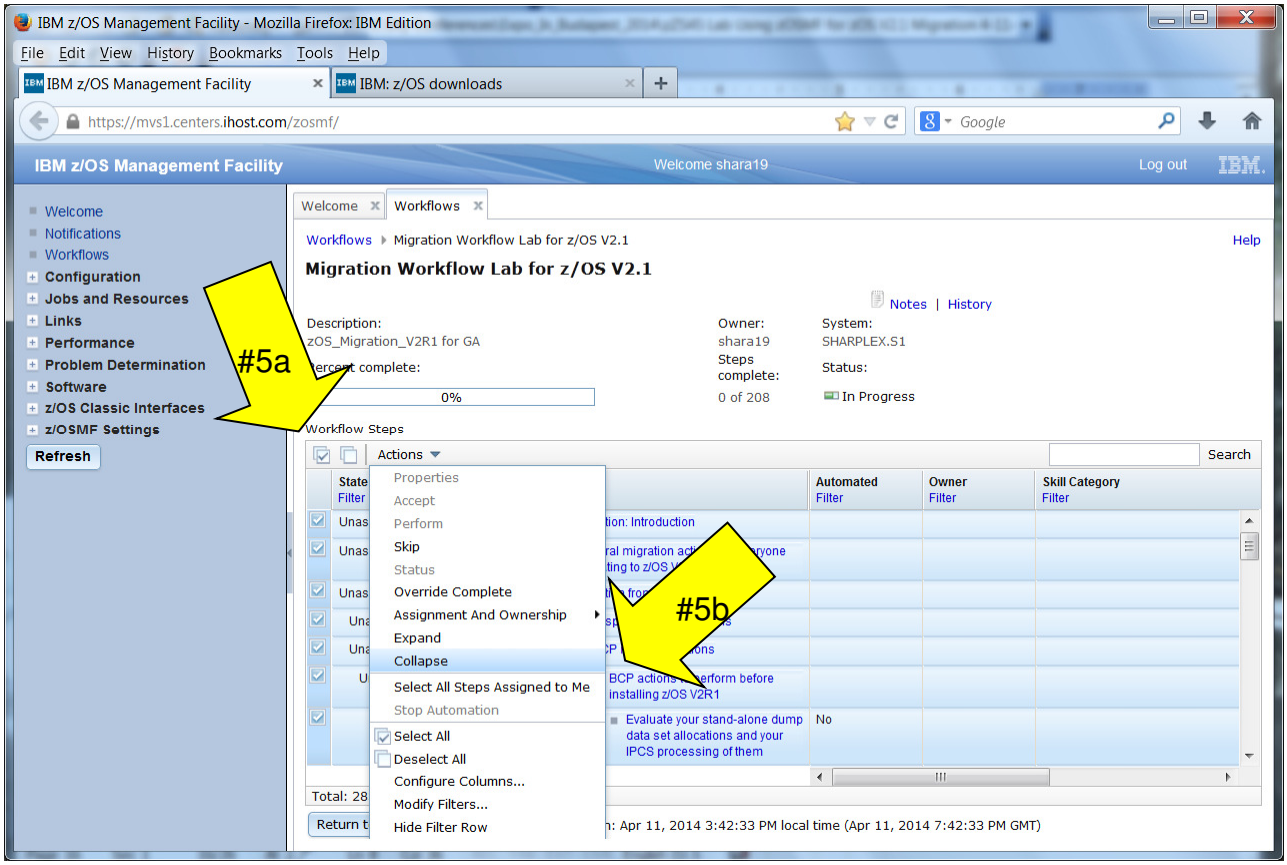
5. Assigning a step (migration action).

We now know the basic layout of what the z/OS migration workflow looks like. Let's get to the real work – assigning those migration actions to get them done! You can assign a group of migration actions (say, all the Security Server migration actions), or individual migration actions to a z/OSMF user. The only difference is what steps are checked – on a step with smaller sub-steps (which would include all the sub-steps), or on the smallest sub-step itself. The idea is the same. We will assign all the Security Server migration actions to our lucky security administrator in this lab.

Back on the panel where the steps are shown:

a. Click on the box with the check in it, to select all the boxes. This will select all the steps in the workflow.

b. Then, under "Actions", select "Collapse". This will collapse all the steps down to the three major steps (the chapters in the book).



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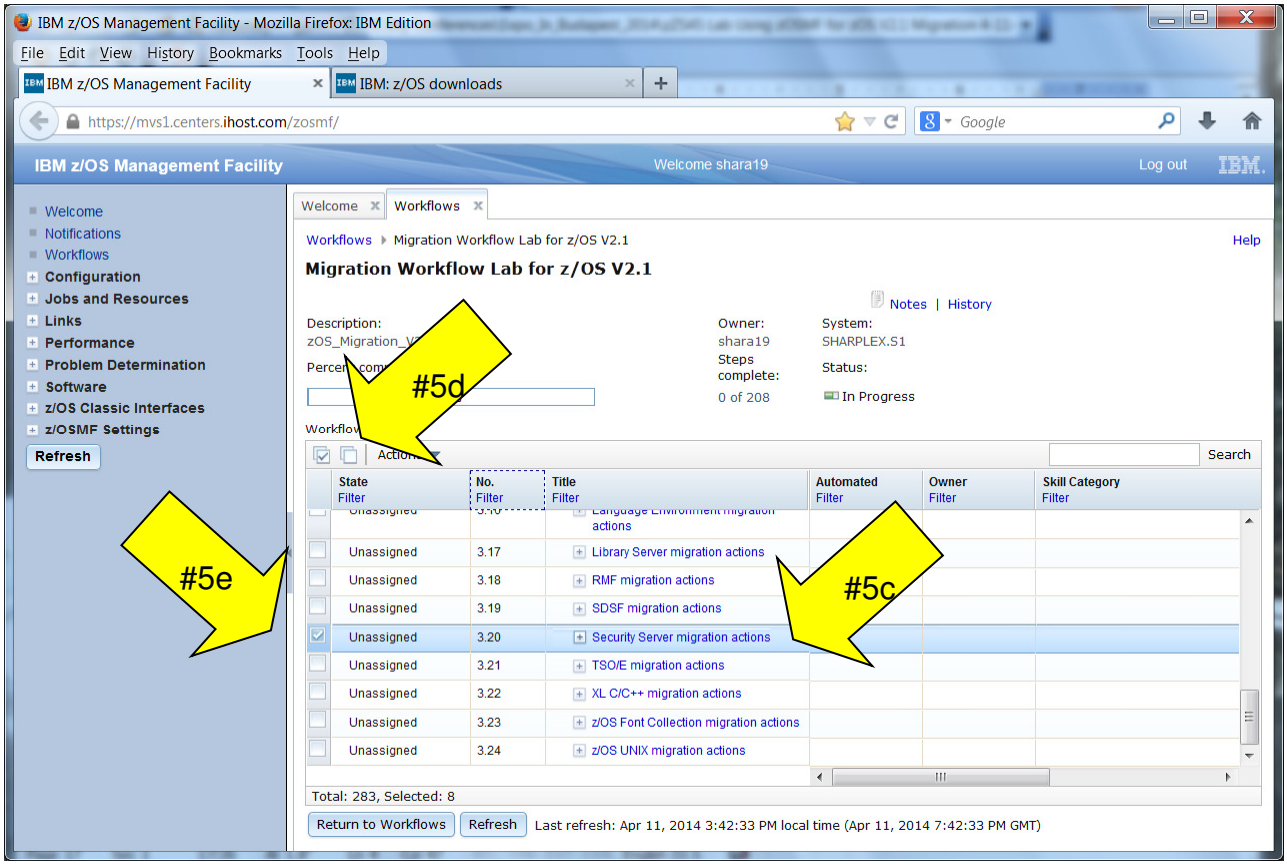
We know from the layout of the book, that all the Security Server migration actions are found in its own section. For the workflow, that means its own sub-step.

c. As before, untwist “Migration from z/OS R13”, then keep scrolling until you find “Security Server migration actions”.

d. Click on the “empty check” box to clear out all the checks, so no step has been selected. Make sure that there are no checks on any steps before doing the next step.

e. Click on just the “Security Server migration actions” box to select just that one. Notice that the state right now is “Unassigned”. That is what we are changing.



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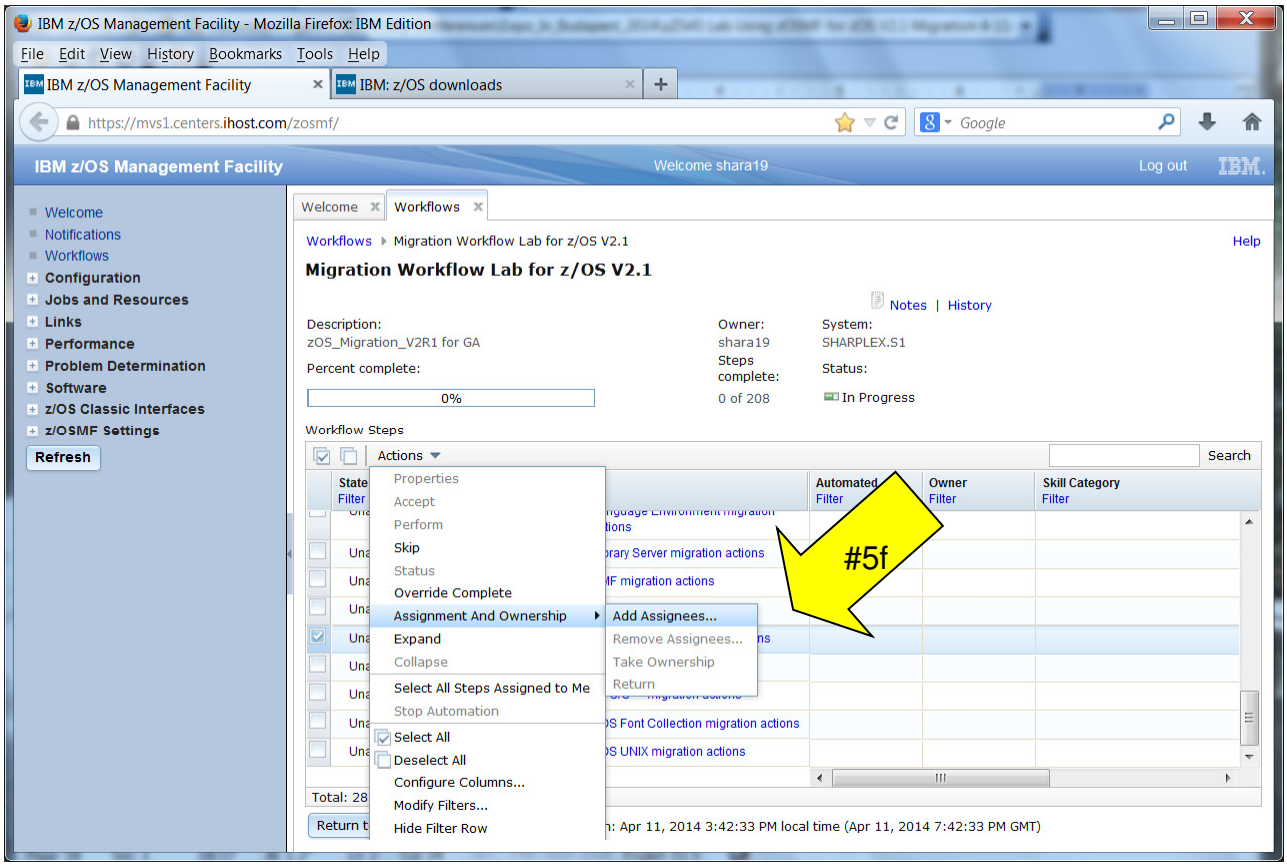
f. With only the “Security Server migration actions” selected, under the Actions pull-down, go to “Assignment and Ownership”, then select “Add Assignees… “.



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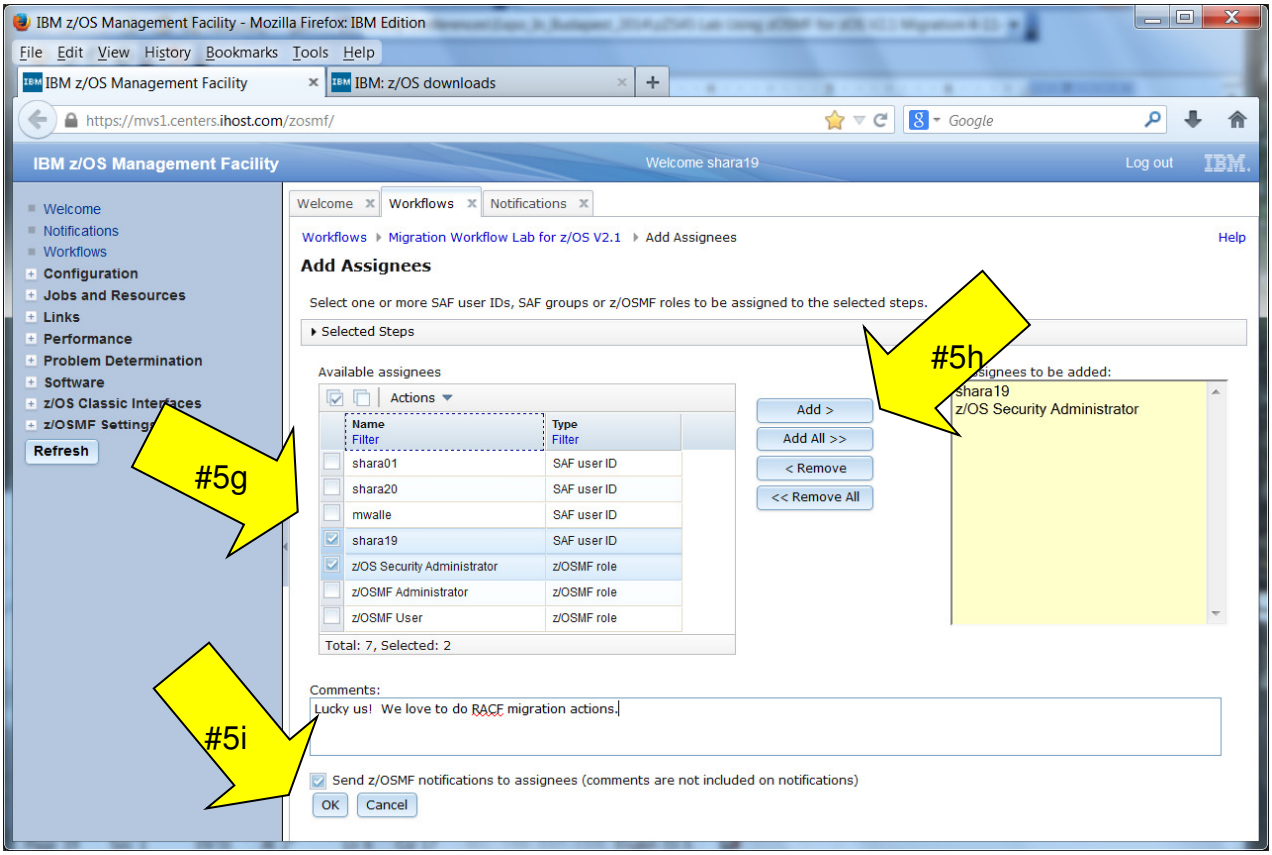
g. This is an interface you are probably familiar with. Click on “z/OS Security Administrator” AND on your userid you were given for the lab (SHARAnn, for instance). If you don’t see your userid on the list…then add it! (Actions -> Add… -> then for SAF User ID, type your SHARAnn and “OK”. Now, it should appear on the list!). We are assigning to two people, so you can learn how to accept a migration action (step) assigned to you. Click on both your SHARAnn user ID AND the z/OS Security Administrator.

h. Click on the “Add >” button, and see that two people have been added to the yellow box on the right.

i. Type a friendly note, if you want, and then click on “OK”. If you left the “Send z/OSMF notifications to assignees…” box checked, these people will be notified they have something to do. The Notification is sent.



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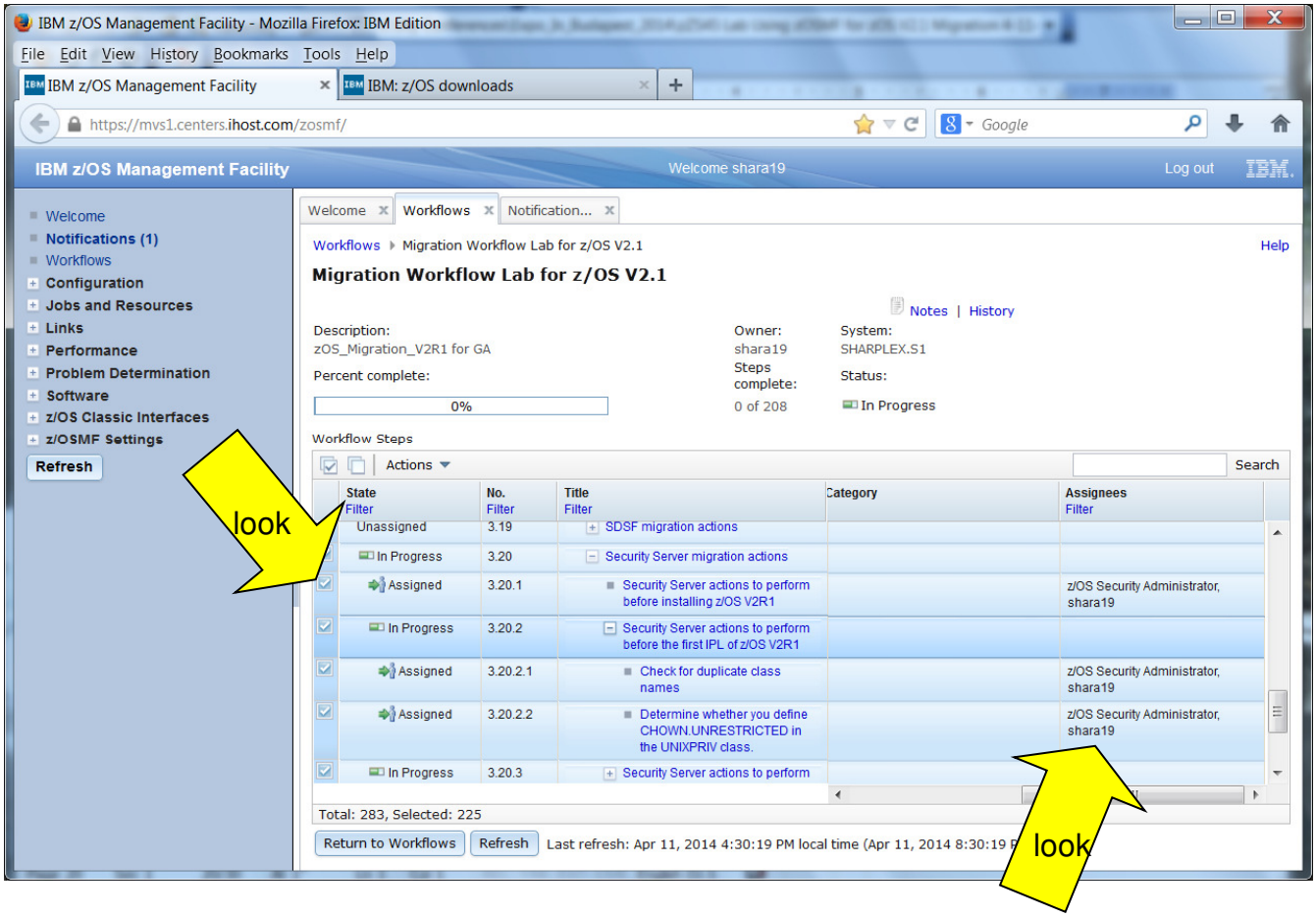
Now you are back into the workflow. Untwist the “Security Server migration action” items (there are three of them to untwist – before installing, before first IPL, and after first IPL) so you can see all the Security Server migration actions. Scroll to the right…

Under “Assignees” you can see the migration actions for all of Security Server have been assigned. Notice also that the State is now “Assigned” on *all* this element’s migration actions (steps), because we selected the entire element of Security Server.



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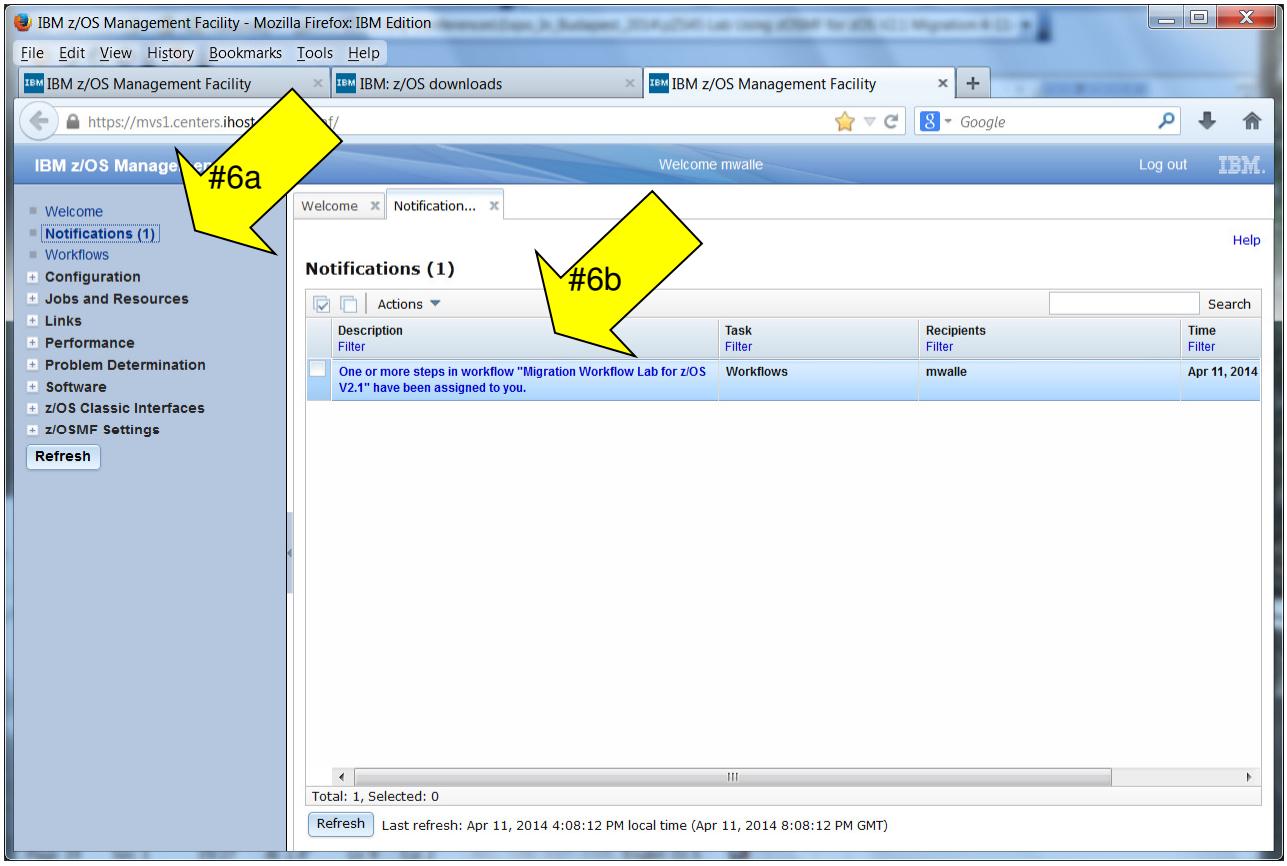
6. Accepting a step (migration action).

"Assigned" isn't enough to perform the migration action (step). You must also have the migration action **accepted** by the assignee. We are going to temporarily leave the workflow in order to accept our assignment of the Security Server migration actions.

You should at this point see that 'Notifications(1)' has appeared on your screen. If you don't see it, try to click "Refresh", or you can logoff and logon back to z/OSMF. The lab system sometimes loses connectivity at a conference and you may have to re-establish your identity in order to see the Notification.

a. Click on "Notifications(1)".

b. Click the blue highlighted Description. This will bring you back into the workflow where you have steps assigned to you. Once you click on the notification, it will not show up as "Notifications(1)" anymore. It will have just "Notifications" indicating that you have seen new messages. (You can delete a notification if you wish in Notifications, by just selecting the item(s), then Actions pull-down -> Delete.)



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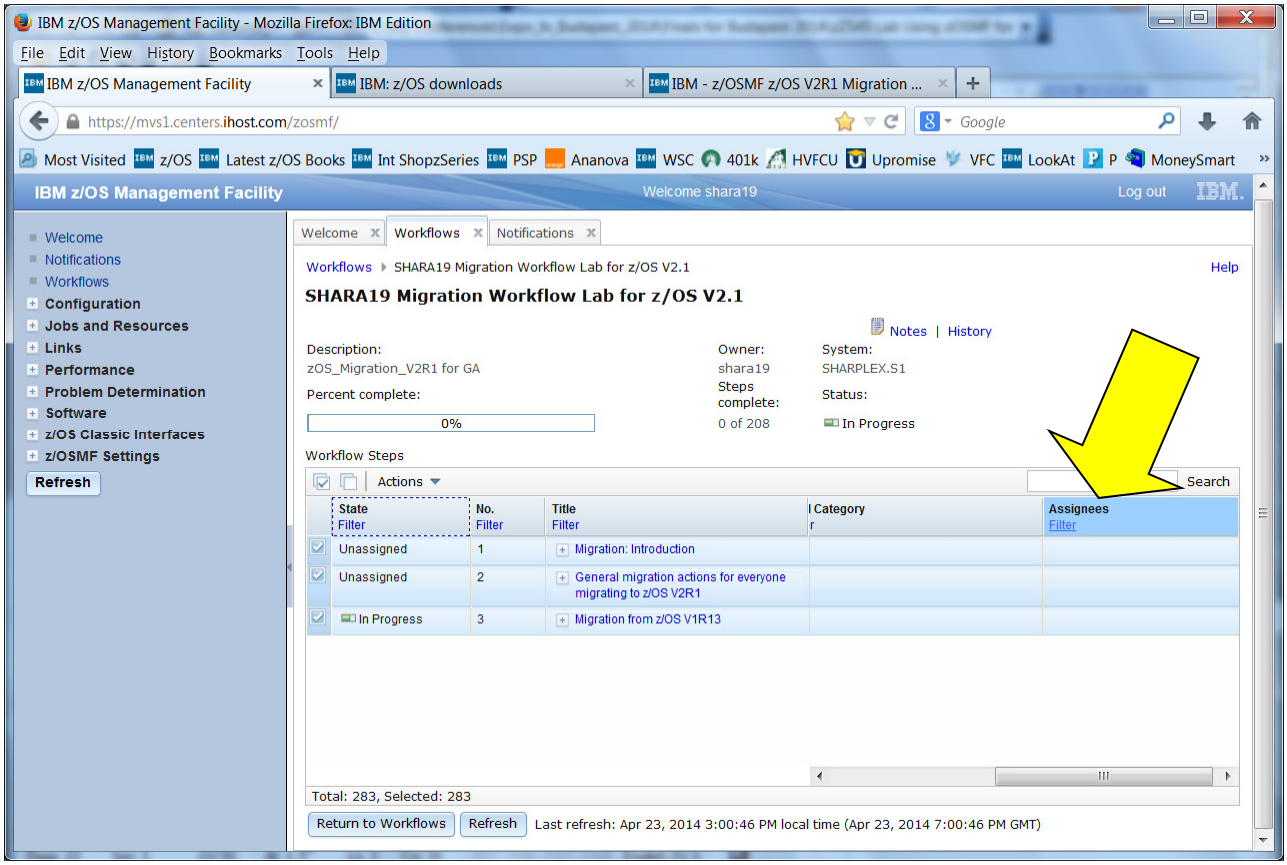
Back in the workflow (which we got to by way of the Notifications selection).

Let's see how to find what was assigned to our userid. Scroll to the right to find the "Assignees" column, and click on "filter".



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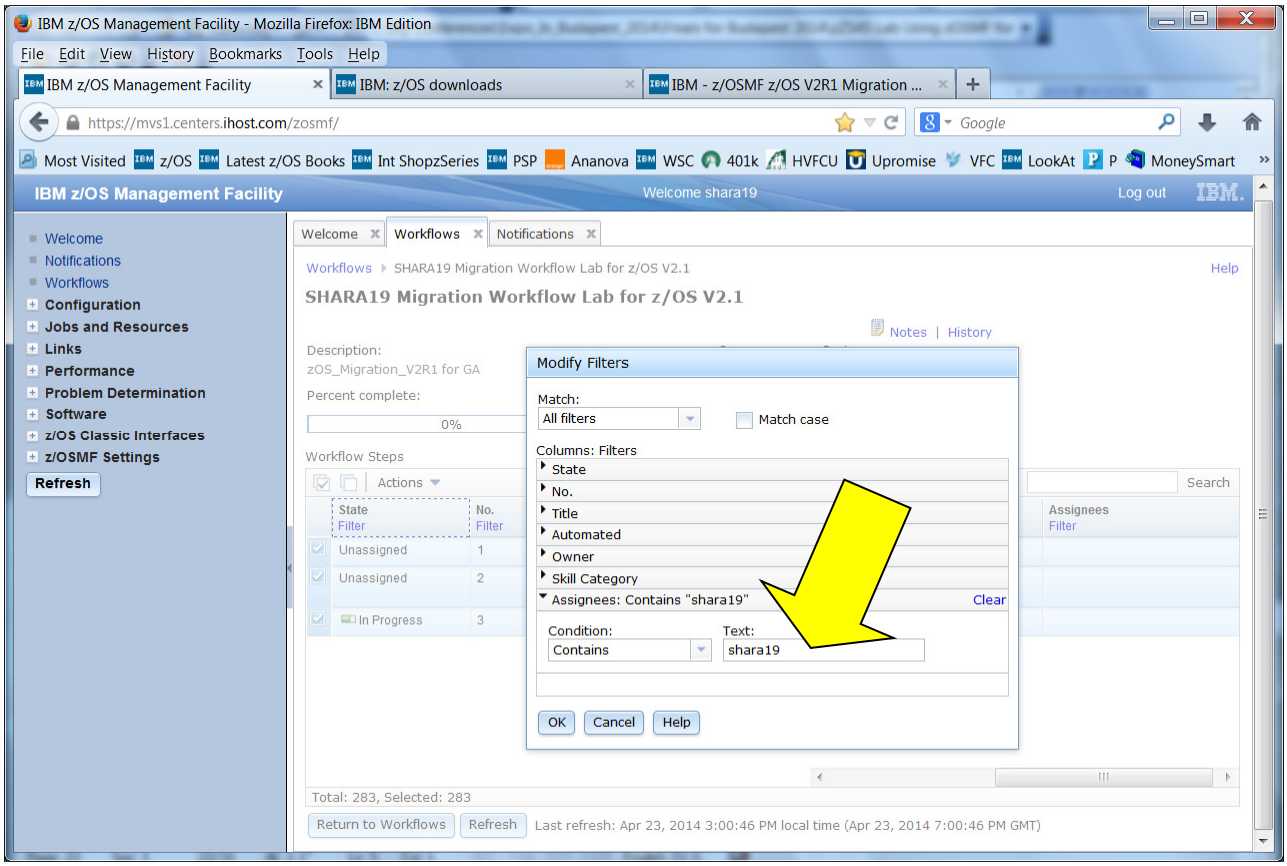
Then, under the “Assignees” area, type your userid (SHARAnn, SHARBnn, SHARCnn), to filter on migration actions that are assigned to you, and OK.



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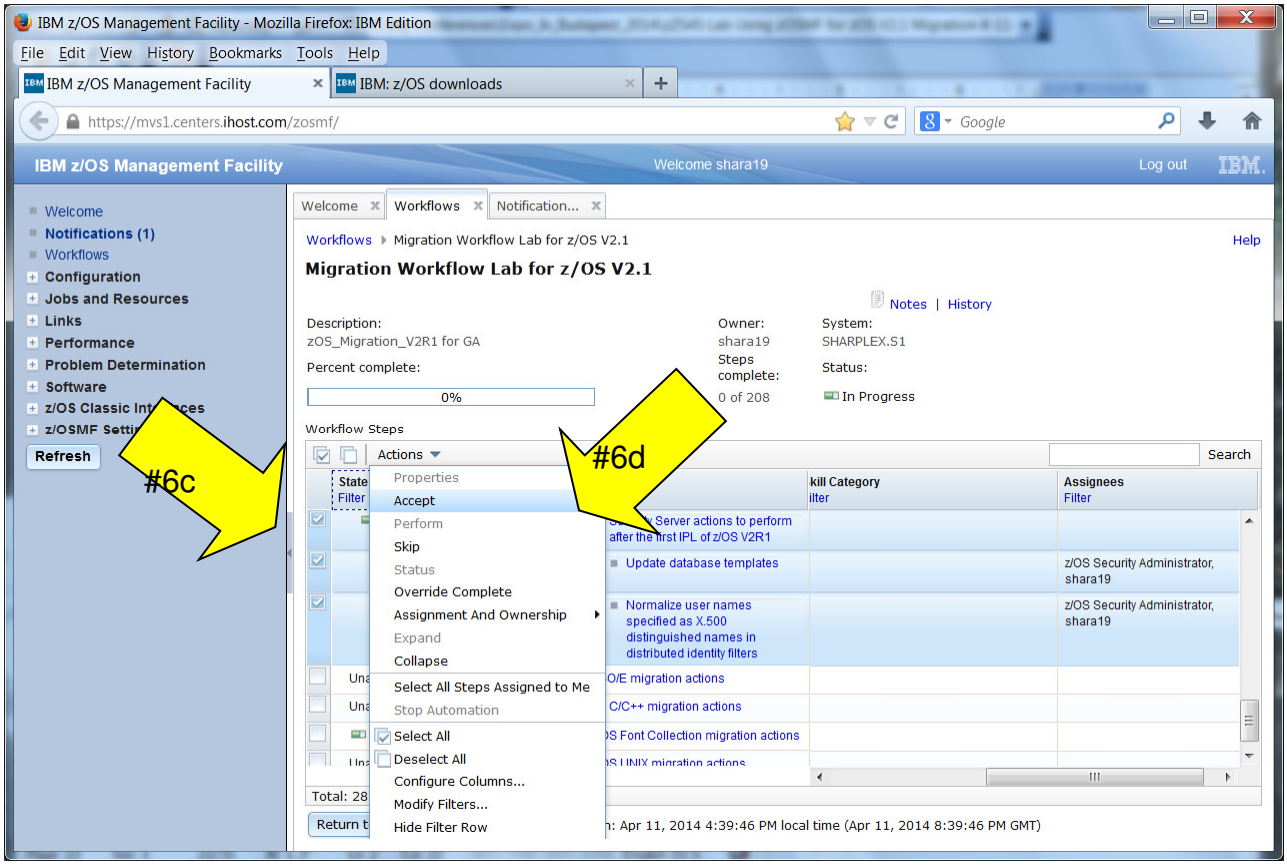
c. Keep untwisting until you see the migration actions that are assigned to you. We are going to accept *all* the Security Server migration action. Check the box called "Security Server migration actions" (which indirectly selects all the sub-steps!).

d. Then click on the "Actions" drop-down, then "Accept".



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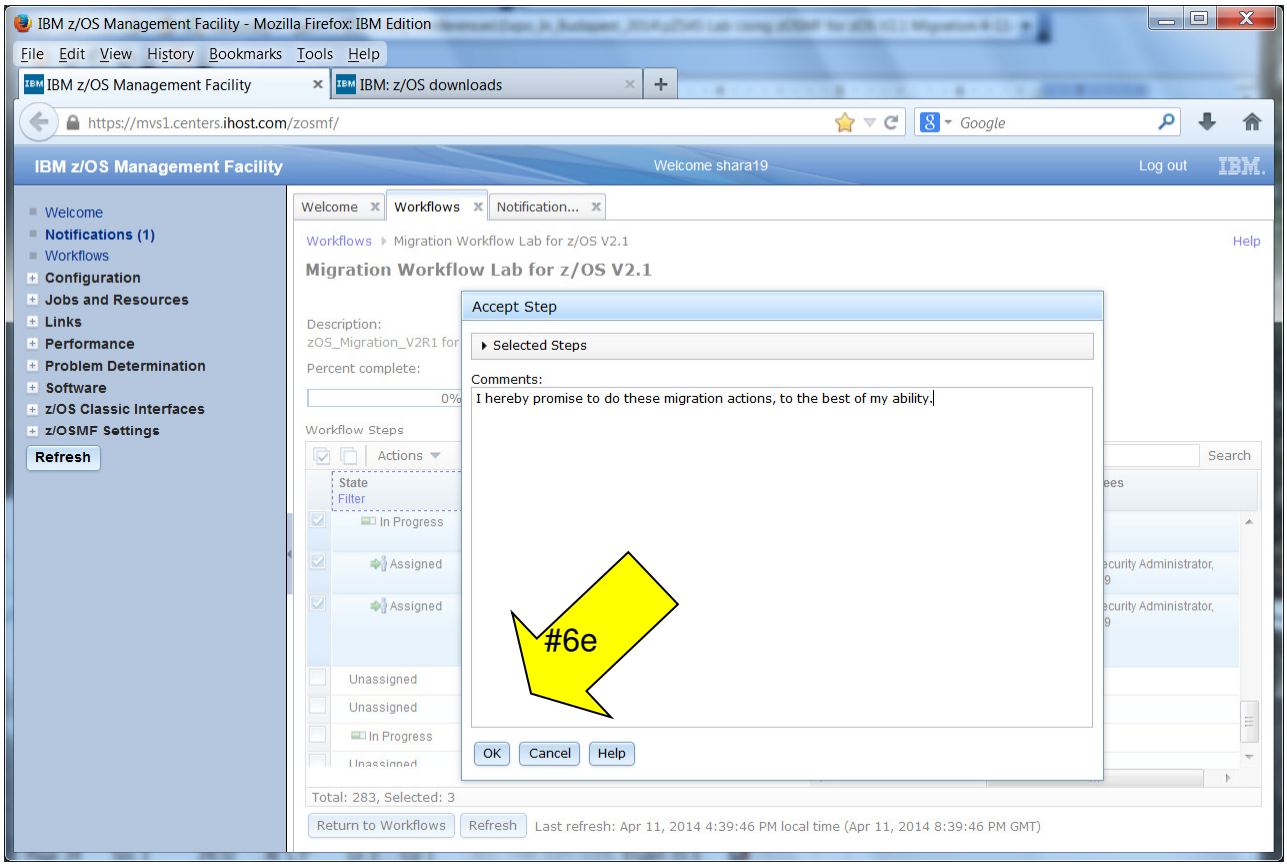
e. You can make a comment when you accept these steps (migration actions), then Click on OK.



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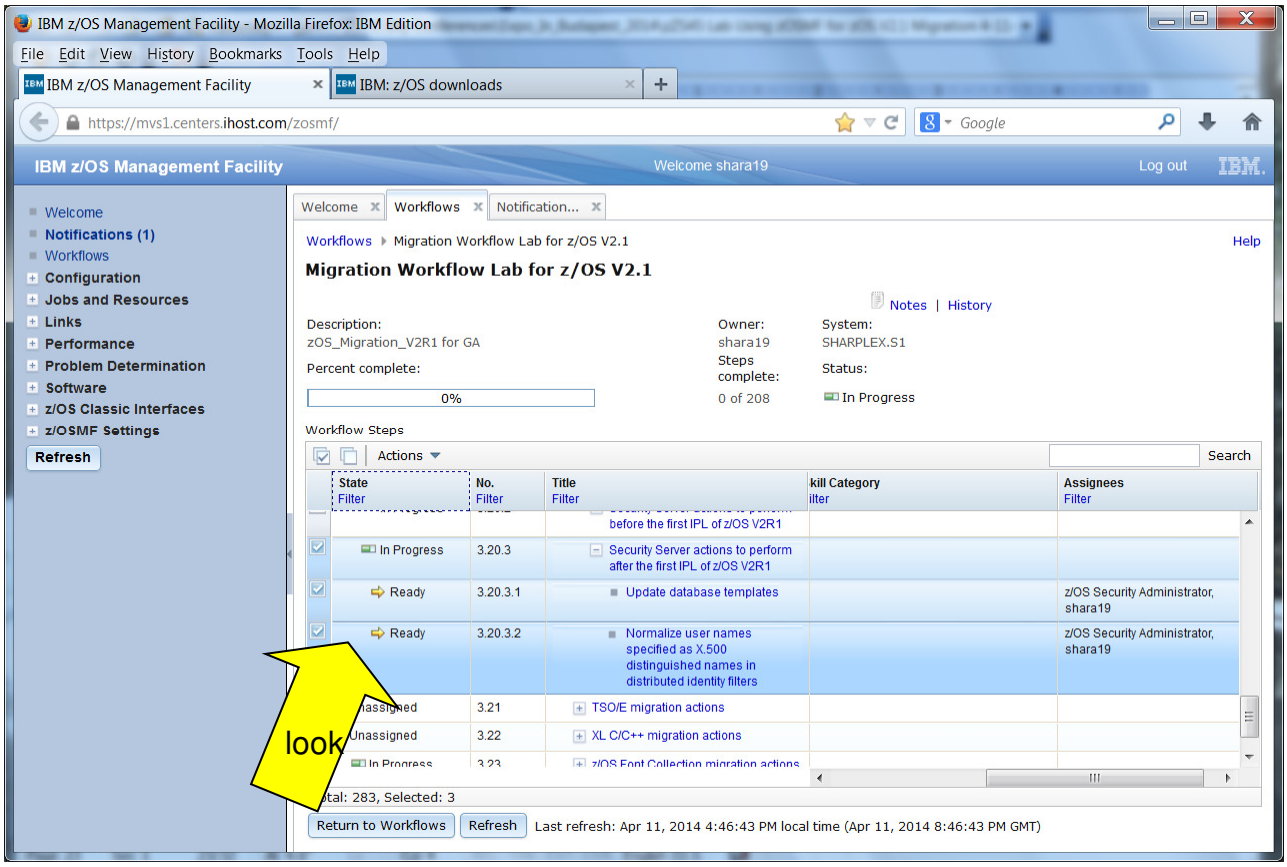
These steps (migration actions) for Security Server are now accepted, and are “Ready” to be performed!



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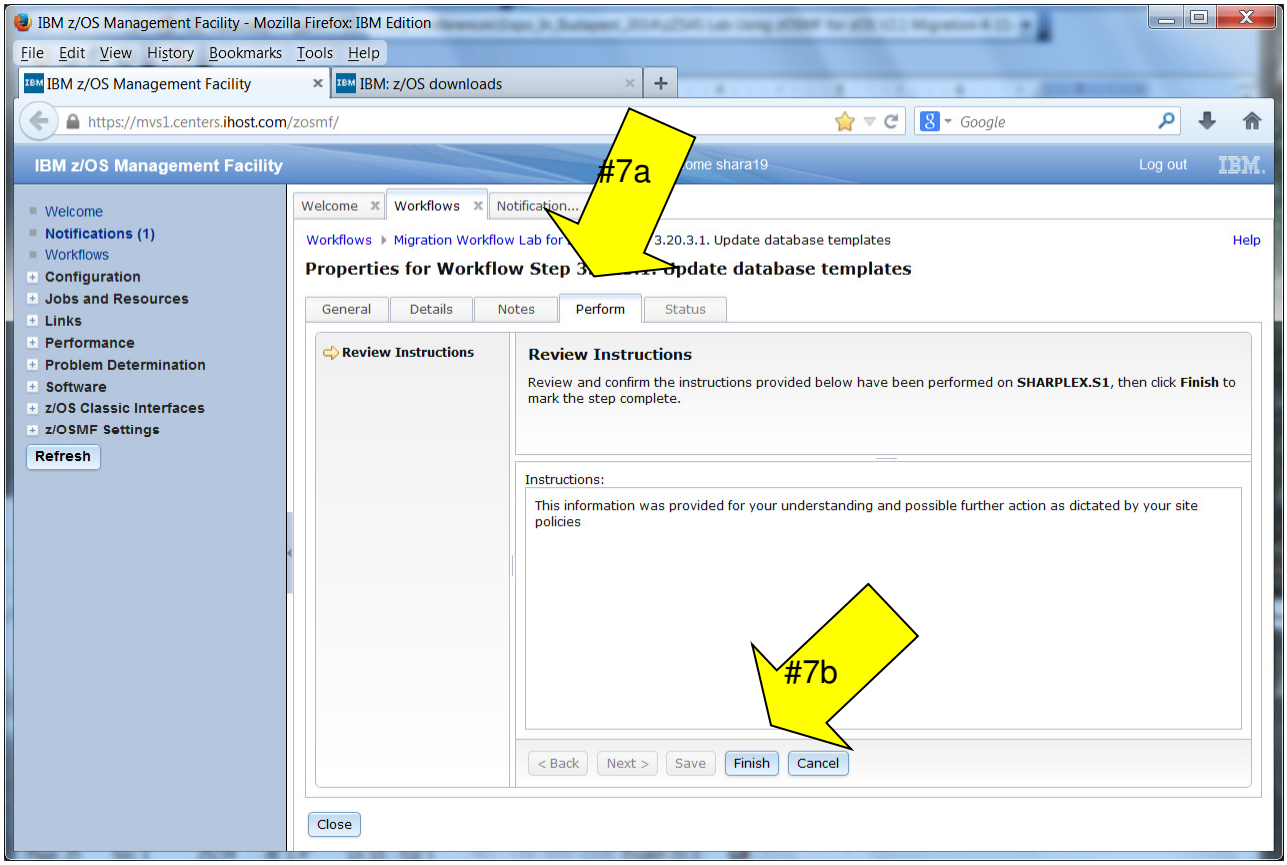
7. Performing a step (migration action).

Let's recap: you've defined a migration workflow to a system, you've assigned migration actions to lucky folks, you've got the migration action assignments accepted, and now you need to perform the migration action. Although the migration action may require a lot of work to perform, it is very easy within the z/OSMF workflow to say it's been done.

Select just one of the Security Server migration actions from the workflow (you should know how to do that by now – hint, click on the blue title, when you can see all the workflow steps. Just make sure it is in "Ready" state).

a. Click on the Perform tab. This was previously grayed out, because it wasn't assigned and accepted. You can see what is there now. For the z/OS V2.1 migration workflow that you have created, there is no programmatic assistance with doing any migration action. Obviously you can imagine that this would be something that would be very nice to have someday! Although you assigned and accepted the steps en masse, you can only perform one migration action at a time.

b. Let's pretend you have actually done this migration action and want to mark it as completed. You want the migration workflow to reflect that this step has been done. Click on "Finish".



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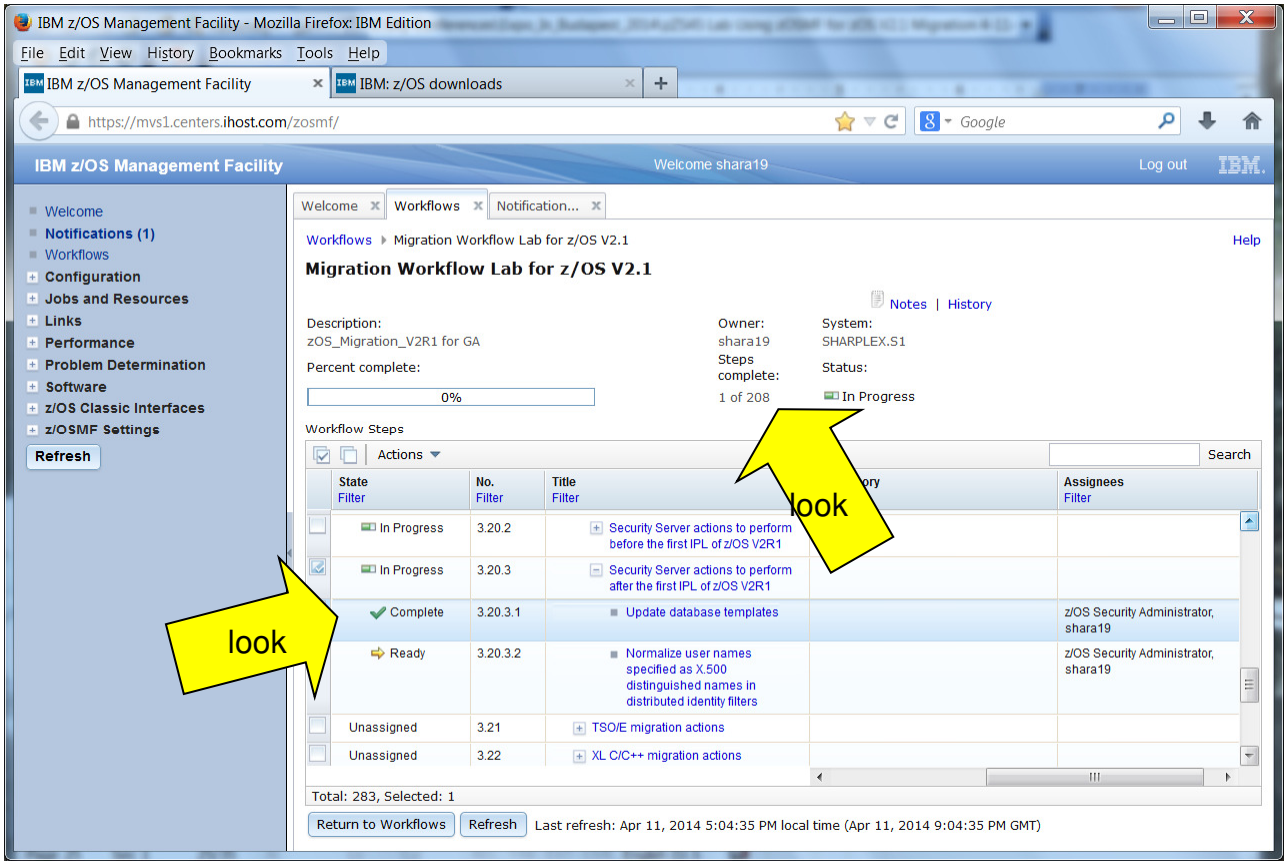
Look at the workflow now!

c. You have a migration action in Complete state.

d. You have 1 of 208 migration steps complete. (Although you are still at 0%).



You can continue to assign, accept, and perform migration actions as you wish at this point.

Clearing your filter off, to see all the migration actions again:

Make sure you remove your Assignee filter to see all the migration actions in the entire workflow. (Click on “Contains SHARAxx” under Assignees, then “Clear Filters” to see all the migration actions.) This is standard z/OSMF filter control, and is similar in Workflows as it is in other applications for z/OSMF.

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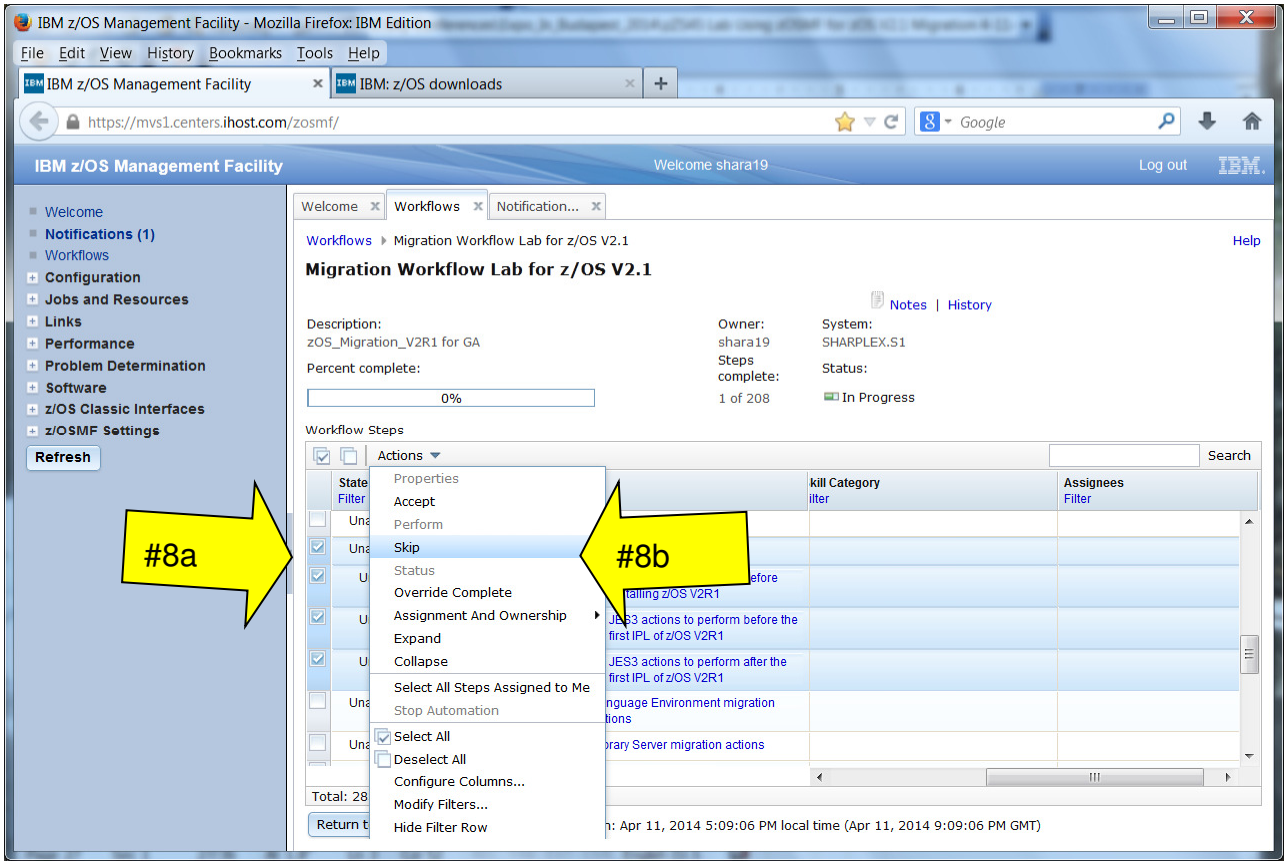
8. Skipping a step (migration action).

We know that all 206 migration actions don't need to be done on each and every system, so you will want to skip some migration actions. We also know that JES3 is a perfectly fine JES, however let's just assume that we don't use JES3 and want to skip those migration actions.

a. While in the workflow, find the JES3 migration actions. Click on the block next to "JES3 migration actions".

b. Then on the "Actions" pull-down, select "Skip".

- You may add a comment, and then press OK on the pop-up which isn't shown below. You get the idea of how that works by now.



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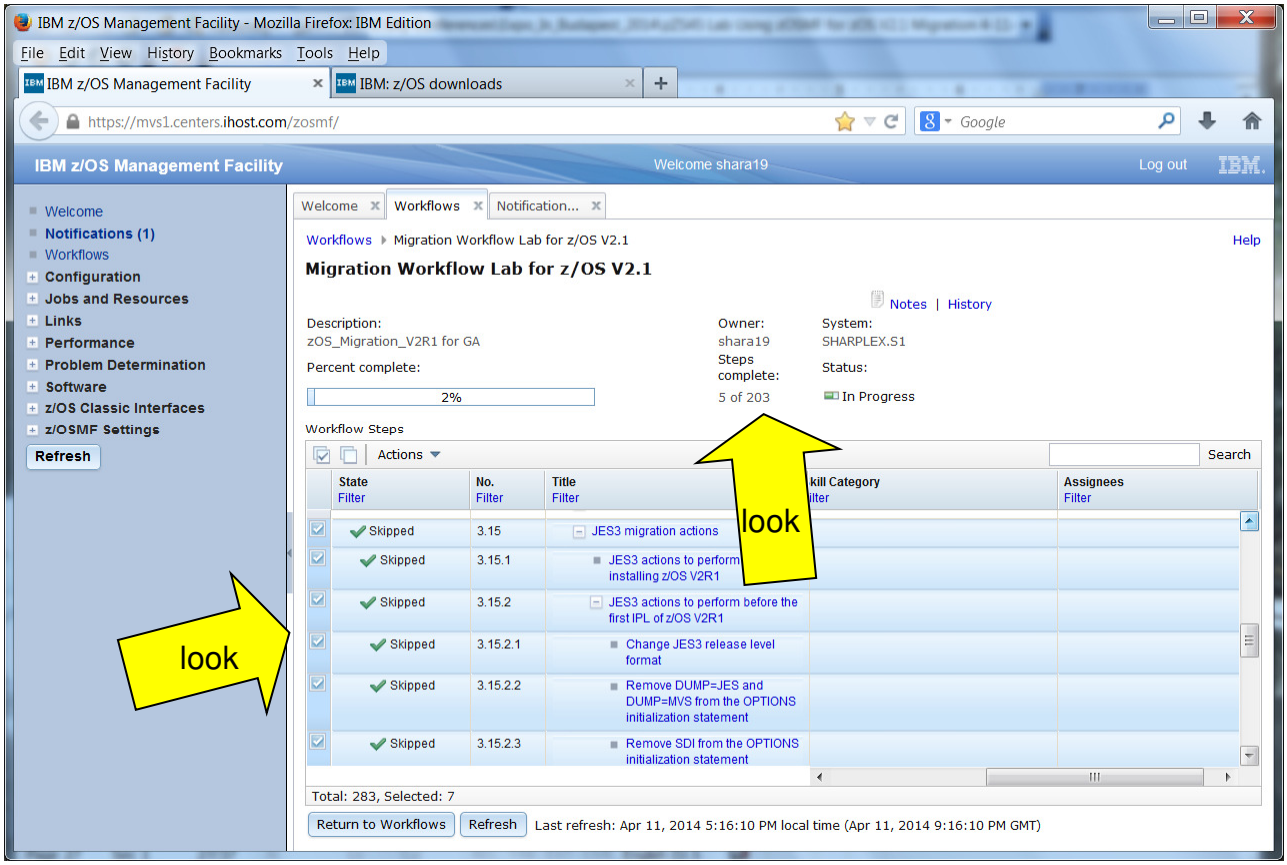
This could not be any easier. All five JES3 migration actions have been skipped, and removed off the total migration actions to perform.

c. Notice the total went from 208 to 203, since five JES3 steps were removed (skipped) from the workflow. Also notice, all the five Security Server migration actions were Performed and were Completed to bring the total complete to 5. This is because this screen shot shows all five Security Server migration actions were completed in the prior step. You may see something different, based on what you did in the prior step on your own.

d. Notice that the JES3 steps are in a state of “Skipped”.



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At this point, you can continue through the workflow if you wish, assigning, accepting, performing and skipping any migration action that you want!

A couple of items that you might notice when exploring this migration workflow:

1. A migration action that is listed as “None” on the General tab, corresponds *exactly* in the z/OS V2.1 Migration book to section of the book that has no migration actions. For instance, look at “BookManager Build migration actions”. There are no migration actions in “BookManager BUILD actions to perform before the first IPL of z/OS V2R1”. This matches the book, and has been moved into the workflow to *exactly* match the book. You will still need to Perform these empty migration actions to have them marked Complete. Imagine the lucky person assigned an empty migration action – talk about productivity for finishing them!
2. Many migration actions in this workflow must be done before z/OS V2.1 can be IPLed. z/OSMF V2.1 needs z/OS V2.1, so why is there a migration workflow to get where you’ve been? That is because there are several migration actions that need to be done *after* z/OS V2.1 (and z/OSMF V2.1 presumably) are up and running. Also, there are several migration actions in the z/OS V2.1 workflow which will be required in future releases. You can keep track of those in this workflow now, before you even migrate to those future releases.

End of exercise

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Exercise review and wrap-up

By completion of this lab, you now know how to:

__ 1. Download the z/OSMF z/OS V2.1 migration workflow from the web. You know where to find it, and which file to download. You know to transfer it in BINARY to a file system on your z/OSMF system.

__ 2. Logon to z/OSMF. Enter into the Workflow function. You know what the Notification function is, and how to use it.

__ 3. Create a z/OS V2.1 migration workflow within z/OSMF.

__ 4. Look at some of the z/OSMF workflow functions, and generally how to maneuver around a workflow. Understanding the concept of states and steps (and sub-steps). Understand what the five tabs for a z/OS migration action are, and how they are used.

__ 5. Assign steps (migration actions) to different users.

__ 6. Accept the assignment of a step (migration action).

__ 7. Perform a step (migration action).

__ 8. Skip several steps (migration actions) at once.

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