Contents

Introduction Prerequisites Requirements Components Used Background Information Procedure Verify Troubleshoot

Introduction

This document describes procedure to update Cisco IP Phone Firmware without Cisco CallManager, through any Third-Party Trivial File Transfer Protocol (TFTP) server.

Contributed by Sankalp Jain, Cisco TAC Engineer.

Prerequisites

Requirements

There are no specific requirements for this document .

Components Used

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

- Cisco IP Phone Model 7841
- Cisco IP Phone Firmware sip78xx.11-5-1-18
- Third-Party TFTP Server SolarWinds TFTP Server 10.4.1

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.

Background Information

Cisco IP Phone Firmware update without Cisco CallManager, through any Third Party TFTP server comes in handy when a Cisco IP Phone is used with a Third-Party Call Control system and Cisco Call Manager is not available to follow the traditional

firmware update method. This procedure also comes in handy when phone is at a remote location and traditional

firmware update method timeout due to lack of network bandwidth .

Procedure

Step 1.Download the firmware file of the phone with .ZIP Extension, from Cisco.com.

File Information



7811/7821/7841/7861 SIP IP Phone firmware files only - Compatible CUCM Versio ns: 8.5(1)+

cmterm-78xx.11-5-1-18.zip

Step 2. Download the default configuration file of Cisco IP Phone from Cisco CallManager. In case, there is no Cisco CallManager available, reach out to Cisco TAC and they can assist you with the same. The name of default configuration file of Cisco IP Phone is **XMLDefault.cnf.xml**.

From a Windows Machine, that file can be downloaded by this command on the the command prompt of your windows computer .

tftp - i <ip address of call manager's TFTP server> get XMLDefault.cnf.xml

Step 3. Once the Default configuration file of Cisco IP PhoneFile is downloaded, Edit the file with any text editor and modify the value of load name for your respective phone to the name of your firmware load file.

```
<leadInformation8 model="Cisco 7940">P0030801SR02</loadInformation8>
<loadInformation479 model="Cisco TelePresence 3000"/>
<loadInformation30027 model="Analog Phone"/>
<loadInformation622 model="Cisco 7841">sip78xx.11-5-1-18</loadInformation622>
<loadInformation119 model="Cisco 7971">SCCP70.9-4-2SR1-1S</loadInformation622>
<loadInformation626 model="Cisco TelePresence SX20"/>
<loadInformation596 model="Cisco TelePresence TX1310-65"/>
<loadInformation577 model="Cisco 7926">CP7926G-1.4.7.3</loadInformation577>
<loadInformation564 model="Cisco 6945">SCCP6945.9-4-1-3SR2</loadInformation577>
<loadInformation604 model="Cisco TelePresence EX60"/>
```

Step 4. Transfer the firmware file and the default configuration file to the root directory of your Third-Party TFTP server. Extract the .ZIP firmware file in the Root Directory of the TFTP, as shown in the image:

	kern2.78xx.11-5-1-18.sbn
	kern78xx.11-5-1-18.sbn
(N)	nXMLDefault.cnf.xml
	rootfs2.78xx.11-5-1-18.sbn
	rootfs78xx.11-5-1-18.sbn
	sboot2.78xx.11-5-1-18.sbn
	sboot78xx.11-5-1-18.sbn
	sip78xx.11-5-1-18.loads

Step 5. Navigate to the **Network settings** of your Cisco IP Phone and change the TFTP IP address to the IP address of your Third-Party TFTP Server and Reset the Phone .

Verify

Once the phone is reset, it contacts the Third Party TFTP server. It then downloads the default configuration file first and then the other required firmware files.

If you run a packet capture of the phone, you notice that the phone first requests for a configuration file with its MAC address but receives Error code "file not found" from the TFTP server. After this the phone requests its default configuration file, **XMLDefault.cnf.xml**, this further informs the phone of the firmware load and it needs to download from the TFTP server.

Troubleshoot

There is currently no specific troubleshooting information available for this configuration.