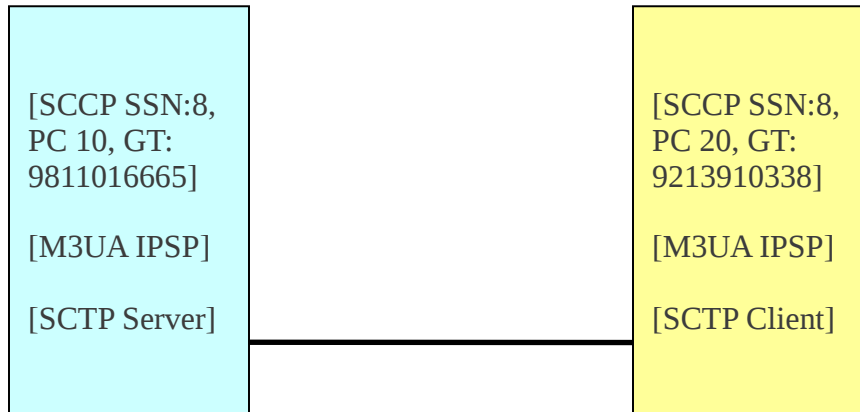


TCAP, CL-SCCP & M3UA Demonstration



Pre-Requisites

- 1) Linux System
- 2) LK-SCTP
- 3) Sure Speed CL-SCCP
- 4) Sure Speed M3UA
- 5) Wireshark [Please use wireshark to capture packets between Client and Server entity to verify the demonstrations.

Building the Demo Application [not applicable if application binary available]

To build the demo application, change to directory “./tcap/demo” and give command “make”. This will prepare the executable “./tcapdemo”. The source code that may be used to understand how applications using SCCP and M3UA layers may be built are present in source files “./tcap/demo”.

CL-SCCP and M3UA demo applications are available separately also. They illustrate more detailed functionalities of the CL-SCCP and the M3UA. Please refer CL-SCCP and M3UA Programmer’s Manual for details about Sure Speed CL-SCCP and M3UA.

Beginning the Demonstrations

To begin the demonstration, we first need to start the server entity as following:

```
./tcapdemo <server-ip-address>:<server-port> <client-ip-address>:<client-port> s
```

Once Server has begun successfully, we will now begin the client entity a following:

```
./tcapdemo <client-ip-address>:<client-port> <server-ip-address>:<server-port> c
```

The demo application first configures SCTP layer, followed by M3UA layer, then configures local subsystems and remote subsystems in the SCCP layer. Finally TCAP layer is configured.

As soon as both Server and Client entities are active, they would undergo M3UA ASP/IPSP activation procedure. Once M3UA IPSP/ASP are active, SCCP subsystems would get RESUME indications, based on which they will exchange SPMG-SST and SPMG-SSA messages and become available for message processing. Once local and remote SCCP subsystems are ready, then only TCAP layer demonstration begins to execute.

Demonstration 1) TCAP Unidirectional Transaction

Demonstration 1 is initiated by client entity where it sends TCAP Unidirectional Message to the server entity.

Demonstration 2) TCAP Dialogue with Prearranged End

Demonstration 2 is performed after 15 seconds of demonstration 1. Here client entity sends TCAP BEGIN to the server entity and both the entities close the dialogue using prearranged END. So, no TCAP END message is exchanged between client and server.

Demonstration 3) TCAP Dialogue with Basic End

In Demonstration 3, client send a TCAP BEGIN to the server. The server entity replies with a TCAP CONTINUE message. Client entity closes the dialogue using TCAP END message. Here TCAP END is sent from client entity to the server entity.

Demonstration 4) TCAP Dialogue with Components

In Demonstration 4, client sends TCAP BEGIN with INVOKE component in it to the server entity. Server entity responds with TCAP END containing RETURN-RESULT-LAST component.

Demonstration 5) TCAP Dialogue with User Abort

In Demonstration 5, client sends TCAP BEGIN with INVOKE component in it to the server entity. Server entity responds with TCAP ABORT message, thus, aborting the dialogue.

Demonstration 6) TCAP Dialogue with Return-Error Component

In Demonstration 6, client sends TCAP BEGIN with INVOKE component in it to the server entity. Server entity responds with TCAP END containing RETURN-ERROR component.

Demonstration 7) TCAP Dialogue with Reject Component

In Demonstration 7, client sends TCAP BEGIN with INVOKE component in it to the server entity. Server entity responds with TCAP END containing REJECT component.

M3UA & CL-SCCP Demonstration

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