Oracle® Communications

Policy Management

SNMP User's Guide

Release 12.5

E94227-01

December 2018

ORACLE

Policy Management SNMP User's Guide, Release 12.5

E94227-01

Contents

About This Guide xiii

Scope and Audience xiii
How This Guide is Organized xiii
Related Publications xiii
Locate Product Documentation on the Oracle Help Center Site xiii
Customer Training xiv
My Oracle Support xiv
Emergency Response xiv

1 Overview

Simple Network Management Protocol 1-1
The SNMP Standard 1-1
SNMP Message Types 1-2
Standard Managed Objects 1-2

2 Configuring SNMP

About SNMP Configuration 2-1
SNMP Versions 2-2
Configuring SNMP Settings 2-3

3 Supported MIBs

Supported MIBs 3-1
SNMP MIB Objects 3-1
MIB Object Access Values 3-2
Compiling MIB Objects 3-2

4 Support for Traps

Alarms Overview 4-1
Alarms formatting information 4-2
Alarm and Event Severity Levels 4-4
Platform (31000-32800) 4-5
31000 - S/W fault 4-5

31001 - S/W status 4-5
31002 - Process watchdog failure 4-6
31003 - Tab thread watchdog failure 4-6
31004 - Test Status 4-7
31005 - Test Fault 4-7
31100 - Database replication fault 4-7
31101 - Database replication to slave failure 4-8
31102 - Database replication from master failure 4-9
31103 - DB Replication update fault 4-10
31104 - DB Replication latency over threshold 4-10
31105 - Database merge fault 4-11
31106 - Database merge to parent failure 4-11
31107 - Database merge from child failure 4-12
31108 - Database merge latency over threshold 4-13
31109 - Topology config error 4-13
31110 - Database audit fault 4-14
31111 - Database merge audit in progress 4-14
31112 - DB replication update log transfer timed out 4-15
31113 - DB replication manually disabled 4-15
31114 - DB replication over SOAP has failed 4-16
31115 - Database service fault 4-16
31116 - Excessive shared memory 4-17
31117 - Low disk free 4-18
31118 - Database disk store fault 4-18
31119 - Database updatelog overrun 4-19
31120 - Database updatelog write fault 4-19
31121 - Low disk free early warning 4-20
31122 - Excessive shared memory early warning 4-21
31123 - Database replication audit command complete 4-21
31124 - ADIC error 4-22
31125 - Database durability degraded 4-22
31126 - Audit blocked 4-23
31127 - DB Replication Audit Complete 4-23
31128 - ADIC Found Error 4-24
31129 - ADIC Found Minor Issue 4-24
31130 - Network health warning 4-25
31131 - DB Ousted Throttle Behind 4-25
31132 - DB Replication Precedence Relaxed 4-26
31133 - DB Replication Switchover Exceeds Threshold 4-27
31134 - DB Site Replication To Slave Failure 4-27
31135 - DB Site Replication From Master Failure 4-28
31136 - DB Site Replication Precedence Relaxed 4-28
31137 - DB Site Replication Latency Over Threshold 4-29

31140 - Database perl fault 4-29
31145 - Database SQL fault 4-30
31146 - DB mastership fault 4-30
31147 - DB upsynclog overrun 4-31
31148 - DB lock error detected 4-32
31149 - DB Late Write Nonactive 4-32
31200 - Process management fault 4-33
31201 - Process not running 4-33
31202 - Unkillable zombie process 4-34
31206 - Process mgmt monitoring fault 4-34
31207 - Process resource monitoring fault 4-35
31208 - IP port server fault 4-36
31209 - Hostname lookup failed 4-36
31213 - Process scheduler fault 4-37
31214 - Scheduled process fault 4-37
31215 - Process resources exceeded 4-38
31216 - SysMetric configuration error 4-38
31217 - Network Health Warning 4-39
31220 - HA configuration monitor fault 4-39
31221 - HA alarm monitor fault 4-40
31222 - HA not configured 4-40
31223 - HA Heartbeat transmit failure 4-41
31224 - HA configuration error 4-42
31225 - HA service start failure 4-42
31226 - HA availability status degraded 4-43
31227 - HA availability status failed 4-43
31228 - HA standby offline 4-44
31229 - HA score changed 4-44
31230 - Recent alarm processing fault 4-45
31231 - Platform alarm agent fault 4-46
31232 - Late heartbeat warning 4-46
31233 - HA Path Down 4-47
31234 - Untrusted Time Upon Initialization 4-47
31235 - Untrusted Time After Initialization 4-48
31236 - HA Link Down 4-49
31240 - Measurements collection fault 4-49
31250 - RE port mapping fault 4-50
31260 - SNMP Agent 4-50
31261 - SNMP Configuration Error 4-51
31270 - Logging output 4-51
31280 - HA Active to Standby transition 4-52
31281 - HA Standby to Active transition 4-53
31282 - HA Management Fault 4-53

31283 - Lost Communication with server 4-54
31284 - HA Remote Subscriber Heartbeat Warning 4-54
31285 - HA Node Join Recovery Entry 4-55
31286 - HA Node Join Recovery Plan 4-55
31287 - HA Node Join Recovery Complete 4-56
31288 - HA Site Configuration Error 4-56
31290 - HA Process Status 4-57
31291 - HA Election Status 4-57
31292 - HA Policy Status 4-58
31293 - HA Resource Link Status 4-58
31294 - HA Resource Status 4-59
31295 - HA Action Status 4-60
31296 - HA Monitor Status 4-60
31297 - HA Resource Agent Info 4-61
31298 - HA Resource Agent Detail 4-61
31299 - HA Notification Status 4-62
31300 - HA Control Status 4-62
31301 - HA Topology Events 4-63
31322 - HA Configuration Error 4-63
32100 - Breaker Panel Feed Unavailable 4-64
32101 - Breaker Panel Breaker Failure 4-64
32102 - Breaker Panel Monitoring Failure 4-65
32103 - Power Feed Unavailable 4-65
32104 - Power Supply 1 Failure 4-65
32105 - Power Supply 2 Failure 4-66
32106 - Power Supply 3 Failure 4-66
32107 - Raid Feed Unavailable 4-67
32108 - Raid Power 1 Failure 4-67
32109 - Raid Power 2 Failure 4-68
32110 - Raid Power 3 Failure 4-68
32111 - Device Failure 4-69
32112 - Device Interface Failure 4-69
32113 - Uncorrectable ECC memory error 4-70
32114 - SNMP get failure 4-70
32115 - TPD NTP Daemon Not Synchronized Failure 4-71
32116 - TPD Server's Time Has Gone Backwards 4-72
32117 - TPD NTP Offset Check Failure 4-74
32300 - Server fan failure 4-75
32301 - Server internal disk error 4-76
32303 - Server Platform error 4-76
32304 - Server file system error 4-77
32305 - Server Platform process error 4-78
32306 - Server RAM shortage error 4-79

32307 - Server swap space shortage failure 4-79
32308 - Server provisioning network error 4-80
32309 - Eagle Network A Error 4-81
32310 - Eagle Network B Error 4-81
32311 - Sync Network Error 4-82
32312 - Server disk space shortage error 4-82
32313 - Server default route network error 4-83
32314 - Server temperature error 4-84
32315 - Server mainboard voltage error 4-85
32316 - Server power feed error 4-86
32317 - Server disk health test error 4-87
32318 - Server disk unavailable error 4-88
32319 - Device error 4-88
32320 - Device interface error 4-89
32321 - Correctable ECC memory error 4-90
32322 - Power Supply A error 4-91
32323 - Power Supply B error 4-91
32324 - Breaker panel feed error 4-92
32325 - Breaker panel breaker error 4-93
32326 - Breaker panel monitoring error 4-96
32327 - Server HA Keepalive error 4-97
32328 - DRBD is unavailable 4-98
32329 - DRBD is not replicating 4-98
32330 - DRBD peer problem 4-99
32331 - HP disk problem 4-100
32332 - HP Smart Array controller problem 4-100
32333 - HP hpacucliStatus utility problem 4-101
32334 - Multipath device access link problem 4-102
32335 - Switch link down error 4-103
32336 - Half Open Socket Limit 4-103
32337 - Flash Program Failure 4-104
32338 - Serial Mezzanine Unseated 4-105
32339 - TPD Max Number Of Running Processes Error 4-105
32340 - TPD NTP Daemon Not Synchronized Error 4-106
32341 - TPD NTP Daemon Not Synchronized Error 4-107
32342 - NTP Offset Check Error 4-108
32343 - TPD RAID disk 4-109
32344 - TPD RAID controller problem 4-110
32345 - Server Upgrade snapshot(s) invalid 4-111
32346 - OEM hardware management service reports an error 4-111
32347 - The hwmgmtcliStatus daemon needs intervention 4-112
32348 - FIPS subsystem problem 4-113
32349 - File Tampering 4-113

32350 - Security Process Terminated 4-114
32500 - Server disk space shortage warning 4-114
32501 - Server application process error 4-115
32502 - Server hardware configuration error 4-116
32503 - Server RAM shortage warning 4-117
32504 - Software Configuration Error 4-117
32505 - Server swap space shortage warning 4-118
32506 - Server default router not defined 4-119
32507 - Server temperature warning 4-120
32508 - Server core file detected 4-121
32509 - Server NTP Daemon not synchronized 4-122
32510 - CMOS battery voltage low 4-123
32511 - Server disk self test warning 4-123
32512 - Device warning 4-124
32513 - Device interface warning 4-124
32514 - Server reboot watchdog initiated 4-125
32515 - Server HA failover inhibited 4-126
32516 - Server HA Active to Standby transition 4-126
32517 - Server HA Standby to Active transition 4-127
32518 - Platform Health Check failure 4-127
32519 - NTP Offset Check failure 4-128
32520 - NTP Stratum Check failure 4-129
32521 - SAS Presence Sensor Missing 4-130
32522 - SAS Drive Missing 4-131
32523 - DRBD failover busy 4-131
32524 - HP disk resync 4-132
32525 - Telco Fan Warning 4-133
32526 - Telco Temperature Warning 4-133
32527 - Telco Power Supply Warning 4-134
32528 - Invalid BIOS value 4-135
32529 - Server Kernel Dump File Detected 4-135
32530 - TPD Upgrade Failed 4-136
32531 - Half Open Socket Warning Limit 4-136
32532 - Server Upgrade Pending Accept/Reject 4-137
32533 - TPD Max Number Of Running Processes Warning 4-138
32534 - TPD NTP Source Is Bad Warning 4-138
32535 - TPD RAID disk resync 4-139
32536 - TPD Server Upgrade snapshot(s) warning 4-140
32537 - FIPS subsystem warning event 4-141
32540 - CPU Power limit mismatch 4-141
32700 - Telco Switch Notification 4-142
32701 - HIDS Initialized 4-142
32702 - HIDS Baseline Deleted 4-143

32703 - HIDS Enabled 4-143
32704 - HIDS Disabled 4-143
32705 - HIDS Monitoring Suspended 4-144
32706 - HIDS Monitoring Resumed 4-144
32707 - HIDS Baseline Updated 4-144
QP (70000-70999) 4-145
70001 – QP_procmgr failed 4-145
70002 – QP Critical process failed 4-145
70003 – QP Non-critical process failed 4-146
70004 – QP Processes down for maintenance 4-146
70007 - QP Resource Not Ready 4-147
70010 – QP Failed Server-backup Remote Archive Rsync 4-148
70011 – QP Failed System-backup Remote Archive Rsync 4-148
70012 – QP Failed To Create Server Backup 4-149
70013 – QP Failed To Create System Backup 4-150
70015 – Route Add Failed 4-150
70016 – No Available VIP Route 4-151
70017 – No Available Static IP 4-151
70020 – QP Master database is outdated 4-152
70021 – QP slave database is unconnected to the master 4-153
70022 – QP Slave database failed to synchronize 4-153
70023 – QP Slave database lagging the master 4-154
70024 - QP Slave database is prevented from synchronizing with the master 4-155
70025 – QP Slave database is a different version than the master 4-155
70026 – QP Server Symantec NetBackup Operation in Progress 4-156
70027 – QP Server Network Config Error 4-156
70028 – QP bonded interface is down 4-157
70029 – QP peer node bonded interface is down 4-157
70030 – QP backplane bonded interface is down 4-158
70031 – QP degrade because one or more interfaces are down 4-159
70032 – QP direct link does not work as configuration 4-159
70038 – QP has blocked IPv4 traffic on an OAM interface 4-160
70039 – QP has blocked IPv4 traffic on all interfaces 4-160
70040 – Failure to block IPv4 on the OAM interface 4-161
70041 – Failure to block IPv4 on the all interfaces 4-161
70042 – Failure to remove OAM IPv4 addresses from the cluster/site 4-162
70043 – Failure to remove all IPv4 addresses from the cluster/site 4-162
70044 – Failure to rollback changes for removing IPv4 addresses 4-163
70045 – DNS Server is not available 4-163
70050 – QP Timezone change detected 4-164
70500 – System Mixed Version 4-165
70501 – Cluster Mixed Version 4-165
70502 – Cluster Replication Inhibited 4-166

70503 – Server Forced Standby 4-167
70505 – ISO Mismatch 4-167
70506 – Upgrade Operation Failed 4-168
70507 – Upgrade In Progress 4-169
70508 – Server Is Zombie 4-169
Policy Server Alarms (71000-79999) 4-170
71001 – Remote Diversion Not Possible 4-170
71002 – OM Stats Parse Error 4-170
71003 – OM Stats Exception Error 4-171
71004 – AM Conn Lost 4-172
71005 – OM Stats Value Exceed Error 4-172
71101 – DQOS Downstream Connection Closed 4-173
71102 – MSC Conn Lost 4-173
71103 – PCMM Conn Lost 4-174
71104 – DQOS AM Connection Closed 4-175
71204 – SPC Conn Closed 4-175
71402 – Connectivity Lost 4-176
71403 – Connectivity Degraded 4-176
71408 – Diameter New Conn Rejected 4-177
71414 – SCTP Path Status Changed 4-178
71605 – LDAP Conn Failed 4-178
71630 – DHCP Unexpected Event ID 4-179
71631 – DHCP Unable to Bind Event ID 4-179
71632 – DHCP Response Timeout Event ID 4-180
71633 – DHCP Bad Relay Address Event ID 4-180
71634 – DHCP Bad Primary Address Event ID 4-181
71635 – DHCP Bad Secondary Address Event ID 4-181
71684 – SPR Connection Closed 4-182
71685 – MSR DB Not Reachable 4-182
71702 – BRAS Connection Closed 4-183
71703 – COPS Unknown Gateway 4-184
71801 – PCMM No PCEF 4-184
71805 – PCMM Non Connection PCEF 4-185
72198 – SMSR SMSC Switched to Primary 4-185
72199 – SMSR SMSC Switched to Secondary 4-186
72210 – PCMM Reached Max Gates Event ID 4-186
72211 – PCMM Reached Max GPI Event ID 4-187
72501 – SCE Connection Lost 4-187
72549 – SMSR Queue Full 4-188
72559 – SMSR SMSC Connection Closed 4-189
72565 – SMSR SMTP Connection Closed 4-189
72575 – Policy Notification:Lost connection with destination URL 4-190
72703 – RADIUS Server Failed 4-190

72706 - RADIUS Server Corrupt Auth 4-191
72904 – Diameter Too Busy 4-191
72905 – Radius Too Busy 4-192
74000 – Policy Server Critical Alarm 4-192
74001 – Policy Server Major Alarm 4-193
74002 – Policy Server Minor Alarm 4-193
74020 – Stats Files Generator Delete Expire Files 4-194
74021 – Files Synchronization Failure 4-194
74022 - Files Uploading Failure 4-195
74102 - CMTS Subnet Overlapped 4-196
74103 - NES Without CMTS IP 4-196
74602 - Multiple Active In Cluster Failure 4-197
74603 - Max Primary Cluster Failure Threshold 4-198
74604 - MPE Cluster Offline Failure 4-198
74605 - Subscriber Trace Backup Failure 4-199
75000 - Policy Library Loading Failed 4-199
77904 - BOD PCMM Too Busy 4-200
77905 - BOD DIAMETER Too Busy 4-200
78000 - ADS Connection Lost 4-201
78001 - Rsync Failed 4-201
78850 - VNF operation error 4-202
79002 - Sess Size Reached Threshold 4-203
79003 - Avg Sess Size Exceed 4-203
79004 - Bind Size Reached Threshold 4-204
79005 - Avg Bind Size Exceed 4-205
79105 - Mediation SOAP Too Busy 4-205
79106 - SPR Connection Failed 4-206
79107 - Mediation Disk Quota Exceed 4-206
79108 - Mediation Disk No Space 4-207
79109 - SPR License Limit 4-207
79110 - Files Uploading Failure 4-208
79120 - Batch Disk Quota Exceeds 4-208
79995 - X1 Connection Lost 4-209
79996 - X2 Connection Lost 4-209
Policy Server Events (80000-89999) 4-210
80001 - DB State Transition 4-210
80002 - MySQL Relay Log Dropped 4-211
80003 - QP MySQL DB Level 4-211
82704 - Binding Release Task 4-212
84004 - Policy Info Event 4-212
86001 – Application Is Ready 4-213
86100 - CMP User Login 4-213
86101 - CMP User Login Failed 4-214

86102 - CMP User Logout 4-214
86200 - CMP User Promoted Server 4-215
86201 - CMP User Demoted Server 4-215
86300 - Sh Enable Failed 4-216
86301 - Sh Disable Failed 4-216
86303 - NW-CMP Apply Failed 4-217
86304 - S-CMP Unreachable 4-217
86305 - S-CMP Split Brain 4-218
86306 - CMP Apply Failed 4-218
86307 - S-CMP Sync Fails 4-219
86308 - NCMP Ref Obj Miss 4-219

5 Obtaining SNMP Status and Statistics

Obtaining CMTS and DPS Connection Status 5-1
Obtaining Rx and Diameter AF Operation Measurement Statistics 5-2
Obtaining PCMM Operation Measurement Statistics 5-3

About This Guide

This guide describes Policy Management product support for Simple Network Management Protocol (SNMP).

Scope and Audience

This guide is intended for service personnel who are responsible for managing Policy Management systems.

How This Guide is Organized

The information in this guide is presented in the following order:

- About This Guide contains general information about this guide, the organization of this guide, and how to get technical assistance.
- Overview provides an overview of how Policy Management supports the Simple Network Management Protocol (SNMP).
- Configuring SNMP describes how to configure SNMP support on the CMP system.
- Supported MIBs describes the MIBs that are supported for SNMP.
- Support for Traps describes Policy Management support of SNMP alarms and traps.
- Obtaining SNMP Status and Statistics describes support in cable mode for obtaining Diameter Rx and PCMM statistics.

Related Publications

For information about additional publications related to this document, refer to the Oracle Help Center site. See Locate Product Documentation on the Oracle Help Center Site for more information on related product publications.

Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, http://docs.oracle.com. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at http://www.adobe.com.

1. Access the Oracle Help Center site at http://docs.oracle.com.
2. Click `Industries`.
3. Under the Oracle Communications subheading, click the `Oracle Communications documentation` link.

   The Communications Documentation page appears. Most products covered by these documentation sets will appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."
4. Click on your Product and then the Release Number.

   A list of the entire documentation set for the selected product and release appears.
5. To download a file to your location, right-click the `PDF` link, select `Save target as` (or similar command based on your browser), and save to a local folder.

Customer Training

Oracle University offers training for service providers and enterprises. Visit our web site to view, and register for, Oracle Communications training:

http://education.oracle.com/communication

To obtain contact phone numbers for countries or regions, visit the Oracle University Education web site:

www.oracle.com/education/contacts

My Oracle Support

My Oracle Support is your initial point of contact for all product support and training needs. A representative at Customer Care Center can assist you with My Oracle Support registration.

Call the My Oracle Support main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request
2. Select 3 for Hardware, Networking and Solaris Operating System Support
3. Select one of the following options:
   - For Technical issues such as creating a new Service Request (SR), Select 1
   - For Non-technical issues such as registration or assistance with MOS, Select 2

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support main number at 1-800-223-1711 (toll-free in the US), or by

calling the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

List of Figures

2-1 SNMP Configuration..... 2-2
4-1 Breaker Panel LEDs..... 4-94
4-2 Breaker Panel Setting..... 4-95
5-1 Sample CMTS And DPS Connection Table Statistics..... 5-1
5-2 Sample Rx/Diameter OM Statistics..... 5-3
5-3 Sample PCMM Northbound And Southbound OM Statistics..... 5-4

List of Tables

4-1 Alarm and Event Types.. 4-3

1

Overview

This chapter provides an overview of Policy Management support for the Simple Network Management Protocol (SNMP).

Simple Network Management Protocol

Simple Network Management Protocol (SNMP) is a communication protocol that provides a method of managing TCP/IP networks, including individual network devices, and devices in aggregate. SNMP was developed by the IETF (Internet Engineering Task Force), and is applicable to any TCP/IP network, as well as other types of networks.

SNMP is an Application Program Interface (API) to the network, so that general-purpose network management programs can be easily written to work with a variety of different devices. SNMP defines a client/server relationship. The client program (called the network manager) makes virtual connections to a server program (called the SNMP agent). The SNMP agent executes on a remote network device and serves information to the manager about the status of the device. The database (referred to as the SNMP Management Information Base or MIB) is a standard set of statistical and control values that is controlled by the SNMP agent.

Through the use of private MIBs, SNMP allows the extension of the standard values with values specific to a particular agent. SNMP agents can be tailored for a myriad of specific devices such as computers, network bridges, gateways, routers, modems, and printers. The definitions of MIB variables supported by a particular agent are incorporated in descriptor files that are made available to network management client programs so that they can become aware of MIB variables and their usage. The descriptor files are written in Abstract Syntax Notation (ASN.1) format.

Directives are issued by the network manager client to an SNMP agent. Directives consist of the identifiers of SNMP variables (referred to as MIB object identifiers or MIB variables), along with instructions to either get the value for the identifier or set the identifier to a new value.

The SNMP Standard

SNMP can be viewed as three distinct standards:

- A Standard Message Format — SNMP is a standard communication protocol that defines a UDP message format.
- A Standard Set of Managed Objects — SNMP is a standard set of values (referred to as SNMP objects) that can be queried from a device. Specifically, the standard includes values for monitoring TCP, IP, UDP, and device interfaces. Each manageable object is identified with an official name, and also with a numeric identifier expressed in dot-notation.

- A Standard Way of Adding Objects — A standard method is defined to allow the standard set of managed objects to be augmented by network device vendors with new objects specific for a particular network.

SNMP Message Types

Four types of SNMP messages are defined:

- A `get` request returns the value of a named object. Specific values can be fetched to determine the performance and state of the device, without logging into the device or establishing a TCP connection with the device.
- A `get-next` request returns the next name (and value) of the next object supported by a network device given a valid SNMP name. This request allows network managers to review all SNMP values of a device to determine all names and values that an operant device supports.
- A `set` request sets a named object to a specific value. This request provides a method of configuring and controlling network devices through SNMP to accomplish activities such as disabling interfaces, disconnecting users, and clearing registers.
- A `trap` message is generated asynchronously by network devices, which can notify a network manager of a problem apart from any polling of the device. This typically requires each device on the network to be configured to issue SNMP traps to one or more network devices that are awaiting these traps.

The four message types are all encoded into messages referred to as Protocol Data Units (PDUs), which are interchanged with SNMP devices.

Standard Managed Objects

The list of values that an object supports is referred to as the SNMP Management Information Base (MIB). MIB can be used to describe any SNMP object or portion of an SNMP hierarchy.

The various SNMP values in the standard MIB are defined in RFC-1213, one of the governing specifications for SNMP. The standard MIB includes various objects to measure and monitor IP activity, TCP activity, UDP activity, IP routes, TCP connections, interfaces, and general system description. Each of these values is associated with an official name (such as `sysUpTime`, which is the elapsed time since the managed device was booted) and with a numeric value expressed in dot-notation (such as '1.3.6.1.2.1.1.3.0', which is the object identifier for `sysUpTime`).

See Supported MIBs for a description of the use of SNMP MIBs for Policy Management.

2

Configuring SNMP

This chapter describes how to configure SNMP using the CMP system.

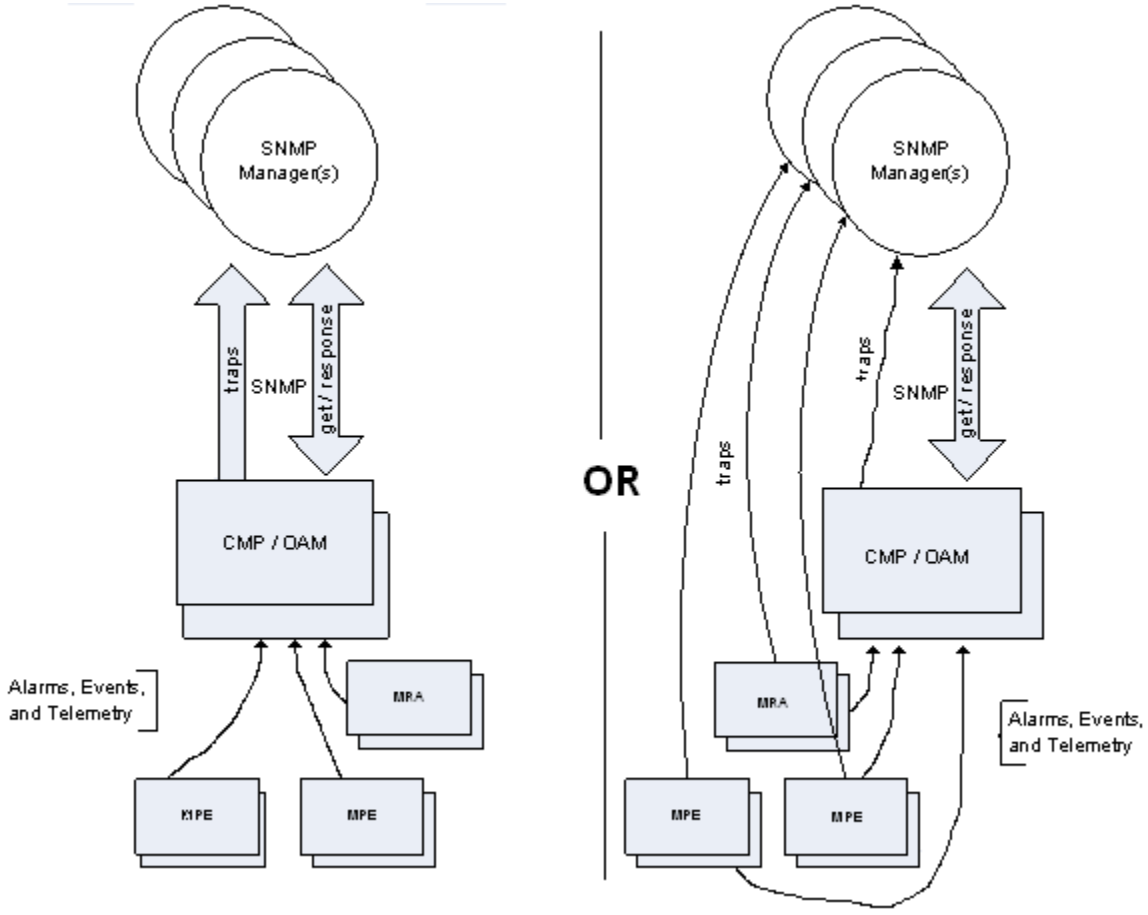
About SNMP Configuration

SNMP configuration architecture is based on using traps to notify a network management system of events and alarms that are generated by the MPE and MRA application software, and those that are generated by the underlying platforms. Alarms and telemetry data are continuously collected from the entire Policy Management network and stored on the CMP system. Alarms will then cause a trap to be sent as a notification of an event.

Because the underlying platform can deliver the alarms from the MPE or MRA system to the CMP system, SNMP can be configured in either of two ways:

- The Policy Management system can be configured so that the CMP system is the source of all traps (the left side of Figure 2-1).
- The Policy Management system can be configured to allow each server to generate its own traps and deliver them to the SNMP management servers (the right side of Figure 2-1).

Figure 2-1 SNMP Configuration



The **Traps from individual Servers** option (see Configuring SNMP Settings) determines the mode in which the SNMP notifications will operate. When enabled, each server generates traps and the Policy Management system will operate as shown in the right side of Figure 2-1.

SNMP configuration is pushed from the CMP system to the managed servers in the network.

SNMP Versions

Note: SNMP version 1 (SNMPv1) is not supported.

SNMP version 2c (SNMPv2c) and SNMP version 3 (SNMPv3) are supported. On the SNMP Setting Edit page:

- When you configure SNMPv2c, you must use a **Community Name** that is not **public** or **private**.
- When you configure SNMPv3, you must enter an **Engine ID**, a **Username**, and **Password** for the SNMPv3 user.

Configuring SNMP Settings

You can configure SNMP settings for the CMP system and all Policy Management servers in the topology network. You can configure the Policy Management network such that the CMP system collects and forwards all traps to up to five external systems (SNMP managers) or such that each server generates and delivers its own traps.

Note: SNMP settings configuration must be done on the active CMP server in the primary cluster. A warning displays if the login is not on the active primary CMP system.

To configure SNMP settings:

1. From the **Platform Setting** section of the navigation pane, select **SNMP Settings**.

   The SNMP Settings page opens, displaying the current settings.

2. Click **Modify**.

   The Edit SNMP Settings page opens.

3. For each SNMP manager, enter a valid host name or an IPv4/IPv6 address.

   The **Hostname/IP Address** field is required for an SNMP Manager to receive traps and send SNMP requests. The field has the following restrictions:

   - The name can only contain the characters A through Z, a through z, 0 through 9, period (.), hyphen (-), and underline (_).
   - The maximum length is 20 characters.
   - The name is case insensitive (uppercase and lowercase are treated as the same).

   By default, these fields are blank.

4. (Optional) You can configure a port for each SNMP manager by entering a port value between 1 and 65535 in the **Port** field. If left blank, the default value is 162.

5. From the **Enabled Versions** list, select one of the following versions:

   - **SNMPv2c**
   - **SNMPv3**
   - **SNMPv2c and SNMPv3** (default)

6. If you selected **SNMPv2c** or **SNMPv2c and SNMPv3** from the **Enabled Versions** list, configure the following:

   a. **Traps Enabled**—Specifies whether sending SNMPv2 traps is enabled. The default is enabled.

   Note: To use the **SNMP Trap Forwarding** feature, enable this option.

b. **Traps from individual Servers**—Specifies whether sending SNMPv2 traps from individual servers is enabled. If disabled, SNMPv2 traps are only sent from the active CMP system only. The default is disabled.

Note: To use the **SNMP Trap Forwarding** feature, disable this option.

c. **SNMPv2c Community Name**—Enter the SNMP read-write community string. This field has the following restrictions:

- The field is required if SNMPv2c is enabled.
- The name can only contain the characters A through Z, a through z, 0 through 9, period (.), hyphen (-), and underline (_).
- The name cannot exceed 31 characters in length.
- The name cannot be either `private` or `public`.

The default value is `snmppublic`.

7. If you selected **SNMPv3** or **SNMPv2c and SNMPv3** from the **Enabled Versions** list, configure the following:

a. **SNMPv3 Engine ID**—Enter an Engine ID for SNMPv3. The Engine ID can be 10 to 64 digits long and must use only hexadecimal digits (0-9 and a-f). The default is no value (null).

b. **SNMPv3 Security Level**—Select the level of SNMPv3 authentication and privacy from the list:

- **No Auth No Priv**—Authenticate using the **Username**. No Privacy.
- **Auth No Priv**—Authenticate using MD5 or SHA1 protocol.
- **Auth Priv** (default)—Authenticate using MD5 or SHA1 protocol. Encrypt using the AES or DES protocol.

c. **SNMPv3 Authentication Type**—Select an SNMPv3 authentication protocol from the list:

- **SHA-1**—Use Secure Hash Algorithm authentication.
- **MD5** (default)—Use Message Digest authentication.

d. **SNMPv3 Privacy Type**—Select an SNMPv3 privacy protocol from the list:

- **AES** (default)—Use Advanced Encryption Standard privacy.
- **DES**—Use Data Encryption Standard privacy.

e. **SNMPv3 Username**—Enter a user name. The user name can contain 0 to 32 characters and must only contain alphanumeric characters. The default is `TekSNMPUser`.

f. **SNMPv3 Password**—Enter an authentication password. The password must contain between 8 and 64 characters and can include any character.

Note: The SNMPv3 password is also used for `msgPrivacyParameters`.

8. Click **Save**.

The SNMP settings for the network are configured.

3

Supported MIBs

This chapter describes the MIBs that are supported for SNMP.

Supported MIBs

A Management Information Base (MIB) contains information required to manage a product cluster and the applications it runs. The exact syntax and nature of the parameters are described in the version of each MIB that you are loading on your NMS.

SNMP MIB Objects

To use SNMP effectively, an administrator must become acquainted with the SNMP Management Information Base (MIB), which defines all the values that SNMP is capable of reading or setting.

The SNMP MIB is arranged in a tree-structured fashion, similar in many ways to a disk directory structure of files. The top-level SNMP branch begins with the ISO `internet` directory, which contains four main branches:

- The `mgmt` SNMP branch contains the standard SNMP objects usually supported (at least in part) by all network devices.
- The `private` SNMP branch contains those `extended` SNMP objects defined by network equipment vendors
- The `experimental` and `directory` SNMP branches, also defined within the `internet` root directory, are usually devoid of any meaningful data or objects.

The tree structure is an integral part of the SNMP standard. However, the most pertinent parts of the tree are the `leaf` objects of the tree that provide actual management data about the device. Generally, SNMP leaf objects can be partitioned into two similar but slightly different types that reflect the organization of the tree structure:

Discrete MIB Objects
Discrete SNMP objects contain one piece of management data. The operator has to know only the name of the object and no other information. Discrete objects often represent summary values for a device, particularly useful for scanning information from the network for the purposes of comparing network device performance. These objects are often distinguished from `Table` objects by adding a '.0' (dot-zero) extension to their names. (If the '.0' extension is omitted from a leaf SNMP object name, it is always implied.)

Table MIB Objects
Table SNMP objects contain multiple pieces of management data; they allow parallel arrays of information to be supported. These objects are distinguished from Discrete

objects by requiring a '.' (dot) extension to their names that distinguishes the particular value being referenced.

By convention, SNMP objects are always grouped in an `Entry` directory, within an object with a `Table` suffix. (The `ifDescr` object described above resides in the `ifEntry` directory contained in the `ifTable` directory.) Several constraints are placed on SNMP objects as follows:

- Each object in the `Entry` directory of a table must contain the same number of elements as other objects in the same `Entry` directory, where instance numbers of all entries are the same. Table objects are always regarded as parallel arrays of data.
- When creating a new `Entry` object, SNMP requires that a value be associated with each table entry in a single SNMP message (single PDU). This means that, to create a row in a table (using an SNMP `set` command), a value must be specified for each element in the row.
- If a table row can be deleted, SNMP requires that at least one object in the entry has a control element that is documented to perform the table deletion. (This applies only if a row can be deleted, which is not necessarily required of an SNMP table.)

The '.' (dot) extension is sometimes referred to as the instance number of an SNMP object. In the case of Discrete objects, this instance number will be zero. In the case of Table objects, this instance number will be the index into the SNMP table.

MIB Object Access Values

Each SNMP object is defined to have a particular access, either read-only, read-write, or write-only, that determines whether the user can read the object value, read and write the object (with a `set` command), or only write the object.

Before any object can be read or written, the SNMP community name must be known. These community names are configured into the system by the administrator, and can be viewed as passwords needed to gather SNMP data. Community names allow reference to portions of the SNMP MIB and object subsets. The purpose of these values is to identify commonality between SNMP object sets, though it is common practice to make these community names obscure to limit access to SNMP capability by outside users.

Compiling MIB Objects

One of the principal components of an SNMP manager is a MIB Compiler, which allows new MIB objects to be added to the management system. When a MIB is compiled into an SNMP manager, the manager is made aware of new objects that are supported by agents on the network. The concept is similar to adding a new schema to a database. The agent is not affected by the MIB compilation (because the agent is already aware of its own objects). The act of compiling the MIB allows the manager to know about the special objects supported by the agent and to access these objects as part of the standard object set.

Typically, when a MIB is compiled into the system, the manager creates new folders or directories that correspond to the objects. These folders or directories can typically be viewed with a MIB Browser, which is a traditional SNMP management tool incorporated into virtually all network management systems. These new objects can often be alarmed or possibly modified to affect the performance of the remote agent.

MIB objects are documented in ASN.1 syntax. The user obtains ASN.1 definitions for a new piece of network equipment or new SNMP agent, transfers this file to the network management system, and runs the management system MIB Compiler to incorporate these definitions into the system. Virtually all agents support the RFC-1213 MIB definitions, and most agents support other definitions as well.

At a minimum, the following MIBs must be compiled into the management station that will be receiving traps from the Policy Management systems in the network. The MIBs must be compiled in the following order:

1. tklc_toplevel.mib
2. COMCOL-TC.mib
3. PCRF-ALARM-MIB.mib
4. NET-SNMP-MIB.txt
5. NET-SNMP-AGENT-MIB.txt
6. TKLC-APP-MIB.txt

Note: The MIB CAMIANT-APP-MIB that was used in release 6.3 is replaced by TKLC-APP-MIB. The OID is changed from .1.3.6.1.4.1.21274.4.1.2.1 to . 1.3.6.1.4.1.323.5.3.29.2.1.1.1.

Supported MIBS are available on the installation media or by contacting My Oracle Support.

MIBs are located on the running system in the following directories:

- `/usr/TKLC/TKLCcomcol/cm?.??/prod/share/snmp/mibs` (where `?.??` refers to the COMCOL software release that is in use on the system)

  COMCOL-TC.mib

- `/etc/camiant/snmp/mibs`

  PCRF-ALARM-MIB.mib

- `/usr/TKLC/camiant/subagent/mibs` (on MPE devices only)

  TKLC-APP-MIB.mib

- `/usr/share/snmp/mibs`

  NET-SNMP-MIB.txt
  NET-SNMP-AGENT-MIB.txt

- `/usr/TKLC/plat/etc/snmp/mib`

  tklc_toplevel.mib

4

Support for Traps

This chapter describes the SNMP alarms and traps supported by Policy Management systems.

Alarms Overview

Alarms provide information about a system's operational condition, which an operator may need to act upon.

MPE or MRA devices generate Policy Server alarms based on the evaluation of component states and external factors. The servers communicate with each other in a cluster. Each server has a database with merge capabilities to replicate the alarm states to the CMP database. This information is shown on the KPI dashboard or in detailed CMP reports.

As alarms and events are raised on an application or the platform, the SNMP subsystem issues a corresponding trap.

Alarms and Events have the following differences:

- Alarms:
  - Are issued when a Fault is detected
  - Are latched until the Fault is removed (that is, they are explicitly `set` and `cleared`)
  - Have a Severity: Critical, Major, Minor
  - Will cause a trap
- Events:
  - Are issued when a Condition is detected (not a Fault)
  - Are not latched (that is they are not explicitly `set` or `cleared`)
  - Do not have a Severity (the Severity is actually INFO)
  - Might cause a trap

Separate traps are sent upon raising an alarm and upon clearing an alarm.

Application traps contain the following variable bindings in addition to the `sysOpTime` and `trapID` fields:

- `comcolAlarmSrcNode` - The node that originated the alarm
- `comcolAlarmNumber` - The OID of the alarm and trap

- `comcolAlarmInstance` - An instance is used when the trap is for a physical device such as `disk1`, or connection `diameterPeer 10.15.22.232:33119`
- `comcolAlarmSeverity` - Severity of the alarm: Critical (1), Major (2), Minor (3), Info (4), Clear (5)
- `comcolAlarmText` - A text object that defines the trap
- `comcolAlarmInfo` - An extended text field that adds information to the trap text
- `comcolAlarmGroup` - The group from which the trap originated (such as PCRF or QP)

Refer to the *Policy Management Troubleshooting Reference* for more information about Policy Server alarms and traps.

Note: If you encounter an alarm not in this document, contact My Oracle Support.

Alarms formatting information

This section of the document provides information to help you understand why an alarm occurred and to provide a recovery procedure to help correct the condition that caused the alarm.

The information provided about each alarm includes:

Alarm Group
The type of alarm that has occurred. For a list of Event types see Alarm and event types.

Description
The reason or cause for the alarm.

Severity
The severity of the alarm. This severity may vary, depending on user-defined and specific application settings.

Instance

HA Score
The HA impact of the alarm: Normal, Failed, or Degraded.

Auto Clear Seconds
The number of seconds required for the alarm to automatically clear (if applicable).

OID
The alarm identifier that appears in SNMP traps.

Alarm ID
The alarm identifier that is used internally (if applicable).

Recovery
Lists any necessary steps for correcting or preventing the alarm.

Alarm and event types

Table 4-1 describes the possible alarm/event types that can be displayed.

Note: Not all applications use all of the alarm types listed.

Table 4-1 Alarm and Event Types

Type Name	Type
APPL	Application
CAF	Communication Agent (ComAgent)
CAPM	Computer-Aided Policy Making (Diameter Mediation)
CFG	Configuration
CHG	Charging
CNG	Congestion Control
COLL	Collection
DAS	Diameter Application Server (Message Copy)
DB	Database
DIAM	Diameter
DISK	Disk
DNS	Domain Name Service
DPS	Data Processor Server
ERA	Event Responder Application
FABR	Full Address Based Resolution
HA	High Availability
HTTP	Hypertext Transfer Protocol
IDIH	Integrated DIH
IF	Interface
IP	Internet Protocol
IPFE	IP Front End
LOADGEN	Load Generator
LOG	Logging
MEAS	Measurements
MEM	Memory
NAT	Network Address Translation
NP	Number Portability
OAM	Operations, Administration & Maintenance

Table 4-1 (Cont.) Alarm and Event Types

Type Name	Type
PCRF	Policy Charging Rules Function
PDRA	Policy Diameter Routing Agent
PLAT	Platform
PROC	Process
PROV	Provisioning
pSBR	Policy SBR
QP	QBus
RBAR	Range-Based Address Resolution
REPL	Replication
SCTP	Stream Control Transmission Protocol
SDS	Subscriber Database Server
SIGC	Signaling Compression
SIP	Session Initiation Protocol Interface
SL	Selective Logging
SS7	Signaling System 7
SSR	SIP Signaling Router
STK	EXG Stack
SW	Software (generic event type)
TCP	Transmission Control Protocol

Alarm and Event Severity Levels

Alarms can be one of three severity levels:

1. Critical
2. Major
3. Minor

Events note the occurrence of an expected condition and are logged in the Trace Log. Events have these severity levels:

1. Emergency
2. Alert
3. Critical
4. Error
5. Warning

6. Notice
7. Info
8. Debug

Platform (31000-32800)

This section provides information and recovery procedures for the Platform alarms, ranging from 31000-32800.

31000 - S/W fault

Alarm Group:
SW

Description:
Program impaired by s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolSwFaultNotify

Recovery:

1. No action is required. This event is used for command-line tool errors only.

31001 - S/W status

Alarm Group:
SW

Description:
Program status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolSwStatusNotify

Recovery:

1. No action required.

31002 - Process watchdog failure

Alarm Group:
SW

Description:
Process watchdog timed out.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolProcWatchdogFailureNotify

Recovery:

1. Alarm indicates a stuck process was automatically recovered, so no additional steps are needed.
2. If this problem persists, collect savelogs ,and it is recommended to contact My Oracle Support.

31003 - Tab thread watchdog failure

Alarm Group:
SW

Description:
Tab thread watchdog timed out

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolThreadWatchdogFailureNotify

Recovery:

1. Alarm indicates a stuck process was automatically recovered, so no additional steps are needed.
2. If this problem persists, collect savelogs, and it is recommended to contact My Oracle Support.

31004 - Test Status

Alarm Type: TEST

Description: For testing purposes only

Severity: Info

OID: comcolTestStatNotify

Recovery:

1. Test message. No action necessary.

31005 - Test Fault

Alarm Type: TEST

Description: For testing purposes only

Severity: Minor

OID: comcolTestFaultNotify

Recovery:

1. Test message. No action necessary.

31100 - Database replication fault

Alarm Group:
SW

Description:
The Database replication process is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbReplicationFaultNotify

Recovery:

1. Export event history for the given server and inetsync task.
2. It is recommended to contact My Oracle Support.

31101 - Database replication to slave failure

Alarm Group:
REPL

Description:
Database replication to a slave database has failed. This alarm is generated when:

- The replication master finds the replication link is disconnected from the slave.
- The replication master's link to the replication slave is OOS, or the replication master cannot get the slave's correct HA state because of a failure to communicate.
- The replication mode is relayed in a cluster and either:
  - No nodes are active in cluster, or
  - None of the nodes in cluster are getting replication data.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbRepToSlaveFailureNotify

Recovery:

1. Verify the path for all services on a node by typing `path.test –a <toNode>` in a command interface to test the paths for all services.
2. Use the path test command to test the communication between nodes by typing `iqt -pE NodeInfo` to get the node ID. Then type `path.test -a <nodeid>` to test the paths for all services.
3. Examine the Platform savelogs on all MPs, SO, and NO by typing `sudo /usr/TKLC/plat/sbin/savelogs_plat` in the command interface. The plat savelogs are in the /tmp directory.
4. Check network connectivity between the affected servers.
5. If there are no issues with network connectivity, contact My Oracle Support.

31102 - Database replication from master failure

Alarm Group:
REPL

Description:
Database replication from a master database has failed. This alarm is generated when the replication slave finds the replication link is disconnected from the master.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbRepFromMasterFailureNotify

Recovery:

1. Verify the path for all services on a node by typing `path.test –a <toNode>` in a command interface to test the paths for all services.
2. Use the path test command to test the communication between nodes by typing `iqt -pE NodeInfo` to get the node ID. Then type `path.test -a <nodeid>` to test the paths for all services.
3. Examine the Platform savelogs on all MPs, SO, and NO by typing `sudo /usr/TKLC/plat/sbin/savelogs_plat` in the command interface. The plat savelogs are in the /tmp directory.
4. Indicates replication subsystem is unable to contact a server, due to networking issues or because the server is not available. Investigate the status of the server and verify network connectivity.

5. If no issues with network connectivity or the server are found and the problem persists, it is recommended to contact My Oracle Support.

31103 - DB Replication update fault

Alarm Group:
REPL

Description:
Database replication process cannot apply update to DB.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbRepUpdateFaultNotify

Recovery:

1. This alarm indicates a transient error occurred within the replication subsystem, but the system has recovered, so no additional steps are needed.
2. If the problem persists, collect savelogs, and it is recommended to contact My Oracle Support.

31104 - DB Replication latency over threshold

Alarm Group:
REPL

Description:
Database replication latency has exceeded thresholds

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbRepLatencyNotify

Recovery:

1. If this alarm is raised occasionally for short time periods (a couple of minutes or less), it may indicate network congestion or spikes of traffic pushing servers beyond their capacity. Consider re-engineering network capacity or subscriber provisioning.
2. If this alarm does not clear after a couple of minutes, it is recommended to contact My Oracle Support.

31105 - Database merge fault

Alarm Group:
SW

Description:
The database merge process (inetmerge) is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbMergeFaultNotify

Recovery:

1. This alarm indicates a transient error occurred within the merging subsystem, but the system has recovered, so no additional steps are needed.
2. If the problem persists, collect savelogs, and it is recommended to contact My Oracle Support.

31106 - Database merge to parent failure

Alarm Group:
COLL

Description:
Database merging to the parent Merge Node has failed.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolDbMergeToParentFailureNotify

Recovery:

1. This alarm indicates the merging subsystem is unable to contact a server, due to networking issues or because the server is not available. Investigate the status of the server and verify network connectivity.
2. If no issues with network connectivity or the server are found and the problem persists, it is recommended to contact My Oracle Support.

31107 - Database merge from child failure

Alarm Group:
COLL

Description:
Database merging from a child Source Node has failed.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbMergeFromChildFailureNotify

Recovery:

1. This alarm indicates the merging subsystem is unable to contact a server, due to networking issues or because the server is not available. Investigate the status of the server and verify network connectivity.
2. If no issues with network connectivity or the server are found and the problem persists, it is recommended to contact My Oracle Support.

31108 - Database merge latency over threshold

Alarm Group:
COLL

Description:
Database Merge latency has exceeded thresholds

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbMergeLatencyNotify

Recovery:

1. If this alarm is raised occasionally for short time periods (a couple of minutes or less), it may indicate network congestion or spikes of traffic pushing servers beyond their capacity. Consider re-engineering network capacity or subscriber provisioning.
2. If this alarm does not clear after a couple of minutes, it is recommended to contact My Oracle Support.

31109 - Topology config error

Alarm Group:
DB

Description:
Topology is configured incorrectly

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolTopErrorNotify

Recovery:

1. This alarm may occur during initial installation and configuration of a server. No action is necessary at that time.
2. If this alarm occurs after successful initial installation and configuration of a server, it is recommended to contact My Oracle Support.

31110 - Database audit fault

Alarm Group:
SW

Description:
The Database service process (idbsvc) is impaired by a s/w fault.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbAuditFaultNotify

Recovery:

1. Alarm indicates an error occurred within the database audit system, but the system has recovered, so no additional steps are needed.
2. If this problem persists, collect savelogs, and it is recommended to contact My Oracle Support.

31111 - Database merge audit in progress

Alarm Group:
COLL

Description:
Database Merge Audit between mate nodes in progress

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbMergeAuditNotify

Recovery:

1. No action required.

31112 - DB replication update log transfer timed out

Alarm Group:
REPL

Description:
DB Replicated data may not have transferred in the time allotted.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
30

OID:
comcolDbRepUpLogTransTimeoutNotify

Recovery:

1. No action required.
2. It is recommended to contact My Oracle Support if this occurs frequently.

31113 - DB replication manually disabled

Alarm Group:
REPL

Description:
DB Replication Manually Disabled

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolDbReplicationManuallyDisabledNotify

Recovery:

1. No action required.

31114 - DB replication over SOAP has failed

Alarm Group:
REPL

Description:
Database replication of configuration data via SOAP has failed.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
3600

OID:
comcolDbReplicationSoapFaultNotify

Recovery:

1. This alarm indicates a SOAP subsystem is unable to connect to a server, due to networking issues or because the server is not available. Investigate the status of the server and verify network connectivity.
2. If no issues with network connectivity or the server are found and the problem persists, it is recommended to contact My Oracle Support.

31115 - Database service fault

Alarm Group:
SW

Description:
The Database service process (idbsvc) is impaired by a s/w fault.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbServiceFaultNotify

Recovery:

1. Alarm indicates an error occurred within the database disk service subsystem, but the system has recovered, so no additional steps are needed.
2. If this problem persists, collect savelogs, and it is recommended to contact My Oracle Support.

31116 - Excessive shared memory

Alarm Group:
MEM

Description:
The amount of shared memory consumed exceeds configured thresholds.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolExcessiveSharedMemoryConsumptionNotify

Recovery:

1. This alarm indicates that a server has exceeded the engineered limit for shared memory usage and there is a risk that application software will fail. Because there is no automatic recovery for this condition, it is recommended to contact My Oracle Support.

31117 - Low disk free

Alarm Group:
DISK

Description:
The amount of free disk is below configured thresholds

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolLowDiskFreeNotify

Recovery:

1. Remove unnecessary or temporary files from partitions.
2. If there are no files known to be unneeded, it is recommended to contact My Oracle Support.

31118 - Database disk store fault

Alarm Group:
DISK

Description:
Writing the database to disk failed

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbDiskStoreFaultNotify

Recovery:

1. Remove unnecessary or temporary files from partitions.
2. If there are no files known to be unneeded, it is recommended to contact My Oracle Support.

31119 - Database updatelog overrun

Alarm Group:
DB

Description:
The Database update log was overrun increasing risk of data loss

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbUpdateLogOverrunNotify

Recovery:

1. This alarm indicates a replication audit transfer took too long to complete and the incoming update rate exceeded the engineered size of the update log. The system will automatically retry the audit, and if successful, the alarm will clear and no further recovery steps are needed.
2. If the alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31120 - Database updatelog write fault

Alarm Group:
DB

Description:
A Database change cannot be stored in the updatelog

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbUpdateLogWriteFaultNotify

Recovery:

1. This alarm indicates an error has occurred within the database update log subsystem, but the system has recovered.
2. If the alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31121 - Low disk free early warning

Alarm Group:
DISK

Description:
The amount of free disk is below configured early warning thresholds

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolLowDiskFreeEarlyWarningNotify

Recovery:

1. Remove unnecessary or temporary files from partitions that are greater than 80% full.
2. If there are no files known to be unneeded, it is recommended to contact My Oracle Support.

31122 - Excessive shared memory early warning

Alarm Group:
MEM

Description:
The amount of shared memory consumed exceeds configured early warning thresholds

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolExcessiveShMemConsumptionEarlyWarnNotify

Recovery:

1. This alarm indicates that a server is close to exceeding the engineered limit for shared memory usage and the application software is at risk to fail. There is no automatic recovery or recovery steps.
2. It is recommended to contact My Oracle Support.

31123 - Database replication audit command complete

Alarm Group:
REPL

Description:
ADIC found one or more errors that are not automatically fixable.

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbRepAuditCmdCompleteNotify

Recovery:

1. No action required.

31124 - ADIC error

Alarm Group:
REPL

Description:
An ADIC detected errors

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbRepAuditCmdErrNotify

Recovery:

1. It is recommended to contact My Oracle Support.

31125 - Database durability degraded

Alarm Group:
REPL

Description:
Database durability has dropped below configured durability level

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbDurabilityDegradedNotify

Recovery:

1. Check configuration of all servers, and check for connectivity problems between server addresses.
2. If the problem persists, it is recommended to contact My Oracle Support.

31126 - Audit blocked

Alarm Group:
REPL

Description:
Site Audit Controls blocked an inter-site replication audit due to the number in progress per configuration.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolAuditBlockedNotify

Recovery:

1. This alarm indicates that WAN network usage has been limited following a site recovery. No recovery action is needed.

31127 - DB Replication Audit Complete

Alarm Group:
REPL

Description:
DB replication audit completed

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbRepAuditCompleteNotify

Recovery:

1. No action required.

31128 - ADIC Found Error

Alarm Group:
REPL

Description:
ADIC found one or more errors that are not automatically fixable.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbADICErrorNotify

Recovery:

1. This alarm indicates a data integrity error was found by the background database audit mechanism, and there is no automatic recovery.
2. It is recommended to contact My Oracle Support.

31129 - ADIC Found Minor Issue

Alarm Group:
REPL

Description:
ADIC found one or more minor issues that can most likely be ignored

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
14400

OID:
comcolDbADICWarn

Recovery:

1. No action required.

31130 - Network health warning

Alarm Group:
NET

Description:
Network health issue detected

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolNetworkHealthWarningNotify

Recovery:

1. Check configuration of all servers, and check for connectivity problems between server addresses.
2. If the problem persists, it is recommended to contact My Oracle Support.

31131 - DB Ousted Throttle Behind

Alarm Group:
DB

Description:
DB ousted throttle may be affecting processes.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolOustedThrottleWarnNotify

Recovery:

1. This alarm indicates that a process has failed to release database memory segments which is preventing new replication audits from taking place. There is no automatic recovery for this failure.
2. Run 'procshm -o' to identify involved processes.
3. It is recommended to contact My Oracle Support.

31132 - DB Replication Precedence Relaxed

Event Type
REPL

Description
Standby Database updates are falling behind. Relaxing the replication barrier to allow non-Standby Databases to update as fast as possible.

Severity
Info

Instance
Remote Node Name + HA resource name (if Policy 0, no resource name)

HA Score
Normal

Throttle Seconds
150

OID
comcolDbRepPrecRelaxedNotify

Recovery

1. No action required.

31133 - DB Replication Switchover Exceeds Threshold

Alarm Group
REPL

Description
DB Replication Active to Standby switchover exceeded maximum switchover time.

Severity
Major

Instance
Remote Node Name + HA resource name (if Policy 0, no resource name)

HA Score
Normal

Auto Clear Seconds
300

OID
comcolDbRepSwitchoverNotify

Recovery

1. If this alarm is raised, it may indicate network congestion or spikes of traffic pushing servers beyond their capacity. Consider re-engineering network capacity or subscriber provisioning.
2. If the problem persists, it is recommended to contact My Oracle Support.

31134 - DB Site Replication To Slave Failure

Alarm Group
REPL

Description
DB Site replication to a slave DB has failed.

Severity
Minor

Instance
Remote Node Name + HA resource name (if Policy 0, no resource name)

HA Score
Normal

Auto Clear Seconds
300

OID
comcolDbSiteRepToSlaveFailureNotify

Recovery

1. Check configuration of all servers, and check for connectivity problems between server addresses.
2. If the problem persists, it is recommended to contact My Oracle Support.

31135 - DB Site Replication From Master Failure

Alarm Group
REPL

Description
DB Site replication from a master DB has failed.

Severity
Minor

Instance
Remote Node Name + HA resource name (if Policy 0, no resource name)

HA Score
Normal

Auto Clear Seconds
300

OID
comcolDbSiteRepFromMasterFailureNotify

Recovery

1. Check configuration of all servers, and check for connectivity problems between server addresses.
2. If the problem persists, it is recommended to contact My Oracle Support.

31136 - DB Site Replication Precedence Relaxed

Event Type
REPL

Description
Standby Site Database updates are falling behind. Relaxing the replication barrier to allow non-Standby Site Databases to update as fast as possible.

Severity
Info

Instance
Remote Node Name + HA resource name (if Policy 0, no resource name)

HA Score
Normal

Throttle Seconds
150

OID
comcolDbSiteRepPrecRelaxedNotify

Recovery

1. No action required.

31137 - DB Site Replication Latency Over Threshold

Alarm Group
REPL

Description
DB Site Replication latency has exceeded thresholds.

Severity
Major

Instance
Remote Node Name + HA resource name (if Policy 0, no resource name)

HA Score
Normal

Auto Clear Seconds
300

OID
comcolDbSiteRepLatencyNotify

Recovery

1. If this alarm is raised occasionally for short time periods (a couple of minutes or less), it may indicate network congestion or spikes of traffic pushing servers beyond their capacity. Consider re-engineering network capacity or subscriber provisioning.
2. If this alarm does not clear after a couple of minutes, it is recommended to contact My Oracle Support.

31140 - Database perl fault

Alarm Group:
SW

Description:
Perl interface to Database is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbPerlFaultNotify

Recovery:

1. This alarm indicates an error has occurred within a Perl script, but the system has recovered.
2. If the alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31145 - Database SQL fault

Alarm Group:
SW

Description:
SQL interface to Database is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbSQLFaultNotify

Recovery:

1. This alarm indicates an error has occurred within the MySQL subsystem, but the system has recovered.
2. If this alarm occurs frequently, it is recommended to collect savelogs and contact My Oracle Support.

31146 - DB mastership fault

Alarm Group:
SW

Description:
DB replication is impaired due to no mastering process (inetrep/inetrep).

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbMastershipFaultNotify

Recovery:

1. Export event history for the given server.
2. It is recommended to contact My Oracle Support.

31147 - DB upsynclog overrun

Alarm Group:
SW

Description:
UpSyncLog is not big enough for (WAN) replication.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbUpSyncLogOverrunNotify

Recovery:

1. This alarm indicates that an error occurred within the database replication subsystem. A replication audit transfer took too long to complete, and during the

audit the incoming update rate exceeded the engineered size of the update log. The replication subsystem will automatically retry the audit, and if successful, the alarm will clear.

2. If the alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31148 - DB lock error detected

Alarm Group:
DB

Description:
The DB service process (idbsvc) has detected an IDB lock-related error caused by another process. The alarm likely indicates a DB lock-related programming error, or it could be a side effect of a process crash.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolDbLockErrorNotify

Recovery:

1. This alarm indicates an error occurred within the database disk service subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31149 - DB Late Write Nonactive

Alarm Group
DB

Description
Application wrote to database while HA role change from active was in progress.

Severity
Minor

Instance
HA resource name

HA Score
Normal

Auto Clear Seconds
3600

OID
comcolDbLateWriteNotify

Recovery

1. It is recommended to contact #unique_86 for assistance.

31200 - Process management fault

Alarm Group:
SW

Description:
The process manager (procmgr) is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolProcMgmtFaultNotify

Recovery:

1. This alarm indicates an error occurred within the process management subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31201 - Process not running

Alarm Group:
PROC

Description:
A managed process cannot be started or has unexpectedly terminated

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolProcNotRunningNotify

Recovery:

1. This alarm indicates that the managed process exited unexpectedly due to a memory fault, but the process was automatically restarted.
2. It is recommended to collect savelogs and contact My Oracle Support.

31202 - Unkillable zombie process

Alarm Group:
PROC

Description:
A zombie process exists that cannot be killed by procmgr. procmgr will no longer manage this process.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolProcZombieProcessNotify

Recovery:

1. This alarm indicates managed process exited unexpectedly and was unable to be restarted automatically.
2. It is recommended to collect savelogs and contact My Oracle Support.

31206 - Process mgmt monitoring fault

Alarm Group:
SW

Description:
The process manager monitor (pm.watchdog) is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolProcMgmtMonFaultNotify

Recovery:

1. This alarm indicates an error occurred within the process management subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31207 - Process resource monitoring fault

Alarm Group:
SW

Description:
The process resource monitor (ProcWatch) is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolProcResourceMonFaultNotify

Recovery:

1. This alarm indicates an error occurred within the process monitoring subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31208 - IP port server fault

Alarm Group:
SW

Description:
The run environment port mapper (re.portmap) is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolPortServerFaultNotify

Recovery:

1. This alarm indicates an error occurred within the port mapping subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31209 - Hostname lookup failed

Alarm Group:
SW

Description:
Unable to resolve a hostname specified in the NodeInfo table

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHostLookupFailedNotify

Recovery:

1. This typically indicates a DNS Lookup failure. Verify all server hostnames are correct in the GUI configuration on the server generating the alarm.
2. If the problem persists, it is recommended to contact My Oracle Support.

31213 - Process scheduler fault

Alarm Group:
SW

Description:
The process scheduler (ProcSched/runat) is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolProcSchedulerFaultNotify

Recovery:

1. This alarm indicates an error occurred within the process management subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31214 - Scheduled process fault

Alarm Group:
PROC

Description:
A scheduled process cannot be executed or abnormally terminated

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolScheduleProcessFaultNotify

Recovery:

1. This alarm indicates that a managed process exited unexpectedly due to a memory fault, but the system has recovered.
2. It is recommended to contact My Oracle Support.

31215 - Process resources exceeded

Alarm Group:
SW

Description:
A process is consuming excessive system resources.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
14400

OID:
comcolProcResourcesExceededFaultNotify

Recovery:

1. This alarm indicates a process has exceeded the engineered limit for heap usage and there is a risk the application software will fail.
2. Because there is no automatic recovery for this condition, it is recommended to contact My Oracle Support.

31216 - SysMetric configuration error

Alarm Group:
SW

Description:
A SysMetric Configuration table contains invalid data

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolSysMetricConfigErrorNotify

Recovery:

1. This alarm indicates a system metric is configured incorrectly.
2. It is recommended to contact My Oracle Support.

31217 - Network Health Warning

Alarm Group
SW

Description
Missed Heartbeats Detected

Severity
Minor

Instance
IP Address

HA Score
Normal

Auto Clear Seconds
300

OID
comcolNetworkHealthWarningNotify

Recovery

1. Check configuration of all servers, and check for connectivity problems between server addresses.
2. If the problem persists, it is recommended to contact My Oracle Support.

31220 - HA configuration monitor fault

Alarm Group:
SW

Description:
The HA configuration monitor is impaired by a s/w fault.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaCfgMonitorFaultNotify

Recovery:

1. It is recommended to contact My Oracle Support.

31221 - HA alarm monitor fault

Alarm Group:
SW

Description:
The high availability alarm monitor is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaAlarmMonitorFaultNotify

Recovery:

1. It is recommended to contact My Oracle Support.

31222 - HA not configured

Alarm Group:
HA

Description:
High availability is disabled due to system configuration

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaNotConfiguredNotify

Recovery:

1. It is recommended to contact My Oracle Support.

31223 - HA Heartbeat transmit failure

Alarm Group:
HA

Description:
The high availability monitor failed to send heartbeat.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaHbTransmitFailureNotify

Recovery:

1. This alarm clears automatically when the server successfully registers for HA heartbeating.
2. If this alarm does not clear after a couple minutes, it is recommended to contact My Oracle Support.

31224 - HA configuration error

Alarm Group:
HA

Description:
High availability configuration error

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaCfgErrorNotify

Recovery:

1. This alarm indicates a platform configuration error in the High Availability or VIP management subsystem.
2. Because there is no automatic recovery for this condition, it is recommended to contact My Oracle Support.

31225 - HA service start failure

Alarm Group:
HA

Description:
The required high availability resource failed to start.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0

OID:
comcolHaSvcStartFailureNotify

Recovery:

1. This alarm clears automatically when the HA daemon is successfully started.
2. If this alarm does not clear after a couple minutes, it is recommended to contact My Oracle Support.

31226 - HA availability status degraded

Alarm Group:
HA

Description:
The high availability status is degraded due to raised alarms.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0

OID:
comcolHaAvailDegradedNotify

Recovery:

1. View alarms dashboard for other active alarms on this server.
2. Follow corrective actions for each individual alarm on the server to clear them.
3. If the problem persists, it is recommended to contact My Oracle Support.

31227 - HA availability status failed

Alarm Group:
HA

Description:
The high availability status is failed due to raised alarms.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
N/A

OID:
comcolHaAvailFailedNotify

Recovery:

1. View alarms dashboard for other active alarms on this server.
2. Follow corrective actions for each individual alarm on the server to clear them.
3. If the problem persists, it is recommended to contact My Oracle Support.

31228 - HA standby offline

Alarm Group:
HA

Description:
High availability standby server is offline.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolHaStandbyOfflineNotify

Recovery:

1. If loss of communication between the active and standby servers is caused intentionally by maintenance activity, alarm can be ignored; it clears automatically when communication is restored between the two servers.
2. If communication fails at any other time, it is recommended to look for network connectivity issues and/or contact My Oracle Support.

31229 - HA score changed

Alarm Group:
HA

Description:
High availability health score changed

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaScoreChangeNotify

Recovery:

1. Status message - no action required.

31230 - Recent alarm processing fault

Alarm Group:
SW

Description:
The recent alarm event manager (raclerk) is impaired by a s/w fault.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolRecAlarmEvProcFaultNotify

Recovery:

1. This alarm indicates an error occurred within the alarm management subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31231 - Platform alarm agent fault

Alarm Group:
SW

Description:
The platform alarm agent impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolPlatAlarmAgentNotify

Recovery:

1. This alarm indicates an error occurred within the alarm management subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to contact My Oracle Support.

31232 - Late heartbeat warning

Alarm Group:
HA

Description:
High availability server has not received a message on specified path within the configured interval.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaLateHeartbeatWarningNotify

Recovery:

1. No action is required. This is a warning and can be due to transient conditions. If there continues to be no heartbeat from the server, alarm 31228 - HA standby offline occurs.

31233 - HA Path Down

Alarm Group:
HA

Description:
High availability path loss of connectivity

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaPathDownNotify

Recovery:

1. If loss of communication between the active and standby servers over the secondary path is caused intentionally by maintenance activity, alarm can be ignored; it clears automatically when communication is restored between the two servers.
2. If communication fails at any other time, look for network connectivity issues on the secondary network.
3. It is recommended to contact My Oracle Support.

31234 - Untrusted Time Upon Initialization

Alarm Group:
REPL

Description:
Upon system initialization, the system time is not trusted probably because NTP is misconfigured or the NTP servers are unreachable. There are often accompanying Platform alarms to guide correction. Generally, applications are not started if time is

not believed to be correct on start-up. Recovery will often will require rebooting the server.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolUtrustedTimeOnInitNotify

Recovery:

1. Correct NTP configuration.
2. If the problem persists, it is recommended to contact My Oracle Support.

31235 - Untrusted Time After Initialization

Alarm Group:
REPL

Description:
After system initialization, the system time has become untrusted probably because NTP has reconfigured improperly, time has been manually changed, the NTP servers are unreachable, etc. There are often accompanying Platform alarms to guide correction. Generally, applications remain running, but time-stamped data is likely incorrect, reports may be negatively affected, some behavior may be improper, etc.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolUtrustedTimePostInitNotify

Recovery:

1. Correct NTP configuration.

2. If the problem persists, it is recommended to contact My Oracle Support.

31236 - HA Link Down

Alarm Group:
HA

Description:
High availability TCP link is down.

Severity:
Critical

Instance:
Remote node being connected to plus the path identifier

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaLinkDownNotify

Recovery:

1. If loss of communication between the active and standby servers over the specified path is caused intentionally by maintenance activity, alarm can be ignored; it clears automatically when communication is restored between the two servers.
2. If communication fails at any other time, it is recommended to look for network connectivity issues on the primary network and/or contact My Oracle Support.

31240 - Measurements collection fault

Alarm Group:
SW

Description:
The measurements collector (statclerk) is impaired by a s/w fault.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolMeasCollectorFaultNotify

Recovery:

1. This alarm indicates that an error within the measurement subsystem has occurred, but that the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to collect savelogs and contact My Oracle Support.

31250 - RE port mapping fault

Alarm Group:
SW

Description:
The IP service port mapper (re.portmap) is impaired by a s/w fault

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolRePortMappingFaultNotify

Recovery:

1. This typically indicates a DNS Lookup failure. Verify all server hostnames are correct in the GUI configuration on the server generating the alarm.

31260 - SNMP Agent

Alarm Group:
SW

Description:
The SNMP agent (cmsnmpa) is impaired by a s/w fault.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
eagleXgDsrDbcomcolSnmpAgentNotify

Recovery:

1. This alarm indicates an error occurred within the SNMP subsystem, but the system has recovered.
2. If this alarm occurs repeatedly, it is recommended to collect savelogs and contact My Oracle Support.

31261 - SNMP Configuration Error

Alarm Group
SW

Description
A SNMP configuration error was detected

Severity
Minor

Instance
comcolAlarmSrcNode, comcolAlarmNumber, comcolAlarmInstance, comcolAlarmSeverity, comcolAlarmText, comcolAlarmInfo, comcolAlarmGroup, comcolServerHostname, comcolAlarmSequence, comcolAlarmTimestamp, comcolAlarmEventType, comcolAlarmProbableCause, comcolAlarmAdditionalInfo

HA Score
Normal

Auto Clear Seconds
0 (zero)

OID
comcolSnmpConfigNotify

Recovery

1. Export event history for the given server and all processes.
2. It is recommended to contact My Oracle Support for assistance.

31270 - Logging output

Alarm Group:
SW

Description:
Logging output set to Above Normal

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolLoggingOutputNotify

Recovery:

1. Extra diagnostic logs are being collected, potentially degrading system performance. Turn off the debugging log.

31280 - HA Active to Standby transition

Alarm Group:
HA

Description:
HA active to standby activity transition

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolActiveToStandbyTransNotify

Recovery:

1. If this alarm occurs during routine maintenance activity, it may be ignored.
2. Otherwise, it is recommended to contact My Oracle Support.

31281 - HA Standby to Active transition

Alarm Group:
HA

Description:
HA standby to active activity transition

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolStandbyToActiveTransNotify

Recovery:

1. If this alarm occurs during routine maintenance activity, it may be ignored.
2. Otherwise, it is recommended to contact My Oracle Support.

31282 - HA Management Fault

Alarm Group:
HA

Description:
The HA manager (cmha) is impaired by a software fault.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaMgmtFaultNotify

Recovery:

1. This alarm indicates an error occurred within the High Availability subsystem, but the system has automatically recovered.
2. If the alarm occurs frequently, it is recommended to contact My Oracle Support.

31283 - Lost Communication with server

Alarm Group:
HA

Description:
Highly available server failed to receive mate heartbeats

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
comcolHaServerOfflineNotify

Recovery:

1. If loss of communication between the active and standby servers is caused intentionally by maintenance activity, alarm can be ignored; it clears automatically when communication is restored between the two servers.
2. If communication fails at any other time, look for network connectivity issues and/or it is recommended to contact My Oracle Support for assistance.

31284 - HA Remote Subscriber Heartbeat Warning

Alarm Group:
HA

Description:
High availability remote subscriber has not received a heartbeat within the configured interval.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaRemoteHeartbeatWarningNotify

Recovery:

1. No action required. This is a warning and can be due to transient conditions. The remote subscriber will move to another server in the cluster.
2. If there continues to be no heartbeat from the server, it is recommended to contact My Oracle Support.

31285 - HA Node Join Recovery Entry

Alarm Group:
HA

Description:
High availability node join recovery entered

Severity:
Info

Instance:
Cluster set key of the DC outputting the event

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaSbrEntryNotify

Recovery:

1. No action required; this is a status message generated when one or more unaccounted for nodes join the designated coordinators group.

31286 - HA Node Join Recovery Plan

Alarm Group:
HA

Description:
High availability node join recovery plan

Severity:
Info

Instance:
Names of HA Policies (as defined in HA policy configuration)

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaSbrPlanNotify

Recovery:

1. No action required; this is a status message output when the designated coordinator generates a new action plan during node join recovery.

31287 - HA Node Join Recovery Complete

Alarm Group:
HA

Description:
High availability node join recovery complete

Severity:
Info

Instance:
Names of HA Policies (as defined in HA policy configuration)

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaSbrCompleteNotify

Recovery:

1. No action required; this is a status message output when the designated coordinator finishes running an action plan during node join recovery.

31288 - HA Site Configuration Error

Alarm Group
HA

Description
High availability site configuration error

Severity
Critical

Instance
GroupName, Policy ID, Site Name

HA Score
Normal

Auto Clear Seconds
0 (zero)

OID
comcolHaBadSiteCfgNotify

Recovery

1. If this alarm does not clear after correcting the configuration, it is recommended to contact My Oracle Support for assistance.

31290 - HA Process Status

Alarm Group:
HA

Description:
HA manager (cmha) status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaProcessStatusNotify

Recovery:

1. This event is used for internal logging. No action is required.

31291 - HA Election Status

Alarm Group:
HA

Description:
HA DC Election status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaElectionStatusNotify

Recovery:

1. This event is used for internal logging. No action is required.

31292 - HA Policy Status

Alarm Group:
HA

Description:
HA Policy plan status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaPolicyStatusNotify

Recovery:

1. This event is used for internal logging. No action is required.

31293 - HA Resource Link Status

Alarm Group:
HA

Description:
This alarm is raised for nodes in our topology that we should be connected to (i.e., not OOS), but that we do not have any TCP links to it over any configured paths. It does not matter why the links were not established (networking connectivity, node not running, etc.).

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaRaLinkStatusNotify

Recovery:

1. If loss of communication between the active and standby servers is caused intentionally by maintenance activity, alarm can be ignored. It clears automatically when communication is restored between the two servers.
2. If communication fails at any other time, look for network connectivity issues.
3. If the problem persists, it is recommended to contact My Oracle Support.

31294 - HA Resource Status

Alarm Group:
HA

Description:
HA Resource registration status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaResourceStatusNotify

Recovery:

1. This event is used for internal logging. No action is required.

31295 - HA Action Status

Alarm Group:
HA

Description:
HA Resource action status

Severity:
Info

Instance
N/A

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaActionStatusNotify

Recovery:

1. This event is used for internal logging. No action is required.

31296 - HA Monitor Status

Alarm Group:
HA

Description:
HA Monitor action status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaMonitorStatusNotify

Recovery:

1. This event is used for internal logging. No action is required.

31297 - HA Resource Agent Info

Alarm Group:
HA

Description:
HA Resource Agent Info

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaRaInfoNotify

Recovery:

1. This event is used for internal logging. No action is required.

31298 - HA Resource Agent Detail

Alarm Group:
HA

Description:
Resource Agent application detailed information

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaRaDetailNotify

Recovery:

1. This event is used for internal logging. No action is required.

31299 - HA Notification Status

Alarm Group:
HA

Description:
HA Notification status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaNotificationNotify

Recovery:

1. No action required.

31300 - HA Control Status

Alarm Group:
HA

Description:
HA Control action status

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
300

OID:
comcolHaControlNotify

Recovery:

1. No action required.

31301 - HA Topology Events

Alarm Group:
HA

Description:
HA Topology events

Severity:
Info

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
eagleXgDsrHaTopologyNotify

Recovery:

1. No action required.

31322 - HA Configuration Error

Alarm Group
HA

Description
High availability configuration error

Severity
Minor

Instance
NodeID, or HA Tunnel ID

HA Score
Normal

Auto Clear Seconds
0 (zero)

OID
comcolHaBadCfgNotify

Recovery

1. It is recommended to contact #unique_86.

32100 - Breaker Panel Feed Unavailable

Alarm Group:
PLAT

Description:
Breaker Panel Breaker Unavailable

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdBrkPnlFeedUnavailable

Recovery:

1. It is recommended to contact My Oracle Support to request hardware replacement.

32101 - Breaker Panel Breaker Failure

Alarm Group:
PLAT

Description:
Breaker Panel Breaker Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdBrkPnlBreakerFailure

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32102 - Breaker Panel Monitoring Failure

Alarm Group: PLAT

Description: Breaker Panel Monitoring Failure

Severity: Critical

Instance: May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score: Normal

Auto Clear Seconds: 0 (zero)

OID: tpdBrkPnlMntFailureNotify

Recovery

1. Contact My Oracle Support to request hardware replacement.

32103 - Power Feed Unavailable

Alarm Group:
PLAT

Description:
Power Feed Unavailable

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPowerFeedUnavail

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32104 - Power Supply 1 Failure

Alarm Group:
PLAT

Description:
Power Supply 1 Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPowerSupply1Failure

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32105 - Power Supply 2 Failure

Alarm Group:
PLAT

Description:
Power Supply 2 Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPowerSupply2Failure

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32106 - Power Supply 3 Failure

Alarm Group: PLAT

Description: Power Supply 3 Failure

Severity: Critical

Instance: May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score: Normal

Auto Clear Seconds: 0 (zero)

OID: tpdPowerSupply3FailureNotify

Recovery

1. Contact My Oracle Support to request hardware replacement.

32107 - Raid Feed Unavailable

Alarm Group:
PLAT

Description:
Raid Feed Unavailable

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdRaidFeedUnavailable

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32108 - Raid Power 1 Failure

Alarm Group:
PLAT

Description:
Raid Power 1 Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdRaidPower1Failure

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32109 - Raid Power 2 Failure

Alarm Group:
PLAT

Description:
Raid Power 2 Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdRaidPower2Failure

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32110 - Raid Power 3 Failure

Alarm Group:
PLAT

Description:
Raid Power 3 Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdRaidPower3Failure

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32111 - Device Failure

Alarm Group:
PLAT

Description:
Device Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDeviceFailure

Recovery:

1. It is recommended to contact My Oracle Support to request hardware replacement.

32112 - Device Interface Failure

Alarm Group:
PLAT

Description:
Device Interface Failure

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDeviceIfFailure

Recovery:

1. It is recommended to contact My Oracle Support to request hardware replacement.

32113 - Uncorrectable ECC memory error

Alarm Group:
PLAT

Description:
This alarm indicates that chipset has detected an uncorrectable (multiple-bit) memory error that the ECC (Error-Correcting Code) circuitry in the memory is unable to correct.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdEccUncorrectableError

Alarm ID:
TKSPLATCR14

Recovery:

1. Contact the hardware vendor to request hardware replacement.

32114 - SNMP get failure

Alarm Group:
PLAT

Description:
The server failed to receive SNMP information from the switch.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSNMPGetFailure

Alarm ID:
TKSPLATCR15

Recovery:

1. Verify device is active and responds to the ping command.
2. If the problem persists, it is recommended to contact My Oracle Support.

32115 - TPD NTP Daemon Not Synchronized Failure

Alarm Group:
PLAT

Description:
This alarm indicates the server's current time precedes the timestamp of the last known time the servers time was good.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdNTPDaemonNotSynchronizedFailure

Alarm ID:
TKSPLATCR16

Recovery:

1. Verify NTP settings and that NTP sources are providing accurate time.
   a. Ensure ntpd service is running with correct options: -x -g.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Type `/usr/sbin/ntpdc -c sysinfo` to check the current state of the ntpd daemon.
   d. Verify the ntp peer configuration; execute ntpq -np; and analyze the output. Verify peer data, such as tally code (first column before remote), remote, refid, stratum (st), and jitter, are valid for server.
   e. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server, then ping the ntp peer to determine if peer can be reached.
2. If ntp peer is reachable, then restart the ntpd service.
3. If problem persists, then a reset the NTP date may resolve the issue.

   Note: Before resetting the ntp date, the applications may need to be stopped; and subsequent to the ntp reset, the application restarted.

   a. Reset ntpd:
   - sudo service ntpd stop
   - sudo ntpdate <ntp server ip>
   - sudo service ntpd start
4. Conform to recommended NTP topology and strategy.
   - No fewer than tree references are recommended.
   - If selecting a different number, the number should be odd.
   - No intermediate reference should be a virtualized server.
   - Additional recommendations and topology are available in NTP Strategy section in the DSR Hardware and Software Installation 1/2 customer document
5. If the problem persists, it is recommended to contact My Oracle Support.

32116 - TPD Server's Time Has Gone Backwards

Alarm Group:
PLAT

Description:
This alarm indicates the server's current time precedes the timestamp of the last known time the servers time was good.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdNTPTimeGoneBackwards

Alarm ID:
TKSPLATCR17

Recovery:

1. Verify NTP settings and NTP sources are providing accurate time.
   a. Ensure ntpd service is running with correct options: -x -g
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Type `/usr/sbin/ntpdc -c sysinfo` to check the current state of the ntpd daemon.
   d. Verify the ntp peer configuration; execute ntpq -p; and analyze the output. Verify peer data, such as tally code (first column before remote), remote, refid, stratum (st), and jitter, are valid for server.
   e. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server, then ping the ntp peer to determine if peer can be reached.
2. If ntp peer is reachable, then restart the ntpd service.
3. If problem persists, then a reset the NTP date may resolve the issue.

   Note: Before resetting the ntp date, the applications may need to be stopped; and subsequent to the ntp reset, the application restarted.

   a. Reset ntpd:
   - sudo service ntpd stop
   - sudo ntpdate <ntp server ip>
   - sudo service ntpd start
4. Conform to recommended NTP topology and strategy.
   - No fewer than tree references are recommended.
   - If selecting a different number, the number should be odd.
   - No intermediate reference should be a virtualized server.

- Additional recommendations and topology are available in NTP Strategy section in the DSR Hardware and Software Installation 1/2 customer document

5. If the problem persists, it is recommended to contact My Oracle Support.

32117 - TPD NTP Offset Check Failure

Alarm Group:
PLAT

Description:
This alarm indicates the NTP offset of the server that is currently being synced to is greater than the critical threshold.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
ntpOffsetCheckFailure

Alarm ID:
TKSPLATCR18

Recovery:

1. Verify NTP settings and NTP sources can be reached.
   a. Ensure ntpd service is running using `ps -ef | grep` or `service ntpd status`.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Type `/usr/sbin/ntpdc -c sysinfo` to check the current state of the ntpd daemon.
   d. Verify the ntp peer configuration; execute ntpq -p; and analyze the output. Verify peer data, such as tally code (first column before remote), remote, refid, stratum (st), and jitter, are valid for server.
   e. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server, then ping the ntp peer to determine if peer can be reached.
2. If ntp peer is reachable, then restart the ntpd service.
3. If problem persists, then a reset the NTP date may resolve the issue.

Note: Before resetting the ntp date, the applications may need to be stopped; and subsequent to the ntp reset, the application restarted.

a. To reset date:

- sudo service ntpd stop
- sudo ntpdate <ntp server ip>
- sudo service ntpd start

4. Conform to recommended NTP topology and strategy.
   - No fewer than tree references are recommended.
   - If selecting a different number, the number should be odd.
   - No intermediate reference should be a virtualized server.
   - Additional recommendations and topology are available in NTP Strategy section in the DSR Hardware and Software Installation 1/2 customer document
5. If the problem persists, it is recommended to contact My Oracle Support.

32300 - Server fan failure

Alarm Group:
PLAT

Description:
This alarm indicates that a fan on the application server is either failing or has failed completely. In either case, there is a danger of component failure due to overheating.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdFanError

Alarm ID:
TKSPLATMA1

Recovery:

1. Run Syscheck in Verbose mode to determine which server fan assemblies is failing and replace the fan assembly.
2. If the problem persists, it is recommended to contact My Oracle Support.

32301 - Server internal disk error

Alarm Group:
PLAT

Description:
This alarm indicates the server is experiencing issues replicating data to one or more of its mirrored disk drives. This could indicate that one of the server's disks has either failed or is approaching failure.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdIntDiskError

Alarm ID:
TKSPLATMA2

Recovery:

1. Run syscheck in verbose mode.
2. Determine the raid state of the mirrored disks, collect data:

   cat /proc/mdstat
   cat /etc/raidtab

3. It is recommended to contact My Oracle Support and provide the system health check output and collected data.

32303 - Server Platform error

Alarm Group:
PLAT

Description:
This alarm indicates an error such as a corrupt system configuration or missing files.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPlatformError

Alarm ID:
TKSPLATMA4

Recovery:

1. Run syscheck in verbose mode.
2. Determine the raid state of the mirrored disks, collect data:

   ```
   cat /proc/mdstatcat /etc/raidtab
   ```

3. It is recommended to contact My Oracle Support and provide the system health check output and collected data.

32304 - Server file system error

Alarm Group:
PLAT

Description:
This alarm indicates unsuccessful writing to at least one of the server's file systems.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdFileSystemError

Alarm ID:
TKSPLATMA5

Recovery:

1. Run syscheck in verbose mode.
2. Address full file systems identified in syscheck output, and run syscheck in verbose mode.
3. It is recommended to contact My Oracle Support and provide the system health check output.

32305 - Server Platform process error

Alarm Group:
PLAT

Description:
This alarm indicates that either the minimum number of instances for a required process are not currently running or too many instances of a required process are running.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPlatProcessError

Alarm ID:
TKSPLATMA6

Recovery:

1. Rerun syscheck in verbose mode.
2. If the alarm has been cleared then the problem is solved.
3. If the alarm has not been cleared then determine the run level of the system.
4. If system run level is not 4 then determine why the system is operating at that run level.
5. If system run level is 4, determine why the required number of instances process(es) are not running.
6. If the alarm persists, it is recommended to contact My Oracle Support and provide the system health check output.

32306 - Server RAM shortage error

Alarm Group:
PLAT

Description:
Not Implemented.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdRamShortageError

Recovery

1. It is recommended to contact My Oracle Support.

32307 - Server swap space shortage failure

Alarm Group:
PLAT

Description:
This alarm indicates that the server's swap space is in danger of being depleted. This is usually caused by a process that has allocated a very large amount of memory over time.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSwapSpaceShortageError

Alarm ID:
TKSPLATMA8

Recovery:

1. Run syscheck in verbose mode.
2. Determine processes using swap.

> **Note:** One method to determine the amount of swap being used by process is:
> `grep VmSwap /proc/<process id>/status`

3. It is recommended to contact My Oracle Support and provide the system health check output and process swap usage.

32308 - Server provisioning network error

Alarm Group:
PLAT

Description:
This alarm indicates that the connection between the server's ethernet interface and the customer network is not functioning properly.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdProvNetworkError

Alarm ID:
TKSPLATMA9

Recovery:

1. Verify that a customer-supplied cable labeled TO CUSTOMER NETWORK is securely connected to the appropriate server. Follow the cable to its connection point on the local network and verify this connection is also secure.
2. Test the customer-supplied cable labeled TO CUSTOMER NETWORK with an Ethernet Line Tester. If the cable does not test positive, replace it.
3. Have your network administrator verify that the network is functioning properly.

4. If no other nodes on the local network are experiencing problems and the fault has been isolated to the server or the network administrator is unable to determine the exact origin of the problem, it is recommended to contact My Oracle Support.

32309 - Eagle Network A Error

Alarm Group:
PLAT

Description:
Uncorrectable ECC Memory Error -- This alarm indicates that chipset has detected an uncorrectable (multiple-bit) memory error that the ECC (Error-Correcting Code) circuitry in the memory is unable to correct.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdEagleNetworkAError

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32310 - Eagle Network B Error

Alarm Group:
PLAT

Description:
Uncorrectable ECC Memory Error -- This alarm indicates that chipset has detected an uncorrectable (multiple-bit) memory error that the ECC (Error-Correcting Code) circuitry in the memory is unable to correct.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdEagleNetworkBError

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32311 - Sync Network Error

Alarm Group:
PLAT

Description:
Uncorrectable ECC Memory Error -- This alarm indicates that chipset has detected an uncorrectable (multiple-bit) memory error that the ECC (Error-Correcting Code) circuitry in the memory is unable to correct.

Severity:
Critical

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSyncNetworkError

Recovery

1. It is recommended to contact My Oracle Support to request hardware replacement.

32312 - Server disk space shortage error

Alarm Group:
PLAT

Description:
This alarm indicates that one of the following conditions has occurred:

- A file system has exceeded a failure threshold, which means that more than 90% of the available disk storage has been used on the file system.
- More than 90% of the total number of available files have been allocated on the file system.

- A file system has a different number of blocks than it had when installed.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDiskSpaceShortageError

Alarm ID:
TKSPLATMA13

Recovery:

1. Run syscheck in verbose mode.
2. Examine contents of identified volume in syscheck output to determine if any large files are in the file system. Delete unnecessary files, or move files off of server. Capture output from "du -sx <file system>".
3. Capture output from "df -h" and "df -i" commands.
4. Determine processes using the file system(s) that have exceeded the threshold.
5. It is recommended to contact My Oracle Support and provide the system health check output and provide additional file system output.

32313 - Server default route network error

Alarm Group:
PLAT

Description:
This alarm indicates that the default network route of the server is experiencing a problem.

> **Caution:** When changing the network routing configuration of the server, verify that the modifications will not impact the method of connectivity for the current login session. The route information must be entered correctly and set to the correct values. Incorrectly modifying the routing configuration of the server may result in total loss of remote network access.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDefaultRouteNetworkError

Recovery:

1. Run syscheck in verbose mode.
2. If the syscheck output is: `The default router at <IP_address> cannot be pinged`, the router may be down or unreachable. Do the following:
   a. Verify the network cables are firmly attached to the server and the network switch, router, hub, etc.
   b. Verify that the configured router is functioning properly. Check with the network administrator to verify the router is powered on and routing traffic as required.
   c. Check with the router administrator to verify that the router is configured to reply to pings on that interface.
   d. Rerun syscheck.
   e. If the alarm has not been cleared, it is recommended to collect the syscheck output and contact My Oracle Support.
3. If the syscheck output is: `The default route is not on the provisioning network`, it is recommended to collect the syscheck output and contact My Oracle Support.
4. If the syscheck output is: `An active route cannot be found for a configured default route`, it is recommended to collect the syscheck output and contact My Oracle Support.

32314 - Server temperature error

Alarm Group:
PLAT

Description:
The internal temperature within the server is unacceptably high.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdServerTemperatureError

Alarm ID:
TKSPLATMA15

Recovery:

1. Ensure that nothing is blocking the fan intake. Remove any blockage.
2. Verify that the temperature in the room is normal. If it is too hot, lower the temperature in the room to an acceptable level.

   Note: Be prepared to wait the appropriate period of time before continuing with the next step. Conditions need to be below alarm thresholds consistently for the alarm to clear. It may take about ten minutes after the room returns to an acceptable temperature before the alarm cleared.

3. Run syscheck.
   a. If the alarm has been cleared, the problem is resolved.
   b. If the alarm has not been cleared, continue troubleshooting.
4. Replace the filter.

   Note: Be prepared to wait the appropriate period of time before continuing with the next step. Conditions need to be below alarm thresholds consistently for the alarm to clear. The alarm may take up to five minutes to clear after conditions improve. It may take about ten minutes after the filter is replaced before syscheck shows the alarm cleared.

5. Re-run syscheck.
   a. If the alarm has been cleared, the problem is resolved.
   b. If the alarm has not been cleared, continue troubleshooting.
6. If the problem has not been resolved, it is recommended to contact My Oracle Support.

32315 - Server mainboard voltage error

Alarm Group:
PLAT

Description:
This alarm indicates that one or more of the monitored voltages on the server mainboard have been detected to be out of the normal expected operating range.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdServerMainboardVoltageError

Alarm ID:
TKSPLATMA16

Recovery:

1. Run syscheck in verbose mode.
2. If the alarm persists, it is recommended to contact My Oracle Support and provide the system health check output.

32316 - Server power feed error

Alarm Group:
PLAT

Description:
This alarm indicates that one of the power feeds to the server has failed. If this alarm occurs in conjunction with any Breaker Panel alarm, there might be a problem with the breaker panel.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPowerFeedError

Alarm ID:
TKSPLATMA17

Recovery:

1. Verify that all the server power feed cables to the server that is reporting the error are securely connected.
2. Check to see if the alarm has cleared
   - If the alarm has been cleared, the problem is resolved.
   - If the alarm has not been cleared, continue with the next step.
3. Follow the power feed to its connection on the power source. Ensure that the power source is ON and that the power feed is properly secured.
4. Check to see if the alarm has cleared
   - If the alarm has been cleared, the problem is resolved.
   - If the alarm has not been cleared, continue with the next step.
5. If the power source is functioning properly and the wires are all secure, have an electrician check the voltage on the power feed.
6. Check to see if the alarm has cleared
   - If the alarm has been cleared, the problem is resolved.
   - If the alarm has not been cleared, continue with the next step.
7. If the problem has not been resolved, it is recommended to contact My Oracle Support.

32317 - Server disk health test error

Alarm Group:
PLAT

Description:
Either the hard drive has failed or failure is imminent.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDiskHealthError

Alarm ID:
TKSPLATMA18

Recovery:

1. Run syscheck in verbose mode.
2. Replace the hard drives that have failed or are failing.
3. Re-run syscheck in verbose mode.
4. Perform the recovery procedures for the other alarms that may accompany this alarm.
5. If the problem has not been resolved, it is recommended to contact My Oracle Support and provide the system health check output. .

32318 - Server disk unavailable error

Alarm Group:
PLAT

Description:
The `smartd` service is not able to read the disk status because the disk has other problems that are reported by other alarms. This alarm appears only while a server is booting.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDiskUnavailableError

Alarm ID:
TKSPLATMA19

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support and provide the system health check output.

32319 - Device error

Alarm Group:
PLAT

Description:
This alarm indicates that the offboard storage server had a problem with its disk volume filling up.

Severity:
Major

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDeviceError

Alarm ID:
TKSPLATMA20

Recovery

1. It is recommended to contact the My Oracle Support.

32320 - Device interface error

Alarm Group:
PLAT

Description:
This alarm indicates that the IP bond is either not configured or down.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDeviceIfError

Alarm ID:
TKSPLATMA21

Recovery:

1. Run syscheck in verbose mode.
2. Investigate the failed bond, and slave devices, configuration:
   a. Navigate to /etc/sysconfig/network-scripts for the persistent configuration of a device.
3. Determine if the failed bond, and slave devices, has been administratively shut down or has operational issues:
   a. cat /proc/net/bonding/bondX, where X is bond designation
   b. ethtool <slave device>
4. If bond, and slaves, are healthy attempt to administratively bring bond up:
   a. ifup bondX
5. If the problem has not been resolved, it is recommended to contact My Oracle Support and provide the system health check output and the output of the above investigation.

32321 - Correctable ECC memory error

Alarm Group:
PLAT

Description:
This alarm indicates that chipset has detected a correctable (single-bit) memory error that has been corrected by the ECC (Error-Correcting Code) circuitry in the memory.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdEccCorrectableError

Alarm ID:
TKSPLATMA22

Recovery:

1. No recovery necessary.
2. If the condition persists, verify the server firmware. Update the firmware if necessary, and re-run syscheck in verbose mode. Otherwise if the condition persists

and the firmware is up to date, contact the hardware vendor to request hardware replacement.

32322 - Power Supply A error

Alarm Group:
PLAT

Description:
This alarm indicates that power supply 1 (feed A) has failed.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPowerSupply1Error

Alarm ID:
TKSPLATMA23

Recovery:

1. Verify that nothing is obstructing the airflow to the fans of the power supply.
2. Run syscheck in verbose mode. The output will provide details about what is wrong with the power supply.
3. If the problem persists, it is recommended to contact My Oracle Support and provide the syscheck verbose output. Power supply 1 (feed A) will probably need to be replaced.

32323 - Power Supply B error

Alarm Group:
PLAT

Description:
This alarm indicates that power supply 2 (feed B) has failed.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdPowerSupply2Error

Alarm ID:
TKSPLATMA24

Recovery:

1. Verify that nothing is obstructing the airflow to the fans of the power supply.
2. Run syscheck in verbose mode. The output will provide details about what is wrong with the power supply.
3. If the problem persists, it is recommended to contact My Oracle Support and provide the syscheck verbose output. Power supply 2 (feed B) will probably need to be replaced.

32324 - Breaker panel feed error

Alarm Group:
PLAT

Description:
This alarm indicates that the server is not receiving information from the breaker panel relays.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdBrkPnlFeedError

Alarm ID:
TKSPLATMA25

Recovery:

1. Verify that the same alarm is displayed by multiple servers:

- If this alarm is displayed by only one server, the problem is most likely to be with the cable or the server itself. Look for other alarms that indicate a problem with the server and perform the recovery procedures for those alarms first.
- If this alarm is displayed by multiple servers, go to the next step.

2. Verify that the cables that connect the servers to the breaker panel are not damaged and are securely fastened to both the Alarm Interface ports on the breaker panel and to the serial ports on both servers.
3. If the problem has not been resolved, it is recommended to contact My Oracle Support to request that the breaker panel be replaced.

32325 - Breaker panel breaker error

Alarm Group:
PLAT

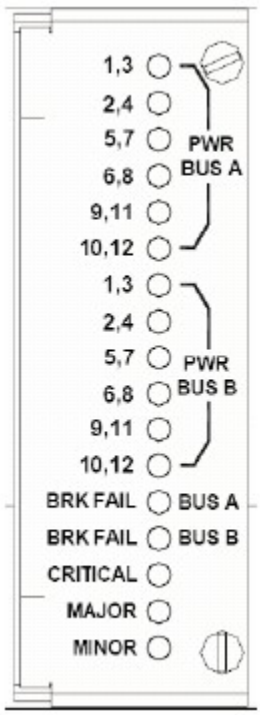
Description:
This alarm indicates that a power fault has been identified by the breaker panel. The LEDs on the center of the breaker panel (see Figure 4-1) identify whether the fault occurred on the input power or the output power, as follows:

- A power fault on input power (power from site source to the breaker panel) is indicated by one of the LEDs in the PWR BUS A or PWR BUS B group illuminated Red. In general, a fault in the input power means that power has been lost to the input power circuit.

  Note: LEDs in the PWR BUS A or PWR BUS B group that correspond to unused feeds are not illuminated; LEDs in these groups that are not illuminated do not indicate problems.

- A power fault on output power (power from the breaker panel to other frame equipment) is indicated by either BRK FAIL BUS A or BRK FAIL BUS B illuminated RED. This type of fault can be caused by a surge or some sort of power degradation or spike that causes one of the circuit breakers to trip.

Figure 4-1 Breaker Panel LEDs



Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

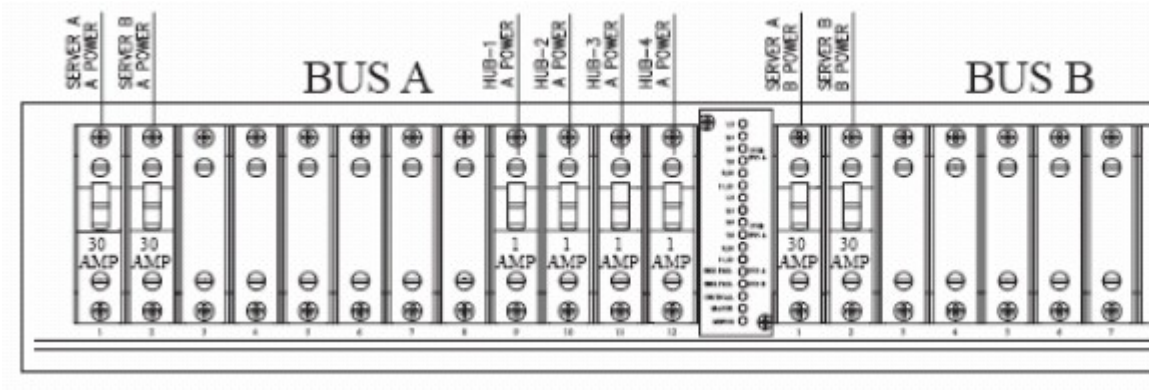
OID:
TPDBrkPnlBreakerError

Alarm ID:
TKSPLATMA26

Recovery:

1. Verify that the same alarm is displayed by both servers. The single breaker panel normally sends alarm information to both servers:
   - If this alarm is displayed by only one server, the problem is most likely to be with the cable or the server itself. Look for other alarms that indicate a problem with the server and perform the recovery procedures for those alarms first.
   - If this alarm is displayed by both servers, go to the next step.
2. For each breaker assignment, verify that the corresponding LED in the PWR BUS A group and the PWR BUS B group is illuminated Green.

Figure 4-2 Breaker Panel Setting



If one of the LEDs in the PWR BUS A group or the PWR BUS B group is illuminated Red, a problem has been detected with the corresponding input power feed. Perform the following steps to correct this problem:

- Verify that the customer provided source for the affected power feed is operational. If the power source is properly functioning, have an electrician remove the plastic cover from the rear of the breaker panel and verify the power source is indeed connected to the input power feed connector on the rear of the breaker panel. Correct any issues found.
- Check the LEDs in the PWR BUS A group and the PWR BUS B group again.

  a. If the LEDs are now illuminated Green, the issue has been resolved. Proceed to step 4 to verify that the alarm has been cleared.

  b. If the LEDs are still illuminated Red, continue to the next sub-step.

- Have the electrician verify the integrity of the input power feed. The input voltage should measure nominally -48VDC (that is, between -41VDC and -60VDC). If the supplied voltage is not within the acceptable range, the input power source must be repaired or replaced.

Note:

Be sure the voltmeter is connected properly. The locations of the BAT and RTN connections are in mirror image on either side of the breaker panel.

If the measured voltage is within the acceptable range, the breaker panel may be malfunctioning. The breaker panel must be replaced.

- Check the LEDs in the PWR BUS A group and the PWR BUS B group again after the necessary actions have been taken to correct any issues found

  a. If the LEDs are now illuminated Green, the issue has been resolved and proceed to step 4 to verify that the alarm has been cleared.

  b. If the LEDs are still illuminated Red, skip to step 5

3. Check the BRK FAIL LEDs for BUS A and for BUS B.

- If one of the BRK FAIL LEDs is illuminated Red, then one or more of the respective Input Breakers has tripped. (A tripped breaker is indicated by the

toggle located in the center position.) Perform the following steps to repair this issue:

a. For all tripped breakers, move the breaker down to the open (OFF) position and then back up to the closed (ON) position.

b. After all the tripped breakers have been reset, check the BRK FAIL LEDs again. If one of the BRK FAIL LEDs is still illuminated Red, run syscheck and contact My Oracle Support

4. If all of the BRK FAIL LEDs and all the LEDs in the PWR BUS A group and the PWR BUS B group are illuminated Green, there is most likely a problem with the serial connection between the server and the breaker panel. This connection is used by the system health check to monitor the breaker panel for failures. Verify that both ends of the labeled serial cables are properly secured. If any issues are discovered with these cable connections, make the necessary corrections and continue to the next step to verify that the alarm has been cleared, otherwise it is recommended to run syscheck and contact My Oracle Support

5. Run syscheck.

   - If the alarm has been cleared, the problem is resolved.
   - If the problem has not been resolved, it is recommended to contact My Oracle Support

32326 - Breaker panel monitoring error

Alarm Group:
PLAT

Description:
This alarm indicates a failure in the hardware and/or software that monitors the breaker panel. This could mean there is a problem with the file I/O libraries, the serial device drivers, or the serial hardware itself.

Note: When this alarm occurs, the system is unable to monitor the breaker panel for faults. Thus, if this alarm is detected, it is imperative that the breaker panel be carefully examined for the existence of faults. The LEDs on the breaker panel will be the only indication of the occurrence of either alarm:

- 32324 – Breaker panel feed error
- 32325 – Breaker panel breaker error

until the Breaker Panel Monitoring Error has been corrected.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdBrkPnlMntError

Alarm ID:
TKSPLATMA27

Recovery:

1. Verify that the same alarm is displayed by both servers (the single breaker panel normally sends alarm information to both servers):
   - If this alarm is displayed by only one server, the problem is most likely to be with the cable or the server itself. Look for other alarms that indicate a problem with the server and perform the recovery procedures for those alarms first.
   - If this alarm is displayed by both servers, go to the next step.
2. Verify that both ends of the labeled serial cables are secured properly (for locations of serial cables, see the appropriate hardware manual).
3. Run syscheck..
   - If the alarm has been cleared, the problem is resolved.
   - If the alarm has not been cleared, it is recommended to contact My Oracle Support

32327 - Server HA Keepalive error

Alarm Group:
PLAT

Description:
This alarm indicates that heartbeat process has detected that it has failed to receive a heartbeat packet within the timeout period.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHaKeepaliveError

Alarm ID:
TKSPLATMA28

Recovery:

1. Determine if the mate server is currently down and bring it up if possible.
2. Determine if the keepalive interface is down.
3. Determine if heartbeart is running (service TKLCha status).

> **Note:** This step may require command line ability.

4. It is recommended to contact My Oracle Support.

32328 - DRBD is unavailable

Alarm Group:
PLAT

Description:
This alarm indicates that DRBD is not functioning properly on the local server. The DRBD state (disk state, node state, and/or connection state) indicates a problem.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDrbdUnavailable

Alarm ID:
TKSPLATMA29

Recovery

1. It is recommended to contact My Oracle Support.

32329 - DRBD is not replicating

Alarm Group:
PLAT

Description:
This alarm indicates that DRBD is not replicating to the peer server. Usually this indicates that DRBD is not connected to the peer server. It is possible that a DRBD Split Brain has occurred.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDrbdNotReplicating

Alarm ID:
TKSPLATMA30

Recovery

1. It is recommended to contact My Oracle Support.

32330 - DRBD peer problem

Alarm Group:
PLAT

Description:
This alarm indicates that DRBD is not functioning properly on the peer server. DRBD is connected to the peer server, but the DRBD state on the peer server is either unknown or indicates a problem.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDrbdPeerProblem

Alarm ID:
TKSPLATMA31

Recovery

1. It is recommended to contact the My Oracle Support.

32331 - HP disk problem

Alarm Group:
PLAT

Description:
This major alarm indicates that there is an issue with either a physical or logical disk in the HP disk subsystem. The message will include the drive type, location, slot and status of the drive that has the error.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHpDiskProblem

Alarm ID:
TKSPLATMA32

Recovery:

1. Run syscheck in verbose mode.
2. If "Cache Status" is OK and "Cache Status Details" reports a cache error was detected so diagnostics should be run, there probably is no battery and data was left over in the write cache not getting flushed to disk and won't since there is no battery.
3. If "Cache Status" is "Permanently Disabled" and "Cache Status Details" indicated the cache is disabled, if there is no battery then the firmware should be upgraded.
4. Re-run syscheck in verbose mode if firmware upgrade was necessary.
5. If the condition persists, it is recommended to contact My Oracle Support and provide the system health check output. The disk may need to be replaced.

32332 - HP Smart Array controller problem

Alarm Group:
PLAT

Description:
This major alarm indicates that there is an issue with an HP disk controller. The message will include the slot location, the component on the controller that has failed, and status of the controller that has the error.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHpDiskCtrlrProblem

Alarm ID:
TKSPLATMA33

Recovery:

1. Run syscheck in verbose mode.
2. If condition persists, it is recommended to contact My Oracle Support and provide the system health check output.

32333 - HP hpacucliStatus utility problem

Alarm Group:
PLAT

Description:
This major alarm indicates that there is an issue with the process that caches the HP disk subsystem status. This usually means that the hpacucliStatus/hpDiskStatus daemon is either not running, or hung.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHPACUCLIProblem

Alarm ID:
TKSPLATMA34

Recovery:

1. Run syscheck in verbose mode.
2. Verify the firmware is up to date for the server, if not up to date upgrade firmware, and re-run syscheck in verbose mode.
3. Determine if the HP disk status daemon is running. If not running verify that it was not administratively stopped.

   Note: The disk status daemon is named either TKLChpacucli or TPDhpDiskStatus in more recent versions of TPD.

   a. Executing "status TPDhpDiskStatus", or "status TKLChpacucli" depending on TPD release, should produce output indicating that the process is running.
4. If not running, attempt to start the HP disk status process :

   "start TPDhpDiskStatus", or if appropriate "start TKLChpacucli" .
5. Verify that there are no hpssacli, or hpacucli, error messages in /var/log/messages. If there are this could indicate that the HP utility is hung. If the HP hpssacli utility, or hpacucli utility, is hung, proceed with next step.
6. It is recommended to contact My Oracle Support and provide the system health check output, and savelogs_plat output.

32334 - Multipath device access link problem

Alarm Group:
PLAT

Description:
One or more "access paths" of a multipath device are failing or are not healthy, or the multipath device does not exist.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdMpathDeviceProblem

Recovery:

1. It is recommended to contact My Oracle Support.

32335 - Switch link down error

Alarm Group:
PLAT

Description:
The link is down.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSwitchLinkDownError

Alarm ID:
TKSPLATMA36

Recovery:

1. Verify the cabling between the port and the remote side.
2. Verify networking on the remote end.
3. If the problem persists, it is recommended to contact My Oracle Support to determine who should verify port settings on both the server and the switch.

32336 - Half Open Socket Limit

Alarm Group:
PLAT

Description:
This alarm indicates that the number of half open TCP sockets has reached the major threshold. This problem is caused by a remote system failing to complete the TCP 3-way handshake.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHalfOpenSockLimit

Alarm ID:
TKSPLATMA37

Recovery:

1. Run syscheck in verbose mode.
2. Determine what process and address reports a state of SYN_RECV and collect data:
   - netstat -nap.
3. It is recommended to contact My Oracle Support and provide the system health check output and collected data.

32337 - Flash Program Failure

Alarm Group:
PLAT

Description:
This alarm indicates that there was an error while trying to update the firmware flash on the E5-APP-B cards.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdFlashProgramFailure

Alarm ID:
TKSPLATMA38

Recovery:

1. It is recommended to contact My Oracle Support.

32338 - Serial Mezzanine Unseated

Alarm Group:
PLAT

Description:
This alarm indicates that a connection to the serial mezzanine board may not be properly seated.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSerialMezzUnseated

Alarm ID:
TKSPLATMA39

Recovery:

1. Ensure that both ends of both cables connecting the serial mezzanine card to the main board are properly seated into their connectors.
2. It is recommended to contact My Oracle Support if reseating the cables does not clear the alarm.

32339 - TPD Max Number Of Running Processes Error

Alarm Group:
PLAT

Description:
This alarm indicates that the maximum number of running processes has reached the major threshold.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdMaxPidLimit

Alarm ID:
TKSPLATMA40

Recovery:

1. Run syscheck in verbose mode.
2. Execute 'pstree' to see what pids are on the system and what process created them. Collect the output of command, and review the output to determine the process responsible for the alarm.
3. It is recommended to contact My Oracle Support and provide the system health check output, and pid output.

32340 - TPD NTP Daemon Not Synchronized Error

Alarm Group:
PLAT

Description:
This alarm indicates that the server is not synchronized to an NTP source and has not been synchronized for an extended number of hours and has reached the major threshold.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdNTPDaemonNotSynchronizedError

Alarm ID:
TKSPLATMA41

Recovery:

1. Verify NTP settings and that NTP sources can be reached.

a. Ensure ntpd service is running.

b. Verify the content of the /etc/ntp.conf file is correct for the server.

c. Verify the ntp peer configuration; execute ntpq -p and analyze the output. Verify peer data, (such as tally code (first column before "remote"), remote, refid, stratum (st), and jitter), are valid for server.

d. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server then ping the ntp peer to determine if peer can be reached.

2. If ntp peer is reachable, restart the ntpd service.

3. If problem persists then a reset the NTP date may resolve the issue.

Note: Prior to the reset of the ntp date the applications may need to be stopped, and subsequent to the ntp reset, the application restarted.

a. To reset date:

- sudo service ntpd stop
- sudo ntpdate <ntp server ip>
- sudo service ntpd start

4. If the problem persists, it is recommended to contact My Oracle Support.

32341 - TPD NTP Daemon Not Synchronized Error

Alarm Group:
PLAT

Description:
This alarm indicates that the server is not synchronized to an NTP source and has never been synchronized since the last configuration change.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdNTPDaemonNeverSynchronized

Alarm ID:
TKSPLATMA42

Recovery:

1. Verify NTP settings and that NTP sources can be reached.
   a. Ensure ntpd service is running.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Verify the ntp peer configuration; execute ntpq -p and analyze the output. Verify peer data, (such as tally code (first column before "remote"), remote, refid, stratum (st), and jitter), are valid for server.
   d. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server then ping the ntp peer to determine if peer can be reached.
2. If the ntp peer is reachable, restart the ntpd service.
3. If the problem persists then a reset the NTP date may resolve the issue.

   Note: Prior to the reset of the ntp date the applications may need to be stopped, and subsequent to the ntp reset, the application restarted.

   a. To reset date:

   - sudo service ntpd stop
   - sudo ntpdate <ntp server ip>
   - sudo service ntpd start

4. If the problem persists, it is recommended to contact My Oracle Support.

32342 - NTP Offset Check Error

Alarm Group:
PLAT

Description:
This alarm indicates the NTP offset of the server that is currently being synced to is greater than the major threshold.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
ntpOffsetCheckError

Alarm ID:
TKSPLATMA43

Recovery:

1. Verify NTP settings and that NTP sources can be reached.
   a. Ensure ntpd service is running.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Verify the ntp peer configuration; execute ntpq -p and analyze the output. Verify peer data, (such as tally code (first column before "remote"), remote, refid, stratum (st), and jitter), are valid for server.
   d. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server then ping the ntp peer to determine if peer can be reached.
2. If the ntp peer is reachable, restart the ntpd service.
3. If the problem persists then a reset the NTP date may resolve the issue.

   Note: Prior to the reset of the ntp date the applications may need to be stopped, and subsequent to the ntp reset, the application restarted.

   a. To reset date:

   - sudo service ntpd stop
   - sudo ntpdate <ntp server ip>
   - sudo service ntpd start

4. If the problem persists, it is recommended to contact My Oracle Support.

32343 - TPD RAID disk

Alarm Group:
PLAT

Description:
This alarms indicates that physical disk or logical volume on RAID controller is not in optimal state as reported by syscheck.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDiskProblem

Alarm ID:
TKSPLATMA44

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support and provide the system health check output.

32344 - TPD RAID controller problem

Alarm Group:
PLAT

Description:
This alarms indicates that RAID controller needs intervention.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDiskCtrlrProblem

Alarm ID:
TKSPLATMA45

Recovery:

1. Run syscheck in verbose mode.
2. Verify firmware is up to date for the server, if not up to date upgrade firmware, and re-run syscheck in verbose mode.

3. It is recommended to contact My Oracle Support and provide the system health check output.

32345 - Server Upgrade snapshot(s) invalid

Alarm Group:
PLAT

Description:
This alarm indicates that upgrade snapshot(s) are invalid and backout is no longer possible.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdUpgradeSnapshotInvalid

Alarm ID:
TKSPLATMA46

Recovery:

1. Run accept to remove invalid snapshot(s) and clear alarms.
2. If the alarm persists, it is recommended to contact My Oracle Support.

32346 - OEM hardware management service reports an error

Alarm Group:
PLAT

Description:
This alarms indicates that OEM hardware management service reports an error.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdOEMHardware

Alarm ID:
TKSPLATMA47

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support and provide the system health check output.

32347 - The hwmgmtcliStatus daemon needs intervention

Alarm Group:
PLAT

Description:
This alarms indicates the hwmgmtcliStatus daemon is not running or is not responding.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHWMGMTCLIProblem

Alarm ID:
TKSPLATMA47

Recovery:

1. Run syscheck in verbose mode.
2. Verify the firmware is up to date for the server, if not up to date upgrade firmware, and re-run syscheck in verbose mode.
3. Determine if the hwmgmtd process is running. If not running verify that it was not administratively stopped.
   - Running "service hwmgmtd status" should produce output indicating that the process is running.

- If not running, attempt to start process "service hwmgmtd status".

4. Determine if the TKLChwmgmtcli process is running. If not running verify that it was not administratively stopped.
   - Running "status TKLChwmgmtcli" should produce output indicating that the process is running.
   - If not running, attempt to start process "start TKLChwmgmtcli".
5. Verify that there are no hwmgmt error messages in /var/log/messages. If there are this could indicate that the Oracle utility is hung. If hwmgmtd process is hung, proceed with next step.
6. It is recommended to contact My Oracle Support and provide the system health check output.

32348 - FIPS subsystem problem

Alarm Group:
PLAT

Description:
This alarm indicates the FIPS subsystem is not running or has encountered errors.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdFipsSubsystemProblem

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support and provide the system health check output.

32349 - File Tampering

Alarm Group:
PLAT

Description:
This alarm indicates HIDS has detected file tampering.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHidsFileTampering

Recovery:

1. It is recommended to contact My Oracle Support.

32350 - Security Process Terminated

Alarm Group:
PLAT

Description:
This alarm indicates that the security process monitor is not running.

Severity:
Major

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSecurityProcessDown

Recovery:

1. It is recommended to contact My Oracle Support.

32500 - Server disk space shortage warning

Alarm Group:
PLAT

Description:
This alarm indicates that one of the following conditions has occurred:

- A file system has exceeded a warning threshold, which means that more than 80% (but less than 90%) of the available disk storage has been used on the file system.
- More than 80% (but less than 90%) of the total number of available files have been allocated on the file system.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDiskSpaceShortageWarning

Alarm ID:
TKSPLATMI1

Recovery:

1. Run syscheck in verbose mode.
2. Examine contents of identified volume in syscheck output to determine if any large files are in the file system. Delete unnecessary files, or move files off of server. Capture output from "du -sx <file system>".
3. Capture output from "df -h" and "df -i" commands.
4. Determine processes using the file system(s) that have exceeded the threshold.
5. It is recommended to contact My Oracle Support, provide the system health check output, and provide additional file system output.

32501 - Server application process error

Alarm Group:
PLAT

Description:
This alarm indicates that either the minimum number of instances for a required process are not currently running or too many instances of a required process are running.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdApplicationProcessError

Alarm ID:
TKSPLATMI2

Recovery:

1. Run syscheck in verbose mode.
2. If the alarm has been cleared, then the problem is solved.
3. If the alarm has not been cleared, determine the run level of the system.
   - If system run level is not 4, determine why the system is operating at that run level.
   - If system run level is 4, determine why the required number of instances processes are not running.
4. For additional assistance, it is recommended to contact My Oracle Support and provide the syscheck output.

32502 - Server hardware configuration error

Alarm Group:
PLAT

Description:
This alarm indicates that one or more of the server's hardware components are not in compliance with specifications (refer to the appropriate hardware manual).

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHardwareConfigError

Alarm ID:
TKSPLATMI3

Recovery:

1. Run syscheck in verbose mode.
2. Contact the hardware vendor to request a hardware replacement.

32503 - Server RAM shortage warning

Alarm Group:
PLAT

Description:
This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdRamShortageWarning

Alarm ID:
TKSPLATMI4

Recovery

1. Refer to MPS-specific documentation for information regarding this alarm.
2. It is recommended to contact the My Oracle Support.

32504 - Software Configuration Error

Alarm Group:
PLAT

Description:
This alarm is generated by the MPS syscheck software package and is not part of the PLAT distribution.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSoftwareConfigError

Recovery

1. It is recommended to contact My Oracle Support.

32505 - Server swap space shortage warning

Alarm Group:
PLAT

Description:
This alarm indicates that the swap space available on the server is less than expected. This is usually caused by a process that has allocated a very large amount of memory over time.

> **Note:** For this alarm to clear, the underlying failure condition must be consistently undetected for a number of polling intervals. Therefore, the alarm may continue to be reported for several minutes after corrective actions are completed.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSwapSpaceShortageWarning

Alarm ID:
TKSPLATMI6

Recovery:

1. Run syscheck in verbose mode.
2. Determine which processes are using swap.
   a. List application processes and determine the process id.

b. Determine how much swap each process is using. One method to determine the amount of swap being used by process is:

- grep VmSwap /proc/<process id>/status

3. It is recommended to contact My Oracle Support, provide the system health check output, and process swap usage.

32506 - Server default router not defined

Alarm Group:
PLAT

Description:
This alarm indicates that the default network route is either not configured or the current configuration contains an invalid IP address or hostname.

> **Caution:** When changing the server's network routing configuration it is important to verify that the modifications will not impact the method of connectivity for the current login session. It is also crucial that this information not be entered incorrectly or set to improper values. Incorrectly modifying the server's routing configuration may result in total loss of remote network access.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDefaultRouteNotDefined

Alarm ID:
TKSPLATMI7

Recovery:

1. Run syscheck in verbose mode.
2. If the syscheck output is: `The default router at <IP_address> cannot be pinged`, the router may be down or unreachable. Do the following:
   a. Verify the network cables are firmly attached to the server and the network switch, router, hub, etc.

b. Verify that the configured router is functioning properly. Check with the network administrator to verify the router is powered on and routing traffic as required.

c. Check with the router administrator to verify that the router is configured to reply to pings on that interface.

d. Rerun syscheck.

3. If the alarm has not cleared, it is recommended to collect the syscheck output and contact My Oracle Support.

32507 - Server temperature warning

Alarm Group:
PLAT

Description:
This alarm indicates that the internal temperature within the server is outside of the normal operating range. A server Fan Failure may also exist along with the Server Temperature Warning.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdServerTemperatureWarning

Alarm ID:
TKSPLATMI8

Recovery:

1. Ensure that nothing is blocking the fan intake. Remove any blockage.
2. Verify that the temperature in the room is normal. If it is too hot, lower the temperature in the room to an acceptable level.

> **Note:** Be prepared to wait the appropriate period of time before continuing with the next step. Conditions need to be below alarm thresholds consistently for the alarm to clear. It may take about ten minutes after the room returns to an acceptable temperature before the alarm cleared.

3. Run syscheck.

4. Replace the filter (refer to the appropriate hardware manual).

> **Note:** Be prepared to wait the appropriate period of time before continuing with the next step. Conditions need to be below alarm thresholds consistently for the alarm to clear. It may take about ten minutes after the filter is replaced before the alarm cleared.

5. Run syscheck.

6. If the problem has not been resolved, it is recommended to contact My Oracle Support.

32508 - Server core file detected

Alarm Group:
PLAT

Description:
This alarm indicates that an application process has failed and debug information is available.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdServerCoreFileDetected

Alarm ID:
TKSPLATMI9

Recovery:

1. It is recommended to contact My Oracle Support to create a service request.

2. On the affected server, run this command:

   ```
   ll /var/TKLC/core
   ```

   Add the command output to the service request. Include the date of creation found in the command output.

3. Attach core files to the My Oracle Support service request.

4. The user can remove the files to clear the alarm with this command:

   ```
   rm -f /var/TKLC/core/<coreFileName>
   ```

32509 - Server NTP Daemon not synchronized

Alarm Group:
PLAT

Description:
This alarm indicates that the NTP daemon (background process) has been unable to locate a server to provide an acceptable time reference for synchronization.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdNTPDeamonNotSynchronizedWarning

Alarm ID:
TKSPLATMI10

Recovery:

1. Verify NTP settings and that NTP sources can be reached.
   a. Ensure ntpd service is running.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Verify the ntp peer configuration; execute ntpq -p and analyze the output. Verify peer data, (such as tally code (first column before "remote"), remote, refid, stratum (st), and jitter), are valid for server.
   d. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server then ping the ntp peer to determine if peer can be reached.
2. If ntp peer is reachable, restart the ntpd service.
3. If problem persists then a reset the NTP date may resolve the issue.

   Note: Before resetting the ntp date, the applications may need to be stopped; and subsequent to the ntp reset, the application restarted.

   a. To reset date:

   - sudo service ntpd stop

- sudo ntpdate <ntp server ip>
- sudo service ntpd start

4. If the problem persists, it is recommended to contact My Oracle Support.

32510 - CMOS battery voltage low

Alarm Group:
PLAT

Description:
The presence of this alarm indicates that the CMOS battery voltage has been detected to be below the expected value. This alarm is an early warning indicator of CMOS battery end-of-life failure which will cause problems in the event the server is powered off.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdCMOSBatteryVoltageLow

Alarm ID:
TKSPLATMI11

Recovery:

1. It is recommended to contact My Oracle Support.

32511 - Server disk self test warning

Alarm Group:
PLAT

Description:
A non-fatal disk issue (such as a sector cannot be read) exists.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdSmartTestWarn

Alarm ID:
TKSPLATMI12

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support.

32512 - Device warning

Alarm Group:
PLAT

Description:
This alarm indicates that either we are unable to perform an `snmpget` command on the configured SNMP OID or the value returned failed the specified comparison operation.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDeviceWarn

Alarm ID:
TKSPLATMI13

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support.

32513 - Device interface warning

Alarm Group:
PLAT

Description:
This alarm can be generated by either an SNMP trap or an IP bond error.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDeviceIfWarn

Alarm ID:
TKSPLATMI14

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support.

32514 - Server reboot watchdog initiated

Alarm Group:
PLAT

Description:
This alarm indicates that the hardware watchdog was not strobed by the software and so the server rebooted the server. This applies to only the last reboot and is only supported on a T1100 application server.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdWatchdogReboot

Alarm ID:
TKSPLATMI15

Recovery:

1. It is recommended to contact My Oracle Support.

32515 - Server HA failover inhibited

Alarm Group:
PLAT

Description:
This alarm indicates that the server has been inhibited and therefore HA failover is prevented from occurring.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHaInhibited

Alarm ID:
TKSPLATMI16

Recovery:

1. It is recommended to contact My Oracle Support.

32516 - Server HA Active to Standby transition

Alarm Group:
PLAT

Description:
This alarm indicates that the server is in the process of transitioning HA state from Active to Standby.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHaActiveToStandbyTrans

Alarm ID:
TKSPLATMI17

Recovery:

1. It is recommended to contact My Oracle Support.

32517 - Server HA Standby to Active transition

Alarm Group:
PLAT

Description:
This alarm indicates that the server is in the process of transitioning HA state from Standby to Active.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHaStandbyToActiveTrans

Alarm ID:
TKSPLATMI18

Recovery:

1. It is recommended to contact My Oracle Support.

32518 - Platform Health Check failure

Alarm Group:
PLAT

Description:
This alarm is used to indicate a configuration error.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHealthCheckFailed

Alarm ID:
TKSPLATMI19

Recovery:

1. It is recommended to contact My Oracle Support.

32519 - NTP Offset Check failure

Alarm Group:
PLAT

Description:
This minor alarm indicates that time on the server is outside the acceptable range (or offset) from the NTP server. The Alarm message will provide the offset value of the server from the NTP server and the offset limit that the application has set for the system.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
ntpOffsetCheckWarning

Alarm ID:
TKSPLATMI20

Recovery:

1. Verify NTP settings and that NTP sources can be reached.
   a. Ensure ntpd service is running.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Verify the ntp peer configuration; execute ntpq -p and analyze the output. Verify peer data, (such as tally code (first column before "remote"), remote, refid, stratum (st), and jitter), are valid for server.
   d. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server then ping the ntp peer to determine if peer can be reached.
2. If ntp peer is reachable, restart the ntpd service.
3. If problem persists then a reset the NTP date may resolve the issue.

   Note: Before resetting the ntp date, the applications may need to be stopped; and subsequent to the ntp reset, the application restarted.

   a. To reset date:

   - sudo service ntpd stop
   - sudo ntpdate <ntp server ip>
   - sudo service ntpd start

4. If the problem persists, it is recommended to contact My Oracle Support.

32520 - NTP Stratum Check failure

Alarm Group:
PLAT

Description:
This alarm indicates that NTP is syncing to a server, but the stratum level of the NTP server is outside of the acceptable limit. The Alarm message will provide the stratum value of the NTP server and the stratum limit that the application has set for the system.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
ntpStratumCheckFailed

Alarm ID:
TKSPLATMI21

Recovery:

1. Verify NTP settings and that NTP sources can be reached.
   a. Ensure ntpd service is running.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Verify the ntp peer configuration; execute ntpq -p and analyze the output. Verify peer data, (such as tally code (first column before "remote"), remote, refid, stratum (st), and jitter), are valid for server.
   d. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server then ping the ntp peer to determine if peer can be reached.
2. If ntp peer is reachable, restart the ntpd service.
3. If problem persists then a reset the NTP date may resolve the issue.

   Note: Before resetting the ntp date, the applications may need to be stopped; and subsequent to the ntp reset, the application restarted.

   a. To reset date:

   - sudo service ntpd stop
   - sudo ntpdate <ntp server ip>
   - sudo service ntpd start

4. If the problem persists, it is recommended to contact My Oracle Support.

32521 - SAS Presence Sensor Missing

Alarm Group:
PLAT

Description:
This alarm indicates that the T1200 server drive sensor is not working.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
sasPresenceSensorMissing

Alarm ID:
TKSPLATMI22

Recovery:

1. It is recommended to contact My Oracle Support to get a replacement sensor.

32522 - SAS Drive Missing

Alarm Group:
PLAT

Description:
This alarm indicates that the number of drives configured for this server is not being detected.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
sasDriveMissing

Alarm ID:
TKSPLATMI23

1. It is recommended to contact My Oracle Support.

32523 - DRBD failover busy

Alarm Group:
PLAT

Description:
This alarm indicates that a DRBD sync is in progress from the peer server to the local server. The local server is not ready to act as the primary DRBD node, since it's data is not up to date.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDrbdFailoverBusy

Alarm ID:
TKSPLATMI24

Recovery

1. A DRBD sync should not take more than 15 minutes to complete. Please wait for approximately 20 minutes, and then check if the DRBD sync has completed. If the alarm persists longer than this time period, it is recommended to contact My Oracle Support.

32524 - HP disk resync

Alarm Group:
PLAT

Description:
This minor alarm indicates that the HP disk subsystem is currently resynchronizing after a failed or replaced drive, or some other change in the configuration of the HP disk subsystem. The output of the message will include the disk that is resynchronizing and the percentage complete. This alarm should eventually clear once the resync of the disk is completed. The time it takes for this is dependent on the size of the disk and the amount of activity on the system.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHpDiskResync

Alarm ID:
TKSPLATMI25

Recovery:

1. Run syscheck in verbose mode.
2. If the percent recovering is not updating, wait at least 5 minutes between subsequent runs of syscheck.
3. If the alarm persists, it is recommended to contact My Oracle Support and provide the syscheck output.

32525 - Telco Fan Warning

Alarm Group:
PLAT

Description:
This alarm indicates that the Telco switch has detected an issue with an internal fan.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdTelcoFanWarning

Alarm ID:
TKSPLATMI26

Recovery:

1. Contact the vendor to get a replacement switch. Verify the ambient air temperature around the switch is as low as possible until the switch is replaced.

Note: My Oracle Support personnel can perform an `snmpget` command or log into the switch to get detailed fan status information.

32526 - Telco Temperature Warning

Alarm Group:
PLAT

Description:
This alarm indicates that the Telco switch has detected the internal temperature has exceeded the threshold.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdTelcoTemperatureWarning

Alarm ID:
TKSPLATMI27

Recovery:

1. Lower the ambient air temperature around the switch as low as possible.
2. If the problem persists, it is recommended to contact My Oracle Support.

32527 - Telco Power Supply Warning

Alarm Group:
PLAT

Description:
This alarm indicates that the Telco switch has detected that one of the duplicate power supplies has failed.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdTelcoPowerSupplyWarning

Alarm ID:
TKSPLATMI28

Recovery:

1. Verify the breaker was not tripped.
2. If the breaker is still good and problem persists, it is recommended to contact My Oracle Support who can perform a `snmpget` command or log into the switch to determine which power supply is failing. If the power supply is bad, the switch must be replaced.

32528 - Invalid BIOS value

Alarm Group:
PLAT

Description:
This alarm indicates that the HP server has detected that one of the setting for either the embedded serial port or the virtual serial port is incorrect.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdInvalidBiosValue

Alarm ID:
TKSPLATMI29

Recovery:

1. Change the BIOS values to the expected values which involves re-booting the server. It is recommended to contact My Oracle Support for directions on changing the BIOS.

32529 - Server Kernel Dump File Detected

Alarm Group:
PLAT

Description:
This alarm indicates that the kernel has crashed and debug information is available.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdServerKernelDumpFileDetected

Alarm ID:
TKSPLATMI30

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support.

32530 - TPD Upgrade Failed

Alarm Group:
PLAT

Description:
This alarm indicates that a TPD upgrade has failed.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
TpdServerUpgradeFailed

Alarm ID:
TKSPLATMI31

Recovery:

1. It is recommended to contact My Oracle Support.

32531 - Half Open Socket Warning Limit

Alarm Group:
PLAT

Description
This alarm indicates that the number of half open TCP sockets has reached the major threshold. This problem is caused by a remote system failing to complete the TCP 3-way handshake.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdHalfOpenSocketWarning

Alarm ID:
TKSPLATMI32

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support.

32532 - Server Upgrade Pending Accept/Reject

Alarm Group:
PLAT

Description:
This alarm indicates that an upgrade occurred but has not been accepted or rejected yet.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdServerUpgradePendingAccept

Alarm ID:
TKSPLATMI33

Recovery:

1. Follow the steps in the application procedure to accept or reject the upgrade.

32533 - TPD Max Number Of Running Processes Warning

Alarm Group:
PLAT

Description:
This alarm indicates that the maximum number of running processes has reached the minor threshold.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdMaxPidWarning

Alarm ID:
TKSPLATMI34

Recovery:

1. Run syscheck in verbose mode.
2. It is recommended to contact My Oracle Support.

32534 - TPD NTP Source Is Bad Warning

Alarm Group:
PLAT

Description:
This alarm indicates that an NTP source has been rejected by the NTP daemon and is not being considered as a time source.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdNTPSourceIsBad

Alarm ID:
TKSPLATMI35

Recovery:

1. Verify NTP settings and that NTP sources can be reached.
   a. Ensure ntpd service is running.
   b. Verify the content of the /etc/ntp.conf file is correct for the server.
   c. Verify the ntp peer configuration; execute ntpq -p and analyze the output. Verify peer data, (such as tally code (first column before "remote"), remote, refid, stratum (st), and jitter), are valid for server.
   d. Execute ntpstat to determine the ntp time synchronization status. If not synchronized or the stratum is not correct for server then ping the ntp peer to determine if peer can be reached.
2. If ntp peer is reachable, restart the ntpd service.
3. If problem persists then a reset the NTP date may resolve the issue.

   Note: Before resetting the ntp date, the applications may need to be stopped; and subsequent to the ntp reset, the application restarted.

   a. To reset date:
   - sudo service ntpd stop
   - sudo ntpdate <ntp server ip>
   - sudo service ntpd start
4. If the problem persists, it is recommended to contact My Oracle Support.

32535 - TPD RAID disk resync

Alarm Group:
PLAT

Description:
This alarm indicates that the RAID logical volume is currently resyncing after a failed/replaced drive, or some other change in the configuration. The output of the message will include the disk that is resyncing. This alarm should eventually clear once the resync of the disk is completed. The time it takes for this is dependent on the size of the disk and the amount of activity on the system (rebuild of 600G disks without any load takes about 75min).

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdDiskResync

Alarm ID:
TKSPLATMI36

Recovery:

1. Run syscheck in verbose mode.
2. If this alarm persists for several hours (depending on a load of a server, rebuilding an array can take multiple hours to finish), it is recommended to contact My Oracle Support.

32536 - TPD Server Upgrade snapshot(s) warning

Alarm Group:
PLAT

Description:
This alarm indicates that upgrade snapshot(s) are above configured threshold and either accept or reject of LVM upgrade has to be run soon, otherwise snapshots will become full and invalid.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdUpgradeSnapshotWarning

Alarm ID:
TKSPLATMI37

Recovery:

1. Run accept or reject of current LVM upgrade before snapshots become invalid.
2. It is recommended to contact My Oracle Support

32537 - FIPS subsystem warning event

Alarm Type:
PLAT

Description:
This alarm indicates that the FIPS subsystem requires a reboot in order to complete configuration.

Severity:
Minor

Instance:
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdFipsSubsystemWarning

Recovery

1. If alarm does not clear on its own, it is recommended to contact My Oracle Support.

32540 - CPU Power limit mismatch

Alarm Group:
PLAT

Description:
The BIOS setting for CPU Power Limit is different than expected.

Severity:
Minor

Instance:
N/A

HA Score:
Normal

Auto Clear Seconds:
0 (zero)

OID:
tpdCpuPowerLimitMismatch

Alarm ID:
TKSPLATMI41

Recovery:

1. It is recommended to contact My Oracle Support.

32700 - Telco Switch Notification

Alarm Group:
PLAT

Description
Telco Switch Notification

Severity
Info

Instance
May include AlarmLocation, AlarmId, AlarmState, AlarmSeverity, and bindVarNamesValueStr

HA Score
Normal

Auto Clear Seconds
86400

OID
tpdTelcoSwitchNotification

Recovery:

1. It is recommended to contact My Oracle Support.

32701 - HIDS Initialized

Alarm Group:
PLAT

Description:
This alarm indicates HIDS was initialized.

Default Severity:
Info

OID:
tpdHidsBaselineCreated

Recovery:

1. It is recommended to contact My Oracle Support.

32702 - HIDS Baseline Deleted

Alarm Group:
PLAT

Description:
HIDS baseline was deleted.

Default Severity:
Info

OID:
tpdHidsBaselineDeleted

Recovery:

1. It is recommended to contact My Oracle Support.

32703 - HIDS Enabled

Alarm Group:
PLAT

Description:
HIDS was enabled.

Default Severity:
Info

OID:
tpdHidsEnabled

Recovery:

1. It is recommended to contact My Oracle Support.

32704 - HIDS Disabled

Alarm Group:
PLAT

Description:
HIDS was disabled.

Default Severity:
Info

OID:
tpdHidsDisabled

Recovery:

1. It is recommended to contact My Oracle Support.

32705 - HIDS Monitoring Suspended

Alarm Group:
PLAT

Description:
HIDS monitoring suspended.

Default Severity:
Info

OID:
tpdHidsSuspended

Recovery:

1. It is recommended to contact My Oracle Support.

32706 - HIDS Monitoring Resumed

Alarm Group:
PLAT

Description:
HIDS monitoring resumed.

Default Severity:
Info

OID:
tpdHidsResumed

Recovery:

1. It is recommended to contact My Oracle Support.

32707 - HIDS Baseline Updated

Alarm Group:
PLAT

Description:
HIDS baseline updated.

Default Severity:
Info

OID:
tpdHidsBaselineUpdated

Recovery:

1. It is recommended to contact My Oracle Support.

QP (70000-70999)

The QBus Platform (QP) software provides an execution environment for Java-based applications, which are the Multiprotocol Routing Agent (MRA) devices, Multimedia Policy Engine (MPE) devices, or the Configuration Management Platform (CMP) server. QP provides common interfaces into databases, event logging, SNMP, and cluster state. Two servers in the cluster provide 1+1 High-Availability (HA) protection. The application executes on one server. The other server acts as a hot standby in case the first server fails to provide service.

70001 – QP_procmgr failed

Alarm Type
QP

Description
The QP`-procmgr` process has failed. This process manages all PCRF software.

Default Severity
Critical

Instance
N/A

HA Score
Failed

Clearing Action
This alarm is cleared by `qp-procmgr` after `qp-procmgr` is restarted.

OID
QPProcmgrFailed

Recovery:

1. If the alarm does not clear automatically within a few seconds, or if the alarm occurs frequently, contact My Oracle Support.

70002 – QP Critical process failed

Alarm Type
QP

Description
The `QP_procmgr` has detected that one of the critical processes it monitors has failed.

Default Severity
Critical

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically.

OID
QPCriticalProcFailed

Recovery:

1. This alarm automatically clears as Policy processes are restarted.
2. If the alarm does not clear automatically within a few seconds, or if the alarm occurs frequently, contact My Oracle Support.

70003 – QP Non-critical process failed

Alarm Type
QP

Description
The `QP_procmgr` has detected that one of the non-critical processes it monitors has failed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 seconds.

OID
QPNonCriticalProcFailed

Recovery:

1. If the alarm occurs infrequently, monitor the health of the system.
2. If the alarm occurs frequently, contact My Oracle Support.

70004 – QP Processes down for maintenance

Alarm Type
QP

Description
The QP processes have been brought down for maintenance.

Default Severity
Major

Instance
N/A

HA Score
Failed

Clearing Action
This alarm clears when the QP processes are restarted and exit maintenance.

OID
QPMaintShutdown

Recovery:

1. If the alarm is occurring, confirm that the server is down for maintenance.

70007 - QP Resource Not Ready

Alarm Type: QP

Description: Not all QP resources are ready.

Severity: Critical

Instance: N/A

HA Score: Failed

Clearing Action: To clear the alarm, one of the following conditions must be met:

- All route resources managed by QP are functional.
- The alarm auto clears after 300 sec.

OID: QPResourceNotReady

Recovery:

Note: Static routes will be reapplied during the promotion of a node to Active. If a failure occurs while reapplying static routes, promoting a node to Active in turn will fail.

Note: Currently, only the route resource is managed by QP.

Note: The main log location for troubleshooting route resource not ready issues is here:`/var/camiant/log/qpRouteTool.log`. Trace logs for `qp_procmgr` and `routemgr` may be needed for troubleshooting. Trace logs can be captured using commands:`tr.cat qp_procmgr > / qp_procmgr.trace tr.cat routemgr > /routemgr.trace`

1. If the original Active node can go back to Active, the current node will be demoted after failure. In this situation, no workaround is needed because the system will recover automatically. However, you need to check the reason that applying routes fails so that it does not occur in the next failover.
2. If the original Active node can not go back to Active, the current node will repeatedly attempt to go Active. It will not become Active until the application of static routes is successful. In this situation, the reason for the failure needs to be checked case by case so that the system can be recovered.

70010 – QP Failed Server-backup Remote Archive Rsync

Alarm Type
QP

Description
A scheduled backup failed to synchronize the local server-backup archive with the remote server-backup archive.

- Hostname=<hostname | IPaddr>
- path=<path>
- errorcode=<rsync error>

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 64800 seconds (18 hours).

OID
QPServerBackupRsyncFailed

Recovery:

1. Check that the parameters are correct; take corrective action based on the returned error code details for alarms 70010 and 70011. Then re-attempt server-backup remote archive synchronization.

70011 – QP Failed System-backup Remote Archive Rsync

Alarm Type
QP

Description
A scheduled backup failed to synchronize the local system-backup archive with the remote system-backup archive.
Hostname=<host name | IP addr>, user=<user>, path=<path>,errorcode=<rsync error>

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 64800 seconds (18 hours).

OID
QPSystemBackupRsyncFailed

Recovery:

1. Check that the parameters are correct; take corrective action based on the returned error code details for alarms 70010 and 70011. Then re-attempt server-backup remote archive synchronization.

70012 – QP Failed To Create Server Backup

Alarm Type
QP

Description
A scheduled backup failed to create the local server-backup file.
Failure-reason=<errorcode>

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 64800 seconds (18 hours).

OID
QPServerBackupFailed

Recovery:

1. Check that the parameters are correct; take corrective action based on the returned error code details for alarms 70010 and 70011. Then re-attempt server-backup remote archive synchronization.

70013 – QP Failed To Create System Backup

Alarm Type
QP

Description
A scheduled backup failed to create the local system-backup file.
Failure-reason=<errorcode>

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 64800 seconds (18 hours).

OID
QPSystemBackupFailed

Recovery:

1. Check that the parameters are correct; take corrective action based on the returned error code details for alarms 70010 and 70011. Then re-attempt server-backup remote archive synchronization.

70015 – Route Add Failed

Alarm Type
QP

Description
VIP Route Add Failed — VIP route add failed to re-apply during VIP event.
The alarm displays the following information:

- IP-Type
- Route-Type
- Network
- Destination
- Gateway-Address
- Error Message

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 3600 seconds (60 minutes).

OID
QpAddRouteFailed

Recovery:

1. Use Platcfg Routing menu to repair the route manually.

70016 – No Available VIP Route

Alarm Type
QP

Description
This alarm is raised when the application of a route item with VIP as the preferred source fails because the VIP is not configured.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
When VIP becomes available, this alarm is cleared. If the route item is deleted, this alarm is also cleared.

OID
QPNoVipForRoute

Recovery:

1. Check route configuration.
2. If route is configured correctly, this alarm can be ignored.

70017 – No Available Static IP

Alarm Type
QP

Description
This alarm is raised when the application of a route item with STATIC IP as preferred source fails because the STATIC IP is not available.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
When a STATIC IP becomes available, this alarm is cleared. If the route item is deleted, this alarm is also cleared.

OID
QPNoStaticIPForRoute

Recovery:

1. Check the route configuration and check the STATIC IP status.
2. Check route configuration; if route is configured correctly, this alarm can be ignored.

70020 – QP Master database is outdated

Alarm Type
QP

Description
The current MYSQL master server has an outdated database.

Default Severity
Critical

Instance
N/A

HA Score
Degraded

Clearing Action
This alarm clears when the master server either is made a slave server or if a database restore action clears the condition.

OID
QPMySQLMasterOutdated

Recovery:

1. Once the condition has occurred, the 80003 event will be sent once a minute. Wait until all of the expected servers are being reported. It is important to wait because

the best slave might be undergoing a restart and its DB Level will not be known until after the restart completes.

2. Use the information in 80003 to select the new master candidate.
3. Except for the current master and the master candidate, put all of the other servers into forced standby.
4. If the best secondary server is in the same cluster (the most common case), perform a failover by restarting the current active blade. If the best secondary server is in a separate cluster, then a site promotion is necessary.
5. Remove the forced standby settings on the other slaves.
6. If none of the slaves are good candidates, perform a database restore.
   a. Put all of the slave servers into forced standby state.
   b. Perform a restore on the active server.

      The restore will clear the condition.

   c. Take the slave servers out of the standby state.

70021 – QP slave database is unconnected to the master

Alarm Type
QP

Description
The MySQL slave is not connected to the master.

Default Severity
Major

Instance
N/A

HA Score
Failed

Clearing Action
This alarm clears automatically when the slave server connects to the master server.

OID
QPMySQLSlaveUnconnected

Recovery:

1. No action required unless the alarm does not clear within a few hours.
2. If the problem persists, contact My Oracle Support.

70022 – QP Slave database failed to synchronize

Alarm Type
QP

Description
The MySQL slave failed to synchronize with the master.

Default Severity
Major

Instance
N/A

HA Score
Failed

Clearing Action
This alarm clears when the slave server synchronizes with the master server.

OID
QPMySQLSlaveSyncFailure

Recovery:

1. No action required unless the alarm does not clear within a few hours.
2. If the problem persists, contact My Oracle Support.

70023 – QP Slave database lagging the master

Alarm Type
QP

Description
The MySQL slave is lagging the master —The MYSQL slave server is connected to the master server but its database has fallen behind the master database.

Default Severity
Minor

Instance
N/A

HA Score
Degraded

Clearing Action
This alarm clears automatically when the slave database is synchronized with the master database.

OID
QPMySQLSlaveLagging

Recovery:

1. No action required unless the alarm does not clear within a few hours or the condition is repeatedly set and cleared.
2. If either of the problems persists, contact My Oracle Support.

70024 - QP Slave database is prevented from synchronizing with the master

Alarm Type
QP

Description
The MySQL slave has been prevented from synchronizing with the master—The MySQL slave database has been prevented from synchronization with the master database because the master database is outdated.

Default Severity
Critical

Instance
N/A

HA Score
Degraded

Clearing Action
This alarm clears when the slave database is synchronized with the master database. This alarm is set on the slave server and will only occur when the active server on the primary site has set alarm 70020. This alarm clears automatically when the slave database is synchronized with the master database.

OID
QPMySQLSlaveSyncPrevented

Recovery:

1. Diagnose the CMP master server to clear its 70020 alarm.
2. Once alarm 70020 is cleared, the slave server will clear alarm 70024.

70025 – QP Slave database is a different version than the master

Alarm Type
QP

Description
The MySQL slave has a different schema version than the master.
This alarm is set by the CMP Slave Server during a CMP Server Upgrade or Backout, when the CMP Master Server DB is a different version than the CMP Slave Server DB.

Default Severity
Critical

Instance
N/A

HA Score
Normal

Clearing Action
The slave server clears the alarm when the master DB version is equal to the slave DB version.

OID
QPMySQLSchemaVersionMismatch

Recovery:

1. The Slave Server clears the alarm when the Master Server and the Slave Server again have the same version.

70026 – QP Server Symantec NetBackup Operation in Progress

Alarm Type
QP

Description
Server is performing a Symantec NetBackup Operation.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Alarm clears when the NetBackup client operation has completed.

OID
QPNetBackupInProgress

Recovery:

1. When operation is complete, alarm should clear.
2. If the alarm does not clear within a few hours, then check the NetBackup Server logs.
3. If the NetBackup Server logs have no errors or if the alarm is occurring over and over, contact My Oracle Support.

70027 – QP Server Network Config Error

Alarm Type
QP

Description
QP Server Network Error.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Autoclears in 1800 seconds (30 minutes).

OID
QPServerNetworkConfigError

Recovery

1. Correct the indicated networking configuration.
2. If the problem persists, contact My Oracle Support.

70028 – QP bonded interface is down

Alarm Type
QP

Description
OAM bonded interface bond0 is down; Signaling bonded interface bond1 is down; Signaling bonded interface bond2 is down.

Default Severity
Critical

Instance
OAM, SIGA, SIGB

HA Score
Degraded

Clearing Action
Process `qp_hamonitor` has detected the VIP is not defined on this bonded network interface; VIP is defined on this bonded network interface and `qp_hamonitor` process has detected the interface is up.

OID
QPBondedInterfaceDown

Recovery:

1. Reset the OAM network interface and run process `qp_hamonitor` to clear the alarm.
2. If the `qp_hamonitor` process does not clear the alarm, or if the alarm does not clear automatically, or if the alarm is persists, contact My Oracle Support

70029 – QP peer node bonded interface is down

Alarm Type
QP

Description
QP Peer Node ${*host name*} (${*ip addr*}) bonded interface bond0 (OAM) is down.

Default Severity
Critical

Instance
Peer_OAM

HA Score
Normal

Clearing Action
Process `qp_hamonitor` will clear the alarm once the OAM network interface is up. The alarm will also clear automatically after 60 seconds.

OID
QPPeerBondedInterfaceDown

Recovery:

1. Reset the OAM network interface and run process `qp_hamonitor` to clear the alarm.
2. If the `qp_hamonitor` process does not clear the alarm, or if the alarm does not clear automatically, or if the alarm is persists, contact My Oracle Support

70030 – QP backplane bonded interface is down

Alarm Type
QP

Description
Backplane bonded interface is down.

Default Severity
Critical

Instance
Backplane_bond3

HA Score
Normal

Clearing Action
Process `qp_hamonitor` has detected the bonded backplane network interface has been restored or the alarm has been raised for 60 seconds.

OID
QPBackplaneBondedInterfaceDown

Recovery:

1. Restore the bonded backplane network interface that is down and the `qp_hamonitor` process will clear the alarm.

70031 – QP degrade because one or more interfaces are down

Alarm Type
QP

Description
HA status is degraded because selected interface(s) (${*OAM, SIGA, or SIGB*}) are down.

Default Severity
Critical

Instance
OAM or SIGA or SIGB

HA Score
Failed

Clearing Action
Alarm clears when process `qp_hamonitor` has detected all OAM, SIGA and SIGB network interfaces are up. Alarm also clears automatically after 60 seconds.

OID
QPInterfacesDegrade

Recovery:

1. Reset the interfaces that are down and run the `qp_hamonitor` process to clear the alarm.
2. If this does not clear the alarm, or if the alarm does not automatically clear, or if the alarm persists, contact My Oracle Support.

70032 – QP direct link does not work as configuration

Alarm Type
QP

Description
QP degrade because one or more interfaces are down.
This alarm is due to the incorrect configuration of backplane so that it cannot be applied to the system.

Default Severity
Notice

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
QPBpMismatch

Recovery:

1. Check the validity of backplane IP Address and Comcol table LogicPath.

70038 – QP has blocked IPv4 traffic on an OAM interface

Alarm Type
QP

Description
This alarm is raised on each server if IPv4 is blocked on an OAM. After `qpIPv4Harvest --block_oam_ipv4` is finished successfully, this alarm is raised.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm is cleared by `qpIPv4Harvest –harvest_oam_only` or `qpIPv4Harvest –harvest_oam_all`.

OID
QPHasBlockedIPv4

Recovery:

1. Rollback changes in `qpIPv4Harvest –block_oam_ipv4`; Or continue to run `qpIPv4Harvest –harvest_oam_only`.

70039 – QP has blocked IPv4 traffic on all interfaces

Alarm Type
QP

Description
This alarm is raised on each server if IPv4 is blocked on all interfaces. After `qpIPv4Harvest –block_all_ipv4` is finished successfully, this alarm is raised.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm is cleared by `qpIPv4Harvest –harvest_all`.

OID
QPHasBlockedIPv4

Recovery:

1. Rollback changes in `qpIPv4Harvest –block_all_ipv4`; Or continue to run `qpIPv4Harvest –harvest_all`.

70040 – Failure to block IPv4 on the OAM interface

Alarm Type
QP

Description
This alarm is raised when there is a failure to block IPv4 on an OAM interface.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm will be cleared automatically in 60 minutes. Or it can be cleared once the cluster/site has successfully blocked IPv4 on an OAM interface.

OID
QPFailedToBlockOAMIpv4

Recovery:

1. Correct the error conditions and run `qpIPv4Harvest –block_oam_ipv4` again.

70041 – Failure to block IPv4 on the all interfaces

Alarm Type
QP

Description
This alarm is raised when there is a failure to block IPv4 on all interfaces.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm will be cleared automatically in 1 hour. Or it can be cleared once the cluster/site has successfully blocked IPv4 on all interfaces.

OID
QPFailedToBlockAllIpv4

Recovery:

1. Correct the error conditions, and run `qpIPv4Harvest -block_all_ipv4` again.

70042 – Failure to remove OAM IPv4 addresses from the cluster/site

Alarm Type
QP

Description
This alarm is raised when there is a failure to remove OAM IPv4 addresses from cluster/site

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm will be cleared automatically in 1 hour. Or it can be cleared once the OAM IPv4 addresses are successfully removed.

OID
QPFailedToRemoveOAMIpv4

Recovery:

1. Correct the error conditions and do the harvest again.

70043 – Failure to remove all IPv4 addresses from the cluster/site

Alarm Type
QP

Description
This alarm is raised when there is a failure to remove all IPv4 addresses from cluster/site.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm will be cleared automatically in 1 hour. Or it can be cleared once all IPv4 addresses are successfully removed.

OID
QPFailedToRemoveAllIpv4

Recovery:

1. Correct the error conditions and do harvest again.

70044 – Failure to rollback changes for removing IPv4 addresses

Alarm Type
QP

Description
This alarm is raised when there is a failure to rollback changes for removing IPv4 addresses.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm will be cleared automatically in 1 hour. Or it can be cleared once the rollback action finished successfully.

OID
QPFailedToRollbackRecaptureIpv4

Recovery:

1. Correct the error conditions and do the rollback again.

70045 – DNS Server is not available

Alarm Type
QP

Description
If DNS servers are configured on PCRF nodes, those nodes will use DNS servers. Process qp_monitor will check DNS availability at the runtime of every node. If a DNS server is found unavailable, QP alarm 70045 is triggered.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm will be cleared automatically after 120 seconds.

OID
QPDNSServerIsNotAvailable

Recovery:

1. If the alarm message is **No reply from server**, the server could not be reached or the connection has timed out. To resolve:
   a. Check the route and firewall settings from the PCRF node reporting the alarm to determine if a DNS server can be accessed.
   b. Repair the access to the specific DNS server.
2. If the alarm message is **Internal error** the DNS server IP address format is incorrect. To resolve:
   a. Use Platcfg commands `Policy Configuration -> Perform Initial Configuration` to check the IP address format of the DNS server:

70050 – QP Timezone change detected

Alarm Type
QP

Description
Time zone has been changed using `platcfg` commands `Server Configuration -> Time Zone -> Edit`. The application needs to be restarted after this change.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears when the application is restarted (`qp_procmgr` restarted). This is not an auto-clear alarm.

OID
QPTimezonechangedetected

Recovery:

1. Log in to the server with root privileges.
2. Execute the command `service qp_procmgr restart`.
3. If the alarm persists, collect savelogs and contact My Oracle Support.

70500 – System Mixed Version

Alarm Type
QP

Description
There are multiple software versions running in the system because of an upgrade or backout. This alarm is raised when the upgrade director determines that different versions of code are running in the topology. This is expected during an upgrade. It is intended to be a signal that further upgrade activity is required before the system is fully consistent.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
SystemMixedVersion

Recovery:

1. The upgrade director will clear this condition once all servers are running a consistent version.
2. If the alarm does not clear automatically, contact My Oracle Support.

70501 – Cluster Mixed Version

Alarm Type
QP

Description
There are multiple software versions running in a cluster because of an upgrade or backout. Since the cluster is in mixed version, its behavior is likely to be impaired (for example, loss of redundancy/replication). Certain operations may not be possible for the cluster while this alarm is asserted. This alarm is raised when the upgrade director determines that different versions of code are running in the specified cluster. This is expected during an upgrade. It is intended to be a signal that further upgrade activity is required before the cluster is fully consistent.

Default Severity
Minor

Instance
The Comcol ID of the cluster.

HA Score
Normal

Clearing Action
N/A

OID
ClusterMixedVersion

Recovery:

1. The upgrade director will clear this condition once all servers in the cluster are running a consistent version.
2. If the alarm does not clear automatically, contact My Oracle Support.

70502 – Cluster Replication Inhibited

Alarm Type
QP

Description
The upgrade director will inhibit replication to a server if it determines that replication would result in a corrupted database. This can happen if there is an incompatibility between different versions.

Default Severity
Minor

Instance
The Comcol ID of the server.

> **Note:** The alarm text will contain the proper host name of the server.

HA Score
Normal

Clearing Action
N/A

OID
ClusterReplicationInhibited

Recovery:

1. Once the server completes the upgrade or backout, the upgrade director will clear the inhibition and the alarm.
2. If the alarm does not clear automatically, contact My Oracle Support.

70503 – Server Forced Standby

Alarm Type
QP

Description
The upgrade director will place a server into forced standby if it is NOT running the same version of software as the active server in the cluster. This alarm signals that the upgrade director has taken this action.

Default Severity
Minor

Instance
The Comcol ID of the server.

> **Note:** The alarm text will contain the proper hostname of the server.

HA Score
Normal

Clearing Action
N/A

OID
ServerForcedStandby

Recovery:

1. When the server completes the upgrade or backout, the upgrade director will take the server out of forced standby.
2. If the alarm does not clear automatically, contact My Oracle Support.

70505 – ISO Mismatch

Alarm Type
QP

Description
The server's ISO is not the expected version. This alarm is raised when the upgrade director determines that the 'pending ISO' (the one that would be installed if we attempted an upgrade) is not consistent with what is expected (for example, the wrong version).

Default Severity
Minor

Instance
The Comcol ID of the server.

> **Note:** The alarm text will contain the proper host name of the server.

HA Score
Normal

Clearing Action
N/A

OID
ISOMismatch

Recovery:

1. Have the operator remove the offending ISO from `/var/TKLC/log` on the affected machine.
2. If the alarm does not clear automatically, contact My Oracle Support.

70506 – Upgrade Operation Failed

Alarm Type
QP

Description
An action initiated by the upgrade director has failed. Click **Alarm Details** associated with the alarm in the CMP GUI to find the root cause of the failed upgrade action.

Default Severity
Minor

Instance
The Comcol ID of the server.

> **Note:** The alarm text will contain the proper host name of the server.

HA Score
Normal

Clearing Action
N/A

OID
UpgradeOperationFailed

Recovery:

1. Make changes as detailed in the **Alarm Detail** associated with the alarm and then re-attempt the failed upgrade action.
2. If the issues cannot be resolved, collect savelogs and contact My Oracle Support.

70507 – Upgrade In Progress

Alarm Type
QP

Description
An upgrade or backout action on a server is in progress.

Default Severity
Minor

Instance
The Comcol ID of the server.

> **Note:** The alarm text will contain the proper host name of the server.

HA Score
Normal

Clearing Action
N/A

OID
UpgradeInProgress

Recovery:

1. Once the upgrade/backout process has completed, the upgrade director will clear this alarm.
2. If the alarm does not clear automatically, contact My Oracle Support.

70508 – Server Is Zombie

Alarm Type
QP

Description
A server has failed an upgrade or backout and now is in an unknown state.

Default Severity
Critical

Instance
The Comcol ID of the server.

Note: The alarm text will contain the proper host name of the server.

HA Score
Normal

Clearing Action
N/A

OID
ServerIsZombie

Recovery:

1. If alarm 70506 is also triggered, make changes as detailed in the **Alarm Detail** associated with alarm 70506 and then re-attempt the failed upgrade action to resolve both alarms.
2. If the alarm persists, collect savelogs and contact My Oracle Support.

Policy Server Alarms (71000-79999)

This section provides a list of Policy Server alarms (71000-79999) which are generated by policy devices, such as MPE devices and MRA devices.

71001 – Remote Diversion Not Possible

Alarm Type
PCRF

Description
This alarm occurs when all other associated MRA devices are currently unavailable for remote diversion.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Auto clear after 7200 seconds.

OID
RemoteDiversionNotPossible

Recovery:

1. If the problem persists, contact My Oracle Support.

71002 – OM Stats Parse Error

Alarm Type
PCRF

Description
OM statistics task could not parse statistics information.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Auto clears after 7200 seconds or when OM statistics are run again.

OID
OmStatsParseError

Recovery:

1. Check to ensure Policy server version is the same as the CMP version. If the versions are different, upgrade the server version to be the same as the CMP version.

71003 – OM Stats Exception Error

Alarm Type
PCRF

Description
OM statistics task could not generate particular statistics due to an exception.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Auto clear after 7200 seconds (120 minutes) or when OM statistics are run again.

OID
OmStatsExceptionError

Recovery:

1. Check to ensure Policy server version is the same as the CMP version. If the versions are different, upgrade the server version to be the same as the CMP version.

2. Check MySQL status to ensure there is not an exception in the DC log.

71004 – AM Conn Lost

Alarm Type
PCRF

Description
AM socket closed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
AM connection restored to remote peer.

OID
AMConnLost

Recovery:

1. Check the availability of the AM.
2. Check the AM log for a recent failover or other operations that can interrupt communications.
3. If the AM has not failed, make sure that the path from the AM to the MPE device (port 3918) is operational.
4. If the problem persists, contact My Oracle Support.

71005 – OM Stats Value Exceed Error

Alarm Type
PCRF

Description
OM statistics value has been truncated to fit the data size.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Auto clears after 7200 seconds or when OM statistics are run again.

OID
OmStatsValueExceedError

Recovery:

1. Check whether the list of IP addresses in a Network Element Diameter SCTP connection association value exceeds 255 in length. If found, correct the value length.

71101 – DQOS Downstream Connection Closed

Alarm Type
PCRF

Description
DQoS Downstream connection is closed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
DQoS connection restored to a remote peer.

OID
DqosDownstreamConnectionClosed

Recovery:

1. Check configuration and availability of the downstream element.
2. Check the downstream element for a reboot or other service interruption.
3. .If the downstream element has not failed, make sure that the network path from the MPE device to the downstream element is operational.
4. If the problem persists, contact My Oracle Support.

71102 – MSC Conn Lost

Alarm Type
PCRF

Description
MSC connection lost. The connection was lost to the specified CMTS or downstream policy server.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to a remote peer is restored.

OID
MSCConnLost

Recovery:

1. Check configuration and availability of the network element.
2. Check the network element for a reboot or other service interruption.
3. If the element has not failed, make sure that the network path from the MPE device to the element (port 3918) is operational.
4. If the problem persists, contact My Oracle Support.

71103 – PCMM Conn Lost

Alarm Type
PCRF

Description
PCMM connection lost. The connection was lost to the specified CMTS or downstream policy server.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Alarm clears when the connection to a remote peer is restored. The alarm also clears automatically after 7200 seconds.

OID
PCMMConnLost

Recovery:

1. Check configuration and availability of the network element.
2. Check the network element for a reboot or other service interruption.

3. If the element has not failed, make sure that the network path from the MPE device to the element (port 3918) is operational.
4. If the problem persists, contact My Oracle Support.

71104 – DQOS AM Connection Closed

Alarm Type
PCRF

Description
DQoS AM Connection Closed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to a remote peer is restored.

OID
DqosAmConnectionClosed

Recovery:

1. If the problem persists, contact My Oracle Support.

71204 – SPC Conn Closed

Alarm Type
PCRF

Description
SPC connection closed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to a remote peer is restored.

OID
SPCConnClosed

Recovery:

1. Check configuration and availability of the SPC element. Check the MPE device for a reboot or other service interruption.
2. If the MPE device has not failed, make sure that the network path from the MPE device to the SPC device is operational.
3. If the problem persists, contact My Oracle Support.

71402 – Connectivity Lost

Alarm Type
PCRF

Description
Diameter connection socket is closed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 7200 seconds or the connection to a Diameter peer is restored.

OID
ConnectivityLost

Recovery:

1. Check the configuration and availability of the network element.
2. Check the network element for a reboot or other service interruption.
3. If the network element has not failed, ensure the network path from the device to the network element is operational.
4. If the problem persists, contact My Oracle Support.

71403 – Connectivity Degraded

Alarm Type
PCRF

Description
A connection with a Diameter peer has been closed by a network element.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 7200 seconds or the connection to a Diameter peer is restored.

OID
ConnectivityDegraded

Recovery:

1. Check the configuration and availability of the network element.
2. Check the network element for a reboot or other service interruption.
3. If the network element has not failed, ensure the network path from the device to the network element is operational.
4. If the problem persists, contact My Oracle Support.

71408 – Diameter New Conn Rejected

Alarm Type
PCRF

Description
Diameter new connection rejected as an already functioning one exists. A Diameter peer (identified by its Diameter Identity) attempted to establish a connection with the device although it already has a valid connection. The Diameter protocol allows only one connection from a particular peer.

> **Note:** This situation only occurs when DIAMETER.AllowMultipleConnectionsPerPeer is set to false, or when the multiple connections setting is turned off on the Advanced Settings of the Policy Server tab in the CMP system.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 300 seconds.

OID
DIAMETERNewConnRejected

Recovery:

1. Check the peer configuration and ensure that the peer sees a valid connection with the device.
2. If the problem persists, contact My Oracle Support.

71414 – SCTP Path Status Changed

Alarm Type
PCRF

Description
SCTP Path Status Changed. Occurs when an MPE or MRA device is multihoming. The alarm occurs when one path fails, and clears when the path becomes available again. If the path that is currently transmitting Diameter messages fails, the alarm is triggered when the SCTP association tries to send the next Diameter message. If the path is not transmitting Diameter messages (it is a backup) then it may take up to 30 seconds for the alarm to be triggered, since heartbeat chunks are sent every 30 seconds.

Default Severity
Minor

Instance
Peer address + Association ID

HA Score
Normal

Clearing Action
This alarm clears automatically after 7200 seconds (2 hours).

OID
SctpPathStatusChanged

Recovery:

1. If the problem persists, contact My Oracle Support.

71605 – LDAP Conn Failed

Alarm Type
PCRF

Description
Connection to LDAP server failed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to LDAP server is restored or clears automatically after 7200 seconds (2 hours).

OID
LdapConnFailed

Recovery:

1. Verify that there is no problem with the LDAP server or the network path used to reach the server.
2. If the problem persists, contact My Oracle Support.

71630 – DHCP Unexpected Event ID

Alarm Type
PCRF

Description
DHCP Communication exception.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Next successful DHCP operation will clear this alarm.

OID
DHCPUnexpectedEventId

Recovery:

1. If the problem persists, contact My Oracle Support.

71631 – DHCP Unable to Bind Event ID

Alarm Type
PCRF

Description
DHCP unable to bind event ID.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Next successful DHCP bind operation will clear this alarm or clears automatically after 60 seconds.

OID
DHCPUnableToBindEventId

Recovery:

1. If this alarm occurs infrequently, monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

71632 – DHCP Response Timeout Event ID

Alarm Type
PCRF

Description
DHCP Response Timeout Event Id.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 seconds.

OID
DHCPResponseTimeoutEventId

Recovery:

1. If this alarm occurs infrequently, then monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

71633 – DHCP Bad Relay Address Event ID

Alarm Type
PCRF

Description
DHCP bad relay address event id.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 30 seconds.

OID
DHCPBadRelayAddressEventId

Recovery:

1. If this alarm occurs infrequently, then monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

71634 – DHCP Bad Primary Address Event ID

Alarm Type
PCRF

Description
DHCP no primary address specified.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 30 seconds.

OID
DHCPBadPrimaryAddressEventId

Recovery:

1. If this alarm occurs infrequently, then monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

71635 – DHCP Bad Secondary Address Event ID

Alarm Type
PCRF

Description
DHCP no secondary address specified.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 30 seconds.

OID
DHCPBadSecondaryAddressEventId

Recovery:

1. If this alarm occurs infrequently, then monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

71684 – SPR Connection Closed

Alarm Type
PCRF

Description
SPR Closing a secondary connection to revert to primary connection.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to SPR is restored.

OID
SPRConnectionClosed

Recovery:

1. If the problem persists, contact My Oracle Support.

71685 – MSR DB Not Reachable

Alarm Type
PCRF

Description
Unable to connect to Multimedia Subscriber Repository (MSR) after several attempts.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to MSR is restored.

OID
MSRDBNotReachable

Recovery:

1. Verify that there is no problem with the MSR server or the network path used to reach the server.
2. If the problem persists, contact My Oracle Support.

71702 – BRAS Connection Closed

Alarm Type
PCRF

Description
BRAS Connection Closed. The MPE device lost a connection to the B-RAS element of the gateway.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to BRAS is restored.

OID
BrasConnectionClosed

Recovery:

1. Check availability of the gateway.
2. If the gateway has not failed, make sure that the path from the gateway to the MPE is operational.

3. If the problem persists, contact My Oracle Support.

71703 – COPS Unknown Gateway

Alarm Type
PCRF

Description
COPS Unknown Gateway. An unknown gateway is trying to establish a COPS-PR connection to the MPE device.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
COPS network element is associated with MPE device.

OID
COPSUnknownGateway

Recovery:

1. Check the configuration of the network elements in the CMP system. There should be a B-RAS network element for this gateway and that B-RAS must be associated with this MPE device.
2. Make sure that the configuration of the B-RAS network element is consistent with the provisioned information on the gateway.

   The network element name in the CMP system must match the provisioned router name on the gateway.
3. If the problem persists, contact My Oracle Support.

71801 – PCMM No PCEF

Alarm Type
PCRF

Description
This alarm is raised when the MPE cannot find the PCEF. The alarm is disabled by default unless the user sets `RC.TrapNoPcefEnabled` to true in `RcMgr`. This update occurs in both the MPE-R and MPE-S. The SubId in the alarm details is actually CMTSIP if the MPE uses CMTSIP to find PCEF when it receives PCMM requests. The PCMM requests may be GateSet/GateInfo/GateDelete.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 seconds.

OID
PCMMNoPCEF

Recovery:

1. If this alarm occurs infrequently, monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

71805 – PCMM Non Connection PCEF

Alarm Type
PCRF

Description
PCMM Non Connection to PCEF.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 seconds.

OID
PCMMNonConnectionPCEF

Recovery:

1. If this alarm occurs infrequently, monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

72198 – SMSR SMSC Switched to Primary

Alarm Type
PCRF

Description
Switched to primary Short Message Service Center (SMSC). Switched from Secondary to Primary SMSC.

Default Severity
Minor

Instance
SMSC address

HA Score
Normal

Clearing Action
This alarm automatically clears after 60 minutes (3600 seconds).

OID
SMSRSMSCSwitchedToPrimary

Recovery:

1. No action necessary.

72199 – SMSR SMSC Switched to Secondary

Alarm Type
PCRF

Description
Switched to Secondary Short Message Service Center (SMSC). Switched from Primary to Secondary SMSC.

Default Severity
Minor

Instance
SMSC Address

HA Score
Normal

Clearing Action
This alarm automatically clears after 60 minutes (3600 seconds).

OID
SMSRSMSCSwitchedToSecondary

Recovery:

1. No action necessary.

72210 – PCMM Reached Max Gates Event ID

Alarm Type
PCRF

Description
PCMM Reached Maximum Gates. A subscriber at IP address *ip-addr* has reached the configured maximum number of upstream gates.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 seconds.

OID
PCMMReachedMaxGatesEventId

Recovery:

1. If this alarm occurs infrequently, monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

72211 – PCMM Reached Max GPI Event ID

Alarm Type
PCRF

Description
PCMM Reached Maximum GPI. A subscriber at IP address *ip-addr* has reached the configured maximum grants per interval on all upstream gates.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 seconds.

OID
PCMMReachedMaxGPIEventId

Recovery:

1. This subscriber address is exceeding the capacity; attention is required.
2. If the problem persists, contact My Oracle Support.

72501 – SCE Connection Lost

Alarm Type
PCRF

Description
Service Control Engine (SCE) Connection is lost.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Connection to SCE is restored.

OID
SCEConnectionLost

Recovery:

1. If the problem persists, contact My Oracle Support.

72549 – SMSR Queue Full

Alarm Type
PCRF

Description
Short Message Service Relay (SMSR) internal queue is full: notification internal queue has reached capacity. Messages will be rejected until the queue space becomes available.

Default Severity
Minor

Instance
SMSR queue

HA Score
Normal

Clearing Action
Available capacity is restored and queue begins to accept new messages or automatically clears after 60 minutes (3600 seconds).

OID
SMSRQueueFull

Recovery:

1. Check configuration and availability of the destination service to ensure there are no connections problems and that the network path from the MPE device to the element (host/port/resource location) is operational.

72559 – SMSR SMSC Connection Closed

Alarm Type
PCRF

Description
SMSC connection closed.

Default Severity
Minor

Instance
SMSC address

HA Score
Normal

Clearing Action
This alarm automatically clears after 60 minutes (3600 seconds) or when the SMSC connection is restored.

OID
SMSRSMSCConnectionClosed

Recovery:

1. No action necessary.

72565 – SMSR SMTP Connection Closed

Alarm Type
PCRF

Description
Simple Mail Transfer Protocol (SMTP) connection closed. SMTP connection has been closed to MTA *{IP Address}*.

Default Severity
Minor

Instance
{host name of MTA}

HA Score
Normal

Clearing Action
This alarm automatically clears after 60 minutes (3600 seconds) or when the SMTP connection is restored.

OID
SMSRSMTPConnectionClosed

Recovery:

1. If the problem persists, contact My Oracle Support.

72575 – Policy Notification:Lost connection with destination URL

Alarm Type
PCRF

Description
The connection to a configured Policy Notification destination was lost.

Default Severity
Minor

Instance
Destination Name

HA Score
Normal

Clearing Action
Auto clears after 60 minutes (3600 seconds) or when HTTP connection is restored.

OID
SMSRHTTPConnectionClosed

Recovery:

1. Check configuration, including URL, and availability of the destination service.
2. Check the client for reboot or other service interruption.
3. If the element has not failed, make sure that the network path from the MPE device to the element (host/port/resource location) is operational.
4. If the problem persists, contact My Oracle Support.

72703 – RADIUS Server Failed

Alarm Type
PCRF

Description
RADIUS server start failed.

Default Severity
Minor

Instance
N/A

HA Score
N/A

Clearing Action
N/A

OID
RADIUSServerFailed

Recovery:

1. If the problem persists, contact My Oracle Support.

72706 - RADIUS Server Corrupt Auth

Alarm Type
PCRF

Description
RADIUS authenticator is corrupted.

Severity
Minor

Instance
N/A

HA Score
N/A

Clearing Action
N/A

OID
RADIUServerCorrupAuth

Recovery:

1. Check the connectivity and configuration of the RADIUS server.

72904 – Diameter Too Busy

Alarm Type
PCRF

Description
System has entered a busy state.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
The Diameter load drops below admission criteria thresholds or this alarm clears automatically after 30 seconds.

OID
DiameterTooBusy

Recovery:

1. If this alarm occurs infrequently, then monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

72905 – Radius Too Busy

Alarm Type
PCRF

Description
RADIUS load shedding set a busy state.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
The RADIUS load drops below admission criteria thresholds or this alarm clears automatically after 30 seconds.

OID
RadiusTooBusy

Recovery:

1. If this alarm occurs infrequently, then monitor the health of the system.
2. If this alarm occurs frequently, contact My Oracle Support.

74000 – Policy Server Critical Alarm

Alarm Type
PCRF

Description
Critical Policy alarm.

Default Severity
Critical

Instance
N/A

HA Score
Normal

Clearing Action
This alarm can be cleared by a policy or clears automatically after 3600 seconds (60 minutes).

OID
PolicyServerCriticalAlarm

Recovery:

1. If the problem persists, contact My Oracle Support.

74001 – Policy Server Major Alarm

Alarm Type
PCRF

Description
Major Policy alarm.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm can be cleared by a policy or clears automatically after 3600 seconds (60 minutes).

OID
PolicyServerMajorAlarm

Recovery:

1. If the problem persists, contact My Oracle Support.

74002 – Policy Server Minor Alarm

Alarm Type
PCRF

Description
Minor Policy alarm.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm can be cleared by a policy or clears automatically after 3600 seconds (60 minutes).

OID
PolicyServerMinorAlarm

Recovery:

1. If the problem persists, contact My Oracle Support.

74020 – Stats Files Generator Delete Expire Files

Alarm Type
PCRF

Description
Delete expire files. Stats Files Generator Task has removed some files which were not synchronized to remote servers (*{external system IP}*, *{external system IP}*, etc).

Default Severity
Major

Instance
Stats files generator

HA Score
Normal

Clearing Action
The alarm is automatically cleared after 300 seconds (5 minutes).

OID
StatsFilesGeneratorDeleteExpireFiles

Recovery:

1. Check all enabled Stats Files Synchronization tasks status in the DC (Data Collection) tasks of CMP system and ensure they are configured successfully.
2. Exchange SSL key with mate server in cluster.

74021 – Files Synchronization Failure

Alarm Type
PCRF

Description
Files synchronization failure. Files Synchronization #*{num}* task failed to synchronize local to remote server (*{external system Host Name/IP}*) after retry *{num}* times, where:

- *{num}* is task #
- *{num}*is retry times (1 to 5)
- *{external system Host Name/IP}* is the user-defined remote server's IP address to which files are synchronized

Default Severity
Minor

Instance
Stats files synchronization

HA Score
Normal

Clearing Action
Auto clear 300 seconds

OID
FilesSynchronizationFailure

Recovery:

1. Check the network status of the remote server which you configured in the Stats Files Synchronization task.
2. Ensure remote server supports SSH protocol and you configured the user name and password correctly.

74022 - Files Uploading Failure

Alarm Type
PCRF

Description
PM Statistics Files Uploading Task failed to upload local statistics files to FTP server *FTP server Host Name/IP* after retry *number* times.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm automatically clears after 5 minutes (300 seconds).

OID
FilesUploadingFailureNotify

Recovery:

1. Fix network problems or verify FTP configuration information, which is defined in the scheduler task of the CMP system.
2. If the issue does not resolve, contact My Oracle Support.

74102 - CMTS Subnet Overlapped

Alarm Type

Description
Overlapped subnets are present on the CMTS.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Auto clears when task runs again.

OID
CmtsSubnetOverlapped

Recovery:

1. Go to Schedule Tasks Administration with menu item **System Administration** > **Scheduled Tasks**.
2. Open Subnet Overlap Detector Task hyperlink.
3. Open Subnet Overlapping Report by clicking 'details' hyperlink in Exit Status Message.
4. Refer to Subnet Overlap Report for overlapped subnets of CMTS detail information.
5. Reconfigure the subnets of CMTS to resolve the overlap.
6. Run the Subnet Overlap Detector task again.
7. If the issue still exists, repeat the previous steps.

74103 - NES Without CMTS IP

Alarm Type

Description
This alarm is raised when Routing by CMTS IP is enabled and Network Elements exist without CMTS IP addresses assigned.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm automatically clears after 30 seconds.

OID
NeWithoutCmtsIp

Recovery:

1. If the problem persists, contact My Oracle Support.

74602 - Multiple Active In Cluster Failure

Alarm Type
QP

Description
Multiple Active servers have been detected in the same cluster; the cluster is in Split Brain state.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears when HA recovers or clears automatically after 30 minutes (1800 seconds). When HA recovers there will be only one Active server in a cluster.

OID
QPMultipleActiveInClusterFailure

Recovery:

1. Fix network problems and restore connectivity.
2. Place one of the Active servers in the cluster into Forced Standby mode.
3. If the problem persists, contact My Oracle Support.

74603 - Max Primary Cluster Failure Threshold

Alarm Type
QP

Description
The number of failed MPE pairs reaches the threshold of *configured threshold value* at *site name*.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears when the number of failed MPE pairs remain at a lower value than the threshold of *max primary site failure threshold* at *site*, or clears automatically after 30 minutes (1800 seconds).

OID
QPMaxMPEPrimaryClusterFailure

Recovery:

1. When the failure count drops below the threshold value and stays below the threshold for 30 seconds, the alarm is cleared. (The 30 seconds delay prevents the alarm from being cleared too soon.)
2. If alarm does not clear automatically, contact My Oracle Support.

74604 - MPE Cluster Offline Failure

Alarm Type
QP

Description
Policy Cluster is offline.

Default Severity
Critical

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears when a server in the MPE cluster comes online. The alarm clears automatically after 30 minutes (1800 seconds).

OID
QPMPEClusterOfflineFailure

Recovery:

1. When a server comes online (in Active, Standby, or Spare state), the alarm is cleared. Please check whether all servers are powered down or rebooted at that time.
2. If alarm does not clear automatically, contact My Oracle Support.

74605 - Subscriber Trace Backup Failure

Alarm Type
QP

Description
The script responsible for backing up the subscriber trace log has failed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action

OID
SubscriberTraceBackupFailure

Recovery:

1. When a server comes online (in Active, Standby, or Spare state), the alarm is cleared. Please check whether all servers are powered down or rebooted at that time.
2. If alarm does not clear automatically, contact My Oracle Support.

75000 - Policy Library Loading Failed

Alarm Type
PCRF

Description
Policy library loading failed. PCRF was unable to load the latest policy library. If this alarm occurred at startup time or at failover, this indicates the PCRF does not have any policies deployed. If this alarm occurred on a new policy push when PCRF was running with some existing policies, this alarm indicates that the PCRF will continue to run with those existing policies.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
Performing a reapply config may fix the problem.

OID
PolicyLoadingLibraryFailed

Recovery:

1. Perform a reapply config from the CMP system to reload the library.
2. If the problem persists, contact My Oracle Support.

77904 - BOD PCMM Too Busy

Alarm Type
PCRF

Description
BOD PCMM load shedding set a busy state.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 30 seconds.

OID
BODPCMMTooBusy

Recovery:

1. If the problem persists, contact My Oracle Support.

77905 - BOD DIAMETER Too Busy

Alarm Type
PCRF

Description
BOD DIAMETER Too Busy

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 30 seconds.

OID
BODDiameterTooBusy

Recovery:

1. If the problem persists, contact My Oracle Support.

78000 - ADS Connection Lost

Alarm Type
PCRF

Description
ADS Connection Lost. The Analytics Data Stream (ADS) connection was lost to the specified client.

Default Severity
Minor

Instance
Analytics Client ID

HA Score
Normal

Clearing Action
Connection to a remote peer is restored by the same client (ID), or automatically clears in 60 minutes (3600 seconds).

OID
ADSConnectionLost

Recovery:

1. Check configuration and availability of the analytics client.
2. Check the client for reboot or other service interruption.
3. If the element has not failed, make sure that the network path from the MPE device to the element (port 222) is operational.
4. If the problem persists, contact My Oracle Support.

78001 - Rsync Failed

Alarm Type
PCRF

Description
Transfer of Policy jar files failed. PCRF was unable to transfer the latest policy library from the active to the standby server. The alarm can be raised by the active server when a policy change is made or a Reapply Configuration is performed. It can be raised by the standby server during startup if it was unable to get the policy jar file from the active server during startup.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
Since the alarm can be raised by both the active and standby servers, the alarm will not clear once the problem is fixed. It will be cleared when the issue is fixed internally on the affected blades.

OID
RsyncFailed

Recovery:

1. This alarm can be ignored during a mixed version upgrade (for example, 7.5/7.6 to 9.1) and when rebooting both servers on the MPE device.
2. If the alarm is seen on the MRA device, it indicates the logback config files are not transferring, which is harmless to the operation.
3. The most likely cause is that the ssh keys have not been exchanged; ensure they are exchanged correctly.
4. Perform a Reapply Configuration.
5. If performing a Reapply Configuration does not fix the problem, another alarm will be raised by the active server for that particular operation. If the problem persists, contact My Oracle Support.

78850 - VNF operation error

Alarm Type
PCRF

Description
There was an error while performing the requested operation on the VNF cluster.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
The event will clear when the VM is in the Active state or the event must be cleared manually.

OID
VNFOperationError

Recovery:

1. Trace Logs provide details of the operation failure and which VMs were impacted. Validate information that was submitted as part of the request. Correct Topology and repeat the failed operation or take corrective action on the VM directly.

79002 - Sess Size Reached Threshold

Alarm Type
PCRF

Description
Total session database size reached maximum threshold percentage of planned session database size.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Total session database size goes below minimum threshold percentage of planned session database size.

OID
SessDBSizeReachedThreshold

Recovery:

1. Check the threshold configuration to make sure that it matches the expectation.

2. If the problem persists, contact My Oracle Support.

79003 - Avg Sess Size Exceed

Alarm Type
PCRF

Description
Average session size exceeded the projected size.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 minutes (3600 seconds).

OID
AvgSessSizeReachedThreshold

Recovery:

1. Check the threshold configuration to make sure that it matches the customer's expectation.
2. If the problem persists, contact My Oracle Support.

79004 - Bind Size Reached Threshold

Alarm Type
PCRF

Description
Total binding database size reached maximum threshold percentage of planned binding database size.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
Total binding database size goes below minimum threshold percentage of planned binding database size or clears automatically after 60 minutes (3600 seconds).

OID
BindDBSizeReachedThreshold

Recovery:

1. Check the threshold configuration to make sure that it matches the customer's expectation.
2. If the problem persists, contact My Oracle Support.

79005 - Avg Bind Size Exceed

Alarm Type
PCRF

Description
Average binding size exceeded the projected size.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 60 minutes (3600 seconds).

OID
AvgBindSizeReachedThreshold

Recovery:

1. Check the threshold configuration to make sure that it matches the expectation.
2. If the problem persists, contact My Oracle Support.

79105 - Mediation SOAP Too Busy

Alarm Type
PCRF

Description
Mediation Server SOAP provisioning interface reaches busy state; load shedding begins.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 30 seconds or when the Mediation load recovers.

OID
MediationSOAPTooBusy

Recovery:

1. Check that UDR is in a normal state to handle a SOAP provisioning request.
2. If the problem persists, contact My Oracle Support.

79106 - SPR Connection Failed

Alarm Type
PCRF

Description
Created connection to SPR failed.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears when provisioning the connection between the Mediation and UDR recovers.

OID
SPRConnectionFailed

Recovery:

1. Check that the provisioning data source configuration on the Mediation server is correct.
2. If the problem persists, contact My Oracle Support.

79107 - Mediation Disk Quota Exceed

Alarm Type
PCRF

Description
Sync directory disk quota exceeded.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 3600 seconds or when the disk usage of the Mediation server is decreased to value less than the quota limit.

OID
MSDiskQuotaExceed

Recovery:

1. Release disk usage to ensure that 32G of free disk space is available in the sync directory.
2. If the problem persists, contact My Oracle Support.

79108 - Mediation Disk No Space

Alarm Type
PCRF

Description
No space left on device.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears when the disk space is not fully used.

OID
MSDiskNoSpace

Recovery:

1. Release disk usage to ensure that 32G of free disk space is available in the sync directory.
2. If the problem persists, contact My Oracle Support.

79109 - SPR License Limit

Alarm Type
PCRF

Description
Achieve 80% maximum number of users in SPR.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
SPRLicenselimit

Recovery:

1. If the problem persists, contact My Oracle Support.

79110 - Files Uploading Failure

Alarm Type
PCRF

Description
SMS Notification Statistics Upload Task failed to upload stats files to remote FTP server after retry.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
Auto clears after 300 seconds or the next time the task is run.

OID
FilesUploadingFailure

Recovery:

1. Check the FTP server configuration is correct in schedule task *SMS Notification Statistics Uploading Task*.
2. Check and ensure remote FTP server is accessible and service is available.

79120 - Batch Disk Quota Exceeds

Alarm Type
PCRF

Description
The batch folder disk quota exceeds.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
BatchDiskQuotaExceeds

Recovery:

1. If the problem persists, contact My Oracle Support.

79995 - X1 Connection Lost

Alarm Type
PCRF

Description
The X1 Connection between the Mediation Function and Policy Server is Lost.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 7200 seconds.

OID
X1ConnectionLost

Recovery:

1. Check if the X1 Connection is down.
2. If the problem persists, contact My Oracle Support.

79996 - X2 Connection Lost

Alarm Type
PCRF

Description
X2 Connection between the Policy Server and Mediation Function is Lost.

Default Severity
Minor

Instance
N/A

HA Score
Normal

Clearing Action
This alarm clears automatically after 7200 seconds.

OID
X2ConnectionLost

Recovery:

1. Check if the X2 Connection is down.
2. If the problem persists, contact My Oracle Support.

Policy Server Events (80000-89999)

This section provides a list of Policy Server events (80000-89999) which are generated by policy devices, such as MPE devices and MRA devices.

80001 - DB State Transition

Alarm Type
QP

Description
The DB status of the blade is not fully ready. The MySQL database manager generates a "MySQL state transition" event every time it makes a state-machine transition. The event text describes the transition.

Default Severity
Info

Instance
MySQL

HA Score
Normal

Clearing Action
This alarm is cleared by `qp-procmgr` as `qp-procmgr` shuts down.

OID
QPDBStateChange

Recovery:

1. Because this is an information-only message, there is no recovery action required.

80002 - MySQL Relay Log Dropped

Alarm Type
QP

Description
A portion of the MySQL relay log was dropped as the secondary server was shutting down. This event is raised when a secondary server times out while trying to apply its relay log during a secondary stop. The server may not be hurt, but there may be after effects. This event is raised to trigger a debug for possible after effects.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
QPMySQLRelayLogDropped

Recovery:

1. Debug the system for possible after effects caused by the timeout.

80003 - QP MySQL DB Level

Alarm Type
QP

Description
The ranking of secondaries when the primary database is outdated. If the primary database is outdated, the server raises this event once per minute. The server will rank the secondaries, from best to worst, based on their database level.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
QPMySQLDBLevel

Recovery:

1. Use the information of this event to help resolve an outdated primary database raised by alarm 70020.

82704 - Binding Release Task

Alarm Type
PCRF

Description
Binding Release Task. The binding release task has started, completed, or aborted.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
BindingReleaseTask

Recovery:

1. No action required.

84004 - Policy Info Event

Alarm Type
PCRF

Description
Policy Info Event. Application is ready.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
PolicyInfoEvent

Recovery:

1. No action required.

86001 – Application Is Ready

Alarm Type
PCRF

Description
Application is ready for service.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
ApplicationIsReady

Recovery:

1. No action required.

86100 - CMP User Login

Alarm Type
PCRF

Description
CMP user login was successful.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPUserLogin

Recovery:

1. No action required. Recovery is immediate.

86101 - CMP User Login Failed

Alarm Type
PCRF

Description
CMP user login failed.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPUserLoginFailed

Recovery:

1. No action required. Recovery is immediate.

86102 - CMP User Logout

Alarm Type
PCRF

Description
CMP User performed logout.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPUserLogout

Recovery:

1. No action required. Recovery is immediate.

86200 - CMP User Promoted Server

Alarm Type
PCRF

Description
CMP user promoted server. The current site becomes the Primary site.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPUserPromotedServer

Recovery:

1. No action required. Recovery is immediate.

86201 - CMP User Demoted Server

Alarm Type
PCRF

Description
CMP user demoted server. The current site becomes the Secondary site.

Default Severity
Info

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPUserDemotedServer

Recovery:

1. No action required. Recovery is immediate.

86300 - Sh Enable Failed

Alarm Type
PCRF

Description
Enable Sh Connection failed. The CMP server performed a global operation to enable Sh on all MPE devices and it failed on the specified MPE.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPShConEnableFailed

Recovery:

1. The operation can be retried. If repeated attempts fail, there may be other management issues with the associated MPE devices and connectivity to those devices should be verified.

86301 - Sh Disable Failed

Alarm Type
PCRF

Description
Disable Sh Connection failed. The CMP performed a global operation to disable Sh on all MPE devices and it failed on the specified MPE.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPShConDisableFailed

Recovery:

1. The operation can be retried. If repeated attempts fail, there may be other management issues with the associated MPE devices and connectivity to those devices should be verified.

86303 - NW-CMP Apply Failed

Alarm Type
PCRF

Description
NW-CMP failed to apply settings to S-CMP.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
NWCMPApplyFailed

Recovery:

1. The alarm on the NW-CMP will be cleared once the NW-CMP successfully applies the configuration to the S-CMP.

86304 - S-CMP Unreachable

Alarm Type
PCRF

Description
The S-CMP is offline or unreachable by the NW-CMP. This alarm will be raised on the NW-CMP.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
SCMPUNREACHABLE

Recovery:

1. This alarm will be cleared once the S-CMP is reachable.

86305 - S-CMP Split Brain

Alarm Type
PCRF

Description
When a geo-redundant S-CMP is in split brain (that is, both sites are reporting as Primary), an alarm is raised on NW-CMP.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
SCMPSplitBrain

Recovery:

1. This alarm will be cleared automatically when the split brain on the S-CMP is gone.

86306 - CMP Apply Failed

Alarm Type
PCRF

Description
When a CMP system failed to apply settings to any MRA or MPE device, this alarm is raised on this S-CMP.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
CMPApplyFailed

Recovery:

1. This alarm will be cleared automatically when the next applying to that MRA or MPE device is successful.

86307 - S-CMP Sync Fails

Alarm Type
PCRF

Description
If the connection between the NW-CMP and the S-CMP is broken and the synchronization fails, an alarm will be raise in S-CMP.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
SCMPSYNCFAILS

Recovery:

1. The alarm will be cleared once the synchronization is successful in the next cycle.

86308 - NCMP Ref Obj Miss

Alarm Type
PCRF

Description
The top level object is missing in NW-CMP but is referred by S-CMP server. This alarm will be raised in the NW-CMP server.

Default Severity
Major

Instance
N/A

HA Score
Normal

Clearing Action
N/A

OID
NCMPReferdObjMiss

Recovery:

1. This alarm will be cleared once there is no referred but missing top level object.

5

Obtaining SNMP Status and Statistics

This chapter describes how to obtain status and statistical information from a cable-mode Policy Management system using the SNMP interface.

Obtaining CMTS and DPS Connection Status

Using an SNMP `GetNext` request, you can obtain connection status information from the following Tables:

- `cmtsConnTable` for cable modem termination systems (CMTSs)
- `dpsConnTable` for downstream policy servers (DPSs)

The following information is reported for each network element of both kinds of devices:

- ID
- Host Name
- Connection Type
- Connection Status
- Last Connection Time
- Last Disconnection Time
- Collection Time Stamp

Counters are updated every thirty seconds.

You can obtain this data using a variety of SNMP applications. The example shown in Figure 5-1 uses `snmpwalk`.

Figure 5-1 Sample CMTS And DPS Connection Table Statistics

```
# snmpwalk -c public 10.24.19.54 -m TKLC-APP-MIB cmtsConnTable
TKLC-APP-MIB::cmtsHostName."...f" = STRING: 10.0.7.102
TKLC-APP-MIB::cmtsID."...f" = STRING: cmts
TKLC-APP-MIB::cmtsConnStatus."...f" = INTEGER: disconnected(2)
TKLC-APP-MIB::cmtsLastConnTime."...f" = Counter64: 0
TKLC-APP-MIB::cmtsLastDisconnTime."...f" = Counter64: 0
TKLC-APP-MIB::cmtsCollectTime."...f" = Counter64: 1275496585399

# snmpwalk -c public 10.24.19.54 -m TKLC-APP-MIB dpsConnTable
TKLC-APP-MIB::dpsHostName."...d".pcmm = STRING: 10.0.10.100
TKLC-APP-MIB::dpsConnType."...d".pcmm = INTEGER: pcmm(1)
TKLC-APP-MIB::dpsID."...d".pcmm = STRING: mpeadam
```

```
TKLC-APP-MIB::dpsConnStatus."...d".pcmm = INTEGER: connected(1)
TKLC-APP-MIB::dpsLastConnTime."...d".pcmm = Counter64: 1275417944367
TKLC-APP-MIB::dpsLastDisconnTime."...d".pcmm = Counter64: 1275417899375
TKLC-APP-MIB::dpsCollectTime."...d".pcmm = Counter64: 1275496622064
#
```

Obtaining Rx and Diameter AF Operation Measurement Statistics

Using an SNMP `GetNext` request, you can obtain operation measurement (OM) statistics from diameterOMStats for the Rx and Diameter protocols. The following OM counters are reported:

- AAR Initial messages received
- AAR Initial messages sent
- AAR Modification messages received
- AAR Modification messages sent
- AAR Received messages
- AAR Received Success messages
- AAR Received Failure messages
- AAR Sent messages
- AAR Sent Success messages
- AAR Sent Failure messages
- STR Received messages
- STR Sent messages
- STA Received Success messages
- STA Received Failure messages
- STA Sent Success messages
- STA Sent Failure messages
- ASR Received messages
- ASR Sent messages
- ASA Received Success messages
- ASA Received Failure messages
- ASA Sent Success messages
- ASA Sent Failure messages
- RAR Received messages
- RAR Sent messages
- RAA Received Success messages

- RAA Received Failure messages
- RAA Sent Success messages
- RAA Sent Failure messages
- Collection time
- Reset time
- Rx-PCMM messages timeout counter

Counter values are absolute values. Counters are updated every five minutes.

You can obtain OM statistics using a variety of SNMP applications. The example shown in Figure 5-2 uses `snmpwalk`.

Figure 5-2 Sample Rx/Diameter OM Statistics

```
# snmpwalk -c public 10.24.19.54 -m TKLC-APP-MIB diameterOMStats
TKLC-APP-MIB::diameterOMAARRecv.0 = Counter32: 0
TKLC-APP-MIB::diameterOMAARSent.0 = Counter32: 0
TKLC-APP-MIB::diameterOMAAARecvSuccess.0 = Counter32: 0
TKLC-APP-MIB::diameterOMAAARecvFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMAAASentSuccess.0 = Counter32:
TKLC-APP-MIB::diameterOMAAASentFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMSTRRecv.0 = Counter32: 0
TKLC-APP-MIB::diameterOMSTRSent.0 = Counter32: 0
TKLC-APP-MIB::diameterOMSTARecvSuccess.0 = Counter32:
TKLC-APP-MIB::diameterOMSTARecvFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMSTASentSuccess.0 = Counter32:
TKLC-APP-MIB::diameterOMSTASentFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMASRRecv.0 = Counter32: 0
TKLC-APP-MIB::diameterOMASRSent.0 = Counter32: 0
TKLC-APP-MIB::diameterOMASARecvSuccess.0 = Counter32:
TKLC-APP-MIB::diameterOMASARecvFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMASASentSuccess.0 = Counter32:
TKLC-APP-MIB::diameterOMASASentFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMRARRecv.0 = Counter32: 0
TKLC-APP-MIB::diameterOMRARSent.0 = Counter32: 0
TKLC-APP-MIB::diameterOMRAARecvSuccess.0 = Counter32:
TKLC-APP-MIB::diameterOMRAARecvFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMRAASentSuccess.0 = Counter32:
TKLC-APP-MIB::diameterOMRAASentFailure.0 = Counter32:
TKLC-APP-MIB::diameterOMCollectTime.0 = Counter64: 0
TKLC-APP-MIB::diameterOMResetTime.0 = Counter64: 0
TKLC-APP-MIB::diameterOMAARInitRecv.0 = Counter32: 0
TKLC-APP-MIB::diameterOMAARInitSent.0 = Counter32: 0
TKLC-APP-MIB::diameterOMAARModRecv.0 = Counter32: 0
TKLC-APP-MIB::diameterOMAARModSent.0 = Counter32: 0
TKLC-APP-MIB::diameterOMRxPcmmTimeout.0 = Counter32: 0
#
```

Obtaining PCMM Operation Measurement Statistics

Using an SNMP `GetNext` request, you can obtain operation measurement (OM) statistics for the PacketCable MultiMedia (PCMM) protocol.

OM statistics are reported from

- northBoundPcmmOMStats for northbound traffic between application managers (AMs) and MPE devices
- southBoundPcmmCmtsOMStats for southbound traffic between MPE devices and CMTSs
- southBoundPcmmDpsOMStats for southbound traffic between MPE devices and DPSs

The following OM counters are reported:

- Gate Set messages
- Gate Set Acknowledgment messages
- Gate Set Error messages
- Gate Delete messages
- Gate Delete Acknowledgment messages
- Gate Delete Error messages
- Gate Info messages
- Gate Info Acknowledgment messages
- Gate Info Error messages
- Gate Report messages
- Gate Report Drop messages
- Collection time
- Reset time

Counters are updated every five minutes.

You can obtain PCMM OM statistics using a variety of SNMP applications. The example shown in Figure 5-3 uses `snmpwalk`.

Figure 5-3 Sample PCMM Northbound And Southbound OM Statistics

```
# snmpwalk -c public 10.24.19.54 -m TKLC-APP-MIB northBoundPcmmOMStats
TKLC-APP-MIB::northBoundPcmmOMGateSet.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateSetAck.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateSetErr.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateInfo.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateInfoAck.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateInfoErr.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateDelete.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateDeleteAck.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateDeleteErr.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateReport.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMGateReportDrop.0 = Counter32: 0
TKLC-APP-MIB::northBoundPcmmOMCollectTime.0 = Counter64: 0
TKLC-APP-MIB::northBoundPcmmOMResetTime.0 = Counter64: 0
```

```
# snmpwalk -c public 10.24.19.54 -m TKLC-APP-MIB
southBoundPcmmCmtsOMStats
TKLC-APP-MIB::southBoundPcmmCmtsOMGateSet.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateSetAck.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateSetErr.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateInfo.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateInfoAck.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateInfoErr.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateDelete.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateDeleteAck.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateDeleteErr.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateReport.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMGateReportDrop.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmCmtsOMCollectTime.0 = Counter64:
1275496500897
TKLC-APP-MIB::southBoundPcmmCmtsOMResetTime.0 = Counter64: 0

# snmpwalk -c public 10.24.19.54 -m TKLC-APP-MIB southBoundPcmmDpsOMStats
TKLC-APP-MIB::southBoundPcmmDpsOMGateSet.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateSetAck.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateSetErr.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateInfo.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateInfoAck.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateInfoErr.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateDelete.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateDeleteAck.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateDeleteErr.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateReport.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMGateReportDrop.0 = Counter32: 0
TKLC-APP-MIB::southBoundPcmmDpsOMCollectTime.0 = Counter64: 1275496800903
TKLC-APP-MIB::southBoundPcmmDpsOMResetTime.0 = Counter64: 0
#
```