1.0 Connecting OpenGN to an FX-2000

Attention: Before you begin, follow the instructions in LT-1113 "OpenGN Administrator's Guide" (available on http://www.mircom.com) to install OpenGN and configure the computer running OpenGN and the OpenGN Gateway.

Note: These instructions should be completed by someone who is familiar with configuring the FX-2000. See LT-657, the FX-2000 Installation and Operation manual available on **http://www.mircom.com**.

You need:

- ARW-VESP211 Advantech Serial to Ethernet Converter
- Advantech software CD
- Ethernet cable (maximum 300')
- 9 pin male to female serial cable
- OpenGN version 3.4 or later
- OpenGN Gateway version 3.4 or later
- OpenGN license key
- Ethernet cable
- The FX-2000 Config Utility version 2.3.30 or later
- The FX-2000 Fire Alarm Control Panel with firmware version 2.14 or later

1.1 Connect the ARW-VESP211

1. Connect the 9 pin serial cable to the COM port on the ARW-VESP211.
2. Connect the other end of the 9 pin serial cable to the RS-232 port on the FX-2000. See Figure 2.
3. Use an Ethernet cable to connect the LAN port on the ARW-VESP211 to the computer running the OpenGN Gateway.
4. Connect the ARW-VESP211 to the power.

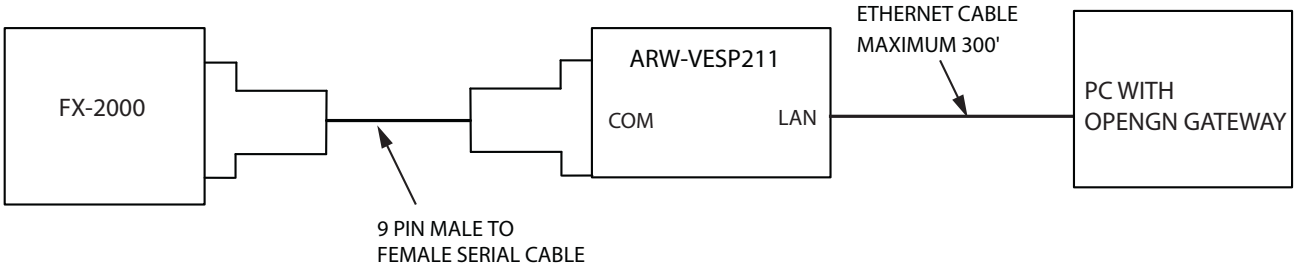

Figure 1 Connect the ARW-VESP211 to the OpenGN Gateway Computer

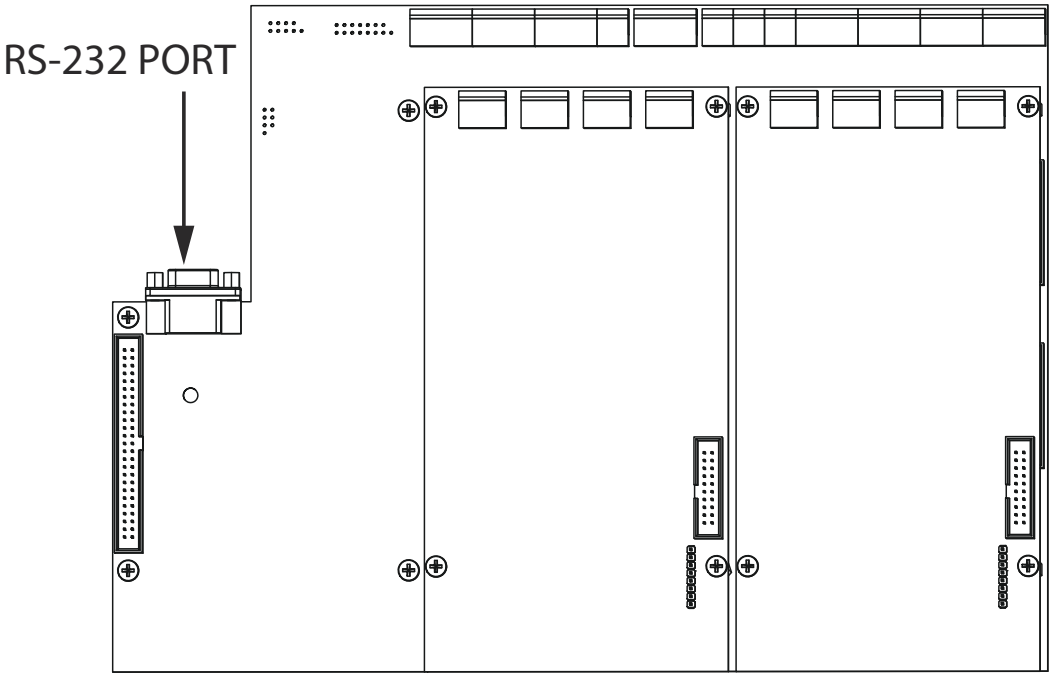

Figure 2 RS-232 Port on the FX-2000

1.2 Configure the ARW-VESP211

1.2.1 Configure the OpenGN Gateway Computer to Connect to the ARW-VESP211

In order to initially connect to the ARW-VESP211, the OpenGN Gateway computer must have a specific IP address.

1. On the computer that the OpenGN Gateway is on, click **Start**, then click **Settings**.
2. Click **Network and Internet**.
3. Click **Network and Sharing Center**.
4. Click the Ethernet connection.

The **Ethernet Status** window appears.

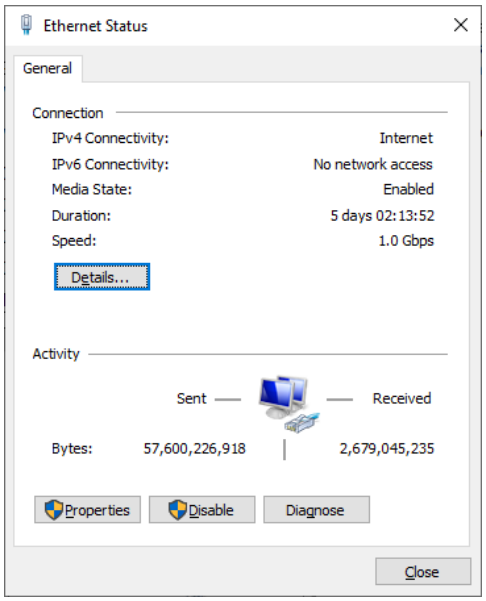

Figure 3 Ethernet Status

5. Click **Properties**.

   The **Ethernet Properties** window appears.

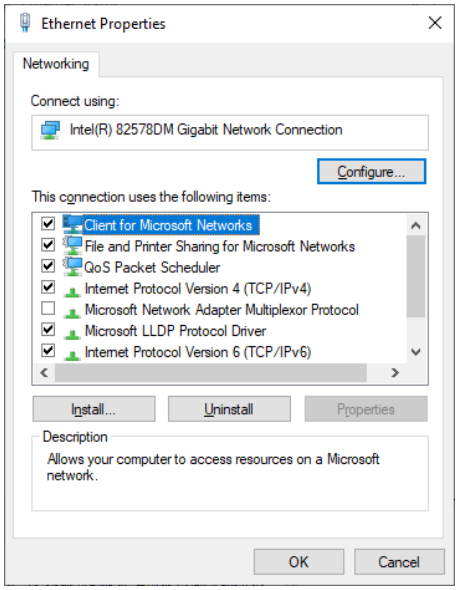

Figure 4 Ethernet Properties

6. Double-click **Internet Protocol Version 4 (TCP/IPv4)**.

The **Internet Protocol Version 4 (TCP/IPv4) Properties** window appears.

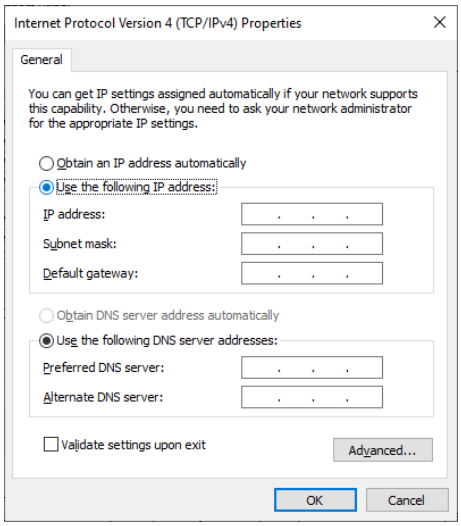

Figure 5 Internet Protocol Version 4 (TCP/IPv4) Properties

7. Click **Use the following IP address**.
8. Type the following addresses:
   - **IP address:** 169.254.102.40
   - **Subnet mask:** 255.255.0.0
5. Click **OK**.

1.2.2 Install the Vlinx Serial Server Manager

1. Insert the Advantech CD into the OpenGN Gateway computer.

   The Vlinx Serial Server Manager Installation Wizard starts automatically.

Figure 6 Welcome to the Vlinx Serial Server Manager Installation Wizard

2. Follow the instructions on the screen to install the Vlinx Serial Server Manager.

1.2.3 Configure the ARW-VESP211

1. On the OpenGN Gateway computer, open the Serial Server Manager: click **Start** > **B&B Electronics** > **Vlinx** > **Vlinx Serial Server Manager**.

   The Vlinx Serial Server Manager appears.

Figure 7 Vlinx Serial Server Manager

2. Click **I don't know the IP address of the device**.
3. Click **Connect**.

   The Vlinx Serial Server Manager looks for devices.

Figure 8 Advantech Device Details

The Login screen for the ARW-VESP211 device appears.

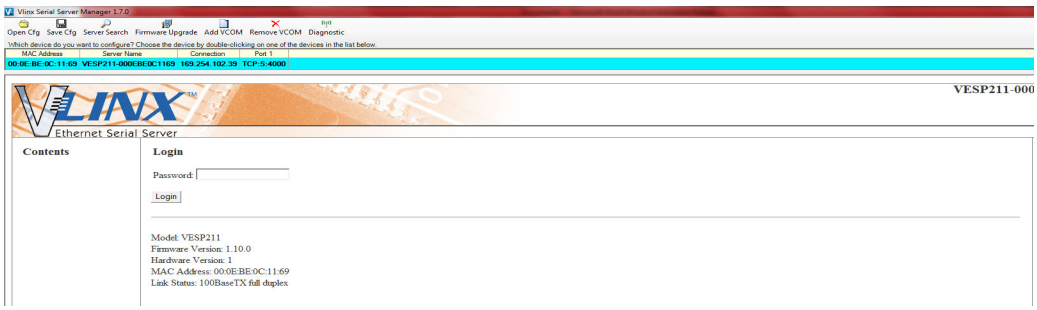

Figure 9 Login screen

4. Enter the Login password, then click **Login**. By default, the password is blank.

   The General screen appears.

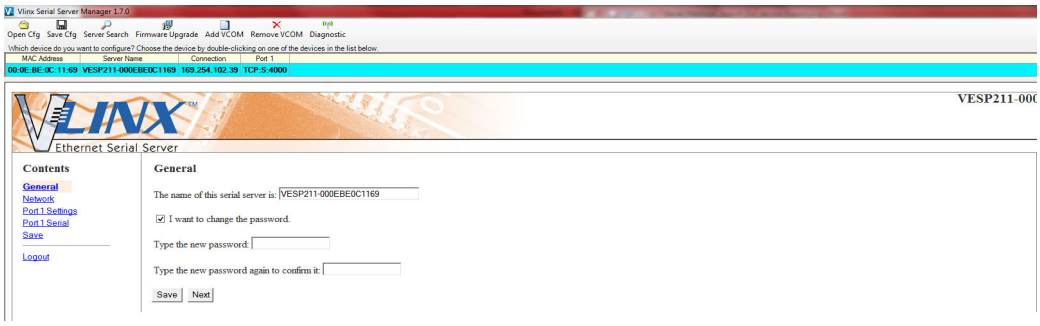

Figure 10 General screen

5. Enter a name that describes the panel that the device is connecting to, for instance **FX-2000**.
6. Select **I want to change the password**, then enter the new password.
7. Click **Save**.

Note: Keep a record of the password. You will need it in a later step.

8. Click **Network** on the left sidebar.

   The Network screen appears.

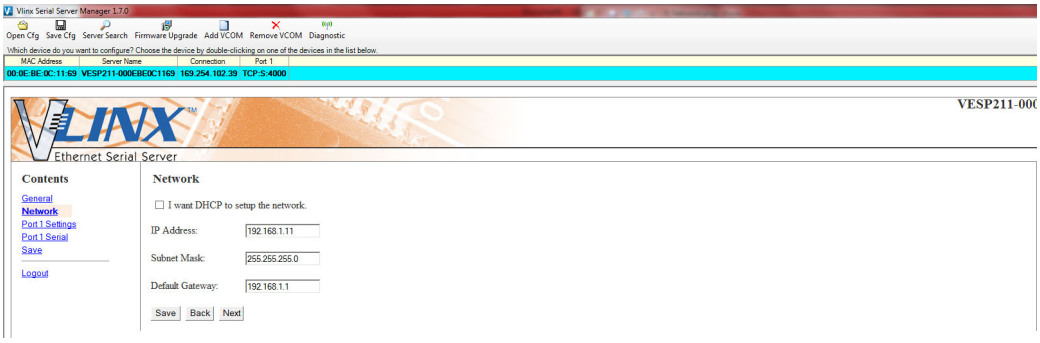

Figure 11 Network screen

9. Enter the following information:

IP address **Subnet Mask** **Default Gateway**	Consult your network administrator for assistance. The IP address must be in the same range as the IP address of the computer running the OpenGN Gateway. The gateway and subnet mask must be the same as they are on the OpenGN Gateway computer. For example, if the OpenGN Gateway computer's IP address and subnet mask are 192.168.1.10 and 255.255.255.0, then you can enter **192.168.1.11** and **255.255.255.0** as the ARW-VESP211's IP address and subnet mask.

Note: Keep a record of the IP address. You will need it in a later step.

To ensure a constant connection to OpenGN, you must assign a static IP address to the ARW-VESP211.

10. Click **Next**.

    The **Port 1 Settings** screen appears.

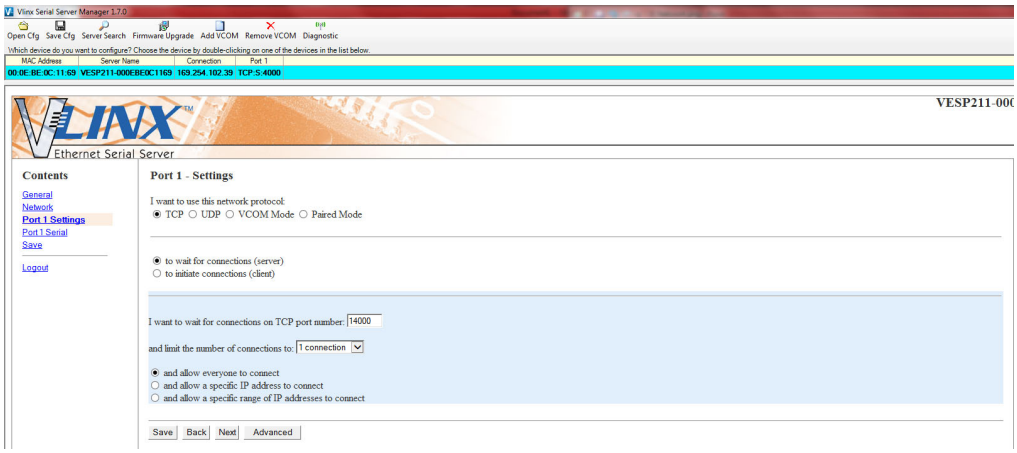

Figure 12 Port 1 - Settings

11. Enter the following information:

I want to use this network protocol	TCP
to wait for connections (server)	Select this option
I want to wait for connections on TCP port number	14000
and limit the number of connections to	1 connection
and allow everyone to connect	Select this option

12. Click **Next**.

    The **Port 1 - Advanced** window appears.

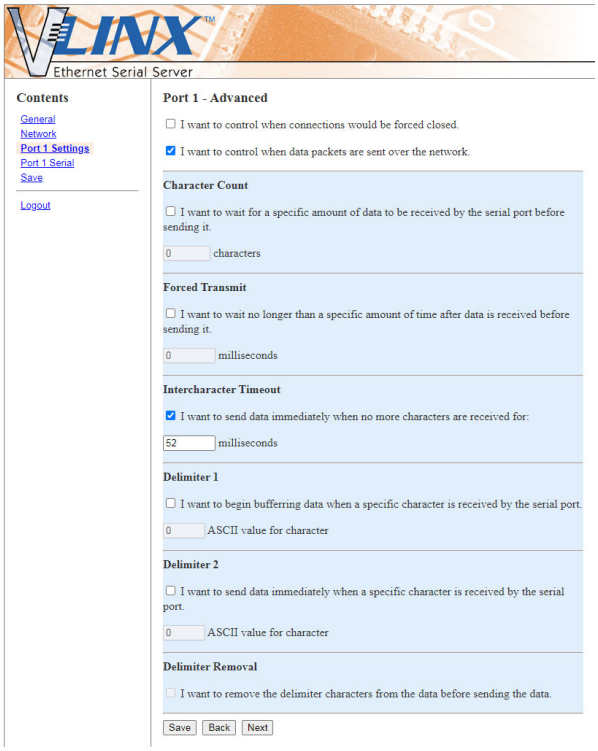

Figure 13 Port 1 - Advanced

13. Enter the following information:

I want to control when data packets are sent over the network	Select this option
Under Intercharacter Timeout: "I want to send data immediately when no more characters are received for"	52 milliseconds

14. Click **Next**.

    The **Port 1 - Serial** window appears.

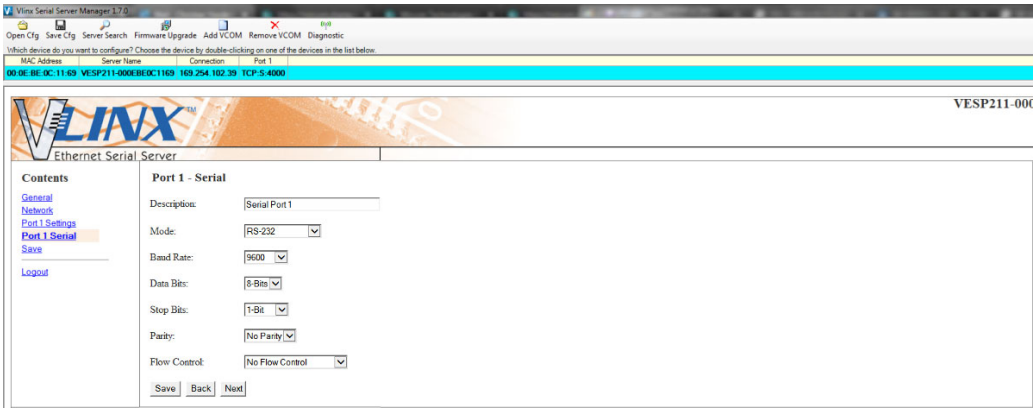

Figure 14 Port 1 - Serial

15. Enter the following information:

Mode	RS-232
Baud	9600
Data bits	8-Bits
Stop bits	1-Bit
Parity	No Parity
Flow Control	No Flow Control

16. Click **Next**.
17. Under **Save**, click the **Save** button and wait for the Login screen to appear.

1.2.4 Configure OpenGN Gateway Computer

- Change the IP settings for the OpenGN Gateway computer to their previous values. See section 1.2.1 on page 2 for instructions on how to change the IP settings.

  If you need assistance, contact your network administrator.

  If you are connecting the OpenGN Gateway computer to an FX-2000 panel directly over Ethernet, enter an IP address that is different than the IP address of the FX-2000 panel. Enter the same subnet mask as the subnet mask on the panel.

1.3 Export the Job File

You need:

- The FX-2000 Config Utility version 2.3.30 or later

1. Connect the FX-2000 to the computer that has the FX-2000 Config Utility installed on it.
2. In the FX-2000 Config Utility, open the job for the FX-2000 panel.
3. Select **Main Display**.
4. Select **Enable Printer Heart Beat**.
5. Under **Locale**, select **English** in the Language menu.
6. In the **Time Format** menu, select the date in the format **Month Day, Year hour:minute** as shown in Figure 15.

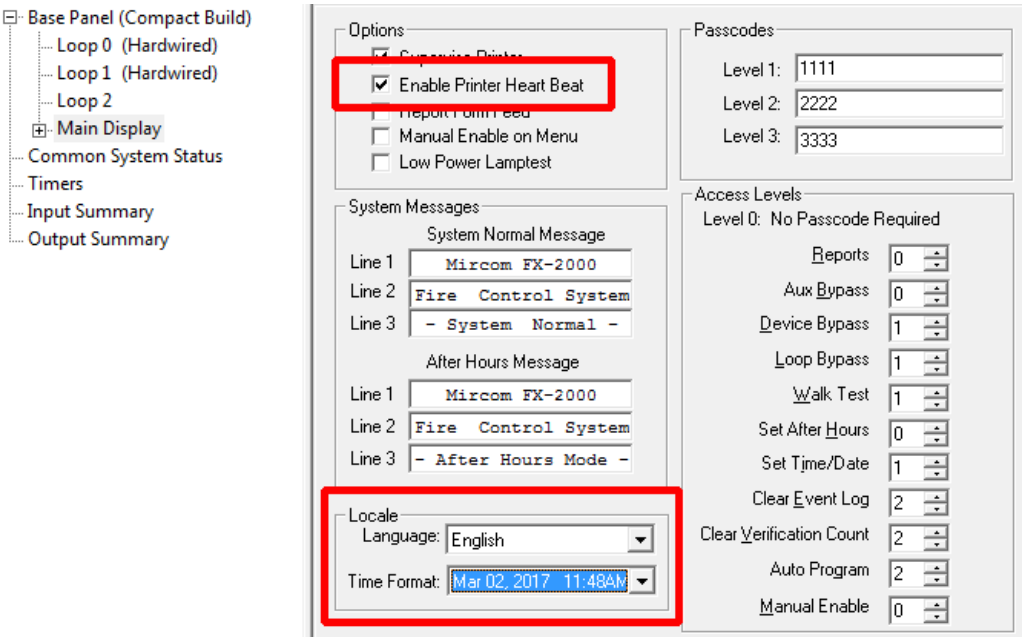

Figure 15 FX-2000 Config Utility

7. Send the job to the panel.
8. Click **Job > Extract Job**.

   The **Specify Database File to Extract Into** window appears.

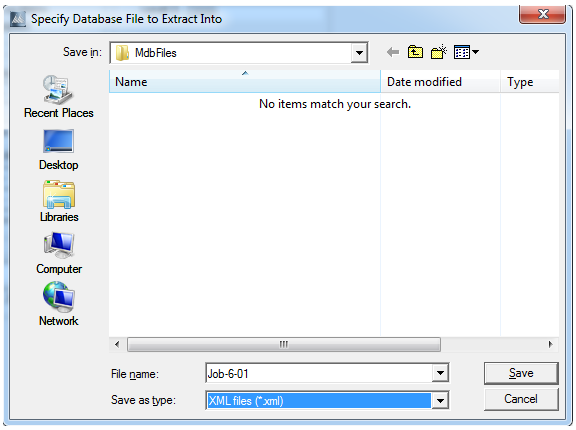

Figure 16 Specify Database File to Extract Into

9. In the **Save as type** menu, click **XML Files (*.xml)**, and then click **Save**.
10. In the XML Export window, select **OpenGN Ph 11 Config.xml**, and then click **OK**.

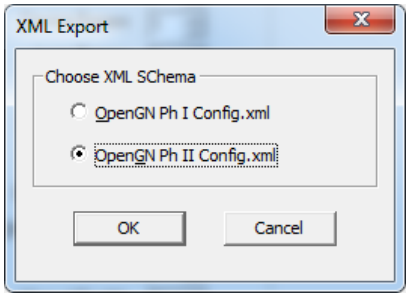

Figure 17 XML Export

The job file is saved with the name **JobX-Y.xml**, where **X** is the job number and **Y** is the job version.

1.4 Import the XML Configuration File into OpenGN

1. Transfer the job file you just saved to the computer that OpenGN is running on.
2. Insert the OpenGN CodeMeter license key in the computer.
3. Start OpenGN.

   The Login window appears.

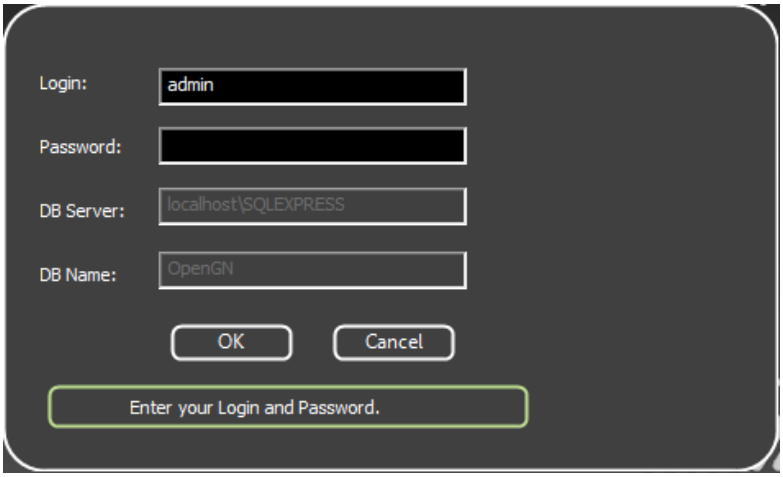

Figure 18 Login Window

4. Select the user from the **Login** menu.
5. Type the password.
6. Click **OK**.

The OpenGN Main Display window appears.

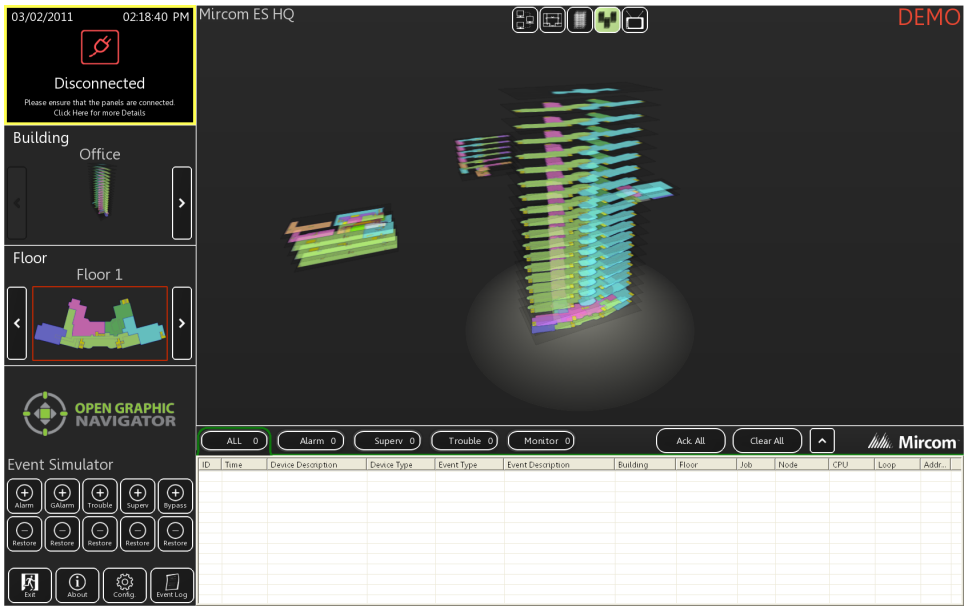

Figure 19 OpenGN Main Display Window

7. Click the **Config** button from the Main Display window. Click **Yes** to confirm that you want to enter the configuration section.

   The Configuration window appears.

8. Click the **Settings** button in the lower right-hand corner of the Configuration window.

   The Panel Settings window appears.

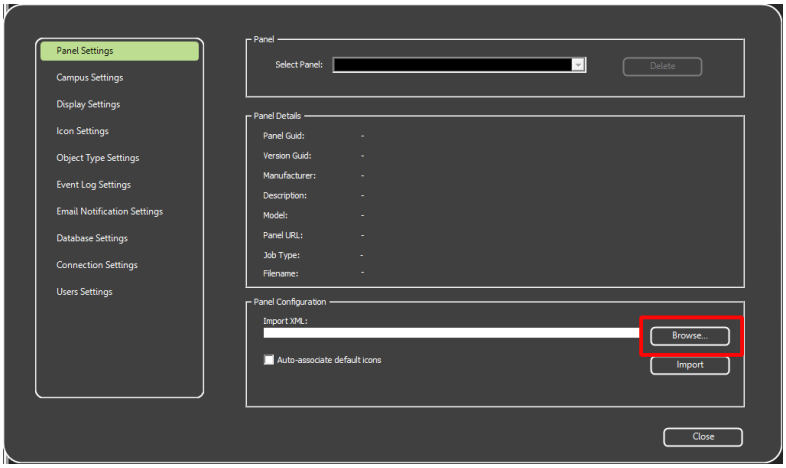

Figure 20 Panel Settings

9. Click **Browse** in the Panel Configuration section, and then navigate to the job file.
10. Select **Auto-associate default icons** if you want to associate the object icons with the existing system icon images.

> **Note:** If you are importing a new version of a previously imported job file, uncheck **Auto-associate default icons**. Otherwise, any custom icon settings you have made will be erased.

11. Click **Import XML**.
12. If the job already exists, a window appears asking you if you want to update the stored version of the job with the one you are importing. Click **Yes**.

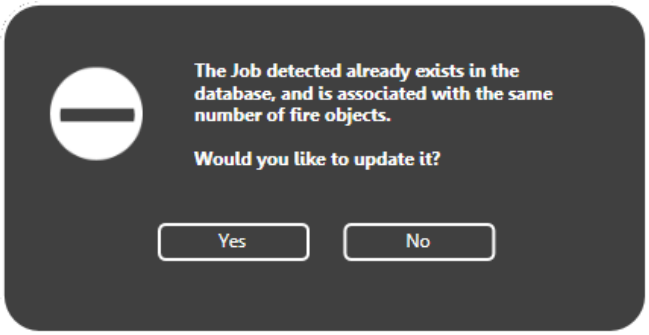

Figure 21 Update Job Confirmation

1.5 Get the JobUniqueID and JobVersion

1. Locate the job file that you saved in section 1.3.
2. Right-click the job file and select **Open with > Wordpad**.
3. Search for **JobUniqueID**.
4. Leave the file open; you will need to copy and paste this information in the next step.

```
<JobInfo JobUniqueID="1fbc3f3a861f4f8aba7b1496f929e203"
JobVersion="211fc778945540a895c7e092d2c0eac4"
ProductType="FX-2000" Tag="Sample Job 3">
```

Figure 22 Example JobUniqueID and JobVersion from the job file

1.6 Configure the OpenGN Gateway

1. Double-click the **Open Graphic Navigator Gateway** icon.

Figure 23 OpenGN Gateway

2. Click the **+** button. 

   The Adapter Configuration window appears.

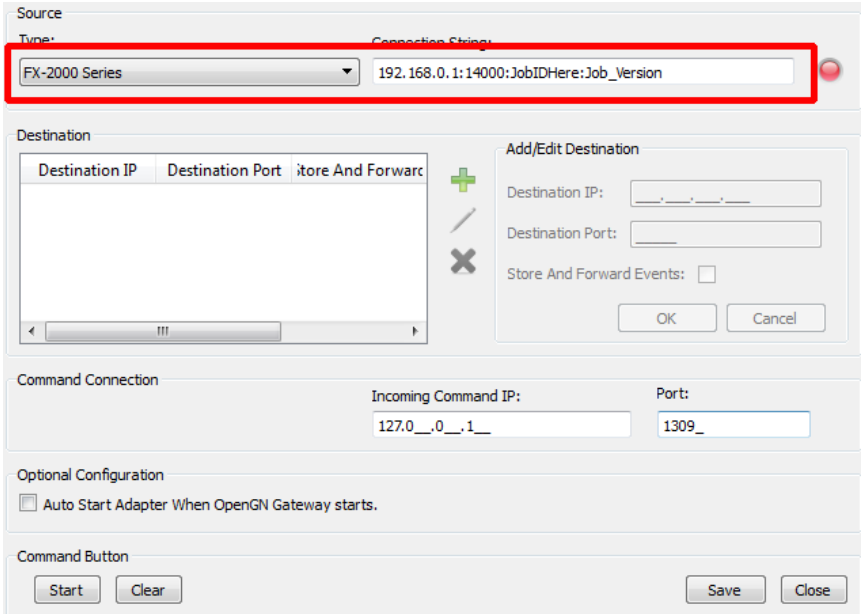

Figure 24 Adapter Configuration Window

3. Enter the following information.

Type	FX-2000 Series
Connection String	The connection string consists of 4 pieces of information separated by colons: • The IP address of the ARW-VESP211: you assigned this in section 1.2 on page 2. • The port: **14000** • **Job Unique Id**: copy and paste the **JobUniqueID** from the job file (section 1.5 on page 13). • **Job Version**: copy and paste the **JobVersion** from the job file (section 1.5 on page 13). For example, if the IP address is **10.10.8.37**, and the Job Unique Id and Job Version are the ones shown in section 1.5, then the connection string is: **10.10.8.37:14000:1fbc3f3a861f4f8aba7b1496f929e203:211fc778945540a895c7e092d2c0eac4**

4. Click the green button beside Destination, and then provide the following information:

Destination IP	The IP address of the OpenGN computer. If the OpenGN Gateway and OpenGN are on the same computer, use 127.0.0.1.
Destination Port	1209
Store and Forward Events	Reserved for future use.

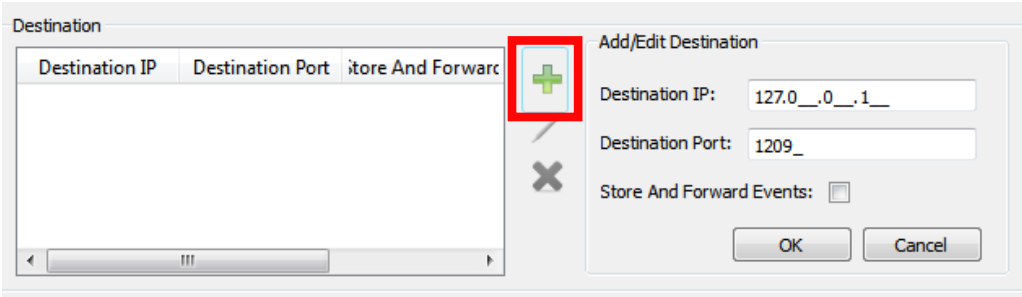

Figure 25 Destination

5. Under **Command Connection**, provide the following information:

Incoming Command IP	The IP address of the computer that the OpenGN Gateway is on. If the OpenGN Gateway and OpenGN are on the same computer, use 127.0.0.1.
Port	**1309**. This must be a different port than the port listed above.

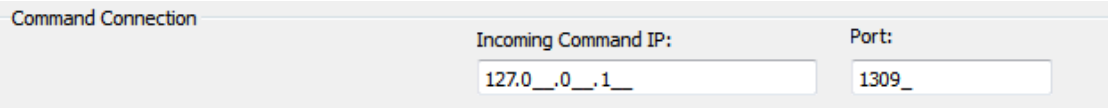

Figure 26 Command Connection

6. Click **Auto Start Adapter When OpenGN Gateway Starts** if you want the OpenGN Gateway to connect automatically with these settings when it starts.
7. Click **Save**.
8. Select the adapter you created, and then click the green arrow icon: 

   When OpenGN is connected, the adapter in the Adapter List is green.

Figure 27 OpenGN Gateway with One Connection

9. Double-click the adapter to view its details.

   When OpenGN is connected, the icon beside **Connection String** turns from red to green, and the Destination turns green.

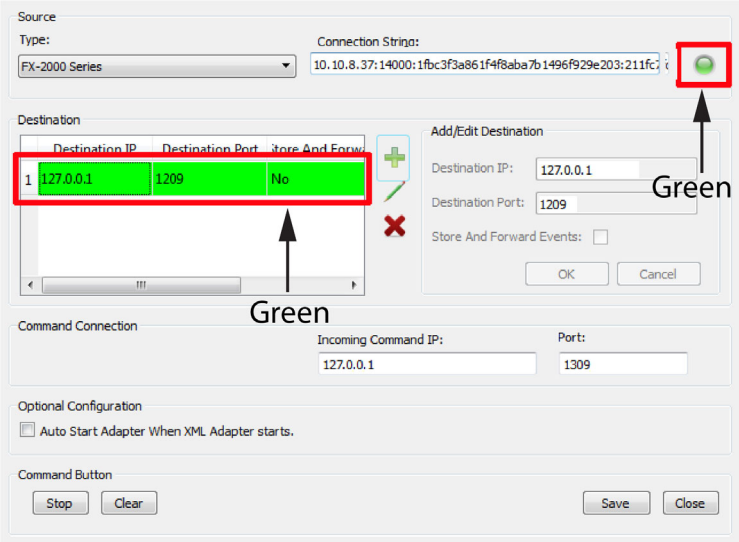

Figure 28 The OpenGN Gateway Showing a Connection

10. Start OpenGN.

OPEN GRAPHIC NAVIGATOR

Canada
25 Interchange Way
Vaughan, ON L4K 5W3
Tel: (888) 660-4655
Fax: (888) 660-4113

U.S.A.
4575 Witmer Industrial Estates
Niagara Falls, NY 14305
Tel: (888) 660-4655

Printed in Canada
Subject to change without prior notice

http://www.mircomgroup.com/opengn