

| Severity Level | Info | Bulletin Number | DN002771 | | |
|-------------------------|---|--|---|--|--|
| Issue Date | 08/20/2014 | Expires | DSR 6.0 Customer Documentation Sets | | |
| Title | Additional information on the Alarms, Events, and Measurements in DSR 4.0, 4.1.5, 5.0, and 5.1. | | | | |
| Product | DSR | Release | 4.0, 4.1.5, 5.0, and 5.1 | | |
| Priority | FYI | Related Bugs | Bugs 19119108, 19119443, 19119442, and 19295518 | | |
| Impacts Compatibility | NO | Product Line(s): (Only if Impacts Compatibility = YES) | N/A | | |
| Author | M. Garrell | Part No. Affected | 910-6638-001 910-6827-001 | | |
| Markets | ALL | | | | |
| Approved By/Date | | | | | |
| Information Davidonment | Manager I CIPSON 9/21/2014 | | | | |

Information Development Manager J. GIBSON 8/21/2014

Problem Description

The Alarms, KPIs, and Measurements Reference Guide did not contain information on the alarms, events, and measurements listed below. Some of the Alarms, Events, and Measurements have been deprecated in DSR Release 6.0 and are no longer valid.

Impact

If an alarm, event, or measurement is raised, but there is no information provided about the alarm/event/measurement, the customer will be unsure as to what to what action to take.

Needed Actions

Customers should store this bulletin in the Documentation location for reference. Contact Customer Access Support (CAS) for further assistance.

This notice is provided to Oracle customers about issues identified with our systems. If you have any questions about this notice, call the CAS main number at 1-800-223-1711 (tollfree 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.

Alarms & Events

For more information, see *DSR Alarms*, *KPIs*, and *Measurements Guide* (part numbers 910-6638-001, 910-6827-001) on the OTN at http://www.oracle.com

| Alarm /Event ID | Description | Alarm Group | Severity | OID |
|-----------------|--|-------------|----------|-------------------------------------|
| 5000 | An IPFE process has stopped | IPFE | Critical | ipfeIpfeProcessFailureNotify |
| 5101 | CPU utilization is approaching maximum levels. | IPFE | Major | ipfeIpfeCpuOverloadNotify |
| 5102 | Disk space utilization is approaching maximum levels. | IPFE | Major | ipfeIpfeDiskUsageNotify |
| 5103 | IPFE memory utilization is approaching maximum levels. | IPFE | Major | ipfeIpfeMemoryOverloadNotify |
| 10050 | An unexpected error occured in the execution of an external resource audit | AUD | Minor | tekelecResourceAuditFailure |
| 10051 | An error occured in the deployment of a network route | AUD | Minor | tekelecRouteDeploymentFailed |
| 10052 | An error occured in the discovery of network routes | AUD | Minor | tekelecRouteDiscoveryFailed |
| 10053 | Could not identify a suitable device for the deployment of a network route | AUD | Minor | tekelecNoRouteDevice |
| 10054 | An error occured in the deployment of a network | AUD | Minor | tekelecDeviceDeploymentFailed |
| 10055 | An error occured in the discovery of network devices | AUD | Minor | tekelecDeviceDiscoveryFailed |
| 10073 | Server Group Max Allowed HA Role Warning | НА | Minor | oAGTSgMaxAllowedHARoleWarn |
| 10104 | The performance data export remote copy operation failed. | LOG | Info | awpss7TekelecExportXferFailedNotify |
| 10115 | The system ID is invalid for the license file | LOG | Minor | tekelecLogSystemIdInvalid |

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| 10116 | The application software license key is invalid | LOG | Minor | tekelecLogApplKeyInvalid |
|-------|---|----------|-------|---|
| 10117 | The trial license file will expire soon | LOG | Info | tekelecLogTrialLicenseExpiring |
| 10118 | Trial license file is expired | LOG | Minor | tekelecLogTrialLicenseExpired |
| 10119 | The system clock has been adjusted by more than 2 hours | LOG | Minor | tekelecLogClockWindBackDetected |
| 10120 | License key validation has been run | LOG | Info | tekelecLogLicenseValidation |
| 19818 | The percent utilization of the Communication Agent DataEventmempool is approaching defined threshold capacity | CAF | Major | cAFDataEvPoolResUtilNotify |
| 19856 | Communication Agent Service Provider Registration State Changed | ComAgent | Info | cAFMultipleActivesNotify |
| 19857 | The Communication Agent Service Provider Operational State has Changed | ComAgent | Info | cAFEventSvcProvOpStateChangedNotify |
| 19862 | The Communication Agent Ingress Stack Event Rate is approaching its defined threshold capacity | ComAgent | Minor | cAFIngressRateNotify |
| 22010 | The DAS Route List specified by the trigger point is not provisioned | Diameter | Info | eagle Xg Diameter Specified Das Route List Not Provisioned Notify |
| 22013 | The configured number of Message Copy retransmits has been exceeded for the DAS Peer | Diameter | Info | eagle Xg Diameter Number Of Retransmits Exceeded To Das Notify |
| 22014 | No valid DAS Route List has been specified in the Message Copy Config Set | Diameter | Info | eagleXgDiameterNoDasRouteListSpecifiedNotify |
| 22021 | Debug Routing Info AVP is Enabled | Diameter | Minor | eagle Xg Diameter Debug Routing Info Avp Enabled Notify |
| 22030 | The percent utilization of the MP's DRL Event Task Queue is approaching its maximum capacity | Diameter | Major | eagleXgDiameterEventTaskQueueUtilNotify |

| 22031 | The percent utilization of the MP's DRL Request Task Queue is approaching its maximum capacity | Diameter | Major | eagle Xg Diameter Request Task Queue Util Notify |
|-------|---|----------|-------|---|
| 22032 | The percent utilization of the MP's DRL Answer Task Queue is approaching its maximum capacity | Diameter | Major | eagle Xg Diameter Answer Task Queue Util Notify |
| 22033 | The percent utilization of the MP's DRL Reroute Task Queue is approaching its maximum capacity | Diameter | Major | eagle Xg Diameter Reroute Task Queue Util Notify |
| 22100 | The percent utilization of the MP's DCL Event Task Queue is approaching its maximum capacity | Diameter | Major | eagleXgDiameterDclEventTaskQueueUtilNotify |
| 22105 | The connection transmit buffer is congested, messages will be discarded. This alarm is deprecated. | Diameter | Major | eagle Xg Diameter Connection Tx Congestion Alarm Notify |
| 22208 | The MP's per-connection egress message queue is approaching its maximum capacity | Diameter | Major | eagle Xg Diameter Per Conn Message Queue Util Notify |
| 22328 | The diameter connection specified in the alarm instance is processing higher than normal ingress messaging rate | Diameter | Info | eagle Xg Diameter Ingress Mps Rate Notify |
| 22333 | Connection was rejected due to insufficient Ingress MPS on the DA-MP to support the Reserved Ingress MPS configured for the connection. | Diameter | Info | eagle Xg Diameter Conn Rej In sufficient In gress Mps Notify |
| 22338 | Connection Degraded: Egress Transport Congestion | Diameter | Info | N/A |
| 22339 | Connection Degraded: Egress Message Rate Congestion | Diameter | Info | N/A |
| 22341 | Egress Transport Congestion – Abatement Complete | Diameter | Info | N/A |
| 22342 | Egress Message Rate Congestion – Abatement Complete | Diameter | Info | N/A |
| 22702 | The hashing result does not match configured Resource or sub-resource. | PDRA | Info | pdraPdraHashingResDoesNotMatchResOrSubResNotify |
| 22703 | Diameter Message Routing Failure Due To Full DRL Queue | PDRA | Info | Pdra Egress Msg Routing Failure Due To Drl Queue Exhausted Notify |

| 31127 | DB replication audit completed | REPL | Info | comcolDbRepAuditCompleteNotify |
|-------|--|----------|----------|--|
| 31299 | HA Notification status | HA | Info | comcolHaNotificationNotify |
| 31300 | HA Control action status | HA | Info | comcolHaControlNotify |
| 32100 | Breaker Panel Feed Unavailable | TPD | Critical | eagleXgDsrTpdBrkPnlFeedUnavailableNotify |
| 32101 | Breaker Panel Breaker Failure | TPD | Critical | eagleXgDsrTpdBrkPnlBreakerFailureNotify |
| 32102 | Breaker Panel Monitoring Failure | TPD | Critical | eagleXgDsrTpdBrkPnlMntFailureNotify |
| 32103 | Power Feed Unavailable | TPD | Critical | eagleXgDsrTpdPowerFeedUnavailNotify |
| 32104 | Power Supply 1 Failure - deprecated | TPD | Critical | eagleXgDsrTpdPowerSupply1FailureNotify |
| 32105 | Power Supply 2 Failure - deprecated | TPD | Critical | eagleXgDsrTpdPowerSupply2FailureNotify |
| 32106 | Power Supply 3 Failure - deprecated | TPD | Critical | eagleXgDsrTpdPowerSupply3FailureNotify |
| 32107 | RAID Feed Unavailable | TPD | Critical | eagleXgDsrTpdRaidFeedUnavailableNotify |
| 32108 | RAID Power Supply 1 Failure | TPD | Critical | eagleXgDsrTpdRaidPower1FailureNotify |
| 32109 | RAID Power Supply 2 Failure | TPD | Critical | eagleXgDsrTpdRaidPower2FailureNotify |
| 32110 | RAID Power Supply 3 Failure | TPD | Critical | eagleXgDsrTpdRaidPower3FailureNotify |
| 32111 | Device Failure | TPD | Critical | eagleXgDsrTpdDeviceFailureNotify |
| 32112 | Device Interface Failure | TPD | Critical | eagleXgDsrTpdDeviceIfFailureNotify |
| 32328 | DRBD block device can not be mounted. | TPD | Major | eagleXgDsrTpdDrbdUnavailableNotify |
| 32329 | DRBD block device is not being replicated to peer. | TPD | Major | eagleXgDsrTpdDrbdNotReplicatingNotify |
| 32306 | Server RAM Shortage Error | TPD | Major | tpdRamShortageError |
| 32309 | Server Eagle Network A Error | TPD | Major | tpdEagleNetworkAError |
| 32310 | Server Eagle Network B Error | TPD | Major | tpdEagleNetworkBError |
| 32311 | Server Sync Network Error | TPD | Major | tpdSyncNetworkError |
| 32328 | DRBD is unavailable | PLAT | Major | tpdDrbdUnavailable |
| 32329 | DRBD is not replicating | PLAT | Major | tpdDrbdNotReplicating |
| 32330 | DRBD peer needs intervention. | TPD | Major | eagleXgDsrTpdDrbdPeerProblemNotify |
| 32504 | Server Software Configuration Error | TPD | Minor | eagleXgDsrTpdSoftwareConfigErrorNotify |
| 32700 | Telco Switch Notification | Platform | Info | tpdTelcoSwitchNotification |

KPIs



| Variable | Description |
|--------------------------------|--|
| Alarm.Crit | The number of critical alarms |
| Alarm.Major | The number of major alarms |
| Alarm.Minor | The number of minor alarms |
| Alarm.State | The alarm state |
| MsgCopyTxQueueUtilization | Percentage of utilization of the Message Copy Tx Queue |
| pSBR Bindings | Total Number of Active Bindings |
| pSBR Avg Binding DB Read Rate | Average number of binding DB reads per second |
| pSBR Avg Binding DB Write Rate | Average number of binding DB writes per second |
| pSBR Sessions | Total Number of Active Sessions |
| pSBR Avg Session DB Read Rate | Average number of session DB reads per second |
| pSBR Avg Session DB Write Rate | Average number of session DB writes per second |

Measurements

RxMaxMpsAnswerRsp

Measurement Group: Diameter Exception

Measurement Dimension: Arrayed (by Connection Name)

Measurement Type: Simple

Description: The number of ingress Diameter Request messages received on a connection that were discarded because the Maximum Ingress MPS has been reached and Error Answer was generated.

Collection Interval: 5 min

Peg Condition: An DA-MP has applied overload message treatment due to Ingress MPS Limitation, and has determined that the message should be discarded and a response is generated.

RxMaxMpsDiscard

Measurement Group: Diameter Ingress Transaction Exception

Measurement Dimension: Arrayed Measurement Type: Simple

Description: The number of ingress Diameter Request messages received on a connection that were discarded because of Local MP Congestion without Error

Answer.

Collection Interval: 5 min

Peg Condition: An DA-MP has applied overload message treatment due to local MP congestion, and has determined that the message should be discarded without generating any response.



TxAllConnQueueFullRequestReject

Measurement Group: Diameter Ingress Transaction Exception

Measurement Type: Simple

Description: The number of egress Diameter Request messages that were rejected because the All-Connections Event Queue was full.

Collection Interval: 5 min

Peg Condition: For each Request message discarded because the All-Connections Event Queue was full. The connection measurement is associated with the

connection from which the message was received.

CARSTxDscrdInternalErr

Measurement Group: ComAgent Exception

Measurement Type: Simple

Measurement Dimension: Arrayed (by Service ID)

Description: Number of egress events discarded because of another Routed Service internal error

Collection Interval: 30 min

Peg Condition: Each time an egress event is discarded because of another Router Service internal error

PsbrLockCollisions

Measurement Group: pSBR Binding Performance

Measurement Type: Simple

Measurement Dimension: Arrayed

Description: The number of collisions that occurred periodically while acquiring a lock

Collection Interval: 5 min

Peq Condition: Each time a collision occurs while acquiring a lock

TmPsbrProcessingTime

Measurement Group: pSBR Binding Performance

Measurement Type: Simple

Measurement Dimension: Arrayed

Description: The time (in microseconds) to process an event on pSBR. The measurement is to measure the average time (ms) taken for pSBR to process the

stack event received from P-DRA and send back the stack event response to P-DRA.

Collection Interval: 5 min

Peg Condition: Each time a stack event is received from P-DRA and is sent back the response to P-DRA

PsbrPendingRarLockCollisions

Measurement Group: pSBR Session Performance

Measurement Type: Simple

Measurement Dimension: Arrayed

Description: The number of collisions occured periodically while acquiring a lock to update PendingRar table.

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Collection Interval: 5 min

Peg Condition: Each time a collision occurs while acquiring a lock to update PendingRar table.

EvSockInitFail

Measurement Group: Connection Exception

Measurement Type: Simple

Measurement Dimension: Arrayed (by Connection ID)

Description: The number of times the socket initialization failed.

Collection Interval: 5 min

Peg Condition: Pegged when the DSR attempts to apply the SCTP/TCP socket options to a peer connection and fails.

EvLongTimeoutPtrPoolPeak

Measurement Group: MP Performance

Measurement Type: Max

Measurement Dimension: Single

Description: The peak Diameter Long Timeout PTR Buffer Pool utilization (0-100%) measured during the collection interval.

A Long Timeout PTR is allocated for each Request message with a Pending Answer Timer value greater than 10 seconds that is forwarded to an upstream peer and is de-allocated when an Answer response is received and routed to a downstream peer. This measurement is useful for evaluating whether excessive traffic levels are being assigned to the Long Timeout pool. Assignment of traffic to this pool should be limited to Requests that are expected to have long response times.

Collection Interval: 5 min

Peg Condition: The maximum Diameter Long Timeout PTR Buffer Pool utilization sample taken during the collection interval.

EvLongTimeoutPtrPoolAvg

Measurement Group: MP Performance

Measurement Type: Average Measurement Dimension: Single

Description: The average Diameter Long Timeout PTR Buffer Pool utilization (0-100%) measured during the collection interval.

Collection Interval: 5 min

Peg Condition: The average of all Diameter Long Timeout PTR Buffer Pool utilization samples taken during the collection interval.

EvStasisModeMaxConnsExceeded

Measurement Group: MP Performance

Measurement Type: Simple Measurement Dimension: Single

Description: The number of times DA-MP requested IPFE to cease distributing Diameter connections to the DA-MP due to maximum number of connections on

the DA-MP.

Collection Interval: 5 min



Peg Condition: This measurement is incremented when the A DA-MP is sending IPFE a "heartbeat" message and it has determined that the number of Diameter connections established has reached the maximum number supported by the DA-MP since the last "heartbeat" message was sent. A DA-MP will send a "heartbeat" message indicating a STASIS availability status when it has reached its maximum number of active Diameter connections.

TxTestMessageDiscard

Measurement Group: Diameter Exception

Measurement Type: Simple Measurement Dimension: Single

Description: The number of egress messages in test mode that were discarded at normal egress connection.

Collection Interval: 5 min

Peg Condition: Each time an egress message in test mode is discarded at normal egress connection

TxConnUnavailDiscard

Measurement Group: Diameter Exception

Measurement Type: Simple

Measurement Dimension: Arrayed (by Connection ID)

Description: The number of egress Diameter messages that were discarded by DCL because the egress connection was Unavailable.

Collection Interval: 5 min

Peg Condition: For each egress message discarded because the egress connection was found to be Unavailable.

RxConnMpCongestionAnswerRsp

Measurement Group: Diameter Exception

Measurement Type: Simple

Measurement Dimension: Arrayed (by Connection ID)

Description: The number of ingress messages that were rejected with an error response because oflocal congestion.

Collection Interval: 5 min

Peg Condition: For each ingress Diameter message that was rejected because of local MP congestion and an Answer response was sent. The connection

measurement is associated with the connection from which the message was received.

RxDiscardedMsgsPerConnControlsMp

Measurement Group: Diameter Ingress Transaction Exception

Measurement Type: Simple Measurement Dimension: Single

Description: The total number of ingress Diameter messages, over all connections, that were discarded by this MP. Discard is either due to the connection

exceeding its configured maximum capacity, or unavailable shared capacity.

Collection Interval: 5 min

Peg Condition: Pegged when a Diameter message, received on any peer connection, is discarded due to exceeding the configured maximum ingress MPS.



TxLongTimeoutPtrListEmpty

Measurement Group: Diameter Ingress Transaction Exception

Measurement Type: Single Measurement Dimension: Single

Description: The number of ingress Diameter Request messages that were discarded because no Long Timeout PTR Buffers were available.

Collection Interval: 5 min

Peg Condition: When any DRL thread within the Diameter Process needs to allocate a Long Timeout PTR Buffer from the Long Timeout PTR Buffer Pool and the number of allocated Long Timeout PTRs from a Long Timeout PTR Buffer Pool is less than the maximum configured capacity of Long Timeout PTR Buffers then:

A Long Timeout PTR Buffer shall be allocated from the Long Timeout PTR Buffer Pool

• The count for the number of allocated Long Timeout PTRs from a Long Timeout PTR Buffer Pool shall be incremented by one.

TxPerConnQueueFullDiscard

Measurement Group: Diameter Ingress Transaction Exception

Measurement Type: Simple

Measurement Dimension: Arrayed (by Connection ID)

Description: The number of egress messages that were discarded because the "Per Connection Egress Message Queue" was full.

Collection Interval: 5 min

Peg Condition: For each message discarded because the "Per Connection Egress Message Queue" was full

TxSockFullDiscard

Measurement Group: Diameter Ingress Transaction Exception

Measurement Type: Simple

Measurement Dimension: Arrayed (by Connection ID)

Description: The number of egress Diameter messages that were discarded because the socket wasnot writable.

Collection Interval: 5 min

Peg Condition: For each egress Diameter message discarded because the socket was not writable.

RxMpMsgPri0

Measurement Group: Message Priority

Measurement Type: Simple Measurement Dimension: Single

Description: Total number of ingress messages assigned message priority 0.

Collection Interval: 5 min

Peg Condition: Pegged when an ingress message is assigned a priority of 0.

RxMpMsgPri1

Measurement Group: Message Priority

Measurement Type: Simple Measurement Dimension: Single

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Description: Total number of ingress messages assigned message priority 1.

Collection Interval: 5 min

Peg Condition: Pegged when an ingress message is assigned a priority of 1.

RxMpMsgPri2

Measurement Group: Message Priority

Measurement Type: Simple Measurement Dimension: Single

Description: Total number of ingress messages assigned message priority 2.

Collection Interval: 5 min

Peg Condition: Pegged when an ingress message is assigned a priority of 2.

EvEmrCongestionOnset

Measurement Group: Connection Congestion

Measurement Type: Simple

Measurement Dimension: Arrayed (by Connection ID)

Description: Number of times an EMR Congestion Level was advanced

Collection Interval: 5 min

Peg Condition Each time the EMR Congestion Level is advanced

EvRemoteBusyCongestion

Measurement Group: Connection Congestion

Measurement Type: Simple

Measurement Dimension: Arrayed (by Connection ID)

Description: Number of times Remote Busy Congestion occurred.

Collection Interval: 5 min

Peg Condition: Each time the Remote Busy Congestion Level changed from CL0 to either CL1, CL2 or CL3.

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