

Configuring SS7 TCAP

OPERATING INSTRUCTION

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1 Overview

1.1 Description

This operating instruction describes, using an example, how to configure Signaling System 7 defined by Transaction Capabilities Application Part (TCAP) for the following standards:

- International Telecommunication Union (ITU)
- China
- Telecommunication Technology Committee (TTC)
- American National Standards Institute (ANSI)

The procedure described in this example shows a complete configuration with usable values. For a specific customer configuration, other values may be relevant.

Note: All examples in this document are using the ITU/China/TTC TCAP. However, the same procedures can be applied to ANSI TCAP.

1.2 Prerequisites

1.2.1 Documents

For configuration parameter information, see "Configuration File Description for Ericsson Signaling TCAP", Reference [1].

1.2.2 Tools

Signaling Manager is supposed to be used for module configuration. For more details, see Reference [2].

1.2.3 Conditions

Before starting this procedure, ensure that the following conditions are met:

- Configuration has been performed according to *Configuring SS7 Signaling Network, SCCP, M3*

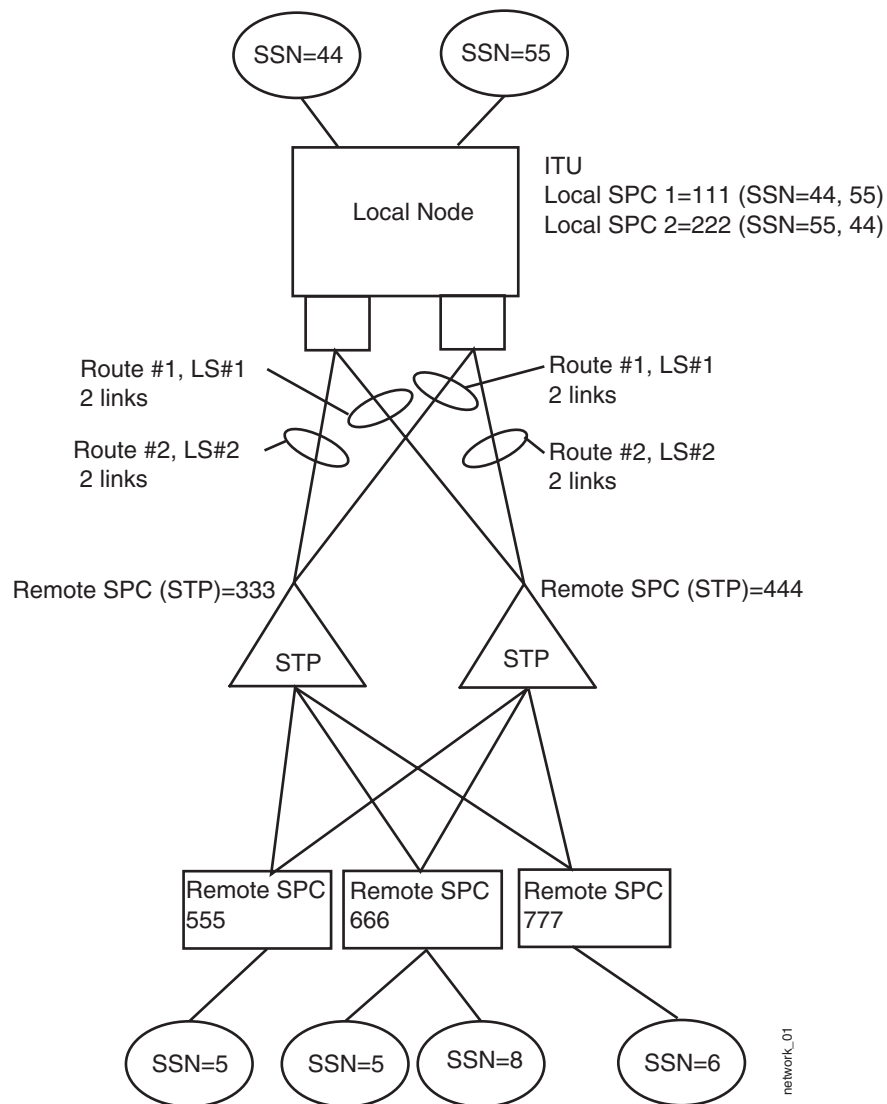


Figure 1 Example of a Network Configuration



2 Procedure

2.1 Configuring TCAP

1. Add element on **TCAP**. An instance of a **TCAP** is added.
2. Select the added **TCAP** element to edit its properties.

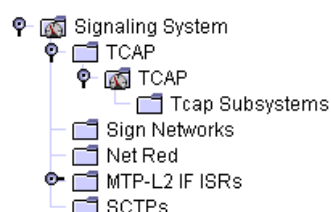


Figure 2 Added TCAP in Signaling Manager Navigation Pane

3. Set **Standard** and other properties. It is up to applications which values for the properties must be used.

Note: You don't need to define **TCAP Subsystem** if you are not configuring TCAP for Loadsharing, or want to use orders on TCAP Subsystems.

2.2 TCAP Loadsharing

TCAP Loadsharing increases the signaling capacity between two end-points beyond 16 signaling links. When loadsharing is active, the dialogue is alternately initiated over the link sets. A prerequisite for loadsharing is that multiple point codes are configured in MTP-L3. A TC-user has two ways to use loadsharing, by setting the routing indicator flag to route on SSN or GT.

Follow the instructions in this section if you want to configure TCAP for loadsharing.

2.2.1 Configure TCAP for Loadsharing

In order to use loadsharing functionality in TCAP, you need to configure **TCAP Subsystem**.

1. Add element on **TCAP Subsystems**. An instance of a TcapSystem called **TCAP SubSystem:[undef]** is added.

Note: As it is seen in the name of the added **TCAP SubSystem:[undef]**, the **SCCP SAP** reference is not set by default.

2. Select the added **TCAP SubSystem:[undef]**, and assign the **SCCP SAP** reference.

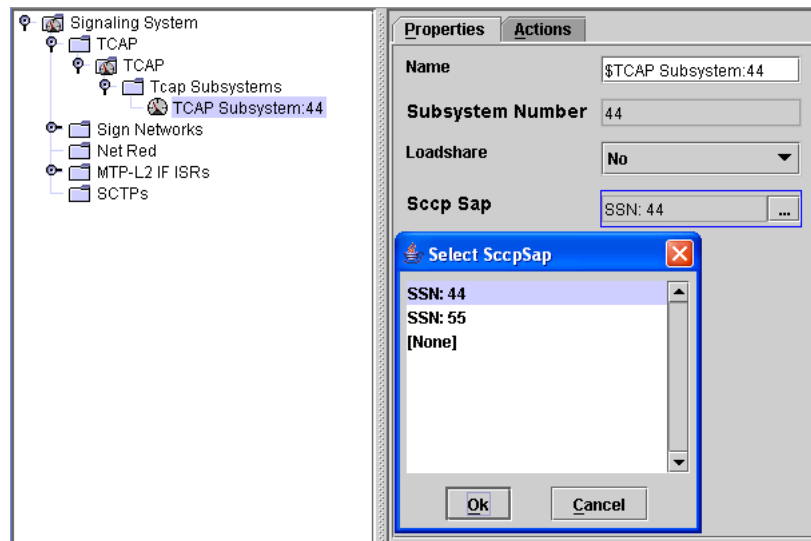


Figure 3 Select SCCP SAP Instances

3. Edit Loadsharing property.

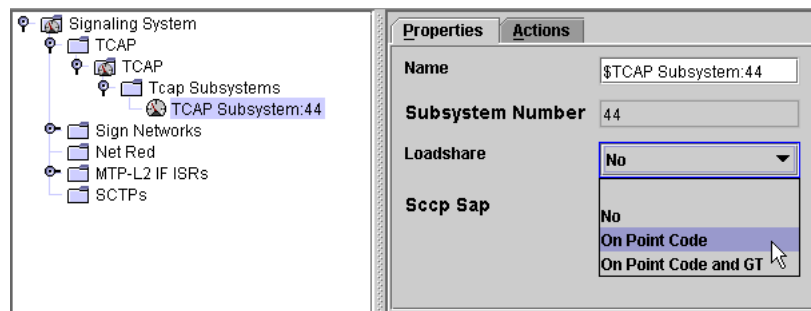


Figure 4 Loadsharing Option Values

4. Select **On Point Code**, when only using OPC in Calling Party Address of the SCCP message (CgPA). Application may not set the Routing Indicator to "Route on GT".
5. Select **On Point Code and GT**, when using OPC or GT in CgPA depending on how the Routing Indicator in the Address Indicator field of the SCCP Message is set by the application.

2.2.2 Limitations

When Loadsharing "On Point Code and GT" is used, there are some limitations on the SCCP configuration:

- Each Local Subsystem must be addressed by exactly one GT per Local Point Code.
- No wildcards ('*' or '?'), may be used in the **Address Info** of this GT.



- A GT translation to Local Sign. Point may also be used. In this case it is important that the remote application specify SSN in the CdPA.





Reference List

- [1] *Configuration File Description for Ericsson Signaling TCAP*, 1/19073-CAA 201 694/3
- [2] *Signaling Manager User Guide*, 1553-CNA 403 0874/3