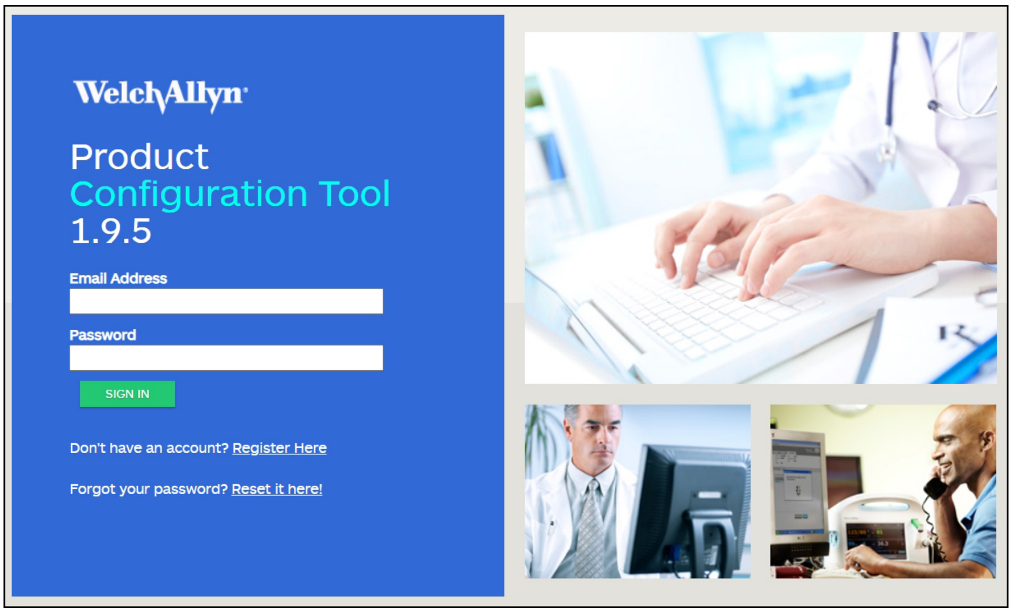
Welch Allyn

Product Configuration Tool

Software version 1.9.5



User guide

For information about any product, contact Baxter Technical Support: Technical Support.

Welch Allyn patents: hillrom.com/patents.

This manual applies to the Welch Allyn Product Configuration Tool # 901197.

REF 80023800B

Revision date: 2025-08

Welch Allyn, Inc.
4341 State Street Road
Skaneateles Falls, NY 13153 USA

Made in United States of America

baxter.com

Contents

Symbols and definitions

For information on the origin of these symbols, see the Welch Allyn symbols glossary: bax.to/docs-wa-symbols.

Documentation symbols

WARNING		The warning statements in this manual identify conditions or practice that could lead to illness, injury, or death. Warning statements appear with a gray background in a black and white document.
CAUTION		The caution statements in this manual identify conditions or practices that could result in damage to the equipment or other property, or loss of data.
7d baxter.com		Follow instructions for use (IFU) -- mandatory action. A copy of the IFU is available on this website. A printed copy of the IFU can be ordered from Baxter for delivery within 7 calendar days.

Miscellaneous symbols

	Manufacturer	REF	Reorder number
GTIN	Global Trade Item Number	LOT	Batch code
Rx ONLY	Prescription device	#	Model number

Introduction

About this User guide

This User guide is intended to help users interact with the **Welch Allyn** Product Configuration Tool by describing its capabilities and operation. Before using the Configuration Tool, read this manual. You can use the Configuration Tool with the following devices:

- **Welch Allyn Connex 360** Vital Signs Monitor
- Welch Allyn **Connex Spot** Monitor (CSM)
- **Connex Vital Signs Monitor 6000 Series** (Connex VSM) for configuring custom scoring and manual parameters only

Primary intended users

Primary intended users of the Configuration Tool include biomedical personnel, systems integrators, and both Baxter and third-party service personnel. Secondary intended users include medically qualified, trained healthcare professionals.

System requirements

Web browser

- **Microsoft Edge** (Version 112.0 or later)
- **Google Chrome** (latest version) for **Windows**
- **Firefox** (Version 112.0.2 or later)
- IOS **Safari** (Version 16.2 or later)

High-speed Internet connection

Broad-band Internet connection (minimum download speed 1.5 Mbps)

IT Network Security

Computers used to connect to the Configuration Tool should be set up and maintained following IEC 80001 or similar IT Network security practices. These include:

- physical security of the computer and any connected peripherals to prevent theft, tampering, unauthorized use, or unintended disclosure of private data shown on the computer screen.
- individual user authentication using strong passwords and, if possible, some form of multifactor authentication.
- idle-session timeouts with either screen locking or automatic logout.
- user access rights/permissions limited to those required for the user's assigned role.
- timely installation of all computer and operating system vendor's security patches and updates.
- anti-virus, anti-malware, and intrusion detection/prevention software from a trusted vendor installed and regularly updated.
- periodic system backups, with regular testing of system recovery procedures.
- secure network connection, either wired or wireless. Wired network connections should be physically secured and/or protected by 802.1X network access control and/or IPsec. Wireless network connections

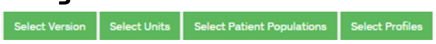
should use WPA2-PSK or WPA2- Enterprise security with strong user name and password or X.509 certificate-based authentication.

Customers should only download configuration files directly from the secure Configuration Tool website.

⚠ **WARNING** Product security hazard. Protect your passwords and physical access to computers and servers with the **Connex 360** Monitor, **Connex Spot** Monitor, or **Connex** Vital Signs Monitor. Follow local and facility-wide practices and regulations intended to protect patient data. Unauthorized access can lead to loss of data confidentiality, corruption of data, device unavailability, and attempts to retrieve customer network credentials from the device.

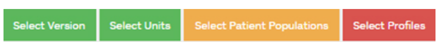
Screen elements

Navigation tabs



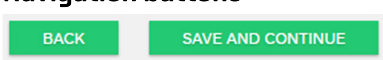
Click the navigation tab to move to the next section on the screen. (For example, click **Select Units** to move to that section. Tabs in green or yellow are active.)

For the **Connex 360** monitor, the fourth tab is Select Interval and Average.



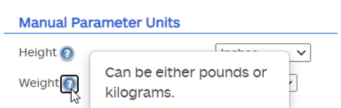
Click the navigation tab to move to the next section on the screen. (For example, if you click **Select Profiles** for a **Connex Spot** Monitor or **Select Interval and Average** for a **Connex 360** device, that tab appears red. A red tab indicates that the section is not complete and not active yet.)

Navigation buttons



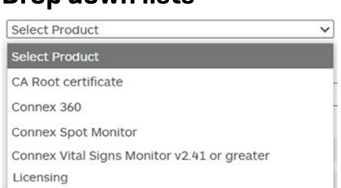
Click global navigation buttons. (For example, click **BACK** or **SAVE AND CONTINUE**, to move to the previous or next screen.

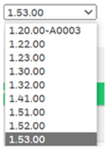
Help button



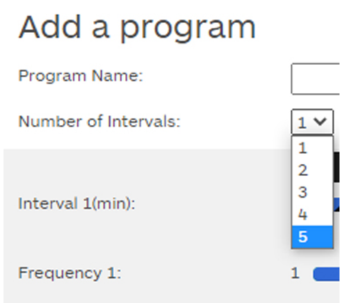
Click **?** for on-screen context-sensitive help. (Click the button to see additional information presented on the screen.)

Drop down lists





Select an item from a drop-down list. (Choices are pre-populated and the maximum number of choices appear in each list. Scroll through the list and click the choice to select it. When selected, the choice is indicated with a highlight.)



Select an item from a drop-down list. (Choices are pre-populated and the maximum number of choices appear in each list. For the screen example shown for Add a program, the maximum number of intervals is 5.)

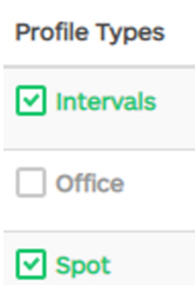
Field entries

Displays the characters you enter. The field name appears above this field. Refer to the on screen help for character limitations for entry fields. Example message: `A valid Program Name is required. It must be 1-32 characters in length.` Input text fields in the sensitive areas of the Configuration Tool are protected from script execution.

Radio buttons

Click a radio button to choose one of the options presented on the screen. When selected, the choice is indicated with the circle filled in.

Selection boxes



Click a selection box to choose one or more options presented on the screen.

Lock button

Incomplete configuration. Download locked.

Sliders

Click a parameter slider to change a parameter value presented on the screen and on a device configuration file (once loaded onto the device). Use the slider to set the numeric value for the parameter. (In this example, 75 is the default value. The minimum value is 1 and the maximum value is 240 on the scale.)

Logout time

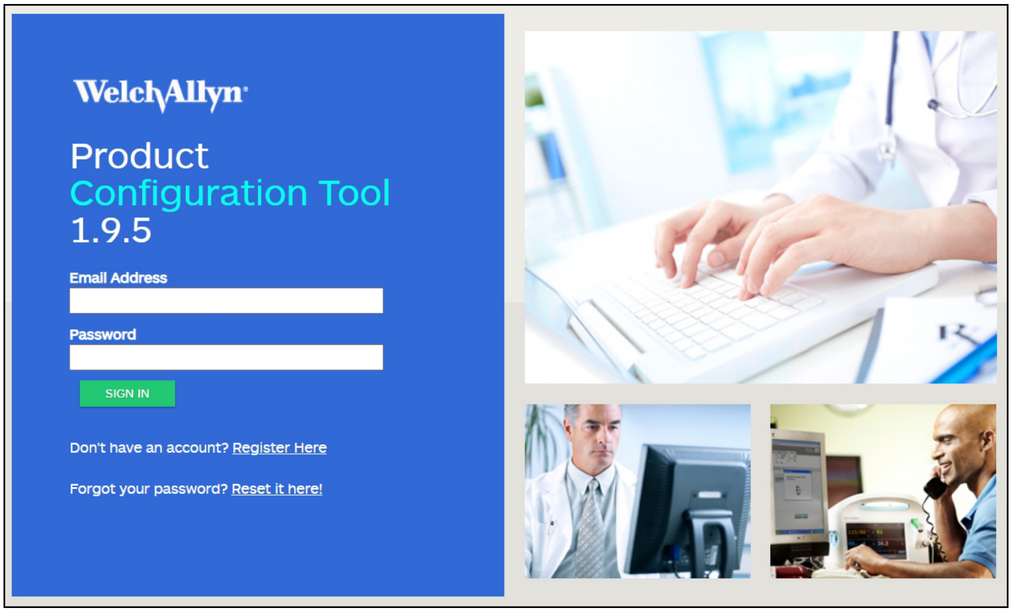
After a period of inactivity of approximately 20 minutes, the Configuration Tool automatically logs out the user. Log back in to the Configuration Tool to continue working in the tool.

NOTE You may need to edit a configuration file if the last transaction was not saved before log out.

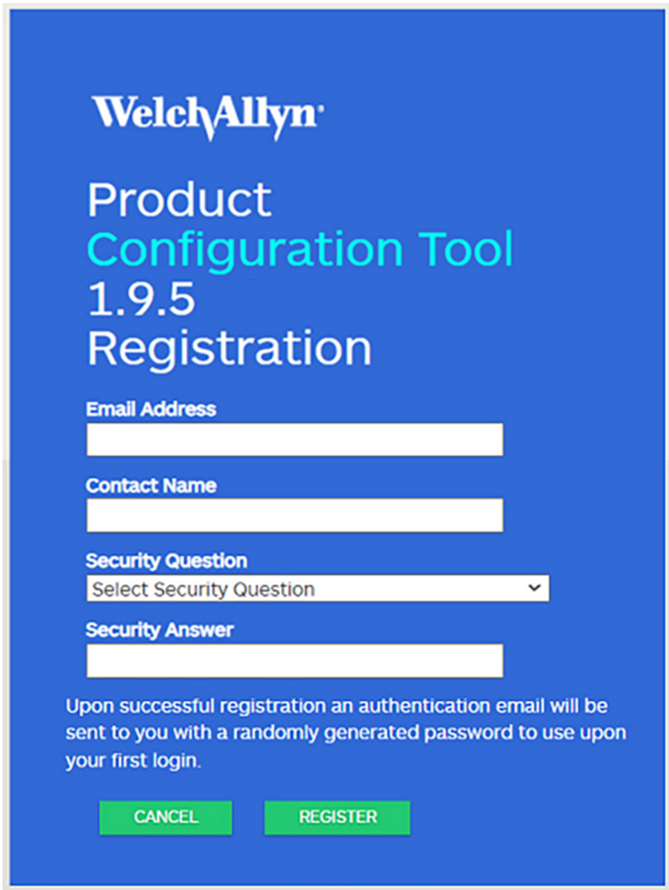
Registering the Configuration Tool

NOTE *New users*: Click **Register Here**. *Existing users*: Enter your email address and password in the Email Address and Password fields of the Configuration Tool and then click **SIGN IN**.

1. Use a web browser to navigate to the Configuration Tool at: https://config.welchallyn.com/configurator/.



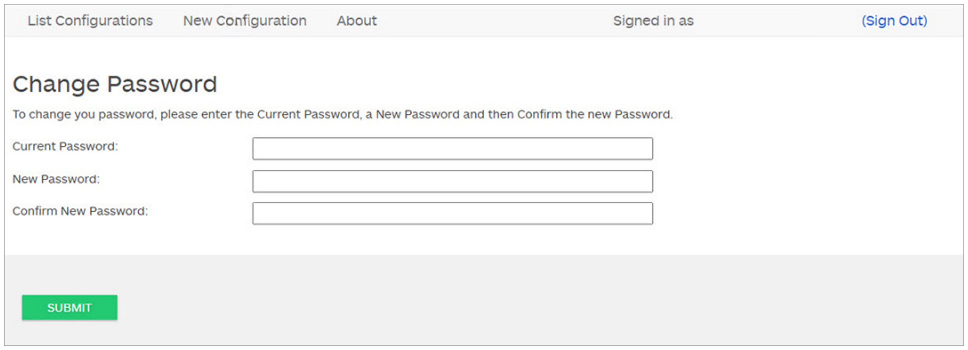
2. If you do not have an account set up yet, click **Register Here** and complete the fields on the Registration screen.



New users: Enter your email address and password in the Email Address, Contact Name fields, and then select a Security Question from the drop-down menu. Type your answer into the Security Answer field. When done, click **REGISTER**. The website will return you to the sign in page once the registration is complete. The email address must be valid. An email will be sent to the Email Address with instructions to login using a temporary password and to change your password.

Existing users: Enter your email address and password in the Email Address and Password fields of the Configuration Tool and then click **SIGN IN**. If you do not know, or have forgotten your password, click **Reset it here!**. From the Forgot Password screen, enter your email address and then click **CONTINUE**. From the Forgot Password screen, answer the security question that you chose during registration. Enter a new password and confirm the password and then click **SUBMIT**.

3. To change your password, click **Change Password**. The Change Password screen appears. Enter your: Current Password, New Password, and then Confirm New Password. When done, click **SUBMIT**.

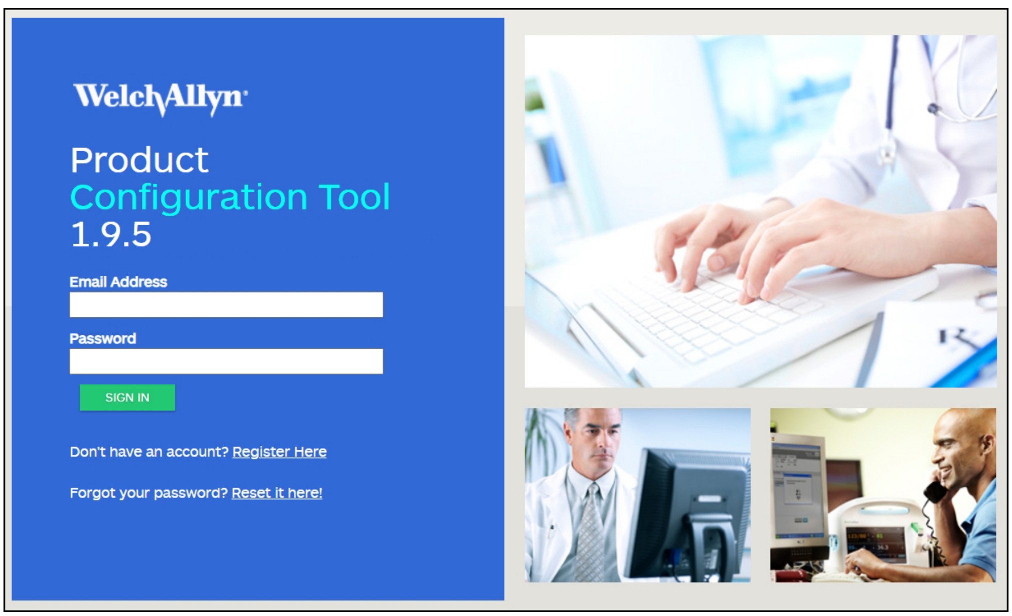


Log in to the Configuration Tool

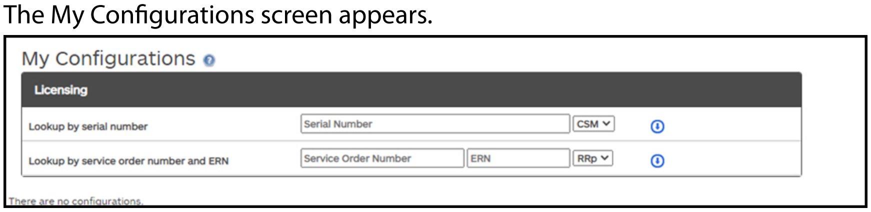
1. Log in to the Configuration Tool at config.welchallyn.com/configurator/.

   NOTE New users: Click **Register Here**.

2. Enter your email address and password and click **SIGN IN**.



The My Configurations screen appears.



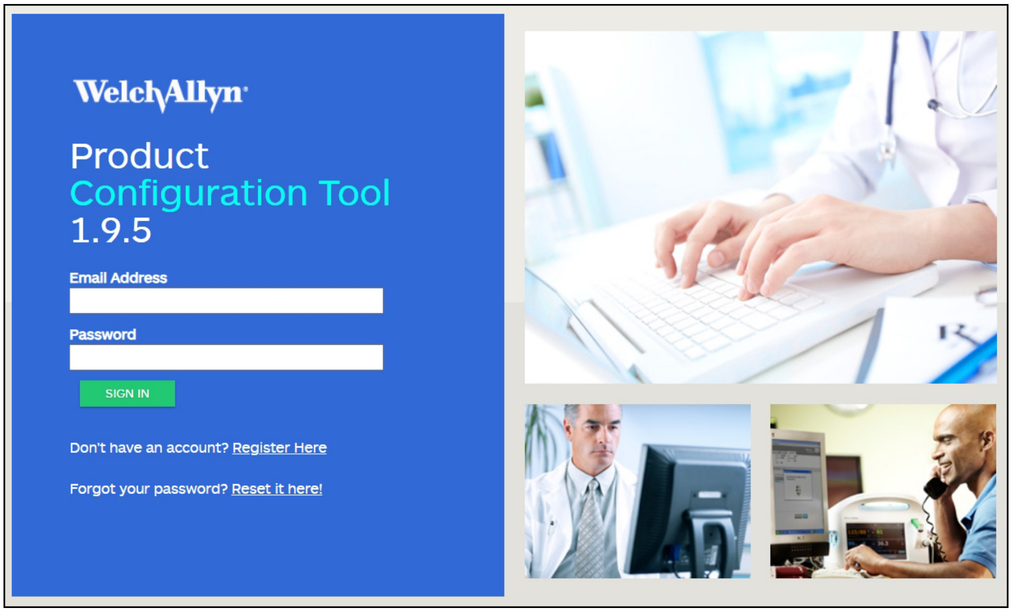
Change password in the Configuration Tool

NOTE Passwords need to contain:

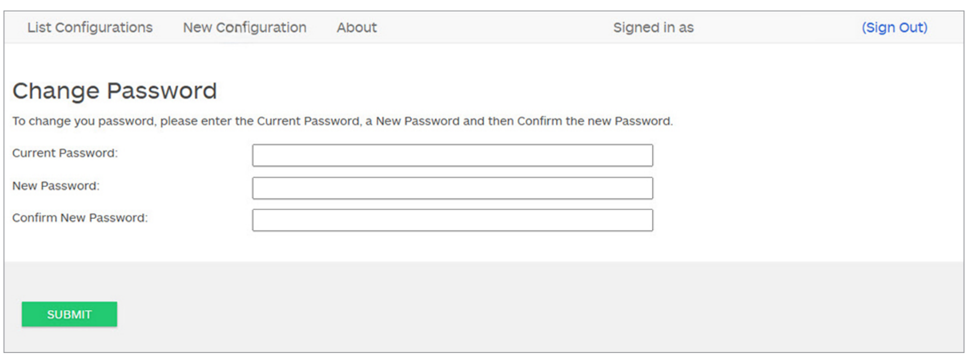
- a minimum of 8 characters

- a maximum of 20 characters
- at least 1 special character (examples include: @!#$%)
- at least 1 numeric character
- at least 1 lower case letter
- at least 1 upper case letter

1. Log in to the Configuration Tool at config.welchallyn.com/configurator/.



2. To change your password, click **Change Password**.
   The Change Password screen appears.



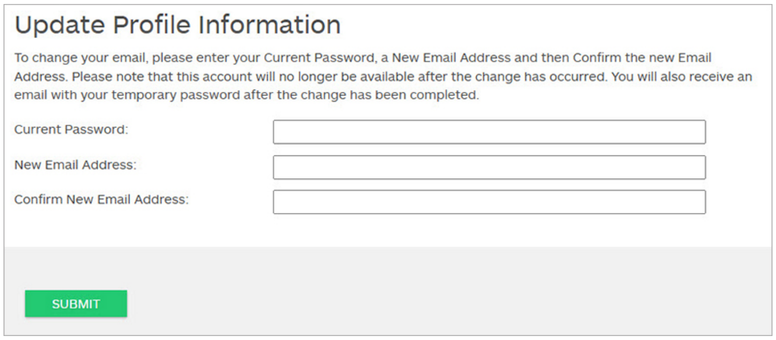
3. Enter your: Current Password, New Password, and then Confirm New Password.
4. When done, click **SUBMIT**.

Change email address for your account

You can change the email address that is associated with your Configuration Tool account.

1. Log into your Configuration Tool account using your old email address and password.
2. After you log in, click **Update Profile** at the bottom of the My Configurations screen.

3. In the Update Profile Information screen, enter your Current Password, New Email Address, and Confirm New Email Address. Click **SUBMIT**.



Log out of the Configuration Tool and log back in using your new email address.

Features of the Configuration Tool

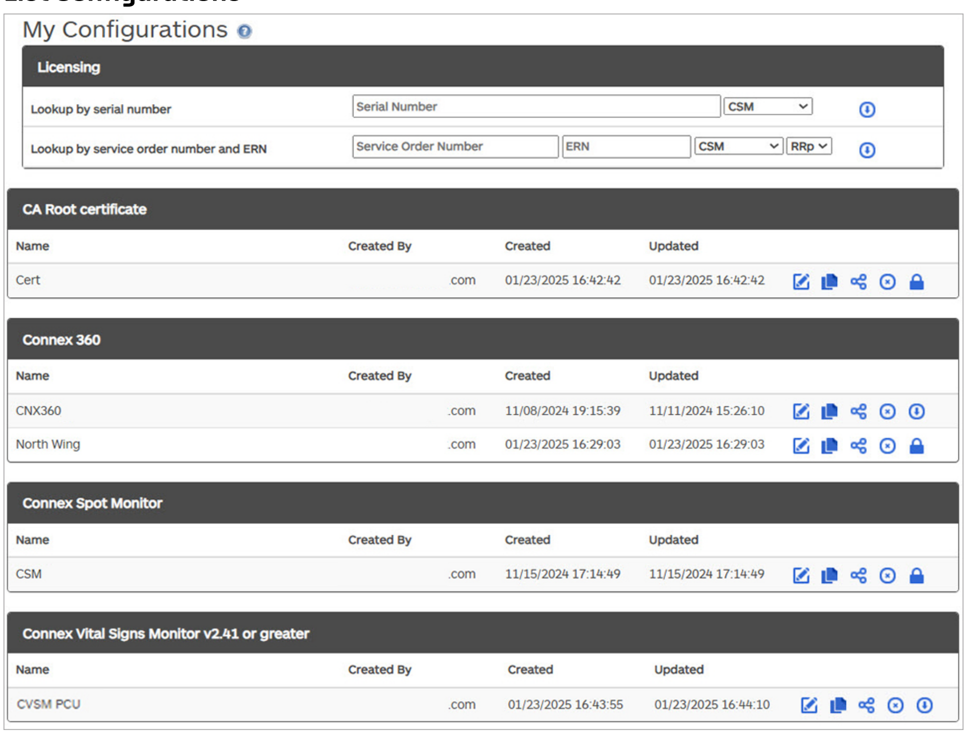
The following features are available in the Configuration Tool:

New Configuration

You can configure the following products:

- CA Root certificate
- **Connex 360**
- **Connex Spot** Monitor
- **Connex** Vital Signs Monitor v2.41 or greater
- Licensing (for **Connex Spot** Monitor)
- **Connex 360** - Licensing

List Configurations



Look up Licensing by serial number or sales order number.

Use the buttons on the right side to do the following tasks:

- Edit a configuration file.
- Copy a configuration file.
- Share a configuration file.
- Delete a configuration file.
- Download a configuration file.

About tab

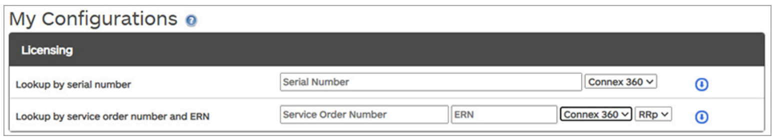
Click the **About** tab (to the right of the New Configuration tab) to see the Configuration Tool labels, such as the product name and the manufacturer. For more information, see "Symbols and definitions".

Overview of List Configurations

To view device configurations from the My Configurations screen, click **List Configurations**. If there are no configurations for new users, a message displays below the Licensing section.

Licensing section

The Licensing section appears first on the My Configurations screen even if you do not have user configurations.



If you want to retrieve a license for **Bluetooth**® Low Energy (BLE) or the **RRp** sensor, or create a configuration for a licensed feature, see "Licensed features" for the steps. These configurations appear in the License section below the look-up fields.

NOTE The **Connex 360** monitor supports only the **RRp** sensor license. The **Connex 360** monitor does not support **Bluetooth** or **Bluetooth** Low Energy (BLE). **Connex Spot** Monitor supports the **RRp** sensor and BLE licenses.

Configurations for devices

The device configurations that have already been completed appear for existing users. The configurations are grouped by device type.

The buttons on the right side allow you to:

- Click to edit a configuration file.
- Click to copy a configuration file.
- Click to share a configuration file.
- Click to delete a configuration file.
- Click to download a configuration file.

NOTE If (lock) appears instead of (download), the configuration is incomplete and the download is locked.

Create a new **Connex 360** monitor configuration

Set up a new **Connex 360** monitor configuration

The configuration tool customizes the **Connex 360** monitor to your facility preferences. Only the Hospital configuration is available for the **Connex 360** monitor.

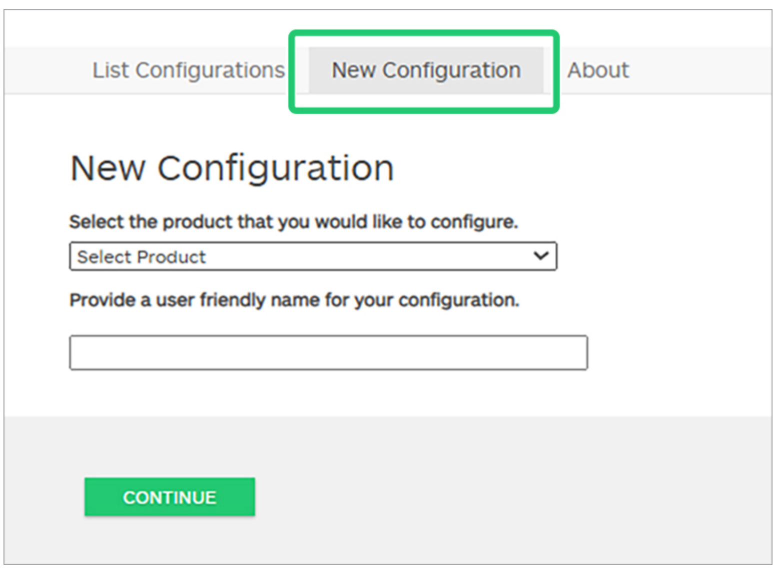
Use this tool to:

- set up default configurations.
- set up the device for **Wi-Fi**® technology, or other connectivity such as Ethernet.
- set up and define functionality like Early Warning Scores (EWS) protocols or prescriptive workflow settings.

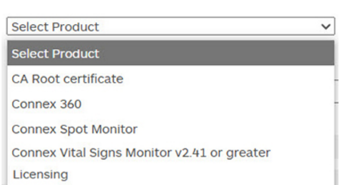
As the Configuration Tool is updated, the screen moves to the Progress Summary screen. Partially complete sections appear yellow and new sections appear red. When all the sections appear green, the configuration file can be downloaded or shared.

Begin new configuration

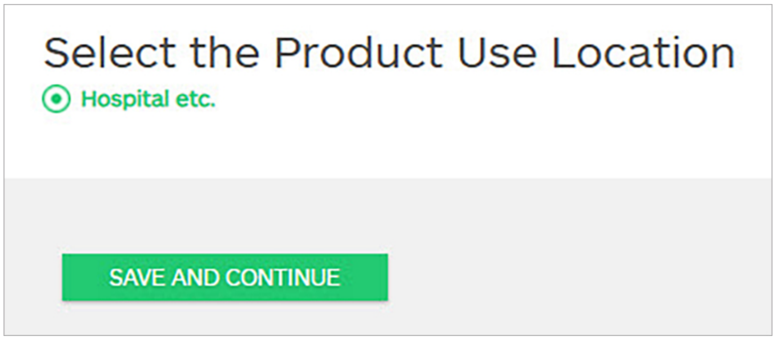
1. From the main screen, click the **New Configuration** tab.



2. Use the drop-down menu to select the **Connex 360** monitor. Provide a name for the configuration by typing in the field and click **CONTINUE**.

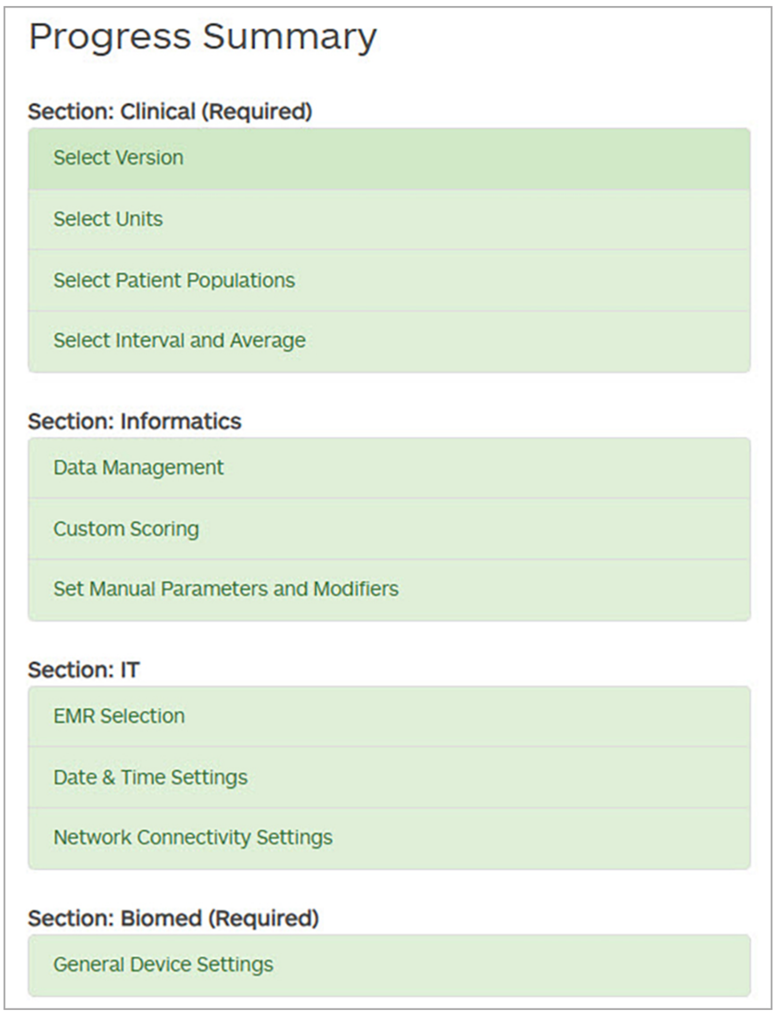


3. Hospital is preselected as the Product Use Location.



4. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the Progress Summary view updates to show completed sections in green. Incomplete sections are yellow and not yet started sections are red. When all sections are green, you can download the configuration file.

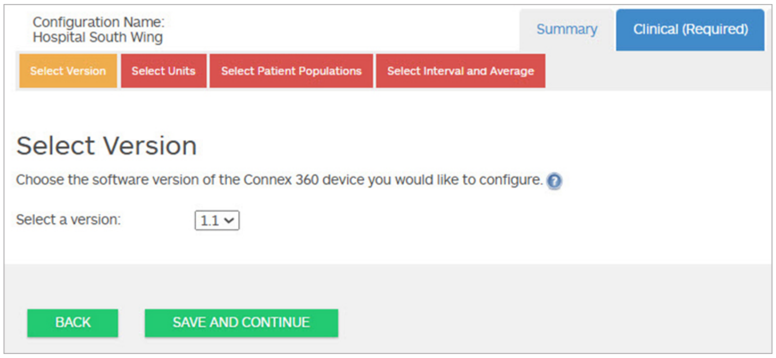


Select version

1. On the Progress Summary screen, click **Select Version**.

2. Use the drop-down menu to select a software version.

   The default selection is the latest software version available.

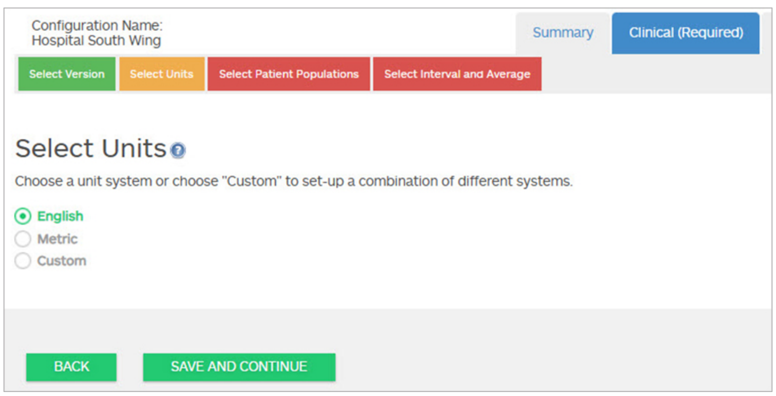


3. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Select Units tab.

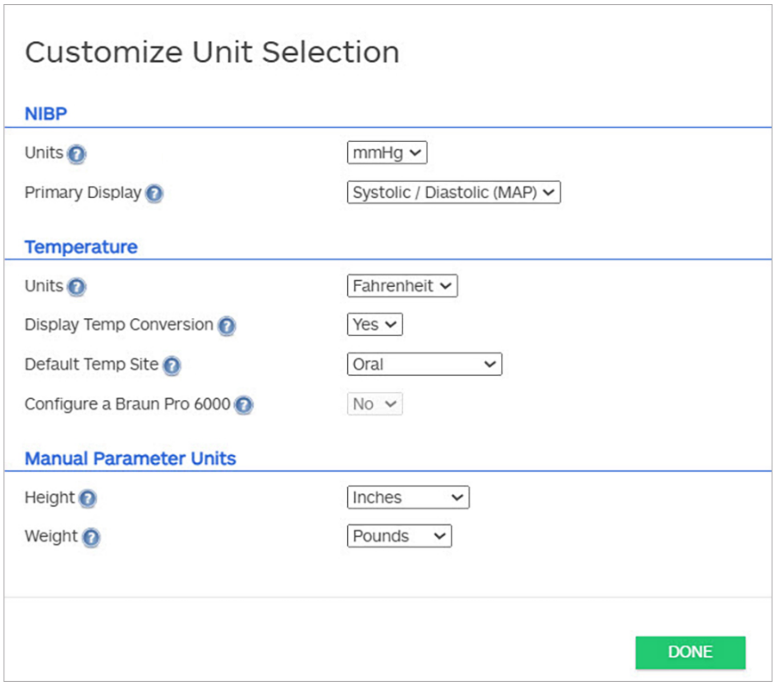
Select units

1. Click the radio button to select the desired unit system.



   Choose a unit system or select the **Custom** radio button to set up a combination of different systems. Choices include: English, Metric, and Custom. The default choice is English.

2. Optional: Choose **Custom** to set up a combination of different systems.



   a. For Non-Invasive Blood Pressure (NIBP), use the drop-down menu to choose **mmHg** or **kPa**. For Primary Display, use the drop-down menu to choose **Systolic/Diastolic with Mean Arterial Pressure (MAP)**, **MAP (Systolic/Diastolic)**, or **Systolic/Diastolic**.
   b. For Temperature, use the drop-down menu to choose **Celsius** or **Fahrenheit**. For Display Temp Conversion, use the drop-down menu to choose **Yes** or **No**. For Default Temp Site, use the drop-down menu to choose **Oral**, **Pediatric Axillary**, **Adult Axillary**, or **Last Site**.

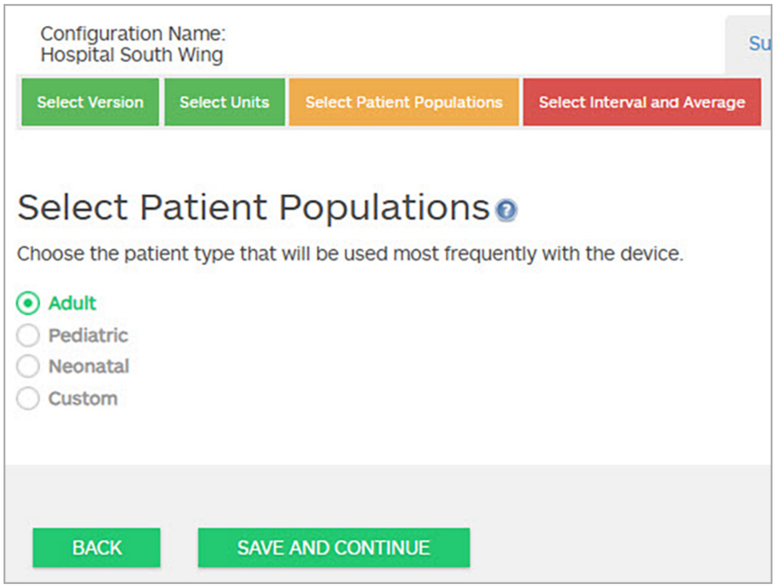
      NOTE **Braun** PRO 6000 is unavailable on **Connex 360** monitors.

   c. For Height, use the drop-down menu to choose **Centimeters** or **Inches**. For Weight, use the drop-down menu to choose **Kilograms** or **Pounds**.
   d. Click **DONE**.
3. Click **SAVE AND CONTINUE**.

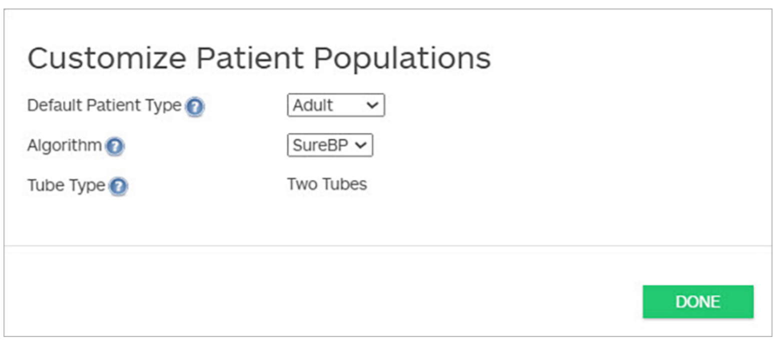
As the Configuration Tool is updated, the screen moves to the Select Patient Populations tab.

Select patient populations

1. Choose the patient type that will be used most frequently with the device. Radio button choices include: Adult (default), Pediatric, Neonatal, and Custom. Customize patient populations to set the BP algorithm.

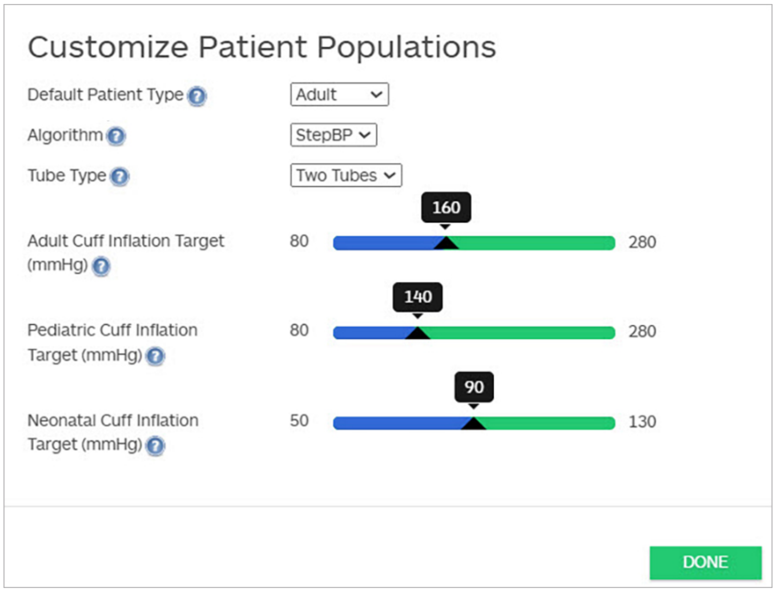


2. Optional: For Default Patient Type, use the drop-down menu to choose **Adult** in Customize Patient Populations. The default settings are: Algorithm = **SureBP** and Tube Type = **Two Tubes**.



a. If you select the **StepBP** algorithm, use the slider or arrow keys on your computer keyboard to change the default values for the adult, pediatric, or neonatal cuff inflation target.

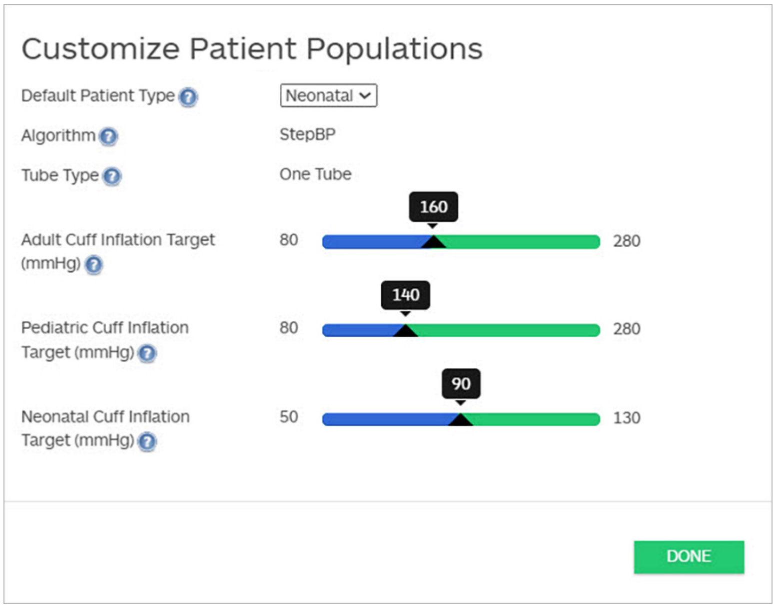
For StepBP, the adult cuff inflation target default is set to 160 mmHg. The pediatric cuff inflation target default is set to 140 mmHg. The neonatal cuff inflation target default is set to 90 mmHg.



3. Optional: For Default Patient Type, use the drop-down menu to choose **Pediatric**. The default settings are: Algorithm = **SureBP** and Tube Type = **Two Tubes**.

a. If you select the **StepBP** algorithm, use the slider or arrow keys on your computer keyboard to change the default values for the adult, pediatric, or neonatal cuff inflation target. For StepBP, the adult cuff inflation target default is set to 160 mmHg. The pediatric cuff inflation target default is set to 140 mmHg. The neonatal cuff inflation target default is set to 90 mmHg.

4. Optional: For Default Patient Type, use the drop-down menu to choose **Neonatal**. The default settings are: Algorithm = **StepBP** and Tube Type = **One Tube**.



a. Use the slider or arrow keys on your computer keyboard to change the default values for the adult, pediatric, or neonatal cuff inflation target. For StepBP, the adult cuff inflation target default is set to 160 mmHg. The pediatric cuff inflation target default is set to 140 mmHg. The neonatal cuff inflation target default is set to 90 mmHg.

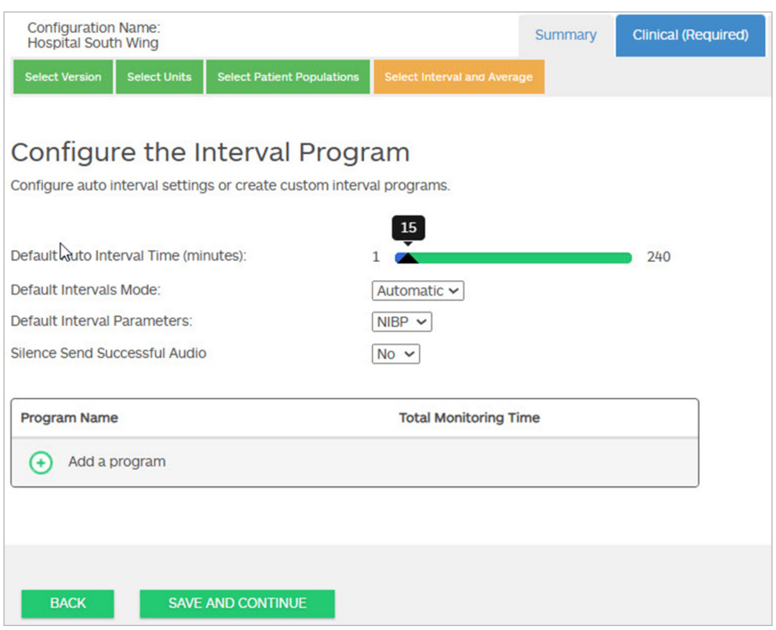
5. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Intervals and Average tab.

Set interval time

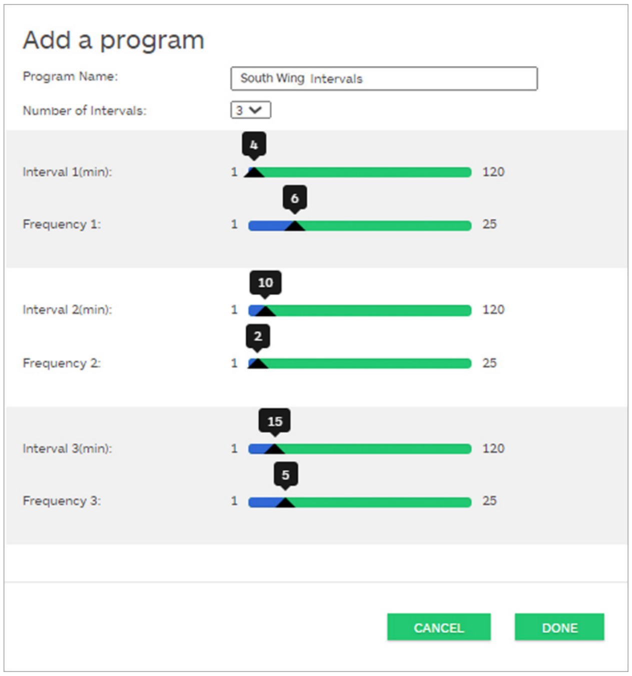
In the Interval and Average tab, you can configure intervals, set alarm limits, and configure programs.

1. Click the numeric slider to modify the auto interval time. Other choices on this screen include modifying the intervals mode, interval parameters, setting the audio for silent send, and adding an intervals program.



- Default Interval Time has a slider for setting the interval time in minutes.
- Default Intervals Mode includes drop-down choices for **Automatic** (default), **STAT**, **Program**, and **Averaging**.
- Default Interval Parameters includes choices for **NIBP** (default), **SpO2**, or both.
- Silence Send Successful Audio includes choices for **Yes** or **No** (default).

2. Click **Add a program** if you want to add a custom interval program. Choices are available for the program name, the number of intervals, the interval time, and the interval frequency. Click **DONE** to save.



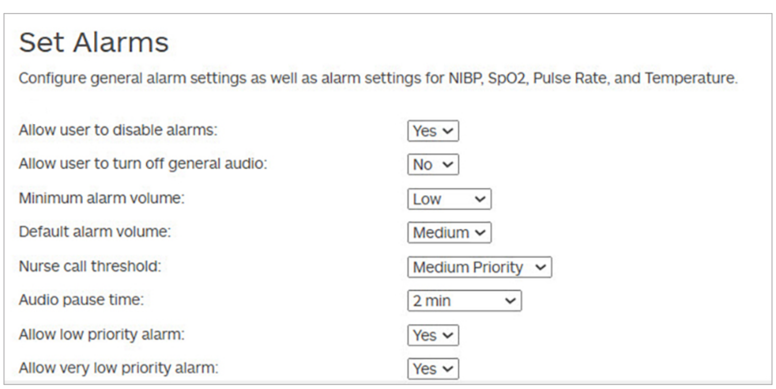
3. Optional: To edit the intervals program, click (edit).
4. Optional: To delete the averaging program, click (delete).
5. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Set Alarms section.

Set alarms

Configure the general alarm settings.

1. Select the desired settings from the drop-down lists. Use the sliders to set the alarm limits for NIBP, SpO2, Pulse Rate, Temperature, or Respiration Alarms.



- Allow user to disable alarms includes choices for **Yes** (default) or **No**.
- Allow user to turn off general audio includes choices for **Yes** or **No** (default).
- Minimum alarm volume includes choices for **Low** (default), **Medium**, or **High**.
- Default alarm volume includes choices for **Low**, **Medium** (default), or **High**.
- Nurse call threshold includes choices for **Very low priority**, **Low priority**, **Medium priority** (default), or **High priority**.
- Audio pause time includes choices for **Disabling**, **90 seconds**, **2 min** (default), **2 min 30 seconds**, **3 minutes**, **5 minutes**, **10 minutes**, or **15 minutes**.
- Allow low priority alarm includes choices for **Yes** (default) or **No**.
- Allow very low priority alarm includes choices for **Yes** (default) or **No**.

This screen also includes sliders to set the alarm limits for NIBP, SpO2, Pulse Rate, Temperature, or Respiration Alarms. Choose the lower and upper alarm limits for each reading and for each patient type.

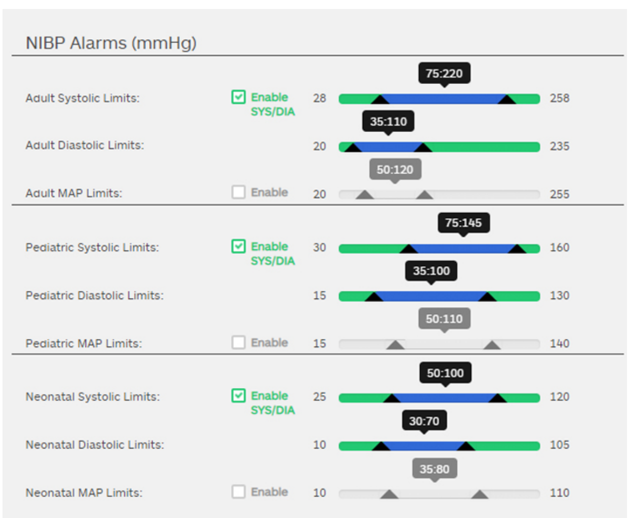
2. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Configure the Averaging Program screen.

NIBP alarms (mmHg)

Configure alarm settings for NIBP.

1. Configure the general alarm settings.
2. Optional: To change NIBP alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm and how to enable the alarm limits.



The default settings are:

- For adults: Enable SYS/DIA, Adult Systolic Limits **75:220**, Adult Diastolic Limits **35:110**, and Adult MAP Limits **50:120** is disabled.
- For pediatric: Enable SYS/DIA, Pediatric Systolic Limits **75:145**, Pediatric Diastolic Limits **35:100**, and Pediatric MAP Limits **50:110** is disabled.
- For neonatal: Enable SYS/DIA, Neonatal Systolic Limits **50:100**, Neonatal Diastolic Limits **30:70**, and Neonatal MAP Limits **35:80** is disabled.

3. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Adult Systolic Limits. Values range from 28 to 258.
4. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Adult Diastolic Limits. Values range from 20 to 235.

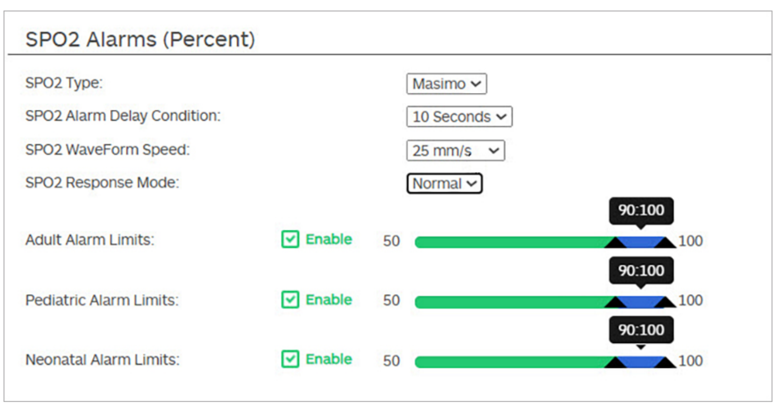
5. Optional: To change NIBP alarms, check the **Enable** box and then use the sliders, or computer arrow keys, to set the value for Adult MAP Limits. Values range from 20 to 255.
6. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the value for Pediatric Systolic Limits. Values range from 30 to 160.
7. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the value for Pediatric Diastolic Limits. Values range from 15 to 130.
8. Optional: To change NIBP alarms, check the **Enable** box and then use the sliders, or computer arrow keys, to set the value for Pediatric MAP Limits. Values range from 15 to 140.
9. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Neonatal Systolic Limits. Values range from 25 to 120.
10. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Neonatal Diastolic Limits. Values range from 10 to 105.
11. Optional: To change NIBP alarms, check the **Enable** box and then use the sliders , or computer arrow keys, to set the values for Neonatal MAP Limits. Values range from 10 to 110.
12. Click **SAVE AND CONTINUE**.

SpO2 alarms (percent)

Configure alarm settings for SpO2.

1. Configure the general alarm settings.
2. Use the drop-down menu to select the SpO2 Type. Choices include Masimo (default) or Nellcor.
3. Select the SpO2 Alarm Delay Condition setting. Choices include: **10 seconds** (default), **0**, **15**, **30 seconds**, or **SatSec**.

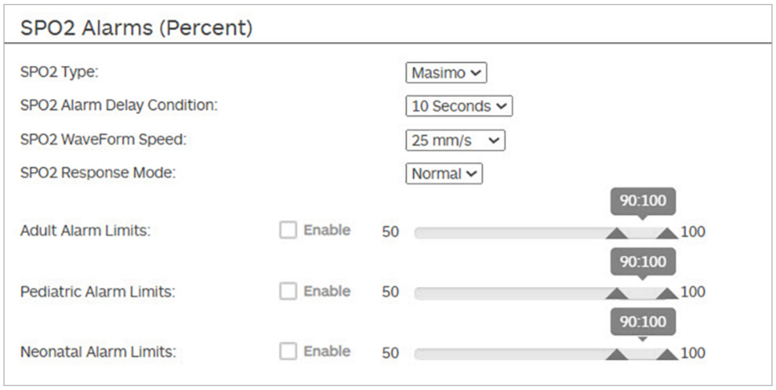
   For SatSec settings, choices include: **25** (default) , **0**, **10**, **50**, or **100**.
4. Select the SpO2 WaveForm Speed setting. Choices include **25 mm/s** (default), **12.5**, or **50** mm/s.
5. Select the SpO2 Response Mode setting. Choices include **Normal** (default) or **Fast**.
6. Optional: To change SpO2 alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm.

   The default settings are Enable Adult Alarm Limits **90:100**, Pediatric Alarm Limits **90:100**, and Neonatal Alarm Limits **90:100**.
7. Optional: To change SpO2 alarms, use the sliders, or computer arrow keys, to set the values for Adult Alarm Limits. Values range from 50 to 100.
8. Optional: To change SpO2 alarms, use the sliders, or computer arrow keys, to set the values for Pediatric Alarm Limits. Values range from 50 to 100.
9. Optional: To change SpO2 alarms, use the sliders, or computer arrow keys, to set the values for Neonatal Alarm Limits. Values range from 50 to 100.

10. Optional: To disable SpO2 alarms, click within the checkbox next to each limit to disable the alarm limit.

NOTE When an alarm limit is disabled in the Configuration Tool, the limits are grayed out and Enable turns from green to gray.

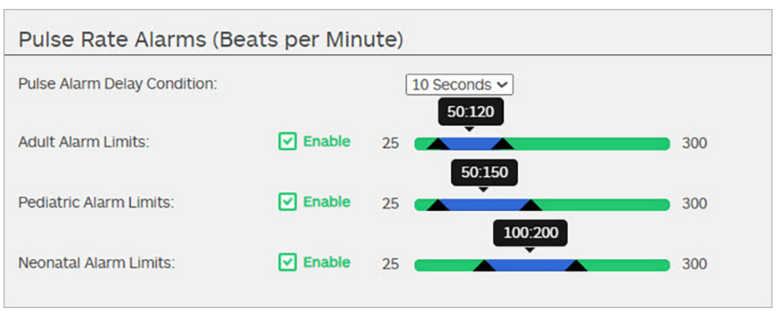


11. Click **SAVE AND CONTINUE**.

Pulse Rate alarms (beats per minute)

Configure alarm settings for Pulse Rate.

1. Configure the general alarm settings.
2. Select the Pulse Rate Alarm Delay setting. Choices include 3, 10 (default), 15, or 30 seconds.
3. Optional: To change Pulse Rate Alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm.



The default settings are Enable Adult Alarm Limits **50:120**, Pediatric Alarm Limits **50:150**, and Neonatal Alarm Limits **100:200**.

4. Optional: To change Pulse Rate Alarm Limits, use the sliders, or computer arrow keys, to set the values for Adult Alarm Limits. Values range from 25 to 300.
5. Optional: To change Pulse Rate Alarm Limits, use the sliders, or computer arrow keys, to set the values for Pediatric Alarm Limits. Values range from 25 to 300.
6. Optional: To change Pulse Rate Alarm Limits, use the sliders, or computer arrow keys, to set the values for Neonatal Alarm Limits. Values range from 25 to 300.
7. Optional: To disable Pulse Rate Alarm Limits, click within the checkbox next to each limit to disable the alarm limit.

NOTE When an alarm limit is disabled in the Configuration Tool, the limits are grayed out and Enable turns from green to gray.

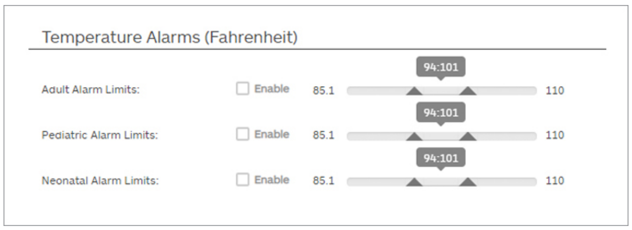
8. Click **SAVE AND CONTINUE**.

Temperature alarms (Fahrenheit)

Configure alarm settings for temperature (Fahrenheit).

The Temperature Alarms (Fahrenheit) are disabled by default. The default settings are Disable Adult Alarm Limits **94:101**, Pediatric Alarm Limits **94:101**, and Neonatal Alarm Limits **94:101**.

1. Configure the general alarm settings.
2. Optional: To change the Temperature Alarm Limits, click the **Enable** checkbox for each setting. Use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm limits.



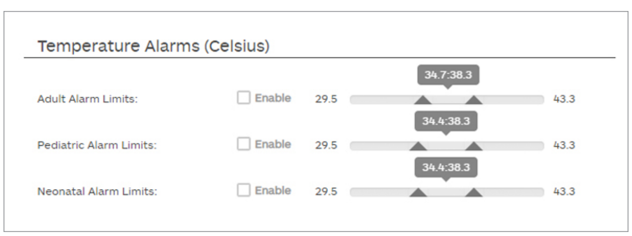
   a. Optional: Set the values for Adult Alarm Limits. Values range from 85.1 to 110.
   b. Optional: Set the values for Pediatric Alarm Limits. Values range from 85.1 to 110.
   c. Optional: Set the values for Neonatal Alarm Limits. Values range from 85.1 to 110.
3. Click **SAVE AND CONTINUE**.

Temperature alarms (Celsius)

Configure alarm settings for temperature (Celsius).

The Temperature Alarms (Celsius) are disabled by default. The default settings are Disable Adult Alarm Limits **34:7 : 38.3**, Pediatric Alarm Limits **34:7 : 38.3**, and Neonatal Alarm Limits **34:7 : 38.3**.

1. Configure the general alarm settings.
2. Optional: To change the Temperature Alarm Limits, click the **Enable** checkbox for each setting. Use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. If the Units selected are set to Metric, the Temperature Alarms appear in Celsius. See the next steps for specific values for each alarm limits.



   a. Optional: Set the values for Adult Alarm Limits. Values range from 29.5 to 43.3.
   b. Use the sliders, or computer arrow keys, to set the values for Pediatric Alarm Limits. Values range from 29.5 to 43.3.
   c. Use the sliders, or computer arrow keys, to set the values for Neonatal Alarm Limits. Values range from 29.5 to 43.3.
3. Click **SAVE AND CONTINUE**.

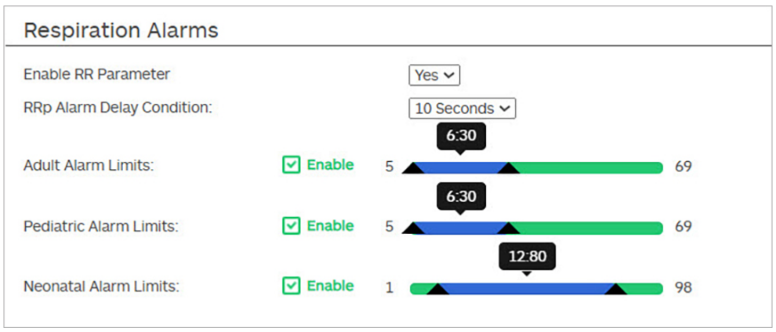
Respiration alarms

Configure alarm settings for Respiration Rate.

The ability to configure respiration alarms depends on the RR parameter. If the RR parameter is set to **Yes**, then you can configure Respiration alarms. If the RR parameter is set to **No**, then you cannot configure Respiration alarms.

1. Configure the general alarm settings.
2. Optional: To change Respiration Alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm and how to enable the alarm limits.

   The default settings are Enable RR Parameter = **Yes**, RRp Alarm Delay Condition **10 seconds**, Adult Alarm Limits **6:30**, Pediatric Alarm Limits **6:30**, and Neonatal Alarm Limits **12:80**.



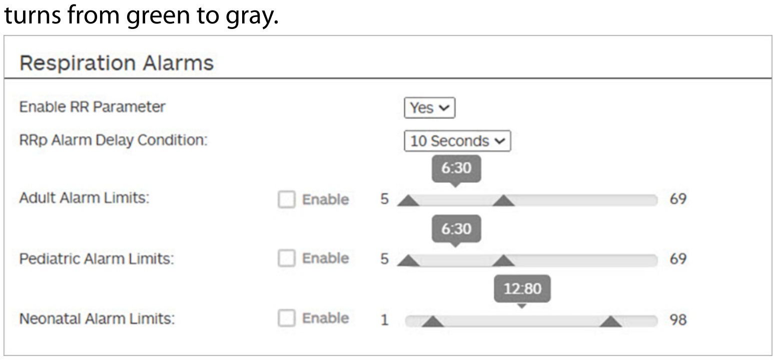
3. Select the **RRp Alarm Delay Condition** setting. Choices are 0, 10 (default), 15, and 30 seconds.

   NOTE RRp Alarm Delay Condition is activated only if the **Connex 360** monitor is configured with Masimo SpO2 with the **RRp** license activated.

   For more information on acquiring a Masimo **RRp** license, see the **Connex 360** *Service Manual.* **Connex 360** monitors that are sold with the Masimo **RRp** license already activated *do not* require activation in the Configuration Tool.

4. Optional: To change Respiration Alarm Limits, use the sliders to set the values for Adult Alarm Limits. Values range from 5 to 69.
5. Optional: To change Respiration Alarm Limits, use the sliders to set the values for Pediatric Alarm Limits. Values range from 5 to 69.
6. Optional: To change Respiration Alarm Limits, use the sliders to set the values for Neonatal Alarm Limits. Values range from 1 to 98.

NOTE When an alarm limit is disabled in the Configuration Tool, the limits are grayed out and Enable turns from green to gray.



For more information about setting **RRp** alarms, click **?** for on-screen context-sensitive help.

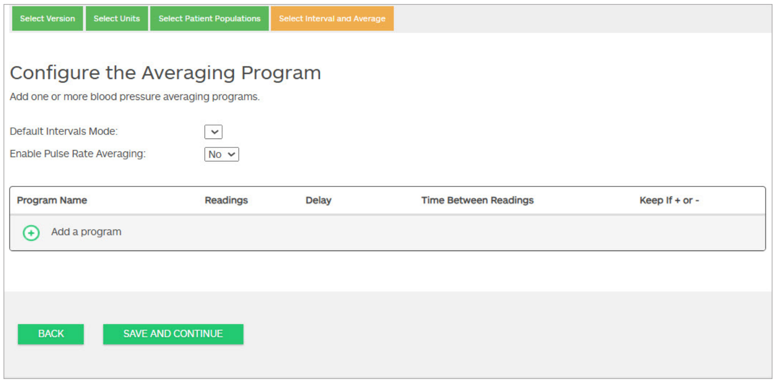
Configure the averaging program

The averaging program allows you add up to four blood pressure averaging programs.

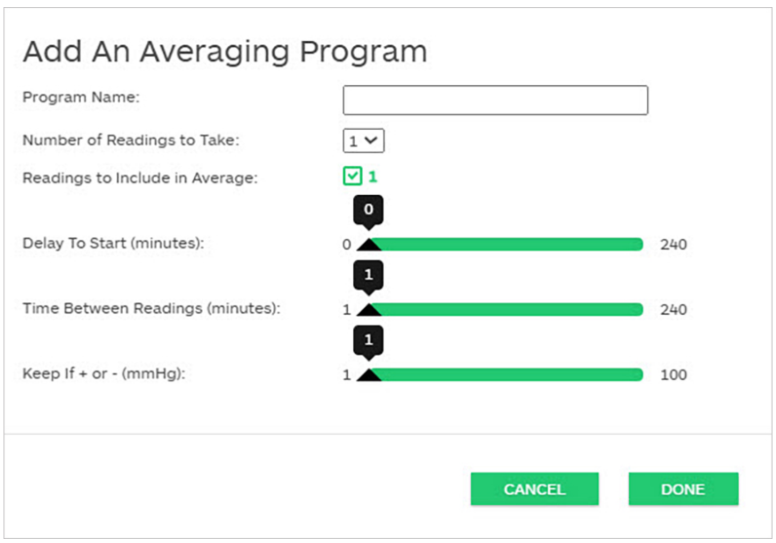
- Create up to 6 readings.
- Set delays before starting readings.
- Set length of time in between readings.

Default Intervals Mode is blank until you add an averaging program. See step 3.

1. Select **Enable Pulse Rate Averaging**. Choices are **Yes** or **No** (default).



2. Click **Add a program** to customize the blood pressure averaging program.



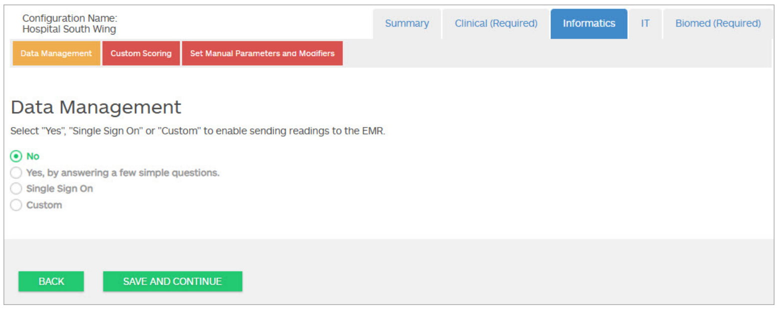
   a. Enter the Program Name.
   b. Choose Number of Readings to Take. The default is 1 and the range is 1 to 6 readings.
   c. Select the number of Readings to Include in the Average. The default is 1 and the range is 1 to 6 programs.
   d. Use the slider to set Delay to Start (minutes). The default is 0 and the range is 0 to 240.
   e. Use the slider to set Time Between Readings (minutes). The default is 1 and the range is 1 to 240.
   f. Use the slider to set Keep If + or = (mmHg). The default is 1 and the range is 1 to 100.
   g. Click **DONE** when complete. Then you are returned to the Configure Averaging Program screen.
3. After you add the averaging programs, select the Default Intervals Mode to choose the averaging program to use.
4. Optional: To edit the averaging program, click (edit).
5. Optional: To delete the averaging program, click (delete).
6. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Progress Summary screen. The next section to configure is Informatics (Data Management).

Select Data Management

At the Progress Summary screen, review the completed sections, now marked in green.

Click **Data Management** to select how clinicians will sign on and to configure the **Active Directory**. You can define additional modifications to clinician and patient authentication and how the authenticated data will be displayed on the device.



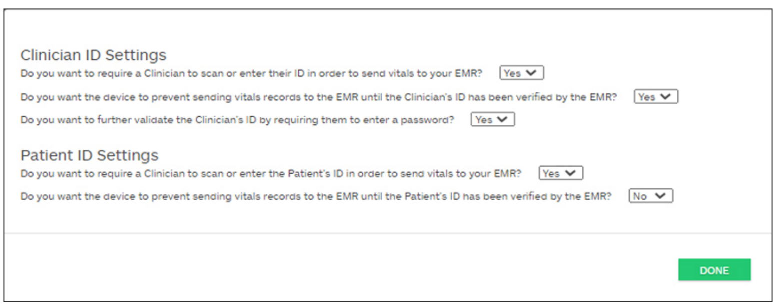
1. Select how you would like clinicians to sign on.

   The default setting is not to send readings to an EMR. If your facility uses an EMR, click the radio button to select **Yes, by answering a few simple questions**, **Single Sign On**, or **Custom**.

   a. Click the radio button to select **No** (default) if your facility does not use an EMR.

      This option requires the clinician to manually log in.

   b. Optional: Use the radio button to select **Yes, by answering a few simple questions**.

      a. Set up the Clinician ID and Patient ID settings. These settings allow a clinician to scan their ID and to enter the patient's ID to send vitals to your EMR. Use the drop-down menus to answer the following questions:

         a. Select **Do you want to require a Clinician to scan or enter their ID in order to send vitals to your EMR?**. Choices are **No** (default) and **Yes**.

         b. Select **Do you want to require a Clinician to scan or enter the Patient's ID in order to send vitals to your EMR?**. Choices are **No** (default) and **Yes**.

         If you selected **Yes**, additional fields display:

         a. Select **Do you want the device to prevent sending vitals records to the EMR until the Clinician's ID has been verified?** Choices are **No** (default) and **Yes**.

         b. Select **Do you want to further validate the Clinician's ID by requiring them to enter a password?**. Choices are **Yes** or **No** (default).

         c. Select **Do you want the device to prevent sending vitals records to the EMR until the Patient's ID has been verified by the EMR?**. Choices are **Yes** or **No** (default).

         NOTE Changes made in data management CAN BE overridden by certain EMR selections in later screens.

   b. Click **DONE** when complete.

   c. Optional: Use the radio button to select **Single Sign On**.

   For more information, see "Configure Single Sign On settings."

   d. Optional: Use the radio button to select **Custom**.

   For more information, see "Configure Custom Data Management settings."

2. You also can configure **Active Directory** settings if you have selected Yes, by answering a few simple questions, Single Sign On, or Custom.

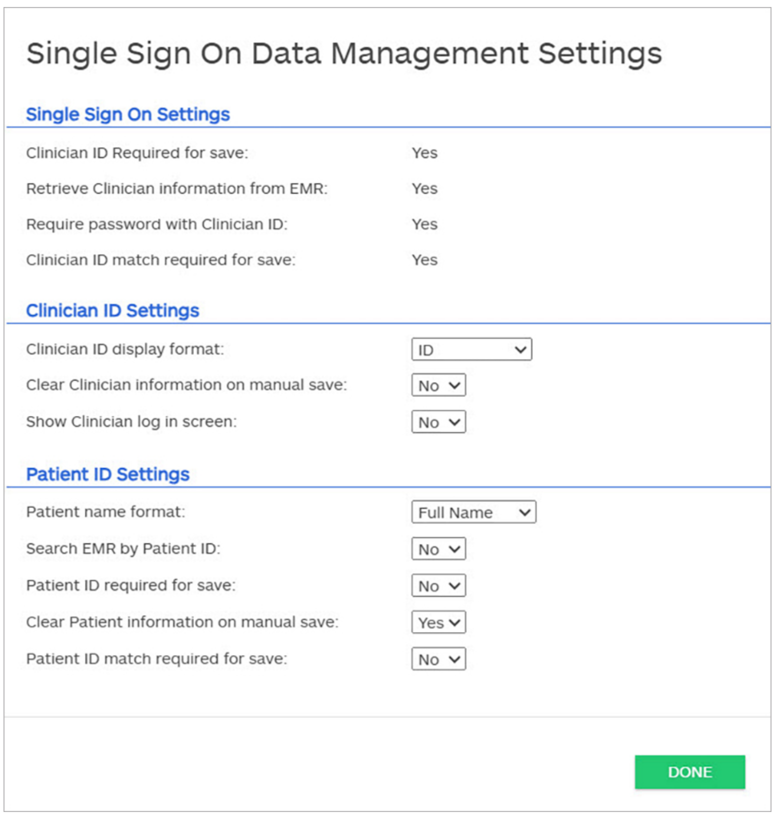
   For more information, see "Configure **Active Directory**."

3. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Custom Scoring tab.

Configure Single Sign On settings

You can configure the Data Management settings for Single Sign On.



Single Sign On has several drop-down choices:

- Single Sign On settings:
  - Clinician ID Required for save is set to **Yes**.
  - Retrieve Clinician information from EMR is set to **Yes**.
  - Require password with Clinician ID is set to **Yes**.
  - Clinician ID match required for save is set to **Yes**.
- Clinician ID settings:
  - Clinician ID display format includes choices for **abbreviated**, **name**, **ID** (default), or **symbol**.
  - Clear Clinician information on manual save includes choices **Yes** or **No** (default).

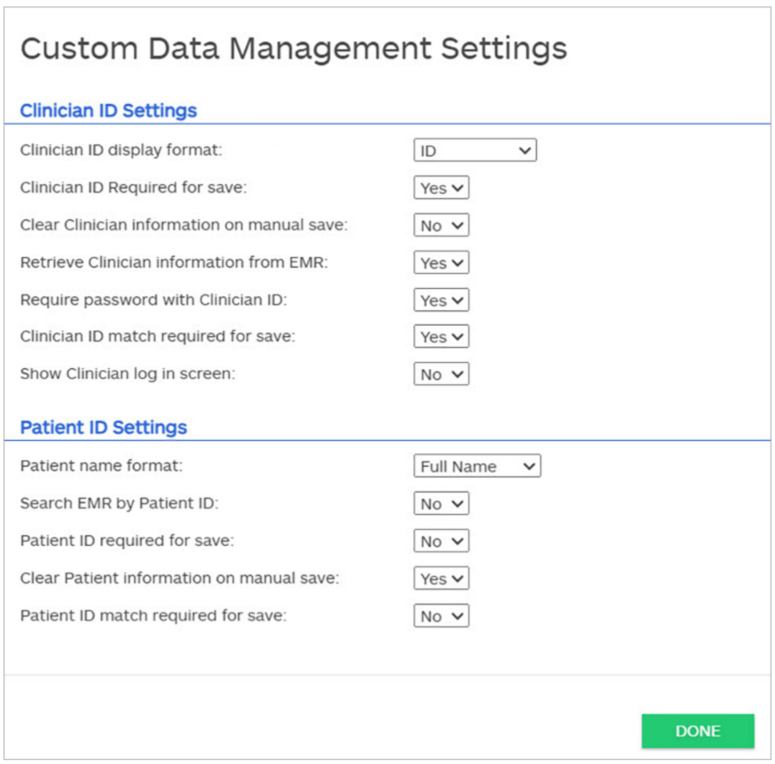
    - Show Clinician log in screen includes choices **Yes** or **No** (default).
- Patient ID settings:
    - Patient name format includes choices **Full name** (default) or **Abbreviation**.
    - Search EMR by Patient ID includes choices **Yes** or **No** (default).
    - Patient ID required for save includes choices **Yes** or **No** (default).
    - Clear Patient information on manual save includes choices **Yes** (default) or **No**.
    - Patient ID match required for save includes choices **Yes** or **No** (default).

1. Select the Single Sign On settings.
2. Click **DONE**.

   This step returns you to the Data Management screen.
3. Optional: Configure the **Active Directory** settings.

Configure Custom Data Management settings

You can configure custom Data Management settings.



Custom Data Management settings has several drop-down choices:

- Clinician ID Settings
    - Clinician ID display format includes choices for **abbreviated**, **name**, **ID** (default), or **symbol**.
    - Clinician ID required for save includes choices **Yes** (default) or **No**.
    - Clear Clinician information on manual save includes choices **Yes** or **No** (default).
    - Retrieve Clinician information from EMR includes choices **Yes** (default) or **No**.
    - Require password with Clinician ID includes choices **Yes** (default) or **No**.
    - Clinician ID match required for save includes choices **Yes** (default) or **No**.
    - Show Clinician log in screen includes choices **Yes** or **No** (default).
- Patient ID Settings

- Patient name format includes choices **Full name** (default) or **Abbreviation**.
- Search EMR by Patient ID includes choices **Yes** or **No** (default).
- Patient ID required to save includes choices **Yes** or **No** (default).
- Clear Patient information on manual save includes choices **Yes** (default) or **No**.
- Patient ID match required for save includes choices **Yes** or **No** (default).

1. Select the Custom Data Management settings.
2. Click **DONE**.

   This step returns you to the Data Management screen.
3. Optional: Configure the **Active Directory** settings.

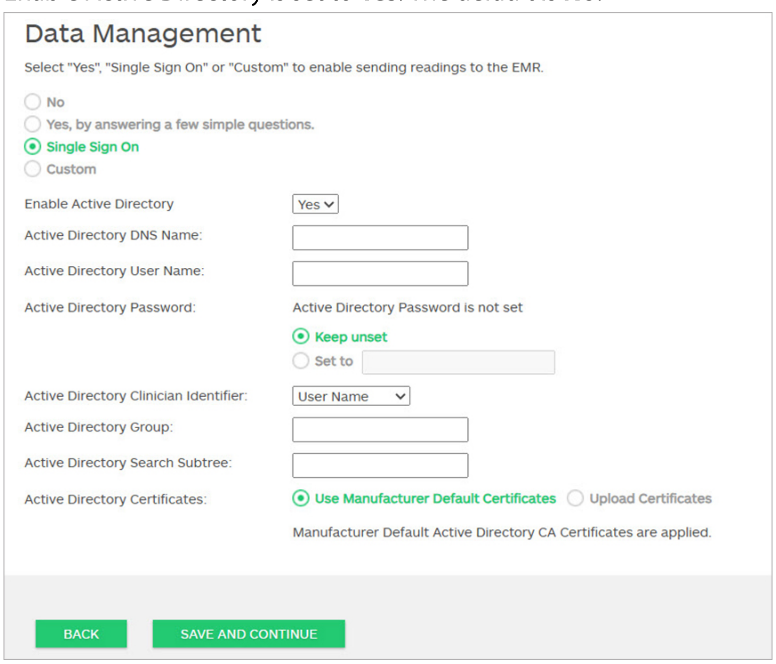
Configure **Active Directory**

You can configure the **Active Directory** settings if you selected Yes, by answering a few simple questions, Single Sign On, or Custom on the Data Management screen.

You can manage CA certificates in the Data Management screen. These selections affect the Network Connectivity Settings and General Device Settings screens.

1. If you want to configure **Active Directory**, set the Active Directory option to **Yes**.

   Enable Active Directory is set to **Yes**. The default is **No**.



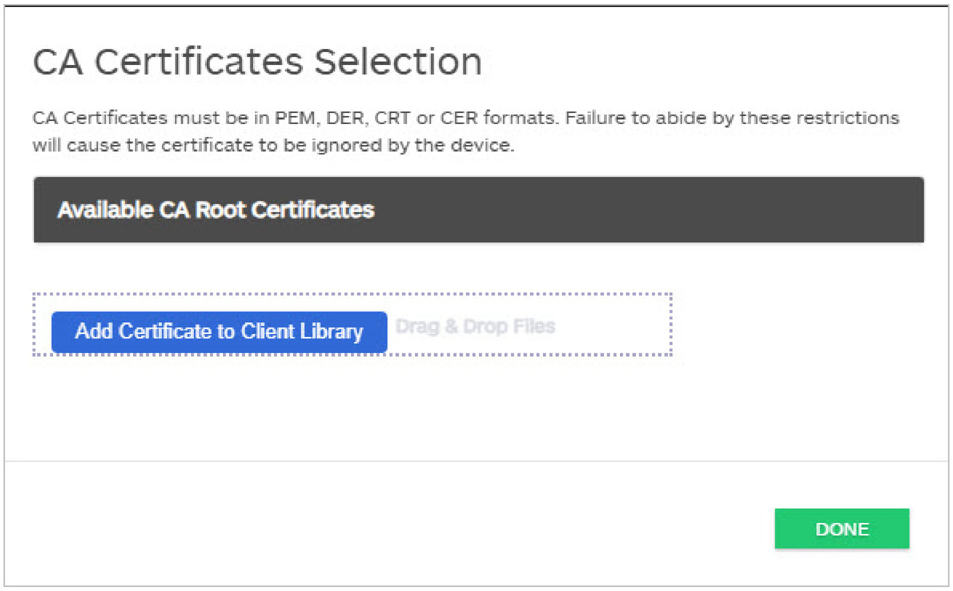
   a. Type the **Active Directory** domain name into the DNS Name field.
   b. Type the **Active Directory** user name.
   c. Either leave the **Active Directory** password unset (default) or select the radio button to set the password.

   NOTE The **Active Directory** password should not include special characters &, <, >, or and.

   d. Select the Active Directory Clinician Identifier. Choices include **User Name** (default), **Account Name**, or **Employee ID**.
   e. Type the **Active Directory** group name.
   f. Type the **Active Directory** search subtree.
   g. Select the **Active Directory** certificate type. The default is **Use Manufacturer Default Certificates**.

h. Optional: If you select the **Upload Certificates** radio button, the CA Certificate Selection screen displays.

The CA certificate must be in PEM, DER, CRT, or CER format (ex: `cacert.pem`). Failure to abide by these restrictions causes the device to ignore the certificate. For more information about using and uploading certificates, see "Configure a CA Root certificate."



a. Click **Add Certificate to Client Library** and upload the certificates from your computer.
b. Click **DONE**. Then the list of uploaded certificates displays on the screen.

2. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Custom Scoring tab.

You can optionally delete an uploaded CA certificate. For more information, see "Delete a CA certificate."

Delete a CA certificate

You can upload and delete CA certificates from the following screens:

- Data Management
- Network Connectivity Settings
- General Device Settings (**Connex 360** monitor only)

If you need to delete an uploaded CA certificate, follow these steps:

1. Optional: If you want to delete a CA certificate, click the (delete) button next to it.

   An informational message on the screen explains that the certificate is removed from the library, and the Network Connectivity Settings tab turns yellow in the Progress Summary view.
2. Open the Network Connectivity Settings tab and click the informational message to clear it. Although the Progress Summary view turns green, if you try to download the configuration file, you get an error.
3. Verify that the list of uploaded certificates matches in the Data Management, Network Connectivity Settings and General Device Settings screens. The list of uploaded certificates needs to match on all three screens before you can download the configuration file.

Verify that you can download the configuration file. For more information, see "Download a configuration file to install on another device."

Custom scoring (early warning scores) on the **Connex 360** monitor

You define custom scoring through the Configuration Tool. The order in which the custom score parameters are entered in the Configuration Tool is the order in which they appear in the Modified Early Warning Score section on the **Connex 360** monitor.

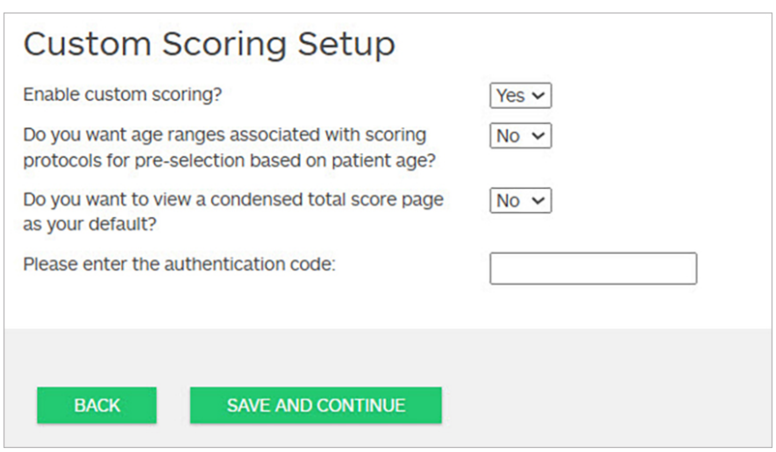
Custom scoring enables you to configure specific parameters that calculate scores for patient monitoring. These scores generate messages regarding the patient status, based on the parameters chosen. These messages are provided only as reminders.

Set up custom scoring on the **Connex 360** monitor

This section describes how to set up Bedside Protocols that can be replicated on a **Connex 360** monitor. You can preselect from a list of clinical protocols. All scoring protocols are customizable to meet user requirements.

You may add up to 6 scoring systems. Select a predefined Scoring System template, enter a unique name, and add the scoring system. Your scoring system will be added to the bottom of the page. You may then edit or delete your scoring system.

1. Click the **Custom Scoring** tab and choose your preferences for custom scoring.



- Enable custom scoring includes choices **Yes** (default) or **No**.

- Do you want age ranges associated with scoring protocols for pre-selection based on patient age includes choices for **Yes** or **No** (default).
- Do you want to view a condensed total score page as your default includes choices **Yes** or **No** (default).

2. Click the Please enter the authentication code field and enter a valid code in the format of `[YY]Connex360[MM]` with the current year and month.

   NOTE The Authentication code field appears the first time you select the Custom Scoring tab.

3. Click **SAVE AND CONTINUE**.

   If you selected **No** for Enable custom scoring, the screen moves to the Set Manual Parameters and Modifiers tab.

   If you selected **Yes** for Enable custom scoring, the Custom Scoring Selection screen displays.

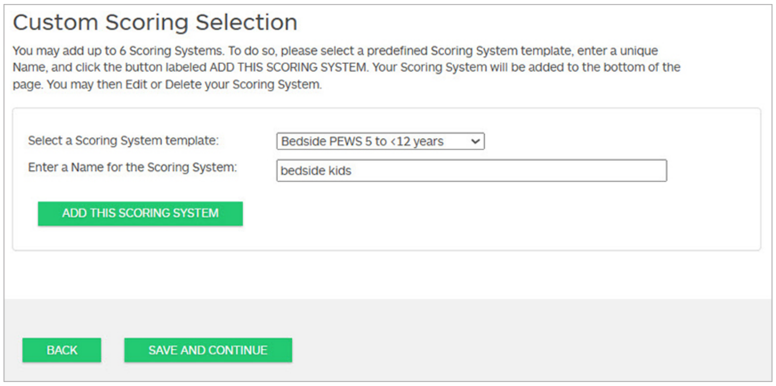
4. Select a Scoring System template. Choices include:

   - Bedside PEWS 3 to <12 months
   - Bedside PEWS 1 to 4 years
   - Bedside PEWS 5 to <12 years
   - Bedside PEWS >=12 years
   - Braden
   - BTF SAGO
   - BTF ED
   - BTF SPOC <3 months
   - BTF SPOC 3 to 12 months
   - BTF SPOC 1 to 4 years
   - BTF SPOC 5 to 11 years
   - BTF SPOC 12 years
   - Falls Risk Assessment Tool
   - Glasgow Coma Scale
   - Modified Early Obstetric Warning
   - Modified Early Warning Score
   - MEWS for General Surgical Ward
   - Morse Fall Score
   - National Early Warning Score
   - National Early Warning Score 2
   - NEWS2 Scale 1
   - NEWS2 Scale 2
   - Norton
   - Pediatric Early Warning Score
   - Rapid Emergency Medicine Score
   - Triage Early Warning System
   - Walsall
   - Blank Scoring System

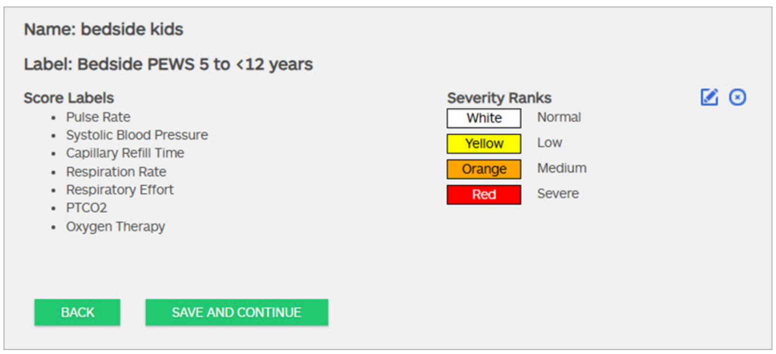
5. Enter a name for the Scoring System by clicking the Enter a Name for the Scoring System field and typing a name for the scoring system as you want it to appear on the device.

6. When finished, click **ADD THIS SCORING SYSTEM**.

   After a successful addition, the following message appears: `The Scoring System has been successfully added.`



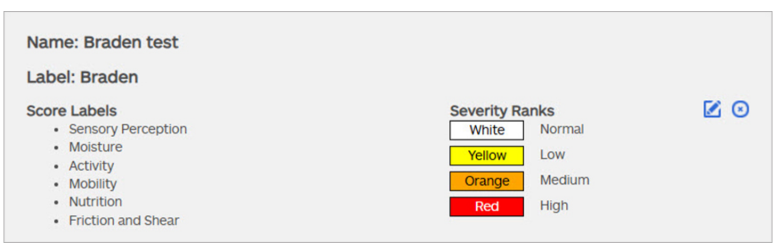
The name for the scoring system also appears at the bottom of the Custom Scoring Selection screen. This example is for *Bedside PEWS 5 to <12 years*.



NOTE The Custom Scoring Selection can be used as is or modified to meet facility requirements. Each scoring system has different score labels and severity ranks.

NOTE The name of the custom Scoring System defines how the scoring protocol will appear on the device. The HIS ID information for the EMR can be applied here too. Configure the capability for Single Parameter Scoring by itself or as part of an Aggregate Score.

This example is for *Braden test*.



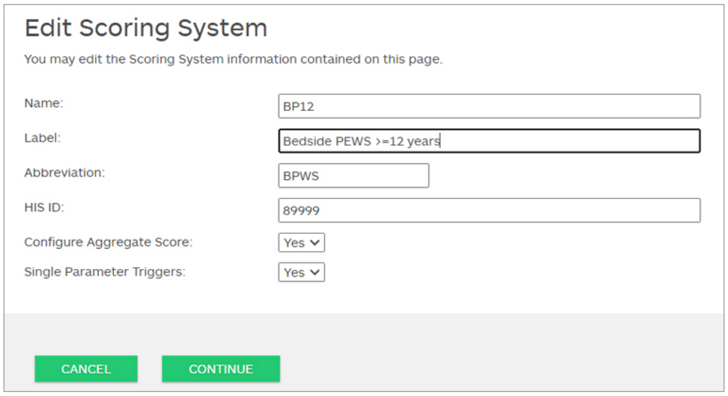
7. Optional: If you want to delete the Scoring System, click (delete).
8. Optional: If you want to edit the scoring system, click (edit).
   For the detailed steps, see "Edit a Scoring System."
9. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Set Custom Parameters and Modifiers tab.

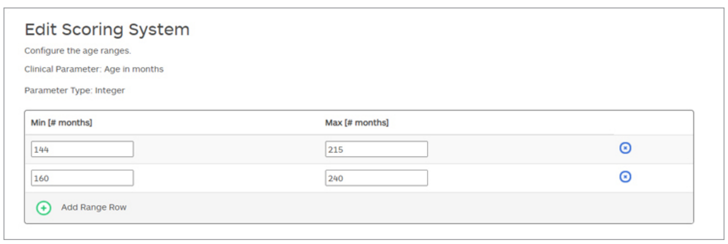
Edit a Scoring System

You can edit a Scoring System.

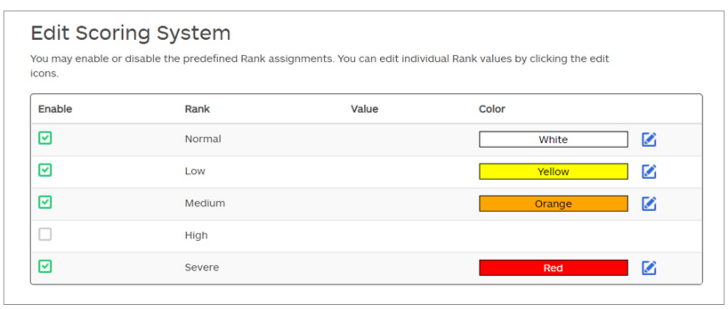
1. Optional: To edit the scoring system, click (edit). Click within the fields to enter changes or use the drop-down menu to change the Configure Aggregate Score or Single Parameter Triggers.



2. Click **CONTINUE**.
3. To continue to edit the Scoring System, configure the minimum or maximum age ranges (in months).



4. Optional: To add a range row , click (add). To delete a range row, click (delete).
5. Optional: To continue editing the Scoring System, check or uncheck the Enable settings. All the ranks are enabled by default.



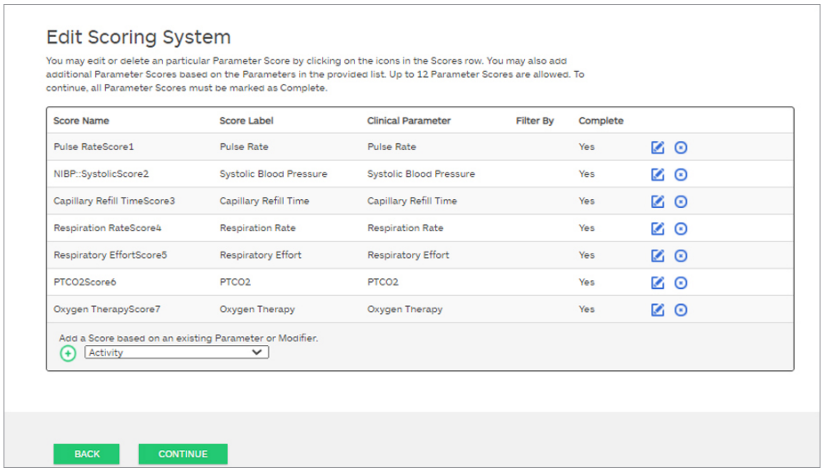
6. Click (edit) to change the rank information.

NOTE You can make the following edits to the rank information:

- Modify the color of the severity rankings based on protocol.
- Omit or add rankings based on protocol.
- Edit the message in the Edit Rank Information message box.

  The message must be a continuous paragraph in the message box. Do not hit Enter on the keyboard or type \n to bring the text to the next line, or you might get an error when completing the configuration file.

7. Optional: To continue editing the Scoring System, click (edit) to change the values.



TIP If you want to disassociate a parameter from the score, click (delete).

If you want to add a new parameter associated with the score, either select an existing one from the drop-down list, or create a custom parameter in the Set Manual Parameters and Modifiers tab.

8. Click **CONTINUE**.

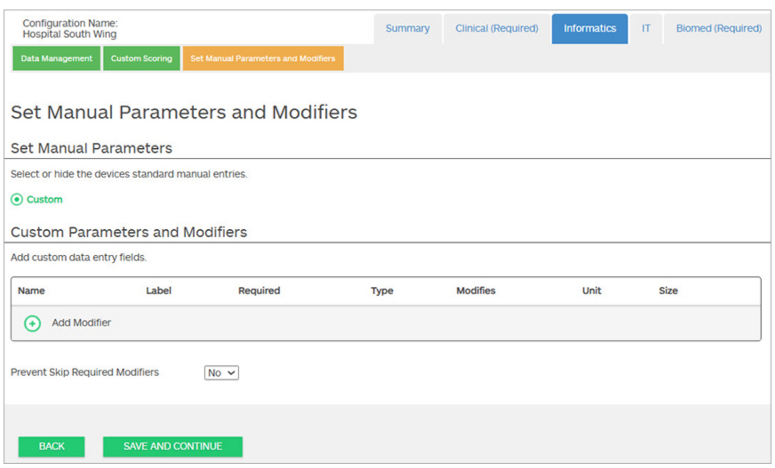
   You are returned to the Custom Scoring Selection screen.

9. Click **SAVE AND CONTINUE**.

Select Set Manual Parameters and Modifiers tab

Configure the manual and custom parameters and modifiers settings. Custom is the only option. You can add a modifier to add custom data entry fields. By default, Prevent Skip Required Modifiers is set to **No**.

If you set up custom scoring for a Bedside protocol, the custom parameters and modifiers display on the Set Manual Parameters and Modifiers screen.

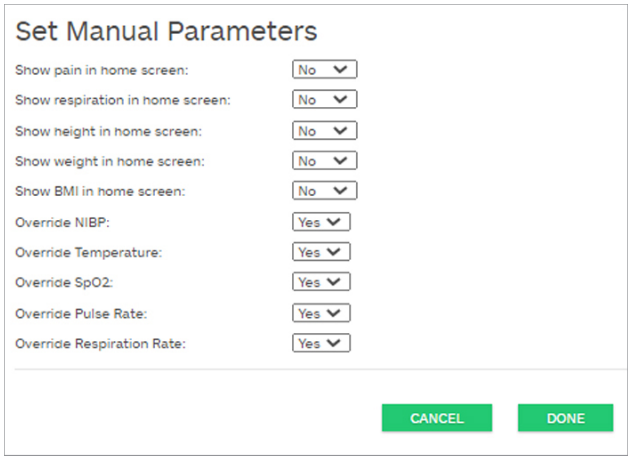


1. Optional: See "Set Manual Parameters" for how to override the parameters for NIBP, temperature, SpO2, pulse rate, and respiration rate.
2. Optional: See "Select Custom Parameters and Modifiers" for additional details on customizing these parameters and modifiers.

Set Manual Parameters

Review or modify the manual parameters.

1. If you want to review or modify the manual parameters, double-click the **Custom** radio button and the Set Manual Parameters screen pops up.



   Set Manual Parameters:

   - Show pain in home screen includes choices for **Yes** or **No** (default).
   - Show respiration in home screen includes choices for **Yes** or **No** (default).
   - Show height in home screen includes choices for **Yes** or **No** (default).
   - Show weight in home screen includes choices for **Yes** or **No** (default).
   - Show BMI in home screen includes choices for **Yes** or **No** (default).
   - Override NIBP includes choices for **Yes** (default) or **No**.
   - Override Temperature includes choices for **Yes** (default) or **No**.
   - Override SpO2 includes choices for Yes (default) or **No**.
   - Override Pulse Rate includes choices for **Yes** (default) or **No**.
   - Override Respiration Rate includes choices for **Yes** (default) or **No**.

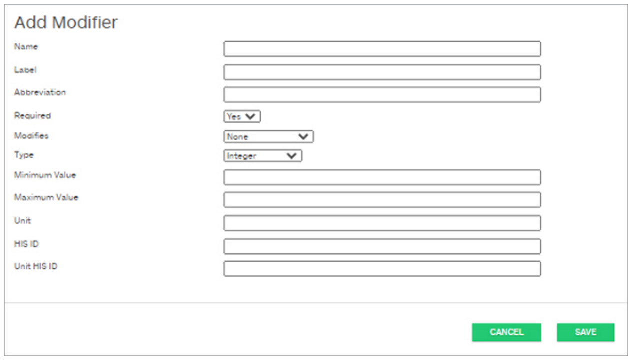
2. Click **SAVE AND CONTINUE**.

Set custom parameters and modifiers

You can set, add, or delete custom parameters and modifiers.

NOTE Every parameter or modifier that you enter in the list goes to the top of the list. If you want the parameter or modifier to appear in a specific order on your device, enter the list in REVERSE order (with the one you want at the bottom of the list being first, and the one you want at the top of the list being last). Then the list will look correct. When the list is complete, click **SAVE**. Do not modify the list again, because modifying an existing list reloads it in reverse order after you click SAVE. If you must edit a list, delete all the entries and start from scratch again.

1. Optional: Click to add a modifier.

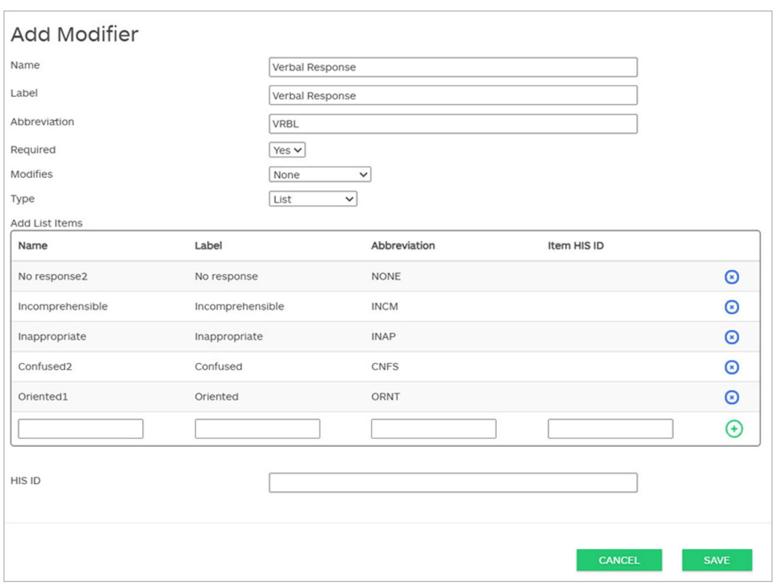


Complete the requested information for adding a custom modifier:

a. Type a name for the modifier that will appear in the Set Manual and Custom Parameters table.
b. Type a label for the modifier that will appear on the **Connex 360** monitor screen.
c. Type an abbreviation for the modifier.
d. Use the drop-down menu to select whether the modifier is required. Required includes choices **Yes** (default) or **No**.
e. Use the drop-down menu to select whether the modifier modifies: **NIBP**, **SpO2**, **Temperature**, **Pulse Rate**, **Respiration Rate**, or **None** (default).
f. Use the drop-down menu to select the type of modifier: **Integer** (default), **Decimal**, **Alphanumeric**, or **List**.

   - If you selected Decimal, enter the Decimal Precision (**1 decimal** or **2 decimals**).
   - If you selected List, you can add list items. Enter the Name, Label, Abbreviation, and Item HIS ID.

   In this example, the `Verbal Response` modifier is being added to the list.



g. Optional: Click to add another list Item.
h. Type a minimum value. (Values must be within -32768 and 32767 and be an integer. The Minimum Value must be less than the Maximum Value.)
i. Type a maximum value. (Values must be within -32768 and 32767.)

j. Type a unit.
k. Type a HIS ID.
l. Type a unit HIS ID.
m. When finished, click **SAVE**.

The new modifier displays in the Custom Parameters and Modifiers section of the Set Manual Parameters and Modifiers screen.

2. Optional: To continue editing the new modifier, click (edit). Make the necessary changes and click **SAVE**.

   The new modifier appears at the top of the list.

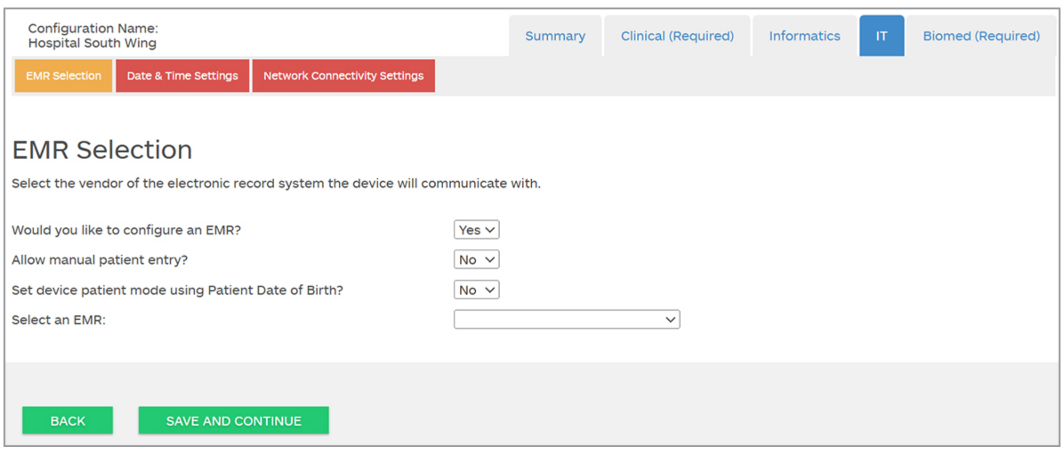
3. Optional: To delete the new modifier, click (delete). Click **DELETE**.
4. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the EMR Selection tab.

Set up the Electronic Medical Record (EMR)

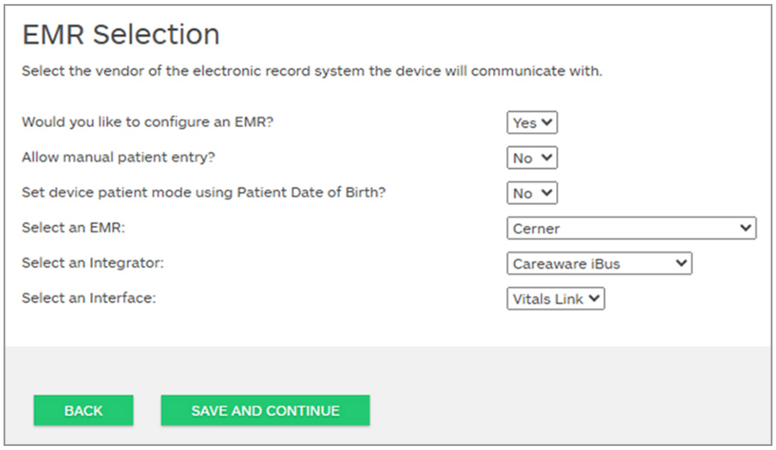
Configure the EMR settings.

1. If your facility is using an Electronic Medical Records (EMR) system, select the EMR vendor and other preferences:



- Would you like to configure an EMR includes choices **Yes** (default) or **No**.
- Allow manual patient entry? includes choices **Yes** or **No** (default).
- Set device patient mode using Patient Date of Birth includes choices **Yes** or **No** (default).
- Select an EMR includes choices: **Allscripts Sunrise 6.1 and higher**, **Cerner**, **I will customize my selection**, **Epic**, **McKesson Horizon**, **McKesson Paragon**, **Medhost (HMS)**, **Meditech 6.X**, **Meditech Client/Server**, **Meditech Magic**, **Siemens Invision**, **Siemens Sorian**, **VA - VistA/CPRS**.

2. If prompted, select an Integrator and select an Interface from the drop-down menus.



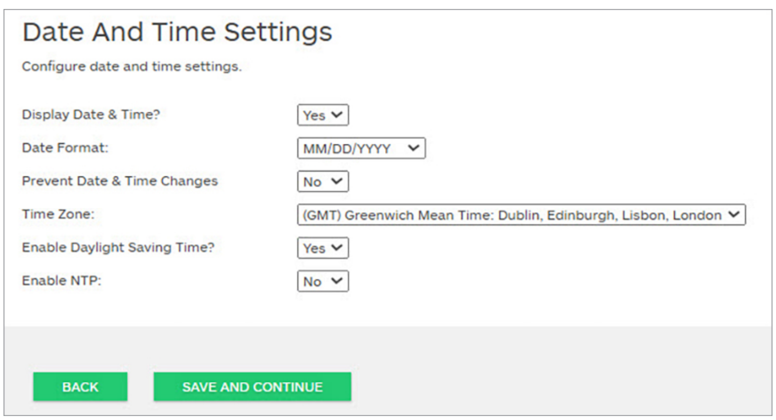
3. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Date and Time Settings section, and the Progress Summary shows completed sections in green.

Set date and time

Configure the date and time preferences.

1. Click the **Date & Time** tab in the IT section to configure the date and time preferences.



   - Display Date & Time includes choices **Yes** (default) or **No**.
   - Date format includes choices **MM/DD/YYYY** (default), **YYYY-MM-DD**, **DD/MM/YYYY**, **DD.MM.YYYY**, **DD/MMM/YYYY.**
   - Prevent Date & Time Changes includes choices **Yes** or **No** (default).
   - Use the drop-down menu to select the Time Zone.
   - Enable Daylight Saving Time includes choices **Yes** (default) or **No**.
   - Enable NTP (Network Time Protocol server) includes choices **Yes** or **No** (default).

2. Click **SAVE AND CONTINUE**.

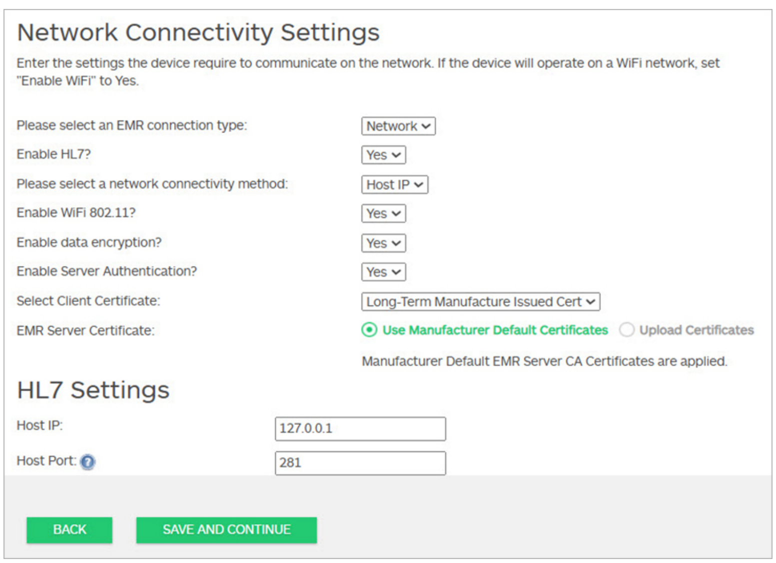
   As the Configuration Tool is updated, the screen moves to the Network Connectivity Settings tab.

Connect to a network

Configure your settings that the **Connex 360** monitor requires to communicate on the network.

1. Use the drop-down lists to configure your network settings:
   - Please select an EMR connection type is set to **Network** by default.
   - Enable HL7 includes choices **Yes** (default) or **No**. When **No** is selected, WACP protocol will be used instead of HL7.
   - Please set a network connectivity method. It is set to **Host IP** by default.

     NOTE The **Host IP** value can be the IP address or DNS address entry.
   - Enable Wi-Fi 802.11 includes choices **Yes** (default) or **No**. If the device operates on a **Wi-Fi** network, set Enable Wi-Fi 802.11 to **Yes**.
   - Enable data encryption includes choices **Yes** (default) or **No**.
   - Enable Server Authentication includes choices **Yes** (default) or **No**.
   - Select Client Certificate includes choices:
     - **No Client Certificate Offered**
     - **Long-term Manufacture Issued Cert** (default)
     - **Client Provided Certificate 3**
     - **Client Provided Certificate 4**
     - **Client Provided Certificate 5**
   - EMR Server Certificate includes radio button selections for **Use Manufacturer Default Certificates** or **Upload Certificates**.



2. Optional: If you select the Upload Certificates radio button, the CA Certificate Selection screen displays.

   The CA certificate must be in PEM, DER, CRT, or CER format (ex: `cacert.pem`). Failure to abide by these restrictions causes the device to ignore the certificate. For more information about using and uploading certificates, see "Configure a CA Root certificate."

   a. Click **Add Certificate to Library** and upload the certificates from your computer.

   b. Click **DONE**. Then the list of uploaded certificates displays on the screen.

      You can optionally delete an uploaded CA certificate. For more information, see "Delete a CA certificate."
3. Optional: The HL7 Settings are completed by default. Enter a new Host IP and Host Port, if desired.

   If you set HL7 Settings to **No**, the **HL7** entry fields change to Host IP and Host Port.
4. Click **SAVE AND CONTINUE**.

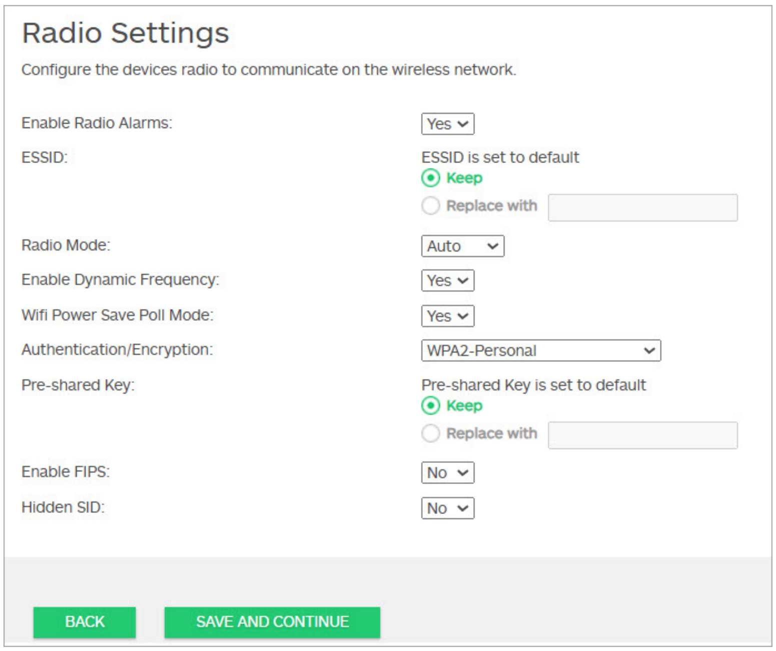
   As the Configuration Tool is updated, the screen moves to the Radio Settings section.

Set up radio settings

Configure the radio settings for the **Connex 360** monitor.

1. Use the drop-down lists and radio buttons to configure the radio settings to communicate with the wireless network.

   NOTE The ESSID and EAP passwords should not include special characters &, <, >, or and.



- Enable radio alarms includes choices Yes (default) or No.
- ESSID is set to Keep by default. If you set **ESSID** to **Replace with**, enter a unique name for the wireless network.
- Radio mode includes choices for Auto (default), 2.4 GHz, or 5 GHz.
- Enable Dynamic Frequency includes choices Yes (default) or No.
- **Wi-Fi** Power Save Poll Mode includes choices Yes (default) or No.
- Authentication/Encryption includes many choices. WPA2-Personal is the default. Use the drop-down list to customize.

  NOTE For example, if you select **WPA2-Enterprise** for **Authentication/Encryption**, several new fields display:

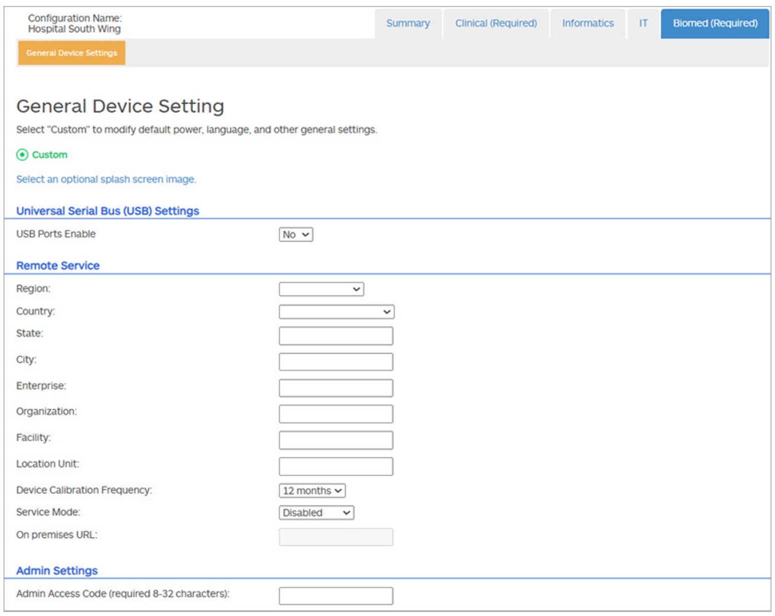
  - Roam Type includes choices OKC\PMK (default) or 802.11r.
  - Roam Mode includes choices default, disable, optional, or required.
  - Enter the identity in the **EAP identity** field.
  - EAP type is set to NONE by default. Use the drop-down list to select a different EAP type, such as PEAP-MSCHAPv2. Additional fields, such as the EAP Password, might display, depending on which **EAP type** you select.
  - Authentication Server Type includes choices username (default) or anonymous.
- Pre-shared Key is set to Keep by default. If you set **Pre-shared Key** to **Replace with**, enter the replacement key name.
- Enable FIPS includes choices Yes or No (default).
- Hidden SID includes choices Yes or No (default).

2. Click **SAVE AND CONTINUE**.
   As the Configuration Tool is updated, the screen moves to the General Device Settings tab.

Select General Device Settings for USB and remote services

Set up the general device settings for Universal Serial Bus (USB) and Remote Services for the **Connex 360** monitor.

The **Custom** radio button is pre-selected.

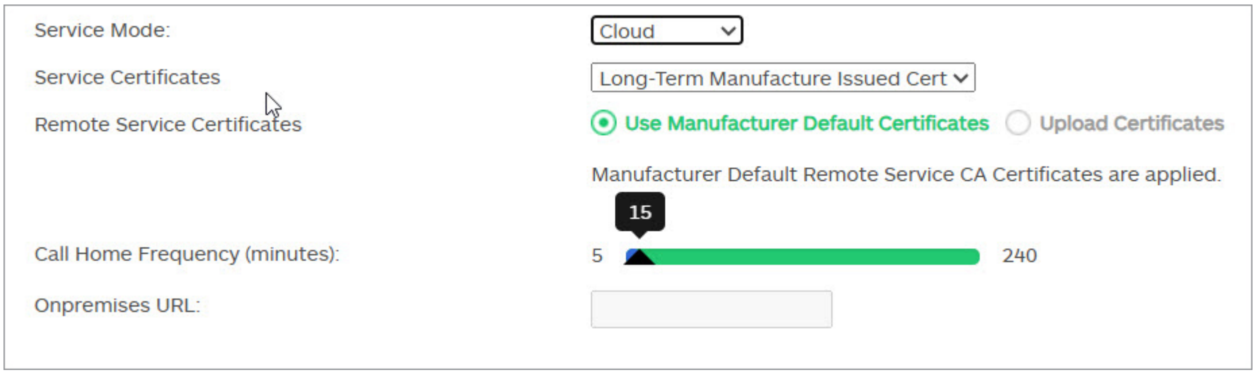


1. Click **Select an optional splash screen image** and follow the on screen instructions to upload a custom splash screen image onto the device. To create your facility's custom splash screen image, the image must be in the **Windows** BMP format file. It must be 1280 pixels wide by 800 pixels tall and have 24 bits of color using 3 bytes per pixel. The image must not contain color space information. Failure to abide by these restrictions will cause the device to ignore the image.
2. In the Universal Serial Bus (USB) Settings section, set **USB Ports Enable**. Choices include No (default) or Yes.
3. Set the **Remote Service** settings, commonly referred to as Remote Management. Important: This organization hierarchy will determine where the devices with this configuration file will be located within the Remote Management platform.
   - Select the region name from the list.
   - Select the country name from the list.
   - Type the state name.
   - Type the city name.
   - Type the enterprise name.
   - Type the organization name.
   - Type the facility name.
   - Type the location unit.
   - Select the **Device Calibration Frequency**. Choices include 12 months (default). You can select a range of 1 month to 36 months.

- Select the **Service Mode**. Choices include Disabled (default), Cloud, or Onpremises.

> **NOTE** The enterprise, region, organization, and facility govern how the devices are grouped in the Remote Management solution. If you change these parameters, it will create a new grouping that you will need to link to your Remote Management account. These fields are case sensitive and space sensitive. For more information on how devices are grouped, see the **SmartCare** Remote Management *Instructions for Use*. For more information on Remote Management, contact your sales representative or go to the https://www.baxter.com/our-services website.

a. If you set **Service Mode** to **Cloud** or **Onpremises**, additional fields appear where you can select the following:



1. Select the **Service Certificates** setting to define which Client Certificates will be used. The default is Long-Term Manufacture Certificates. Choices include Long-Term Manufacture Certificates (default) or three available slots for client-provided certificates.
2. Under Remote Service Certificates, select the **Upload Certificates** radio button if you want to add your own CA certificates for the device.

   The CA certificate must be in PEM, DER, CRT, or CER format (ex: `cacert.pem`). Failure to abide by these restrictions causes the device to ignore the certificate. For more information about using and uploading certificates, see "Configure **Active Directory**" and "Configure a CA Root certificate."
3. Select the **Call Home Frequency**. Choices include a default of 15. The range is 5 to 240. For more information, see the **Connex 360** *Service Manual*.
4. If you have selected the **Cloud** Service Mode, the device will automatically connect to the default Remote Service server hosted on the cloud.

   If you have chosen the **Onpremises** Service Mode, you will be able to specify a custom Remote Service server. To do this, enter the URL of your Remote Service server in the designated Onpremises URL field. Do not include "https://" when typing in URL.

> **NOTE** You can optionally delete an uploaded CA certificate. For more information, see "Delete a CA certificate." If you are on a custom tenant, use the **Onpremises** option and contact your Baxter representative to obtain your custom URL.

4. Required: Enter the **Admin Access Code**.

> **NOTE** The following are the access code password requirements:
>
> - The password length must be between 8 and 32 characters.
> - The password must contain at least one uppercase and one lowercase letter.
> - The password must contain at least one number.
> - The password must contain one of the following symbols: '-!"#$%&()*,./:;? @[]^_`{|}~+<=>

5. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Progress Summary view. When all the sections appear green, the configuration file can be downloaded or shared.

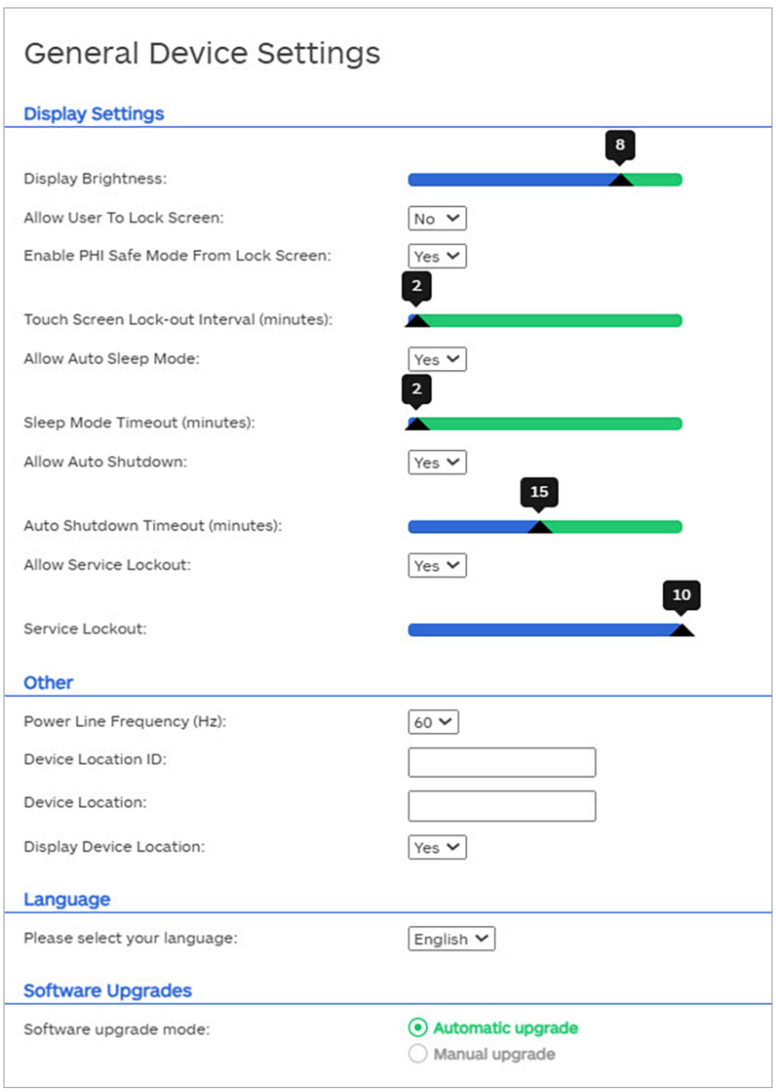
If you want to modify the power, language, and software update settings, see "Select General Device Settings for power, language, software."

Select General Device Settings for power, language, software

You can customize the general device settings for the display, power, language, and software upgrades on the **Connex 360** monitor.

1. Click the **Custom** radio button on the **General Device Settings** tab.

   The General Device Settings screen for the display, power, language, and software appears.



For Custom General Device Settings, the default settings are:

- Display Brightness = 8
- Allow User to Lock Screen = No
- Enable PHI Safe Mode From Lock Screen = Yes
- Touch Screen Lock-out Interval (minutes) = 2
- Allow Auto Sleep Mode = Yes
- Sleep Mode Timeout (minutes) = 2
- Allow Auto Shutdown = Yes
- Auto Shutdown Timeout (minutes) = 15
- Allow Service Lockout = Yes
- Service Lockout (minutes) = 10
- Power Line Frequency (Hz) = 60
- Device Location ID = blank
- Device Location = blank
- Display Device Location = Yes
- Language = English
- Software Upgrade Mode = Automatic upgrade

2. Optional: To change the default value for **Display Brightness**, use the slider to set the value. Values range from 1 to 10.
3. Optional: To change the default value for **Allow User To Lock Screen**, use the drop-down menu to select **Yes** or **No**.
4. Optional: To change the default value for **Enable PHI Safe Mode From Lock Screen**, use the drop-down menu to select **Yes** or **No**.
5. Optional: To change the default value for **Touch Screen Lock-out Interval (minutes)**, use the slider to set the value. Values range from 1 to 30.
6. Optional: To change the default value for **Allow Auto Sleep Mode**, use the drop-down menu to select **Yes** or **No**.
7. Optional: To change the default value for **Sleep Mode Timeout (minutes)** , use the slider to set the value. Values range from 1 to 30.
8. Optional: To change the default value for **Allow Auto Shutdown**, use the drop-down menu to select **Yes** or **No**.
9. Optional: To change the default value for **Auto Shutdown Timeout (minutes)** , use the slider to set the value. Values range from 1 to 30.
10. Optional: To change the default value for **Allow Service Lockout**, use the drop-down menu to select **Yes** or **No**.
11. Optional: To change the default value for **Service Lockout**, use the slider to set the value. Values range from 1 to 10.
12. Optional: To change the default value for **Power Line Frequency (Hz)**, use the drop-down menu to select 50 or 60.
13. Optional: To add a **Device Location ID** to the device, type in an ID. The Device Location ID field is the same as the EMR Location field on the **Connex 360** user interface.
14. Optional: To add a **Device Location** to the device, type in an user-friendly location name.
15. Optional: To display the **Device Location** on the device, use the drop-down menu to select **Yes** or **No**.
16. Optional: To change the default language on the device, use the drop-down menu to select the desired language. Choices are English or French.
17. Optional: To set the device to perform a software update when a new software version is available and deployed remotely, select either the **Automatic upgrade** or **Manual upgrade** radio button.

    If you selected **Manual upgrade**, select either **Upon reboot** or **Upon acceptance** for when the software upgrade occurs.

18. When finished, click **DONE**.
19. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the Progress Summary view. When all the sections appear green, the configuration file can be downloaded or shared.

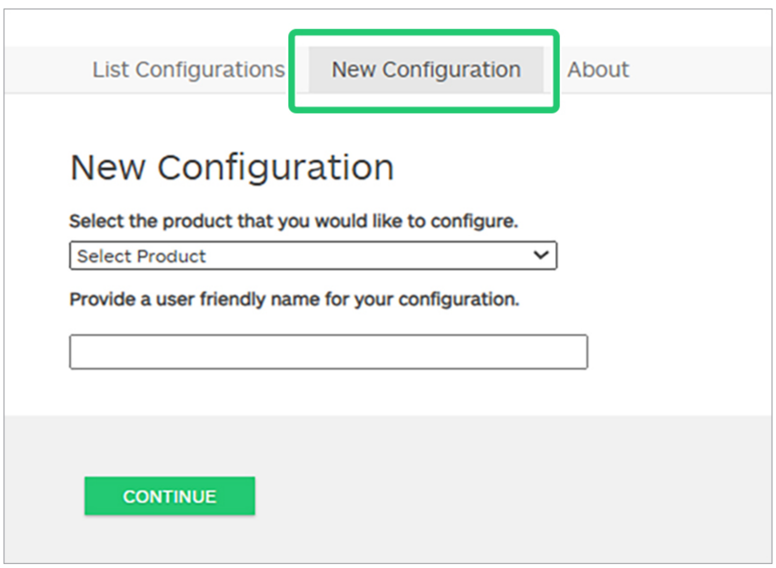
Create a new **Connex Spot** Monitor configuration

Create a new configuration for Physician's Office or Clinic

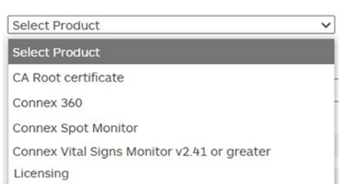
As a new configuration is completed, the configuration:

- determines default profiles.
- determines whether the device will be set up for **Wi-Fi** technology, **Bluetooth** technology, **Bluetooth** Low Energy (BLE), or other connectivity such as Ethernet or USB.
- opens or limits functionality like Early Warning Scores (EWS) protocols or prescriptive workflow settings.

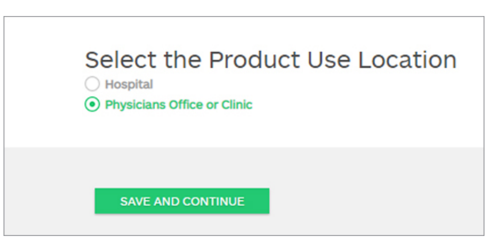
1. From the main screen, click the **New Configuration** tab.



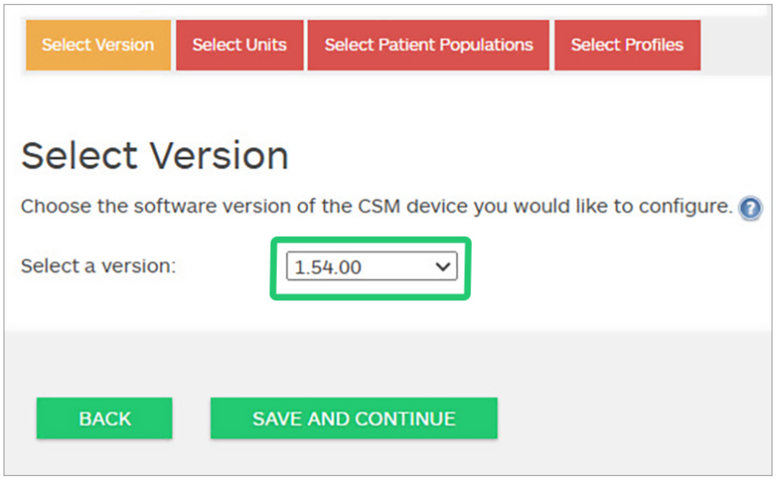
2. Use the drop-down menu to select the Connex Spot Monitor product. Provide a name for the configuration by typing in the field and click **CONTINUE**.



3. Select the Physicians Office or Clinic Product Use Location. (Choices include: **Hospital** and **Physicians Office or Clinic**.)



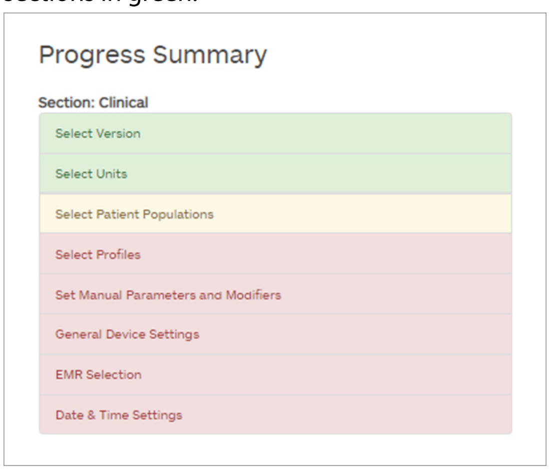
4. Click **SAVE AND CONTINUE**.
5. Click **Select Version**.
6. Use the drop-down menu to select a software version.



The default selection is the latest software version available (1.54.00).

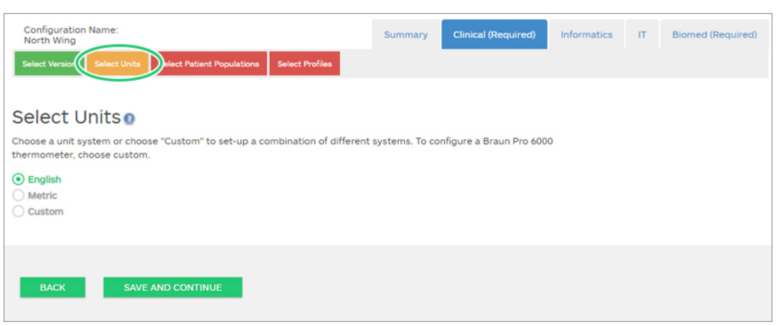
7. Click **SAVE AND CONTINUE**.

NOTE As the Configuration Tool is updated, the Progress Summary view updates to show completed sections in green.



As the Configuration Tool is updated, the screen moves to the Select Units tab.

8. Click the radio button to select the units.



Choose a unit system or select **Custom** to set up a combination of different systems. To configure a PRO 6000 thermometer, select **Custom**. Choices include: **English**, Metric, and Custom. The default choice is English.

9. Click **SAVE AND CONTINUE**.

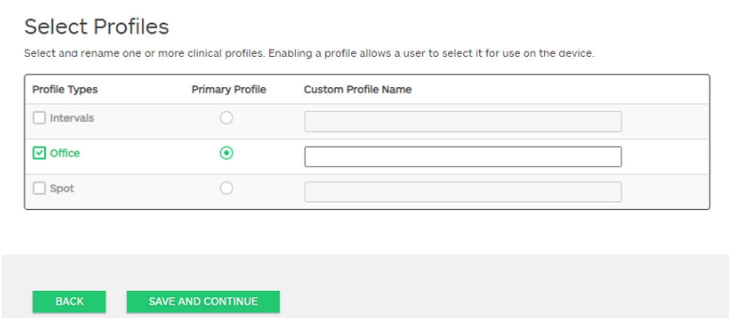
   As the Configuration Tool is updated, the screen moves to the Select Patient Populations tab.

10. Click the radio button for the patient type in Select Patient Populations. Choose the patient type that will be used most frequently with the device. Choices include: Adult, Pediatric, Neonatal, and Custom. The default choice is Adult.

11. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the Select Profiles tab.

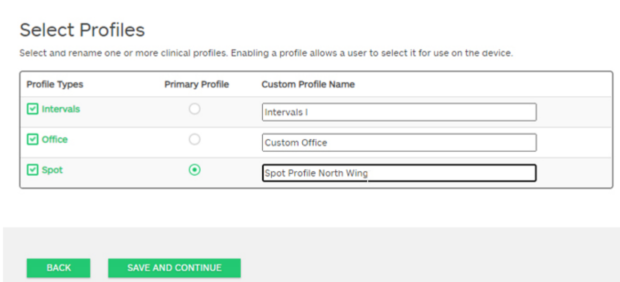
12. Click the checkbox next to the Profile type to select the clinical profile. If the Product Use Location selected is Physicians Office or Clinic, the default selection for Profile type is set to Office for the Primary Profile. (If the Product Use Location selected is Hospital, the default selection for Profile type is set to Spot for the Primary Profile with Intervals enabled. The three choices for Profile type include: Intervals, Office, and Spot.)



- Use Office to enable Blood Pressure Averaging and **Bluetooth** connectivity.
- Use Intervals to enable alarms and timed NIBP and SpO2, or just one or the other.
- Use Spot to enable spot check vitals without alarms.

a. Click the radio button in the Primary Profile column across from the Profile Types to select that profile as the Primary Profile.

b. Optional: Add a Custom Profile Name to any or all of the profiles by typing into the Custom Profile Name field.

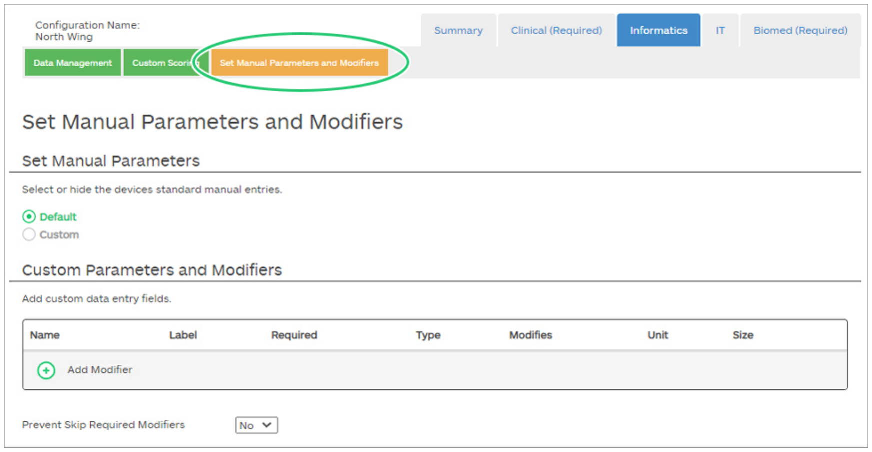


   c. See "Configure the Office Profile" for additional details about creating blood pressure averaging programs.

13. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the Set Manual Parameters and Modifiers tab.

14. Configure the Manual Parameters and Modifiers settings.

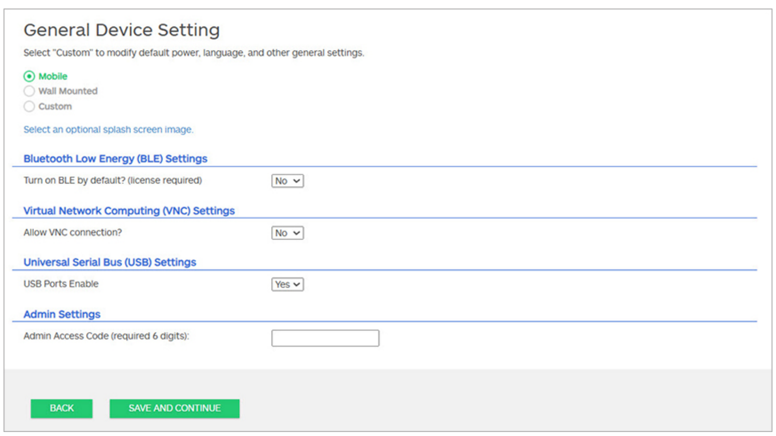


    The default settings are: Select or hide the devices standard manual entries = Default, Prevent Skip Required Modifiers = No. See the "Select Custom Parameters and Modifiers" for additional details on customizing the manual parameters.

15. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the General Device Settings tab.

16. Click the radio button next to one of the choices to select that choice: Mobile, Wall Mounted, or Custom.



   a. Optional: Select **Custom** to modify default power, language, and other general settings. The default selection is Mobile. Choices include: Mobile, Wall Mounted, and Custom. See: "(Optional) Select Custom General Device Settings" for additional instructions to modify the General Device Settings.

   b. Optional: Click **Select an optional splash screen image** and follow the on screen instructions to upload a custom splash screen image onto the device. To create your facility's custom splash screen image, the image must be in the **Windows** BMP file format. It must be must be 800 pixels wide by 480 pixels tall and have 24 bits of color using 3 bytes per pixel. The image must not contain color space information. Failure to abide by these restrictions will cause the device to ignore the image.

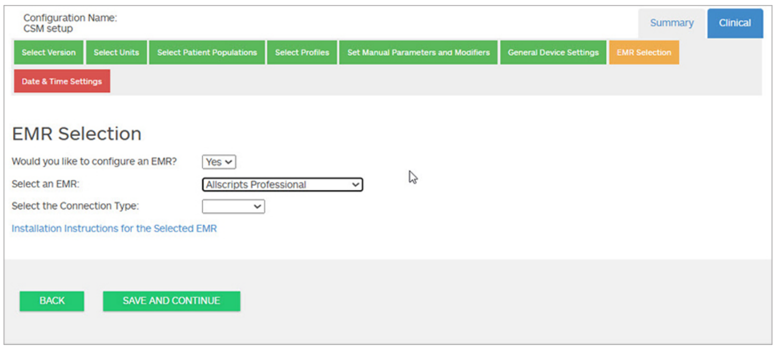
   c. Optional: Enable Bluetooth Low Energy (BLE), Virtual Network Computing (VNC) settings, and Universal Serial Bus (USB) settings. Use the drop-down menu to change any the default settings. The default settings for Bluetooth Low Energy (BLE) are: Turn on BLE by default? (license required) = **No**. The default setting for Virtual Network Computing (VNC) Settings is: Allow VNC connection? = **No**. The default setting for Universal Serial Bus (USB) is: USB Ports Enable = **Yes**.

d. Select an Admin Access Code that is exactly 6 digits long.

17. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the EMR Selection tab.

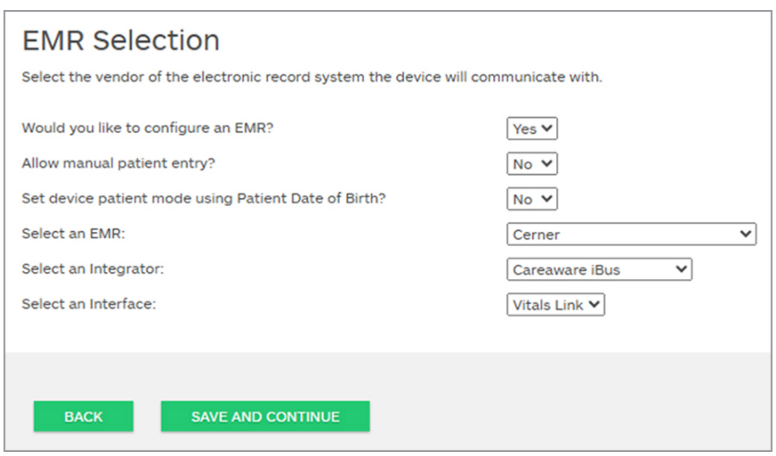
18. If your facility is using an Electronic Medical Records (EMR) system, select the EMR settings. Use the drop-down menu to answer **Yes** or **No** in the Would you like to configure an EMR? field.



The default settings for the EMR Selection are: Would you like to configure an EMR? = **Yes**. Select an EMR = blank. Select the Connection Type = blank.

a. If Yes is selected, use the drop-down menu to select your EMR. Choices include: **Allscripts Professional**, **Allscripts Touchworks**, **Amazing Charts**, **Aprima**, **Athena Health**, **Cerner**, **Epic**, **GE Centricity**, **Greenway**, **McKesson Practice Choice**, **McKesson Practice Partner, Medent**, **Meditab**, **Next Gen**, **Practice Fusion**, **Vitera (Greenway**, **Success EHS**, **e-MDs**, and **eClinicalWorks**.

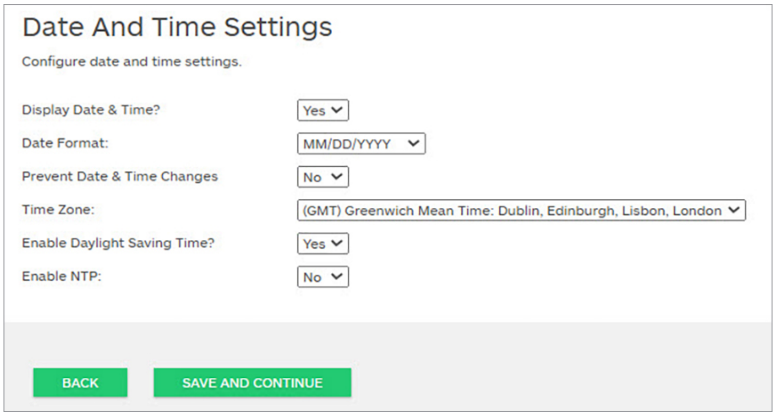
b. If prompted, select an Integrator and select an Interface from the drop-down menus.



c. Use the drop-down menu to select the Connection Type: **Bluetooth** or **USB**.

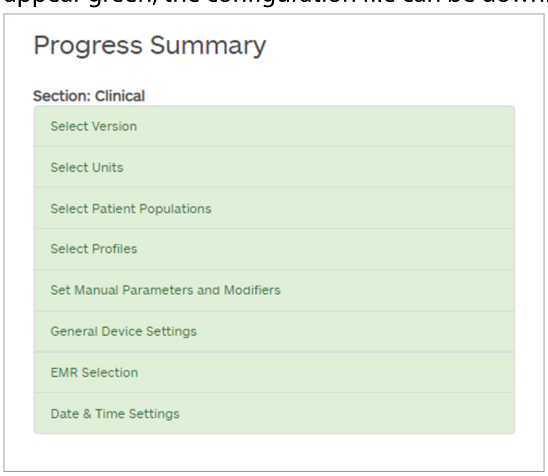
d. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves from the EMR Selection section to the Date and Time Settings section and the view is updated to show completed sections in green.



19. Click **Date And Time Settings** to continue.
    a. Use the drop-down menu to select **Display Date & Time**. The default settings for Display Date & Time = **Yes**.
    b. Use the drop-down menu to select Date Format. Choices include: **MM/DD/YYYY** (default), **YYYY/MM/DD**, **DD/YYYY/MM**, or **DD.MM.YYYY**.
    c. Use the drop-down menu to select Prevent Date & Time Changes. The default setting = **No**.
    d. Use the drop-down menu to select Time Zone.
    e. Use the drop-down menu to select Enable Daylight Savings Time?. The default setting = **Yes**.
    f. Use the drop-down menu to select Enable NTP?. The default setting = **No**.
20. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to Configuration complete. When all the sections appear green, the configuration file can be downloaded or shared.

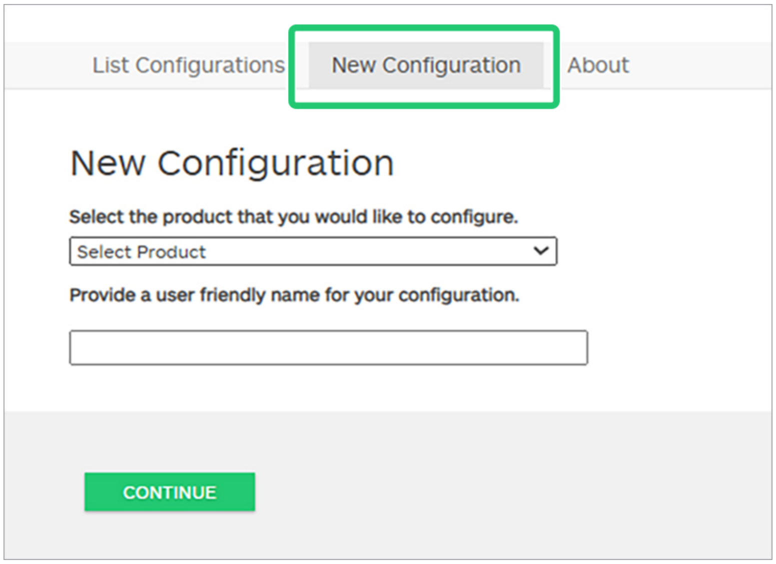


Create a new configuration for a Hospital setting

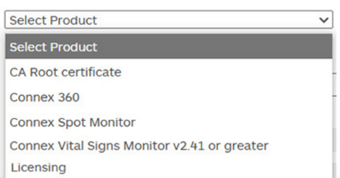
As a new configuration is completed, the configuration:

- determines default profiles.
- determines whether the device will be set up for **Wi-Fi** technology, **Bluetooth** technology, **Bluetooth** Low Energy (BLE), or other connectivity such as Ethernet or USB.
- opens or limits functionality like Early Warning Scores (EWS) protocols or prescriptive workflow settings.

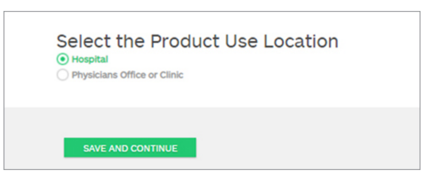
1. From the main screen, click the **New Configuration** tab.



2. Use the drop-down menu to select the Connex Spot Monitor product. Provide a name for the configuration by typing in the field and click **CONTINUE**.

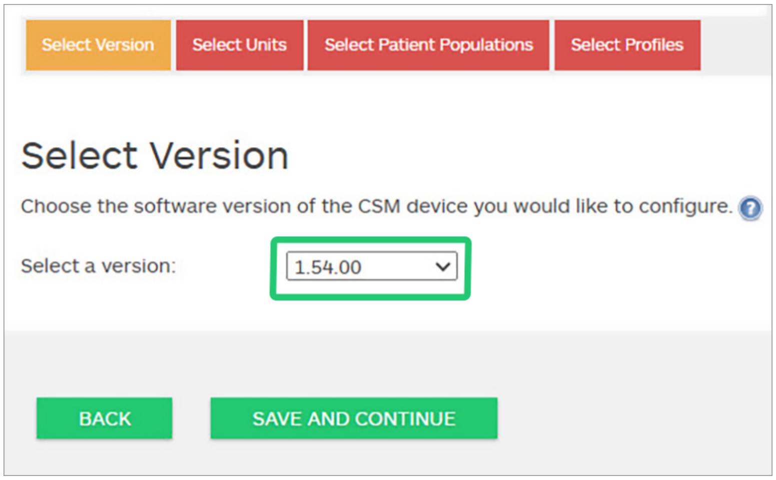


3. Select the **Hospital** Product Use Location. (Choices include: Hospital or Physicians Office or Clinic.) See: "Create a new configuration for Physician's Office or Clinic" for instructions on setting up a device for a Physician's Office or Clinic.



4. Click **SAVE AND CONTINUE**.
5. Click **Select Version**.

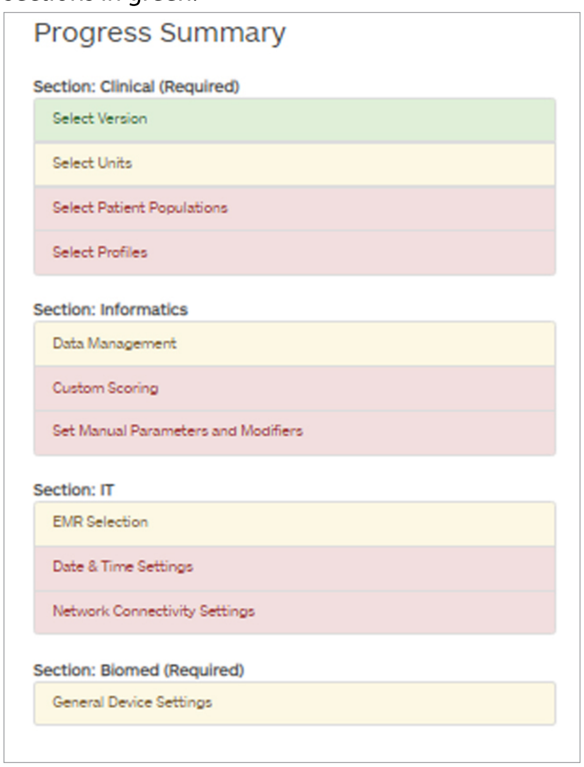
6. Use the drop-down menu to select a software version.



The default selection is the latest software version available (1.54.00).

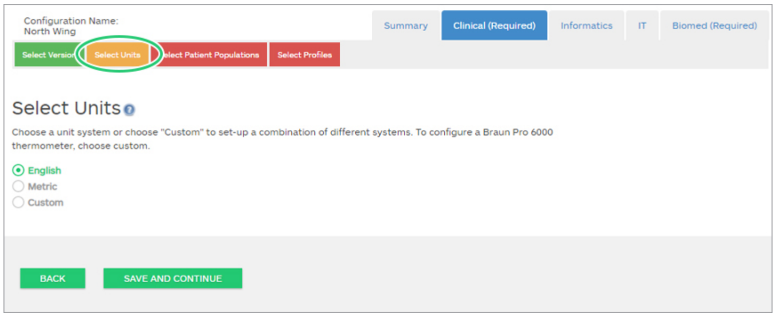
7. Click **SAVE AND CONTINUE**.

NOTE As the Configuration Tool is updated, the Progress Summary view updates to show completed sections in green.



As the Configuration Tool is updated, the screen moves to the Select Units tab.

8. Click the radio button to select the units.



Choose a unit system or select Custom to set up a combination of different systems. To configure a PRO 6000 thermometer, select **Custom**. Choices include: English, Metric, and Custom. The default choice is English.

9. Click **SAVE AND CONTINUE**.

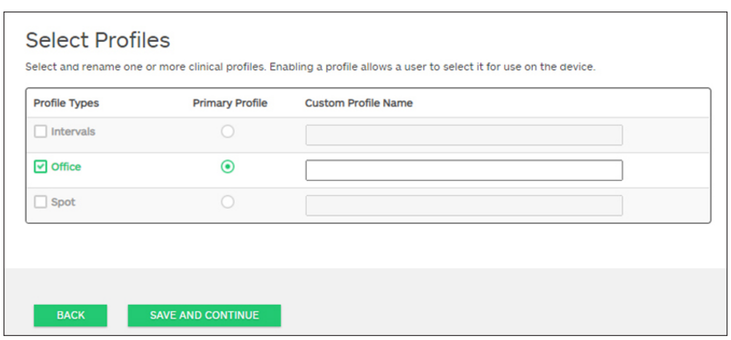
   As the Configuration Tool is updated, the screen moves to the Select Patient Populations tab.

10. Click the radio button for the patient type in Select Patient Populations. Choose the patient type that will be used most frequently with the device. Choices include: Adult, Pediatric, Neonatal, and Custom. The default choice is Adult.

11. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the Select Profiles tab.

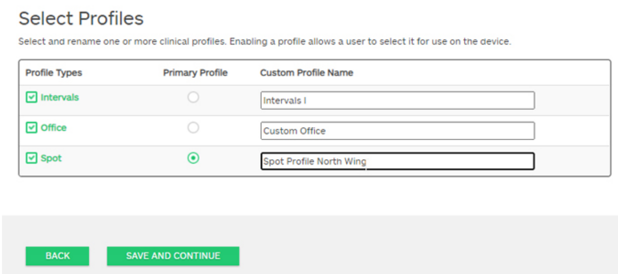
12. Click the checkbox next to the Profile type to select the clinical profile. The three choices for profile types include: Intervals, Office, and Spot. The default selection for Profile type is set to Spot for the Primary Profile with Intervals enabled. (The example shown is for the Office profile.)



- Use **Intervals** to enable alarms and timed NIBP and SpO2, or just one or the other.
- Use **Office** to enable Blood Pressure Averaging and **Bluetooth** connectivity.
- Use **Spot** to enable spot check vitals without alarms.

a. Click the radio button in the Primary Profile column across from the Profile Types to select that profile as the Primary Profile.

b. Optional: Add a Custom Profile Name to any or all of the profiles by typing into the Custom Profile Name field.



c. See "Configure the Interval Profile" for additional details about configuring Auto Intervals settings or to create Custom intervals programs.

NOTE To accept the default settings for the Intervals profile, click **SAVE AND CONTINUE**.

d. If the Intervals profile was previously selected, follow the instructions in the "Configure the Interval Profile" section to complete that profile.

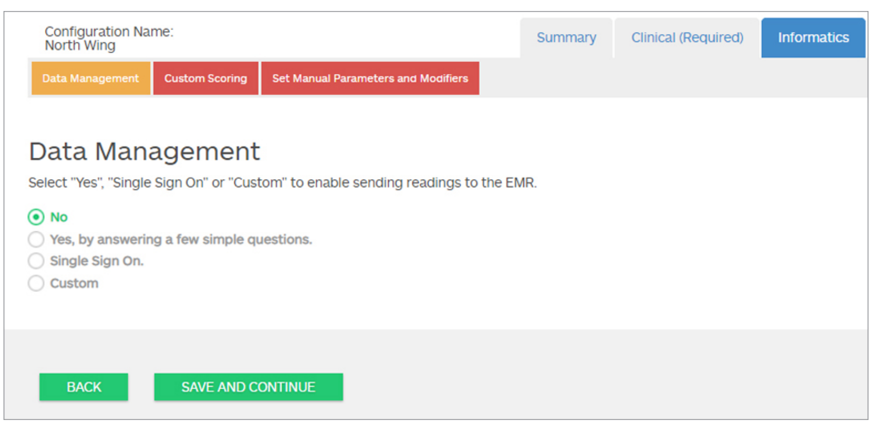
NOTE To accept the default settings for Configure the Interval Profile click **SAVE AND CONTINUE**.

If the Intervals profile was previously selected, configure the general alarm settings. See "Set Alarms" for additional details to configure general alarm settings as well as alarm settings for NIBP, SpO2, Pulse Rate, Respiration Rate, and Temperature.

NOTE To accept the default settings for Set Alarms click **SAVE AND CONTINUE**.

e. See "Configure the Office Profile" for additional details about creating blood pressure averaging programs.

13. Click **SAVE AND CONTINUE**.
14. Click **Data Management** to continue.



a. The default setting is set to not send readings to an EMR. To change the default setting, use the radio button to select Yes, by answering a few simple questions, Single Sign On, or Custom to enable sending readings to the EMR. See the "Data Management " section for further details.

b. Click **SAVE AND CONTINUE**.

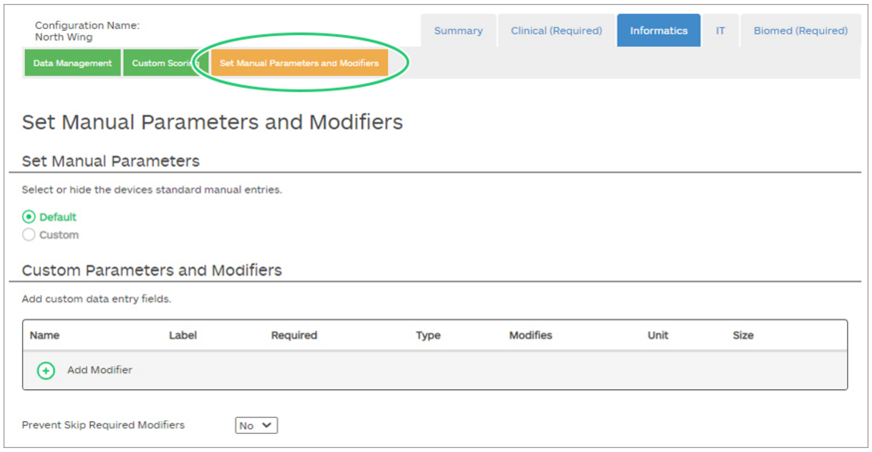
c. Optional: Select a Custom Scoring Setup. For: Enable custom scoring? Use the drop-down menu to select **Yes** or **No**. The default choice = **No**. For further information about enabling Custom Scoring, see the section "Select Custom Scoring Setup (**Connex Spot** Monitor)".

NOTE An authentication code is required.

d. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Set Manual Parameters and Modifiers tab.

15. Configure the manual parameters and modifiers settings.

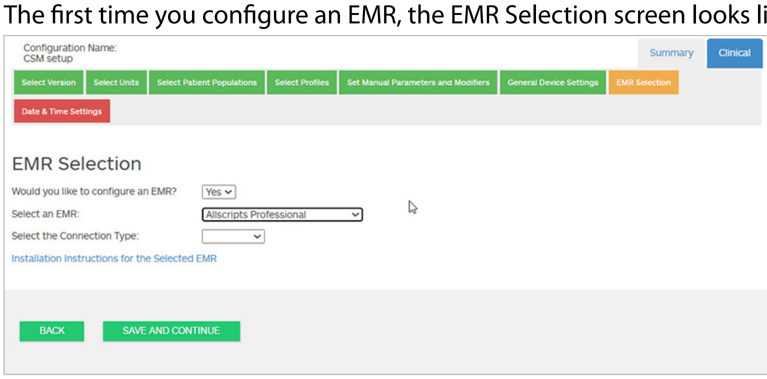


The default settings are: Select or hide the devices standard manual entries = Default, Prevent Skip Required Modifiers = No. See the "Select Custom Parameters and Modifiers" for additional details on customizing the manual parameters.

16. Click **SAVE AND CONTINUE**.

17. Click the **EMR Selection** tab to continue.

The first time you configure an EMR, the EMR Selection screen looks like this.



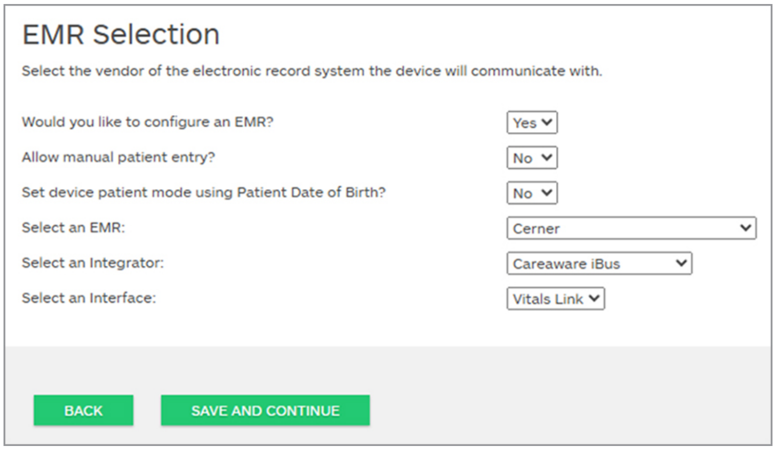
18. If your facility is using an Electronic Medical Records (EMR) system, select the EMR settings. Use the drop-down menu to answer **Yes** or **No** in the Would you like to configure an EMR? field.

The default settings for the EMR Selection are: Would you like to configure an EMR? = Yes. Allow manual patient entry? = Yes. Set device patient mode using Patient Date of Birth? = **No**. Select an EMR = blank.

a. If **Yes** is selected, use the drop-down menu to select your EMR. Choices include: **Allscripts Sunrise 6.1 and higher**, **Cerner**, **I will customize my selection, EPIC**, **McKesson Horizon**, **McKesson Paragon**, **Medhost (HMS)**, **Meditech 6.X**, **Meditech Client/Server**, **Meditech Magic**, **Siemens Invision**, **Siemen's Sorian**, **VA - VistA/CPRS**.

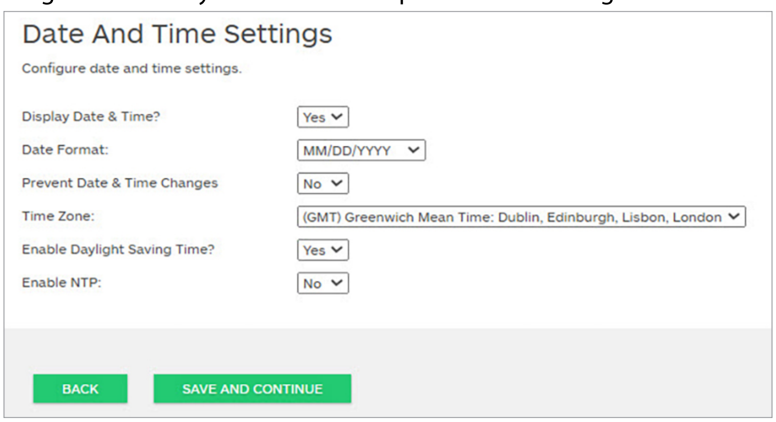
If you have previously configured an EMR and want to change the settings, the EMR Selection screen looks like this.

b. If prompted, select an Integrator and select an Interface from the drop-down menus.



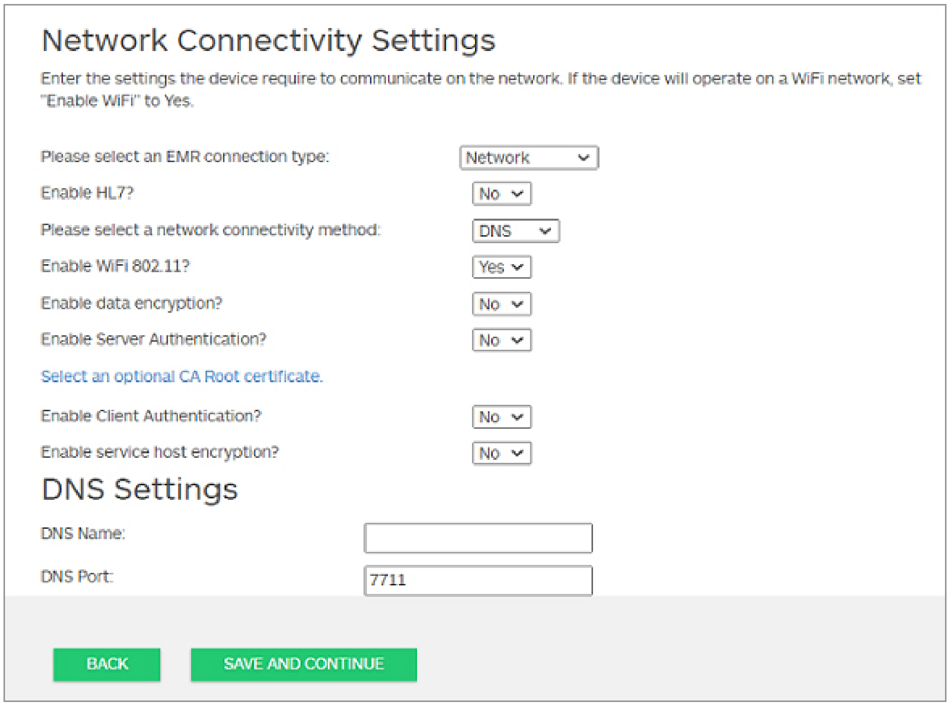
c. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Date and Time Settings section and the Progress Summary view shows completed sections in green.



19. Click **Date & Time Settings** to continue.
    a. Use the drop-down menu to select Display Date & Time. The default settings for Display Date & Time = **Yes**.
    b. Use the drop-down menu to select Date Format. Choices include: **MM/DD/YYYY** (default), **YYYY/MM/DD**, **DD/YYYY/MM**, or **DD.MM.YYYY**.
    c. Use the drop-down menu to select **Prevent Date & Time Changes**. The default setting = **No**.
    d. Use the drop-down menu to select the Time Zone.
    e. Use the drop-down menu to select Enable Daylight Savings Time?. The default setting = **Yes**.
    f. Use the drop-down menu to select Enable NTP?. The default setting = **No**.
20. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the Network Connectivity Settings tab.



Enter the settings that the device requires to communicate on the network. If the device operates on a **Wi-Fi** network, set Enable Wi-Fi 802.11? to **Yes**.

Default settings include:

- Please select an EMR connection type is set to **Network** by default. Choices include **USB** and **Defer to Later**.
- Enable **HL7** includes choices **Yes** or **No** (default).
- Please select a network connectivity method is set to **DNS** by default. Choices include **DHCP**, **Host IP**, and **NRS**.

  NOTE The connectivity method affects the input options.
- Enable **WI-FI** 802.11 includes choices **Yes** (default) or **No**.
- Enable data encryption includes choices **Yes** or **No** (default).
- Enable Server Authentication includes choices **Yes** or **No** (default).
- Enable Client Authentication includes choices **Yes** or **No** (default).
- Enable service host encryption includes choices **Yes** or **No** (default).

If you click Select an optional CA Root certificate, the CA Root Certificate Selection screen displays.

NOTE The CA Root certificate must be in PEM or DER formats (ex: `cacert.pem`). Failure to abide by these restrictions will cause the device to ignore the certificate.

Click **Add Certificate to Library** and upload a previously created PEM or DER format file. Click **DONE**.

For DNS Settings, there are 2 fields.

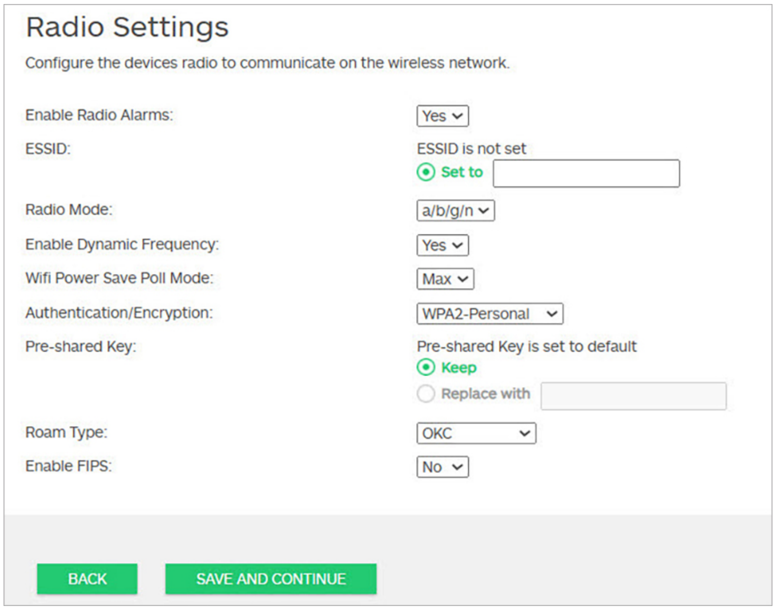
DNS Name: Click within the DNS Name: field and enter a DNS name.

DNS Port is set to 7711 by default. Enter a new DNS Port number, if desired.

NOTE If you select the **DHCP**, **Host IP** and **Service Host**, or **NRS** settings, the fields change.

21. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the Radio Settings tab.



Configure the device's radio to communicate on the wireless network. Use the drop-down menu to change any of the default settings.

NOTE The ESSID and EAP passwords should not include special characters &, <, >, or and.

- Enable radio alarms includes choices **Yes** (default) or **No**.
- ESSID is not set by default. If you set ESSID, the radio options change to Replace with. Enter a unique name for the wireless network.
- Radio mode includes choices for **a/b/g/n** (default), **a/b/g**, **a/n**, **a only**, or **b/g/n**.
- Enable Dynamic Frequency includes choices **Yes** (default) or **No**.
- **WI-FI** Power Save Poll Mode includes choices **Max** (default) or **Fast**.
- Authentication/Encryption includes choices **WPA2-Personal** (default) or **WPA2-Enterprise**.

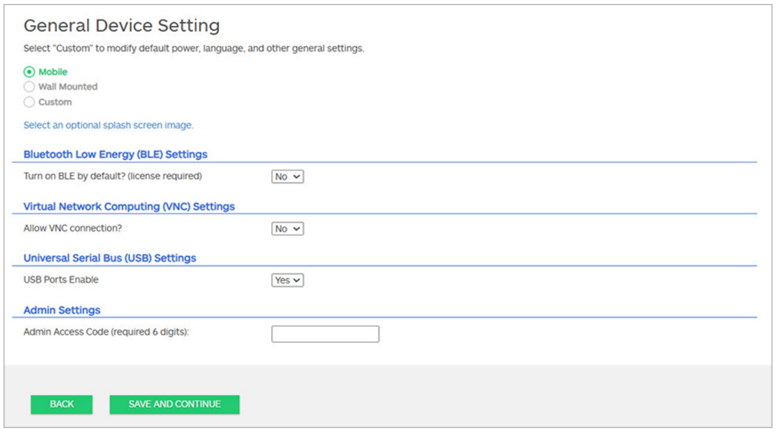
  NOTE If you select **WPA2-Enterprise** for Authentication/Encryption, several new fields display:

  - Enable Server Validation includes choices **Yes** (default) or **No**.
  - Enter the identity in the EAP identity field.
  - EAP Password is not set by default. Click the **Set** radio button to enter a password.
  - EAP type is set to **PEAP-MSCHAPv2** by default. Use the drop-down list to select a different EAP type. Additional fields might display, depending on which EAP type you select.
  - Authentication Server Type includes choices **username** (default) or **anonymous**.
- Pre-shared Key is set to Keep by default. If you set Pre-shared Key, the radio options change to Replace with and Replace with default. Enter the replacement key name.
- Roam Type is set to **OKC** (default). Other choices include **PMK Caching** or **CCKM**.
- Enable FIPS includes choices **Yes** or **No** (default).

22. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the General Device Settings tab.

23. Click **General Device Settings**.

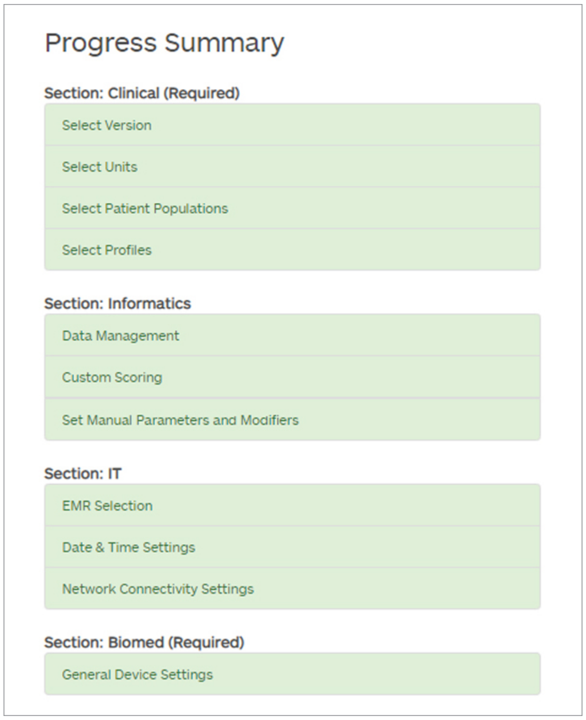


   a. Optional: Select **Custom** to modify default power, language, and other general settings. The default selection is Mobile. Choices include: Mobile, Wall Mounted, and Custom. See "Select Custom General Device Settings" for additional instructions to modify the general device settings.
   b. Optional: Click **Select an optional splash screen image** and follow the on screen instructions to upload a custom splash screen Image onto the device. To create your facility's custom splash screen image, the image must be in the **Windows** BMP format file. It must be must be 800 pixels wide by 480 pixels tall and have 24 bits of color using 3 bytes per pixel. The image must not contain color space information. Failure to abide by these restrictions will cause the device to ignore the image.
   c. Optional: Use the drop-down menu to change any of the default settings.
   d. Required: Admin Settings. Select an Admin Access Code that is exactly 6 digits long.

   The default settings for Bluetooth Low Energy (BLE) are: Turn on BLE by default? (license required) = **No**. The default setting for Virtual Network Computing (VNC) Settings is: Allow VNC connection? = **No**. The default setting for Universal Serial Bus (USB) is Ports Enable = **Yes**.

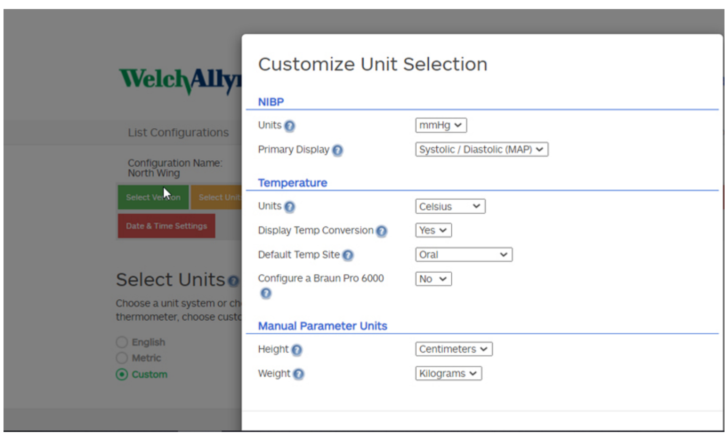
24. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Progress Summary view. When all the sections appear green, the configuration file can be downloaded or shared.



Select Custom Units

1. Select the device units. Click **Select Units**.
2. Click the radio button next to Custom to select the custom units.



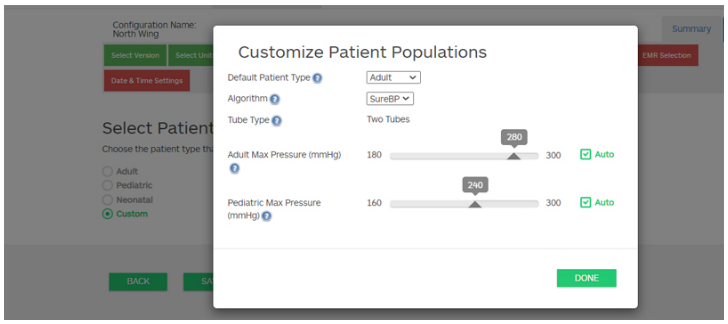
   Choose **Custom** to set up a combination of different systems or to configure a PRO 6000 thermometer.
3. For Non-Invasive Blood Pressure (NIBP) Units, use the drop-down menu to choose **mmHg** or **kPa**. For Primary Display, use the drop-down menu to choose **Systolic/Diastolic with Mean Arterial Pressure (MAP)**, **MAP (Systolic/Diastolic)**, or **Systolic/Diastolic**.
4. For Temperature Units, use the drop-down menu to choose **Celsius** or **Fahrenheit**. For Display Temp Conversion, use the drop-down menu to choose **Yes** or **No**. For Default Temp Site, use the drop-down menu to choose **Oral**, **Pediatric Axillary**, **Adult Axillary**, or **Last Site**. For Configure a **BRAUN** PRO 6000 , use the drop-down menu to choose **Yes** or **No**.
5. For Manual Parameter Units Height, use the drop-down menu to choose **Centimeters** or **Inches**. For Manual Parameter Units Weight, use the drop-down menu to choose **Kilograms** or **Pounds**.
6. When finished, click **DONE**.

7. Click **SAVE AND CONTINUE**.

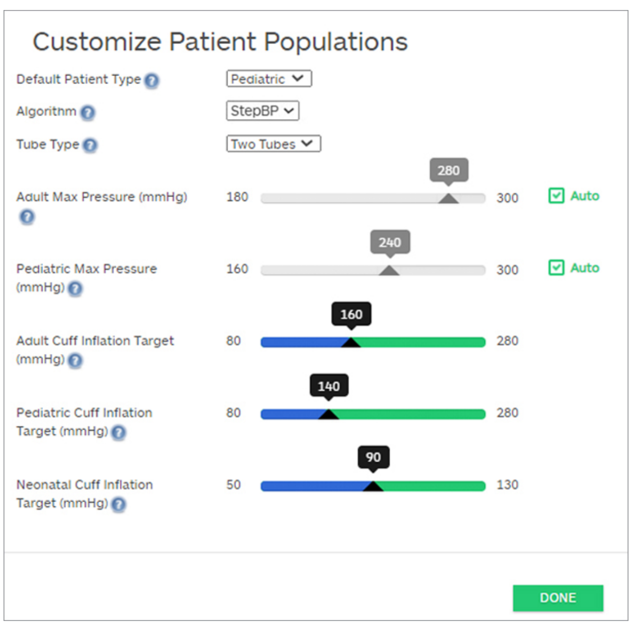
Select Custom Patient Populations

1. Select the default patient type in Select Patient Populations.
2. Click the Custom radio button to select the custom patient type. Choices include: **Adult**, **Pediatric**, **Neonatal**, or **Custom**.

   The default settings are: Default Patient Type = **Adult**, Algorithm = **SureBP**, and Tube Type = **Two Tubes**. The adult maximum cuff pressure is set to 280 mmHg and the pediatric maximum cuff pressure is set to 240 mmHg with the default Auto settings.

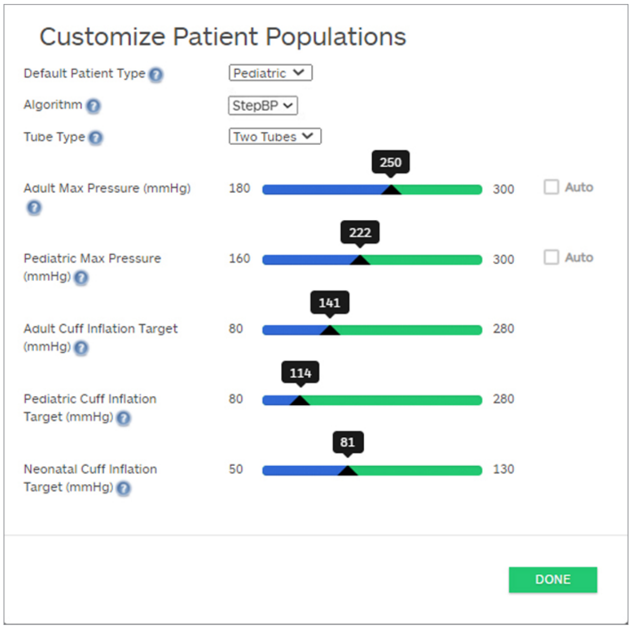
   

3. Optional: For Default Patient Type, use the drop-down menu to choose **Pediatric** in Customize Patient Populations. The default settings are: Algorithm = **SureBP** and Tube Type = **Two Tubes**. The adult maximum cuff pressure is set to 280 mmHg and the pediatric maximum cuff pressure is set to 240 mmHg with the default Auto settings. The adult cuff inflation target is set to 160 mmHg. The pediatric cuff inflation target is set to 140 mmHg. The neonatal cuff inflation target is set to 90 mmHg.

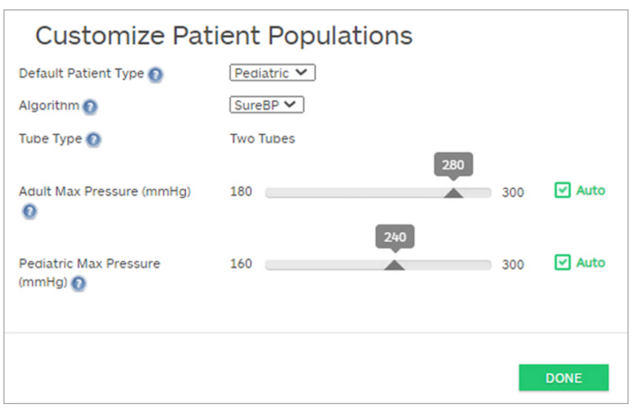
   

   a. To change the default values for the adult maximum cuff pressure or the pediatric maximum cuff pressure, deselect the Auto checkbox and use the slider, or use the arrow keys on your computer keyboard, to set the value.

b. To change the default values for the adult, pediatric, or neonatal cuff inflation target use the slider, or use the arrow keys on your computer keyboard, to set the value.



c. For Customize Patient Populations, Pediatric Default Patient Type, you can change the default settings from the **StepBP** to **SureBP** algorithm, and change the default settings for Tube Type from **Two Tubes** to **One Tube**. For the **SureBP** algorithm, the default Tube Type remains **Two Tubes** and the maximum cuff pressures remain at 280 mmHg for adult and 240 mmHg for pediatric with the default Auto settings.



- To change the default values for the adult maximum cuff pressure or the pediatric maximum cuff pressure, deselect the Auto checkbox and use the slider, or use the arrow keys on your computer keyboard, to set the value.
- To change the default values for **StepBP**, Tube Type, use the drop-down menu to select **One Tube**.

4. Optional: For Customize Patient Populations, Default Patient Type, use the drop-down menu to choose **Neonatal**. The default settings are: Default Patient Type = **Neonatal**, Algorithm = **StepBP**, and Tube Type = **One Tube**. The adult maximum cuff pressure is set to 280 mmHg and the pediatric maximum cuff pressure

is set to 240 mmHg with the default Auto settings. The adult cuff inflation target is set to 160 mmHg. The pediatric cuff inflation target is set to 140 mmHg. The neonatal cuff inflation target is set to 90 mmHg.

a. To change the default values for the adult maximum cuff pressure or the pediatric maximum cuff pressure, deselect the Auto settings and use the slider, or use the arrow keys on your computer keyboard, to set the value.
b. To change the default values for the adult, pediatric, or neonatal cuff inflation target use the slider, or use the arrow keys on your computer keyboard, to set the value.

5. When finished, click **DONE**.
6. Click **SAVE AND CONTINUE**.

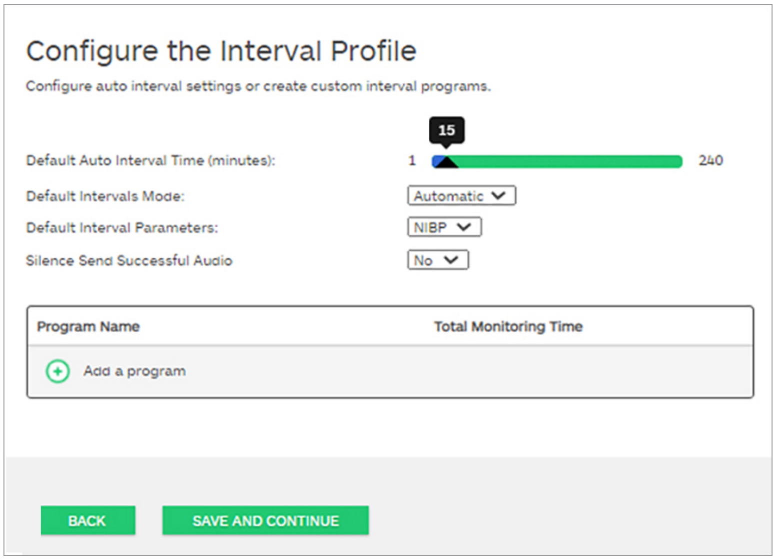
   As the Configuration Tool is updated, the screen moves to the Select Profiles tab.

Configure the Interval Profile

The Interval Profile allows you to choose which interval profile appears as the default on the device. You can configure auto interval settings or create custom interval programs.

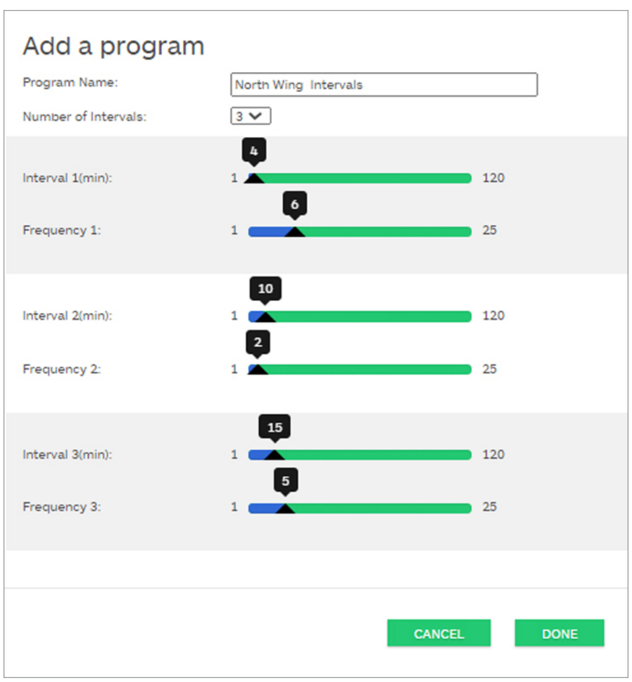
- Create up to 5 unique programs.
- Create specific intervals.
- Program 6 remains available for customization on the device.

1. Configure the Interval Profile.



The default settings are: Default Auto Interval Time (minutes) = **15**, Default Intervals Mode = **Automatic**, Default Interval Parameters = **NIBP**, and Silence Send Successful Audio = **No**.

2. Optional: To change the Default Auto Interval Time, use the slider, or use the arrow keys on your computer keyboard, to set the value. Values range from 1 minute to 240 minutes.
3. Optional: To change the Default Intervals Mode, use the drop-down menu to select **Automatic** or **STAT**.
4. Optional: To change the Default Interval Parameters, use the drop-down menu to select **NIBP**, **SpO2**, or **Both**.
5. Optional: To change the Silence Send Successful Audio, use the drop-down menu to select **No** or **Yes**.
6. Optional: Click  to add a program.

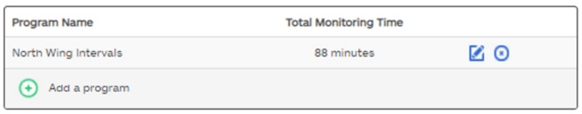


a. Click within the Program Name field and enter the name as you want it to appear on the device.
b. Accept the default values or use the slider, or use the arrow keys on your computer keyboard, to set the value for Intervals. Values range from 1 minute to 120 minutes.

c. Accept the default values or use the slider, or use the arrow keys on your computer keyboard, to set the value for Frequency. Values range from 1 to 25.

- Use the drop-down menu to set the number of Intervals from 1 to 5.
- Set each Frequency. Values range from 1 to 25.

7. When finished, click **DONE**.
8. As programs are added, the Total monitoring time appears and the edit and delete buttons are available for modifications.



9. Click **SAVE AND CONTINUE**.

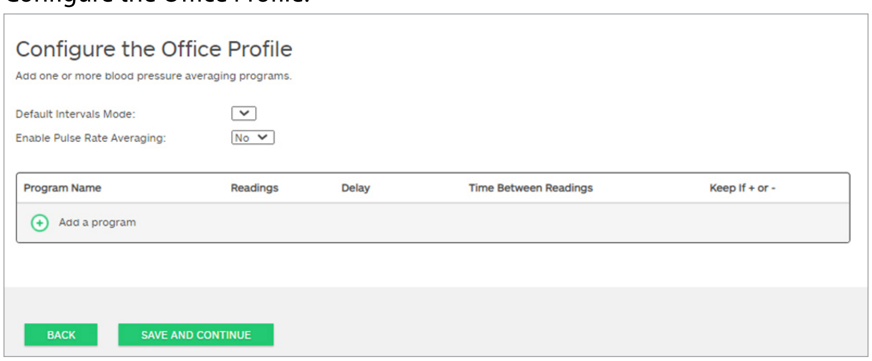
   As the Configuration Tool is updated, the screen moves to the Set Manual Parameters and Modifiers tab.

Configure the Office Profile

The Office Profile allows you to add one or more blood pressure averaging programs.

- Create up to 6 readings.
- Set delays before starting readings.
- Set length of time in between readings.

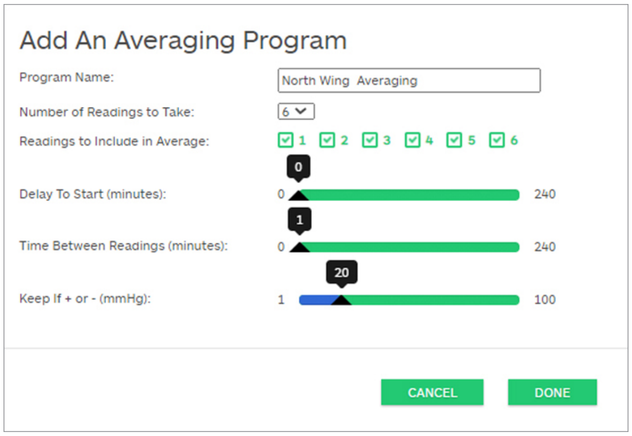
1. Configure the Office Profile.



   The default settings are: Default Intervals Mode = blank and Enable Pulse Rate Averaging = **No**.

2. Optional: To change the Enable Pulse Rate Averaging, use the drop-down menu to select **Yes** or **No**.

3. Optional: Click  to add a program. The default settings are: Number of Readings to take = 1, Readings to Include in Average = 1, Delay To Start (minutes) = 0, Time Between Readings (minutes) =1, and Keep If + or - (mmHg) = 20.



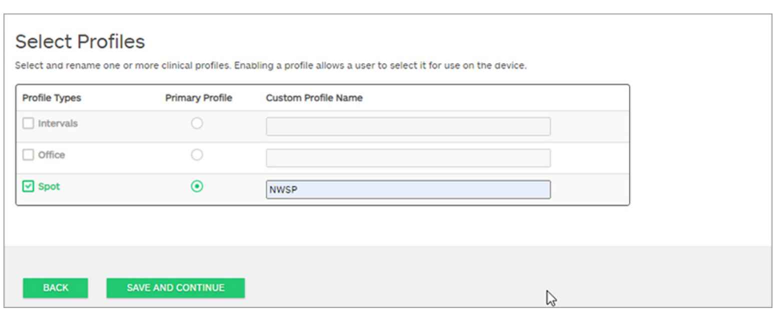
   a. Click within the Program Name field and enter the name as you want it to appear on the device.
   b. Accept the default values or use the slider, or use the arrow keys on your computer keyboard, to set the value for Delay To Start (minutes). Values range from 0 minute to 240 minutes.
   c. Accept the default values or use the slider, or use the arrow keys on your computer keyboard, to set the value for Time Between Readings (minutes). Values range from 1 minute to 240 minutes.
   d. Accept the Keep If reading if the reading falls within + or - 20 mmHg of the default value, or use the slider, or use the arrow keys on your computer keyboard, to change the value and keep the readings if the mmHg value is + or - of the newly set value. For example: Keep if + or - 13 (mmHg). Values range from 1 mmHg to 100 mmHg.
4. When finished, click **DONE**.
5. As programs are added, the Delay and Time Between Readings appear and the edit and delete buttons are available for modifications.

6. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Set Manual Parameters and Modifiers tab.

Configure the Spot Profile

1. Configure the Spot Profile.



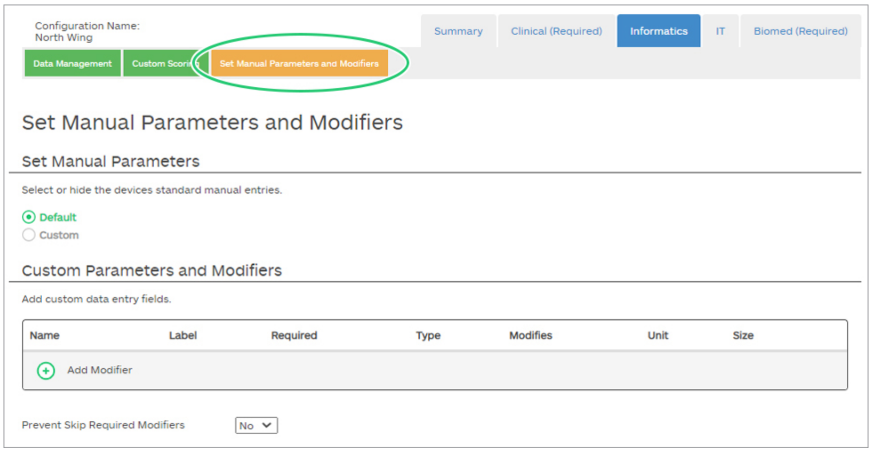
2. Optional: Click in the Custom Profile Name field and enter the name as you want it to appear on the device.

3. Click **SAVE AND CONTINUE**.
   As the Configuration Tool is updated, the screen moves to the Set Manual Parameters and Modifiers tab.

Set Manual Parameters

Select or hide the manual parameters.

1. Configure the manual parameters and modifiers settings.



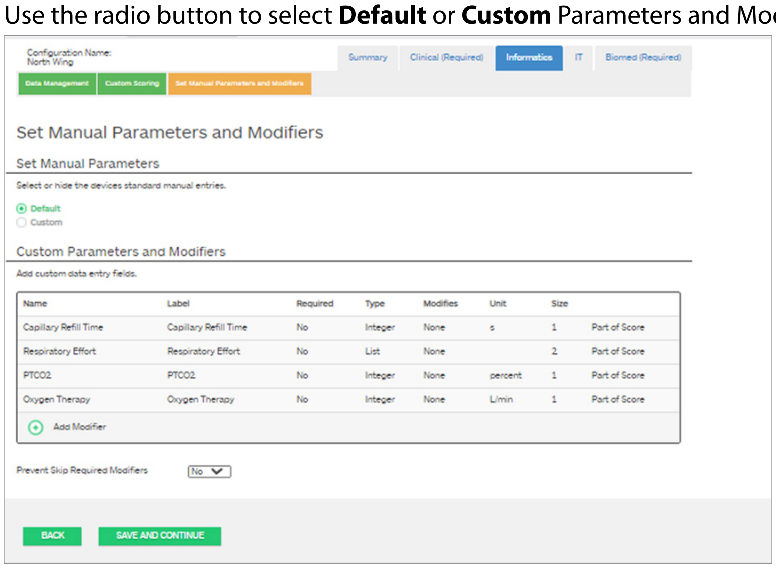
   The default settings are: Select or hide the devices standard manual entries = Default radio button, Prevent Skip Required Modifiers = No.
2. Optional: See the "Select Custom Parameters and Modifiers" for additional details on customizing the Manual Parameters.
3. Click **SAVE AND CONTINUE**.
   As the Configuration Tool is updated, the screen moves to the EMR Selection tab.

Select custom parameters and modifiers

You can select, add, or delete custom parameters and modifiers.

Click the **Set Manual Parameters and Modifiers** tab.

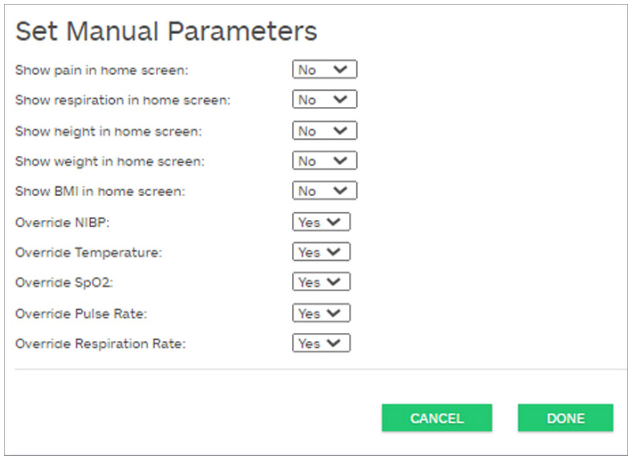
1. Use the radio button to select **Default** or **Custom** Parameters and Modifiers.

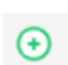


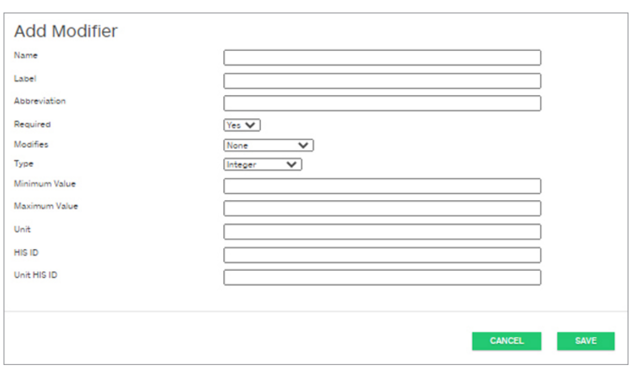
If you set up custom scoring for a Bedside protocol, the custom parameters and modifiers display on the Set Manual Parameters and Modifiers screen. Prevent Skip Required Modifiers is set to **No** (default).

> **NOTE** In this example, the custom parameters come from the "Bedside PEWS 3 to <12 months" protocol in the Custom Scoring Selection section.

2. Optional: Select the **Custom** radio button to change the manual parameters.



3. Optional: To change Show pain in home screen, use the drop-down menu to select **No** (default), **Yes**, or **Hide**.
4. Optional: To change Show respiration in home screen, use the drop-down menu to select **No** (default), **Yes**, or **Hide**.
5. Optional: To change Show height in home screen, use the drop-down menu to select **No**, **Yes** (default), or **Hide**.
6. Optional: To change Show weight in home screen, use the drop-down menu to select **No**, **Yes** (default), or **Hide**.
7. Optional: To change Show BMI in home screen, use the drop-down menu to select **No**, **Yes** (default), or **Hide**.
8. Optional: To change Override NIBP, use the drop-down menu to select **Yes** (default) or **No**.
9. Optional: To change Override Temperature, use the drop-down menu to select **Yes** (default) or **No**.
10. Optional: To change Override SpO2, use the drop-down menu to select **Yes** or **No** (default).
11. Optional: To change Override Pulse Rate, use the drop-down menu to select **Yes** or **No** (default).
12. Optional: To change Override Respiration Rate, use the drop-down menu to select **Yes** or **No** (default).
13. Click **DONE**.
14. Optional: Click  to add a modifier.



> **NOTE** Every parameter or modifier that you enter in the list goes to the top of the list. If you want the parameter or modifier to appear in a specific order on your device, enter the list in REVERSE order

(with the one you want at the bottom of the list being first, and the one you want at the top of the list being last). Then the list will look correct. When the list is complete, click **SAVE**. Do not modify the list again, because modifying an existing list reloads it in reverse order after you click SAVE. If you must edit a list, delete all the entries and start from scratch again.

a. Click in the Name field and type in a name for the modifier.
b. Click in the Label field and type in a label for the modifier.
c. Click in the Abbreviation field and type in an abbreviation for the modifier.
d. Use the drop-down menu to select whether the modifier is required.
e. Use the drop-down menu to select whether the modifier modifies: **NIBP**, **SpO2**, **Temperature**, **Pulse Rate**, **Respiration Rate**, or **None** (default).
f. Use the drop-down menu to select the type of modifier: **Integer** (default), **Decimal**, **Alphanumeric**, or **List**.

   If **List** is selected, click in the Name field and type in a name, click in the Label field and type in a label, click in the Abbreviation field and type in an abbreviation, click in the HIS ID field and type in a HIS ID.

   Click  to add another list Item.
g. Click in the Name field and type in a name for the modifier.
h. Click in the Minimum Value field and type in a value. (Values must be within -32768 and 32767 and be an integer. The Minimum Value must be less than the Maximum Value.)
i. Click in the Maximum Value field and type in a value. (Values must be within -32768 and 32767.)
j. When finished, click **SAVE**.

15. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the EMR Selection tab.

Custom scoring (Early Warning Scores) on the **Connex Spot** Monitor

You define custom scoring through the Configuration Tool. The order in which the custom score parameters are entered in the Configuration Tool is the order in which they appear in the custom scoring on the device.

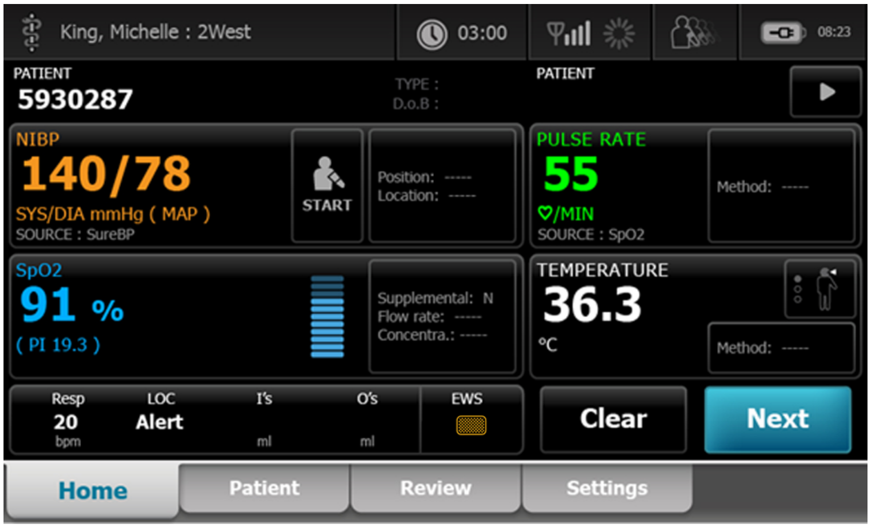
Custom scoring enables you to configure specific parameters that calculate scores for patient monitoring. These scores generate messages regarding the patient status, based on the parameters chosen. These messages are provided only as reminders.

See the " Install a configuration file" for additional details. This sections shows examples of Custom scoring/Early Warning Scores (EWS) after the configuration file is installed on the **Connex Spot** Monitor.

Each Single Parameter Trigger can have its own associated message.

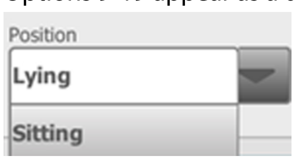
In the following example of a **Connex Spot** Monitor screen, a Single Parameter Score is triggered, but an Aggregate Score is not triggered.

Single Parameter messages shown in the message screen are similar to the Aggregate Score messages.



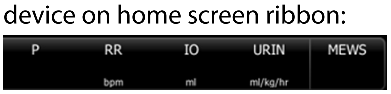
A list of up to 8 options appear as buttons on the interface:

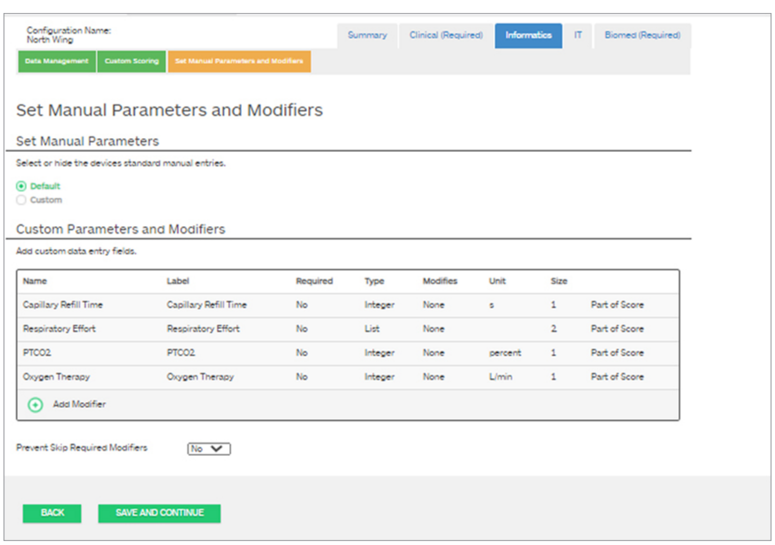
Options 9-19 appear as a drop-down menu on the device:



Labels created in the Configuration Tool for the modifiers determine how the modifier will appear on the device:

Abbreviations created in the Configuration Tool for the modifiers determine how the modifier will appear on the device on home screen ribbon:



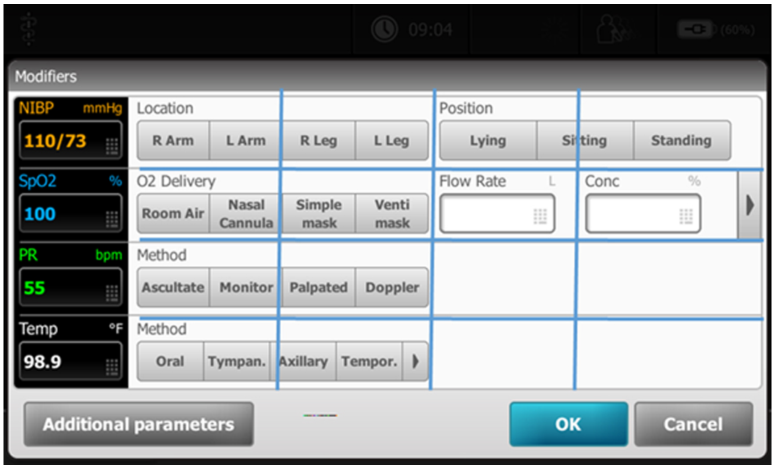


If you wish to edit a parameter that is part of a score, you must first delete the parameter from all scores in the EWS scoring system.

In the newest version of the configuration tool, parameters and modifiers that are not part of the score can be manually re-ordered by using the button on the list.

Planning a Workflow Layout

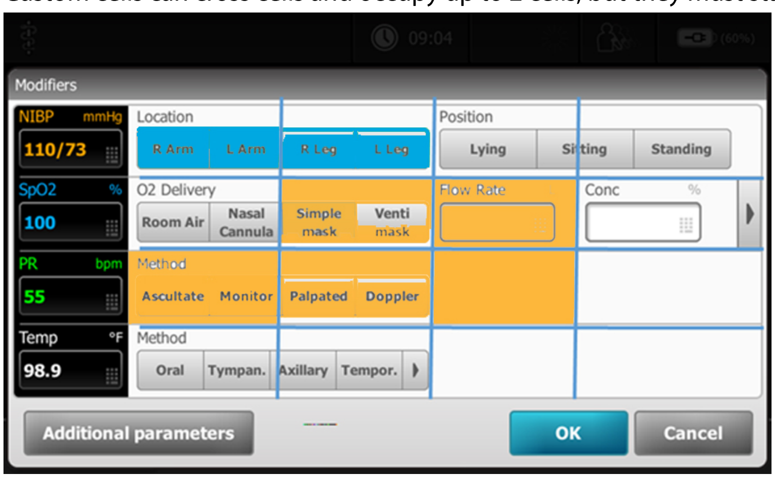
The **Connex Spot** Monitor screen is divided into 16 customizable cells.



Lists occupy 2 cells.

Integers, decimals, and alphanumerics occupy 1 cell.

Custom cells can cross cells and occupy up to 2 cells, but they must start as far left as possible.



In the example shown, the blue-colored cells are acceptable, however the salmon-colored cells are unacceptable.

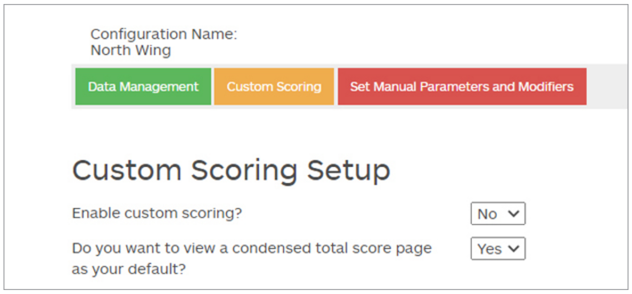
Select Custom Scoring Setup for **Connex Spot** Monitor

This section describes how to set up Bedside Protocols that can be replicated on a **Connex Spot** Monitor device. You can preselect from a list of clinical protocols. All scoring protocols are completely customizable to meet user requirements.

You may add up to 6 scoring systems. Select a predefined Scoring System template, enter a unique name, and click the button labeled ADD THIS SCORING SYSTEM. Your Scoring System will be added to the bottom of the page. You may then edit or delete your scoring system.

Click the **Custom Scoring** tab.

1. Optional: Use the drop-down menu to select **Yes** to enable custom scoring. (The default for Enable custom scoring = **No**).



2. Optional: To change the default selection for Do you want age ranges associated with scoring protocols for pre-selection based on patient age?, use the drop-down menu to select **Yes** or **No** (default).
3. Optional: To change the default selection for Do you want to view a condensed total score page as your default?, use the drop-down menu to select **Yes** (default) or **No**.
4. Click the Please enter the authentication code field and enter a valid code in the format of `[YY]CSM[MM]` with the current year and month.

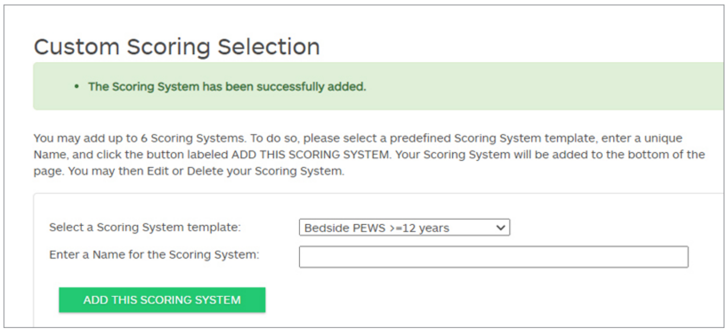
   NOTE The Authentication code field appears the first time you select the Custom Scoring tab.

5. Click **SAVE AND CONTINUE**.
6. Select a Scoring System template. Choices include:
   - Bedside PEWS <3 months
   - Bedside PEWS 3 to <12 months
   - Bedside PEWS 1 to 4 years
   - Bedside PEWS 5 to <12 years
   - Bedside PEWS >=12 years
   - Braden
   - BTF SAGO
   - BTF ED
   - BTF SPOC <3 months
   - BTF SPOC 3 to 12 months
   - BTF SPOC 1 to 4 years
   - BTF SPOC 5 to 11 years
   - BTF SPOC 12 years
   - Falls Risk Assessment Tool
   - Glasgow Coma Scale
   - Modified Early Obstetric Warning
   - Modified Early Warning Score
   - MEWS for General Surgical Ward
   - Morse Fall Score
   - National Early Warning Score
   - National Early Warning Score 2
   - NEWS2 Scale 1
   - NEWS2 Scale 2
   - Norton
   - Pediatric Early Warning Score
   - Rapid Emergency Medicine Score
   - Triage Early Warning System

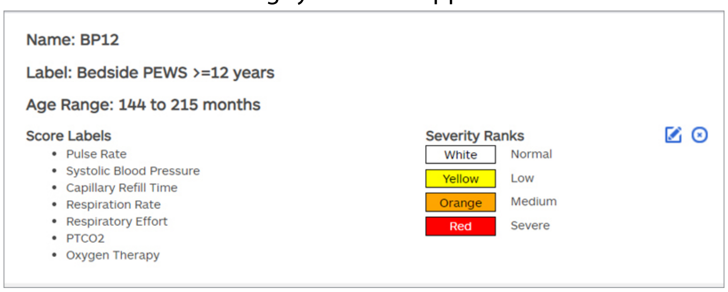
- Walsall
- Blank Scoring System

7. To enter a name for the Scoring System, click the Enter a Name for the Scoring System field and type a name for the scoring system as you want it to appear on the device.
8. When finished, click **ADD THIS SCORING SYSTEM**.

   After a successful addition, the following message appears: `The Scoring System has been successfully added.`



The name for the scoring system also appears at the bottom of the Custom Scoring Selection screen.



NOTE The Custom Scoring Selection can be used as is or modified to meet facility requirements. Each scoring system has different score labels and severity ranks.

NOTE The name of the custom Scoring System defines how the scoring protocol will appear on the device. The HIS ID information for the EMR can be applied here too. Configure the capability for Single Parameter Scoring by itself or as part of an Aggregate Score.

9. Optional: To delete the Scoring System, click (delete).
10. Click **SAVE AND CONTINUE**.
11. Optional: If you want to edit the scoring system, click (edit).

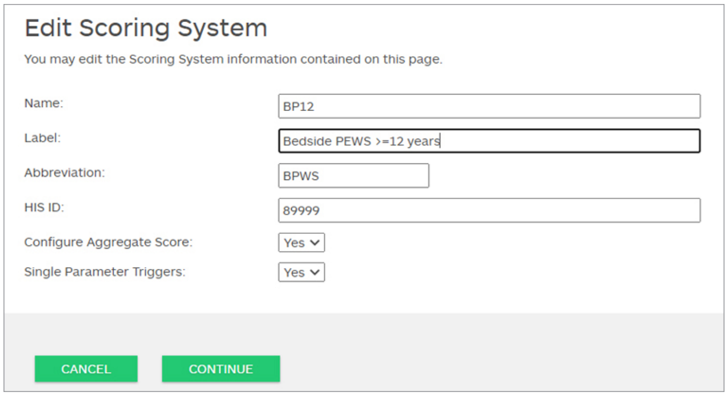
    For the detailed steps, see "Edit a Scoring System."
12. Click **SAVE AND CONTINUE**.

As the Configuration Tool is updated, the screen moves to the Set Custom Parameters and Modifiers

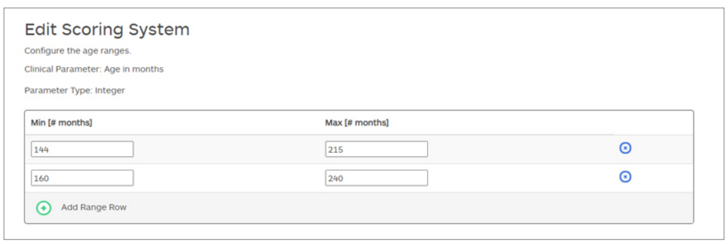
Edit a Scoring System

You can edit a Scoring System.

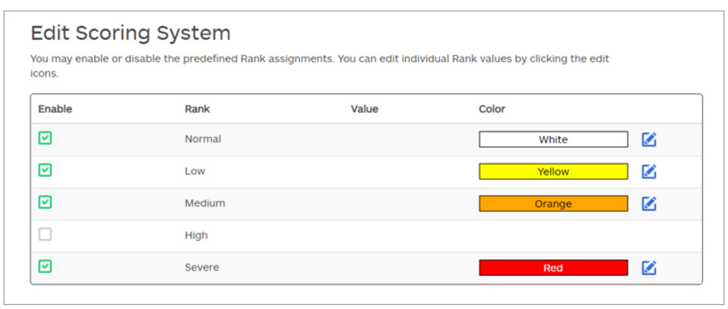
1. Optional: To edit the scoring system, click (edit). Click within the fields to enter changes or use the drop-down menu to change the Configure Aggregate Score or Single Parameter Triggers.



2. Click **CONTINUE**.
3. To continue to edit the Scoring System, configure the minimum or maximum age ranges (in months).



4. Optional: To add a range row , click (add). To delete a range row, click (delete).
5. Optional: To continue editing the Scoring System, check or uncheck the Enable settings. All the ranks are enabled by default.



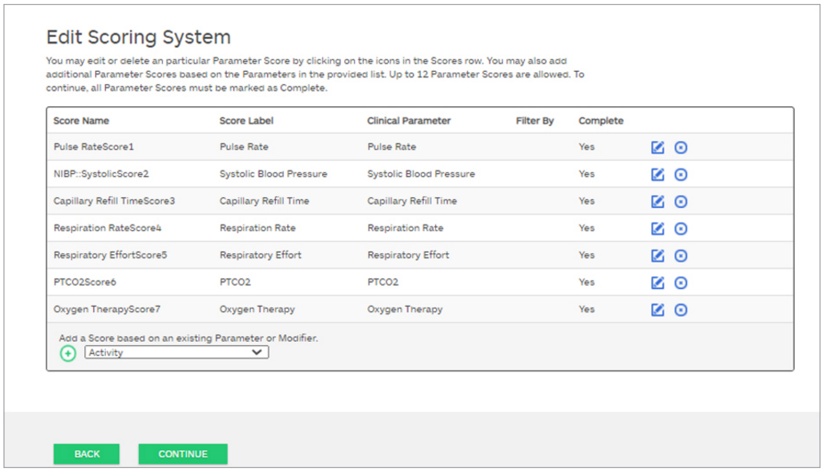
6. Click (edit) to change the rank information.

NOTE You can make the following edits to the rank information:

- Modify the color of the severity rankings based on protocol.
- Omit or add rankings based on protocol.
- Edit the message in the Edit Rank Information message box.

  The message must be a continuous paragraph in the message box. Do not hit Enter on the keyboard or type \n to bring the text to the next line, or you might get an error when completing the configuration file.

7. Optional: To continue editing the Scoring System, click (edit) to change the values.



TIP If you want to disassociate a parameter from the score, click (delete).

If you want to add a new parameter associated with the score, either select an existing one from the drop-down list, or create a custom parameter in the Set Manual Parameters and Modifiers tab.

8. Click **CONTINUE**.

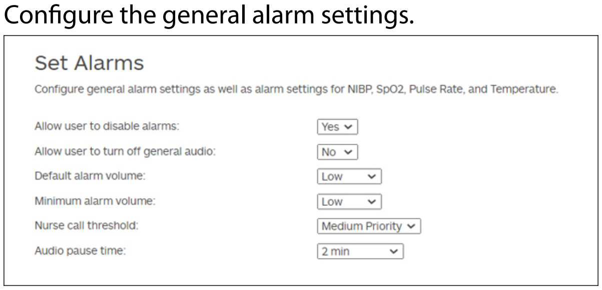
   You are returned to the Custom Scoring Selection screen.

9. Click **SAVE AND CONTINUE**.

Set Alarms

Configure general alarm settings as well as alarm settings for NIBP, SpO2, Pulse Rate, Respiration Rate, and Temperature.

1. Configure the general alarm settings.



   The default settings are: Allow user to disable alarms = **Yes**, Allow user to turn off general audio = **No**, Default alarm volume = **Low**, Minimum alarm volume = **Low**, Nurse call threshold = **Medium Priority**, and Audio pause time = **2 min**.

2. Optional: To change Allow user to disable alarms, use the drop-down menu to select **Yes** or **No**.
3. Optional: To change Allow user to turn off general audio, use the drop-down menu to select **Yes** or **No**.
4. Optional: To change the Default alarm volume, use the drop-down menu to select **Low**, **Medium**, or **High**.
5. Optional: .To change the Minimum alarm volume, use the drop-down menu to select **Low**, **Medium**, or **High**.
6. Optional: To change the Nurse call threshold, use the drop-down menu to select **Medium Priority**, **Low Priority**, or **High Priority**.
7. Optional: To change the **Audio pause time**, use the drop-down menu to select 2 min (minutes), Disable, 2 min 30 sec (seconds), 3 min, 5 min, 10 min, or 15 min.

   Refer to the individual parameters for instructions on changing alarm limits.

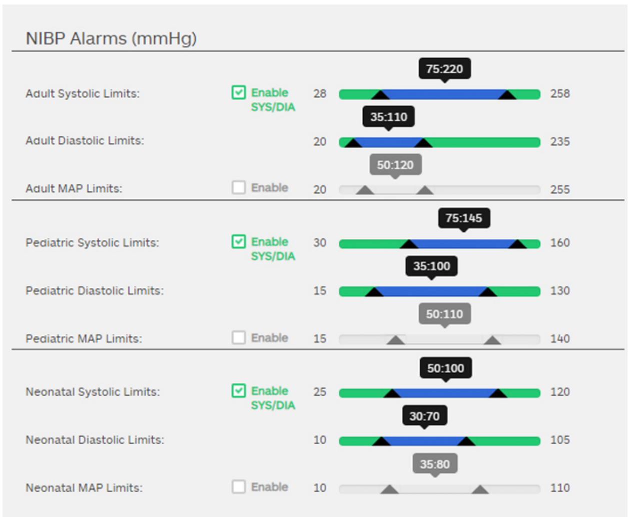
8. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Set Manual Parameters and Modifiers tab.

NIBP alarms (mmHg)

Configure general alarm settings as well as alarm settings for NIBP.

1. Configure the general alarm settings.
2. Optional: To change NIBP alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper values. See the next steps for specific values for each alarm.



   The default settings are:

   - Enable SYS/DIA, Adult Systolic Limits **75:220**, Adult Diastolic Limits **35:110**, and Adult MAP Limits **50:120** is disabled.
   - Enable SYS/DIA, Pediatric Systolic Limits **75:145**, Pediatric Diastolic Limits **35:100**, and Pediatric MAP Limits **50:110** is disabled.
   - Enable SYS/DIA, Neonatal Systolic Limits **50:100**, Neonatal Diastolic Limits **30:70**, and Neonatal MAP Limits **35:80** is disabled.
3. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Adult Systolic Limits. Values range from 28 to 258.
4. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Adult Diastolic Limits. Values range from 20 to 235.
5. Optional: To change NIBP alarms, check the Enable box and then use the sliders, or computer arrow keys, to set the value for Adult MAP Limits. Values range from 20 to 255.
6. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the value for Pediatric Systolic Limits. Values range from 30 to 160.
7. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the value for Pediatric Diastolic Limits. Values range from 15 to 130.
8. Optional: To change NIBP alarms, check the Enable box and then use the sliders, or computer arrow keys, to set the value for Pediatric MAP Limits. Values range from 15 to 140.
9. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Neonatal Systolic Limits. Values range from 25 to 120.
10. Optional: To change NIBP alarms, use the sliders, or computer arrow keys, to set the values for Neonatal Diastolic Limits. Values range from 10 to 105.

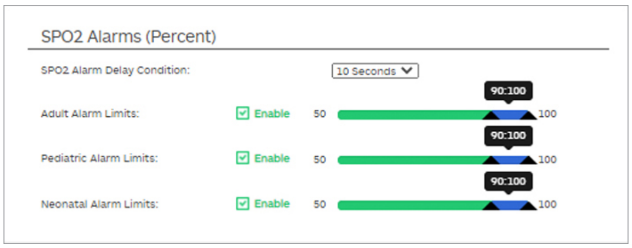
11. Optional: To change NIBP alarms, check the Enable box and then use the sliders , or computer arrow keys, to set the values for Neonatal MAP Limits. Values range from 10 to 110.
12. Click **SAVE AND CONTINUE**.

SpO2 alarms (percent)

Configure general alarm settings as well as alarm settings for SpO2.

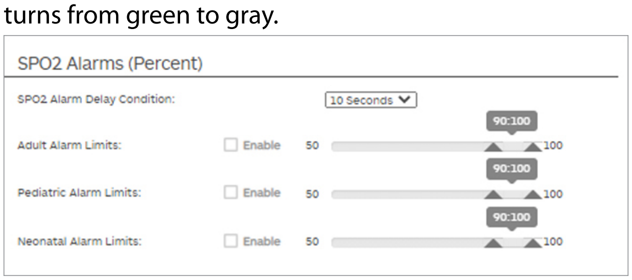
1. Configure the general alarm settings.
2. Use the drop-down menu to select the SpO2 Alarm Delay Condition. Choices include: **10 seconds** (default), **Off**, or **SatSec**.

   For SatSec settings, choices include: **25** (default) , **0**, **10**, **50**, or **100**.
3. Optional: To change SpO2 alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm.

   The default settings are Enable Adult Alarm Limits **90:100**, Pediatric Alarm Limits **90:100**, and Neonatal Alarm Limits **90:100**.
4. Optional: To change SpO2 alarms, use the sliders, or computer arrow keys, to set the values for Adult Alarm Limits. Values range from 50 to 100.
5. Optional: To change SpO2 alarms, use the sliders, or computer arrow keys, to set the values for Pediatric Alarm Limits. Values range from 50 to 100.
6. Optional: To change SpO2 alarms, use the sliders, or computer arrow keys, to set the values for Neonatal Alarm Limits. Values range from 50 to 100.
7. Optional: To disable SpO2 alarms, click within the checkbox next to each limit to disable the alarm limit.

   NOTE When an alarm limit is disabled in the Configuration Tool, the limits are grayed out and Enable turns from green to gray.

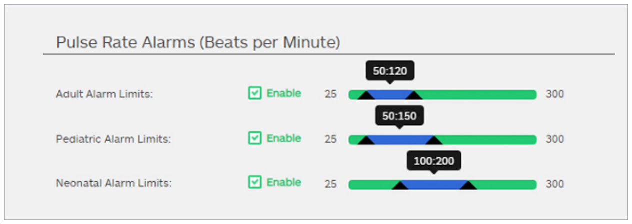
   

8. Click **SAVE AND CONTINUE**.

Pulse Rate alarms (beats per minute)

Configure general alarm settings as well as alarm settings for Pulse Rate.

1. Configure the general alarm settings.
2. Optional: To change Pulse Rate Alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm.



The default settings are Enable Adult Alarm Limits **50:120**, Pediatric Alarm Limits **50:150**, and Neonatal Alarm Limits **100:200**.

3. Optional: To change Pulse Rate Alarm Limits, use the sliders, or computer arrow keys, to set the values for Adult Alarm Limits. Values range from 25 to 300.
4. Optional: To change Pulse Rate Alarm Limits, use the sliders, or computer arrow keys, to set the values for Pediatric Alarm Limits. Values range from 25 to 300.
5. Optional: To change Pulse Rate Alarm Limits, use the sliders, or computer arrow keys, to set the values for Neonatal Alarm Limits. Values range from 25 to 300.
6. Optional: To disable Pulse Rate Alarm Limits, click within the checkbox next to each limit to disable the alarm limit.

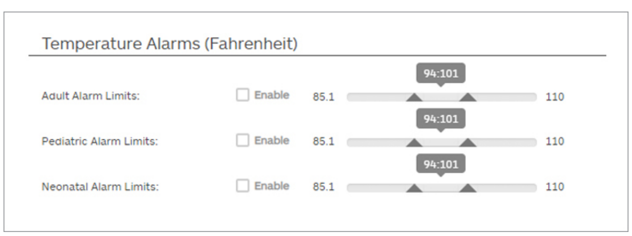
   NOTE When an alarm limit is disabled in the Configuration Tool, the limits are grayed out and Enable turns from green to gray.
7. Click **SAVE AND CONTINUE**.

Temperature alarms (Fahrenheit)

Configure alarm settings for temperature (Fahrenheit).

The Temperature Alarms (Fahrenheit) are disabled by default. The default settings are Disable Adult Alarm Limits **94:101**, Pediatric Alarm Limits **94:101**, and Neonatal Alarm Limits **94:101**.

1. Configure the general alarm settings.
2. Optional: To change the Temperature Alarm Limits, click the **Enable** checkbox for each setting. Use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm limits.



   a. Optional: Set the values for Adult Alarm Limits. Values range from 85.1 to 110.
   b. Optional: Set the values for Pediatric Alarm Limits. Values range from 85.1 to 110.
   c. Optional: Set the values for Neonatal Alarm Limits. Values range from 85.1 to 110.
3. Click **SAVE AND CONTINUE**.

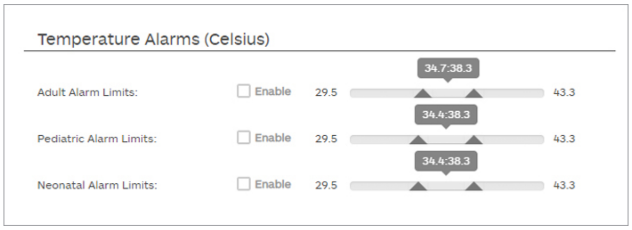
Temperature alarms (Celsius)

Configure alarm settings for temperature (Celsius).

The Temperature Alarms (Celsius) are disabled by default. The default settings are Disable Adult Alarm Limits **34:7 : 38.3**, Pediatric Alarm Limits **34:7 : 38.3**, and Neonatal Alarm Limits **34:7 : 38.3**.

1. Configure the general alarm settings.

2. Optional: To change the Temperature Alarm Limits, click the **Enable** checkbox for each setting. Use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. If the Units selected are set to Metric, the Temperature Alarms appear in Celsius. See the next steps for specific values for each alarm limits.



   a. Optional: Set the values for Adult Alarm Limits. Values range from 29.5 to 43.3.
   b. Use the sliders, or computer arrow keys, to set the values for Pediatric Alarm Limits. Values range from 29.5 to 43.3.
   c. Use the sliders, or computer arrow keys, to set the values for Neonatal Alarm Limits. Values range from 29.5 to 43.3.

3. Click **SAVE AND CONTINUE**.

Respiration alarms

Configure general alarm settings as well as alarm settings for Respiration Rate.

The ability to configure respiration alarms depends on the RR parameter. If the RR parameter is set to **Yes**, then you can configure Respiration alarms. If RR the parameter is set to **No**, then you cannot configure Respiration alarms.

1. Configure the general alarm settings.
2. Optional: To change Respiration Alarms, use the sliders, or use the arrow keys on your computer keyboard, to set the lower and upper limit values. See the next steps for specific values for each alarm and how to enable the alarm limits.

   The default settings are Enable RR Parameter, Adult Alarm Limits **6:30**, Pediatric Alarm Limits **6:30**, and Neonatal Alarm Limits **12:68**.

3. Optional: To change Respiration Alarm Limits, use the sliders to set the values for Adult Alarm Limits. Values range from 5 to 69.
4. Optional: To change Respiration Alarm Limits, use the sliders to set the values for Pediatric Alarm Limits. Values range from 5 to 69.
5. Optional: To change Respiration Alarm Limits, use the sliders to set the values for Neonatal Alarm Limits. Values range from 12 to 98.
6. Optional: To disable Respiration Alarm Limits, use the drop-down menu to set the Enable RR Parameter to No.

Alternatively, click within the checkbox next to each limit to disable the alarm limit.

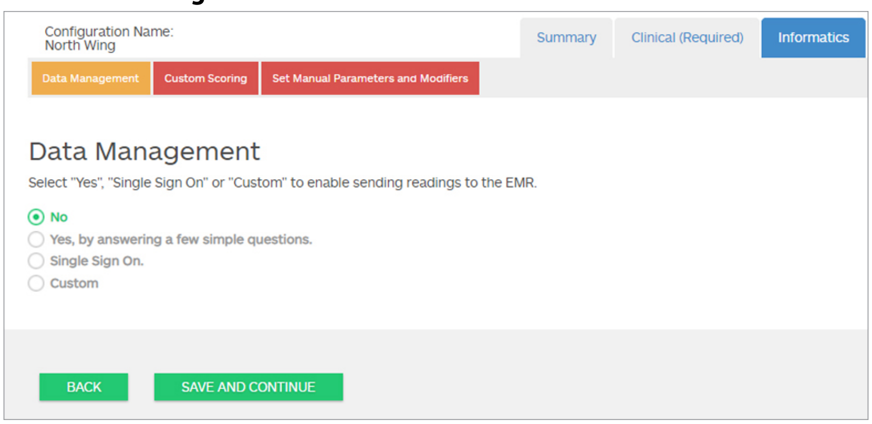
NOTE When an alarm limit is disabled in the Configuration Tool, the limits are grayed out and Enable turns from green to gray.

7. Click **SAVE AND CONTINUE**.

Data Management

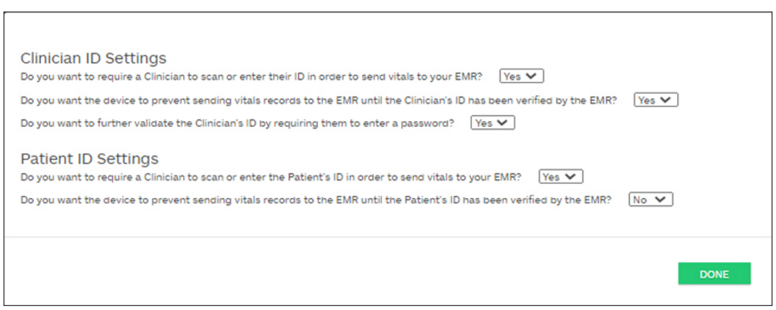
This section is where clinical workflow settings are established. You can define additional modifications to clinician and patient authentication and how the authenticated data will be displayed on the device.

1. Click **Data Management** to continue.



The default setting is set to not send readings to an EMR. To change the default setting, use the radio button to select **Yes, by answering a few simple questions**, **Single Sign On**, or **Custom** to enable sending readings to the EMR.

2. Optional: Use the radio button to select **Yes, by answering a few simple questions**.



a. Set up the Clinician ID Settings and the Patient ID Settings. These settings allow a clinician to scan their ID and to enter the patient's ID to send vitals to your EMR. Use the drop-down menus to answer the following questions:

- Do you want to require a Clinician to scan or enter their ID in order to send vitals to your EMR? Choices are **No** (default) and **Yes**.

- Do you want to require a Clinician to scan or enter the Patient's ID in order to send vitals to your EMR? Choices are **No** (default) and **Yes**.

If you selected **Yes**, additional fields display:

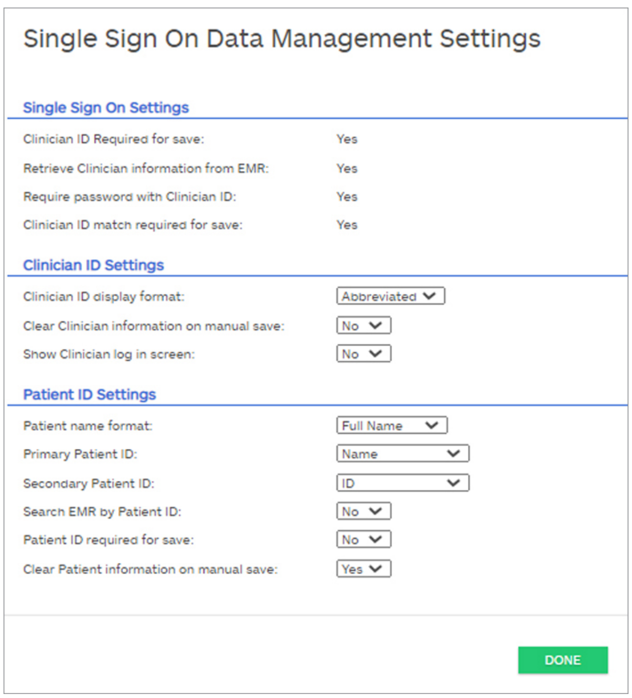
- Select Do you want to further validate the Clinician's ID by requiring them to enter a password?. Choices are **Yes** or **No** (default).
- Select Do you want to require a Clinician to scan or enter the Patient's ID in order to send vitals to your EMR?. Choices are **Yes** or **No** (default).
- Select Do you want the device to prevent sending vitals records to the EMR until the Patient's ID has been verified by the EMR?. Choices are **Yes** or **No** (default).

NOTE Changes made in data management CAN BE overridden by certain EMR selections in later screens.

b. Click **DONE**.

c. Optional: Use the radio button to select **Single Sign On**.

NOTE Single Sign On (SSO) can be configured on the Welch Allyn **Connex Spot** Monitor (CSM) in the Spot and Interval Profiles for CSM devices with firmware version 1.32 and later. SSO can be configured on the CSM in the Office Profile (in addition to Spot and Interval Profiles) for CSM devices with firmware 1.54 and later.



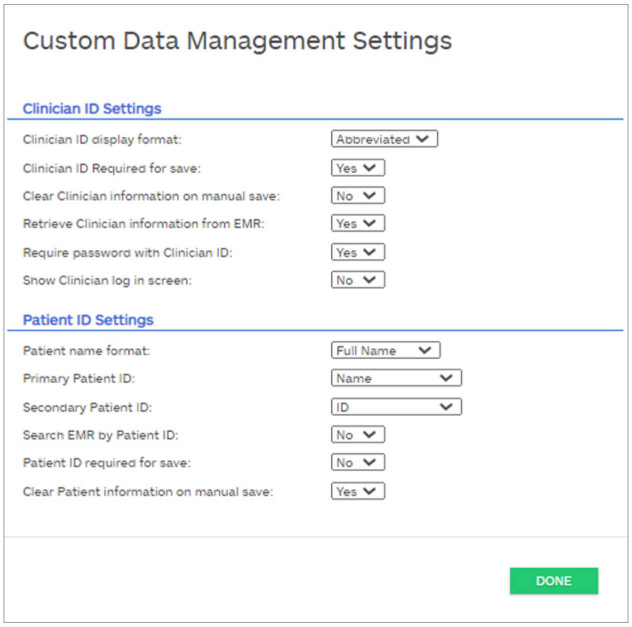
Single Sign On Settings: Clinician ID Required for save = **Yes**. Retrieve Clinician information from EMR = **Yes**. Require password with Clinician ID = **Yes**. Clinician ID match required for save = **Yes**.

Clinician ID Settings: Clinician ID display format = **Abbreviated**. Clear Clinician information on manual save = **No**. Show Clinician log in screen = **No**.

Patient ID Settings: Patient name format = **Full Name**. Primary Patient ID = **Name**. Secondary Patient ID = **ID**. Search EMR by Patient ID = **No**. Patient ID required for save = **No**. Clear Patient information on manual save = **Yes**.

d. Use the drop-down menu to change the default values.

e. Optional: Use the radio button to select **Custom**.



3. Click **SAVE AND CONTINUE**.

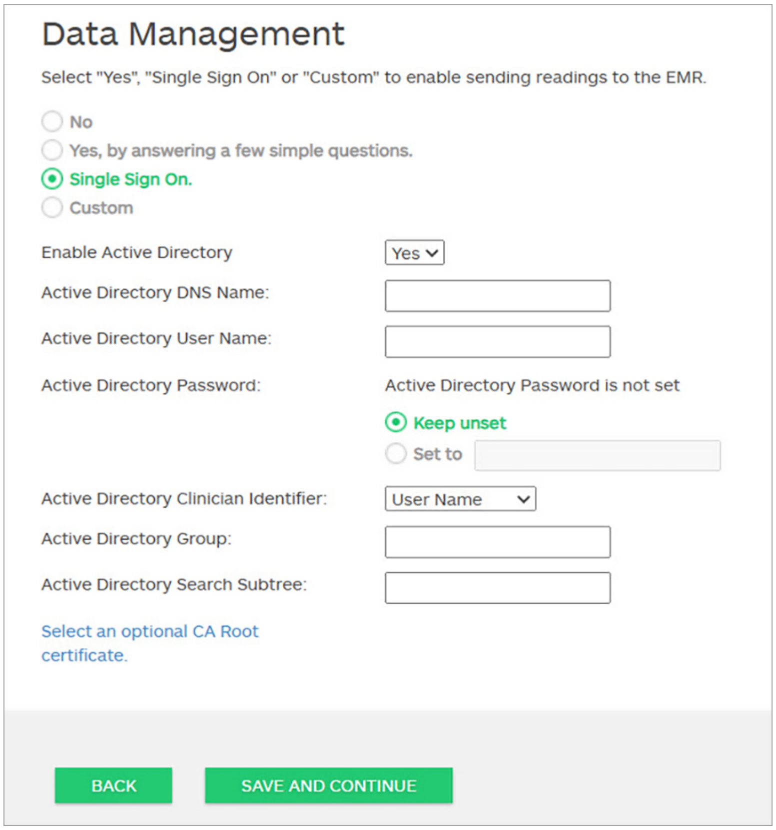
Configure **Active Directory**

You can configure the **Active Directory** settings if you selected Yes, by answering a few simple questions, Single Sign On, or Custom on the Data Management screen.

You can manage CA certificates in the Data Management screen. These selections affect the Network Connectivity Settings screen.

1. If you want to configure **Active Directory**, set the Active Directory option to **Yes**.

   Enable Active Directory is set to **Yes**. The default is No.

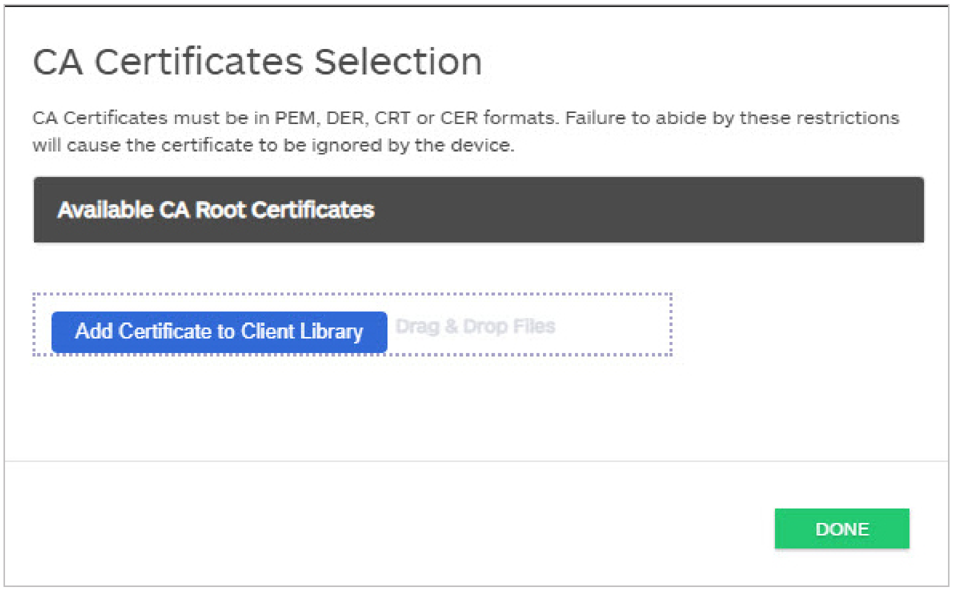


a. Type the **Active Directory** DNS name.
b. Type the **Active Directory** user name.
c. Either leave the **Active Directory** password unset (default) or select the radio button to set the password.

NOTE The **Active Directory** password should not include special characters &, <, >, or and.

d. Select the **Active Directory** Clinician Identifier. Choices include **User Name** (default), **Account Name**, or **Employee ID**.
e. Type the **Active Directory** group name.
f. Type the **Active Directory** search subtree.
g. Click **Select an optional CA Root certificate**. The CA Root Certificate Selection screen displays.

The CA certificate must be in PEM, DER, CRT, or CER format (ex: `cacert.pem`). Failure to abide by these restrictions causes the device to ignore the certificate. For more information about using and uploading certificates, see "Configure a CA Root certificate."



   a. Click **Add Certificate to Client Library** and upload the certificates from your computer.
   b. Click **DONE**. Then the list of uploaded certificates displays on the screen.

2. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Custom Scoring tab.

You can optionally delete an uploaded CA certificate. For more information, see "Delete a CA certificate."

Delete a CA certificate

You can upload and delete CA certificates from the following screens:

- Data Management
- Network Connectivity Settings
- General Device Settings (**Connex 360** monitor only)

If you need to delete an uploaded CA certificate, follow these steps:

1. Optional: If you want to delete a CA certificate, click the (delete) button next to it.

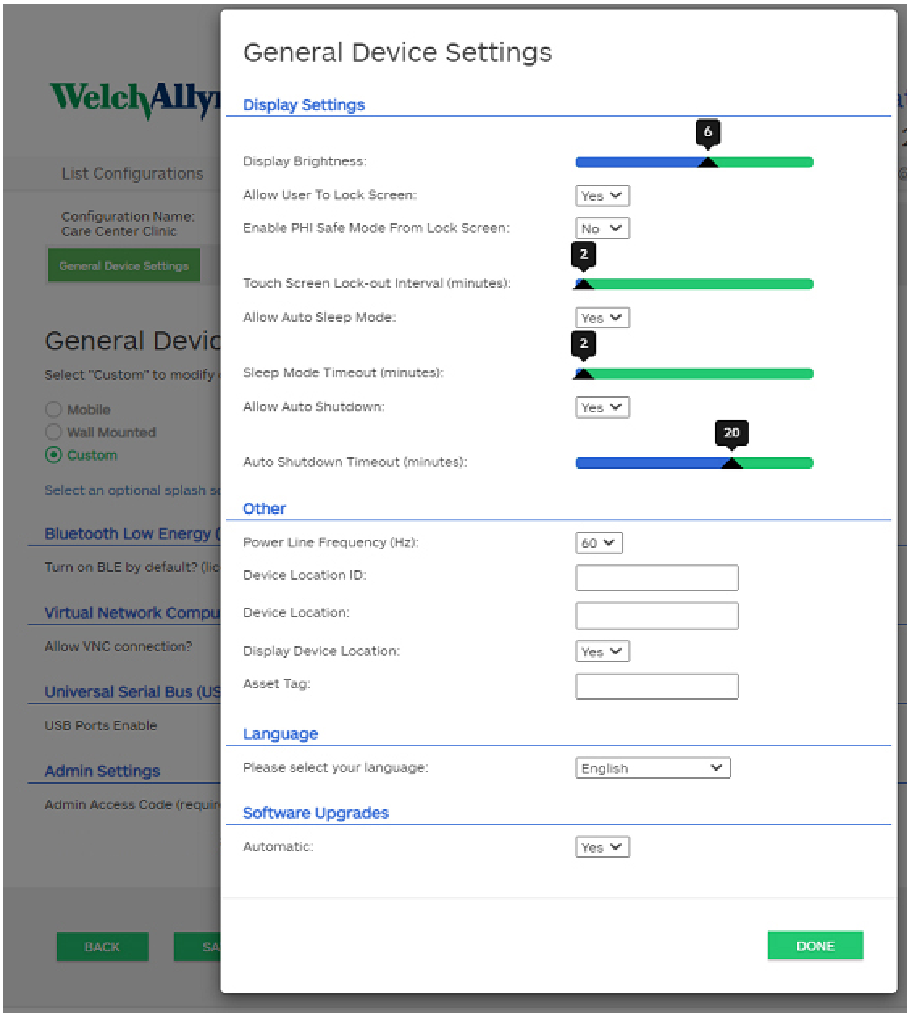
   An informational message on the screen explains that the certificate is removed from the library, and the Network Connectivity Settings tab turns yellow in the Progress Summary view.
2. Open the Network Connectivity Settings tab and click the informational message to clear it. Although the Progress Summary view turns green, if you try to download the configuration file, you get an error.
3. Verify that the list of uploaded certificates matches in the Data Management, Network Connectivity Settings and General Device Settings screens. The list of uploaded certificates needs to match on all three screens before you can download the configuration file.

Verify that you can download the configuration file. For more information, see "Download a configuration file to install on another device."

Select Custom General Device Settings

You can customize the general device settings for the display, power, language, and software upgrades on the **Connex Spot** monitor.

1. Click the **Custom** radio button on the General Device Settings tab. (Choices include: Mobile, Wall Mounted, or Custom).



For Custom General Device Settings, the default settings are:

- Display Brightness = 6
- Allow User To Lock Screen = **Yes**
- Enable PHI Safe Mode From Lock Screen = **No**
- Touch Screen Lock-out Interval (minutes) = 2
- Allow Auto Sleep Mode = **Yes**
- Sleep Mode Timeout (minutes) = 2
- Allow Auto Shutdown = **Yes**
- Auto Shutdown Timeout (minutes) = 20
- Power Line Frequency (Hz) = 60
- Admin Access Code = blank
- Device Location ID = blank
- Device Location = blank
- Asset Tag = blank
- Language = **English**
- Software Upgrades Automatic = **Yes**

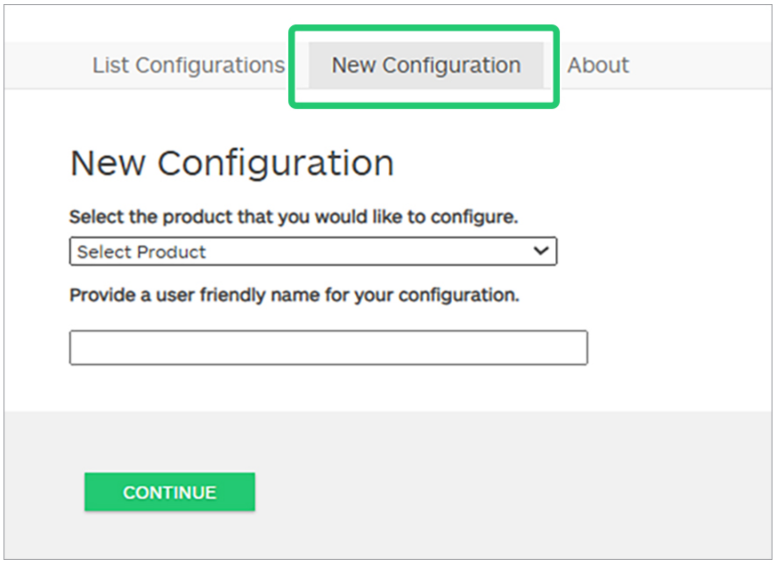
2. Optional: To change the default value for Display Brightness, use the slider to set the value. Values range from 1 to 10.
3. Optional: To change the default value for Allow User To Lock Screen, use the drop-down menu to select **Yes** or **No**.
4. Optional: To change the default value for Enable PHI Safe Mode From Lock Screen, use the drop-down menu to select **Yes** or **No**.
5. Optional: To change the default value for Touch Screen Lock-out Interval (minutes), use the slider to set the value. Values range from 1 to 30.
6. Optional: To change the default value for Allow Auto Sleep Mode, use the drop-down menu to select **Yes** or **No**.
7. Optional: To change the default value for Sleep Mode Timeout (minutes) , use the slider to set the value. Values range from 1 to 30.
8. Optional: To change the default value for Allow Auto Shutdown, use the drop-down menu to select **Yes** or **No**.
9. Optional: To change the default value for Auto Shutdown Timeout (minutes), use the slider to set the value. Values range from 1 to 30.
10. Optional: To change the default value for Power Line Frequency (Hz), use the drop-down menu to select 50 or 60.
11. Optional: To add a Device Location ID to the device, type in an ID.
12. Optional: To add a Device Location to the device, type in an user-friendly location name.
13. Optional: To display the Device Location on the device, use the drop-down menu to select **Yes** or **No**.
14. Optional: To add an Asset Tag to the device, type in an asset tag identifier.
15. Optional: To change the default language on the device, use the drop-down menu to select the desired language. Choices include English, French, German, Swedish, Dutch, Danish, Finnish, Greek, Italian, Norwegian, Spanish, Portuguese, Polish, Simplified Chinese, Thai, or Traditional Chinese.
16. Optional: To set the device to perform a software update when a new software version is available, use the drop-down menu to select **Yes** or **No**.
17. When finished, click **DONE**.
18. Click **SAVE AND CONTINUE**.

    As the Configuration Tool is updated, the screen moves to the Progress Summary view. When all the sections appear green, the configuration file can be downloaded or shared.

Create a new **Connex** Vital Signs Monitor configuration

This section applies to a **Connex** Vital Signs Monitor with software version 2.41 or greater.

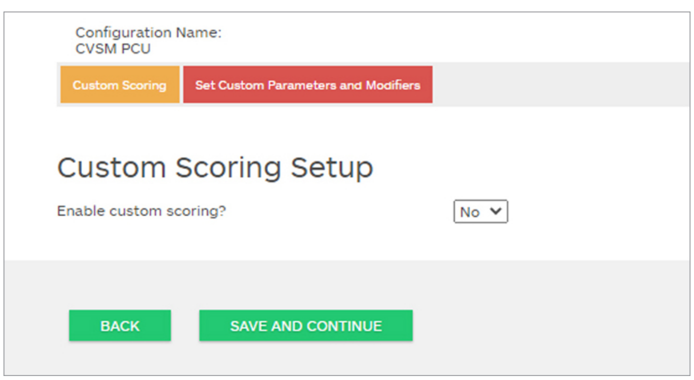
1. From the main screen, click the **New Configuration** tab.



2. Use the drop-down menu to select **Connex Vital Signs Monitor v2.41 or greater**. Provide a name for the configuration and click **CONTINUE**.
3. Select the **Product Use Location: Hospital**.
4. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Custom Scoring tab. As the Configuration Tool is updated, the Progress Summary view updates to show completed sections in green. The Progress Summary has two sections: Custom Scoring and Set Custom Parameters and Modifiers.
5. Optional: Select **Custom Scoring** and set Enable custom scoring to **Yes**. Choices include: **Yes** or **No** (default).

   For additional steps, see "Select Custom Scoring Setup for Connex Vital Signs monitor."



6. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Set Custom Manual Parameters and Modifiers tab. Configure the manual parameters and modifiers settings. For the steps, see "Select Custom Parameters and Modifiers" in the "Create a new **Connex** Vital Signs Monitor configuration" section.

7. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Progress Summary tab for completion. You can now download the CVSM configuration file. For more information, see "Download a configuration file to install on another device."

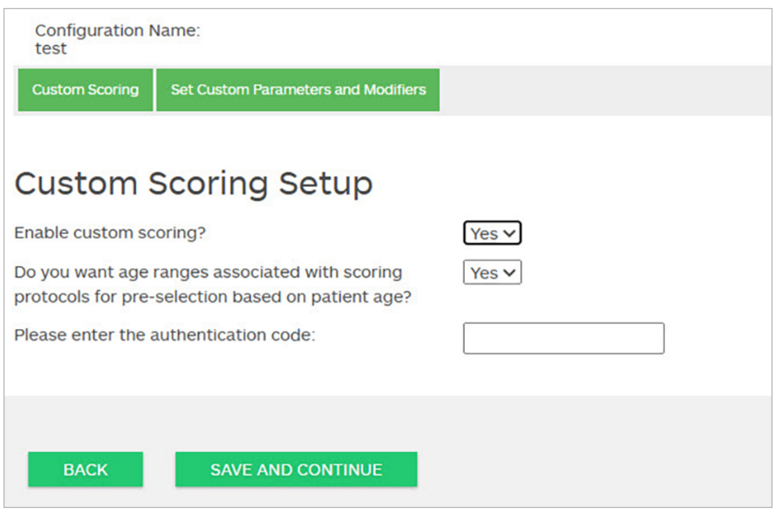
Select Custom Scoring Setup for **Connex** Vital Signs Monitor

This section describes how to set up Bedside Protocols that can be replicated on a **Connex** Vital Signs Monitor device. You can preselect from the list of clinical protocols. All scoring protocols are customizable to meet user requirements.

You may add up to 6 scoring systems. Select a predefined Scoring System template, enter a unique name, and add the scoring system. Your scoring system will be added to the bottom of the page. You may then edit or delete your scoring system.

Click the **Custom Scoring** tab and choose your preferences for custom scoring.

1. Optional: Use the drop-down menu to select **Yes** to enable custom scoring. (The default is **No**).



2. Optional: In the Do you want age ranges associated with scoring protocols for pre-selection based on patient age field, use the drop-down menu to select **Yes** or **No** (default).
3. Optional: In the Do you want to view a condensed total score page as your default field, use the drop-down menu to select **Yes** (default) or **No**.
4. Click the Please enter the authentication code field and enter a valid code in the format of `[YY]CVSM[MM]` with the current year and month.

   NOTE The Authentication code field appears the first time you select the Custom Scoring tab.

5. Click **SAVE AND CONTINUE**.

   If you selected **No** for Enable custom scoring, the screen moves to the Set Manual Parameters and Modifiers tab.

   If you selected **Yes** for Enable custom scoring, the Custom Scoring Selection screen displays.

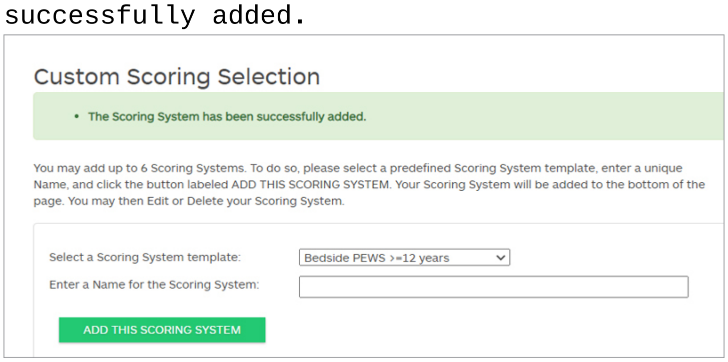
6. Select a Scoring System template. Choices include:

   - Bedside PEWS < 3 months
   - Bedside PEWS 3 to < 12 months
   - Bedside PEWS 1 to 4 years

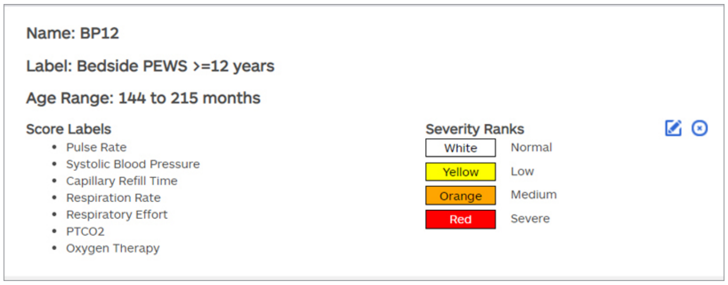
- Bedside PEWS 5 to < 12 years
- Bedside PEWS >=12 years
- Braden
- BTF SAGO
- BTF ED
- BTF SPOC < 3 months
- BTF SPOC 3 to 12 months
- BTF SPOC 1 to 4 years
- BTF SPOC 5 to 11 years
- BTF SPOC 12 years
- Falls Risk Assessment Tool
- Glasgow Coma Scale
- Modified Early Obstetric Warning
- Modified Early Warning Score
- MEWS for General Surgical Ward
- Morse Fall Score
- National Early Warning Score
- National Early Warning Score 2
- NEWS2 Scale 1
- Norton
- Pediatric Early Warning Score
- Rapid Emergency Medicine Score
- Triage Early Warning System
- Walsall
- Blank Scoring System

7. Enter a name for the Scoring System by clicking the Enter a Name for the Scoring System field and typing a name for the scoring system as you want it to appear on the device.
8. When finished, click **ADD THIS SCORING SYSTEM**.

   After a successful addition, the following message appears: `The scoring System has been successfully added.`



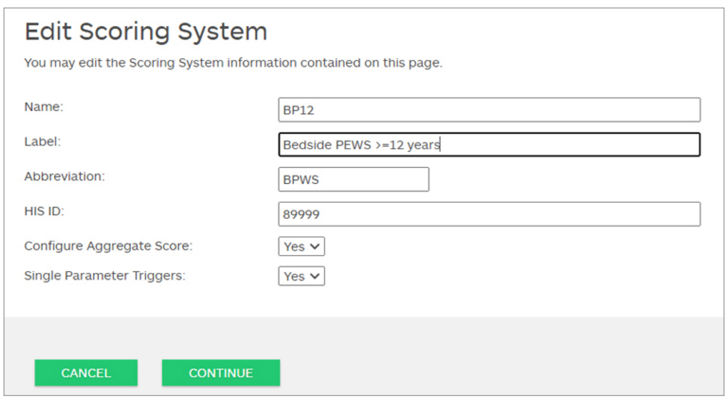
The name for the scoring system also appears at the bottom of the Custom Scoring Selection screen.



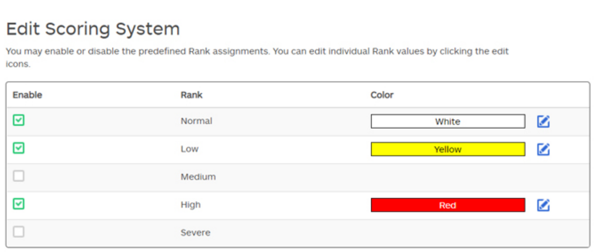
NOTE The Custom Scoring Selection can be used as is or modified to meet facility requirements. Each scoring system has different score labels and severity ranks.

NOTE The name of the custom scoring system defines how the scoring protocol will appear on the device. The HIS ID information for the EMR can be applied here too. Configure the capability for Single Parameter Scoring by itself or as part of an Aggregate Score.

9. Optional: To edit the scoring system, click (edit). Click within the fields to enter changes or use the drop-down menu to change the Configure Aggregate Score or Single Parameter Triggers.



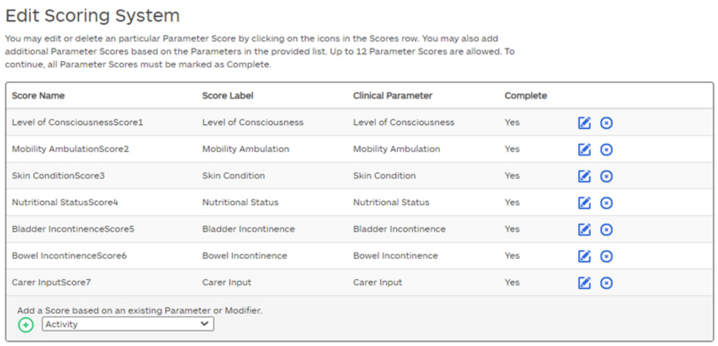
10. Optional: To delete the scoring system, click (delete).
11. Click **SAVE AND CONTINUE**.
12. Optional: To add a range row, click (add). To delete a row, click (delete).
13. Click **CONTINUE**.
14. Optional: To continue editing the scoring system, check or uncheck the Enable settings. Default settings include: Rank Normal = Enable, Rank Low = Enable, Rank Medium = Enable, Rank High = Disable, Rank Severe = Enable.



NOTE Severity rankings color can modified based on protocol.

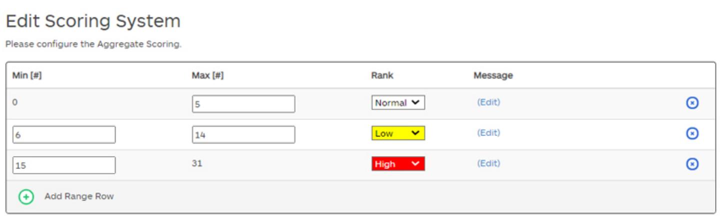
NOTE Rankings can either be omitted or added based on protocol.

15. Click (edit) to change the rank information and then click **DONE**.
16. Click **CONTINUE**.
17. Optional: To continue editing the scoring system, click (edit) to change the values.



QUICK TIP: If you want to disassociate a parameter from the score, click (delete). If you want to add a new parameter associated to the score either select an existing one from the drop-down list, or create a custom parameter in the next tab.

18. Click **CONTINUE**.
19. Configure the Aggregate Scoring.



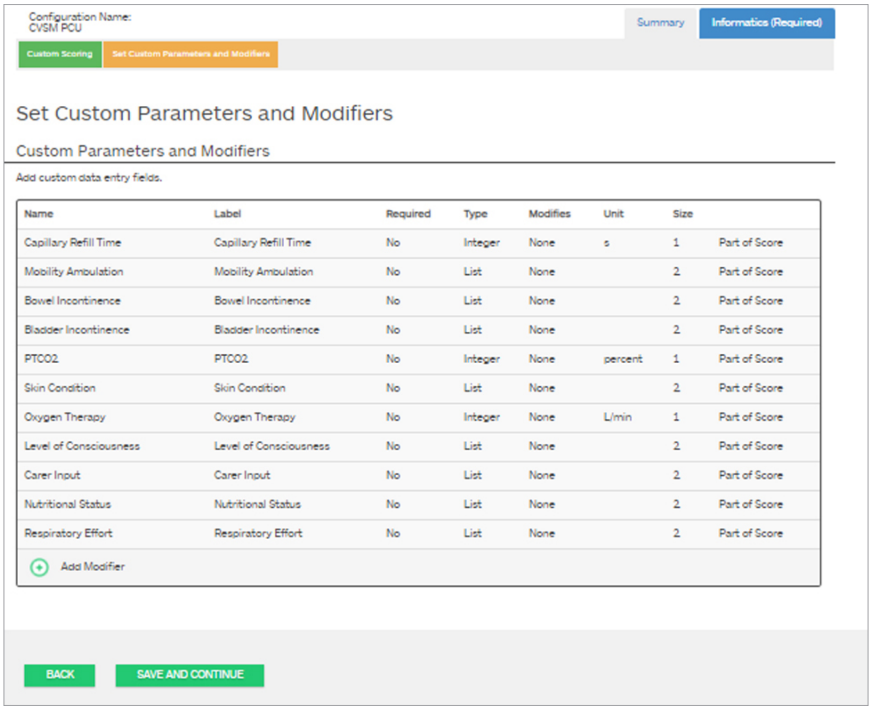
20. Click **CONTINUE**.
21. Click **SAVE AND CONTINUE**.
22. As the Configuration Tool is updated, the screen moves to the Set Custom Parameters and Modifiers tab.

Select Custom Parameters and Modifiers

Configure the manual parameters and modifiers settings.

Click the **Set Manual Parameters and Modifiers** tab.

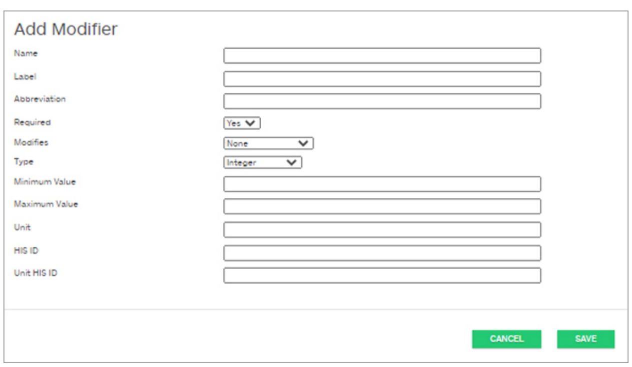
1. Use the radio button to select **Default** or **Custom** parameters and modifiers.



Name	Label	Required	Type	Modifies	Unit	Size	
Capillary Refill Time	Capillary Refill Time	No	Integer	None	s	1	Part of Score
Mobility Ambulation	Mobility Ambulation	No	List	None		2	Part of Score
Bowel Incontinence	Bowel Incontinence	No	List	None		2	Part of Score
Bladder Incontinence	Bladder Incontinence	No	List	None		2	Part of Score
PTCO2	PTCO2	No	Integer	None	percent	1	Part of Score
Skin Condition	Skin Condition	No	List	None		2	Part of Score
Oxygen Therapy	Oxygen Therapy	No	Integer	None	L/min	1	Part of Score
Level of Consciousness	Level of Consciousness	No	List	None		2	Part of Score
Carer Input	Carer Input	No	List	None		2	Part of Score
Nutritional Status	Nutritional Status	No	List	None		2	Part of Score
Respiratory Effort	Respiratory Effort	No	List	None		2	Part of Score

2. The default settings are: Capillary Refill Time= **No**, Mobility Ambulation = **No**, Bowel Incontinence = **No**, Bladder Incontinence = **No**, PTCO2 = **No**, Skin Condition = **No**, Oxygen Therapy = **No**, Level of Consciousness = **No**, Carer Input = **No**, Nutritional Status = **No**, Respiratory Effort = **No**.

3. Optional: Click to add a modifier.



   a. Click in the Name field and type in a name for the modifier.
   b. Click in the Label field and type in a label for the modifier.
   c. Click in the Abbreviation field and type in an abbreviation for the modifier.
   d. Use the drop-down menu to select whether the modifier is required.
   e. Use the drop-down menu to select whether the modifier modifies: **NIBP**, **SpO2**, **Temperature**, **Pulse Rate**, **Respiration Rate**, or **None**.
   f. Use the drop-down menu to select the type of modifier: **Integer**, **Decimal**, **Alphanumeric**, or **List**.

      If List is selected, type in a name, type in a label, type in an abbreviation, and type in a HIS ID.

   g. Optional: Click to add another list Item.
   h. Click in the Name field and type in a name for the modifier.

   i. Click in the Minimum Value field and type in a value. (Values must be within -32768 and 32767 and be an integer. The minimum value must be less than the maximum value.)
   j. Click in the Maximum Value field and type in a value. (Values must be within -32768 and 32767.)
   k. When finished, click **SAVE**.

4. Click **SAVE AND CONTINUE**.

   As the Configuration Tool is updated, the screen moves to the Progress Summary tab for completion.

Licensed features

Create a new configuration for the **Bluetooth** Low Energy (BLE) features

To configure the **Connex Spot** Monitor, use the Configuration Tool to create a new configuration file and add the Bluetooth Low Energy (BLE) option.

Retrieve a license

In the Licensing section of the My Configurations screen, you can retrieve the license in one of the following ways:

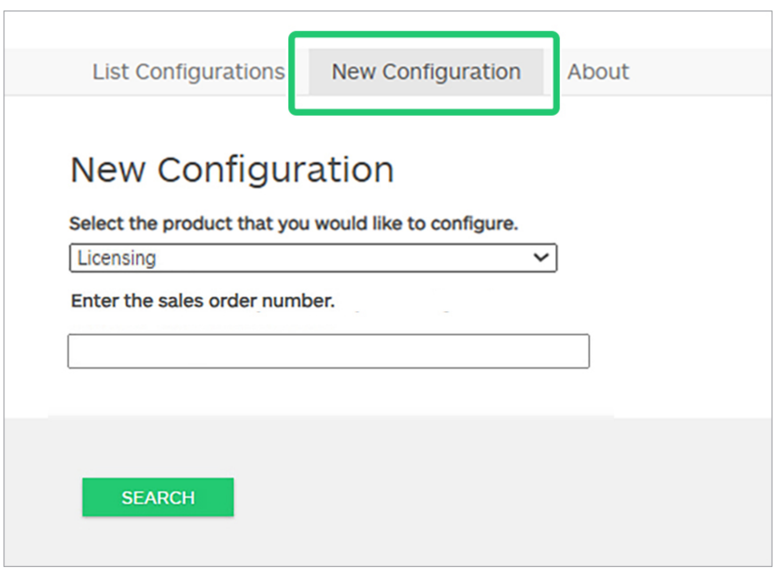
- Enter the serial number from the **Connex Spot** Monitor device label and select ***CSM*** in the drop-down list.
- Enter the service order number, Equipment record number (ERN), and select ***CSM*** and the material number for **Bluetooth** Low Energy (BLE) if that feature is purchased and enabled.
- Type in the sales order number and material number, and select ***CSM***.

NOTE **Bluetooth** (BLE) is not available for the **Connex 360** monitor.

NOTE The **Connex Spot** Monitor requires software version 1.52, or later, and a **Bluetooth** radio.

Create a new licensing configuration

1. From the main screen, click the **New Configuration** tab.
2. Use the drop-down menu to select the **Licensing** product.

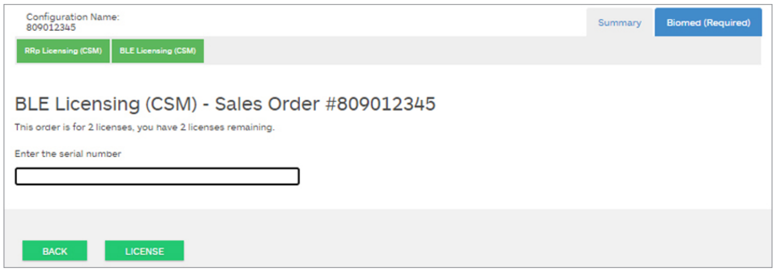


3. Enter the sales order number that you received in the Enter the sales order number field and click **SEARCH**.

   NOTE You are required to enter the sales order number and all the device serial numbers that you want to activate.

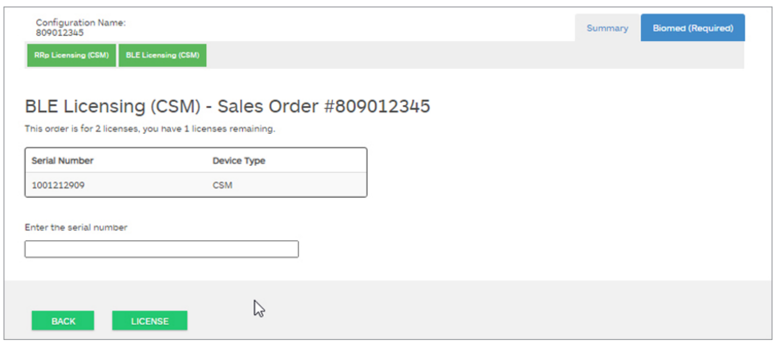
   As the Configuration Tool is updated, the Progress Summary view updates to show completed sections in green and the screen moves to the Biomed (Required) tab.
4. Click **BLE Licensing** in the Progress Summary view.

5. Click within the Enter serial number field and enter the serial number from the **Connex Spot** Monitor device and then click **LICENSE**.

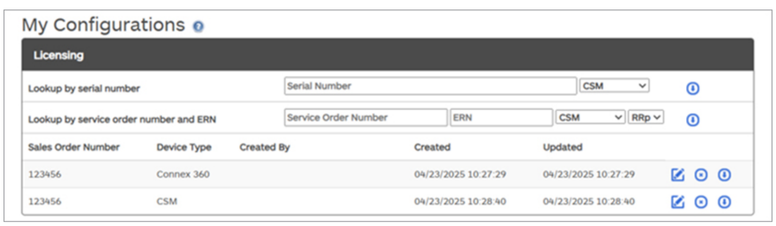


The screen indicates the number of licenses available.

6. To install a second license, click within the Enter serial number field again and enter the second serial number from the **Connex Spot** Monitor device and then click **LICENSE**.



7. To view or use licenses, click the **List Configurations** tab. The Licensing section appears at the top of My Configurations.



8. Click **Download** or enter the device serial number into the Lookup by serial number field to download the configuration file.

   The file names are different for the three download options. Examples:

   - Serial number: `125020000114`
   - Service order number: `11140525` ERN: `40009997`
   - Sales order number: `74151963`

9. To complete the installation on a device, follow the instructions in the section, "Install a configuration file."

Create a new configuration for **RRp** sensor licensing features

To configure the **Connex Spot** Monitor or **Connex 360** monitor, use the Configuration Tool to create a new configuration file and add the **RRp** sensor licensing option.

Retrieve a license

In the Licensing section of the My Configurations screen, you can retrieve the license in one of the following ways:

- Enter the serial number from the **Connex Spot** Monitor or **Connex 360** device label and select the device type (**Connex 360** or **CSM**).
- Enter the service order number, ERN, select the device type and the material number for Respiration rate (**RRp** sensor) if that feature is purchased and enabled.
- Type in the sales order number and material number, and select the device type.

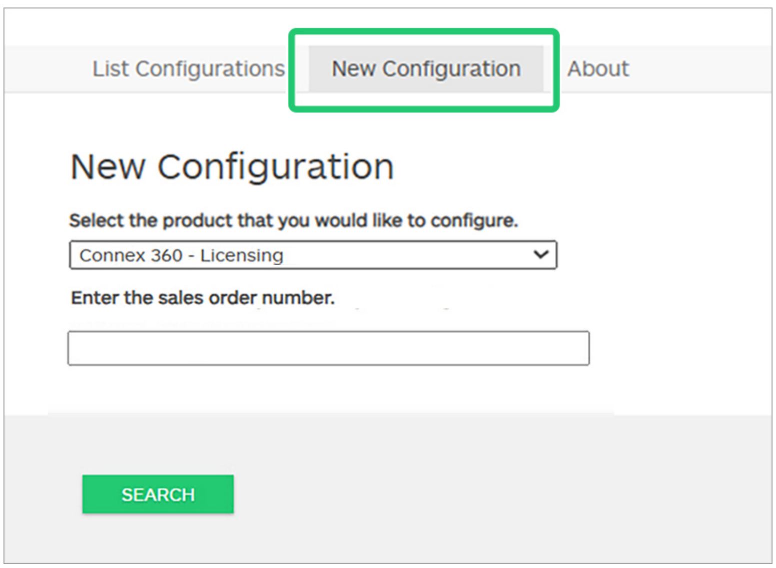
NOTE The **Connex 360** monitor requires software version 1.1. **RRp** is only available to devices with the Masimo **RRp** license activated. For more information on acquiring a Masimo **RRp** license, see the **Connex 360** *Service Manual*. **Connex 360** monitors that are sold with the Masimo **RRp** license already activated *do not* require activation in the Configuration Tool.

NOTE The **Connex Spot** Monitor requires software version 1.51, or later. The **Connex Spot** Monitor also requires the Masimo SpO2 sensor hardware to be installed for the **RRp** sensor parameter. Use the Welch Allyn Service Tool version 1.9, or later, to confirm that the device contains a Masimo SpO2 sensor firmware version of 7.14.6.2, or later. For more information, see the *Connex Spot Monitor Service Manual*.

Create a new licensing configuration

1. From the main screen, click the **New Configuration** tab.
2. For **Connex Spot** Monitor, use the drop-down menu to select the **Licensing** product.

   For **Connex 360** Monitor, use the drop-down menu to select the **Connex 360 - Licensing** product.



3. Enter the sales order number that you received in the Enter the sales order number field and click **SEARCH**.

   NOTE You are required to enter the sales order number and all of the device serial numbers that you want to activate.

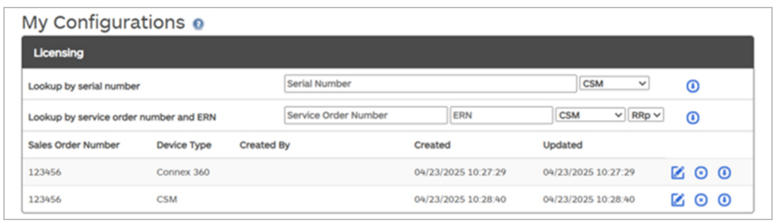
   As the Configuration Tool is updated, the Progress Summary view updates to show completed sections in green and the screen moves to the Biomed (Required) tab.
4. Click **RRp Licensing** in the Progress Summary view.
5. Enter the serial number from the **Connex Spot** Monitor or **Connex 360** monitor, and then click **LICENSE**.

   Connex Spot *Monitor example:*

The screen indicates the number of licenses available.

Connex 360 *example:*

6. To install a second license, enter the second serial number from the **Connex Spot** Monitor or **Connex 360** device, and then click **LICENSE**.
7. To view or use licenses, click the **List Configurations** tab. The Licensing information appears at the top of My Configurations.



8. Click **Download** or enter the device serial number into the **Lookup by serial number** field to download the configuration file.

   File name example for **Connex Spot** Monitor: `"licenses_keith_abbit_carecenter_com-signed.waconfig"`

   File name example for **Connex 360** Monitor: `"licenses_keith_abbit_carecenter_com-c360.signed"`
9. To complete the installation on a device, follow the instructions in the section, "Install a configuration file".

Configure a CA Root certificate

You can load self-signed security certificates onto the **Connex Spot** Monitor to ensure secure communication with an authenticated server on the network.

The CA Root certificate can be in either PEM or DER format and can have extensions: `.pem`, `.der`, `.crt`, or `.cer`. These certificate files are converted into PEM format during the load process on the device. A CA Root certificate can be either: third-party (GoDaddy, **Symantec**, **Comodo**, **VeriSign**, or DigiCert), or self-signed internal CA certificates.

There are four categories of public host certificates:

- Baxter trusted certificates
- CA certificates for EMR server authentication
- Host certificates for **Active Directory**
- Host certificates for service platform server authentication

NOTE The radio software manages the radio trust store.

The following is a partial list of the public certificates that are preloaded onto the **Connex 360** device:

```
Go_Daddy_Class_2_Certification_Authority.pem
Symantec_Class_3_Public_Primary_Certification_Authority_-_G6.pem
VeriSign_Class_3_Public_Primary_Certification_Authority_-_G4.pem
VeriSign_Class_3_Public_Primary_Certification_Authority_-_G5.pem
Veri_Sign_Class_3_Public_Primary_Certification_Authority_-_G3.pem
COMODO_ECC_Certificate_Authority.pem
COMODO_Certificate_Authority.pem
Symantec_Class_3_Public_Primary_Certification_Authority_-_G4.pem
Go_Daddy_Root_CertificateAuthority_-_G2.pem
COMODO_RSA_Certificate_Authority.pem
VeriSign_Universal_Root_Certification_Authority.pem
```

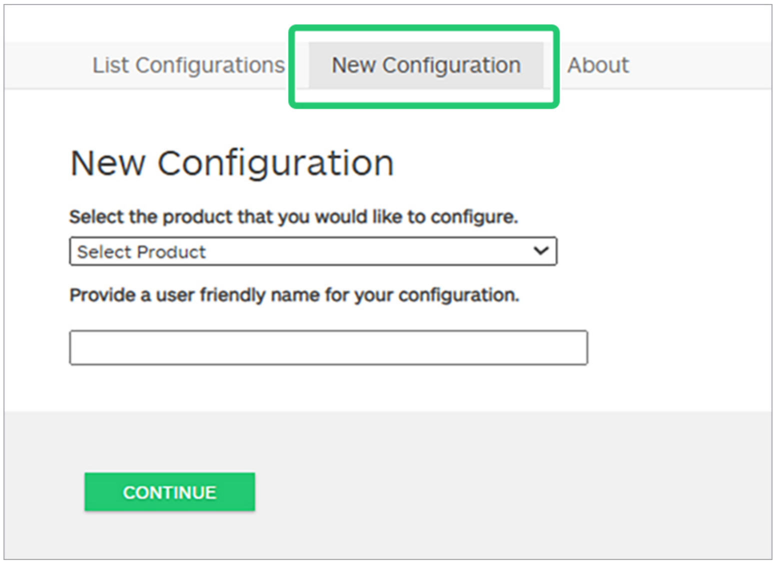
For the complete list of the public CA certificates, contact Baxter (baxter.com/our-services). Also see the **Active Directory** setup section of the service manual for your device.

You also can upload your own CA certificates.

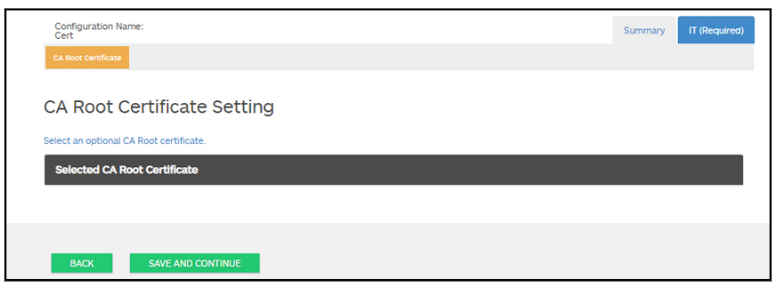
To add a certificate from your computer:

1. From the main screen, click the **New Configuration** tab.
2. Use the drop-down menu to select **CA Root certificate**.

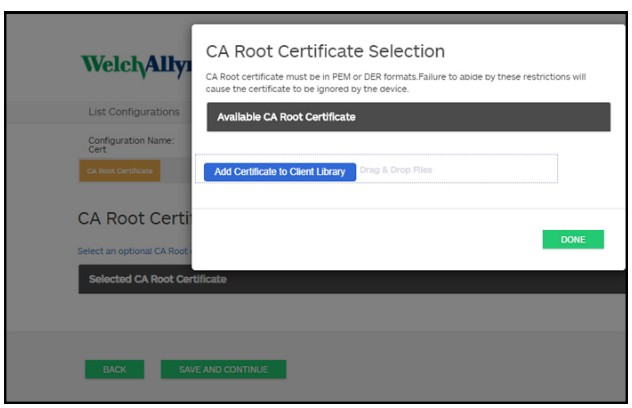
3. Provide a name for the configuration by typing in the field to enter a user-friendly name and then click **CONTINUE**.



4. Select the Product Use Location. (Choices include Hospital or Physicians Office or Clinic.)
5. Click **SAVE AND CONTINUE**.
6. Click **CA Root Certificate** in the Progress Summary view.

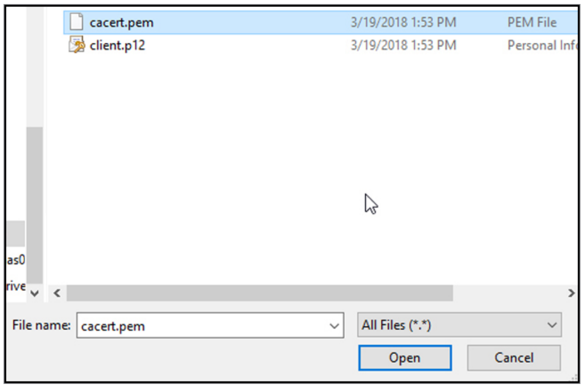


7. Click **Select an optional CA Root Certificate**.



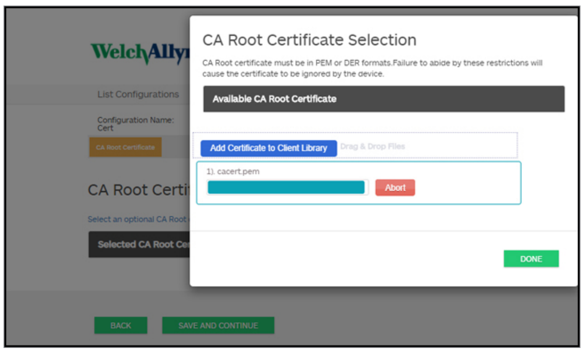
8. Click **Add Certificate to Client Library**.

9. Navigate to the `.pem` file, or `.der` file, location using your computer's **Windows** File Explorer window. (The sample screen shows a `.pem` file type.)



Select the file and click **Open**.

10. Select **DONE**.



11. Click **SAVE AND CONTINUE**.

Device configuration and setup

Configuration overview

You can create a configuration file that specifies preferences for the **Connex Spot** Monitor, **Connex 360** monitor, or **Connex** Vital Signs monitor. When powered on, the monitor recognizes all available options and features and applies the associated configuration file preferences.

If no customized configuration file is loaded onto the device, the device applies factory defaults to all available options.

NOTE The device does not support configuration file names that include parentheses. If these names are present in the file name, the device does not recognize the file. This is a common issue if you've downloaded the same file multiple times from your web browser. For example, the web browser may automatically rename `"MyFile.config"` to `"MyFile.config(2)"` if you download it a second time. If this happens, rename the file by deleting the parentheses; then it will appear in the list on the monitor.

The remainder of this section instructs you how to do the following:

- Edit a configuration file.
- Copy a configuration file.
- Share a configuration file.
- Download a configuration file to install on another device.
- Create a new configuration file.
- Install a configuration file.

Edit a configuration file

To edit a saved configuration file, complete the following steps:

1. Access the Configuration Tool at http://config.welchallyn.com.
2. Log in with a user name and password.
3. Click **List Configurations** on the navigation bar.
4. Locate the configuration file to be edited in the list, and click the  on the right side of the table to launch the editor.
5. Under Progress Summary, locate the section you want to edit (Clinical, Informatics, IT, or Biomed) and click the specific step you want to edit.
6. Review the selections in each step and modify them as desired.
7. Click **SAVE AND CONTINUE** to accept the changes or **BACK** to return to the previous screen without saving.

   Clicking SAVE AND CONTINUE automatically moves you to the next step in that section of the Progress Summary. When you reach the last step in a section, clicking SAVE AND CONTINUE returns you to the Progress Summary.
8. Repeat steps 5 through 7 until you complete all desired edits.
9. Click **List Configurations** on the navigation bar to see a new date stamp in the Updated column for your configuration file.

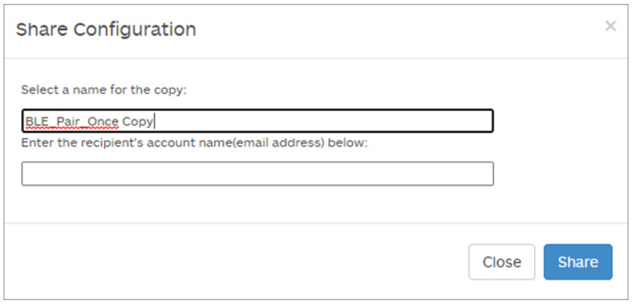
Copy a configuration file

To copy a saved configuration file, complete the following steps:

1. Access the Configuration Tool at http://config.welchallyn.com.
2. Log in with a user name and password.
3. Click **List Configurations** on the navigation bar.
4. Locate the configuration file to be copied in the list, and click the on the right side of the table.
5. Either accept or enter a new name for the copied file in the Copy Configuration dialog, then click **Copy**.
6. View your new configuration file on the List Configurations tab.

Share a configuration file

1. To share a configuration file, click next to the configuration that you want to share.



2. Enter the recipient's account name (typically an email address) into the field: Enter the recipient's account name (email address) below: and optionally rename the file by typing a name for the configuration into the field: Select a name for the copy.
3. Click **Share**.

For the recipient to receive the shared file, they need to have access to the Configuration Tool with their own account. The shared file shows who created the file and the date it was created. Shared files also have the file name with "Copy" at the end of the file name. (See the example: `BLE_Pair_Once Copy` for a sample of a file received from a sender into your Configuration Tool account.)

Connex Spot Monitor

Name	Created By	Created	Updated
BLE_Pair_Once Copy	.co...	11/18/2020 17:13:03	11/18/2020 17:17:06
Medical Center	.com	11/19/2020 20:12:37	11/19/2020 20:16:27
North Wing	.com	11/17/2020 23:02:38	11/18/2020 02:01:20

To use a file that another user shares with you, the copy must be opened in the Configuration Tool and all the sections in the Progress Summary must appear green.

Download a configuration file to install on another device

To download a saved configuration file, complete the following steps:

From the Configuration Tool

1. Access the Configuration Tool at config.welchallyn.com.
2. Log in with a user name and password.
3. Click **List Configurations** on the navigation bar.
4. Locate the configuration file to be downloaded in the list, and click (download) on the right side of the table.

   The configuration file downloads to the tray on your PC.

5. Using the drop-down menu on the right side of the downloaded file, select **Show in folder**.

   Windows Explorer opens the `Downloads` folder with the most recent download selected.
6. Copy the downloaded configuration file to a USB flash drive.
7. See "Install a configuration file" for instructions to load this configuration on another device.

NOTE If (lock) appears instead of , it means that the configuration is incomplete and the download is locked. After you complete the configuration, you can download it.

Install a configuration file

To install a configuration file, you must first download the configuration file to a USB flash drive. If you have not done so already, complete the steps in "Download a configuration file to install on another device," then complete the following steps:

1. Insert the flash drive into the device which needs to have the configuration loaded onto it.

   A pop-up dialog appears listing the configuration files on your flash drive.
2. Select the desired configuration file and touch **Load**.
3. Repeat this process on as many devices as you wish.

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