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## Net-Net® Diameter Director Maintenance Release Guide

Release Version D-Cz2.1.0

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# About this Guide

## Overview

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The *Net-Net® Diameter Director Maintenance Release Guide* provides information about the contents of maintenance releases related to Net-Net D-CZ2.1.0. This information can be related to defect fixes, to adaptations made to the system software, and to adaptations ported to this release of the Net-Net OS from prior releases. When applicable, this guide contains explanations of defect fixes to the software and step-by-step instructions, if any, for how to enable these fixes on your system. This guide also contains explanations of adaptations including conceptual information and configuration steps.

## Purpose of This Document

Designed as a supplement to the main documentation set supporting Net-Net D-CZ2.1.0, this document informs you of changes made to the Net-Net OS software in the maintenance releases of D-CZ2.1.0. Consult this document for content specific to maintenance releases.

## Organization

The *Net-Net® Diameter Director Maintenance Release Guide* is organized chronologically by maintenance release number, started with the oldest available maintenance release and ending with the most recently available maintenance release.

This document contains a [Maintenance Release Availability Matrix \(3\)](#), showing when and if given maintenance releases have been issued and the date of issue. Each available maintenance release constitutes one chapter of this guide.

In certain cases, a maintenance release will not have been made generally available. These cases are noted in the Maintenance Release Availability Matrix. When Acme Packet has not made a maintenance release available, there will be no corresponding chapter for that release. Therefore, you might encounter breaks in the chronological number of maintenance release.

## Maintenance Release Availability Matrix

The table below lists the availability for Net-Net D-CZ2.1.0 maintenance releases.

Maintenance Release Number	Availability Notes
D-CZ2.1.0 M1	March 8, 2013
D-CZ2.1.0 M2	May 3, 2013

## Who is Acme Packet?

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Acme Packet (NASDAQ: APKT), the leader in session delivery network solutions, enables the trusted, first-class delivery of next-generation voice, data and unified communications services and applications across IP networks. Our Net-Net product family fulfills demanding security, service assurance and regulatory requirements in service provider, enterprise and contact center networks. Based in Bedford, Massachusetts, Acme Packet designs and manufactures its products in the USA. For more information, visit [www.acmepacket.com](http://www.acmepacket.com).

## Technical Assistance

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If you need technical assistance with Acme Packet products, you can obtain it on-line by going to [support.acmepacket.com](http://support.acmepacket.com). With your customer identification number and password, you can access Acme Packet's on-line resources 24 hours a day. If you do not have the information required to access the site, send an email to [tac@acmepacket.com](mailto:tac@acmepacket.com) requesting a login.

In the event that you are experiencing a critical service outage and require live assistance, contact the Acme Packet Technical Assistance Center emergency hotline:

- From the United States, Canada, and Mexico call: 1 866 226 3758
- From all other locations, call: +1 781 756 6920

Please note that a valid support/service contract with Acme Packet is required to obtain technical assistance.

## Release Caveats

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The following sections list caveats related to this release of the Net-Net Diameter Director.

### IPSec-Related Caveats

- `outbound-fine-graned-sa-match` configuration
  - Issue - The kernel supporting IPSec on Net-Net 7000 and Net-Net 17000 devices only supports 1-1 SA matches.
  - Resolution - Do not use `outbound-fine-graned-sa-match` within you IPSec configuration on the Net-Net 7000 and Net-Net 17000
- Ping in transport mode
  - Issue - Ping is not supported across IPSec connections in transport mode.
  - Resolution - Do not ping from the Net-Net DD across IPSec connections in transport mode. Instead, ping from devices related to the connection.

### System-Related Caveat

- SIP threads
  - Issue - SIP redundancy threads configuration can generate `acmePipeDev` errors at the console.
  - Resolution - If you see the error listed above at the console, ensure the SIP threads configuration in the `system-config > options` is set to `sip-threads=1`.

## Performance-Related Caveat

- MTU size in conjunction with encryption
  - Issue - Encryption can cause packets to exceed the accepted MTU size.
  - Resolution - If you find your traffic is exceeding MTU size, change the default signaling-MTU on the applicable network interface. For example, if the expected MTU is 1500, configure the applicable network interface for an MTU between 1200 and 1300. This provides the headroom needed to accommodate the encryption.

## Customer Questions, Comments, or Suggestions

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Acme Packet is committed to providing our customers with reliable documentation. If you have any questions, comments, or suggestions regarding our documentation, please contact your Acme Packet customer support representative directly or email [support@acmepacket.com](mailto:support@acmepacket.com).

## Contact Us

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## Revision History

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This section contains a revision history for this document.

Date	Revision Number	Description
March 8, 2013	Revision 1.00	• Initial Release
May 3, 2013	Revision 2.00	• Adds content for M2



## Overview

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This chapter provides descriptions, explanations, and configuration information for the contents of Net-Net DD release version D-Cz2.1.0M1.

## Content Map

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This section provides a table listing all content in Net-Net OS Release D-Cz2.1.0 M1.

Content Type	Description
Adaptation	Documents two new Traps, including apDdSCTPPathFailureTrap and apDdSCTPPathFailureClearTrap

## SCTP Path Traps

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The following table identifies the applicable SCTP path traps. Note that these traps apply only to D-Cz2.1.0M1 and above.

Trap Name	Description
apDdSCTPPathFailureTrap: 1.3.6.1.4.1.9148.3.12.2.2.0.3	Generated when a connection failure event occurs in an SCTP path.
apDdSCTPPathFailureClearTrap: 1.3.6.1.4.1.9148.3.12.2.2.0.4	Generated when a failed connection event is restored in an SCTP path.

Both of these traps return data as shown in the table below, which displays the data items and their possible values. Note that “Display String” equates to the names of the applicable elements configured on the Net-Net DD.

Payload	Values	Description
apDdInterfaceRealmName,	Display String	Realm name of the DD interface if the row is for per interface stats. Otherwise, it is an empty string.
apDdDiameterAgentHostName	Display String	The hostname of the Diameter Agent where it is hosted.
apDdDiameterIPPort	Display String	The IP port of the Diameter Agent where it is hosted.
apDdDiameterAgentOriginHostName	Display String	The origin hostname of the Diameter Agent where it is hosted.
apDdDiameterAgentOriginRealmName	Display String	The origin realm name of the Diameter Agent where it is hosted

<b>Payload</b>	<b>Values</b>	<b>Description</b>
apDdDiameterRemoteIPPort	Display String	The IP port of the remote host.
apDdSCTPAssociationID	Integer	The ID of the SCTP association.
apDdSCTPIsPrimaryPath	(0), istrue(1)	Indicates if this SCTP path becomes the new primary path.

## Overview

---

This chapter provides descriptions, explanations, and configuration information for the contents of Net-Net DD release version D-Cz2.1.0M2.

## Content Map

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This section provides a table listing all content in Net-Net OS Release D-Cz2.1.0 M2.

Content Type	Description
Adaptation	Documents a configuration workaround allowing interoperability with SCTP path signaling that is not compliant with RFC4895.

## Incompatible SCTP Association Signaling Workaround

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The Net-Net DD supports RFC5061 allowing the SCTP stack to dynamically add or delete an IP address to or from and SCTP association. RFC 4895 defines a new chunk type which can be used to authenticate SCTP chunks. RFC 5061 mandates use of these authenticated chunks (as defined in RFC 4985) to dynamically modify an SCTP association.

Some devices, however, do not support the AUTH chunk specified by RFC4895. For this reason, the Net-Net D-CZ2.1.0M2 and above allows you to bypass the use of this information, effectively disabling this authentication process, during association change signaling procedures.

This configuration violates RFC5061. Use it only to interoperate with applicable devices.

## ACLI Instructions

### To disable RFC4895 association change authentication:

1. In Superuser mode, type **configure terminal** and press <Enter>.
 

```
ACMEPACKET# configure terminal
```
2. Type **system** and press <Enter> to access the system path.
 

```
ACMEPACKET(configure)# system
```
3. Type **network-parameters** and press <Enter>. The system prompt changes to let you know that you can begin configuring individual parameters.
 

```
ACMEPACKET(system)# network-parameters
```
4. Type **options sctp-asconf-auth-no-check=1** and press <Enter>. The default value for this option is "0", which tells the system to perform the authentication check via the AUTH chunk.

```
ACMEPACKET(network-parameters)# option +sctp-asconf-no-check=1
```

5. Save this change to the element with the done command and press <Enter>.

```
ACMEPACKET(network-parameters)# done
```

Note that the use of the “+” sign prior to the option ensures that previously configured options stay in effect. Omitting the option tells the system to use only the newly configured option.