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TECHNICAL BULLETIN

Summa Four, Inc., 25 Sundial Avenue, Manchester, New Hampshire 03103

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Audience:	CCITT Integrated SS7 V3.0 Customers
Product(s) Affected:	Integrated SS7 Systems
Distribution:	___- Critical __X_- Standard ___- Special

Purpose of Bulletin

Clarification of GRPID and TRNKGRPID parameters in Integrated SS7 V3.0 system software.

Corrective Action

In general, GRPIDs, along with the Destination Point Code (DPC), uniquely identify circuits to the SS7 network. TRNKGRPIDs uniquely identify circuits to Circuit Interworking. GRPIDs and TRNKGRPIDs are defined in the following configuration files:

ISUP Level Provisioning Configuration File

The ISUP Level Provisioning configuration file defines the circuits.

The MML **ADD-ISUPCGRP** command adds circuit groups to the ISUP database. The following are the parameters for ADD-ISUPCGRP:

PCNO—A unique point code index number that refers to the DPC.

GRPID—A value that identifies a circuit group. Most often, circuit groups are set up to correspond to a span of an E1/T1 card.

GRPID is a user-defined value you use as a multiplier when you calculate the circuit identification codes (CICs). GRPIDs, along with the DPC, identify specific circuits to the SS7 network. **Valid values are decimal, 0 through 127. Each GRPID must be unique per PCNO.**

TIP: *The circuit identification code (CIC) is a decimal number that identifies each circuit to the SS7 network. Calculate the CIC by using the following expression:*

CIC = (GRPID x 32) + Circuit ID

Since GRPID can equal 0 through 127 and CCITT Circuit IDs can equal 1 to 32, CCITT CICs can equal 0 through 4,095.

Max_T1_CIC = (127 x 32) + 31 = 4,095

CICs are not unique and can be duplicated for different signaling nodes (PCNO).

CCTNUM—Specifies both maximum number of circuits and limits the circuit numbers available to this group. Values are from 1 to 32.

NOTE: Summa Four recommends you set the default value to 32.

TRNKGRPID—A unique value that identifies a circuit group. Most often, circuit groups are set up to correspond to a span of an E1/T1 card.

TRNKGRPID is a unique, user-defined value you use as a multiplier when you calculate the global circuit identification codes (GCICs). TRNKGRPIDs identify specific circuits to Circuit Interworking. **Valid values are decimal, 1 through 73. Each TRNKGRPID must be unique.**

TIP: *The global circuit identification code (GCIC) uniquely identifies every circuit in the Integrated SS7 domain. GCICs use the Trunk ID (TRNKGRPID) as a multiplier in the calculation. Calculate GCICs using the following expression:*

GCIC = (TRNKGRPID x 32) + Circuit ID

Resource Provisioning Files: ckt_ss7_to_sds and grp_ss7_to_sds

The configuration files **ckt_ss7_to_sds** and **grp_ss7_to_sds** contain the parameters for provisioning the circuit IDs and the circuit groups. The circuit configuration file defines parameters for SS7 circuits. The circuit group configuration file defines parameters for circuit groups.

Circuit Configuration File

The **ckt_ss7_to_sds** file contains the address translation parameters for SS7 circuit to SDS/VCO ports. Each line in the file corresponds to a single circuit. Table 1.1 lists and describes the fields in the **ckt_ss7_to_sds** file.

Table 1.1: Circuit Configuration Fields

Configuration Field	Description
SDS/VCO Port Address	Hex value representing the SDS/VCO port address.
CCTNUM	Circuit ID. Hexadecimal value. Use the same value as in the EBS SS7 stack configuration file, but convert to a hexadecimal number.
SDS/VCO Device	Reserved. Set to zero (0).
Circuit Name	40-character ASCII string.
GRPID	Circuit Group ID. Use the same value as in the EBS SS7 stack configuration file. **Valid values are decimal, 0 through 127.**
Inpulse Rule Number	Reserved. Set to zero (0).
TRNKGRPID	Trunk Group ID. Use the same value as in the EBS SS7 stack configuration file. **Valid values are decimal, 1 through 73.**
Signaling Point	Set to zero (0). The signaling point for this device is always 0.
Resource Group	Decimal value for resource group number that is defined for the SDS/VCO port in the SDS/VCO's database. For more information, refer to the *System Administrator's Guide*. The SDS/VCO port must belong to a resource group. *NOTE: Although the SDS/VCO can support resource group values from 1 to 63,* ***the Integrated SS7 software only supports resource group values from 1 to 31****.*

Group Configuration File

Each line in the **grp_ss7_to_sds** file specifies parameters for a single circuit group. An example line from a **grp_ss7_to_sds** file is shown in Figure 1.1.

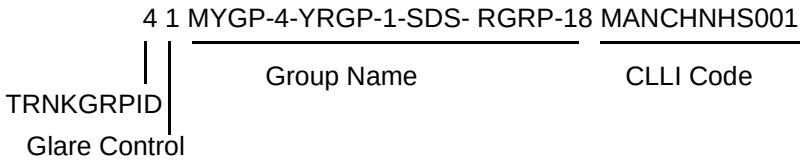

Figure 1.1: Sample Line From grp_ss7_to_sds File

Table 1.2 lists and describes the fields in the **grp_ss7_to_sds** file.

Table 1.2: Circuit Group Configuration Fields

Configuration Field	Description
TRNKGRPID	Trunk Group ID. Use the same value as in the EBS SS7 Stack configuration file. **Valid values are decimal, 1 through 73.**
Glare Control	Use for double seizing control indicator in Circuit Group Characteristics Indicator parameter. The following are the valid values for Glare Control: 1 - Control odd circuits. Use this value if Integrated SS7 has the higher Point Code for this group. 2 - Control even circuits. Use this value if Integrated SS7 has the lower Point Code for this group.
Group Name	40-character ASCII group name
CLLI Code *	Common Language Location ID code. 12-character string.

* Bytes 1-5 are the town code, bytes 6 and 7 are the state code, bytes 8 and 9 are building codes, bytes 10 and 12 are subdivision codes.