



**IMPORTANT:**  
Refer to [www.extron.com](http://www.extron.com) for  
the complete user guide and  
installation instructions.

# VNM Enterprise Controller

## Hard Disc to Compact Flash Upgrade Kit • Setup Guide

This setup guide describes how the Extron VNM Enterprise Controller Hard Disc to Compact Flash Kit is used to replace the hard disc drive (HDD) of an Enterprise Controller with an equivalent compact flash (CF) module. When the installation is complete, the Enterprise Controller will be configured with the same settings that were applied to the hard disc drive.

The replacement kit contains a SATA connect cable and a CF card that is configured with the following Extron factory default settings:

- IP address: 192.168.254.254
- Username: admin
- By default, no password is assigned.

There are three main steps to replacing the HDD with a CF module:

1. **Save the Enterprise Controller configuration settings**
2. **Install the CF module**
3. **Configure the Enterprise Controller**

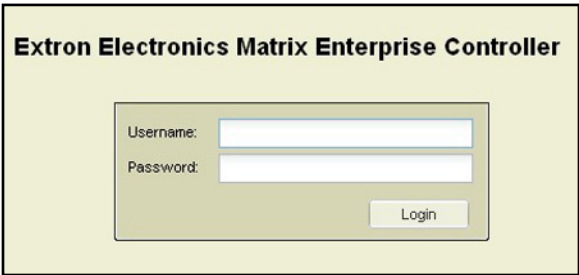
**NOTE:** This procedure assumes the user knows the current password and IP address for the controller.

## Saving the Enterprise Controller Configuration Settings

Prior to upgrading the Enterprise Controller, it is necessary to collect some information regarding the current system configuration. This information can be copied and pasted into a text program (for example, Notepad).

**CAUTION:** All of the information that is saved in this section must be accurately saved so that it can be re-entered into the Enterprise Controller after installing the Compact Flash module.

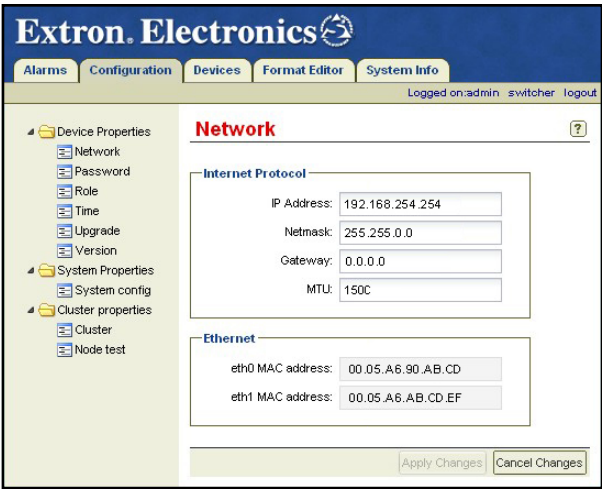
1. Ensure the Enterprise Controller is running with an HDD installed.
2. Connect the Enterprise Controller to a control PC, via the network.
3. Open the control PC web browser program.
4. Enter the IP address of the Enterprise Controller into the browser address bar and press <Enter>.
5. At the login page, enter the username and password (see the figure to the right). Click **Login**.



**NOTE:** The default username is admin. By default, no password is required. Be aware that the default password may have changed. Entries are case sensitive.

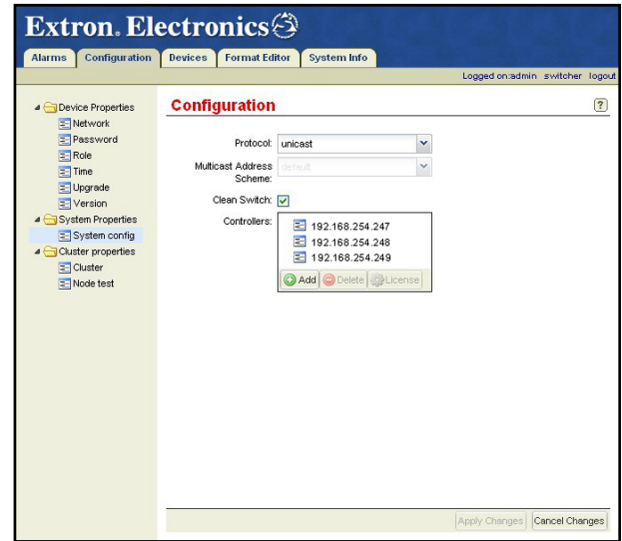
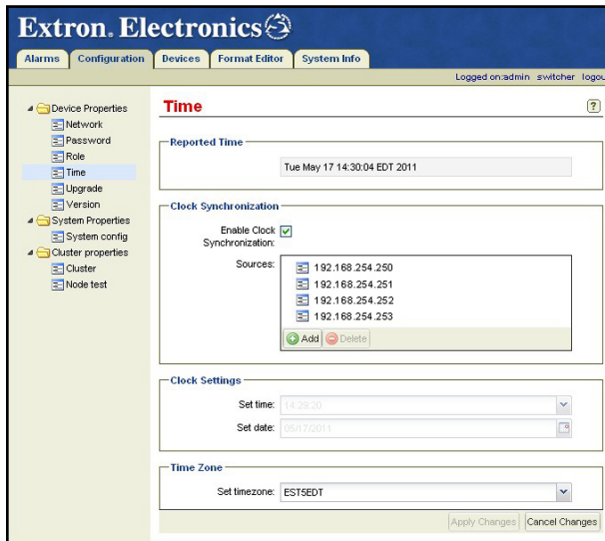
The Enterprise Controller web page opens.

6. Select the **Configuration** tab, then **Network** from the menu on the left (see the figure to the right).
7. Note the following settings, which can be found in the Internet Protocol box.
  - **IP address**
  - **Netmask**
  - **Gateway**
  - **MTU**
8. Select **Role** from the menu on the left. Note the setting in the **Device Mode** drop-down menu.



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9. Select **Time** from the menu on the left of the screen (see the figure below to the left). Note the following settings in the Clock Synchronization box:
  - Enable Clock Synchronization
  - Sources (note the IP addresses listed)
10. Note the settings for the time, date, and time zone.



11. Select **System config** from the menu on the left of the screen (see the figure above to the right). Note the following settings:
  - **Protocol**
  - **Multicast Address Scheme**
  - **Clean Switch** status
12. In the Controllers box:
  - Click on the IP address of the Enterprise Controller you are logged into.
  - Click on the **License** button. From the Controller License Management window, note the **Options**, **Checksum**, and **Serial Number** values.

**CAUTION:** The licensing information must be recorded accurately. Any errors in copying the data to the compact flash module will result in a non-functional unit.

13. If the Enterprise Controller is configured as part of a redundant pair, select **Cluster** from the menu on the left of the screen. Note the settings displayed in the Configuration box.
14. Select **Node test** from the menu on the left of the screen. Note the IP addresses in the Sources box.
15. Save the text file containing the configuration information.

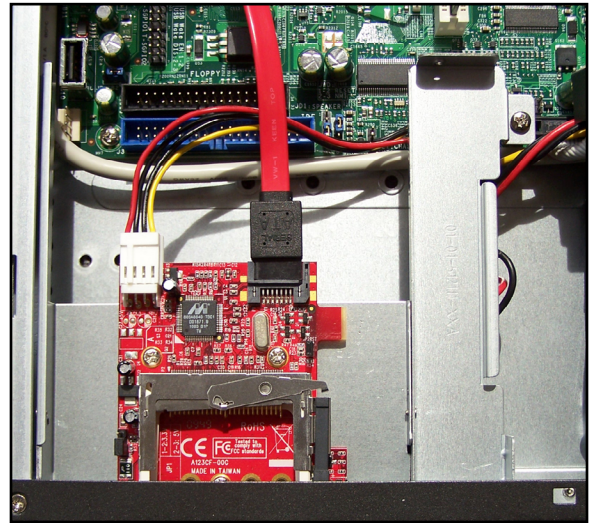
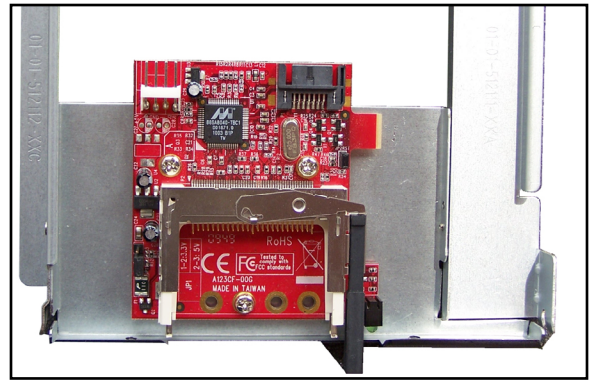
## Installing the Compact Flash Module

1. Remove and save the two top cover retaining screws located on the side of the unit.
2. Push down on the two round levers located at the front edge of the top cover. Slide the top cover toward the rear and remove.
3. Disconnect the DVD IDE cable from the DVD drive and from the motherboard connector.
4. Disconnect the DVD power lead.
5. Unscrew the DVD drive retaining screws and remove the assembly from the Enterprise Controller.
6. Remove the DVD mounting plates from the sides of the DVD drive. Retain the mounting plates and screws; these are required to mount the CF module. The DVD drive is no longer required.
7. Disconnect the SATA cable from the hard disc drive.
8. Disconnect the power connector from the hard disc drive.

9. Turn the Enterprise Controller over and remove the four screws that secure the hard disc to the chassis. Remove the hard disc drive. This and the fixing screws are no longer required.
10. Attach the previously removed DVD mounting plates to the new compact flash module, using the screws saved from step 6 of this section.
11. Mount the compact flash module into the chassis, in the space previously housing the DVD drive (see the picture to the right). Ensure that the mounting plates engage correctly with the mounting pins on the front plate of the controller chassis.
12. Remove the existing HDD SATA cable from the motherboard and fit the new SATA cable, supplied with the kit, to the same location.

**NOTE:** The original SATA cable must not be reused because the angled plug prohibits refitting of the top cover.

13. Connect the other end of the SATA cable to the SATA connector on the compact flash module (see the figure to the right).
14. Connect the floppy disc power connector (4-pin white connector) to the compact flash module. It is vital that this plug is connected correctly. The red wire of the plug connects to the pin nearest the edge of the printed circuit board (see the figure to the right).
15. Remove the compact flash card cover from the front of the module. Insert the new compact flash card into the compact flash drive. Replace the compact flash front cover.
16. Replace the Enterprise Controller top cover and secure it, using the screws removed in step 1 of this section.



## Configuring the Enterprise Controller

Use the following procedures to configure the new CF module.

### Setting the Serial Number:

1. If they are not already connected, connect a mouse, keyboard, and monitor to the controller.
2. Apply power to the Enterprise Controller and switch on.
3. When fully booted, use the local mouse and keyboard to log into to the controller with the username of root and the password of Extron2010.
4. At the prompt [root@singleton ~]#  
Type `cd scripts`  
Press <Enter>
5. At the prompt [root@singleton scripts]#  
Type `./set_serial.sh xxxxxx`  
where xxxxxx is the serial number of the Enterprise Controller, which was saved in step 12 on page 2 Press <Enter>. A script runs, which enters the serial number into the Enterprise Controller.
6. At the prompt [root@singleton ~]#  
Type `reboot`  
Press <Enter>  
The Enterprise Controller reboots.

### Entering System Data: Device Properties

1. Ensure the Enterprise Controller is connected to the control PC via the network.
2. Open the control PC web browser, enter the IP address of the controller into the address bar, and press <Enter>.

**NOTES:**

- The control PC requires a subnet setting of 192.168.254.xxx to connect to the Enterprise Controller.
- By default the new card has an IP address of 192.168.254.254.

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3. In the **Username** field of the login page, enter admin. Leave the **Password** field blank. Click **Login**.

**NOTE:** (Optional) It is not necessary to enter a password. A new password can be entered, if required.

4. Select the **Configuration** tab and select **Network** from the menu on the left of the screen. Enter the IP address, subnet mask, gateway, and MTU values that were saved in step 7 on page 1. Click the **Apply Changes** button at the bottom of the browser window and close the browser window.
5. Change the network address of the control PC so that it is compatible with the new subnet of the Enterprise Controller.
6. Open the control PC web browser, enter the new IP address of the Enterprise Controller in the browser address bar and press <Enter>.
7. In the **Username** field of the login page, enter admin. Click **Login**.
8. Select the **Configuration** tab and select **Role** from the menu on the left of the screen. Choose the required value from the **Device Mode** drop-down menu. Click **Apply Changes** to save the settings.
9. Select **Time** from the menu on the left of the screen. Under Clock synchronization, set **Enable Clock Synchronization** to the value previously noted. Add the IP addresses of the sources saved in step 9 on page 2. Add each address by clicking the **Add** button. Click **Apply Changes** to save the settings.
10. Under Clock Settings, set the local time and date. Under **Set Time Zone** select the time zone that was previously noted. Click **Apply Changes** to save the settings.

## Entering System Data: System Properties

1. Select **System config** from the menu on the left of the screen. Select values from the appropriate drop-down menu to enter the **Protocol** and **Multicast Address Scheme**. Set the **Clean Switch Control** status information that was previously noted. Click **Apply Changes** to save the settings.
2. In the Controllers box, click the **Add** button. Enter the IP address of this controller. Click **OK** to save. When the dialog box closes, click **Apply Changes** to save the settings. If other controllers were listed in the original configuration, add these IP addresses to the list and click **Apply Changes** to save these values.
3. Select the IP address of this Enterprise Controller (entered in step 2 above) and click on the **License** button.
4. Enter the information noted in step 12 on page 2.

**CAUTION:** The licensing information must be entered accurately. Any errors in copying the data to the new installation will result in a non-functional unit.

**NOTE:** When updating the license information, there is no feedback to say that the settings have been accepted.

5. To check the license data, reboot the Enterprise Controller, reconnect to the Enterprise Controller, using a web browser on the control PC, and view the information contained in the controller License Management dialogue.

The information in the License Management dialogue takes several seconds to appear after reboot has completed. If the data does not appear, close the dialog box, wait for ten seconds and retry. If the information is still not present, repeat steps 3 and 4 above, to enter the serial number and license data again.

## Entering System Data: Cluster Properties

If the **Device Mode** (under **Role**) is set to redundant primary or redundant secondary, the **Cluster Properties** menu will be visible.

1. Select **Cluster**. Enter the information noted in step 13 on page 2. Click **Apply Changes** to save the settings.
2. Select **Node test**. Enter the information noted in step 14 on page 2. Click **Apply Changes** to save the settings. Sources may be added by clicking the **Add** button and entering the IP addresses previously noted.

The Enterprise Controller is now configured.

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+1.714.491.1500	+1.919.863.1794	+31.33.453.4040	+65.6383.4400		+86.21.3760.1568	68-2123-50
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