



# PrecisionHD 1080p 12x Ethernet SW Upgrade

## Application Note

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# Contents

<b>Introduction .....</b>	<b>3</b>
Prerequisites.....	3
Summary of process.....	3
<b>Connect the chained camera.....</b>	<b>4</b>
<b>Get the IP Address of the Camera.....</b>	<b>5</b>
<b>Transfer the software to the Camera .....</b>	<b>6</b>
<b>Disclaimer .....</b>	<b>7</b>

## Introduction

This application note describes how to upgrade the software on a Cisco TelePresence PrecisionHD 1080p 12x camera using the available network connection. This is useful in situations where software upgrade is needed on daisy chained cameras

### Prerequisites

Before upgrading the Cisco TelePresence PrecisionHD 1080p 12x chained camera ensure that:

- ▶ The chained camera is powered up using an external power supply.
- ▶ The chained camera is connected to a network through the Ethernet 10/100 connector.
- ▶ The chained camera is running software version ID 40053 or later. This can be verified by navigating to the **Home > Settings > System Information page**.
- ▶ The primary camera is connected to a Cisco TelePresence System Codec C90/C60/C40.
- ▶ The chained camera is connected to the primary camera using a daisy chain cable.
- ▶ The Cisco TelePresence System Codec C90/C60/C40 is running software version TC3.0 or later. This can be verified by navigating to the **Home > Settings > System Information page**.

### Summary of process

The process of upgrading the Cisco TelePresence PrecisionHD 1080p 12x camera consists of the following steps. Each step is described in a separate section:

1. Connect the chained camera.
2. Get the IP address of the camera.
3. Transfer the SW to the camera

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**Note:** The primary camera connected directly to a Cisco TelePresence C-series Codec is automatically upgraded by the Codec.

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## Connect the chained camera

Any camera in a chain can be upgraded through the network. Connect the chained camera to the local network using the Ethernet connection. The chained camera must have an external power supply, and the camera must be connected to a Cisco TelePresence System Codec C90/C60/C40 through the primary camera using a daisy chain cable as shown in Figure 1. The codec must be running software version TC3.0 or later.



Figure 1: Connecting the Camera

## Get the IP Address of the Camera

In order to assign an IP address to the camera, the internal Dynamic Host Configuration Protocol (DHCP) service has to be turned on. This service is turned off by default since it delays the camera boot up time, and should be turned off again when upgrade is finished.

The retrieval of the IP address of a camera *n*, where *n* is the ID number of the camera subject to upgrade, is obtained by using the Application Programming Interface (API) of the Cisco TelePresence System Codec C90/C60/C40 by following these steps:

4. Login to the Codec using SSH.
5. Verify that the camera is running software ID 40053 or later by issuing the following command:

```
xStatus Camera n SoftwareID
```

or use the remote control and navigate to the **Home > Settings > System Information** page.

6. Turn on DHCP by issuing the following command:

```
xConfiguration Cameras Camera n DHCP: On
```

or use the remote control: **Home > Settings > Advanced > Advanced Configuration > Cameras > Camera *n* > DHCP: On**

Camera will now reboot. Please note that if DHCP was already on prior to step 3, the camera will not reboot. Jump to step 5 to check if IP address is already set. If not, turn DHCP off and on again in order to issue a camera reboot.

7. Wait for camera to reboot.
8. Retrieve the camera IP address by issuing the following command:

```
9. xStatus Camera n IpAddress
```

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**Note:** If the camera is running software older than ID 40053 it has to be upgraded from a Cisco TelePresence C-Series Codec running Software TC3.0 or later. This is done by connecting it as the primary camera directly to the Codec as described in the previous chapter.

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## Transfer the software to the Camera

The camera software can be transferred using any ftp client of choice using binary mode to the IP address of the camera.

In the following example the built in command line ftp client available in most operating systems is used. On a Windows system, open a command line and type the following:

```
ftp ↵  
open <camera ip address> ↵  
↵  
binary ↵  
put <path to camera software pkg file> ↵
```

Reboot the camera by turning DHCP off and on again by following step 3 in the previous chapter when the file has successfully transferred. The camera will boot with new software installed

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**Note:** It is recommended to turn DHCP off when the camera is successfully upgraded in order to reduce camera boot up time.

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