



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. Work with CF Sizing
16. Export Policy
17. 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.

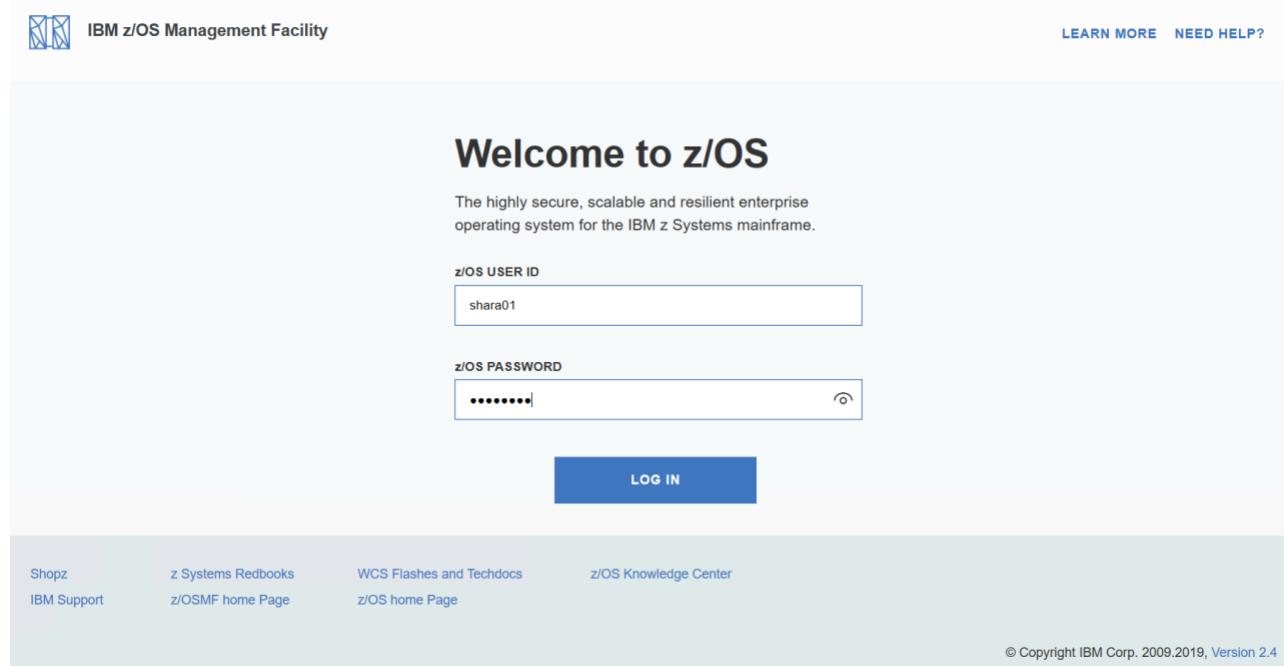
Notes:

-
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

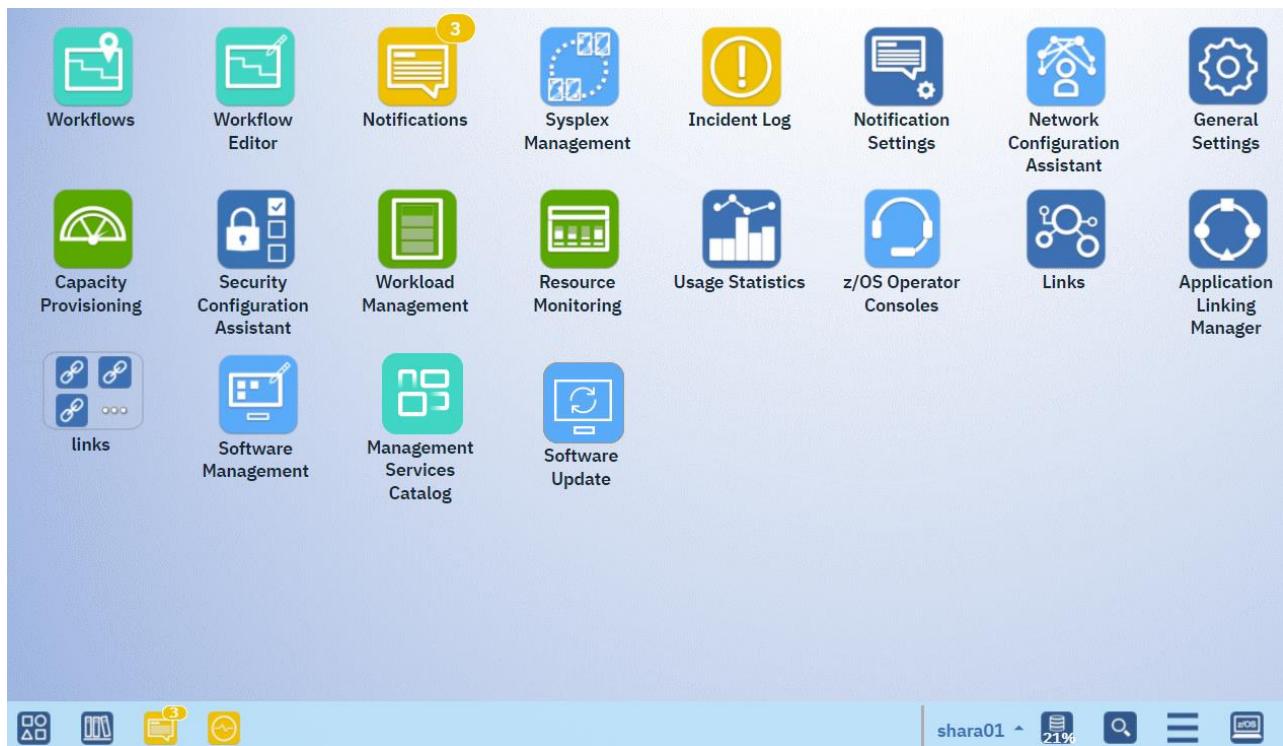
- Launch browser from your workstation
- Point browser to z/OSMF – enter the following url
<https://share.centers.ihost.com/zosmf>
- Login with SHARE userid/pw as provided by the lab instructor
 - Each workstation has been assigned a unique z/OS user id

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.



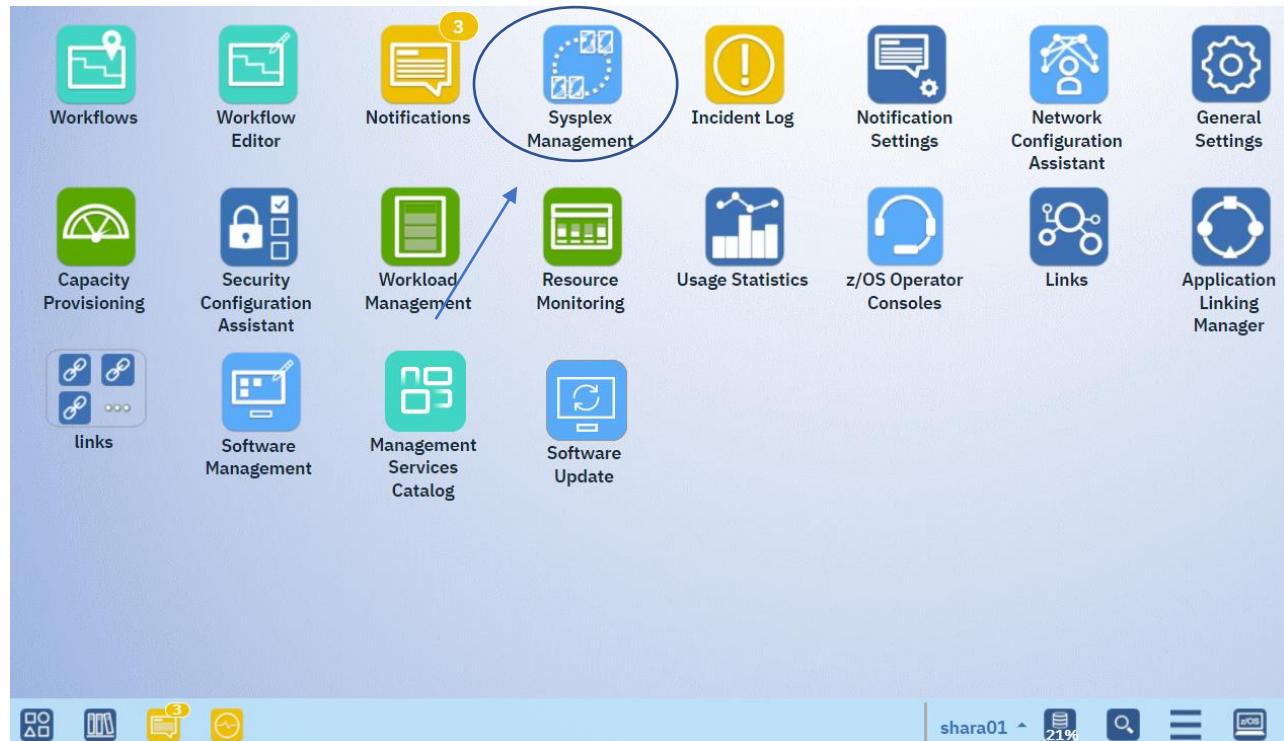
The screenshot shows the IBM z/OS Management Facility login interface. At the top left is the IBM logo and the text "IBM z/OS Management Facility". At the top right are links for "LEARN MORE" and "NEED HELP?". The main title "Welcome to z/OS" is centered above a brief description: "The highly secure, scalable and resilient enterprise operating system for the IBM z Systems mainframe." Below this are two input fields: "z/OS USER ID" containing "shara01" and "z/OS PASSWORD" containing masked text. A "LOG IN" button is at the bottom of the form. At the bottom of the page, there's a footer bar with links: "Shopz", "IBM Support", "z Systems Redbooks", "z/OSMF home Page", "WCS Flashes and Techdocs", "z/OS home Page", and "z/OS Knowledge Center". The footer also includes a copyright notice: "© Copyright IBM Corp. 2009.2019, Version 2.4".

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



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

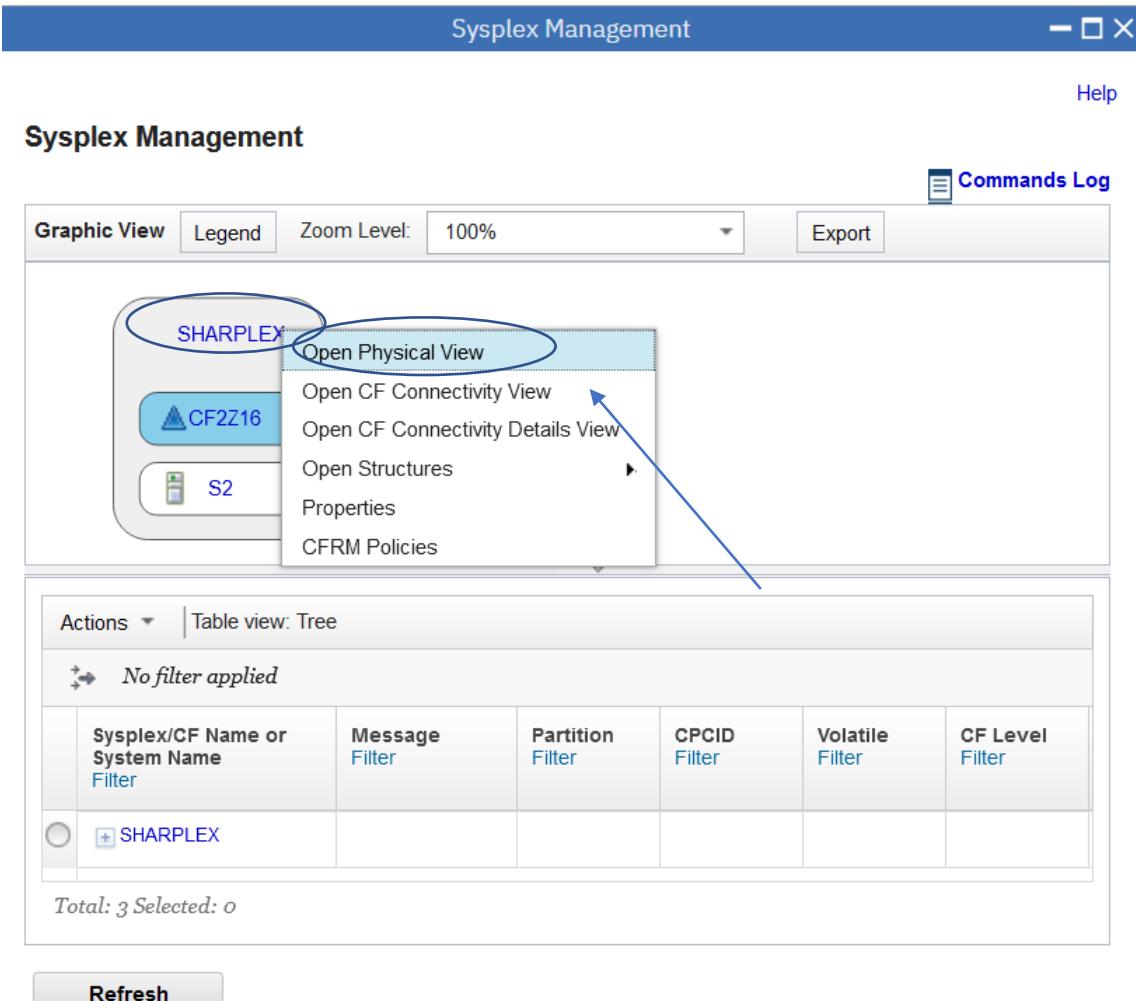
Use the Topology View to manage your sysplex topology.

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.

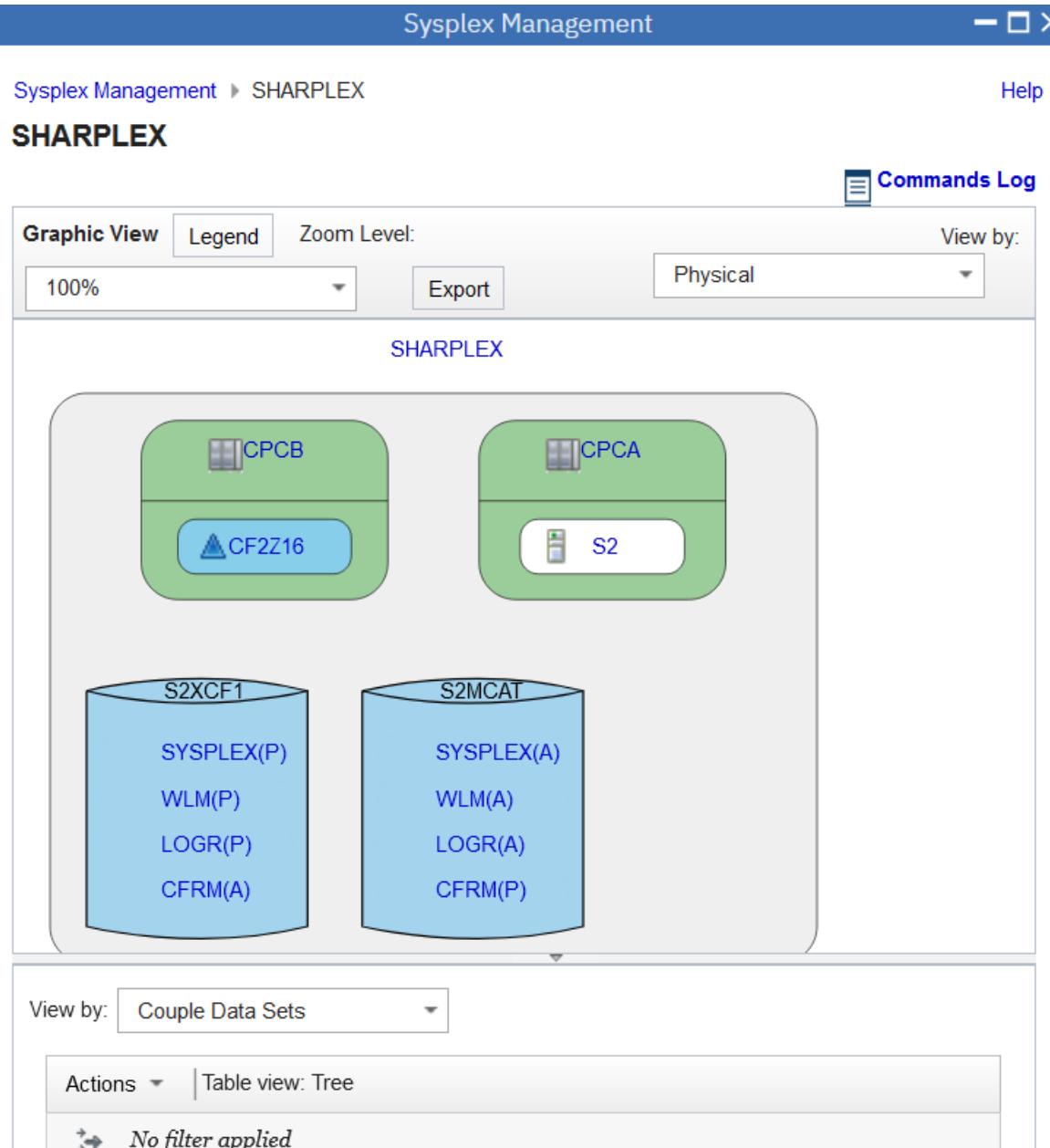
The screenshot shows the 'Sysplex Management' interface. At the top, there's a blue header bar with the title 'Sysplex Management' and standard window controls (minimize, maximize, close). Below the header is a toolbar with buttons for 'Graphic View' (selected), 'Legend', 'Zoom Level' (set to 100%), and 'Export'. To the right of the toolbar is a 'Commands Log' button. The main area is divided into two sections: a graphic view on the left and a table view on the right. The graphic view shows a 'SHARPLEX' sysplex with a 'CF2Z16' coupling facility and a 'S2' system. The table view below it has a header row with filters: 'Sysplex/CF Name or System Name Filter', 'Message Filter', 'Partition Filter', 'CPCID Filter', 'Volatile Filter', and 'CF Level Filter'. A single row is listed under the 'Sysplex/CF Name or System Name Filter' column, showing 'SHARPLEX'. At the bottom of the table view, it says 'Total: 3 Selected: 0'. A 'Refresh' button is located at the bottom left of the main area.

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

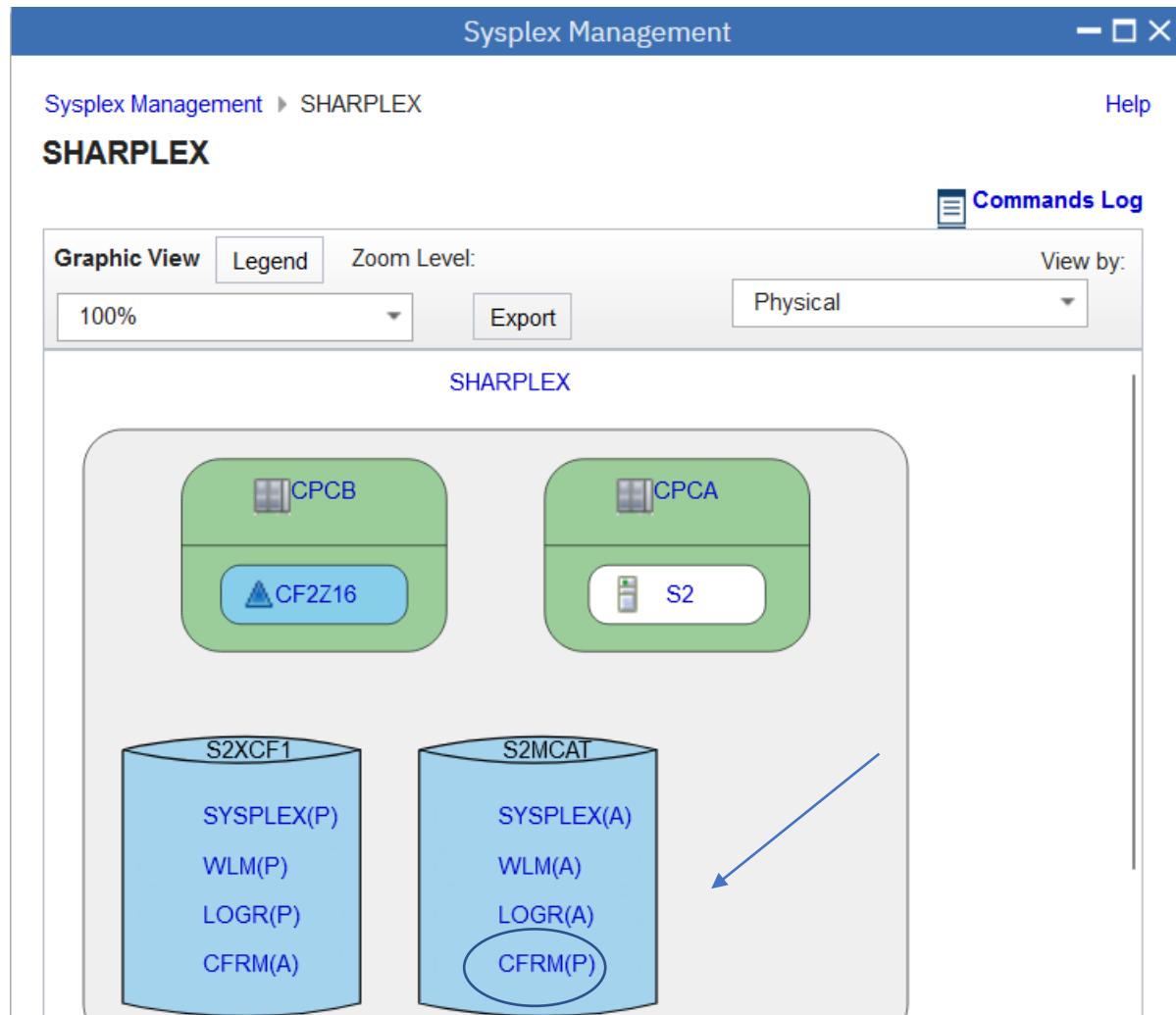
Use the Physical View to manage your sysplex. The Physical View shows the major physical elements in a sysplex include Central Processor Complexes (CPCs), coupling facilities (CFs), systems, and different types of couple data sets. It includes a graphical and table view. With both the graphic and table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



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.

Sysplex Management

Sysplex Management ▶ SHARPLEX ▶ View Properties for CFRM Couple Data Sets Help

View Properties for CFRM Couple Data Sets

Sysplex: SHARPLEX

Primary **Alternate**

Couple data set name:
SHPLEX.CFRM.DSN1

Type:
CFRM

Volume serial:
S2MCAT

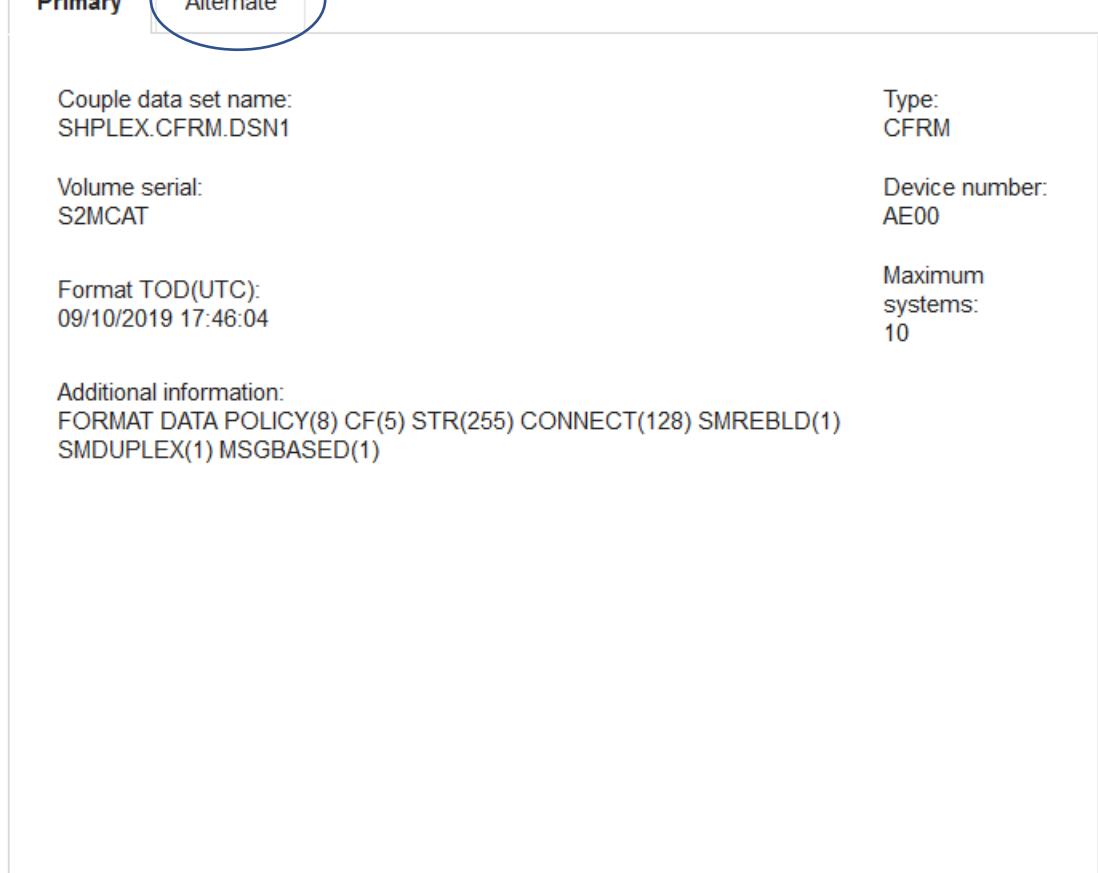
Device number:
AE00

Format TOD(UTC):
09/10/2019 17:46:04

Maximum
systems:
10

Additional information:
FORMAT DATA POLICY(8) CF(5) STR(255) CONNECT(128) SMREBLD(1)
SMDUPLEX(1) MSGBASED(1)

Close



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

Sysplex Management

Sysplex Management ▶ SHARPLEX ▶ View Properties for CFRM Couple Data Sets Help

View Properties for CFRM Couple Data Sets

Sysplex: SHARPLEX

Primary **Alternate**

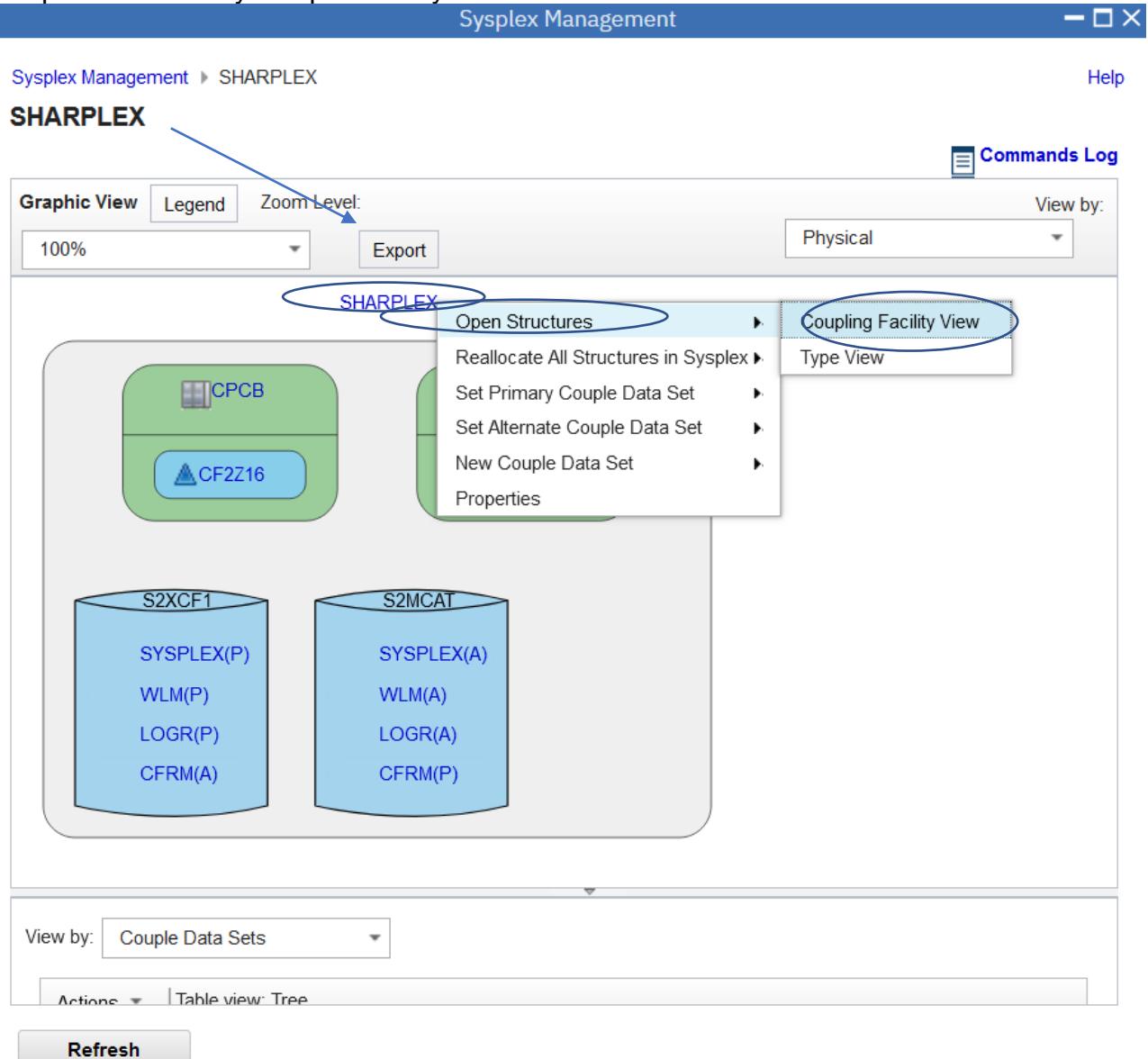
Couple data set name: SHPLEX.CFRM.DSN2	Type: CFRM
Volume serial: S2XCF1	Device number: AE06
Format TOD(UTC): 09/10/2019 17:46:05	Maximum systems: 10

Additional information:
FORMAT DATA POLICY(8) CF(5) STR(255) CONNECT(128) SMREBLD(1)
SMDUPLEX(1) MSGBASED(1)

Close

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.

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.

Sysplex Management

Sysplex Management > SHARPLEX > Coupling Facility Structures for SHARPLEX

Coupling Facility Structures for SHARPLEX

Graphic View Legend Zoom Level: 100% Export

View by: CF

Type

<Unallocated>

CF2Z16

- SYSZLWM_W...
- SYSZLWM_A...
- ISTGENERI...

CF2

- SYSZLWM_W...
- ISTGENERI...

IXCPATH1

IXCPATH2

HASPCKPT1

HASPCKPT2

OPERLOG_S...

LOGREC_ST...

Actions ▾ Table view: Tree

No filter applied

	CF Name/Structure Filter	CF Name Filter	Status Filter	Type Filter	Allocation Time Filter
<input checked="" type="radio"/>	<input type="checkbox"/> CF2Z16				

Refresh

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

Type	CF Name	Status	Type	Allocation Time
SLIST	ISTGENERI...	OK	LOCK	2023-09-01 10:00:00
SLIST	ISTGENERI...	OK	LOCK	2023-09-01 10:00:00
CACHE	SYSZWLM_W...	OK	LOCK	2023-09-01 10:00:00
CACHE	SYSZWLM_W...	OK	LOCK	2023-09-01 10:00:00
CACHE	SYSZWLM_A...	OK	LOCK	2023-09-01 10:00:00
N/A	IXCPATH1	OK	LOCK	2023-09-01 10:00:00
N/A	IXCPATH2	OK	LOCK	2023-09-01 10:00:00
N/A	HASPCKPT1	OK	LOCK	2023-09-01 10:00:00
N/A	HASPCKPT2	OK	LOCK	2023-09-01 10:00:00
N/A	OPERLOG_S...	OK	LOCK	2023-09-01 10:00:00
N/A	LOGREC_ST...	OK	LOCK	2023-09-01 10:00:00

Actions | Table view: Tree
No filter applied

Type/Structure Filter CF Name Filter Status Filter Type Filter Allocation Time Filter

Refresh

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' interface with the title 'Coupling Facility Structures for SHARPLEX'. The breadcrumb navigation bar at the top indicates the current location: 'Sysplex Management' > 'SHARPLEX' > 'Coupling Facility Structures for SHARPLEX'. A blue arrow points from the text 'click sysplex name SHARPLEX to go back to Physical View of Sysplex' to the 'SHARPLEX' link in the breadcrumb.

The main view displays two clusters of coupling facility structures:

- N/A**: Contains nodes: IXCPATH1, IXCPATH2, HASPCKPT1, HASPCKPT2, OPERLOG_S..., and LOGREC_ST... (all marked as N/A).
- SLIST**: Contains nodes: ISTGENERI... (marked as N/A) and ISTGENERI... (marked as OK).
- CACHE**: Contains nodes: SYSZWLM_W... (marked as N/A), SYSZWLM_W... (marked as OK), and SYSZWLM_A... (marked as N/A).

Below the structures, there is a table view with the following columns:

Type/Structure Filter	CF Name Filter	Status Filter	Type Filter	Allocation Time Filter
<input checked="" type="radio"/> N/A				

A 'Refresh' button is located at the bottom left of the table view.

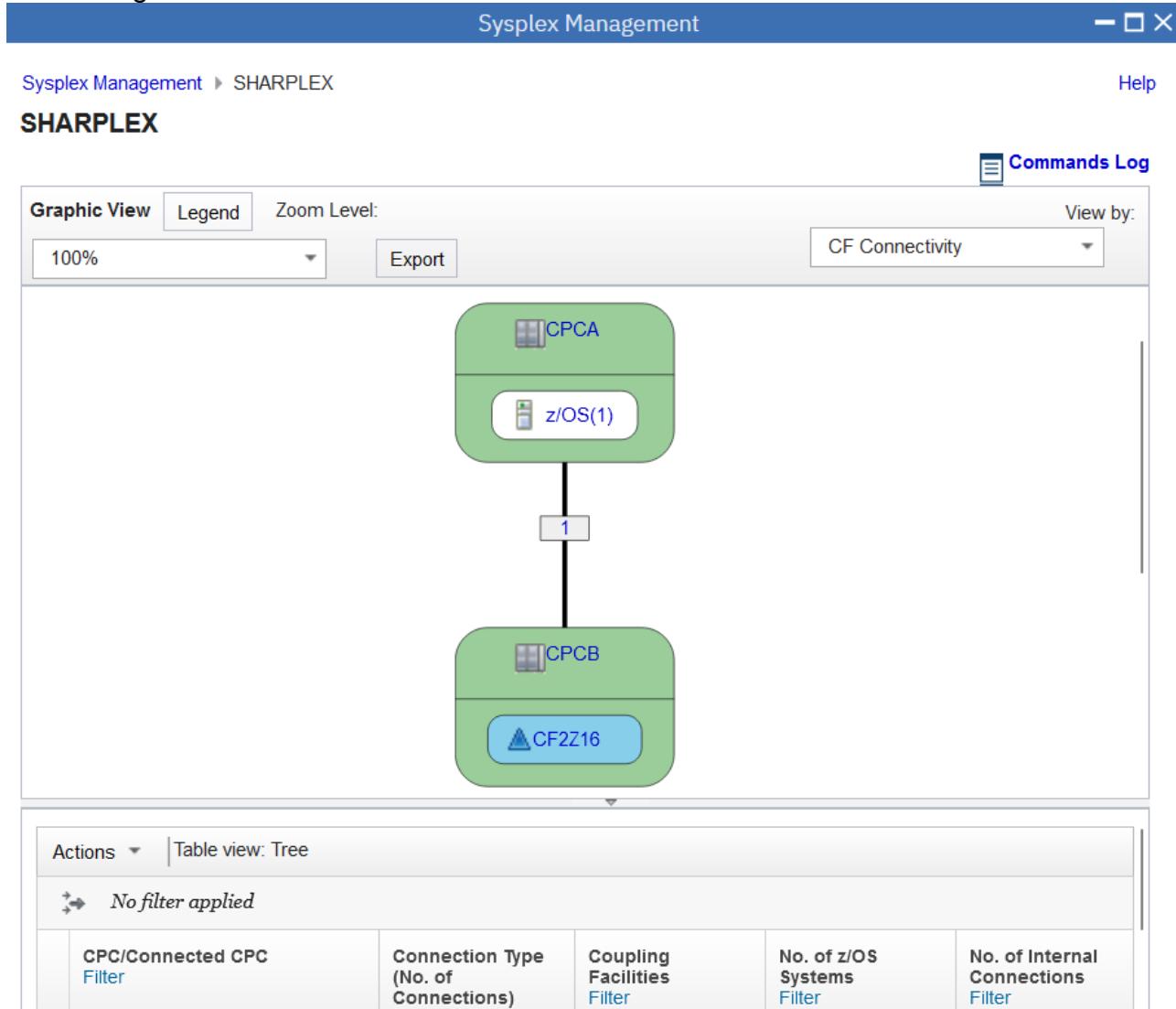
In the Physical View, move cursor to the right top, click **View by** drop down, select **CF Connectivity**, then you will go to **CF Connectivity View of Sysplex**.

The screenshot shows the 'Sysplex Management' interface for the 'SHARPLEX' sysplex. The main area displays a graphic view of the sysplex components: two CPCs (CPCB and CPCA) connected to a shared S2 data set, which in turn connects to two S2CF data sets (S2XCF1 and S2MCAT). Each S2CF data set contains subsystems: S2XCF1 has WLM(P), LOGR(P), and CFRM(A); S2MCAT has WLM(A), LOGR(A), and CFRM(P).

A callout arrow points from the text "then you will go to CF Connectivity View of Sysplex." to the 'View by:' dropdown menu in the top right corner. The 'View by:' menu is open, showing four options: 'Physical' (selected), 'Physical', 'CF Connectivity' (highlighted with a blue oval and a blue arrow pointing to it), and 'CF Connectivity Details'.

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

The screenshot shows the Sysplex Management interface for the SHARPLEX sysplex. At the top, there's a navigation bar with 'Sysplex Management' and 'Help'. Below it, the title 'SHARPLEX' is displayed. On the left, there are tabs for 'Graphic View' (which is selected), 'Legend', and 'Zoom Level'. Under 'Zoom Level', a dropdown shows '100%' and an 'Export' button. To the right, there's a 'Commands Log' section and a 'View by:' dropdown menu. This menu has options: 'CF Connectivity' (selected), 'Physical', 'CF Connectivity', and 'CF Connectivity Details'. The 'CF Connectivity Details' option is circled with a blue oval, and an arrow points from the text above to this circle. The main area displays a connectivity diagram between two CPCs: CPC A (CPCA) and CPC B (CPCB). CPC A contains a z/OS(1) system. A connection labeled '1' connects CPC A to CPC B, which contains a CF2Z16 system. Below the diagram is a table titled 'Actions' with a 'Table view: Tree' option. It shows a single row under 'No filter applied' with columns for 'CPC/Connected CPC Filter', 'Connection Type (No. of Connections) Filter', 'Coupling Facilities Filter', 'No. of z/OS Systems Filter', and 'No. of Internal Connections Filter'.

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 (CF2Z16 in the example). CHPIDs, adapters, and ports are represented to show the connection between systems and CFs. In the example, the CHPIDs are E0, and the adapters/ports are both N/A.

Sysplex Management - □ ×

Sysplex Management ▶ SHARPLEX Help

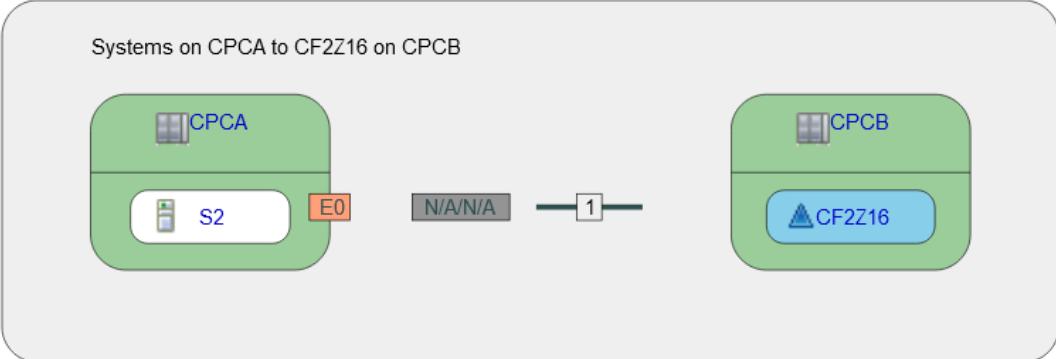
SHARPLEX

 Commands Log

Graphic View Legend Zoom Level:

100% ▼ Export View by: CF Connectivity Details ▼

SHARPLEX



Systems on CPCA to CF2Z16 on CPCB

The diagram illustrates the connectivity between two CPCs, CPCA and CPCB. CPCA contains system S2 and channel path E0. CPCB contains channel function CF2Z16. A connection is shown between S2 and CF2Z16, labeled with 'N/A/N/A' and a value of '1'.

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 checked="" type="radio"/> S2	E0		ICP	● Online	● Online	N/A	N/A	CF2Z16

9. Check Command Log

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

The screenshot shows the 'Sysplex Management' interface with the title bar 'Sysplex Management'. Below it, the path 'Sysplex Management > SHARPLEX' is displayed. On the right side of the header, there is a 'Help' link and a blue oval highlighting the 'Commands Log' button, which has a list icon next to it. The main content area is titled 'SHARPLEX' and shows a diagram of 'Systems on CPC A to CF2Z16 on CPC B'. The diagram includes two green rounded rectangles representing CPCs, each containing a smaller rectangle labeled 'S2'. Between them is a red box labeled 'E0'. To the right of the diagram is a grey box labeled 'CF2Z16'. Below the diagram is a table with the following data:

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	E0		ICP	● Online	● Online	N/A	N/A	CF2Z16	

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.

Commands Log for SHARPLEX (48)								
Actions		Table view: Tree						
No filter applied								
Command Filter	Objects Filter	Sysplex Filter	System Filter	Details Filter	Status Filter	Date Submitted Filter	Date Updated Filter	User Filter
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Feb 23, 2024, 4:31:57 PM	Feb 23, 2024, 4:31:57 PM	SHARA26
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Dec 13, 2023, 6:05:29 PM	Dec 13, 2023, 6:05:29 PM	sharb15
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Dec 13, 2023, 1:56:26 PM	Dec 13, 2023, 1:56:26 PM	shara13
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Dec 13, 2023, 12:44:09 PM	Dec 13, 2023, 12:44:09 PM	SHARA03

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

Commands Log for SHARPLEX (48)								
Actions		Table view: Tree						
No filter applied								
Command Filter	Objects Filter	Sysplex Filter	System Filter	Details Filter	Status Filter	Date Submitted Filter	Date Updated Filter	User Filter
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Feb 23, 2024, 4:31:57 PM	Feb 23, 2024, 4:31:57 PM	
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Dec 13, 2023, 6:05:29 PM	Dec 13, 2023, 6:05:29 PM	
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Dec 13, 2023, 1:56:26 PM	Dec 13, 2023, 1:56:26 PM	
<input type="checkbox"/> Switch to Primary - New Alternate (2)		SHARPLEX	S2	Output	✖ Failed	Dec 13, 2023, 12:44:09 PM	Dec 13, 2023, 12:44:09 PM	

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

Sysplex Management > SHARPLEX > Commands Log > Commands Output

Commands Output

Command:	Sysplex:	Status:
Switch to Primary - New Alternate	SHARPLEX	Failed
<p>▼ Switch to Primary CFRM Failed</p> <pre>Command Submitted: SETXCF COUPLE,TYPE=CFRM,PSWITCH Fri Feb 23 08:31:57 GMT 2024 S2 IEE345I SETXCF AUTHORITY INVALID, FAILED BY SECURITY PRODUCT</pre>		
<p>▼ Specify new alternate CFRM Not Started</p> <pre>Command Submitted: SETXCF COUPLE,TYPE=CFRM,ACOUPLE=(SHPLEX.CFRM.DSN1,S2MCAT)</pre>		

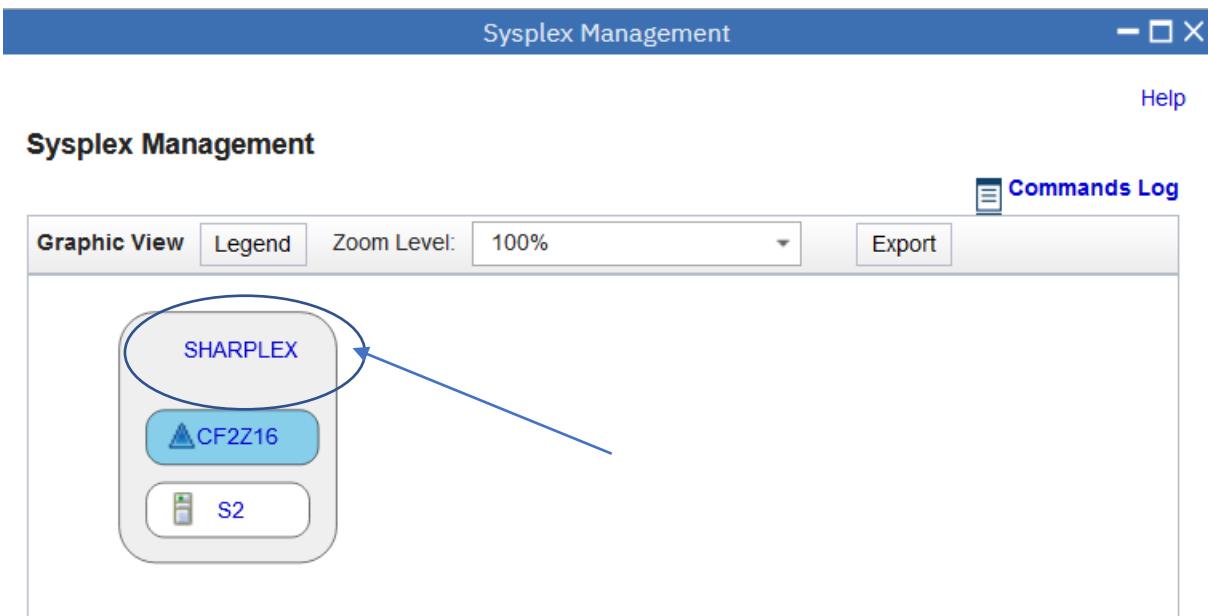
10. Switch Alternate to Primary

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

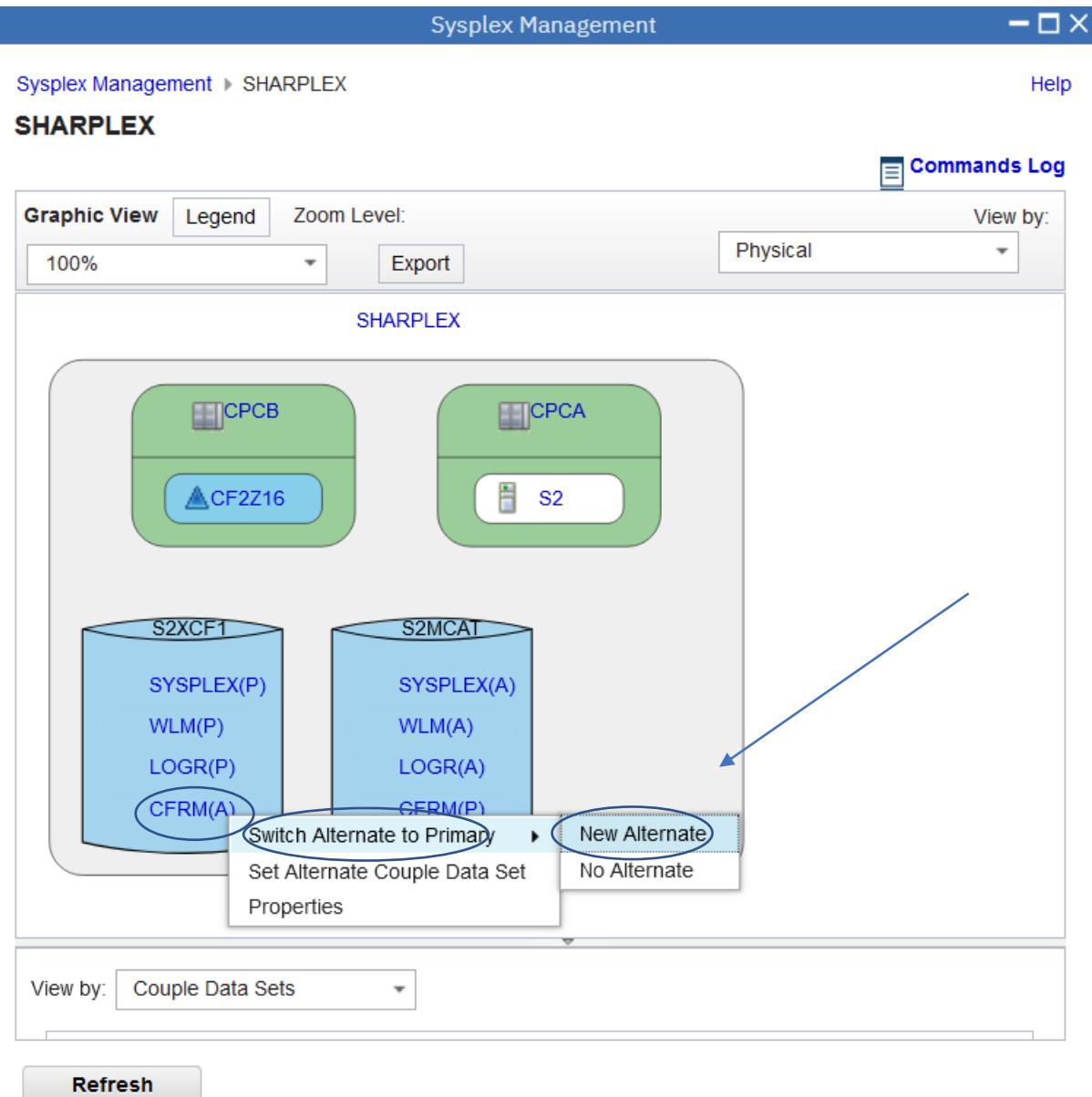
The screenshot shows a table titled "Commands Log for SHARPLEX (46)". The columns are: Actions, Command Filter, Objects Filter, Sysplex Filter, System Filter, Details Filter, Status Filter, and Date Submitted Filter. There are five rows, each representing a failed attempt to switch to primary. The "Status Filter" column shows "Failed" for all entries.

Actions	Command Filter	Objects Filter	Sysplex Filter	System Filter	Details Filter	Status Filter	Date Submitted Filter
	[+ Switch to Primary - New Alternate]		SHARPLEX	S2	Output	Failed	Feb 23, 2024, 4:31:57 PM
	[+ Switch to Primary - New Alternate (2)]		SHARPLEX	S2	Output	Failed	Dec 13, 2023, 6:05:29 PM
	[+ Switch to Primary - New Alternate (2)]		SHARPLEX	S2	Output	Failed	Dec 13, 2023, 1:56:26 PM
	[+ Switch to Primary - New Alternate (2)]		SHARPLEX	S2	Output	Failed	Dec 13, 2023, 12:44:09 PM

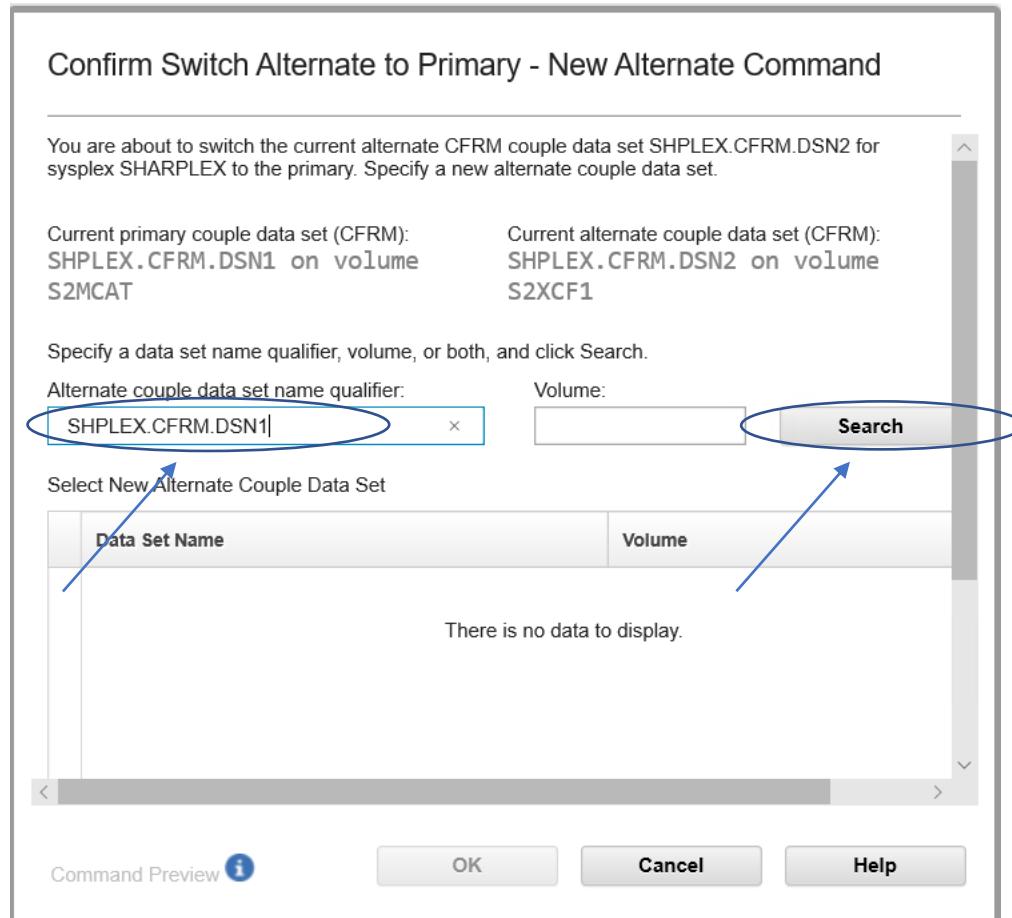
In the Topology View, click on the sysplex name **SHARPLEX** to open Physical View



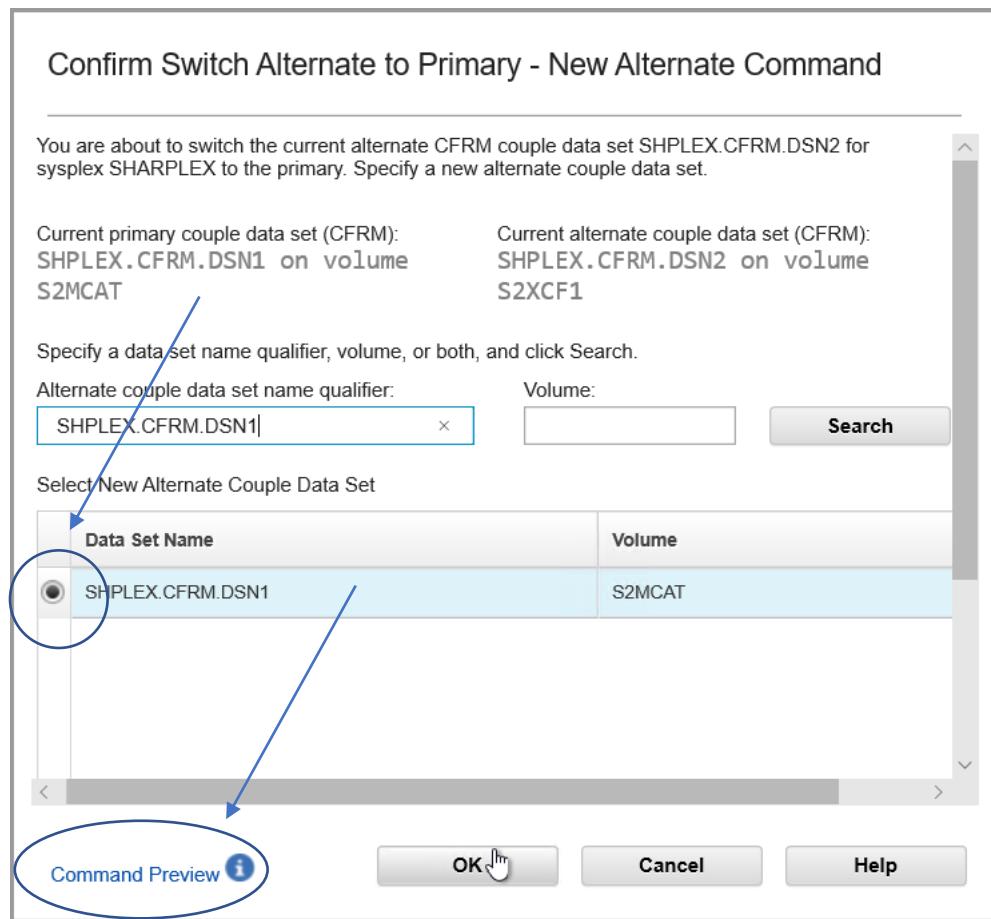
In the Physical View, right click on the couple data set **CFRM(A)**, select **Switch Alternate to Primary**, then select **New Alternate**



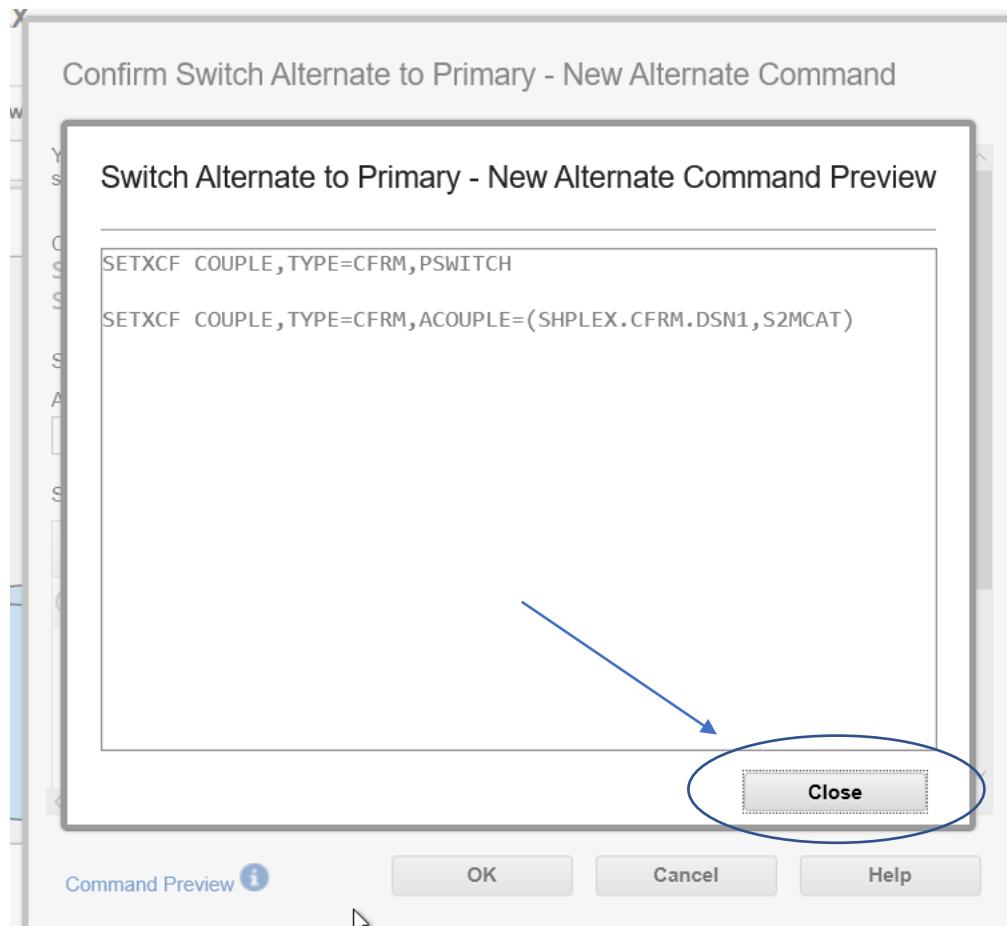
In the opened Confirm Switch Alternate to Primary dialog, input an available couple dataset **SHPLEX.CFRM.DSN1**, click **Search** button



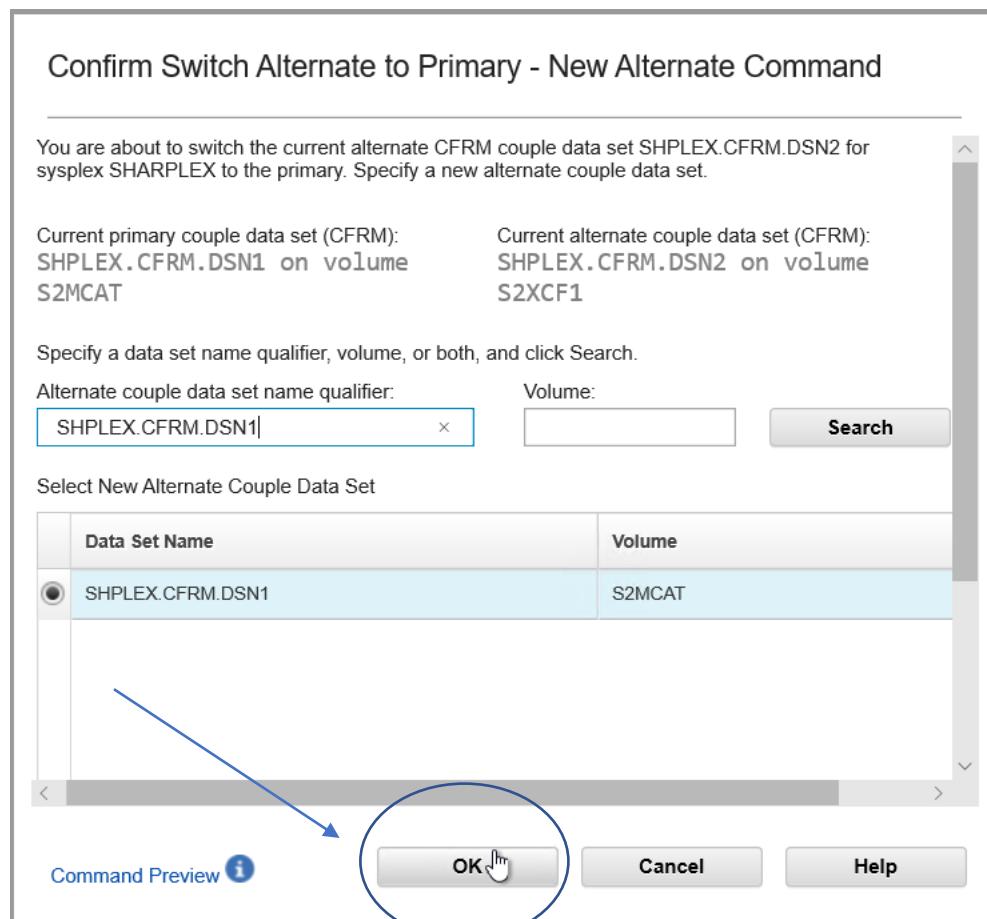
Click the **checkbox** of the new couple dataset in the table, then **Command Preview** on the left of OK button will be available. Click **Command Preview** to view the command.



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



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



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

Sysplex Management

Sysplex Management > SHARPLEX

SHARPLEX

Messages 1 0 0

✖ The command "Switch Alternate to Primary - New Alternate" failed, for the IZUS301E Jan 22, 2020, 12:58:25 AM following reason: IEE345I SETXCF AUTHORITY INVALID, FAILED BY SECURITY PRODUCT.

Close All

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

Commands Log

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.

Sysplex Management

Sysplex Management > SHARPLEX

SHARPLEX

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

Commands Log

SHARPLEX

The diagram shows two CPCs, CPCB and CPCA, each with a primary couple dataset (CF2Z16) and an alternate couple dataset (S2). Below them is a sysplex coupling facility (S2XCF1 and S2MCAT) containing the following datasets:

- S2XCF1: SYSPLEX(P), WLM(P), LOGR(P), CFRM(P)
- S2MCAT: SYSPLEX(A), WLM(A), LOGR(A), CFRM(A)

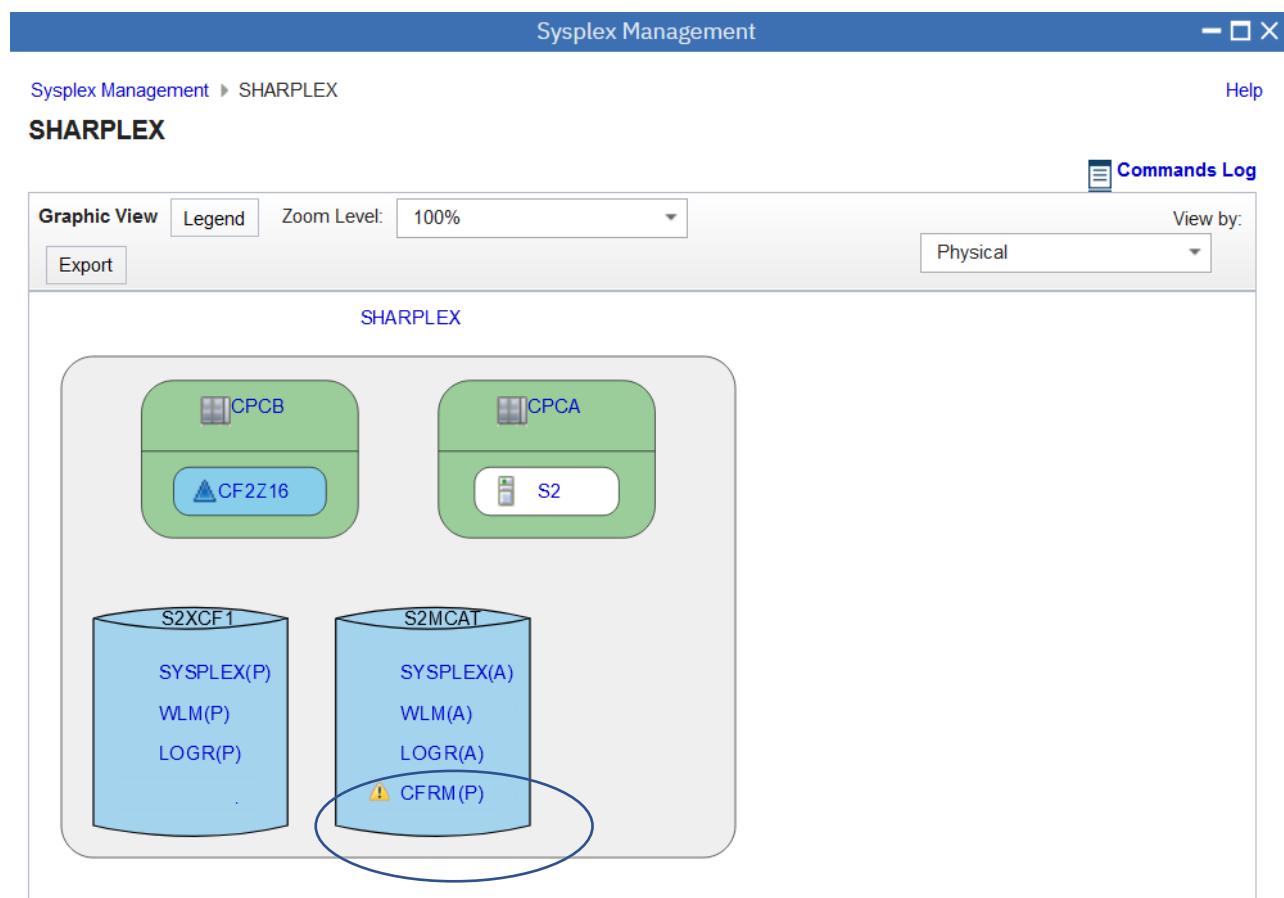
Blue ovals highlight the CFRM(P) and CFRM(A) datasets, indicating they are the primary datasets for their respective sysplexes.

11. Check Warning icon

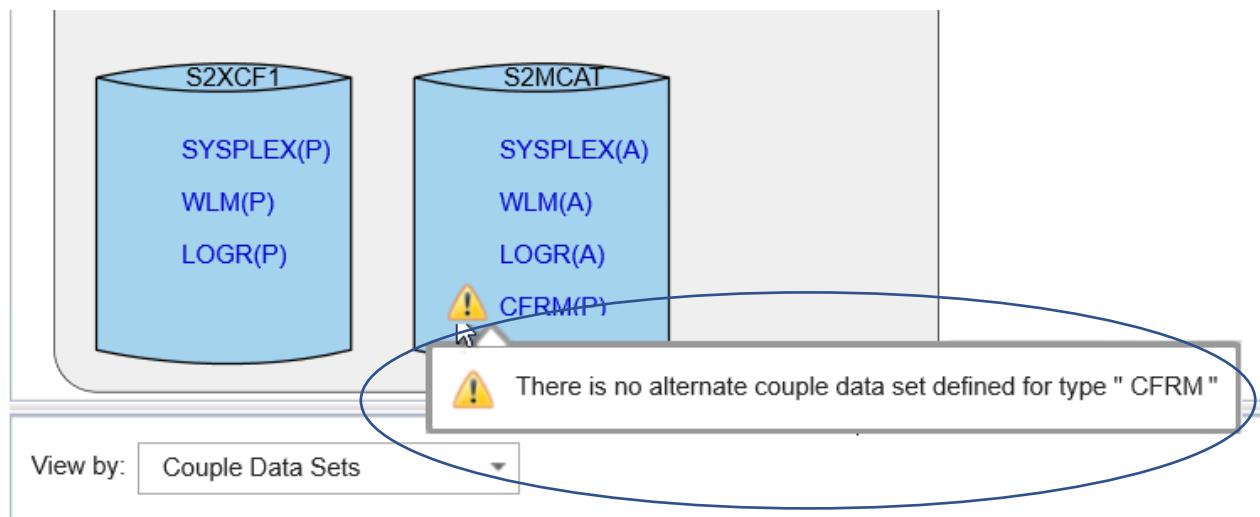
In the graphical view, single point of failure is indicated by a yellow warning icon (⚠) before a couple data set. Click on the warning icon can display details of the warning which could be, for example, no alternate couple data set is defined, or the primary couple data set and the alternate couple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



12. Check Notification

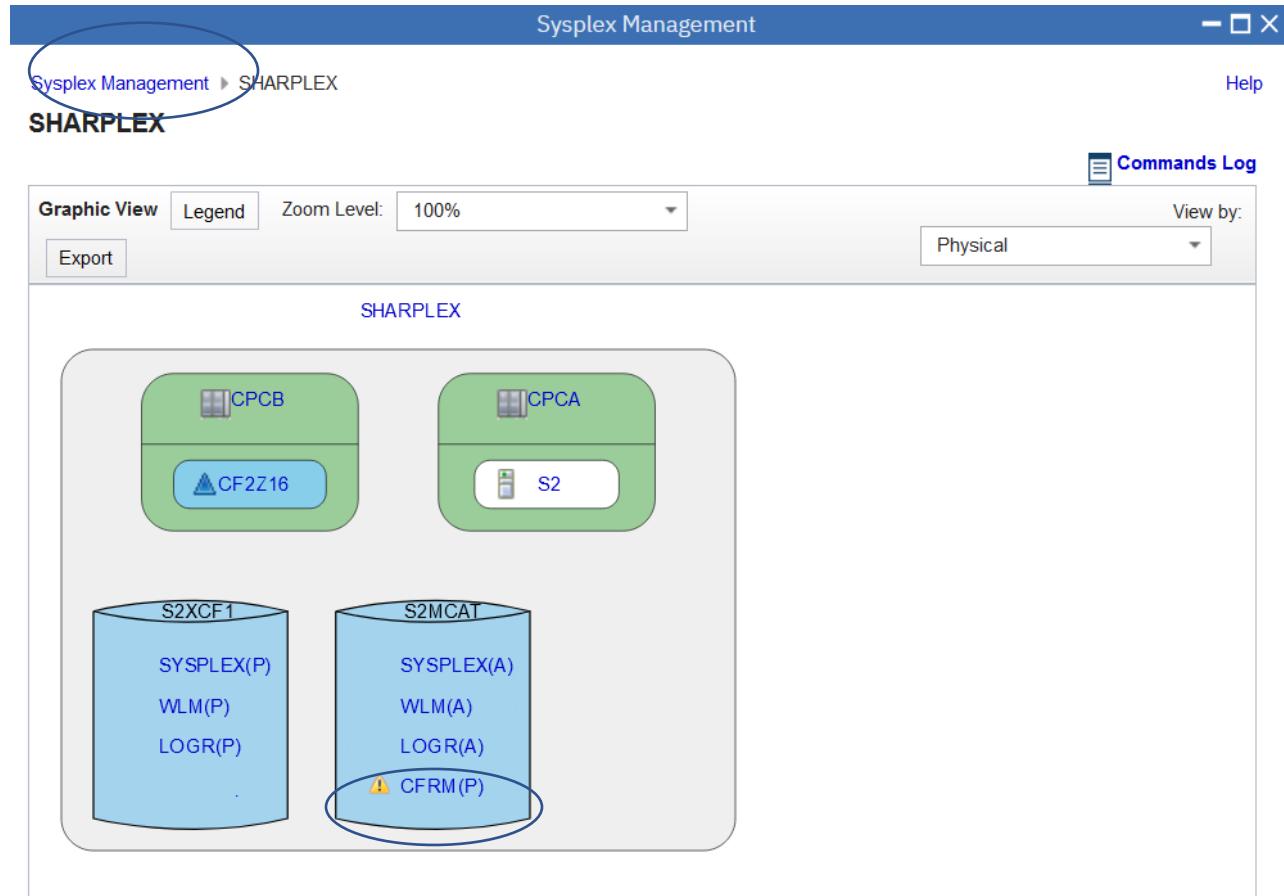
The Notifications page displays warning and error notifications associated with the sysplex.

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.



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.

The screenshot shows the 'Sysplex Management' interface. At the top, there's a toolbar with 'Sysplex Management' and standard window controls. Below it is a 'Help' button. The main area is titled 'Sysplex Management'. It features a 'Graphic View' section with a 'SHARPLEX' sysplex box containing two nodes: 'CF2Z16' and 'S2'. A yellow bell icon is highlighted with a blue circle. To the right of the sysplex box is a 'Commands Log' button. Below the graphic view is a filter panel with the following columns:

Sysplex/CF Name or System Name Filter	Message Filter	Partition Filter	CPCID Filter	Volatile Filter	CF Level Filter	CFCC Release Filter
Actions ▾ Table view: Tree No filter applied						

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="checkbox"/>	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.

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="checkbox"/>	IZUS400W	There is no alternate couple data set defined for type "CFRM"	SHARPLEX	S2

Sysplex Management

Help

Sysplex Management

Commands Log

Graphic View Legend Zoom Level: 100% ▾ Export

The diagram shows a sysplex named "SHARPLEX". It contains two members: "CF2Z16" and "S2".

Actions ▾ Table view: Tree						
Sysplex/CF Name or System Name Filter		Message Filter	Partition Filter	CPCID Filter	Volatile Filter	CF Level Filter
No filter applied						CFCC Releas Filter
<input checked="" type="radio"/>	+ SHARPLEX					

13. List CFRM Policies

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

The screenshot shows the 'Sysplex Management' interface. At the top, there's a toolbar with 'Sysplex Management' and standard window controls. Below it is a header bar with 'Sysplex Management' and a 'Commands Log' button. The main area has tabs for 'Graphic View' (selected), 'Legend', 'Zoom Level' (set to 100%), and 'Export'. A context menu is open over a node labeled 'SHARPLEX' which contains icons for 'CF2Z16' and 'S2'. The menu items are: 'Open Physical View', 'Open CF Connectivity View', 'Open CF Connectivity Details View', 'Open Structures', 'Properties', and 'CFRM Policies'. The 'CFRM Policies' item is highlighted with a blue oval and has a blue arrow pointing from the left towards it. Below the menu is a table titled 'Actions' with a 'Table view: Tree' dropdown. It shows a filter section with 'No filter applied' and a table with columns: 'Sysplex/CF Name or System Name Filter', 'Message Filter', 'Partition Filter', 'CPCID Filter', 'Volatile Filter', 'CF Level Filter', and 'CFCC Release Filter'. A row in the table shows a radio button next to 'SHARPLEX' under the 'Sysplex/CF Name or System Name Filter' column.

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

CFRM Administrative Policies

Sysplex:	Active policy:	Date policy activated (UTC):
SHARPLEX	SHPLEX	02/24/2023 21:38:49

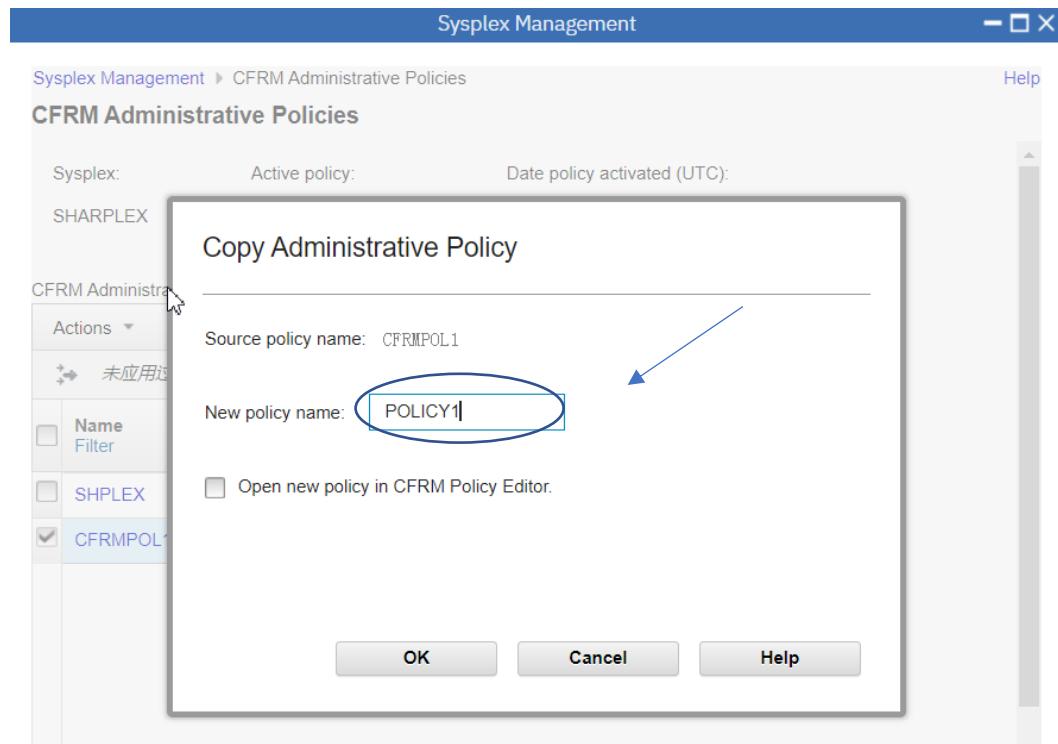
CFRM Administrative Policies

Actions ▾			
No filter applied			
	Name Filter	Last Updated (UTC) Filter	Updated By Filter
<input type="checkbox"/>	SHPLEX	02/02/2024 02:16:02	SHARC03
<input checked="" type="checkbox"/>	CFRMPOL1	03/07/2022 06:24:13	SHARA01

Total: 2 Selected

Refresh

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”. Select **POLICY1** and another available policy in the list, click **Action** menu.

The screenshot shows the 'CFRM Administrative Policies' page with 'SHARPLEX' selected as the sysplex. The 'Actions' menu is highlighted with a blue oval. Two policies are selected: 'CFRMPOL1' and 'POLICY1'. The 'Active policy' is 'SHARPLEX'. The 'Date policy activated (UTC)' is '02/24/2023 21:38:49'. The table lists the policies with their last update times and updated by users:

Name	Last Updated (UTC)	Updated By
SHARPLEX	02/02/2024 02:16:02	SHARC03
CFRMPOL1	03/07/2022 06:24:13	SHARA01
POLICY1	02/06/2024 08:57:37	SHARA01

Total: 3 Selected: 2

Refresh

Click **Compare** to open comparison tool to preview differences between two selected policies. This action is only enabled when exactly two policies are selected by the user.

Sysplex Management

Sysplex Management ▶ CFRM Administrative Policies

CFRM Administrative Policies

Sysplex:	Active policy:	Date policy activated (UTC):
SHARPLEX	SHPLEX	02/24/2023 21:38:49

CFRM Administrative Policies

Actions	Updated (UTC)	Updated By
Open in CFRM Policy Editor	2024 02:16:02	SHARC03
View Content	2022 06:24:13	SHARA01
Rename...	2024 08:57:37	SHARA01
Copy...		
Export...		
Export to CSV...		
Activate...		
Compare...		
Delete...		
New...		
Import...		
<input checked="" type="checkbox"/> Select All		
<input type="checkbox"/> Deselect All		
Configure Columns...		
Hide Filter Row		

You can use this dialog to compare two CFRM administrative policies. The content of the Angular-based dialog is separated into two parts, which correspond to the two policies selected by the user. To view previous or next differences in the policies, click the arrows in the upper left corner of the dialog.

Close the dialog to return to the CFRM Administrative policies page.

```

CFRMPOL1 <-> POLICY1
? - □ X

CFRMPOL1
1 DATA TYPE(CFRM) REPORT(No)
2-DEFINE POLICY NAME(CFRMPOL1) REPLACE(YES)
3- /* Defined: 03/07/2022 01:24:13.604288 U
4   /* Version: 0 */
5   /* 18 Structures defined in this policy
6   /* 1 Coupling Facilities defined in this
7 CF NAME(CF2) DUMPSPACE(100K) PARTITION(3F) C
8   TYPE(003906) MFG(IBM) PLANT(02) SEQUENCE(
9   STRUCTURE NAME(IXCPTH1) SIZE(40000K)
10  PREFLIST(CF2)
11  EXCLLIST(IXCPTH2)
12  STRUCTURE NAME(IXCPTH2) SIZE(40000K)
13  PREFLIST(CF2)
14  EXCLLIST(IXCPTH1)
15  STRUCTURE NAME(HASPKPT1) SIZE(20000K)
16  PREFLIST(CF2)
17  EXCLLIST(HASPKPT2)
18  STRUCTURE NAME(HASPKPT2) SIZE(20000K)
19  PREFLIST(CF2)
20  EXCLLIST(HASPKPT1)
21  STRUCTURE NAME(OPERLOG_STR) SIZE(48000K)
22  PREFLIST(CF2)
23  STRUCTURE NAME(LOGREC_STR) SIZE(48000K)
24  PREFLIST(CF2)
25  STRUCTURE NAME(IRRXCFOO_P001) SIZE(2000K)
26  REBUILDPERCENT(1)
27  PREFLIST(CF2)

POLICY1
1 DATA TYPE(CFRM) REPORT(No)
2+DEFINE POLICY NAME(POLICY1) REPLACE(YES)
3+ /* Defined: 02/06/2024 03:57:37.419058 U
4   /* Version: 0 */
5   /* 18 Structures defined in this policy
6   /* 1 Coupling Facilities defined in this
7 CF NAME(CF2) DUMPSPACE(100K) PARTITION(3F) C
8   TYPE(003906) MFG(IBM) PLANT(02) SEQUENCE(
9   STRUCTURE NAME(IXCPTH1) SIZE(40000K)
10  PREFLIST(CF2)
11  EXCLLIST(IXCPTH2)
12  STRUCTURE NAME(IXCPTH2) SIZE(40000K)
13  PREFLIST(CF2)
14  EXCLLIST(IXCPTH1)
15  STRUCTURE NAME(HASPKPT1) SIZE(20000K)
16  PREFLIST(CF2)
17  EXCLLIST(HASPKPT2)
18  STRUCTURE NAME(HASPKPT2) SIZE(20000K)
19  PREFLIST(CF2)
20  EXCLLIST(HASPKPT1)
21  STRUCTURE NAME(OPERLOG_STR) SIZE(48000K)
22  PREFLIST(CF2)
23  STRUCTURE NAME(LOGREC_STR) SIZE(48000K)
24  PREFLIST(CF2)
25  STRUCTURE NAME(IRRXCFOO_P001) SIZE(2000K)
26  REBUILDPERCENT(1)
27  PREFLIST(CF2)

```

In the CFRM Administrative Policies page, select POLICY1, right click to open action menu. **Export to CSV** is to download two CSV files, one for Coupling Facility and one for Structure.

Since you are operating with a shared system, we won't perform Export to CSV action.

The screenshot shows the CFRM Administrative Policies page under Sysplex Management. The page displays the following information:

- Sysplex: SHARPLEX
- Active policy: SHPLEX (with a warning icon)
- Date policy activated (UTC): 02/24/2023 21:38:49

A context menu is open over the row for policy **POLICY1**. The menu items are:

- Open in CFRM Policy Editor
- View Content
- Rename...
- Copy...
- Export
- Export to CSV...** (This item is highlighted with a blue oval and a blue arrow points to it from the text above.)
- Activate...
- Compare...
- Delete...

On the right side of the menu, there is a "Updated By Filter" section listing three entries:

- SHARC03
- SHARA01
- SHARA01

14. Work with CFRM Policy Editor

In the CFRM Administrative Policies, select policy “POLICY1”, right click to open action menu. Select “**Open in CFRM Policy Editor**”, CFRM Policy Editor is opened.

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			
	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	01/28/2022 08:55:50	SHARA01

总计: 3 已选: 1

Open in CFRM Policy Editor

- View Content
- Rename...
- Copy...
- Export...
- Activate...
- Delete...

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

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1 Editor CF Sizing

Policy Sysplex Number of Coupling Facilities Number of CF Structures

POLICY1	SHARPLEX	1	18
---------	----------	---	----

Coupling Facilit... CF Structures

CF Name Machine Type Manufacturer Plant Sequence Number Partition

<input type="checkbox"/>	CF2	003906	IBM	02	0000000FB8F7	3F
--------------------------	-----	--------	-----	----	--------------	----

Items per page: 1 1-1 of 1 item

1 of 1 page < >

Close Submit

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

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1 Editor CF Sizing

Policy Sysplex Number of Coupling Facilities Number of CF Structures

POLICY1	SHARPLEX	1	18
---------	----------	---	----

Coupling Facilit... CF Structures

CF Name Machine Type Manufacturer Plant Sequence Number Partition

<input type="checkbox"/>	CF2	003906	IBM	02	0000000FB8F7	3F
--------------------------	-----	--------	-----	----	--------------	----

Items per page: 1 1-1 of 1 item

1 of 1 page < >

Close Submit

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

The screenshot shows the CFRM Policy Editor interface for policy POLICY1. At the top, there are tabs for 'Editor' and 'CF Sizing'. Below the tabs, the policy name 'POLICY1' is displayed along with the sysplex 'SHARPLEX', the number of coupling facilities (1), and the number of CF structures (18). A sub-menu titled 'Coupling Facility...' is open, showing a list of items including 'Modify', 'Rename', 'Copy', and 'Delete'. An arrow points from the 'Modify' option to the highlighted row in the table below.

CF Name	Machine Type	Manufacturer	Plant	Sequence Number	Partition
CF2	003906	IBM	02	000000FB8F7	3F

Items per page: 100 of 1 item

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.

The screenshot shows the 'Modify Coupling Facility CF2' dialog box. It contains fields for CF name (CF2), Machine type (003906), Manufacturer (IBM), Plant (02), Sequence number (000000FB8F7), Partition (3F), Dump space (100 K), and Site (dropdown menu). Below these fields is a section titled '* List of CF Structures with Coupling Facility in their Preference List'. This section displays a table with two rows:

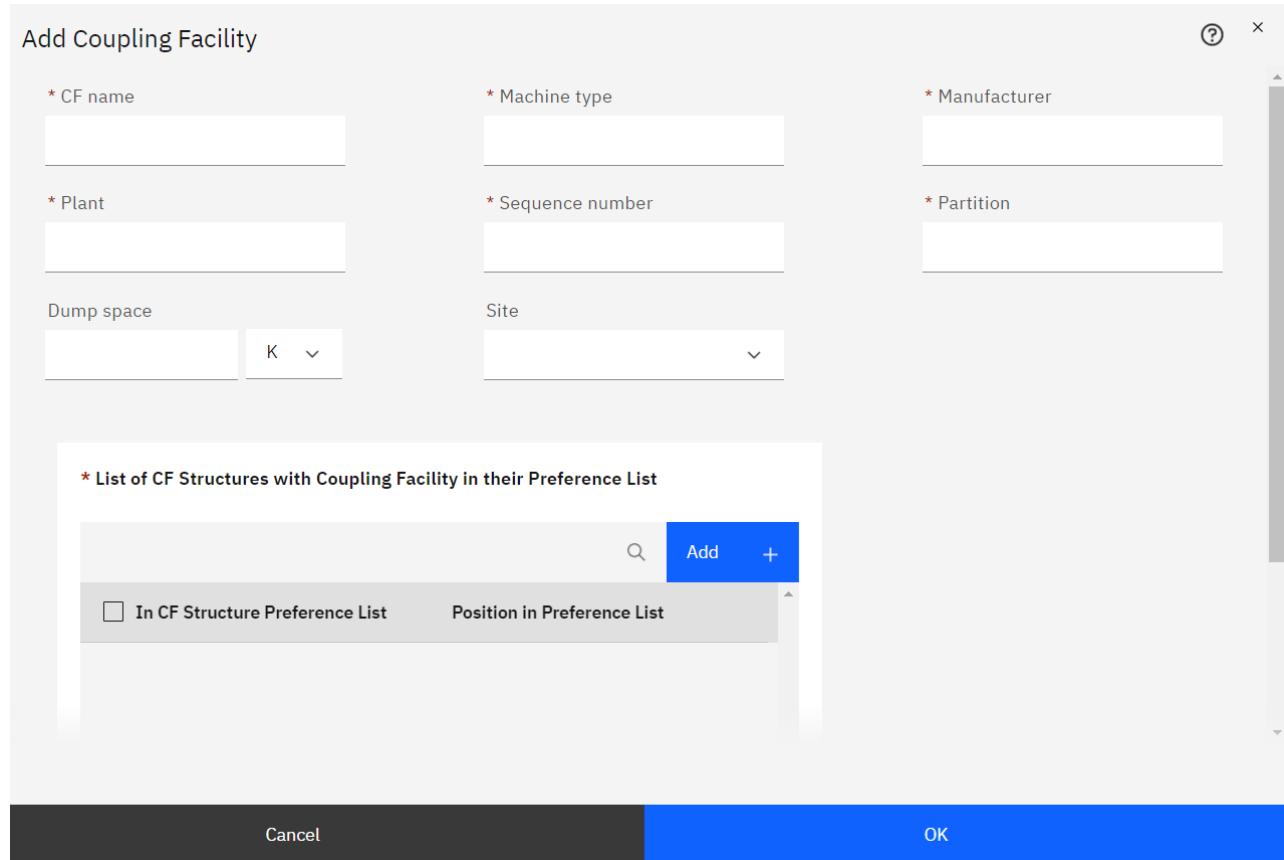
In CF Structure Preference List	Position in Preference List
<input type="checkbox"/> CHRIS_TEST	1 of 1
<input type="checkbox"/> ISGLOCK	1 of 1

At the bottom of the dialog box are 'Cancel' and 'OK' buttons. A blue circle highlights the 'Cancel' button, and an arrow points from it to the 'Cancel' button in the footer of the dialog.

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

The screenshot shows the CFRM Policy Editor interface for policy POLICY1. At the top, there are fields for 'Policy' (POLICY1), 'Sysplex' (SHARPLEX), 'Number of Coupling Facilities' (1), and 'Number of CF Structures' (18). A blue arrow points from the text 'Number of CF Structures' to the 'Add' button in the table header. The table has two tabs: 'Coupling Facilities' (selected) and 'CF Structures'. The 'Coupling Facilities' tab displays one row: CF Name (CF2), Machine Type (003906), Manufacturer (IBM), Plant (02), Sequence Number (000000FB8F7), Partition (3F), Dump Space (100K), and Site (-). Below the table are pagination controls: 'Items per page: 1' and '1-1 of 1 items'. At the bottom are 'Close' and 'Submit' buttons.

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.



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

CFRM Policy Editor - POLICY1

Editor CF Sizing

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

<input type="checkbox"/>	CF Name	Machine Type	Manufacturer	Plant	Sequence Number	Partition
<input type="checkbox"/>	CF2	003906	IBM	02	0000000FB8F7	3F

Items per page: 200 1-18 of 18 items

1 of 1 page

Close Submit

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.

CFRM Policy Editor - POLICY1

Editor CF Sizing

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

<input type="checkbox"/>	Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	Exclusion List
<input type="checkbox"/>	IXCPATH1	40000K	-	-	-	CF2	IXCPATH2
<input type="checkbox"/>	IXCPATH2	40000K	-	-	-	CF2	IXCPATH1
<input type="checkbox"/>	HASPKPT1	20000K	-	-	-	CF2	HASPKPT2
<input type="checkbox"/>	HASPKPT2	20000K	-	-	-	CF2	HASPKPT1
<input type="checkbox"/>	OPERLOG_STR	48000K	-	-	-	CF2	-
<input type="checkbox"/>	LOGREC_STR	48000K	-	-	-	CF2	-
<input type="checkbox"/>	IRRXCFO0_P001	2000K	-	-	-	CF2	IRRXCFO0_B001
<input type="checkbox"/>	IRRXCFO0_B001	1000K	-	-	-	CF2	IRRXCFO0_P001

Items per page: 200 1-18 of 18 items

1 of 1 page

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

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1 Editor CF Sizing

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

Coupling Facilities **CF Structures**

<input type="checkbox"/>	Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	Exclusion List
<input type="checkbox"/>	IXCPATH1	40000K	-	-	-	CF2	IXCPATH2
<input type="checkbox"/>	IXCPATH2	40000K	-	-	-	CF2	IXCPATH1
<input type="checkbox"/>	HASPCKPT1	20000K	-	-	-	CF2	HASPCKPT2
<input type="checkbox"/>	HASPCKPT2	20000K	-	-	-	CF2	HASPCKPT1
<input type="checkbox"/>	OPERLOG_STR	48000K	-	-	-	CF2	-
<input type="checkbox"/>	LOGREC_STR	48000K	-	-	-	CF2	-
<input type="checkbox"/>	IRRXCFO0_P001	2000K	-	-	-	CF2	IRRXCFO0_B001
<input type="checkbox"/>	IRRXCFO0_B001	1000K	-	-	-	CF2	IRRXCFO0_P001

Items per page: 200 ▾ 1-18 of 18 items 1 ▾ of 1 page

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

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1 Editor CF Sizing

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

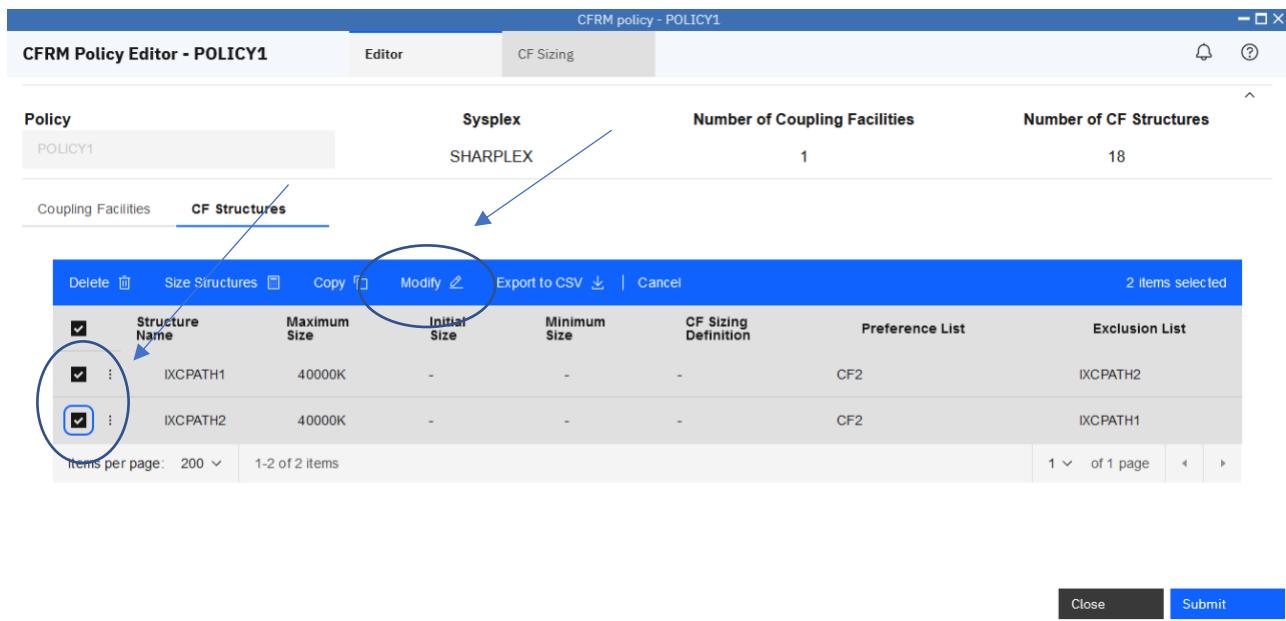
Coupling Facilities **CF Structures**

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

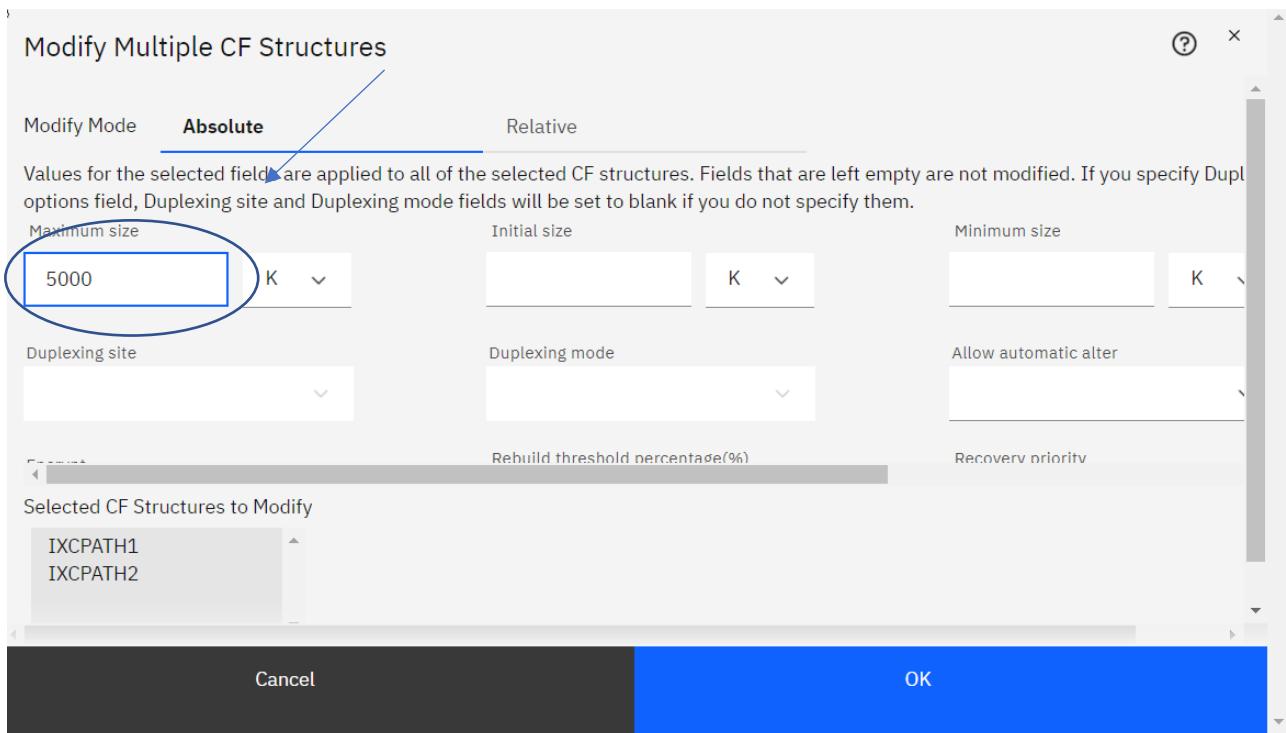
Items per page: 200 ▾ 1-2 of 2 items 1 ▾ of 1 page

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.



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.



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

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1 Editor CF Sizing

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	CF Sizing Definition	Preference List	Exclusion List
IXCPATH1	5000K	-	-	-	CF2	IXCPATH2
IXCPATH2	5000K	-	-	-	CF2	IXCPATH1

Items per page: 200 1-2 of 2 items 1 of 1 page Close Submit

Select two structures, click Modify again.

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1 Editor CF Sizing

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

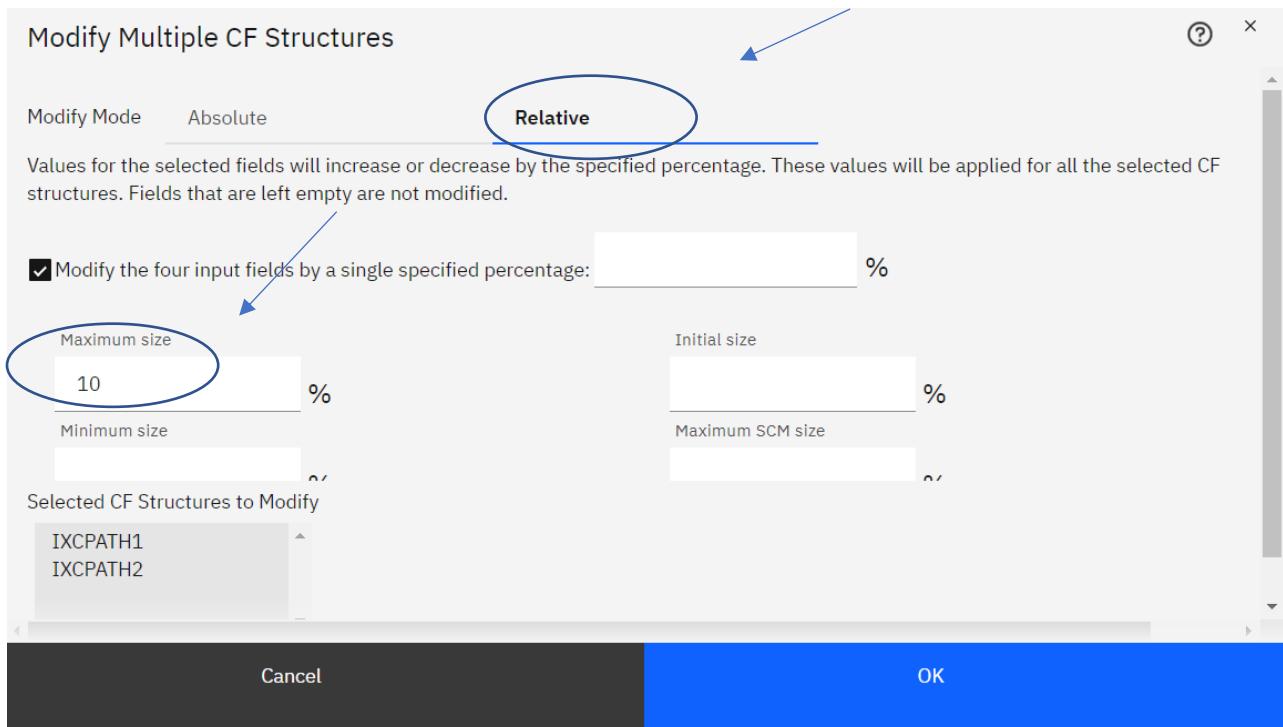
Coupling Facilities CF Structures

Modify

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

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



In the CFRM Policy Editor, you can see the Maximum Size is 5500K, increasing 10%.

Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	Exclusion List
IXCPATH1	5500K	-	-	-	CF2	IXCPATH2
IXCPATH2	5500K	-	-	-	CF2	IXCPATH1

After you have 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.

15. Work with CF Sizing

In the CFRM Policy Editor page, click tab **CF Sizing** to open CF Sizing.

The screenshot shows the CFRM Policy Editor interface for policy POLICY1. The 'CF Sizing' tab is highlighted. The 'Sysplex' field is set to 'SHARPLEX'. The 'Number of Coupling Facilities' is 1, and the 'Number of CF Structures' is 18. The 'CF Structures' table lists 18 items, each with columns for Structure Name, Maximum Size, Initial Size, Minimum Size, CF Sizing Definition, Preference List, and Exclusion List. The 'Add' button is visible at the top right of the table area.

Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	Exclusion List
IXCPATH1	5500K	-	-	CF2	IXCPATH2	
IXCPATH2	5500K	-	-	CF2	IXCPATH1	
HASPCKPT1	20000K	-	-	CF2	HASPCKPT2	
HASPCKPT2	20000K	-	-	CF2	HASPCKPT1	
OPERLOG_STR	48000K	-	-	CF2	-	
LOGREC_STR	48000K	-	-	CF2	-	
IRRXCFO0_P001	2000K	-	-	CF2	IRRXCFO0_B001	
IRRXCFO0_B001	1000K	-	-	CF2	IRRXCFO0_P001	

In the CF Sizing tab, click **Add** to add a Sizing Definition.

The screenshot shows the CFRM Policy Editor interface for policy POLICY1. The 'CF Sizing' tab is highlighted. The message 'There are no CF sizing definitions.' is displayed. The 'Add' button is visible at the top right of the table area. The table has columns for Product, Sizing Definition Name, Function, Groups, CF Level, and No. of Structures.

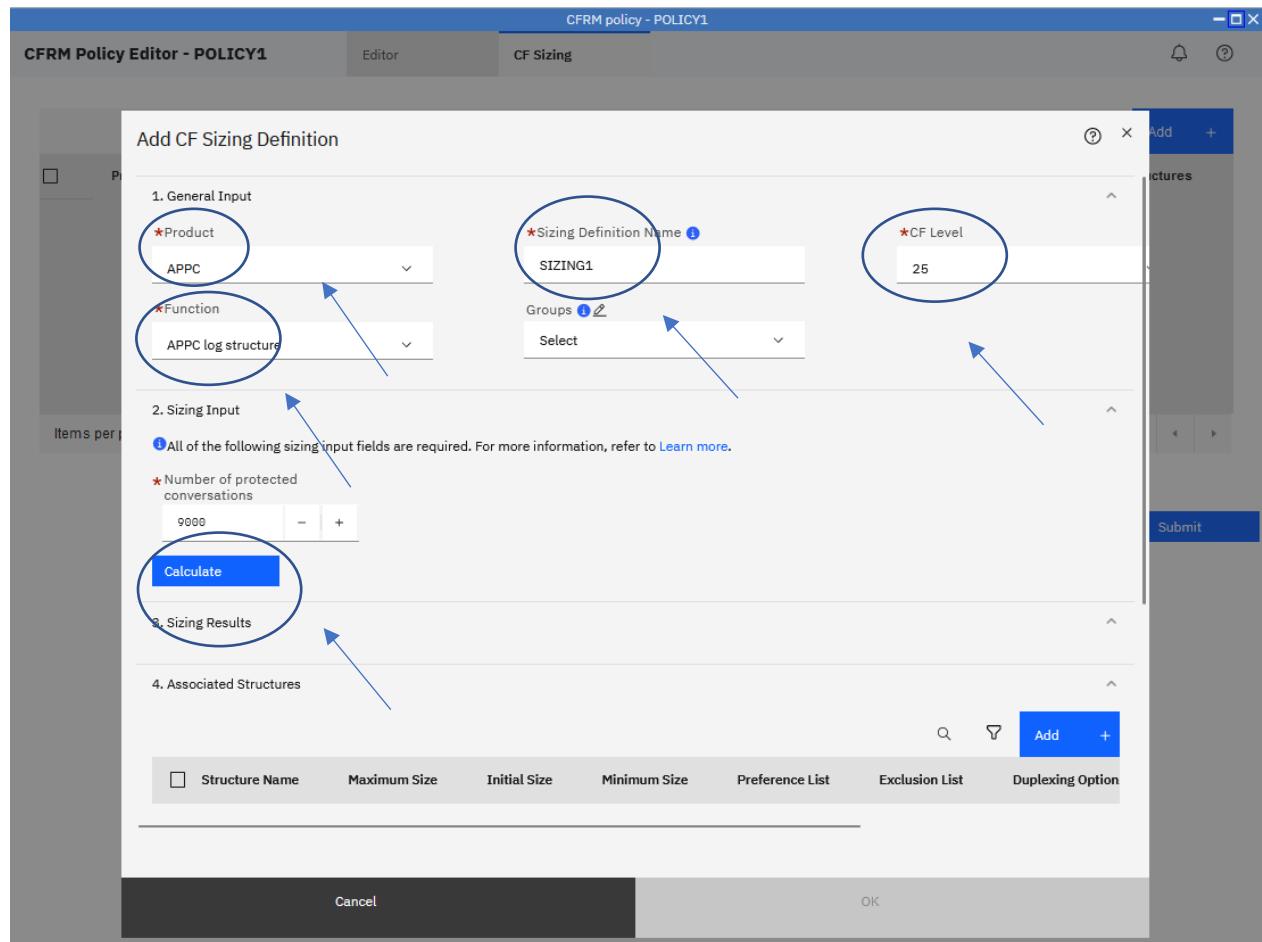
Product	Sizing Definition Name	Function	Groups	CF Level	No. of Structures
---------	------------------------	----------	--------	----------	-------------------

In the Add Sizing Definition, select **APPC** from Product dropdown list as Product.

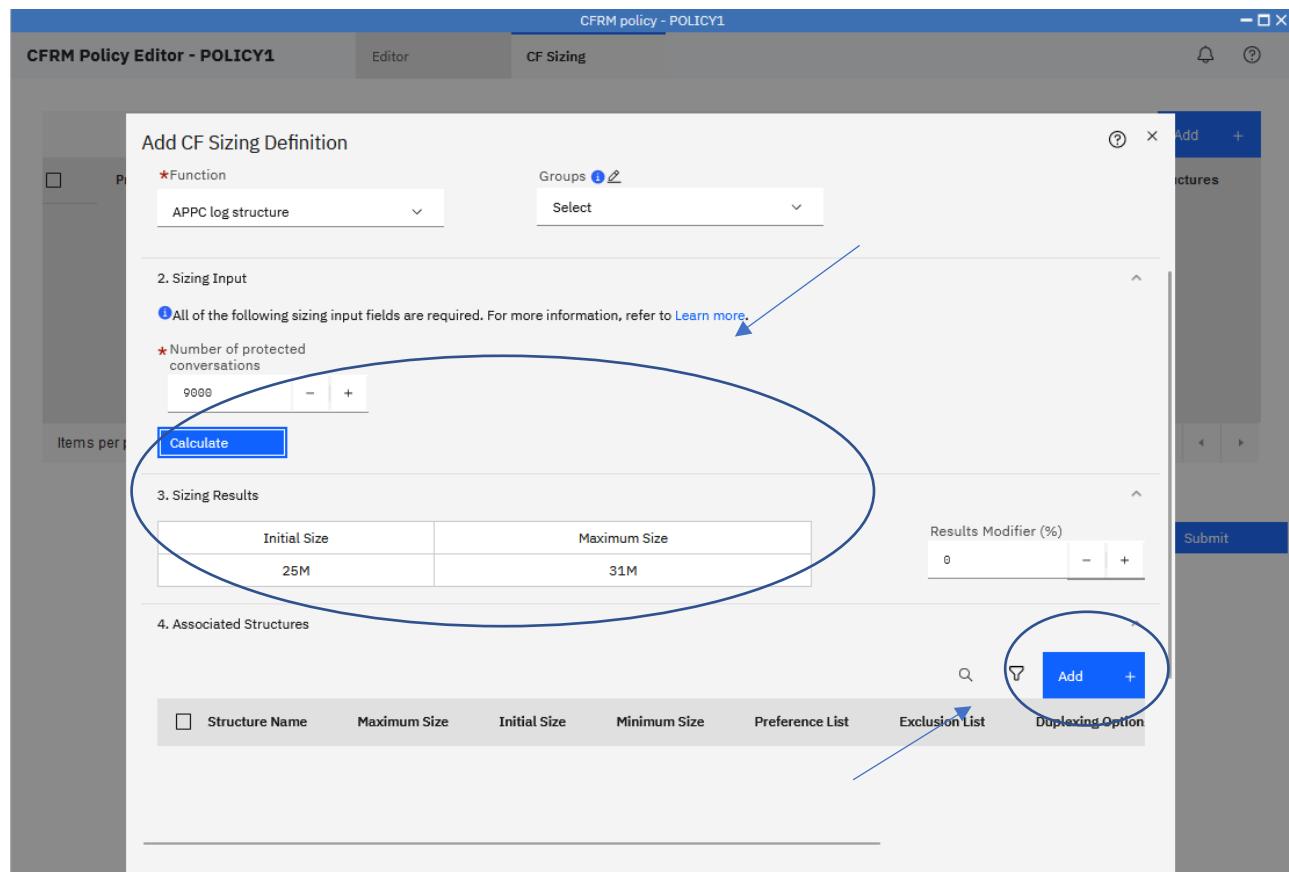
Input new Sizing Definition Name (although below screen shots used “**SIZING1**”, we recommend you to use “<userid>S”, in which <userid> should be replaced with your current logon user id). Sizing Definition Name is a unique field. You can input another value if it has existed.

Select one available value from the dropdown list as CF Level (although below screen shots used **25**, the system may have different available CF Levels).

Select **APPC log structure** as Product Function, click **Calculate**.



Then, you can view Sizing Results. Click button **Add** to add associated structures.



In the Add Associated Structures to Upgrade Sizing Definition, select two structures, click **Add**.

Add Associated Structures to Upgrade Sizing Definition

Select Structures to Add

Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List
<input checked="" type="checkbox"/> IXCPATH1	5500K	-	-	-	CF2
<input checked="" type="checkbox"/> IXCPATH2	5500K	-	-	-	CF2
<input type="checkbox"/> HASPCKPT1	20000K	-	-	-	CF2
<input type="checkbox"/> HASPCKPT2	20000K	-	-	-	CF2
<input type="checkbox"/> OPERLOG_STR	48000K	-	-	-	CF2

Items per page: 50 ▾ 1-18 of 18 items 1 ▾ of 1 page

Cancel Add

Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List
<input checked="" type="checkbox"/> IXCPATH1	5500K	-	-	-	CF2
<input checked="" type="checkbox"/> IXCPATH2	5500K	-	-	-	CF2
<input type="checkbox"/> HASPCKPT1	20000K	-	-	-	CF2
<input type="checkbox"/> HASPCKPT2	20000K	-	-	-	CF2
<input type="checkbox"/> OPERLOG_STR	48000K	-	-	-	CF2

In the Add CF Sizing Definition, two structures are associated with the sizing definition. Click **OK**.

Add CF Sizing Definition

*Function APPC log structure Groups [Select](#)

2. Sizing Input
All of the following sizing input fields are required. For more information, refer to [Learn more](#).

*Number of protected conversations 9000

Calculate

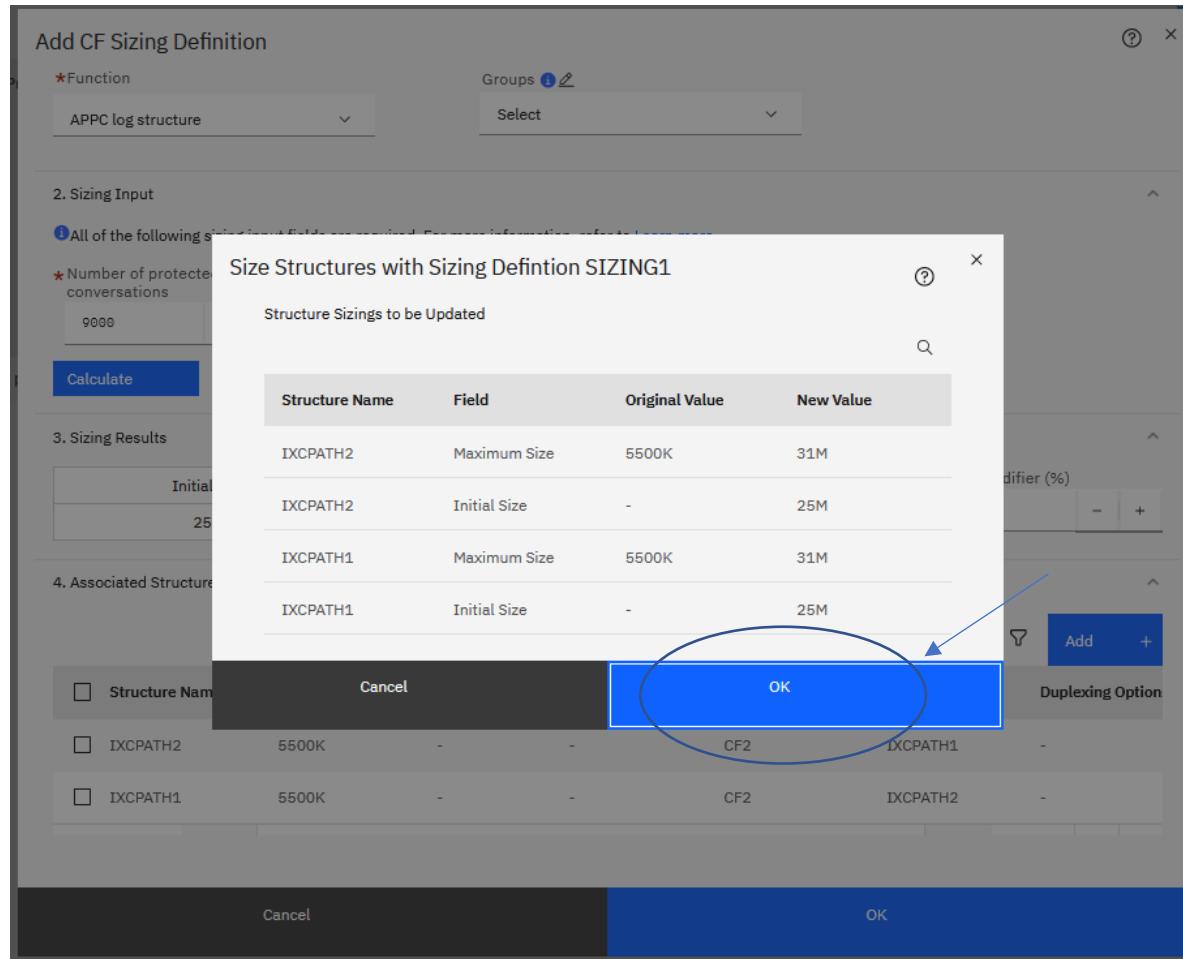
3. Sizing Results
Initial Size Maximum Size Results Modifier (%)
25M 31M 0

4. Associated Structures

Structure Name	Maximum Size	Initial Size	Minimum Size	Preference List	Exclusion List	Duplexing Option
<input type="checkbox"/> IXCPATH2	5500K	-	-	CF2	IXCPATH1	-
<input type="checkbox"/> IXCPATH1	5500K	-	-	CF2	IXCPATH2	-

Cancel OK

In the Size Structures with Sizing Definition SIZING1, click **OK**.



In the CFRM Policy Editor, CF Sizing named SIZING1 is showed in table.

Product	Sizing Definition Name	Function	Groups	CF Level	No. of Structures
APPC	SIZING1	APPC log structure	-	25	2

Click **Editor** tab, then click **CF Structures** tab, you can see the CF Sizing Definition attribute value of the two structures are SIZING1.

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1

Editor CF Sizing

Policy

POLICY1

Sysplex SHARPLEX

Coupling Facilities CF Structures

Number of Coupling Facilities 1

Number of CF Structures 18

Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	Exclusion List	Duplexing Options	All Aut Alloc
IXCPATH1	31M	25M	-	SIZING1	CF2	IXCPATH2	-	
IXCPATH2	31M	25M	-	SIZING1	CF2	IXCPATH1	-	
HASPKPT1	2000K	-	-	-	CF2	HASPKPT2	-	
HASPKPT2	2000K	-	-	-	CF2	HASPKPT1	-	
OPERLOG_STR	4800K	-	-	-	CF2	-	-	
LOGREC_STR	4800K	-	-	-	CF2	-	-	

After you have 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.

Click **CF Sizing** tab of CFRM Policy Editor, click the action icon in front of a CF sizing definition, open action menu, you can Modify and Size, Copy, Remove Association and Delete a CF sizing definition.

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

CFRM policy - POLICY1

CFRM Policy Editor - POLICY1

Editor CF Sizing

Product	Sizing Definition Name	Function	Groups	CF Level	No. of Structures
APPCL	SIZING1	APPCL log structure	-	25	2

Items per page: 100 Item: 1 of 1 page < >

Modify and Size

Copy
Remove Associations
Delete

Close Submit

In the Modify SIZING1 Sizing Definition, you can modify the attributes of sizing definition SIZING1.

Modify SIZING1 Sizing Definition

1. General Input

*Product	*Sizing Definition Name ?	*CF Level
APPC	SIZING1	25
*Function	Groups ?	
APPC log structure	Select	

2. Sizing Input

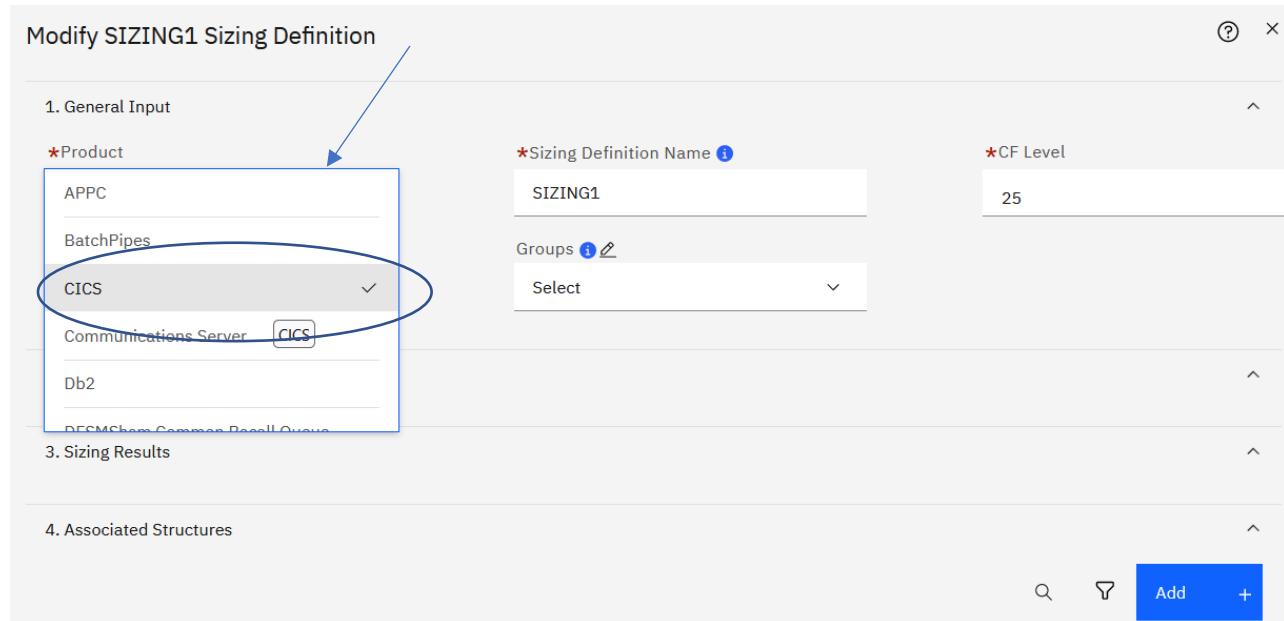
[?](#) All of the following sizing input fields are required. For more information, refer to [Learn more](#).

* Number of protected conversations

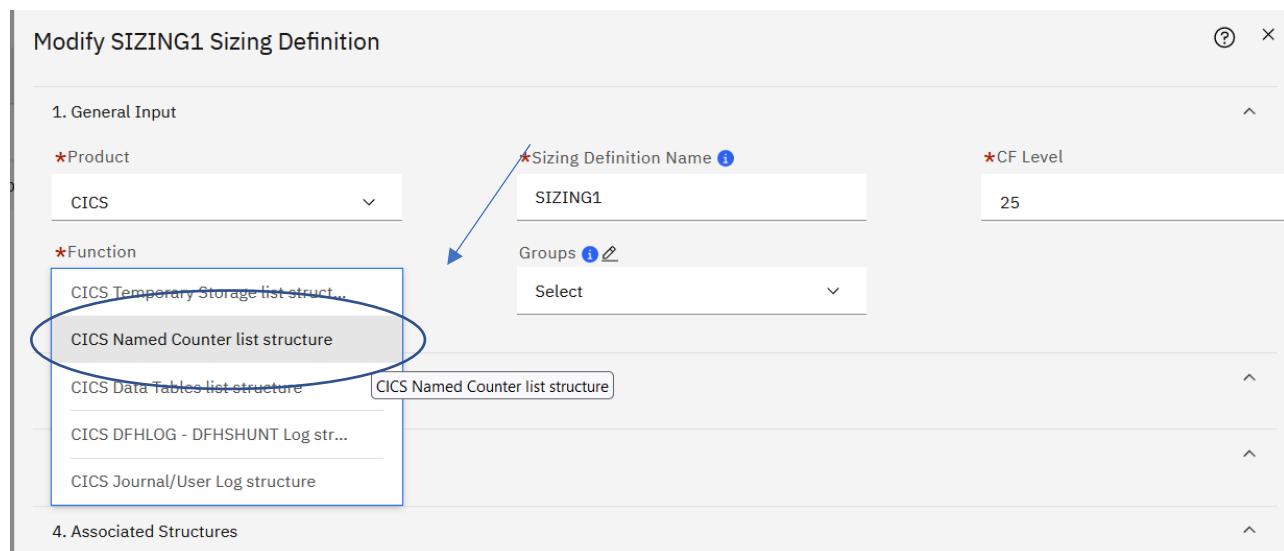
9000 - +

Calculate

Click Product to open the dropdown list, move cursor to CICS, click **CICS**.



Click Function, in the dropdown list, move cursor to click **CICS Named Counter list structure**.



Click Calculate.

Modify SIZING1 Sizing Definition

1. General Input

*Product: CICS

*Sizing Definition Name: SIZING1

*CF Level: 25

*Function: CICS Named Counter list structure

Groups: Select

2. Sizing Input

All of the following sizing input fields are required. For more information, refer to [Learn more](#).

* Number of counters: 1000

Calculate

3. Sizing Results



You can view the Sizing Result.

Modify SIZING1 Sizing Definition

CICS: SIZING1: Job Level: 25

2. Sizing Input

All of the following sizing input fields are required. For more information, refer to [Learn more](#).

*** Number of counters**: 1000

Calculate

3. Sizing Results

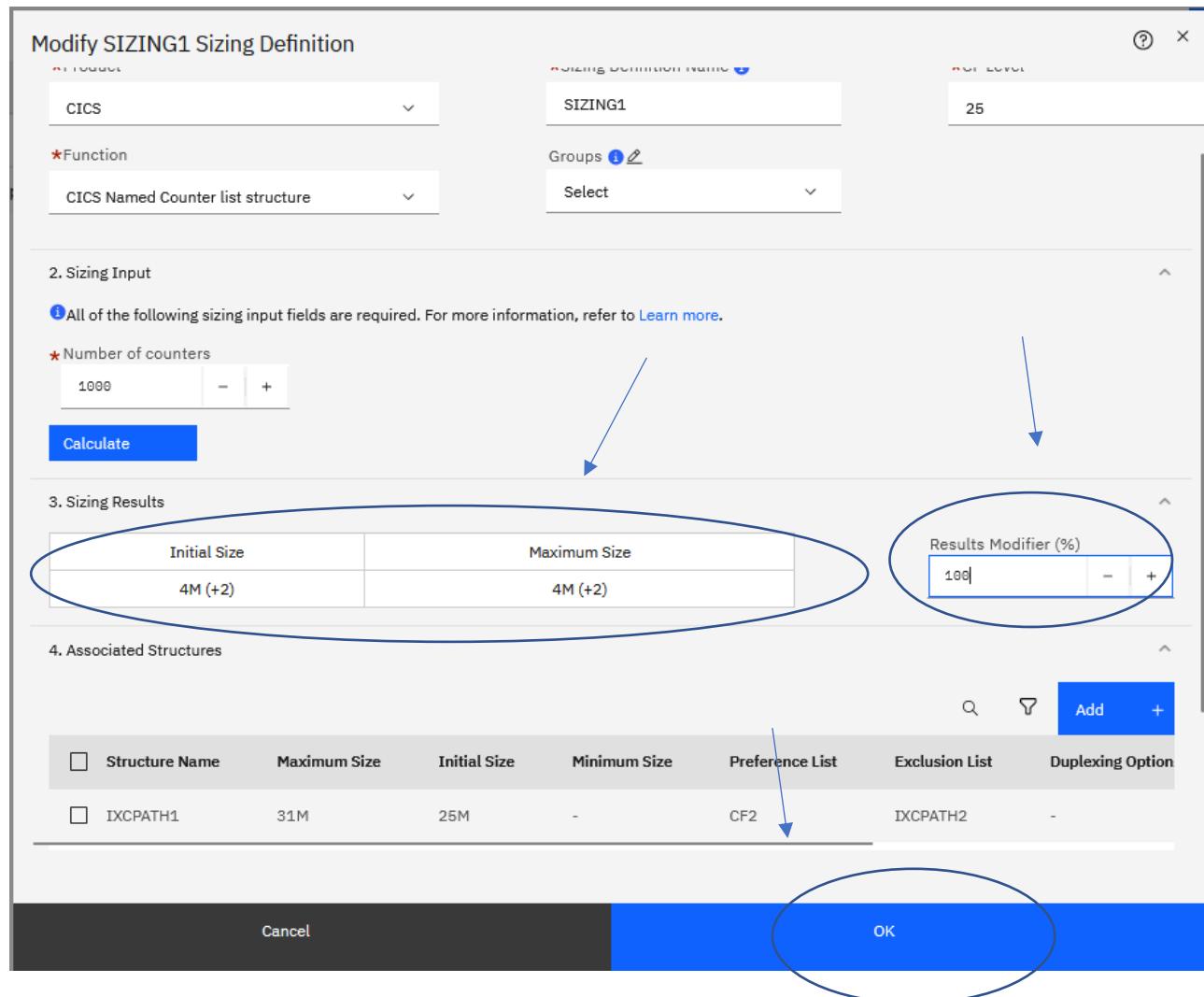
Initial Size	Maximum Size	Results Modifier (%)
2M	2M	0

4. Associated Structures

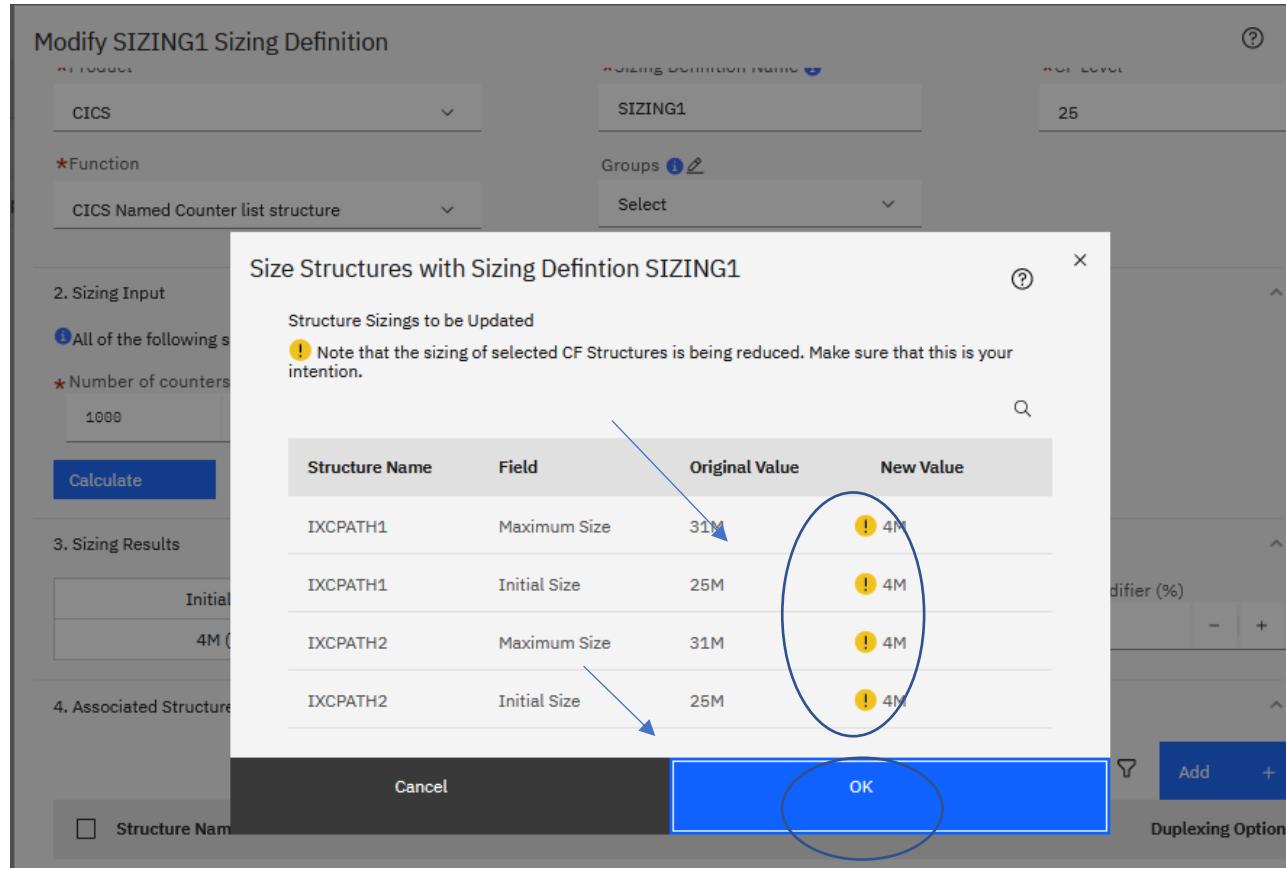
Structure Name	Maximum Size	Initial Size	Minimum Size	Preference List	Exclusion List	Duplexing Option
IXCPATH1	31M	25M	-	CF2	IXCPATH2	-

Cancel OK

Move Cursor to Results Modifier. Set Results Modifier value as **100**, the Sizing Results are amplified by 100%. Click **OK**.



In the Size Structures with Sizing Definition SIZING1, you will see a warning icon which notes that the sizing of selected CF Structures is being reduced. Click **OK**



In the CFRM Policy Editor, the CF sizing definition is showed with updated result.

Product	Sizing Definition Name	Function	Groups	CF Level	No. of Structures
CICS	SIZING1	CICS Named Counter list structure		25	2

After you have 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.

In the CF Sizing tab of CFRM Policy Editor, click the action icon in front of a CF sizing definition, open action menu, move cursor to Copy, click **Copy**.

The screenshot shows the CFRM Policy Editor interface with the title bar "CFRM Policy Editor - POLICY1". The main area is titled "CF Sizing". A table lists sizing definitions, with one row selected for "SIZING1". A context menu is open at the bottom left of this row, with "Copy" highlighted. A blue arrow points from the text "move cursor to Copy" to the "Copy" option in the menu.

When you copy a CF sizing definition, all fields from the General Input and Sizing Input sections are copied over to the new CF sizing definition.

The associated CF structures from the copied CF sizing definition are brought over, since a CF structure can be associated with only one CF sizing definition.

The default Sizing Definition name is **SIZING1_COPY**, you can input one unique name.

Click **OK** to create the copied CF sizing definition and update the associated structure,

The screenshot shows the "Copy SIZING1 Sizing Definition" dialog. It has three sections: 1. General Input, 2. Sizing Input, and 3. Sizing Results. In the General Input section, the Product is CICS, Function is CICS Named Counter list structure, and the Sizing Definition Name is "SIZING1_COPY". The CF Level is set to 25. In the Sizing Input section, the Number of counters is 1000. The OK button at the bottom right is circled.

On completion, the CF Sizing Definitions table is displayed, showing the new CF sizing definition named **SIZING1_COPY**.

Product	Sizing Definition Name	Function	Groups	CF Level	No. of Structures	Modified By	Date Modified (UTC)
CICS	SIZING1_COPY	CICS Named Counter list structure		25	0	SHARA01	02/05/2024 08:19
CICS	SIZING1	CICS Named Counter list structure		25	2	SHARA01	02/05/2024 07:59

You can apply modifications and sizing to a set of CF sizing definitions at one time. This approach can save your time compared with editing sizing definitions one by one.

Select a set of CF sizing that you want to modify, click **Modify and Size**.

Product	Sizing Definition Name	Function	Groups	CF Level	No. of Structures	Modified By	Date Modified (UTC)
CICS	SIZING1_COPY	CICS Named Counter list structure		25	0	SHARA01	02/05/2024 08:19
CICS	SIZING1	CICS Named Counter list structure		25	2	SHARA01	02/05/2024 07:59

In the Modify and Size Multiple CF Sizing Definitions, enter values for the attributes that you want to modify. These values are applied to the selected CF sizing definitions, which are listed under **Modify and Size Structures in Selected CF Sizing Definitions**.

Set **50** as Results Modifier. Click **Next**.

Modify and Size Multiple CF Sizing Definitions

Sizing Details Summary of Updates

Input fields that you enter values for will be applied to all CF structures associated with the selected Sizing Definitions. Fields that are left empty will not be modified.

CF Level: 25

Results Modifier (%): 50

Modify and Size Structures in Selected CF Sizing Definitions

Product	Sizing Definition Name	Function	Groups	CF Level
CICS	SIZING1_COPY	CICS Named Counter list structure		25
CICS	SIZING1	CICS Named Counter list structure		25

Items per page: 50 1-2 of 2 items 1 of 1 page

Cancel Back Next

Click **Finish** to confirm your update.

Modify and Size Multiple CF Sizing Definitions

Sizing Details Summary of Updates

The following structure sizings will be updated

Sizing Definition	Structure Name	Field	Original Value	New Value
SIZING1	IXCPATH1	Initial Size	4M	! 3M (+1)
SIZING1	IXCPATH1	Maximum Size	4M	! 3M (+1)
SIZING1	IXCPATH2	Initial Size	4M	! 3M (+1)
SIZING1	IXCPATH2	Maximum Size	4M	! 3M (+1)

! The sizing of the selected CF structures is being reduced. Make sure that this result is your intention.

Cancel Back Finish

Click **Editor** tab, then click **CF Structures** tab, you can see **Maximum Size** and **Initial Size** value of the two structures associated with CF sizing definition SIZING1 are updated.

CFRM Policy Editor - POLICY1

CFRMS policy - POLICY1

Policy

POLICY1

Sysplex

SHARPLEX

Coupling Facilities

CF Structures

Number of Coupling Facilities

1

Number of CF Structures

18

<input type="checkbox"/>	Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	Exclusion List	Duplexing Options
<input type="checkbox"/>	IXCPATH1	3M	3M	-	SIZING1	CF2	IXCPATH2	-
<input type="checkbox"/>	IXCPATH2	3M	3M	-	SIZING1	CF2	IXCPATH1	-
<input type="checkbox"/>	HASPKPT1	20000K	-	-	-	CF2	HASPKPT2	-
<input type="checkbox"/>	HASPKPT2	20000K	-	-	-	CF2	HASPKPT1	-

After you have 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.

In the CF Sizing tab of CFRM Policy Editor, click the action icon in front of a CF sizing definition, open action menu, move cursor to Remove Association, click **Remove Association**.

CFRM Policy Editor - POLICY1

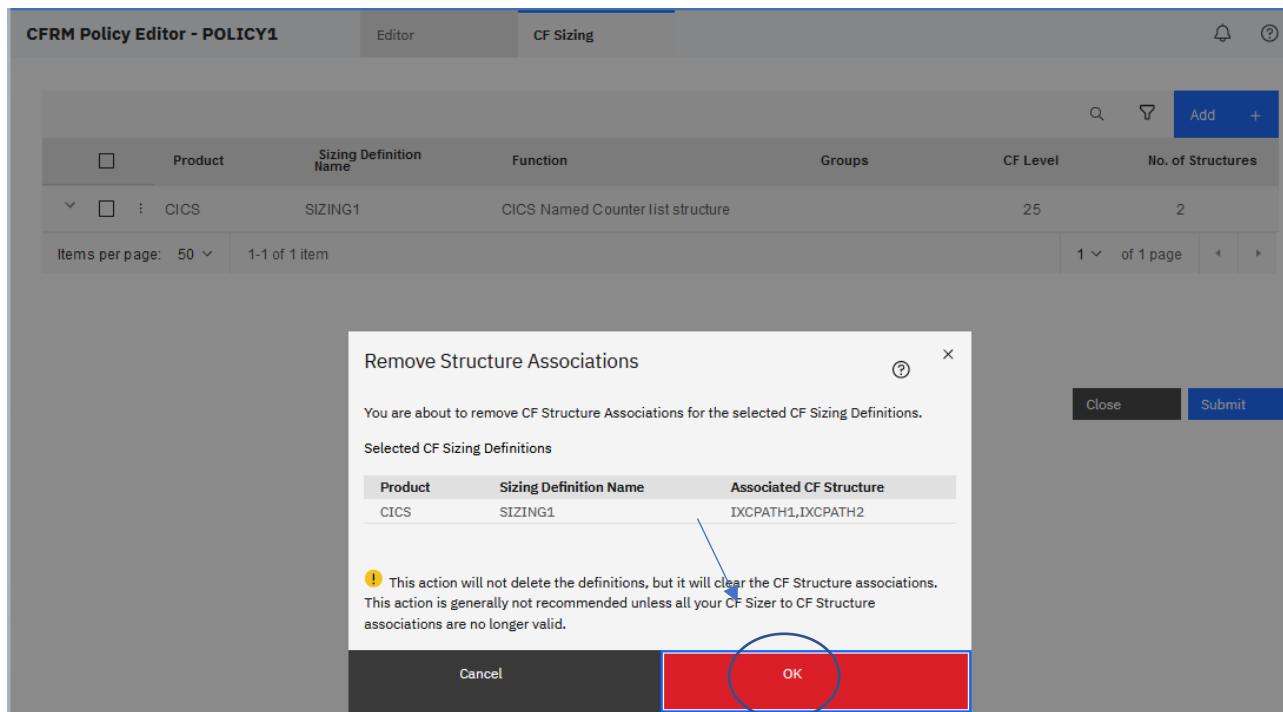
CFRMS policy - POLICY1

CF Sizing

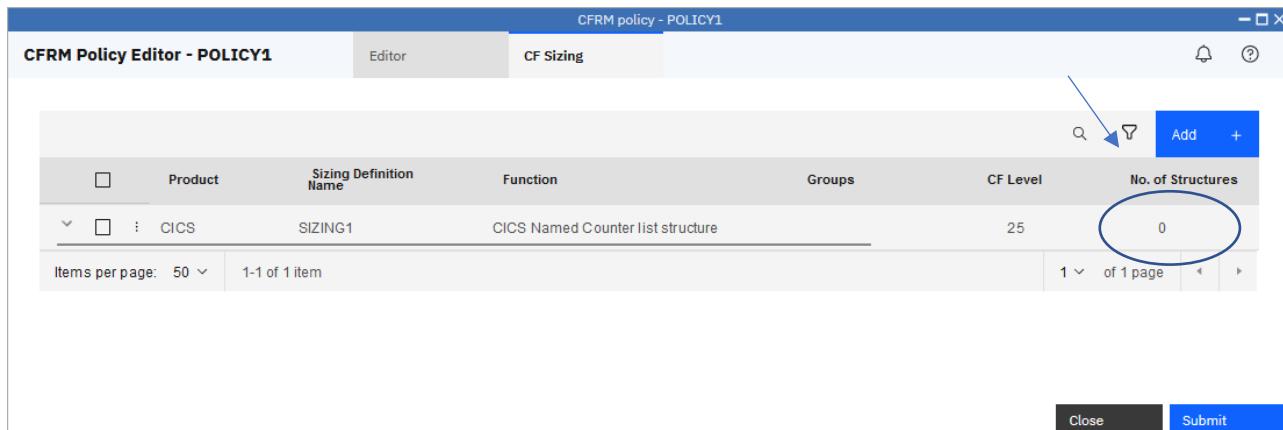
Product	Sizing Definition Name	Function	Groups	CF Level	No. of Structures	Modified By	Date Modified (UTC)
□ CICS	SIZING1_COPY	CICS Named Counter list structure	25	0	SHARA01	02/05/2024 08:25	
□ CICS	SIZING1	CICS Named Counter list structure	25	2	SHARA01	02/05/2024 08:25	

Items per page: 100 | **of 1 page** | **Close** | **Submit**

In the Remove Structure Associations, click **OK**.



In the CFRM Policy Editor, **No. of structures** of CF sizing definition SIZING1 is updated.



Click **Editor** tab, then click **CF Structures** tab, you can see the **CF Sizing Definition** attribute value of the two structures are updated to none.

Structure Name	Maximum Size	Initial Size	Minimum Size	CF Sizing Definition	Preference List	Exclusion List	Duplexing Options	Allow Automatic Alter	Full Threshold Percentage
IXCPATH1	3M	3M	-	CF2	IXCPATH2	-	-	-	-
IXCPATH2	3M	3M	-	CF2	IXCPATH1	-	-	-	-
HASPCKPT1	20000K	-	-	CF2	HASPCKPT2	-	-	-	-
HASPCKPT2	20000K	-	-	CF2	HASPCKPT1	-	-	-	-
OPERLOG_STR	48000K	-	-	CF2	-	-	-	-	-
LOGREC_STR	48000K	-	-	CF2	-	-	-	-	-
IRRXCFO0_P001	2000K	-	-	CF2	IRRXCFO0_B001	-	-	-	-
IRRXCFO0_B001	1000K	-	-	CF2	IRRXCFO0_P001	-	-	-	-

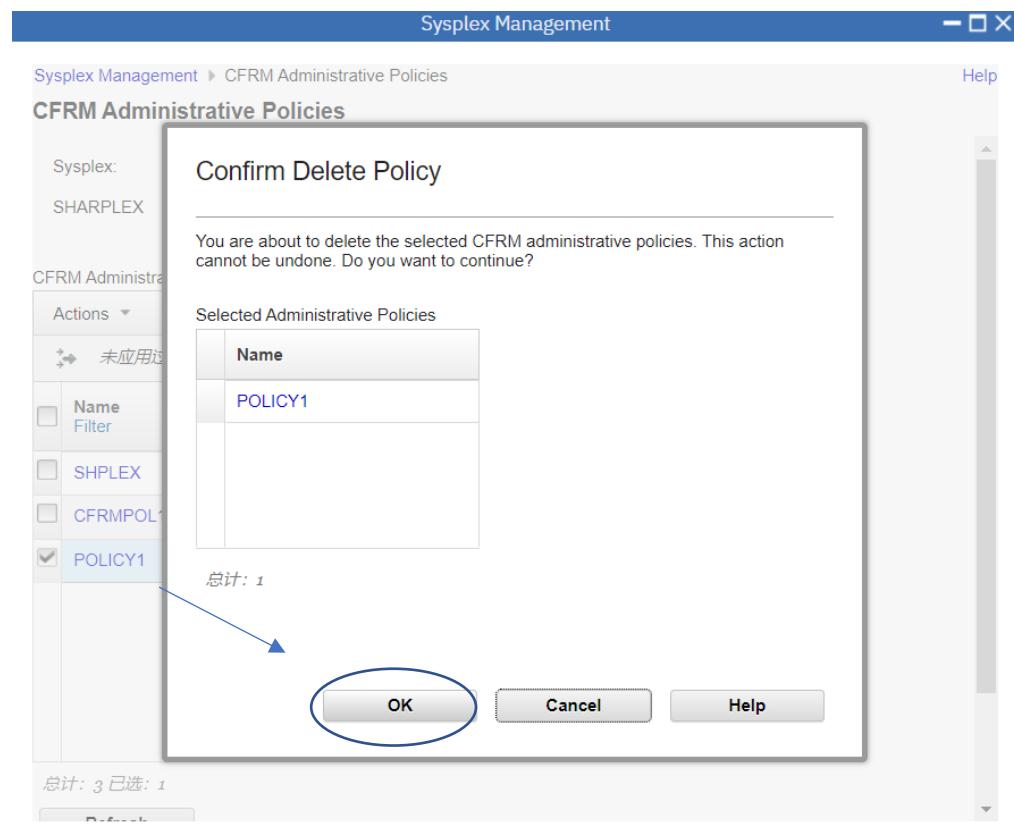
After you have done all update, **Submit** button can be used to save changes. Since you are operating with a shared system, we won't perform Submit action.

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**.

Name	Last Updated (UTC)	Updated By
SHPLEX	09/10/2019 17:55:07	VANWAG
CFRMPOL1	03/07/2022 06:24:13	SHARA01
POLICY1	08/08/2022 08:45:01	SHARA01

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 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

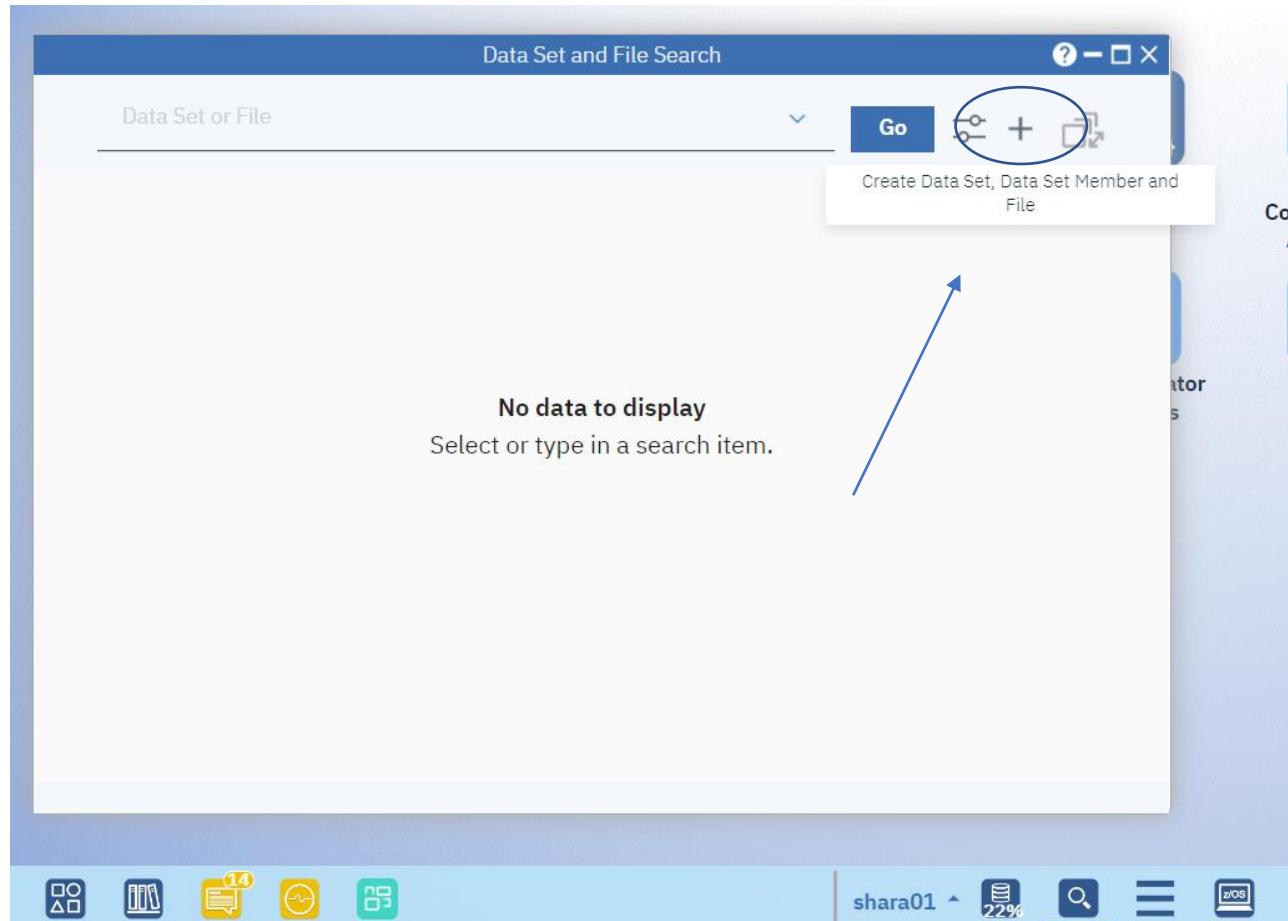
Actions		
未应用过滤器		
<input type="checkbox"/>	Name Filter	Last Updated (UTC) Filter
<input type="checkbox"/>	SHPLEX	09/10/2019 17:55:07
<input type="checkbox"/>	CFRMPOL1	03/07/2022 06:24:13

16. 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.

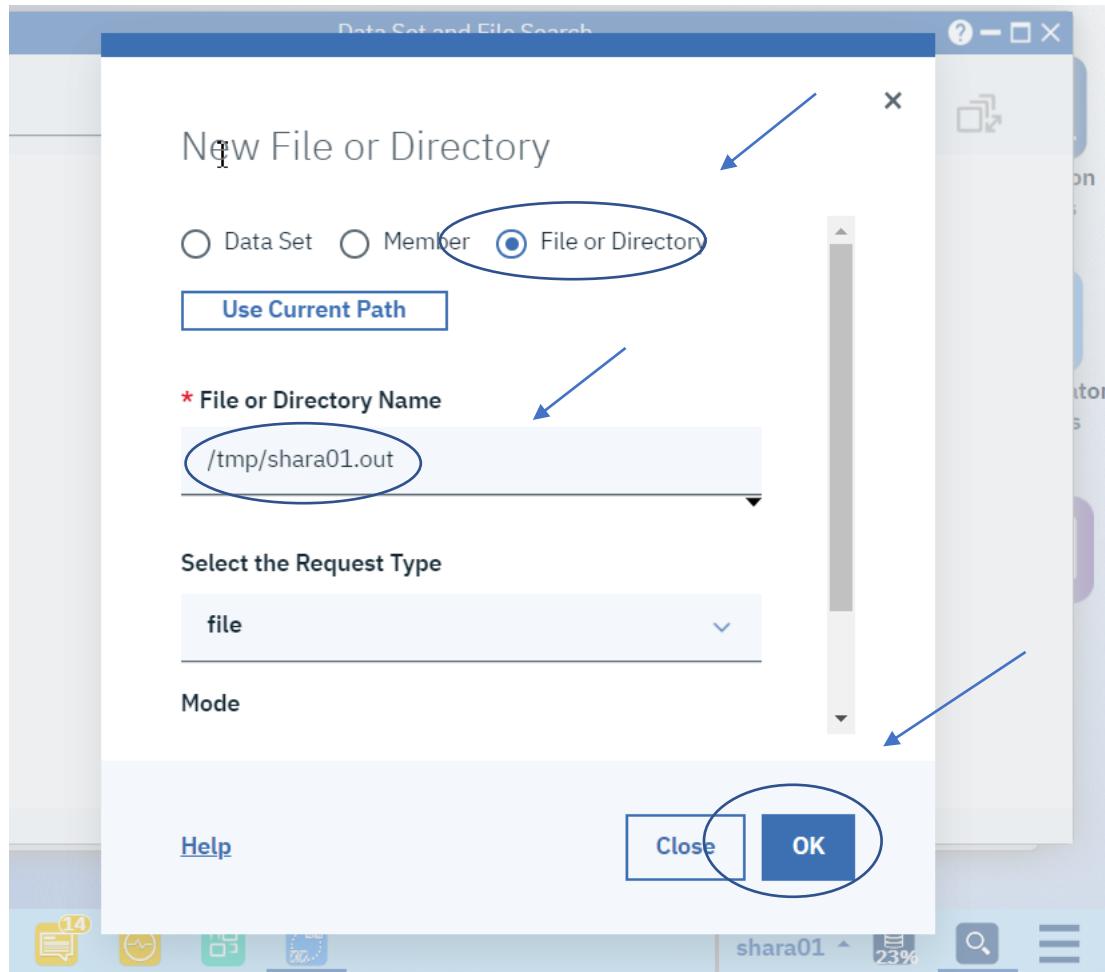


In Data Set and Search dialog, click **Create Data Set, Data Set Member and File** on the top right of the dialog.

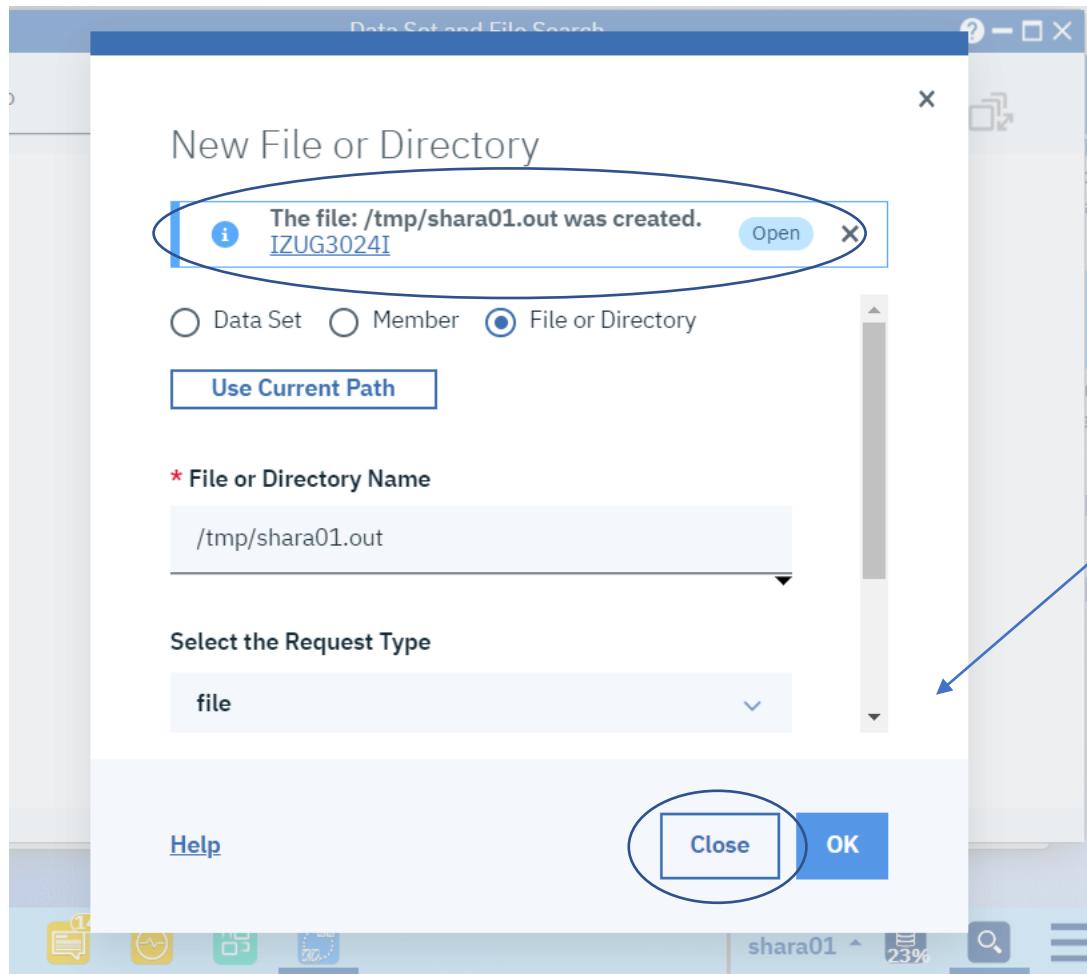


In New File or Directory dialog, check **File or Directory**, input file name you want to create in File or Directory Name field. **To ensure that the file name is unique, please**

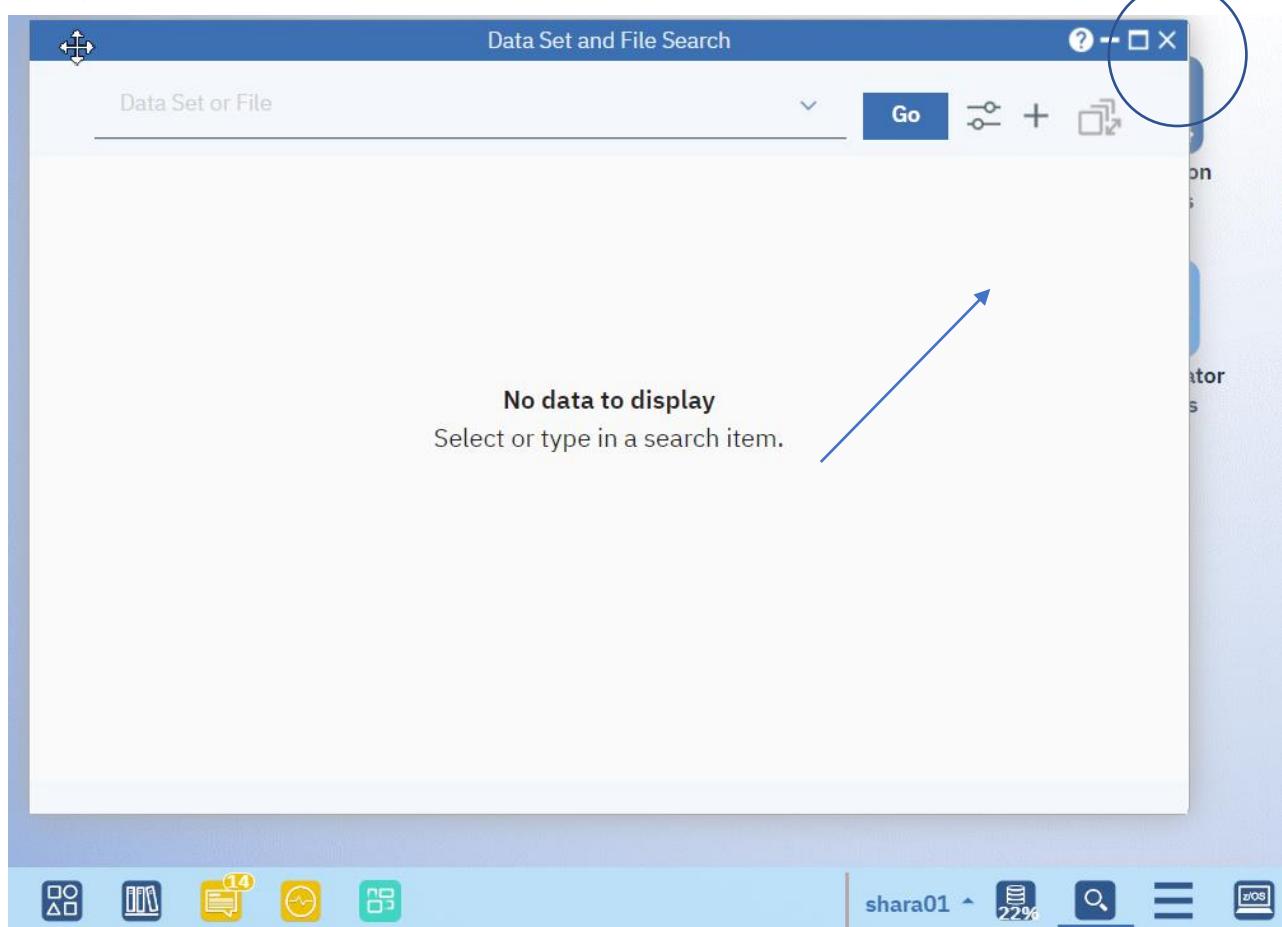
use username as your file name. Below screen shot is using user shara01, therefore, the input for “File or Directory Name” is /tmp/shara01.out. Click **OK** to create the file.



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

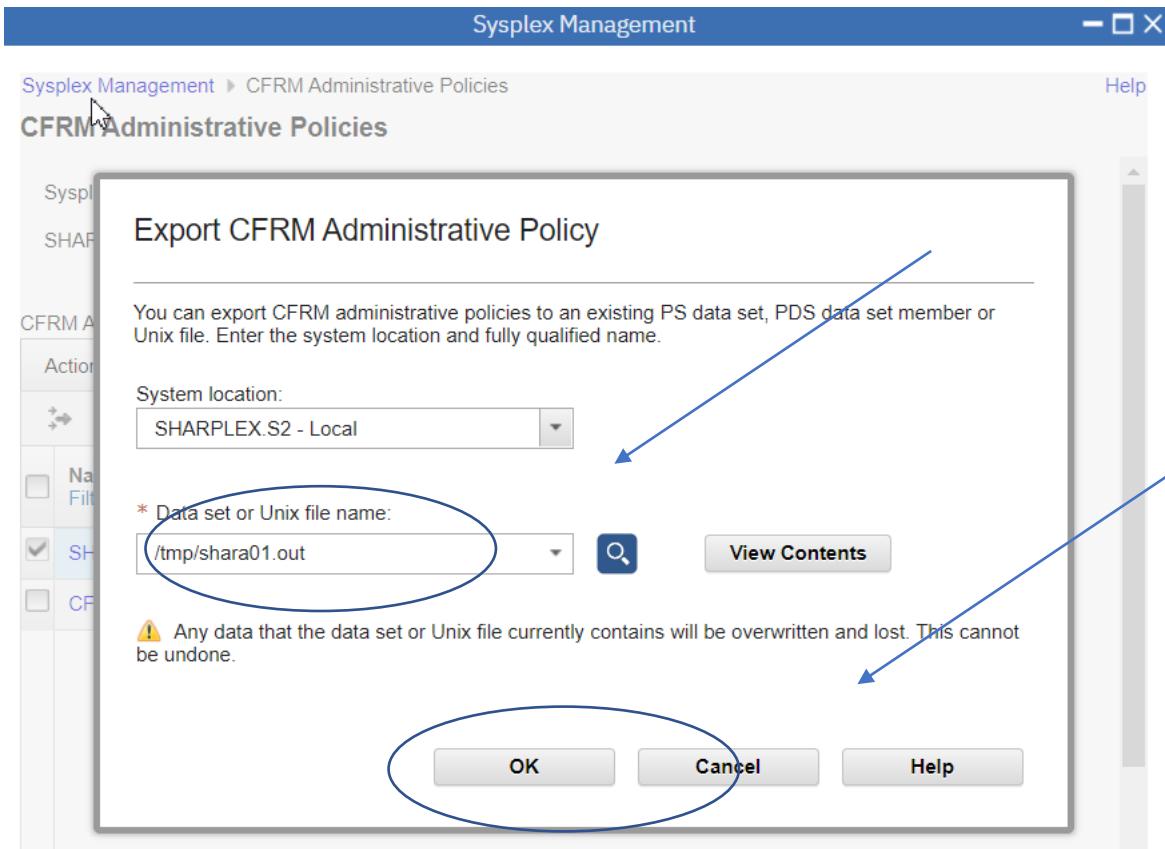
CFRM Administrative Policies			
Actions ▾			
未应用过滤器			
<input type="checkbox"/>	Name Filter	Last Updated (UTC) Filter	Updated By Filter
<input checked="" type="checkbox"/>	SHPLEX	09/10/2019 17:55:07	VANWAG
<input type="checkbox"/>	CFRMPOL1		SHARA01

A context menu is open over the 'SHPLEX' row, showing the following options:

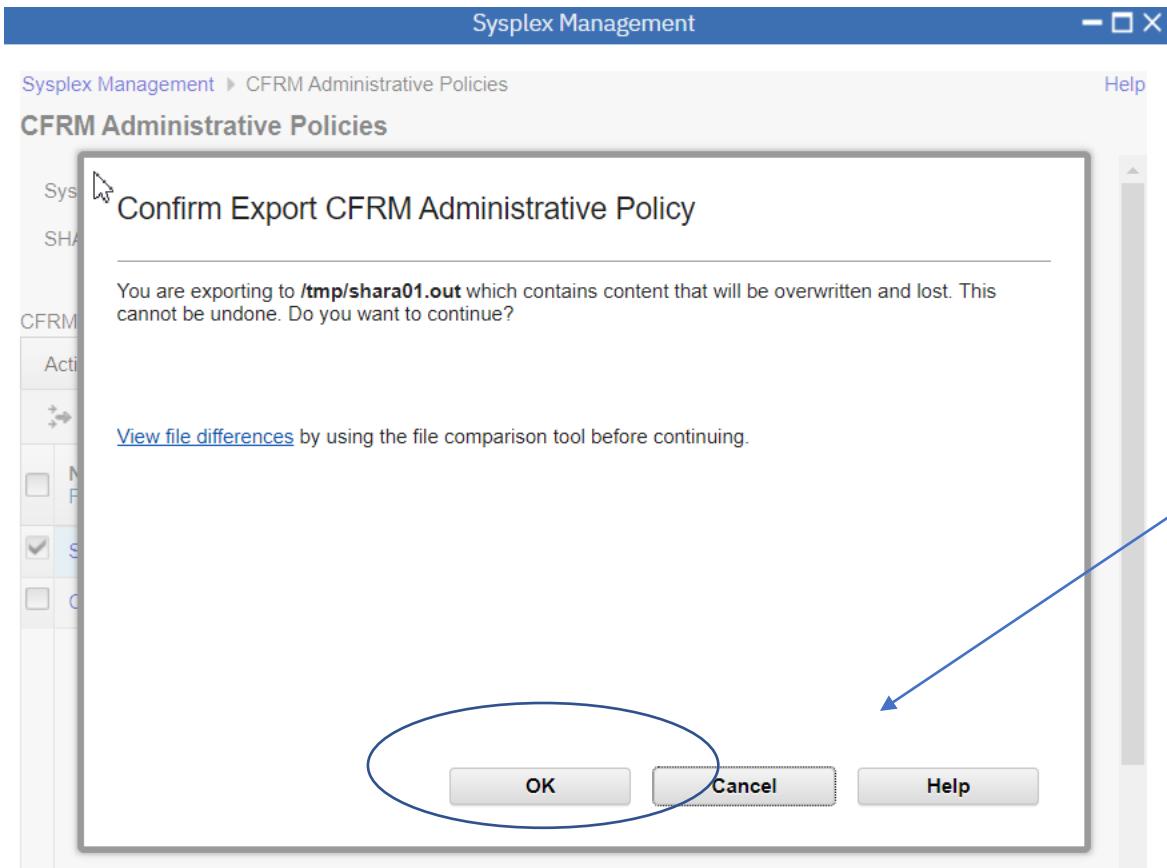
- Open in CFRM Policy Editor
- View Content
- Rename...
- Copy...
- Export...** (highlighted with a blue oval)
- Activate...
- Delete...

An arrow points from the 'Export...' option in the context menu to the 'Export...' option in the list.

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.



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.

Sysplex Management

Sysplex Management > CFRM Administrative Policies

CFRM Administrative Policies

Messages 0 0 1

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

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

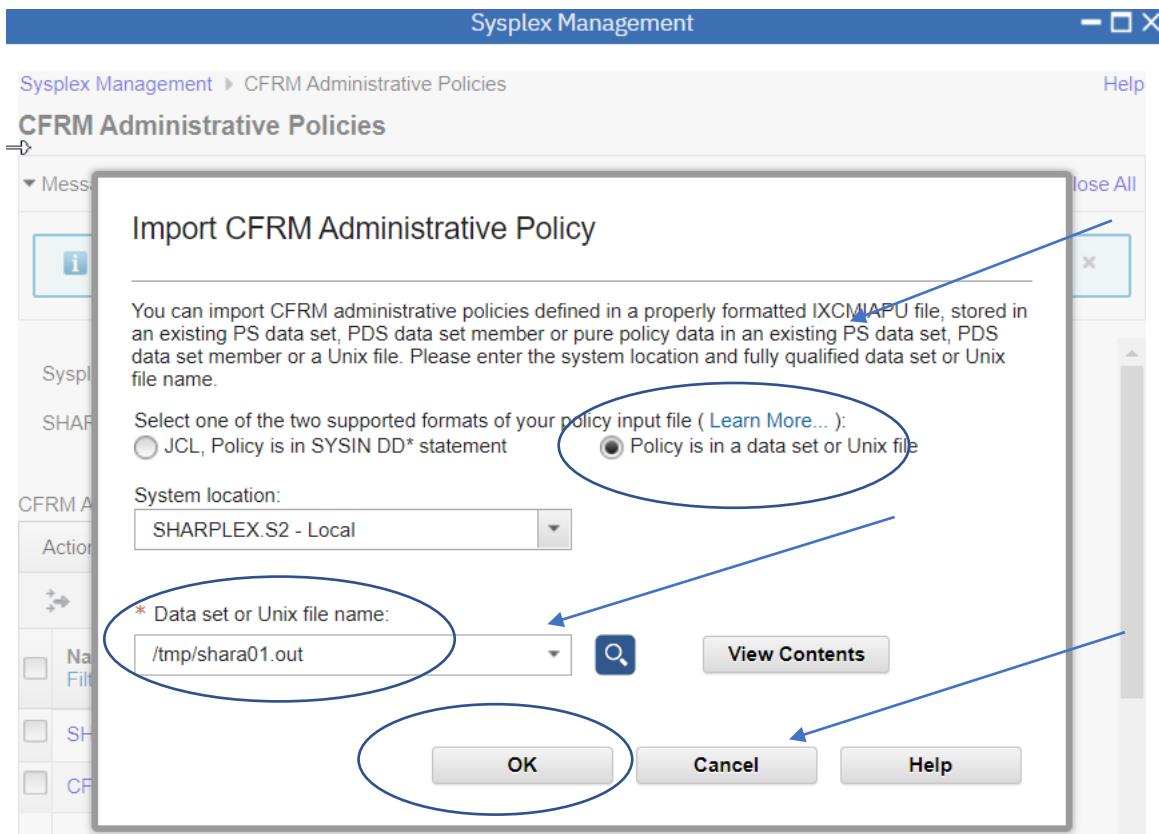
17. Import Policy

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

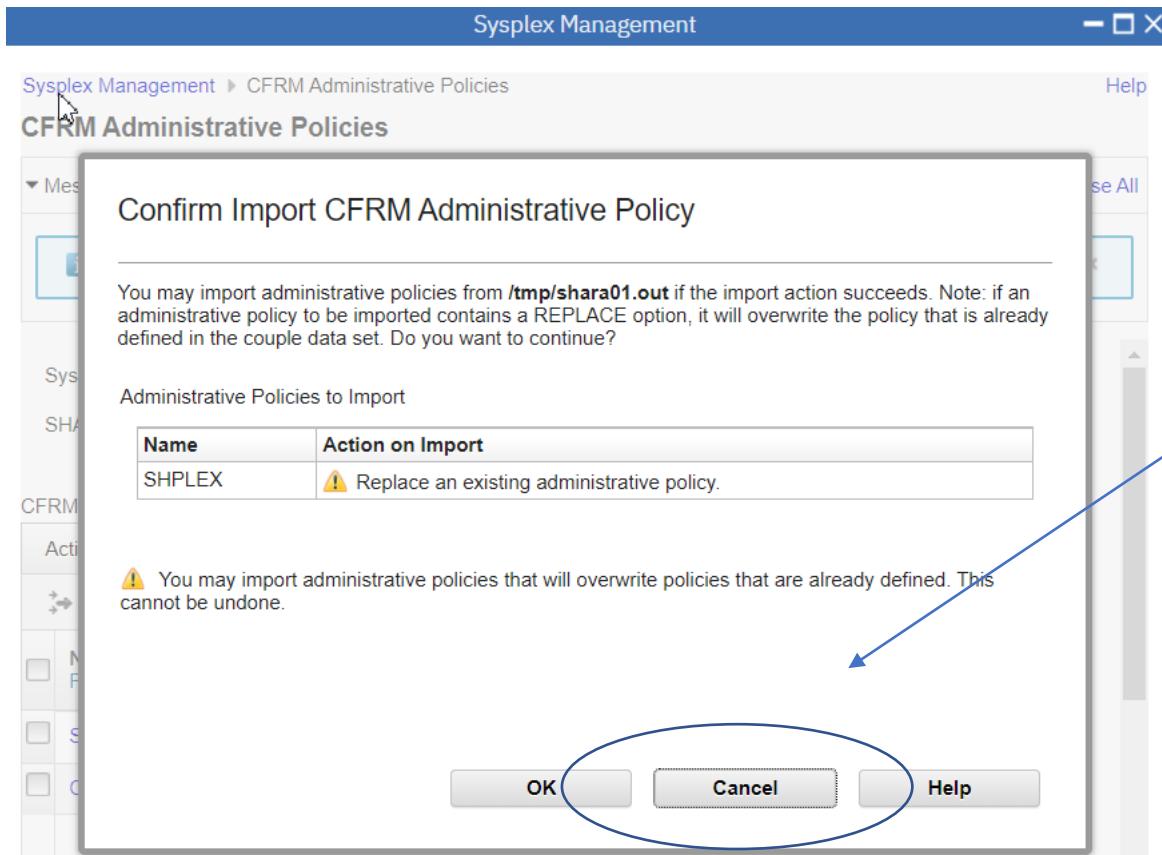
The screenshot shows the 'CFRM Administrative Policies' panel within the 'Sysplex Management' interface. At the top, there are message counts: 0 errors (red), 0 warnings (yellow), and 3 informational messages (blue). Below that, it displays the sysplex name 'SHARPLEX' and the active policy 'CFRMPOL1' with a warning icon. The date the policy was activated is shown as '01/24/2022 18:08:44'. The main area lists CFRM administrative policies, with a table showing columns for 'Updated By' and 'Filter'. A blue arrow points from the 'Import...' option in the Actions dropdown menu to the 'Import...' option in the table header. The 'Import...' option is circled in blue.

Updated By	Filter
JTC	
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. Work with CF Sizing
16. Export Policy
17. Import Policy



Thank You