CHAPTER 5

GGSN Alarms

Revised: 6/25/10, OL-22499-01

This chapter contains a list of the alarms for the Gateway GPRS Support Node (GGSN) that the Cisco Mobile Wireless Transport Manager 6.1.3 supports.

Table 5-1 GGSN Alarms

Name	Source	Type	Auto Clear	Severity	Message Text
APN-ConfigModified	Trap	Alarm	No	Warning	APN $ApnDisplayName on GGSN $NodeDisplayName - The APN configuration was modified.
APN-UpstreamSecurityViolation	Trap	Alarm	No	Warning	APN $ApnDisplayName on GGSN $NodeDisplayName - Upstream security violation.
APN-DownstreamSecurityViolation	Trap	Alarm	No	Warning	APN $ApnDisplayName on GGSN $NodeDisplayName - Downstream security violation.
APN-ServiceMode	Trap	Alarm	Yes	Major	APN $ApnDisplayName on GGSN $NodeDisplayName - The APN is in maintenance mode.
APN-ServiceMode	Trap	Alarm	Yes	Normal	APN $ApnDisplayName on GGSN $NodeDisplayName - The APN is in service.
APN-ServiceMode	Poll	Alarm	Yes	Major	APN $ApnDisplayName on GGSN $NodeDisplayName - The APN is in maintenance mode.
APN-ServiceMode	Poll	Alarm	Yes	Normal	APN $ApnDisplayName on GGSN $NodeDisplayName - The APN is in service.
ChargingGatewayMaintenanceMode	Trap	Alarm	Yes	Normal	$NodeDisplayName - The charging gateway is in service.
ChargingGatewayMaintenanceMode	Trap	Alarm	Yes	Major	$NodeDisplayName -- The charging gateway is in maintenance mode.
ChargingGatewayMaintenanceMode	Poll	Alarm	Yes	Normal	$NodeDisplayName -- The charging gateway is in service.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
ChargingGatewayMaintenanceMode	Poll	Alarm	Yes	Major	$NodeDisplayName -- The charging gateway is in maintenance mode.
ChargingGatewayState	Trap	Alarm	Yes	Critical	$NodeDisplayName -- The charging gateway is down.
ChargingGatewayState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The charging gateway is up.
ChargingGatewaySwitchover	Trap	Alarm	No	Major	$NodeDisplayName -- The charging gateway switched from $cgprsCgOldChgGatewayAddress to $cgprsCgActiveChgGatewayAddress.
GtpPathFailed	Trap	Alarm	No	Major	$NodeDisplayName - Peer ($cGtpLastNoRespToEchoGSNIpAddr) failed to respond to the GTP Echo Request.
DccaRatingFail	Trap	Alarm	No	Major	$NodeDisplayName - The Credit Control Server cannot rate a service request for $cGgsnNotifPdpImsi / $cGgsnNotifPdpMsisdn
DccaServiceDenied	Trap	Alarm	No	Major	$NodeDisplayName - The Credit Control Server denied a service request due to service restrictions for $cGgsnNotifPdpImsi / $cGgsnNotifPdpMsisdn
CSGState	Trap	Alarm	Yes	Critical	$NodeDisplayName -- The CSG is down.
CSGState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The CSG is up.
DCCACreditLimitReached	Trap	Alarm	No	Major	$NodeDisplayName - Credit limit reached for $cGgsnNotifPdpImsi / $cGgsnNotifPdpMsisdn
DCCAUserUnknown	Trap	Alarm	No	Major	$NodeDisplayName - User is unknown in the Credit Control Server $cGgsnNotifPdpImsi / $cGgsnNotifPdpMsisdn
DCCAAuthReject	Trap	Alarm	No	Major	$NodeDisplayName - The Credit Control Server rejected authorization of user $cGgsnNotifPdpImsi / $cGgsnNotifPdpMsisdn.
GWServiceState	Trap	Alarm	Yes	Critical	$NodeDisplayName -- The gateway service is shutdown.
GWServiceState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The gateway service is started.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
APN-NoResource	Trap	Alarm	No	Major	APN $ApnDisplayName on GGSN $NodeDisplayName - Resources to continue GGSN service have been exhausted because the maximum number of PDP contexts has been reached. Reason: $cGgsnHistNotifInfo
GWMaintenanceMode	Trap	Alarm	Yes	Major	$NodeDisplayName -- The gateway is in maintenance mode.
GWMaintenanceMode	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The gateway is in service.
GWMaintenanceMode	Poll	Alarm	Yes	Major	$NodeDisplayName -- The gateway is in maintenance mode.
GWMaintenanceMode	Poll	Alarm	Yes	Normal	$NodeDisplayName -- The gateway is in service.
APN-NoRadius	Trap	Alarm	No	Major	APN $ApnDisplayName on GGSN $NodeDisplayName - No RADIUS server is configured. $cGgsnHistNotifInfo
GWMemoryThreshold	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The gateway memory threshold is cleared. The gateway memory overload protection mechanism is disengaged.
GWMemoryThreshold	Trap	Alarm	Yes	Critical	$NodeDisplayName -- The gateway memory threshold is reached. The gateway memory overload protection mechanism is engaged.
PSDDiskFull	Trap	Alarm	No	Major	$NodeDisplayName - The PSD disk is full. No more CDRs are being stored on the PSD.
PSDServerState	Trap	Alarm	Yes	Critical	$NodeDisplayName -- The PSD is down.
PSDServerState	Trap	Alarm	Yes	Normal	$NodeDisplayName - The PSD is up.
APN-IpAllocationFail	Trap	Alarm	No	Major	APN $ApnDisplayName on GGSN $NodeDisplayName - IP address allocation failed. $cGgsnHistNotifInfo
APN-Unreachable	Trap	Alarm	No	Critical	APN $ApnDisplayName on GGSN $NodeDisplayName - Access point is not reachable. $cGgsnHistNotifInfo
MapSgsnDown	Trap	Alarm	No	Major	$NodeDisplayName - MAP-SGSN service is shutdown. Reason: $cGgsnHistNotifInfo
MapSgsnUp	Trap	Alarm	No	Normal	$NodeDisplayName - MAP-SGSN service is started. Reason: $cGgsnHistNotifInfo
NoDHCPServer	Trap	Alarm	No	Major	$NodeDisplayName - No DHCP server is configured. Reason: $cGgsnHistNotifInfo

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
APN-AuthenticationFail	Trap	Alarm	No	Minor	APN $ApnDisplayName on GGSN $NodeDisplayName - A PDP activation failed because of an authentication failure. Reason: $cGgsnHistNotifInfo
APN-CcrInitFail	Trap	Alarm	No	Minor	APN $ApnDisplayName on GGSN $NodeDisplayName - The TX timer expired before getting a CCR (initial) response. Reason: $cGgsnHistNotifInfo
APN-QuotaPushFail	Trap	Alarm	No	Minor	APN $ApnDisplayName on GGSN $NodeDisplayName - Quota Push failed to the CSG quota server. Reason: $cGgsnHistNotifInfo
APN-ConfigCreated	Trap	Alarm	No	Warning	APN $ApnDisplayName on GGSN $NodeDisplayName - The APN configuration was created.
APN-ConfigDeleted	Trap	Alarm	No	Warning	APN $ApnDisplayName on GGSN $NodeDisplayName - The APN configuration was deleted.
ChargingTransferState	Trap	Alarm	Yes	Major	$NodeDisplayName -- The gateway has repeatedly failed to receive responses for the data record transfer request messages from the charging gateway.
ChargingTransferState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The gateway has successfully sent data record transfer request messages to the charging gateway.
ChargingCapacityState	Trap	Alarm	Yes	Major	$NodeDisplayName -- The gateway is out of memeory and has failed to buffer a G-CDR internally.
ChargingCapacityState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The gateway is able to buffer G-CDRs after the failure to buffer G-CDRs.
ChargingGatewayEchoState	Trap	Alarm	Yes	Major	$NodeDisplayName -- The gateway has repeatedly failed to receive the echo response messages from the charging gateway for the echo request message.
ChargingGatewayEchoState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The gateway received an echo response from the charging gateway.
ChargingCDRBufferState	Trap	Alarm	Yes	Major	NodeDisplayName -- The gateway has discarded G-CDRs.
ChargingCDRBufferState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The gateway has started buffering G-CDRs after G-CDRs have been discarded.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
ChargingState	Trap	Alarm	Yes	Major	$NodeDisplayName -- The charging transactions on the gateway are disabled.
ChargingState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The charging transactions on the gateway are enabled.
DiameterPeerConnectionState	Trap	Alarm	Yes	Major	$NodeDisplayName -- The diameter peer state is down.
DiameterPeerConnectionState	Trap	Alarm	Yes	Normal	$NodeDisplayName -- The diameter peer state is up.
DiameterPeerConnectionState	Poll	Alarm	Yes	Major	$NodeDisplayName -- The diameter peer state is down.
DiameterPeerConnectionState	Poll	Alarm	Yes	Normal	$NodeDisplayName -- The diameter peer state is up.
DiameterPeerConnectionState	Poll	Alarm	Yes	Normal	$NodeDisplayName -- The diameter peer state is up.
DiameterPeerConnectionState	Poll	Event	Yes	Informational	$NodeDisplayName -- The diameter peer state is waitConnAck.
DiameterPeerConnectionState	Poll	Event	Yes	Informational	$NodeDisplayName -- The diameter peer state is waitICEA.
DiameterPeerConnectionState	Poll	Event	Yes	Informational	$NodeDisplayName -- The diameter peer state is elect.
DiameterPeerConnectionState	Poll	Event	Yes	Informational	$NodeDisplayName -- The diameter peer state is waitReturns.
DiameterPeerConnectionState	Poll	Event	Yes	Informational	$NodeDisplayName -- The diameter peer state is closing.
DiameterPermanentFailure	Trap	Alarm	No	Major	$NodeDisplayName -- The number of protocol permanent failures for the diameter peer $cdbpPeerId has increased.
DiameterProtocolError	Trap	Alarm	No	Major	$NodeDisplayName -- The number of protocol errors returned to the diameter peer $cdbpPeerId has increased.
DiameterTransientFailure	Trap	Alarm	No	Major	$NodeDisplayName -- The number of protocol transient failures for the diameter peer $cdbpPeerId has increased.
MemoryBufferElementsFree	Poll	Alarm	Yes	Normal	$NodeDisplayName - The memory buffer elements free threshold is Acceptable. Value $MemoryBufferElementsFreeValue
MemoryBufferElementsFree	Poll	Alarm	Yes	Major	$NodeDisplayName - The memory buffer elements free threshold is Exceeded. Value $MemoryBufferElementsFreeValue
FreeMemory	Poll	Alarm	Yes	Normal	$NodeDisplayName - The free memory threshold is Acceptable. Value $FreeMemoryValue

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
FreeMemory	Poll	Alarm	Yes	Major	$NodeDisplayName - The free memory threshold is Exceeded. Value $FreeMemoryValue
CPUavgBusy5	Poll	Alarm	Yes	Normal	$NodeDisplayName - The CPU 5 minute average utilization threshold is Acceptable. Value $CPUavgBusy5Value
CPUavgBusy5	Poll	Alarm	Yes	Warning	$NodeDisplayName - The CPU 5 minute average utilization threshold is Exceeded. Value $CPUavgBusy5Value
SlbVirtualServerStateChange	Trap	Alarm	Yes	Major	$NodeDisplayName -- SLB Virtual Server $slbVirtualServerState_slbEntity:$slbVirtualServerState_slbVirtualServerName -- This virtual server is not active and is not affecting client traffic.
SlbVirtualServerStateChange	Trap	Alarm	Yes	Normal	$NodeDisplayName -- SLB Virtual Server $slbVirtualServerState_slbEntity:$slbVirtualServerState_slbVirtualServerName -- This virtual server is active and is load-balancing client traffic to available real servers.
SlbVirtualServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbVirtualServerState_slbEntity:$slbVirtualServerState_slbVirtualServerName -- This virtual server is in standby mode and is acting as a backup for a virtual server on another SLB device.
SlbVirtualServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbVirtualServerState_slbEntity:$slbVirtualServerState_slbVirtualServerName -- The real server associated with this redirect virtual server is not operational.
SlbVirtualServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbVirtualServerState_slbEntity:$slbVirtualServerState_slbVirtualServerName -- The real server associated with this virtual server is not operational and this virtual server is in standby state.
SlbVirtualServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbVirtualServerState_slbEntity:$slbVirtualServerState_slbVirtualServerName -- The real server associated with this virtual server is being tested.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
SlbVirtualServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbVirtualServerState_slbEntity:$slbVirtualServerState_slbVirtualServerName -- This virtual server is not enabled because it does not have enough memory to hold the configured matching policy information.
SlbVirtualServerStateChange	Poll	Alarm	Yes	Major	$NodeDisplayName -- SLB Virtual Server $slbEntity:$slbVirtualServerName -- This virtual server is not active and is not affecting client traffic.
SlbVirtualServerStateChange	Poll	Alarm	Yes	Normal	$NodeDisplayName -- SLB Virtual Server $slbEntity:$slbVirtualServerName -- This virtual server is active and is load-balancing client traffic to available real servers.
SlbVirtualServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbEntity:$slbVirtualServerName -- This virtual server is in standby mode and is acting as a backup for a virtual server on another SLB device.
SlbVirtualServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbEntity:$slbVirtualServerName -- The real server associated with this redirect virtual server is not operational.
SlbVirtualServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbEntity:$slbVirtualServerName --The real server associated with this virtual server is not operational and this virtual server is in standby state.
SlbVirtualServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbEntity:$slbVirtualServerName -- The real server associated with this virtual server is being tested.
SlbVirtualServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Virtual Server $slbEntity:$slbVirtualServerName -- This virtual server is not enabled because it does not have enough memory to hold the configured matching policy information.
SlbRealServerStateChange	Trap	Alarm	Yes	Major	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This real server is out of service and is not in use as a destination for client connections.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
SlbRealServerStateChange	Trap	Alarm	Yes	Normal	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This real server is in service and is a destination for SLB client connections.
SlbRealServerStateChange	Trap	Alarm	Yes	Major	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This real server has failed.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This server has received a test probe from the SLB.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This server has failed and been given a test connection.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This real server has reached its maximum number of connections.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This real server has reached its maximum number of clients.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- DFP has lowered the weight of this server to throttle level, so that no new connections will be assigned to it until DFP raises its weight.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- The probe to this server has failed. No new connections will be assigned to this server until a probe to this server succeeds.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This server has received a test probe from the SLB.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This real server is ready to go operational, but is waiting for the associated virtual server to be in service.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This server is ready to be tested. This state is applicable only when the server is used for http redirect load balancing.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This real server has failed the inband health probe agent.
SlbRealServerStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbRealState_slbEntity:$slbRealState_slbRealServerFarmName:$slbRealState_slbRealIpAddress:$slbRealState_slbRealPort -- This server has been disabled because it returned an HTTP code that matched a configured value.
SlbRealServerStateChange	Poll	Alarm	Yes	Major	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slbRealIpAddress:$slbRealPort -- This real server is out of service and is not in use as a destination for client connections.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
SlbRealServerStateChange	Poll	Alarm	Yes	Normal	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This real server is in service and is a destination for SLB client connections.
SlbRealServerStateChange	Poll	Alarm	Yes	Major	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This real server has failed.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This server has received a test probe from the SLB.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This server has failed and been given a test connection.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This real server has reached its maximum number of connections.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This real server has reached its maximum number of clients.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- DFP has lowered the weight of this server to throttle level, so that no new connections will be assigned to it until DFP raises its weight.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- The probe to this server has failed. No new connections will be assigned to this server until a probe to this server succeeds.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This server has received a test probe from the SLB.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This real server is ready to go operational, but is waiting for the associated virtual server to be in service.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This server is ready to be tested. This state is applicable only when the server is used for http redirect load balancing.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This real server has failed the inband health probe agent.
SlbRealServerStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName -- SLB Real Server $slbEntity:$slbRealServerFarmName:$slb RealIpAddress:$slbRealPort -- This server has been disabled because it returned an HTTP code that matched a configured value.
SlbFaultToleranceStateChange	Trap	Alarm	Yes	Major	$NodeDisplayName -- SLB Entity: $cslbxFtState_slbEntity -- SLB fault tolerance is not configured.
SlbFaultToleranceStateChange	Trap	Alarm	Yes	Warning	$NodeDisplayName -- SLB Entity: $cslbxFtState_slbEntity -- SLB fault tolerance is initializing.
SlbFaultToleranceStateChange	Trap	Alarm	Yes	Normal	$NodeDisplayName -- SLB Entity: $cslbxFtState_slbEntity -- SLB fault tolerance is active.
SlbFaultToleranceStateChange	Trap	Alarm	Yes	Major	$NodeDisplayName -- SLB Entity: $cslbxFtState_slbEntity -- SLB fault tolerance is in standby mode.
SlbFaultToleranceStateChange	Poll	Alarm	Yes	Major	$NodeDisplayName -- SLB Entity: $slbEntity -- SLB fault tolerance is not configured.
SlbFaultToleranceStateChange	Poll	Alarm	Yes	Warning	$NodeDisplayName - SLB Entity: $slbEntity - SLB fault tolerance is initializing.
SlbFaultToleranceStateChange	Poll	Alarm	Yes	Normal	$NodeDisplayName - SLB Entity: $slbEntity - SLB fault tolerance is active.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
SlbFaultToleranceStateChange	Poll	Alarm	Yes	Major	$NodeDisplayName - SLB Entity: $slbEntity - SLB fault tolerance is in standby mode.
GTPReceivedMsgsRateThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The rate of signalling messages received is $GGSNThresholdValue percent of the signalling throughput limit which is above the high threshold of $GGSNHighThreshold percent of the signalling throughput limit.
GTPReceivedMsgsRateThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The rate of signalling messages received is $GGSNThresholdValue percent of the signalling throughput limit which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of the signalling throughput limit.
GTPReceivedMsgsRateThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The rate of signalling messages received is $GGSNThresholdValue percent of the signalling throughput limit which is below the low threshold of $GGSNLowThreshold percent of the signalling throughput limit.
GTPUnexpectedMsgsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of unexpected signalling messages received is $GGSNThresholdValue percent of total signalling messages received which is above the high threshold of $GGSNHighThreshold percent of total signalling messages received.
GTPUnexpectedMsgsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of unexpected signalling messages received is $GGSNThresholdValue percent of total signalling messages received which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of total signalling messages received.
GTPUnexpectedMsgsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of unexpected signalling messages received is $GGSNThresholdValue percent of total signalling messages received which is below the low threshold of $GGSNLowThreshold percent of the total signalling messages received.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
GPDUBytesSentRateThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The rate of G-PDU bytes sent is $GGSNThresholdValue percent of the G-PDU bytes sent throughput limit which is above the high threshold of $GGSNHighThreshold percent of the G-PDU bytes sent throughput limit.
GPDUBytesSentRateThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The rate of G-PDU bytes sent is $GGSNThresholdValue percent of the G-PDU bytes sent throughput limit which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of the G-PDU bytes sent throughput limit.
GPDUBytesSentRateThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The rate of G-PDU bytes sent is $GGSNThresholdValue percent of the G-PDU bytes sent throughput limit which is below the low threshold of $GGSNLowThreshold percent of the G-PDU bytes sent throughput limit.
GPDUBytesReceivedRateThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The rate of G-PDU bytes received is $GGSNThresholdValue percent of the G-PDU bytes received throughput limit which is above the high threshold of $GGSNHighThreshold percent of the G-PDU bytes received throughput limit.
GPDUBytesReceivedRateThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The rate of G-PDU bytes received is $GGSNThresholdValue percent of the G-PDU bytes received throughput limit which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of the G-PDU bytes received throughput limit.
GPDUBytesReceivedRateThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The rate of G-PDU bytes received is $GGSNThresholdValue percent of the G-PDU bytes received throughput limit which is below the low threshold of $GGSNLowThreshold percent of the G-PDU bytes received throughput limit.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
RejectedPDPContextsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of rejected PDP contexts is $GGSNThresholdValue percent of total PDP contexts created which is above the high threshold of $GGSNHighThreshold percent of total PDP contexts created.
RejectedPDPContextsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of rejected PDP contexts is $GGSNThresholdValue percent of total PDP contexts created which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of total PDP contexts created.
RejectedPDPContextsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of rejected PDP contexts is $GGSNThresholdValue percent of total PDP contexts created which is below the low threshold of $GGSNLowThreshold percent of total PDP contexts created.
DroppedPDPContextsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of dropped PDP contexts is $GGSNThresholdValue percent of total PDP contexts created which is above the high threshold of $GGSNHighThreshold percent of total PDP contexts created.
DroppedPDPContextsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of dropped PDP contexts is $GGSNThresholdValue percent of total PDP contexts created which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of total PDP contexts created.
DroppedPDPContextsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of dropped PDP contexts is $GGSNThresholdValue percent of total PDP contexts created which is below the low threshold of $GGSNLowThreshold percent of total PDP contexts created.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
ActiveGTPVersion0PDPsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of active GTP version 0 PDP contexts is $GGSNThresholdValue percent of the active GTP version 0 PDP contexts limit which is above the high threshold of $GGSNHighThreshold percent of the active GTP version 0 PDP contexts limit.
ActiveGTPVersion0PDPsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of active GTP version 0 PDP contexts is $GGSNThresholdValue percent of the active GTP version 0 PDP contexts limit which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of the active GTP version 0 PDP contexts limit.
ActiveGTPVersion0PDPsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of active GTP version 0 PDP contexts is $GGSNThresholdValue percent of the active GTP version 0 PDP contexts limit which is below the low threshold of $GGSNLowThreshold percent of the active GTP version 0 PDP contexts limit.
ActiveGTPVersion1PDPsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of active GTP version 1 PDP contexts is $GGSNThresholdValue percent of the active GTP version 1 PDP contexts limit which is above the high threshold of $GGSNHighThreshold percent of the active GTP version 1 PDP contexts limit.
ActiveGTPVersion1PDPsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of active GTP version 1 PDP contexts is $GGSNThresholdValue percent of the active GTP version 1 PDP contexts limit which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of the active GTP version 1 PDP contexts limit.
ActiveGTPVersion1PDPsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of active GTP version 1 PDP contexts is $GGSNThresholdValue percent of the active GTP version 1 PDP contexts limit which is below the low threshold of $GGSNLowThreshold percent of the active GTP version 1 PDP contexts limit.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
G-CDRMessagesPendingThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of G-CDR messages pending is $GGSNThresholdValue percent of the G-CDR messages pending limit which is above the high threshold of $GGSNHighThreshold percent of the G-CDR messages pending limit.
G-CDRMessagesPendingThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of G-CDR messages pending is $GGSNThresholdValue percent of the G-CDR messages pending limit which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of the G-CDR messages pending limit.
G-CDRMessagesPendingThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of G-CDR messages pending is $GGSNThresholdValue percent of the G-CDR messages pending limit which is below the low threshold of $GGSNLowThreshold percent of the G-CDR messages pending limit.
IPInboundHeaderErrorsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of inbound datagrams with header errors is $GGSNThresholdValue percent of total inbound datagrams which is above the high threshold of $GGSNHighThreshold percent of total inbound datagrams.
IPInboundHeaderErrorsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of inbound datagrams with header errors is $GGSNThresholdValue percent of total inbound datagrams which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of total inbound datagrams.
IPInboundHeaderErrorsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of inbound datagrams with header errors is $GGSNThresholdValue percent of total inbound datagrams which is below the low threshold of $GGSNLowThreshold percent of total inbound datagrams.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
IPOutboundDiscardsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of discarded outbound datagrams is $GGSNThresholdValue percent of outbound datagram requests which is above the high threshold of $GGSNHighThreshold percent of outbound datagram requests.
IPOutboundDiscardsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of discarded outbound datagrams is $GGSNThresholdValue percent of outbound datagram requests which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of outbound datagram requests.
IPOutboundDiscardsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of discarded outbound datagrams is $GGSNThresholdValue percent of outbound datagram requests which is below the low threshold of $GGSNLowThreshold percent of outbound datagram requests.
IPOutboundNoRoutesThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of outbound datagrams discarded because of no route is $GGSNThresholdValue percent of outbound datagram requests which is above the high threshold of $GGSNHighThreshold percent of outbound datagram requests.
IPOutboundNoRoutesThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of outbound datagrams discarded because of no route is $GGSNThresholdValue percent of outbound datagram requests which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of outbound datagram requests.
IPOutboundNoRoutesThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of outbound datagrams discarded because of no route is $GGSNThresholdValue percent of outbound datagram requests which is below the low threshold of $GGSNLowThreshold percent of outbound datagram requests.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
IPReassemblyFailuresThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of IP reassembly failures is $GGSNThresholdValue percent of inbound datagrams which is above the high threshold of $GGSNHighThreshold percent of inbound datagrams.
IPReassemblyFailuresThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of IP reassembly failures is $GGSNThresholdValue percent of inbound datagrams which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of inbound datagrams.
IPReassemblyFailuresThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of IP reassembly failures is $GGSNThresholdValue percent of inbound datagrams which is below the low threshold of $GGSNLowThreshold percent of inbound datagrams.
UDPIncomingErrorsThreshold	Poll	Alarm	Yes	Major	$NodeDisplayName - The number of UDP datagrams received in error is $GGSNThresholdValue percent of the number of UDP datagrams delivered which is above the high threshold of $GGSNHighThreshold percent of the number of UDP datagrams delivered.
UDPIncomingErrorsThreshold	Poll	Alarm	Yes	Warning	$NodeDisplayName - The number of UDP datagrams received in error is $GGSNThresholdValue percent of the number of UDP datagrams delivered which is between the high threshold of $GGSNHighThreshold percent and the low threshold of $GGSNLowThreshold percent of the number of UDP datagrams delivered.
UDPIncomingErrorsThreshold	Poll	Alarm	Yes	Normal	$NodeDisplayName - The number of UDP datagrams received in error is $GGSNThresholdValue percent of the number of UDP datagrams delivered which is below the low threshold of $GGSNLowThreshold percent of the number of UDP datagrams delivered.
PdfStateDown	Trap	Event	No	Warning	The cGgsnPdfStateDownNotif is deprecated.
PdfStateUp	Trap	Event	No	Warning	The cGgsnPdfStateUpNotif is deprecated.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
GWNotification	Trap	Event	No	Warning	The cGgsnNotification is deprecated.
IPLocalPoolThreshold	Trap	Event	No	Informational	$NodeDisplayName - IP local pool threshold exceeded. Used addresses = $cIpLocalPoolStatInUseAddrs. Available addresses = $cIpLocalPoolStatFreeAddrs .
IPLocalPoolThreshold	Trap	Event	No	Informational	$NodeDisplayName - IP local pool threshold abated. Used addresses = $cIpLocalPoolStatInUseAddrs. Available addresses = $cIpLocalPoolStatFreeAddrs.
IPLocalPoolThreshold	Trap	Event	No	Informational	$NodeDisplayName - IP local pool threshold exceeded. Used addresses = $cIpLocalPoolStatInUseAddrs. Available addresses = $cIpLocalPoolStatFreeAddrs.
ApnInstanceState	Poll	Event	No	Normal	APN $ApnDisplayName on gateway $NodeDisplayName added in state Active/$ApnInstanceStateReason.
ApnInstanceState	Poll	Event	No	Informational	APN $ApnDisplayName on gateway $NodeDisplayName added in state $ApnInstanceState/$ApnInstanceStateReason.
ApnInstanceState	Poll	Event	No	Normal	APN $ApnDisplayName on gateway $NodeDisplayName changed state from $ApnInstanceLastState to Active/$ApnInstanceStateReason.
ApnInstanceState	Poll	Event	No	Informational	APN $ApnDisplayName on gateway $NodeDisplayName changed state from $ApnInstanceLastState to $ApnInstanceState/$ApnInstanceStateReason.
ApnState	Poll	Event	No	Normal	APN $ApnDisplayName added in state Active/$ApnStateReason.
ApnState	Poll	Event	No	Informational	APN $ApnDisplayName added in state $ApnState/$ApnStateReason.
ApnState	Poll	Event	No	Normal	APN $ApnDisplayName changed state from $ApnLastState to Active/$ApnStateReason.
ApnState	Poll	Event	No	Informational	APN $ApnDisplayName changed state from $ApnLastState to $ApnState/$ApnStateReason.
ApnInstanceIgnoredSet	User Action	Event	No	Informational	APN $ApnDisplayName on GGSN $NodeDisplayName ignore flag is set to $IgnoredFlag by $User.
ApnIgnoredSet	User Action	Event	No	Informational	APN $ApnDisplayName ignore flag is set to $IgnoredFlag by $User.

Table 5-1 GGSN Alarms (continued)

Name	Source	Type	Auto Clear	Severity	Message Text
ApnInstanceUserDataUpdated	User Action	Event	No	Informational	APN $ApnDisplayName on GGSN $NodeDisplayName edited by user $User.
ApnUserDataUpdated	User Action	Event	No	Informational	APN $ApnDisplayName edited by user $User.
ApnInstanceDeleted	User Action	Event	No	Informational	APN $ApnDisplayName on GGSN $NodeDisplayName deleted by user $User.
Provision Request	User Action	Event	No	Informational	$NodeDisplayName - Provision request succeeded. $UserName requested to $Operation a $NEType on $FQDN.
Provision Request	User Action	Event	No	Informational	$NodeDisplayName - Provision request failed. $UserName requested to $Operation a $NEType on $FQDN. Error message: $ErrorMessage.