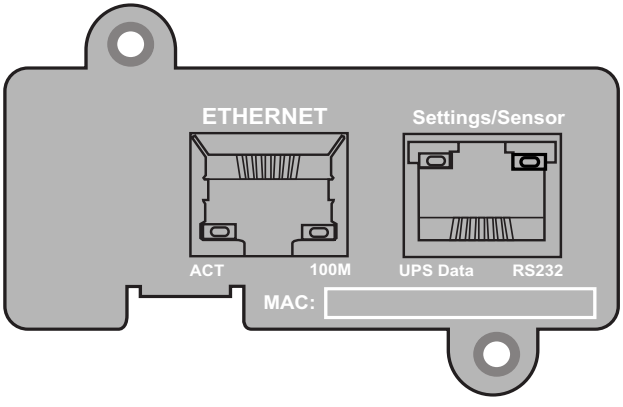
Eaton® Network Card-MS

Quick Start Instructions



Package Contents

- Network Card-MS
- USB Cable
- Quick Start Instructions

Powering Business Worldwide

Help Desk Numbers

United States	1-800-356-5737 or 1-800-843-9433
Canada	1-800-461-9166 ext 260
All Other Countries	Call your local service representative

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Section 1 Installation Checklist

1. Verify that the following items are available:

   ❑ Network Card-MS card package contents (card, cable, Quick Start Instructions)

   ❑ Phillips® screwdriver

   ❑ Available USB port on a computer running Microsoft® Windows®

   ❑ Web browser (Microsoft Internet Explorer® version 8.0 and higher, Mozilla® Firefox®, or Google Chrome™ are recommended)

2. If you are going to use Dynamic Host Configuration Protocol (DHCP), provide your local network administrator with the card's MAC address. The MAC address is located on either the shipping box label or the label on this card.

   ❑ MAC Address _____

3. If you are not going to use DHCP to provide any of the settings listed below, contact your local network administrator for the settings.

   In the table below, check the **DHCP** check box or enter the values for manual configuration.You will reference this data later in the procedure.

Item	DHCP*	Manual Configuration	
IPv4	❑	Card IP Address:	_____
		Netmask:	_____
		Gateway:	_____
DNS – Name Servers	❑	Name Server #1:	_____
		Name Server #2:	_____
		Name Server #3:	_____
DNS – Domain	❑	Domain:	_____

* The network administrator normally sets up the DHCP server to provide a static IP address each time the card makes a DHCP request.

4. If you need e-mail functionality, obtain the SMTP mail server's IP address or host name. If using the SMTP host name, verify that you also have the Name Server IP address (see Step 3).

   ❑ SMTP (mail server) IP Address or Host Name _____

Section 2 Install the Card

Note: The hot-swappable Network Card-MS card can be installed without turning off the UPS or disconnecting the load.

To install the Network Card-MS card:

1. Remove the minislot cover from the UPS. Retain the screws.
2. If not already done, record the card's MAC address from the label on the card for future reference (see Step 2 in the "Installation Checklist").

Note: If another card is already installed with an attached communication cable, disconnect the cable and then remove the card.

3. To prevent electrostatic discharge (ESD), place one hand on a metal surface, such as the UPS rear panel.
4. Slide the card into the open slot and secure it with the screws removed in Step 1 (see Figure 1).

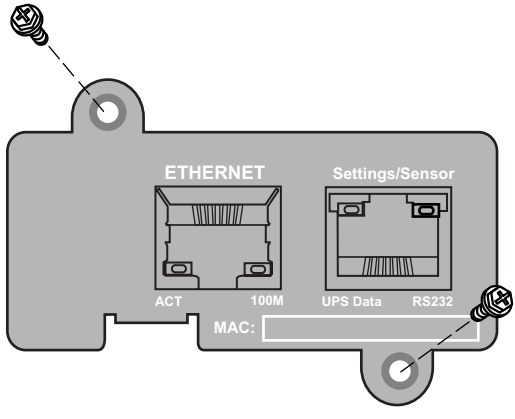

Figure 1. Installing the Card

Section 3 Connect the Card to the Computer

Note: You can set the card parameters through the Settings/Sensor port even if the network is not connected.

Note: You cannot use the Ethernet port for configuration.

Note: When the card is not connected to the network, it continuously attempts to connect. When the connection is established, the LEDs indicate the status.

To connect the card to the computer and the network:

1. Verify that the UPS is on and in normal mode.

Note: If you are not sure how to know if the UPS is in normal mode, refer to the User's Guide for your UPS.

2. Plug the RJ-45 end of the supplied configuration cable into the Settings/Sensor port on the card (see Figure 2).
3. Plug the other end of the serial cable into the serial COM port on the computer. (Depending on your laptop, you may need an adapter for this step.)
4. Connect an active Ethernet cable (not supplied) from the network connection to the Ethernet port on the Network Card-MS (see Figure 2).

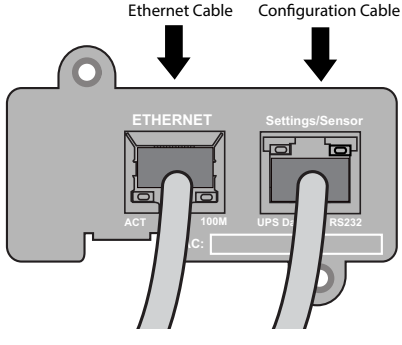

Figure 2. Connecting the Card

5. Wait approximately two minutes until the green UPS Data LED flashes regularly, indicating normal operation.

Section 4 Initialize the Card Configuration

Note: These instructions are for HyperTerminal, but you can use the terminal emulation program of your choice, such as HyperTerminal or PuTTY.

Note: Before you start initializing the card configuration, you will need to know which COM port you are using on your computer.

To initialize the card configuration:

1. Verify that the serial cable (supplied) connects the card's Settings/Sensor port to the computer's COM port. Also verify that the UPS is on and in normal mode.
2. Click **Start** in the computer Start bar. Type **Device** in the search box. Select **Device Manager** in the list above the search box. The Device Manager opens.
3. Locate **Ports (COM & LPT)** in the list and click the adjacent "plus box" to expand the selection. Make a note of the COM port you are using.
4. Open HyperTerminal.
5. Respond **Yes** or **No** to the message asking if you want to make HyperTerminal your default terminal emulation program.
6. **Optional.** When the Connection Description dialog box opens, enter a name for this connection and click **OK**. Otherwise, click **Cancel**.
7. In the New Connection Window, make the menu selection **File > Properties**. On the screen that displays, select **New Connection Properties**.
8. From the "**Connect Using...**"drop-down list, select the COM port that you are using (see Figure 3).

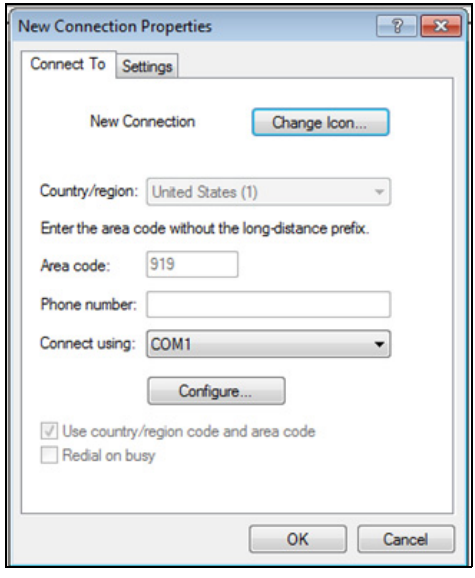

Figure 3. Selecting the COM Port

9. Click **Configure**.
10. In the COM Properties dialog, click **Restore Defaults** to set the correct baud rate, data bits, stop bit, and flow control.
11. Click **OK**.
12. At the blinking screen, press **Enter.** You should be prompted enter the password (default is **admin**).

Note: If the Password prompt does not appear, press **Enter** again. If it still does not appear, check the following conditions:

- Verify the serial line is set to 9600 baud, no parity, 8 data bits, 1 stop bit, and no flow control.
- If the serial line settings are correct, check the cabling to verify all connections are secure.
- Verify that your terminal program is set to the correct communication port for the serial connection.
- Verify that the card has power (one or more LEDs on the card are illuminated). The UPS should be turned on.

13. Enter the password (default is **admin**). The Network Card-MS main menu displays (see Figure 4).

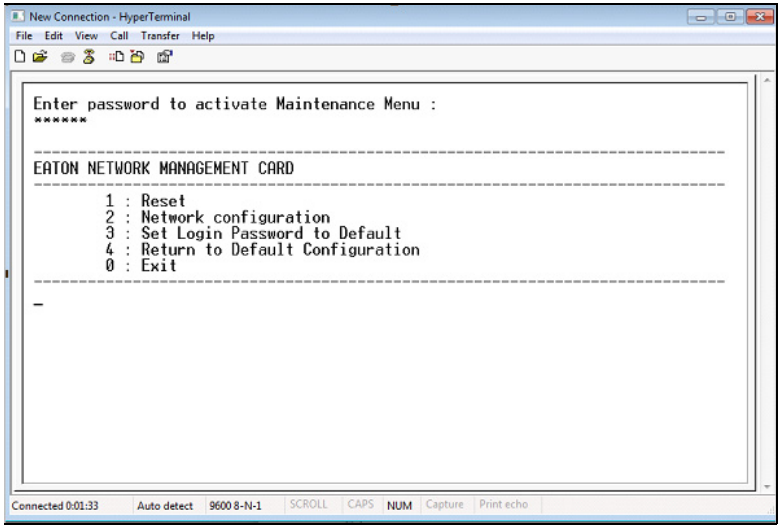

Figure 4. Network Card-MS Main Menu

14. Determine the IP address for the card. Either obtain a DHCP-assigned IP address or manually enter a fixed IP address:

    - To obtain the IP address assigned through DHCP, continue to "Obtain a DHCP-assigned IP Address" on page 10.
    - To manually enter a static (fixed) IP address for the card's network connection, continue to "Assign an IP Address Manually" on page 14.

Section 5 Obtain a DHCP-assigned IP Address

1. From the Network Card-MS main menu, type **2** for Network Configuration. The Network Settings menu displays.
2. Type **1** for Read Network Settings. At the cursor prompt, enter **Y** for "yes," in order to use DHCP to obtain an IP address from the network (see Figure 5).

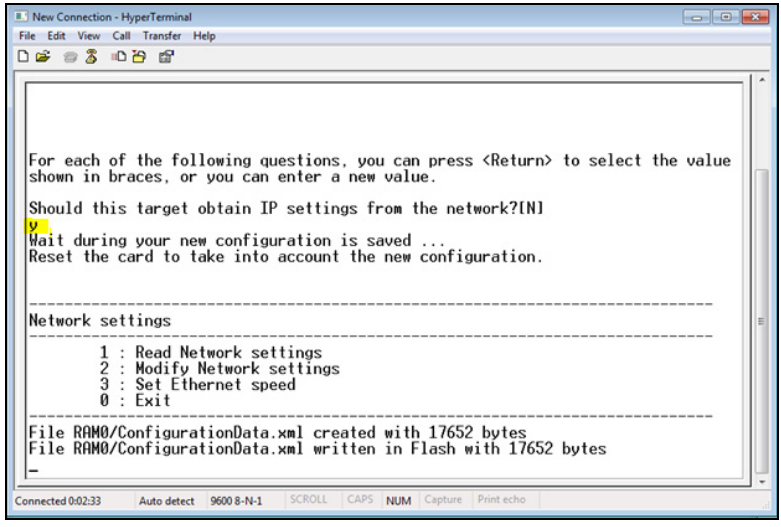

Figure 5. Select Yes for DHCP

3. This setting is saved. Wait approximately two minutes while the card restarts. A series of messages displays. You will see opportunities to press keys in the message line, but do not press any keys until you see the instruction to enter the password to activate the Maintenance menu (see Figure 6).

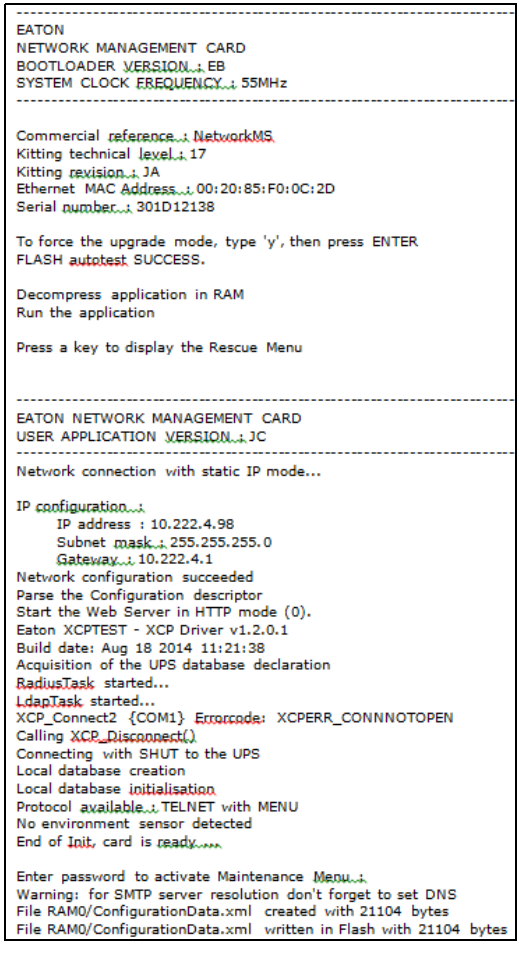

Figure 6. Restart Process Example Messages

4. Enter the password (**admin**).
5. Type **0** and press **Enter** to return to the Network Card-MS main menu.
6. From the main menu, type **1** for the Reset menu and press **Enter** to save this new configuration. Type **1** again and press **Enter** to Restart the card from the boot. (Entering "1" here will not the display the "1" at the cursor, but it will cause the action to start.)
7. From the Network Card-MS main menu, type **2** for Network Configuration and press **Enter.** The Network Settings menu displays.
8. Type **1** for Read Network Settings and press **Enter.**
9. The settings supplied by the server using DHCP display (see Figure 7). Make a note of the static IP address.

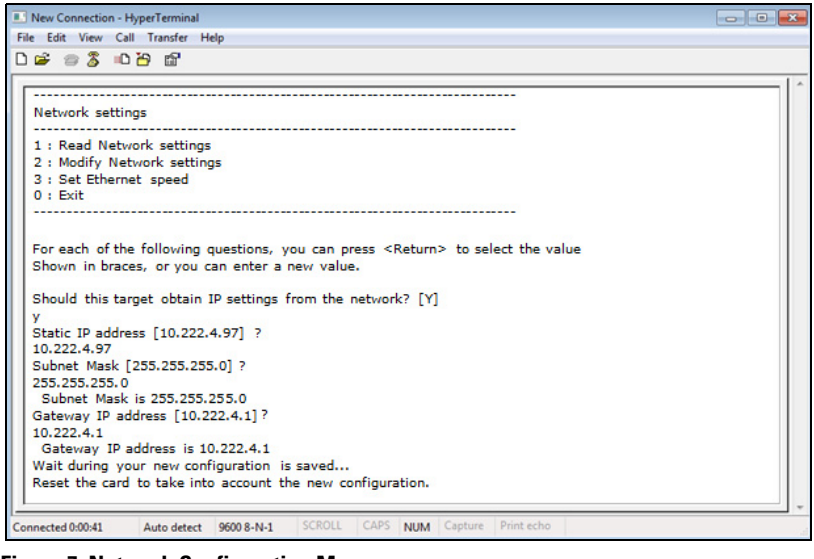

Figure 7. Network Configuration Menu

10. Type **0** and press **Enter** to return to the Network Card-MS main menu.

11. Follow the prompt to Reset (restart) the card from the main menu to take into account the new configuration:
    - Type **1** for the Reset menu and press **Enter**.
    - Type **1** again and press **Enter** to Restart the card from the boot. (Entering "1" here will not the display the "1" at the cursor, but it will cause the action to start.)
12. Wait approximately two minutes while the card restarts. Several messages display. You will see opportunities to press keys in the message line, but do not press any keys until you see the message to enter the password to activate the Maintenance menu.

Note: When the green UPS Data LED flashes regularly, the card has been restarted and is operating normally.

13. The card is now operational. To return to the Network Card-MS main menu, enter the password at the cursor (default is **admin**). Otherwise, type **0** and press **Enter** to exit the Network Settings menu, then type **0** and press **Enter** a second time to exit the main menu.
14. Verify network communication:
    a. Open a browser, enter the IP address in the Address bar, and click **Go**. If the assigned IP address is working, you are prompted to log on.
    b. Log on as administrator. The default user name and default password are "admin."
    c. When the Network Card-MS Web page displays, you know that the card is communicating with the network.

Note: For detailed information, refer to the *Eaton®Network Card-MS User's Guide*, which is available through a link on the Documentation tab on the card's product Web site.

Section 6 Assign an IP Address Manually

1. From the Network Card-MS main menu, type **2** for Network Configuration and press **Enter**. The Network Settings menu displays (see Figure 8).

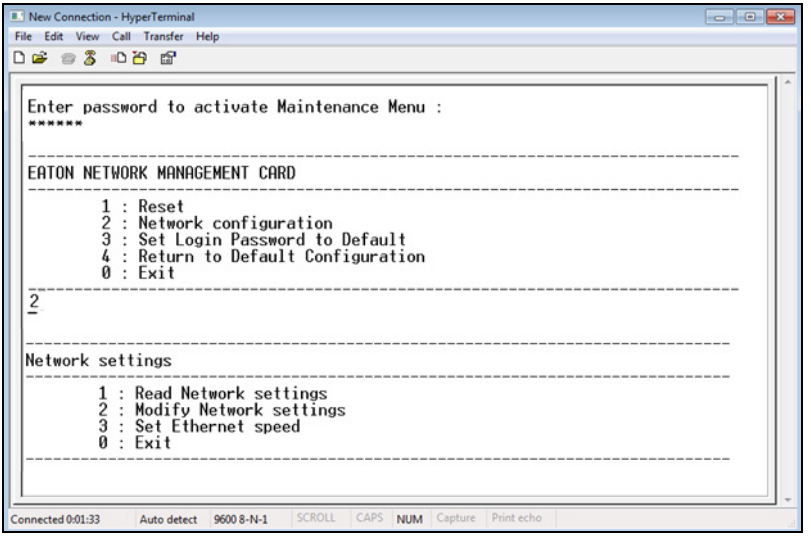

Figure 8. Modifying the Network Settings

2. Type **2** for Modify Network Settings.
3. At the cursor prompt, enter **N** for "no," in order to disable DHCP and manually set an IP address (see Figure 9).
4. Follow the instructions on the screen and enter the fixed IP parameters. Refer to the data you logged in the "Installation Checklist" on page 4. See Figure 9.

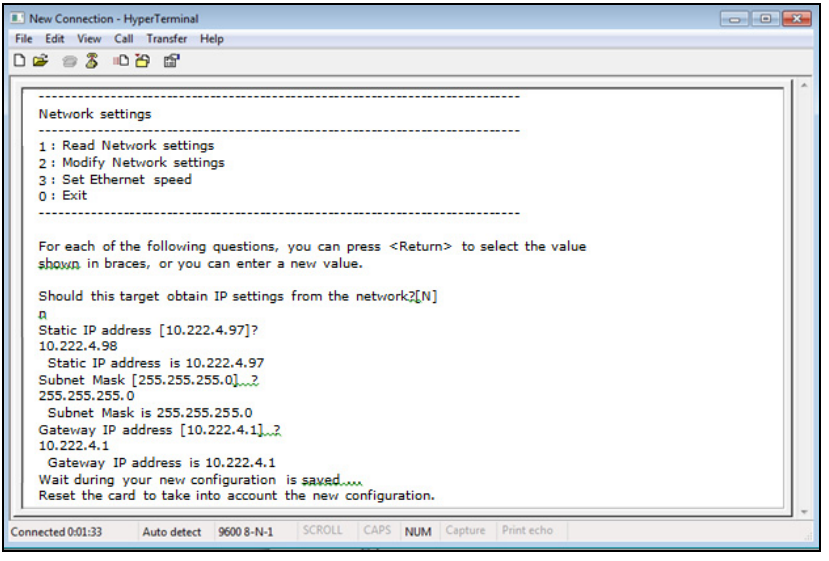

Figure 9. Select No for Manual

5. Follow the prompt to Reset (restart) the card from the main menu to take into account the new configuration:
   - Type **1** for the Reset menu and press **Enter**.
   - Type **1** again and press **Enter** to Restart the card from the boot. (Entering "1" here will not the display the "1" at the cursor, but it will cause the action to start.)

6. Wait approximately two minutes while the card restarts. Several messages display. You will see opportunities to press keys in the message line, but do not press any keys until you see the message to enter the password to activate the Maintenance menu (see Figure 10).

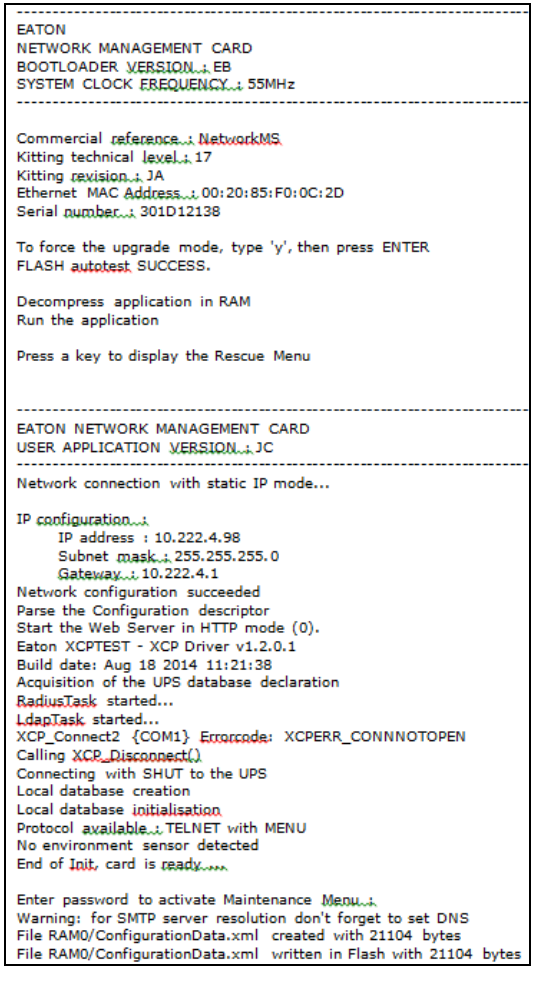

Figure 10. Restart Process Example Messages

Note: When the green UPS Data LED flashes regularly, the card has been restarted and is operating normally.

7. The card is now operational. If you want to return to return to the Network Card-MS main menu, enter the password at the cursor (default is **admin**). Otherwise, type **0** and press **Enter** to exit the Network Settings menu, then type **0** and press **Enter** to exit the main menu.

8. Verify network communication:

    a. Open a browser, enter the IP address in the Address bar, and click **Go**. If the assigned IP address is working, you are prompted to log on.

    b. Log on as administrator. The default user name and default password are "admin."

    c. When the Network Card-MS Web page displays, you know that the card is communicating with the network.

Note: For detailed information, refer to the user's guide for the *Eaton®Network Card-MS User's Guide*, which is available through a link on the Documentation tab on the card's product Web site.

Section 7 Disable Browser Compatibility Mode

Browser compatibility allows Web pages designed for older versions to display properly. If data does not display properly on the Network Card-MS Web page, the browser compatibility mode should be disabled.

To disable the compatibility mode:

1. Open a Web browser.
2. In the Menu bar select **Tools > Compatibility View Settings**. The Compatibility View Settings window opens (see Figure 11).

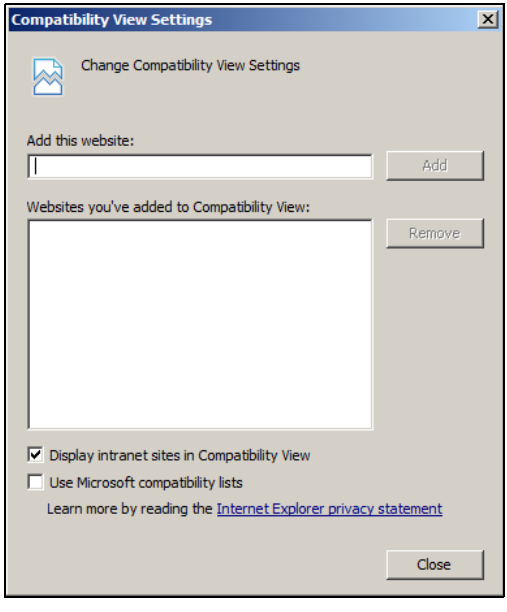

Figure 11. Compatibility View Settings Window

3. Uncheck (disable) the **Display all websites in Compatibility View** checkbox to disable compatibility mode and click **Close**.

Note: Close and re-open the browser so that the changes take effect.

Section 8 Register a PredictPulse Subscription

PredictPulse is a remote monitoring and management subscription service that collects and analyzes data from connected power infrastructure devices, providing Eaton with the insight needed to make recommendations and take action on your behalf. This service has limited availability outside of the United States. For more information go to **www.eaton.com/predictpulse**.

Note: Contact your Eaton service representative for availability of PredictPulse in your region.

Use the universal PredictPulse Subscription Wizard to configure your profile and register the Eaton UPS devices monitored by PredictPulse.

To begin the subscription registration, download the universal PredictPulse Wizard from the PredictPulse web site and enter the card device and profile data. An e-mail with additional instructions to finish registering and configuring the card is automatically sent to the provided e-mail address.

Note: Devices can be registered individually or as a group using the wizard.

To register an installed Network Card-MS for PredictPulse:

1. Download the Eaton PredictPulse Wizard from **www.eaton.com/predictpulse**.
2. Double-click the downloaded **Activate PredictPulse.exe** icon. The PredictPulse registration window opens (see Figure 12).

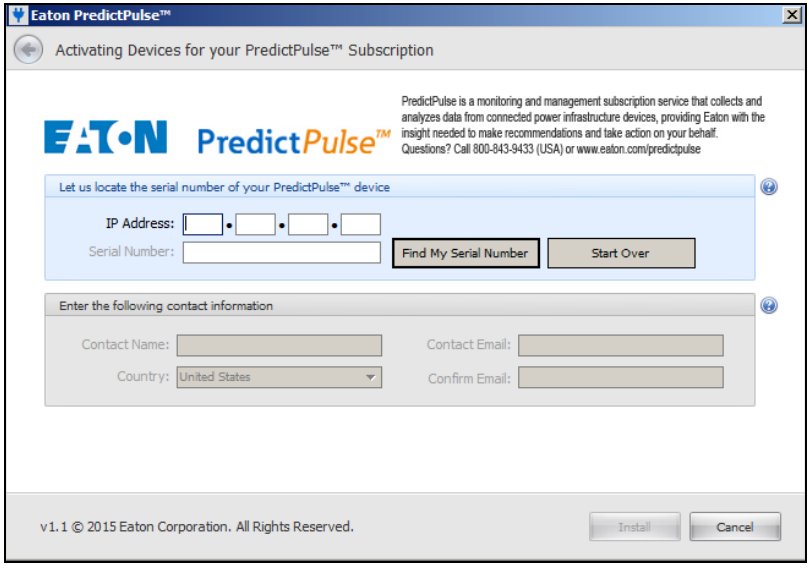

Figure 12. Registering a PredictPulse Subscription

3. Enter the IP address for the installed Network Card-MS and click **Find My Serial Number**.

Note: If the serial number does not display, click **Start Over** and manually enter the serial number.

4. Complete the following fields:
   - **Contact Name:** First and last name of the contact person.
   - **Contact Email**: E-mail address of the contact person for event data.
   - **Confirm Email**: E-mail address again for confirmation.
   - **Country**: Country where the main contact resides.
5. Click **Install** to save. The progress bar indicates the percent of completion.

6. When this stage of registration completes, an information window explains the next step (see Figure 13). Click **Activate Another Serial Number** to register multiple devices or click **Exit** to continue.

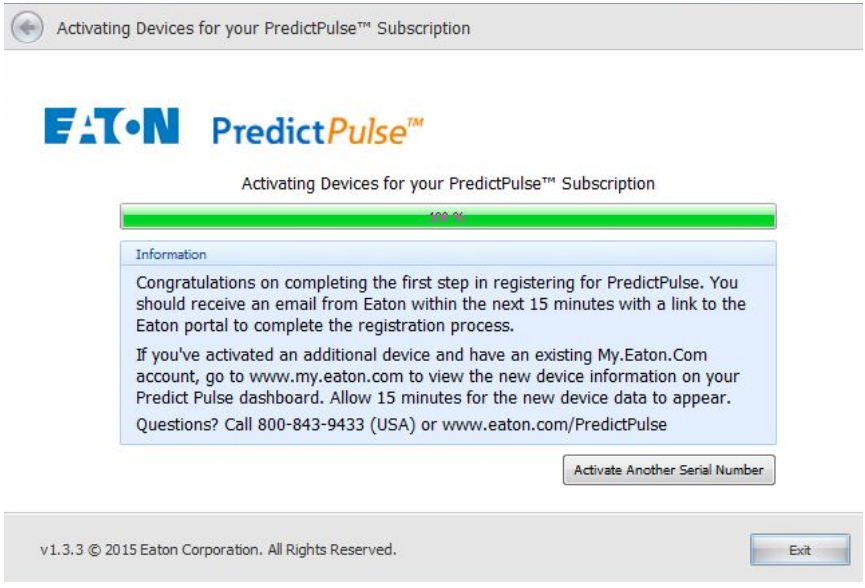

Figure 13. Example of First Step E-mail

7. After approximately 15 minutes, the contact person identified in the PredictPulse Wizard will receive a confirmation e-mail (see Figure 14).

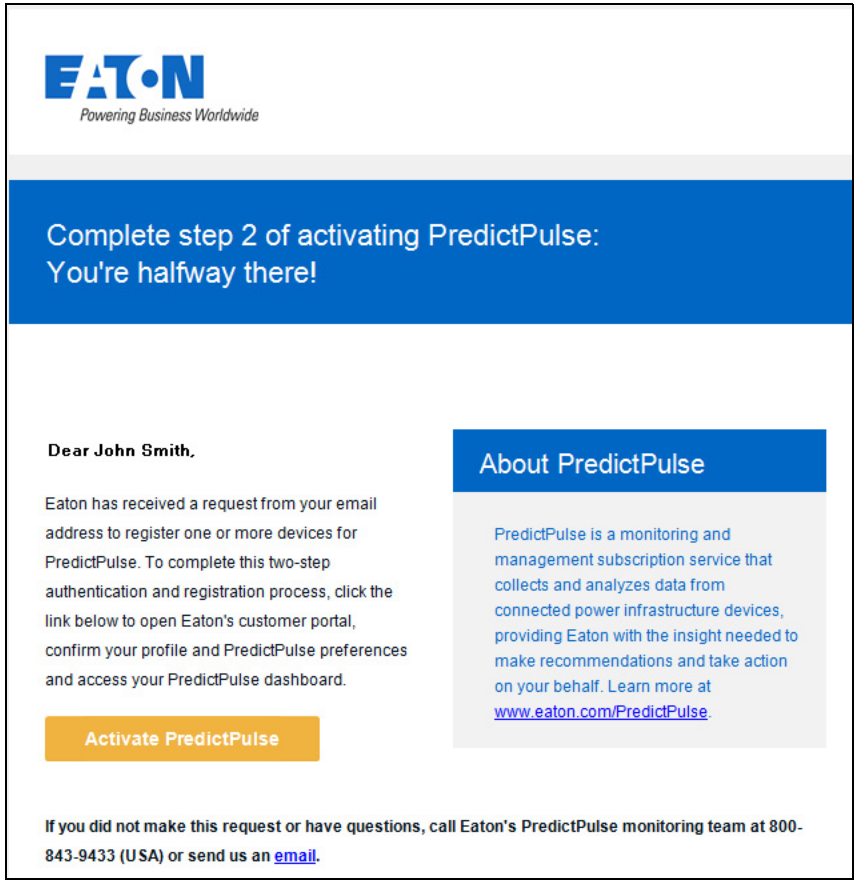

Figure 14. Example Confirmation E-mail

8. Click **Activate PredictPulse** to proceed.

Note: If you try to register a device that has already been registered, you will receive an error message e-mail from the PredictPulse support team with instructions about the problem.

9. A profile e-mail displays with your profile data (see Figure 15).

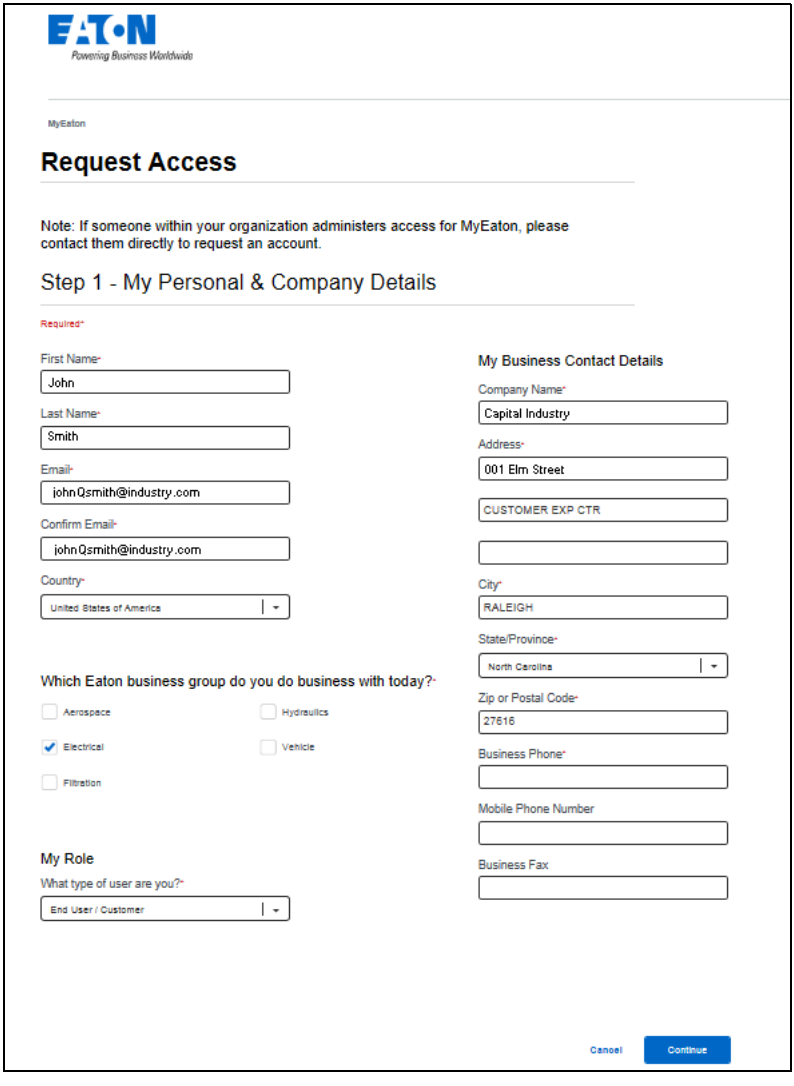

Figure 15. Example Profile Page

10. Click **Continue** to finish the registration (see Figure 16).

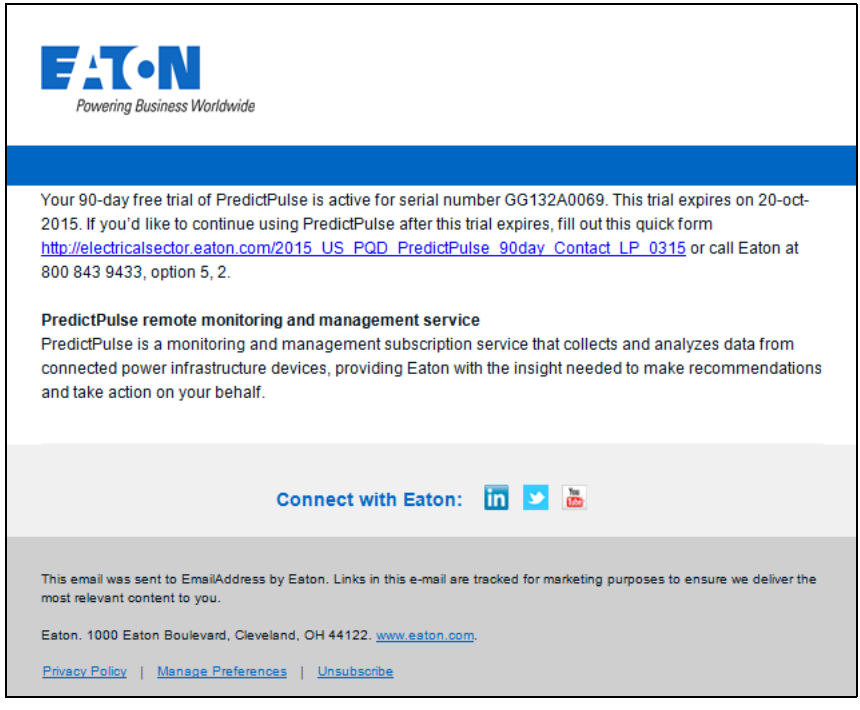

Figure 16. Example Completion E-mail

P-164000507 1