

Convert Video Communications Server Cluster to Expressway Cluster

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Introduction

This document describes conversion of Video Communications Server (VCS) Cluster to Expressway Cluster.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco Expressways
- Video Communications Server (VCS) Cluster

Components Used

The information in this document is based on these software and hardware versions:

- VCS Cluster

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.

Configure

***Steps along with snippets have been shared in this section:**

Summary of Migration

1.) Before proceeding with the conversion, ensure to take backups of all VCS nodes from the Web GUI, including certificate backups.

<https://video.cisco.com/detail/video/6036232606001>

1.1.) Login to winscp as a root.

1.2.) /tandberg/persistent/certs/ take a backup of certs folder

2.) Log in to the VCS node using **ssh** (as admin).

2.1.) Run the command - **Xconfiguration**

2.2.) Save the output in Notepad.

3.) On the VCS overview, click on “Run service setup”:

3.1.) Once you click on that option, that takes you to the services selection so you can opt to use Expressway.

3.2.) Select **Expressway, C or E**.

4.) After you select your expressway, select the services that you run on the server.

5.) Click **Continue**.

5.1.) On next page, click **Continue** again.

Note: Option keys are not needed.

5.2.) On next page, complete configuration and click **Finish**.

* **Steps with snippet shared for reference:**

Before conversion:

The screenshot shows a web interface for configuring a cluster. The page title is "Clustering" and the section is "Configuration". The form includes the following fields:

- Cluster name (FQDN for Provisioning):
- Configuration primary:
- TLS verification mode:
- Cluster IP version:
- Peer 1 address: ✓Certificate: Valid
- Peer 2 address: ✓Certificate: Valid
- Peer 3 address:
- Peer 4 address:


Additional status messages on the right side of the form:

- ✓Clustering: This system
- ✓Certificate: Valid
- ✓Clustering: Active as ExpC2 (Resolved 'expc2.acanotaclab.com' as '10.104.215.216')



Note: On the Overview page, 2500 Free Registrations on VCS, License types are traversal and non-traversal.

Overview

 Note: This VCS is part of a cluster but is not the configuration primary. You should only change configuration that is specific to this peer (marked with †). Other configuration

System mode

Selected modes Generic - Do you want to [Run service setup?](#)

System information

[System name](#)

Up time 20 hours 50 minutes 21 seconds

[Software version](#) X14.0.7

[IPv4 address](#) LAN 1: 192.168.10.22

[Options](#) 0 Non Traversal Calls, 0 Traversal Calls, 2500 Registrations, Encryption, FindMe, Device Provisioning.

Resource usage (last updated: 12:55:15 UTC)

		Total	192.168.10.20	192.168.10.22
Non-traversal calls	Current	0	0	0
	Peak	0	0	0
	Since last restart	0	0	0
	License usage current	N/A		
	License usage peak	N/A		
Traversal calls	Current video	0	0	0
	Current audio (SIP)	0	0	0
	Peak video	0	0	0
	Peak audio (SIP)	0	0	0
	Since last restart video	0	0	0
	Since last restart audio (SIP)	0	0	0
	License usage current	N/A		
	License usage peak	N/A		
Local Registrations	Current	0	0	0

On VCS, you only have the “Option Keys” option, whereas on Expressway you have Smart Licensing option too.



Note: As of x14.2, the “Option Keys” option has been removed on the Expressway Series; only Smart Licensing supported.

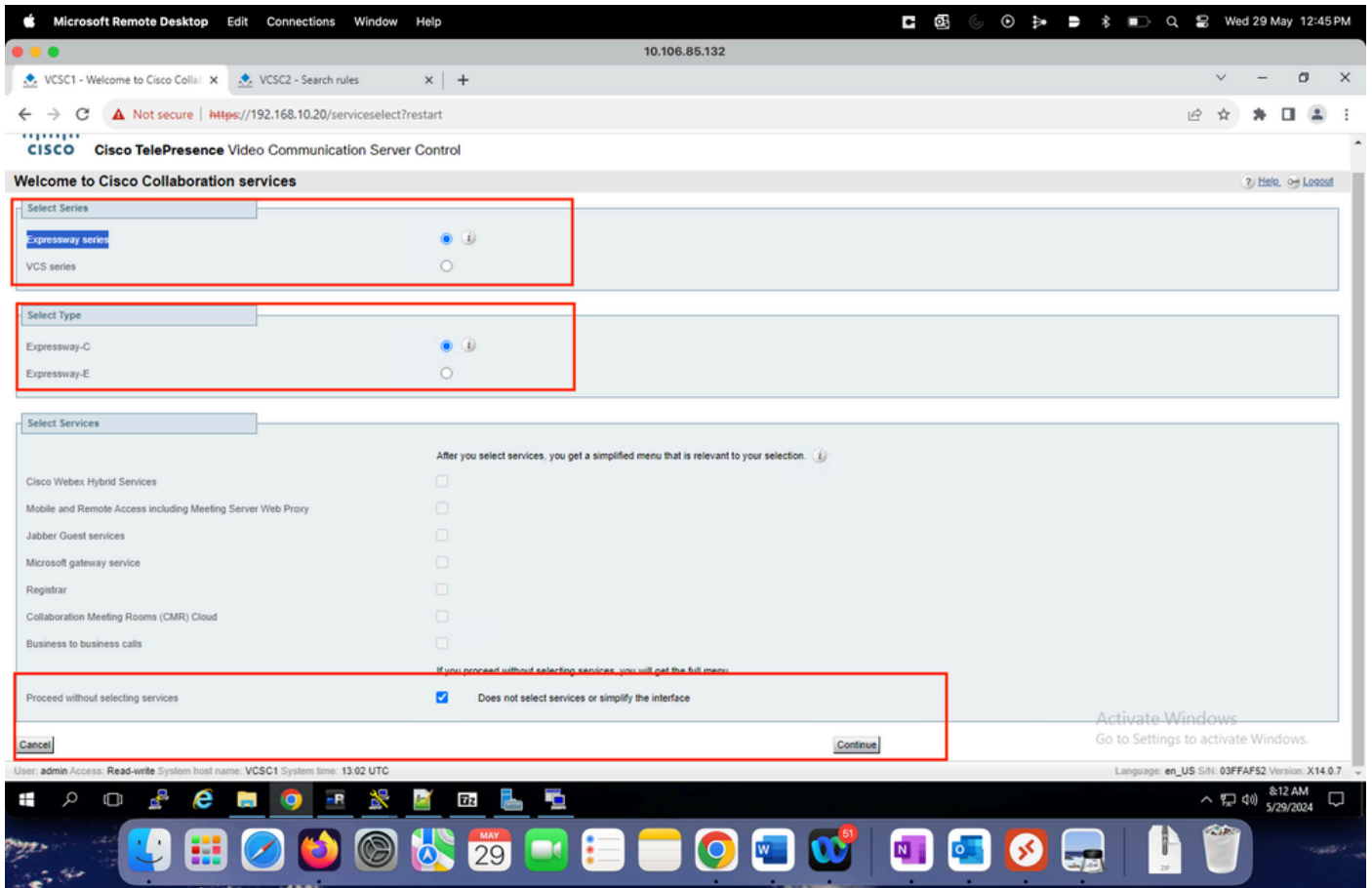
The screenshot shows the Cisco TelePresence Video Communication Server Control web interface. The browser address bar displays "Not secure | https://192.168.10.20/searchrules". The navigation menu includes Status >, System >, Configuration >, Applications >, Users >, and Maintenance. The Maintenance menu is open, listing options such as Upgrade, Logging, Email Notifications, Option keys, Tools >, Security >, Backup and restore, Diagnostics >, Maintenance mode, Language, and Restart options. The main content area shows a table of search rules with columns for Priority, Rule name, Protocol, Source, and Authentication. Two rules are listed: one with priority 50 and name LocalZoneMatch, and another with priority 100 and name test. Below the table are buttons for New, Delete, Enable, Disable, Select all, and Unselect all. A Related tasks section contains links for testing pattern matches and performing search tests.

Priority	Rule name	Protocol	Source	Authentication
50	LocalZoneMatch	Any	Any	No
100	test	Any	Any	No

Migration


Conversion steps with reference snippets:

- 1.) Go to the Overview Page under Status and click **Run service setup**.
- 2.) Select the Expressway server and Server Type, select C or E accordingly and select **Proceed**. Do not select services.
- 3.) Click **Continue**.



4.) On the next page, apply the license keys obtained. Otherwise, you can skip the Add keys option and click **Continue**. License keys can be added at later time.

Option keys

 You've licensed this system correctly for the services you selected. Click Continue to go to configuration

Licensing help

Serial number

03FFAF52

How to get licenses

You need this system's serial number to order keys. Go to the [Product License Registration Portal](#), and load your PAK (Product Authentication Identifiers (PIDs) that are named like the examples shown in the License status section further down this page. Select the PIDs that you need. When you've selected PIDs, click Assign to device and enter the serial number with the keys you need. Paste all the email text into this page so the system can read the keys for you. If you generate more than one

License status

Based on the services you have selected:

Optional

Description	License PID example	Status
Rich Media Sessions	LIC-EXP-RMS	Not loaded
Microsoft Interoperability	LIC-EXP-MSFT	Not loaded
H323-SIP Interworking Gateway	LIC-EXP-GW	Not loaded
FindMe	LIC-VCS-FINDME	Not loaded

Apply keys

Paste the text from your option keys email here

Add keys

[New paste area](#)

[Back](#) [Skip Service Setup Wizard](#)

[Continue](#)

5.) On the next page, verify and confirm the core configuration.

6.) Click **Finish**:

Confirm core configuration

IP	
IP protocol	↑ IPv4 ⓘ
IPv4 address	* ↑ 192.168.10.20 ⓘ
IPv4 subnet mask	* ↑ 255.255.128.0 ⓘ
IPv4 gateway	* ↑ 192.168.0.1 ⓘ
Configure IP on IP page instead	

Credentials	
Your current password	Password has been set
Root password	Password has been set

DNS	
System host name	* ↑ VCSC1 ⓘ
Domain name	* ↑ ssmlab.com ⓘ
Primary DNS address	192.168.10.25
Secondary DNS address	↑ ⓘ
Configure DNS servers on DNS page instead	


Time	
Primary NTP address	192.168.0.1
Configure NTP servers on Time page instead	

[Back](#) [Skip Service Setup Wizard](#)

[Finish](#)

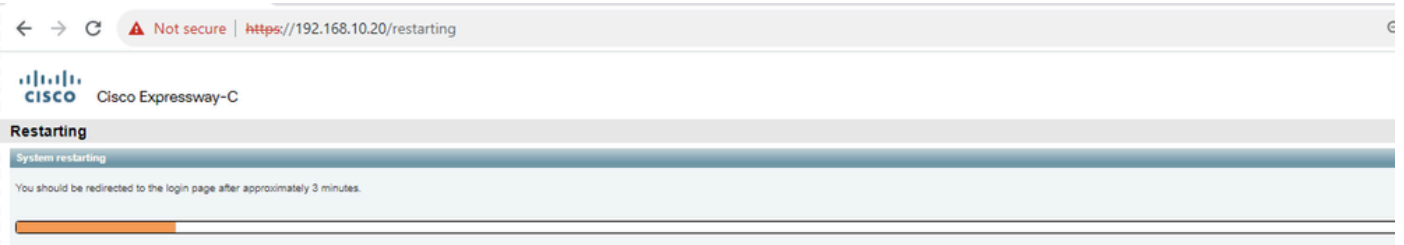
Restart is required to take the changes into effect:

Restart options

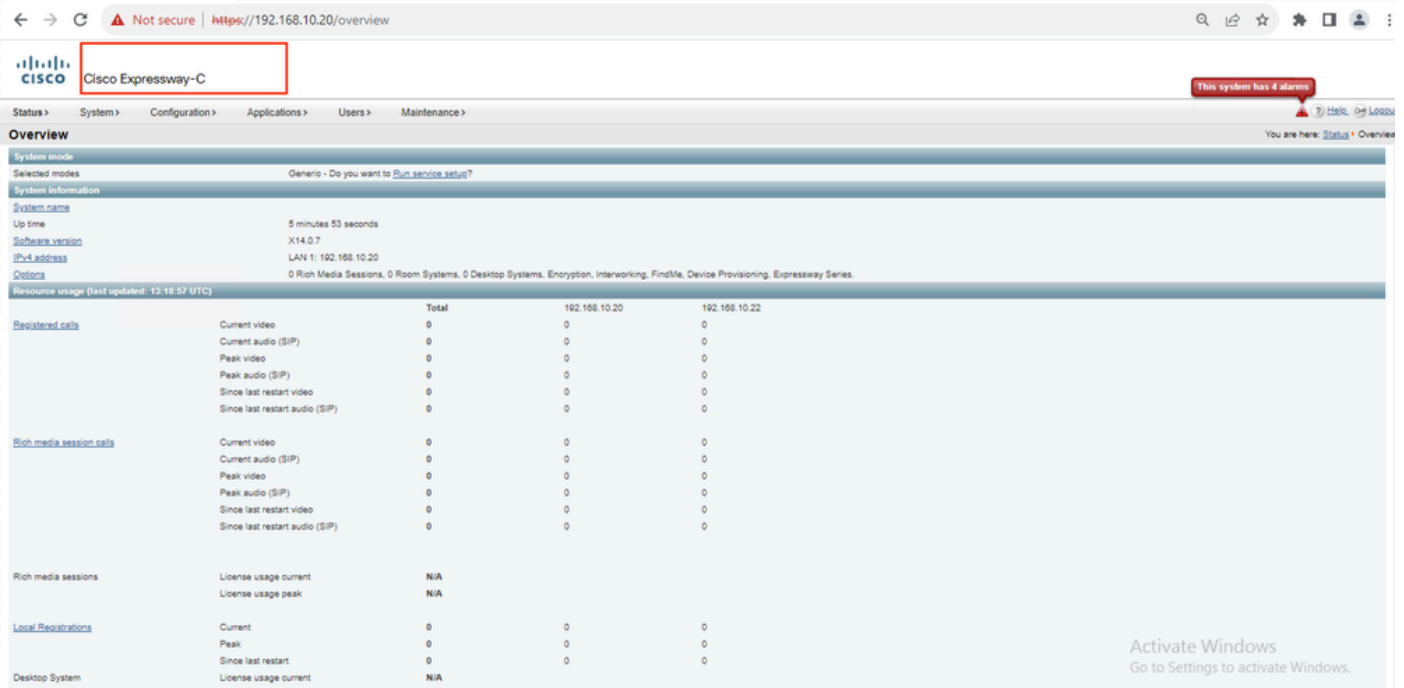
 **Note:** This Expressway is part of a cluster but is not the configuration primary. You should only change configuration that is specific to this peer (marked with †). Other co

System status	
Cluster status	This system is part of a cluster
Call status	There are 0 calls active
Registration status	There are 0 registrations active

[Restart](#)




The primary node has been migrated to Expressway:




Peer node is still a VCS server but no issues are observed:

← → ↻ ⚠ Not secure <https://192.168.10.22/overview>

 **Cisco TelePresence Video Communication Server Control**

Status > System > Configuration > Applications > Users > Maintenance >

Overview

 **Note:** This VCS is part of a cluster but is not the configuration primary. You should only change configuration that is specific to this peer (marked with †). Other

System mode

Selected modes: Generic - Do you want to [Run service setup?](#)

System information

System name

Up time: 21 hours 3 minutes 13 seconds

Software version: X14.0.7

IPv4 address: LAN 1: 192.168.10.22

Options: 0 Non Traversal Calls, 0 Traversal Calls, 2500 Registrations, Encryption, FindMe, Device Provisioning.

Resource usage (last updated: 13:18:43 UTC)

		Total	192.168.10.20	192.168.10.21
<u>Non-traversal calls</u>	Current	0	0	0
	Peak	0	0	0
	Since last restart	0	0	0
	License usage current	0%		
	License usage peak	0%		
<u>Traversal calls</u>	Current video	0	0	0
	Current audio (SIP)	0	0	0
	Peak video	0	0	0
	Peak audio (SIP)	0	0	0
	Since last restart video	0	0	0
	Since last restart audio (SIP)	0	0	0
	License usage current	N/A		

7.) Repeat the previous steps on the peer node to migrate to Expressway.

No issues are observed on both nodes after conversion:

Clustering

Configuration

Cluster name (FQDN for Provisioning):

Configuration primary:

TLS verification mode:

Cluster IP version:

Peer 1 address: ✓Certificate: Valid
 ✓Clustering: This system

Peer 2 address: ✓Certificate: Valid
 ✓Clustering: Active as ExpC2 (Resolved 'expc2.acanotaclab.com' as '10.104.215.216')

Peer 3 address:

Peer 4 address:

The License Type has been changed:



Status > System > Configuration > Applications > Users > Maintenance >

Overview

[System information](#)

[System name](#)
Up time: 15 minutes 51 seconds
[Software version](#): X14.0.7
[IPv4 address](#): LAN 1: 192.168.10.20
[Options](#): 0 Rich Media Sessions, 0 Room Systems, 0 Desktop Systems, Encryption, Interworking, FindMe, Device Provisioning, Expressway Series

Resource usage (last updated: 13:29:26 UTC)

	Total	192.168.10.20	192.168.10.22
Registered calls			
Current video	0	0	0
Current audio (SIP)	0	0	0
Peak video	0	0	0
Peak audio (SIP)	0	0	0
Since last restart video	0	0	0
Since last restart audio (SIP)	0	0	0
Rich media session calls			
Current video	0	0	0
Current audio (SIP)	0	0	0
Peak video	0	0	0
Peak audio (SIP)	0	0	0
Since last restart video	0	0	0
Since last restart audio (SIP)	0	0	0
Rich media sessions			
License usage current	N/A		
License usage peak	N/A		
Local Registrations			
Current	0	0	0
Peak	0	0	0
Since last restart	0	0	0
Desktop System			
License usage current	N/A		
License usage peak	N/A		
Room System			
License usage current	N/A		
License usage peak	N/A		

The conversion process is complete.

Frequently Asked Questions

Q: Does conversion impact clustering?

A: No

Q: Does conversion of primary node automatically convert other nodes to Expressway?

A: No, it needs to be done separately on each node.

Q: What would be the impact to licenses?

A: Licenses gets changed.

Points to be Considered before Migration

- Traversal/Non-traversal licenses change to RMS licenses
- You get 2500 free registrations on VCS that is not available on Expressway
- Registration licenses are changed to Desktop/Room Licenses and needs to be obtained separately, Please talk to the Cisco sales team
- After version x14.2 traditional licenses are not supported on Expressway Series:

- https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/expressway/admin_guide/X14-2/exwy_b_cisco-expressway-administrator-guide-x142/exwy_m_smart-licensing-x142.html

Related Information

VCS is already end of support:

- https://www.cisco.com/c/en/us/td/docs/voice_ip_comm/expressway/release_note/X14-2-5/Expressway/exwy_b_cisco-expressway-release-note-x1425.html#reference_D8C52445C823D50F27C9DD95F9759E52