



Supported Syslogs and Traps in Cisco Broadband Access Center 3.5 and 3.5.1

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This document provides the detailed information about the traps and syslogs supported in Cisco BAC 3.5 and 3.5.1 releases.

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SNMP Traps

Cisco BAC provides basic SNMP v2-based monitoring of the RDU and DPE servers. The Cisco BAC SNMP agents support SNMP informs and traps, collectively called notifications.

You can configure an SNMP agent on the DPE by using `snmp-server` CLI commands. For additional information of the commands, see [*Cisco Broadband Access Center DPE CLI Reference 3.5*](#).

You can configure an SNMP agent on the RDU by using the snmpAgentCfgutil.sh tool. For information about configuring SNMP agent on the RDU using snmpAgentCfgutil.sh tool, see [Cisco Broadband Access Center Administrator's Guide, Release 3.5](#).

[Table 1](#) lists the RDU SNMP traps.

Table 1 Cisco BAC RDU SNMP Traps

MIB	Trap Name	Trap OID	Sub Type Varbind OID	Sub Type Varbind Value	Sub Type Varbind Value Description	Trap Description
CISCO-BAC C-SERVER-MIB	ciscoBaccServerStateChanged	.1.3.6.1.4.1.9.9.349.0.0	.1.3.6.1.4.1.9.9.349.1.1.1.3.(1 - n) (cbsState)	1..8	Indicates the status of the server.	This notification appears when the status of the server is changed to: <ul style="list-style-type: none"> • Unknown (1) • initializing (2) • disconnected (3) • shuttingDown(4) • readyOverloaded (5) • ready (6) • offline (7) • unlicensed (8)
			.1.3.6.1.4.1.9.9.349.1.1.1.6.(1 - n) (cbsServerType)	[ServerType] RDU,DPE,etc.	A unique name identifying the type of the server. For example: RDU, DPE and so on.	
			.1.3.6.1.2.1.1.5.0 (sysName)	DisplayString (SIZE (0..255))	An administratively-assigned name for the managed node. By convention, this is the fully-qualified domain name of the node. If the name is unknown, the value is a zero-length string.	

Syslog Alerts and Messages

Cisco BAC generates alerts through the Solaris syslog service. Syslog is a client-server protocol that manages the logging of information on Solaris. Cisco BAC syslog alerts are not a logging service; they provide a notification if a problem exist, but do not necessarily define the specific cause of the problem. You might find this information in the appropriate Cisco BAC log files. For more information on Cisco BAC logging events see [Cisco Broadband Access Center Administrator's Guide, Release 3.5](#).

This section describes the alerts generated from the Cisco BAC components:

- [RDU Alerts, page 3](#)
- [DPE Alerts, page 4](#)

- [Watchdog Alerts, page 5](#)

Message Format

When Cisco BAC generates an alert message, the format is:

XXX-#-####: Message

- *XXX*—Identifies the facility code, which can include:
 - RDU (Regional Distribution Unit)
 - DPE (Device Provisioning Engine)
 - AGENT (rduSnmpAgent or dpeSnmpAgent)
- *#*—Identifies the severity level in use. The three levels of alert are:
 - 1—Identifies an alert
 - 3—Identifies an error
 - 4—Identifies an informational message
- *###*—Identifies the numeric error code.
- *Message*—Provides the alert text or message.

RDU Alerts

Whenever an RDU syslog alert is sent, additional details (if any) can be found in the log file, BPR_DATA/rdu/logs/rdu.log.

[Table 2](#) lists the RDU Alerts.

Table 2 Cisco BAC RDU Syslog Alerts

Syslog Name	Description
RDU-1-101:RDU ran out of disk space	Indicates that the storage partition of the RDU server ran out of space. After encountering this error, the RDU attempts to restart automatically, but will typically encounter the same error again until more storage space is available. You can remove or compress some of the log files.
RDU-1-103:RDU ran out of memory	Indicates that the RDU ran out of memory. After encountering this error, the RDU server restarts automatically.
RDU-1-111: Evaluation key for technology [<i>technology_name</i>] expired	Indicates that an evaluation key for the technology specified expired. You must contact Cisco sales or TAC for a new license key.
RDU-1-115:You have used [/] percent of available [<i>technology_name</i>] licenses.	Identifies, in percentage, the quantity of licenses used out of the total number of allowable licenses. Appears when you reach 80 percent of the license capacity.
BPR-RDU-4-1140: DNS took X seconds for lookup of address [10.0.0.1/test.com]; Check DNS configuration and health of servers	Indicates that Cisco BAC performance may be slow due to delayed response from the DNS. The alert is generated whenever IP Address look-up takes more than 60 seconds.

DPE Alerts

Whenever a DPE syslog alert is sent, you can find additional details in the DPE logs.

You can use the `show log` command to access the DPE logs. For additional information, see [Cisco Broadband Access Center DPE CLI Reference, Release 3.5](#).

Some DPE errors are also propagated to the RDU server log files. You can find these in the `BPR_DATA/rdu/logs/rdu.log` file.

[Table 3](#) lists the DPE syslog alerts.

Table 3 Cisco BAC DPE Syslog Alerts

Syslog Name	Description
DPE-1-102: DPE ran out of disk space	<p>The storage partition that the DPE server uses ran out of space. You have three options:</p> <ul style="list-style-type: none"> a. Clear out any excess support bundles from the disk. You can do this by moving those support bundles to another machine and then running the <code>clear bundles</code> command from the DPE CLI. b. Run the <code>clear logs</code> command from the DPE CLI to clear more disk space. c. As a last resort, run the <code>clear cache</code> command from the DPE CLI to remove any cache files and force the DPE to resynchronize with the RDU server.
DPE-1-104: DPE ran out of memory	<p>The DPE process ran out of memory. After encountering this error condition, the DPE restarts automatically.</p> <p>Determine how many device configurations are on the DPE; the larger the number of device configurations, the more memory is used. To reduce device configurations, limit the number of devices in the provisioning groups that the DPE serves.</p>
DPE-1-109: Failed to connect to RDU	<p>The RDU cannot be contacted. You must:</p> <ul style="list-style-type: none"> a. Verify if the DPE network is configured and connected correctly. b. Check if the DPE is configured to connect to the proper RDU, and that the connecting port is configured properly by using the <code>dpe rdu-server</code> command. c. Check if the RDU process is running on the correct server and listening on the correct port. The DPE attempts to reconnect to the RDU process every few seconds until a connection is established.

Watchdog Alerts

Whenever the process watchdog sends a syslog alert, you can find error details (if any) in the *BPR_DATA/agent/logs/agent_console.log* file and the log files corresponding to the specific component mentioned in the alert (if any). For example, if you receive an alert similar to *The rdu unexpectedly terminated*, you would check the RDU server log file (*BPR_DATA/rdu/logs/rdu.log*) for additional information.

[Table 4](#) lists the process watchdog alerts:

Table 4 *Process Watchdog Alerts*

Alert	Description
AGENT-3-9001: Failed to start the <i>[component]</i>	Indicates that the watchdog has failed to start the specified component.
AGENT-3-9002: The <i>[component]</i> unexpectedly terminated	Indicates that the specified component, monitored by the process watchdog, has unexpectedly failed.
AGENT-3-9003: Failed to stop the <i>[component]</i>	Indicates that a component did not stop when the process watchdog attempted to stop it.
AGENT-6-9004: The <i>[component]</i> has started	Generated any time a component is successfully started by the process watchdog. This message is for informational purposes only.
AGENT-6-9005: The <i>[component]</i> has stopped	Generated any time a component is successfully stopped through the process watchdog. This message is for informational purposes only.

The *[component]* variable presented in the process watchdog alerts list shown in [Table 4](#) represents any of these component values:

- rdu
- dpe
- tomcat
- cli
- snmpAgent

Related Documentation

This release of the Cisco BAC product is supported by the following documents:

- [Cisco Broadband Access Center Administrator's Guide, Release 3.5](#)
- [Installation Guide for Cisco Broadband Access Center, Release 3.5](#)
- [Cisco Broadband Access Center DPE CLI Reference, Release 3.5](#)
- [Cisco Broadband Access Center Integration Developer's Guide, Release 3.5](#)
- [Release Notes for Cisco Broadband Access Center, 3.5](#)
- [Readme for Cisco Broadband Access Center 3.5.1](#)

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

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This document is to be used in conjunction with the documents listed in the section [Related Documentation, page 5](#).

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