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Tech Note 2

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## IEI eMerge™ Quick Start Guide

**The purpose of this document:** is to provide install technicians with an introductory setup guide that can be performed in minimal time.

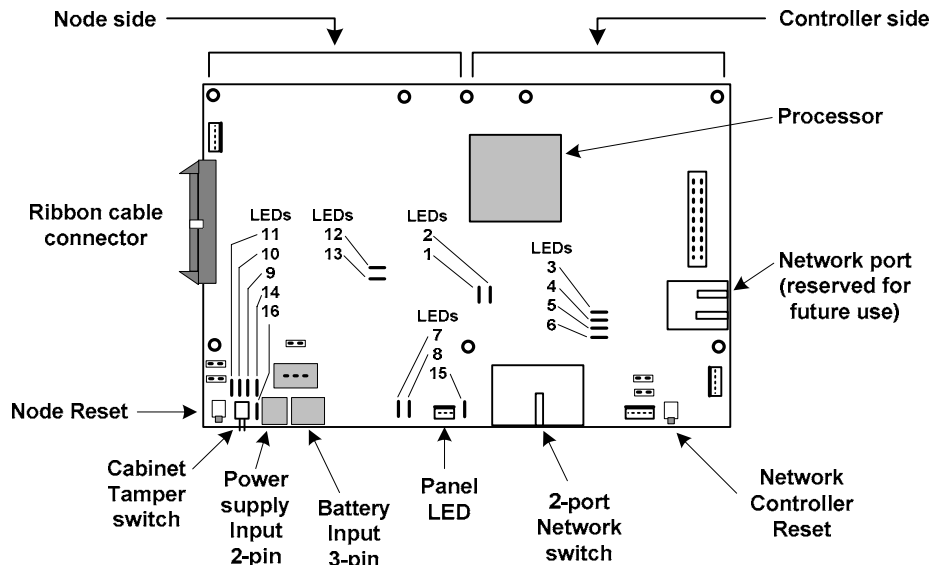
**NOTE:** This document is not intended to substitute for the Installation Manual and the online Help system. It is intended only to get your eMerge up and talking on the network and to setup basic access control.

**Minimum system hardware required:** An IEI eMerge with a Network Controller and a Node, an Access Control blade, a Wiegand card reader, an access card, and a router with DHCP.

**What you will need to know:** Your test access card's format bit length and facility code.

### Complete IP and Network Settings with Init Mode.

1. Setup a router with DHCP, set its address to 192.168.0.1, and connect it to your network.
2. Connect the router to one of the network ports on the Network Controller using a CAT 5 or better cable with an RJ-45 connector. If the network connection is functioning properly the Amber LED on the network switch will light and LED 5 on the Network Controller will light green. See the drawing below.



The Network Controller/Node blade

3. Open a browser window on a computer connected to the router. The computer must have its network IP address set to 192.168.0.X, or DHCP, before you connect to the router.

4. In the browser address field enter 192.168.0.250. This is the Network Controller default IP address. The Init Mode page should now display allowing you to set network IP settings.

**NOTE:** If the Init Mode page does not display select **Setup : Site Settings : Network Controller** and click the link in the **Initmode Settings** section.

5. In the **Network Controller Settings** section, the default values should work.
6. In the **Node IP Addressing Scheme** section, the default **Method** is **DHCP**. This should work.
7. In the **Time Settings** section, enter the current date and time.
8. In the **Initmode Settings** section select **No** from the drop-down. This ensures that Init mode will not redisplay when you reboot. You can redisplay the Init mode page at any time from the security application by selecting **Setup : Site Settings : Network Controller** and click the link in the **Initmode Settings** section.
9. Click **Save**.
10. Click **Reboot**. The application may take several minutes to shut down and restart. You will hear two beeps when it shuts down, followed by a single beep when it restarts.
11. Open a browser window on a computer connected to the router and in the Address box, enter the IP address that you set for the Network Controller.
12. On the page that appears, the **Activation Key** and **Product Key** boxes should contain the correct keys for your system. If these boxes are empty, you will need to enter this information manually. The activation and product keys are included on a license label that is shipped with the system.
13. After reviewing the license agreement, click the **Apply** button to accept it.

**IMPORTANT:** Click the **Apply** button only once.

14. At the Login page, enter the **User name** "admin."
15. Enter the **Password** "admin."
16. Click **Go**. The security application will now display.

### **Configure and Enable the Node.**

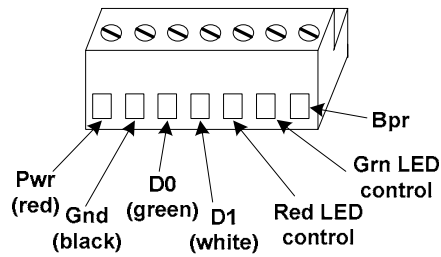
1. In the application select **Setup : Site Settings : Network Nodes**.
2. Select from the **Name** drop-down the node you wish to enable. In this Quick Start there should only be one node to choose.
3. Click the **Rename** link under the drop-down and enter a name that will help you to identify it, e.g. "Quick Start Node."

**NOTE:** Do not change the **Unique Identifier** field.

4. Click to check the **Enabled** box to the right of the **Name** drop-down. This allows the communication of security data between the Network Controller and the Node.
5. Click **Save**.

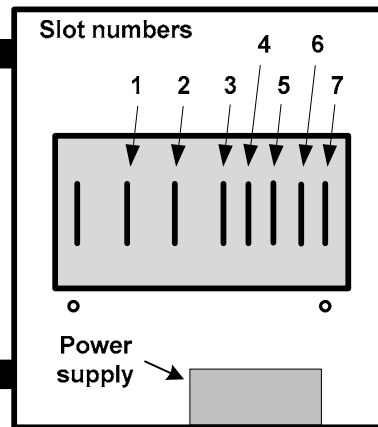
### **Wire and Setup a Reader.**

1. Wire up one reader and connect it to one of the two reader connectors on the Access Control blade in the eMerge cabinet. See the drawing below.



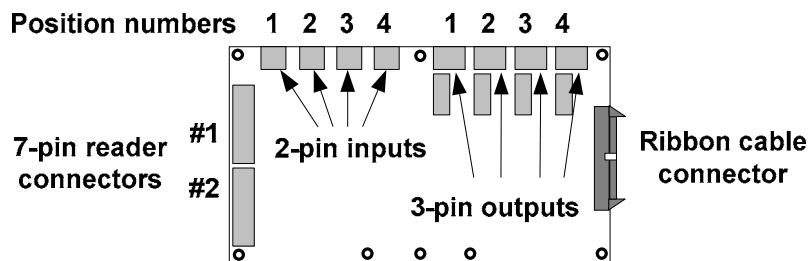
A Reader connector

2. In the application select **Setup : Access Control : Reader/Keypads**.
3. Enter a name for the reader in the **Name** text box, for example: "Front door reader."
4. Be sure that the **Enabled** checkbox to the right of the **Name** text box is checked.
5. Select "Quick Start node" from the **Network Node** drop-down list.
6. Select from the **Expansion Slot** drop-down list the eMerge cabinet slot number of the Access Control blade. See the drawing below.



The eMerge cabinet slot numbering.

7. Select from the **Position** drop-down list the Access blade connector position number to which the reader is connected. See the drawing below.



An Access Control blade with connectors numbered.

8. Click **Save**.

### Setup a Lock Output.

Physically wiring a lock output is not necessary for purposes of this Quick Start. Software setup only will be sufficient. You will be able to determine if the output has fired by the click sound of the relay on the Access blade after a valid card read.

1. Select **Setup : Alarms : Outputs**.
2. Enter a name for the output in the **Name** text box, for example: "Front door lock."
3. Be sure that the **Enabled** checkbox to the right of the **Name** text box is checked.
4. Select "Quick Start node" from the **Network Node** drop-down list.
5. Select from the **Expansion Slot** drop-down list the eMerge cabinet slot number of the Access blade. See the drawing above.
6. Select from the **Position** drop-down list the Access blade connector position number to which the output is connected. See the drawing above.
7. Click **Save**.

### Setup a Portal.

1. Select **Setup : Access Control : Portals**.
2. Enter a name for the portal in the **Name** text box, for example: "Front door portal."
3. Select "Quick Start node" from the **Network Node** drop-down list.
4. Select "Front door lock" from the **Lock** drop-down list and enter the **Unlock** time in seconds.
5. Select "Front door reader" from the **Reader 1** drop-down list.
6. Click **Save**.

### Enter a Card/Keypad Format.

The Wiegand 26-bit format is in the system by default. Therefore, if you have a Wiegand 26-bit card you will only need to complete step 5 by entering the correct facility code, and then click **Save**.

1. Select **Setup : Access Control : Card/Keypad Formats**.
2. Click the **add** link under the **Name** drop down list.
3. Enter a **Name** for the card format you are creating. This is a required entry.
4. In the **Bit Length** text box enter the number of bits in this card format. This is a required entry. The number entered here determines the number of bit definition dropdowns provided below.
5. Check the card manufacturer documentation for the facility code of the card batch that you are using. Enter this **Facility Code** number in the text box.
6. If the number printed on the card is the same as the card ID number then check the **Hot Stamp # = Card ID** box.
7. **Bit definitions in card format:** For each bit in the card select from the dropdowns the function of the bit. **P** is for a parity bit. **F** is for a facility code bit. **N** is for a card number bit. The number of bit dropdowns will match the **Bit Length** entered above.
8. Click **Save**.
9. A dialog box with the following warning may appear: "Changing the Card Format may invalidate cards already entered into the system. Are you sure you want to continue?"
10. Click **OK**.

### Setup an Access Level.

1. Select **Setup : Access Control : Access Levels**.
2. In the **Name** field enter a name for this new access level, for example "Quick Start access."
3. Be sure that the **Enabled** checkbox to the right of the **Name** text box is checked.
4. Select **Single reader** to assign and select "Front door reader" from the appropriate drop-down list.
5. Be sure that the default time specification, "Always," is selected from the **Time Spec** drop-down list.
6. Click **Save**.

### Add a Person

1. Select **Administration : People : Add**.
2. In the **Last Name** text box enter the name, "User." In the **First Name** text box enter the name, "QuickStart."
3. **Activation Date/Time** defaults to today at 00:00 AM. This need not be changed for this Quick Start.
4. Click **Next**.

### Issue a Card.

1. In the **Access Control** tab of the Personal Information page select **<add new>** from the **Access Cards** list box.
2. Select from the **Card Format** drop-down list the card type being issued.
3. Click the **Read Card** button.
4. The **Issue Card** popup window will appear.
5. In the popup window select "Front door reader" from the **Reader** drop-down list and click **Go**.
6. Swipe or pass the card by the reader and the electronically encoded number in the card will appear in the **Encoded #** field back in the **Access Control** tab of the Personal Information page.
7. From the **Access Levels Available** list in the **Access Control** tab select the "Quick Start access" and click the right arrow button to move it into the **Selected** list.
8. Scroll down and click **Save**.

### Display the Activity Log and swipe the card on the reader.

1. Select **Monitor : Activity Log**.
2. Pass the card across the reader. Listen for the click of the output relay on the Access blade. This indicates that the lock output has fired.
3. Check the Activity Log for a log entry of valid access. The most recent entry appears at the top of the list.

## Results and Troubleshooting.

Log Entry	What to do next...
Access granted for QuickStart User	Congratulations. You have successfully set up the eMerge for access control. To complete a full installation at a customer site use the Installation Guide and Help system.
Access denied [BIT MISMATCH]	The access card used has a different bit format than the card format you entered. Correct the card format. Select <b>Setup : Access Control : Card/Keypad Formats.</b>
Access denied [LOCATION]	This person's access level does not allow the use of this reader. Edit the access level definition. Select <b>Setup : Access Control : Access Levels.</b>
Access denied [NOT IN NODE]	The access card was not successfully entered into the database, or this person has not been assigned an access level. Select <b>Administration : People</b> and check the <b>Access Control</b> tab of the Personal Information page.
Access denied [TIME]	The time specification assigned to this person's access level does not allow access at this time. Edit the time specification. Select <b>Setup : Time : Time Specs.</b>
Access denied [EXPIRED]	This person's record has expired. Edit the expiration date on the Personal Information page. Select <b>Administration : People.</b>
Access denied [WRONG DAY]	The Time Specification does not allow access for this person on this day. Edit the time specification. Select <b>Setup : Time : Time Specs.</b>
<no log entry>	It is likely that the Network Controller and the Node are not communicating. Recheck the IP and network settings.