

Mobile and Remote Access (MRA) License Key Requirements Guide

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Introduction

This document describes Mobile and Remote Access (MRA) license key requirements.

Prerequisites

Requirements

Cisco recommends that you have knowledge on these topics:

- Expressway Series and Video Communication Server (VCS) Series application.
- Successfully installed a VCS Series or Expressway Series server and applied a valid IP address reachable via web interface and or Command Line Interface (CLI).
- Applied for and received a licensing email with any option or release keys valid for the device application serial number.
- Accessed the web interface with an admin account.
- Reviewed 'Install a VCS Option Key via the Web Interface and CLI Configuration Example'
- [Install VCS Option Key](#)
- Reviewed 'Install a VCS Release Key via the Web Interface and CLI Configuration Example'
- [Install VCS Release Key](#)

- Reviewed 'Install a Cisco Expressway Series Release Key via the Web Interface and CLI Configuration Example'
- [Install Expressway Series Release Key](#)
- Reviewed 'Install an Expressway Series Option Key via the Web Interface and CLI Configuration Example'
- [Install Expressway Series Option Key](#)

Note: VCS Installation guides can be found here: [VCS Installation Guides](#)

Note: Expressway Series Installation guides can be found here: [Expressway Series Installation Guides](#)

Components Used

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

- Cisco VCS Series versions X8.1 and higher.
- Expressway Series versions X8.1 and higher.
- **PuTTY** (terminal emulation software)
- Alternatively, you could use any terminal emulation software that supports Secure Shell (SSH) such as Secure CRT, TeraTerm and so on.
- Licensing email with an **Option Key** or **Release Key**.
- A web browser, such as Firefox, Internet Explorer or Chrome.

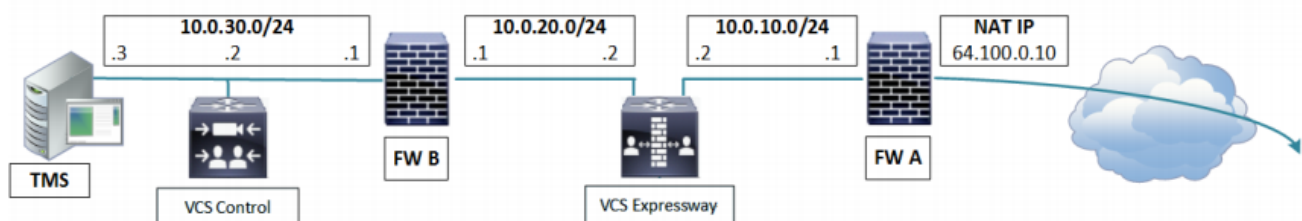
The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Configure

Network Diagram

Cisco recommends a Dual NIC VCS Series or Expressway Series deployment as shown in the image.

Figure 10 Dual Network Interfaces Deployment



Note: More information on Video Communication Server deployments found here, (Pg. 63-72): [Deployment Scenarios](#)

Configure

These web interface example videos supplement this document:

VCS Release Key Install

VCS Option Key Install

Expressway Release Key Install

Expressway Option Key Install

Required Keys

Video Communication Server - Control or Expressway - Core

- X.8 VCS Release Key for Control
- LIC-EXP-SERIES for Expressway Core

Video Communication Server - Expressway or Expressway - Edge

- X.8 VCS Release Key for VCS - Expressway
- LIC-EXP-SERIES for Expressway - Edge
- LIC-VCSE-E

Optional Keys

Video Communication Server - Control or Expressway - Core

- LIC-EXP-RMS

Video Communication Server - Expressway or Expressway - Edge

- LIC-EXP-RMS
- LIC-VCS-DI /LIC-EXP-AN (Recommended)
- LIC-EXP-TURN
- LIC-EXP-GWY

Key Description

X.8 Video

Communication Server Release Key
Activates Cisco Video Communication Server

LIC-EXP-SERIES Enables Expressway Series

LIC-VCSE-E Enables Expressway-E Feature Set

**LIC-VCS-DI / LIC-EXP-AN
Enables Dual NIC interfaces for Expressway-Edge

- **LIC-EXP-RMS Required for concurrent calls to and from any endpoint or application not registered to Cisco Unified Communications Manager. For example, business-to-business calls, Cisco Collaboration Meeting Rooms, Cisco Jabber Guest, and interworked calls (H.323 to SIP, H.264 AVC to H.264 SVC)
- **LIC-EXP-TURN Enables TURN Relay Option
- **LIC-EXP-GWY Enables Interworking Gateway Feature (H323-SIP)

Note: Indicates Not Required For Mobile and Remote Access functionality

Verify

Use this section in order to confirm that your configuration works properly.

Add the required **MRA option** and **release** keys to the VCS Series Device or Expressway Series Device. Navigate to Maintenance > Option Keys and note the keys displayed in the **Option keys** section.

Note: For VCS Series, review Install a VCS Option Key via the Web Interface and CLI Configuration Example [Install VCS Option Key](#).

Also review Install a VCS Release Key via the Web Interface and CLI Configuration Example [Install VCS Release Key](#).

Alternatively for Expressway Series, review Install a Cisco Expressway Series Release Key via the Web Interface and CLI Configuration Example [Install Expressway Series Release Key](#) and Install an Expressway Series Option Key via the Web Interface and CLI Configuration Example [Install Expressway Series Option Key](#)

Note: This example shows and Expressway Series Core and Edge device.

Expressway-C

Option keys

Key	Description	Status
<input type="checkbox"/> 116341E00-1	Expressway Series	Active

Delete Select all Unselect all

System information

Serial number: 02530

Active options: 0 Rich Media Sessions, 0 Room Systems, 0 Desktop Systems, Encryption, Interworking, FindMe, Device Provisioning, Expressway Series.

Software option

Add option key:

Add option

Release key

Release key: 80555

Set release key

Expressway-E

Option keys

Key	Description	Status	Validity period
<input type="checkbox"/> 116341E00-1	Expressway Series	Active	Unlimited
<input type="checkbox"/> 116341L00-1	Advanced Networking	Active	Unlimited
<input type="checkbox"/> 116341T00-1	Traversal Server	Active	Unlimited

Delete Select all Unselect all

System information

Serial number: 0885

Active options: 0 Rich Media Sessions, 0 Room Systems, 0 Desktop Systems, 0 TURN Relays, Traversal Server, Encryption, Interworking, FindMe, Device Provisioning, Advanced Networking, Expressway Series.

Software option

Add option key:

Add option

Release key

Release key: 2529843

Set release key

Note: Adding an Expressway Series key **LIC-EXP-SERIES** requires a **RESTART** of the Expressway Series device.

Troubleshoot

This section provides information you can use in order to troubleshoot your configuration.

You should not have any issues when you install a **release key** onto a Cisco VCS Series or Expressway Series. Enter an **option key** in the **Release key** field of the device or enter an **option key** when you upgrade are the most common causes for failure. An error occurs when an option key is entered in the **Release Key** field:

A VCS Series or Expressway Series accepts any value in the **Release key** field. Reboot the device with an incorrect value entered and you receive an error **"Invalid release key"**:

Install a **release key** as noted in guides recommended for review in the **Requirements** section of this guide to correct this condition.

Engage Cisco TAC for assistance for any other types of failure.