Clock Setting Management Guide

OneVue Sync PoE

Publication date May 4, 2020

Printed in the USA.

Primex is the leading provider of solutions to automate and maintain facility compliance, increase efficiencies, enhance safety and reduce risk for enterprise organizations in the healthcare, education, manufacturing and government vertical markets. Primex delivers solutions that utilize a facility's existing network infrastructure to automate, monitor, document and report essential activities performed by facility staff. Our solutions include synchronized time, automated critical notifications and bell scheduling, and environmental and event monitoring.

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About managing clock settings

Each device has a unique profile, where you can view and manage its settings. Settings include its name, digital display settings, time zone, and assigned Business Unit and Location.

Methods to manage settings

- **Device Preconfiguration (new order only)**

  Device Preconfiguration automates the configuration of Primex network devices for use with your OneVue account before they arrive at your facility - eliminating the need to manually configure a device onsite. Device Preconfiguration is completed after an order is placed with Primex and completed online from your OneVue account. Your OneVue account ID, the devices' assigned network and settings provided are configured into each device and the devices are labeled before they are shipped from Primex - it's an easy online process that allows devices to be ready for use when they arrive at your facility.
- **OWDC app (new order and post-install)**

  The OneVue Wired Device Configurator (OWDC) Android™ app provides the experience of managing Primex network devices locally at a device on a mobile platform. The app provides flexibility and convenience to add new devices to OneVue and also view or edit a device's primary settings. Once you download the app from the Google Play™ store (it’s free!), you connect a Primex network device to your Android device and the app guides you through the entire process. It's an easy process that provides onsite configuration.
- **Clock Profile (post-install)**

  From its profile, you can view and manage its settings.

  To view a clock profile, go to Devices > Clocks > select the Name link of the device. To view all settings, select Show Advanced Options.

Settings configured from a clock profile

From the profile of a clock, you can manage its settings, view its current state and status, and historical data.

- **Name**

  Uniquely identifies the device and commonly identifies its install location. If a name is not provided, is set to its unique 12-character Device ID (MAC address). Allows up to a maximum of 50 characters.
- **Label**

  Information printed on the label affixed to the device by Primex when the device is configured through the device configuration. By default set to the first 20 characters of the Name. Allows up to a maximum of 20 characters. By default, set to its unique 12-character Device ID.
- **Business Unit**

  By default, assigned to your account Business Unit. To control user access, assign a device to a Business Unit to ensure users have access to the devices they are responsible for.

- **Location**

  By default, a device is not assigned to a Location. If your account structure uses Locations to control user access, assign a device to a Location to ensure users have access to the devices they are responsible for.
- **Time Zone**

  The clock time zone. Default indicates the device is either set to the account time zone or its assigned Location time zone. The time zone is displayed in the parentheses. If the device is assigned to a Location, the default time zone is the Location's time zone.
- **Change State**

  Although OneVue monitors and manages the state of devices, the state change is designed to provide a function that allows a user to manually change the state of a device.

Settings configured from a clock gateway profile

From a clock profile, selecting the Gateway ID link opens its gateway profile.

- **Network**

  Primary network assigned to the device. During its check-in sequence to OneVue, the device attempts to connect to this network first. If the connection fails, the device automatically attempts to connect to its alternate network.
- **Alternate Network**

  This network serves as a backup network. When a device cannot establish a connection to its primary network, it automatically attempts to connect to its assigned alternate network.
- **Firmware**

  Identifies the current firmware version. When set to Latest, the device automatically downloads new firmware released by Primex. If not set to Latest, displays the device's current installed version. Primex strongly recommends that firmware is set to Latest (default setting). To view firmware release notes, select View Change Log.
- **Unresponsive Timeout**

  The Unresponsive Timeout is the maximum amount of time a Primex device can go without a check-in to OneVue. When this time limit is exceeded, the device is set to an Alarm state with an Unresponsive status.
- **NTP Servers**

  The device's NTP time sources. When set to Default, the device connects to the NTP Servers set in the account profile. When assigned to a Location and set to Default, the device connects to the NTP Servers set in the Location. Primex strongly recommends to set all three servers for fail over purposes. When a device fails to connect to or receive time from a NTP Server, it's set a Warning state with a Time Sync Error status.
- **Check-in Interval**

  The Check-In Interval sets how often the device connects to the network and checks-in to OneVue. During each check-in, the device connects to its NTP time source and synchronizes its time, sends its current status to OneVue, and downloads pending setting changes.

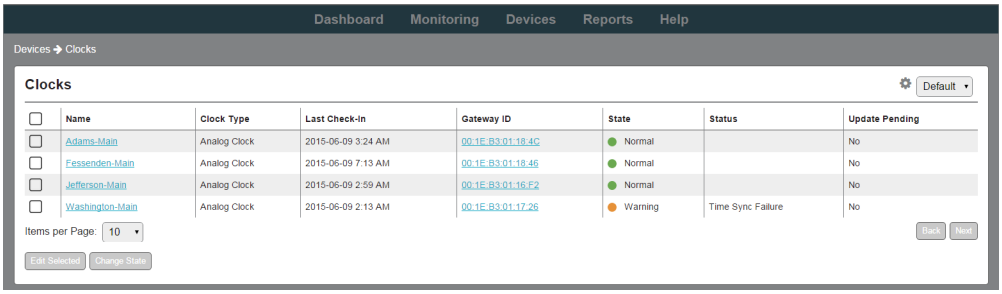
View clock settings

You may have a handful to hundreds of devices deployed at your facility. Each clock has its own its profile, where you can manage its settings, view its current state and status, and historical data.

From a clock profile, you can manage its settings, view its current state and status, and historical data.

View all clocks

1. Go to Devices > Clocks.
2. A list of all devices is displayed.



Column	Definition
Name	Commonly identifies the device install location. By default, set to its 12-character Sync Bluetooth Device ID (BTID). Allows up to a maximum of 50 characters. Selecting the Name link opens its profile.
Description	Identifies the type of device. BC indicates a Sync Bluetooth device.
Gateway ID	Selecting the link opens the gateway profile.
State	Current state of the device.
Status	Current status of the device.
Update Pending	Its Update Pending status is set to Yes. The update is scheduled to be downloaded to the device during its next daily connection to the mesh network. Once downloaded, its Updating Pending status is set to No. Also, the Update Pending Status for all bridges is set to Yes. This is due to a Bridge sends setting updates to clocks and repeaters.

View a clock profile

From a clock profile you can manage its settings, view its current state and status, and historical data.

1. Go to Devices > Clocks.
2. Select the Name link of the clock.
3. To view all settings, select **Show Advanced Options**.

Setting	Definition
Name	Commonly identifies its install location. By default, set to its 12-character Device ID (BTID). Allows up to a maximum of 50 characters. It's recommended to develop a standard naming convention to allow you to easily locate a device if maintenance should be required.
Description	Identifies the device model.
BTID	System generated, unique Bluetooth Device ID assigned to the device.
Gateway ID	Gateway profile associated to the device. Selecting the link opens the gateway profile.
State	Current state of the device.
Status	Current status of the device. The status indicates the cause of the clock entering a Warning state.
Update Pending	Indicates if a change is scheduled to be downloaded to the device during its connection to a Sync Bluetooth mesh network. The pending setting change takes effect once the setting change is downloaded to the device. Once successfully downloaded, its Updating Pending status is set to No.
State History	All state changes occurred by a device.
Accuracy Log	Summary of the check-in history and drift and NTP accuracy log. This data may be beneficial when troubleshooting the time accuracy of a clock.
Digital Event History	Sync PoE Digital Elapsed Timer and Code Blue Timers: During each check-in, digital events are transmitted to your OneVue account. A Digital Event is a specific action of an elapsed or code blue timer invoked by use of the timer switch control. Typically each digital event has a start and stop action and either a count up, count down, or code blue type of event.
Advanced settings. Below settings are only viewable when Show Advanced Options is selected.	
Business Unit	Business Unit assigned to the clock. By default, set to the account Business Unit.
Location	Location assigned to the device. By default, not assigned to a Location. Locations are commonly used if a groups of device reside in different time Zones.
Notes	For information purposes only. Commonly identifies other unique device detail in addition to its name.
Change State	Allows a user assigned to an Admin Role to change the state of the device. Although the system monitors and manages the state of all devices, the state change is designed to provide a function that allows an admin user to change the state of a device.
Time Zone	The clock time zone. Default indicates the clock is either set to the account time zone or its assigned Location time zone. The time zone is displayed in the parentheses. If the clock is assigned to a Location, the default time zone is the Location's time zone.

Setting	Definition
Display Settings (Digital Clocks/ Timers)	Set the brightness level, display mode and format of a digital clock or timer, and the audio buzzer setting of an elapsed timer.

Configure the name of a clock

The name of a clock commonly identifies its install location. It's recommended to develop a standard naming convention to allow the device to be locate if maintenance should be required.

1. Go to Devices > Clocks.
2. From the list, select the Name link of the device.
3. From the Name field, enter its name. Allows up to a maximum of 50 characters.
4. Select Save.

Configure the time zone of a clock

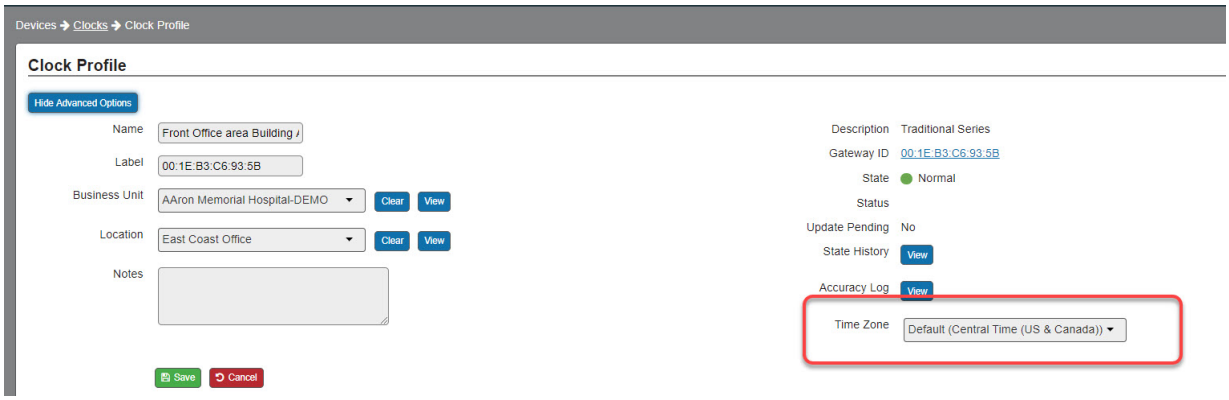
You may need a clock or several clocks to display a time zone different than all other clocks. For example, you have a wall of clocks that display various time zones.

By default, all clocks are set to the time zone set in the OneVue account profile. The only exception is when a clock is assigned to a Location, it then is set to the time zone of the Location. Locations are commonly only used when clocks are located in different geographic areas.

1. Go to **Devices** > **Clocks**.

> **TIP**
>
> You can also set the time zone of multiple clocks [16] at the same time.

2. Select the **Name link** of the clock. Its profile is displayed.
3. Select **Show Advanced Options**.
4. From the **Time Zone** drop-down list, select a time zone. The time zone is displayed in the (parentheses). Default indicates the clock is either set to the account time zone or its assigned Location time zone. If the time zone is set to default and the account or assigned Location time zone is updated, the system automatically updates the time zone of the clock.



5. Select **Save**.

Its Update Pending status is set to Yes and the setting change is scheduled to be downloaded to the device during its next check-in to OneVue.

Its Update Pending status is set to Yes. The update is scheduled to be downloaded to the device during its next daily connection to the mesh network. Once downloaded, its Updating Pending status is set to No.

Also, the Update Pending Status for all bridges is set to Yes. This is due to a Bridge sends setting updates to clocks and repeaters.

Configure clocks to use specific NTP servers (time source)

A PoE Clock obtains UTC time from an NTP server during each check-in and then synchronizes the received UTC time to its assigned time zone. By default, all clocks are set to the NTP servers set in the account settings. If all clocks will use the same NTP servers, it's recommended to update the NTP account server settings (go to Admin > select your account name).

1. Go to **Devices** > **Clocks**.

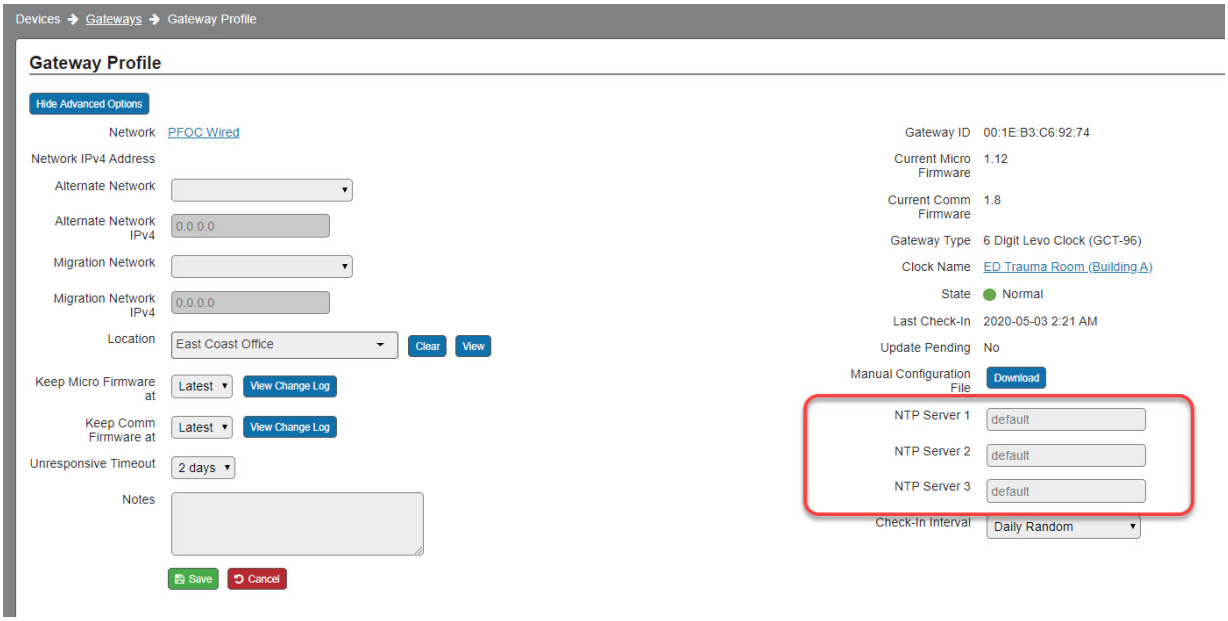
> **TIP**
>
> If you need to update more than one clock, be sure to use the multi-edit feature. From the list, select all of the clocks to update and then select Edit Selected. You can then apply an NTP server update for all of the selected clocks.

2. From the list, select the **Gateway ID link** of the clock. Its gateway profile is displayed.
3. Select **Show Advanced Options**.

4. From the **NTP Servers (1-3)**, enter the domain name for each NTP server.

   NTP server guidelines

   - The system default NTP servers are set to (1) 0.us.pool.ntp.org (2) 1.us.pool.ntp.org (3) 2.us.pool.ntp.org, which are external servers.
   - The use of external NTP servers requires that port 123 is open to UDP traffic to allow the Primex network devices to connect to an external server.
   - Primex recommends to set the NTP Servers to your organization's designated NTP servers and configure all three servers to ensure a reasonable level of accuracy can be maintained.
   - By default, Primex devices are set to synchronize to the NTP servers set in the account profile. Optionally, the NTP servers can be set in a device's gateway profile or location.



5. Select **Save**.

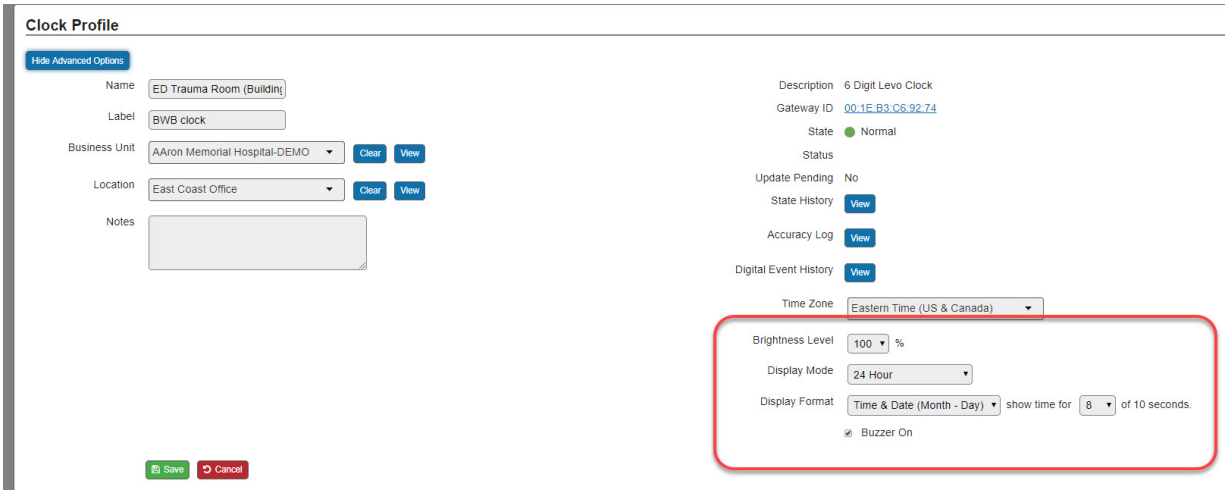
   Its Update Pending status is set to Yes and the setting change is scheduled to be downloaded to the device during its next check-in to OneVue.

Configure the display of a digital clock or timer

You can set the display brightness level, display mode, and time and date format. For an elapsed timer, you can set its audio buzzer to be on or off.

1. Go to **Devices** > **Clocks**.
2. From the list, select the **Name link** of the clock. Its profile is displayed.
3. Select **Show Advanced Option**s.

4. Update its **display settings**.



Setting	Definition
Brightness Level	The brightness percentage of its LED display. Options include 25%, 50%, 75%, 100%. A lower percentage results in a dimmer display. The default value is 75%.
Display Mode	Sets how the clock displays its time. Options include 12 Hour, 12 Hour w/ AM & PM, and 24 Hour. The default value is 12 Hour w/ AM & PM.
Display Format	Sets if the clock displays its time only or if it alternates between its time and the current date. Options include Time Only, Time & Date (Month - Day), Time & Date (Day - Month). By default, set to Time Only. If a time and date setting is selected, the clock display alternates between the time and date at the interval set (show time for) every 10 seconds. For example, if set to show for 8 seconds of 10 seconds; every 8 seconds the time is displayed and then the date is displayed for 2 seconds.
Show Time For	When its display format is set to a time and date format, sets the number of seconds time is displayed during the 10 second alternating cycle between the time and date. The default value is 8 seconds.
Buzzer On (elapsed timer model only)	Indicates if the timer audio buzzer is ON during a count down event. By default set to On.

5. Select **Save**.

   Its Update Pending status is set to Yes and the setting change is scheduled to be downloaded to the device during its next check-in to OneVue.

   Its Update Pending status is set to Yes. The update is scheduled to be downloaded to the device during its next daily connection to the mesh network. Once downloaded, its Updating Pending status is set to No.

   Also, the Update Pending Status for all bridges is set to Yes. This is due to a Bridge sends setting updates to clocks and repeaters.

Configure the settings of multiple clocks at the same time

You can update the settings of multiple devices at the same time, eliminating the need to update each device individually from its profile. If updating digital display settings, all models selected must be digital.

The setting change is scheduled to be downloaded to each device during its next check-in to your OneVue account and its Update Pending status is set to Yes. Once downloaded, the device's Updating Pending status is set to No.

1. Go to **Devices** > **Clocks**.
2. From the list, **select each device to be updated**. When selected, a checkmark is displayed in the row of each device selected.
3. Select **Edit Selected**. The Mass Edits Clocks window is displayed.
   For all clock models, setting options include: Business Unit, Location, Time Zone
   For digital clock models, settings include display options.
4. Select **Update All Selected Clocks**.

Assign a clock to Business Unit or Location

If there is a change in your account structure, you may need change a device's assigned Business Unit or Location. By default, a device is set to your account Business Unit. A Location is an optional setting that may be used in large organizations spanning across multiple buildings or geographic areas.

1. Go to Devices > Clocks.
2. Select the Name link of the clock.
3. Select Show Advanced Options.
4. From the Business Unit or Location setting, select an option from the drop-down menu. A Location is an optional setting.
5. Select Save.

Change the state of a clock

Although the system monitors and manages the state of your devices, the state change feature is designed to provide a function that allows an authorized user to change the state of a device. A state change is performed from a clock profile. You can also change the state of multiple devices [18] at the same time.

Considerations when changing the state of a device

- Should only be performed if a condition warrants manually changing its state.
- When you change the state of a device to a Warning state, upon each check-in the system automatically sets the state transmitted by the device. Therefore, if a subsequent check-in results in a Normal state, the system automatically sets the device to a Normal state.
- If the device is set to a Suspended or Decommissioned state, a subsequent check-in with a Normal or Warning state does not change its state. Therefore, a state change is required to be completed to change the state from Suspended or Decommissioned.
- All changes are logged, including the date and time the state change was made, the user that performed the change, and the reason the change was performed. The state change details are viewable from the clock state history.

Change the state of a clock

1. Go to Devices > Clocks.
2. Select the Name link of the device.
3. Select Show Advanced Options.
4. From the New State Change drop-down menu, select the state the device is to be changed to.
5. From the Reason field, enter the condition that warranted changing the state.
6. Select Change State.

The device's state is changed. Any statuses associated to the previous state are cleared.

Change the state of multiple device at the same time

You can easily change the state of multiple device at the same time. All selected devices are changed to the state selected during this procedure.

1. Go to Devices > Clocks.
2. From the list, select the devices to be changed.
3. Select Change State. The Mass Change State window is displayed.
4. From the New State drop-down menu, select the state to be changed to.
5. Enter a Reason the state change is being performed.
6. Select Change State of All Selected Clocks.

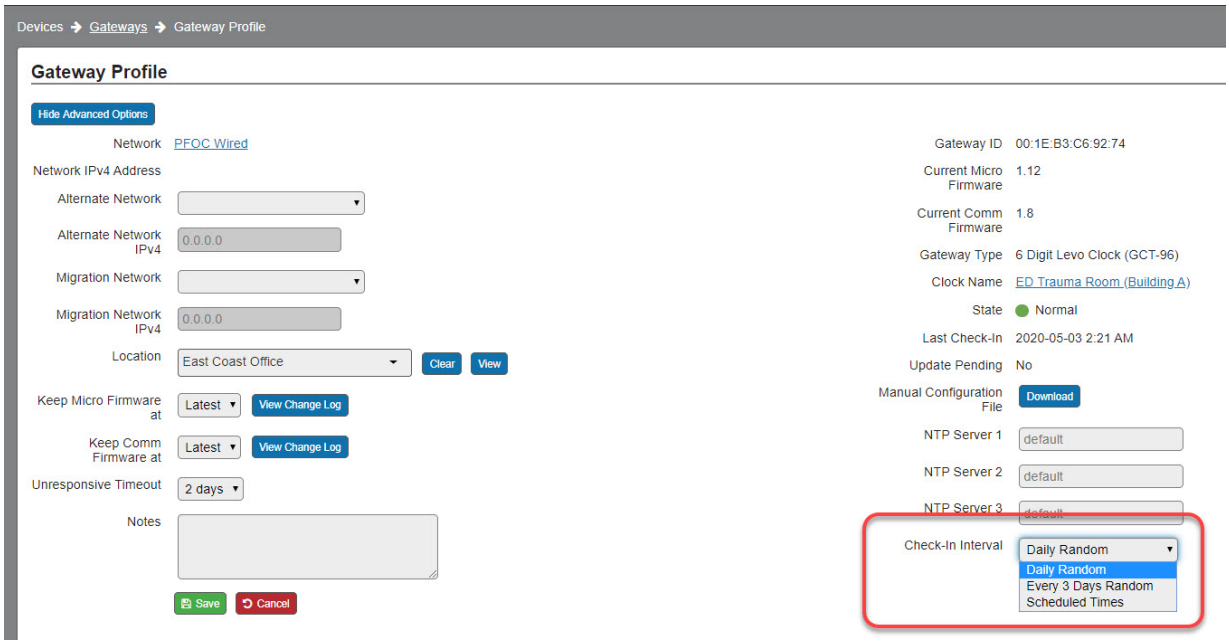
The state is changed for all of the selected devices. Any statuses associated to the previous state are cleared.

Configure how frequent a clock connects to the network

A PoE clock has a Check-in Interval setting that sets how frequently it connects to the facility's network to obtain time from its NTP time source and check-in to OneVue. During each check-in, it sends its current operating status and events and downloads pending setting updates.

By default, set to connect to the network at a daily at a random time. The additional options include every 3 days at a random time or at six daily scheduled times.

1. Go to **Devices** > **Clocks**.
2. From the list, select the **Name link** of the clock. Its profile is displayed.
3. Select its **Gateway ID link**.
4. Select **Show Advanced Options**.
5. From the **Check-In Interval** drop-down menu, select an option.



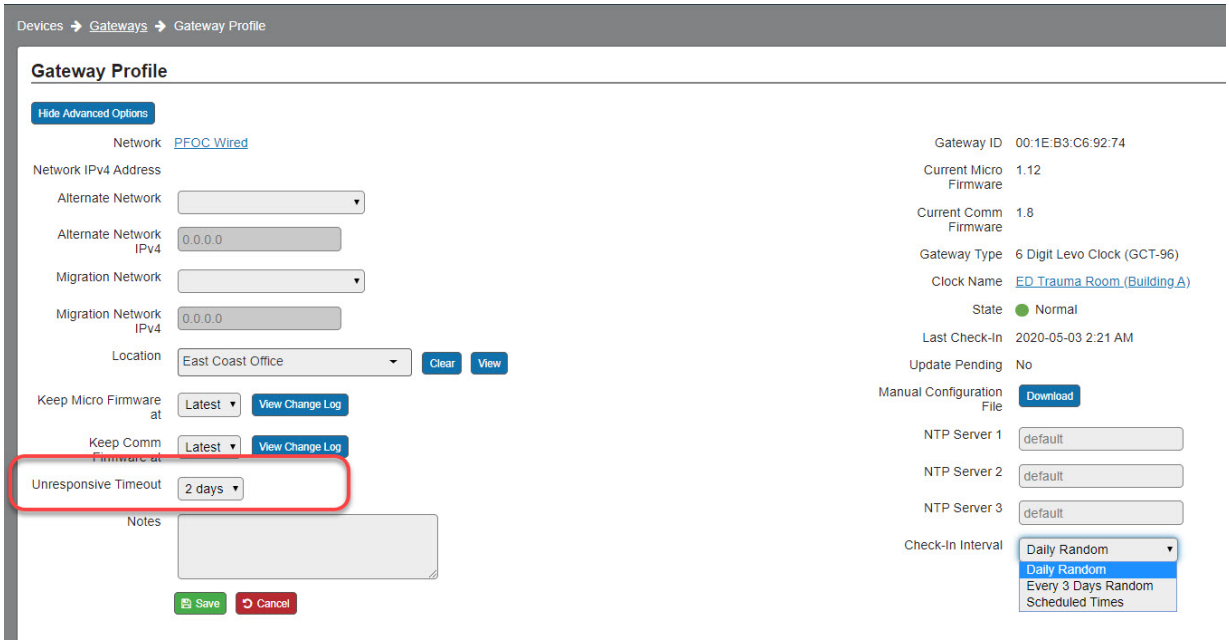
6. Select Save.

   The Update Pending status is set to Yes when a setting change is scheduled to be downloaded to the device during its next check-in to OneVue. Setting changes take effect when downloaded to the device. Once downloaded, its Updating Pending status is set to No.

Configure how long a clock can go without a check-in to OneVue (Unresponsive Timeout)

A PoE Clock has an Unresponsive Timeout setting that sets the maximum amount of time a clock can go without a check-in to OneVue. When this time limit is exceeded, the clock is set to a Warning state with an Unresponsive status. Commonly a clock cannot check-in to OneVue due to a network connectivity or power issue. By default, the Unresponsive Timeout is set to 2 days and additional options include 1, 2, 3, 4, or 6 days.

1. Go to **Devices** > **Clocks**.
2. From the list, select the **Gateway ID link** of the clock.
3. Select **Show Advanced Options**.
4. From the **Unresponsive Timeout** drop-down, select the maximum amount of time a clock can go without a check-in to OneVue.



5. Select **Save**.

   The Update Pending status is set to Yes when a setting change is scheduled to be downloaded to the device during its next check-in to OneVue. Setting changes take effect when downloaded to the device. Once downloaded, its Updating Pending status is set to No.

View and configure clock firmware

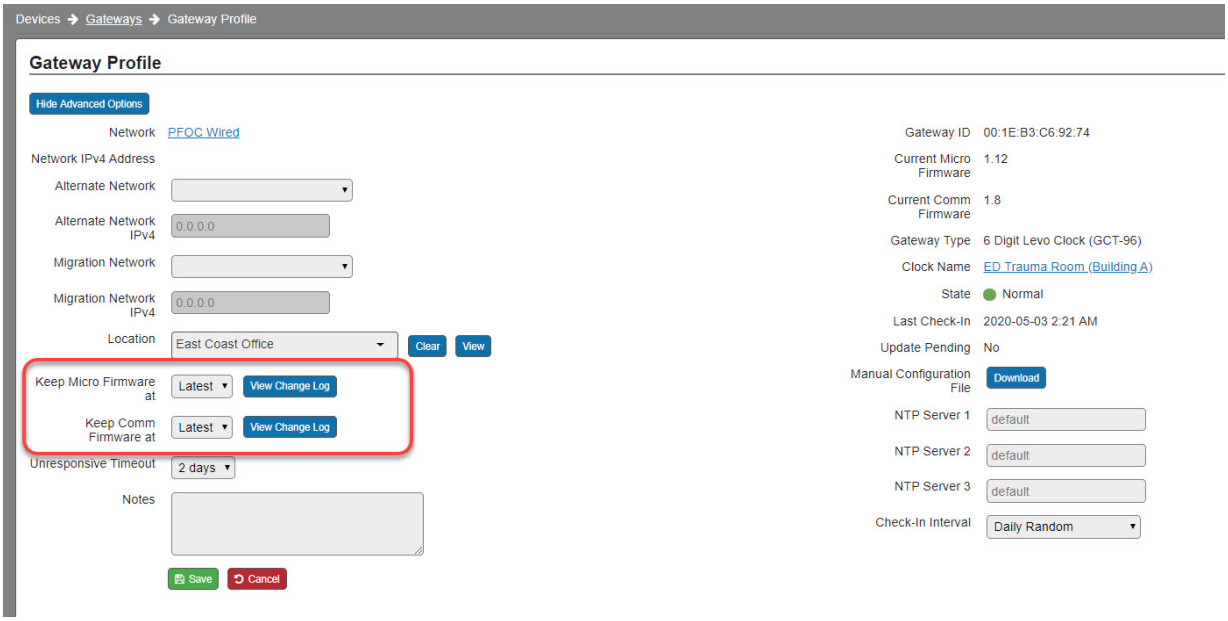
A PoE clock has firmware that controls how it operates and communicates over a network. By default, clock firmware is configured to update automatically when released by Primex.

Firmware updates can also be manually managed by your staff, which should be performed under the direction of Primex technical support. Primex may release a firmware update that is either required to be applied or an optional update.

View current firmware version

1. Go to **Devices** > **Clocks**.
2. From the list, select the **Name link** of the clock. Its profile is displayed.
3. Select its **Gateway ID link**.
4. Select **Show Advanced Options**.

   The current firmware versions are displayed. If a value is blank, the firmware type does not apply to the device model.



Set firmware to update automatically

You can set a PoE clock to automatically download firmware updates released by Primex. This is the system default and recommended by Primex.

1. Go to **Devices** > **Clocks**.
2. From the list, select the **Name link** of the clock. Its profile is displayed.
3. Select its **Gateway ID** link.

4. Select **Show Advanced Options**.
5. Set firmware to update automatically.

   From both the **Keep Micro Firmware at** and **Keep Comm Firmware at**: select **Latest**.
6. Select **Save**.

   When a new firmware version is released, the firmware update is automatically downloaded and applied.

Update firmware manually

You can manually update the firmware version. During this procedure, you select a specific firmware version and at its next check-in the firmware update is downloaded to device.

This procedure should only be completed under the direction of Primex technical support.

1. Go to **Devices** > **Clocks**.
2. From the list, select the **Name link** of the clock. Its profile is displayed.
3. Select its **Gateway ID link**.
4. Select **Show Advanced Options**.
5. Set the firmware versions.

   The latest version is the highest number and are listed in descending order. For example, 8.11 is newer than 8.2. Numbers to the right of the decimal point should be read as a whole number representing the sub-unit of the main version number.

   It's recommended to update to the latest version, unless directed otherwise by Primex.

   To view the details of the firmware update, select View Change Log.
6. Select **Save**.

   Its Update Pending status is set to Yes and the setting change is scheduled to be downloaded to the device during its next check-in to OneVue.

Technical Support

You may require Technical Support when you have questions about product features, system configuration, or troubleshooting. Support services are delivered in accordance with your organization's support agreement, end-user license agreements, and warranties, either with a Primex Certified Sales and Service Partner or directly with Primex.

Support through Primex Certified Sales and Service Partners

Ensuring our customers experience excellent service is of utmost importance to Primex. Our network of Certified Sales and Service Partners offers technical support services for Primex products.

If you have purchased Primex products or have a service agreement with a Primex Partner, they are your primary contact for all Technical Support inquires.

Primex Technical Support

Make sure you have satisfied the system requirements that are listed in your product documentation. Also, you should be at the computer or device on which the problem occurred, in case it's necessary to replicate the problem.

When you contact Primex Technical Support, please have the following information available:

- Customer ID/Account Name
- Problem description/error messages
- Device hardware information
- Troubleshooting performed before contacting Primex
- Recent network changes

PRIMEX TECHNICAL SUPPORT

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