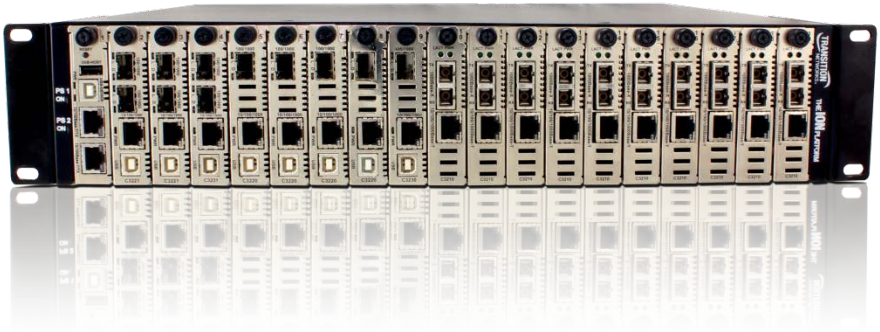
SG

Support Guide

Firmware Upgrades for the ION Multi-Service Integration Platform

Transition Networks' ION Multi-Service Integration Platform provides first-rate solutions for integrating copper and fiber equipment with infrastructure. The ION Platform accommodates a variety of slide-in network interface devices and media conversion modules supporting Layer 1, Layer 2 Ethernet, and TDM networks. Designed for enterprise data centers as well as core network applications, the ION Platform provides the secure network management of fiber interface points required for both carrier-class and enterprise-class services.



The ION Management System

The ION Management System was designed to be one of the most versatile and secure management systems available in the market today. To take full advantage of all of the features and functions available with the ION chassis, an ION Management Module is required to be installed in the ION chassis. The ION Management Module connects to the chassis backplane and communicates with the individual cards installed in the ION chassis. Each slide-in module has specific features and functions that are controlled from the chassis via the ION Management Module. Only management traffic - no end-user data traffic - is sent across the ION Chassis backplane to maintain security.

ION Module Suite

A variety of slide-in interface devices and converter modules support Layer 1 Ethernet, Layer 2 Ethernet, and TDM networks. These include:

- Ethernet System Modules
- 10/100/1000 Copper/Fiber SM/MM (Layer 1 and Layer 2)
- Full SOAM (802.3ah/802.1ag, Y.1731)
- 10GE Copper to Fiber; 10GE Fiber to Fiber
- 1GE Fiber to Fiber
- TDM System Modules
- DS1/DS3
- ION Management Module

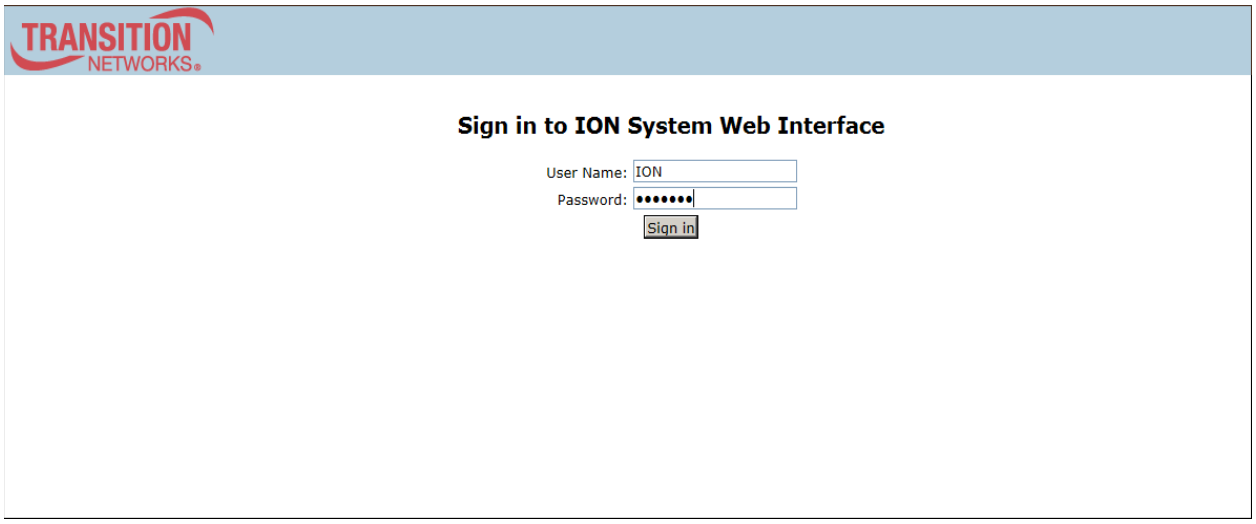
As new modules and updates to the ION Platform become available, upgrades can be performed using either the ION WEB-GUI management internal software or the Focal Point 3.0 management program downloadable from the Transition Networks website, www.transition.com. Instructions for both methods are included in this document.

The ION Upgrade is accomplished through the following steps:

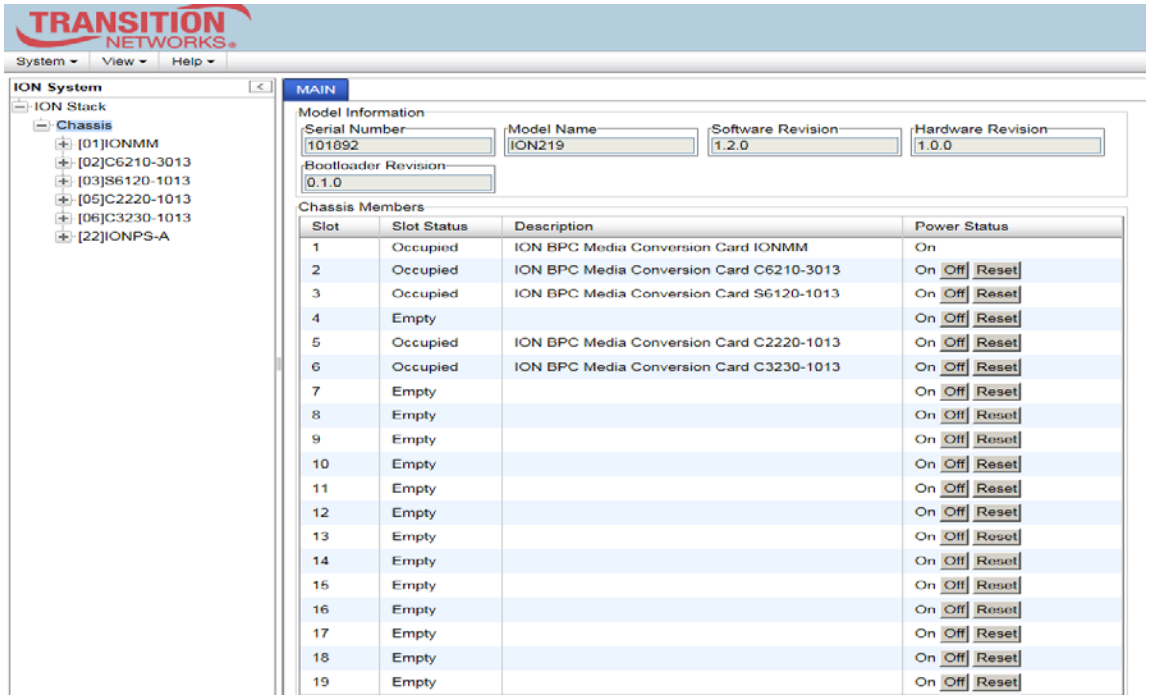
1. Check Software Revisions on ION Platform
2. Check Transition Networks' Website for the latest firmware available and download to your PC
3. Upgrading of firmware requires the initiation of TFTP Server on PC
4. Upload new software files to the ION Firmware Database
5. Backup device configuration files for each module
6. Upgrade modules to new firmware load
7. Verify new Software Revision on each module
8. Restore device configuration files for each module

Upgrade Procedures Using the ION WEB-GUI

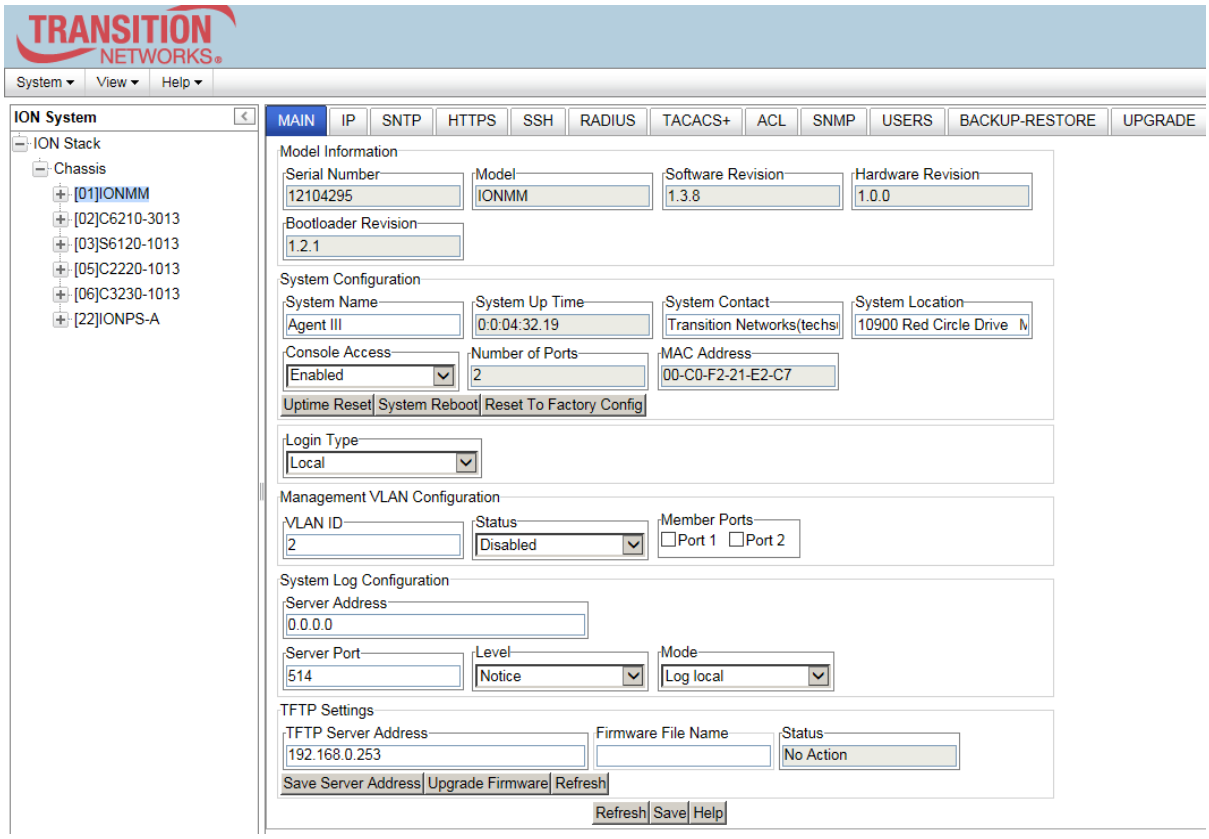
The ION Management Module can be accessed using a standard web browser such as Internet Explorer or Mozilla Firefox. Default Username: ION, default Password: private.



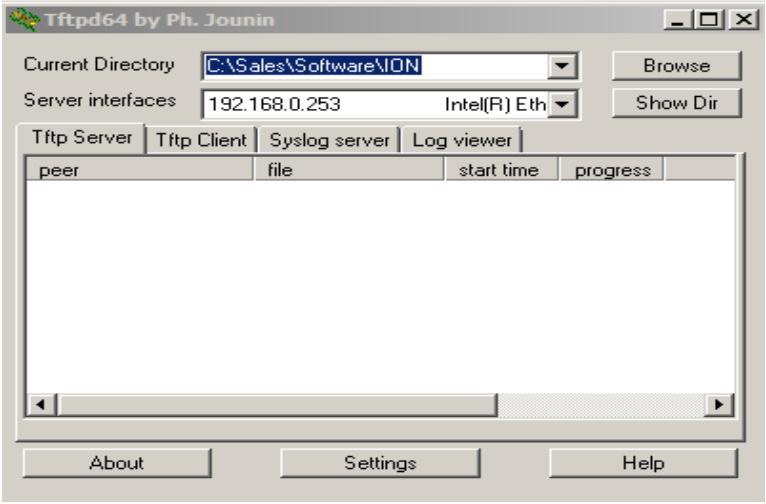
1) In the menu on the left side of the screen, click on **Chassis** to show all modules inserted in the ION as well as the Software Revision of the chassis.



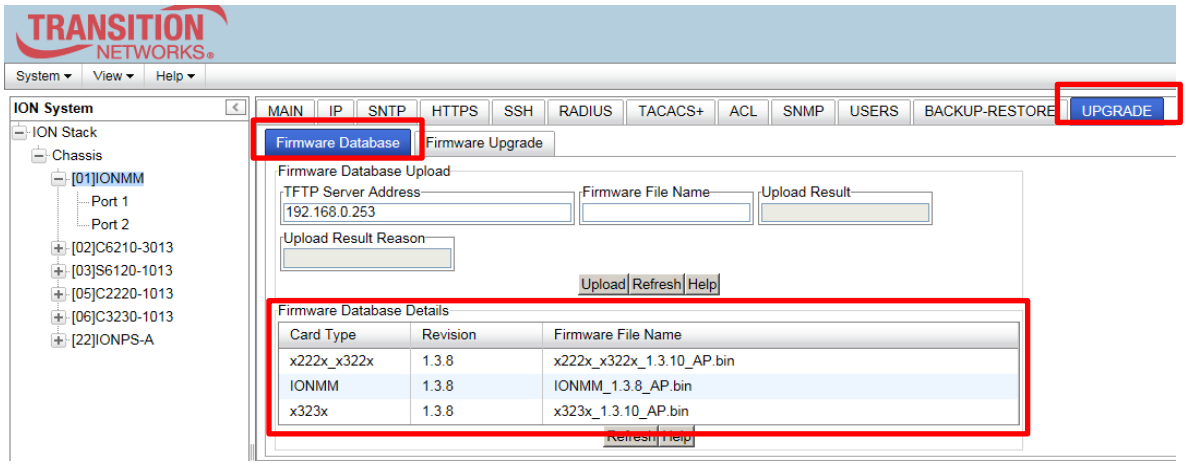
2) Clicking on **IONMM** shows all tabs for configuration of the ION Management Module as well as its Software Revision. For the purpose of firmware updates, this document will be concentrating on the **UPGRADE** tab and its procedures.



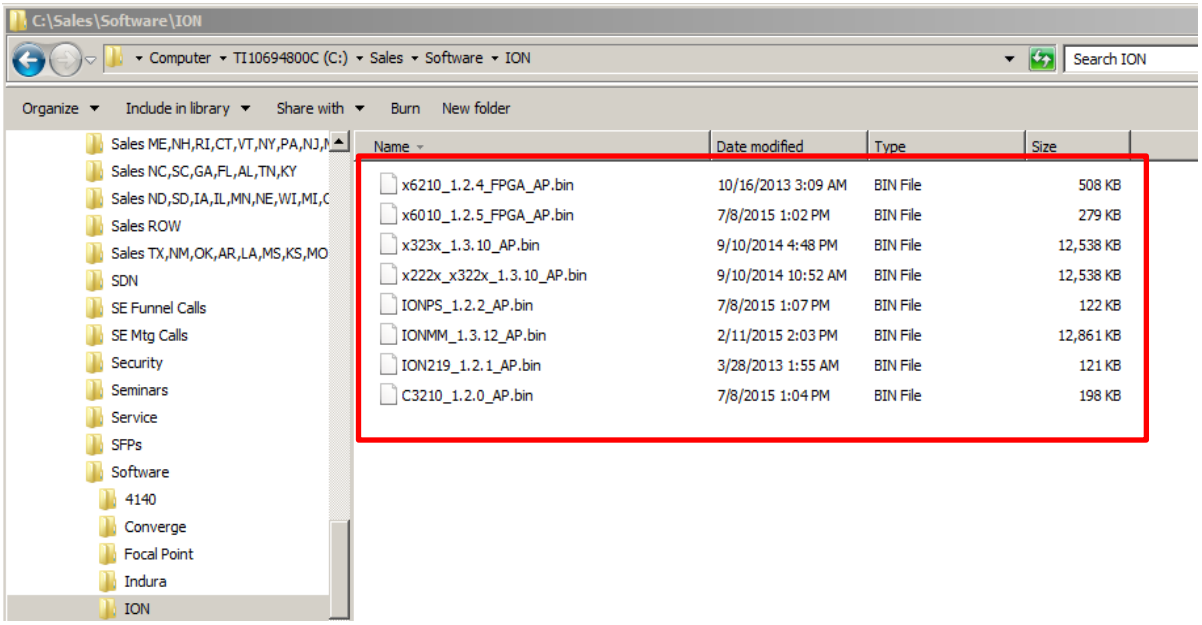
3) Upgrading the software for each of the ION modules requires the use of a TFTP Server. This can be any industry standard TFTP Server. Enter the server interface IP address and point the directory of the TFTP server to the folder where the ION software files are located.



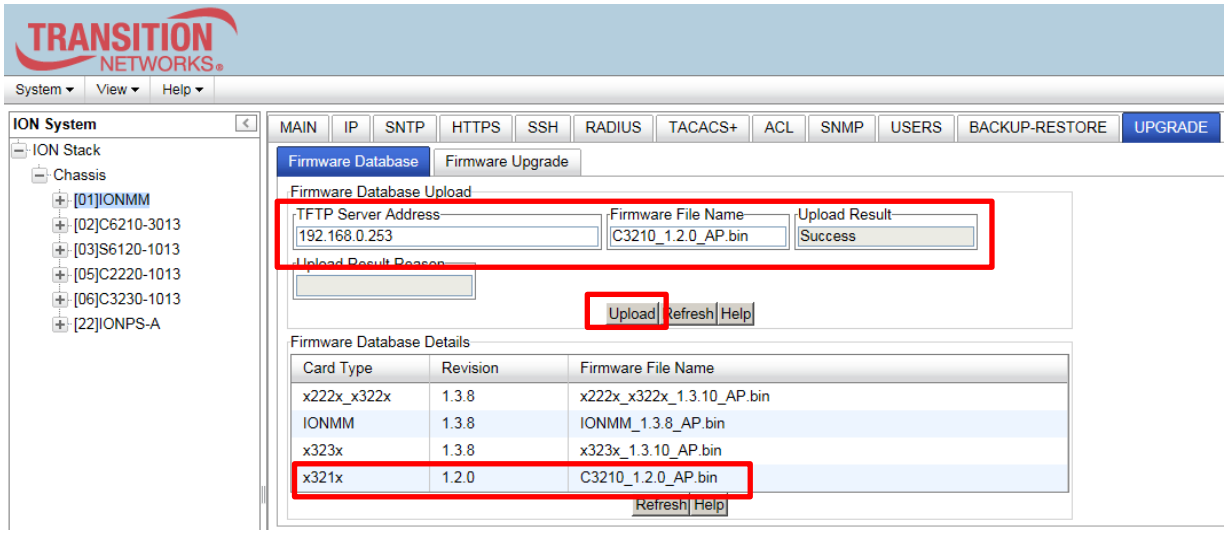
4) To perform the upgrading of software for each of the ION modules, each of the software files must exist in the **ION Firmware Database**. To check the files stored, click on the **IONMM**, **UPGRADE** tab, **Firmware Database** tab. The **Firmware Database Detail** box shows files currently stored.



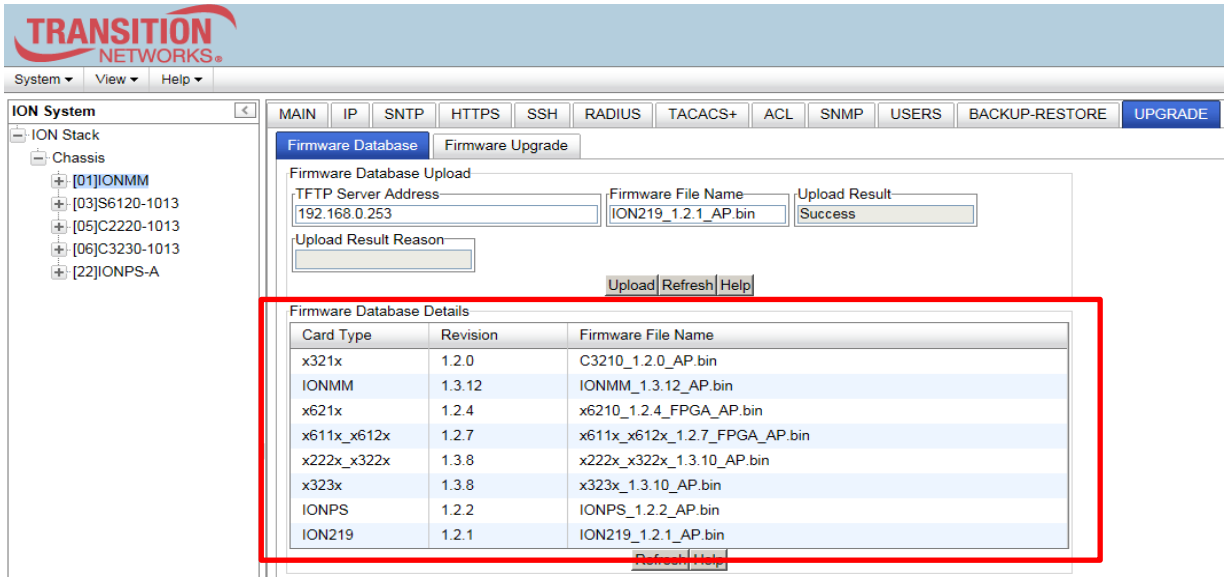
5) Go to Transition Networks' website, www.transition.com, and log in/sign up to My TN Access for the current ION software files for the modules in your chassis. Download the files to the TFTP server's folder directory.



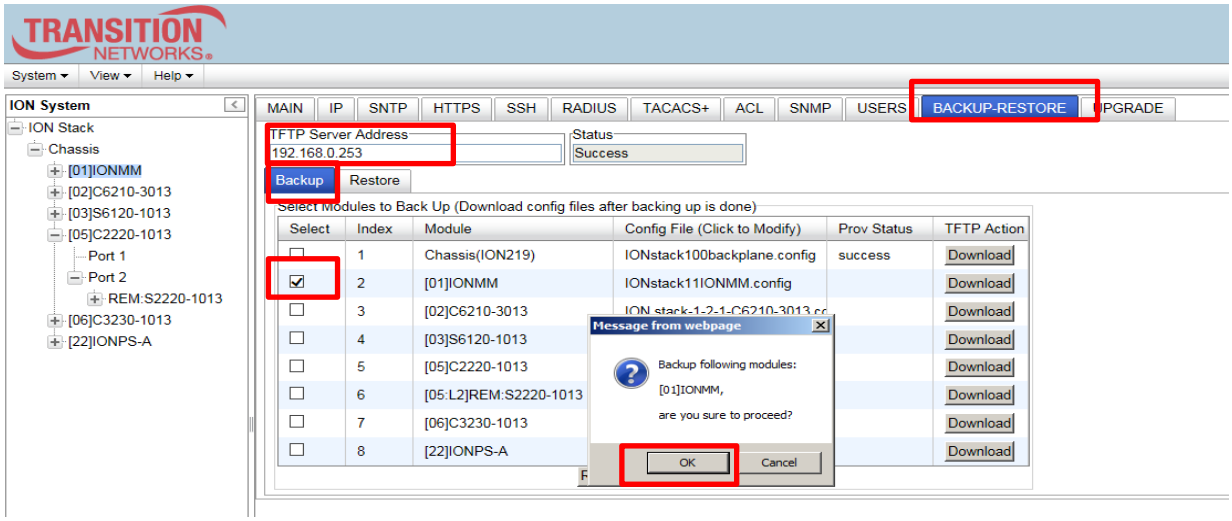
6) To load new files into the firmware database, enter the TFTP Server Address, Firmware File Name and click on the **Upload** button. The **Upload Result** will show **Success** upon completion, and the new software file will show in the **Firmware Database Details** box below. Old firmware will be overwritten in this procedure.



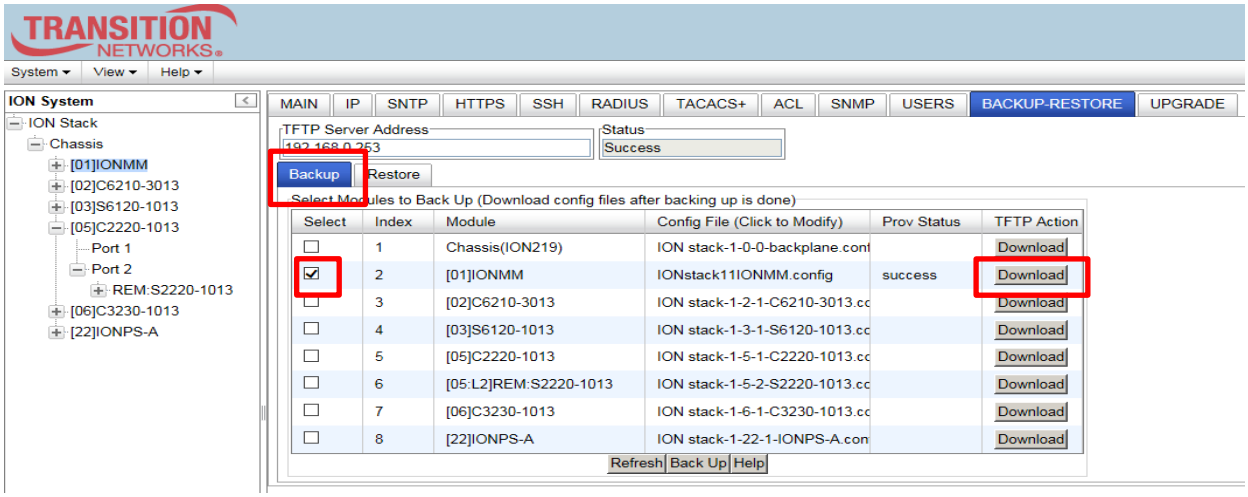
7) Upon completion of the last procedure, all firmware files for the chassis, power supplies and modules will now be in the ION **Firmware Database** ready for loading into the modules.



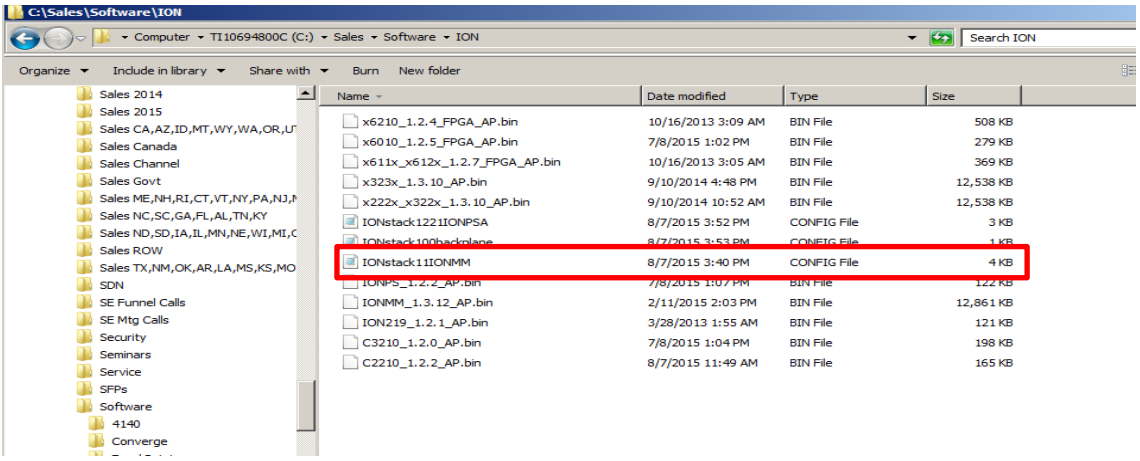
8) Before performing a module upgrade, you should backup the configuration file of the module. In order to back up the configuration, click on the **BACKUP-RESTORE** tab, enter the TFTP Server IP Address, click on the **Backup** tab, check the box next to the module and click on **Backup** at the bottom of the screen. When asked for verification, click **OK**.



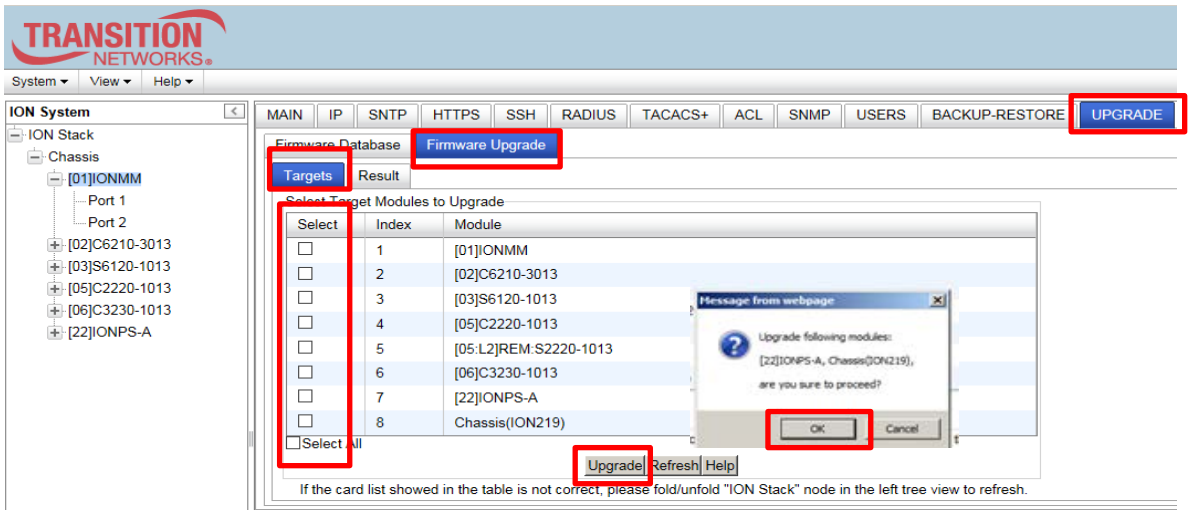
9) To save the backup configuration file to your TFTP server PC, check the box next to the module and click on the **Download** button.



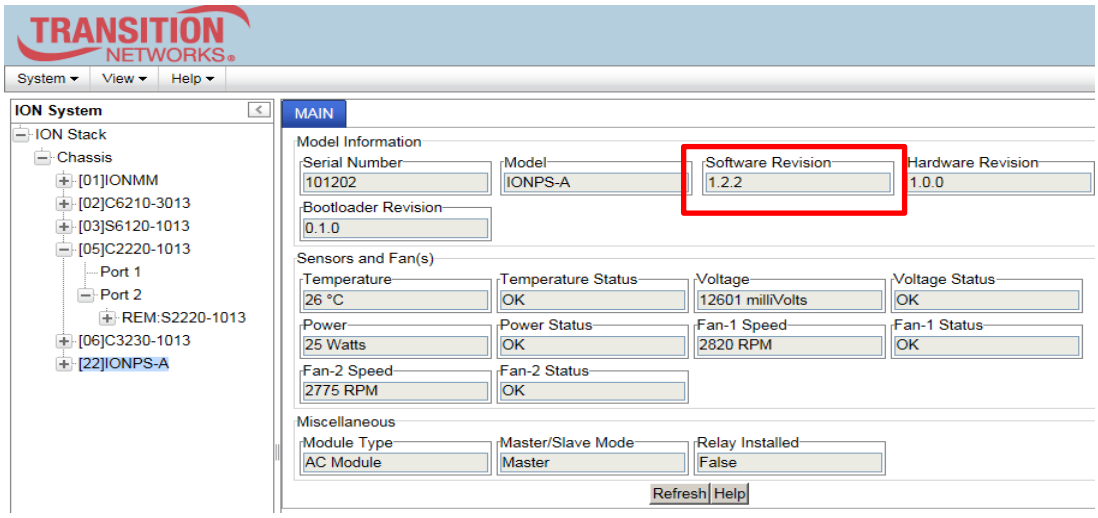
10) The backup configuration file will now be in your TFTP Server PC directory.

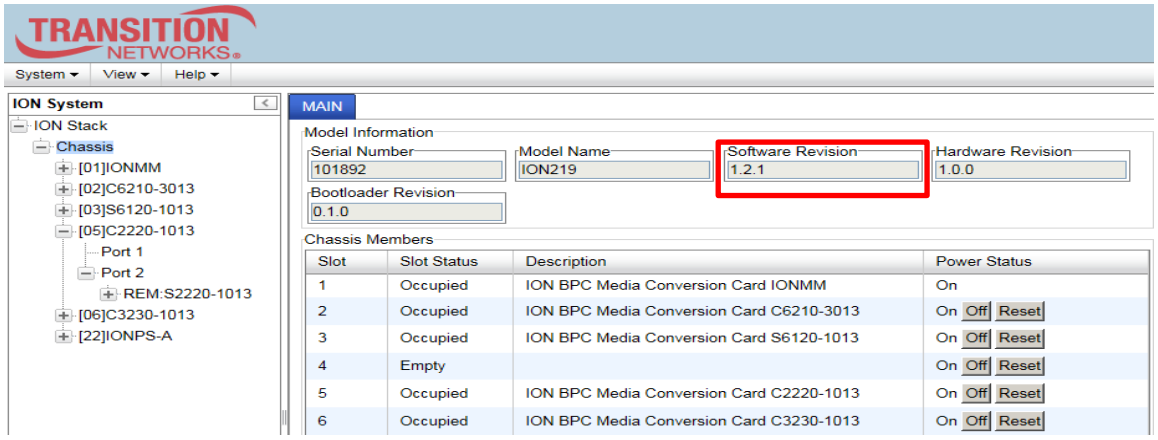


11) To upgrade the new firmware files, click on **UPGRADE**, **Firmware Upgrade**, **Targets**. Check the boxes to select the devices to upgrade, and then click the **Upgrade** button. When asked for verification, click **OK**.

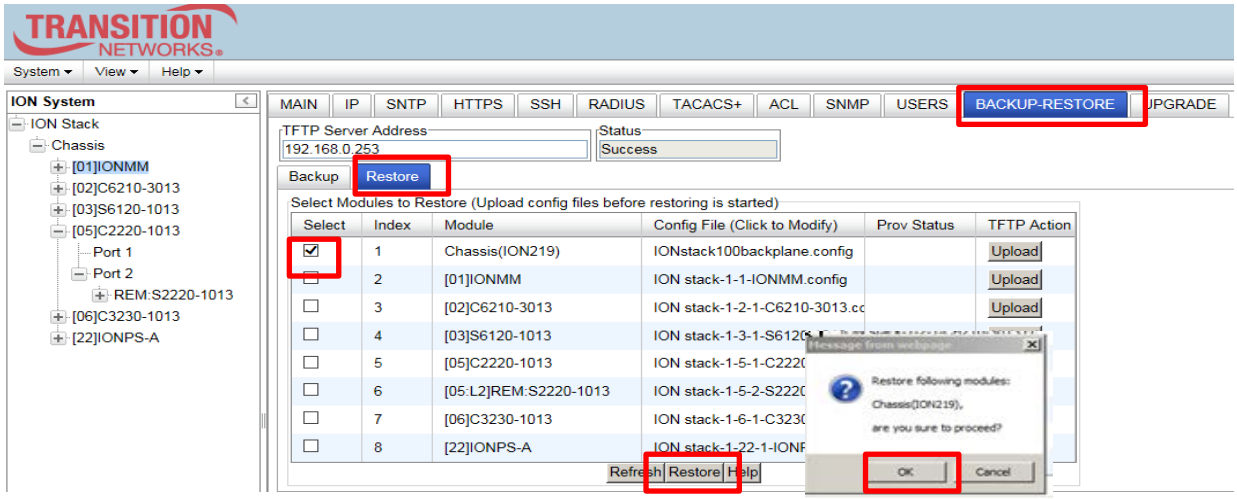


12) Verify the Software Revision on the **MAIN** menu page of the devices.

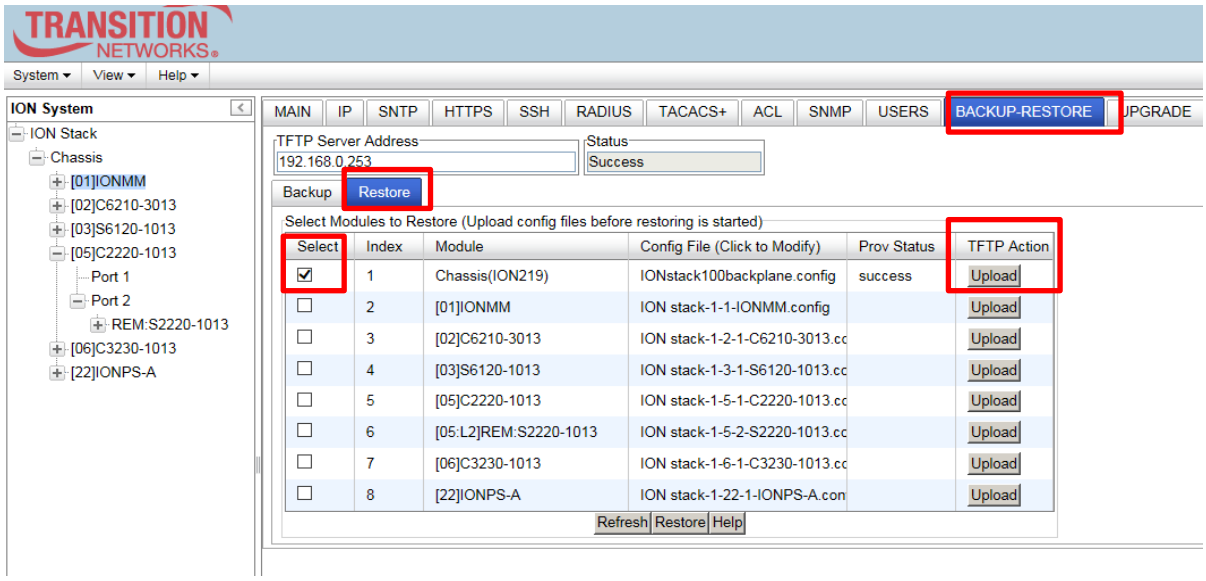




13) Now you can restore the configuration file of the module. In order to restore the configuration, click on the **BACKUP-RESTORE** tab, enter the TFTP Server IP Address, click on the **Restore** tab, check the box next to the module and click **Restore** at the bottom of the screen. When asked for verification, click **OK**.



14) If you wish to restore the configuration file from the file on your PC to the ION database, click on the **BACKUP-RESTORE** tab, enter the TFTP Server IP Address, click on the **Restore** tab, check the box next to the module and click on the **Upload** button.



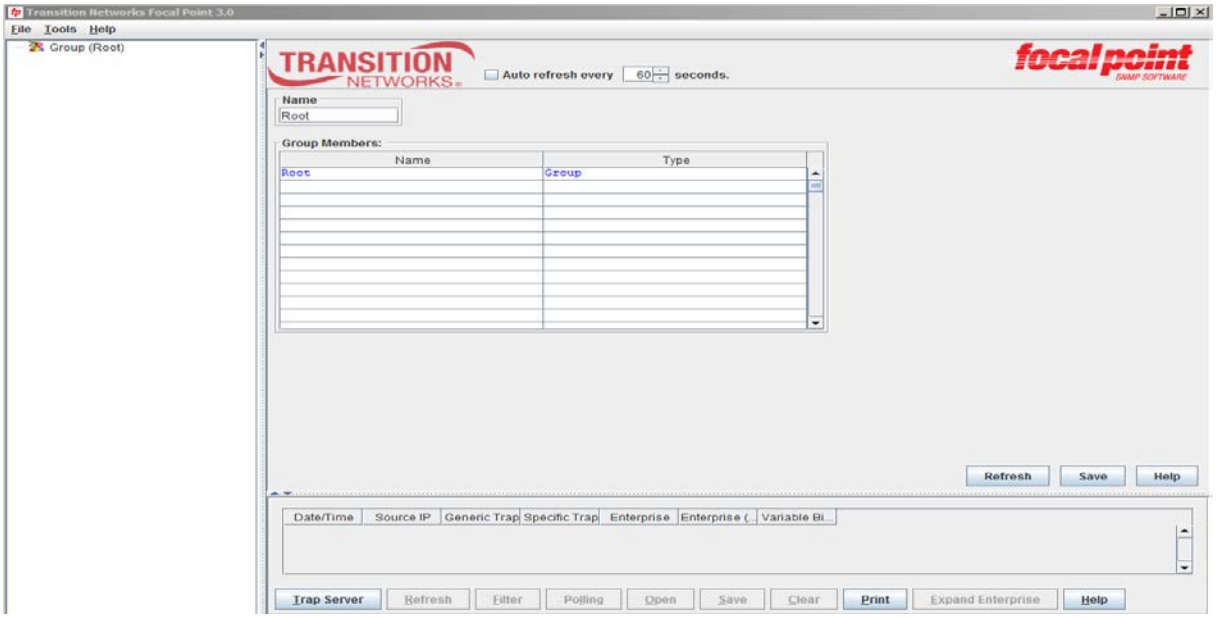
The ION firmware upgrade via WEB GUI is now complete. For additional assistance or technical support, please contact Transition Networks, www.transition.com. Or for instructions on upgrades via Focal Point, please continue.

Upgrade Procedures Using Focal Point Software

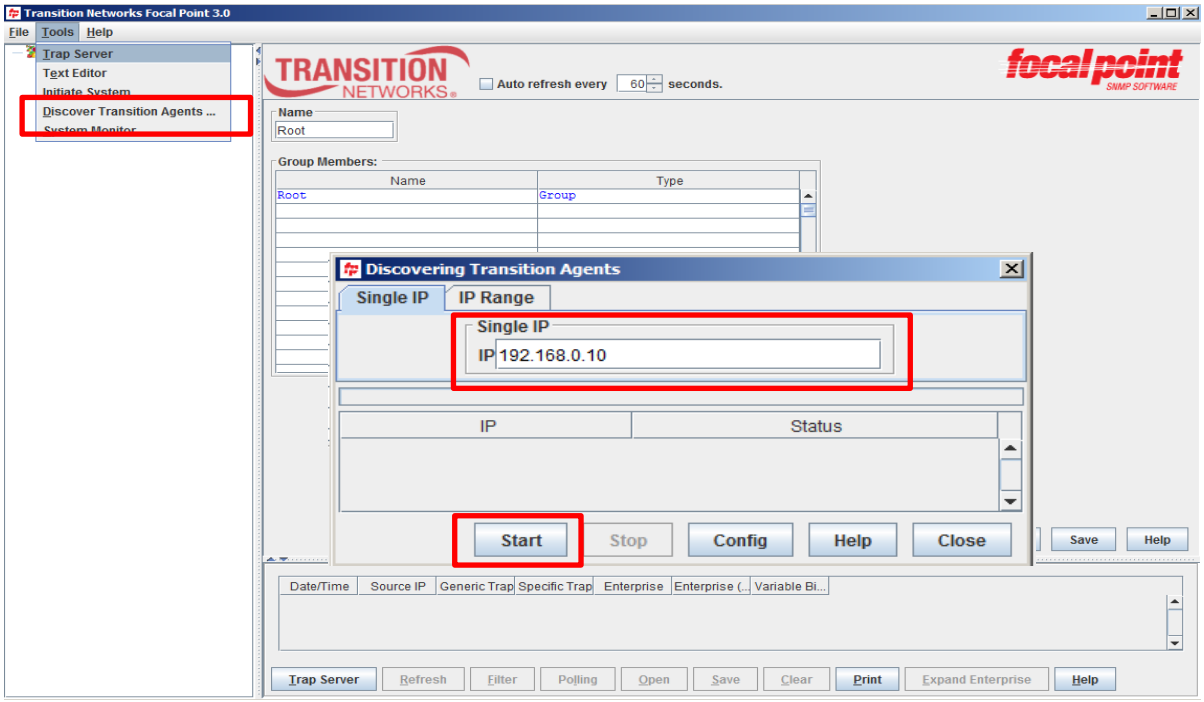
Upgrading the ION Platform can also be performed through the Focal Point 3.0 management program, downloadable off the Transition Networks website www.transition.com.

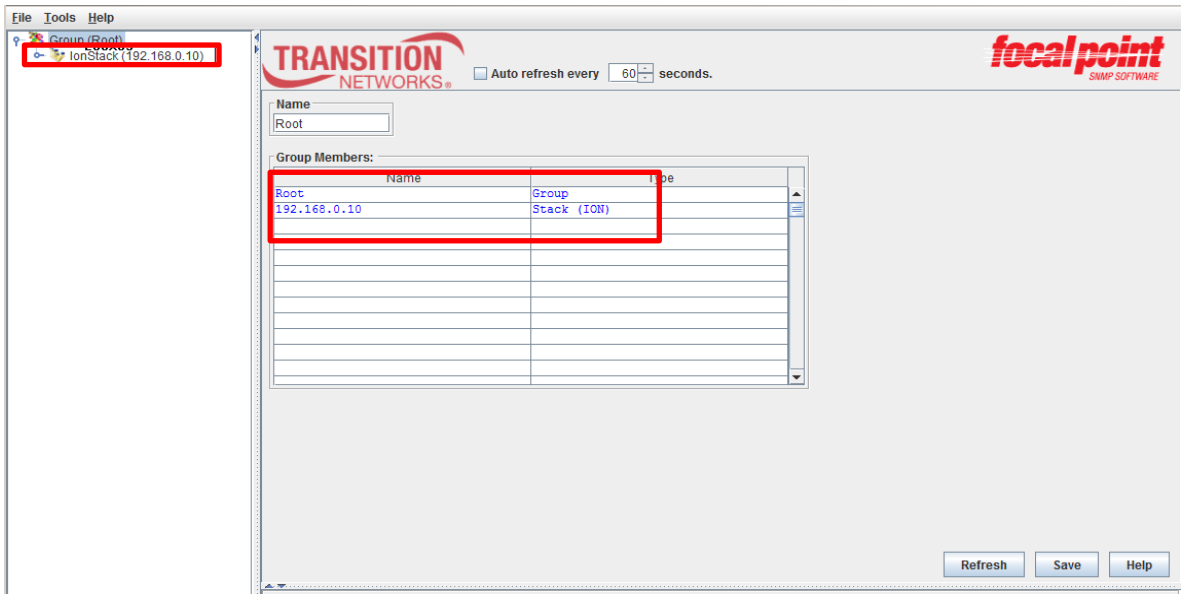
Transition Networks provides free SNMP graphical user interface (GUI) software, Focal Point, for management purposes. Focal Point offers full read and write capabilities in a user friendly GUI.

Focal Point Main Screen

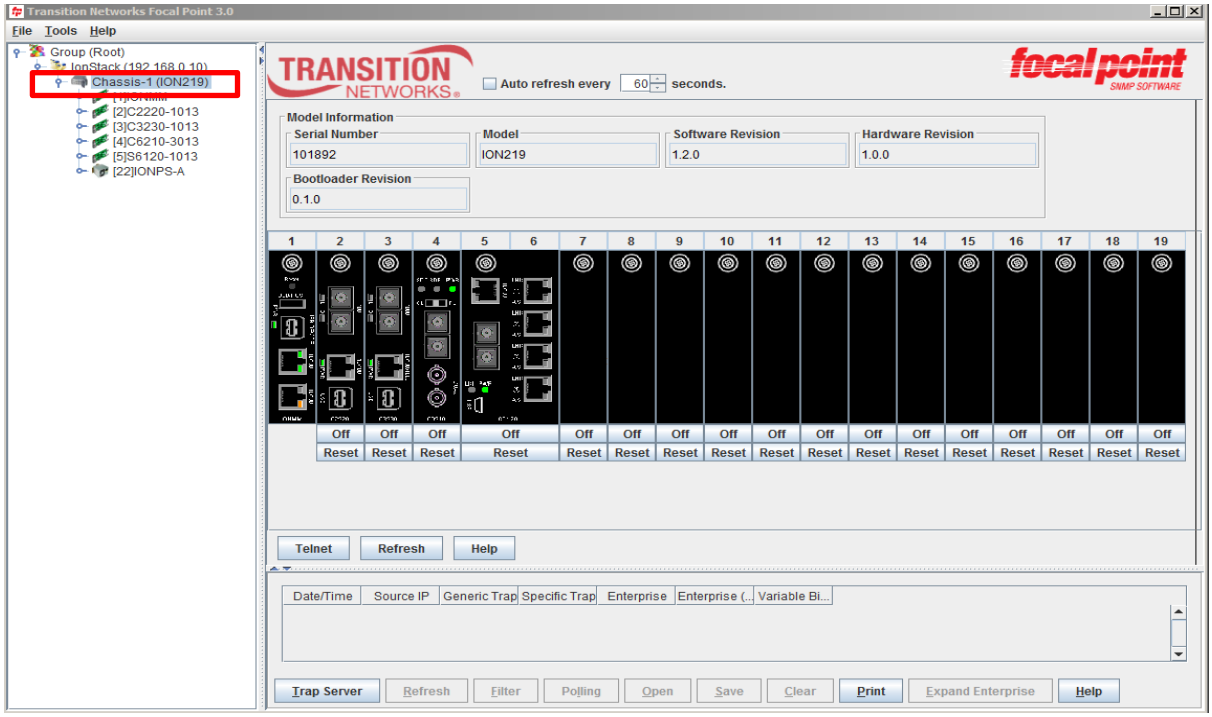


1) Discover the ION Chassis – Click on **Tools**, **Discover Transition Agents**, enter the IP Address of the ION chassis and click **Start**.





2) Click on **Chassis** in the left side menu to show all modules inserted in the ION chassis and the Software Revision of the chassis.



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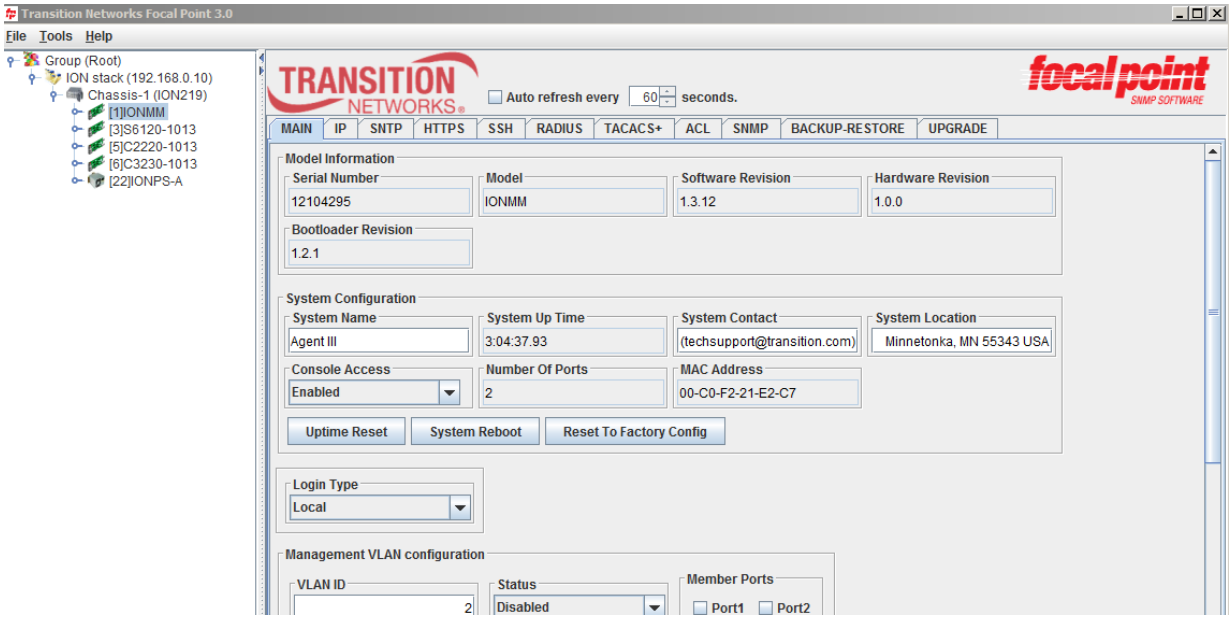

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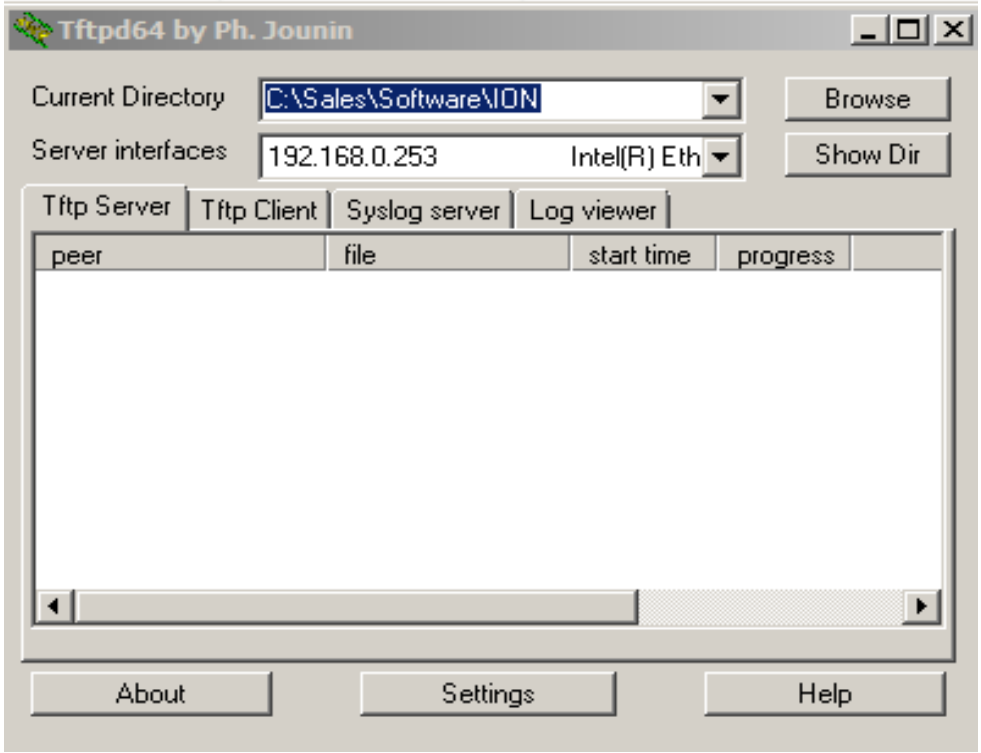

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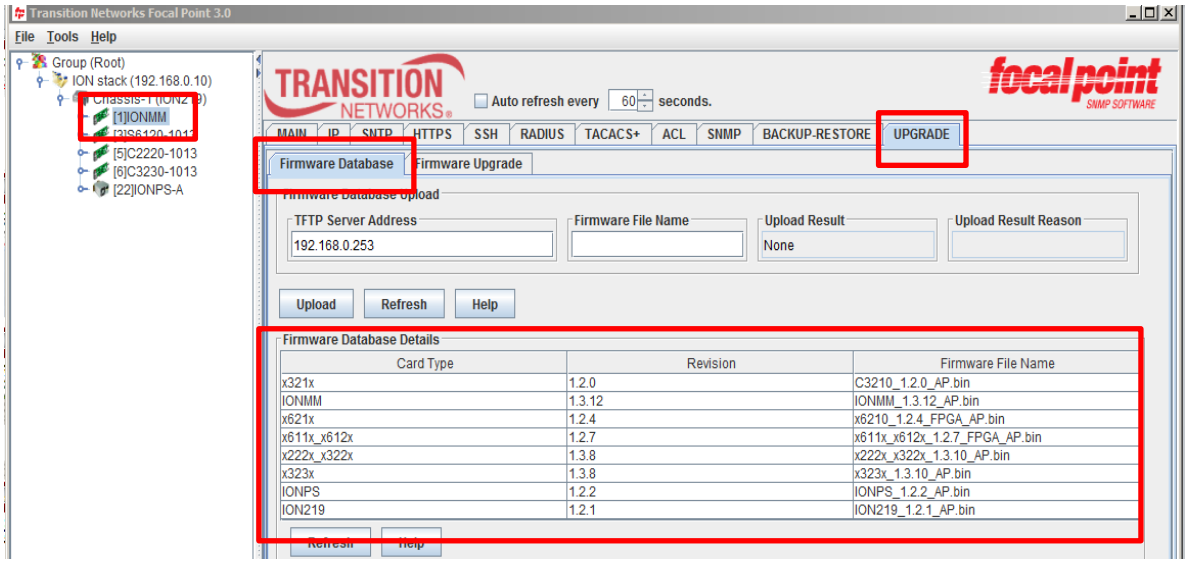
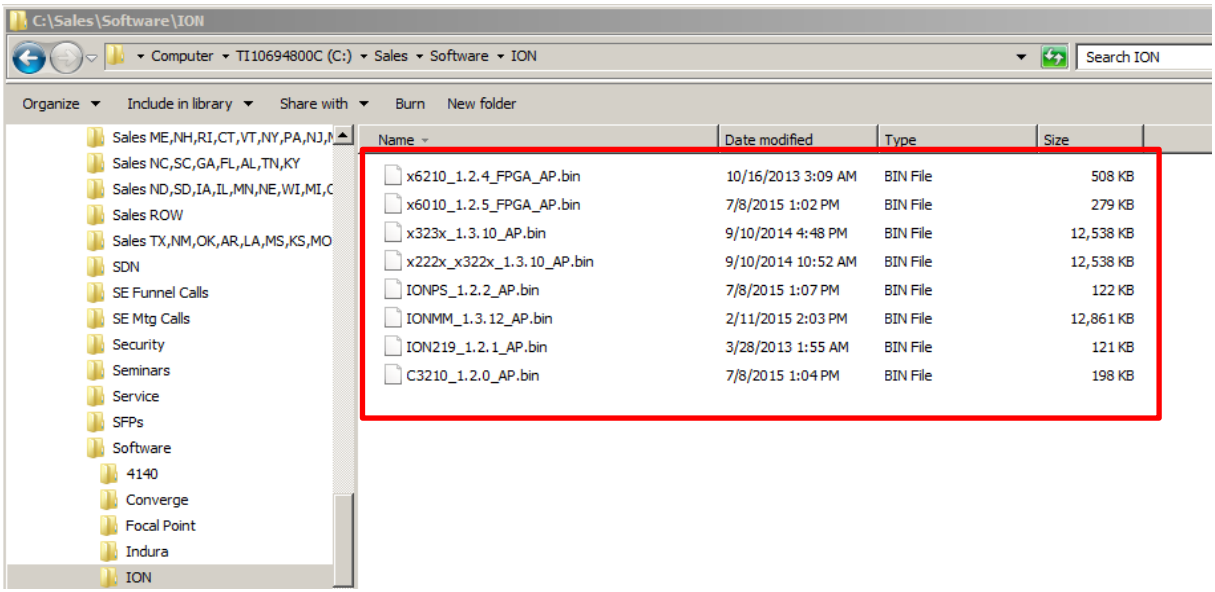
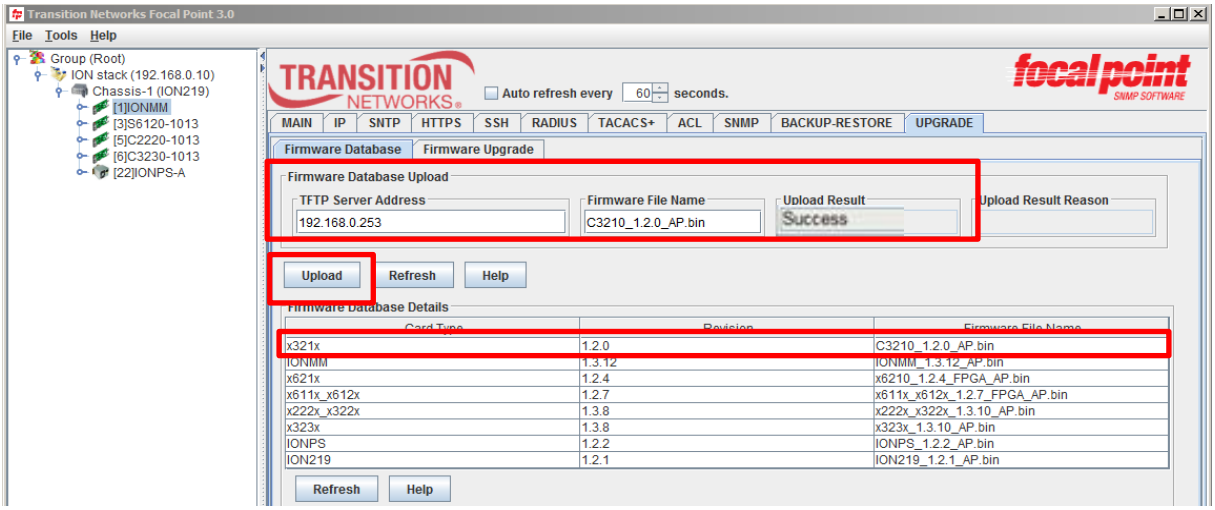


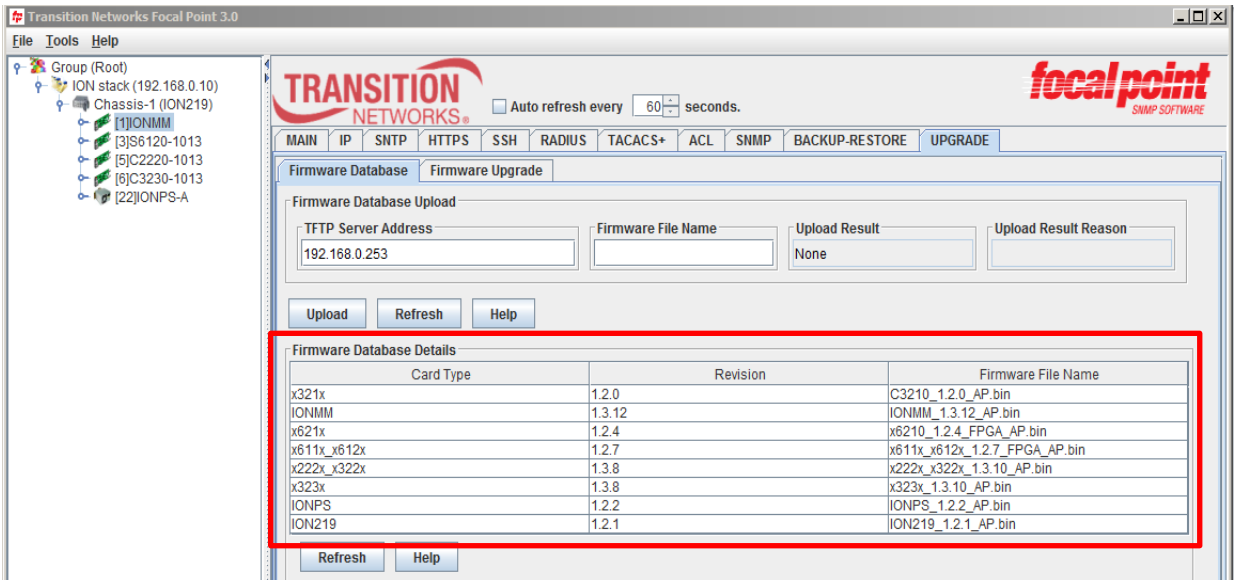
6) Go to Transition Networks' website, www.transition.com, and log in/sign up to My TN Access for the current ION software files for the modules in your chassis. Download the files to the TFTP server folder directory.



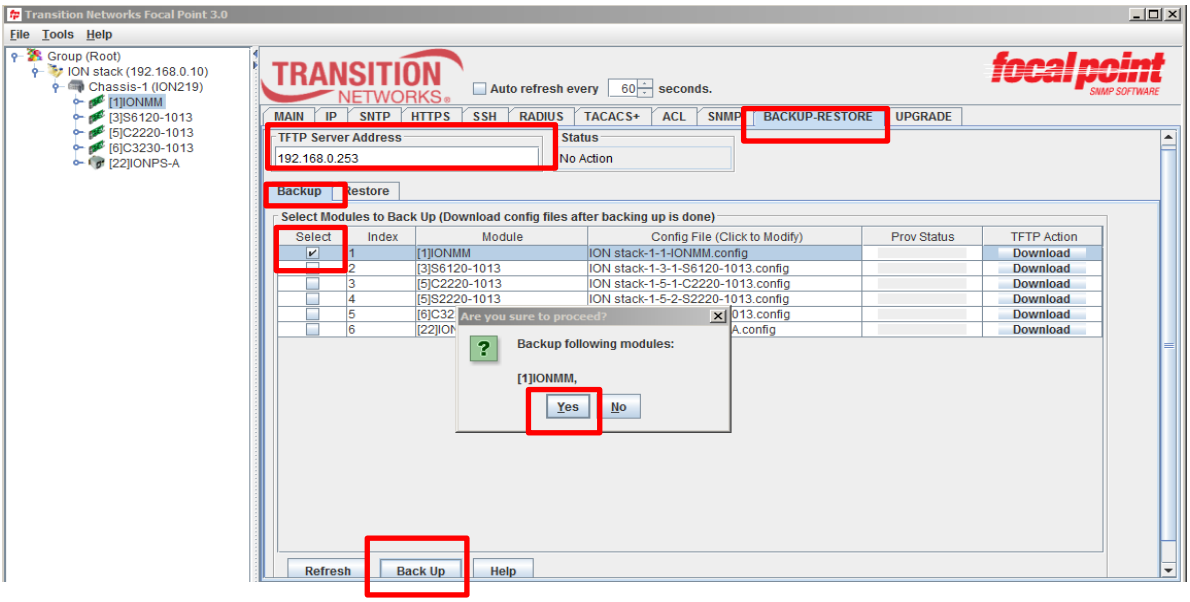
7) To load new files into the firmware database, enter the TFTP Server Address, Firmware File Name and click on the **Upload** button. **The Upload Result** will show **Success** upon completion and the new software file will show in the **Firmware Database Details** box below. Old firmware will be overwritten in this procedure.



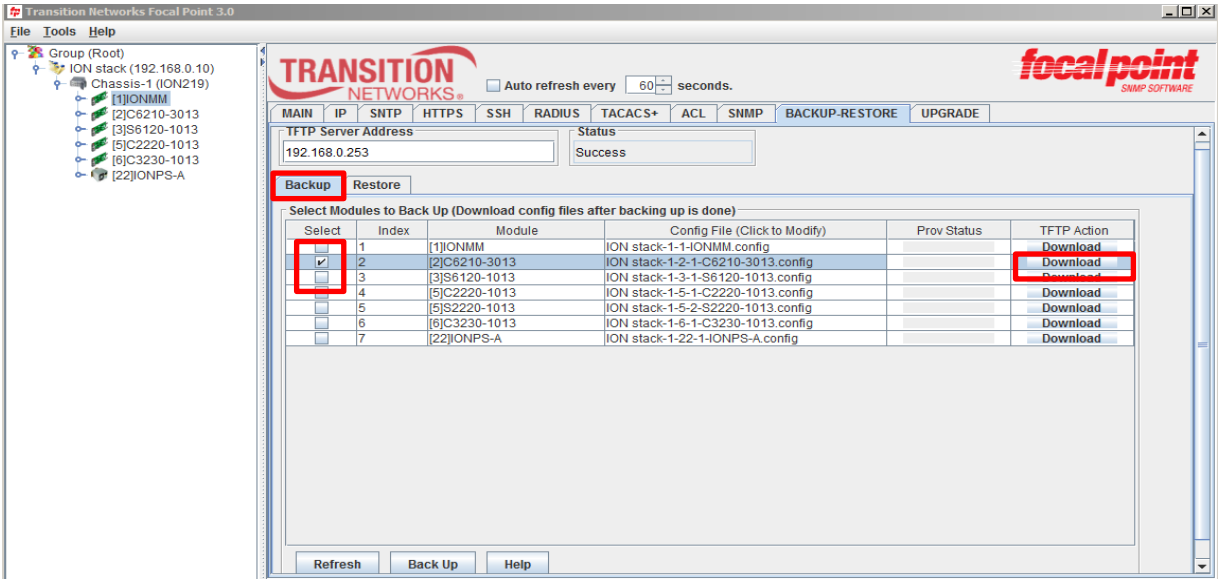
8) Upon completion of the last procedure, all firmware files for the chassis, power supplies and modules will now be in the ION **Firmware Database Details** box ready for loading into the modules.



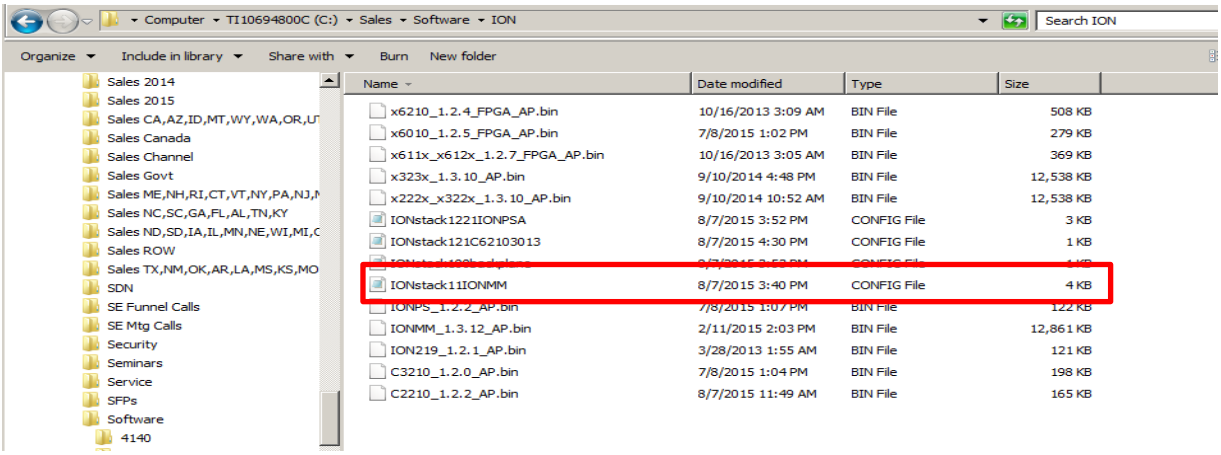
9) Before performing a module upgrade, you should backup the configuration file of the module. In order to back up the configuration, click on the **BACKUP-RESTORE** tab, enter the TFTP Server IP Address, click on **Backup** tab, check the box next to the module and click on **Backup** at the bottom of the screen. When asked for verification, click **Yes**.



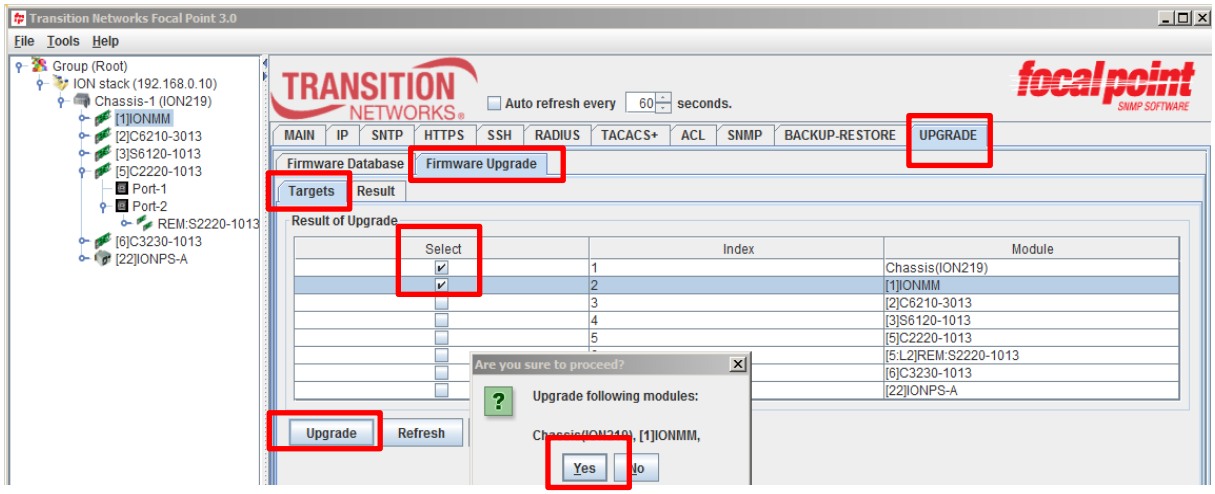
10) To save the backup configuration file to your TFTP Server PC, check the box next to the module and click on the **Download** button.



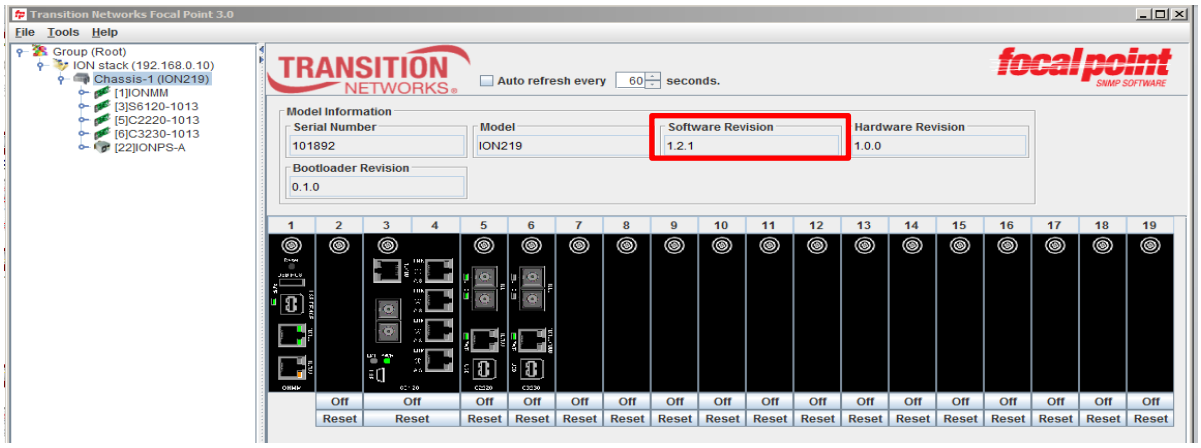
11) The backup configuration file will now be in your TFTP Server PC directory.

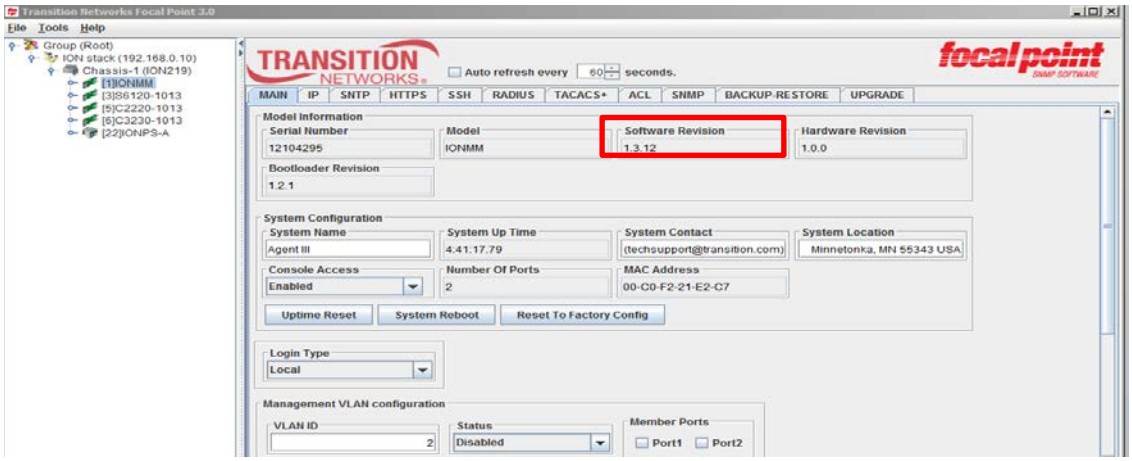


12) To upgrade the new firmware files, click on **UPGRADE**, **Firmware Upgrade**, **Targets**. Check the boxes to select the devices to upgrade, and then click the **Upgrade** button. When asked for verification, click **Yes**.

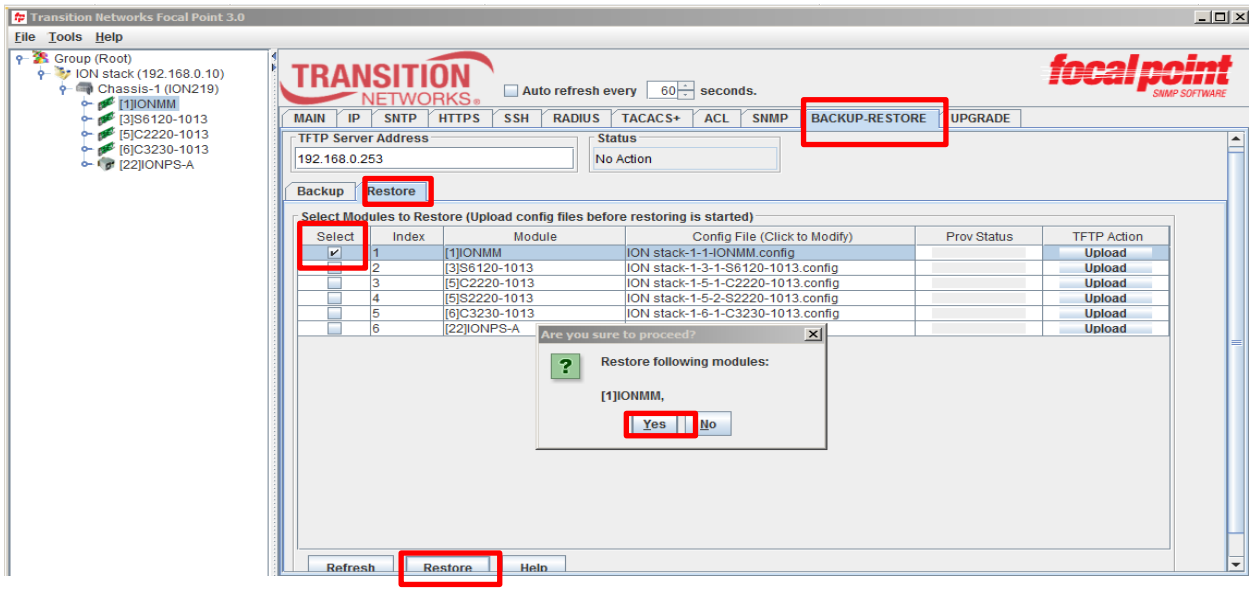


13) Verify Software Revision on the **Main** menu page of the devices.

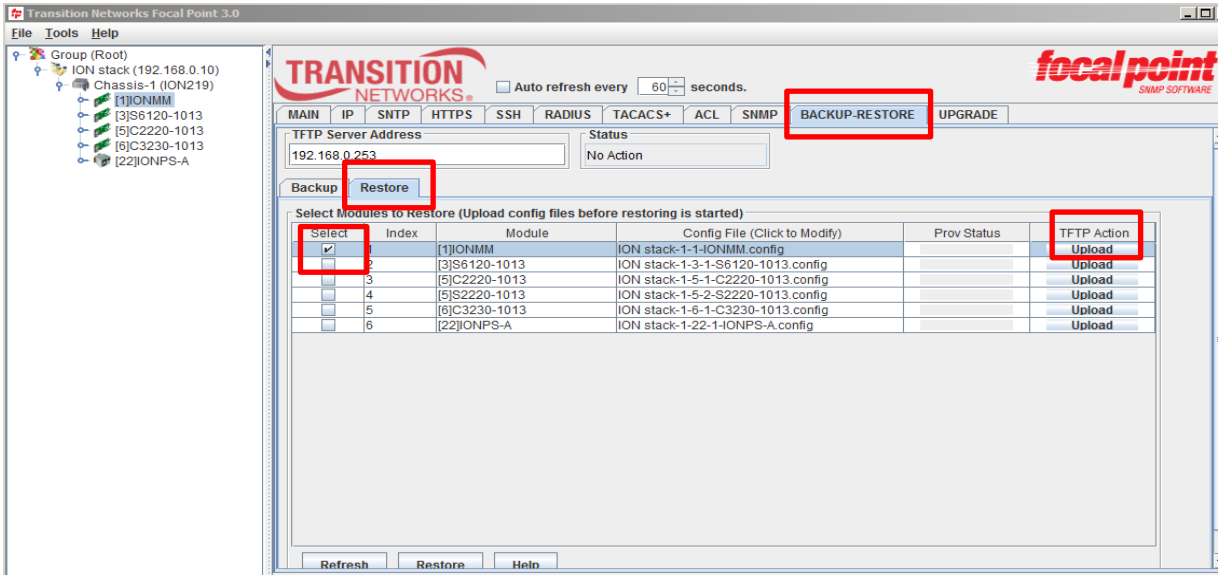




14) Now you can restore the configuration file of the module. In order to restore the configuration, click on the **BACKUP-RESTORE** tab, enter the TFTP Server IP Address, click on **Restore** tab, check the box next to the module and click on **Restore** at the bottom of the screen. When asked for verification, click **Yes**.



15) If you wish to restore the configuration file from the file on your PC to the ION database, click on the **BACKUP-RESTORE** tab, enter the TFTP Server IP Address, click on **Restore** tab, check the box next to the module and click on **Upload** button.



The ION firmware upgrade via Focal Point is now complete. For additional assistance or technical support, please contact Transition Networks, www.transition.com/contact.