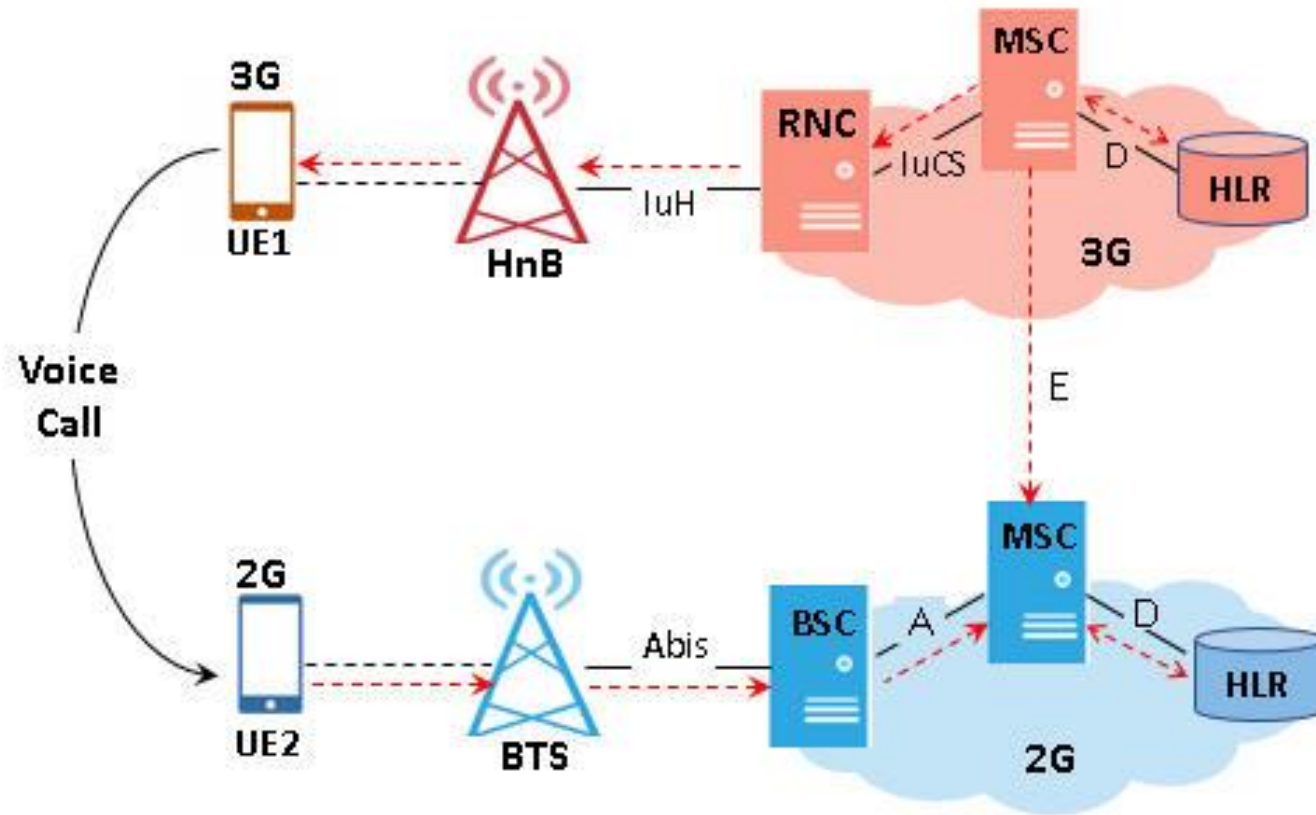


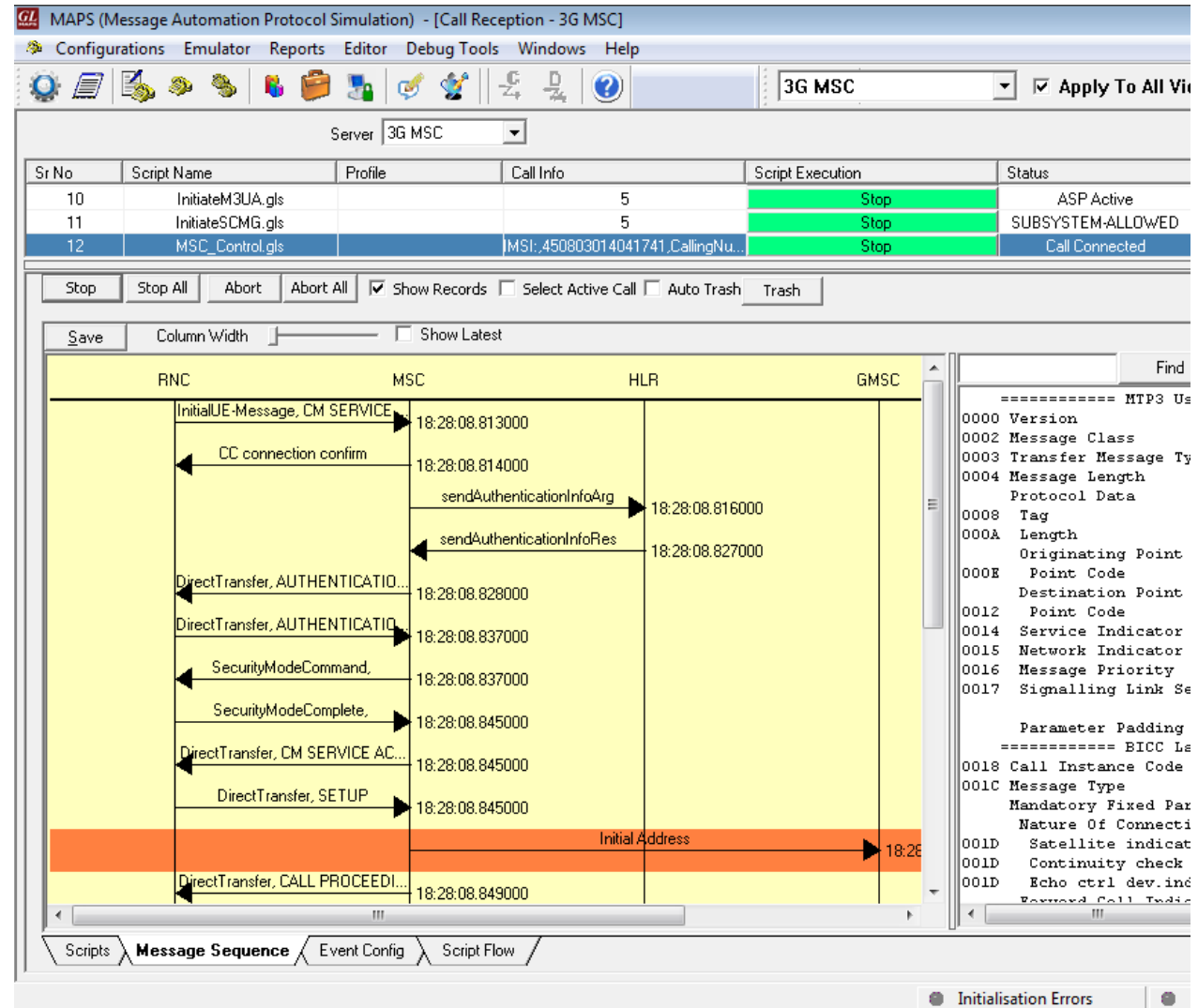
Inter-Network Calls - 3G user Calling 2G user

- ❖ UE1 placing call to UE2 while both the users reside in their home network.
- ❖ Location is updated for both the users in their home network (home HLR). MSC maintains a map table for IMSI and MSISDN of all the registered users.
- ❖ When a voice call or SMS call is placed from UE1 to UE2, MSC on 3G network receives call from UE1 and checks for the received MSISDN registration using MAP table. If MAP is found then call is routed within same network otherwise call is routed to 2G MSC. MSC in the 2G network routes the request to 2G user.
- ❖ For simulated calls, generate call from MAPS RNC using `IuCS_Call-3G-2G.gls` script



Inter-Network Calls - 3G user Calling 2G user

- ❖ CM SERVICE REQUEST message is sent to 3G MSC
- ❖ Authentication procedure is initiated at the HLR Node
- ❖ When Setup Message (Voice Call) is received, MSC checks whether Called MSISDN is registered to 3G Network. If not, the Initial Address (BICC Call is initiated) towards GMSC.



Inter-Network Calls - 3G user Calling 2G user

- ❖ 2G MSC extracts called MSISDN from the received Initial Address Message and if the user registration is verified with the network, Paging is initiated towards BSC.
- ❖ On reception of PAGING, BSC will respond with Paging Response and end-to-end call is established from 2G user to 3G user.

MAPS (Message Automation Protocol Simulation) - [Call Reception - 2G MSC]

Configurations Emulator Reports Editor Debug Tools Windows Help

Server: 2G MSC

Sr No	Script Name	Profile	Call Info	Script Execution	Status
12	InitiateSCMG.gls		3	Stop	SUBSYSTEM-ALLOWED
13	MSC_Control.gls		IMSI:.,Calling Number,3014041741...	Stop	Call Connected

Stop Stop All Abort Abort All Show Records Select Active Call Auto Trash Trash

Save Column Width Show Latest

GMSC MSC BSC 1 HLR

Initial Address → 18:28:09.344000

Application Transport ← 18:28:09.356000

Application Transport → 18:28:09.377000

Application Transport ← 18:28:09.382000

Application Transport → 18:28:09.392000

PAGING → 18:28:09.398000

PAGING RESPONSE ← 18:28:09.413000

CC connection confirm → 18:28:09.415000

sendAuthenticationInfoArg → 18:28:09.504000

sendAuthenticationInfoRes ← 18:28:09.514000

AUTHENTICATION REQUEST → 18:28:09.504000

AUTHENTICATION RESPONSE ← 18:28:09.514000

Find

```

===== MTP3 User
0000 Version
0002 Message Class
0003 Transfer Message Type
0004 Message Length
    Protocol Data
0008 Tag
000A Length
    Originating Point Cod
000E Point Code
    Destination Point Cod
0012 Point Code
0014 Service Indicator
0015 Network Indicator
0016 Message Priority
0017 Signalling Link Selec
    Pdu
    Parameter Padding
===== BICC Layer
0018 Call Instance Code
001C Message Type
    Mandatory Fixed Parame
    Nature Of Connection
001D Satellite indicator
001D Continuity check ind
001D Echo ctrl dev.ind(Ne
    Forward Call Indicate
    
```

Scripts Message Sequence Event Config Script Flow

Initialisation Errors Error