Oracle® Communications Performance Intelligence Center

ProAlarm Alarm Troubleshooting User Guide

Release 9.0

February 2014

ORACLE®

Oracle Communications Performance Intelligence Center ProAlarm Alarm Troubleshooting User Guide, Release 9.0

CHANGE HISTORY

Date	Revision No.	Author	Revision Description	Approved
27-Jan-12	0.1	Anand Swarup V	New document	No
14/02/2012	0.2	Pascal Tribollet	Introduction	No
17/02/2012	0.3	Pascal Tribollet	Specific problem	No
05/11/2012	1.0	Pascal Tribollet	Astellia Neptune probe specific problem	No
07/01/2013	1.1	Pascal Tribollet	Table of content	yes

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Chapter 1: Introduction

Topics:

1.1 Documentation Admonishments

Admonishments are icons and text throughout this manual that alert the reader to assure personal safety, to minimize possible service interruptions, and to warn of the potential for equipment damage.

Table 1: Admonishments

	DANGER :(This icon and text indicate the possibility of *personal injury*.)
	WARNING: (This icon and text indicate the possibility of *equipment damage*.)
	CAUTION:(This icon and text indicate the possibility of *service interruption*.)

1.2 Customer Care Center

The Tekelec Customer Care Center is your initial point of contact for all product support needs. A representative takes your call or email, creates a Customer Service Request (CSR) and directs your requests to the Tekelec Technical Assistance Center (TAC). Each CSR includes an individual tracking number. Together with TAC Engineers, the representative will help you resolve your request.

The Customer Care Center is available 24 hours a day, 7 days a week, 365 days a year, and is linked to TAC Engineers around the globe.

Tekelec TAC Engineers are available to provide solutions to your technical questions and issues 7 days a week, 24 hours a day. After a CSR is issued, the TAC Engineer determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, normal support procedures apply. A primary Technical Engineer is assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Tekelec Technical Assistance Centers are located around the globe in the following locations:

Tekelec - Global

Email (All Regions): support@tekelec.com

- **USA and Canada**

  Phone:

  1-888-FOR-TKLC or 1-888-367-8552 (toll-free, within continental USA and Canada)

  1-919-460-2150 (outside continental USA and Canada)
  TAC Regional Support Office Hours:

  8:00 a.m. through 5:00 p.m. (GMT minus 5 hours), Monday through Friday, excluding holidays

- **Caribbean and Latin America (CALA)**

Phone:

USA access code +1-800-658-5454, then 1-888-FOR-TKLC or 1-888-367-8552 (toll-free)

TAC Regional Support Office Hours (except Brazil):

10:00 a.m. through 7:00 p.m. (GMT minus 6 hours), Monday through Friday, excluding holidays

- **Argentina**

  Phone:

  0-800-555-5246 (toll-free)

- **Brazil**

  Phone:

  0-800-891-4341 (toll-free)

  TAC Regional Support Office Hours:

  8:30 a.m. through 6:30 p.m. (GMT minus 3 hours), Monday through Friday, excluding holidays

- **Chile**

  Phone:

  1230-020-555-5468

- **Colombia**

  Phone:

  01-800-912-0537

- **Dominican Republic**

  Phone:

  1-888-367-8552

- **Mexico**

  Phone:

  001-888-367-8552

- **Peru**

  Phone:

  0800-53-087

- **Puerto Rico**

  Phone:

  1-888-367-8552 (1-888-FOR-TKLC)

- **Venezuela**

  Phone:

  0800-176-6497

- **Europe, Middle East, and Africa**

  Regional Office Hours:

  8:30 a.m. through 5:00 p.m. (GMT), Monday through Friday, excluding holidays

  - **Signaling**

    Phone:

    +44 1784 467 804 (within UK)

  - **Software Solutions**

    Phone:

    +33 3 89 33 54 00

- **Asia**

  - **India**

    Phone:

    +91 124 436 8552 or +91 124 436 8553
    TAC Regional Support Office Hours:

    10:00 a.m. through 7:00 p.m. (GMT plus 5 1/2 hours), Monday through Saturday, excluding holidays

  - **Singapore**

    Phone:

    +65 6796 2288

    TAC Regional Support Office Hours:

    9:00 a.m. through 6:00 p.m. (GMT plus 8 hours), Monday through Friday, excluding holidays

1.3 Emergency Response

In the event of a critical service situation, emergency response is offered by the Tekelec Customer Care Center 24 hours a day, 7 days a week. 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 the Tekelec Customer Care Center.

1.4 Related Publications

For information about additional publications that are related to this document, refer to the *Release Notice* document. The *Release Notice* document is published as a part of the *Release Documentation* and is also published as a separate document on the Tekelec Customer Support Site.

1.5 Documentation Availability, Packaging, and Updates

Tekelec provides documentation with each system and in accordance with contractual agreements. For General Availability (GA) releases, Tekelec publishes a complete PIC 7.1 documentation set. For Limited Availability (LA) releases, Tekelec may publish a documentation subset tailored to specific feature content or hardware requirements. Documentation Bulletins announce a new or updated release.

The Tekelec PIC 7.1 documentation set is released on an optical disc. This format allows for easy searches through all parts of the documentation set.

The electronic file of each manual is also available from the *Tekelec Customer Support* site. This site allows for 24-hour access to the most up-to-date documentation, including the latest versions of Feature Notices.

Printed documentation is available for GA releases on request only and with a lead time of six weeks. The printed documentation set includes pocket guides for commands and alarms. Pocket guides may also be ordered separately. Exceptions to printed documentation are:

- Hardware or Installation manuals are printed without the linked attachments found in the electronic version of the manuals.
- The Release Notice is available only on the Customer Support site.

Note: Customers may print a reasonable number of each manual for their own use.

Documentation is updated when significant changes are made that affect system operation. Updates resulting from Severity 1 and 2 Problem Reports (PRs) are made to existing manuals. Other changes are included in the documentation for the next scheduled release. Updates are made by re-issuing an electronic file to the customer support site. Customers with printed documentation should contact their Sales Representative for an addendum. Occasionally, changes are communicated first with a Documentation Bulletin to provide customers with an advanced notice of the issue until officially released in the documentation. Documentation Bulletins are posted on the Customer Support site and can be viewed per product and release.

1.6 Locate Product Documentation on the Customer Support Site

Access to Tekelec's Customer Support site is restricted to current Tekelec customers only. This section describes how to log into the Tekelec Customer Support site and locate a document. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the *Tekelec Customer Support* site.

   Note: If you have not registered for this new site, click the **Register Here** link. Have your customer number available. The response time for registration requests is 24 to 48 hours.

2. Click the **Product Support** tab.
3. Use the Search field to locate a document by its part number, release number, document name, or

document type. The Search field accepts both full and partial entries.

4. Click a subject folder to **browse through a list of related files.**
5. **To download a file to your location**, right-click the file name and select **Save Target As**.

1.7 Scope and Audience

Refer IAS "System Alarm User Guide – Revision A" to manage alarms and required actions based on events occurred.

This alarms guide provides a list of alarms (events) for Performance Intelligence Center (PIC). With each alarm are the explanation, severity level (warning, minor, major, etc.), and probable cause. The alarms are grouped according to type. The types are listed here.

- Host
- Cross-Connect
- DTO
- Generic
- IXP
- Message Feeder
- MSW
- Platform
- Probe ATM 155
- ProTrace
- ProTraq

Note: For Platform alarms, the user must have *Platform Alarms* documentation readily available. This documentation is found on the Customer Support Web site.

Note: Do not use the Function Keys (F1 through F12) when using NSP. Function keys work in unexpected ways. For example, the F1 key does not open NSP help but opens the help for the browser in use. The F5 key does not refresh a specific screen, but refreshes the entire session and results in a loss of any entered information.

This manual provides alarm names, descriptions, severity levels, and probable causes. It is intended for anyone who is responsible for monitoring or troubleshooting alarms for the PIC and related hardware or software systems.

Alarms Understanding

PIC alarms managed by ProAlarm are divided into several types:

- Platform alarms
- Alarms generated by the TPD OS (disc, fan, power supply, and other Hardware events)
- PIC alarms

Events of Integrated Application System

- Host
- Cross-Connect
- DTO
- Generic
- IXP

- Message Feeder
- MSW
- Probe ATM 155
- ProTrace
- ProTraq

Except the first point, it concerns Application issues

Chapter 2 : TKPIC00xxx Common Specific Problem

Topics:

TKPIC00001: WatchDog

Description

The remote host cannot be reached (CRITICAL) or does not send any event (WARNING).

Severity

WARNING,CRITICAL,CLEARED

Source product

NSP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_SIGNAL

Recovery steps

If CRITICAL event received, check if remote host is alive and pingable and verify if JMX agent is running. Check if firewall ports for communication is opened (1099, 41000). Administrator or Tekelec Customer Care Center can try to access secured HTTPS interface of JMX agent (port 49696)

If WARNING event received, check if JMX agent is properly configured with NSP address(es). Administrator or Tekelec Customer Care Center can access secured HTTPS interface of JMX agent and verify NotificationForwarder MBean attributes

Data to gather

Host name (and corresponding IP from Centralized Configuration)

TKPIC00002: Queue Size Exceeded

Description

Too many items in the queue. The application cannot process all of them. Some items can be lost
Severity is major if one items is lost and critical if more than 100 items are lost

Severity

CRITICAL,WARNING,CLEARED

Source product

JMX Agent

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: QUEUE_SIZE_EXCEEDED

Recovery steps

If event additional text mention too many alarm notification, check alarms in ProAlarm to identify which managed object is generating this alarm storm. If problem cannot be solved rapidly, JMX agent on associated host can be stopped. Administrator or Tekelec Customer Care Center can access secured HTTPS interface of JMX agent and turn off NotificationForwarder MBean (stop and purge operations)

Data to gather

Host name (and corresponding IP from Centralized Configuration)

TKPIC00003: Software Error

Description

Generic alarm indicating that a software abnormally terminated

Severity

MINOR,CLEARED,CRITICAL,MAJOR,WARNING

Source product

JMX Agent

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: SOFTWARE_PROGRAM_ABNORMALLY_TERMINATED

Recovery steps

Check alarm event additional text to identify terminated process and try to restart it.

Data to gather

Get process name and associated host

TKPIC00004: Storage capacity problem

Description

Storage device free space is low. See additionnal text
Minor correspond to 75%, Major to 90% and Critical to 2 MB free

Severity

CLEARED,CRITICAL,MAJOR,WARNING

Source product

JMX Agent

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Check host corresponding to managed object and logical drive mentionned in additional text. Try to freed some space

Data to gather

Host name (and corresponding IP from Centralized Configuration)

Logical drive mentionned in alarm event additional text

TKPIC00005: CPU cycles limit exceeded

Description

CPU cycles limit exceeded for the host. See additionnal text
Severity is Warning for 30s over 90%, minor for 5mn (300s), major for 50mn (3000s) and critical for 8h20mn (30000s)

Severity

MAJOR,WARNING,MINOR,CLEARED,CRITICAL

Source product

JMX Agent

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CPU_CYCLES_LIMIT_EXCEEDED

Recovery steps

Check blocked or overloaded processes on host.

Data to gather

Host name (and corresponding IP from Centralized Configuration)

TKPIC00006: Authentication failed

Description

Login attempt with invalid credentials occured. See additional text

Severity

MAJOR

Source product

NSP

ITU classification

Alarm type: SECURITY_VIOLATION
Probable cause: UNAUTHORIZED_ACCESS_ATTEMPT

Recovery steps

Administrator should go to NSP Security application to verify:

- if user is defined
- if user account is not locked due to 3 invalid attempts
- if user account is not invalidated due to expired password

If all above condition are clean, it may comes from a realm synchronization issue in Weblogic cluster. In that case administrator should restart NSP.

In case of externally defined user (LDAP, SSO), please contact IT.

Data to gather

user name

TKPIC00010: Network interface capacity exceeded

Description

NIC system status reports incidents (collision)

Severity

CLEARED,CLEARED,CLEARED,WARNING

Source product

JMX Agent

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: TRANSMIT_FAILURE

Recovery steps

Contact Tekelec Customer Care Center.

Data to gather

Host name and corresponding ip address

TKPIC00011: Low available physical memory

Description

System reports low available physical memory. Measures are based on committed memory which is a guesstimate of how much RAM+Swap system would need worst case.
Severity is minor when Committed/physical memory comes over 100%, then major when committed/total memory is over 75% and critical when committed/total memory is over 90%

Severity

CRITICAL,MINOR,MAJOR,MAJOR,MINOR

Source product

JMX Agent

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Contact Tekelec Customer Care Center.

Data to gather

N/A

Chapter 3: TKPIC02xxx Signalling Element Specific Problems

Topics:

TKPIC02001: Link Failure

Description

Detection of SIOS signal units in the Rx or Tx direction. See ITU-T Q.703 recommendation, paragraph 1.7.
When a signaling link goes out of service, this event is generated on the signaling entity (eg eagle) and received by the xMF.

Severity

CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

The real problem is at the signaling entity (eg eagle) and has to be checked there.

Data to gather

Details about the link (NEPC, FEPC, SLC, LinkSet name)

TKPIC02011: Local Changeover

Description

Detection of a COO or ECO signal unit, acknowledged by a COA signal unit or unacknowledged at the end of a given time delay. See ITU-T Q.704 recommendation, paragraph 5.
This event is received on a SS7 link that is part of a multiple-link linkset. It informs the other end of the link that one of the links in the linkset has undergone a failure, and the traffic that was carried on that link will now be carried by another link. The event is a ChangeOver Order event, and the remote end responds with a COA (ChangeOver Order Acknowledge).

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

The monitored entity (example, eagle) has to be checked for link failures.

Data to gather

Details about the link on which the event was received (NEPC, FEPC, SLC, Linkset Name).

TKPIC02012: Remote Processor Outage

Description

Detection of SIPO signal units in the Rx direction. See ITU-T Q.703 recommendation, paragraph 8 This alarm indicates a signaling link failure due to processor outage at the remote entity, for example, Eagle STP. This may be because of a central processor failure at the remote entity, or it could be a manual blocking operation initiated by a technician. The action has occurred at the remote entity and the remote entity is notifying the local monitored entity (eg. eagle).

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVER_FAILURE_M3100

Recovery steps

The remote entity, for example Eagle, has to be checked.

Data to gather

Details about the link on which the message was recevied can be gathered (such as NEPC, FEPC, SLC, Linkset name).

TKPIC02013: Local Processor Outage

Description

Detection of SIPO signal units in the Tx direction. See ITU-T Q.703 recommendation, paragraph 8. This alarm indicates a signaling link failure due to processor outage at the local monitored entity, for example, Eagle STP. This may be because of a central processor failure at the local entity, or it could be a manual blocking operation initiated by a technician.

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: TRANSMITTER_FAILURE_M3100

Recovery steps

The monitored entity, for example the Eagle, has to be checked.

Data to gather

Details about the link on which the message was recevied can be gathered (such as NEPC, FEPC,

SLC, Linkset name).

TKPIC02014: Local Inhibition

Description

Detection of LIA signal unit in the Rx direction in response to an LIN signal unit in the Tx direction. See ITU-T Q.704 recommendation, paragraph 10
A signaling link has been inhibited on the local monitored entity (eg. eagle). Usually, this is the result of a operator-initiated action.

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

The monitored entity (eg. eagle) has to be checked.

Data to gather

Details about the link on which the message was recevied can be gathered (such as NEPC, FEPC, SLC, Linkset name).

TKPIC02015: Remote Inhibition

Description

Detection of LIA signal unit in the Tx direction in response to an LIN signal unit in the Rx direction. See ITU-T Q.704 recommendation, paragraph 10
A signaling link has been inhibited on the remote (far end) side (eg eagle) of the monitored signaling link . Usually, this is the result of a operator-initiated action.

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

The remote (far end) of the monitored signaling link has to be checked.

Data to gather

Details about the link on which the message was recevied can be gathered (such as NEPC, FEPC, SLC, Linkset name).

TKPIC02016: RouteUnavailability

Description

Detection of a TFP signal unit in the Rx or Tx direction. See ITU-T Q.704 recommendation, paragraph 13
Transfer Prohibited Message indicates the unavailability of a signaling point. When this occurs, the route associated between the two end points is prohibited and alternate routes are used for traffic.

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Recovery has to be done on either the local monitored entity (eg. eagle) or the remote entity corresponding to the far end signaling point.

Data to gather

The end point that is affected. the linkset name, links.

TKPIC02017: Unavailable User Part Tx

Description

Detection of a UPU signal unit in the Tx direction. See ITU-T Q.704 recommendation, paragraph 2.4.2
Local entity (eg eagle) sends this message indicating the unavailability of a user part, to a requesting far end. For example, if far end is requesting ISUP service, and ISUP is not available locally, local entity sends this message.

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

Recovery steps are to be taken on the local monitored entity (eg. eagle).

Data to gather

Details about the far end (FEPC) and the user part requested.

TKPIC02018: Unavailable User Part Rx

Description

Detection of a UPU signal unit in the Rx direction. See ITU-T Q.704 recommendation, paragraph 2.4.2
Remote entity (eg eagle) sends this message indicating the unavailability of a user part, to the local end. For example, if near end is requesting ISUP service, and ISUP is not available at the remote signaling point, local entity receives this message.

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

Recovery steps are to be taken on the remote side

Data to gather

Details about the far end (FEPC) and the user part requested.

TKPIC02033: Q752 1_10 Threshold

Description

Threshold violation for Q.752 counter 1.10 (number of local automatic changeovers) for a 30 minutes period. See ITU-T Q.704 recommendation, paragraph 5 and ITU-T Q.752 recommendation, table 1
This alarm is generated if the link receives more than the specified number of Changeover messages in a thirty minute period. The low and high threshold can be set in CCM. A high number of changeover messages indicates that the links are bouncing and need to be looked into.

Severity

MAJOR,CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM

Probable cause: THRESHOLD_CROSSED

Recovery steps

The monitored entity (eagle for example) needs to be checked to see why links are bouncing. If the entity is ok, then the connectivity between the entity and the xmf needs to be checked to make sure that the monitoring is not being interrupted.

Data to gather

eagleMonitor logs, probeMonitor logs, troubleshoot eagle

TKPIC02034: Q752 2_1 Threshold

Description

Threshold violation for Q.752 counter 2.1 (duration of signalling link unavailability for any reason : failure, inhibition or processor outage) for a 30 minutes period. See ITU-T Q.752 recommendation, table 2
This alarm is generated when a signaling link is inactive (or unavailable) for a specified amount of time (duration) in a 30 minute period. The threshold is set in CCM.

Severity

MINOR,MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Check why the link is unavailable. Check the monitored entity (eg. eagle). If eagle is ok, then check the xMF connectivity, whether the link is in a monitoring group.

Data to gather

eagleMonitor logs, probeMonitor logs, troubleshoot on eagle, check CCM for monitoring group assignments.

TKPIC02035: Q752 2_15 (5 min) Threshold

Description

Threshold violation for Q.752 counter 2.15 (duration of local busy) for a 5 minutes period. See ITU-T Q.703 recommendation, paragraph 9.3 and ITU-T Q.752 recommendation, table 2
This alarm is generated when a signaling link is in the busy state for a specified amount of time (duration) in a 5 minute period. The threshold is set in CCM.

Severity

MAJOR,CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Check why the link is unavailable. Check the monitored entity (eg. eagle). If eagle is ok, then check the xMF connectivity, whether the link is in a monitoring group.

Data to gather

eagleMonitor logs, probeMonitor logs, troubleshoot on eagle, check CCM for monitoring group assignments.

TKPIC02036: Q752 2_15 (30 min) Threshold

Description

Threshold violation for Q.752 counter 2.15 (duration of local busy) for a 30 minutes period. See ITU-T Q.703 recommendation, paragraph 9.3 and ITU-T Q.752 recommendation, table 2
This alarm is generated when a signaling link is in the busy state for a specified amount of time (duration) in a 30 minute period. The threshold is set in CCM.

Severity

MAJOR,MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Check why the link is unavailable. Check the monitored entity (eg. eagle). If eagle is ok, then check the xMF connectivity, whether the link is in a monitoring group.

Data to gather

eagleMonitor logs, probeMonitor logs, troubleshoot on eagle, check CCM for monitoring group assignments.

TKPIC02037: PrOceSS7 : Monitoring Failure

Description

The alarm consists of event pair "Start of Monitoring Problem" and "End of Monitoring Problem".Time interval between these two events bounds the time in which associated link wasn't monitored on xMF. For example EMP connection between Eagle and IMF was terminated or successfully started, results in this alarm.

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: INPUT_DEVICE_ERROR

Recovery steps

Check network connection between xMF and Eagle - error rate, delays, packet loss, ...

Check whether systems are not overloaded.

Data to gather

N/A

TKPIC02082: Link Occupancy Rate (Rx)

Description

Rx SLOR threshold overrun. The SLOR indicates the number of transmitted bytes from signal units other than FISU divided by the maximal theoretical number of bytes that can be transmitted. This rate is integrated over 10 seconds periods. Using preventive cyclic retransmission, retransmitted signal units are not taken into account. If this rate exceeds the specified threshold, the alarm is generated. Threshold is set in CCM.

Severity

MAJOR,MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Check the signaling link bandwidth on the entity being monitored (eg eagle). Check configuration.
Check xMF to see if processes are getting overloaded, or losing traffic, processes getting restarted.

Data to gather

Troubleshoot eagle or other entity being monitored. Check configuration at CCM. Check XMF using commands such as pm.getprocs, top, eagleMonitor logs, probeMonitor logs.

TKPIC02083: Link Occupancy Rate (Tx)

Description

Tx SLOR threshold overrun. The SLOR indicates the number of transmitted bytes from signal units

other than FISU divided by the maximal theoretical number of bytes that can be transmitted. This rate is integrated over 10 seconds periods. Using preventive cyclic retransmission, retransmitted signal units are not taken into account.SLOR value is measured with a 10 seconds integration time If this rate exceeds the specified threshold, the alarm is generated. Threshold is set in CCM.

Severity

MAJOR,MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Check the signaling link bandwidth on the entity being monitored (eg eagle). Check configuration.

Check xMF to see if processes are getting overloaded, or losing traffic, processes getting restarted.

Data to gather

Troubleshoot eagle or other entity being monitored. Check configuration at CCM. Check XMF using commands such as pm.getprocs, top, eagleMonitor logs, probeMonitor logs.

Chapter 4: TKPIC03xxx ProTraq Specific Problems

Topics:

TKPIC03000: ProTraq Events : Overflow

Description

ProTraq engine generates warning alarm when more than 100 custom alarms have to be generated in a given period (defined in protraq GUI as alarm period). Note: Only the first 100 alarms will be emitted.

Severity

MAJOR,CRITICAL

Source product

NSP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

Change the protraq configuration of the alarm to generate less than 100 (focus on TOP cells). You should change threshold values in order to produce less alarms.

Data to gather

N/A

TKPIC03001: ProTraq Threshold

Description

The threshold defined on a given counter by the user in the ProTraq application has been crossed. Example the user set a threshold on a answer seizure ratio to 80% , and when this value is crossed the alarm is generated.

Severity

CRITICAL,MINOR,MAJOR

Source product

NSP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

N/A (user defined alarm)

Data to gather

See corresponding ProTraq configuration for details

Chapter 5: TKPIC05xxx Message Switch Specific Problems

Topics:

TKPIC05001: MessageSwitch Ethernet Buffer Overrun

Description

Loss of Ethernet frames due to overrun errors on the NDIS driver (protocol driver); acquisition overload.

Severity

WARNING,CLEARED

Source product

MSW

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Input bandwith must be reduced (dimensioning issue)

Data to gather

input bandwith

TKPIC05002: MessageSwitch Network Interface Board Alarm

Description

Errors appear on the Ethernet port (Ethernet driver part):CRC error, No buffers available, Alignment error,Overrun error...

Severity

CLEARED,WARNING

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Check connection and/or cabling,

Check TAP device state,

Check network card health (e.g. use another card to capture the traffic)

Data to gather

Network interface error counters

TKPIC05004: MessageSwitch IP Datagram Construction Error

Description

L4 Data is too large. Fragment concatenation exceeds IPv4 Total Length information. Corrupt data.

Severity

CLEARED,WARNING

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CORRUPT_DATA_M3100

Recovery steps

Make a pcaket capture and contact Tekelec Customer Care Center.

Data to gather

MSW logs (debug and system). Packet capture

TKPIC05005: MessageSwitch IP Datagram Construction Error : Cannot Allocate Raw IP Buffer

Description

No memory can be allocated to store the raw IP data.
Application subsystem failure.

Severity

CLEARED,WARNING

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Check memory usage of the process and contact Tekelec Customer Care Center.

Data to gather

N/A

TKPIC05006: MessageSwitch IP Datagram Construction Error : Unknown IP Version

Description

IP version is neither IPv4 nor IPv6, or data is corrupt.

Severity

CLEARED,WARNING

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CORRUPT_DATA_M3100

Recovery steps

Make a pcaket capture and confim that packet version is not supported (version field in the IP header)

Data to gather

N/A

TKPIC05007: MessageSwitch IP Datagram Construction Error : Null Raw IP

Description

Raw IP buffer pointer is null; corrupt data.

Severity

WARNING,CLEARED

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CORRUPT_DATA_M3100

Recovery steps

Check memory usage of the process,

Make a packet capture and contact Tekelec Customer Care Center.

Data to gather

N/A

TKPIC05008: MessageSwitch IP Datagram Construction Error : Fragment Overlap

Description

New fragment overlaps part of already arrived fragment (the whole datagram is then discarded)
Corrupt data

Severity

WARNING,CLEARED

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CORRUPT_DATA_M3100

Recovery steps

Make a pcaket capture and confim that there is a problem in fragmented packet on the network

Data to gather

MSW logs (debug and system)

TKPIC05009: MessageSwitch IP Datagram Construction Error : Null IP Datagram

Description

IP Datagram object pointer is null; corrupt data.

Severity

CLEARED,WARNING

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CORRUPT_DATA_M3100

Recovery steps

Check memory usage of the process

Restart MSW service and monitor the system

Contact Tekelec Customer Care Center.

Data to gather

N/A

TKPIC05010: MessageSwitch Out of Memory

Description

Platform error; no memory available.

Severity

CLEARED,WARNING

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: OUT_OF_MEMORY

Recovery steps

Check memory usage of the process

Restart MSW service and monitor the system

Contact Tekelec Customer Care Center.

Data to gather

N/A

TKPIC05011: MessageSwitch Link Status Disconnected : Ethernet Disconnected

Description

Ethernet link is disconnected.

Severity

MAJOR,CLEARED

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: ADAPTER_ERROR

Recovery steps

Check input cable

Data to gather

N/A

TKPIC05012: MessageSwitch Link Status Disconnected

Description

ISDN Physical Access state is not ready. Is not receiving
ISDN response or activity frames (REJ, RNR, RR, DISC or UA).

Severity

MAJOR,CLEARED

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: ADAPTER_ERROR

Recovery steps

Check input cable

Data to gather

N/A

TKPIC05013: MessageSwitch Link Status Disconnected : ISDN Layer2 Not Establish

Description

Isdn layer 2 not establish

Severity

MAJOR,CLEARED

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: ADAPTER_ERROR

Recovery steps

Check input cable and check physical signal establishement using a physical layer protocol analyzer device

Data to gather

N/A

TKPIC05014: MessageSwitch Link Status Disconnected : ISDN External PCM Access Failure

Description

Major: PCM alarm related to a cable connected on an interface board. The cables connecting the monitored network to the MSW may be disconnected or damaged. If a cross-connect is inserted between the monitored network and the MSW, its configuration may be incorrect.
Clear: End of PCM alarm condition on a cable connected on PMC.

Severity

MAJOR,CLEARED

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: ADAPTER_ERROR

Recovery steps

Check input cable

Data to gather

N/A

TKPIC05015: MessageSwitch Internal Error

Description

Severity

MAJOR

Source product

MSW

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact Tekelec Customer Care Center.

Data to gather

N/A

Chapter 6: TKPLATssxx
TPD Platform Specific Problems

Topics:

TKSPLATCR1: Breaker Panel Feed Unavailable

Description

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATCR2: Breaker Panel Breaker Failure

Description

This critical alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATCR3: Breaker Panel Monitoring Failure

Description

This critical alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATCR4: Power Feed Unavailable

Description

This critical alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATCR5: Power Supply 1 Failure

Description

This critical alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATCR6: Power Supply 2 Failure

Description

This critical alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATCR7: Power Supply 3 Failure

Description

This critical alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATCR14: Uncorrectable ECC Memory Error

Description

This critical 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Customer Care Center to request hardware replacement.

Data to gather

N/A

TKSPLATCR15: SNMP Get Failure

Description

This critical alarm indicates that the server failed to get snmp information from the device

configured in the SNMPGET syscheck test

Severity

CRITICAL

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Verify device is active and pingable via the ping command.

If problem persists, contact Tekelec Customer Care Center to further troubleshoot.

Data to gather

N/A

TKSPLATMA1: Server Fan Failure

Description

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

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: ENVIRONMENTAL_ALARM
Probable cause: HEATING_OR_VENTILATION_OR_COOLING_SYSTEM_PROBLEM

Recovery steps

Refer to the procedure for replacing a fan assembly in the appropriate hardware manual. After you have opened the front lid to access the fan assemblies, determine whether any objects are interfering with the fan rotation. If some object is interfering with fan rotation, remove the object and skip to step 3.

If visual inspection does not indicate the presence of physical interference, perform the following substeps to determine which of the server's fan assemblies needs replacing and to replace the fan assembly:

Run syscheck in Verbose mode .

Find the section of syscheck output about fans, and refer to the appropriate hardware manual to

determine the location of the fan assembly that contains the failed fan.

Replace the indicated fan tray (using the procedure for replacing a fan assembly in the appropriate hardware manual) and proceed to step 3.

Run syscheck to verify problem is resolved and alarm has been cleared

If the problem has not been resolved, contact the Customer Care Center

Data to gather

N/A

TKSPLATMA2: Server Internal Disk Error

Description

This major 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

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode

Contact the Tekelec Customer Care Center

Data to gather

system health check output

TKSPLATMA3: Server RAID Disk Error

Description

This major alarm indicates that the offboard storage server had a problem with its hardware disks

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM

Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode

Contact the Tekelec Customer Care Center

Data to gather

system health check output

TKSPLATMA4: Server Platform Error

Description

This major alarm indicates a major-class platform error such as a corrupt system configuration or missing files, or indicates that syscheck itself is corrupt

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode

Contact the Tekelec Customer Care Center

Data to gather

system health check output

TKSPLATMA5: Server File System Error

Description

This major alarm indicates that syscheck was unsuccessful in writing to at least one of the server's file systems

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode

Contact the Tekelec Customer Care Center

Data to gather

system health check output

TKSPLATMA6: Server Platform Process Error

Description

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

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode. If the alarm has been cleared, the problem is solved

Else, contact the Tekelec Customer Care Center

Data to gather

system health check output

TKSPLATMA7: Server RAM Shortage Error

Description

This major alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD

distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATMA8: Server Swap Space Shortage Error

Description

This major 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

In order 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

Data to gather

system health check output

TKSPLATMA9: Server Provisioning Network Error

Description

This major alarm indicates that the connection between the server's eth0 interface and the customer network is not functioning properly. The eth0 interface is at the bottom of the Quad gigabit Eth Card in PCI slot 9

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Verify that a customer-supplied cable labeled TO CUSTOMER NETWORK is securely connected to the lower port of the quad-port card in PCI slot 9. Follow the cable to its connection point on the local network and verify this connection is also secure.

Test the customer-supplied cable labeled TO CUSTOMER NETWORK with an Ethernet Line Tester. If the cable does not test positive, replace it.

Have your network administrator verify that the network is functioning properly.

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, contact Tekelec Customer Care Center for assistance

Data to gather

N/A

TKSPLATMA10: Server Eagle Network A Error

Description

This major alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATMA11: Server Eagle Network B Error

Description

This major alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATMA12: Server Sync Network Error

Description

This major alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

This alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Data to gather

N/A

TKSPLATMA13: Server Disk Space Shortage Error

Description

This major 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 has been allocated on the file system.
- A file system has a different number of blocks than it had at install.

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMA14: Server Default Route Network Error

Description

This major alarm indicates that the server's default network route is experiencing a problem. Running syscheck in verbose mode will provide information about which type of problem

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Run syscheck in verbose mode. The output should indicate one of the following error:

- "The default router at <IP_address> cannot be pinged."

This error indicates that the router may be down or unreachable.

Verify the network cables are firmly attached to the server and the network switch, router, hub, etc.

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.

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

Rerun syscheck: problem is solved if alarm has been cleared

- "The default route is not on the provisioning network."

This error indicates that the default route has been defined in the wrong network. When the syscheck verbose output returns this error, contact Tekelec Customer Care Center for assistance.

- "An active route cannot be found for a configured default route."

This error indicates that a mismatch exists between tthe active configuration and the stored configuration. When the syscheck verbose output returns this error, contact Customer Care Center for assistance. See section 75

NOTE: If the verbose output does not indicate the error above, contact Customer Care Center (see section 75) for further assistance.

Data to gather

system health check output

TKSPLATMA15: Server Temperature Error

Description

This major alarm indicates that the internal temperature within the server is unacceptably high
Ambient temperature should be in following limits:
- Operating: 5 °C to 40 °C
- Exceptional Operating Limit: 0 °C to 50 °C
- Storage: -20 °C to 60 °C

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: ENVIRONMENTAL_ALARM
Probable cause: TEMPERATURE_UNACCEPTABLE

Recovery steps

Ensure that nothing is blocking the fan's intake. Remove any blockage.

Verify that the temperature in the room is normal. If it is too hot, lower the temperature in the room to an acceptable level

Run syscheck after waiting appropriate period of time for condition to be below alarm thresholds. It may take about ten minutes after the room return to an acceptable temperature before syscheck shows the alarm cleared.

If alarm is not cleared, replace the filter (refer to the appropriate hardware manual)

Run syscheck after waiting appropriate period of time for condition to be below alarm thresholds.

It may take about ten minutes after the filter is replaced before syscheck shows the alarm cleared.

If alarm has not been cleared, contact Tekelec Customer Care Center for assistance.

Data to gather

N/A

TKSPLATMA16: Server Mainboard Voltage Error

Description

This major 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

Contact Tekelec Customer Care Center for assistance

Data to gather

N/A

TKSPLATMA17: Server Power Feed Error

Description

This major 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. Refer to the Breaker Panel alarm procedures (3324, 3325, and 3326)

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

Verify that all the server power feed cables to the server that is reporting the error are securely

connected.Run syscheck, if the alarm has been cleared, the problem is resolved.

If the alarm has not been cleared, 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.Run syscheck, if the alarm has been cleared, the problem is resolved.

If the alarm has not been cleared, and if the power source is functioning properly and the wires are all secure, have an electrician check the voltage on the power feed.Run syscheck, if the alarm has been cleared, the problem is resolved.

If the problem has not been resolved, contact Tekelec Customer Care Center for assistance

Data to gather

N/A

TKSPLATMA18: Server Disk Health Test Error

Description

This major alarm indicates either the hard drive has failed or failure is imminent.

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Contact Tekelec Customer Care Center for assistance

Data to gather

N/A

TKSPLATMA19: Server Disk Unavailable Error

Description

This major alarm indicates that 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

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Contact Tekelec Customer Care Center for assistance

Data to gather

N/A

TKSPLATMA20: Device Error

Description

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

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact Tekelec Customer Care Center for assistance

Data to gather

N/A

TKSPLATMA21: Device Interface Error

Description

This major alarm indicates that either the IP bond is either not configured or down

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact Tekelec Customer Care Center for assistance

Data to gather

N/A

TKSPLATMA22: Correctable ECC Memory Error

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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

No recovery necessary. If the condition persists, contact the Customer Care Center to request hardware replacement.

Data to gather

N/A

TKSPLATMA23: Power Supply A Error

Description

This major alarm indicates that power supply 1 (feed A) has failed

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

Verify that nothing is obstructing the airflow to the fans of the power supply.

Run syscheck in verbose mode. The output will provide details about what is wrong with the power supply.

Contact the Customer Care Center. Power supply 1 (feed A) will probably need to be replaced

Data to gather

system health check output

TKSPLATMA24: Power Supply B Error

Description

This major alarm indicates that power supply 2 (feed B) has failed

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

Verify that nothing is obstructing the airflow to the fans of the power supply.

Run syscheck in verbose mode. The output will provide details about what is wrong with the power supply.

Contact the Customer Care Center. Power supply 2 (feed B) will probably need to be replaced

Data to gather

system health check output

TKSPLATMA25: Breaker Panel Feed Error

Description

This major alarm indicates that the server is not receiving information from the breaker panel relays

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

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, 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 also to the serial ports on both servers.

If the problem has not been resolved, contact the Tekelec Customer Care Center to request that the breaker panel be replaced

Data to gather

N/A

TKSPLATMA26: Breaker Panel Breaker Error

Description

This alarm indicates that a power fault has been identified by the breaker panel. The LEDs on the center of the breaker panel 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.

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

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, look at the breaker panel assignments. For each breaker assignment, verify that the corresponding LED in the PWR BUS A group and the PWR BUS B group is illuminated Green

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 th

Data to gather

N/A

TKSPLATMA27: Breaker Panel Monitoring Error

Description

This major 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

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

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, verify that both ends of the labeled serial cables are secured properly (for locations of serial cables, see the appropriate hardware manual).

Run syscheck, if the alarm has been cleared, the problem is resolved.

If the problem has not been resolved, contact the Tekelec Customer Care Center

Data to gather

N/A

TKSPLATMA28: Server HA Keepalive Error

Description

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

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Determine if the mate server is currently down and bring it up if possible.

Determine if the keepalive interface is down.

Determine if heartbeart is running (service TKLCha status).

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKSPLATMA29: DRBD is unavailable

Description

This major 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKSPLATMA30: DRBD is not replicating

Description

This major 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Determine if the mate server is currently down and bring it up if possible.

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKSPLATMA31: DRBD peer problem

Description

This major 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKSPLATMA32: HP disk problem

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

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMA33: HP Smart Array controller problem

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

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMA34: HP hpacucliStatus utility problem

Description

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

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMA35: Multipath device access link problem.

Description

This minor alarm indicates when one or more "access paths" of a multipath device are failing or not healthy, or the multipath device itself does not exist. An "access path" is a SCSI device /dev/sdX, which is created by Fiber Channel HBA module, and it is mapped to a particular "volume" (RAID drive) on MSA storage array.
TPD checks if:
- the multipath device exists - if it doesn't, it may be due to multipathd daemon stopped
- each access path of the multipath device exists and is healthy; this is based on "multipath -ll" output

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: SOFTWARE_PROGRAM_ABNORMALLY_TERMINATED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMA36: Switch Link Down Error

Description

This minor alarm indicates that the switch is reporting that the link is down. The link that is down is reported in the alarm. For example, port 1/1/2 is reported as 1102.

Severity

MAJOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: SOFTWARE_PROGRAM_ABNORMALLY_TERMINATED

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMI1: Server Disk Space Shortage Warning

Description

This minor 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

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMI2: Server Application Process Error

Description

This minor 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMI3: Server Hardware Configuration Error

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMI4: Server RAM Shortage Warning

Description

This minor alarm is generated by the MPS syscheck software package and is not part of the TPD distribution. Refer to MPS specific documentation for information regarding this alarm.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMI6: Server Swap Space Shortage Warning

Description

This minor 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.
In order 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI7: Server Default Router not Defined

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMI8: Server Temperature Warning

Description

This minor 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.
Ambient temperature should be in following limits:
- Operating: 5 °C to 40 °C
- Exceptional Operating Limit: 0 °C to 50 °C
- Storage: -20 °C to 60 °C

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: ENVIRONMENTAL_ALARM
Probable cause: TEMPERATURE_UNACCEPTABLE

Recovery steps

Ensure that nothing is blocking the fan's intake. Remove any blockage.

Verify that the temperature in the room is normal. If it is too hot, lower the temperature in the room to an acceptable level

Run syscheck after waiting appropriate period of time for condition to be below alarm thresholds. It may take about ten minutes after the room return to an acceptable temperature before syscheck shows the alarm cleared.

If alarm is not cleared, replace the filter (refer to the appropriate hardware manual)

Run syscheck after waiting appropriate period of time for condition to be below alarm thresholds. It may take about ten minutes after the filter is replaced before syscheck shows the alarm cleared.

If alarm has not been cleared, contact Tekelec Customer Care Center for assistance.

Data to gather

N/A

TKSPLATMI9: Server Core File Detected

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

system health check output

TKSPLATMI10: Server NTP Daemon Not Synchronized

Description

This minor 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI11: CMOS Battery Voltage Low

Description

This minor 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI12: Server Disk Self Test Warning

Description

This minor alarm indicates that a non-fatal disk issue (such as a sector cannot be read) exists.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM

Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI13: Device Warning

Description

This minor alarm indicates that either we are unable to perform a snmpget on the configured SNMP OID or the value returned failed the specified comparison operation.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI14: Device Interface Warning

Description

This minor alarm can be generated by either an SNMP trap or an IP bond error. If syscheck is configured to receive SNMP traps, this alarm indicates that a SNMP trap was received with the "set" state. If syscheck is configured for IP bond monitoring, this alarm can mean a slave device is not up, a primary device is not active or syscheck is unable to read bonding information from interface configuration files.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI15: Server Reboot Watchdog Initiated

Description

This minor 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.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI16: Server HA Failover Inhibited

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI17: Server HA Active To Standby Transition

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI18: Server HA Standby To Active Transition

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI19: Platform Health Check Failure

Description

This minor alarm is used to indicate a syscheck configuration error.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI20: NTP Offset Check Failure

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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI21: NTP Stratum Check Failure

Description

This minor 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI22: SAS Presence Sensor Missing

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI23: SAS Drive Missing

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Customer Care Center to determine if the issue is with a failed drive or failed configuration

Data to gather

N/A

TKSPLATMI24: DRBD failover busy

Description

This minor 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

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: SOFTWARE_PROGRAM_ABNORMALLY_TERMINATED

Recovery steps

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, then contact the Customer Care Center for assistance

Data to gather

N/A

TKSPLATMI25: HP disk resync

Description

This minor alarm indicates that the HP disk subsystem is currently resyncing after a failed/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 resyncing, and the percentage complete. This alarm should eventually clear once the resync of the disk is completed. The time it takes for this is dependant on the size of the disk and the amount of activity on the system.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Run syscheck in Verbose mode If the percent recovering is not updating, wait at least 5 minutes between subsequent runs of syscheck

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI26: Telco Fan Warning

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: ENVIRONMENTAL_ALARM
Probable cause: HEATING_OR_VENTILATION_OR_COOLING_SYSTEM_PROBLEM

Recovery steps

Contact Customer Care Center to get a replacement switch. Verify the ambient air temperature around the switch is as low as possible until the switch is replaced.

Data to gather

N/A

TKSPLATMI27: Telco Temperature Warning

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: ENVIRONMENTAL_ALARM

Probable cause: TEMPERATURE_UNACCEPTABLE

Recovery steps

Lower the ambient air temperature around the switch as low as possible

If problem persists, contact Customer Care Center

Data to gather

N/A

TKSPLATMI28: Telco Power Supply Warning

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

Verify breaker was not tripped.

If breaker is still good and problem persists, contact Customer Care Center 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.

Data to gather

N/A

TKSPLATMI29: Invalid BIOS value

Description

This minor 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

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Issue the following command to determine which BIOS values are invalid:

```
# syscheck hardware serial
```

In order to change the BIOS values to the expected values, the server will need to be rebooted and the BIOS setting will need to be manually changed:

1. Login on the console as root.

2. Reboot the server.

```
# reboot
```

3. Watch the reboot messages closely. When you see the <F9 = Setup> prompt appear in the lower right hand section of the display, begin pressing the F9 key at 1 second intervals until the prompt changes to <F9 pressed>.

4. Wait for the BIOS configuration menu to appear (this may take a minute or two).

5. Hit <Enter> on the highlighted 'System Options' selection.

6. Hit <Enter> on the highlighted 'Serial Port Options' selection.

7. Use the arrow keys to move to the port you need to change. Either 'Embedded Serial Port' or 'Virtual Serial Port'. Hit <Enter> when the selection is highlighted.

8. Use the arrow keys to select the value required for the port you are changing, then hit <Enter> to select.

9. Repeat steps 7 and 8, if necessary, to get both ports configured correctly.

10. Hit the <Esc> key 3 times to back out of the sub-menus and exit the BIOS configuration menu.

11. Confirm the changes with the F10 key when prompted. The server will restart the boot process.

12. When complete, login as root and verify settings are correct:

```
# syscheck hardware serial
```

Data to gather

N/A

TKSPLATMI30: Server Kernel Dump File Detected

Description

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

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Run syscheck in Verbose mode.

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKSPLATMI31: Server Upgrade Fail Detected

Description

This minor alarm indicates that a TPD upgrade has failed.

Severity

MINOR

Source product

OPEN_PLAT

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Execute /usr/TKLC/plat/bin/alarmMgr –clear TKSPLATMI31 to clear the alarm.

Contact the Customer Care Center

Data to gather

N/A

TKSPLATMI32: Half Open Socket Warning Limit

Description

This alarm indicates that the number of half open TCP sockets has reached the warning threshold.

This problem is caused by a remote system failing to complete the TCP 3-way handshake.

Severity

MINOR

Source product

TPD

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: SOFTWARE_PROGRAM_ABNORMALLY_TERMINATED

Recovery steps

Run syscheck in verbose mode

Contact the Customer Care Center

Data to gather

N/A

Chapter 7: TKPIC19xxx Cross Control Specific Problems

Topics:

TKPIC19001: CrossControl Alarm Communication Error

Description

Communication Error

Severity

MAJOR,CLEARED

Source product

CrossControl

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVE_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC19002: CrossControl Level 1 Alarm

Description

Level 1 Alarm

Severity

MAJOR,CLEARED

Source product

CrossControl

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: DEGRADED_SIGNAL_M3100

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

Chapter 8: TKPIC20xxx Message Feeder Specific Problems

Topics:

TKPIC20501: LIM Copy Function on SS7 Card

Description

LIM Copy Function on SS7 Card

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

Check input bandwith and process state at the host level (use top command and probeMonitor logs)

TKPIC20503: LIM - Signal Unit Error Rate Monitor (SUERM) threshold has exceeded.

Description

LIM - Signal Unit Error Rate Monitor (SUERM) threshold has exceeded.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Check level 1 state (if there is level 1 alarm, then follow recovery step described in level 1 alarm)

If no level 1 alarm, then no action possible, inform customer

Data to gather

N/A

TKPIC20504: LIM - Received 2 of 3 invalid Backward Sequence Numbers.

Description

LIM - Received 2 of 3 invalid Backward Sequence Numbers.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

No action possible, inform customer.

Data to gather

N/A

TKPIC20505: LIM - Received 2 out of 3 invalid Forward Indicator Bits.

Description

LIM - Received 2 out of 3 invalid Forward Indicator Bits.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

No action possible, inform customer.

Data to gather

N/A

TKPIC20506: LIM - SS7 Link is available.

Description

LIM - SS7 Link is available.

Severity

CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Check level 1 alarms.

Check signal at monitoring point

Check traffic at monitoring point

Inform customer.

Data to gather

N/A

TKPIC20507: LIM DS1 Loss of Signal

Description

LIM DS1 Loss of Signal

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_SIGNAL

Recovery steps

Check cable connection.

Check signal at monitoring point, inform customer.

Data to gather

level 1 status and counters

TKPIC20508: LIM DS1 Loss of Frame Alignment

Description

LIM DS1 Loss of Frame Alignment

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVE_FAILURE

Recovery steps

Same as for LOS.

Check input mode setup.

No recovery possible if AIS is active (see AIS).

Data to gather

level 1 status and counters

TKPIC20509: LIM Remote Alarm Indication

Description

LIM Remote Alarm Indication

Severity

WARNING,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVE_FAILURE

Recovery steps

No action possible, inform customer.

Data to gather

level 1 status and counters

TKPIC20510: LIM Alarm Indication Signal

Description

LIM Alarm Indication Signal

Severity

WARNING,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVER_FAILURE_M3100

Recovery steps

No action possible, inform customer.

Data to gather

level 1 status and counters

TKPIC20512: Ethernet Loss of Frame

Description

Ethernet Loss of Frame

Severity

CLEARED,WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_FRAME

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC20513: Ethernet Network Interface Board Error

Description

Ethernet Network Interface Board Error

Severity

CLEARED,WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Check the input bandwith/CPU usage and verify that system is not overloaded,

If system is not overloaded, then check the cabling or HW state of the card,

If no problem is detected at XMF side, then check other device state (TAP, switch...)

Data to gather

1. Use "top", "cfgPmia" tool to verify bandwith/CPU usage,

2. Use "ipDevDisp" / "ifconfig", "ethtool"... to verify any HW issue on XMF NIC cards,

   Use /tmp/ngp0/* files to verify any HW issue on NGP Tilera cards (MAC, IPP files)

3. Use other device

TKPIC20514: Ethernet Disconnected Error

Description

Ethernet Disconnected Error

Severity

CLEARED,WARNING

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: INPUT_OUTPUT_DEVICE_ERROR

Recovery steps

Check the cable and/or other device state

Data to gather

Use "ethtool" script ouput

TKPIC20515: Message Feeder Overload

Description

Message Feeder Overload

Severity

CRITICAL,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

You can either lower the traffic (or move some associations or links to mate server) or modify threshold value to be higher. In this case be careful to satisfy specifications of the xMF system.

Data to gather

Check type and amount of the traffic on links or interfaces and system load. You can use nsp diagnostic utilities as well.

TKPIC20516: Message Feeder Overprovision

Description

Message Feeder Overprovision

Severity

WARNING,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: SOFTWARE_PROGRAM_ERROR

Recovery steps

Change the monitoring group to contain less than 512 links per group

Data to gather

N/A

TKPIC20517: Message Feeder Capacity Exceeding

Description

Message Feeder Capacity Exceeding

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

In PMF mode, check if the disk storage is enabled (to reach higher bandwith performance, then disabled disk storage)

Data to gather

Give output of "ifrag -a" scrip on XMF

TKPIC20518: Message Feeder Dropping Messages

Description

Message Feeder Dropping Messages

Severity

CRITICAL,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

To recover use one or more steps:

- try to find out what it the root cause of this issue. For example run healthcheck script, "top" utility, diagnostic utilities on nsp, ...

- lower the traffic or move some links or associations to mate server

- disable PDUStorage

- add and integrate another server to process the traffic

Data to gather

Run healthcheck script on subsystem. Check type and amount of the traffic on links or interfaces.

TKPIC20519: Message Feeder Message Out of Sequence

Description

Message Feeder Message Out of Sequence

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

check network connectivity between xMF and Eagle - throughput, error rate, delay, ...

check whether xMF is not overloaded

check IDB database consistency on xMF

Data to gather

Run healthcheck script on xMF subsystem. Check type and amount of the traffic on links or interfaces.

TKPIC20520: Message Feeder Output Congestion

Description

Message Feeder Output Congestion

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

check whether xMF or (especially) IXP machines are not overloaded.

check network connection and between xMF and IXP for error rate, delay, packet drop, ...

Data to gather

Amount and type of the traffic.

Number and type of destinations on IXP, system resources consumption.

TKPIC20521: Message Feeder Zero Timestamp

Description

Message Feeder Zero Timestamp Sent

Severity

CRITICAL,CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: INFORMATION_MISSING

Recovery steps

Fix the NTP issue on the Eagle

check time setting on both xMF and Eagle

Data to gather

N/A

TKPIC20522: Message Feeder Message Route Getting Behind

Description

Message Feeder Message Route Getting Behind

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: DELAYED_INFORMATION

Recovery steps

If possible try to send data (part of links or associations) to different destination or different IXP server.

Check network connectivity between xMF and IXP - delays, error rate, packet drop, ...

Find out whether xMF or IXP servers are overloaded.

Lower the amount of the traffic flowing through the systems if necessary

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20523: Message Feeder PDU Loss

Description

Message Feeder PDU Loss

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: INFORMATION_MISSING

Recovery steps

find out, whether destination is reachable for xMF through DTS

try to lower system load on xMF or IXP by moving some links / destinations to other server or

lower throughput

fix network connection (speed, error rate, throughput, firewall)

eventually set higher value of PduTimeLimit parameter to handle peak hours

Data to gather

Check type and amount of the traffic on links or interfaces. Check system load on both subsystems (xMF and IXP). Has xMF buffered many PDUs?

TKPIC20524: Message Feeder PDU timestamps are delayed beyond configured limit

Description

Message Feeder PDU timestamps are delayed beyond configured limit

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: DELAYED_INFORMATION

Recovery steps

find out, whether destination is reachable for xMF through DTS

try to lower system load on xMF or IXP by moving some links / destinations to other server or lower throughput

fix network connection (speed, error rate, throughput, firewall)

eventually set higher value of PduTimeLimit parameter to handle peak hours

Data to gather

Check type and amount of the traffic on links or interfaces. Check system load on both subsystems (xMF and IXP). Has xMF buffered many PDUs?

TKPIC20525: Message Feeder Incoming MSU traffic over the specified threshold

Description

Message Feeder Incoming MSU traffic over the specified threshold

Severity

CLEARED,MAJOR,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20526: Message Feeder Outgoing MSU traffic over the specified threshold

Description

Message Feeder Outgoing MSU traffic over the specified threshold

Severity

MINOR,CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20527: Message Feeder Incoming GB traffic over the specified threshold

Description

Message Feeder Incoming GB traffic over the specified threshold

Severity

MAJOR,MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20528: Message Feeder Outgoing GB traffic over the specified threshold

Description

Message Feeder Outgoing GB traffic over the specified threshold

Severity

CLEARED,MAJOR,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20529: Message Feeder Incoming IP traffic over the specified threshold

Description

Message Feeder Incoming IP traffic over the specified threshold

Severity

CLEARED,MAJOR,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20530: Message Feeder Outgoing IP traffic over the specified threshold

Description

Message Feeder Outgoing IP traffic over the specified threshold

Severity

CLEARED,MAJOR,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20531: Message Feeder Incoming traffic over the specified threshold

Description

Message Feeder Incoming traffic over the specified threshold

Severity

CLEARED,MAJOR,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20532: Message Feeder Outgoing traffic over the specified threshold

Description

Message Feeder Outgoing traffic over the specified threshold

Severity

MINOR,CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20533: Destination Traffic over specified threshold

Description

Destination Traffic over specified threshold

Severity

CLEARED,MAJOR,MINOR

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

lower the traffic or move some links or associations to mate server

check whether xMF or IXP machines are not overloaded

modify threshold parameters to more suitable values

Data to gather

Check type and amount of the traffic on links or interfaces.

TKPIC20534: No spare server available, can not failover

Description

No spare server available, can not perform failover

Severity

CRITICAL,CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

fix any failed server or add more physical servers to the subsystem.

Data to gather

get all server defined in the subsystem:

iqt -E DaqServer

get server status by foStat or iFoStat:

foStat

iFoStat

get recent failover alarm from the primary:

foAlarm

get trace from daqManager at the primary:

tr.cat daqManager

TKPIC20535: Server failure, out of service

Description

Server failure, out of service

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

try to login to the server as cfguser from network. if there is no response, try from the console access. otherwise, check the power on the server. try to restart the server if it was cause the power failure after recovery. if there is any hardware failure, please correct them and restart the server.

if you can login to the server, check the run state. if it is not in A state then start it by prod.start

if it is in run state, check the daqManager process by pm.getprocs

if daqManager is in off state, run pm.set on daqManager to start it

Data to gather

make sure the failure server is defined in the subsystem:

iqt -E DaqServer

from the primary, collect the failover log:

foAlarm

from the primary, collect the trace from the daqManager process:

tr.cat daqManager

TKPIC20536: Group failover successful

Description

Monitoring Group failover successful for IMF subsystem

Severity

MINOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

follow the alarm TKPIC20535 to figure out the reason of the failure server and try to recover.

Data to gather

it is information alarm. just need to figure out the reason for the failure server. follow the same steps of alarm ID 20535/TKPIC20535.

TKPIC20537: Group failover failed

Description

Monitoring Group failover failed

Severity

CRITICAL

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

recovery any failure server or add more spare server to the subsystem.

check idb for any error by iaudit and recover the error.

Data to gather

daqManager trace from the primary server:

tr.cat daqManager

idb status:

iaudit

Server definition:

iqt -E DaqServer

Monitoring group definition:

iqt -E DaqGroup

TKPIC20538: Manual group failover

Description

Manual failover for monitoring group

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: INFORMATION_MODIFICATOIN_DETECTED

Recovery steps

nothing to recovery, it is an information alarm to show someone execute the manual failover command.

Data to gather

verify the failover alarm from the primary:

foAlarm

TKPIC20539: No server available for new group

Description

No server available for newly defined monitoring group

Severity

CRITICAL,CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

check the failover status by foStat or iFoStat

find out those OOS servers and try to recover them to back in service.

Data to gather

find out all failure servers:

foStat or iFoStat

trace from daqManager in primary server,

tr.cat daqManager

server definition:

iqt -E DaqServer

monitoring group definition:

iqt -E DaqGroup

TKPIC20540: Spare server failed

Description

Spare server failed

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

recover the failure server and bring it back in service. refer to TKPIC20535.

Data to gather

same as alarm 20535/TKPIC20535.

TKPIC20541: No failover available due to no spare service available

Description

No failover available due to no spare service available

Severity

MAJOR,CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

fix any failed server or add more physical servers to the subsystem.

Data to gather

get all server defined in the subsystem:

iqt -E DaqServer

get server status by foStat or iFoStat:

foStat

iFoStat

get recent failover alarm from the primary:

foAlarm

get trace from daqManager at the primary:

tr.cat daqManager

TKPIC20542: Network on Fast Copy card

Description

Network on Fast Copy card

Severity

CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact Tekelec Customer Care Center.

Data to gather

N/A

TKPIC20543: Network on Fast Copy card

Description

The Network on FastCopy card is inaccessible.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Check IDB tables for this card record and FcMonitor process functionality.

Check whether IDB database is corrupted.

Check FastCopy card physically.

Data to gather

Run healthcheck script on xMF subsystem.

TKPIC20544: Sent Service Reject message for the link

Description

Sent Service Reject message for the link

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Check whether we are connected with proper Eagle with correct version of EMP protocol.

Check network connection between Eagle and xMF - connectivity, error rate, delays, packet loss, ...

Data to gather

N/A

TKPIC20545: Link connected

Description

Link connected

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC20546: Server failure and need to recover

Description

error detected by disasterRecovery script and going to recover automatically.

Severity

CRITICAL

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

it should be done by the disasterRecovery script, if it is not then do

prod.dbup

iaudit

prod.dbdown

prod.start

to restart the XMF service

Data to gather

all log files from disasterRecovery script are under /tekelec/TKLCmf/runtime/run/proc/disasterRecovery.

TKPIC20547: Too many errors in the server

Description

Too many issue found in the XMF server, the service will be restarted.

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

the system should be recovery automatically. if not do restart by

prod.dbup

iaudit

prod.dbdown, if it failed, do re.rmipc to froce to remove shared memory.

prod.start

Data to gather

trace from the procmgr,

tr.cat procmgr

idb status,

iaudit

and trace for all processes.

TKPIC20548: PDP context limit reached

Description

Contact Tekelec Customer Care Center.

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Officially limitation of number of PDP context supported in specify in FRS to 1 Million.

It is possible to increase this limitation by modifying MaxPdpCxtLimit and by restarting pmiaMonitor process

Data to gather

Give output of pdpCxtMngDisp script on XMF

TKPIC20549: Protocol mismatch occured for configured association

Description

Protocol mismatch occured for configured association. It is a warning informing about the misconfiguration of an association. The association configured from ProAdmin was with Protocol "x" but the actual traffic received on the association is for protocol "y".

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

To recover from this problem of misconfigured protocol for an association, user has to reconfigure the association with the correct protocol (the protocol which is received in network on the association).

General recommendation is to delete the association and recreate with correct protocol.

Data to gather

1. ProAdmin should be checked for the currently configured protocol for an association.

2. It should be checked that if PMF is capturing the traffic for same protocol as configured for an association on the same association, means an association (IP addr

TKPIC20550: Message Feeder Destination status

Description

Message Feeder Destination status

Severity

MAJOR,WARNING

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Check whether data is available for destination - have links associated to the destination theirs own data?

Check configuration on nsp and when needed do synchronization or apply changes to xMF & IXP.

Is there some connection issue with network?

Data to gather

Schema of links, associations, dataflows and destinations - execute dumpScript

Chapter 9: TKPIC21xxx Eagle Specific Problems

Topics:

TKPIC21001: Eagle STC Card

Description

Eagle STC Card

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: PHYSICAL_VIOLATION
Probable cause: OUT_OF_SERVICE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21002: Eagle STC Network

Description

Eagle STC Network

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21003: The EROUTE system is available.

Description

The EROUTE system is available.

Severity

CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21004: The EROUTE system threshold is exceeded.

Description

The EROUTE system threshold is exceeded.

Severity

MINOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21005: The EROUTE system capacity is exceeded.

Description

The EROUTE system capacity is exceeded.

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21006: The EROUTE system is normal. However, one or more cards are OOS-MT.

Description

The EROUTE system is normal. However, one or more cards are OOS-MT.

Severity

MINOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21007: Eagle NTP Time

Description

Eagle NTP Time

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: INFORMATION_MISSING

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21008: Eagle Copy Function on SS7 Cards

Description

Eagle Copy Function on SS7 Cards

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21009: Eagle LIM Card Timestamp

Description

Eagle LIM Card Timestamp

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: INFORMATION_MISSING

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21010: Eagle SS7 Link Card

Description

Eagle SS7 Link Card

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: UNDERLYING_RESOURCE_UNAVAILABLE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21011: Eagle Clock A

Description

Eagle Clock A

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVE_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21012: Eagle Clock B

Description

Eagle Clock B

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVER_FAILURE_M3100

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21013: Eagle Clocks A and B

Description

Eagle Clocks A and B

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21014: Eagle LIM Card Service

Description

Eagle LIM Card Service

Severity

MAJOR,MINOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21015: SS7 Link is available.

Description

SS7 Link is available.

Severity

CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21016: SS7 link had numerous interruptions.

Description

SS7 link had numerous interruptions.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21017: SS7 link has lost data.

Description

SS7 link has lost data.

Severity

MINOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21018: Signal Unit Error Rate Monitor (SUERM) threshold has exceeded.

Description

Signal Unit Error Rate Monitor (SUERM) threshold has exceeded.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21019: Level-2 T1 Expired (ready).

Description

Level-2 T1 Expired (ready).

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21020: Level-2 T1 Expired (not ready).

Description

Level-2 T1 Expired (not ready).

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21021: Level-2 T3 Expired.

Description

Level-2 T3 Expired.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21022: Level-2 T2 Expired.

Description

Level-2 T2 Expired.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21023: SS7 link has failed the proving period.

Description

SS7 link has failed the proving period.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21024: OSA - Received SIO.

Description

OSA - Received SIO.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21025: OSA - Received SIN.

Description

OSA - Received SIN.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21026: OSA - Received SIE.

Description

OSA - Received SIE.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21027: OSA - Received SIOS.

Description

OSA - Received SIOS.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21028: ABN - Received 2 of 3 invalid Backward Sequence Numbers.

Description

ABN - Received 2 of 3 invalid Backward Sequence Numbers.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21029: ABN - Received 2 out of 3 invalid Forward Indicator Bits.

Description

ABN - Received 2 out of 3 invalid Forward Indicator Bits.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21030: Remote congestion timed out.

Description

Remote congestion timed out.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21031: XDA - Excess acknowledge delay.

Description

XDA - Excess acknowledge delay.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21032: COO - Received changeover order.

Description

COO - Received changeover order.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21033: False congestion restart.

Description

False congestion restart.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21034: MTP link restart delayed.

Description

MTP link restart delayed.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21035: Remote FE Loopback.

Description

Remote FE Loopback.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21036: SS7 link Test Failed.

Description

SS7 link Test Failed.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21037: SS7 link is blocked due to an event at the far end.

Description

SS7 link is blocked due to an event at the far end.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21038: The local technician has put Eagle link in processor outage.

Description

The local technician has put Eagle link in processor outage.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21039: A craft person at the far end has remotely inhibited Eagle link.

Description

A craft person at the far end has remotely inhibited Eagle link.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21040: SS7 link has been inhibited locally.

Description

SS7 link has been inhibited locally.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21041: SS7 link has lost alignment.

Description

SS7 link has lost alignment.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21042: LM Timer No-Credit expired.

Description

LM Timer No-Credit expired.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21043: XDA - Time No-Response expired.

Description

XDA - Time No-Response expired.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21044: Local Processor Outage.

Description

Local Processor Outage.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21045: The far end sent an End Processor Outage.

Description

The far end sent an End Processor Outage.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21046: The far end sent an End Out Of Service .

Description

The far end sent an End Out Of Service .

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21047: A protocol error has occurred on the far end.

Description

A protocol error has occurred on the far end.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21048: The MAAL layer (not a user) on the far end released.

Description

The MAAL layer (not a user) on the far end released.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21049: The level 1 facility outage: loss of signal.

Description

The level 1 facility outage: loss of signal.

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21050: The level 1 facility outage: loss of frame.

Description

The level 1 facility outage: loss of frame.

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21051: The level 1 facility outage: loss of cell.

Description

The level 1 facility outage: loss of cell.

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21052: In Service Error Rate Monitor threshold exceeded.

Description

In Service Error Rate Monitor threshold exceeded.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21053: Eagle indicates SS7 link is in NE loopback.

Description

Eagle indicates SS7 link is in NE loopback.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21054: Eagle indicates SS7 link is no longer in NE loopback.

Description

Eagle indicates SS7 link is no longer in NE loopback.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21055: Congestion Level 0 to 1.

Description

Congestion Level 0 to 1.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21056: Congestion Level 1 to 2.

Description

Congestion Level 1 to 2.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21057: Congestion Level 2 to 3.

Description

Congestion Level 2 to 3.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21058: Congestion Level 3 to 2.

Description

Congestion Level 3 to 2.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21059: Congestion Level 2 to 1.

Description

Congestion Level 2 to 1.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21060: Congestion has cleared.

Description

Congestion has cleared.

Severity

CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21061: Discard Level 0 to 1.

Description

Discard Level 0 to 1.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21062: Discard Level 1 to 2.

Description

Discard Level 1 to 2.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21063: Discard Level 2 to 3.

Description

Discard Level 2 to 3.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21064: Discard Level 3 to 2.

Description

Discard Level 3 to 2.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21065: Discard Level 2 to 1.

Description

Discard Level 2 to 1.

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21066: Discard has cleared.

Description

Discard has cleared.

Severity

CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21067: IP Connection Unavailable

Description

IP Connection Unavailable

Severity

MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21068: IP Connection Available

Description

IP Connection Available

Severity

CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21069: IP Connection Congested

Description

IP Connection Congested

Severity

MINOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21070: IP Connection manually removed

Description

IP Connection manually removed

Severity

WARNING

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21071: Eagle IP TPS System Threshold

Description

Eagle IP TPS System Threshold

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21072: Eagle IP TPS Linkset Threshold

Description

Eagle IP TPS Linkset Threshold

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21073: Eagle IP TPS Link Threshold

Description

Eagle IP TPS Link Threshold

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21074: Eagle Ethernet Interface A

Description

Eagle Ethernet Interface A

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21075: Eagle Ethernet Interface B

Description

Eagle Ethernet Interface B

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: INPUT_OUTPUT_DEVICE_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21076: Eagle Ethernet Interface A and B

Description

Eagle Ethernet Interface A and B

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21077: Eagle Unexpected Fast Copy Network Address

Description

Eagle Unexpected Fast Copy Network Address

Severity

CLEARED,MAJOR

Source product

XMF

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21078: Eagle Fast Copy Heartbeat Lost

Description

Eagle Fast Copy Heartbeat Lost

Severity

CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LAN_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21079: Eagle Fast Copy Network

Description

Eagle Fast Copy Network

Severity

CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LAN_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21080: Eagle Fast Copy System

Description

Eagle Fast Copy System

Severity

MAJOR,CLEARED,CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LAN_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21081: Eagle Fast Copy Ethernet Interface

Description

Eagle Fast Copy Ethernet Interface

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LAN_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21082: Eagle Fast Copy Ethernet Error Threshold

Description

Eagle Fast Copy Ethernet Error Threshold

Severity

CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LAN_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21083: FC application is de-activated due to CPU congestion

Description

Eagle Fast Copy application is de-activated due to CPU congestion

Severity

CLEARED,MINOR

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LAN_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC21084: FC port is de-activated due to the onset of CPU congestion

Description

Eagle Fast Copy port is de-activated due to the onset of CPU congestion

Severity

MINOR,CLEARED

Source product

XMF

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LAN_ERROR

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

Chapter 10: TKPIC22xxx Hardware Specific Problems

Topics:

TKPIC22001: Configuration error

Description

JMX agent MBean assigned to hardware alarms (SNMP traps from TPD or other hardwares) received an unknown traps.
Ask TEKELEC support to create enhancement PR

Severity

CRITICAL,WARNING,CRITICAL

Source product

JMX Agent

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

No generic recovery.

See NSP alarm additional text to analyze information from unknown SNMP trap relayed by agent

Contact Tekelec Customer support for help

Data to gather

NSP event additional text

TKPIC22011: Weblogic problem

Description

Default SNMP trap from Weblogic was catched. It corresponds to startup/shutdown of instances

Severity

WARNING,MINOR

Source product

NSP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Connect to Weblogic console to check health server instances in NSP cluster

Data to gather

nsp server name is mentionned in additional text

TKPIC22012: Weblogic threshold crossed

Description

Custom SNMP trap from Weblogic was catched
See NSP event additional text referring to this custom Weblogic trap

Severity

WARNING

Source product

NSP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

No generic recovery.

See NSP alarm additional text to analyze involved Weblogic trap configuration.

Then go to Weblogic console to manage NSP cluster.

Data to gather

NSP event additional text

TKPIC22101: H/W: Communication alarm

Description

SNMP trap related to communication and from hardware component was catched.
It may be warning (Blade hotlink) or major (MIB2 NIC up/down or brocade switch problem)

Severity

MINOR,MAJOR,CRITICAL,WARNING

Source product

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Check health of network interfaces for involved hardware component.

Search for correlated alarms in ProAlarm

Data to gather

See alarm event additional text

TKPIC22102: H/W: Equipment malfunction

Description

SNMP trap related to hardware equipement health was catched.
it may be warning (memory errors, SMART event) or critical (BIOS error, SCSI controller failure)

Severity

MINOR,CRITICAL,MAJOR,WARNING

Source product

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Check if there is correlated alarms detected by OS

Contact Tekelec customer support.

Data to gather

N/A

TKPIC22103: H/W: Fan problem

Description

SNMP trap related to fans and from hardware component was catched.
It may be minor (degraded fault tolerant fans on switch, enclosure, blade) or major (fan failure) or critical (processor fan)

Severity

CRITICAL,WARNING,MAJOR,MINOR

Source product

ITU classification

Alarm type: ENVIRONMENTAL_ALARM
Probable cause: HEATING_OR_VENTILATION_OR_COOLING_SYSTEM_PROBLEM

Recovery steps

Check if there is correlated alarms detected by OS

Contact Tekelec customer support.

Data to gather

N/A

TKPIC22104: H/W: Power problem

Description

SNMP trap related to power supply or batteries and from hardware component (switch, enclosure, blade, rack) was catched.
It may be warning, minor (degraded fault tolerant power supply), major (power supply failure) ro critical according hardware provider classification.

Severity

MINOR,CRITICAL,WARNING,MAJOR

Source product

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: POWER_PROBLEM_M3100

Recovery steps

Check if there is correlated alarms detected by OS

Contact Tekelec customer support.

Data to gather

N/A

TKPIC22105: H/W: Storage problem

Description

SNMP trap related to storage hardware component (SAn, MSA) was catched.
It may be warning, minor (SAN, MSA problem), major (spare failure, controller problem, appliance problem) ro critical according hardware provider classification.

Severity

MINOR,WARNING,CRITICAL,MAJOR

Source product

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: STORAGE_CAPACITY_PROBLEM_M3100

Recovery steps

Check if there is correlated alarms detected by OS

Contact Tekelec customer support.

Data to gather

N/A

TKPIC22106: H/W: Temperature unacceptable

Description

SNMP trap related to temperature and from hardware component not directly managed by OS was catched (switch or enclosure)
It may be major (threshold crossed) or critical (sensor failure)

Severity

CRITICAL,WARNING,MAJOR,MINOR

Source product

ITU classification

Alarm type: ENVIRONMENTAL_ALARM
Probable cause: TEMPERATURE_UNACCEPTABLE

Recovery steps

Ensure that nothing is blocking the fan's intake. Remove any blockage.

Verify that the temperature in the room is normal. If it is too hot, lower the temperature in the room to an acceptable level

Wait appropriate period of time for condition to be below alarm thresholds. It may take about ten minutes after the room return to an acceptable temperature before system shows the alarm cleared.

If alarm has not been cleared, contact Tekelec Customer Care Center for assistance.

Data to gather

N/A

Chapter 11: TKPIC23xxx Data Broker Specific Problems

Topics:

TKPIC23001: DataBroker Manager Extraction Late

Description

Extraction is late (> 3*Duration)

Severity

MAJOR,CRITICAL

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC23002: DataBroker Manager Software Error

Description

Software error occured

Severity

WARNING,MAJOR,CRITICAL

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: SOFTWARE_PROGRAM_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC23003: DataBroker Manager Extraction Error

Description

An error occured during extraction (see log file)

Severity

CRITICAL,MINOR

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: SOFTWARE_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC23004: DataBroker Manager Extraction Timeout

Description

Timeout reached

Severity

MINOR,CRITICAL

Source product

IXP

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: TIMING_PROBLEM_M3100

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

Chapter 13: TKPIC25xxx IXP Specific Problems

Topics:

TKPIC25000: IXP: Software Error

Description

A third party API for an external interface failed with an indeterminable cause.

Severity

CRITICAL,CLEARED

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: SOFTWARE_ERROR
Contact the Tekelec Customer Care Center

Data to gather

Get the error code in the alarm text to try to have an explanation from the third party partner.

TKPIC25002: IXP: Event List Size Threshold Crossed

Description

A chronological sorting PDU list (input of data flow processing of type Building) or xDR list (input of a data flow processing of type Operation or Storage) is more than 75% full (minor alarm) or 95% full (major alarm).
The traffic at the input of the data flow processing may be too high.

Severity

CLEARED,MAJOR,MINOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Reduce the traffic at the input of the data flow processing (for example, split the traffic in several DFPs).

Data to gather

N/A

TKPIC25003: IXP: Event List Size Exceeded

Description

Critical alarm. A chronological sorting PDU list (input of data flow processing of type Building) or xDR list (input of a data flow processing of type Operation or Storage) is full.

No data will be lost at IXP level, but since IXP won't get data from xMF, data may be lost at xMF level if this situation lasts more than the bufferization capacity.
The traffic at the input of the data flow processing may be too high.

Severity

CLEARED,CRITICAL

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: QUEUE_SIZE_EXCEEDED

Recovery steps

Reduce the traffic at the input of the data flow processing (for example, split the traffic in several DFPs).

Data to gather

N/A

TKPIC25004: IXP: Stream Connection Loss

Description

A Dataflow Processing (build/store/operate) input stream can't be opened or the connection is lost while reading data.

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

The affected DFP log

The producer log. producers are:

- xMF, IxpAdapt or IxpInterface for IxpBuild

- IxpBuild or IxpOperate for IxpOperate or IxpStore

IDB tables Stream and StreamHistory content

TKPIC25005: IXP: Data timeout

Description

No data was performed on a Dataflow Processing input stream since 10 seconds. This checking is available for PDU and xDR streams. Statistical streams shouldn't raise this alarm as statistical period may be very long.

Severity

MAJOR,CLEARED

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

Check the affected input stream.

Data to gather

Dataflow processing log.

TKPIC25006: IXP: Incorrect data

Description

An unlisted event has been sent by the external probe.

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: VERSION_MISMATCH

Recovery steps

Ask for an enhancement to catch the new event.

Data to gather

IxpInterface log.

TKPIC25007: IXP: Buffer Loss

Description

A data buffer numbering fault has been detected. Some data may be lost.

Severity

WARNING,CLEARED

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_FRAME

Recovery steps

Check IXP server load and possibly move the IxpInterface server to another server in the pool.
Check also the probe and the network.

Data to gather

N/A

TKPIC25008: IXP: Steam data loss

Description

A data buffer numbering fault has been detected. Some data may be lost.

Severity

CLEARED,WARNING

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_FRAME

Recovery steps

Check IXP server load and possibly move the IxpInterface server to another server in the pool.
Check also the probe and the network.

Data to gather

N/A

TKPIC25009: IXP: End of stream connection attempts

Description

The maximum number of connection attempts to third party OCEAN probe is reached. No new connection attempt will be done before a change in the configuration of the corresponding external PDU stream occurs in CCM.
The maximal number of connection attempts is one of the external PDU stream configuration parameters in CCM.
Check the status of OCEAN probe as well as the status of the network connecting OCEAN to IXP.

Severity

WARNING,CLEARED

Source product

IXP

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: RECEIVE_FAILURE

Recovery steps

After checking the external probe, modify the corresponding external stream or restart the IxpInterface process.

Data to gather

N/A

TKPIC25012: IXP: Process heartbeat timeout

Description

Process heartbeat timeout

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25017: IXP: Ocean alarm: PCM disconnection

Description

Ocean alarm: PCM disconnection

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25018: IXP: Ocean alarm: Board error

Description

Ocean alarm: Board error

Severity

MAJOR,CLEARED,CRITICAL

Source product

IXP

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Data to gather

N/A

TKPIC25019: IXP: Ocean alarm: Memory overflow

Description

Ocean alarm: Memory overflow

Severity

MAJOR,CLEARED

Source product

IXP

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25020: IXP: Ocean alarm: FIFO overflow

Description

Ocean alarm: FIFO overflow

Severity

MAJOR,CLEARED

Source product

IXP

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25021: IXP: Ocean alarm: Undefined error

Description

Ocean alarm: Undefined error

Severity

MAJOR,CLEARED

Source product

IXP

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25022: IXP: Ocean alarm: Link problem

Description

Ocean alarm: Link problem

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_SIGNAL

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25023: IXP: Ocean alarm: Link desynchronization

Description

Ocean alarm: Link desynchronization

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_SIGNAL

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25026: IXP: No Frame Timeout exceeded

Description

No PDUs received by an xDR builder during the value of the general configuration parameter "No PDU timeout" (CCM).

Severity

CLEARED,MAJOR

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

If all xDR builders running on an IXP subsystem generate this alarm, check if there are alarms "Stream connection loss".

Otherwise check the configuration (xMF and IXP): is xMF correctly configured to send PDUs to the DFP? are xDR builders' parameters correctly configured on IXP?

This alarm may be normal if traffic corresponding to the concerned xDR builder is not possible according to the network configuration (e.g. an IP Transport builder is systematically created when final builder ISUP is selected; but this IP Transport builder may receive data only in case of SS7 on SIGTRAN; if SS7, this builder will generate the alarm).

Data to gather

N/A

TKPIC25027: IXP: Memory Allocation Error

Description

Critical alarm. Process out of memory.

Severity

CLEARED,CRITICAL

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: OUT_OF_MEMORY

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

Run "collect_data.sh" to get logs of all running IXP processes as well as information on the subsystem health.

Run "top" and "shl.audit".

TKPIC25038: IXP: Q.752 counter 7.1 - Routing failure, no translation for an address of such nature

Description

Q.752 counter 7.1 - Routing failure, no translation for an address of such nature.
See Q.752 recommendation.
Severity: Minor
On first occurrence of the detection of SCCP signal units (UDTS, XUDTS) with an error code corresponding to the above message in the "return cause" field, within the Q.752 period or at the

end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.
Clear: No occurrence detected during the last period (depending of the configuration, please see comments).

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

N/A

Data to gather

N/A

TKPIC25039: IXP: Q.752 counter 7.2 - Routing failure, no translation for this specific address

Description

Q.752 counter 7.2 - Routing failure, no translation for this specific address: See Q.752 recommendation.
Minor: On first occurrence of the detection of SCCP signal units (UDTS, XUDTS) with an error code corresponding to the above message in the "return cause" field, within the Q.752 period or at the end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.
Clear: No occurrence detected during the last period (depending of the configuration, please see comments).

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

N/A

Data to gather

N/A

TKPIC25040: IXP: Q.752 counter 7.3 - Routing failure, MTP failure

Description

Q.752 counter 7.3 - Routing failure, MTP failure.See Q.752 recommendation.
Minor: On first occurrence of the detection of SCCP signal units (UDTS, XUDTS, RLSD) with an error code corresponding to the above message in the "return cause" or "release cause" field, within the Q.752 period or at the end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.
Clear: No occurrence detected during the last period (depending of the configuration, please see comments).

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

N/A

Data to gather

N/A

TKPIC25041: IXP: Q.752 counter 7.4 - Routing failure, network congestion

Description

Q.752 counter 7.4 - Routing failure, network congestion: See Q.752 recommendation.
Minor: On first occurrence of the detection of SCCP signal units (UDTS, XUDTS, RLSD) with an error code corresponding to the above message in the "return cause" or "release cause" field, within the Q.752 period or at the end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.
Clear: No occurrence detected during the last period (depending of the configuration, please see comments).

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: CONGESTION

Recovery steps

N/A

Data to gather

N/A

TKPIC25042: IXP: Q.752 counter 7.5 - Routing failure, subsystem failure

Description

Q.752 counter 7.5 - Routing failure, subsystem failure: See Q.752 recommendation.
Minor: On first occurrence of the detection of SCCP signal units (UDTS, XUDTS, RLSD, CREF) with an error code corresponding to the above message in the "return cause"or "release cause" or "refusal cause" field, within the Q.752 period or at the end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.
Clear: No occurrence detected during the last period (depending of the configuration, please see comments).

Severity

CLEARED,MINOR

Source product

xDR Builders

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

N/A

Data to gather

N/A

TKPIC25043: IXP: Q.752 counter 7.6 - Routing failure, subsystem congestion

Description

Q.752 counter 7.6 - Routing failure, subsystem congestion: See Q.752 recommendation.
Minor: On first occurrence of the detection of SCCP signal units (UDTS, XUDTS, RLSD, CREF) with an error code corresponding to the above message in the "return cause" or "release cause" or "refusal cause" field, within the Q.752 period or at the end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.
Clear: No occurrence detected during the last period (depending of the configuration, please see comments).

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM

Probable cause: CONGESTION

Recovery steps

N/A

Data to gather

N/A

TKPIC25044: IXP: Q.752 counter 7.7 - Routing failure, unequipped user

Description

Q.752 counter 7.7 - Routing failure, unequipped user: See Q.752 recommendation.
Minor: On first occurrence of the detection of SCCP signal units (UDTS, XUDTS) with an error code corresponding to the above message in the "return cause" field, within the Q.752 period or at the end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.
Clear: No occurrence detected during the last period (depending of the configuration, please see comments).

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

N/A

Data to gather

N/A

TKPIC25045: IXP: Q.752 counter 7.9 - Routing failure, unqualified

Description

Q.752 counter 7.9 - Routing failure, unqualified: See Q.752 recommendation.
On first occurrence of the detection of SCCP signal units (UDTS, XUDTS, RLSD, CREF) with an error code corresponding to the above message in the "return cause" or "release cause" or "refusal cause" field, within the Q.752 period or at the end of the Q.752 period, in the Rx or Tx direction. See ITU-T Q.752 recommendation, table 7.

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: CALL_ESTABLISHMENT_ERROR

Recovery steps

N/A

Data to gather

N/A

TKPIC25046: IXP: No Event Timeout exceeded

Description

Minor: No event received by a Q.752 xDR builder for a given duration : value of the general configuration parameter "No PDU timeout" (CCM).
Clear : Automatically cleared as soon as an event is received (depending of the configuration, please see comments).

Severity

MINOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

Check the configuration (xMF and IXP).

Verify that network between XMF and IXP is available.

Data to gather

N/A

TKPIC25047: IXP: SLS failure

Description

Major: All the signaling links of the linkset are unavailable (because of failure, inhibition or processor outage).
Clear : Automatically cleared as soon as one link at least is in service again (depending of the configuration, please see comments).

Severity

MAJOR,CLEARED

Source product

xDR Builders

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25048: IXP: xDR Loss

Description

xDR(s) generated by Building process but not transmitted to Operate or Storage process.

Severity

MAJOR,CLEARED

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

IxpBuild log with BLD trace level = 6 and DTS trace level = 6.

TKPIC25049: IXP: xDR Consumer Frame Loss

Description

PDU(s) not stored.
Possible disk full.

Severity

CLEARED,MINOR

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

If the disk is full, clean useless files.

If there is a mounting issue, mount pdu storages again.

If there is no file "write.enable" in each sub-directory of /opt/TKLCixp/pdu, create such file (empty file).

Data to gather

Result of df -h.

Content of /opt/TKLCixp/pdu and all sub-directories it pointed to.

TKPIC25053: IXP: Close license expiry

Description

Close license expiry

Severity

MAJOR,CLEARED

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25054: IXP: License expiry

Description

License expiry

Severity

CRITICAL,CLEARED

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25057: IXP: Datawarehouse connection error

Description

Cant connect to database

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25058: IXP: Transfer late

Description

Transfer late

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: PERFORMANCE_DEGRADED

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25059: IXP: Main datawarehouse full

Description

Not enough space : urgent purge

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25060: IXP: PDU disk full

Description

Not enough space : urgent PDU purge

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25063: IXP: Pool connection error

Description

Cannot connect to any database of the pool

Severity

CRITICAL,CLEARED

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM

Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25064: IXP: Oracle purge too long

Description

Oracle purge timeout limit exceeded

Severity

CLEARED,MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25065: IXP: Thread CPU overload

Description

CPU overloaded for a thread.
This means that the traffic processed by the thread is too high.
If this alarm is raised for both threads "level 1 data processing" and "level 2 data processing", reduce the traffic at the input of the corresponding DFP, otherwise contact Tekelec.

Severity

WARNING

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CPU_CYCLES_LIMIT_EXCEEDED

Recovery steps

If this alarm is raised for both threads "level 1 data processing" and "level 2 data processing",

reduce the traffic at the input of the corresponding DFP.

If the alarm is raised for thread "level 1 data processing" only or for thread "level 2 data processing"only, change the xDR builder assignment to threads through the file /opt/TKLCixp/prod/lib/plugins/build/XbLoadSharing.cnf (restart IxpBuild process so that changes in that file are taken into account).

Data to gather

N/A

TKPIC25066: IXP: Fse file size Threshold Crossed

Description

The alarm is raised, after configuration changes have been applied (from the NSP/CCM application), when, at least, one ProTraq or Enrichment configuration becomes too large. The limit is of 10MB.
The alarm is cleared, after configuration changes have been applied (from the NSP/CCM application), when, no more ProTraq or Enrichment configuration is too large.

Severity

WARNING

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

To find out which configuration(s) caused this alarm to be raised, proceed as follows:

1) deactivate and dissociate all the ProTraq and Enrichment configurations, apply all the changes to IXP

2) for each single configuration (ProTraq and Enrichment):

2.1) associate and activate the configuration

2.2) apply the changes to IXP

2.3) check for the alarm: if it raised, this configuration is too big, do not associate it anymore

2.4) deactivate and dissociate it

3) associate and activate all the configurations that did not cause the alarm to be raised

4) check with TAC how to handle those configurations that are too big

Data to gather

Dump the whole OperationConfig IDB table into a file and compress it (as it is text only, compression ratio should be very good).

TKPIC25067: IXP: Dictionary discrepancies

Description

A new version of xDR builder was installed, the output format of records (xDRs) has changed and the existing output session was not upgraded (i.e. not adapted to the new xDR format).
This alarm is generated each timethe process handling the DFP is restarted.
Despite the alarm, the records are processed (i.e. stored in the output session) but their content is adapted to the old record format, which causes resource usage and possible loss of some fields.
The level of severity indicates the most significant changes:
- warning = the size of a field has changed or new fields have been added (their content is dropped by the xDR format conversion);
- minor = the size of an address field (A-number, B-number, IMSI, MSISDN, ...) has changed;
- major = one or several fields of previous format have been removed but less than 20%;
- critical = more than 20% of columns have changed. It is possible that we are facing a configuration error where a fully different format of record replaces an old one.

Severity

MAJOR,MINOR,CRITICAL,WARNING

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Change the output session (use an existing session having been upgraded to the new xDR format, or use a new session).

If the alarm is still there after the session change, check the consistency of xDR builder versions between CCM and last installed Xdr builder package (an upgrade error may have occurred).

Data to gather

N/A

TKPIC25068: IXP: external stream connection loss

Description

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: REMOTE_NODE_TRANSMISSION_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25069: IXP: ExportServer storage disk full

Description

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25100: IXP: DataExport Fails to read Data Source

Description

One or more oracle(s) in data warehouse are not readable.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Check connectivity and status of all oracles in data warehouse.

Data to gather

N/A

TKPIC25101: IXP: DataExport Mount or Unmount Fails

Description

Feed is not able to mount path from NFS target server.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

1. check connectivity to NFS server (ping)

2. check status of NFS deamon

3. check access rights of exported directory on NFS target

4. if mounted path is stucked try to umount it on exporting server

Data to gather

N/A

TKPIC25102: IXP: DataExport file system is not writable

Description

Feed is not able to write to mounted directory.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

Check liveness of NFS mount and access rights of exported directory on NFS server.

Data to gather

N/A

TKPIC25104: IXP: DataExport Invalid Configuration parameter

Description

Engine: Not able to create feed or not able to get local config (hostname).
Legacy feeds: Not able to startup due to a wrong config.

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Follow problem in alarm description (might need to change configuration of feed).

Data to gather

N/A

TKPIC25107: IXP: DataExport abnormal number of reconnect

Description

Transport of file to NFS target failed for predefined number of times.

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

1. check connectivity to NFS server (ping)

2. check status of NFS deamon

3. check access rights of exported directory on NFS target

4. if mounted path is stucked try to umount it on exporting server

Data to gather

N/A

TKPIC25109: IXP: DataExport Error creating and starting Exporter

Description

Engine: Not able to startup.
Usage Measurement feeds: Not able to schedule feed or not able to read configuration.
xDR/KPI Feeds: Not able to start up (configuration problem).

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: SOFTWARE_PROGRAM_ERROR

Recovery steps

Follow problem in alarm description (might need to change configuration of feed).

Data to gather

N/A

TKPIC25110: IXP: DataExport Disk Space exceed

Description

Legacy feeds: NFS target free space is lower than 20%.

Severity

MINOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Delete obsolete files from NFS server to get free space.

Data to gather

N/A

TKPIC25111: IXP: DataExport Number of files exceed

Description

Legacy feeds: Max files threshold set in feed config was exceeded.

Severity

MINOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Delete obsolete files from NFS server to get free space.

Data to gather

N/A

TKPIC25112: IXP: DataExport Disk Space exceed major

Description

Legacy feeds: NFS target free space is lower than 10%.
Flexible feeds: Local disc usage (typically to /var/TKLC/ixp/dataexport_tmp) exceeds 35GB.

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Delete obsolete files from NFS server to get free space. If local dics is depleted then restart DataExport engine which performs cleanup procedure.

Data to gather

N/A

TKPIC25113: IXP: DataExport Disk Space exceed critical

Description

Legacy feeds: NFS target free space is lower than 0%.
Flexible feeds: Local disc usage (typically to /var/TKLC/ixp/dataexport_tmp) exceeds 40GB.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

Delete obsolete files from NFS server to get free space. If local dics is depleted then restart DataExport engine which performs cleanup procedure.

Data to gather

N/A

TKPIC25114: IXP: DataExport is behind real time

Description

When feed is in real time mode and latency exceed configured number of periods.

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: THRESHOLD_CROSSED

Recovery steps

Feed is lagging, check if subsystem is not overloaded. Might be thrown in peak period (will be cleared when peak will be over).

Data to gather

N/A

TKPIC25115: IXP: DataExport: Export period dropped.

Description

Usage Measurement: Period was dropped due to long lasting failover (longer than period time).
xDR/KPI Feeds: Period was dropped due to a IXP failover retention time latency (typically 6hours). Historical export is needed to export this period skip.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: LOSS_OF_FRAME

Recovery steps

Use historical export to get skipped data. Timetag range is written in alarm.

Data to gather

N/A

TKPIC25116: IXP: Error during Backup process on Export Server

Description

Severity

MAJOR

Source product

IXP

ITU classification

Alarm type: EQUIPMENT_ALARM
Probable cause: EQUIPMENT_MALFUNCTION

Recovery steps

Contact the Tekelec Customer Care Center.

Data to gather

N/A

TKPIC25117: IXP: DataExport fails to read/write from/to the target oracle

Description

Flexible feeds with oracle transport: Executing query (insert, add partition) failed on target oracle.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

Reason is written in alarm (oracle error code). Follow it to fix this issue.

Data to gather

N/A

TKPIC25118: IXP: DataExport fails to connect to the target oracle

Description

Flexible feeds with oracle transport: Not able to connect to target oracle.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

Reason is written in alarm (oracle error code). Follow it to fix this issue.

Data to gather

N/A

TKPIC25120: IXP: DataExport oracle transport destination schema does not match

Description

Flexible feeds with oracle transport: Target table on table oracle schema does not match with schema of session table.

Severity

CRITICAL

Source product

IXP

ITU classification

Alarm type: COMMUNICATIONS_ALARM
Probable cause: COMMUNICATION_PROTOCOL_ERROR

Recovery steps

In alarm aditional information is written on which column(s) schema differs.

Data to gather

N/A

TKPIC25121: IXP: PDU offloading

Description

Not enough I/O and/or CPU: PDU offload

Severity

CLEARED,MINOR

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: RESOURCE_AT_OR_NEARING_CAPACITY

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

TKPIC25122: IXP: Launch process failed

Description

Launch process failed

Severity

MINOR,CLEARED

Source product

IXP

ITU classification

Alarm type: QUALITY_OF_SERVICE_ALARM
Probable cause: SOFTWARE_PROGRAM_ERROR

Recovery steps

Contact the Tekelec Customer Care Center

Data to gather

N/A

Chapter 14: TKPIC26xxx NSP Specific Problems

Topics:

TKPIC26086: NSP Host Configuration

Description

This major alarm indicates that NSP received some alarms from an unknown (not defined) host.

Severity

MAJOR

Source product

NSP

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: CONFIGURATION_OR_CUSTOMIZING_ERROR

Recovery steps

Go to ProAdmin to declare and discover missing host of the PIC system.

If host already exist in configuration, it can be a cache synchronization issue or OID mismatch.

Contact Tekelec Customer support to manually force cache synchronization and check/synchronize subsystem

Data to gather

event additional text

Chapter 15: TKPIC27xxx
NSP Specific Problems

Topics:

TKPIC27001: Astellia Neptune problem

Description

This major or critical alarm indicates that NSP received some traps from astellia neptune probe.

Severity

MAJOR, CRITICAL

Source product

NEPTUNE

ITU classification

Alarm type: PROCESSING_ERROR_ALARM
Probable cause: APPLICATION_SUBSYSTEM_FAILURE

Recovery steps

Contact Astellia Customer Care Center

Data to gather

event additional text