



## **SNMPWEBCARD v06x TFTP Recovery Procedure**

Certain events, such as interrupting a firmware upgrade procedure may render an SNMPWEBCARD unable to boot. The following network-based recovery procedure will allow the card to be reprogrammed so that the upgrade process can be restarted.

### **Affected Products**

This procedure is valid for Tripp Lite SNMPWEBCARDS with firmware version 12.06.0062 or later.

### **Preparation**

1. Set up a TFTP (not FTP) server on a Microsoft® Windows™ or Linux machine
  - a. For Windows, TFTP freeware--such as TFTPUtil and Open TFTP Server--is available
  - b. On Linux, once tftp has been installed, a tftpDump folder needs to be created:

```
mkdir /home/username/tftpDump
chmod 755 /home/username/tftpDump
sudo in.tftpd --foreground --secure --user [username] --permissive
--verbose /home/[username]/tftpDump
```
2. Copy the **rescue.me** file (downloaded from the Tripp Lite website or provided by Tripp Lite Customer Support) into the tftp home directory.
  - a. For Windows, it will be the TFTP install folder
  - b. For Linux, it will be the tftpDump folder created in Step 1.

### **Instructions**

1. Access the serial console interface of the affected SNMPWEBCARD, using the procedure described in the SNMPWEBCARD [Installation](#) Manual.

An SNMPWEBCARD in recovery mode will display one of two messages on the serial console, depending on the IP address assignment. Refer to **Table A** or **Table B** in this document.

You may also force the card to enter recovery mode by cycling power and pressing capital T on the serial console before the third period '.' appears.

2. Using **Table A** or **Table B**, enter the required information, denoted by the << >> fields.

**Note:** all IP addresses must be in HEX format. For example, IP Address 10.12.100.1 would be entered as **0A0C6401**; Gateway Address 10.0.0.1 would be entered as **0A000001**



3. Once the last input has been entered, the SNMPWEBCARD will reboot and the serial console will display text similar to that shown in **Table C**.  
**Note:** the SNMPWEBCARD is not yet operational – **it must be upgraded** to the latest firmware.
4. Upgrade the recovered SNMPWEBCARD to the latest firmware using the FTP process described in the firmware release notes.

**TABLE A: Recovery message for an SNMPWEBCARD with a DHCP-assigned IP address**

The SNMPWEBCARD is now in recovery mode. You will be prompted for network information so that you can download a boot rescue image and given an opportunity to clear the configuration and file system. All addresses are expressed as unsigned longs. For example, the address 10.2.0.44 would be entered as 0A02002C. The Leading zeroes and use of uppercase are required. If all else fails, call Tripp Lite at 1-773-869-1111

Serial Number: XXXXXXXXXXXXXXXXXXXX MAC address: XX:XX:XX:XX:XX:XX  
The first two words of the SHA256 sum of the valid recovery file for this image are:  
94C204D13DE2DCAA

Getting network addresses ...  
DHCP done  
Configured self address: xxxxxxxx  
Subnet: xxxxxxxx  
Gateway: xxxxxxxx

TFTP server address? <<enter the address in Hex format; example: C0A8017F>>  
Got address 0xC0A8017F

Do you need the files and nv wiped?  
Note: you will lose the serial number and MAC address so jot them down now [yes|return] <<NO>>  
(Enter "NO" in order to preserve the serial number and MAC address)

Image Size...Match  
Image Integrity MD5...Match  
Rescue File Version...Correct  
Burning...Done

Launching Image



**TABLE B: Recovery message for an SNMPWEBCARD with a static IP address**

The SNMPWEBCARD is now in recovery mode. You will be prompted for network information so that you can download a boot rescue image and given an opportunity to clear the configuration and file system. All address are expressed as unsigned longs. For example, the address 10.2.0.44 would be entered as 0A02002C. The Leading zeroes and use of uppercase are required. If all else fails, call Tripp Lite at 1-773-869-1111.

Serial Number: XXXXXXXXXXXXXXXXXXXX MAC address: XX:XX:XX:XX:XX:XX  
The first two words of the SHA256 sum of the valid recovery file for this image are:  
94C204D13DE2DCAA

Getting network addresses ...  
Could not acquire address from DHCP, please enter address information.  
Self IP Address <<enter the address in Hex format; example: COA801B0F>>  
Got address 0xC0A801B0

Subnet Mask <<enter the address in Hex format; example: FFFFFFF0>>  
Got address 0xFFFFF00

Gateway Address <<enter the address in Hex format; example: COA8010>>  
Got address 0xC0A80101

Configured self address: xxxxxxxx  
Subnet: xxxxxxxx  
Gateway: xxxxxxxx  
TFTP server address? <<enter the address in Hex format; example: COA8017F>>  
Got address 0xC0A8017F

Do you need the files and nv wiped?  
Note: you will lose the serial number and MAC address so jot them down now [yes|return] <<NO>>  
(Enter "NO" in order to preserve the serial number and MAC address)

Image Size...Match  
Image Integrity MD5...Match  
Rescue File Version...Correct  
Burning...Done  
Launching Image



**Table C: Example of serial console text after SNMPWEBCARD reboot.**

PLATFORM: trippliteSnmpCard9210\_H\_16\_32 16M/32M

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NETWORK INTERFACE PARAMETERS:

FQDN poweralert-0610339247114  
IP address on LAN is 192.168.1.176  
LAN interface's subnet mask is 255.255.255.0  
IP address of default gateway to other networks is 192.168.1.1  
DHCPv6 is enabled on LAN  
DNS server is 8.8.8.8  
Time is supplied by SNTP at an interval of 360 minutes  
Primary SNTP Server host is 0.pool.ntp.org  
Secondary SNTP Server host is 1.pool.ntp.org  
Time zone is set to -6:00 from GMT, DST Enabled

SERVICES:

FTP is enabled on port 21  
HTTP is enabled on port 80  
HTTPS is enabled on port 443  
SSH is enabled on port 22  
SSH is enabled on port 2112  
TELNET is enabled on port 23  
TELNET is enabled on port 5214  
SNMP is enabled on port 161  
SYSLOG is disabled

HARDWARE PARAMETERS:

Serial channels will use a baud rate of 9600  
RTC date and time in GMT: 12/01/2016 22:49:11  
This board's serial number is XXXXXXXXXXXXXXXXXXXX  
This board's Ethernet MAC Address is XX:XX:XX:XX:XX:XX  
This board's SNMP engine boot count is 6 (0)  
After board is reset, start-up code will wait 5 seconds

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Press any key in 5 seconds to change these settings.

---IAM:Got AUTO-CONFIGURED IPv6 address FE80::206:67FF:FE27:F772 on interface eth0:3

Network IP configured.  
sntpd started  
[TICryptoStore::load] Load complete.  
[TIFtpServer::ftpServerOpen] FTP server running.  
[applicationStart] Server Lit, have a nice day...



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\* You now have a stable loading image, reboot to serial menu to wipe the file  
\* system and default the nv parms if you are trying to recover  
\* from a rolling reboot.

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[tIDhDaemon::work] running  
---IAM:Got STATIC IPv4 address 192.168.1.176 on interface eth0