

FREQUENTLY ASKED QUESTIONS

ETERNITY PE/GE/ME/LE

What
When
Which
Where
How
Who
Why

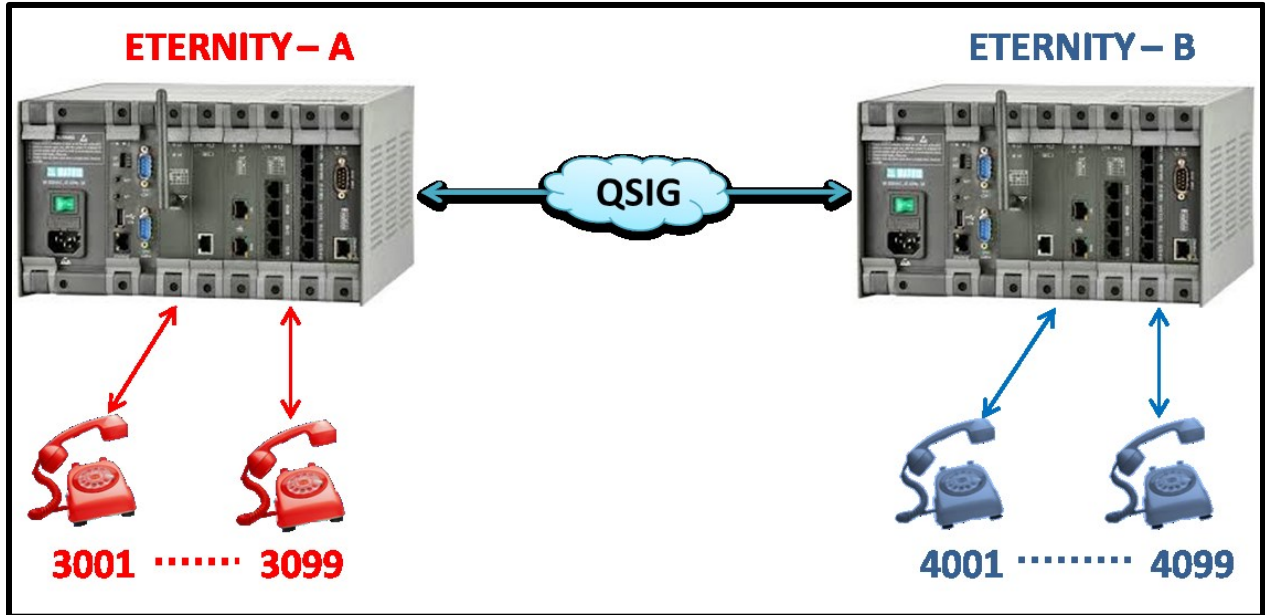


Date: 1st May 2015

Version: V1R1

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How to tie up ETERNITY over QSIG?



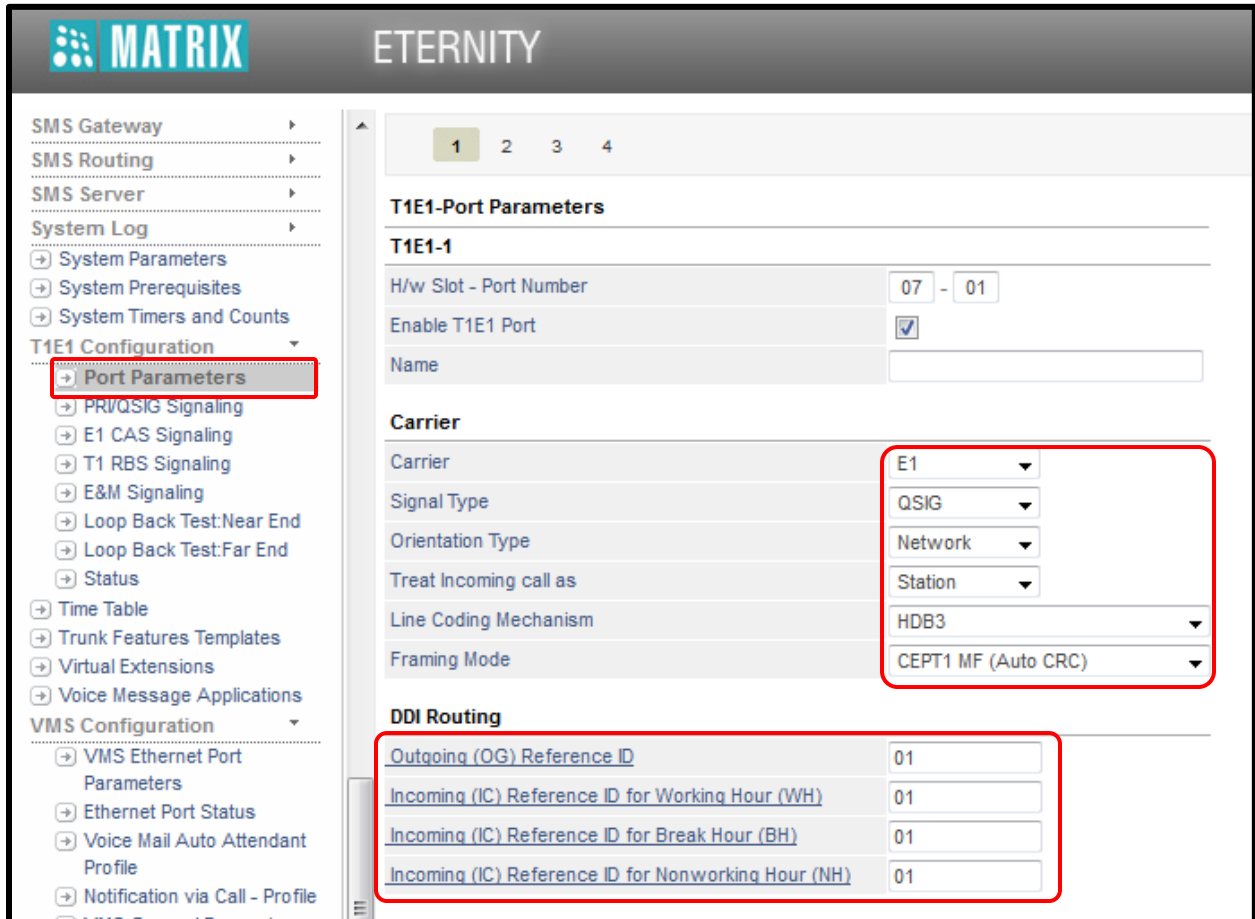
Prerequisites: QSIG License must be activated in the ETERNITY System

The screenshot shows the MATRIX ETERNITY web interface. The left sidebar contains a menu with 'License Management' highlighted. The main content area displays the 'License Management' configuration page. The 'Enter License Key' field is empty, and the 'License Key' field contains the value E801-4AAB-C715-030F-003D-060E-822F-B002-F974-9BC4-2986-9497-027C-01C6. Below this is the 'Service Profile' table, which lists various services and their status. The 'QSIG' service is highlighted with a red box and is set to 'Yes'. The 'Demo Period Left' and 'Demo Period Expired' fields are also visible.

Service	Status
PLCC	No
Hospitality	Yes
PMS	Yes
Business Feature Suite	Yes
QSIG	Yes
Gateway	Yes
SMS Gateway	Yes
SMS Server	Yes
CTI	Yes
Mobility Feature Suite	Yes
Dealer Board	0

Configuration of ETERNITY A:

Step 1: Set T1E1 Configuration → Port Parameters page



MATRIX ETERNITY

SMS Gateway
SMS Routing
SMS Server
System Log
System Parameters
System Prerequisites
System Timers and Counts
T1E1 Configuration
 Port Parameters
 PRI/QSIG Signaling
 E1 CAS Signaling
 T1 RBS Signaling
 E&M Signaling
 Loop Back Test:Near End
 Loop Back Test:Far End
 Status
Time Table
Trunk Features Templates
Virtual Extensions
Voice Message Applications
VMS Configuration
 VMS Ethernet Port Parameters
 Ethernet Port Status
 Voice Mail Auto Attendant Profile
 Notification via Call - Profile

T1E1-Port Parameters

1 2 3 4

T1E1-1

H/w Slot - Port Number 07 - 01
Enable T1E1 Port
Name
Carrier
Carrier E1
Signal Type QSIG
Orientation Type Network
Treat Incoming call as Station
Line Coding Mechanism HDB3
Framing Mode CEPT1 MF (Auto CRC)
DDI Routing
Outgoing (OG) Reference ID 01
Incoming (IC) Reference ID for Working Hour (WH) 01
Incoming (IC) Reference ID for Break Hour (BH) 01
Incoming (IC) Reference ID for Nonworking Hour (NH) 01

Step 2: Set ISDN switch variant as QSIG E1



MATRIX ETERNITY

SMS Gateway
SMS Routing
SMS Server
System Log
System Parameters
System Prerequisites
System Timers and Counts
T1E1 Configuration
 Port Parameters
 PRI/QSIG Signaling
 E1 CAS Signaling
 T1 RBS Signaling
 E&M Signaling
 Loop Back Test:Near End

T1E1:1 - PRI/QSIG Signaling

1 2 3 4

ISDN Switch Variant QSIG E1
Offer continuous Bearer Channel Mapping(01-30)
D-Channel 16
Send Called Party Number Using Called Party Number IE
Dialing Type for Called Party Number Any
Caller-Type of Number (TON) Unknown
Caller-Numbering Plan Identification (NPI) ISDN Numbering
Called-Type of Number (TON) Unknown

Step 3: Configure DDI Routing → Incoming Reference Table

MATRIX ETERNITY

CO Configuration

- COSEC Integration
- CTI
 - CPU PCAP Trace
 - Date & Time
 - DDI Routing**
 - DDI Routing Table**
 - Incoming Reference Table**
 - Outgoing Reference Table
 - Default the System
 - Dial Plan for SIP Extension
 - Department Groups
 - DISA - CLI Authentication
 - DKP Configuration
 - Door Phone
 - E1-Data Settings

01-32 33-64

DDI Routing - Incoming Reference Table

Table ID	IC Ref. ID	Start Channel No.	Total Channel Count	DDI Routing Ref. ID	Route on First Destination	Ring Timer (sec)
1	01	01	30	01	<input type="checkbox"/>	045
2	00	01	00	00	<input type="checkbox"/>	045
3	00	01	00	00	<input type="checkbox"/>	045
4	00	01	00	00	<input type="checkbox"/>	045
5	00	01	00	00	<input type="checkbox"/>	045
6	00	01	00	00	<input type="checkbox"/>	045
7	00	01	00	00	<input type="checkbox"/>	045
8	00	01	00	00	<input type="checkbox"/>	045

Step 4: Configure DDI routing table

MATRIX ETERNITY

CO Configuration

- COSEC Integration
- CTI
 - CPU PCAP Trace
 - Date & Time
 - DDI Routing**
 - DDI Routing Table**
 - Incoming Reference Table
 - Outgoing Reference Table
 - Default the System
 - Dial Plan for SIP Extension
 - Department Groups
 - DISA - CLI Authentication
- DKP Configuration
 - Door Phone

001-032 033-064 065-096 097-128 129-160 161-192 193-224

DDI Routing Table

Table ID	DDI Routing Reference ID	Start DDI No.	Total DDI Numbers	DDI Number of Digit	Route to Destination		
					Port Type	Port Number	Start DDI Flexible No.
1	01	00003001	00000100	4	Flexible Num.	0000	3001
2	00	000000	00000000	0	None	0000	
3	00	0000	00000000	0	None	0000	
4	00	00000000	00000000	0	None	0000	

This DDI routing of extensions in System A is done for landing of calls to respective extension when any extension of Sytem B dials access code of any extension of System A.

Step 5: Configure Outgoing reference table to send CLI from ETERNITY A to ETERNITY B

DDI Routing - Outgoing Reference Table

Table ID	OG Ref. ID	Start Channel No.	Channel Count	Pilot Number	DDI Routing Ref. ID
1	01	01	30	3001	01
2	00	01	00		00
3	00	01	00		00
4	00	01	00		00
5	00	01	00		00
6	00	01	00		00

Step 6: Configure the CUG table with route code 4 and OG trunk bundle group 01 so the extensions of ETERNITY A can dial the extension numbers of ETERNITY B directly

Closed User Group

Index	Route Code	OG Trunk Bundle Group	Strip Digit Count	Self Route	Dialed Digit Count	Apply Toll Control
1	4	01	0	<input type="checkbox"/>	04	<input checked="" type="checkbox"/>
2		01	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
3		01	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
4		01	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
5		0	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
6			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
7			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
8			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
9			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>

The common dial code for extensions(4) in System B is entered in CUG for direct dialing.

Step 7: Set OG trunk bundle member 1 field to 001

MATRIX ETERNITY

01-08 09-16 17-24 25-32

OG Trunk Bundle Groups

Group No.	Rotation	LCR	OG Trunk Bundle Member 1	OG Trunk Bundle Member 2
1	<input type="checkbox"/>	Number	001	000
2	<input checked="" type="checkbox"/>	None	001	000
3	<input checked="" type="checkbox"/>	None	001	000
4	<input checked="" type="checkbox"/>	None	001	000
5	<input checked="" type="checkbox"/>	None	001	000
6	<input checked="" type="checkbox"/>	None	001	000
7	<input checked="" type="checkbox"/>	None	001	000
8	<input checked="" type="checkbox"/>	None	001	000

Submit Default Default One

Step 8: Set T1E1 trunk with Port number 0001 (QSIG link connected to ETERNITY B) in the OG trunk bundle

MATRIX ETERNITY

001-032 033-064 065-096 097-128

OG Trunk Bundle

Bundle No.	Trunk Port		Start Channel No.	Total Trunk Count	Rotation Type	Automatic Number Translation (ANT)	
	Type	Number				Apply	ANT Table No.
1	T1E1	0001	01	30	Ascending	<input type="checkbox"/>	1
2	None	0000	01	032	Ascending	<input type="checkbox"/>	1
3	None	0000	01	002	Ascending	<input type="checkbox"/>	1

Configuration of ETERNITY B:

Step 1: Set T1E1 Configuration → Port Parameters page

MATRIX ETERNITY

SMS Server
System Log
System Parameters
System Prerequisites
System Timers and Counts
T1E1 Configuration
 Port Parameters
 PR/QSIG Signaling
 E1 CAS Signaling
 T1 RBS Signaling
 E&M Signaling
 Loop Back Test:Near End
 Loop Back Test:Far End
 Status
Time Table
Trunk Features Templates
Virtual Extensions
Voice Message Applications
VMS Configuration
 VMS Ethernet Port Parameters
 Ethernet Port Status
 Voice Mail Auto Attendant Profile
 Notification via Call - Profile
 VMS General Parameters
 Memory Status
 SMTP Settings
 Distribution List

T1E1-Port Parameters

T1E1-1

H/w Slot - Port Number: 04 - 01
Enable T1E1 Port:
Name:

Carrier

Carrier: E1
Signal Type: QSIG
Orientation Type: Terminal
Interfaced with: Private ISDN
Treat Incoming call as: Station
Line Coding Mechanism: HDB3
Framing Mode: CEPT1 MF (Auto CRC)

DDI Routing

Outgoing (OG) Reference ID	01
Incoming (IC) Reference ID for Working Hour (WH)	01
Incoming (IC) Reference ID for Break Hour (BH)	01
Incoming (IC) Reference ID for Nonworking Hour (NH)	01

Step 2: Set ISDN switch variant as QSIG E1

MATRIX ETERNITY

SMS Gateway
SMS Routing
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System Timers and Counts
T1E1 Configuration
 Port Parameters
 PRI/QSIG Signaling
 E1 CAS Signaling
 T1 RBS Signaling
 E&M Signaling
 Loop Back Test:Near End

T1E1:1 - PRI/QSIG Signaling

ISDN Switch Variant: QSIG E1
Offer continuous Bearer Channel Mapping(01-30):
D-Channel: 16
Send Called Party Number Using: Called Party Number IE
Dialing Type for Called Party Number: Any
Caller-Type of Number (TON): Unknown
Caller-Numbering Plan Identification (NPI): ISDN Numbering
Called-Type of Number (TON): Unknown

Step 3: Configure DDI Routing → Incoming Reference Table

DDI Routing - Incoming Reference Table

Table ID	IC Ref. ID	Start Channel No.	Total Channel Count	DDI Routing Ref. ID	Route on First Destination	Ring Timer (sec)
1	01	01	30	01	<input type="checkbox"/>	045
2	00	01	00	00	<input type="checkbox"/>	045
3	00	01	00	00	<input type="checkbox"/>	045
4	00	01	00	00	<input type="checkbox"/>	045
5	00	01	00	00	<input type="checkbox"/>	045
6	00	01	00	00	<input type="checkbox"/>	045
7	00	01	00	00	<input type="checkbox"/>	045
8	00	01	00	00	<input type="checkbox"/>	045

Step 4: Configure DDI routing table

DDI Routing Table

Table ID	DDI Routing Reference ID	Start DDI No.	Total DDI Numbers	DDI Number of Digit	Route to Destination		
					Port Type	Port Number	Start DDI Flexible No.
1	01	00004001	00000100	4	Flexible Num.	0000	4001
2	00	00000000	00000000	0	None	0000	
3	00	00000000	00000000	0	None	0000	
4	00	00000000	00000000	0	None	0000	
5	00	00000000	00000000	0	None	0000	
6	00	00000000	00000000	0	None	0000	
7	00	00000000	00000000	0	None	0000	

Set the DDI Routing similar to one done in System A.

Step 5: Configure Outgoing reference table to send CLI from ETERNITY B to ETERNITY A

The screenshot shows the 'MATRIX ETERNITY' configuration interface. On the left, a navigation menu has 'Outgoing Reference Table' highlighted with a red box. The main area displays the 'DDI Routing - Outgoing Reference Table' for extension 01-32. The table below is highlighted with a red border.

Table ID	OG Ref. ID	Start Channel No.	Channel Count	Pilot Number	DDI Routing Ref. ID
1	01	01	30	4001	01
2	00	01	00		00
3	00	01	00		00
4	00	01	00		00
5	00	01	00		00
6	00	01	00		00
7	00	01	00		00

Step 6: Configure the CUG table with route code 3 and OG trunk bundle group 01 so the extensions of ETERNITY B can dial the extension numbers of ETERNITY A directly

The screenshot shows the 'MATRIX ETERNITY' configuration interface. On the left, a navigation menu has 'Closed User Groups' highlighted with a red box. The main area displays the 'Closed User Group' configuration for extension 001-100. The table below is highlighted with a red border.

Index	Route Code	OG Trunk Bundle Group	Strip Digit Count	Self Route	Dialed Digit Count	Apply Toll Control
1	3	01	0	<input type="checkbox"/>	04	<input checked="" type="checkbox"/>
2		01	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
3		01	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
4		01	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
5		0	0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
6			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
7			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
8			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>
9			0	<input type="checkbox"/>	99	<input checked="" type="checkbox"/>

Now add 3 (common route code for extensions in System A) in CUG.

Step 7: Set OG trunk bundle member 1 field to 001

OG Trunk Bundle Groups

Group No.	Rotation	LCR	OG Trunk Bundle Member 1	OG Trunk Bundle Member 2
1	<input type="checkbox"/>	Number	001	000
2	<input checked="" type="checkbox"/>	None	001	000
3	<input checked="" type="checkbox"/>	None	001	000
4	<input checked="" type="checkbox"/>	None	001	000
5	<input checked="" type="checkbox"/>	None	001	000
6	<input checked="" type="checkbox"/>	None	001	000
7	<input checked="" type="checkbox"/>	None	001	000
8	<input checked="" type="checkbox"/>	None	001	000

Buttons: Submit, Default, Default One

Step 8: Set T1E1 trunk with Port number 0001 (QSIG link connected to ETERNITY B) in the OG trunk bundle

OG Trunk Bundle

Bundle No.	Trunk Port		Start Channel No.	Total Trunk Count	Rotation Type	Automatic Number Translation (ANT)	
	Type	Number				Apply	ANT Table No.
1	T1E1	0001	01	30	Ascending	<input type="checkbox"/>	1
2	None	0000	01	032	Ascending	<input type="checkbox"/>	1
3	None	0000	01	002	Ascending	<input type="checkbox"/>	1

For more information, contact
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