



# Hands-On Lab

## z/OSMF Sysplex Management

### Abstract:

IBM z/OS Management Facility (z/OSMF) provides a web-based graphical user interface (UI) for z/OS sysplex management. In this hand-on lab, you will explore various views of sysplex resources and operations provided by z/OSMF Sysplex Management plugin.

This session will be useful to systems programmers and their managers who will be using or are considering using z/OSMF Sysplex Management plugin.

## Introduction: z/OSMF Sysplex Management

The Sysplex Management task simplifies the management of sysplex resources. It provides a number of graphic views to visualize the topology of your sysplex. You can view sysplexes as well as systems in a sysplex. You can view physical configurations, such as coupling facilities and LPARs, as well as logical resources, such as couple data sets and coupling facility structures. From the graphical view, you can drill down to see details. Sysplex Management task also supports a set of clickable actions which can modify sysplex resources such as CDS, CF structures, CF connections, etc. The latest enhancement also provides graphic interface for working with CFRM policies.

## z/OSMF Lab: Exploring Sysplex Management

In this lab, you will learn about various views and actions of Sysplex Management by completing the following activities:

1. Log in to z/OSMF.
2. Open Sysplex Management.
3. Access Topology View of Sysplex.
4. Access Physical View of Sysplex.
5. View Properties of Couple Data Set
6. Open Coupling Facility Structures.
7. Access CF Connectivity View of Sysplex.
8. Access CF Connectivity Detail View of Sysplex.
9. Check Command log.
10. Switch Alternate to Primary.
11. Check Warning icon.
12. Check Notification.
13. List CFRM Policies
14. Work with CFRM Policy Editor
15. Export Policy
16. Import Policy

It is recommended that you perform these activities in the order listed. As you become more familiar with the desktop UI, you will become adept at accessing the particular tasks that you require.

As with the other labs in this session, the lab teams share access to the same z/OS system. Each team is given a unique z/OS user ID to use for the exercises. To avoid confusion, use only the user ID that is assigned to your team.

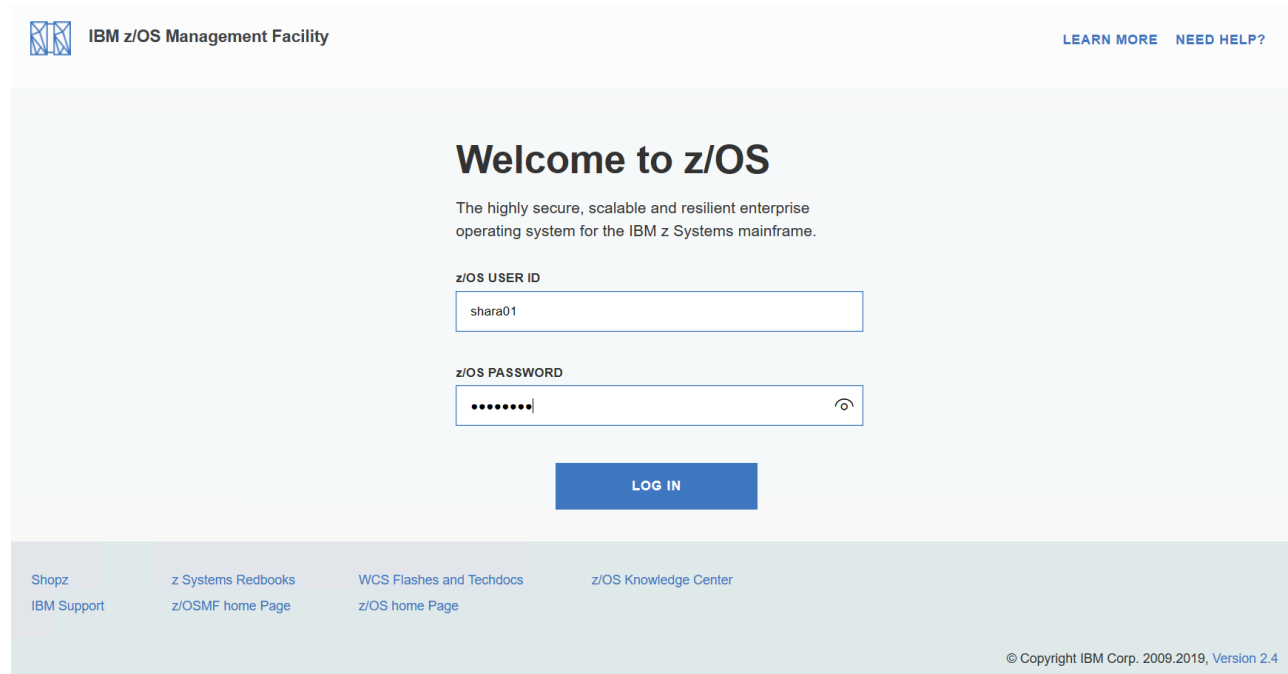
### Notes:

1. The screen captures in this handout show the use of different user IDs. Your browser session will use the user ID that was assigned to your lab team.

# 1. Log in to z/OSMF

- Launch browser from your workstation
- Point browser to z/OSMF – enter the following url  
<https://share.centers.ihost.com/zosmf>
- Login with SHARE userid/pw as provided by the lab instructor
  - Each workstation has been assigned a unique z/OS user id

Note: All screen captures in the handout show the different user ID, your browser will be slightly different to reflect the User ID that you were given.



IBM z/OS Management Facility [LEARN MORE](#) [NEED HELP?](#)

## Welcome to z/OS

The highly secure, scalable and resilient enterprise operating system for the IBM z Systems mainframe.

z/OS USER ID

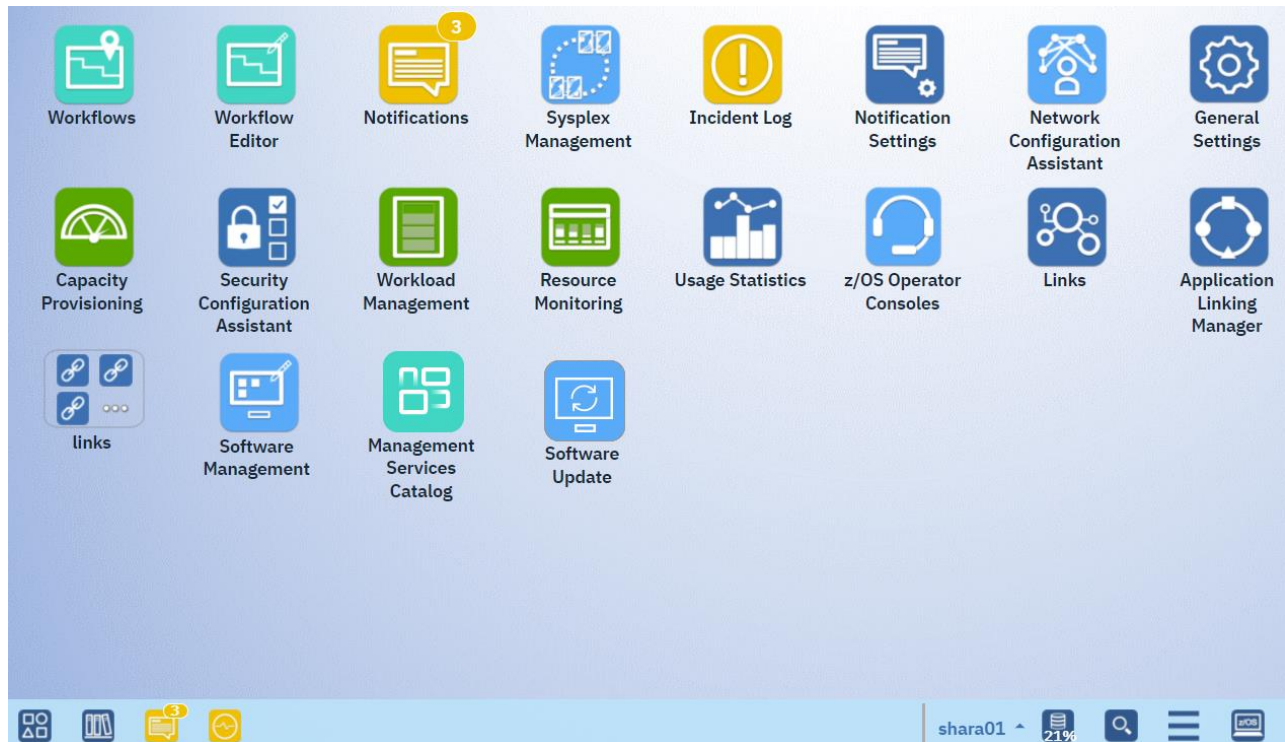
z/OS PASSWORD

[LOG IN](#)

[Shopz](#) [z Systems Redbooks](#) [WCS Flashes and Techdocs](#) [z/OS Knowledge Center](#)  
[IBM Support](#) [z/OSMF home Page](#) [z/OS home Page](#)

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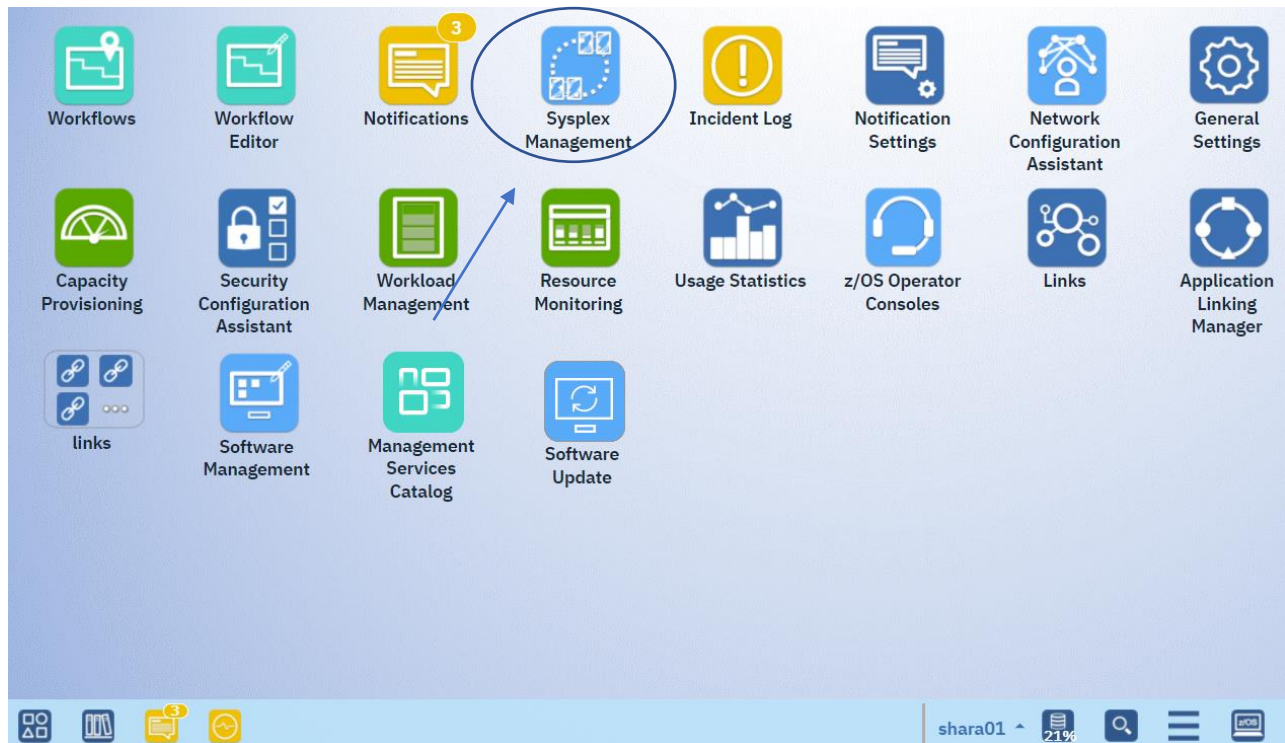
Input user ID and password that provided by the lab instructor, then you will enter the z/OSMF Desktop UI



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## 2. Open Sysplex Management

In z/OSMF Desktop interface, find the icon named **Sysplex Management**. Double click on it to open the Sysplex Management plugin. When Sysplex Management is opened, you will firstly see Topology view of Sysplex.



### 3. Access Topology View of Sysplex

Use the Topology View to manage your sysplex topology.

The Topology View displays the relationship between sysplexes, coupling facilities (CFs), and systems. With a proper setup in z/OSMF Systems task and typically one z/OSMF running in each sysplex, the Topology View is able to provide an enterprise view across sysplex.

The Topology View includes both a graphic view and a table view. You can drag the divider that separates the views to expand or reduce each section.

Sysplex Management
— □ ×

[Help](#)

**Sysplex Management**
Commands Log

Graphic View
Legend
Zoom Level: 100%
Export

SHARPLEX

▲ CF2

🖨 S2

Actions ▾
Table view: Tree

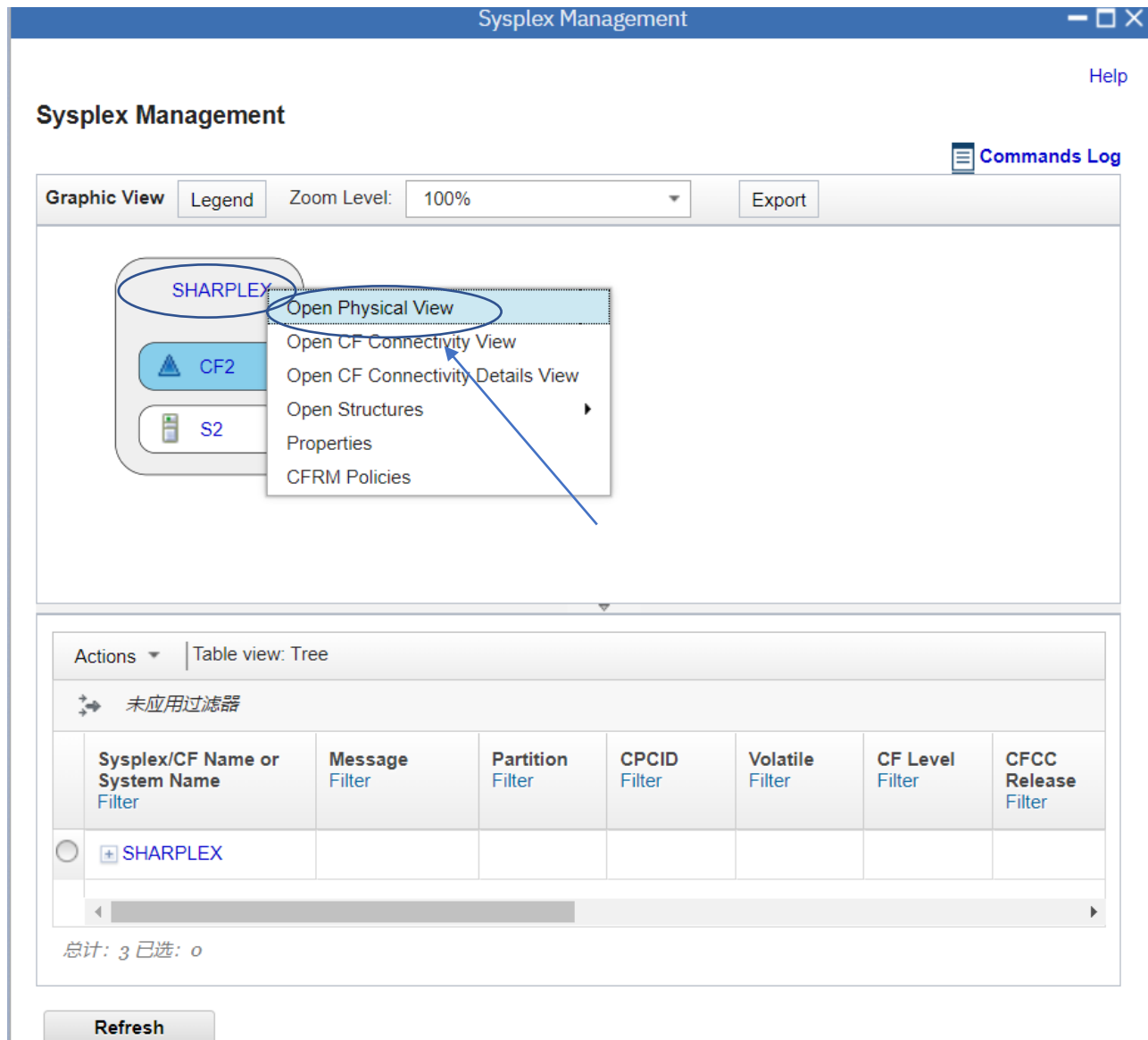
↔ 未应用过滤器

	Sysplex/CF Name or System Name <small>Filter</small>	Message <small>Filter</small>	Partition <small>Filter</small>	CPCID <small>Filter</small>	Volatile <small>Filter</small>	CF Level <small>Filter</small>	CFCC Release <small>Filter</small>
<input type="radio"/>	SHARPLEX						

总计: 3 已选: 0

Refresh

In Topology View, user can right click on sysplex name **SHARPLEX**, click **Open Physical View** to Open Physical View of Sysplex.



## 4. Access Physical View of Sysplex

Use the Physical View to manage your sysplex. The Physical View shows the major physical elements in a sysplex include Central Processor Complexes (CPCs), coupling facilities (CFs), systems, and different types of couple data sets. It includes a graphical and table view. With both the graphic and table views, you can see and manage sysplex objects, including identifying a single point of failure condition.

The screenshot displays the Sysplex Management interface for the SHARPLEX sysplex. The top navigation bar shows 'Sysplex Management' and 'SHARPLEX'. The main content area is titled 'SHARPLEX' and features a 'Graphic View' tab. The 'View by:' dropdown is set to 'Physical'. The diagram shows the following components:

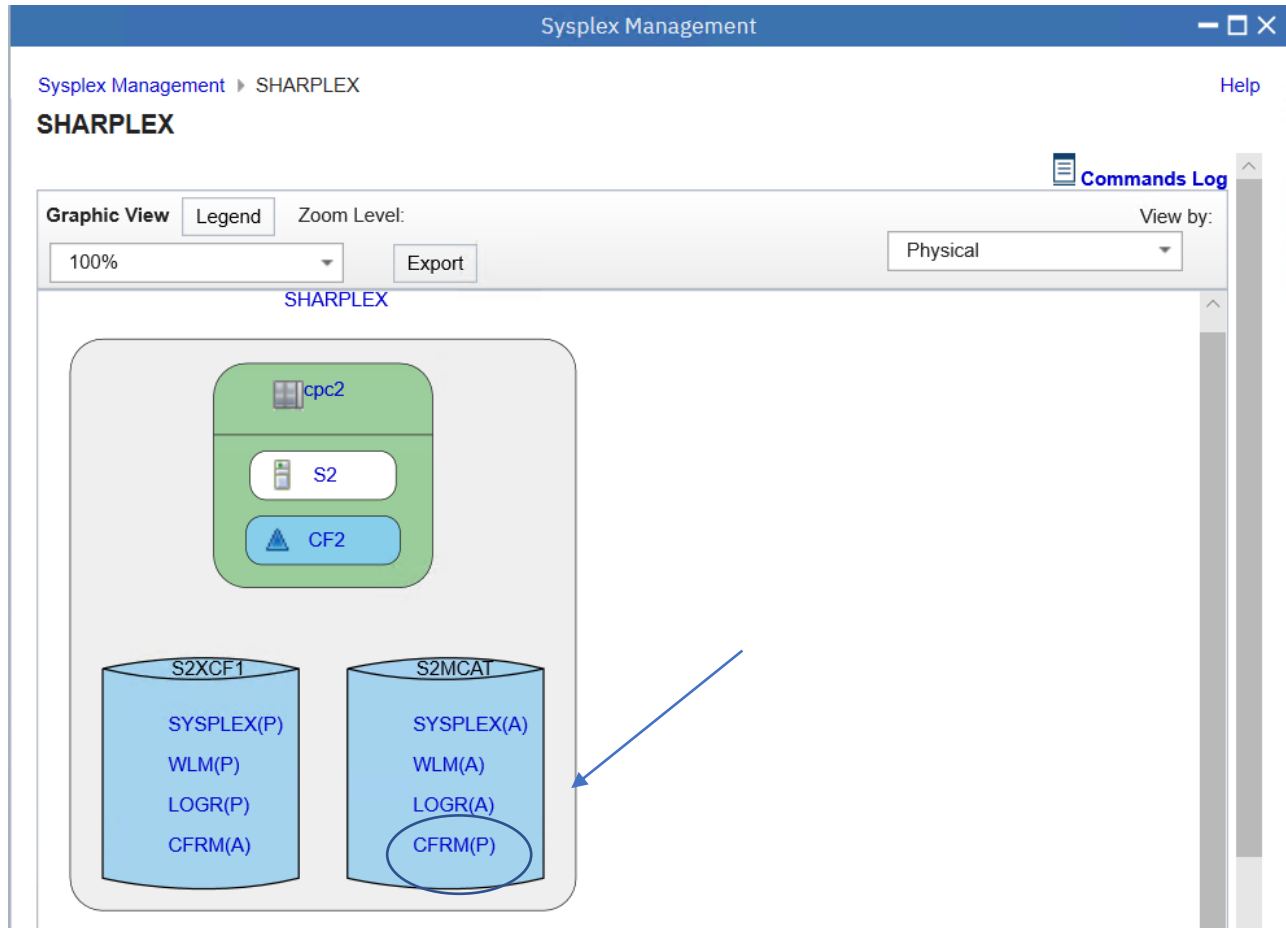
- CPCB** (Central Processor Complex B) containing **CF2** (Coupling Facility 2).
- CPCA** (Central Processor Complex A) containing **S2** (System 2).
- S2XCF1** (Couple Data Set 1) containing:
  - SYSPLEX(P)
  - WLM(P)
  - LOGR(P)
  - CFRM(A)
- S2MCA1** (Couple Data Set 2) containing:
  - SYSPLEX(A)
  - WLM(A)
  - LOGR(A)
  - CFRM(P)

Below the diagram, the 'View by:' dropdown is set to 'Couple Data Sets'. The 'Table view: Tree' is selected, and the status indicates 'No filter applied'.



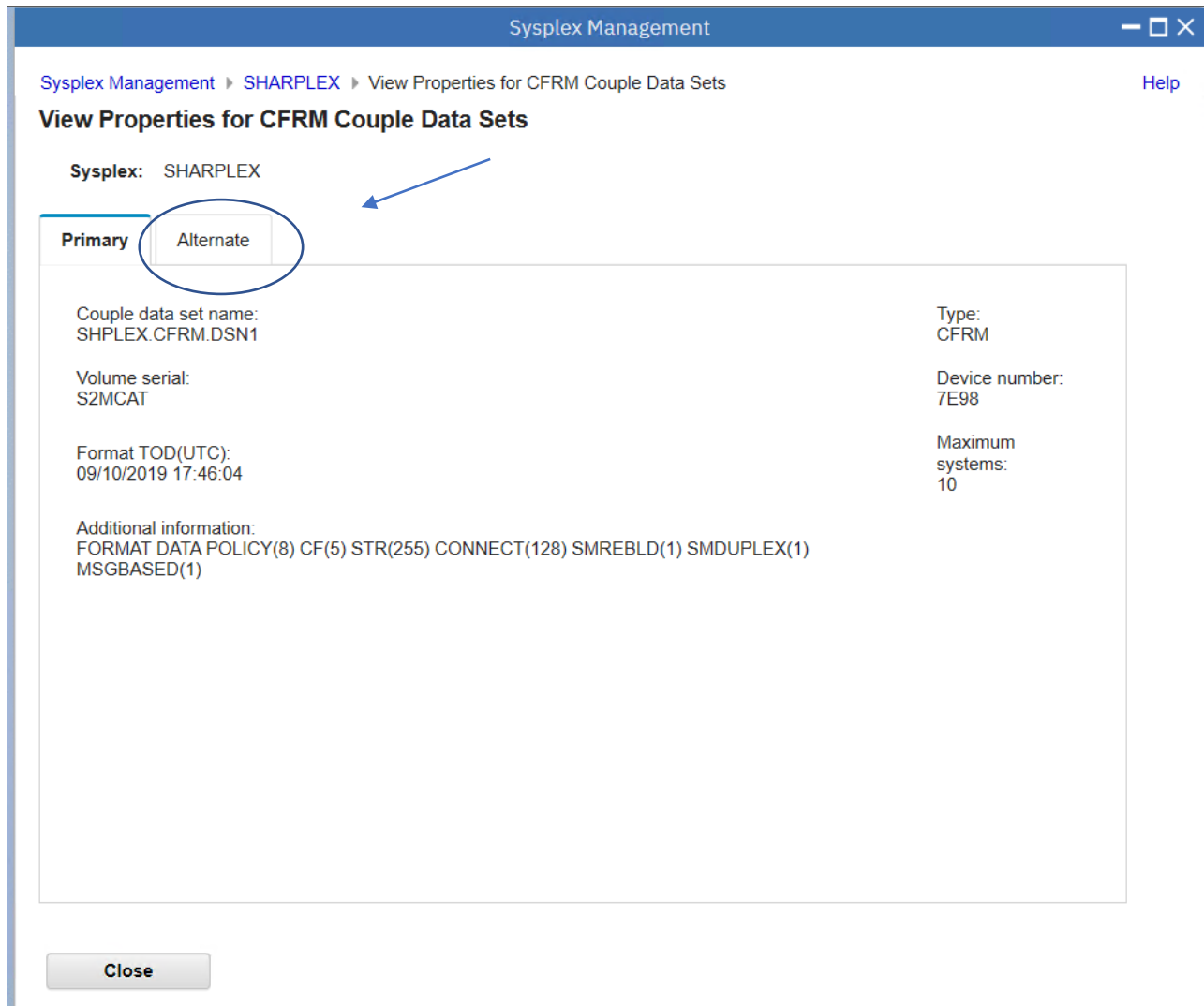
## 5. View Properties of Couple Data Set

The View Properties for Couple Data Set page shows the properties of a couple data set. Move cursor to couple data set column, find **CFRM(P)** which is Primary couple data set of CFRM type, click **CFRM(P)** to open properties of CFRM.

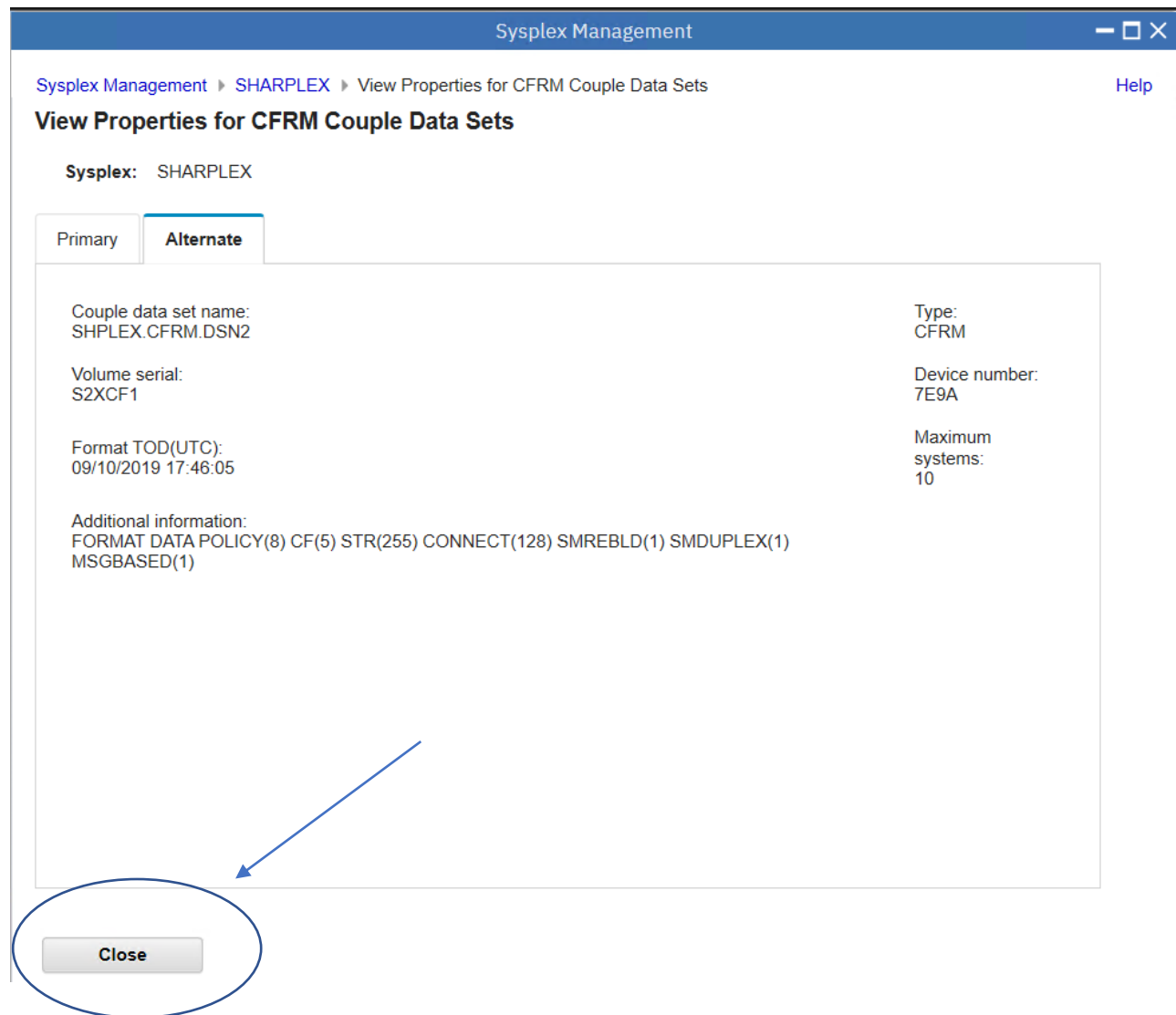


The View Properties for Couple Data Set page shows the properties of a couple data set. The page has a tab for the Primary CDS and a tab for the Alternate CDS. The title of the page indicates the type of couple data set (CFRM, ARM, LOGR, and so on).

Click **Alternate** tab to view properties of alternate couple data set.

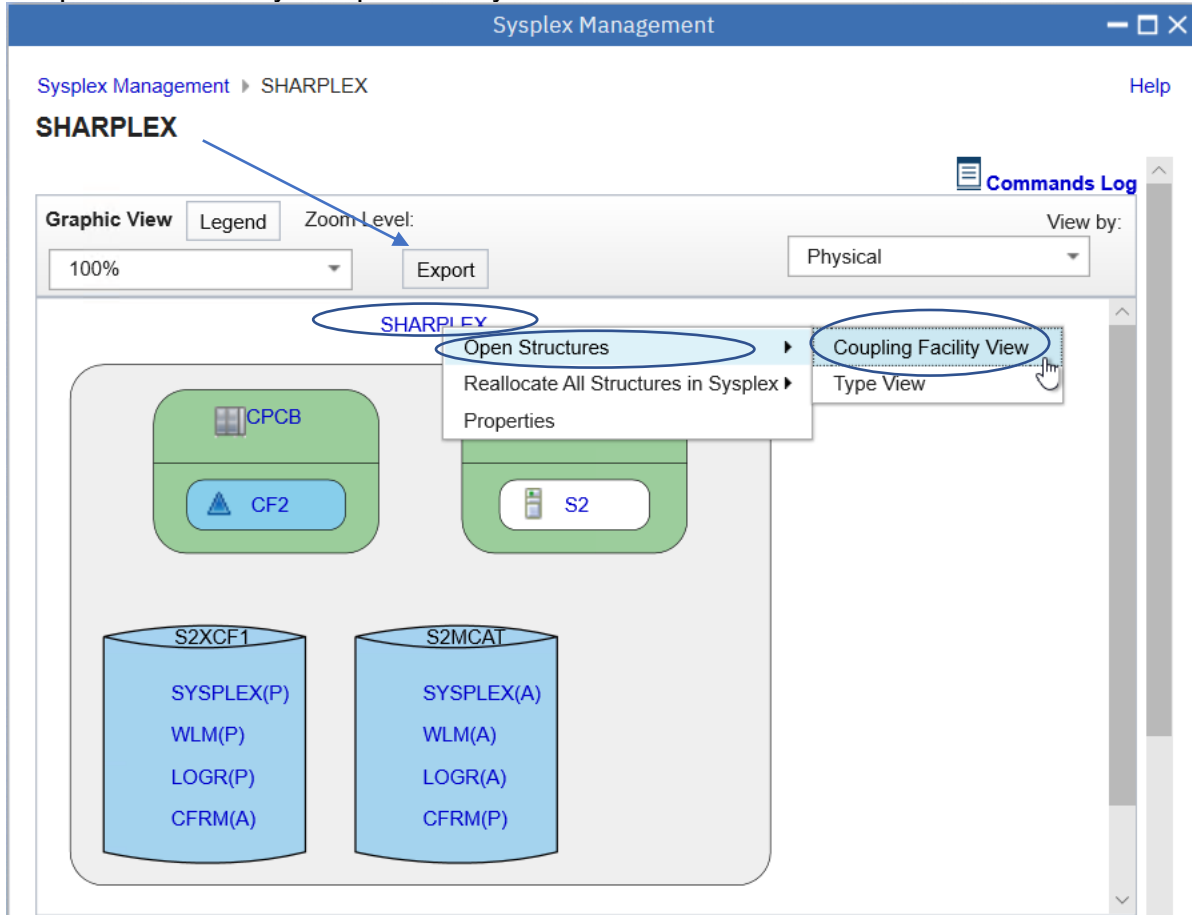


Click **Close** button to close properties page.



## 6. Open Coupling Facility Structures

From Physical View, you can view structure based on sysplex level, right click on the sysplex name **SHARPLEX**, click **Open Structures**, then click **Coupling Facility View** to open structure by Couple Facility view.



Use the Coupling Facility Structures view to see and manage your coupling facility structures by CF. It includes a graphic and a table view.

The graphic view shows:

- Coupling facilities, and objects contained by the coupling facility, representing the structures.
- Unallocated coupling facility structures, which do not have a type. They are assigned a type when they are allocated.

The screenshot displays the 'Sysplex Management' application window. The main title is 'Coupling Facility Structures for SHARPLEX'. The interface is divided into two main sections: a 'Graphic View' and a 'Table view: Tree'.

**Graphic View:** This section shows a hierarchical structure of coupling facilities. On the left, a blue box labeled 'CF2' contains two sub-objects: 'SYSZWM\_W...' and 'ISTGENERI...'. To the right of this box, there is a list of unallocated structures: '<Unallocated>', 'IXCPATH1', 'IXCPATH2', 'HASPCKPT1', and 'HASPCKPT2'. Each of these unallocated structures is represented by a button with a crossed-out circle icon.

**Table view: Tree:** This section displays a table with the following columns: 'CF Name/Structure Filter', 'CF Name Filter', 'Status Filter', 'Type Filter', and 'Allocation Time Filter'. The table contains two rows:

CF Name/Structure Filter	CF Name Filter	Status Filter	Type Filter	Allocation Time Filter
CF2				
<Unallocated>				

You can view coupling facility structures by type and by coupling facility. Each view includes a graphic view and a table view. Move cursor to the right top, Click **View by** arrow, select **Type** to view structure by type.

The screenshot shows the Sysplex Management interface for SHARPLEX. The title bar reads 'Sysplex Management'. The breadcrumb navigation is 'Sysplex Management > SHARPLEX > Coupling Facility Structures for SHARPLEX'. The main heading is 'Coupling Facility Structures for SHARPLEX'. On the right, there is a 'Commands Log' button and a 'View by:' dropdown menu. The dropdown menu is open, showing 'CF', 'CF', and 'Type'. The 'Type' option is highlighted with a blue circle and a blue arrow pointing to it. The main content area is divided into two sections. The left section, titled 'Graphic View', shows a 'Legend' and a 'Zoom Level' of 100%. It contains a blue box labeled 'CF2' with two sub-items: 'SYSZWM\_W...' and 'ISTGENERI...'. The right section, titled '<Unallocated>', contains four items: 'IXCPATH1', 'IXCPATH2', 'HASPCKPT1', and 'HASPCKPT2'. Each item has a circular icon with a diagonal line through it.

Use the Coupling Facility Structures by type view to see and manage your coupling facility structures. It includes a graphic and a table view.

The graphic view varies shows:

- Coupling facility structures grouped by type: List, Lock, Cache, or Serialized List.
- Unallocated coupling facility structures, which do not have a type. They are assigned a type when they are allocated.

Sysplex Management
— □ ×

Sysplex Management > SHARPLEX > Coupling Facility Structures for SHARPLEX Help

### Coupling Facility Structures for SHARPLEX

Graphic View Legend Zoom Level:

100%

Export

View by:

Type

N/A

✕
IXCPATH1

✕
IXCPATH2

✕
HASPCKPT1

✕
HASPCKPT2

✕
OPERLOG\_S...

SLIST

☞
ISTGENERI...

CACHE

☞
SYSZWLM\_W...

Actions ▾
Table view: Tree

↔
No filter applied

	Type/Structure <small>Filter</small>	CF Name <small>Filter</small>	Status <small>Filter</small>	Type <small>Filter</small>	Allocation Time <small>Filter</small>
<input type="radio"/>	<span style="font-size: 0.8em;">+</span> N/A				
<input type="radio"/>	<span style="font-size: 0.8em;">+</span> SLIST				
<input type="radio"/>	<span style="font-size: 0.8em;">+</span> CACHE				

## 7. Access CF Connectivity View of Sysplex

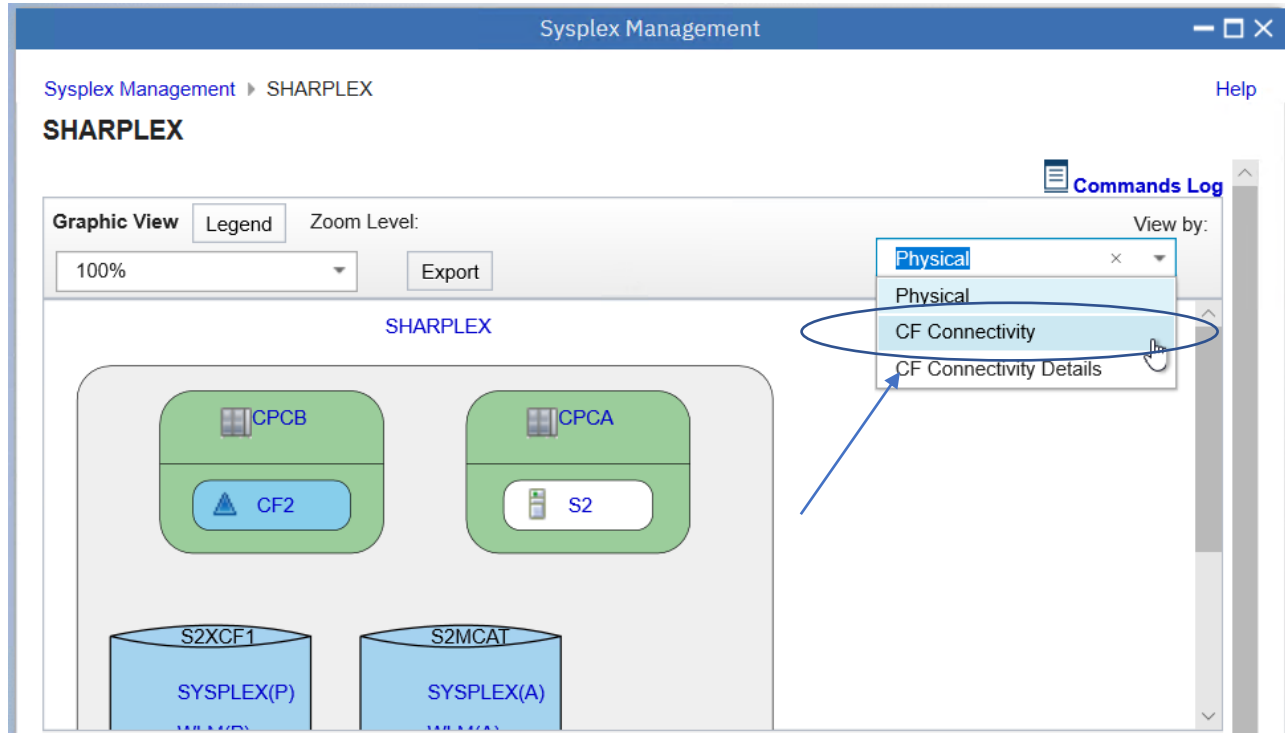
Move cursor to breadcrumb on the top, click sysplex name **SHARPLEX** to go back to **Physical View of Sysplex**

The screenshot shows the 'Sysplex Management' window. The breadcrumb navigation at the top is 'Sysplex Management > SHARPLEX > Coupling Facility Structures for SHARPLEX'. The 'SHARPLEX' breadcrumb is circled, and an arrow points to it from the instruction text. Below the breadcrumb is the title 'Coupling Facility Structures for SHARPLEX'. The main area is divided into two sections: 'Graphic View' and 'Table view: Tree'. The 'Graphic View' section has a 'Legend' tab and a 'Zoom Level' dropdown set to '100%'. It displays three categories of coupling facility structures: 'N/A' (IXCPATH1, IXCPATH2, HASPCKPT1, HASPCKPT2, OPERLOG\_S...), 'SLIST' (ISTGENERI...), and 'CACHE' (SYSZWM\_W...). The 'Table view: Tree' section shows a table with columns: 'Type/Structure Filter', 'CF Name Filter', 'Status Filter', 'Type Filter', and 'Allocation Time Filter'. The table lists the same three categories: N/A, SLIST, and CACHE.

Type/Structure Filter	CF Name Filter	Status Filter	Type Filter	Allocation Time Filter
N/A				
SLIST				
CACHE				

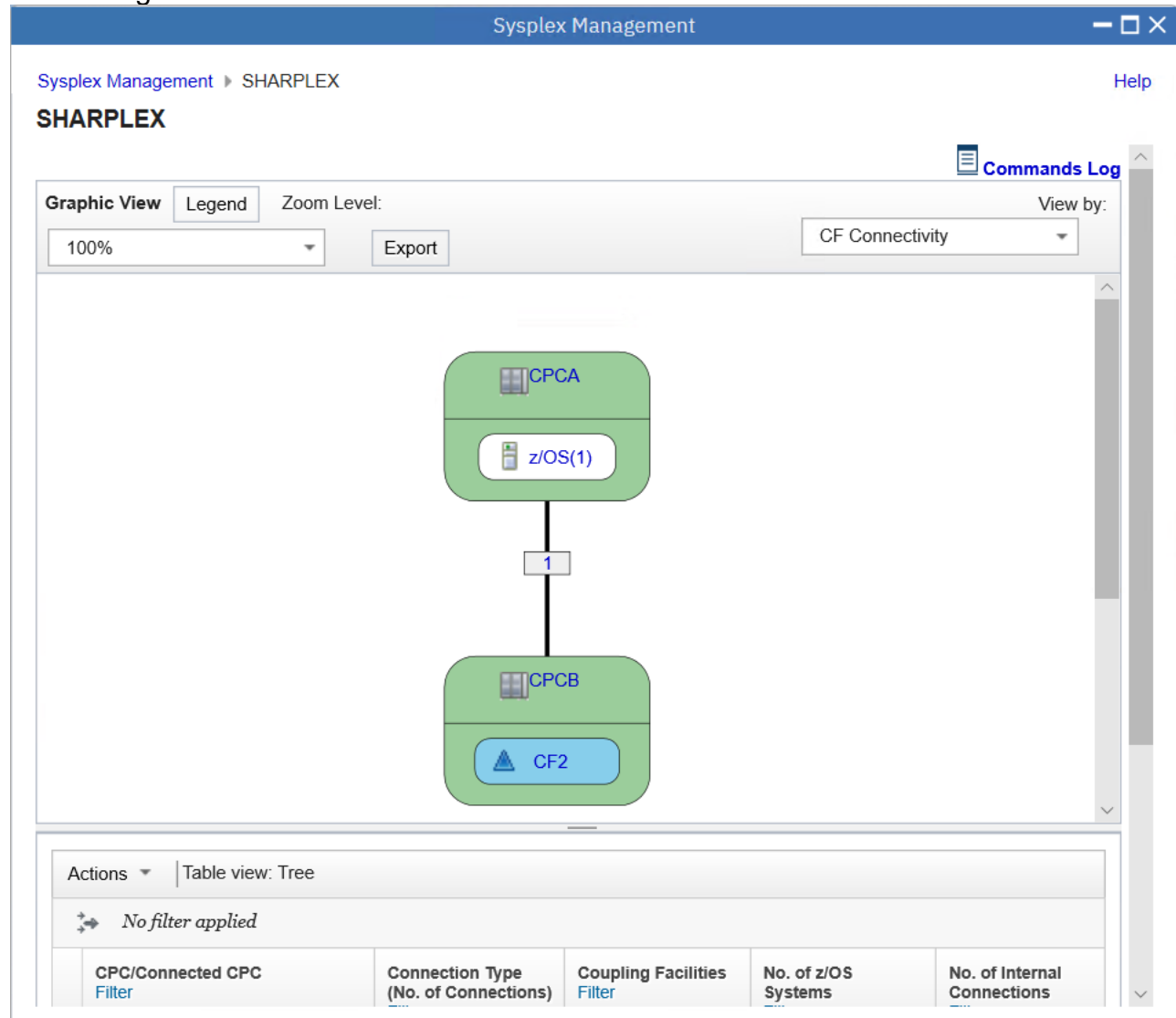


In the Physical View, move cursor to the right top, click **View by** drop down, select **CF Connectivity**, then you will go to **CF Connectivity View of Sysplex**.



Use the CF Connectivity view to view and manage physical connections among systems and CFs. The CF Connectivity view includes a graphic view and a table view.

CPCs are represented by objects containing z/OS systems (a number in parentheses indicates the number of z/OS systems) and coupling facilities. Physical connections are shown as lines. The number of physical connections is shown in a box on the line connecting CPCs.



## 8. Access CF Connectivity Detail View of Sysplex

In Connectivity View, move cursor to the right top, click **View By** drop down, select **CF Connectivity Detail** to open CF Connectivity Detail

Sysplex Management

Sysplex Management > SHARPLEX Help

### SHARPLEX

Graphic View Legend Zoom Level: 100% Export

View by: CF Connectivity Physical CF Connectivity CF Connectivity Details

CPCA z/OS(1) 1 CPCB CF2

Actions Table view: Tree No filter applied

CPC/Connected CPC <a href="#">Filter</a>	Connection Type (No. of Connections) <a href="#">Filter</a>	Coupling Facilities <a href="#">Filter</a>	No. of z/OS Systems <a href="#">Filter</a>	No. of Internal Connections <a href="#">Filter</a>
---	---	---	--	--

Use the CF Connectivity Details view to see details of connectivity between a CF and a system. Besides physical connections for the connectivity, it also shows which Channel Path Identifier (CHPID) and port are used for connectivity. The CF Connectivity Details view includes a graphic view and a table view.

The graphic view shows the sysplex as the largest object, containing CPCs, which in turn contain systems (S2 in the example) and CFs (CF2 in the example). CHPIDs, adapters, and ports are represented to show the connection between systems and CFs. In the example, the CHPIDs are EF, and the adapters/ports are both N/A.

Sysplex Management

Sysplex Management ► SHARPLEX Help

## SHARPLEX

**Graphic View** Legend Zoom Level: 100% Export View by: CF Connectivity Details

SHARPLEX

Systems on CPCA to CF2 on CPCB

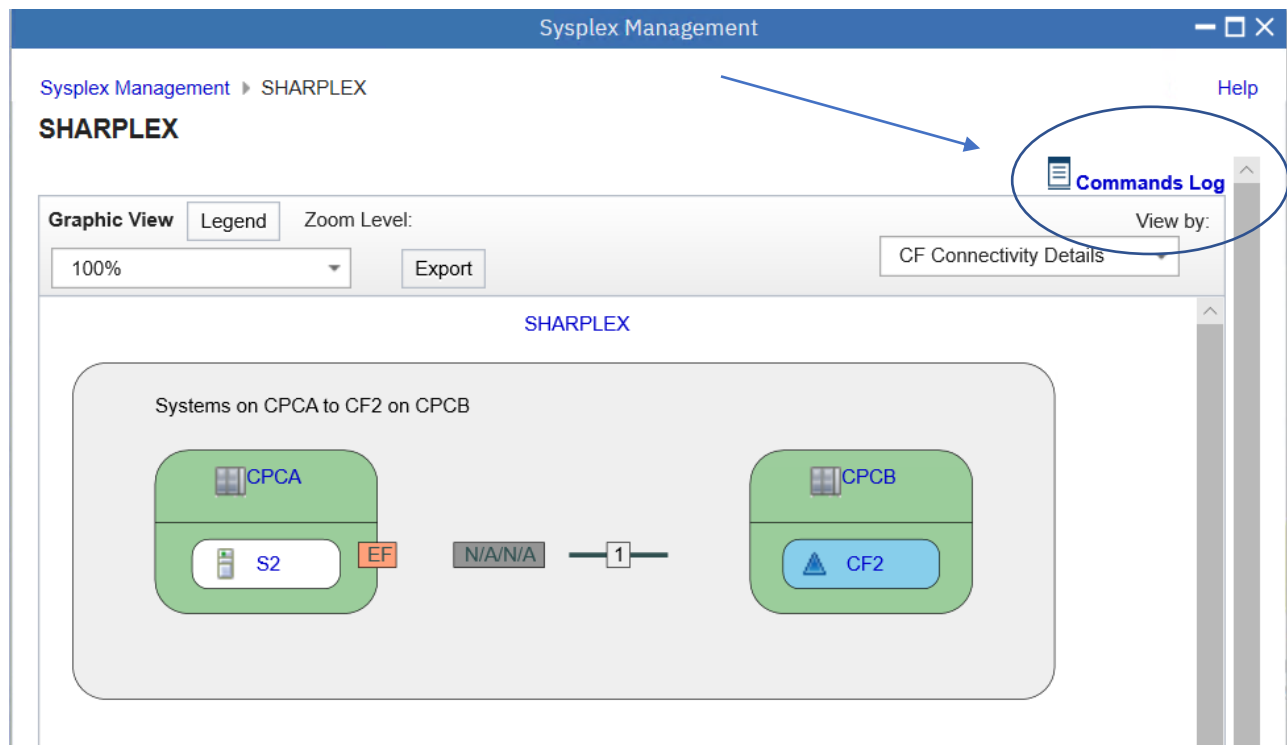
Actions Search

*No filter applied*

	System Name Filter	CHPID Filter	PCHID Filter	Type Filter	Physical Status Filter	Logical Status Filter	Adapter Filter	Port Filter	CF Name Filter
<input type="radio"/>	S2	EF		ICP	● Online	● Online	N/A	N/A	CF2

## 9. Check Command Log

In CF Connectivity Details View, move cursor to the right top, click **Commands Log**



Use the commands log to see and manage your sysplex commands performed by UI actions on Sysplex Management panels. All main views have the link to the commands log.

The commands log displays the commands used in sysplex management and their relationship between sysplexes, objects, and systems. It displays the status and output of each command, as well as the user that issued the command. The number next to commands log indicates how many commands have been updated or added since you last visited the commands log page. The commands that have been updated or added appear in bold type. Use the filter bar to search the commands table.

Sysplex Management
— □ ×

Sysplex Management ▸ Commands Log
Help

### Commands Log for SHARPLEX (2)

Actions ▾ | Table view: TreeSearch

No filter applied

<input type="checkbox"/>	Command <a href="#">Filter</a>	Objects <a href="#">Filter</a>	Sysplex <a href="#">Filter</a>	System <a href="#">Filter</a>	Details <a href="#">Filter</a>	Status <a href="#">Filter</a>	Date Submitted <a href="#">Filter</a>
<input type="checkbox"/>	Switch to Primary - No Alternate	LOGR	SHARPLEX	S2	<a href="#">Output</a>	Failed	Jan 15, 2020, 9:35:06 PM
<input type="checkbox"/>	<b>+ Switch to Primary - New Alternate (2)</b>		<b>SHARPLEX</b>	<b>S2</b>	<b><a href="#">Output</a></b>	Failed	<b>Jan 8, 2020, 1:39:13 AM</b>

Move cursor to column **Detail**, click one blue **Output** to view detail output.

Sysplex Management
— □ ×

Sysplex Management ▸ SHARPLEX ▸ Commands Log
Help

### Commands Log for SHARPLEX (2)

Actions ▾ | Table view: TreeSearch

No filter applied

<input type="checkbox"/>	Command <a href="#">Filter</a>	Objects <a href="#">Filter</a>	Sysplex <a href="#">Filter</a>	System <a href="#">Filter</a>	Details <a href="#">Filter</a>	Status <a href="#">Filter</a>	Date Submitted <a href="#">Filter</a>
<input type="checkbox"/>	Switch to Primary - No Alternate	LOGR	SHARPLEX	S2	<a href="#">Output</a>	Failed	Jan 15, 2020, 9:35:06 PM
<input type="checkbox"/>	<b>+ Switch to Primary - New Alternate (2)</b>		<b>SHARPLEX</b>	<b>S2</b>	<b><a href="#">Output</a></b>	Failed	<b>Jan 8, 2020, 1:39:13 AM</b>

Use the Commands Output to view the output of your command. The Commands Output page displays the console output of commands used in sysplex management.

Sysplex Management

SHARPLEX


Commands Log

Commands Output


Help

## Commands Output

**Command:**  
Switch to Primary - No Alternate

**Objects:**  
 LOGR

**Sysplex:**  
SHARPLEX

**Status:**  
 Failed

**Console output:**

Command Submitted: SETXCF COUPLE,TYPE=LOGR,PSWITCH

Thu Jan 16 02:35:06 GMT  
2020 S2 IEE345I SETXCF AUTHORITY INVALID, FAILED BY SECURITY PRODUCT

## 10. Switch Alternate to Primary

Move cursor to the top, click **Sysplex Management** in the breadcrumb to switch back to Topology View of Sysplex

Sysplex Management

Sysplex Management > SHARPLEX > Commands Log

Commands Log for SHARPLEX (2)

Actions | Table view: Tree | Search

No filter applied

Command Filter	Objects Filter	Sysplex Filter	System Filter	Details Filter	Status Filter	Date Submitted Filter
<input type="checkbox"/> Switch to Primary - No Alternate	LOGR	SHARPLEX	S2	Output	Failed	Jan 15, 2020, 9:35:06 PM
<input type="checkbox"/> <input checked="" type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	Failed	Jan 8, 2020, 1:39:13 AM

In the Topology View, click on the sysplex name **SHARPLEX** to open Physical View

Sysplex Management

Sysplex Management > Commands Log

Graphic View | Legend | Zoom Level: 100% | Export

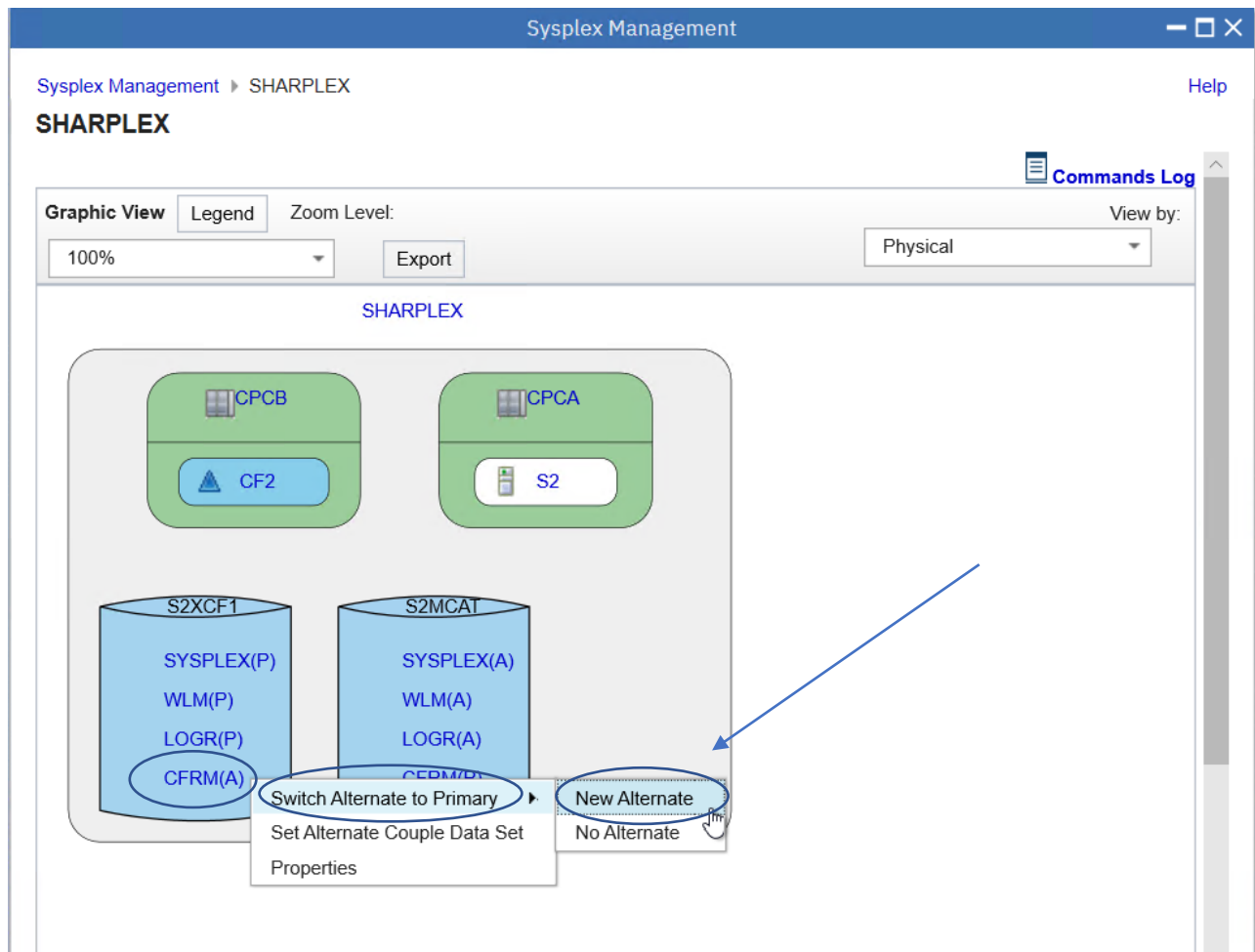
SHARPLEX

CF2

S2



In the Physical View, right click on the couple data set **CFRM(A)**, select **Switch Alternate to Primary**, then select **New Alternate**



In the opened Confirm Switch Alternate to Primary dialog, input an available couple dataset **SHPLEX.CFRM.DSN1**, click **Search** button

**Confirm Switch Alternate to Primary - New Alternate Command**

You are about to switch the current alternate CFRM couple data set SHPLEX.CFRM.DSN2 for sysplex SHARPLEX to the primary. Specify a new alternate couple data set.

Current primary couple data set (CFRM): SHPLEX.CFRM.DSN1 on volume S2MCAT

Current alternate couple data set (CFRM): SHPLEX.CFRM.DSN2 on volume S2XCF1

Specify a data set name qualifier, volume, or both, and click Search.

Alternate couple data set name qualifier: SHPLEX.CFRM.DSN1

Volume:

**Search**

Select New Alternate Couple Data Set

Data Set Name	Volume
There is no data to display.	

Command Preview

OK Cancel Help

Click **the checkbox** of the new couple dataset in the table, then **Command Preview** on the left of OK button will be available. Click **Command Preview** to view the command.

### Confirm Switch Alternate to Primary - New Alternate Command

You are about to switch the current alternate CFRM couple data set SHPLEX.CFRM.DSN2 for sysplex SHARPLEX to the primary. Specify a new alternate couple data set.

Current primary couple data set (CFRM):  
SHPLEX.CFRM.DSN1 on volume  
S2MCAT

Current alternate couple data set (CFRM):  
SHPLEX.CFRM.DSN2 on volume  
S2XCF1

Specify a data set name qualifier, volume, or both, and click Search.

Alternate couple data set name qualifier:  
SHPLEX.CFRM.DSN1

Volume:

Search

Select New Alternate Couple Data Set

Data Set Name	Volume
<input checked="" type="checkbox"/> SHPLEX.CFRM.DSN1	S2MCAT

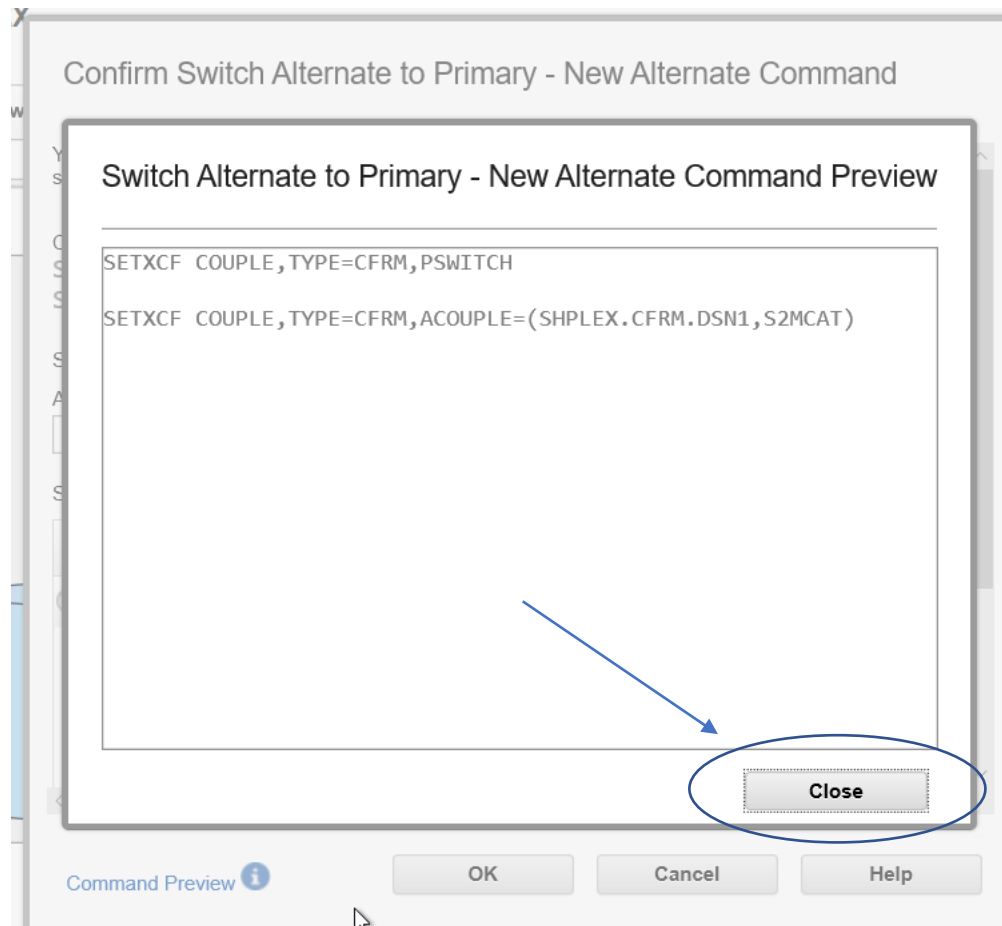
Command Preview ⓘ

OK

Cancel

Help

In the Command Preview dialog, you will see the command detail. Click **Close** to close it.



Then click **OK** to submit the command.

### Confirm Switch Alternate to Primary - New Alternate Command

You are about to switch the current alternate CFRM couple data set SHPLEX.CFRM.DSN2 for sysplex SHARPLEX to the primary. Specify a new alternate couple data set.

Current primary couple data set (CFRM):  
SHPLEX.CFRM.DSN1 on volume  
S2MCAT

Current alternate couple data set (CFRM):  
SHPLEX.CFRM.DSN2 on volume  
S2XCF1

Specify a data set name qualifier, volume, or both, and click Search.

Alternate couple data set name qualifier:  
SHPLEX.CFRM.DSN1

Volume:

Search

Select New Alternate Couple Data Set

Data Set Name	Volume
<input checked="" type="radio"/> SHPLEX.CFRM.DSN1	S2MCAT

Command Preview

OK

Cancel

Help

The operation will be failed because **the lab user does not have such authority.**

Sysplex Management

Sysplex Management ▸ SHARPLEX

SHARPLEX

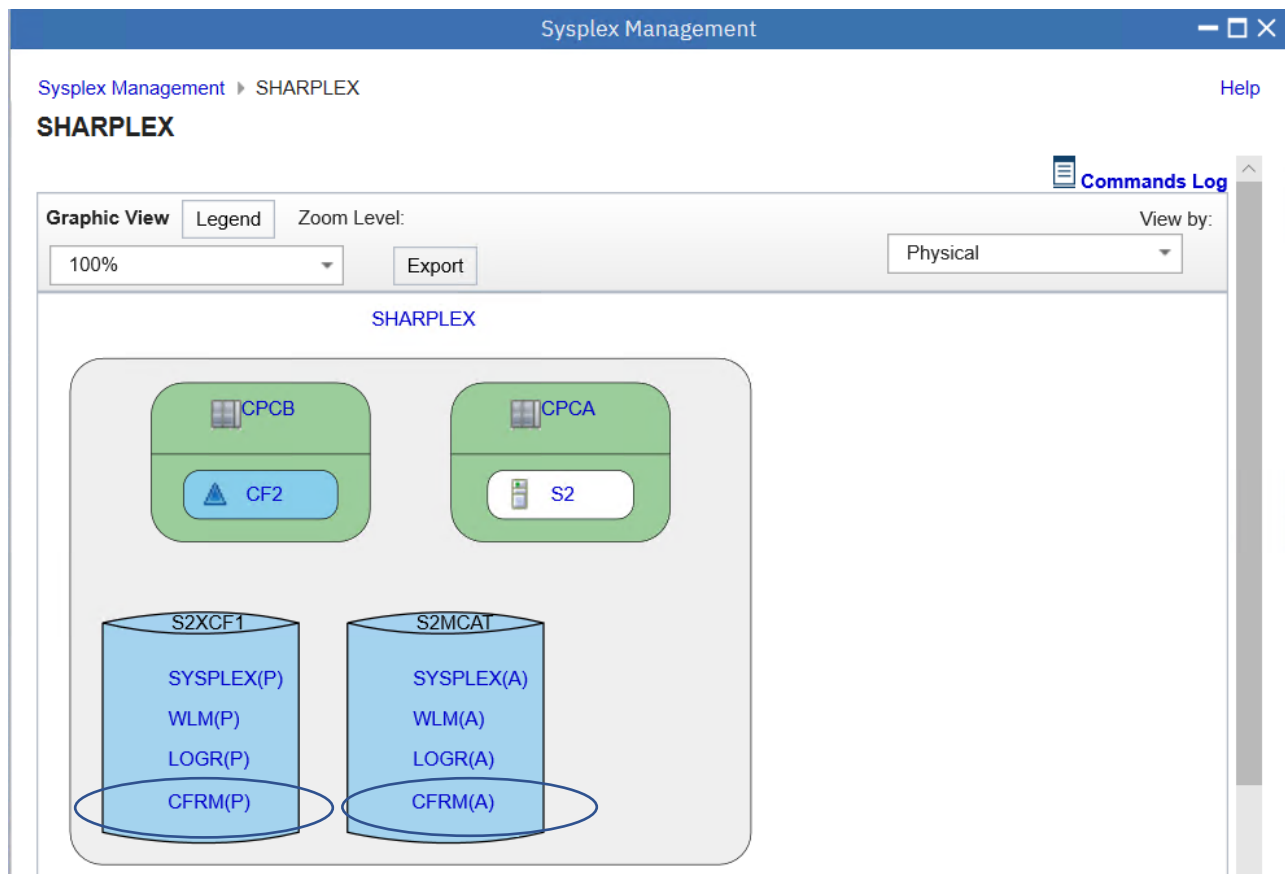
Messages 1 0 0 Close All

The command "Switch Alternate to Primary - New Alternate" failed, for the IZUS301E following reason: IEE345I SETXCF AUTHORITY INVALID, FAILED BY SECURITY PRODUCT.

Graphic View Legend Zoom Level: 100% Export View by: Physical

SHARPLEX

The following is a sample snapshot if the operation can be done successfully. You can see CFRM primary couple dataset and alternate couple dataset is switched successfully.

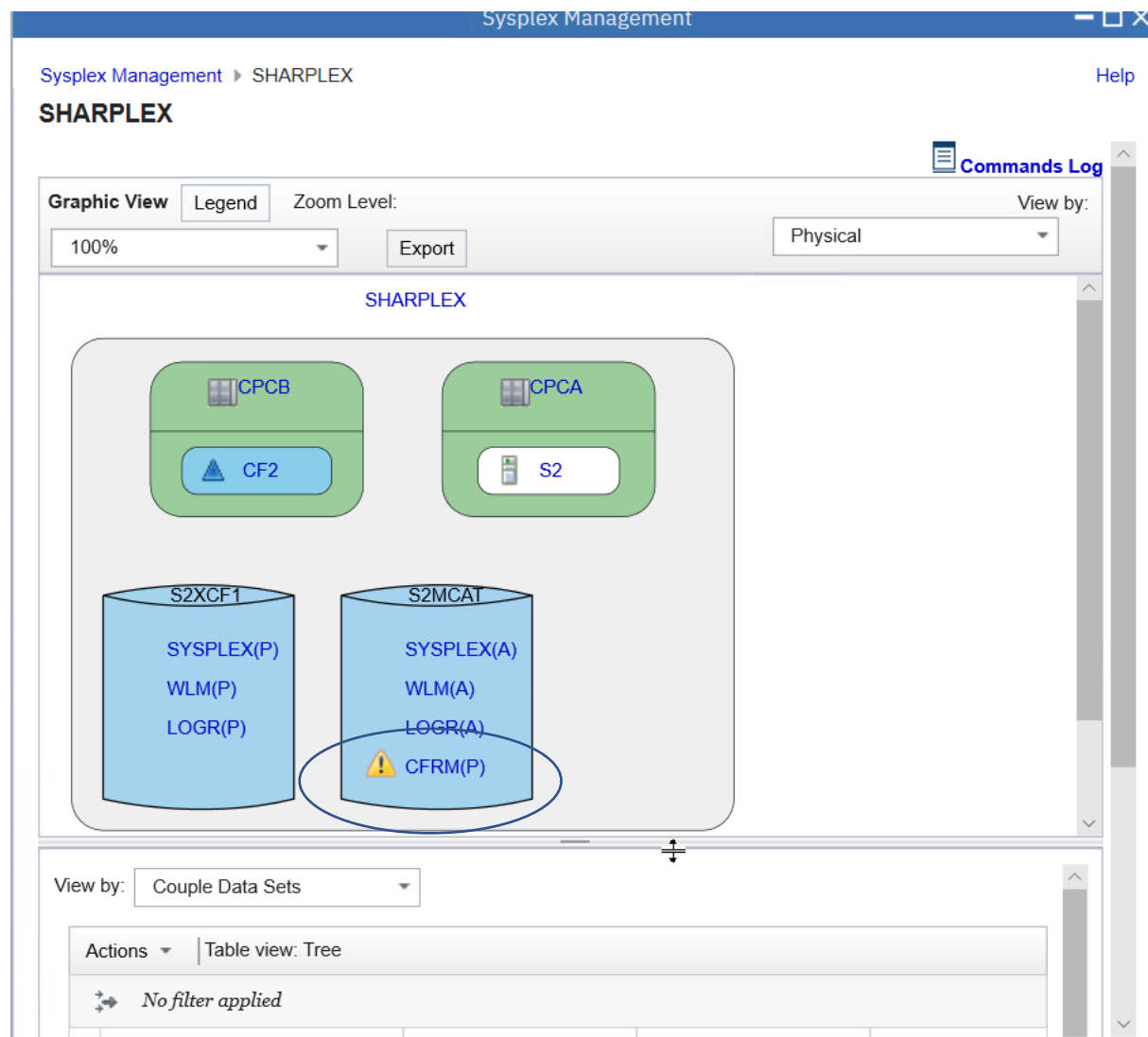


## 11. Check Warning icon

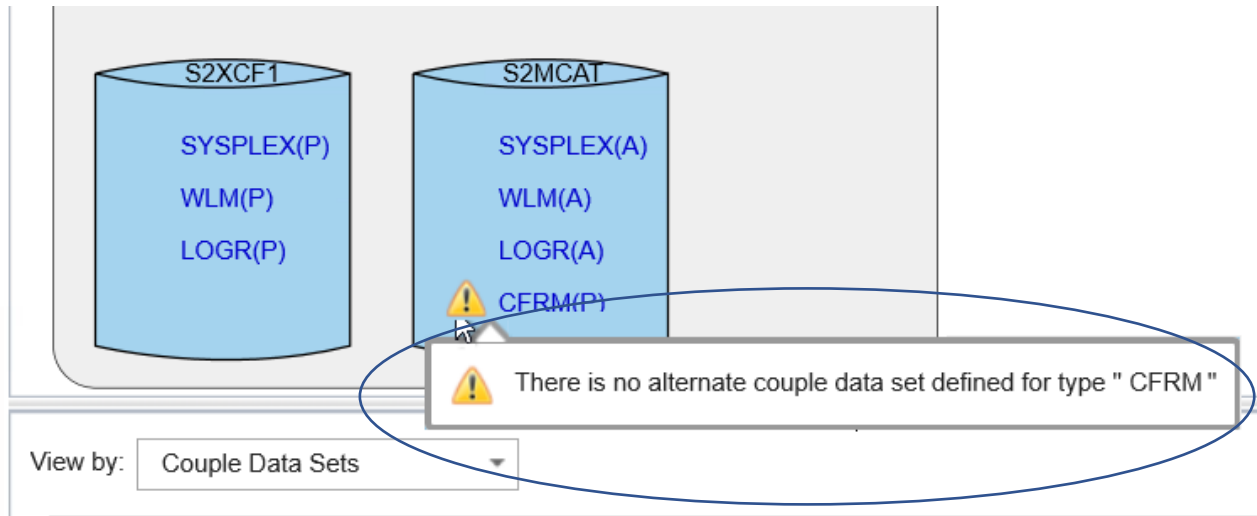
In the graphical view, single point of failure is indicated by a yellow warning icon (⚠️) before a couple data set. Click on the warning icon can display details of the warning which could be, for example, no alternate couple data set is defined, or the primary couple data set and the alternate couple data set are in the same DASD volume.

In our lab system, all configuration is well done, therefore, there is no warning icon displayed on the graphic view. The following screen shots only **show you how the warning could look like. You don't need to do any action for this step.**

For example, if no CFRM alternate couple data set is defined, there will be a warning icon in front of CFRM primary couple data as the below snapshot.



When you hover the warning icon, there is warning message popup.





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## 12. Check Notification

The Notifications page displays warning and error notifications associated with the sysplex.

The Sysplex Management task checks for the following conditions, and generates warning or error notifications as appropriate:

- Single point of failure for a couple data set
- Channel path is not online
- Coupling facility is in maintenance mode
- CPC is not configured correctly.

In our lab system, you might not see Notification on the graphic views. **The following screen shots are just examples for your reference. You don't need to do any action for this step.**

For example, in current system, if there is no alternate CFRM couple data set, in Physical View, you can see a warning icon before primary CFRM couple data set. Click **Sysplex Management** in the breadcrumb to go to Topology View.

Sysplex Management SHARPLEX

SHARPLEX

Commands Log

Graphic View Legend Zoom Level: 100% Export View by: Physical

SHARPLEX

CPCB CPCA

CF2 S2

S2XCF1 S2MCAT

SYSPLEX(P) SYSPLEX(A)

WLM(P) WLM(A)

LOGR(P) LOGR(A)

CFRM(P)

View by: Couple Data Sets

Actions Table view: Tree

No filter applied

In Topology View, on the right top of sysplex, there is a bell icon, this bell icon is Notification mark, click **bell icon** to open Notification page.

Sysplex Management

Help

Sysplex Management

Graphic View

Legend

Zoom Level: 100%

Export

SHARPLEX

CF2

S2

Commands Log

Actions

Table view: Tree

No filter applied

	Sysplex/CF Name or System Name Filter	Message Filter	Partition Filter	CPCID Filter	Volatile Filter	CF Level Filter	CFCC Release Filter	Sen Levi Filde
<input type="radio"/>	+ SHARPLEX							


The notifications are displayed on the Notifications page, in a table. Click Message ID or Message, you can get some Help information.


Sysplex Management

Sysplex Management ▸ Notifications

### Notifications for Sysplex SHARPLEX

Actions ▾

 No filter applied

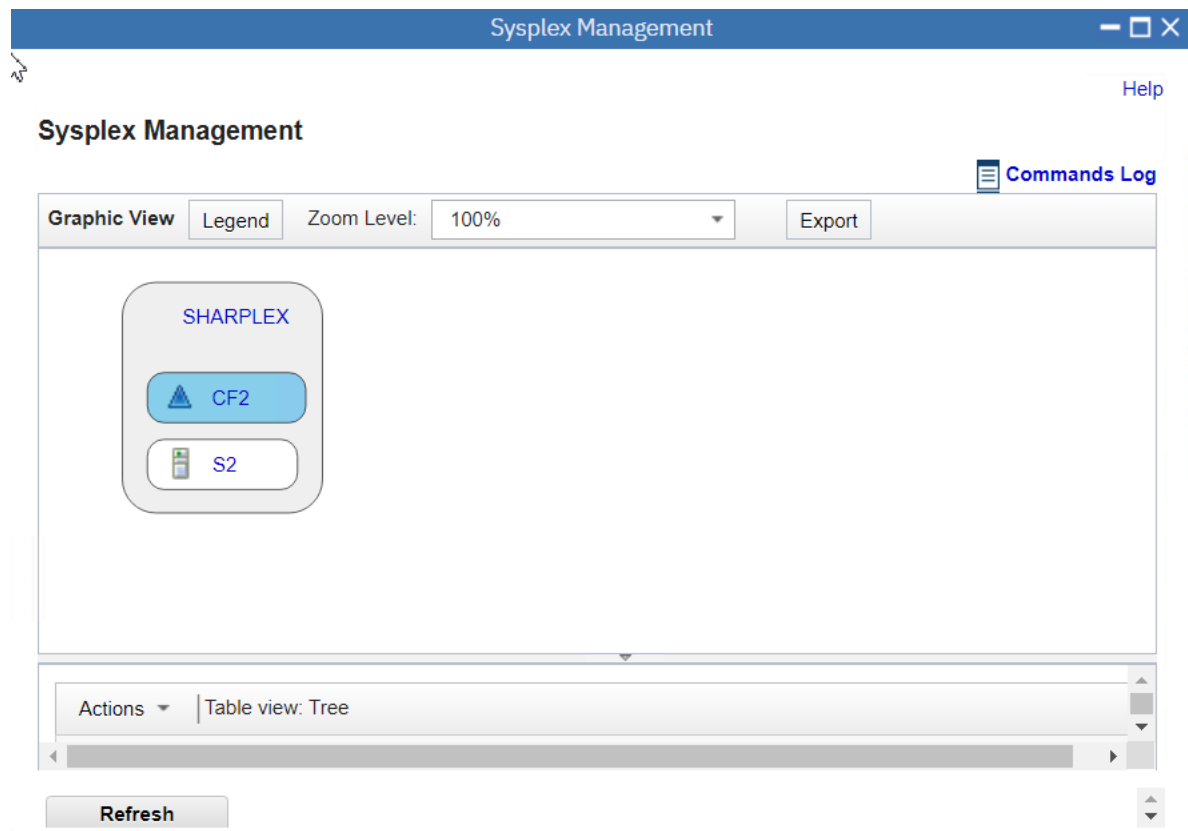
	Notification Message Filter	Notification Description Filter	Sysplex Filter	System Filter
<input type="radio"/>	 IZUS400W	There is no alternate couple data set defined for type "CFRM"	SHARPLEX	S2

Total: 1 Selected: 0

Refresh

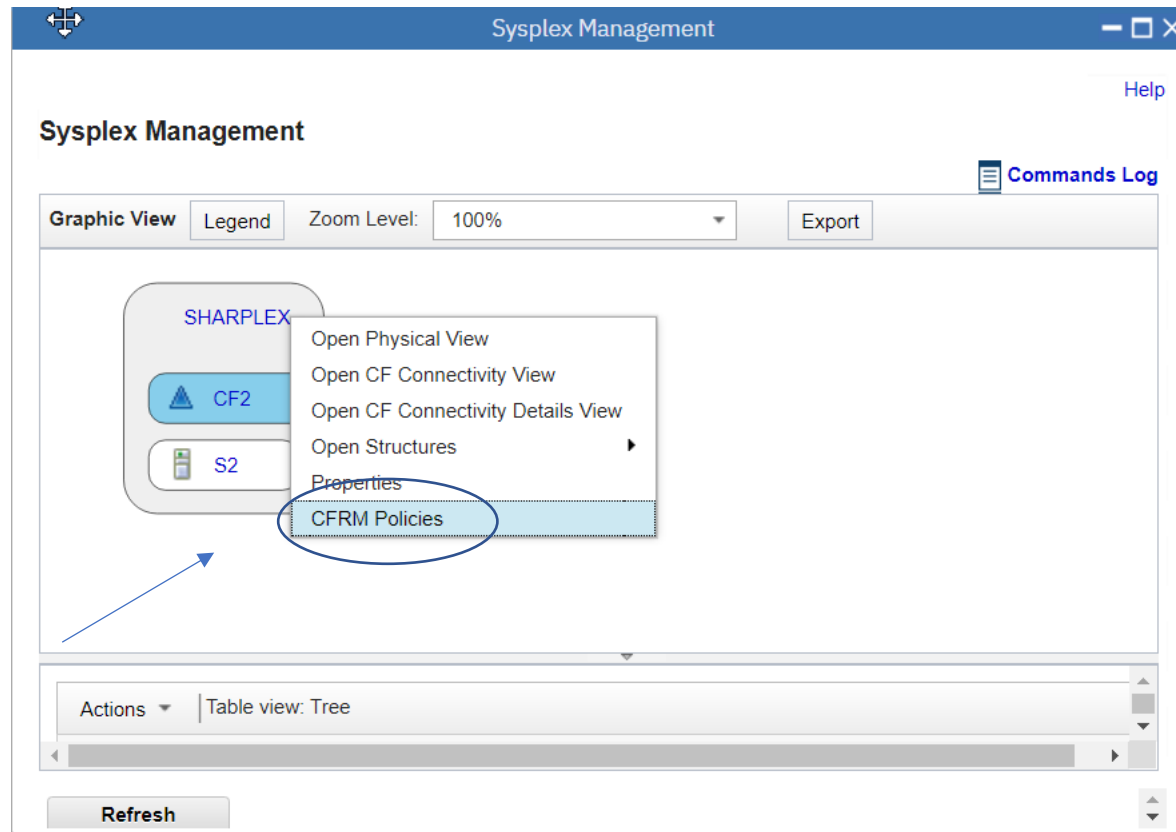
Last refresh: Jan 23, 2020, 1:59:25 AM local time (Jan 23, 2020, 6:59:25 AM GMT)

Click System Management link on the left top, it comes back to Topology View page.



## 13. List CFRM Policies

In Topology View page, right click sysplex name, select **CFRM Policies** to open CFRM Administrative Policies page.



A coupling facility resource management (CFRM) policy describes the coupling facilities and structures that can be used in the sysplex. The CFRM policies reside in the active couple data set. From the CFRM Administrative Policies page, you can view and manage the CFRM policies for your sysplex. The page contains the CFRM Administrative Policies table.

Right click on policy “CFRMPOL1”

Sysplex Management

Sysplex Management

CFRM Administrative Policies

Help

CFRM Administrative Policies

Sysplex:

Active policy:

Date policy activated (UTC):

SHARPLEX

CFRMPOL1

01/24/2022 18:08:44

CFRM Administrative Policies

Actions

未应用过滤器

<input type="checkbox"/>	Name Filter	Last Updated (UTC) Filter	Updated By Filter
<input type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input checked="" type="checkbox"/>	CFRMPOL1		HARA01

Open in CFRM Policy Editor

View Content

Rename...

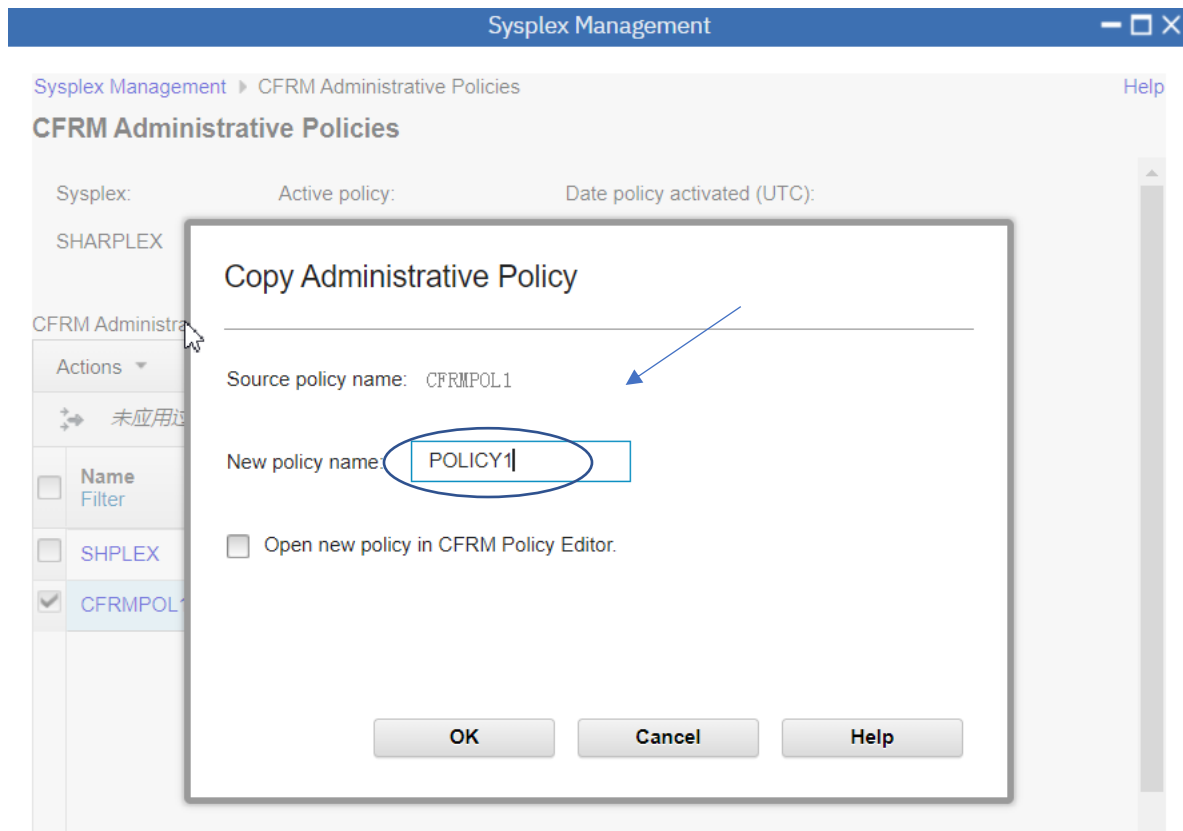
Copy...

Export

Activate...

Delete...

Select Copy, the dialog of Copy Administrative Policy will be opened. Input New Policy Name (although below screen shots used “POLICY1”, we recommend you to use “<userid>P”, in which <userid> should be replaced with your current logon user id), click **OK** button to submit it.



In the CFRM Administrative Policies page, you will see the copied policy “POLICY1”.



Sysplex Management

Sysplex Management

CFRM Administrative Policies

Help

CFRM Administrative Policies

▼ Messages

✖ 0

⚠ 0

ℹ 1

Close All

ℹ The administrative policy "CFRMPOL1" is copied to the new IZUS314I administrative policy "POLICY1" .

2022年8月8日 下午4:45:02

✖

Sysplex:

Active policy:

Date policy activated (UTC):

SHARPLEX

CFRMPOL1

01/24/2022 18:08:44

CFRM Administrative Policies

Actions

未应用过滤器

<input type="checkbox"/>	Name Filter	Last Updated (UTC) Filter	Updated By Filter
<input type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input type="checkbox"/>	CFRMPOL1	03/07/2022 06:24:13	SHARA01
<input type="checkbox"/>	POLICY1	08/08/2022 08:45:01	SHARA01

Select policy "POLICY1", right click to open action menu.

## 14. Work with CFRM Policy Editor

Select “Open in CFRM Policy Editor”, CFRM Policy Editor is opened.

Sysplex Management

Sysplex Management ► CFRM Administrative Policies Help

**CFRM Administrative Policies**

Sysplex: SHARPLEX Active policy: CFRMPOL1 Date policy activated (UTC): 01/24/2022 18:08:44

CFRM Administrative Policies

Actions ▼

未应用过滤器

<input type="checkbox"/>	Name Filter	Last Updated (UTC) Filter	Updated By Filter
<input type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input type="checkbox"/>	CFRMPOL1	03/07/2022 06:24:13	SHARA01
<input checked="" type="checkbox"/>	POLICY1	08/08/2022 09:55:59	SHARA01

Open in CFRM Policy Editor

View Content

Rename...

Copy...

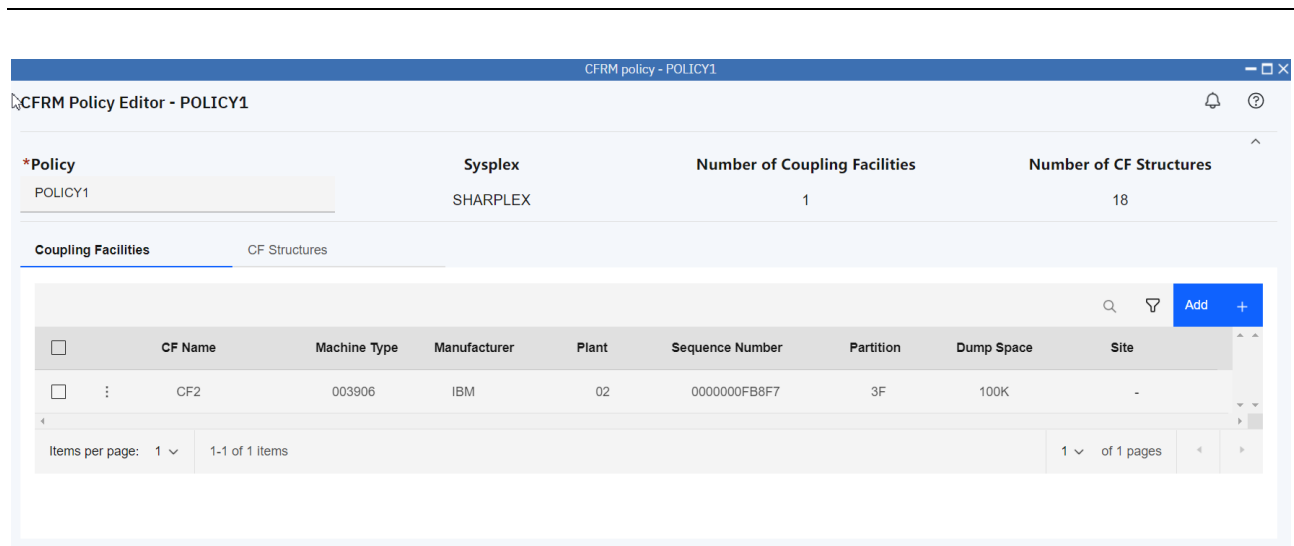
Export...

Activate...

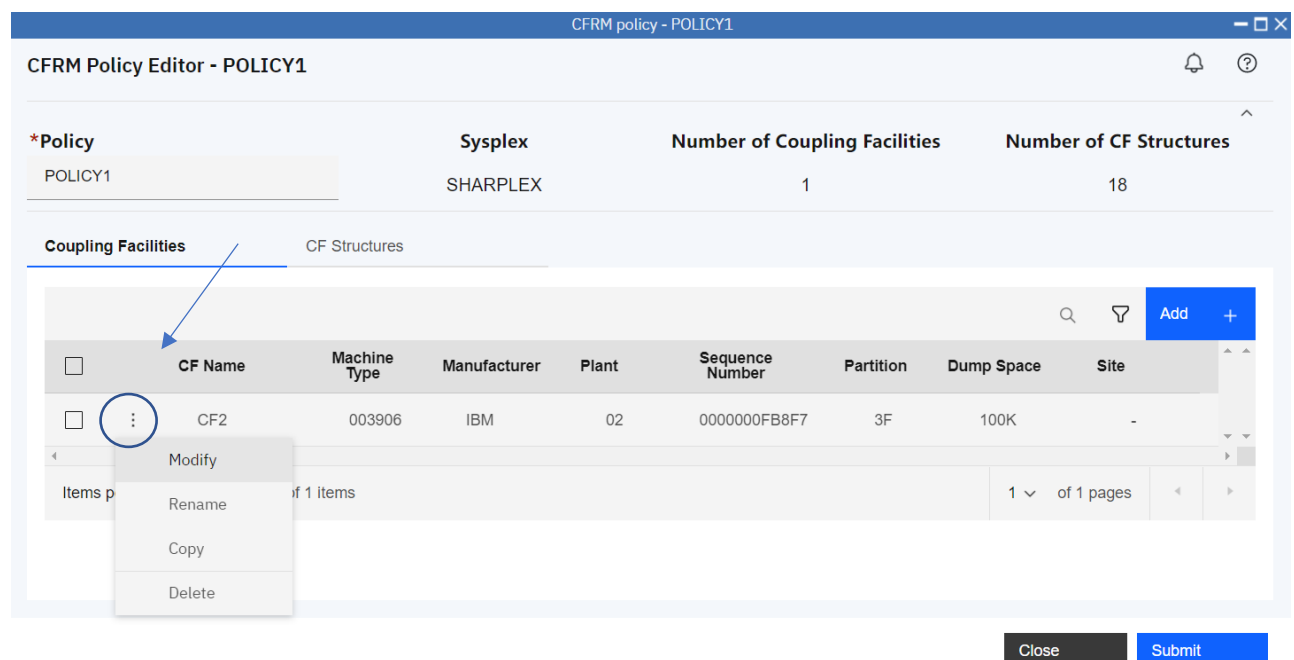
Delete...

总计: 3 已选: 1

You can use the CFRM Policy Editor to modify the CFRM policies in the CFRM couple data set.



Click the action icon in front of a CF, open CF action menu, you can Modify, Rename, Copy and Delete a CF.



Move cursor to Modify, click **Modify**.

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1

*Policy	Sysplex	Number of Coupling Facilities	Number of CF Structures
POLICY1	SHARPLEX	1	18

Coupling Facilities CF Structures

CF Name	Machine Type	Manufacturer	Plant	Sequence Number	Partition	Dump Space	Site
CF2	003906	IBM	02	0000000FB8F7	3F	100K	-

Items per page of 1 items 1 of 1 pages

Close Submit

In Modify Coupling Facility CF2 page, you can update the value of CF. Since you are operating with a shared system, we won't do any update. Please click **Cancel** to switch back to the CFRM Policy Editor.

In CFRM Policy Editor page, you can click **Add** on the right top of the table, to Add a new CF.

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In Add coupling Facility page, you can input attribute value of CF. Again, please click **Cancel** to go back to CFRM Policy Editor as we don't want to change the shared system.

Add Coupling Facility

\* CF name

\* Machine type

\* Manufacturer

\* Plant

\* Sequence number

\* Partition

Dump space

K

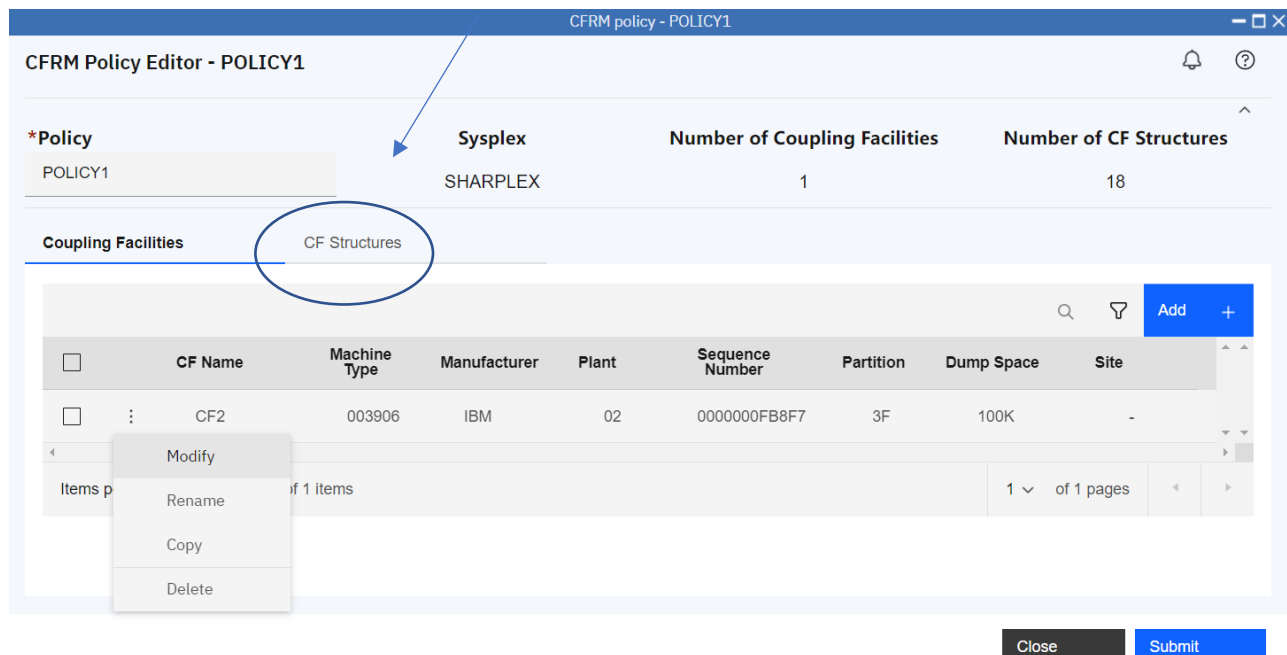
Site

\* List of CF Structures with Coupling Facility in their Preference List

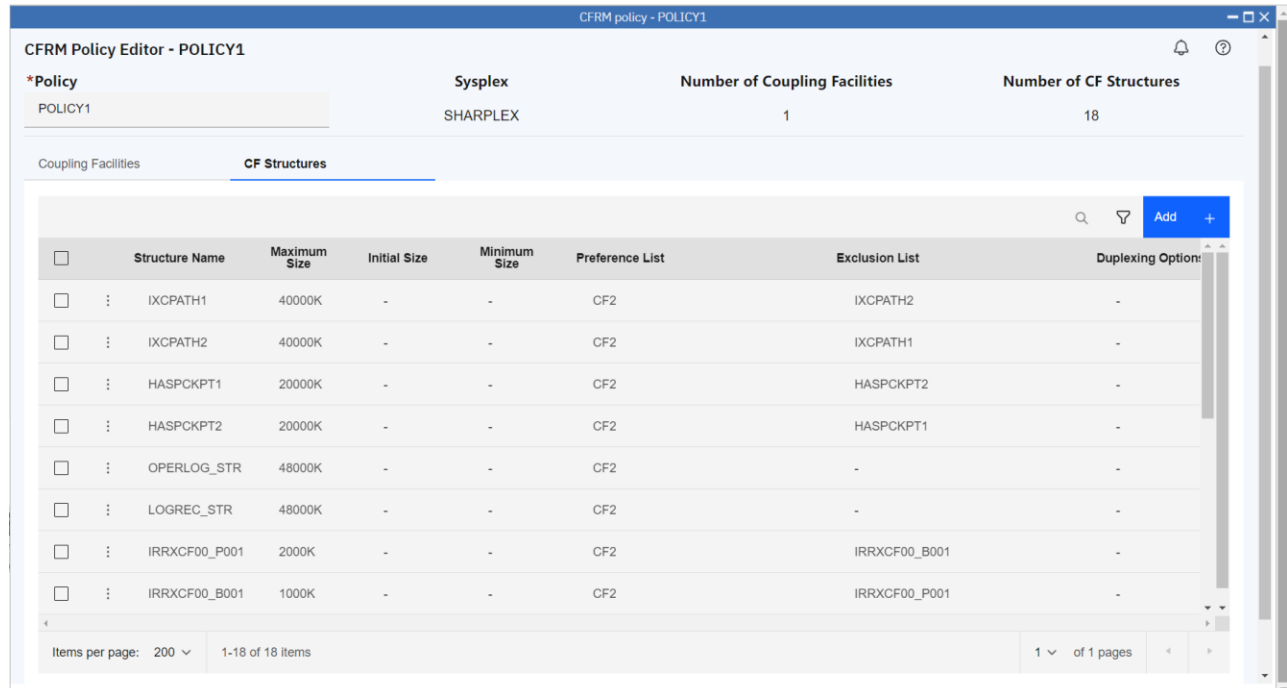
In CF Structure Preference List	Position in Preference List
---------------------------------	-----------------------------

Cancel OK

Now click tab **CF Structures** to open CF structures.



On CF Structures tab, you can add, edit, rename, copy, and delete CF structures for the selected CFRM policy. These actions are similar with the action in Coupling Facilities.



Click Search icon on the right top of the table to open Search.

CFRM Policy Editor - POLICY1

\*Policy: POLICY1    Sysplex: SHARPLEX    Number of Coupling Facilities: 1    Number of CF Structures: 18

Coupling Facilities    **CF Structures**

Structure Name	Maximum Size	Initial Size	Minimum Size	Preference List	Exclusion List
IXCPATH1	40000K	-	-	CF2	IXCPATH2
IXCPATH2	40000K	-	-	CF2	IXCPATH1
HASPCCKPT1	20000K	-	-	CF2	HASPCCKPT2
HASPCCKPT2	20000K	-	-	CF2	HASPCCKPT1
OPERLOG_STR	48000K	-	-	CF2	-

In the Search field, input search condition, such as “ixc”, it gets searched result immediately.

CFRM Policy Editor - POLICY1

\*Policy: POLICY1    Sysplex: SHARPLEX    Number of Coupling Facilities: 1    Number of CF Structures: 18

Coupling Facilities    **CF Structures**

Search: **ixc**

Structure Name	Maximum Size	Initial Size	Minimum Size	Preference List	Exclusion List
IXCPATH1	40000K	-	-	CF2	IXCPATH2
IXCPATH2	40000K	-	-	CF2	IXCPATH1

Items per page: 200    1-2 of 2 items    1 of 1 pages

Close    Submit

Select two structures in the table. Click **Modify** on the right top of the table to modify multiple CF structures at the same time.



CFRM Policy Editor - POLICY1

\*Policy: POLICY1      Sysplex: SHARPLEX      Number of Coupling Facilities: 1      Number of CF Structures: 18

Coupling Facilities      **CF Structures**

2 items selected:      Delete      **Modify**      Cancel

<input checked="" type="checkbox"/>	Structure Name	Maximum Size	Initial Size	Minimum Size	Preference List	Exclusion List
<input checked="" type="checkbox"/>	IXCPATH1	40000K	-	-	CF2	IXCPATH2
<input checked="" type="checkbox"/>	IXCPATH2	40000K	-	-	CF2	IXCPATH1

Items per page: 200      1-2 of 2 items      1 of 1 pages

Close      Submit

In the Modify Multiple CF Structures, enter values for the attributes that you want to modify. For example, input 5000 in Maximum size, then click **OK** to submit.

Modify Multiple CF Structures

Modify Mode: **Absolute**      Relative

Values for the selected fields are applied to all of the selected CF structures. Fields that are left empty are not modified. If you specify Duplexing options field, Duplexing site and Duplexing mode fields will be set to blank if you do not specify them.

Maximum size:  K      Initial size:  K      Minimum size:  K

Duplexing site:       Duplexing mode:       Allow automatic alter:

Rebuild threshold percentage(%):       Recovery priority:

Selected CF Structures to Modify

IXCPATH1  
IXCPATH2

Cancel      **OK**

In the CF Structures table, the two Structures' Maximum Size is updated.

CFRM Policy Editor - POLICY1

*Policy	Sysplex	Number of Coupling Facilities	Number of CF Structures
POLICY1	SHARPLEX	1	18

Coupling Facilities      **CF Structures**

Structure Name	Maximum Size	Initial Size	Minimum Size	Preference List	Exclusion List
IXCPATH1	5000K	-	-	CF2	IXCPATH2
IXCPATH2	5000K	-	-	CF2	IXCPATH1

Items per page: 200    1-2 of 2 items    1 of 1 pages

Close    Submit

Select two structures, click Modify again.

CFRM Policy Editor - POLICY1

*Policy	Sysplex	Number of Coupling Facilities	Number of CF Structures
POLICY1	SHARPLEX	1	18

Coupling Facilities      **CF Structures**

2 items selected    Delete    **Modify**    Cancel

Structure Name	Maximum Size	Initial Size	Minimum Size	Preference List	Exclusion List
IXCPATH1	5000K	-	-	CF2	IXCPATH2
IXCPATH2	5000K	-	-	CF2	IXCPATH1

Items per page: 200    1-2 of 2 items    1 of 1 pages

Close    Submit

In Modify Multiple CF structures page, select the Relative option, the attributes you modify can increase or decrease by the specified percentage. You can apply a relative change to individual fields or all of the selected fields.

Click **Relative** tab, input 10 in Maximum size, click **OK** to submit.



After you done all update, **Submit** button can be used to save changes. Since you are operating with a shared system, we won't perform Submit action.

Now Click **Close** to go back to CFRM Administrator Policies.

In the CFRM Administrator Policies, select the policy you created in the beginning, right click to show the action menu, move cursor to Delete, click **Delete**.

Sysplex Management

Sysplex Management > CFRM Administrative Policies

CFRM Administrative Policies

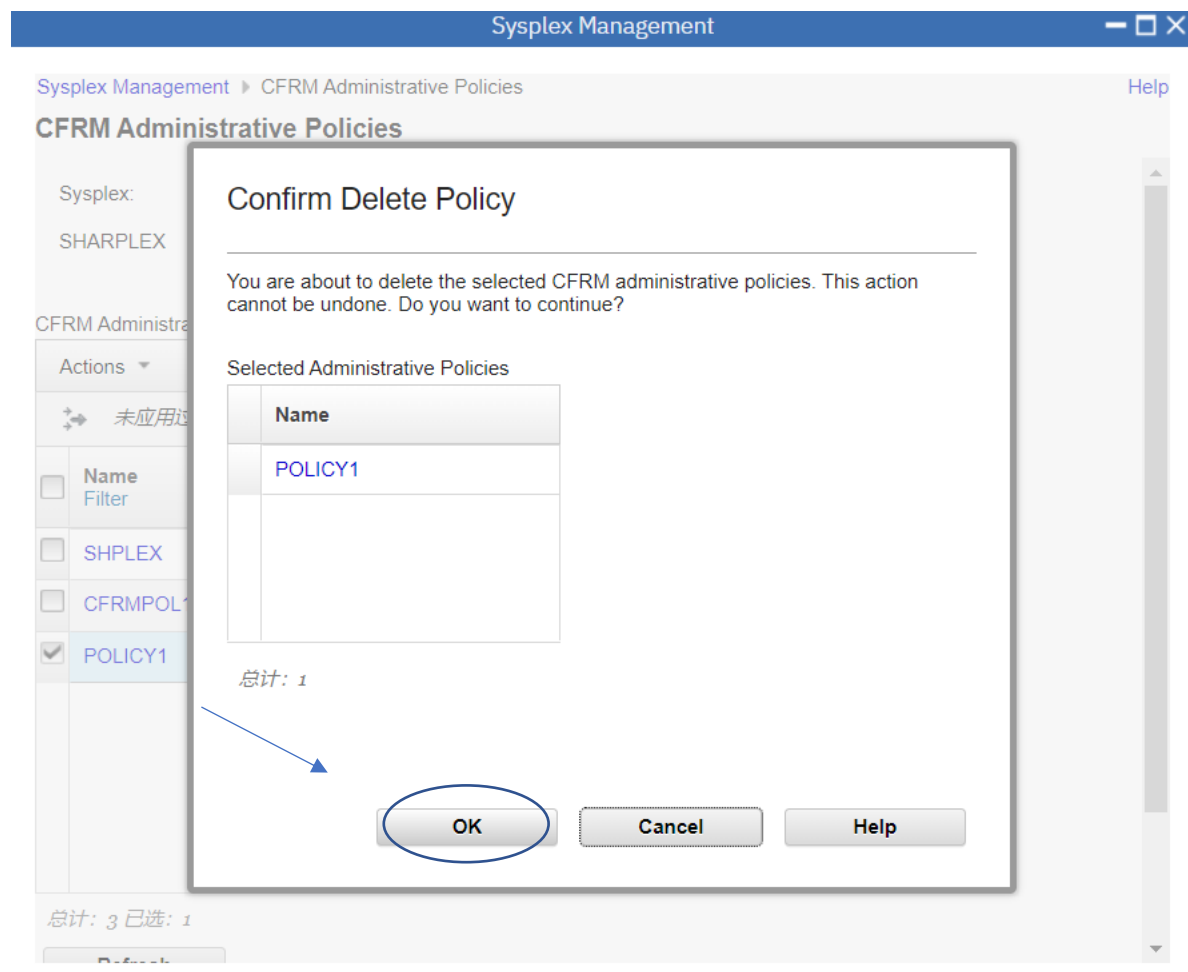
Sysplex: SHARPLEX Active policy: CFRMPOL1 Date policy activated (UTC): 01/24/2022 18:08:44

CFRM Administrative Policies

Actions	Name	Last Updated (UTC)	Updated By
<input type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input type="checkbox"/>	CFRMPOL1	03/07/2022 06:24:13	SHARA01
<input checked="" type="checkbox"/>	POLICY1	08/08/2022 08:45:01	SHARA01

总计: 3 已选: 1

In Confirm Delete Policy, click **OK** to submit.



In CFRM Administrator Policies, you can see the policy “POLICY1” is deleted.

Sysplex Management

— □ ×

Sysplex Management ▸ CFRM Administrative Policies Help

**CFRM Administrative Policies**

▼ Messages ✖ 0 ⚠ 0 ℹ 1 Close All

ℹ The selected administrative policies "POLICY1" are deleted. IZUS316I 2022年8月8日 下午4:53:19 ✕

Sysplex:

Active policy:

Date policy activated (UTC):

SHARPLEX

CFRMPOL1

01/24/2022 18:08:44

CFRM Administrative Policies

Actions ▼

↕ 未应用过滤器

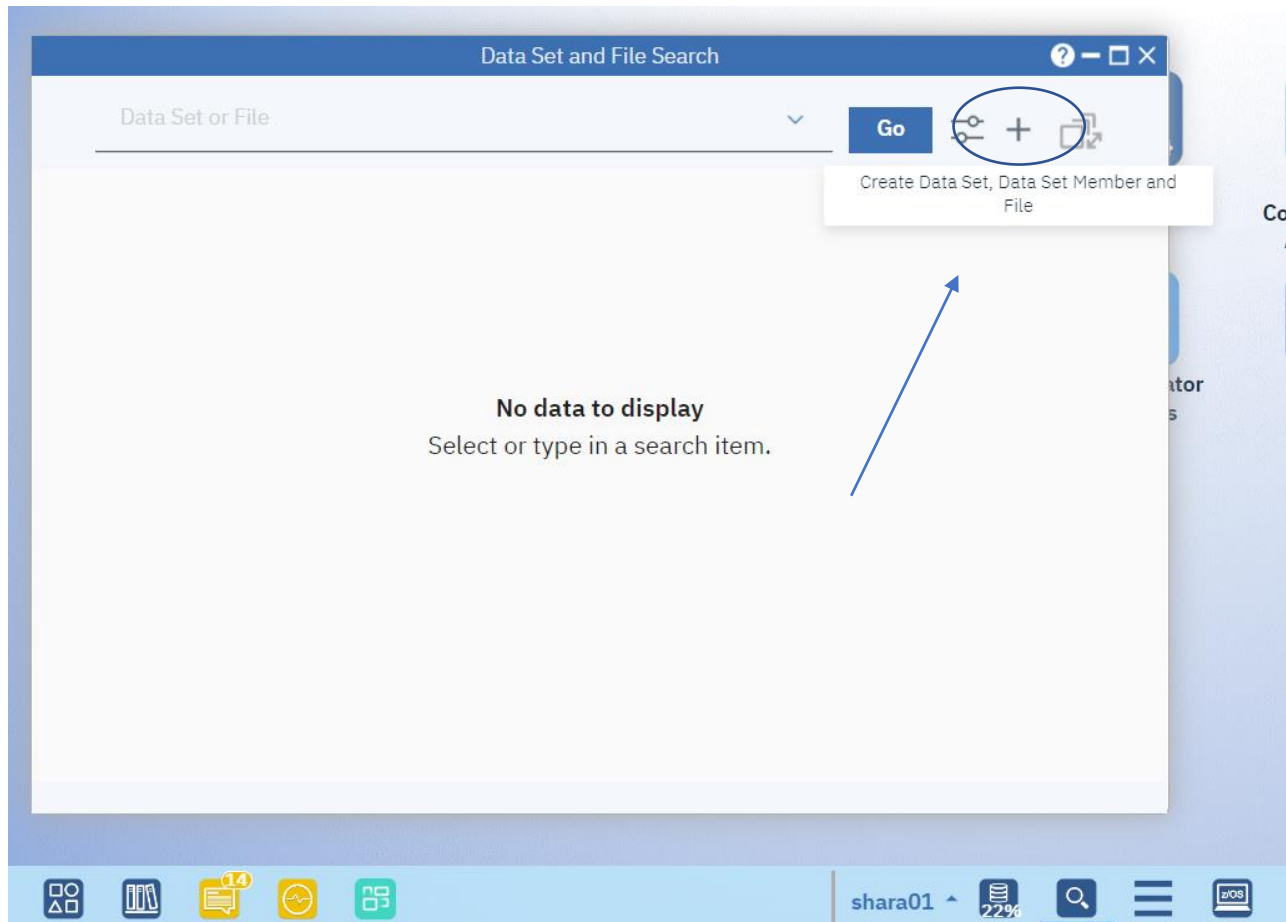
<input type="checkbox"/>	Name Filter	Last Updated (UTC) Filter	Updated By Filter
<input type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input type="checkbox"/>	CFRMPOL1	03/07/2022 06:24:13	SHARA01

## 15. Export Policy

Now let's switch back to z/OSMF Desktop. You can do that by minimize all z/OSMF windows or just double click on the z/OSMF Desktop background. On the right corner of the z/OSMF task bar, click on **Data Set and File Search** icon.

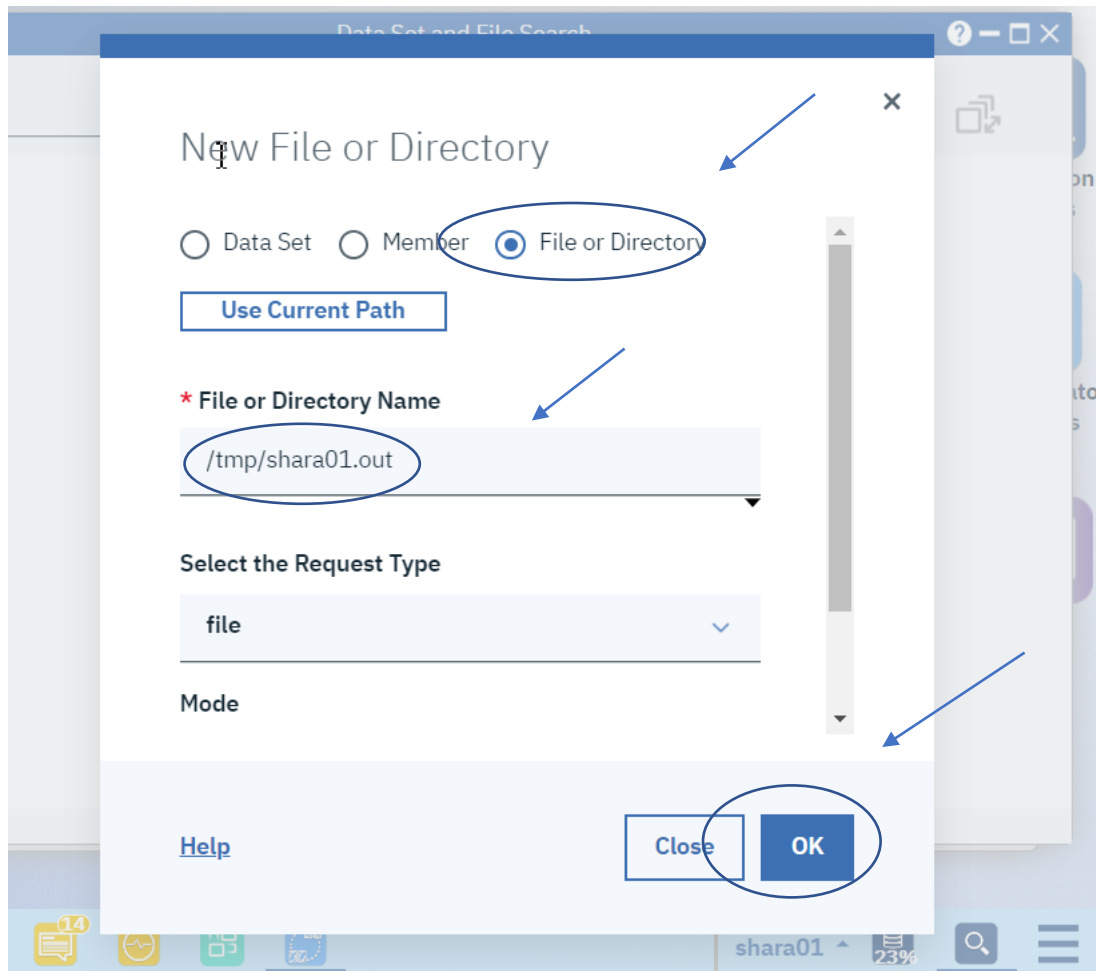


In Data Set and Search dialog, click **Create Data Set, Data Set Member and File** on the top right of the dialog.

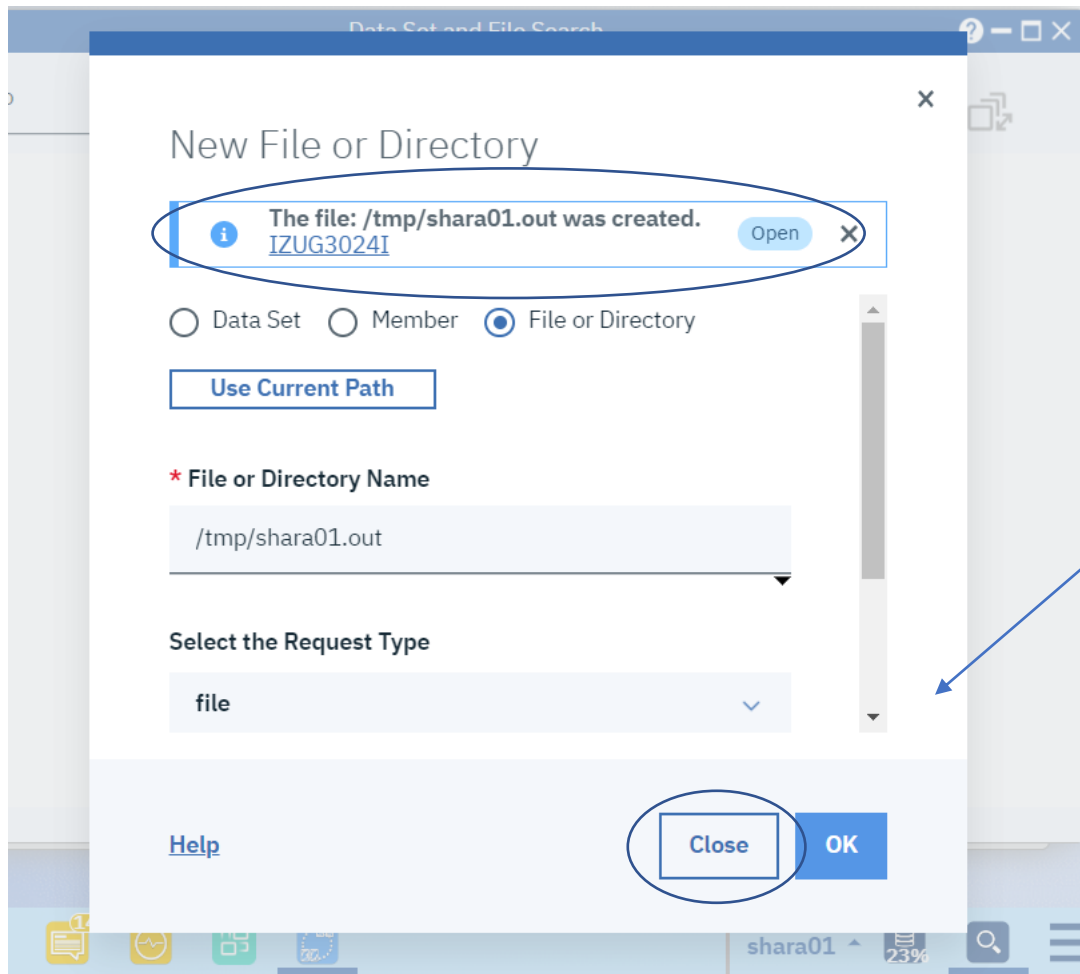




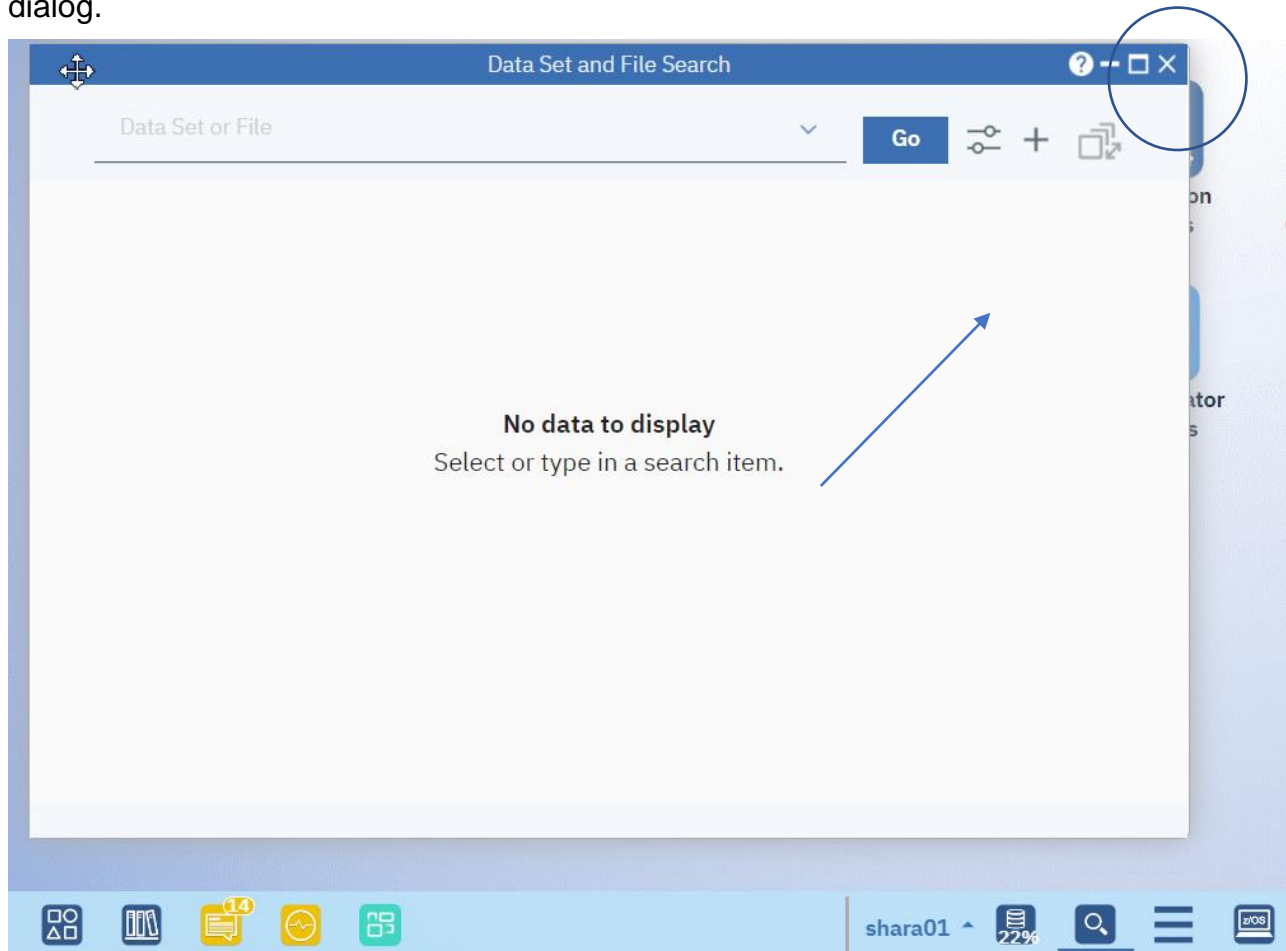
In New File or Directory dialog, check **File or Directory**, input file name you want to create in File or Directory Name field. **To ensure that the file name is unique, please use username as your file name.** Below screen shot is using user shara01, therefore, the input for “File or Directory Name” is /tmp/shara01.out. Click **OK** to create the file.



After the file is created successfully, click **Close** button to close the dialog.



Then close the Data Set and File Search dialog by clicking X icon on the top right of the dialog.



Now switch back to Sysplex Management window, open CFRM Administrative Policies panel, select the policy “SHPLEX”, right click to open action menu, then select **Export**.

Sysplex Management

Sysplex Management > CFRM Administrative Policies Help

### CFRM Administrative Policies

Sysplex: SHARPLEX Active policy: CFRMPOL1 ⚠ Date policy activated (UTC): 01/24/2022 18:08:44

CFRM Administrative Policies

Actions	Name	Last Updated (UTC)	Updated By
Filter	Filter	Filter	Filter
<input checked="" type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input type="checkbox"/>	CFRMPOL1		SHARA01

Open in CFRM Policy Editor  
View Content  
Rename...  
Copy...  
Export...  
Activate...  
Delete...

In Export CFRM Administrative Policy, input the filename you created in prior step (Note that your file should start with your lab user id). Click **OK** to export the policy.

Sysplex Management

Sysplex Management ► CFRM Administrative Policies Help

### CFRM Administrative Policies

Sysplex Management

SHARPLEX.S2 - Local

#### Export CFRM Administrative Policy

You can export CFRM administrative policies to an existing PS data set, PDS data set member or Unix file. Enter the system location and fully qualified name.

System location:

SHARPLEX.S2 - Local

\* Data set or Unix file name:

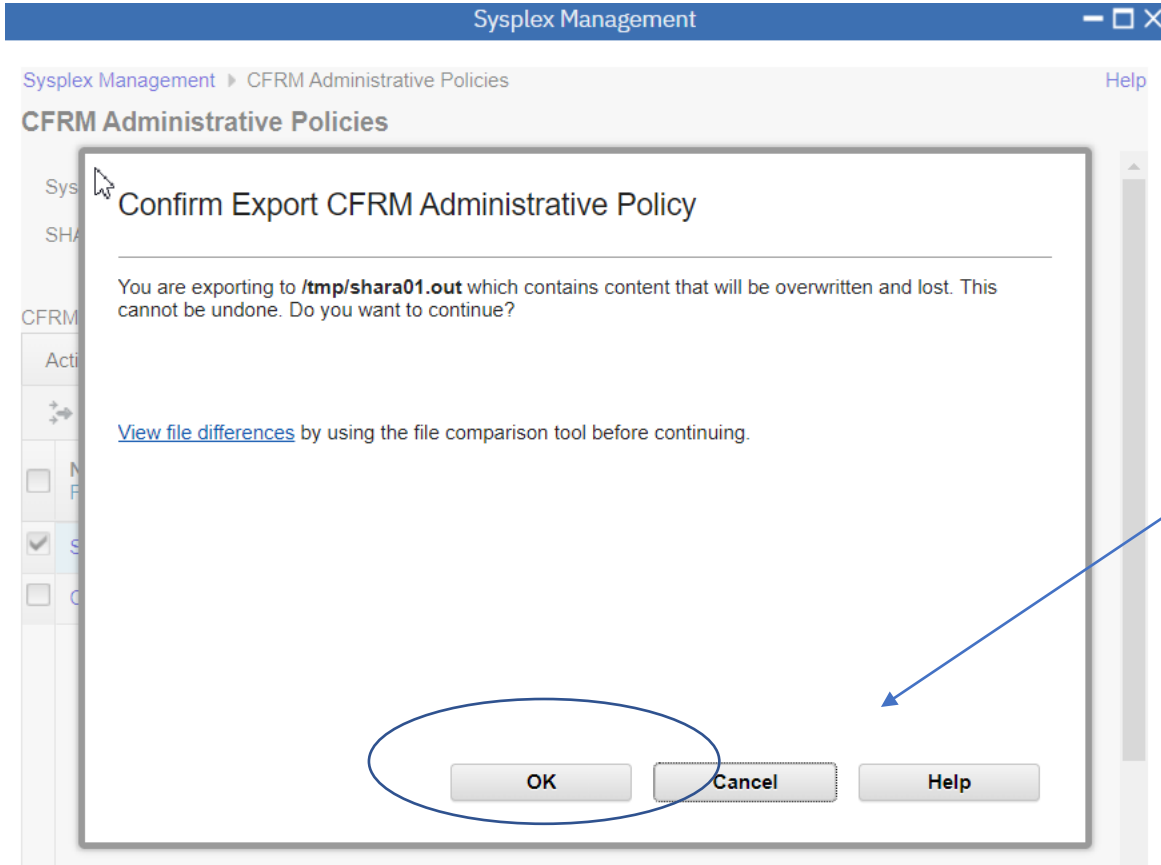
/tmp/shara01.out

View Contents

⚠ Any data that the data set or Unix file currently contains will be overwritten and lost. This cannot be undone.

OK Cancel Help

In Confirm Export CFRM Administrative Policy, click **OK** to confirm.



In the policy list, you can see the msg shows that policy is exported successfully.

The screenshot shows the Sysplex Management interface for CFRM Administrative Policies. At the top, a blue header bar contains the title "Sysplex Management" and window controls. Below the header, the breadcrumb "Sysplex Management > CFRM Administrative Policies" is visible, along with a "Help" link. The main section is titled "CFRM Administrative Policies". A message banner at the top of the content area states: "Administrative policies 'SHPLEX' have been successfully exported to /tmp/shara01.out." with a blue information icon, ID "IZUS327I", and timestamp "2022年8月12日 下午4:36:41". A blue arrow points from the text above to this message. Below the message, a table displays active policies. The table has three columns: "Sysplex:", "Active policy:", and "Date policy activated (UTC):". The first row shows "SHARPLEX" as the Sysplex and "CFRMPOL1" as the active policy, with a yellow warning icon next to the policy name and a timestamp of "01/24/2022 18:08:44". Below the table, the section "CFRM Administrative Policies" is repeated, showing a table with filterable columns: "Name", "Last Updated (UTC)", and "Updated By". The table contains two entries: "SHPLEX" (last updated 09/10/2019 17:55:07 by VANWAG) and "CFRMPOL1" (last updated 03/07/2022 06:24:13 by SHARA01). A vertical scrollbar is visible on the right side of the interface.

Sysplex Management

Sysplex Management > CFRM Administrative Policies Help

### CFRM Administrative Policies

▼ Messages 0 0 1 Close All

**Administrative policies "SHPLEX" have been successfully exported to /tmp/shara01.out.** IZUS327I 2022年8月12日 下午4:36:41

Sysplex:	Active policy:	Date policy activated (UTC):
SHARPLEX	CFRMPOL1	01/24/2022 18:08:44

CFRM Administrative Policies

Actions

未应用过滤器

<input type="checkbox"/>	Name Filter	Last Updated (UTC) Filter	Updated By Filter
<input type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input type="checkbox"/>	CFRMPOL1	03/07/2022 06:24:13	SHARA01

## 16. Import Policy

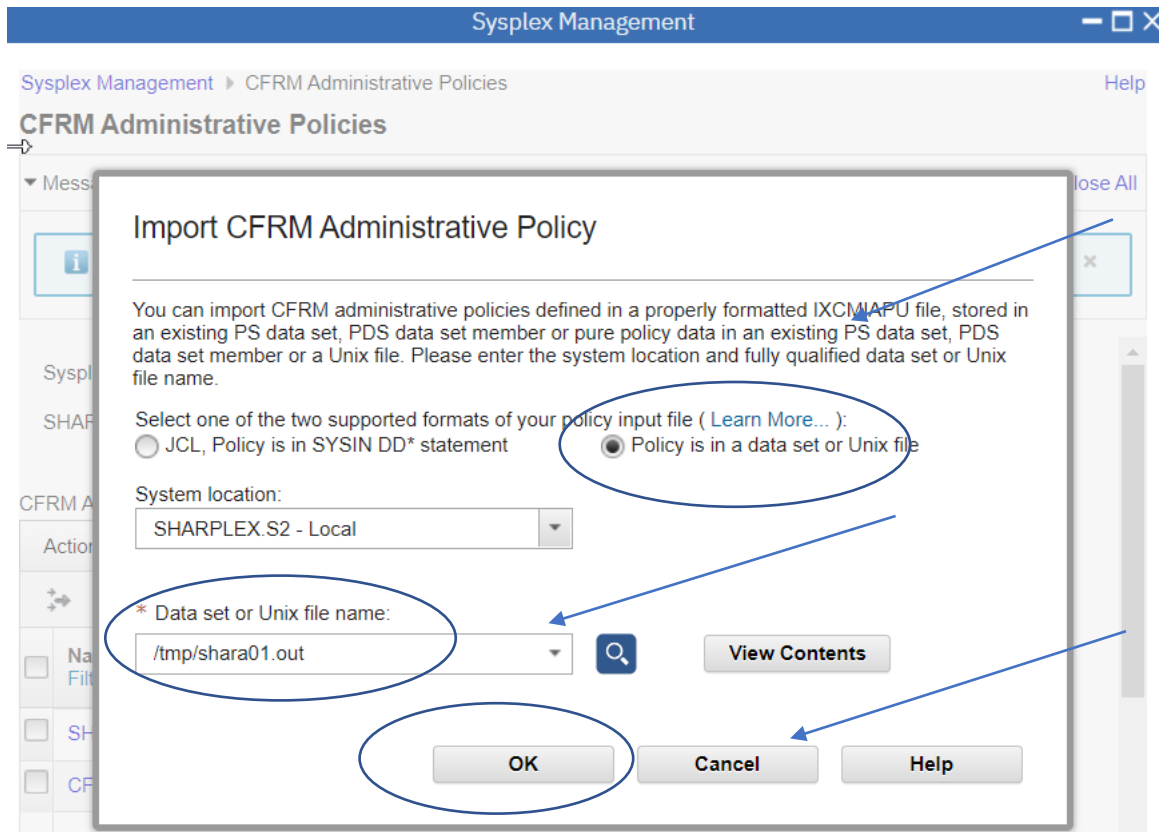
In CFRM Administrative Policies panel, click **Actions** drop down, select **Import**.

The screenshot shows the Sysplex Management interface for CFRM Administrative Policies. The top bar indicates 'Sysplex Management' and 'CFRM Administrative Policies'. Below this, there's a section for 'Messages' with 0 errors, 0 warnings, and 3 information items. The main area displays the active policy 'SHARPLEX' and the date it was activated (01/24/2022 18:08:44). A table of policies is visible, with columns for 'JTC)', 'Updated By', and 'Filter'. The 'Actions' dropdown menu is open, showing options like 'View Content', 'Rename...', 'Copy...', 'Export...', 'Activate...', 'Delete...', 'New...', 'Import...', 'Select All', and 'Deselect All'. The 'Import...' option is highlighted with a blue circle and a blue arrow pointing to it.

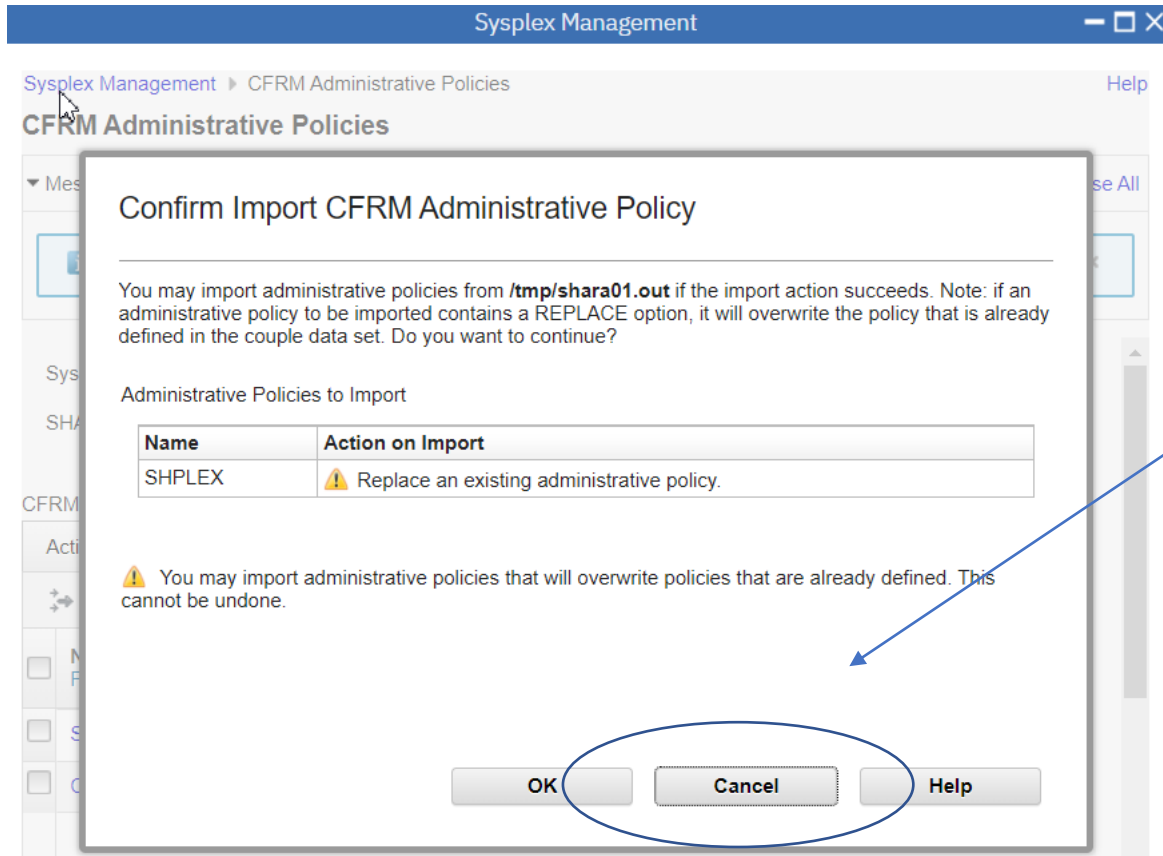
JTC)	Updated By	Filter
5:07	VANWAG	
4:13	SHARA01	



In Import CFRM Administrative Policy dialog, check **Policy in a dataset or Unix file**. In **Data set or Unix file name** field, input filename that you exported policy to in the prior step. Click **OK** to continue.



In Confirm Import CFRM Administrative Policy, click **Cancel** button as we don't want every Lab user to really import a policy to the system. The earlier steps show that how you could import a policy to z/OSMF CFRM Policy Editor so that you can use CFRM Policy Editor to work with your policy later.



---

## Exercise review and wrap-up

In this lab, you became familiar with the z/OSMF Sysplex Management plugin by completing the following activities:

1. Log in to z/OSMF.
2. Open Sysplex Management.
3. Access Topology View of Sysplex.
4. Access Physical View of Sysplex.
5. View Properties of Couple Data Set
6. Open Coupling Facility Structures.
7. Access CF Connectivity View of Sysplex.
8. Access CF Connectivity Detail View of Sysplex.
9. Check Command log.
10. Switch Alternate to Primary.
11. Check Warning icon.
12. Check Notification.
13. List CFRM Policies
14. Work with CFRM Policy Editor
15. Export Policy
16. Import Policy



**Thank You**