

# **SS7 Development Package for Solaris**

## **Release Notes for V1.05**

### **1. Overview**

This release adds support for host systems using the SG430 Signalling Gateway. It includes SIGTRAN SCTP protocol software and a configuration utility SCU to configure the SIGTRAN SCTP and M3UA protocol stacks and increases the maximum number of supported routes to 64.

The release also includes additional host software for use in conjunction with the SIU131, SIU231 and SIU520 Signalling Interface Units, namely client software for the Distributed Transaction Server (DTS) functionality and the INAP API library for linking with the user's application when using the INAP protocol.

This release is fully backwards compatible with the previous release.

### **2. New Functionality**

#### **2.1 Support for SG430 hosts**

This release includes new binaries (sctp, sctpd and scu) for use in conjunction with the Intel® NetStructure™ SG430 Signalling Gateway. The use of these binaries is described in a separate document – *SCU User Guide*. In addition to the binaries supplied as part of this release the user will need to purchase a licence to run the M3UA SIGTRAN binary and any additional user part software as these are not part of this development package.

##### **2.1.1 sctp & sctpd binaries**

The sctp and sctpd binaries provide a software implementation of the SIGTRAN Stream Control Transmission Protocol (SCTP) as specified in the IETF specification RFC2960. Full details of the modules are provided in the *SCTP Programmer's Manual U01STN*.

*NOTE: The sctpd binary must execute with root permissions. In order that a normal user can run the binary with these permissions an administrator must perform the following actions on the binary.*

```
chown root sctpd
chmod +s sctpd
```

##### **2.1.2 scu configuration utility**

The SCU binary is a utility that facilitates the configuration of the SIGTRAN hosts for use in conjunction with the SG430. Full details on the use of this utility are given in the *SCU User Guide - U03SGW*.

## **2.2 dtc binary**

This release includes a new binary – dtc for use in conjunction with the SIU131, SIU231 and SIU520 Signalling Interface Units when using the Distributed Transaction Server mode of operation.

The use of this binary is documented in the appropriate SIU documentation.

## **2.3 INAP API library**

This release includes a new library – in\_api.lib for use in conjunction with the INAP protocol. This library should be linked in with the user's application. It provides a functional interface to the INAP protocol as described in the INAP Programmer's Manual.

## **2.4 Support for increased MTP capacity**

s7\_mgt has been enhanced to support more routes, links and link sets when used in conjunction with MTP implementations that support the increased capacity. s7\_mgt now supports up to 64 MTP\_ROUTE commands, 32 MTP\_LINKSET commands and 64 MTP\_LINK commands on the config.txt file.

## **3. Changes**

### **3.1 ssds enhancements**

Two corrections have been made in the ssds binary for interfacing with the SPC14, SPC12S and CPM8 cards.

Occasionally under heavy load when ssds was running on a very fast processor a fault condition would occur where ssds was repeating a message sent to the board multiple times. When the problem occurred it would usually cause the board to reset. The problem has been corrected.

An internal problem was identified that could cause the hot swap mechanism to become unreliable once ssds had been running for an extended period. This has now been corrected.

### **3.2 Header files**

In common with development packages for other operating systems, header files for use by the user's software are now included in this development package.

### **3.3 Support for Partner ID parameter for ISUP, TUP and NUP**

A new optional parameter <partner\_id> has been added to the ISUP\_CONFIG, TUP\_CONFIG and NUP\_CONFIG commands to allow

the user to configure the partner module\_id when running in resilient configurations. The use of this field is documented in the appropriate Programmer's Manual.

The partner module\_id is referred to in different ways for each module although is the same in each case. For ISUP it is the 'module\_id' field in the ISP\_MSG\_CONFIG message for TUP it is the 'ucic\_id' field in the TUP\_MSG\_CONFIG and for NUP it is the 'module\_id' field in the NUP\_MSG\_CONFIG.

The revised syntax for these commands is as follows:

```
ISUP_CONFIG <local_spc> <ssf> <user_id> <options> <num_grps>  
            <num_ccts> [<partner_id>]
```

```
NUP_CONFIG  <local_spc> <ssf> <user_id> <options> <num_grps>  
            <num_ccts> [<partner_id>]
```

```
TUP_CONFIG  <local_spc> <ssf> <user_id> <options> <num_grps>  
            <num_ccts> [<partner_id>]
```

Intel Corporation  
04-Sep-02

## **SS7 Development Package for Solaris**

### **Release Notes for V1.06**

#### **1. Overview**

This release is a maintenance release to offer support for the SIGTRAN SCTP CRC32 checksum. It includes other minor functional enhancements as detailed below and a change to the product branding to be part of the range of Intel® NetStructure™ SS7 Products.

The release is fully backwards compatible with the previous release.

#### **2. New Functionality**

##### **2.1 SCTP CRC32 checksum**

The SCTP module has been extended to support the CRC-32 checksum in addition to the existing Adler-32 checksum. The SCU configuration tool now configures SCTP to use CRC32 instead of Adler-32. These changes reflect the change in the specification of SCTP as defined as RFC 3309.

#### **3. Changes**

##### **3.1 Package filename**

The installation packages have been renamed dpksol32.Z and dpksol64.Z.

##### **3.2 INAP\_API library removed from release**

The INAP\_API library is no longer included in this release. Instead it can be found in the User Part Development Package.

##### **3.3 SCTP burst control**

Message gapping has been added at the SCTP to user interface to avoid problems caused by large bursts of messages being delivered.

##### **3.4 s7\_play binary discards white space in script files.**

The s7\_play binary has been upgraded so as to discard white space in the script files it uses. This allows scripts to be written with more flexibility in their appearance.

### **3.5 s7\_mgt – extension of capabilities**

The capacity s7\_mgt has been extended to support 684 circuit groups and 128 MTP routes.

### **3.6 s7\_log supports additional TCAP error codes**

s7\_log now decodes the following additional TCAP error events:  
TCPSWE\_DBUF\_LOW, TCPSWE\_NO\_DBUF &  
TCPSWE\_DBUF\_ABMT.

Intel Corporation  
08-Oct-03