

# Install Option Key on TC Based Endpoint

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## Introduction

This document describes how to apply a Release Key and an Option Key license to Telepresence Codec (TC) software based endpoints via the web interface and Command Line Interface (CLI).

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

- TC Software Based Endpoints
- Successfully installed the TC endpoint and applied a valid IP address that is reachable via web interface and or CLI.
- Applied for and received a licensing email with any option or release keys valid for the device serial number.
- Accessed the TC endpoint with an admin account by web interface or CLI.
- Familiar with TC Software based endpoint installation guides:

[SX Series](#)

[MX Series](#)

[EX Series,C Series](#)

### Components Used

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

- TC Software 7.X releases
- PuTTY Secure Shell (SSH) terminal emulation software for Command Line (CLI) access.

- Any TC software endpoint such as C series, MX series, SX series or EX series.
- Licensing email with a Release Key or Option 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, ensure that you understand the potential impact of any command.

## Configure

### Add Option Keys Through Web Interface

**Note:** Release Keys for TC endpoints are not required after TC6.3. You can only add release keys by the CLI via an SSH session after version TC6.3.

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Step1. Review your licensing email which contains a release key and options keys. Here is an example email.

 **\*\*\* IMPORTANT - DO NOT DISCARD THIS E-MAIL \*\*\***

You have received this email because your email address was provided to Cisco Systems during the Serial Number Lookup process for software license activation key/file. Please read this email carefully and forward it with any attachments to the proper system administrator if you are not the correct person.

System Serial Number : FCZ [REDACTED]  
Hardware Serial Number : FTT [REDACTED]  
MAC Address : E4C72260A8FE  
Service Contract : -  
SC End Date : -

Software Part Name : LIC-S52010-TC-K9:  
Tandberg Item No : :  
Shipped Version : TC7.3.6  
Shipped Version Key : 1TC007-1-[REDACTED]  
Shipped Image URL : -  
Upgrade To : TC7.3.6  
Upgrade To Key : 1TC007-1-[REDACTED]  
Upgrade To Image URL : -

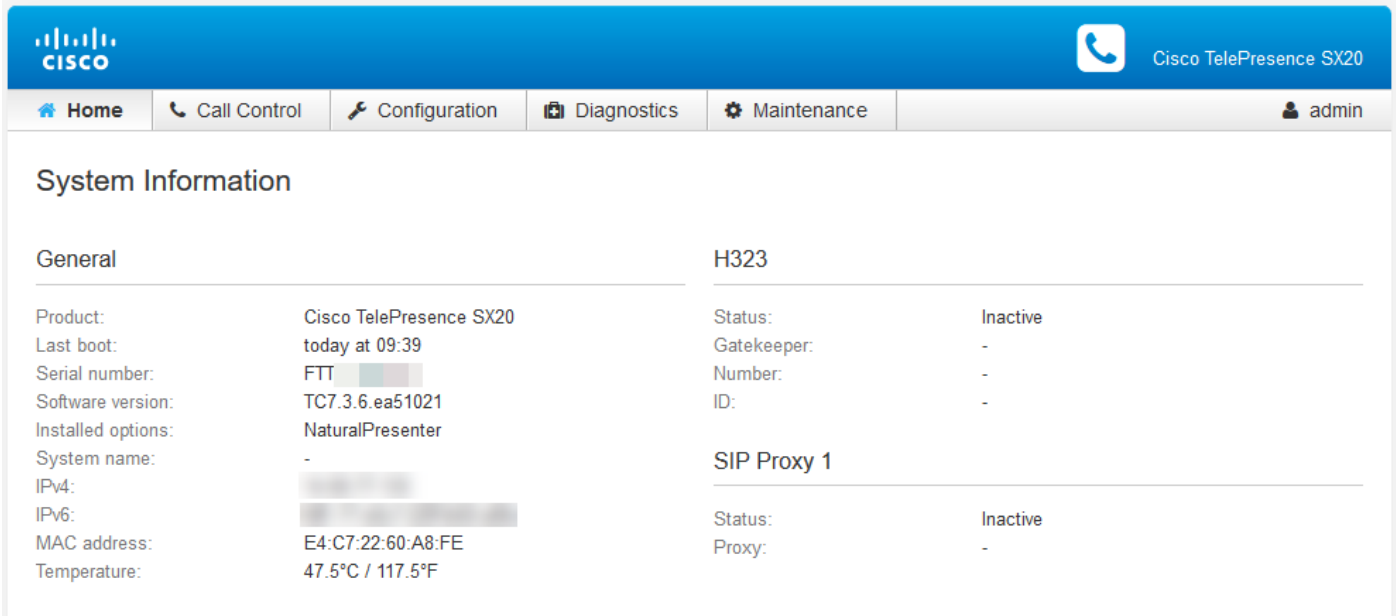
[Release Key](#)

Options  
Cisco Option Name :L-SX20-MS:  
Tandberg Option Name :L-SX20-MS :SX20 MultiSite Software Option  
Option Key :1M003-1-[REDACTED]

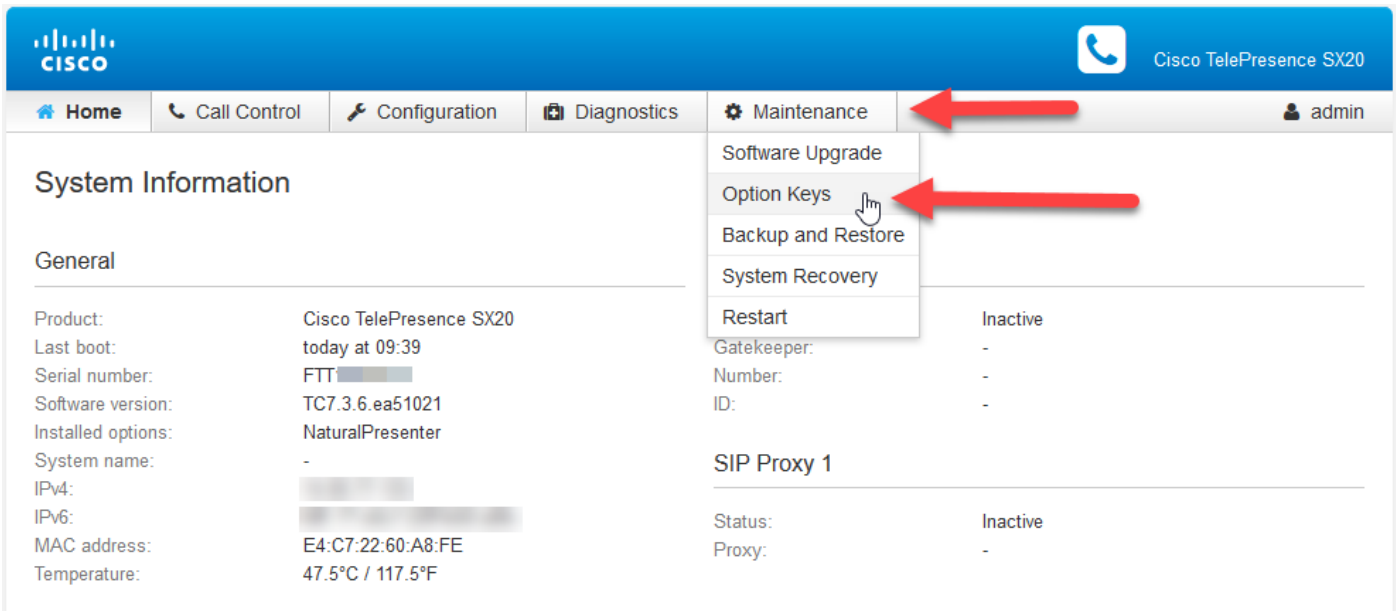
Options  
Cisco Option Name :LIC-SX20-HD:  
Tandberg Option Name :LIC-SX20-HD: SX20 License Key for HD  
Option Key :1R001-1-[REDACTED]

Options  
Cisco Option Name :LIC-SX20-NPP:  
Tandberg Option Name :LIC-SX20-NPP: SX20 Natural Presenter Package (NPP)  
Option  
Option Key :1N000-1-[REDACTED]

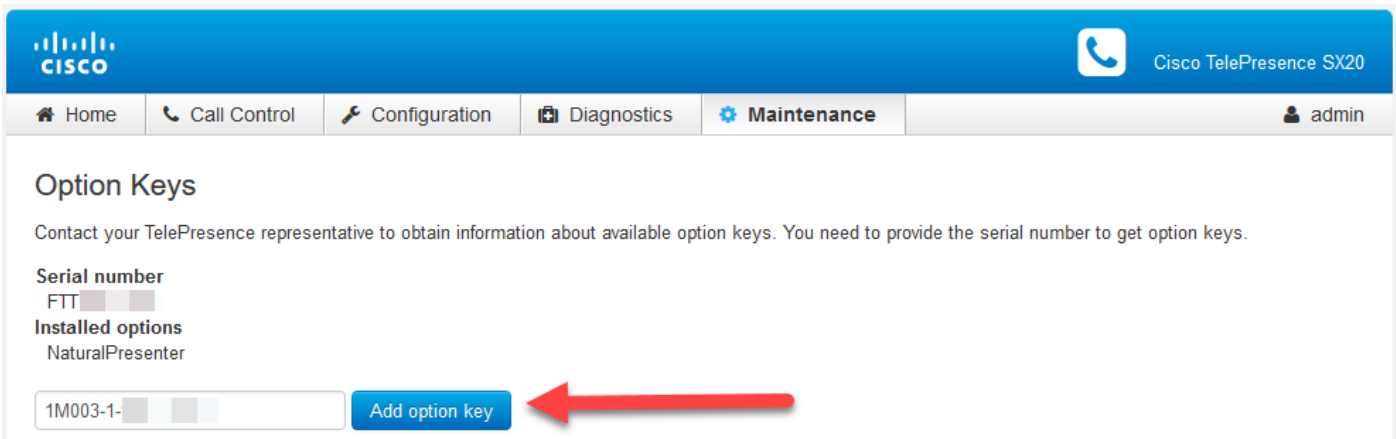
Step 2. Navigate to the web interface of the endpoint. Enter the IP address of the unit into a web browser and log in with an admin account as shown in the image.



Step 3. Navigate to **Maintenance > Option Keys** to install option keys or **Maintenance > Software Upgrade** to install a release key as part of the upgrade process, as shown in the image.



Step 4. Add each option key received by email. Enter the **option key value** into the **Add option** key field and then click **Add option key** as shown in the image.

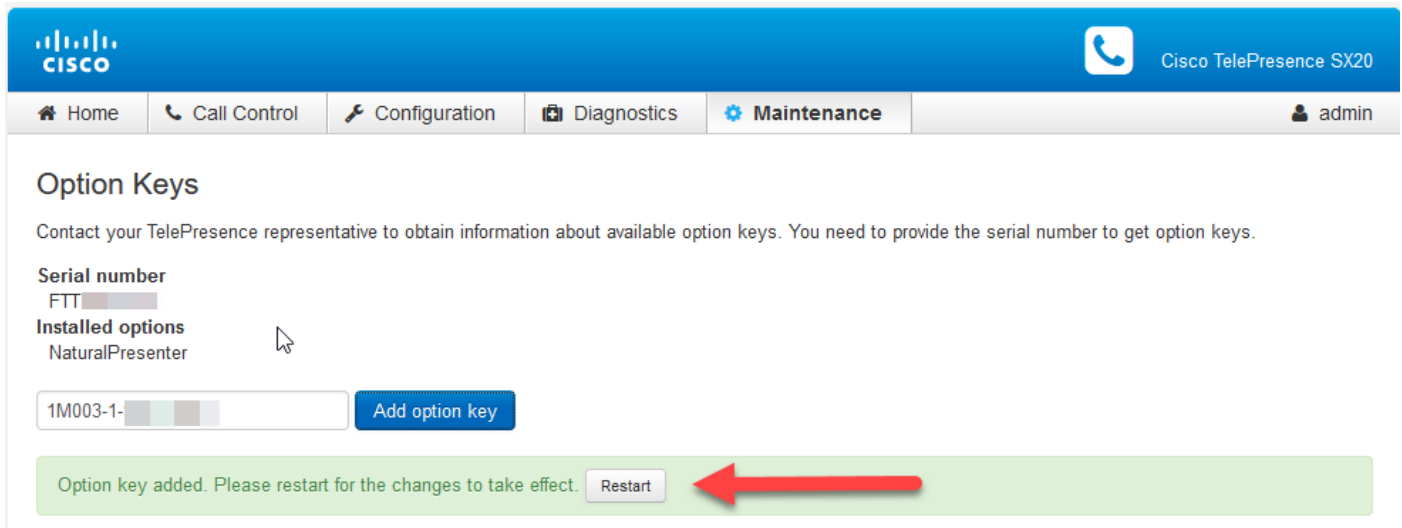


Step 5. Add all option keys one by one. Click **Restart** after all option keys are added as shown in

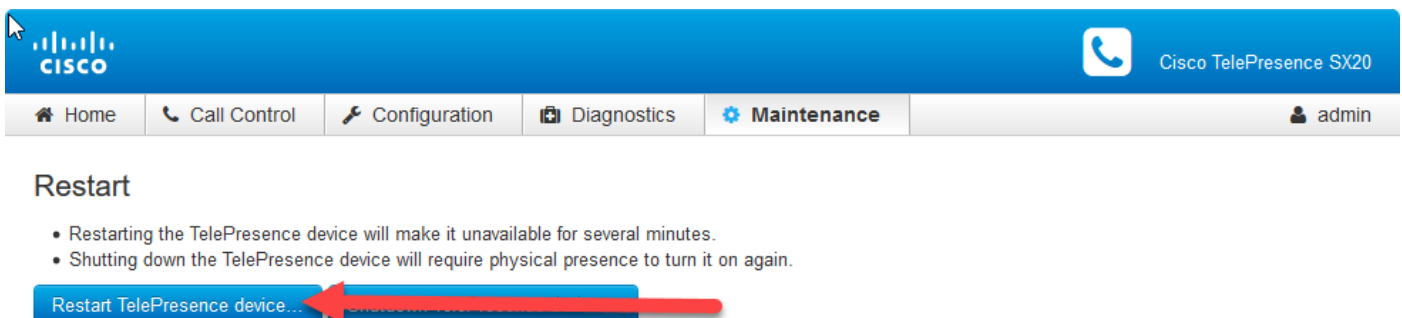
the image.

**Note:** A restart is required for the option keys to take effect.

**Note:** If the endpoint is in a call, the call drops when the endpoint restarts.



Step 6. In order to restart the endpoint, click **Restart Telepresence Device** as shown in the image.

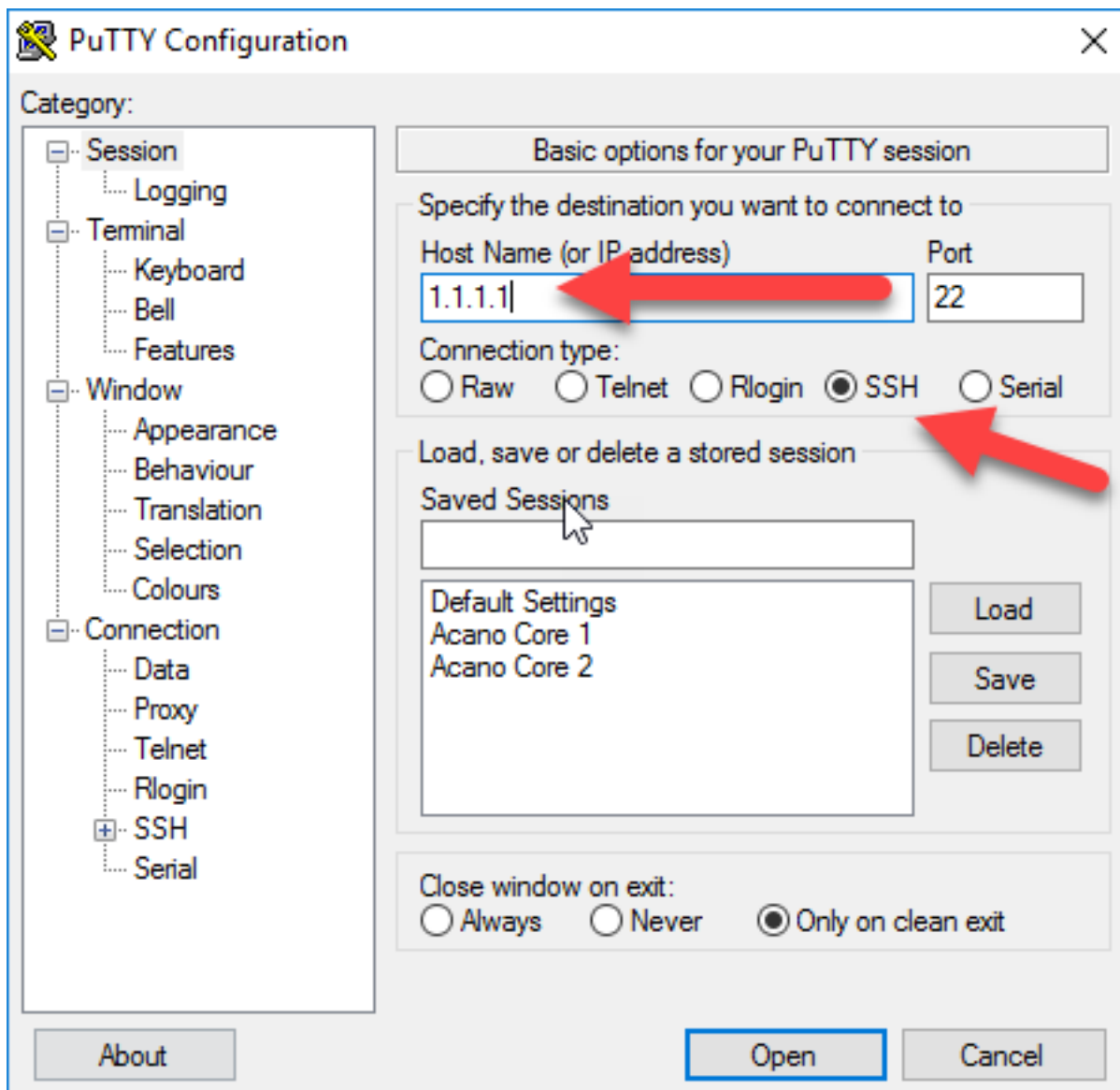


## Add Option Key and Release Key via CLI

Step 1. Open **PuTTY** and Enter the **IP address** of the endpoint in the **Host Name (or IP address)** field.

Step 2. Select **SSH** radio button.

Step 3. Click **Open** as shown in the image.



Step 4. Log in with an admin account. Enter the admin password when prompted.

Step 5. Add the release and option keys to the unit. Run these commands:

**xcommand SystemUnit OptionKey Add Key: [option key]**

**xcommand SystemUnit ReleaseKey Add Key: [release key]**

Step 6. Reboot the endpoint after all keys have been applied. Run the command:

**xcommand boot** as shown in the image.

```
- PuTTY

Password:
Welcome to
Cisco Codec Release TC7.3.6.ea51021
SW Release Date: 2016-04-20
*r Login successful


OK

xcommand SystemUnit OptionKey Add Key: 1M003-1- ██████████ ←
OK
*r OptionKeyResult (status=OK):
** end
xcommand SystemUnit ReleaseKey Add Key: 1TC007-1- ██████████ ←
OK
*r ReleaseKeyResult (status=OK):
** end
xcommand boot ←
OK
*r BootResult (status=OK):
** end
```

## Verify

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

Verify the option keys installed successfully. Navigate to the home page of the endpoint web interface. Observe the options installed are listed by **Installed Options** as shown in the image.

 Cisco TelePresence SX20

[Home](#) [Call Control](#) [Configuration](#) [Diagnostics](#) [Maintenance](#) admin

### System Information

General		H323	
Product:	Cisco TelePresence SX20	Status:	Inactive
Last boot:	today at 10:06	Gatekeeper:	-
Serial number:	FTT ██████████	Number:	-
Software version:	TC7.3.6.ea51021	ID:	-
Installed options:	MultiSite ← NaturalPresenter	<h3>SIP Proxy 1</h3>	
System name:	-	Status:	Inactive
IPv4:	██████████	Proxy:	-
IPv6:	██████████		
MAC address:	E4:C7:22:60:A8:FE		
Temperature:	47°C / 116.6°F		

Verify the release and option keys applied to the endpoint via CLI. Open an **SSH CLI** session and run these commands:

**xcommand SystemUnit OptionKey List**

xcommand SystemUnit ReleaseKey List as shown in the image.

```
- PuTTY
login as: admin
Using keyboard-interactive authentication.
Password:
Welcome to
Cisco Codec Release TC7.3.6.ea51021
SW Release Date: 2016-04-20
*r Login successful

OK

xcommand SystemUnit OptionKey List

OK
*r ListResult OptionKey 1 Key: "1M003-1- "
*r ListResult OptionKey 1 Type: MultiSite
** end

xcommand SystemUnit ReleaseKey List

OK
*r SystemUnit ReleaseKey 1 Version: "TC7"
** end
█
```

## Troubleshoot

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

Issue 1. Install a **Remote Monitoring** option key and you receive an error, "Invalid Option Key" as shown in the image.

The screenshot shows the Cisco TelePresence SX20 web interface. The top navigation bar includes the Cisco logo, a phone icon, and the text 'Cisco TelePresence SX20'. Below this is a menu with 'Home', 'Call Control', 'Configuration', 'Diagnostics', and 'Maintenance'. The 'Maintenance' tab is selected, and the user is logged in as 'admin'. The main content area is titled 'Software Upgrade'. It features a 'Software package' section with a text box containing 'No file selected', a 'Browse...' button, and an 'Upload' button. Below this, it states 'Current software version is TC7.1.4.908e4a9' and has a checkbox for 'Upgrade automatically after upload'. The 'Option key' section has a text box with '1TC007-1-', an 'Add' button, and a red error message 'Invalid option key'. At the bottom, there is a section 'About options keys' with text: 'Contact your TelePresence representative to obtain information about available option keys. You need to provide the serial number to get option keys. The serial number for this TelePresence device is: FTT' followed by a redacted box. A final note states: 'Successful downgrade to TC6.3 or lower will require a valid release key.'

This option key requires a minimum TC software version of TC7.3.3 or higher. Navigate to the home page and verify the software version is at the minimum version or higher. If you have TC 7.3.3 or higher software installed and have a valid release key installed and still encounter this



error, contact Cisco TAC for assistance.

Issue 2. Install a release key and you see an "Invalid Release Key" error on the endpoint. One probable cause stems from non-crypto software installed on the endpoint with a release key for encrypted software. A second probable cause stems from an encrypted software image installed when you have a non-crypto release key installed as shown in the image.

**Note:** The **tcnc** in the file name designates a **non-crypto** image. Just **tc** in the software file name designates a **crypto** image.


Software for SX20 and MXG2 Series s52010tc7_3_6.pkg	29-APR-2016
Non crypto software for SX20 and MXG2 Series s52011tcnc7_3_6.pkg	29-APR-2016

Issue 3. Log in to an endpoint and it shows as an SX80 when it must show as an MX700 or MX800, In this case, the endpoint has an incorrect product key installed. Contact licensing [licensing@cisco.com](mailto:licensing@cisco.com) to have a product key generated. Apply the product key received as an option key with the procedures noted in this document. This issue can occur when a device has been replaced via a Return Material Authorization (RMA) process.

Issue 4. Install a key and observe an "Invalid Option Key" error as shown in the image.

The screenshot shows the Cisco TelePresence SX20 web interface. The top navigation bar includes Home, Call Control, Configuration, Diagnostics, and Maintenance. The 'Maintenance' tab is active, and the user is logged in as 'admin'. The 'Software Upgrade' section is displayed, showing a 'Software package' field with 'No file selected', a 'Browse...' button, and an 'Upload' button. Below this, it states 'Current software version is TC7.1.4.908e4a9' and has an unchecked checkbox for 'Upgrade automatically after upload'. In the 'Option key' section, the text '1TC007-1-' is entered in a field, followed by an 'Add' button and a red error message 'Invalid option key'. A section titled 'About options keys' provides instructions on how to obtain option keys from a TelePresence representative, mentioning the device's serial number 'FTT174201F5' and noting that a downgrade to TC6.3 or lower requires a valid release key.

Verify that you install an **option key** and not a **release key** from your licensing email as shown in the image.

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Hardware Serial Number : FTT [REDACTED]  
MAC Address : E4C72260A8FE  
Service Contract : -  
SC End Date : -

Software Part Name : LIC-S52010-TC-K9:  
Tandberg Item No : :  
Shipped Version : TC7.3.6  
Shipped Version Key : 1TC007-1-[REDACTED]  
Shipped Image URL : -  
Upgrade To : TC7.3.6  
Upgrade To Key : 1TC007-1-[REDACTED]  
Upgrade To Image URL : -



Release Key

In order to properly add a release key to the unit perform the steps listed in the section **Add an Option Key and a Release Key via CLI**.

## Available Option Keys for TC Endpoints

Option Keys	Description
Natural Presenter	(Not valid for EX90, EX60, Intrepid and Veneto) This key is required to send or receive presentation.
Premium Resolution	Allows the maximum call speed to 4Mbps. Default is 2Mbps.
Multisite	(Not valid for C20, EX60, Intrepid and Veneto) Enables endpoints to perform multipoint calls natively.
High Definition	(C20 and SX20 only) Provides high definition calling.
Dual Display	(C20, C40, and EX90 only) Enables the second display. (TC7.3.3 and above)
Remote Monitoring	This feature allows an administrator to monitor a room from the endpoint's web interface. This happens when snapshots from the camera sources are connected to the endpoint.