Binary for Solaris - MST

Release Notes for Version 1.01

1. Overview

This release of the software is the first release approved for general distribution. It includes the following changes from the previous version used during early product trials.

2. Changes

2.1 MST_MSG_M2PA_MSG FSN and BSN

The order of the FSN and BSN parameters in the MST_MSG_M2PA_MSG have been reversed. Now the BSN is at offset 0 and FSN is at offset 4.

2.2 Capability Licensing Throughput Statistics

The units used for a number of parameters in MGT_MSG_R_THR_STATS (0x6f21) have been changed. 'Time Period' is now reported in Seconds and RX_rate_peak, TX_rate_peak and Rate_peak are reported in Bytes/Second.

2.3 Message Type Names

The following message type names have changed:

Old Name	New Name
MST_MSG_STATS	MST_MSG_R_STATS
MST_MSG_TAP_STATS	MST_MSG_R_TAP_STATS
MST_MSG_PORT_STATS	MST_MSG_R_PORT_STATS

3. Faults Cleared

3.1 Monitoring Long Messages

If a long message is monitored starting with it's IP header then this may exceed the maximum message length of 320 Bytes. Previously such messages were silently discarded. Now the messages are truncated and the message header field 'status' is set to 1.

Binary for Solaris - MST

Release Notes for Version 2.00

1. Overview

This release is the first to support filtering of retransmitted SCTP DATA chunks over an association. It also supports ordered delivery of SCTP DATA chunks based on their Transmission Sequence Number (TSN). It is the first release since V1.01.

Please refer to the Dialogic® DSI Sigtran Monitoring Programmer's Manual (U06STN) Issue 3 for details.

2. New Functionality

2.1 Filtering of SCTP Retransmissions

MST can be configured to filter out re-transmitted SCTP DATA chunks based on their Transmission Sequence Number (TSN). See Issue 3 of the DSI Sigtran Monitoring Programmer's Manual for details.

2.2 Ordered delivery of monitored messages

The module can be configured to re-order received packets so that retransmissions are placed back into their intended sequence with those that did not require retransmissions. This is also covered in Issue 3 of the DSI Sigtran Monitoring Programmer's Manual for details.

2.3 Licensing

This version of the software supports the following licenses.

License	Product Id	Throughput (Kbps)	TAPs	Notes
SS7SBHSTSMONS	G02-005-01	2152	2	Small Dimensioning
SS7SBHSTSMONR	G03-005-01	4304	4	Regular Dimensioning
SS7SBHSTSMONL	G04-005-01	8600	8	Large Dimensioning

3. Changes

To ensure backward compatibility, the MST module accepts a configuration message (MST_MSG_CONFIG - 0x7e40) having a

length of 12 bytes as in previous version, as well as accepting a length of 20 bytes.

Default values are used for parameters “Number of associations” and “Filter buffer size” if the configuration message length is 12 bytes.

Parameter	Default Value
Number of associations	8
Filter buffer size	512

Dialogic
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Release Notes for Version 3.00

1. Overview

This release includes new licenses and enhancements to the licensing mechanism to support new format tokens in license files. It is backwards compatible with the previous release.

2. New Functionality

2.1 Licensing

A range of new licenses are now offered allowing users to determine the level of throughput to be supported in any specific deployment. The full range of currently available MST licenses and the capability of each are detailed in the table below.

Dialogic Part Number	Description	Throughput	Max Taps
G02-005-01	SS7SBHSTSMONS	2,152kbps	2
G03-005-01	SS7SBHSTSMONR	4,304 kbps	4
G04-005-01	SS7SBHSTSMONL	8,600 kbps	8
G19-005-01	SS7SBHSTSMONK	17,216 kbps	16
G18-005-01	SS7SBHSTSMONJ	34,432 kbps	32
G17-005-01	SS7SBHSTSMONH	86,080 kbps	64
G16-005-01	SS7SBHSTSMONF	172,160 kbps	64

3. Other Changes

3.1 End User Licensing

This release adds support for a later release of the licensing software and consequently supports operation using ‘dialogic’ vendor id in license fields.

3.2 Slow license validation

Some users have experienced problems with slow license validation when using existing licenses. This can be addressed by reactivating the license and using the updated license file. Contact your support representative if you are experiencing this problem.

Dialogic
10-Mar-09

Binary for Solaris - MST

Release Notes for Version 3.01

1. Overview

This release fixes an issue with truncation of M3UA and M2PA data messages if the MST_TAP_FMT_STN_PAYLOAD format is selected for Configure MST TAP.

In other respects this release is backwards compatible with the previous release.

2. Changes

2.1 Truncated M3UA and M2PA Messages

If a monitored Ethernet packet had a length greater than 320 bytes, but an M3UA or M2PA message length less than 320 bytes the M3UA or M2PA Message sent by MST was inappropriately truncated by the module.

This has been fixed so that only M3UA or M2PA messages greater than 320 bytes are truncated. If a message is truncated the status field is set to 1.

Dialogic
01-May-09

Binary for Solaris - MST

Release Notes for Version 3.02

1. Overview

This release of MST is the first to support the reception of IP packets from ‘Virtual Ports’ as opposed to Ethernet ports. IP packets may be received by the system externally to MST and then encapsulated in a GCT Message and passed to MST for processing as normal.

This release also fixes two problems, including one resulting in the generation of messages of type 0x0000.

This release is backward compatible with the previous release.

2. New Functionality.

2.1 Virtual Ports.

If a system receives IP packets from a source other than an Ethernet Device then these may now be encapsulated and sent to MST for processing as normal. Virtual ports allow the reception of IP packets encapsulated in GCT Messages of type MST_MSG_VPORT_PKT defined below.

The ‘Configure MST Port’ message (MST_MSG_CFG_PORT) is used to define the source of messages to be monitored. This has a parameter called ‘port type’ used to specify what type of port the messages are received on. This will now support Virtual ports in addition to Ethernet ports.

Port Type

Port Type Mnemonic	Value
PRTTYPE_ETHERNET	1
PRTTYPE_VIRTUAL	2

When a virtual port is configured the device name parameter is unused and should be set to zero.

2.1.1 MST Message Virtual Port Packets

A new message, formatted as follows, is used to configuration an MST Port of ‘port type’ Virtual.

MESSAGE HEADER		
FIELD NAME		**MEANING**
type		**MST_MSG_VPORT_PKT** (0xce4d)
id		**MST Port Id**
src		Originating Module Id
dst		MST Module
rsp_req		0
hclass		0
status		0
err_info		0
len		Packet Length
PARAMETER AREA		
OFFSET	**SIZE**	**NAME**
0	len	IP packet starting with the IP header

Description:

This message is used to encapsulate and send IP packets to MST. It requires the configuration of an MST Port of ‘port type’ Virtual.

The parameter area starts with the IP header in network byte order unmodified as seen on the network. Any header in front of the IP header must be removed and not included in this message.

Note: Care should be taken when receiving IP packets of length greater than 320 bytes. Normal GCT Messages have a maximum length of 320 bytes meaning the IP packet would require truncation. To accommodate messages in excess of 320 bytes Large GCT Messages should be allocated by using the NUM_LMSGS command as defined in the Software Environment Programmer’s Manual.

Parameters:

MST Port Id

The ID field of the message identifies the MST Port the message is for. This must match a preconfigured MST Port with a port type of Virtual Port. If the port id has not been configured, or if the port type is not of Virtual Port then the message will be rejected and an event indication message with status set to MST_INVALID_PORT_ID will be generated.

Packet Length

The maximum permitted length of the IP packet is 1500 bytes; this corresponds to the maximum MTU size defined for Ethernet in IEEE 802.3. Messages in excess of this will result in an event indication message with status set to MST_OVERLENGTH_PACKET being generated as defined below.

If an MST_MSG_VPORT_PKT is received with the length field in the message header less than that in the IP header then the message is rejected and an event indication with status MST_IP_PKT_TRUNC is generated as defined below.

Message Data

Data as seen on the link in Network byte order, starting with the IP header and continuing with the SCTP header, the SCTP chunks (including the SCTP chunk header) and other data contained in the message as seen on the link.

2.1.2 MST_MSG_EVENT_IND Additional Event Codes

The MST_MSG_EVENT_IND message has been extended to support the following new event indications.

Value	Event Mnemonic	Description	Id	Param
0x02	MST_IP_PKT_TRUNC	The amount of data received for an IP packet differs from that indicated in the IP header	port Id	0x0000
0x03	MST_INVALID_PORT_ID	Virtual IP Message received for an invalid port	port Id	0x0000
0x04	MST_OVERLENGTH_PACKET	Overlength Virtual IP Message received.	Port id	len

3. Changes

3.1 Erroneous generation of messages of type 0x0000.

MST can be configured to format messages received from the network with or without their IP, SCTP, M3UA or M2PA headers. If configured to not include these headers then only the M3UA or M2PA user payload is formatted and forwarded to the TAP.

MST can also be configured to select what types of messages are forwarded to TAPs. This includes options for SCTP, M2PA and M3UA control messages in addition to M2PA and M3UA payload messages.

Previously MST failed to handle configurations selecting the monitoring of non-payload messages formatted as payload messages resulting in the generation of messages of type 0x0000. Now MST will automatically format Non-Payload messages as messages of type MST_MSG_IP_MSG.

3.2 MST command line license test option.

Previously, if MST was started with the License Test command line option, E.g.

./mst_sol –Lt.

Upon completion of checking for the license the process would fail to automatically exit. This has been corrected.

Dialogic
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