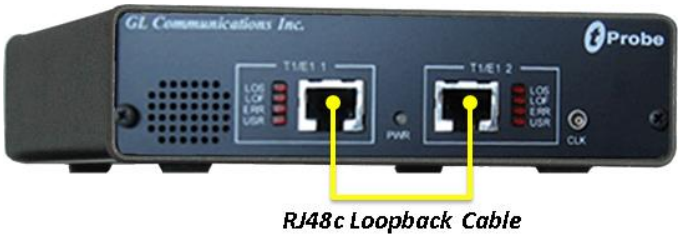
Note: ***MAPS™ IUP UK is supported on E1 systems.***

It is assumed that the E1 Analyzer Hardware, Software and License installations are already performed referring to the purchased Hardware Installation Guide.

MAPS™ IUP Application Verification

For functional verification of MAPS™ IUP application, two instances of **MAPS™ IUP** application are configured on the same PC. On the first instance, MAPS™ is configured as **Incoming Network** terminal, and the second MAPS™ instance is configured as **Outgoing Network** terminal generating IUP procedure messages.

Cross-connect T1/E1 Port #1 and Port #2 of the Hardware unit back-to-back using RJ48c loopback cable.

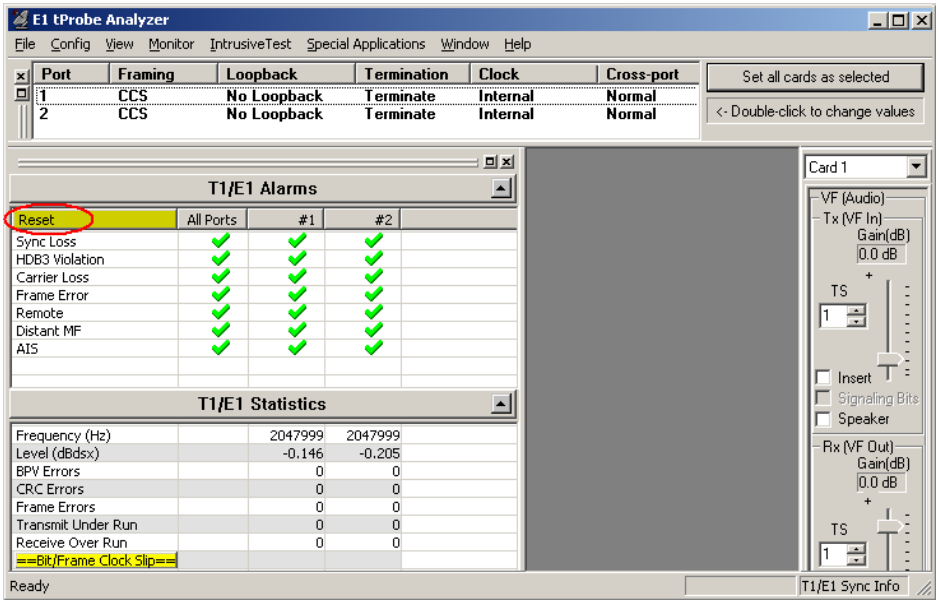


RJ48c Loopback Cable

- Click on the **E1 Analyzer** icon created on the desktop (or) from the installation directory, click on **UsbNGE1.exe** and launch E1 Analyzer application.

Note: The application may take some time to get started due to hardware and software initializations.

- Verify the following **Interface** settings in the E1 main GUI
  - For **E1 Analyzer**, configure Port #1 and Port #2 with the following
    Framing = CCS, Loopback = No Loopback, Termination = Terminate, Clock = Internal, Cross Port = Normal



- Verify the **Sync and Alarm Status** between the ports are indicated in **Green** ✔ in **T1/E1 Alarms** pane. Click **Yellow Reset** button to reset the alarms.

- From E1 Analyzer main window, invoke the **WCS Server: Special Applications > Windows Client Server (WCS) > WCS Server.**
- Configure WCS as follows -
  - Listen Port = 17090 (for E1 systems)
  - Messaging = Binary
  - Version = 4
  - Click on **Start GL Server** button. Minimize the window.

On the first MAPS™ IUP instance

- From E1 Analyzer main window, from **Special Applications** > **Protocol Emulation** > **MAPS™ IUP Emulator**
- This MAPS™ instance is configured for **Call Reception**
- By default, **Testbed Setup** window is displayed. Click and select **Card2** configuration and check for the following parameter default values:
  - **Exchange Type =** Non Control
  - **CIC to Circuit Mapping =** Timeslot Based
  - **SSP Source Point Code =** 2.2.2
  - **Adjacent Destination Point Code =** 1.1.1
  - **Signaling Port** = 2
  - **Signaling Timeslot** = 31 (for E1)
  - **Destination Point Code =** 1.1.1
  - **Port Number** = 2
  - **Routing Destination Point Code** = 1.1.1
- From MAPS™ IUP main window, select **Configuration > Incoming Call Handler Configuration**. Make sure that the **IUP_Call.gls** script is loaded against the **IUP Initial and Final Address Message (IFAM)** and **IUP Initial Address Message (IAM)** messages. Exit from the window.
- From MAPS™ IUP main window, select **"Editor"** menu -> invoke **Profile Editor** window:
  - Click and load **"IUP_Profiles"** file. Scroll down the left pane and select **Card2TS01** profile. Set **Card number = 2, Timeslot = 1, OPC = 2.2.2, DPC = 1.1.1** parameter values. Set **Initiating Protocol** to **IAM**. Click **Save** button.
  - In the same Profile Editor window, click and load **"TrafficProfile"** file. Scroll down the left pane and select **Card2TS01** profile. Set **Enable Traffic** to **AutoTraffic-File** type and **Traffic Direction for AutoTraffic** to **Tx-Rx**. Click **Save** button. Exit from the Profile Editor window.

On the second MAPS™ IUP instance

- From E1 Analyzer main window, from **Special Applications** > **Protocol Emulation** > **MAPS™ IUP Emulator**
- This MAPS™ instance is configured for **Call Generation**
- By default, **Testbed Setup** window is displayed. Click and select **Card1** configuration and check for the following parameter default values:
  - **Exchange Type =** Control
  - **CIC to Circuit Mapping =** Timeslot Based
  - **SSP Source Point Code =** 1.1.1
  - **Adjacent Destination Point Code =** 2.2.2
  - **Signaling Port =** 1
  - **Signaling Timeslot =** 31 (for E1)
  - **Destination Point Code =** 2.2.2

- **Port Number** = 1
- **Routing Destination Point Code** = 2.2.2

- From MAPS™ IUP main window, select **"Editor"** menu -> invoke **Profile Editor** window:
  - Click and load **"IUP_Profiles"** file. From the left pane, select **Card1TS01** profile. Set **Card number = 1, Timeslot = 1, OPC = 1.1.1, DPC = 2.2.2** parameter values. Set **Initiating Protocol** to **IAM**. Click **Save** button.
  - In the same Profile Editor window, click and load **"TrafficProfile"** file. From the left pane, select **Card1TS01** profile. Set **Enable Traffic** to **AutoTraffic-File** type and **Traffic Direction for AutoTraffic** to **Tx-Rx**. Click **Save** button. Exit from the Profile Editor window.

- **Start** the testbed on both the MAPS™ instances
- **Note**: Once the test bed setup is started on both the instances of MAPS™ IUP, from **Reports** menu > invoke **Link Status** window. Verify that the **Link Status** is **UP** (indicated in Green color) before placing the call.

- On both the MAPS™ IUP instances, click icon and open **Call Reception** window. Observe that SLTM script is activated.
- In the MAPS™ second instance, select **Emulator > Call Generation** from main menu.

- By default, a call instance loaded with **IUP_Call.gls** script and **Card1TS01** profile is displayed. Select the instance and click on the Start option to initiate the call generation.

- Return back to the MAPS™ first instance, in the **Call Reception** window, observe that the calls are automatically received running the Rx script.
- Wait for the call to terminate, and verify the **Message Sequence** flow at both generation and reception end.
- Select any message in the ladder diagram and observe the respective decode message on the right pane for the respective message.