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Pulse Tech Connect

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About This Pulse Tech Connect

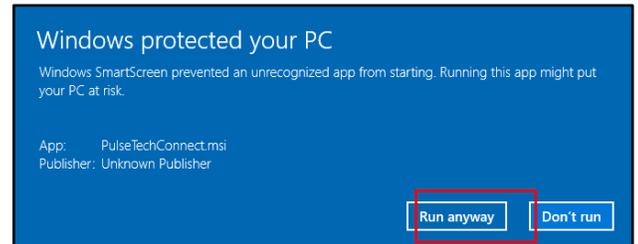
- Pulse Tech Connect monitors the charge level of the battery in the workstation. Pulse Tech connect is compatible with V3 and above Mobius Powered workstations as well as Tripp-Lite and Powervar powered workstations.
- Pulse Tech Connect will send the Rhythm data packet via the wireless connection already established by the PC.
- Since the Pulse Tech Connect Software utilizes the wireless connection of the PC. If the PC is online, then the workstation is online.
- Pulse Tech Connect has a graphical battery icon that will display the charge level of the battery and remaining time in real time directly on the desktop.
- Depending on your security protocols, the PULSE Monitor may download without any file extension. You may need to add “.msi” the file.
- Pulse Tech Connect requires .Net Framework 4.5.2 or above.
- Pulse Tech Connect needs to be install using an administrator account
- MSI’s accept all standard switches/options/parameters for deployment (i.e. */quiet for a silent install*):
 - We have also created a silent installer that bundles both apps together: (based on which service the application will operate under)
 - Local System: http://download.myenovate.com/files/PulseTechConnectSilentInstaller_localsystem.msi
 - Local Service: http://download.myenovate.com/files/PulseTechConnectSilentInstaller_localservice.msi

Installing Pulse Tech Connect Service

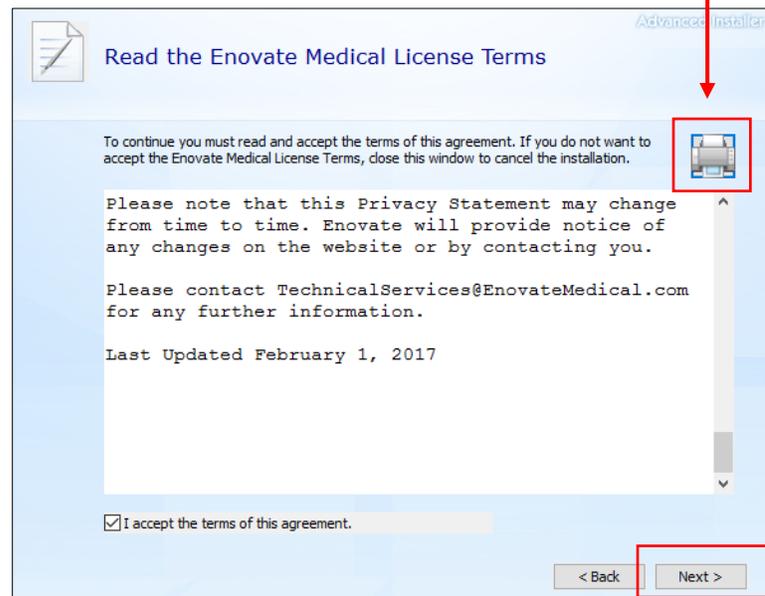
1. Ensure the USB Cable from the power system is connected to the PC
 - a. [Reference USB Locations Below](#)
2. Download PulseConnect from software.myenovate.com



3. Run the Pulse Tech Connect Installer. Windows may present you with a warning, click “more info”, then click “Run Anyway”.



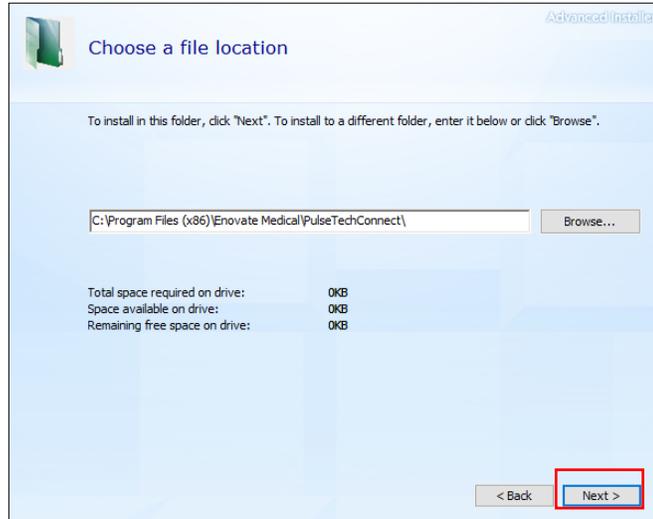
4. The Pulse Tech Connect Setup Wizard will present the Enovate Medical License Terms. Please read the term, check the box next to “I accept the terms of this agreement”, and click next. Click the Printer Icon to print the agreement



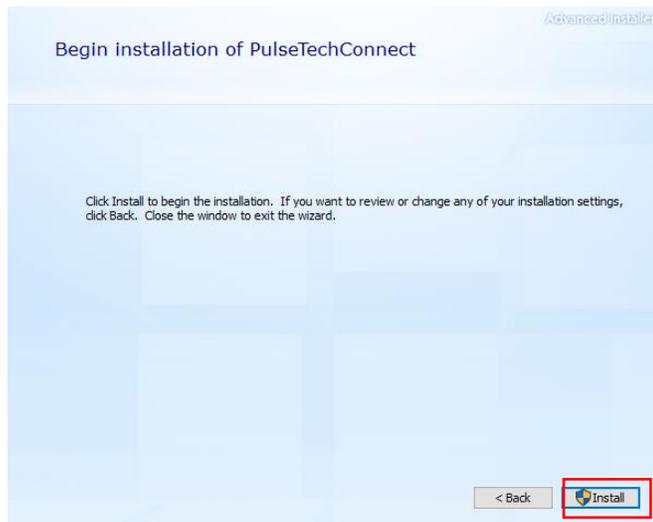
5. The Pulse Tech Connect Setup Wizard will guide you through the installation process. Click “Next” to begin the wizard



6. Chose a file location, then click “Next”



Click “Install” to begin the installation



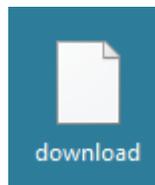
Installing Pulse Tech Connect Monitor

7. After the installation is complete, the Pulse Tech Connect Service will be installed. In order to install the Pulse Tech Connect Monitor (GUI/Icon), Click “Install PulseTech Connect Monitor”. This will download the PulseTech Monitor Application. Save it in a location you can easily remember.



- Due to certain security environment, the file may (or may not) download with the correct file extension. The example below was not. The file name is “download”. I added the file extension “.msi” to restore the file.

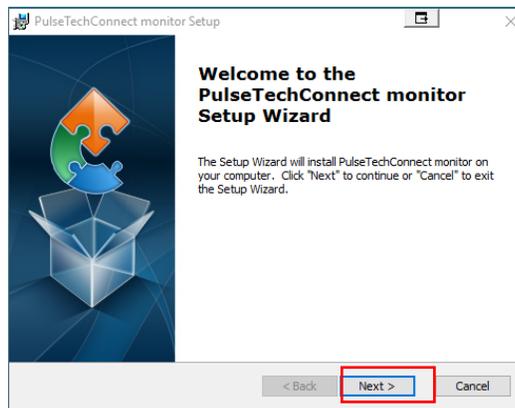
File Ext. Removed



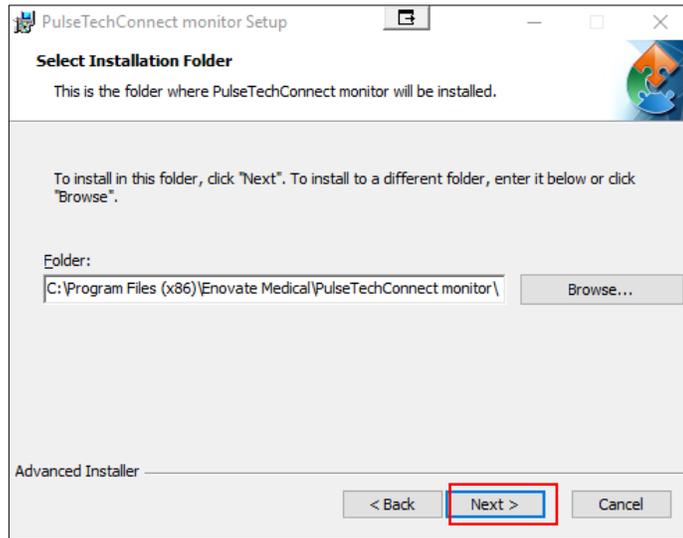
Files Ext. Added



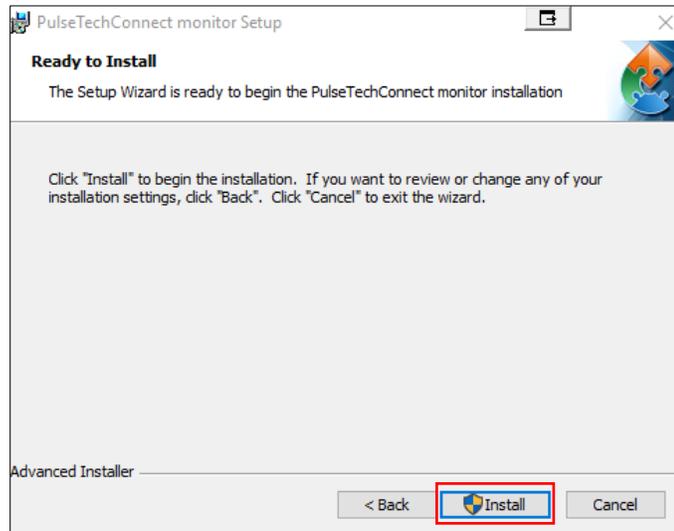
8. Locate and run the file named: Download.msi. This will start the installation of the Pulse Tech Connect Monitor Application. You may be presented with a Windows Security box, please refer to step 4.
9. The Pulse Tech Connect Setup Wizard will guide you through the installation process. Click “Next” to begin the wizard



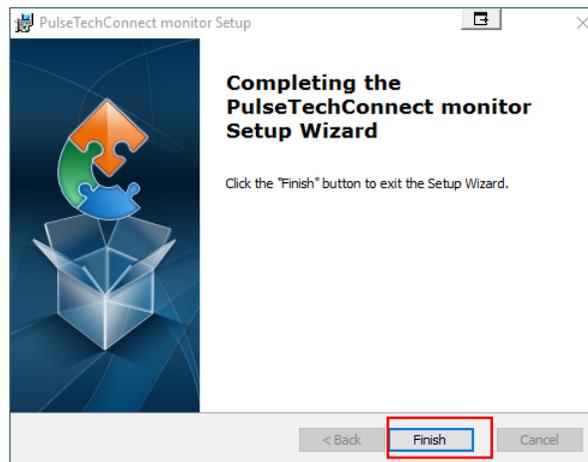
10. Select the Installation Folder, then click “Next”



11. Click "Install" to begin the installation

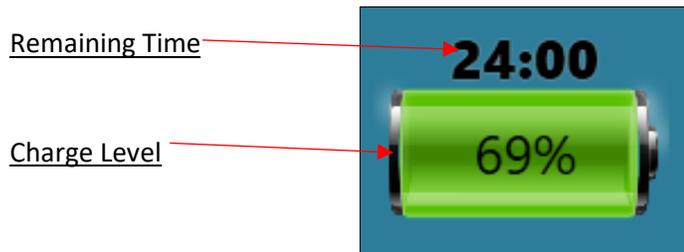


12. Click "Finish" to complete the installation. Reboot the PC.

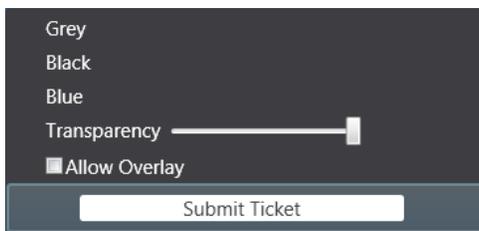


Features & Options

- The gauge is also free-roaming, meaning you can relocate anywhere on the desktop.
- After reboot, the monitor will appear above the task bar. The monitor will show the remaining time and charge level in real time.
 - The charge level will increase or decrease depending on power consumption. If the computer is asleep, the power consumption is low, which increases the runtime vs. when the computer is in use.

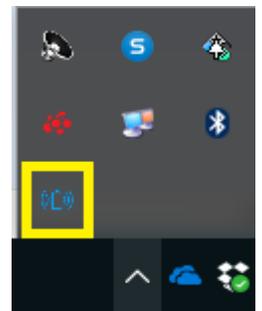


- Right-click on the Charge Level for additional options



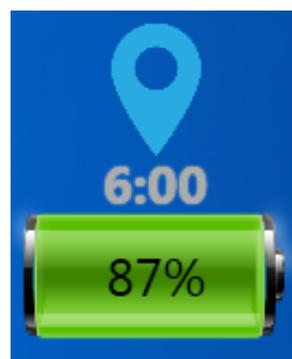
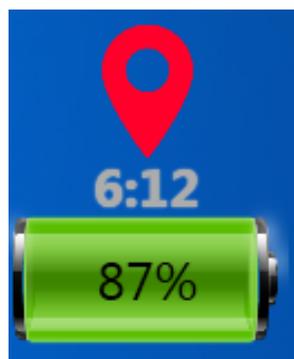
- From this menu, you can change the color of the characters, adjust the transparency, and allow for an overlay.

- If you would like to hide the gauge, simply double-click on it. To restore it, click on the icon on the taskbar



Locate

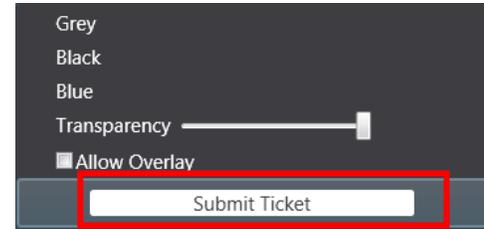
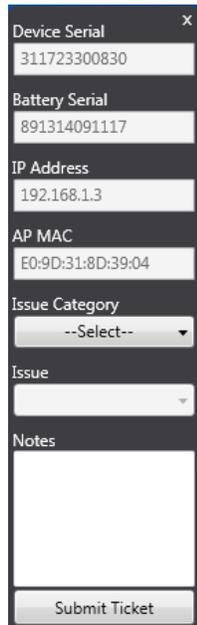
When there is an attempt to locate the workstation, technicians can flash a red and blue indicator above the battery icon on the desktop.



Submit a Trouble Ticket

Users now can submit a trouble to directly to their IT department from the Pulse Tech Connect Application.

1. Right click on the battery gauge on the desktop, then click on "Submit Ticket"

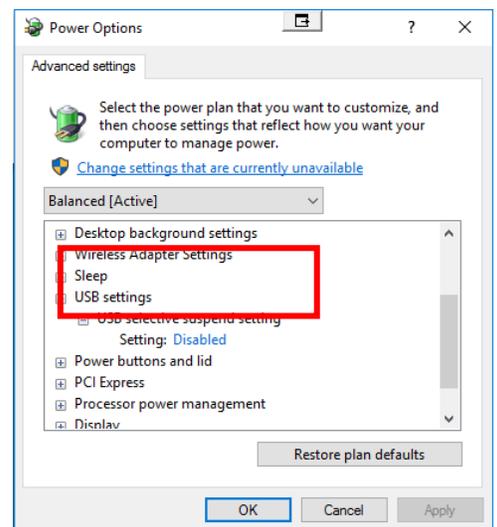


2. Use the dropdown select an Issue Category & Issue that best describe the issue you are having. You must add a small description of the issue in the "Notes" box. Click "Submit Ticket" once complete.

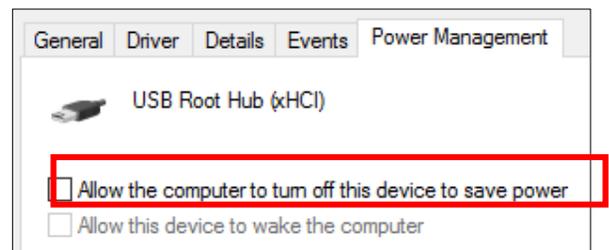
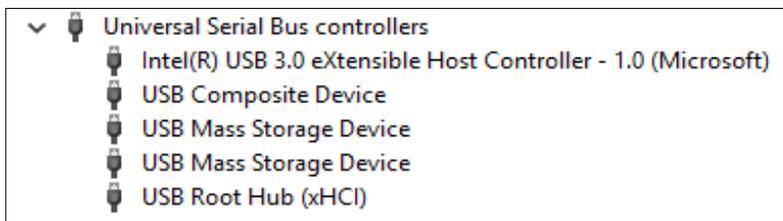
USB Settings

To ensure a stable communication, disable USB Selective Suspend and turn off USB Hub Power Management.

- To Disable USB Selective, Control Panel > Power Options > Change Plan Settings (of the current plan) > Change advanced power settings.



- Turn off power management for USB Root Hub in Device Manager and



USB 3.0 Controllers.

Error Messages

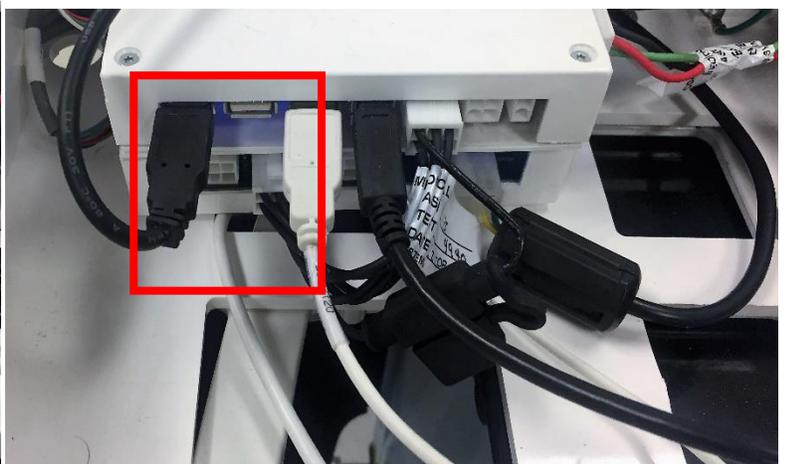
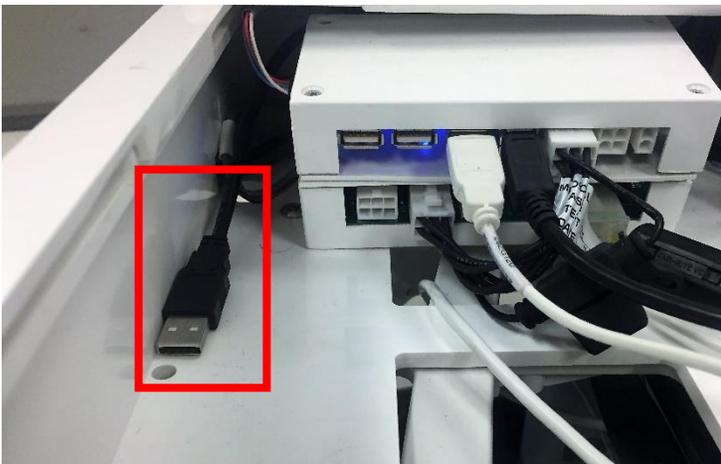
	Ensure the Pulse Tech Connect Service and Pulse Tech Connect Updater have the correct permissions to start and run.
	Ensure the USB cable from the power system is connect to the PC or USB hub.
	The application is reading information from the power system. This typically occurs after a restart. It can also indicate the software is updating.

USB Cable Locations

Slim Line Workstation – Normally a tan USB cable coming up the pole from the power system.



EMC Workstation – Tan or Black USB cable connect to HCMM board under table top.



Pulse Tech Software Service Account Required Permissions

Pulse Tech Connect Service

1. Ability to start a service
2. Ability to stop a service
3. Ability send HTTP/HTTPS requests
4. Ability to open up a named WCF pipe (`net.pipe://localhost/enovatemedical/IPCTest`)
5. Ability to read and write over usb HID and Serial

PulseTechConnect Updater

1. Ability to start a service
2. Ability to stop a service
3. Ability to download & write update packages to “%systemdrive%/Windows/temp” directory (<https://software.myenovate.com/files/zipfiles/PulseTech.zip>)
4. Ability to read from the c drive
5. Ability to write to %systemdrive%/ProgramFiles/EnovateMedical/PulseTechConnect/PulseTechConnect directory
6. Ability to write to:
“%systemdrive%/ProgramFiles(x86)/EnovateMedical/PulseTechConnect/PulseTechConnect” directory
7. Ability to Kill the monitor process
8. Ability to Start the monitor process
9. Ability to determine standard user from admin, locally and over the domain

Pulse Tech Connect Monitor

1. Ability to Kill monitor process
2. Ability to Start monitor process
3. Ability to send HTTP/HTTPS requests
4. Ability to communicate with PulseTechConnect over named WCF pipe (`net.pipe://localhost/enovatemedical/IPCTest`)
5. Ability to run c++ methods to modify GammaRamps

Communication and Security

Technical Overview

Power System, Electrical, and Battery information from EcoFlex and Mobius devices utilizing our RHYTHM or PulseTechWeb solution is communicated in binary format over port 80 (HTTP), or 443 (HTTPS) for EcoFlex/Envoy, back to our Enovate API residing on Enovate servers. All connections are initiated by the device (outbound), and an inbound connection cannot be initiated from Enovate's Cloud servers.

Enovate requires that the hospital's network allow connections to be made to Connect.MyEnovate.com, which currently resolves to 40.122.135.195.

No direct connections to the device can be initiated by Enovate. All remote management, updates, and diagnostic functions of Enovate devices are achieved through responses to the connection initiated by Mobius or Connect.

Mobius Devices

- 2.4 GHz frequency
- Standards a/b/g

Network Types Supported:

- WEP
- WPA-Personal
- WPA/WPA2 Mixed (WPA2TKIP+AES)
- WPA2-Personal

And the following encryption types (where applicable):

- TKIP
- AES

Mobius devices currently support WPA2-Enterprise with PEAP authentication, but do not support EAP-TLS, EAP-TTLS, or other Radius Server configurations. For customers with modern Radius or ISE Servers, we recommend setting up a network using WPA2-Personal and/or utilizing a MAC Address Whitelist for Mobius devices.

For networks that do not support or wish to use the above security protocols, retrofit hardware is available to upgrade Mobius Workstations to support the same wireless network types as EcoFlex (detailed below).



EcoFlex Workstations

- 2.4 and 5 GHz frequencies
- Standards a/b/g/n/ac

NetworkTypesSupported:

- Open
- WEP
- WPA
- WPA/WPA2 Mixed (WPA2TKIP+AES)
- WPA2-Personal (WPA2-PSK)
- WPA2-Enterprise (RADIUS)

Authentication methods:

- EAP-TLS
- EAP-TTLS
- PEAP (Username /Password)



All information that is sent to Enovate that is used for diagnostic, reporting, and technical services is stored in a secure database that is not accessible to any third parties or applications besides Enovate. Customer device information that is sent back to Enovate can be viewed in detail through Pulse Tech Web and Rhythm, Enovate's customer facing applications.

Please contact TechnicalServices@EnovateMedical.com for any further information.



This Privacy Statement for Enovate Products (“Privacy Statement”) describes information that Enovate Medical, LLC and its subsidiaries and affiliates (collectively, “Enovate”) collect, use, and store relating to the operation of Enovate products, including, without limitation, Mobius Power devices (collectively, “Enovate Products”). In this Privacy Statement, the expression “Enovate Products” also includes Enovate’s PULSE, PULSETECH, OR RHYTHM dashboard accessible through a password-protected, secure socket layer Enovate website.

The Enovate Products are not designed or intended to be used to collect, store, or process any protected health information regulated by the Health Insurance Portability and Accountability Act (HIPAA) or similar laws or any other personally identifiable information (except for personally identifiable information of your end users necessary for your end users to access and use the PULSE, PULSETECH, OR RHYTHM dashboard).

The Enovate Products are designed to communicate to Enovate diagnostic data about the devices so that Enovate may support and maintain the devices. Your Enovate Products will be connected to your Wi-Fi network directly or through a PC workstation. Once connected to your Wi-Fi network, your Enovate Product will regularly send the technical and geolocation data described in this Privacy Statement to Enovate.

The Enovate Products collect:

- Technical information from the device. The Enovate Products track and communicate to Enovate technical information such as Wi-Fi/BLE connectivity, power system, electrical, and battery information.
- Geolocation data: The Enovate Products collect and communicate to Enovate their geolocation data to facilitate maintenance.
- Information input during PULSE, PULSETECH, OR RHYTHM dashboard setup. To set up user accounts for the PULSE, PULSETECH, OR RHYTHM dashboard, you will need to provide certain information about your applicable personnel, such as their names and email addresses.

Enovate uses the collected information for diagnostic, reporting, and technical purposes, including, without limitation, to support and maintain the Enovate Products and to develop and improve the Enovate Products and related services. Enovate may use service providers to perform some of these functions. Those service providers are restricted from sharing collected information for any other purpose.

Enovate uses industry-standard methods to keep the collected information safe and secure while it is transmitted over your network and through the Internet to Enovate’s servers.

Enovate may provide information to a third party if Enovate believes in good faith that it is required to do so for legal reasons. For example, to respond to legal process, or comply with state and federal laws (or the applicable laws of foreign countries other than the United States).

Please note that this Privacy Statement may change from time to time. Enovate will provide notice of any changes on the website or by contacting you.

Please contact TechnicalServices@EnovateMedical.com for any further information.

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