

# ScanTool User Guide

Applicable to  
Tsunami® 800, 8000 & 10000 Series  
ORiNOCO 8100 & 9100 Series  
(Point-to-point, Point-to-multipoint and Access Point Products)



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### ScanTool Guide

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# Preface

## About this Guide

This guide gives working knowledge of the ScanTool application which can be used with all the Tsunami® 800, 8000 & 10000 Series and ORiNOCO 8100 & 9100 Series products.

## Audience

The intended audience for this guide is the network administrators who install and/or manage the device.

## Prerequisites

The reader of this document should have working knowledge of Wireless Networks, Local Area Networking (LAN) concepts, Network Access Infrastructures and Client-Server Applications.

## Documentation Conventions

### Icon Representation

| Name      | Image                                                                               | Meaning                                                            |
|-----------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Note      |   | A special instruction that draws attention of a user.              |
| Important |  | A note of significant importance that the user should be aware of. |
| Caution   |  | A warning that cautions the user of a possible danger.             |

# ScanTool

# 1

## 1.1 Introduction to ScanTool

Proxim's ScanTool ([Answer ID - 1735](#)) is a software utility that runs on Microsoft Windows 7 and above.

By using ScanTool, a user can,

- Scan devices (Proxim devices only) available on the network
- Scan devices based on IPv4 or IPv6 address
- Obtain device's IP address
- Modify device's IP Configuration parameters (IP Address, Address Type, Gateway and so on)
- Launch the Web interface
- Switch between the network adapters, if there are multiple network adapters in the Personal Computer
- Reset a device to factory default
- Force Reload a device (i.e., delete firmware image)



- *IPv6 is supported only by ScanTool v3.0.1 and higher versions.*
- *Network Adapter of ScanTool supports up to 16 virtual / real interfaces*
- *Disable Windows Firewall (or add an exception) for ScanTool to function or to detect the radio.*

## 1.2 Initialize a device using ScanTool

To scan and locate the devices on a network by using ScanTool, do the following:

1. Power on, or reset the device.
2. To download Proxim's ScanTool, log on to Proxim's support site at <http://support.proxim.com> and search for ScanTool with ([Answer ID - 1735](#)). Upon successful download, double-click the icon to start the ScanTool.
3. If there are more than one network adapter installed on the computer, then the user will be prompted to select the adapter for scanning Proxim devices. Use an Ethernet adapter. Select an adapter and click **OK**.

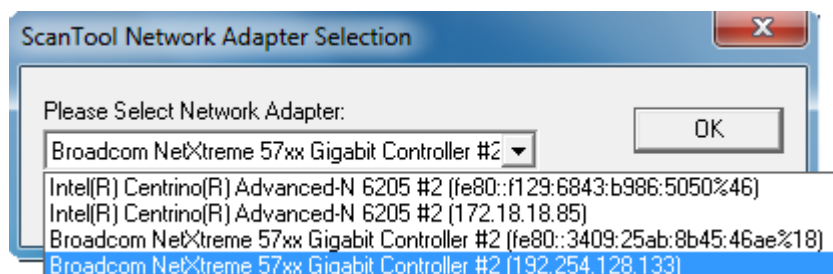


Figure 1-1 Network Adapter List

4. The following **Scan List** screen appears, which displays all devices that are connected to the selected adapter.

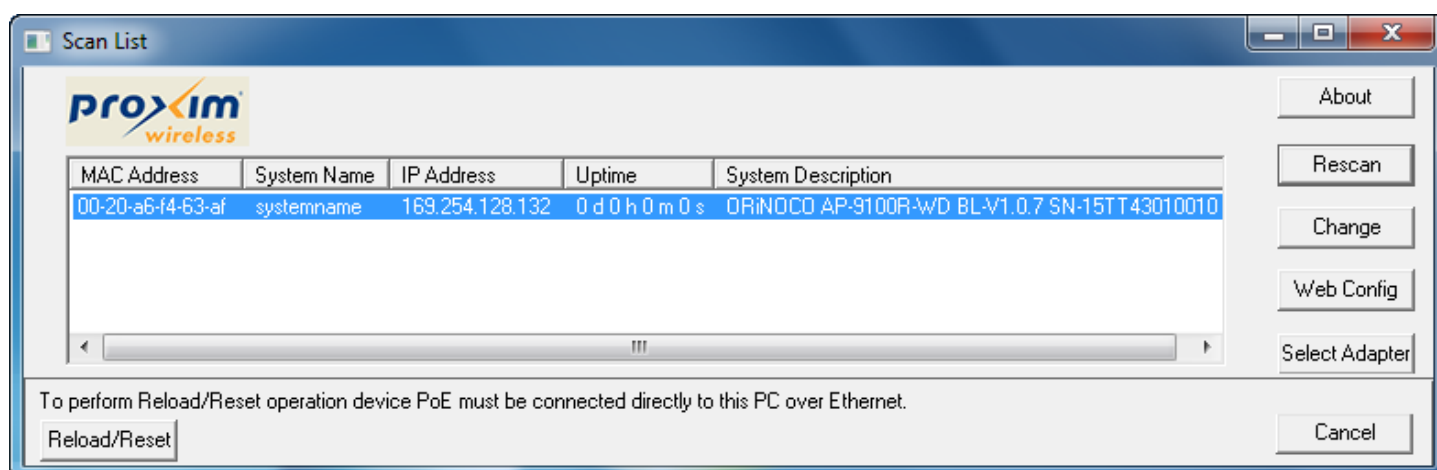


Figure 1-2 Scan List - Scanned Devices (IPv4)

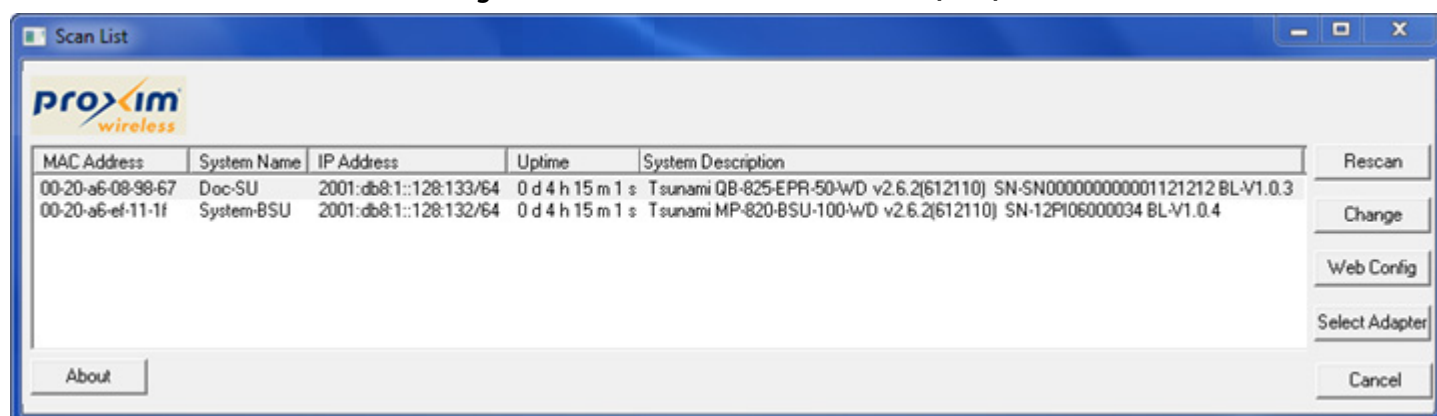


Figure 1-3 Scan List - Scanned Devices (IPv6)

This screen contains the following device information:

- **MAC Address**
- **System Name**
- **IP Address**
- **Uptime**
- **System Description:** The system description comprises the following information:
  - **Device Description:** For example, MP-820-BSU-100-WD
  - **Firmware Version:** 2.X.Y; For example, version 2.6.2
  - **Serial Number :** For example, SN-12PI06000034
  - **Bootloader Version:** For example, BL - V1.0.4

5. Click **Select Adapter**, to change adapter settings.

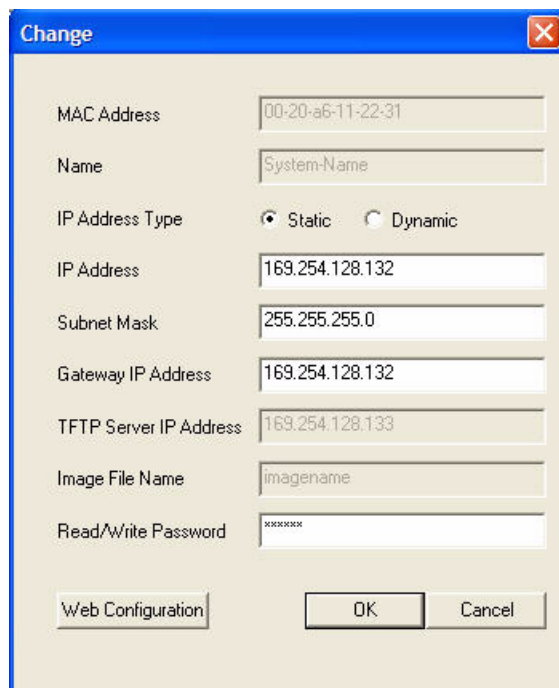
6. From the list, identify and select the MAC address of the device that needs to be initialized, and click **Web Config** to log on to the Web Interface.



*If the device does not appear in the Scan List, click Rescan in the Scan List screen. Also ensure that Windows Firewall is not blocking ScanTool. If the device still does not appear in the list, see **Troubleshooting in Deployment and Troubleshooting Guide** or **Software Management Guide**. Note that after rebooting the device, it may take up to five minutes for the device to appear in the Scan List.*

## 1.3 Modifying the IP Address of the device using ScanTool

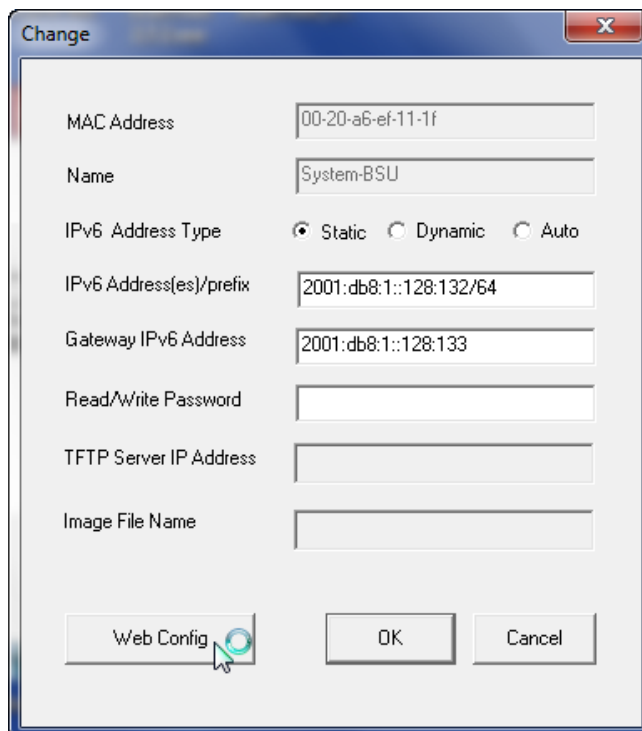
To modify the IP address of a device by using ScanTool, select the device from the scan list and click **Change**. A **Change** screen appears as shown in the following screen. The system automatically populates the **MAC Address**, **System Name**, **TFTP Server IP Address** and **Image File Name** of the device, which are read-only.



The 'Change' dialog box for IPv4 configuration contains the following fields and controls:

- MAC Address: 00-20-a6-11-22-31
- Name: System-Name
- IP Address Type: ☒ Static ☐ Dynamic
- IP Address: 169.254.128.132
- Subnet Mask: 255.255.255.0
- Gateway IP Address: 169.254.128.132
- TFTP Server IP Address: 169.254.128.133
- Image File Name: imagename
- Read/Write Password: xxxxxx
- Buttons: Web Configuration, OK, Cancel

Figure 1-4 Modifying Device's IP Address (IPv4)



The 'Change' dialog box for IPv6 configuration contains the following fields and controls:

- MAC Address: 00-20-a6-ef-11-1f
- Name: System-BSU
- IPv6 Address Type: ☒ Static ☐ Dynamic ☐ Auto
- IPv6 Address(es)/prefix: 2001:db8:1::128:132/64
- Gateway IPv6 Address: 2001:db8:1::128:133
- Read/Write Password: (empty)
- TFTP Server IP Address: (empty)
- Image File Name: (empty)
- Buttons: Web Config (with a circular arrow icon), OK, Cancel

Figure 1-5 Modifying Device's IP Address (IPv6)

1. Select the **IP Address Type** as **static/dynamic** for IPv4 and as **static/dynamic/auto** for IPv6
  - **Static:** When set to static, the IP address of the device can be manually changed.
  - **Dynamic:** When set to dynamic, the IP address is dynamically generated by the DHCP server.
  - **Auto:** When set to auto, the IPv6 address is calculated by the device using the router advertisement messages.
2. Type the appropriate **IP Address**, **Subnet Mask**, and the **Gateway IP Address** parameters.
3. Enter the SNMP Read/Write password in the **Read/Write Password** box. By default, it is **public**.
4. Click **OK** to save the details. The device automatically reboots.

To log on to the Web Interface, click **Web Configuration**.

The user is then prompted to enter its username and password. For more information on how to logon, please see **Logging on to the Web Interface** in **Device Management Guide (or) Software Management Guide**.

# Reload/Reset Procedure

# 2

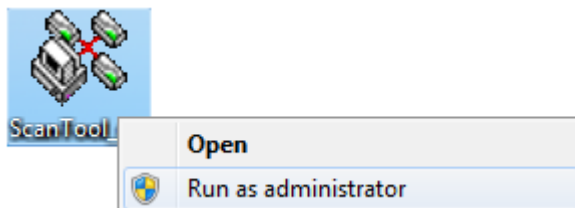
## IMPORTANT!

- *Tsunami 8xxx devices, ORiNOCO AP-8100 and ORiNOCO AP-9100 devices do not support Reload/Reset functionality. Refer to ORiNOCO AP Hardware Installation Guide to know how to use Access Point's built-in Reload button.*
- *It is recommended to strictly follow the below instructions for successful Reload/Reset operation.*

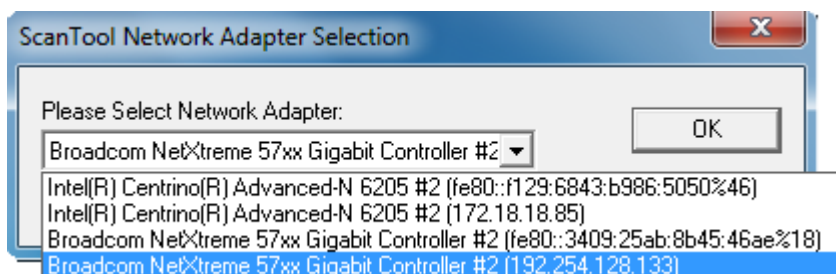
### Pre-requisites

- Device must be connected directly to the PC over Ethernet cable.
- User must be able to turn on & off the power supply, during the device Reload/Reset procedure.
- Download & Install the latest ScanTool application & WinPcap available at <http://support.proxim.com>
- To view the Reload/Reset button on ScanTool window, the PC operating system must be Windows 7 and above.
- Ensure that Windows Firewall is turned off before ScanTool is launched.
- Ensure that ScanTool is **Run as Administrator**.

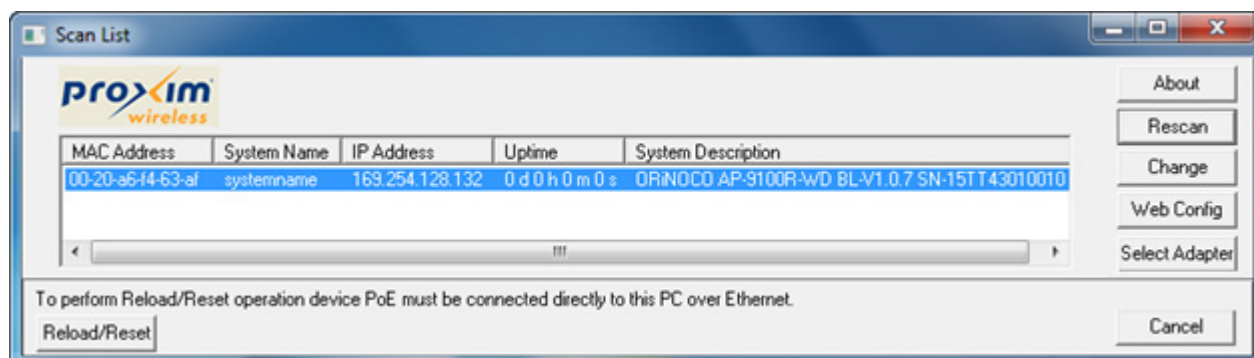
1. Right click the **ScanTool** Application and click **Run as Administrator**.



2. Choose a Network Adapter (to which the device is connected) and click **OK**.



3. Click **Reload/Reset** at the bottom-left corner of the ScanTool window.



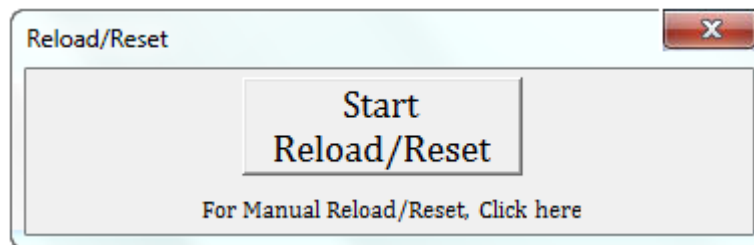
## 2.1 Reload/Reset



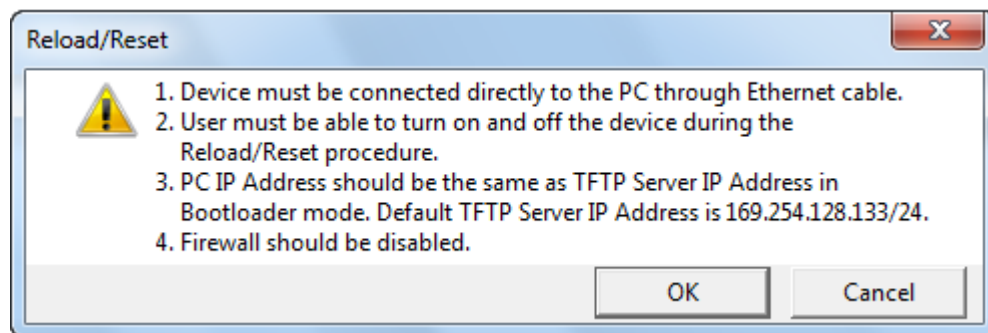
To perform Reload/Reset (in NetConsole Mode) using ScanTool\_v5.1:

1. **Tsunami 82x devices:** Upgrade bootloader version to 1.0.13 & above
2. **Tsunami 83x devices:** Upgrade bootloader version to 2.0.6 & above  
Else use Manual Reload/Reset. To upgrade bootloader, visit <http://support.proxim.com>

1. Click **Start Reload/Reset** to perform Reload/Reset operation.



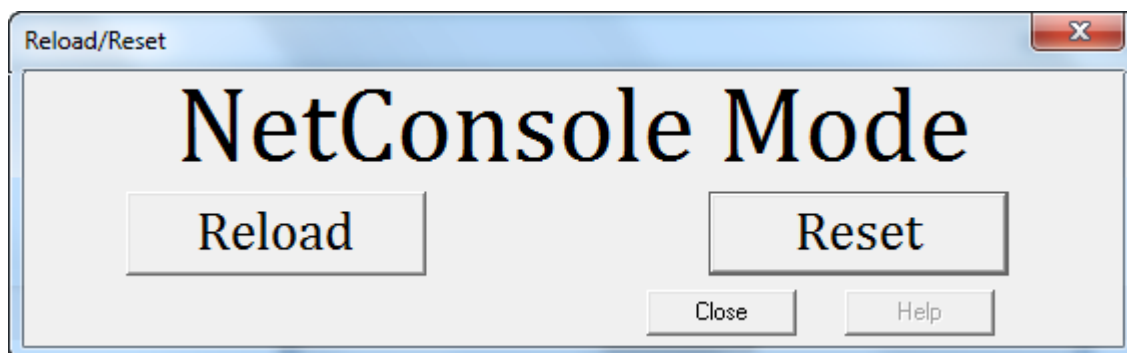
2. Follow the instructions in the pop-up given below and then click **OK**.



Reload/Reset works only if the UDP Port number 15000 is not in use. For details, see [UDP Port No. 15000](#).

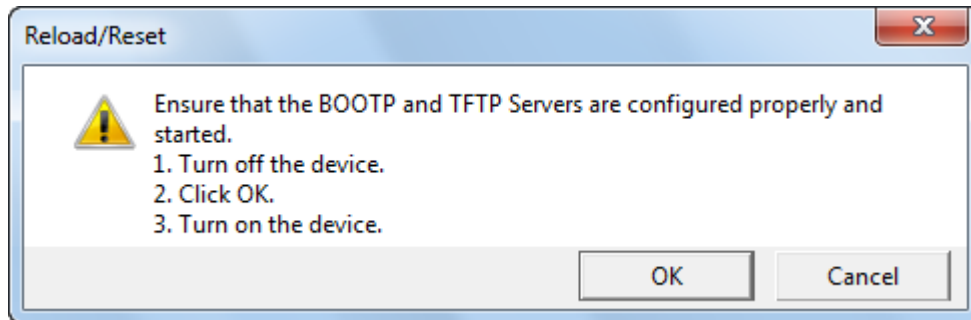
3. Reload/Reset Dialog

Click [Reload](#) or [Reset](#) depending upon the requirement.

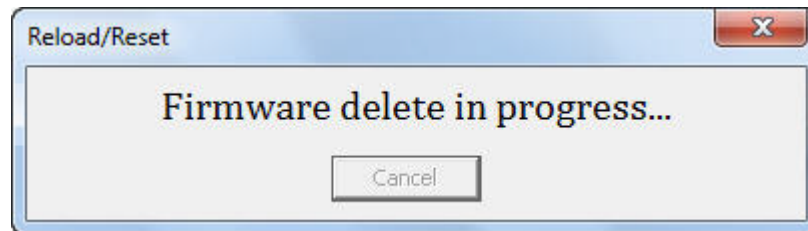
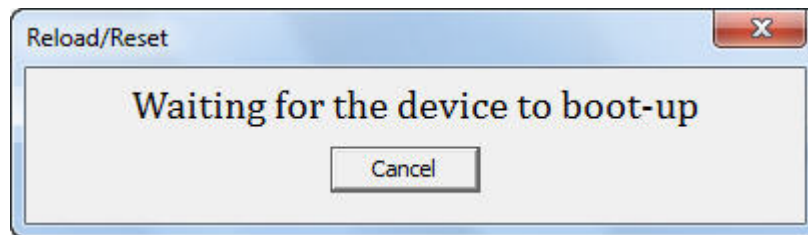


### 2.1.1 Reload

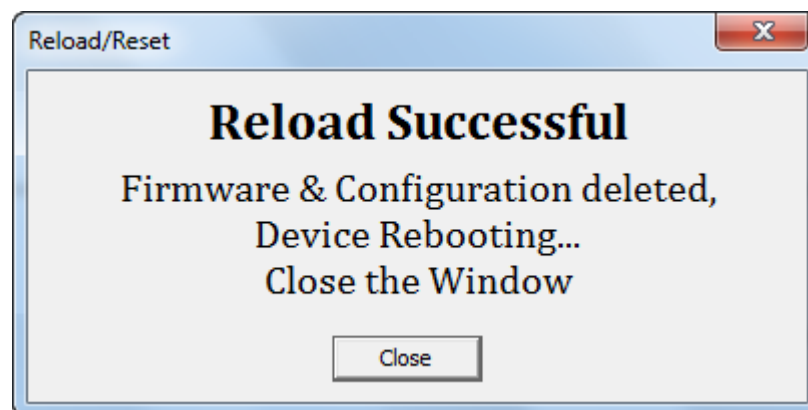
1. In the [Reload/Reset Dialog](#), click **Reload** and perform the steps on the pop-up given below.



2. During the Reload operation various messages are displayed on the dialog, which are as given below:



3. Reload operation is performed successfully.



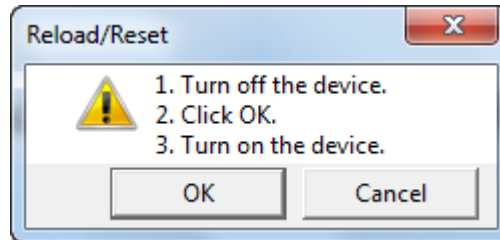
4. If an issue arises, the **Help** button is enabled in the [Reload/Reset Dialog](#). To fix the issue see [Help](#) and follow the instructions.



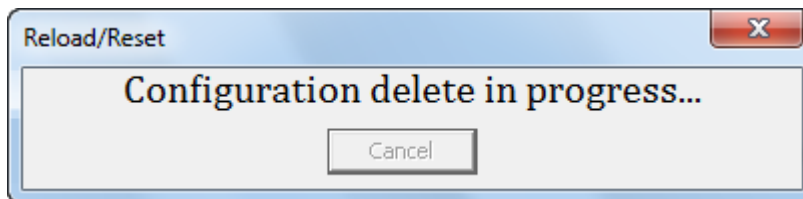
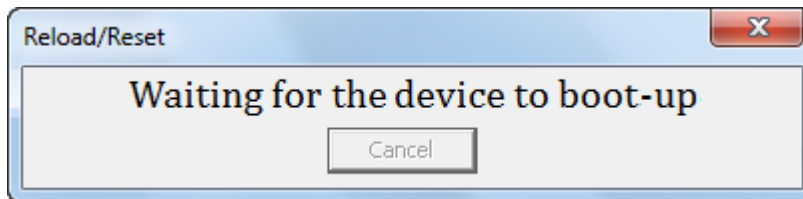
: See chapter 3 to [Load Image onto a device](#)

### 2.1.2 Reset

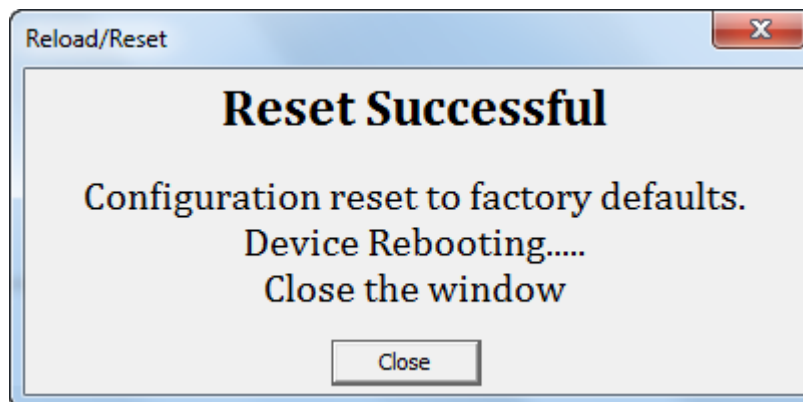
1. Perform the steps on the pop-up given below.



2. During the Reset operation various messages are displayed on the dialog as given below.



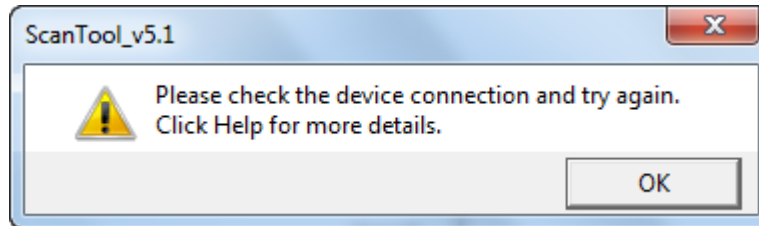
3. Reset operation is performed successfully. Click **Close**.



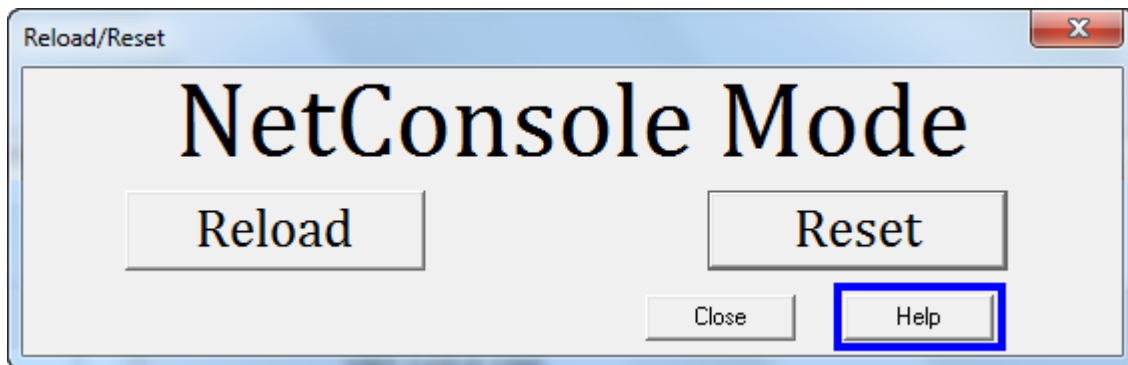
4. If an issue arises, the **Help** button is enabled in the [Reload/Reset Dialog](#). To fix the issue see [Help](#) and follow the instructions.

### 2.1.3 Help

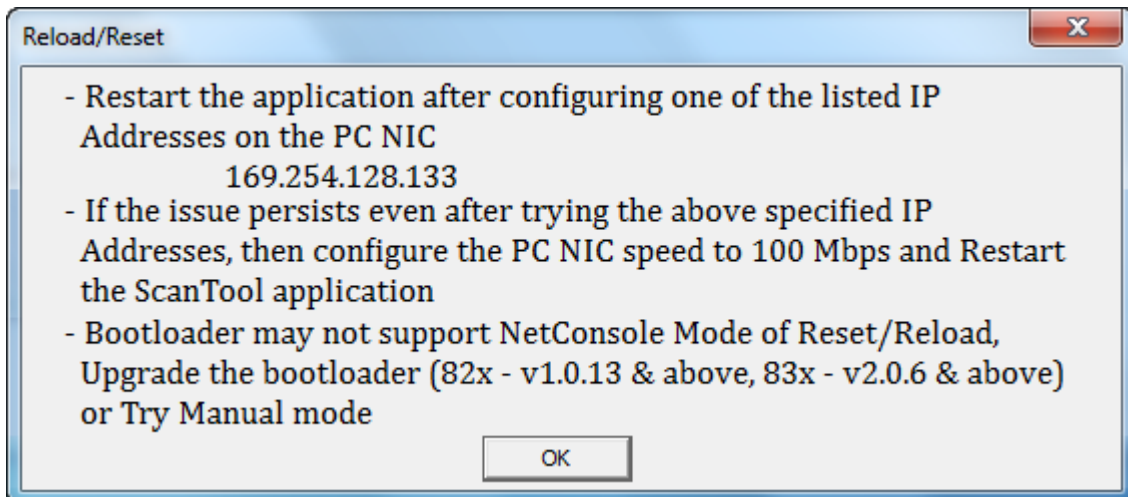
1. The below pop-up message appears, if there is a mismatch between the **PC IP Address** and **TFTP Server IP Address** in the bootloader mode. Click **OK**.



2. View the Reload/Reset window with the **Help** button enabled, as shown below. Click **Help**.



3. View the below pop-up with help messages.



4. Now configure (one of) the above listed IP Address(es) on the PC.
5. Close and re-open the Scantool application and continue with Reload/Reset procedure.
6. If the issue persists, configure the PC NIC Speed to 100 Mbps.
7. Close and re-open the Scantool application and continue with Reload/Reset procedure.
8. Issue may also arise if the bootloader version in the device is older. It must be ensured that bootloader version in the device is as below:
  - 82x device - v1.0.13 & above
  - 83x device - v2.0.6 & above

To upgrade bootloader, visit <http://support.proxim.com>

## 2.2 Reload/Reset - Manual Mode

When to use **Manual mode**?

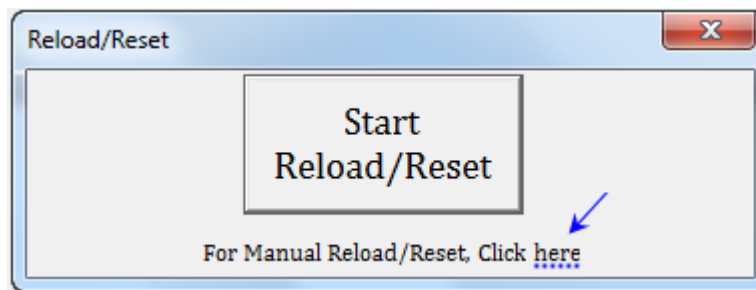
Manual mode should be used in the following cases:

- Tsunami 820 series with bootloader versions 1.0.8 to 1.0.12.
- Tsunami 830 series with bootloader versions older than 2.0.6.

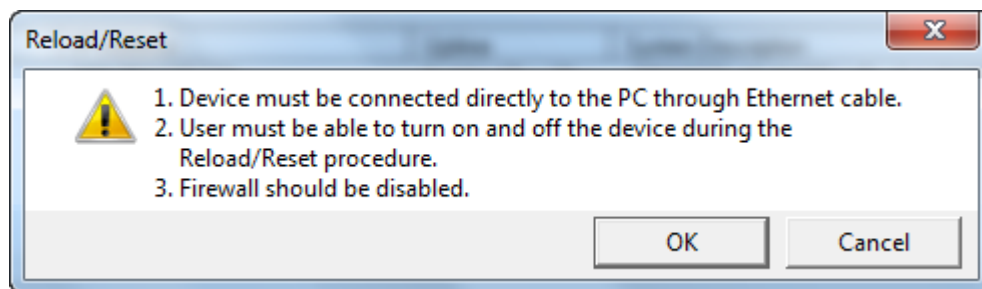


: Manual mode will not work if the bootloader version in 820 series device is older than 1.0.8 (SN number lower than 16TT18XXXXXX - built prior to week 18, 2016).

1. For Manual Reload/Reset, click 'here' on the dialog given below.

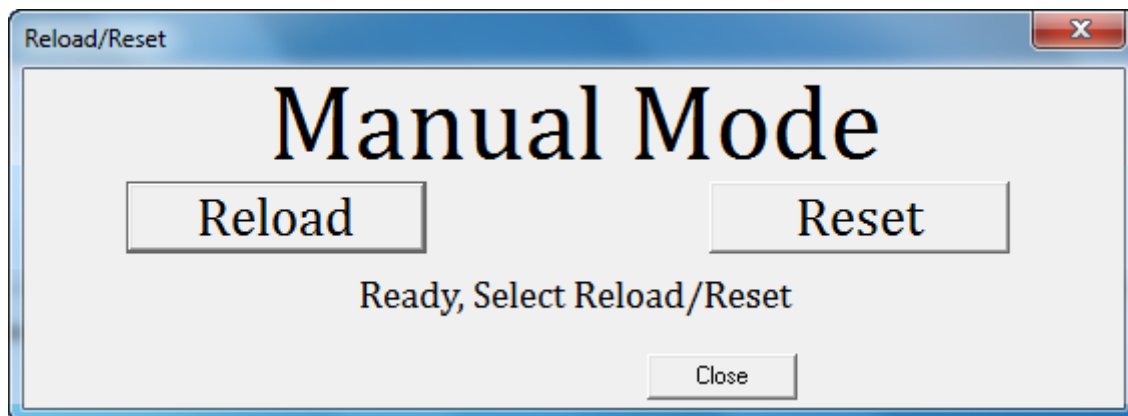


2. Prior to Manual Reload/Reset, follow the instructions on the pop-up given below.



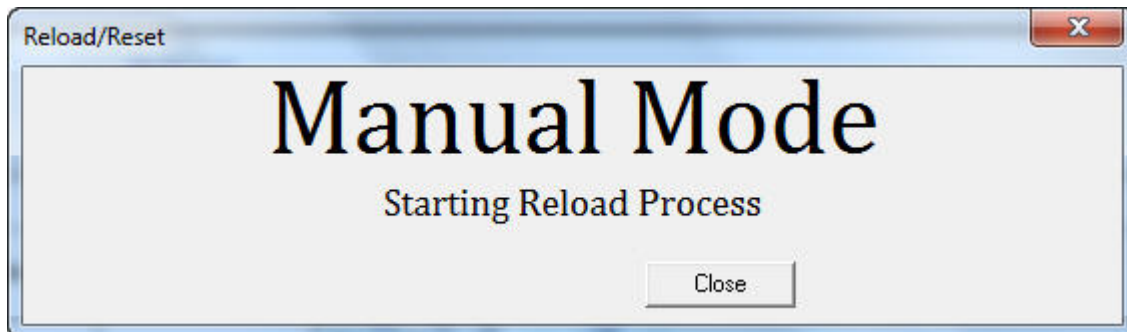
3. Reload/Reset dialog

Click [Reload](#) or [Reset](#) depending upon the requirement.

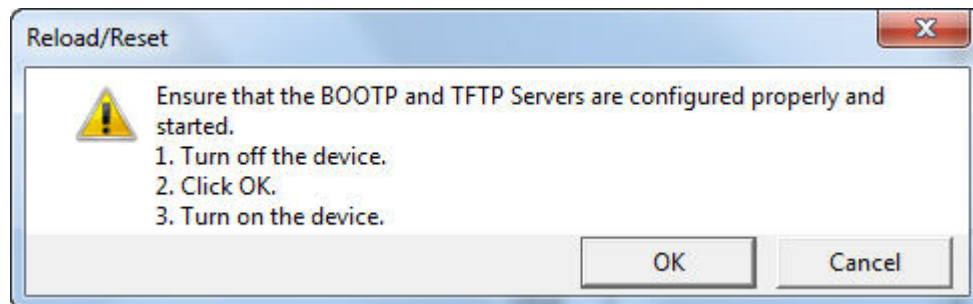


### 2.2.1 Reload

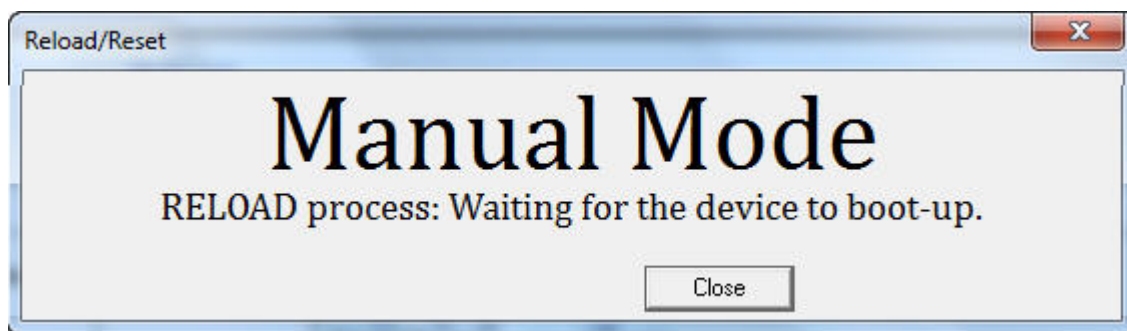
1. In the [Reload/Reset dialog](#), click **Reload** to see the below message.



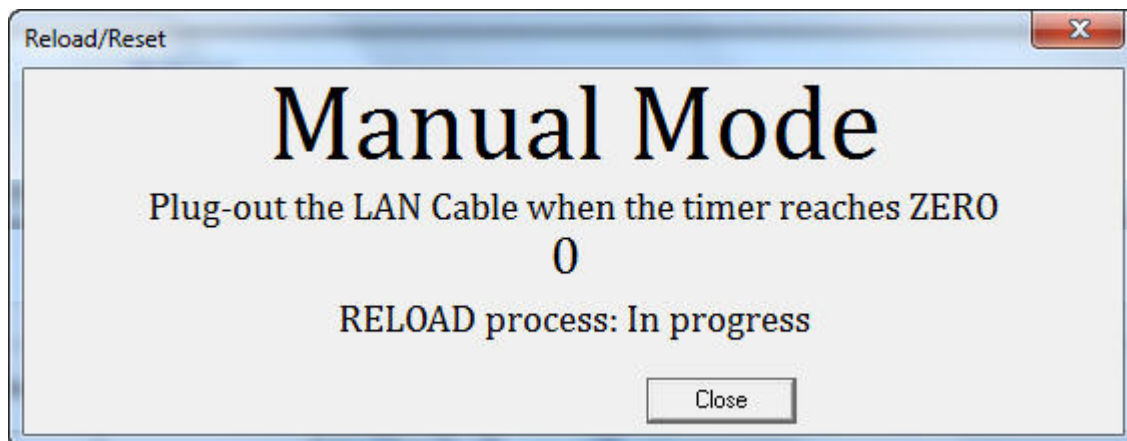
2. Perform the steps on the pop-up given below.

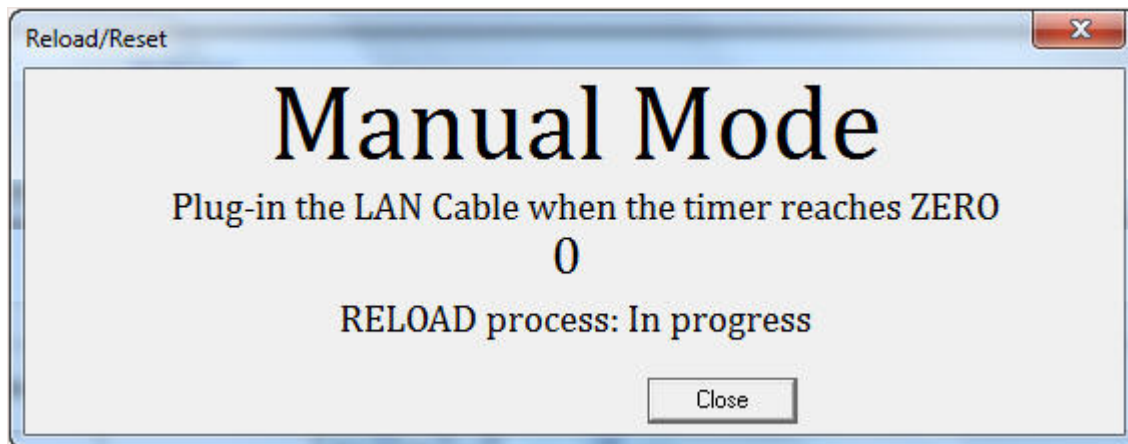


3. View the device boot-up message.

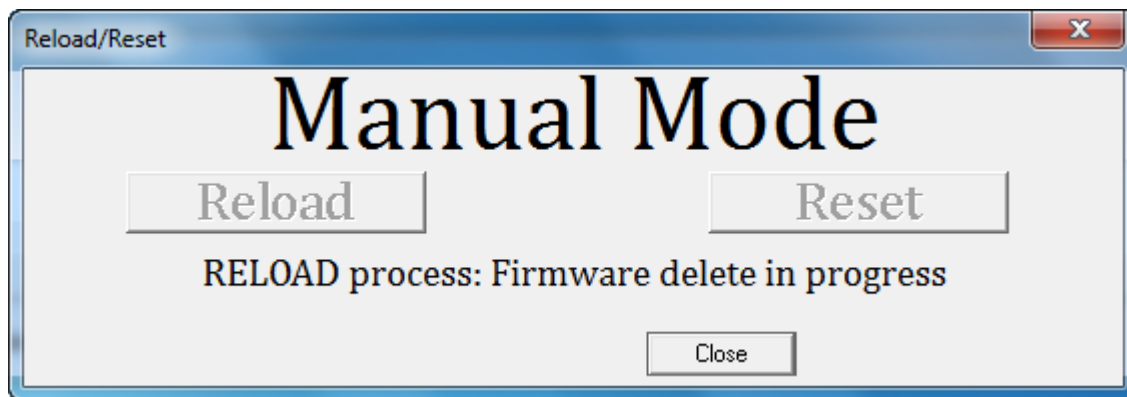


4. Plug-out and Plug-in the LAN cable by following the instructions and timer on the dialog given below.





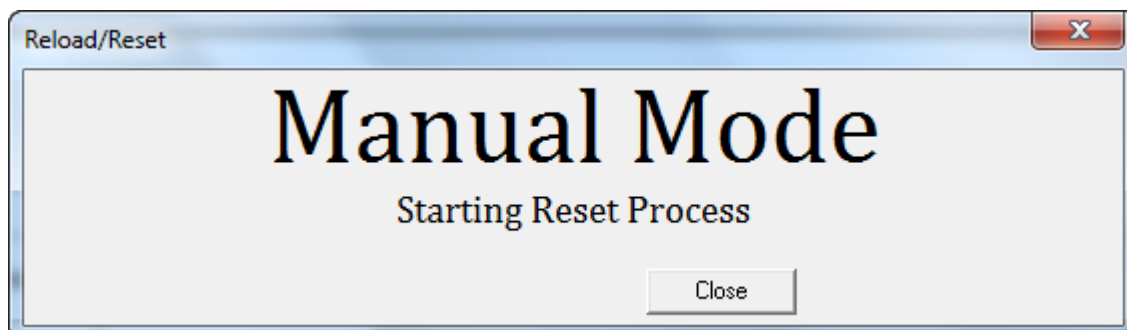
5. Firmware deleted successfully. (Please wait 5-7 minutes for the Reload operation to complete). Click **Close**.



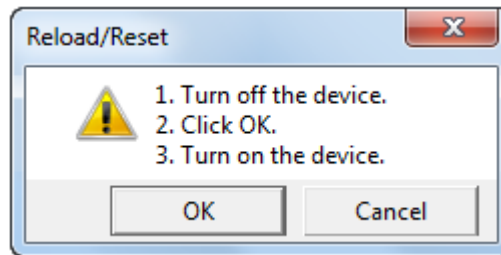
- Though the above dialog displays "progress" message, device might have been reloaded. To confirm, please scan again and try to access webconfig.
- See chapter 3 to [Load Image onto a device](#).

### 2.2.2 Reset

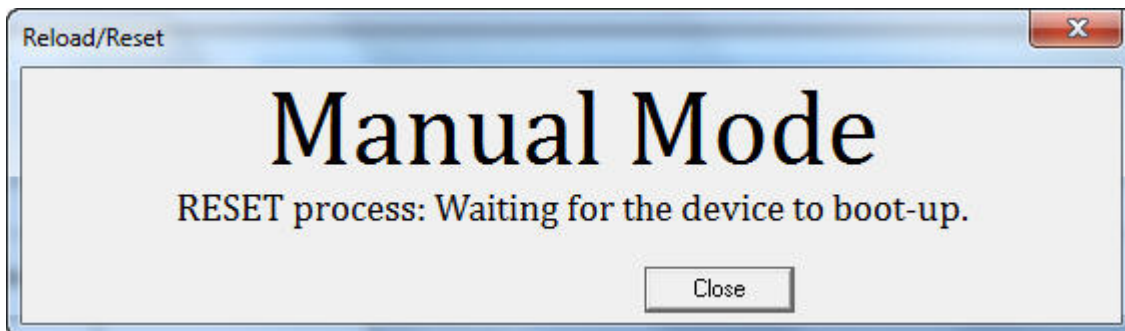
1. In the [Reload/Reset dialog](#), click **Reset** to see the below message.



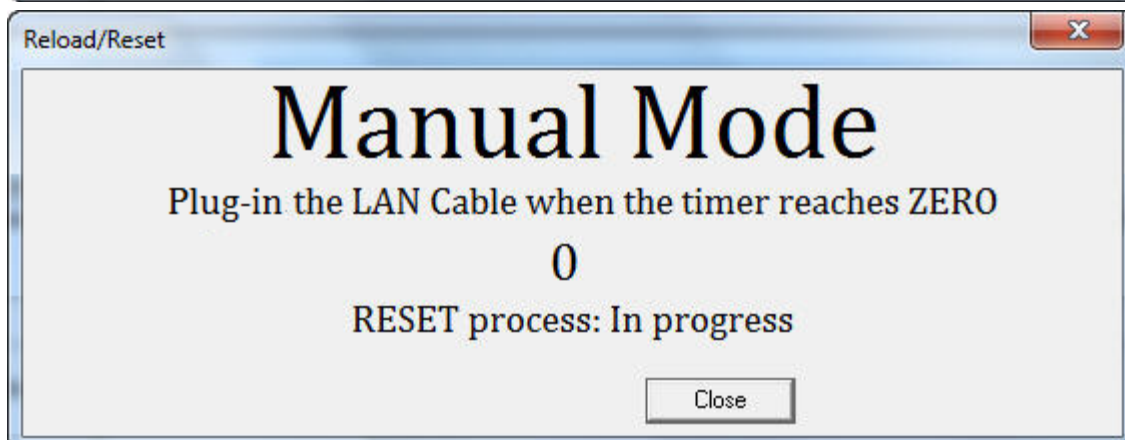
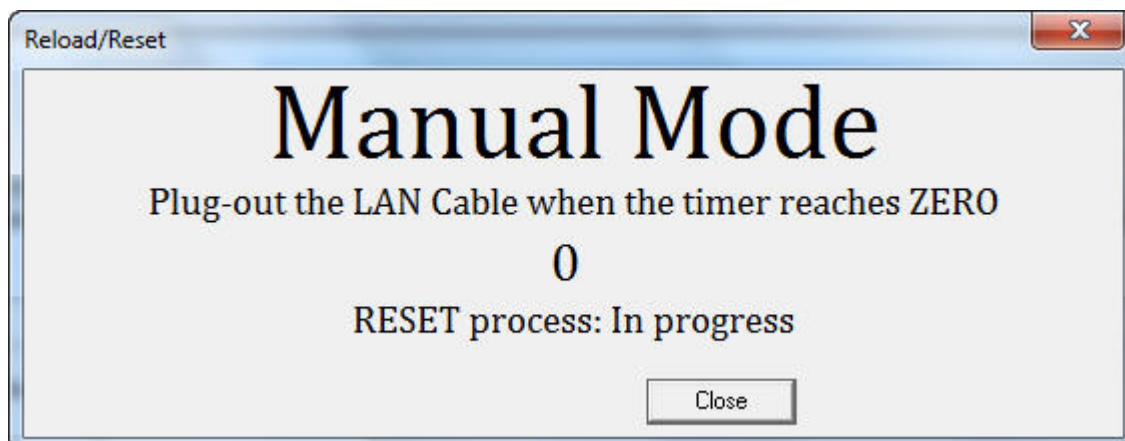
2. Perform the steps on the pop-up given below.



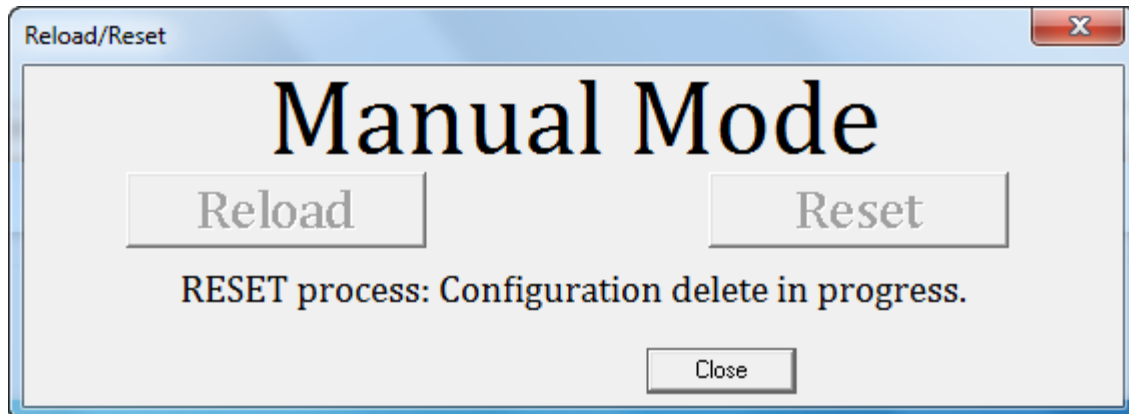
3. View the device boot-up message as given below.



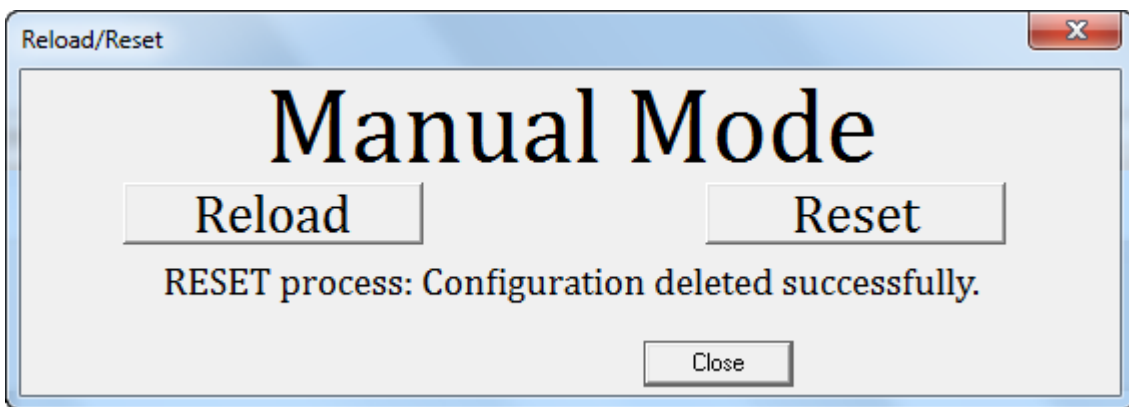
4. To Reset the configuration on the device, Plug-out and Plug-in the LAN cable by following the instructions and timer on the dialog given below.



5. Configuration delete is in progress.



6. Configuration deleted successfully. Click **Close**.



## 2.3 UDP Port No. 15000

1. How to determine whether the UDP Port No. 15000 is being used by an application?

Type the command `netstat -ano | find "15000"` in the windows command prompt and find a result as below:

```
C:\Users\Ktaduri>netstat -ano | find "15000"
UDP    0.0.0.0:15000    *:*                9304
```

2. How to ensure that UDP Port No. 15000 is available for use by ScanTool?

Close the application that is currently using UDP Port No.15000.

(**NetConsole** is one of the applications that uses UDP Port No.15000)

---

# Load Image onto a device

# 3

## 3.1 Load Image onto a device using ScanTool

To download the firmware image to the device, you will need an Ethernet connection to the computer on which the TFTP server resides and to a computer that is running ScanTool (this is either two separate computers connected to the same network or a single computer running both programs).

ScanTool automatically detects the device that does not have a valid software image. The **TFTP Server** and **Image File Name** parameters are enabled in the ScanTool's **Change** screen so that you can download a new image to the device. (These fields are disabled, if ScanTool detects a software image on the device).

### 3.1.1 Preparing to download the device Image

Before starting the download process, you need to know the device IP Address, Subnet Mask, the TFTP Server IP Address, and the Image file name. Make sure the TFTP server is running and properly configured to point to the folder containing the image to be downloaded.

### 3.1.2 Procedure to load a software image onto the device

Follow these steps to load a software image to the device using ScanTool:

1. Download the latest software from <http://support.proxim.com>, and copy it to the default directory of the TFTP server.
2. Launch Proxim's ScanTool.
3. Highlight the entry for the device that you want to update and click **Change**.
4. Set **IP Address Type** to **Static**.



: You need to assign static IP information temporarily to the device since its DHCP client functionality is not available when no image is installed on the device.

5. Now enter the IP address, Subnet mask, Default-gateway, Server - IP address and the image filename.
6. Click OK. The device will reboot and the download starts automatically.
7. Click OK when prompted to return to the Scan List screen after the device has been updated successfully.
8. Click Cancel to close the ScanTool.

After the download process is completed, the device will reboot and initialize. After successful initialization, the device is ready to be configured.