Dialogic® DSI Signaling Components
SUA Binary for Windows® - Release Notes

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1 Overview

This release is the first release of this binary to support the Dialogic named license token.

The use of trial mode is now limited to one hour but in all other respects this release is backwards compatible with the previous release.

1.1 Applicability

This version of the binary is suitable for all users.

2 Changes

2.1 Support for dual license tokens

This release supports both the old style "INTEL" tokens and the new style "dialogic" tokens within the license file allowing it to function with existing deployed licenses and support future enhancements. This change should be of no consequence to the user.

2.2 Trial Mode

When operating in trial mode (using the –t command line option), the period of operation is now restricted to one hour after which the binary will terminate.

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Binary for Windows® - SUA V1.05

1 Overview

This is the first full release of the Dialogic® SUA Protocol Module which is intended for use in conjunction with the Dialogic® TCAP module and the SCTP modules contained in the Dialogic® SS7 Development Package for Windows®.

The implementation is based on the IETF RFC 3868 protocol specification and offers support for both ASP and IPSP operation. ASP operation is appropriate when connecting to SUA Signaling Gateways whilst IPSP operation permits connection to other IPSP nodes in a peer-to-peer configuration. Functionality in the modules includes Global Title Translation and Transaction Id based routing.

These release notes should be read in conjunction with the Dialogic® SUA Programmer's Manual, Issue 3.

1.1 Applicability

All users should upgrade to this release in preference to earlier releases of the software that have been available during the field trial. This release includes support for a large numbers of global title translations as well as a number of other enhancements and fault resolutions.

2 New Functionality

2.1 Global Title Translation Support

The SUA module incorporates an enhanced algorithm for Global Title Translation (GTT) which permits storage in excess of 1 million translations and supports both fixed and variable rules. Global Titles can be translated to a primary and a backup address.

GTT configuration uses the same API as the existing SCCP module. Global Titles can be configured either using the s7_mgt configuration utility or dynamically using the message-based interface as detailed in the Dialogic® SCCP Programmer's Manual.

Note: Where a zero value is configured for the number of GTT supported in the main SUA configuration message then 64K GTT are configured by default. This permits s7_mgt users to configure large numbers of GTT without including them in the config.txt file.

Note: Under certain conditions the maximum number of GTT supported by the SUA Module is restricted to 256 GTT rules. This is the case where specific digit(s) would be matched between a pair of variable length wildcard parts. For fixed translations or those with a single variable length part the module supports over 1 million GTT

2.2 Capability Licensing

The SUA module is licensed for use through one of a number of purchasable licenses. Different licenses support different amount of traffic throughput and may also impose a limit on the number of SCTP associations supported as detailed in the following table.

Traffic throughput is calculated as the sum of transmitted data and received data as follows:

- Licensed Transmit Data (N-UNITDATA Request passed into SUA) includes Source and Destination addresses and the data parameter length + 13 Bytes for the MTP3 Routing Label and SCCP Headers.
- Licensed Receive Data (CLDT Received via SCTP) includes Source and Destination address parameter lengths divided by 2 + data parameter length + 13 Bytes as described above.

Note: The action of passing messages down through the SUA and SCTP protocol modules results in the addition of message headers. Consequently messages transmitted towards the network will contain less 'traffic' than the corresponding message when it is received from the network and passed up through the stack.

2.3 Long Message Support

When used in conjunction with the appropriate Dialogic® SCTP Module, SUA supports message lengths up to 4065 octets as defined by the ITU-T in Recommendation Q.715 for SCCP.

Note: When working in an SUA environment where message lengths including headers may exceed 320 octets it is essential that the user configures a pool of long messages when initializing the GCT environment. This is achieved using the NUM_LMSGS command in the system.txt file.

3 Other Changes

3.1 Routing based on TID cannot be specified by peer

The TCAP Transaction Id (TID) label is now passed correctly when the R_ASP goes active for a R_AS. This label gives the TCAP instance value and masking info and is saved within SUA for the R_ASP. When a message is received from the R_AS and a reply is generated by the L_AS, the DTID in the reply can be used with the TID info saved to identify the R_ASP to send the reply to.

Note: It is essential to use Binary for Windows® – TCAP V6.02 or later.

3.2 Traffic Mode cannot be specified by peer

Traffic mode can now determined by the peer by passing it in the ASP Active request. Local configuration of peer Load share is retained for use when connecting to a SG and as a default when connecting to a R_ASP.

3.3 Load sharing across multiple streams

Traffic will be load shared across the available streams (using the sequence control parameter), excluding stream 0 which is for management messages only – unless it is the only stream.

3.4 Support for 16-bit Point codes

This release supports the optional use of 16-bit Point code values.

3.5 GTT Error Checking

GTT previously differentiated Rules based on the Target digits, however if some of these digits were different but specified as 'ignore' in the GTT mask, the rule would be accepted. GTT now detects this and rejects the configuration Rule to avoid ambiguous translations.

For clarity GTT will now reject an Enhanced rule which does not have the same number of separators in the Target, Primary/Backup and GTT_MASK parameters, unless the Global Title Indicator for the Primary/Backup is set to "no global title included".

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