

Diameter AAA, Diameter Stack Entered Overload Protection

IPWorks

OPERATING INSTRUCTIONS

Copyright

© Ericsson AB 2018. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

Disclaimer

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

Trademark List

All trademarks mentioned herein are the property of their respective owners. These are shown in the document Trademark Information.



Contents

1	Introduction	1
1.1	Alarm Description	1
1.2	Prerequisite	2
1.3	Related Information	2
2	Procedure	3
	Reference List	5





1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is issued when Diameter traffic is overloaded.

The possible alarm causes and the corresponding fault reasons, fault locations, and impacts are described in Table 1.

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact	Solution
Diameter stack traffic is overloaded.	The alarm is raised when the diameter traffic is overloaded.	The incoming messages exceed the capacity of diameter stack.	Diameter stack	Diameter stack discards part of the traffic.	See Section 2 on page 3

Note: An alarm can appear as a result of the maintenance activity.

The alarm attributes are listed and explained in Table 2.

Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	864265
Managed Object Class	IpworksDiameterAAA
Source	ManagedElement=<Node Name>, SystemFunctions=1, Fm=1, FmAlarmModel=ipworksDiameterAAA, FmAlarmType=ipworksDiameterStackEnterOverloadProtection
Specific Problem	Diameter AAA, Diameter Stack Entered Overload Protection
Event Type	qualityOfServiceAlarm(3)
Probable Cause	x733ThresholdCrossed(351)



Attribute Name	Attribute Value
Additional Text	This alarm is raised by Diameter Stack %s when the Diameter traffic is overloaded.;uuid:<Product_UUID> ⁽¹⁾
Perceived Severity	Major

(1) <Product_UUID> is the universally unique identifier (UUID) of machine that generates the alarm. The value can be fetched from `/sys/devices/virtual/dmi/id/product_uuid` on the PL node.

1.2 Prerequisite

This section provides information on the documents, tools, and conditions that apply to the procedure.

1.2.1 Documents

Before starting this procedure, ensure that the following document has been read:

- Fault Management

1.2.2 Tools

- otpdia

1.2.3 Conditions

Not Applicable.

1.3 Related Information

Trademark information, typographic conventions, and definition and explanation of abbreviations and terminology can be found in the following documents:

- Trademark Information
- Typographic Conventions
- Glossary of Terms and Acronyms



2 Procedure

To clear the alarm, do the following:

1. Check the CPU usage and traffic where AAA server resides:
 - If CPU usage is high and the traffic is heavy, consider other reason.
 - If CPU usage is low and the traffic is little, this overload may be introduced by AAA server. Consider restarting AAA server or fixing the problem of AAA Server.
2. Check the process in other surrounding NEs, the details are out of the scope of this document.
3. When the traffic is back to normal, the alarm is cleared automatically.

If the alarm remains original status after 2 minutes, consult the next level of maintenance support. Further actions are outside the scope of this instruction.
4. If the traffic overloads frequently, consider adding more servers to distribute traffic.





Reference List

Ericsson Documents

- [1] Trademark Information
- [2] Typographic Conventions
- [3] Glossary of Terms and Acronyms
- [4] Fault Management
- [5] Configure EPC AAA