Troubleshoot Organizations and Resource Groups in Intersight

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Related Information

Introduction

This document describes scenarios for Organizations and Resource Groups utilization in Intersight, as well as common troubleshoot.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Unified Computing System (UCS) and Intersight Managed Mode (IMM)
- General knowledge of Organizations in Intersight - Cisco Intersight Help Center - Organizations and Roles in Intersight
- General knowledge of Resource Groups in Intersight - Cisco Intersight Help Center - Resources

Components Used

- Intersight Account with Admin Privileges
- Cisco UCS 6454 Fabric Interconnect managed by Intersight
- Cisco UCS B200 M5 server
- Cisco UCS C240 M6 integrated server

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

What is a Resource Group?

A Resource Group is a collection of hardware resources like servers, grouped for management purposes. These groups allow to manage them in a collectively way which makes easier to control and handle configurations.

What is an Organization?

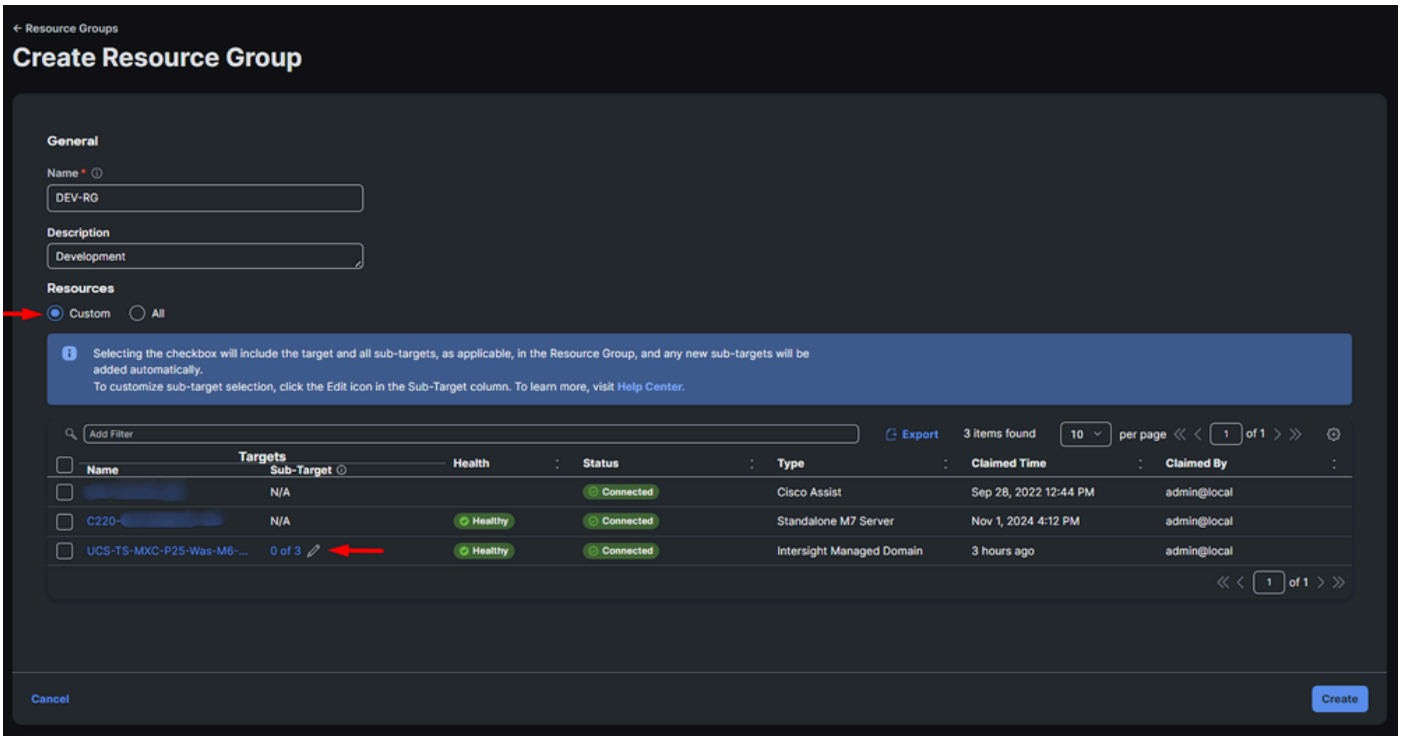
An Organization is a logical entity that helps separate and manage different resources of an Intersight account so multiple users can work independently in the same system.
The Organizations let you manage the Resource Groups to apply configuration to specific resources.

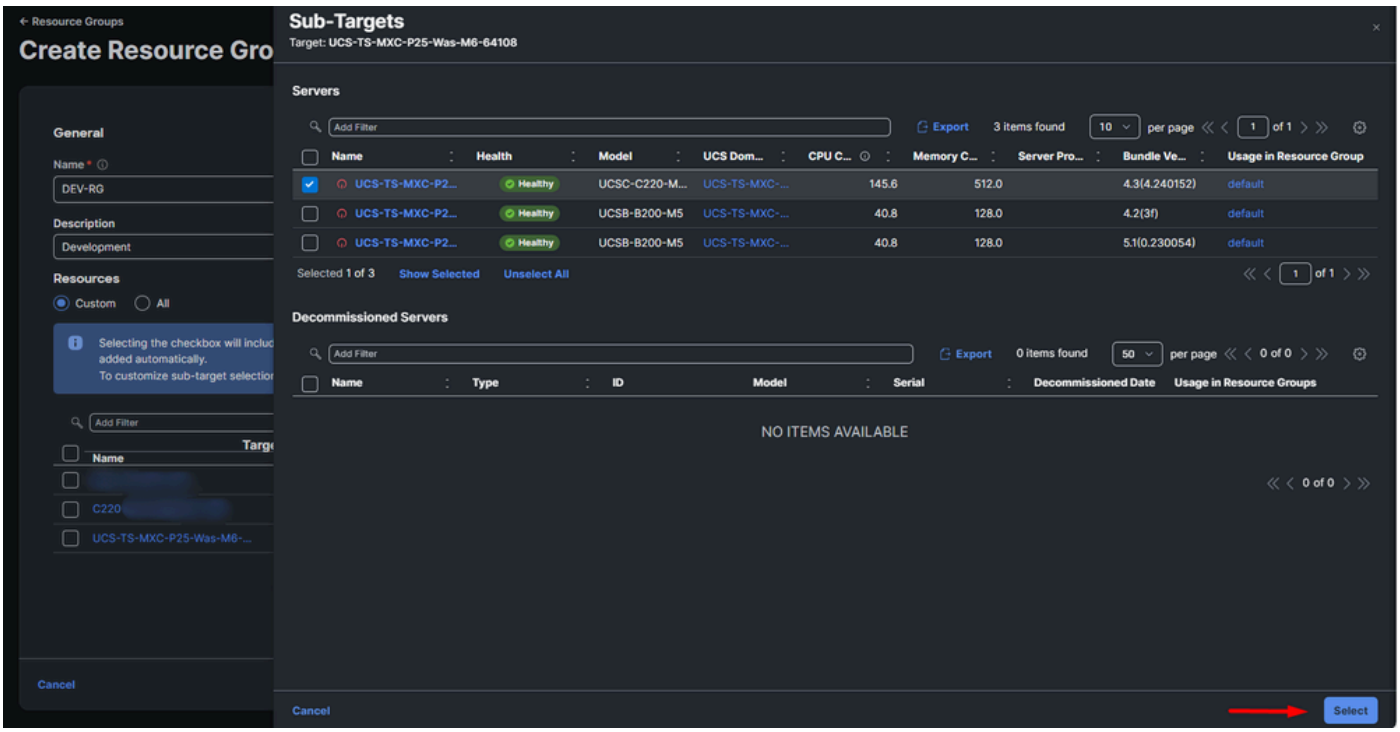
Configure

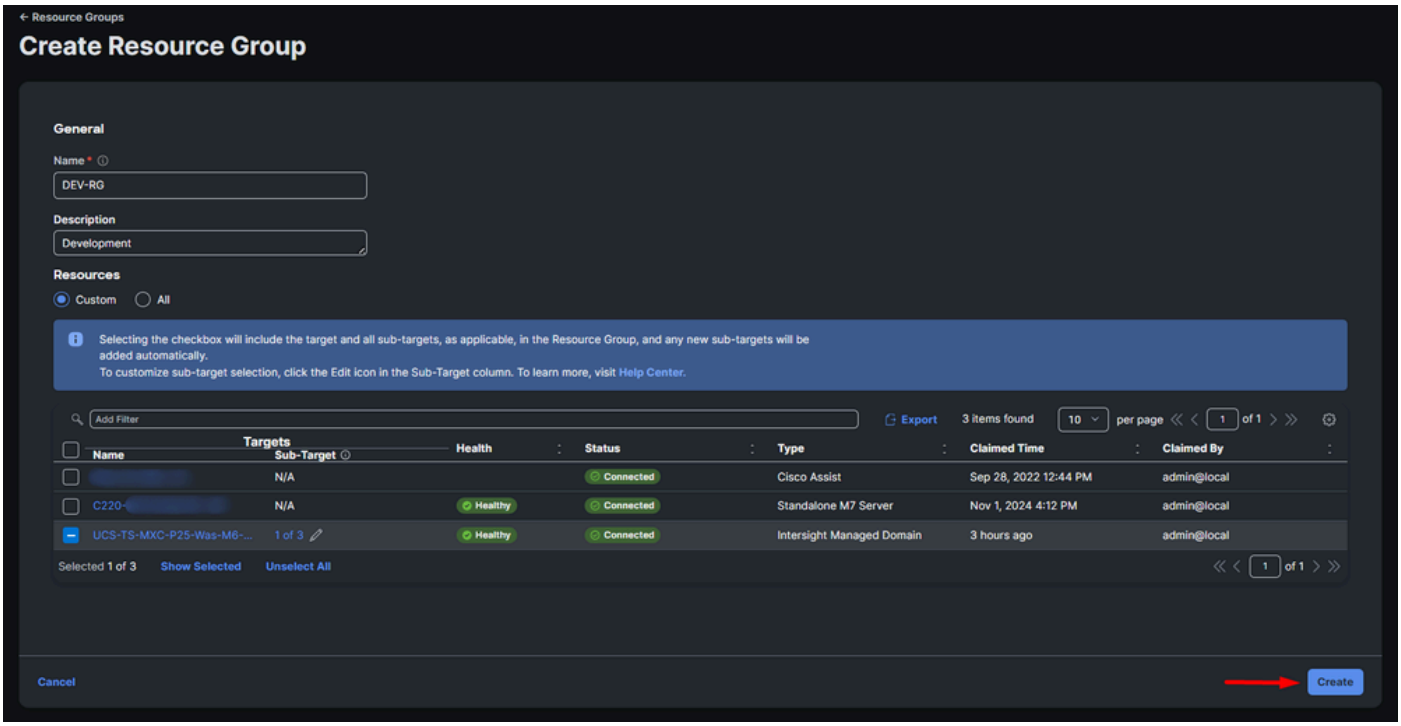
Create a Resource Group

You can assign servers to specific Resource Groups to enable granular access control at the server level. You have the option to assign a target to one or multiple Resource Groups.

1. Navigate to **System** > **Resource Groups** > **Create a Resource Group**.
2. Edit the Resource Groups, name it and select Custom membership to allocate only the desired targets or sub-targets to the Resource Groups.


← Resource Groups
Create Resource Group
General
Name *
DEV-RG
Description
Development
Resources
Custom
All
Selecting the checkbox will include the target and all sub-targets, as applicable, in the Resource Group, and any new sub-targets will be added automatically.
To customize sub-target selection, click the Edit icon in the Sub-Target column. To learn more, visit Help Center.
Add Filter
Export
3 items found
10
per page
1 of 1
Targets
Name
Sub-Target
Health
Status
Type
Claimed Time
Claimed By
N/A
Connected
Cisco Assist
Sep 28, 2022 12:44 PM
admin@local
C220-
N/A
Healthy
Connected
Standalone M7 Server
Nov 1, 2024 4:12 PM
admin@local
UCS-TS-MXC-P25-Was-M6-...
0 of 3
Healthy
Connected
Intersight Managed Domain
3 hours ago
admin@local
Cancel
Create

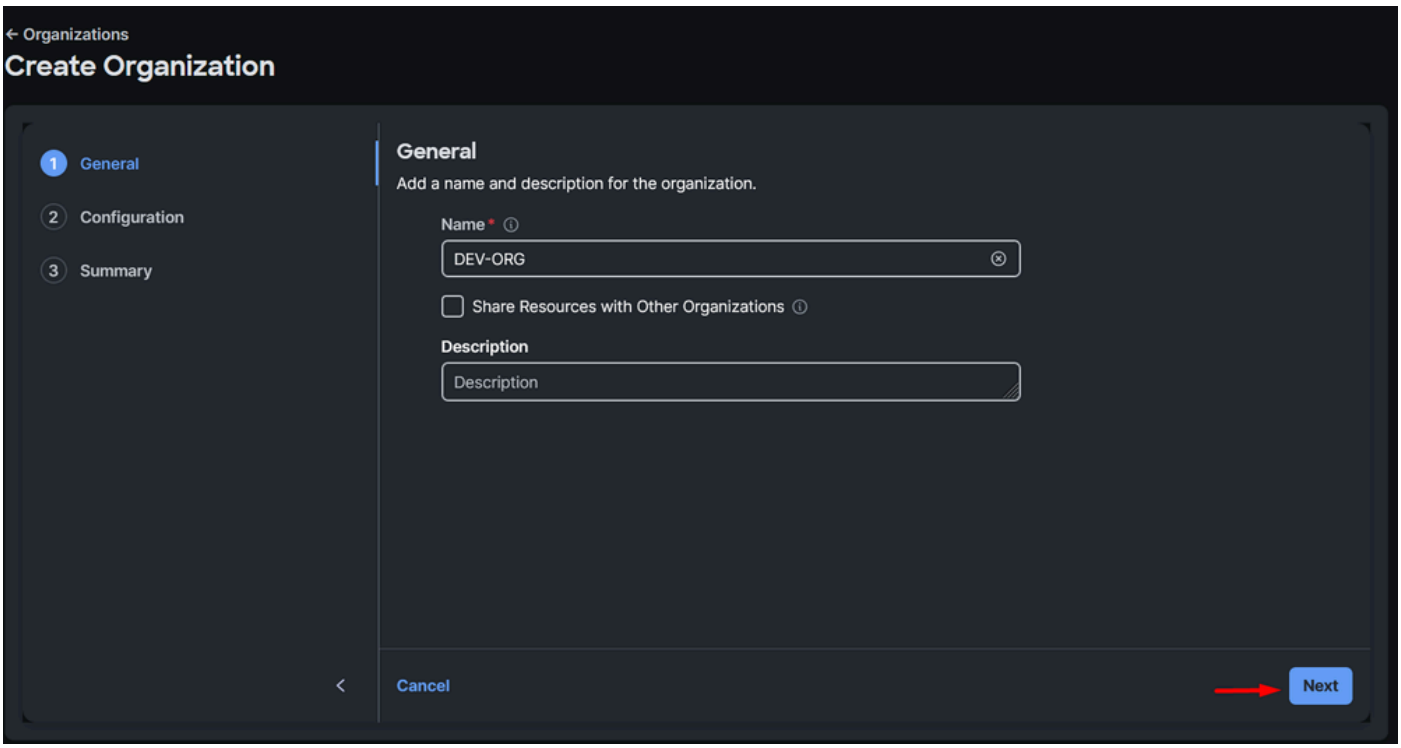

← Resource Groups
Create Resource Gro
Sub-Targets
Target: UCS-TS-MXC-P25-Was-M6-64108
Servers
Add Filter
Export
3 items found
10
per page
1 of 1
Name
Health
Model
UCS Dom...
CPU C...
Memory C...
Server Pro...
Bundle Ve...
Usage in Resource Group
UCS-TS-MXC-P2...
Healthy
UCSC-C220-M...
UCS-TS-MXC-...
145.6
512.0
4.3(4.240152)
default
UCS-TS-MXC-P2...
Healthy
UCSB-B200-M5
UCS-TS-MXC-...
40.8
128.0
4.2(3f)
default
UCS-TS-MXC-P2...
Healthy
UCSB-B200-M5
UCS-TS-MXC-...
40.8
128.0
5.1(0.230054)
default
Selected 1 of 3
Show Selected
Unselect All
Decommissioned Servers
Add Filter
Export
0 items found
50
per page
0 of 0
Name
Type
ID
Model
Serial
Decommissioned Date
Usage in Resource Groups
NO ITEMS AVAILABLE
Cancel
Select

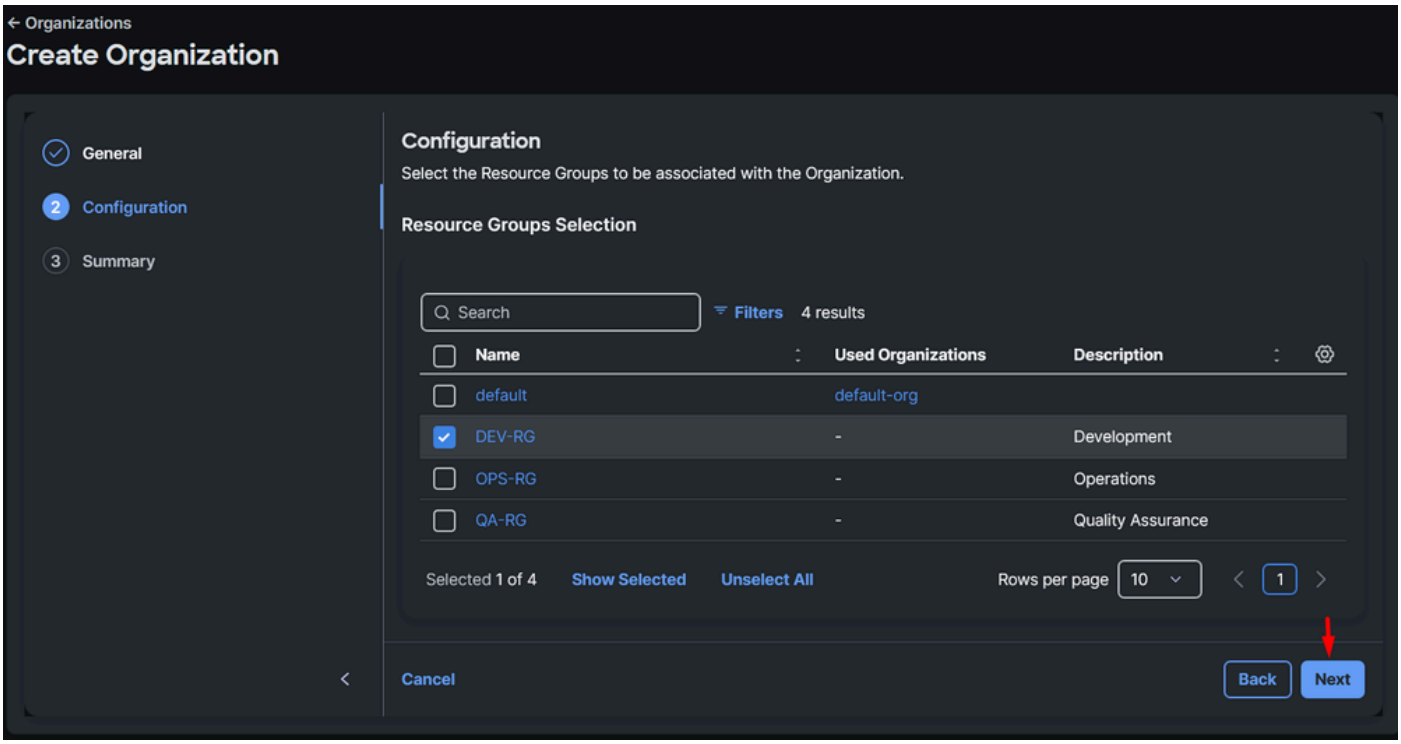


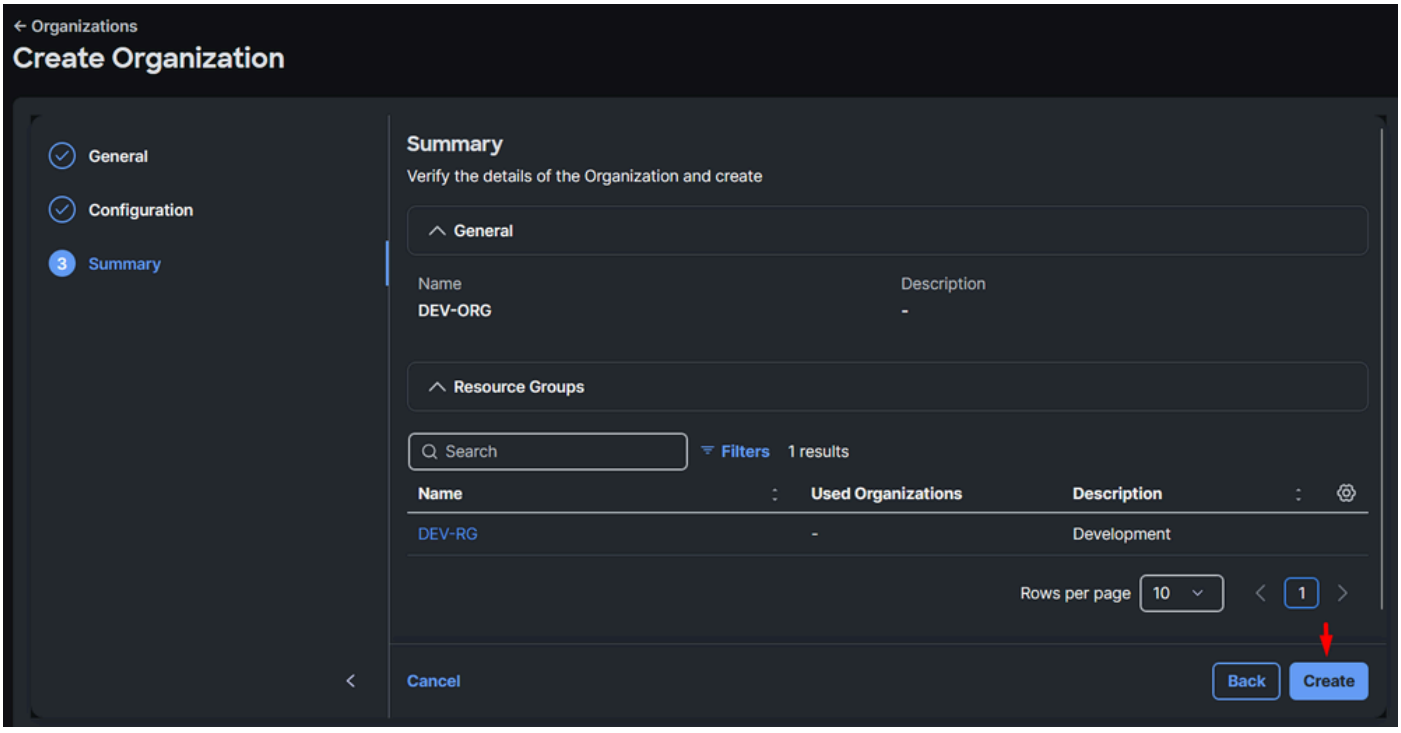
Create an Organization

Assign a Resource Group to one or multiple Organizations.

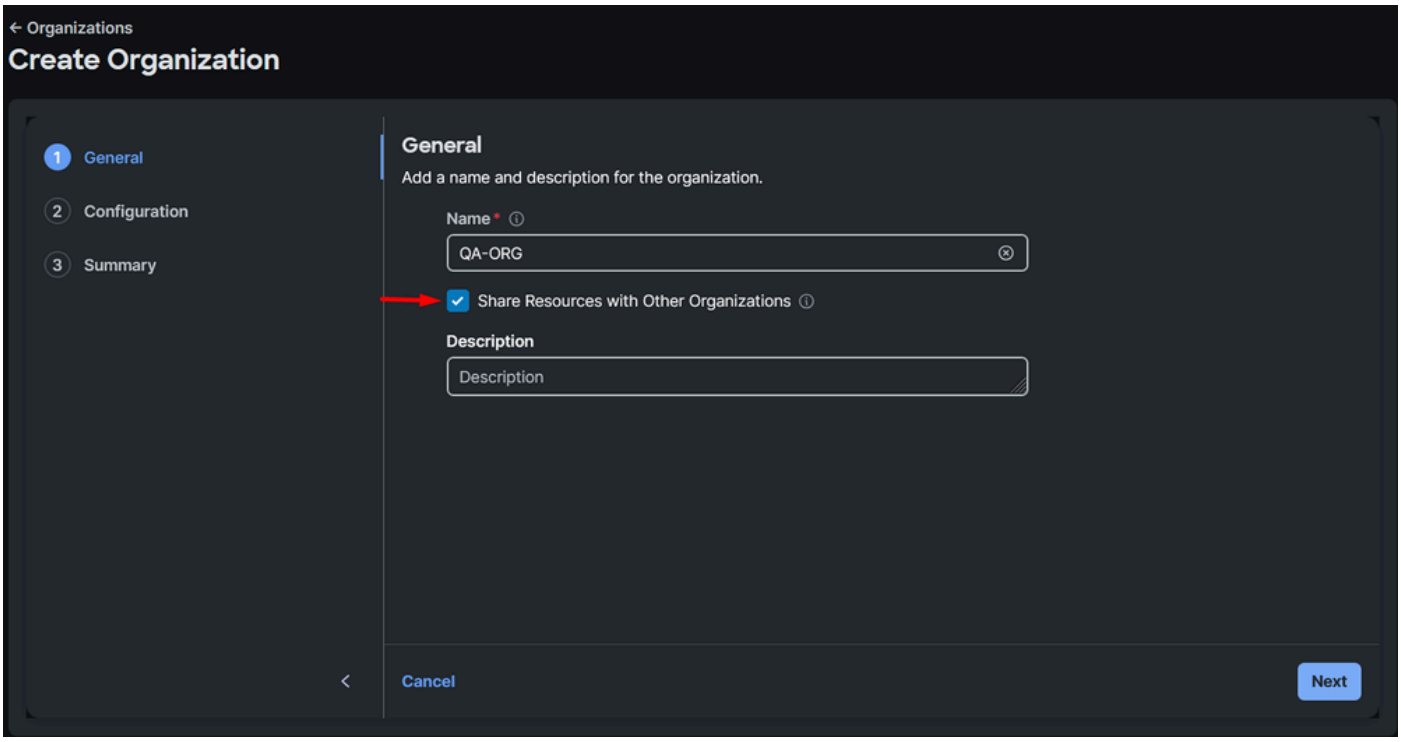
1. Navigate to **System** > **Organizations** > **Create Organization**.
2. Edit the Organization, name it and add the desired Resource Groups.

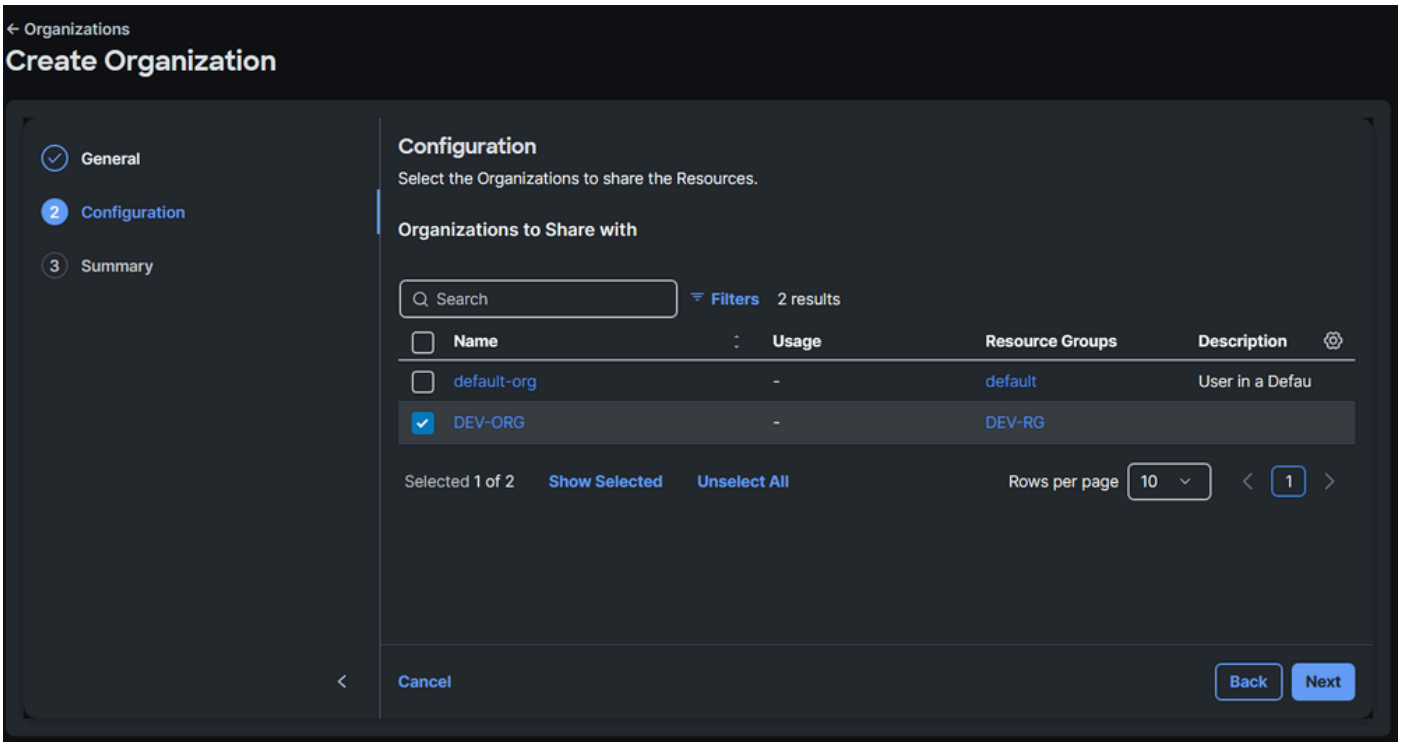






If you check **Share Resources with Other Organizations**, the list displayed is for Organizations. These are shown because they are intended to share the resources associated with other organizations that are about to be created:





Scenarios

For this document, three Resource Groups and three Organizations are used to illustrate scenarios.

Warning: The scenarios in this document are for illustrative and explanatory purposes only and must not be considered best practices. Users are encouraged to plan the organization of their resources and objects according to their specific needs to use the benefits this feature offers fully.

Tip: Regardless of the scenario to be used, you must ensure that at least one Organization is

associated with all the resources managed by the domain. This ensures you the Fabric Interconnects belong to at least one Organization, and this lets you associate a Domain Profile with the devices.

Scenario 1. All Devices in Default

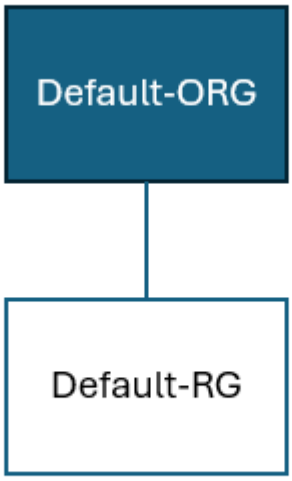
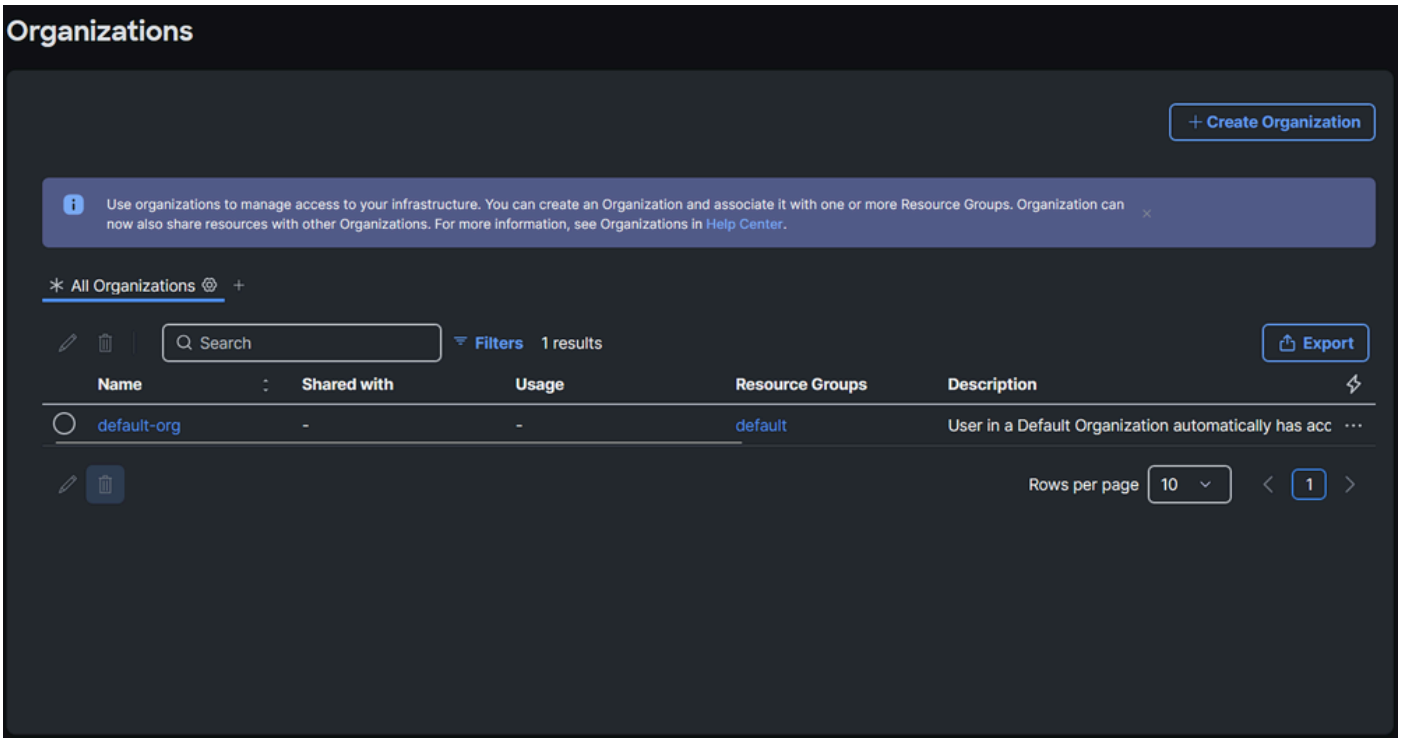


Diagram of Scenario 1



Result of the Scenario 1 Configuration

- This is the default configuration. All the resources and configurations are automatically placed in a default Resource Group (**default-RG**) and Organization (**default-ORG**).

Scenario 2. Default Shares with all Other Organizations

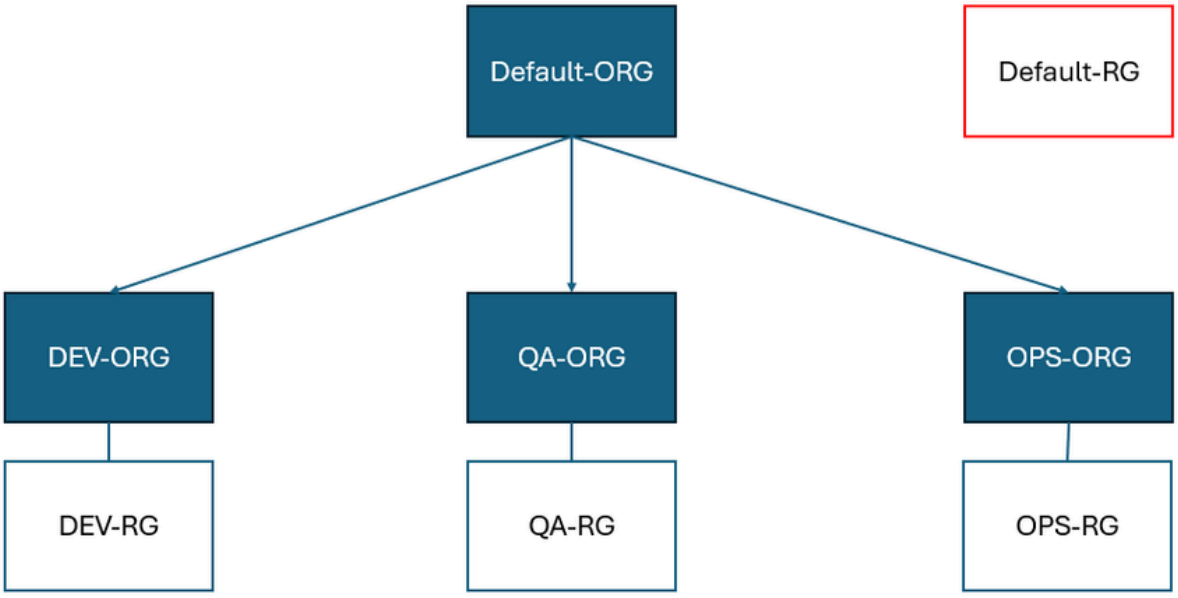
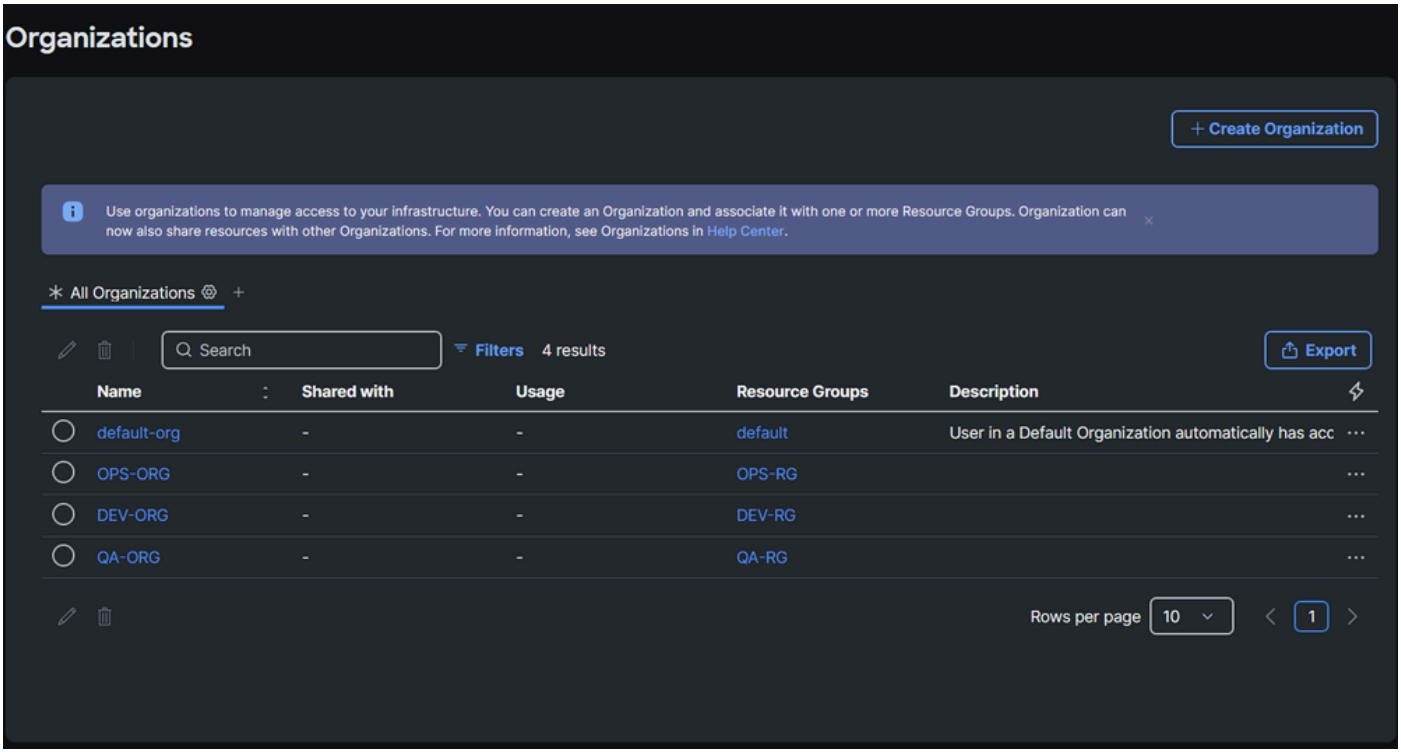


Diagram of Scenario 2



Result of the Scenario 2 Configuration

- All the objects (policies, pools and profiles) created in default Organization (**default-ORG**) can be used by DEV, OPS & QA Organizations (**DEV-ORG**, **OPS-ORG** & **QA-ORG** respectively), but not the other way around.
- Objects from one Organization (but the ones created in **default-ORG**) cannot be used in other Organizations. For example, DEV Organization (**DEV-ORG**) cannot be used in OPS Organization (**OPS-ORG**) nor QA Organization (**QA-ORG**).
- The default Resource Group (**default-RG**) does not belong anymore to the default Organization (**default-ORG**). The servers that belong to **default-RG** cannot be used unless they are assigned to

another Organization.

Scenario 3. QA-ORG Shares with DEV-ORG & OPS-ORG

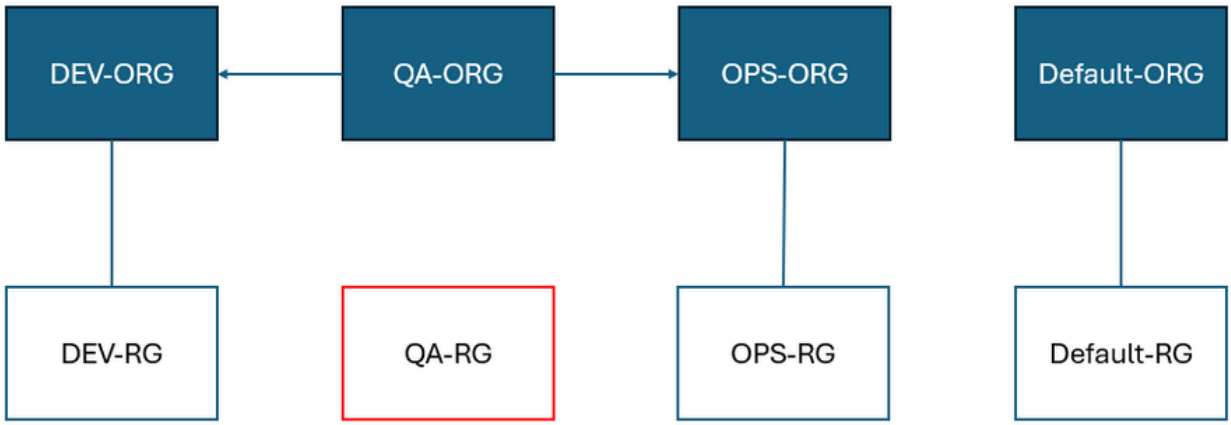
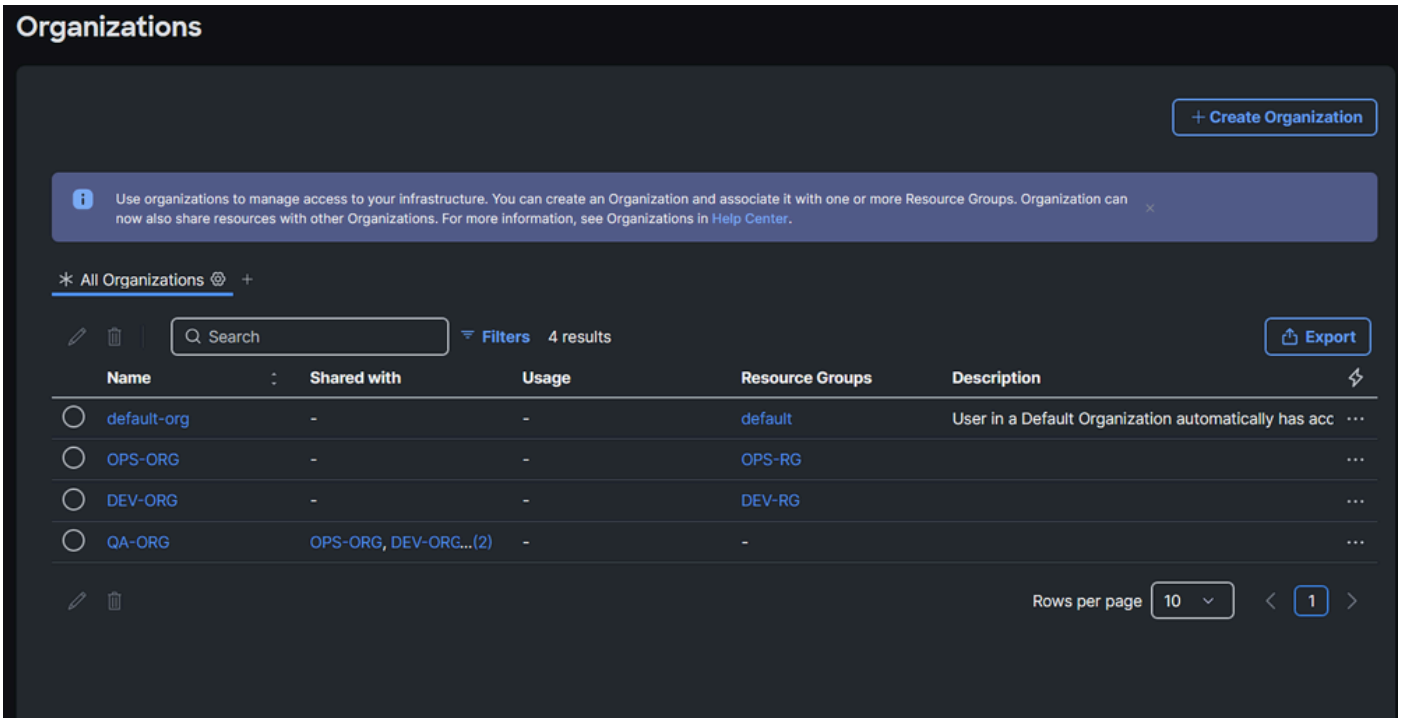


Diagram of Scenario 3



Result of the Scenario 3 Configuration

- Objects created in DEV, OPS or QA Organizations (**DEV-ORG**, **OPS-ORG** & **QA-ORG** respectively) cannot be used in default Organization (**default-ORG**) and vice versa.
- Objects created in QA Organization (**QA-ORG**) can be used in DEV and OPS Organizations (**DEV-ORG** & **OPS-ORG**).
- Objects created in DEV, OPS and default Organizations (**DEV-ORG**, **OPS-ORG** & **default-ORG** respectively) cannot be used in QA Organization (**QA-ORG**).
- The QA Resource Group (**QA-RG**) does not belong to QA Organization (**QA-ORG**) anymore. The servers that belong to **QA-RG** cannot be used unless they are assigned to another Organization.

For this scenario, the most intuitive solution is that **QA-RG** are associated with **DEV-ORG** and **OPS-ORG**:

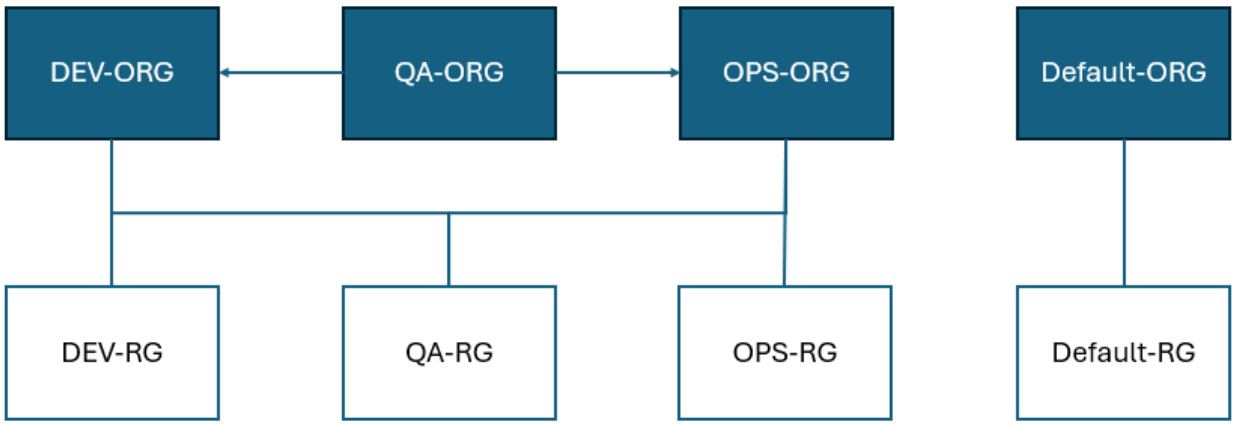
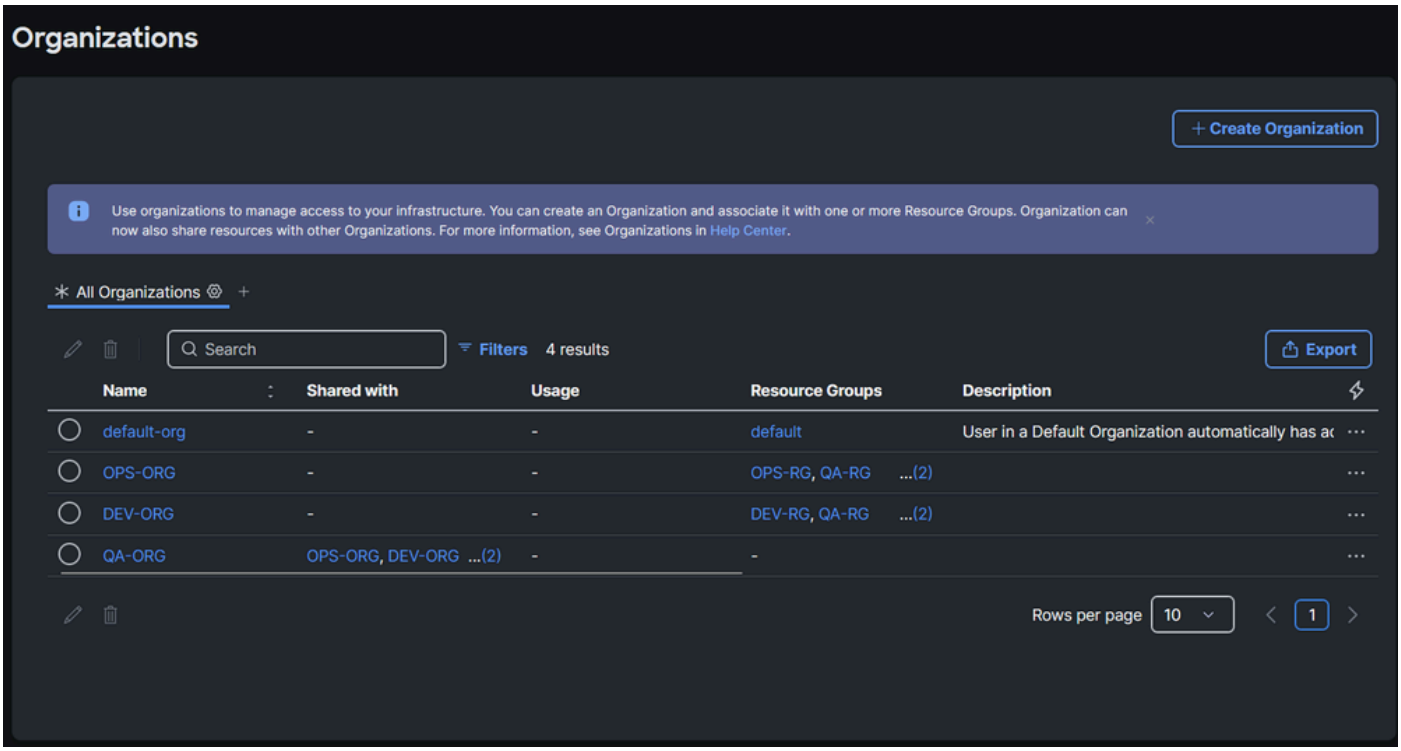


Diagram of Proposed Solution for Scenario 3



This is the result of the configuration proposed as an intuitive solution for Scenario 3. It is seen that the DEV and OPS Organizations (DEV-ORG & OPS-ORG) are associated with the QA Resource Group (QA-RG).

Scenario 4. Default Shares with QA-ORG, DEV-ORG Shares with OPS-ORG

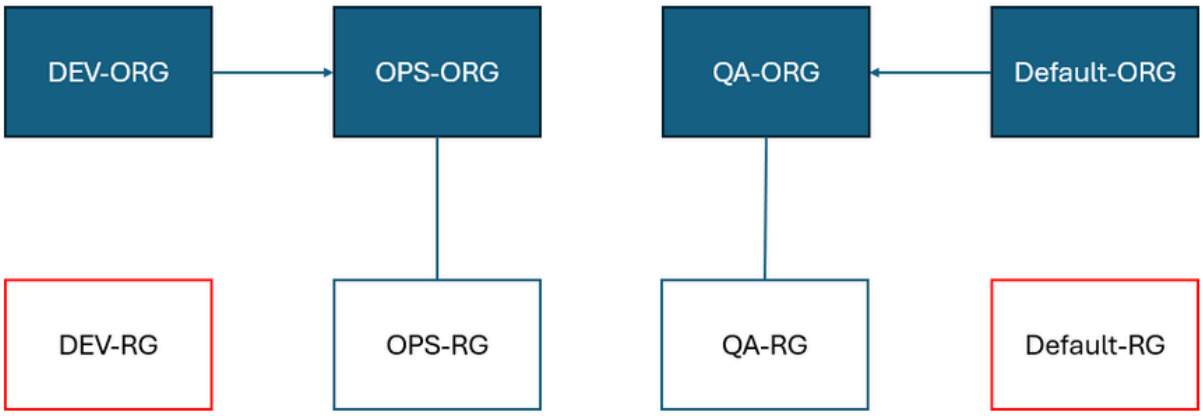
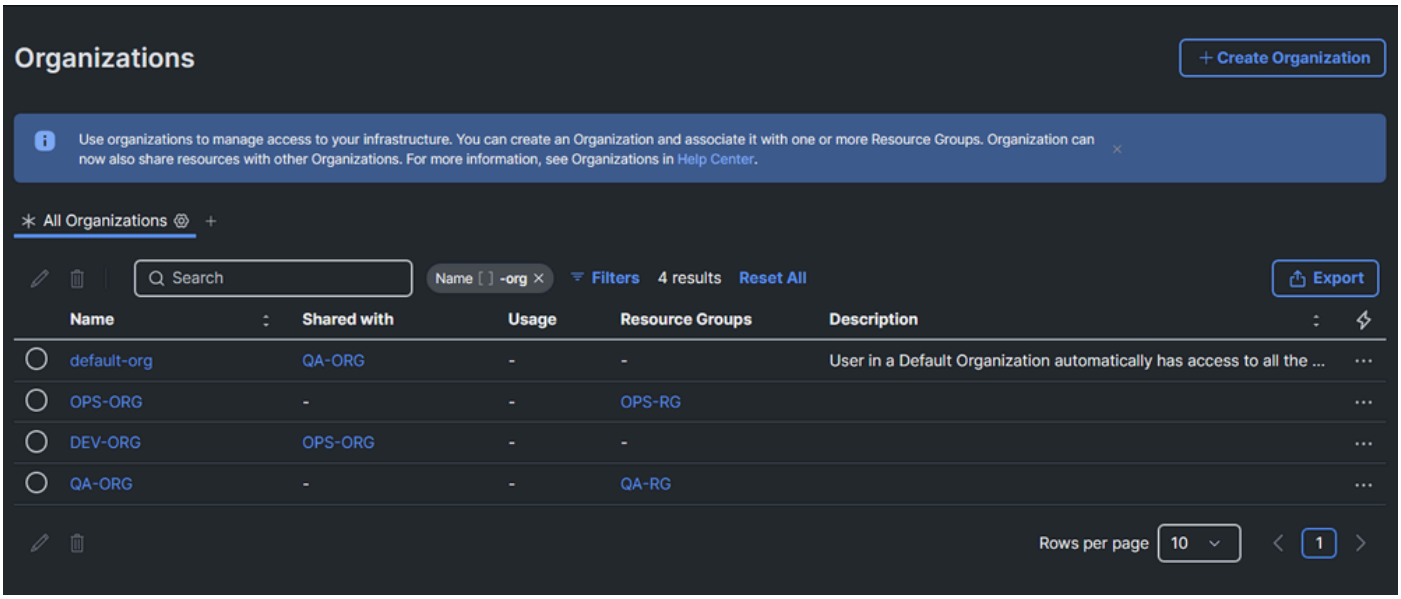


Diagram of Scenario 4



Result of the Scenario 4 Configuration

- Objects created in DEV and OPS Organizations (**DEV-ORG** & **OPS-ORG**) cannot be used in QA and default Organizations (**QA-ORG** & **default-ORG**) and the other way around.
- Objects created in DEV Organization (**DEV-ORG**) can be used in OPS Organization (**OPS-ORG**) but not the other way around.
- Same applies to default and QA Organizations (**default-ORG** & **QA-ORG**). Objects created in **default-ORG** can be used in **QA-ORG** Organization but not the other way around.
- The default Resource Group (**default-RG**) does not belong anymore to default Organization (**default-ORG**). Same for DEV Resource Group (**DEV-RG**), it does not belong to DEV Organization (**DEV-ORG**) anymore. Both Resource Groups are unavailable unless they are managed by other Organization.

For this scenario, the most intuitive solution is **OPS-ORG** associated with **ORG-RG** & **DEV-RG**. Identical solution for **default-RG** which could be attached to **QA-ORG**:

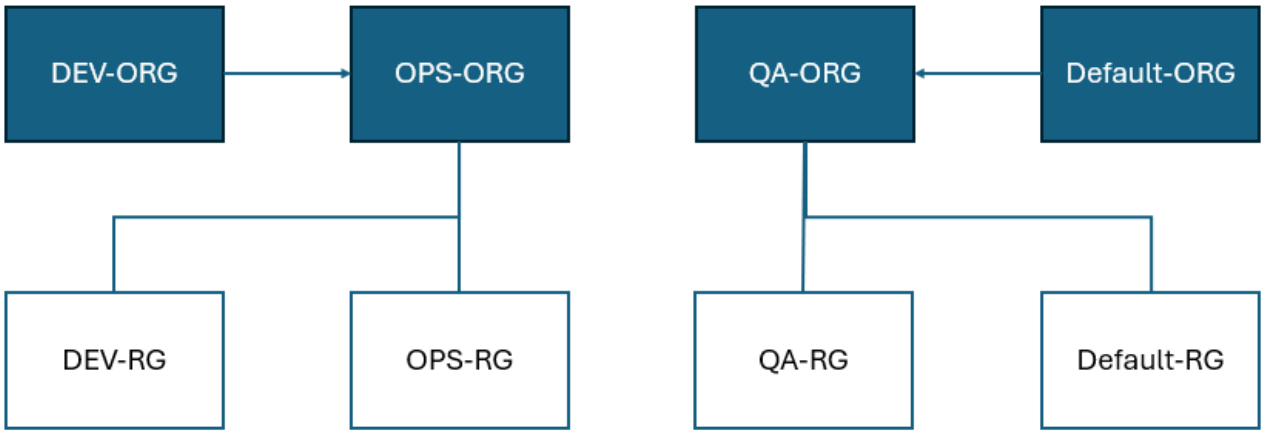
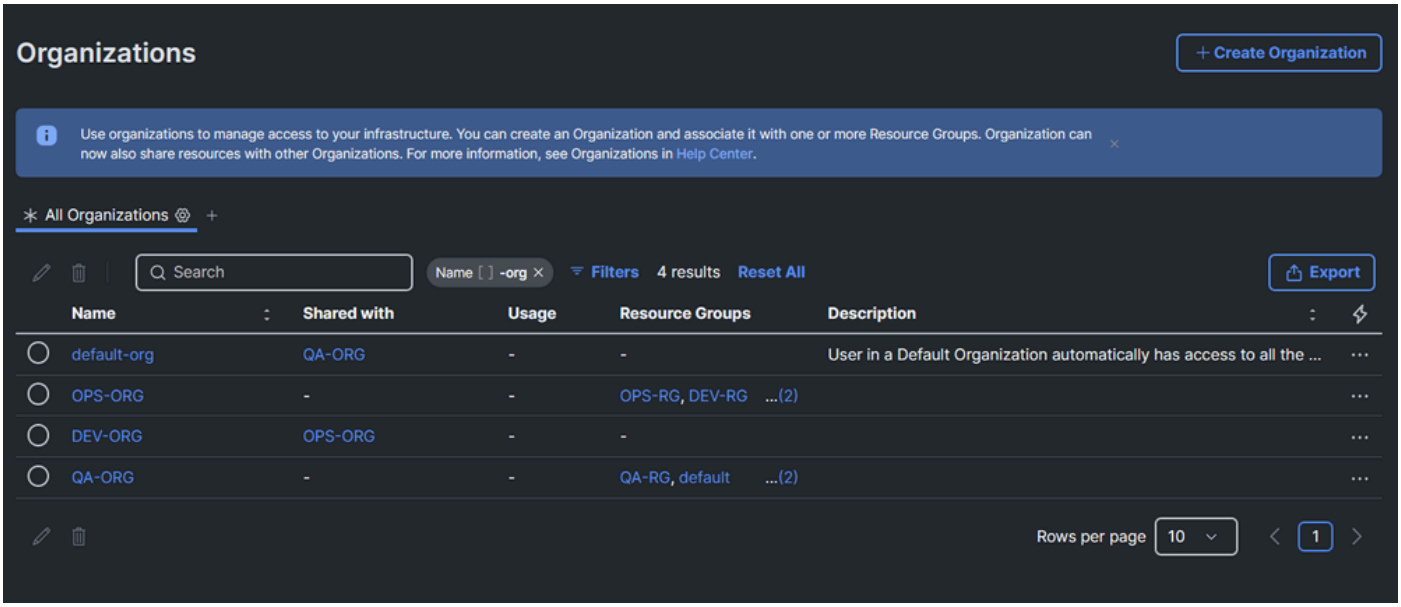


Diagram of Proposed Solution for Scenario 4



This is the result of the configuration proposed as an intuitive solution for Scenario 4. It is evident that the OPS Organization (OPS-ORG) is associated to the Resource Groups of OPS and DEV (OPS-RG & DEV-RG). On the other hand the QA Organization is associated with the default and QA Resource Groups (default-RG & QA-RG).

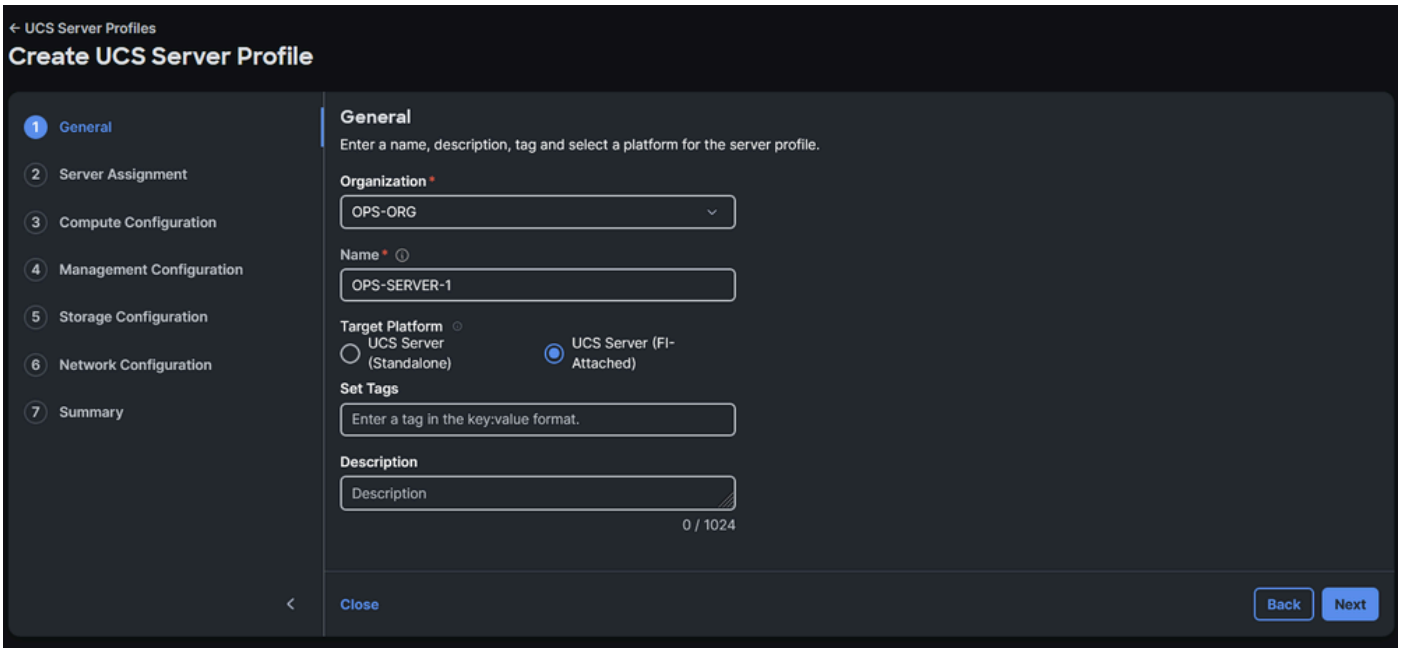
Verify

For this section, scenario 4 is used as a reference.

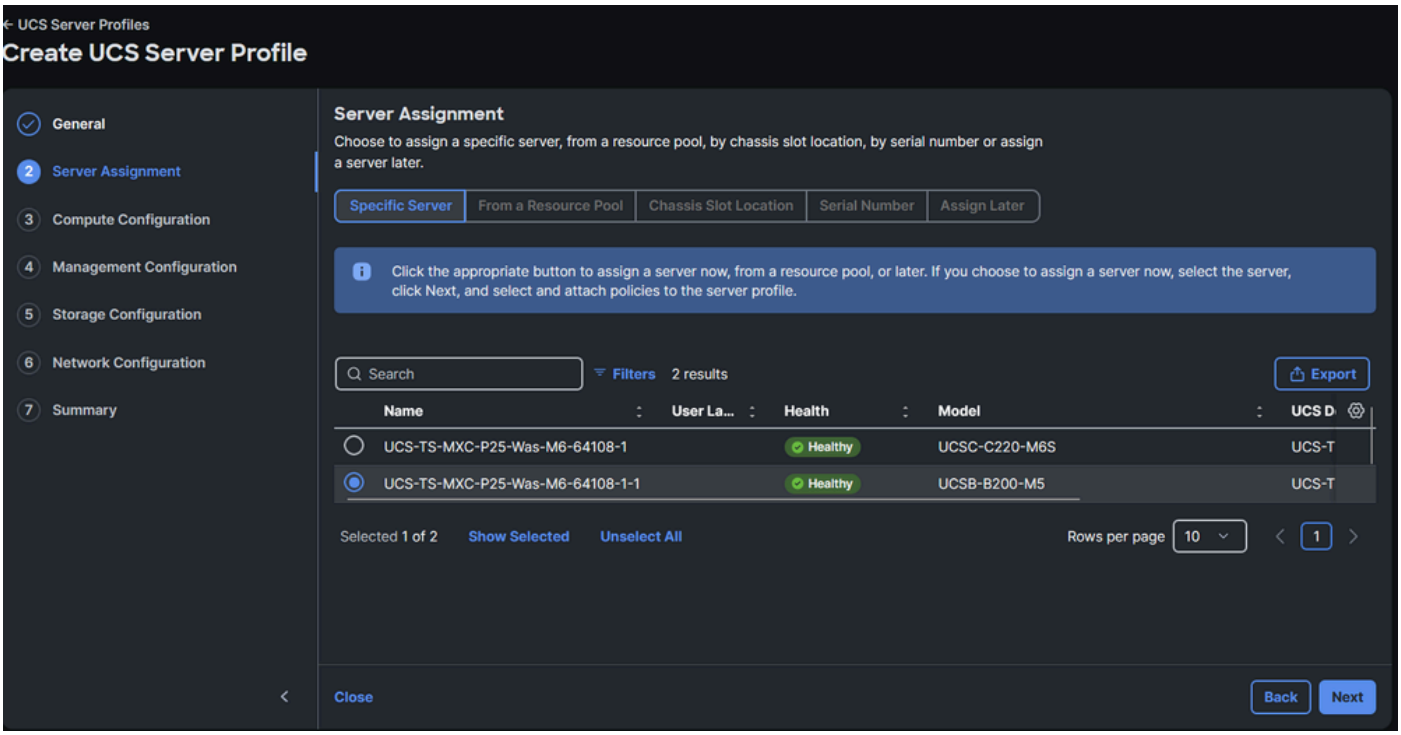
Through the Creation and Assignment of a Server Profile

Create a Server Profile in the desired organization.

1. Navigate to **Configure** > **Profiles** > **UCS Server Profiles** > **Create UCS Server Profile**:

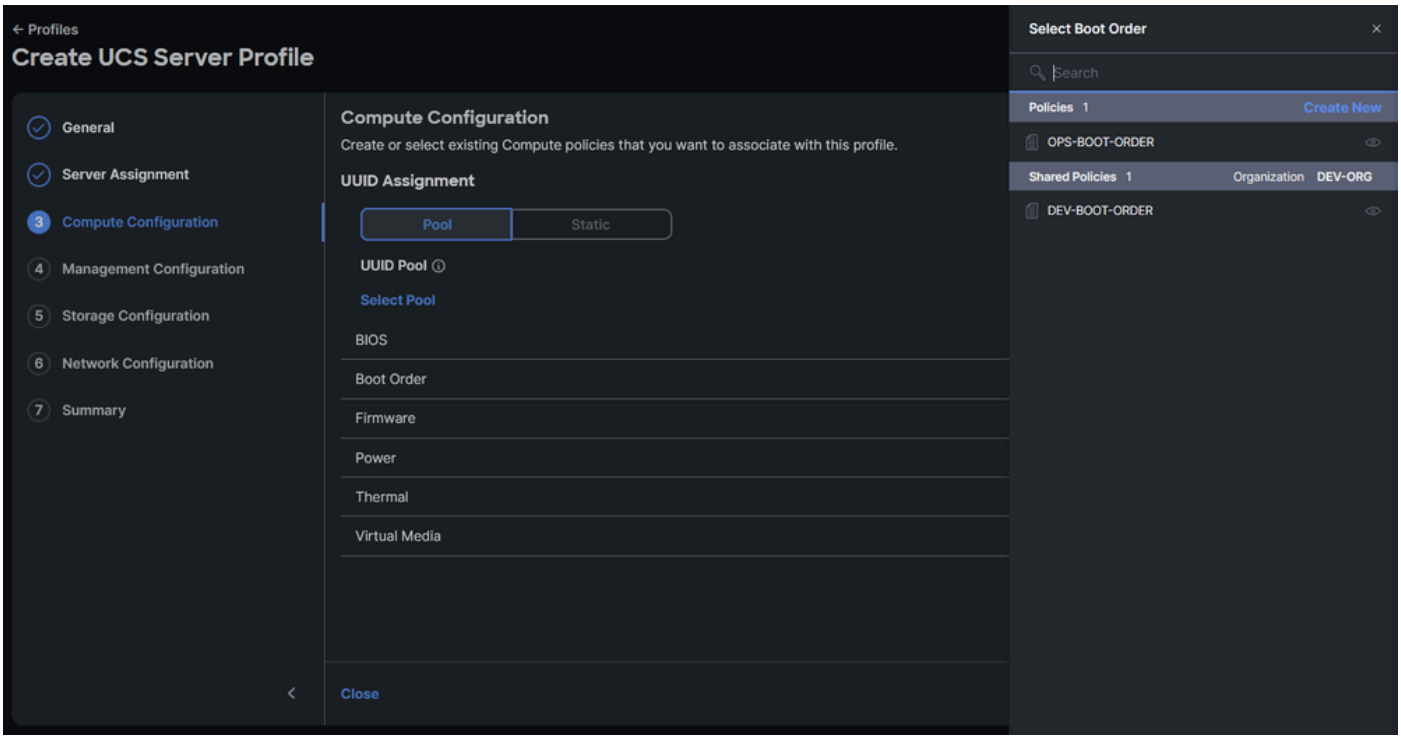


You can see the servers associated with your organization listed by the resource groups they belong to.



2. Associate the policies to the profile depending on the Organization the policies belong to.

The image shows the policies of the profiles from OPS and DEV Organizations. This can happen because **DEV-ORG** is shared with **OPS-ORG**:



Through Intersight API Requests

Tip: On Query Parameters, ensure to use the same exact letters for Key and Value Examples to avoid errors.

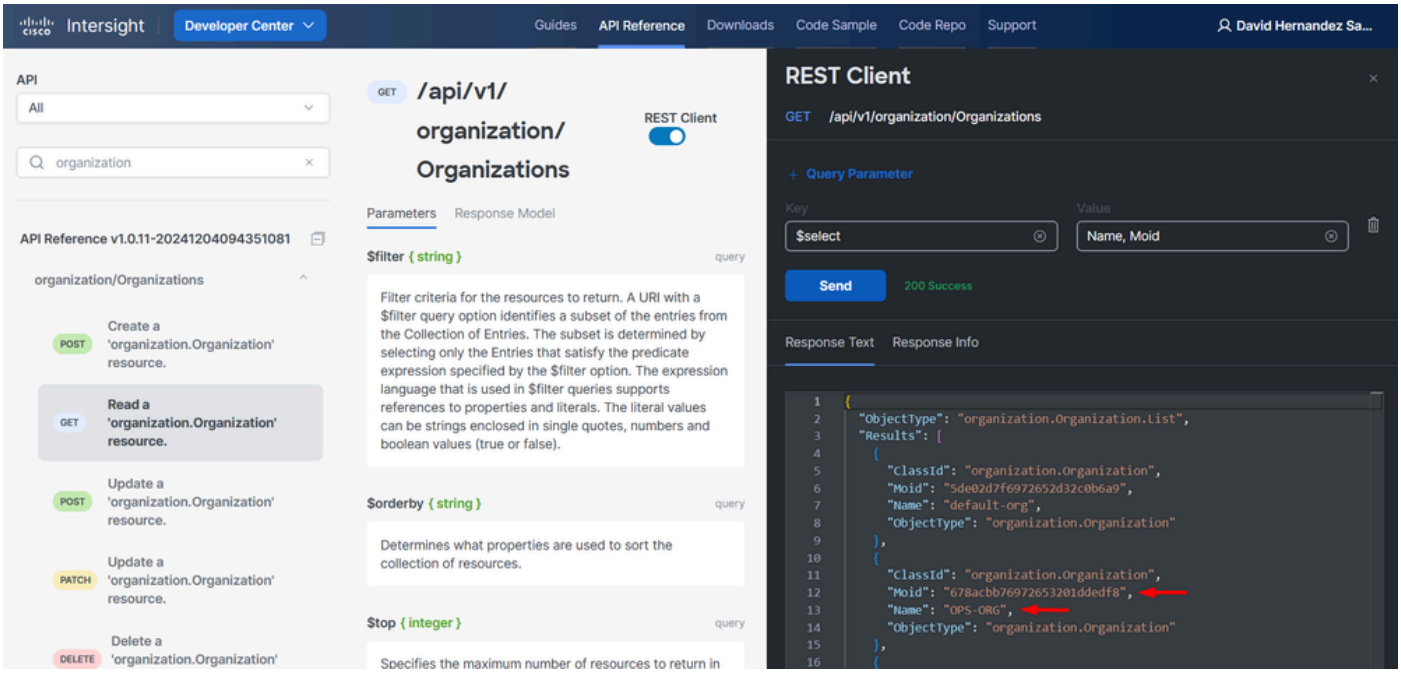
Navigate to Intersight API Reference and log in with your account:

1. Look for the **/api/v1/organization/Organizations** request.
2. Select the first **GET** call, and then enter the required Query Parameters.

This example uses these parameters:

Key	Value	Usage
$select	Name, MOID	Select the value(s) to display from that object.

The response lists the Organizations created in your Intersight Account. Copy the MOID of the organization you are interested in for future reference.



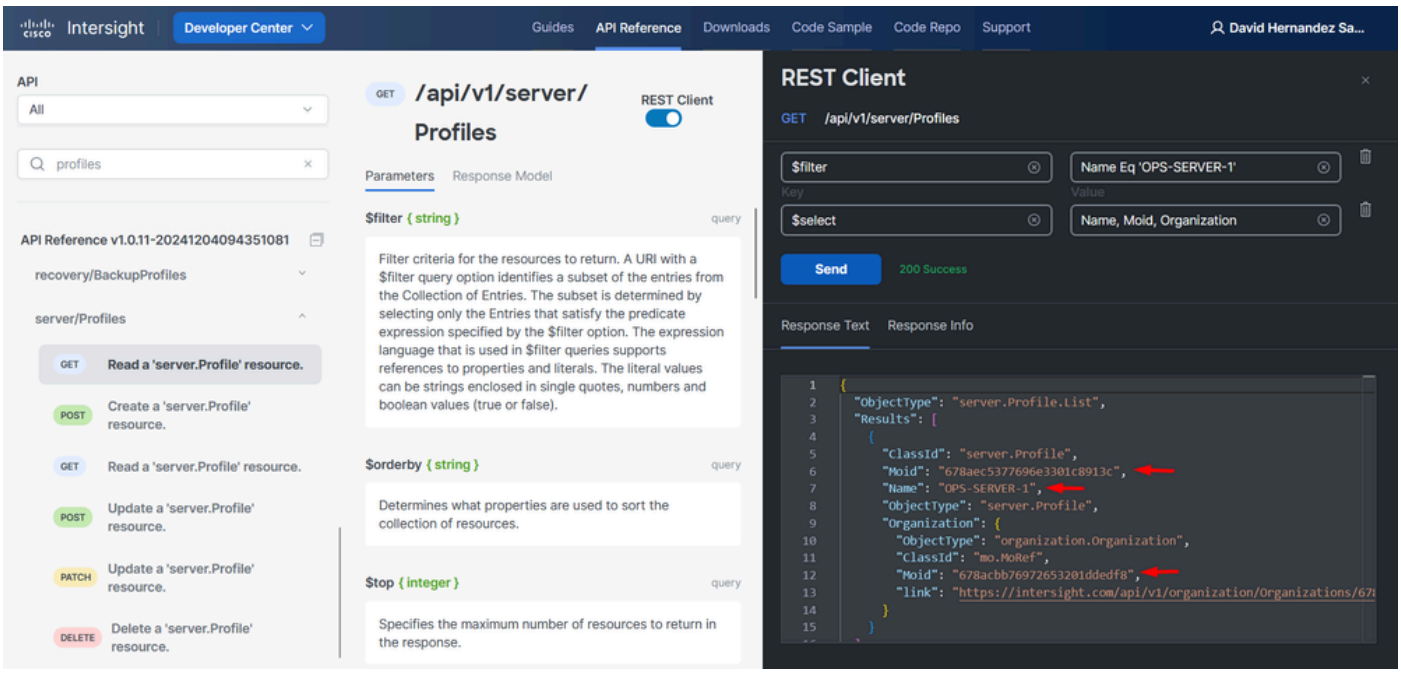
The MOID related to OPS-ORG is 678acbb76972653201ddedf8

Look for **/api/v1/server/Profiles** and enter the Query Parameters.

This example uses these parameters:

Key	**Value**	**Usage**
$filter	Name Eq 'OPS-SERVER-1'	Filter output to server profile that has the name entered.
$select	Name, MOID, Organization	Select the values to display from that object. Values displayed are Profile Name, Profile MOID and Organization MOID.

Verify that the profiles belongs to the organization. Match the MOID.

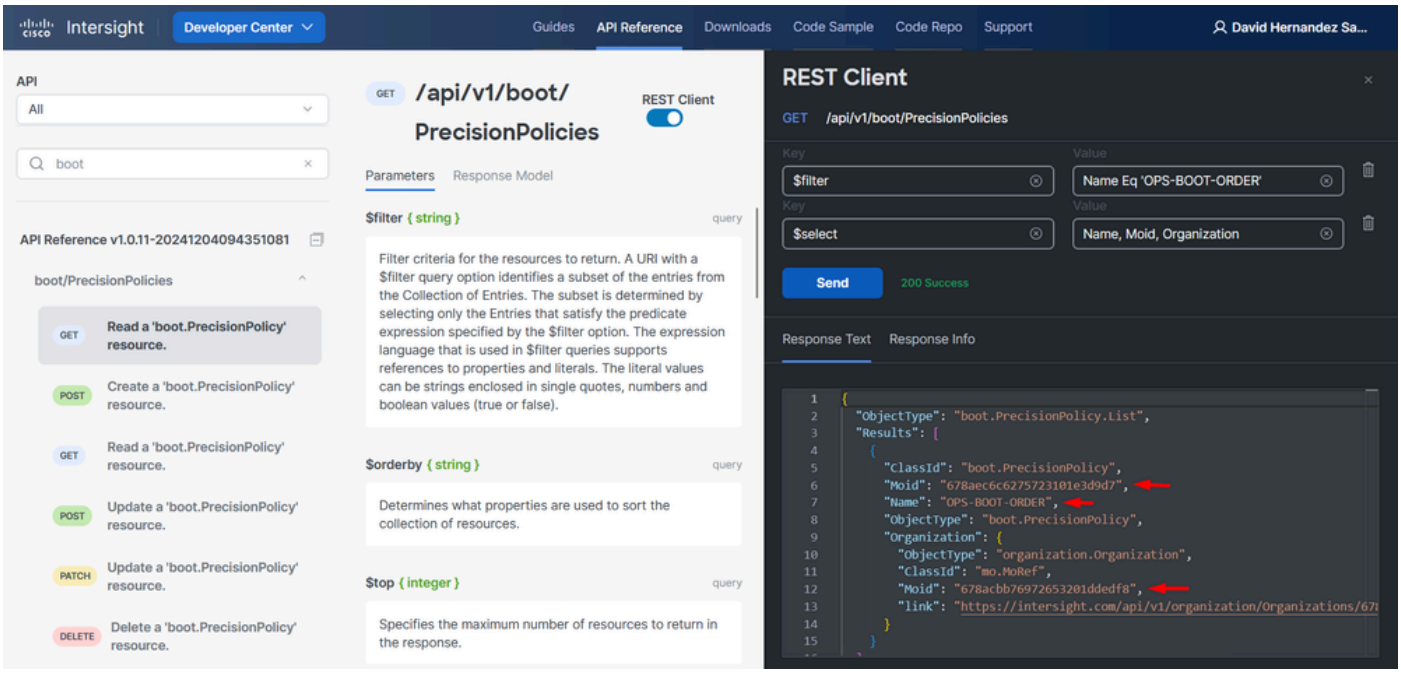


The Organization MOID associated with the Profile 'OPS-SERVER-1' is 678acbb76972653201ddedf8 which corresponds to OPS-ORG.

You can do the same for your policies. For this case, **/api/v1/boot/PrecisionPolicies** is used. This is because a boot order policy is sought to check which Organization it belongs to.

This example uses these parameters:

Key	Value	Usage
$filter	Name Eq 'OPS-BOOT-ORDER'	Filter output to server profile that has the name entered.
$select	Name, MOID, Organization	Select the values to display from that object. Values displayed are Policy Name, Policy MOID and Organization MOID.

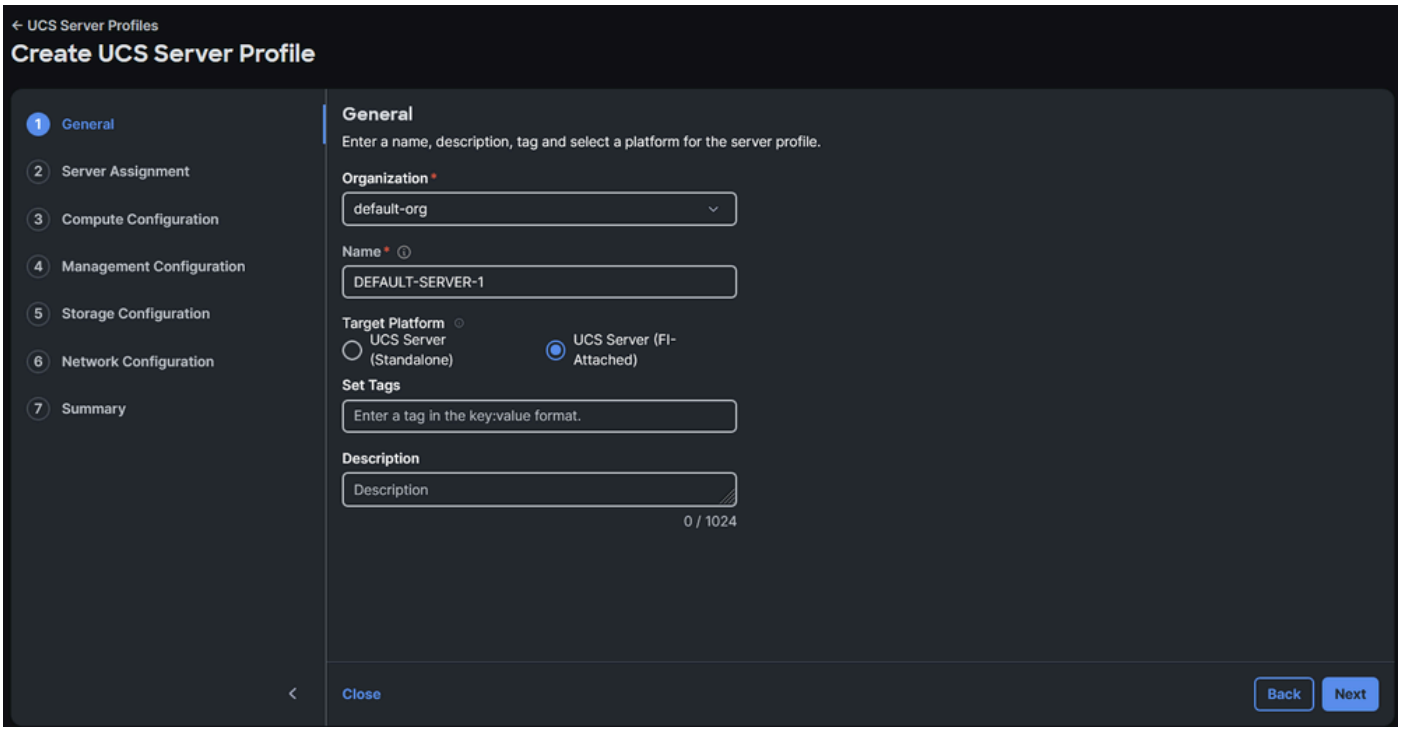


The Organization MOID associated with the policy OPS-BOOT-ORDER is 678acbb76972653201ddedf8 which corresponds to OPS-ORG.

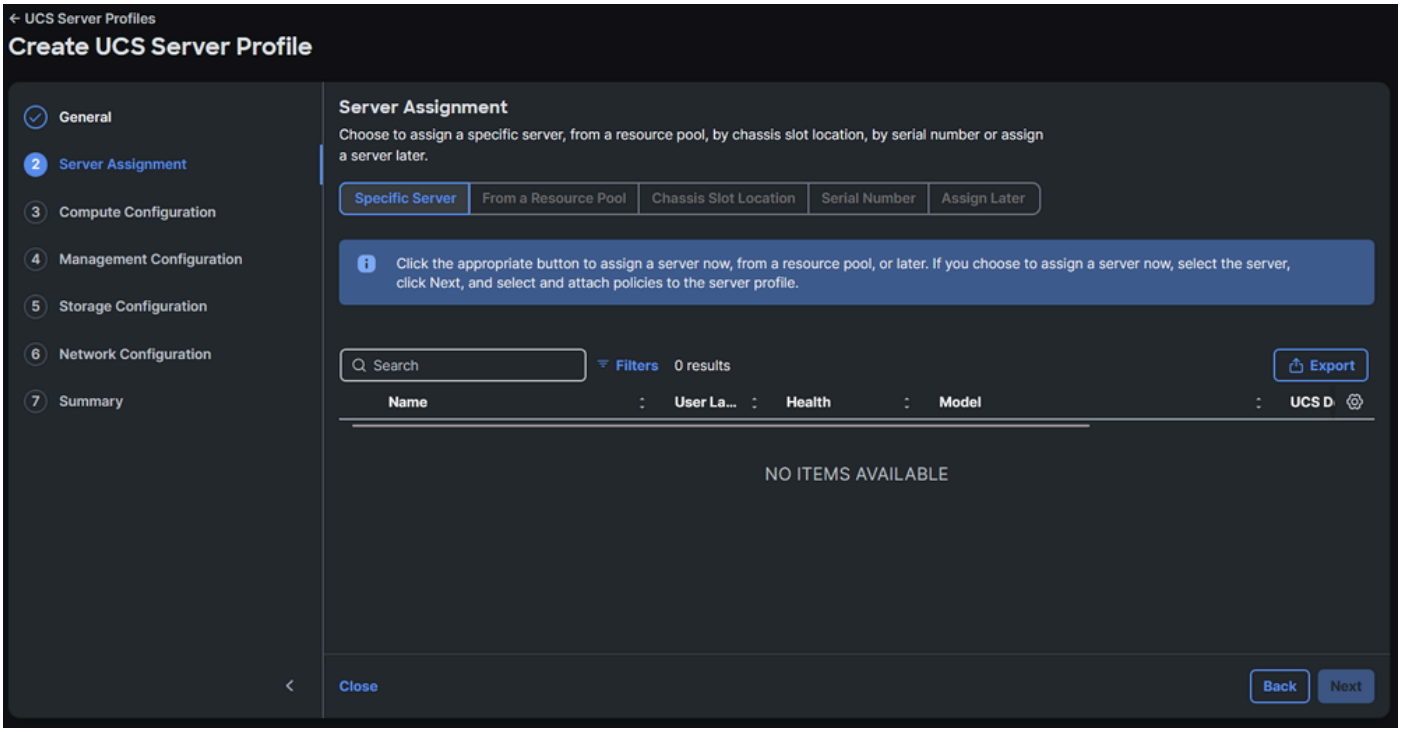
Troubleshoot

Issue 1. No Servers Listed after the Creation of a Server Profile with a Specific Organization

For this issue, Scenario 4 is used as a reference.

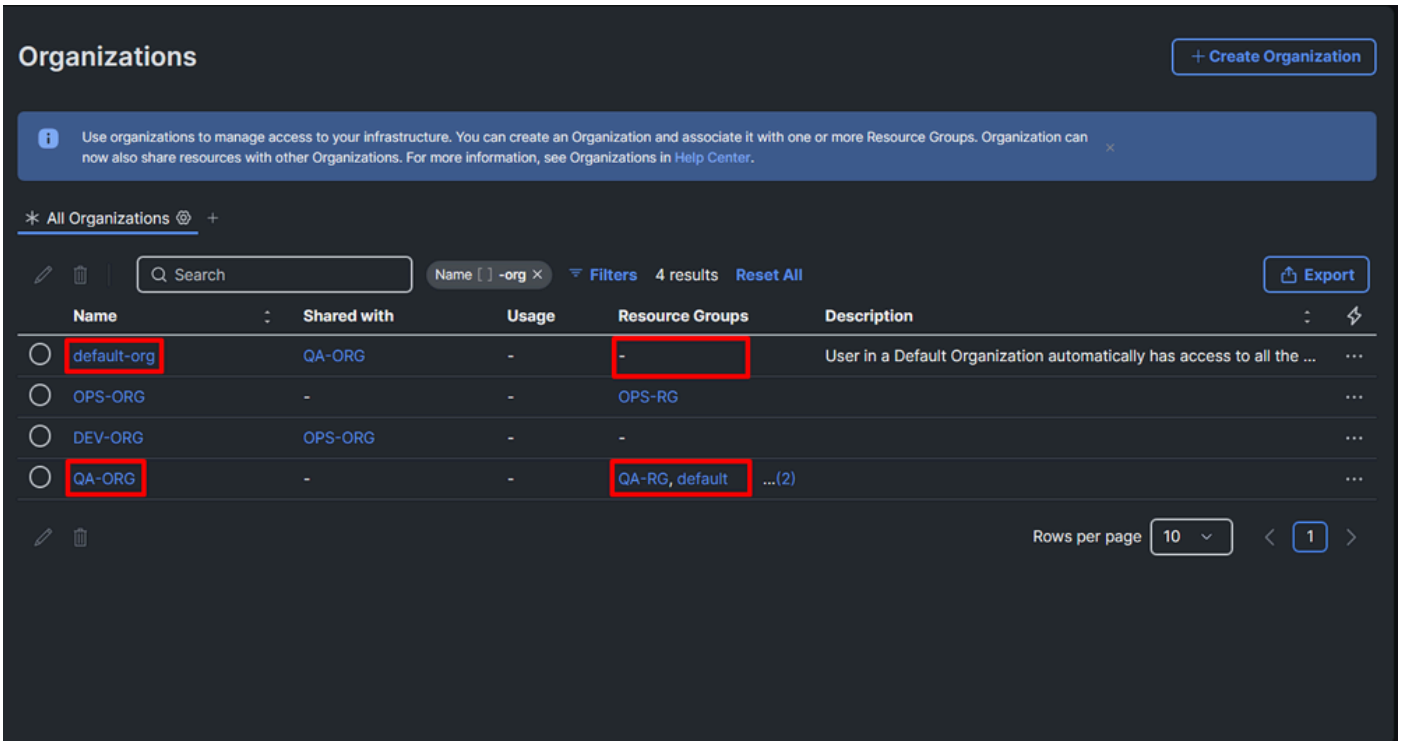


Server Profile is Created with Default Organization (default-ORG)



No Server is Listed when You Try to Assign the Server Profile

Verify that the organization is directly associated with the resource group of the server. It cannot be from a shared organization since they share objects such as pools, policies, and profiles; not resources such as servers.



The Default Organization (default-ORG) is not directly associated with the Resource Group. If the Server Profile is created with QA Organization instead (QA-ORG), the servers are listed in the Server Assignment section.

Issue 2. Cannot Delete a Resource Group

1. Verify the Resource Group is not associated with any Organization. If so, edit the Organization to not use the Resource Group anymore.

Issue 3. Cannot Delete an Organization

1. Check if a Profile, Pool, or Policy is associated with it. If that is the case, remove the object(s).
2. Look at the Organizations table and confirm it is not shared with other Organization.

⚠ **Caution**: You can remove Organizations even if they are associated with a Resource Group. Consider the attachment of Resource Groups to an Organization, since it is necessary to have a Profile assignment.

Issue 4. Fabric Interconnect does not Belong to any Organization and Domain Profile Cannot be Associated

Check that all domain servers belong to a common Resource Group. This Resource Group must be associated with the Organization that owns the domain profile.

✎ **Note**: The Chassis Organizations work in much the same way as the Domain Organizations do.

Issue 5. Servers have been Added to a Resource Group, yet the Fabric Interconnect does not Show the Organization

1. Edit the Resource Group, make a change: unselect a server from it. Save the changes.
2. Edit the Resource Group and add the unselected server to add it again. Save changes and verify.

Repeat 2-3 times if necessary.
3. Ensure all servers that belong to the Fabric Interconnect are members of the Resource Group which is associated to the Organization you require.

Alternative:

- Edit the Resource Group and add **All** devices and save. Edit one more time and leave only the specific servers you want to belong to your Resource Group. (This is most likely to work but the complexity depends directly on the number of servers managed on the account.)

Related Information

- Cisco Intersight Help Center - Resources
- Cisco Intersight Help Center - Organizations and Roles in Intersight
- Cisco Intersight Help Center - Assigning Individual Servers of IMM Domains to a Resource Group
- Advanced Configurations (at-scale) for Intersight Managed Mode (IMM)
- Cisco Intersight API Docs
- Troubleshoot Actions on IMM Servers through Intersight API Requests - Cisco