Video Configuration

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Disable Video Services

You can disable or hide all video settings on the phone to disable the video capability of the phone. When you disable video services, your user can't see any video settings menu on their phone and the Video and Camera Exposure parameters don't appear on the phone web page. For information on camera exposure, see Adjust the Camera Exposure, on page 2.

Procedure

Step 1 On the phone web page, select **Admin Login** > **Advanced** > **Voice** > **Phone**.

Step 2 Under **Supplementary Services** section, from the **Video Serv** list, select **Yes** to enable video services or **No** to disable the service.

Step 3 Click **Submit All Changes** to save your settings.

Control the Video Bandwidth

If you have a busy network or have limited network resources, users may complain about video issues; for example, the video may lag or suddenly stop.

By default, the phone automatically selects a bandwidth setting that balances the audio and video network requirements.

You can configure a fixed bandwidth setting to override the automatic selection, if required for your network conditions. If you configure a fixed bandwidth, select a setting and adjust downwards until there is no video lag.

You can also configure the parameters in the phone configuration file with XML (cfg.xml) code.

Procedure

Step 1 On the phone web page, select **Admin Login** > **Voice** > **Phone**.

Step 2 In the **Video Configuration** section, choose a bandwidth from the **Bandwidth Allowance** parameter to restrict the maximum amount of information that the phone can transmit or receive. For more information.

Options: Auto

- Auto
- 2 Mbps
- 1 Mbps
- 750 Kbps
- 500 Kbps
- 250 Kbps

Default: Auto

You can also configure this parameter in the configuration file (cfg.xml) by entering a string in this format:

```
<Bandwidth_Allowance ua="na">Auto</Bandwidth_Allowance>
```

Step 3 Click **Submit All Changes**.

Adjust the Camera Exposure

You can adjust the camera exposure for the ambient light in your office. Adjust the exposure to change the brightness of the transmitted video.

Your users can also adjust the exposure on the phone from **Applications** > **User Preference** > **Video** > **Exposure** menu.

Before you begin

The camera shutter must be open.

Procedure

Step 1 On the phone web page, select **Admin Login** > **Advanced** > **Voice** > **User**.

Step 2 In the **Video Configuration** section, enter a value in the **Camera Exposure** field.

The exposure range is 0 to 15, and the default value is 8.

Step 3 Click **Submit All Changes**.

Video Transmit Resolution Setup

Cisco IP Phone 8845 and 8865 supports the following video formats:

- 720p (1280x720)
- WVGA (800x480)
- 360p (640x360)
- 240p (432x240)
- VGA (640x480)
- CIF (352x288)
- SIF (352x240)
- QCIF (176x144)

Cisco IP Phones that support video negotiate the best bandwidth and resolution based on the phone configuration and phone screen limitations.

The next table shows the resolutions, frames per second, and video bit rate range for each of the supported video types.

Video type	Video resolution	Frames per second (fps)	Video bit rate range
720p	1280 x 720	30	1360–2500 kbps
720p	1280 x 720	15	790–1359 kbps
WVGA	800 x 480	30	660–789 kbps
WVGA	800 x 480	15	350–399 kbps
360p	640 x 360	30	400–659 kbps
360p	640 x 360	15	210–349kbps
240p	432 x 240	30	180–209kbps
240p	432 x 240	15	64–179kbps
VGA	640 x 480	30	520–1500kbps
VGA	640 x 480	15	280–519kbps
CIF	352 x 288	30	200–279 kbps
CIF	352 x 288	15	120–199 kbps
SIF	352 x 240	30	200–279 kbps
SIF	352 x 240	15	120–199 kbps
QCIF	176 x 144	30	94–119 kbps

Video type	Video resolution	Frames per second (fps)	Video bit rate range
QCIF	176 x 144	15	64–93 kbps

Configure the Video Codec

Video codecs enable compression or decompression of digital video. You can enable or disable video codecs from the phone web page.

The Cisco IP Phone 8845 and 8865 supports the H.264 High Profile packetization mode 1, Base Profile Mode 0, and Base Profile packetization mode 1 codecs.

For all codecs, the Real Time Protocol (RTP) payload type is dynamic and you can configure it on the phone web page from **Admin Login** > **Advanced** > **Voice** > **SIP** > **SDP Payloads Type**. For more information, see SDP Payload Types.

You can also configure the parameters in the phone configuration file with XML(cfg.xml) code. To configure each parameter, see the syntax of the string in Video Codec Parameters, on page 4.

Procedure

Step 1 On the phone web page, select **Admin Login** > **Advanced** > **Voice** > **Ext(n)**.

Step 2 In the **Video Configuration** section, set up the fields as described in Video Codec Parameters, on page 4.

Step 3 Click **Submit All Changes**.

Video Codec Parameters

The following table defines the function and usage of the video codec parameters in the **Video Configuration** section under the **Voice** > **Ext (n)** tab in the phone web interface. It also defines the syntax of the string that is added in the phone configuration file (cfg.xml) with XML code to configure a parameter.

Table 1: Video Codec Parameters

Parameter	Description
H264 BP0 Enable	Enables the H264 Base Profile 0 codec when you select **Yes** and disables it when you select **No**. Perform one of the following: • In the phone configuration file with XML(cfg.xml), enter a string in this format: `<H264_BP0_Enable_1_ ua="na">Yes</H264_BP0_Enable_1_>` • In the phone web interface, set this field to **Yes** or **No** to enable or disable the H264 BP0 codec. Allowed values: Yes|No Default: Yes

Parameter	Description
H264 BP1 Enable	Enables the H264 Base Profile 1 codec when you select **Yes** and disables it when you select **No**. Perform one of the following: • In the phone configuration file with XML(cfg.xml), enter a string in this format: `<H264_BP1_Enable_1_ ua="na">Yes</H264_BP1_Enable_1_>` • In the phone web interface, set this field to **Yes** or **No** to enable or disable the H264 BP1 codec. Allowed values: Yes|No Default: Yes
H264 HP Enable	Enables the H264 High Profile codec when you select **Yes** and disables it when you select **No**. Perform one of the following: • In the phone configuration file with XML(cfg.xml), enter a string in this format: `<H264_HP_Enable_1_ ua="na">Yes</H264_HP_Enable_1_>` • In the phone web interface, set this field to **Yes** or **No** to enable or disable the H264 HP codec. Allowed values: Yes|No Default: Yes
Encryption Method	Encryption method to be used during secured call. Perform one of the following: • In the phone configuration file with XML(cfg.xml), enter a string in this format: `<Viedo_Encryption_Method_1_ ua="na">AES 128</Viedo_Encryption_Method_1_>` • In the phone web interface, select your preferred encryption method from the list. Allowed values: AES 128|AES 256 GCM Default: AES 128