

TANDBERG

Codian: MCU 4200 Series MCU 4500 Series MSE 8420 and 8510

Software release notes

Software version 3.0 (1.5)

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Introduction

The TANDBERG Codian MCU 4200 Series, MCU 4500 Series, MSE 8420 Media Blade, and MSE 8510 Media2 blade version 3.0 (1.5) is a new feature release. This document lists and describes the new features supported in this release.



Important note: Upgrading MSE 8510 Media2 blades

The Media2 blade must be running boot loader version 1.0(0.2). To see what version you are running, go to **Settings > Upgrade**.

The .zip file containing the version 3.0(x) application software for the MSE 8510 Media2 blade also contains a new boot loader image. You must upgrade the application software to 3.0(x) **BEFORE** you upload this boot loader to your 8510 blade. This is essential to ensure compatibility between software version 3.0(x) and future versions of application software. Follow this procedure:

1. Extract all files from `codian_mcu8500_3.0(x).zip`. The zip file contains another zip file which contains:

<code>codian_mcu_8500_3.0(x)</code>	(the application software)
<code>bootldr_8510_1.0(0.2).img</code>	(the boot loader)
2. Upgrade the application software (see page 7 of these release notes for instructions).
3. After your Media2 blade has rebooted, go to the web interface of your Media2 blade. Go to **Status**. The *Software version* field will now show 3.0(x).
4. Go to **Settings > Upgrade**.
5. Under *Loader software*, click **Browse...** and locate the `bootldr_8510_1.0(0.2).img` file extracted in Step 1. Click **Upload software image**.
6. Restart the Media2 blade.
7. Go to **Settings > Upgrade**. The boot loader version will show 1.0(0.2) as the current version.

MCU 4200 Series, MCU 4500 Series, and MSE media blades version 3.0

This document describes the following new features:

- ▶ ConferenceMe™
- ▶ Standard Definition mode for MSE 8510 Media2 blade
- ▶ Standard Definition mode for MCU 4501
- ▶ New audio codec support for SIP
- ▶ Improved video for some SIP endpoints
- ▶ Lock conferences option
- ▶ Send DTMF tones to audio bridges
- ▶ Changes to H.243 floor behavior
- ▶ Redial options for preconfigured participants
- ▶ Multiway support
- ▶ API enhancements

New feature descriptions

ConferenceMe™

Release 3.0 introduces a new TANDBERG software endpoint, ConferenceMe™.

ConferenceMe allows participants to join a conference without using a hardware-based endpoint. Using ConferenceMe, there are three methods for joining conferences: through the web interface of your MCU, by clicking a link in an email, or by launching ConferenceMe and entering the conference address.

To access ConferenceMe, your MCU needs to have the Web conferencing feature key installed. If you need a Web conferencing feature key, contact your TANDBERG sales representative.

Standard Definition mode (MaxSD™) for MSE 8510 Media2 blade

The MSE 8510 Media2 blade now has two port capacity modes:

- ▶ High Definition mode (HD mode): supporting up to 20 high definition video participants at up to 720p
- ▶ Standard Definition mode (SD mode): supporting up to 80 participants up to w448p/4CIF

Each high definition participant requires two media port licenses. Each standard definition participant requires only one media port license. Therefore, to achieve full capacity in High Definition mode you need to allocate a total of 40 media port licenses to the blade. To achieve the full capacity in Standard Definition mode you need to allocate a total of 80 media port licenses to the blade.

To register port licenses, go to the web interface of your Supervisor blade. Go to **Port licenses** and enter your key in the *License key* text box. Click **Add key**. To allocate the ports across your blades click the *Media port licenses* link. Under **New allocation** enter the ports to be assigned to each blade. Click **Update allocation**.

To enable Standard Definition mode, go to **Settings > Media ports** on the web interface of your MCU; for *Media port mode*, select *Standard definition*. The *High definition* option enables High Definition mode.

Note: The blade can work in either High Definition mode or Standard Definition mode. After enabling either mode, the blade must be restarted for changes to take effect.

Standard Definition mode for the MCU 4501

The MCU 4501 now has two port capacity modes:

- ▶ High Definition mode (HD mode): supporting up to 6 high definition video participants at up to 720p
- ▶ Standard Definition mode (SD mode): supporting up to 12 participants at w448p

To enable Standard Definition mode, go to **Settings > Media ports** on the web interface of your MCU; for *Media port mode*, select *Standard definition*. The *High definition* option enables High Definition mode.

Note: The MCU 4501 can work in either High Definition mode or Standard Definition mode. After enabling either mode, you must restart the MCU for changes to take effect.

New audio codec support

G.722.1 support in SIP

Release 3.0 introduces support for the G.722.1 audio codec for SIP calls. Previously, this was only supported for H.323 calls.

AAC-LD support in SIP

Release 3.0 introduces support for the AAC-LD audio codec for SIP calls. Previously, this was only supported for H.323 calls.

G.728 for MCU 4500 and MSE 8510 Media2 blade

Release 3.0 introduces support for the G.728 audio codec for the MCU 4500 and MSE 8510 Media2 blade. This was previously only supported on the MCU 4200 and the MSE 8420 Media blade.

Improved video for some SIP endpoints

Release 3.0 introduces improved SIP interoperability with Tandberg H.264 implementations to bring parameter exchange into line with H.323 calls.

Lock conference option

In previous releases, when the last participant leaves a locked conference, the conference would unlock by default. This feature adds an option for conferences to remain locked even when all participants leave.

To enable the *Conferences remain locked when empty* feature, go to **Settings > Conferences > Advanced settings** and select *Conferences remain locked when empty*.

Changes to H.243 floor behavior

Release 3.0 changes the floor control behavior of the MCU. When a participant 'takes the floor', that participant's video will be sent to all other participants as full-screen video ('1 x 1 view'); however, the participant who has 'taken the floor' (the speaker) will see his normal layout view (and be able to change his layout/focused panes as usual). For example, in a lecture where the lecturer has 'taken the floor', the students will see the lecturer in full-screen view; the lecturer will see the students. In previous releases, everyone saw the speaker in full-screen view, including the speaker.

Send DTMF tones to audio bridges

Release 3.0 introduces the ability of the MCU to send DTMF tones to an audio bridge after the audio bridge has answered the call. In this way, the MCU can automatically navigate audio menus. This is useful where a conference on the MCU dials out to an audio-only conference on an audio bridge.

To use this feature, you can either configure the audio bridge as an endpoint (either H.323 or SIP) which can then be added to any conference or you can add the audio bridge to an individual conference's configuration as a participant. You must specify the DTMF sequence in the Call-out parameters for that endpoint. The DTMF sequence can include digits 0-9 and * and #. There is a two second pause after the call connects after which the MCU will send the DTMF tones which are sent one every half second. You

can insert as many additional two second pauses as you want by inserting commas into the DTMF sequence. Each comma represents a two second pause.

For example, you want the MCU to dial out to a PIN-protected audio conference on an audio bridge. The conference ID is 555 and the PIN is 888. The audio bridge requires that you press # after entering the ID and after entering the PIN. In this example the DTMF sequence is: 555#,,888#. The two commas represent a four second pause which allows the audio bridge's automated menu system time to process the ID and request the PIN.

Redial options for preconfigured participants

Previously, if a preconfigured participant failed to connect to a conference the MCU would make nine redial attempts. Release 3.0 provides an option to alter this behavior.

To change redial options, go to **Settings > Conferences > Advanced settings**. For *Failed preconfigured participants redial behavior*, select one of the following:

- ▶ *Default* – this is the same as with previous releases and is selected by default. The first four redial attempts are made at one minute intervals, the remaining five are made at five minute intervals
- ▶ *Never redial* – never attempts to redial a preconfigured participant if they fail to connect
- ▶ *Constant redial* – redials the preconfigured participant constantly. The first four attempts are made at one minute intervals, while the remaining redials are at five minute intervals

Multiway support

MCU v3.0 supports the released version of the Multiway feature. Multiway allows IP endpoints to escalate a point-to-point call to a conference hosted on an MCU on the same IP network. When the call has been escalated to an MCU conference, the caller can add additional participants into the conference.

Note: Multiway requires VCS X4.1 or higher, TANDBERG MXP F8.0 or higher, and TANDBERG Codian MCU 3.0 or higher.

API enhancements

Release 3.0 provides a number of new API features. For more information, refer to the latest version of the API document.

Upgrading software

Using a web browser

1. Unzip the image file.
2. Browse to the current IP address of the MCU using an IE-compatible web browser. Click **Log in.** and then **Change log in.**
3. When prompted, type in **admin** for the user name and its associated password (this is blank in a new unit).
4. Go to the **Settings > Upgrade** page.
5. In the Main software image section, type in, or browse to the location of the software image file.
6. Click the **Upgrade software image** button.

The web browser uploads the file to the MCU. This takes some time – dependent on your network connection. Do not move your web browser away from the Upgrade Software page or refresh this page during the upload process; otherwise, it may abort.

After a number of minutes, the Web browser refreshes automatically and displays “Main image upload completed”. Close this window.

7. Click the **Shutdown button** on the main upgrade page. This option will now change to **Confirm MCU shutdown**. Click to confirm.
8. Click the **Restart MCU and Upgrade** button. This button only appears in the **Upgrade** page during this process.

The unit will reboot and upgrade itself – this also takes a number of minutes.

Note: If you have been logged out due to inactivity, log in again as admin and click **Restart MCU and upgrade** at the bottom of the Upgrade software page to complete the upgrade.

Using FTP

1. Use an FTP client to connect to the MCU – e.g. **ftp <MCU IP Address>** from the command prompt.
2. When prompted type in **admin** as the user name and its associated password (this is blank in a new unit).
3. Upload the upgrade file – e.g. **put codian_mcu_3.0(1.5)** from the command prompt.
4. When the upload has completed, reboot the MCU to start the upgrade. This can be done using the button on the **Upgrade** page within the web interface.

Notes

- ▶ The progress of the upgrade can be monitored through the serial port
- ▶ Before upgrading, make sure that the MCU is not in use. Anyone using the MCU at the time of the upgrade may experience poor performance and loss of connectivity
- ▶ The time required to download and upgrade depends on the speed of your network connection. With a fast connection the total time to download, upgrade and restart the MCU is several minutes

Checking for updates and getting help

If you experience any difficulties or unexpected results when using this version of the Codian MCU software, consult the online help documentation for information on using the device

It is a good idea to regularly check for software updates on the TANDBERG web site.

If the documentation does not answer your question or you have a problem with one of our products, refer to the Troubleshooter and Knowledge Base sections of the web site which are kept up to date with the latest information from TANDBERG customer support.

If the information on the web site does not help you to solve your problem, contact your reseller. Make sure you have the following information ready:

- ▶ The serial number and product model number (for example, MCU 4200) of the unit
- ▶ The software build number (to find this, in the web interface, go to **Status**)
- ▶ Your contact email address or telephone number

Outstanding limitations and bugs

Issues when removing the CompactFlash™ during operation

Removing the CompactFlash card while the MCU is in operation has been known to cause a crash.

Windows Media Player

Streaming a conference with Windows Media Player in multiple windows or tabs on the same browser will crash the browser. This is a known issue with Windows Media Player. If you need to stream more than one conference simultaneously, use a different player such as QuickTime or Real Player.

In addition, Windows Media Player 11 (WMP11) can display streams incorrectly when used as an embedded player with browsers other than Internet Explorer. This is a known incompatibility. In some cases, setting the video size of the main streaming video window (the Video size field in the Streaming page) to Large will correct the problem. To work around this issue, you can use QuickTime or RealPlayer instead of WMP, or use Internet Explorer instead of your normal browser.

Streaming to QuickTime7 causes problems with some browsers

Streaming to an embedded QuickTime player using the QuickTime 7.0 plus later option for the Player format on the MCU can cause certain browsers to crash or remain in the 'negotiating' state indefinitely. Affected browsers include: IE6; Firefox 1.5 (Mac and PC); Safari 2.0.3 and earlier, and Camino. IE7 and Safari 2.0.4 do not appear to be affected by this. Using the QuickTime 6.5 plus later option for the Player format on the MCU will allow streaming to QuickTime using any browser that supports a QuickTime plugin.

Interoperability problems with a VCON HD3000, HD2000 and HD600

No video is received in either direction when connecting to and from the HD3000/HD2000/HD600 running software version 2.6 using H.263+. The Codian MCU will report 100% frame errors. This is a VCON issue. There is a later version of software available from VCON; upgrade your endpoint.

A workaround on the MCU is to go to **Settings > Conferences** and disable H.263+ on the MCU; however, this is a unit-wide setting and therefore may not be appropriate.

Network Port B is not supported on the MSE 8510 Media2 blade series

Port B is currently not supported on the MSE 8510 Media2 blade. Do not enable Port B.

MCU uses DNS to try to resolve non-DNS addresses

Sometimes, if the MCU cannot resolve an E.164 number using the gatekeeper (for example if for whatever reason the gatekeeper does not respond to the MCU), the MCU will then repeatedly attempt to use DNS to find the address. This causes the MCU to report failed name resolutions in the event log.