

Radius AAA, Server Entered Overload Protection

IPWorks

OPERATING INSTRUCTIONS

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1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is issued when AAA 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
AAA traffic is overloaded.	The alarm is raised when AAA traffic is overloaded.	The incoming messages exceed the traffic capacity of AAA.	AAA Server	AAA server rejects part of the traffic.

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	868355
Managed Object Class	IpworksRadiusAAA
Source	ManagedElement=<Node Name>, SystemFunctions=1,Fm=1,FmA larmModel=ipworksRadiusAAA, FmAlarmType=ipworksRadiusAAAEnt erOverloadProtection
Specific Problem	Radius AAA, Server Entered Overload Protection
Event Type	qualityOfServiceAlarm(11)
Probable Cause	x733ThresholdCrossed(351)



Attribute Name	Attribute Value
Additional Text	This alarm is issued when AAA 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 Prerequisites

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

Before starting this procedure, ensure that the following tools are available:

- tcpdump
- Wireshark

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

This section describes the procedure to follow to analyze the cause of this alarm.

1. AAA traffic overload related error information is logged in the following directory:

```
/cluster/storage/no-backup/ipworks/logs/<PL hostname>/aaa_radius_backend.log.
```

For example:

```
2017/05/04 11:02:07|a3backend|Error|Plugins|System 140651236677376 -  
/localdisk/scratch/ipw_dev/ipworks/src/aaa/radius/backend/framework/backend_framework_scc  
/src/RadiusTrafficMonitor.cpp:113 sendEnterAlarm.  
RadiusTrafficMonitor::sendEnterAlarm Radius AAA enters overload protection status
```

2. To clean the alarm, you need to decrease the TPS/QPS of AAA traffic.
3. When the traffic is back to normal, the alarm is cleared automatically. You can check whether the alarm is cleaned in the logs.

For example:

```
2017/05/04 11:02:10|a3backend|Error|Plugins|System 140651236679867 -  
/localdisk/scratch/ipw_dev/ipworks/src/aaa/radius/backend/framework/backend_framework_scc  
/src/RadiusTrafficMonitor.cpp:113 sendEnterAlarm.  
RadiusTrafficMonitor::sendClearAlarm Radius AAA leaves  
overload protection status
```

Note: The alarm status is refreshed every 3 minutes.

4. If the alarm still original status "Radius AAA enters overload protection status" after the AAA traffic is back to normal, consult the next level of maintenance support. Further actions are outside the scope of this instruction.
5. If the traffic overloads frequently, consider to add more AAA servers to distribute traffic.