Acme Packet 4500

10-gigabit NIU Installation Guide

Formerly Net-Net 4500

October 2013

ORACLE

About This Guide

Overview

The Acme Packet 4500 is a high performance, high capacity session border controller that optimally delivers interactive communications—voice, video, and multimedia sessions—across wireline, wireless, and cable IP network borders.

Audience

This guide is written for network administrators, and telecommunications equipment installers and technicians. It provides information related to the hardware components, features, installation, start-up, operation, and maintenance of the Acme Packet 4500. Only experienced and authorized personnel should perform installation, configuration, and maintenance tasks.

Revision History

This section contains a revision history for this document.

Date	Revision Number	Description
September 15 2012	Revision 1.00	• Initial Release
September 15 2012	Revision 1.2	• minor updates

10-gigabit NIU card Installation Guide

Introduction

This guide provides information about how to install a 10 Gigabit NIU card.

The following is a list of the major steps required to install a 10 Gigabit NIU card.

1. Follow preinstallation guidelines
2. Ground yourself and follow proper ESD grounding procedures.
3. Install the 10-gigabit NIU card into the Acme Packet 4500 or 3820.

Shipped Parts

10-gigabit NIU card order contains the following:

- Acme Packet 10-gigabit NIU card.

Installation Tools and Parts

The following tools and parts are required to install a 10-gigabit NIU card.

- #2 Phillips-head screwdriver.
- ESD wrist strap.
- ESD safe location.

Preinstallation

- This Installation should be performed during low-traffic periods or scheduled maintenance windows.
- When installing or removing a 10-gigabit NIU card, use ESD safe standard procedures.

Caution

Before handling an 10-gigabit NIU card follow the proper ESD grounding procedures. Failure to do so could damage the card and its components.

ESD

When performing maintenance on Acme Packet 4500 components you must ground yourself with an ESD wrist strap. An ESD wrist strap is used to channel static electricity to ground. Proper grounding is essential for handling static-sensitive equipment. Alternatively, you can ground yourself according to established grounding guidelines of the location where the Acme Packet 4500 or 3820 resides.

Note: An ESD wrist strap is not shipped with your Acme Packet products.

10-gigabit NIU card Removal

1. Front view of the Acme Packet 4500 chassis.

2. Rear view of the Acme Packet 4500 chassis.
3. Unscrew the two thumb screws located on each side of the 10-gigabit NIU card with a #2 Phillips screwdriver. The screws are spring-loaded and will be pushed forward, but will not fall out of the NIU card. .

4. Pull the two ejector handles out and away from the chassis at the same time to disengage the 10-gigabit NIU card from the midplane and chassis.

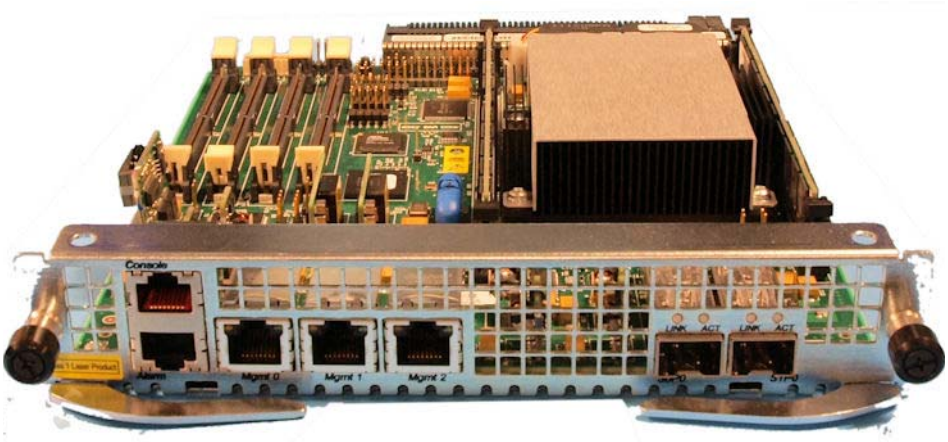
   Note: Do not force the NIU card out of the chassis. If there is any resistance. Check the alignment of the card and guide rails.

5. Remove the NIU card from the Acme Packet 4500 chassis and move it to an ESD safe location.

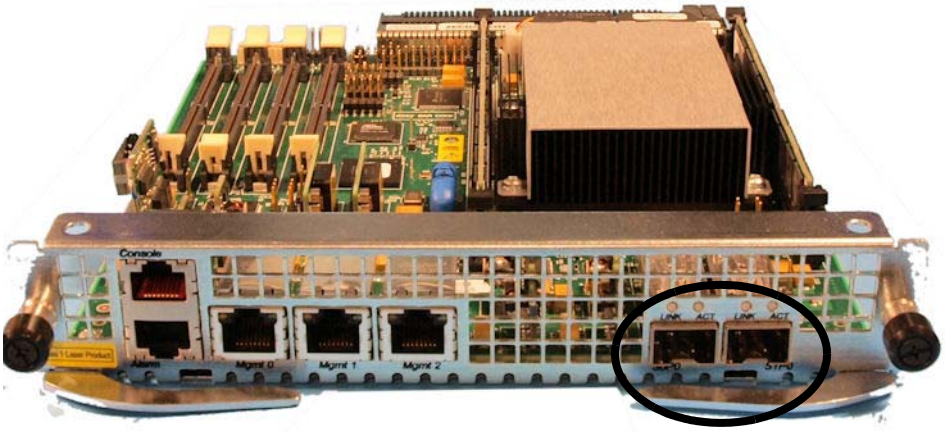
6. The NIU card is removed from the chassis and moved to an ESD safe location.

10-gigabit NIU card Identification

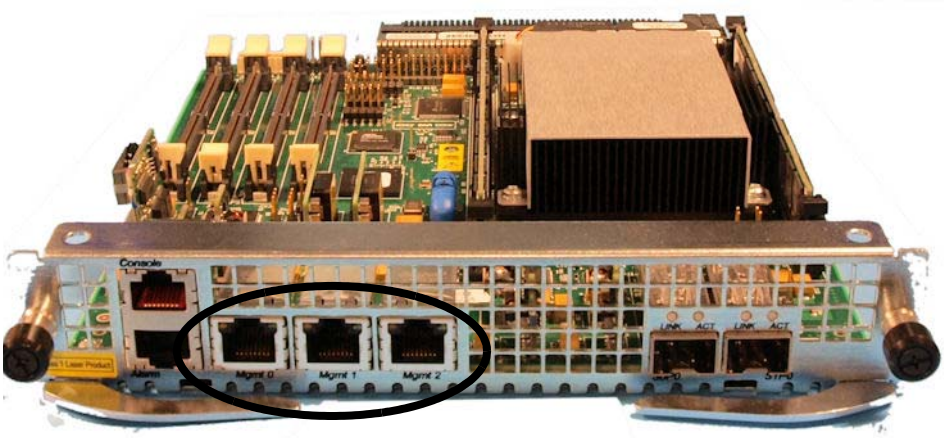
1. 10-gigabit NIU card.



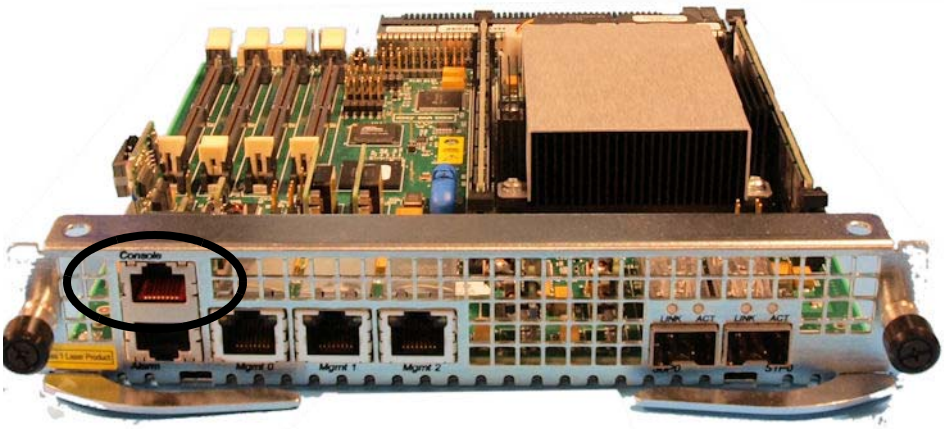
2. The 2 Media ports are identified in this image.



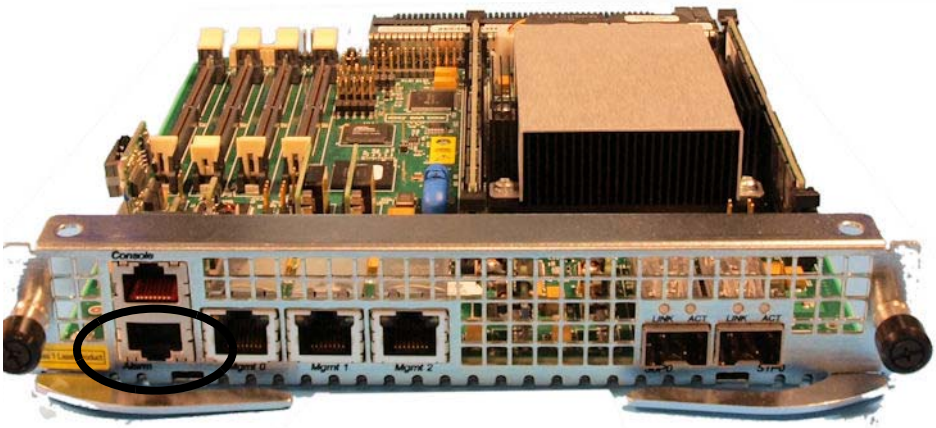
3. The 3 Management ports are identified in this image.



4. The console port is identified in this image.



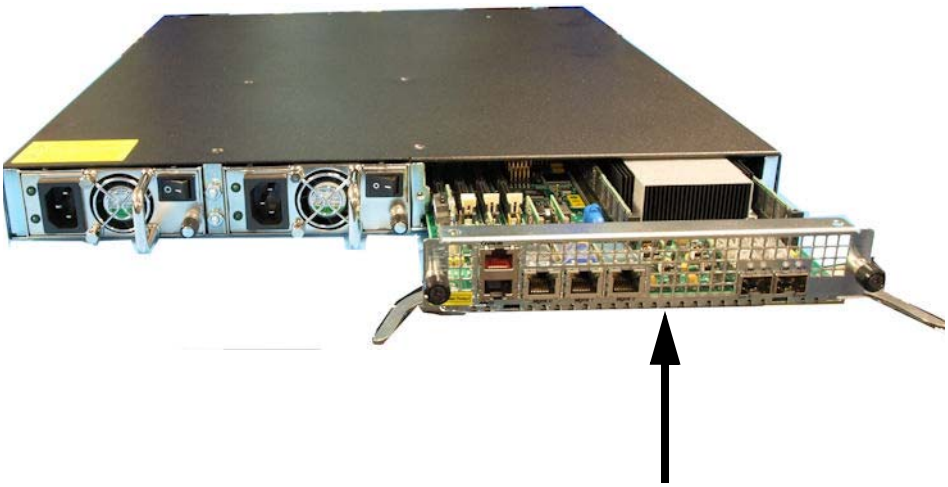
5. The Alarm port is identified in this image.



10-gigabit NIU card Installation

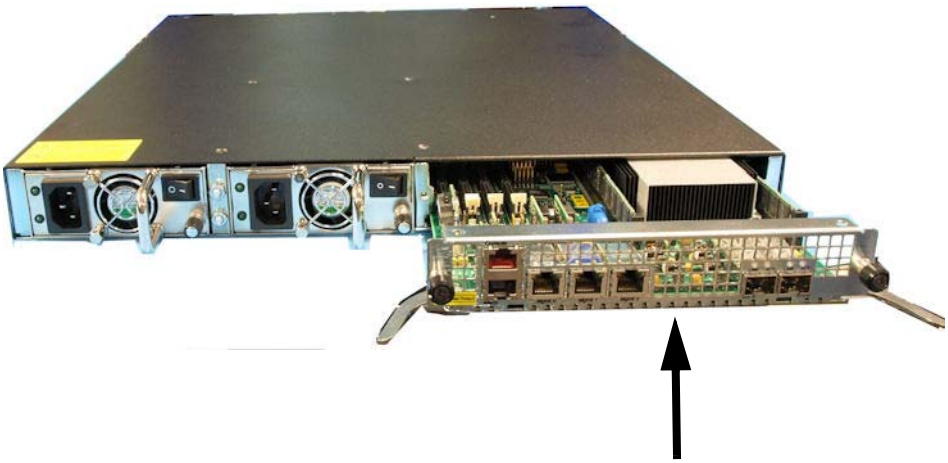
1. Acme Packet 4500 chassis with empty slot for the 10-gigabit NIU card.

2. Insert the 10-gigabit NIU card into the chassis with both sides of the 10-gigabit NIU card inserted into the guide rails.



Note: Do not force the 10-gigabit NIU card into the chassis If there is any resistance. Remove the 10-gigabit NIU card and check the alignment of the card and guide rails.

3. Move the 10-gigabit NIU card forward until it engages with the midplane and chassis.



4. Move the ejector handles from the extended position to the forward position and into the chassis.

5. With a #2 phillips head screw driver, screw in the two screws so the 10-gigabit NIU card is secured in the chassis.

SFP+ Media Signaling Interfaces

This section describes the media signaling interfaces, small form factor pluggable+. The signaling and media interface, provide network connectivity for the signaling and media traffic. Each interface can connect to a network at 10 gigabit.

SFP+ Information

Only transceivers qualified by acme packet can be used in the SBC. Mixed transceiver types are unsupported. Both transceiver locations must be populated with the same SFP+ type, based on compliance testing.

10-gigabit SFP+ transceivers are inserted into the NIU card.

850nm LASER PROD, Check the label on the back of the SFP for this information to make sure you have the right mode transceiver. Black bale clasp latch-Multi Mode.

1310nm LASER PROD Check the label on the back of the SFP for this information to make sure you have the right mode transceiver. Blue bale clasp latch-Single Mode.

SFP+ Identification

The following image shows the 10 gigabit SFP+ Multi Mode transceiver used in the Acme Packet 4500 NIU cards. Black bale clasp latch -Multi Mode.

The following image shows the 10 gigabit SFP+ Single Mode transceiver used in the Acme Packet 4500 NIU cards. Blue bale clasp latch-Single Mode.

Media Cables

This section describes the media signaling interface, fiber optic cable, used in the NIU card that goes with the Net- Net 4500. The fiber optic cables only ship from Acme Packet if you order them.

Cable Information

There is a 10 gigabit cable that is used with the NIU cards that are installed in the Acme Packet 4500.

Cable Identification

Multi Mode 10 gigabit fiber optic cable. The color is Aqua. 50/125

Single Mode 10 gigabit fiber optic cable. The color is Yellow. 9/125

System Startup

Once you have completed installing the 10 gigabit NIU card, power on the system. The system will only alert you if there is an issue with the new 10 gigabit NIU card.