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## ISDN Gateway & MSE 8310

### Version 1.3

### Release Notes

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## Introduction

The Codian ISDN GW 3200 Series and MSE 8310 blade version 1.3(1.1) is a feature release with new features and functionality.

If you experience any difficulties or unexpected results when using version 1.3(1.1) of the ISDN GW or MSE 8310 firmware (both just called the ISDN GW from now on in this document), please consult the online help documentation for information on using the device, and also the FAQs on the Codian web site before contacting Codian technical support.

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**Caution:** If you are using an MSE 8000, the Supervisor Blade **must** be upgraded to Release 1.0(1.15) or later *before* installing this release on a MSE 8310 blade.

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## New features and functionality in 1.3(1.1)

The following features are now supported:

- ▶ Built-in gatekeeper
- ▶ AES (*IP leg only*)
- ▶ G.722.1 Annex C support
- ▶ Support for multiple service prefixes
- ▶ Auto refreshed web pages
- ▶ FECC sent over MLP
- ▶ Support for up to 200 rules in a dial plan
- ▶ Codec filtering by dial plan rule
- ▶ Gatekeeper deregisters when PRIs are down
- ▶ IMUX BONDING support
- ▶ API support

The rest of this document provides more detail about these features.

## ***Built-in gatekeeper***

The ISDN GW now has a built-in gatekeeper. Several devices can be registered with the gatekeeper: up to 25 devices can be registered without a feature key. Feature keys can be purchased to extend this number to 100 and 300. Each device can have multiple entries up to a total of 1000 entries, though in practice it is more likely that the device limit will be reached first. IDs can be numbers, H.323 IDs e.g. Fredsendpoint or prefixes. The built-in gatekeeper is configured in the Gatekeeper page and registrations can be displayed in two views: the ID view or the Registration view.

**Note:** Registrations can be viewed by device or by registered ID, giving complete and easily searchable lists. The Registration view shows the summary per device (also known as the registrant) while the ID view shows individual registrations with the Index column in the format X / Y to help you identify IDs belonging to the same registrant.

To start the gatekeeper, go to **Network > Services**, open the H.323 gatekeeper port, then enable the gatekeeper on the **Gatekeeper** page. (On the ISDN GW ports are not open by default for security reasons. If you enable the built-in gatekeeper without opening the port, an error message is displayed.)

**Note:** Enabling the built-in gatekeeper (when the ISDN GW acts as a server, waiting for endpoints to register) in the **Gatekeeper** page should not be confused with the **Settings > Gatekeeper** page which is for configuring the ISDN GW as a client registering to a gatekeeper (either an external gatekeeper or the ISDN GW's own built-in gatekeeper, in which case the ISDN GW counts as one of the registered devices).

## ***AES (IP leg only)***

IP encryption using AES has been added for the IP portion of calls. To enable encryption, go to **Settings > Encryption**. The encryption technology that the ISDN GW uses is Advanced Encryption Standard (AES); specifically, the Voice Encryption Profile of H235 v3 (which includes video).

**Important Note:** To use encryption, you need a feature key. Without a key this feature is not visible in the user interface. If you need to use this feature contact Codian for a feature key by emailing [support@codian.com](mailto:support@codian.com).

## ***G.722.1 Annex C support***

In this release G.722 - Annex C (a high quality wideband audio codec) is supported and can be selected in the Audio codecs allowed field in the **Settings > ISDN** page. It is deselected by default.

Note that for the Polycom VSX series, you must be using version 8.5.3 or later in order for G.722.1 Annex C to work with our ISDN GW.

## ***Support for multiple service prefixes***

The Dial plan prefix field in **Settings > Gatekeeper** can now be completed with up to ten prefixes, separated by spaces.

## ***Auto refreshed web pages***

A feature has been added to automatically refresh the following pages.

- ▶ **Status > General**
- ▶ **Status > Conferences**
- ▶ **Status > Health**
- ▶ **ISDN > ISDN Calls**
- ▶ **ISDN > ISDN ports**
- ▶ **Events > CDR logs** (Call details records)

The refresh interval is set in the new **Status > User interface** page. The default is No refresh.

## ***FECC sent over MLP***

The ISDN GW can now send FECC over both MLP and LSD. Previously the ISDN GW could only send FECC over LSD; therefore, FECC did not work with those endpoints that supported only MLP. Note that the ISDN GW will preferentially send using LSD if possible, for consistency with earlier versions.

## ***Support for up to 200 rules in a dial plan***

Each dial plan can now have a maximum of 200 rules.

## ***Codec filtering by dial plan rule support***

Each dial plan rule now has its own selection of allowed codecs; however the default (and recommended) setting provides that same set of codecs as selected in the **Settings > ISDN** page. If you have older endpoints that you cannot connect to when some codecs are enabled, you can either select your own combination of codecs for a rule or use the “safe” option that only allows G.711 and H.261.

## ***Gatekeeper deregisters when PRIs are down***

If all the PRIs are down (or disabled), the ISDN GW will deregister from any gatekeeper that it is registered with, including the new built-in gatekeeper. Then the gatekeeper no longer forwards calls to the ISDN GW and may call a different gateway instead, providing some redundancy capability. The ISDN GW reregisters as soon as a PRI becomes available.

## ***IMUX BONDING support***

There is now support for customers who need to connect to devices through a synchronous serial port in their ISDN network; for example, connections to the PictureTel Concord and some encryption applications.

For some older endpoints (e.g. PictureTel Concorde), you might have to disable certain options on the ISDN GW in order for it to work with the IMUX. To do this, go to **Settings > ISDN** and disable/enable the following options:

- **Disable** the following codecs:
  - Video codecs: H.264
  - H.239 video codecs: H.263, H.264

- Check that the following options are **enabled/disabled** as indicated:  
Compatibility: Send calling number - Disabled  
Compatibility: Send “sending complete” – Enabled  
Compatibility: Legacy capabilities – Disabled

Alternatively, in the dial plan, select a custom codec and make the selections above.

## ***API support***

There is now support for monitoring of calls and gateway status using API calls. See the Management API specification available on the Codian web site.

## Upgrading software

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**WARNING:** Before installing this release on a MSE 8310 you **MUST** have MSE 8050 Supervisor Blade Version 1.0(1.15) or later installed on your Supervisor blade.

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### *Using a web browser*

1. Unzip the image file.
2. Browse to the current IP address of the ISDN GW or MSE 8310 using an IE-compatible web browser. Click the **Change log in** button.
3. When prompted, type in **admin** for the user name and its associated password (this is blank in a new unit).
4. Go to **Settings > Upgrade**.
5. In the Main software image section, type in, or browse to the location of the software image file.
6. Click **Upload software image**.

A progress bar is displayed in a separate pop-up widow while the web browser uploads the file to the ISDN GW or MSE 8310. 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 will abort.

After a number of minutes, the web browser refreshes automatically and displays “Main image upload completed successfully”.

7. Click **Close Status window**.
8. In the changed Upgrade page, click **Shut down N-port ISDN-IP gateway**.
9. Click **Confirm N-port ISDN-IP gateway shutdown**.
10. When shutdown has completed, click **Restart N-port ISDN-IP gateway and upgrade**.
11. When prompted, confirm the restart.

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 N-port ISDN gateway and upgrade** on the Shutdown page.

## Using FTP

1. Use an FTP client to connect to the ISDN GW or MSE 8310 – e.g. **ftp <ISDN GW 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\_isdn\_gw\_1.3\_1\_1** from the command prompt.
4. When the upload has completed, go to the Upgrade page within the web interface.
5. Click **Shut down N-port ISDN-IP gateway**.
6. Click **Confirm N-port ISDN-IP gateway shutdown**.
7. When shutdown has completed, click **Restart N-port ISDN-IP gateway and upgrade**.
8. When prompted, confirm the restart.

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 N-port ISDN gateway and upgrade** on the Shutdown page.

## Notes

- ▶ The progress of the upgrade can be monitored through the serial port
- ▶ Before upgrading, make sure that the ISDN GW or MSE 8310 is not in use. Anyone using the ISDN GW or MSE 8310 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 ISDN gateway is approximately 6 minutes

## Checking for updates and getting help

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

If the documentation does not answer your question or you have a problem with one of our products:

1. Refer to the Technical FAQ section of the Codian web site which is kept up to date with the latest information from our technical support team regarding the resolution of customer issues.
2. Contact your reseller. Our resellers have a wealth of experience with our products and this is often a quick way of solving a problem.
3. If your query remains unsolved, there is a web form in the Support area of the Codian web site that you can complete. Ensure that you provide all the details requested by the form to assist the technical support team in resolving your problem:
  - a. The serial number and product model number (for example: ISDN 3200) of the unit.
  - b. The software build number. (To find this, in the web interface, go to **Status > General**).
  - c. Where you purchased the unit.
  - d. Your contact email address or telephone number.

Note that you can also send an email to our technical support team at [support@codian.com](mailto:support@codian.com)

## Outstanding limitations and bugs

Bug ID	Summary
2288	'Attention, snapshot received' message on Tandberg MXP 990 via ISDN GW
2867/2868	When making or receiving a call from an MGC gateway, you must enable transcoding on the MGC gateway for the gateway call and disable H.239 codecs on the Codian ISDN GW; otherwise the call will fail or no video will be seen.  Even with the above set, it will take 2.5 minutes for video to be seen; however, audio will be available from the start of the call.
4035	vPointHD interoperability issues with encryption