ecMON User Guide for Distributor

Abstract: This guide describes the ecMON service capabilities for Epygi distributors.

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Document Revision History

Revision	Date	Description	Valid for Models	Valid for FW
1.0	05-Mar-19	Initial Release	ecQXs, QX IP PBXs, UC IP PBXs, QX GWs	6.2.40 and higher
1.1	26-Apr-19	Updated for ecMON new features	ecQXs, QX IP PBXs, UC IP PBXs, QX GWs	6.2.45 and higher
1.2	19-Feb-20	Updated for ecMON new features	ecQXs, QX IP PBXs, UC IP PBXs, QX GWs	6.3.1 and higher

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1 Introduction

Epygi Cloud Monitoring service (ecMON) is a cloud-based monitoring solution for Epygi products, namely for the ecQXs, on-premise QX/UC IP PBXs and QX Gateways (henceforth QX). It is designed as a WEB application, allowing effective centralized monitoring and control for QX devices. This service, designed for resellers, distributors and Epygi staff, provides a way to monitor and manage the active QXs. Active QXs, configured properly, will be shown in a centralized directory with some key configuration settings and performance parameters. ecMON provides real-time event notifications concerning the status for applications running on QXs. Additionally, the ecMON allows remote web access to QX devices, as well as the IP phones located in the same network as the QX.

Note: The described configuration is generic for all Epygi QX and UC products, namely the QX20, QX50, QX200, QX500, QX2000, QX3000, QX5000, QXISDN4+, ecQX, QXFXO4, QXE1T1, QXFXS24 and UC20, UC80.

2 Functional Description

ecMON is a cloud service designed for Epygi resellers, distributors and Epygi staff for centralized monitoring of active QXs:

- To show all active QXs in a centralized directory.
- To show the key configuration settings of active QXs, such as the product name, used price plan or feature licenses, host address, uptime duration, price plan activation/deactivation time (if any).
- To show the device information, such as the CPU utilization and the number of simultaneous calls on QXs, active licenses, number of registered phones, FW version, uptime duration.
- To get real-time notifications for system events that may affect the quality of services running on the QX, helping to identify and to resolve issues on the QX. Allows to show over 70 system events regarding the services running on the QXs.
- To support remote login access to QX devices through the ecMON, as well as the IP phones located in the same network as the QX. By virtue of creating a secure tunnel between the QX and ecMON, this will allow remote access even to QX units behind a NAT/firewall.
- To upload and save the selected firmware files and install on multiple QXs at once.
- To upload and save the selected configuration backup files and restore on multiple QXs at once.

The ecMON management is accessible via a WEB browser for admin, distributor and reseller levels of login. This guide describes how the ecMON can be used for the role of Epygi distributor. For the functions available when login as reseller or staff refer to the “ecMON User Guide for Resellers” or “ecMON User Guide for Epygi Staff” accordingly.

3 How to Configure QXs to Support the ecMON Service

For the on-premise QXs the following needs to be done to support the ecMON service.

3.1 Activate the QX Monitoring service:

1. Go to the Setup – ecMON page.
2. Enable the QX Monitoring option. By default, the QX monitoring is disabled for on-premise QXs.
3. Leave other settings unchanged and click Save to apply the changes.

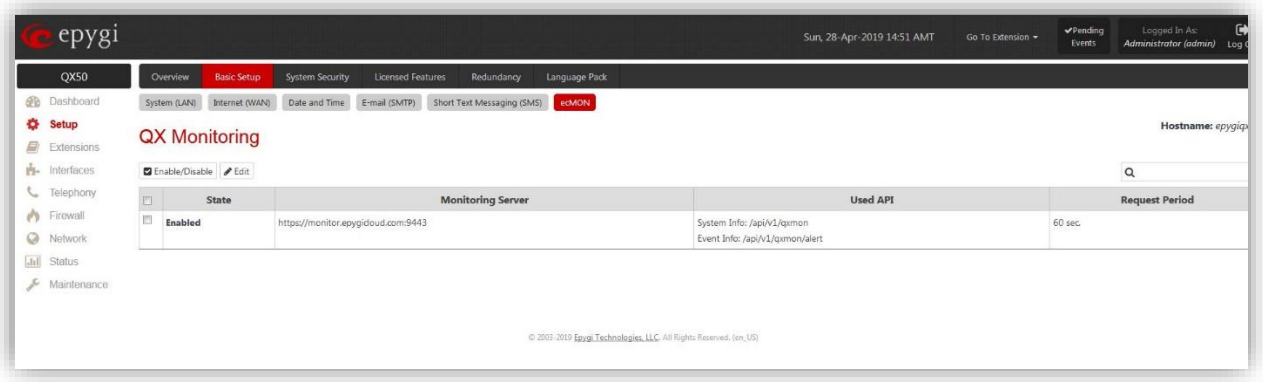


Figure 1: QX Monitoring page

Result: The QX will immediately connect to the ecMON server and will be listed in the **Devices** list of the ecMON main window (see section 5).

3.2 Configure Event Notifications:

1. Go to the **Status** →**Events** →**Event Settings** page.
2. Select the checkbox(es) for desired system event(s) and click **Edit**.

Check the **REST Request** option in Actions and click **Save** to apply the changes.

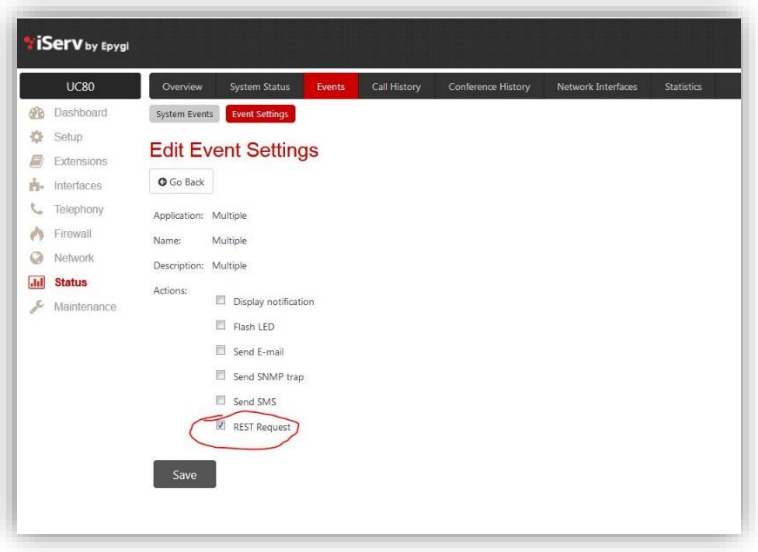


Figure 2: Edit Event Settings page

Result: Any of the system events, that have the REST request enabled, will send an event notification to ecMON every time the event occurred on the QX.

Note. Always use the **latest** available QX **firmware** to achieve maximum compatibility with the ecMON features and settings.

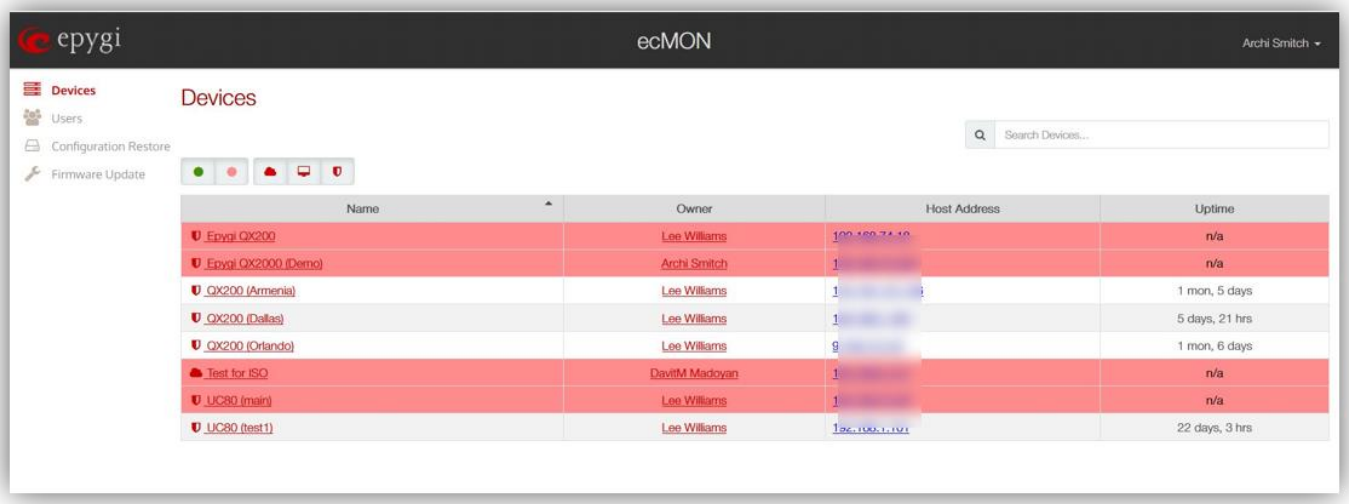
4 ecMON Management

The ecMON account (username and password) will automatically be generated when a distributor purchases ecQX from the https://www.epygicloud.com portal. For the on-premise QXs Epygi would create an account manually based on the information in the e-mail request received from the distributor.
The distributor can then login to ecMON using account credentials as the username and password. The distributor allowed to monitor the active QX devices assigned to his resellers (resellers attached to him).

The following information is needed to login the ecMON management main menu as a distributor:

- The ecMON server URL: https://ecmon.epygicloud.com
- The login credentials (username and password) for distributor.

The ecMON menu options below are available when login as distributor.



4.1 Devices

Allows to search the QX devices by different parameters, monitor and manage the devices assigned to the reseller(s) attached to the logged-in distributor. Clicking the name of specific device will open the configuration options and settings of that device.

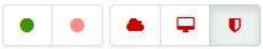
The QXs will be shown in the **Devices** List with the following parameters:

- **Name** – for ecQX this is the name provided by the reseller when the device was purchased; for other QX devices this is the name for the device model.
- **Owner** – The name of the device owner.
- **Host Address** – the IP address or host name of the device.
- **Uptime** – the time during which the device is in operation since the last reboot.

Note: If there are pending events for a specific device in the list, the number of the events will be notified next to the device name. Devices which are currently inactive (not connected to ecMON) will be highlighted in red.

Note: The attachment of reseller(s) to distributor(s) done by the ecMON admin.

4.1.1 Filtering options available on the Devices window

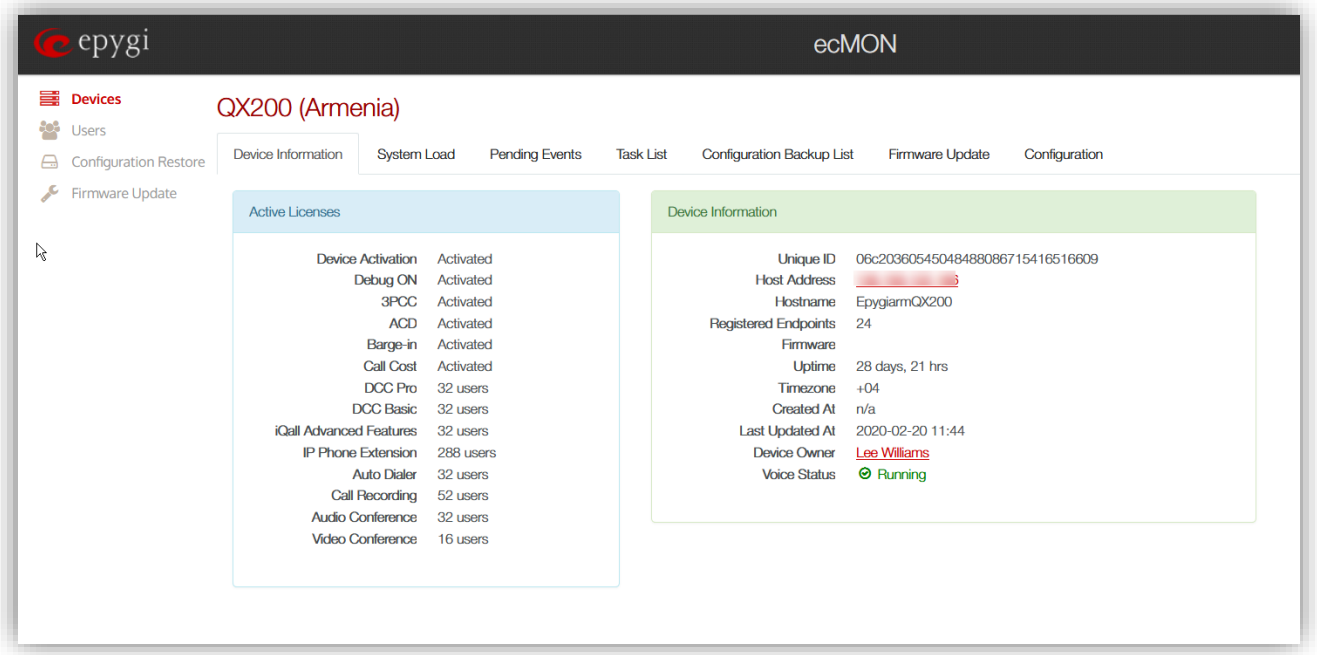
The menu bar  is used to filter out and show the devices having specific statuses, such as **online, offline, QX, ecQX** or **ISO**. When you place the mouse over the icon it pops up a hint with the purpose of that icon (below).

	online devices	devices currently connected to ecMON
	offline devices	devices currently not connected to ecMON
	ecQX devices	virtual device installed by Epygi in Epygi's Cloud. Reseller purchases ecQX devices from the https://www.epygicloud.com portal.
	ISO devices	virtual device installed by the user from ISO image on his virtual machine. These devices are under customer control.
	QX devices	on-premise QX and UC devices

The **Search Devices** field is for serching devices by different parameters.

4.1.2 Device Information

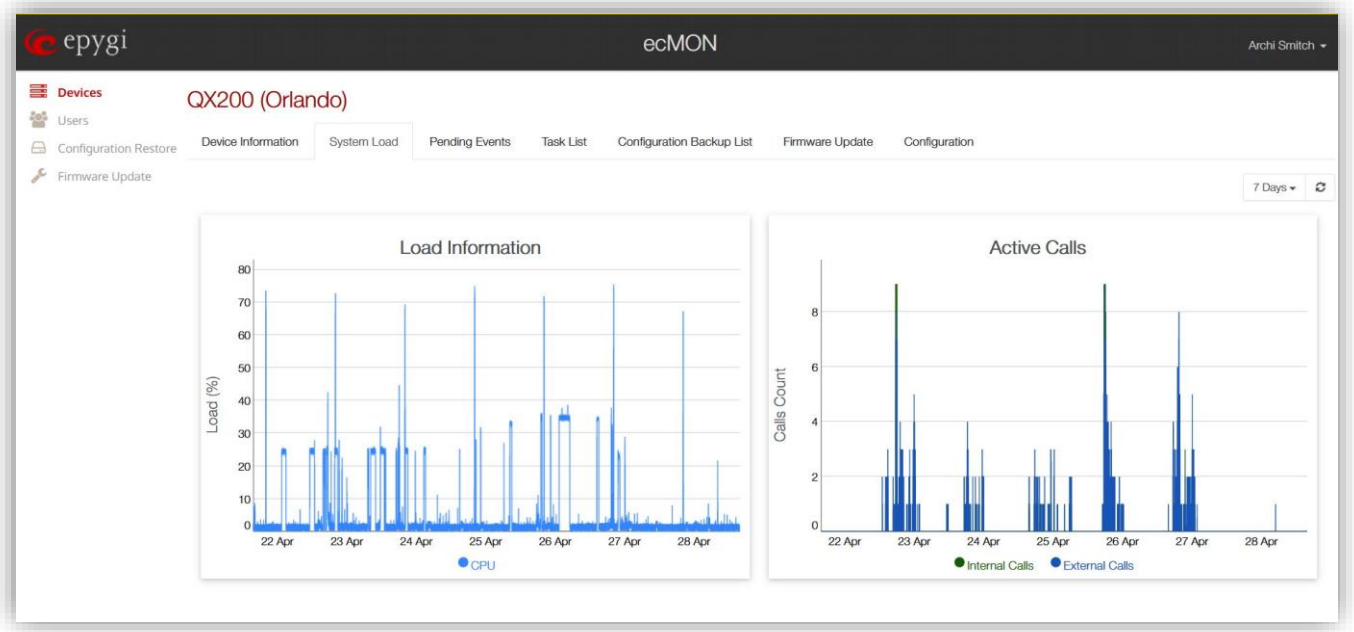
Clicking the name for a selected device in the **Devices** list will open a window with information regarding that specific device (below).



- ✓ Active licenses – the list of licenses purchased and activated for the device
- ✓ Unique ID – the unique ID for the device
- ✓ Price Plan – the name of the price plan attached to device
- ✓ Host address – the host address of the device
- ✓ Hostname – the hostname of the device
- ✓ Registered Endpoints – the number of the phones registered on the device
- ✓ Firmware – the FW version running on the device
- ✓ Uptime – the time period device is up and running since the last reboot
- ✓ Downtime – the time period device lost connection to the ecMON server
- ✓ Timezone – the time zone configured on the device
- ✓ Created At – The time the device registered with ecMON. The device is registered with ecMON server when:
    a. Epygi authorized person (EAP) is registering new device using ecMON web client through Register New Device page from Devices menu.
    b. EAP marked as complete the ecQX device on **www.epygicloud.com** portal, All Devices menu.
    c. On-premise device sent first successful REST request to ecMON server when enabling QX monitoring in Basic Setup-> ecMON menu.
- ✓ Last Update At – the date/time for the last FW update
- ✓ Activate At – The time of first request from device
- ✓ Notes – Any notes regarding the device (optional)
- ✓ Funding – TBD
- ✓ Device Owner – the name for device owner
- ✓ Voice Status – The status of voice subsystem on QX – running/stopped,

4.1.3 System Load

The **System Load** section of the Device Information shows the CPU load and the number of simultaneous active calls on the device for the selected time frame.

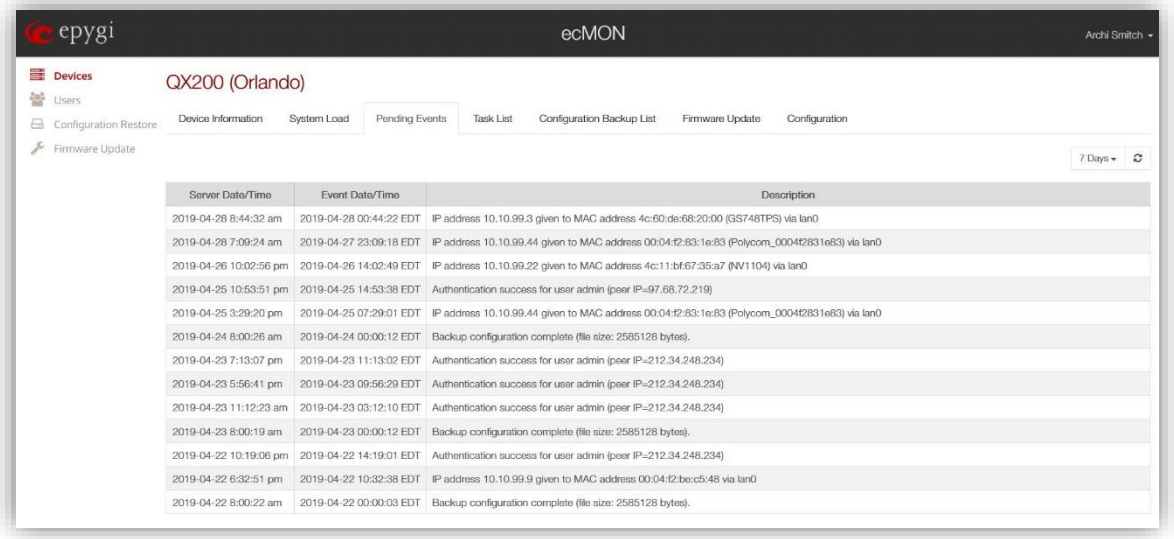


Please Note. If you select a month or a week for the time frame, it will take some time for the graph to load.

4.1.4 Pending Events

The **Pending Events** section of the **Device Information** shows the system events triggered by the selected device.

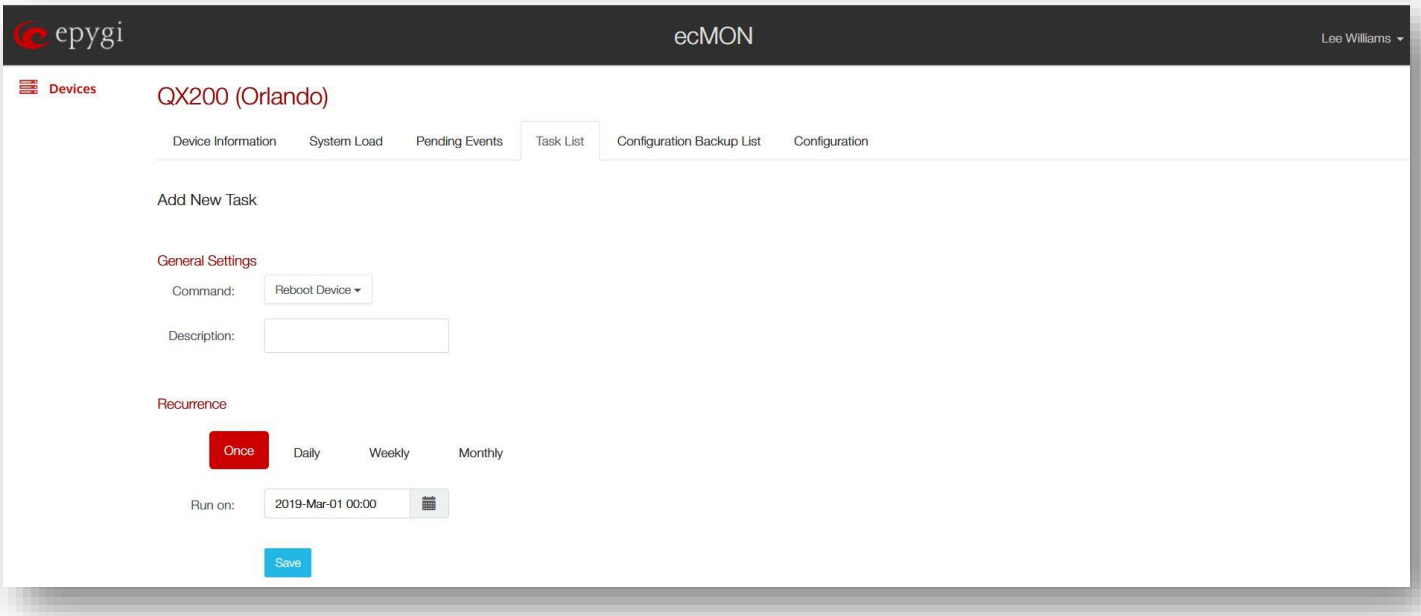
Please note. The red flag indication for pending events disappears when you open device's Pending Events tab in the ecMON console.



4.1.5 Task List

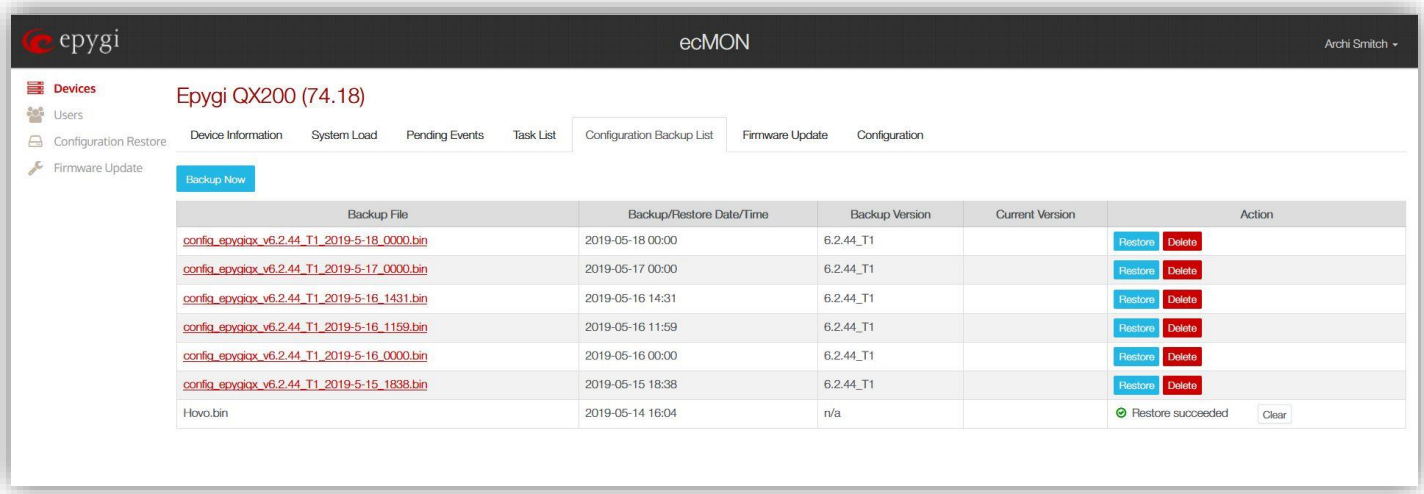
This window allows to schedule the tasks to run on the device automatically. For now, the **Reboot Device** option is the only one available in the task list. The device can be rebooted by adding the Reboot task.

How it works. The device is sending TASK checking REST requests every 30 seconds.



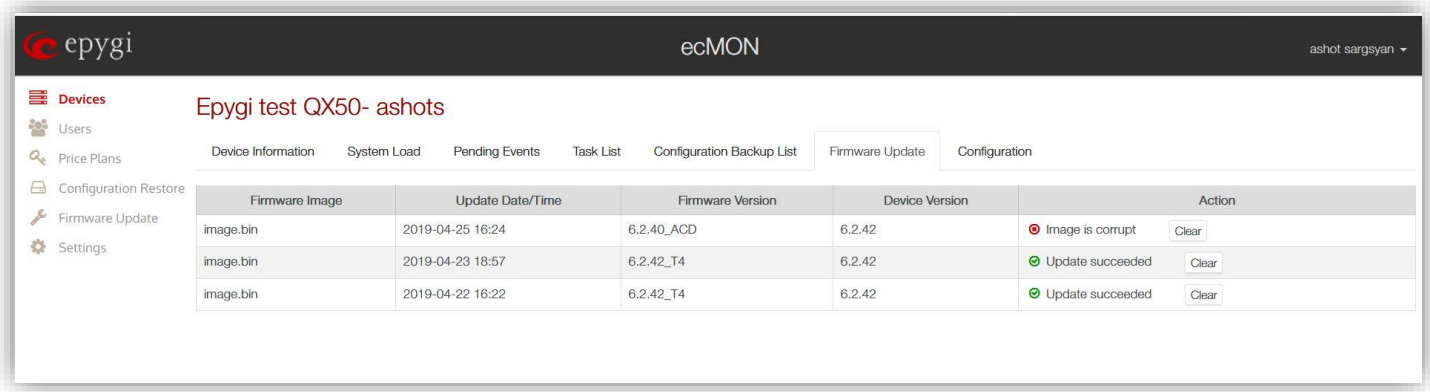
4.1.6 Configuration Backup list

This section shows the automatically backed up configuration files with the backup date/time, backup version, current version and the count for backup restores. The **Restore** and **Delete** actions allow to restore the selected backup or delete the backup file from the list accordingly. The **Restore Count** shows how many times the specific configuration backup file has been restored. Use the **Backup Now** button to back up the configuration manually.



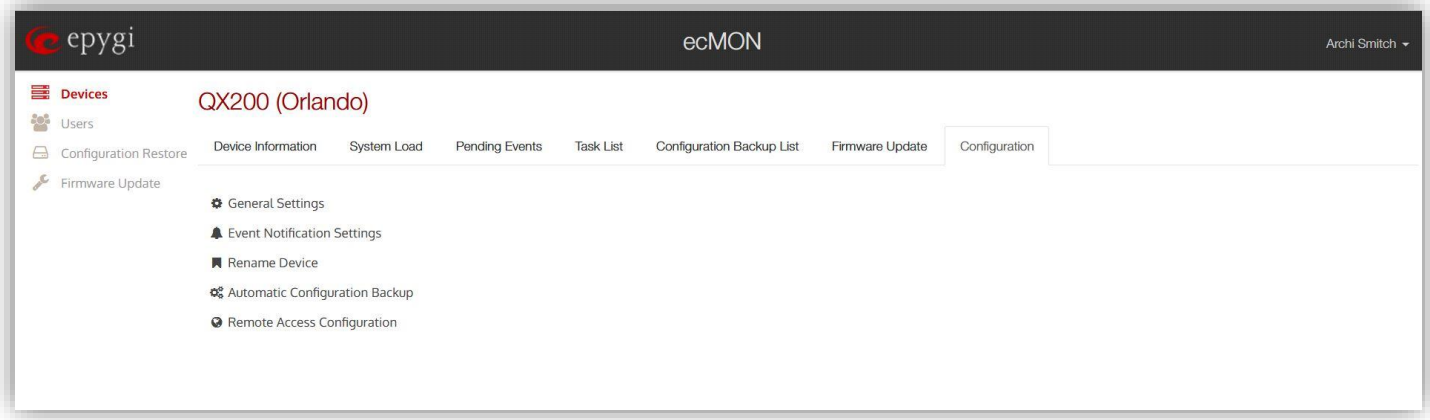
4.1.7 Firmware Update

This section shows the history and the status for FW updates on the selected device by means of ecMON.

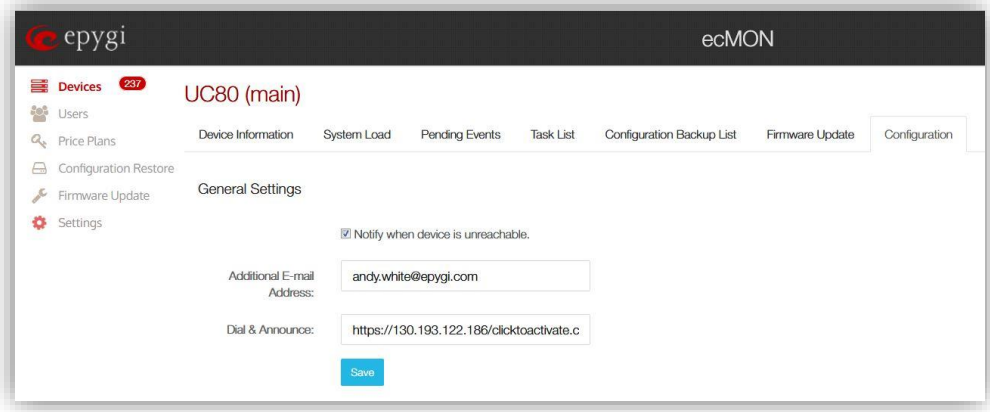


4.1.8 Configuration

This section provides the following menus for configuring and managing the device.



General Settings - This menu allows to activate automatic notifications via email and via phone call when the device is unreachable.



Enter the recipient email address(es) separated by semicolons in the **Additional E-mail Address** field to receive an email notification every time the device loses connection to ecMON and re-establishes connection with it.
Enter the http(s) request in the **Dial &Announce** field to receive phone call notification every time the device loses connection to ecMON. The request URI needs to have the following syntax:

http[s]://[qxdevice]/clicktoactivate.cgi?user=[username]&pass=[userpassword]

Where

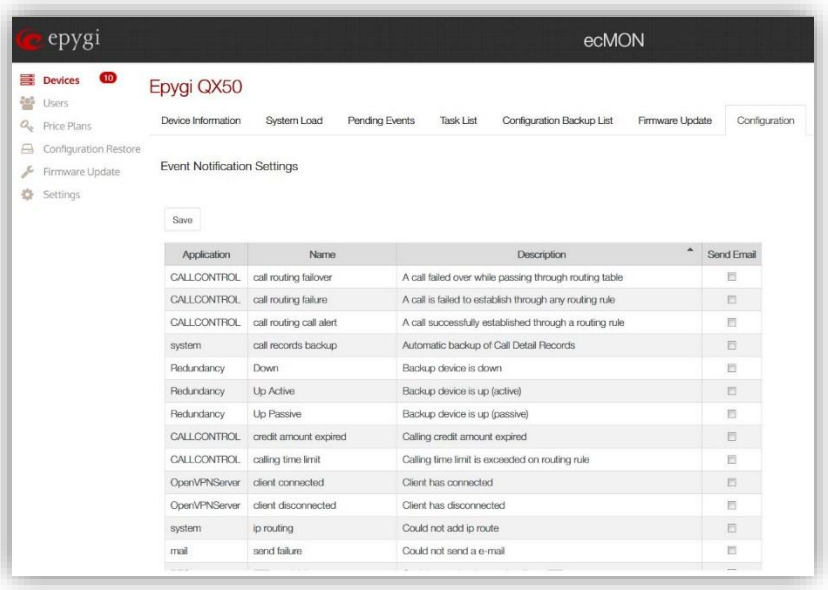
- **[qxdevice]** – the IP address or host name for one of the Epygi IP PBXs of QX line. The Dial @ Announce service and call routing on that QX should be properly configured to support call notifications to recipients
- **clicktoactivate.cgi** – a special command to activate the D&A call on the **[qxdevice]**
- **[username]** – the extension number on the [qxdevice] with Dial @Announce service enabled and properly configured to call the recipient's phone
- **[userpassword]** – the extension password on the **[qxdevice]**

An example for Dial &Announce request URI:

https://130.193.122.188/clicktoactivate.cgi?user=33333&pass=33333

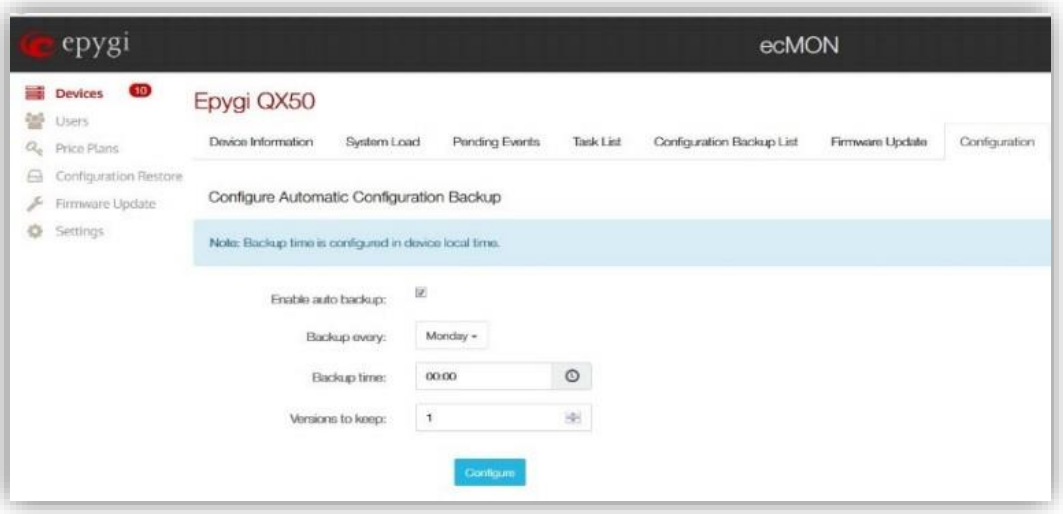
How this works. Every time the device (UC80 in this example) loses connection to ecMON server, the latter sends a request to the QX IP PBX at IP address 130.193.122.188. This QX makes a D&A notification call to the recipient(s) configured for the Dial @ Announce service (under the Caller ID based Services) for the extension 33333.

Event Notification Settings - this section is used to select/deselect the events, which will send to the recipients via email. The events that are shown include all the events on the device regardless if the REST request was enabled or not on the QX. You can setup the desired events using the **Status – Events** menu on the QX. The list of recipients' email addresses is configured in **General Settings**. The e-mail notifications will be sent only for those events that have been configured on the QX to be sent to ecMON.

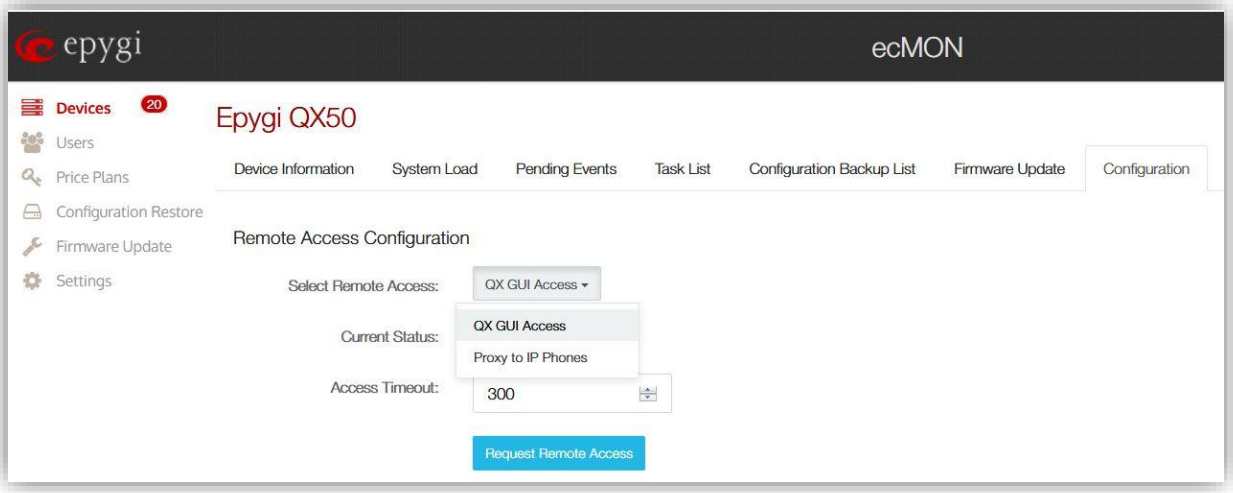


Rename Device - allows to change the device name.

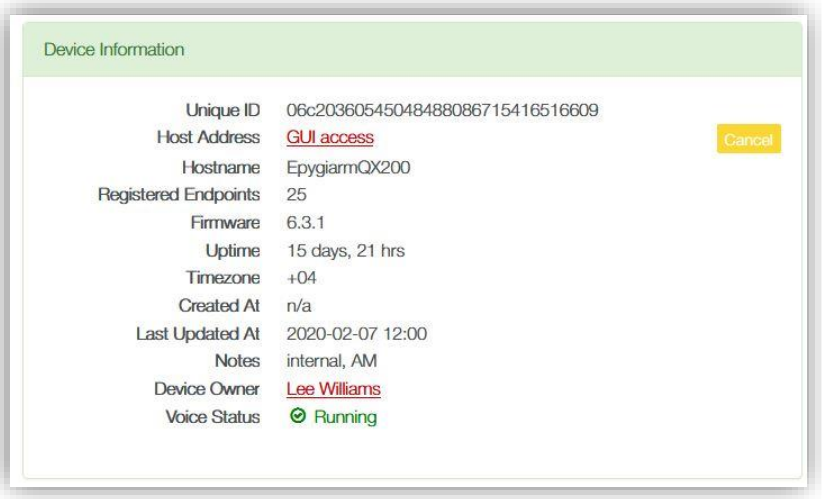
Automatic Configuration backup – allows to enable and schedule the automatic configuration backups. Upon receiving the configuration backup request, the QX backs up the configuration and sends to ecMON, which stores as many backup files as configured. The number of versions of configuration backups is specified in the **Versions to keep** field. This number is limited by 30. The user can restore a QX configuration using one of the stored files from the **Configuration Backup List**.



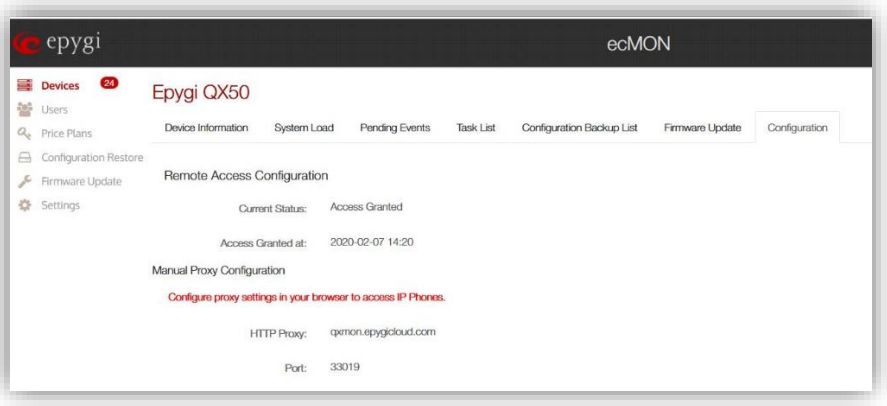
Remote Access Configuration - This feature allows remote access to the QX GUI as well as provides proxy access to the IP phones in the QX LAN.



Remote access to QX GUI - Upon getting the request, the QX will open a temporary secure connection to ecMON. The **Host Address** on the **Device Information** page changes into the "**GUI Access**" link (picture below). Clicking that link will open the login page of the device GUI via a secure connection for a limited time (in seconds), configured in the **Access Timeout** field. When the time limit is reached the QX will close that connection to ecMON. The configuration changes that were saved in the GUI before closing of the connection will be applied; those not saved will be lost.



Remote access proxy to phones - The request for proxy to IP phone access will open the window below:

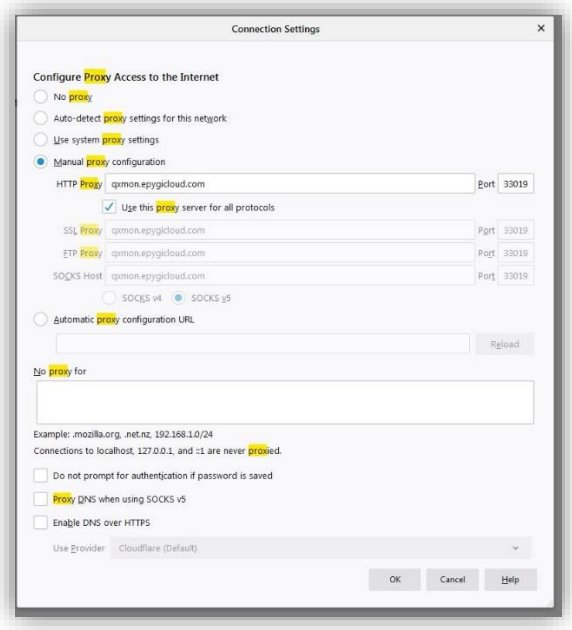


Note. In order to access the IP phone or other devices in QX LAN you have to configure the proxy settings in the your browser. For example, see below the steps on how to do it for the Firefox browser:

- Select **Options** in the Firefox menu
- Open **Network Settings**
- Select **Settings** and then **Manual proxy configuration**
- Fill in the Manual proxy configuration field with the following values as shown in figure below:

Proxy: qxmon.epygicloud.com, port: 33019

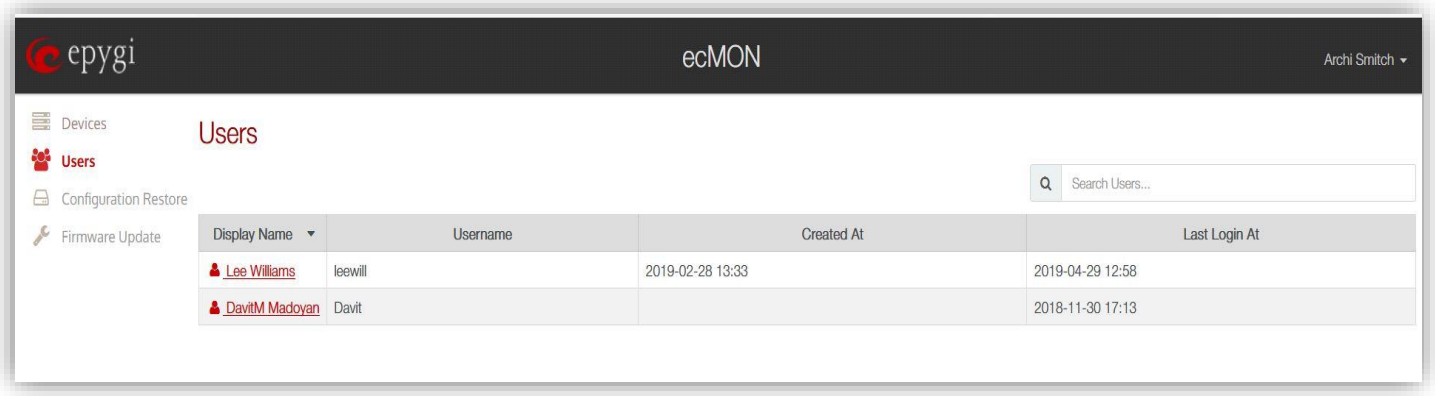
- Press **OK**.



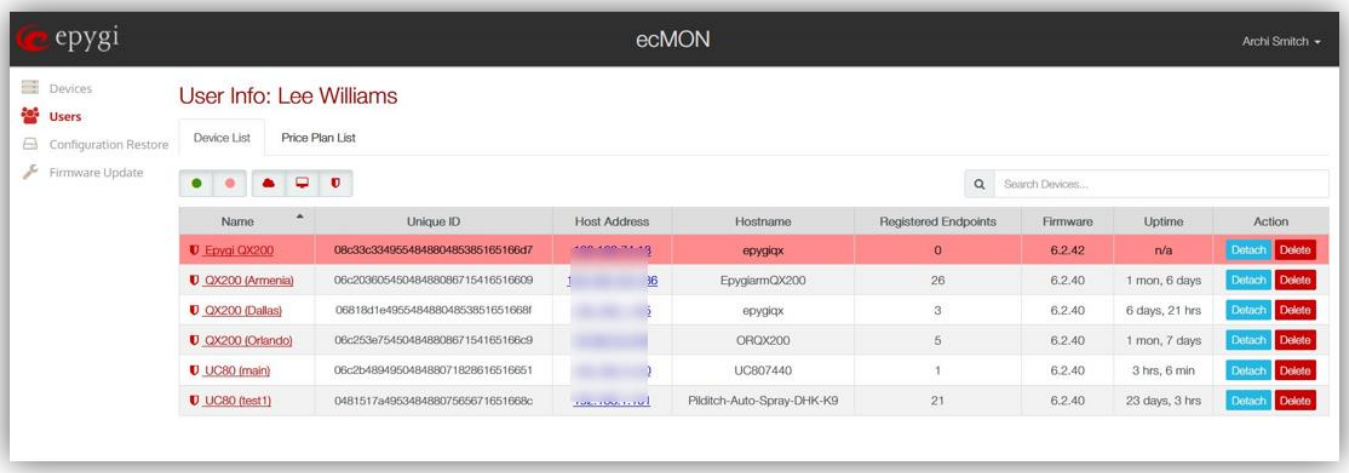
Now entering **qxmon.epygicloud.com:33019** in the Firfox will allow access to the LAN of the QX.

4.2 Users

Shows the list of registered users (resellers) attached to the logged-in distributor.



Clicking on the name of specific user bring the list of devices assigned to that user. Distributor will have full access to the devices belonging to the attached resellers and to the list of Price Plans.



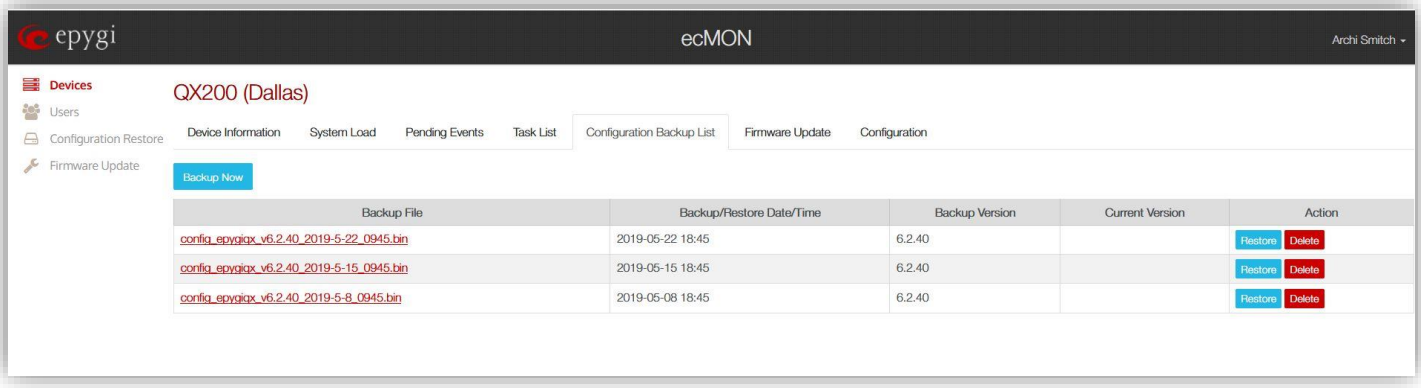
4.3 Configuration Restore

The menu options in this section allow the selected configuration backup files to be uploaded from remote location and saved on the ecMON. The uploaded backups can be then restored on the multiple selected QX devices at once.

4.3.1 Upload Configuration

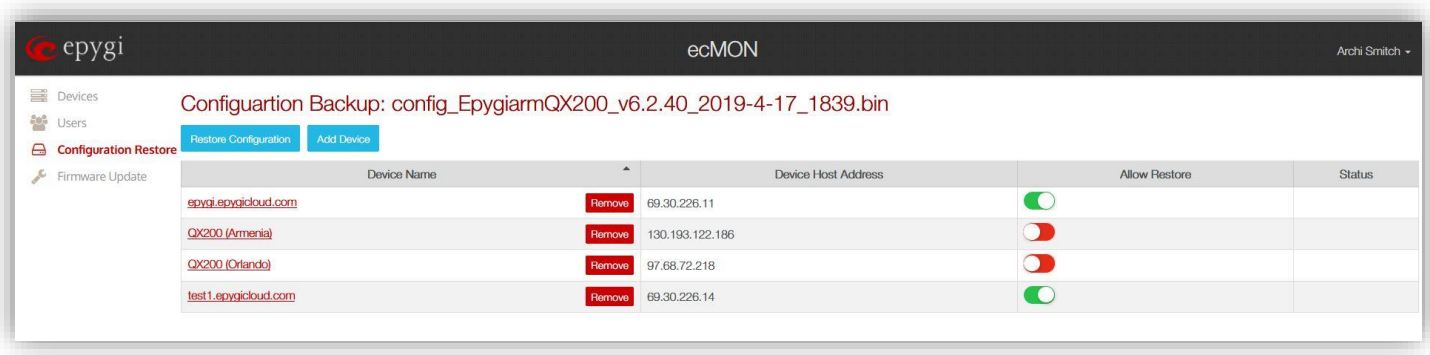
The **Upload Configuration** button allows to load and save backups from PC or any remote location to the ecMON account (Figure 16).

The Uploaded and saved backup files will be listed in the Configuration Backups table.



4.3.2 Restore Configuration

To restore the desirable configuration backup, press the link for backup file. The following page will display:

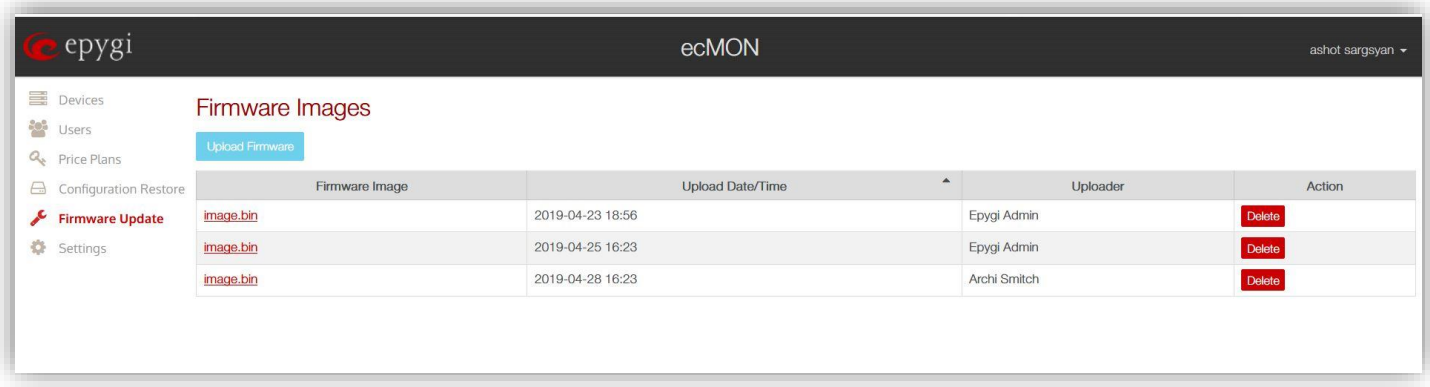


Press the **Restore Configuration** button to restore the backup file. The backed-up configuration would be restored on all devices in the list with the restore allowed. The list of devices could be updated using the **Add/Remove**.

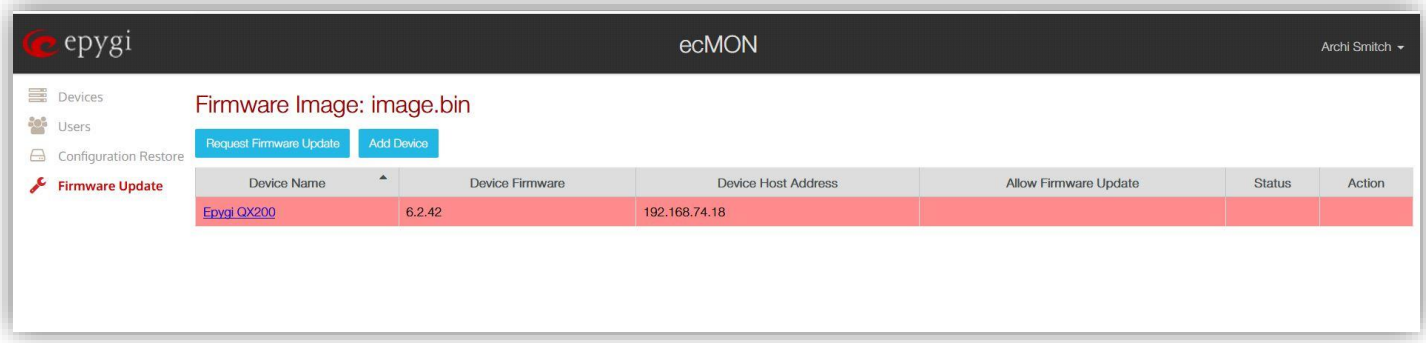
Please Note. In this configuration restore scenario the network related configuration files on all devices in the list will remain unchanged.

4.4 Firmware Update

This section provides menus allowing the specific Firmware to be uploaded and saved on ecMON account. The uploaded Firmware can then be updated on the selected QX devices at once.



To update the desirable Firmware on the selected device(s), press the link for the FW file. The following page will display. Press the **Request Firmware Update.** The Firmware would be updated on all devices in the list with FW update allowed. The list of devices could be updated using the **Add/Remove** links.


epygi
ecMON
Archi Smitch
Devices
Users
Configuration Restore
Firmware Update
Firmware Image: image.bin
Request Firmware Update
Add Device
Device Name
Device Firmware
Device Host Address
Allow Firmware Update
Status
Action
Epygi QX200
6.2.42
192.168.74.18

5 References

Refer to the below listed resources to get more details about the configurations described in this guide:

- Manual-II: Administration Guide for QX IP PBXs
- Manual-I Administration Guide for ecQX
- Manual-II: Administration Guide for UC IP PBXs
- ecQX Portal – Reseller Guide

Find the above listed document on Epygi Support Portal.

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