

## **z/OSMF Hand-On Labs**

### **- Choose Your Own Topic -**

## **Using the z/OSMF Software Updates to manage updates for SMP/E software**

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**Abstract:**

Are you a z/OS system administrator or a system programmer and would like to use a graphical user interface to easily install updates for SMP/E managed software? With the Software Update task, you can apply updates to existing software instances and manage in-progress and completed update processes,

This self-directed lab will take you through a guided experience for installing corrective, recommended, and functional updates to your system.

So, you've bought a great new product called "The Box III" from Hooli! You've successfully deployed this software. How do you update your newly installed product? It is very simple with z/OSMF Software Update.

*What level of z/OSMF do you need to package or install a PSI? Ensure you have the appropriate z/OSMF Software Management support installed:*

- *z/OSMF V2.2 with PTF UI44516 , or*
- *z/OSMF V2.1 with PTF UI42018*

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Note: Subsequent enhancements are being made to z/OSMF Software Management all the time. To find them, just use the SMP/E FIXCAT IBM.DrivingSystem-RequiredService.

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When you follow this self-directed lab, here is a high-level overview of what you will learn:

1. Logon to z/OSMF with your supplied lab id and password.
2. z/OS Customer view: install a PSI provided from a software vendor using z/OSMF Software Management's deployment task.

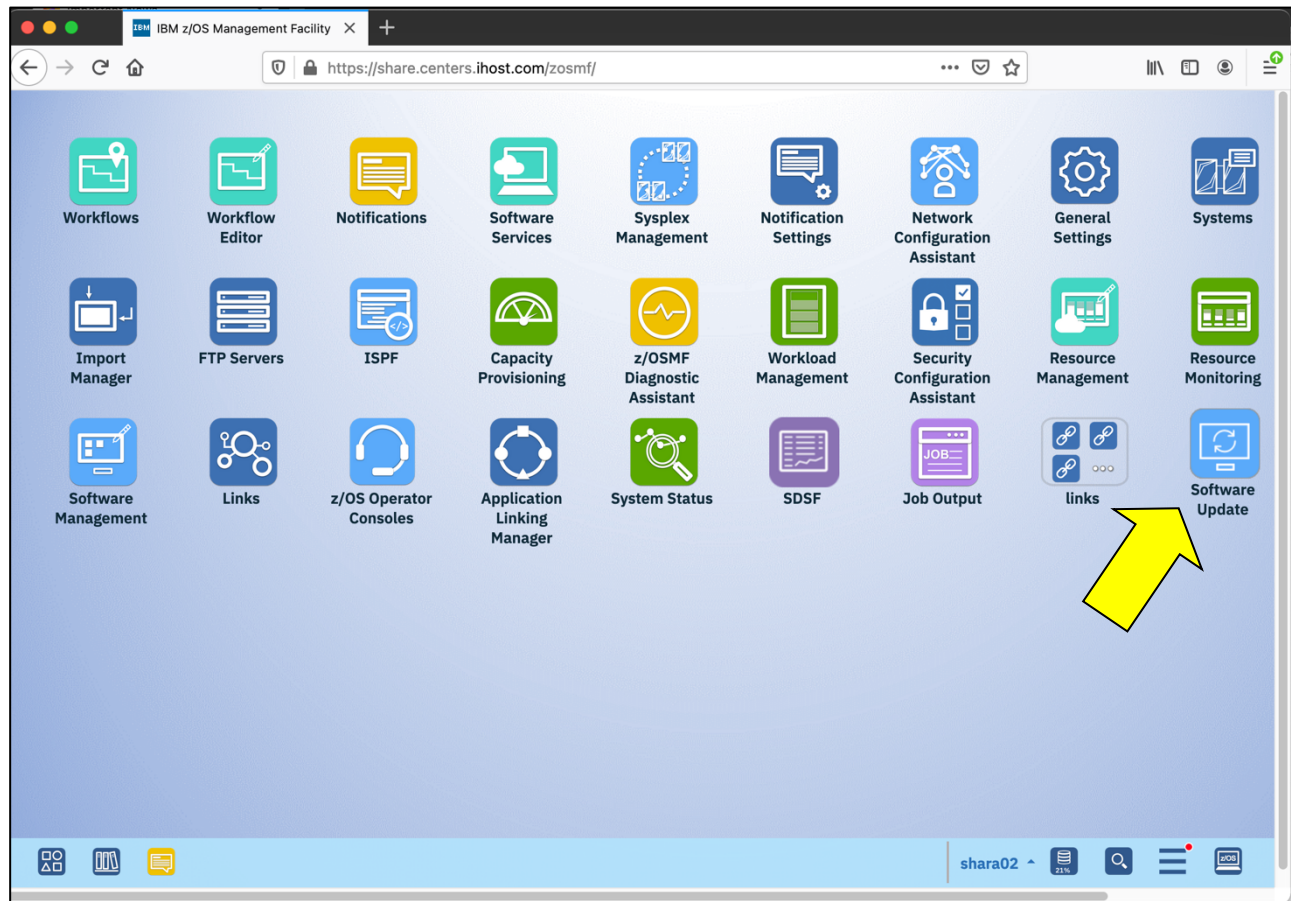
## Logon to z/OSMF.

In this step, we will now go into z/OSMF to use the Software Update function. For this lab, we are using a z/OSMF V2.5 system.

- a. Go to <https://share.centers.ihost.com/zosmf/> on the Firefox or IE web browser. (If you want to follow this lab on your own system, that is fine. Just not some of the samples we use you will need to supply yourself, using the Appendix to find those samples.).
- b. Using the userid you were given (SHARAnn, SHARBnn, or SHARCnn) and the password, logon to z/OSMF. 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, all executables (except the web browser) are on the z/OS system.
- c. Click on “LOG IN”.

The screenshot shows a web browser window with the address bar displaying <https://share.centers.ihost.com/zosmf/>. The page title is "IBM z/OS Management Facility". The main heading is "Welcome to z/OS" with the subtitle "The highly secure, scalable and resilient enterprise operating system for the IBM z Systems mainframe." Below this, there are two input fields: "z/OS USER ID" with the value "shara02" and "z/OS PASSWORD" with masked characters ".....". A blue "LOG IN" button is positioned below the password field. Three yellow arrows with black outlines point to specific elements: arrow #1a points to the address bar, arrow #1b points to the password field, and arrow #1c points to the "LOG IN" button. The footer contains links for "Shopz", "IBM Support", "z Systems Redbooks", "z/OSMF home Page", "WCS Flashes and Techdocs", "z/OS home Page", and "z/OS Knowledge Center". The copyright notice at the bottom right is "© Copyright IBM Corp. 2009.2019, Version 2.4".

Click on “**Software Update**”.



In the **Software Update** window.

- 1) To limit the Software Instances that are displayed, put in your SHARE\_ID -SWULAB in the search line. This will show your Software Instance that you will work with
- 2) Click on the arrow next to your Software Instance. This will show you the Zone for your Software Instance
- 3) Select the Zone.
- 4) You can “View Updates in Progress” and cancel the update.
- 5) You can also see the completed updates.

The screenshot shows the 'Software Update' window. At the top, there are buttons for 'Start New Software Update', 'View Updates in Progress' (circled in red with a yellow arrow labeled 4), 'Settings', and 'Help'. Below these is a search bar containing 'SHARA02-SWULAB' (labeled 1). A table lists software instances. The first instance is 'SHARA02-SWULAB-TheBoxIII\_PTFs' with system 'S2' and status 'Ready'. A yellow arrow labeled 2 points to the expand/collapse arrow next to it. Below the instance name, the 'Zone' is listed as 'MYTGT - No recommended updates have been installed.' (labeled 3). At the bottom, there are buttons for 'Refresh', 'Install Corrective', 'Install Recommended', and 'Install Functional'. The last refresh time is 'Mar 22, 2022 1:37:26 PM'. A yellow arrow labeled 5 points to a 'Show completed updates' button (circled in red) in the top right corner.

Name	System	Description	Status
SHARA02-SWULAB-TheBoxIII_PTFs	S2		Ready

Zone

- MYTGT - No recommended updates have been installed.

Items per page: 10 1-1 of 1 item 1 of 1 page

Refresh Install Corrective Install Recommended Install Functional

Last refresh: Mar 22, 2022 1:37:26 PM

You now have the option to choose which type of updates you want to install. “**Install Corrective**”, “**Install Recommended**”, or “**Install Functional**”.

For this lab, we are going to go ahead and install a functional update.  
Click on **“Install Functional”**.

The screenshot shows the 'Software Update' window. At the top, there's a title bar 'Software Update' with window controls. Below it, the main header 'Software Update' has an info icon. To the right are links for 'Settings' (gear icon) and 'Help' (question mark icon). Below the header, there are two buttons: 'Start New Software Update' (dark grey) and 'View Updates in Progress' (light grey). To the right of these is a link 'Show completed updates' with a plus icon. The main section is titled 'Software Instances and Zones' with a subtitle 'Choose a software instance and select a zone for a software update.' Below this is a search bar containing 'SHARA02-SWULAB'. A table lists software instances with columns: Name, System, Description, and Status. The first row shows 'SHARA02-SWULAB-TheBoxIII\_PTFs' with system 'S2' and status 'Ready'. Below the table, a 'Zone' section shows a radio button selected for 'MYTGT - No recommended updates have been installed.' At the bottom, there are four buttons: 'Refresh', 'Install Corrective', 'Install Recommended', and 'Install Functional'. A large yellow arrow points to the 'Install Functional' button. Below the buttons, it says 'Last refresh: Mar 22, 2022 1:41:34 PM'.

Software Update

Settings Help

Start New Software Update View Updates in Progress

Show completed updates

Software Instances and Zones

Choose a software instance and select a zone for a software update.

SHARA02-SWULAB

Name	System	Description	Status
SHARA02-SWULAB-TheBoxIII_PTFs	S2		Ready

Zone

MYTGT - No recommended updates have been installed.

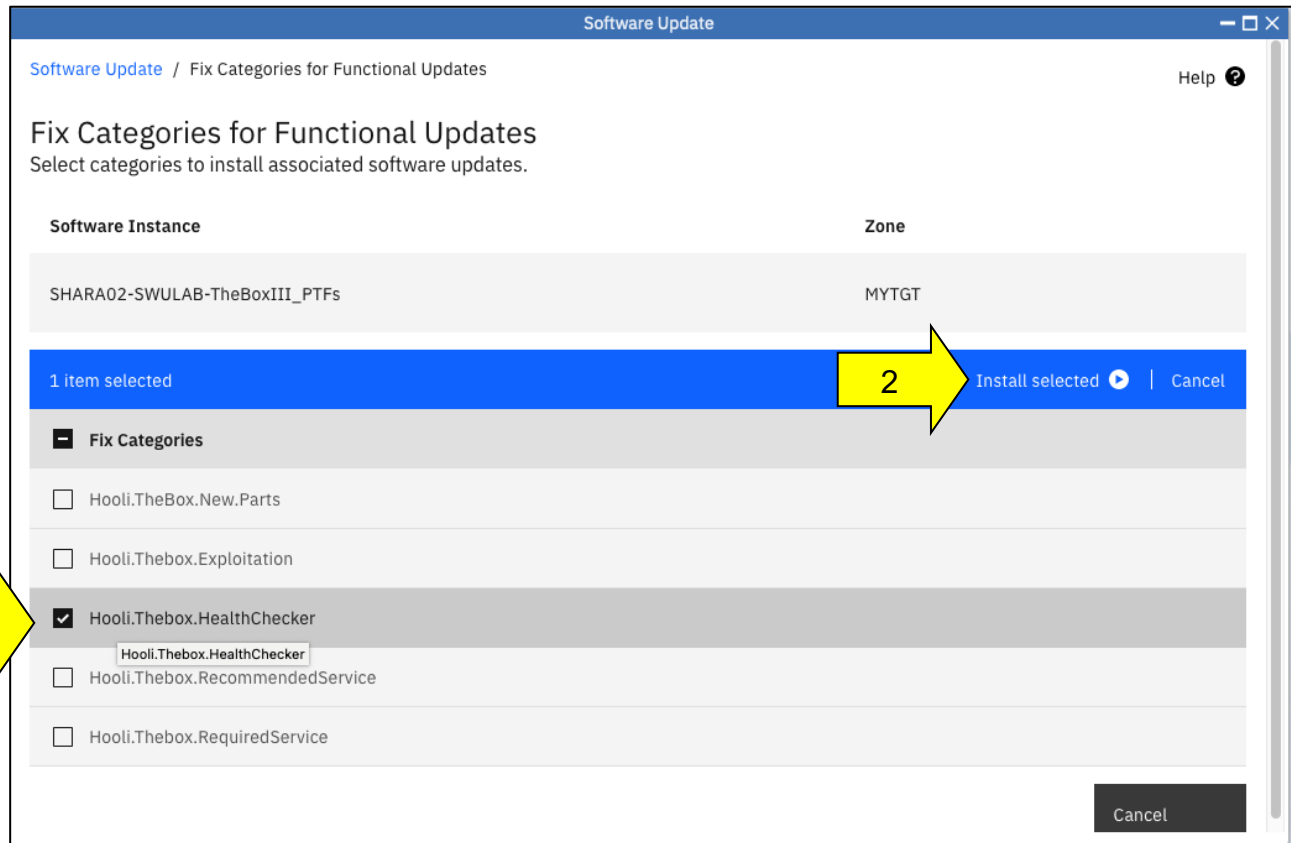
Items per page: 10 1-1 of 1 item 1 of 1 page

Refresh Install Corrective Install Recommended Install Functional

Last refresh: Mar 22, 2022 1:41:34 PM

Here we can see all the FIXCATs that are available for us to install. For this lab we are to install fixes that have the Hooli.Thebox.HealthChecker FIXCAT associated with them.

1. Select Hooli.Thebox.HealthChecker
2. Click on Install selected.



Now we are ready to start installing our PTFs.

This next window, “Preparing Updates”, shows the status of the process to prepare updates for installation.

Here we can see that we will have some “New HOLDs”(1) that we will be working with.

Click “Next”(2) to continue.

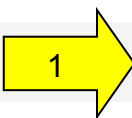

Software Update

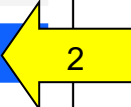
### Preparing Updates


Help ?

☒ Preparing Updates ☐ Resolve HOLDs ☐ Verifying Updates ☐ Pre-install Summary ☐ Installing Updates ☐ Review Post-installation HOLDs ☐ Installation Summary

Software Instance	Zone	Notes
SHARA02-SWULAB-TheBoxIII_PTFs	MYTGT	Use a maximum of 140 characters per note. <a href="#">Edit Notes</a>

Process	Status
Preparing Updates	  New HOLDs Found

[Cancel](#) [Save and Exit](#) [Next](#) 



Note: At any time in the process you can click “Save and Exit”(3) and come back to the installation at a future time.



We can now see we have 4 HOLDS to resolve. We have 3 DOC holds that we can resolve before we install, and 1 IPL HOLD that we will want to resolve after installation.

Software Update

Resolve HOLDS ⓘ

Help ⓘ

☒ Preparing Updates

☒ Resolve HOLDS

☐ Verifying Updates

☐ Pre-install Summary

☐ Installing Updates

☐ Review Post-installation HOLDS

☐ Installation Summary

Software Instance

Zone

Notes

SHARA02-SWULAB-TheBoxIII\_PTFs

MYTGT

Use a maximum of 140 characters per note.

Edit Notes

Unresolved (4)

Resolved (0)

Resolve after Installation (0)

Excluded (0)

Filter by Type

Filter by Reason

Reset all filters ↻

☐ ERROR (0)

☐ SYSTEM (4)

☐ FIXCAT (0)

☐ USER (0)

☐ DOC (3)

☐ IPL (1)

Export ⬇

<input type="checkbox"/>	Type	Reason	FMID	Update Name
✓ <input type="checkbox"/>	SYSTEM	DOC	HOOMOC3	HL00006
✓ <input type="checkbox"/>	SYSTEM	DOC	HOOMOC3	HL00008
✓ <input type="checkbox"/>	SYSTEM	DOC	HOOMOC3	HL00011
✓ <input type="checkbox"/>	SYSTEM	IPL	HOOMOC3	HL00011

Cancel

Save and Exit

Next

Select the 3 DOC HOLDs. Notice now just above the HOLDs we have several different options we can do with these HOLDs.

**Software Update**

### Resolve HOLDs ⓘ

Help ⓘ

☒ Preparing Updates ☒ **Resolve HOLDs** ☐ Verifying Updates ☐ Pre-install Summary ☐ Installing Updates ☐ Review Post-installation HOLDs ☐ Installation Summary

Software Instance	Zone	Notes
SHARA02-SWULAB-TheBoxIII_PTFs	MYTGT	Use a maximum of 140 characters per note. <a href="#">Edit Notes</a>

Unresolved (4) | Resolved (0) | Resolve after Installation (0) | Excluded (0)

Filter by Type: ☐ ERROR (0) ☒ **SYSTEM (4)** ☐ FIXCAT (0) ☐ USER (0) ☐ DOC (3) ☐ IPL (1)

Filter by Reason: [Reset all filters](#) ↻

3 items selected **Resolve HOLD** Resolve HOLD after Installation Exclude Update from Installation | Cancel

Type	Reason	FMID	Update Name
✓ <b>SYSTEM</b>	DOC	H00MOC3	HL00006
✓ <b>SYSTEM</b>	DOC	H00MOC3	HL00008
✓ <b>SYSTEM</b>	DOC	H00MOC3	HL00011
✗ <b>SYSTEM</b>	IPL	H00MOC3	HL00011

[Cancel](#) [Save and Exit](#) [Next](#)

Before we resolve these HOLDs, let's take a look at them. Click on the arrow next to one of the HOLDs(1). This will expand and show you the HOLD related to the PTF shown to the right. Once you review all the HOLDs, click on "Resolve HOLD"(2).

The screenshot displays the 'Unresolved (4)' tab of the IBM Support Center interface. At the top, there are filter buttons for 'ERROR (0)', 'SYSTEM (4)', 'FIXCAT (0)', 'USER (0)', 'DOC (3)', and 'IPL (1)'. Below these, a table lists the holds. The first hold is expanded, showing its details. A yellow arrow labeled '1' points to the expand icon (a small triangle) next to the first hold. Another yellow arrow labeled '2' points to the 'Resolve HOLD' button in the action bar above the expanded hold details.

Type	Reason	FMID	Update Name
SYSTEM	DOC	H00MOC3	HL00006
++ HOLD(HL00006) SYS FMID(H00MOC3) REASON(DOC) DATE(19010) COMMENT (***** * FUNCTION AFFECTED: H00LI (HL00003) * ***** * DESCRIPTION : Documentation updates * ***** * TIMING : as needed * ***** This is a sample DOC Hold for H00LI.).			
SYSTEM	DOC	H00MOC3	HL00008
SYSTEM	DOC	H00MOC3	HL00011

You should now only see 1 HOLD, the IPL HOLD. For this HOLD we will want to resolve after installation. Select this HOLD(1), then click on “Resolve after Installation”(2), then Click “Next” which will be active once you resolve the IPL HOLD(3).

Software Update

### Resolve HOLDS ⓘ

Help ⓘ

☒ Preparing Updates ☒ **Resolve HOLDS** ☐ Verifying Updates ☐ Pre-install Summary ☐ Installing Updates ☐ Review Post-installation HOLDS ☐ Installation Summary

Software Instance	Zone	Notes
SHARA02-SWULAB-TheBoxIII_PTFs	MYTGT	Use a maximum of 140 characters per note. <button>Edit Notes</button>

Unresolved (1) | Resolved (3) | Resolve after Installation (0) | Excluded (0)

Filter by Type: ☐ ERROR (0) ☐ SYSTEM (1) ☐ FIXCAT (0) ☐ USER (0) ☐ DOC (0) ☐ IPL (1)

Filter by Reason: ☐ ERROR (0) ☐ SYSTEM (1) ☐ FIXCAT (0) ☐ USER (0) ☐ DOC (0) ☐ IPL (1)

Reset all filters ↻

1 item selected

Type	Reason	FMID	Update Name
<input checked="" type="checkbox"/> SYSTEM	IPL	HOOMOC3	HL00011

**2** Resolve HOLD after Installation | Exclude Update from Installation | Cancel

**1**

Cancel | Save and Exit | **3** Next

This next window, “Verifying Updates”, shows the status of the process to verify your hold resolution choices. Go ahead and click “Next” once you see the checkmark next to Done.

Software Update

## Verifying Updates

Help ?

☒ Preparing Updates ☒ Resolve HOLDS ☒ Verifying Updates ☐ Pre-install Summary ☐ Installing Updates ☐ Review Post-installation HOLDS ☐ Installation Summary

Software Instance	Zone	Notes
SHARA02-SWULAB-TheBoxIII_PTFs	MYTGT	Use a maximum of 140 characters per note. <button>Edit Notes</button>

Process	Status
Verifying Updates	✓ Done

Cancel Save and Exit Next

This window is the “Pre-install Summary”. This window summarizes the installation status of the updates. It shows all updates that have been selected for installation or that were excluded from the installation. No updates have been installed at this point. You can see that we have 4 updates that have been selected to be installed. Click “Next”

Software Update

### Pre-install Summary

Help ?

☒ Preparing Updates ☒ Resolve HOLDS ☒ Verifying Updates ☒ Pre-install Summary ☐ Installing Updates ☐ Review Post-installation HOLDS ☐ Installation Summary

Software Instance	Zone	Notes
SHARA02-SWULAB-TheBoxIII_PTFs	MYTGT	Use a maximum of 140 characters per note.

Edit Notes

#### Updates to be installed

Export ↓

Filter by Installation Status

☐ Will be installed (5) ☐ Excluded (0) ☐ Will be installed (satisfies dependencies) (0)

Search

Update Name	Installation Status
HL00006	Will be installed
HL00007	Will be installed
HL00008	Will be installed
HL00010	Will be installed
HL00011	Will be installed

Items per page: 10 ▾ 1-5 of 5 items 1 ▾ of 1 page

Cancel Save and Exit Next

This next window, “Install Updates”, shows the status of its work to install the selected updates on the selected software instance. If there was an “ERROR” you would be able to download a zip file with the job output. Click “Next” when you see the checkmark next to “Done”.

The screenshot shows a window titled "Software Update" with a progress bar at the top. The progress bar has seven steps: "Preparing Updates", "Resolve HOLDS", "Verifying Updates", "Pre-install Summary", "Installing Updates" (which is currently active and highlighted with a blue dot), "Review Post-installation HOLDS", and "Installation Summary". Below the progress bar, there is a table with three columns: "Software Instance", "Zone", and "Notes". The table contains one row with the instance "SHARA02-SWULAB-TheBoxIII\_PTFs", zone "MYTGT", and a note "Use a maximum of 140 characters per note." with an "Edit Notes" button. Below the table, there is a section titled "Process" with a sub-header "Status". It shows "Installing Updates" with a green checkmark and the word "Done". At the bottom right, there are three buttons: "Cancel", "Save and Exit", and "Next". A large yellow arrow points to the "Next" button.

Software Instance	Zone	Notes
SHARA02-SWULAB-TheBoxIII_PTFs	MYTGT	Use a maximum of 140 characters per note. <a href="#">Edit Notes</a>

Process	Status
Installing Updates	✓ Done

[Cancel](#) [Save and Exit](#) [Next](#)

Now we can now resolve our HOLD that we chose to resolve after installation. Like the DOC holds, you can click on the arrow next to the HOLD(1) to read the content. Select the HOLD(2) and click on “Resolve HOLD”(3). then Click “Next” which will be active once you resolve the IPL HOLD(4).

Software Update

### Review Post-installation HOLDS

Help ?

☒ Preparing Updates ☒ Resolve HOLDS ☒ Verifying Updates ☒ Pre-install Summary ☒ Installing Updates ☒ Review Post-installation HOLDS ☐ Installation Summary

Software Instance	Zone	Notes
SHARA02-SWULAB-TheBoxIII_PTFs	MYTGT	Use a maximum of 140 characters per note. <a href="#">Edit Notes</a>

Unresolved (1) Resolved (0)

Filter by Type Filter by Reason Reset all filters ↻

☐ ERROR (0) ☒ SYSTEM (1) ☐ FIXCAT (0) ☐ USER (0) ☐ IPL (1)

1 Item selected [Resolve HOLD](#) [Cancel](#)

Reason	FMID	Update Name
SYSTEM	H00MOC3	HL00011

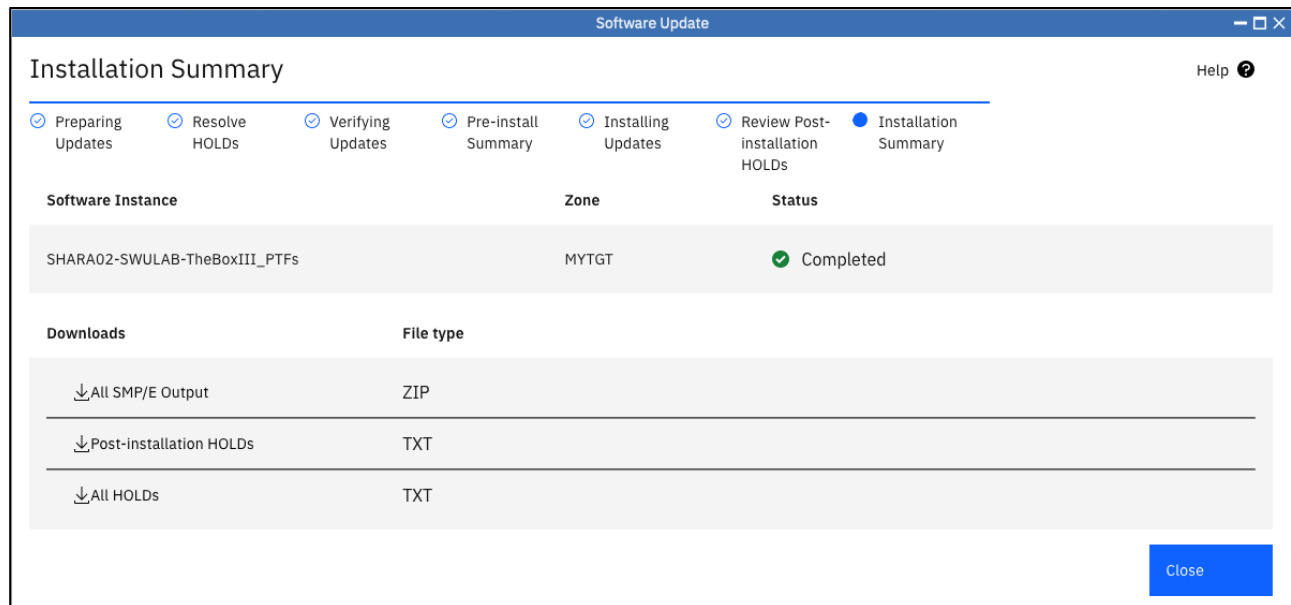
++ HOLD(HL00011) SYS FMID(H00MOC3) REASON(IPL) DATE(19010)  
COMMENT  
(\*\*\*\*\*  
\* FUNCTION AFFECTED: H00LI (HL00011) \*  
\*\*\*\*\*  
\* DESCRIPTION : Need an IPL \*  
\*\*\*\*\*  
This requires an IPL.  
Mark this HOLD as something to do after install.).

[Resolve HOLD](#)

[Save and Exit](#) [Next](#)



This final window, “Installation Summary”, provides links to download the SMP/E output for the update process and information about the HOLDS for you to review.



Congratulations!! You have just used Software Update to install your SYSMODs. You can **Close** out of this window.

If you would like to try the “Install Corrective” option on your own, go ahead and try to install update HL00009.

Thank you for being a good user on our system!