A

System Alarms

A system alarm is triggered when a condition or event happens within either the system hardware or software. Given a specific alarm, the system generates the appropriate SNMP trap. These traps include a description of the event or condition that caused the trap to be generated; or provides information associated with the alarm, such as the interface ID (ifIndex)/status or object identifier/object type integer values.

The following table maps system alarms to SNMP traps. This table includes the following information:

- alarm names
- alarm IDs
- alarm severities (including threshold values)
- alarm causes
- example log messages

In addition, this table specifies the type of traps that are generated for SNMP and the trap reference locations (the supported MIB or RFC).

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
FAN STOPPED	65537	CRITICAL: any fan speed is <50%. Or speed of two or more fans is >50% and <75%. MAJOR: speed of two or more fans is > 75% and < 90%. Or speed of one fan is >50% and <75% and the other two fans are at normal speed. MINOR: speed of one fan> 75% and <90%, the other two fans are at normal speed.	Fan speed failure. NOTE: If this alarm occurs, the system turns up the fan speed to the fastest possible speed.	fan speed: XXXX, XXXX, XXXX (where xxxx xxxx xxxx is the revolutions per minute (RPM) of each fan on the fan module)	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib) apSysMgmtFanTrap (ap-smgmt.mib)

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
TEMPERATURE HIGH	65538	Acme Packet 4600/6100/6300/6350 CRITICAL: speed of any fan is < 5000 RPM, apEnvMonFanState is set to critical. MINOR: speed of any fan < 8000 RPM, apEnvMonFanState set to minor. MINOR: a fan is pulled (RPM == 0) Acme Packet 3900: CRITICAL: speed of any fan is < 4000 RPM MINOR: the speed of any fan is < 6000 RPM Acme Packet 1100: CRITICAL: the fan speed is < 4000 RPM Note: Fans may not be removed in the field for the Acme Packet 3900. Note: Fans may not be removed in the field for the Acme Packet 1100	Fans are obstructed or stopped. The room is abnormally hot.	Temperature: XX.XX C (where XX.XX is the temperature in degrees)	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib) apSysMgmtTempTrap (ap-smgmt.mib)

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
ENVIRONMENTAL SENSOR FAILURE	65539	CRITICAL	The environmental sensor component cannot detect fan speed and temperature.	Hardware monitor failure! Unable to monitor fan speed and temperature!	apSyslogMessageGenerated (ap-slog.mib) apEnvMonI2CFailNotification (ap-env-monitor.mib)
PLD POWER A FAILURE Note: PLD stands for Programmable Logical Device	65540	MINOR	Power supply A has failed.	Back Power Supply A has failed!	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib) apSysMgmtPowerTrap (ap-smgmt.mib)
PLD POWER A UP Note: If the system boots up with one power supply, the health score is 100, and an alarm is not generated. If another power supply is then added to that same system, this alarm is generated, but the health score is not decremented.	65541	MINOR	Power supply A is now present and functioning.	Back Power Supply A is present!	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib) apSysMgmtPowerTrap (ap-smgmt.mib)
PLD POWER B FAILURE	65542	MINOR	Power supply B has failed.	Back Power Supply B has failed!	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib) apSysMgmtPowerTrap (ap-smgmt.mib)

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
PLD POWER B UP Note: If the system boots up with one power supply, the health score is 100, and an alarm is not generated. If another power supply is then added to that same system, this alarm is generated, but the health score is not decremented.	65543	MINOR	Power supply B is now present and functioning.	Back Power Supply B is present!	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib) apSysMgmtPowerTrap (ap-smgmt.mib)
PHY0 Removed	65550	MAJOR	Physical interface card 0 was removed.	N/A	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib)
PHY0 Inserted	65552	MAJOR	Physical interface card 0 was inserted.	N/A	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib)
PHY1 Removed	65553	MAJOR	Physical interface card 1 was removed.	N/A	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib)
PHY1 Inserted	65554	MAJOR	Physical interface card 1 was inserted.	N/A	apSyslogMessageGenerated (ap-slog.mib) apEnvMonStatusChangeNotification (ap-env-monitor.mib)

The following table lists the supported system alarms.

Alarm Name	Alarm ID	Alarm Severity	Causes	Example Log Message	Trap Generated (Trap Reference)
COMM MONITOR CONNECTION DOWN	327716 (Hex 50024)	Major	CommMonitor disconnected	One or more CommMonitors are disconnected	apMonitorCollectorDownTrap (ap-apps.mib)

Alarm Name	Alarm ID	Alarm Severity	Causes	Example Log Message	Trap Generated (Trap Reference)
LINK UP ALARM GIGPORT	131073	MINOR	Gigabit Ethernet interface 1 goes up.	Slot 0 port 0 UP	linkUp (IETF RFC 2233)
LINK UP ALARM GIGPORT	131074	MINOR	Gigabit Ethernet interface 2 goes up.	Slot 1 port 0 UP	linkUp(IETF RFC 2233)
LINK DOWN ALARM GIGPORT	131075	MAJOR	Gigabit Ethernet interface 1 goes down.	Slot 0 port 0 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM GIGPORT	131076	MAJOR	Gigabit Ethernet interface 2 goes down.	Slot 1 port 0 DOWN	linkDown (IETF RFC 2233)
LINK UP ALARM VXINTF	131077	MINOR	Control interface 0 goes up.	wancom0 UP	linkUp (IETF RFC 2233)
LINK UP ALARM VXINTF	131078	MINOR	Control interface 1 goes up.	wancom1 UP	linkUp (IETF RFC 2233)
LINK UP ALARM VXINTF	131079	MINOR	Control interface 2 goes up.	wancom2 UP	linkUp (IETF RFC 2233)
LINK DOWN ALARM VXINTF	131080	MAJOR	Control interface 0 goes down.	wancom0 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM VXINTF	131081	MAJOR	Control interface 1 goes down.	wancom1 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM VXINTF	131082	MAJOR	Control interface 2 goes down.	wancom2 DOWN	linkDown (IETF RFC 2233)
LINK UP ALARM FEPORT	131083	MAJOR	Fast Ethernet slot 0, port 0 goes up.	Slot 0 port 0 UP	linkUp (IETF RFC 2233)
LINK UP ALARM FEPORT	131084	MAJOR	Fast Ethernet slot 1, port 0 goes up.	Slot 1 port 0 UP	linkUp (IETF RFC 2233)
LINK UP ALARM FEPORT	131085	MINOR	Fast Ethernet slot 0, port 1 goes up.	Slot 0 port 1 UP	linkUp (IETF RFC 2233)
LINK UP ALARM FEPORT	131086	MINOR	Fast Ethernet slot 1, port 1 up.	Slot 1 port 1 DOWN	linkUp (IETF RFC 2233)
LINK UP ALARM FEPORT	131087	MINOR	Fast Ethernet slot 0, port 2 goes up.	Slot 0 port 2 UP	linkUp (IETF RFC 2233)
LINK UP ALARM FEPORT	131088	MINOR	Fast Ethernet slot 1, port 2 goes up.	Slot 1 port 2 UP	linkUp (IETF RFC 2233)

Alarm Name	Alarm ID	Alarm Severity	Causes	Example Log Message	Trap Generated (Trap Reference)
LINK UP ALARM FEPORT	131089	MINOR	Fast Ethernet slot 0, port 3 goes up.	Slot 0 port 3 UP	linkUp (IETF RFC 2233)
LINK UP ALARM FEPORT	131090	MINOR	Fast Ethernet slot 1, port 3 goes up.	Slot 1 port 3 UP	linkUp (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131091	MAJOR	Fast Ethernet slot 0, port 0 goes down.	Slot 0 port 0 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131092	MAJOR	Fast Ethernet slot 1, port 0 goes down.	Slot 1 port 0 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131093	MAJOR	Fast Ethernet slot 0, port 1 goes down.	Slot 0 port 1 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131094	MAJOR	Fast Ethernet slot 1, port 1 goes down.	Slot 1 port 1 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131095	MAJOR	Fast Ethernet slot 0, port 2 goes down.	Slot 0 port 2 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131096	MAJOR	Fast Ethernet slot 1, port 2 goes down.	Slot 1 port 2 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131097	MAJOR	Fast Ethernet slot 0, port 3 goes down.	Slot 0 port 3 DOWN	linkDown (IETF RFC 2233)
LINK DOWN ALARM FEPORT	131098	MAJOR	Fast Ethernet slot 1, port 3 goes down.	Slot 1 port 3 DOWN	linkDown (IETF RFC 2233)
CPU UTILIZATION	131099	MINOR	CPU usage reached 90% or greater of its capacity.	CPU usage X% over threshold X%	apSysMgmtGroupTrap (ap-smgmt.mib)
MEMORY UTILIZATION	131100	CRITICAL	Memory usage reached 90% or greater of its capacity.	Memory usage X% over threshold X%	apSysMgmtGroupTrap (ap-smgmt.mib)
HEALTH SCORE	131101	MAJOR	system's health score fell below 60.	Health score X is under threshold (where X is the health score)	apSysMgmtGroupTrap (ap-smgmt.mib)
NAT TABLE UTILIZATION	131102	MINOR	NAT table usage reached 90% or greater of its capacity.	NAT table usage X% over threshold X%	apSysMgmtGroupTrap (ap-smgmt.mib)

Alarm Name	Alarm ID	Alarm Severity	Causes	Example Log Message	Trap Generated (Trap Reference)
ARP TABLE UTILIZATION	131103	MINOR	ARP table usage reached 90% or greater of its capacity.	ARP table X% over threshold X%	apSysMgmtGroupTrap (ap-smgmt.mib)
REDUNDANT SWITCH-TO-ACTIVE	131104	CRITICAL	A state transition occurred from Standby/ BecomingStandby to BecomingActive.	Switchover, <state to state>, active peer <name of HA peer> has timed out or Switchover, <state to state>, active peer <name of HA peer> has unacceptable health (x) (where x is the health score) or Switchover, <state to state>, forced by command	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtRedundancyTrap (ap-smgmt.mib)
REDUNDANT SWITCH-TO-STANDBY	131105	CRITICAL	A state transition occurred from Active/ BecomingActive to BecomingStandby/ Relinquishing Active.	Switchover, <state to state>, peer <name of HA peer> is healthier (x) than us (x) (where x is the health score) or Switchover, <state to state>, forced by command	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtRedundancyTrap (ap-smgmt.mib)
REDUNDANT TIMEOUT	131106	MAJOR	An HA system peer was not heard from within the configured silence window.	Peer <name of HA peer> timed out in state x, my state is x (where x is the state (e.g., BecomingStandby))	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtRedundancyTrap (ap-smgmt.mib)

Alarm Name	Alarm ID	Alarm Severity	Causes	Example Log Message	Trap Generated (Trap Reference)
REDUNDANT OUT OF SERVICE Note: The activate-config failed log message appears for those cases in which the execution of the activate config command failed on the standby SBC.	131107	CRITICAL	Unable to synchronize with Active HA system peer within BecomingStandby timeout.	Unable to synchronize with Active redundant peer within BecomingStandby timeout, going OutOfService or activate-config failed, process busy or activate-config failed, must do save-config before activating. or activate-config failed, could not get current config version from file or activate-config failed, could not set running config version to file.	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtRedundancyTrap (ap-smgmt.mib)
SYSTEM TASK SUSPENDED	131108	CRITICAL	A system task (process) suspends or fails.	Task X suspended, which decremented health by 75! (where X is the task/process name)	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtTaskSuspendTrap (ap-smgmt.mib)

The following table lists the supported media alarms.

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
MBCD ALARM OUT OF MEMORY	262145	CRITICAL: for flow MAJOR: for media (if server cannot allocate a new context)	No further memory can be allocated for MBCD.	Flow: Cannot create free port list for realm. Media Server: Failed to allocate new context.	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtMediaOutofMemory (ap-smgmt.mib)
MBCD ALARM UNKNOWN REALM	262147	MAJOR: if media server is adding a new flow	Media server is unable to find realm interface.	Realm type (ingress, egress, hairpin) X, not found	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtUnknownRealm (ap-smgmt.mib)
MBCD ALARM OUT OF BANDWIDTH	262149	CRITICAL: failure rate = 100% MAJOR: failure rate > or = 50%	The realm is out of bandwidth.	Out of bandwidth	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtMediaBandwidthTrap (ap-smgmt.mib)
MBCD ALARM OUT OF PORTS	262150	CRITICAL: failure rate = 100% MAJOR: failure rate > or = 50%	The realm is out of steering ports.	Out of steering ports	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtMediaPortsTrap (ap-smgmt.mib)
SRTP DECRYPTION ERROR		MAJOR	Decryption for SRTP packets fails.	SRTP Decryption Failed	apSecuritySrtpDecryptionFailureNotification (ap-security.mib)
SRTP ENCRYPTION ERROR	327744	MAJOR	Encryption integrity check for SRTP packets fails.	SRTP Encryption Failed	apSecuritySrtpEncryptionFailureNotification (ap-security.mib)
TLS DECRYPTION ERROR		MAJOR	Decryption for TLS packets fails.	TLS Decryption Failed	apSecurityTlsDecryptionFailureNotification (ap-security.mib)
TLS ENCRYPTION ERROR		MAJOR	Encryption integrity check for TLS packets fails.	TLS Encryption Failed	apSecurityTlsEncryptionFailureNotification (ap-security.mib)

The following table lists the supported network alarms.

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
GATEWAY UNREACHABLE	dynamicID	MAJOR	The SBC lost ARP connectivity to a front interface gateway.	gateway X.X.X.X unreachable on slot Y port Z subport ZZ (where X.X.X.X is the IPv4 address of the front interface gateway, Y is the front interface slot number, Z is the front interface port number, and ZZ is the subport ID)	apSysMgmtGatewayUnreachableTrap (ap_smgmt.mib)

Note:

The value of this alarm ID is dynamic. That is, it changes based on a numbers of factors, but the total alarm ID range falls between 196608 and 262143. The alarm ID is calculated based on the compilation of the following information: a hexadecimal number that represents the VLAN ID and the front interface port/slot numbers.

The following table lists the supported application alarms.

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
RADIUS ACCOUNTING CONNECTION DOWN	327681	CRITICAL: if all enabled and configured Remote Authentication Dial-in User Service (RADIUS) accounting server connections have timed-out without response from the RADIUS server MAJOR: if some, but not all configured RADIUS accounting server connections have timed-out without response from the RADIUS server.	The enabled connections to RADIUS servers have timed-out without a response from the RADIUS server.	CRITICAL: All enabled accounting connections have been lost! Check accounting status for more details. MAJOR: One or more enabled accounting connections have been lost! Check accounting status for more details.	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtRadiusDownTrap (ap-smgmt.mib)
ENUM SERVER STATUS New to Release C5.0	XX	CRITICAL: All ENUM servers are unreachable MAJOR: Some ENUM servers are unreachable	The enabled connections to ENUM servers have been lost.	CRITICAL: All ENUM Servers are currently unreachable! MAJOR: One or more ENUM Servers are currently unreachable!	apSysMgmtENUMStatusChangeTrap (ap-smgmt.mib)
H.323 ALARM STACK INITIALIZATION FAILURE	327682	CRITICAL	The H.323 stack has failed to initialize properly and is terminated.	[H.323 | IWF] stack <stack-name> has failed to initialize and is terminated	apSyslogMessageGenerated (ap-slog.mib) (ap-smgmt.mib)

The following table lists the supported configuration alarms.

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
CFG ALARM SAVE FAILED	393217	MAJOR	The save-config command execution failed on a standby SBC peer operating as part of an HA pair.	save-config failed on targetName!/ code full, config sync stopped! or save-config failed on targetName!/ code full, config sync stopped! (where the targetName is the target name (tn) configured in the boot parameters)	apSyslogMessageGenerated (ap-slog.mib) apSysMgmtCfgSaveFailTrap (ap-smgmt.mib)

The following table lists the supported license alarms.

Alarm Name	Alarm ID	Alarm Severity	Cause(s)	Example Log Message	Trap Generated (Trap Reference)
LICENSE APPROACH CAPACITY	50004	MAJOR	Total session count is approaching the license capacity allowed (98% or higher) This alarm is cleared when total sessions is less than 90% of license capacity.		apSyslogMessageGenerated (ap-slog.mib) apLicenseApproachingCapacityNotification (ap-smgmt.mib)

For additional information about system alarms for the components of the system, refer to the Alarms section of the Monitoring via the ACLI chapter of the Administration and Configuration Guide for the ACLI.

Alarm Severities

The system architecture includes five levels of alarm severity. These levels have been designated so that the system can take action that is appropriate to the situation triggering the alarm.

Alarm Severity	Description
Emergency	Requires immediate attention. If you do not attend to this condition immediately, there will be physical, permanent, and irreparable damage to your system.
Critical	System is inoperable, causing a complete loss of service in a production environment. Requires attention as soon as it is noted.
Major	Functionality has been seriously compromised. This situation might cause loss of functionality, hanging applications, and dropped packets. If you do not attend to this situation, your system will suffer no physical harm, but it will cease to function.
Minor	Functionality has been impaired to a certain degree. As a result, you might experience compromised functionality. You should attend to this type of alarm as soon as possible in order to keep your system operating properly.
Warning	Some irregularities in performance. This condition describes situations that are noteworthy, however, you should attend to this condition in order to keep your system operating properly. For example, this type of alarm might indicate the system is running low on bandwidth and you may need to contact your Oracle customer support representative to arrange for an upgrade.