



Cisco 2600 Series Gateway-PBX Interoperability: Ericsson MD-110 with E1 QSIG Signaling

This document describes the interoperability and configuration of a Cisco 2600 series voice gateway with an Ericsson MD-110 PBX using E1 QSIG signaling. It includes the following sections:

- System Components
- Configuration Tasks
- Caveats

System Components

PBX Model	Ericsson MD-110 PBX
PBX Release	ASB50104-R6-SES-R9-BC90D/CNI80
Telephony Signaling	E1 QSIG
Voice Gateway	Cisco 2621
Gateway Release	Cisco IOS™ 12.2(1)
VoX Protocol	H.323

Configuration Tasks

See the following sections for configuration tasks for this feature:

- Set Up
- Ericsson PBX Configuration
- Cisco 2621 Gateway Configuration

Set Up

This section includes the following information:

- Connectivity Diagrams
- Set Up Notes

Connectivity Diagrams

Figure 1: Test Configuration

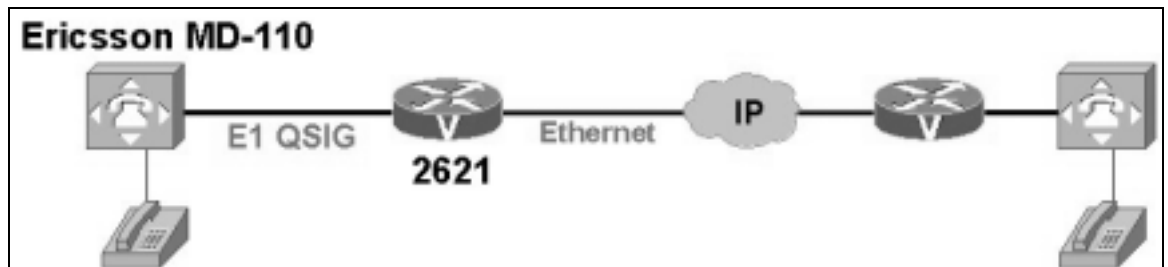


Figure 1 represents the configuration used for testing: an Ericsson MD-110 PBX connected to a Cisco 2621 voice gateway via an E1 QSIG connection.

Set Up Notes

- The Ericsson MD-110 uses a command line interface where many switch features are changed with a single command. The PBX documentation must be consulted to make changes. Physical layer parameters, along with many other features, are controlled by using RODAI command.
- The Cisco 3640 gateway with an ISDN switch type setting of primary-qsig supports both master and slave QSIG operation by using the `isdn protocol-emulate {network | user}` command.
- Configuring the Ericsson MD-110 operation to be Master (or Network) side sets the Layers 2 & 3 protocol side setting to master as well. Therefore, the Cisco 3640 gateway should be set to Slave protocol side by issuing the `isdn protocol-emulate user` command.
- Similarly, if the Ericsson MD-110 operation is set for Slave (or user) side, layers 2 & 3 protocol side are set for slave side. The Cisco 3640 gateway is set to Master protocol side by issuing the `isdn protocol-emulate network` command.
- The Ericsson MD-110 supports both USER (peer-slave) and NETWORK (peer-master) protocol sides by using RODAI command.
- The Cisco 2621 uses the ECMA QSIG standard. ECMA QSIG uses channel numbers 1-15 and 17-31 as B-channels, while channel 16 is allocated for the D-channel. Since the Ericsson MD-110 PBX also supports the ECMA standard, logical channels 16-30 are mapped correctly to the Cisco 2621's 17-31 timeslots. Therefore, the `isdn contiguous-bchan` command is not needed on the Cisco 2621 router. However, it may be necessary in the Cisco 2621 to use this command to allow the Cisco 2621 gateway to support ETSI QSIG channel mapping standard.

Ericsson PBX Configuration

 **Note:** All parameters and options for the Ericsson MD-110 PBX are mapped to position-dependent numeric fields within the various commands listed below. To understand each field position's meaning, you must have the correct version of the Ericsson MD-110 PBX Administration Manual.

Version Information

```
<•CADAP;
CALENDAR DATA

IDENTITY=CISCO-SYSTEMS
VERSION=ASB50104-R6-SES-R9-BC90D/CNI80

CALENDAR TIME NOT VALID
03:32:31
TUE 15 MAY 2001
END
```

Ericsson PBX Sample Configuration

See the following sections for sample configuration information:

- E1-QSIG D-Channel Signaling Parameters
- E1-QSIG B-Channel Physical Parameters
- E1-QSIG Trunk Status
- Telephone COS, Restrictions, Naming Conventions, Etc.
- Telephone Key Mapping
- E1-QSIG Route Data Blk, Protocol Side User
- E1-QSIG Route Data Blk, Protocol Side Network
- List of System Equipment

Class of Service and Class of Restriction

```
<•RODDP:DEST=ALL;
EXTERNAL DESTINATION ROUTE DATA

DEST  DRN  ROU  CHO  CUST  ADC                TRC  SRT  NUMACK  PRE
2      9      100500000000025000 0    1    0
30     1      100500000000025000 0    3    0
31     2      100500000000025000 0    3    0
32     3      100500000000025000 0    3    0
33     4      100500000000025000 0    3    0
34     5      100500000000025000 0    3    0
35     6      000500000000025000 0    3    0
36     7      000500000000025000 0    3    0
37     8      000500000000025000 0    3    0
```

```
39      10      1005000000000025000 0 3 0
40      11      1005000000000025000 0 3 0
```

END

 **Note:** QSIG uses Route 9.

E1-QSIG D-Channel Signaling Parameters

```
<•ROCAP:ROU=9;
ROUTE CATEGORY DATA
```

ROU SEL	TRM SERV	NODG DIST	DISL TRAF	SIG	BCAP
9	711000000000 7	3110000010 0	5 20	03151515 211100000031	111111

END

E1-QSIG B-Channel Physical Parameters

```
<•ROEDP:ROU=9,TRU=ALL;
ROUTE EQUIPMENT DATA
```

ROU	TRU	EQU	SQU	INDDAT
9	001-1	001-1-40-01		H'000000000000
9	001-2	001-1-40-02		H'000000000000
9	001-3	001-1-40-03		H'000000000000
9	001-4	001-1-40-04		H'000000000000
9	001-5	001-1-40-05		H'000000000000
9	001-6	001-1-40-06		H'000000000000
9	001-7	001-1-40-07		H'000000000000
9	001-8	001-1-40-08		H'000000000000
9	001-9	001-1-40-09		H'000000000000
9	001-10	001-1-40-10		H'000000000000
9	001-11	001-1-40-11		H'000000000000
9	001-12	001-1-40-12		H'000000000000
9	001-13	001-1-40-13		H'000000000000
9	001-14	001-1-40-14		H'000000000000
9	001-15	001-1-40-15		H'000000000000
9	001-17	001-1-40-17		H'000000000000
9	001-18	001-1-40-18		H'000000000000
9	001-19	001-1-40-19		H'000000000000
9	001-20	001-1-40-20		H'000000000000
9	001-21	001-1-40-21		H'000000000000
9	001-22	001-1-40-22		H'000000000000
9	001-23	001-1-40-23		H'000000000000
9	001-24	001-1-40-24		H'000000000000
9	001-25	001-1-40-25		H'000000000000
9	001-26	001-1-40-26		H'000000000000
9	001-27	001-1-40-27		H'000000000000
9	001-28	001-1-40-28		H'000000000000
9	001-29	001-1-40-29		H'000000000000
9	001-30	001-1-40-30		H'000000000000
9	001-31	001-1-40-31		H'000000000000

END

E1-QSIG Trunk Status

```
<•SUSIP:ROU=9, TRU=ALL;
STATUS INFORMATION AT 00:00:00 01JAN00
```

ROU	TRU	TYPE	TRAFFIC STATE/PTR	LINE STATE/PTR	ADD INFO
9	001-1	TL60	IDLE	#009B FREE	#0061

```

9      001-2   TL60   IDLE      #009A   FREE     #0060
9      001-3   TL60   IDLE      #0099   FREE     #005F
9      001-4   TL60   IDLE      #0098   FREE     #005E
9      001-5   TL60   IDLE      #0097   FREE     #005D
9      001-6   TL60   IDLE      #0096   FREE     #005C
9      001-7   TL60   IDLE      #0095   FREE     #005B
9      001-8   TL60   IDLE      #0094   FREE     #005A
9      001-9   TL60   IDLE      #0093   FREE     #0059
9      001-10  TL60   IDLE      #0092   FREE     #0058
9      001-11  TL60   IDLE      #0091   FREE     #0057
9      001-12  TL60   IDLE      #0090   FREE     #0056
9      001-13  TL60   IDLE      #008F   FREE     #0055
9      001-14  TL60   IDLE      #008E   FREE     #0054
9      001-15  TL60   IDLE      #008D   FREE     #0053
9      001-17  TL60   IDLE      #007D   FREE     #0070
9      001-18  TL60   IDLE      #007C   FREE     #006F
9      001-19  TL60   IDLE      #007B   FREE     #006E
9      001-20  TL60   IDLE      #007A   FREE     #006D
9      001-21  TL60   IDLE      #0079   FREE     #006C
9      001-22  TL60   IDLE      #0078   FREE     #006B
9      001-23  TL60   IDLE      #0077   FREE     #006A
9      001-24  TL60   IDLE      #0076   FREE     #0069
9      001-25  TL60   IDLE      #0075   FREE     #0068
9      001-26  TL60   IDLE      #0074   FREE     #0067
9      001-27  TL60   IDLE      #0073   FREE     #0066
9      001-28  TL60   IDLE      #0072   FREE     #0065
9      001-29  TL60   IDLE      #0071   FREE     #0064
9      001-30  TL60   IDLE      #0070   FREE     #0063
9      001-31  TL60   IDLE      #006F   FREE     #0062
END

```

Telephone COS, Restrictions, Naming Conventions, Etc.

```

<*KSCAP:DIR=ALL;
KEY SYSTEM CATEGORY PRINT

```

DIR	TRAF	SERV	CDIV	ROC	ITYPE	TRM	ADC
5000	03151515	02001207	011151111	7237	21	1	00100013010
5001	03151515	02001207	011151111	7237	21	1	00100013010
5002	03151515	02001207	011151111	7237	21	1	00100013010
5003	03151515	02001207	011151111	7237	21	1	00100013010
5006	03151515	02001207	011151111	7237	21	1	00100013010
5007	03151515	02001207	011151111	7237	21	1	00100013010

END

Telephone Key Mapping

```

<*KSFKP:DIR=ALL;
KEY SYSTEM FUNCTION KEY DATA PRINT

```

DIR = 5000

KEY	KTYPE	VALUE	DIG
00	PGM		
01	FCN	TNS	
02	FCN	TNS	
03	FCN	CNF	
04	SKI	F1	
05	SKI	F2	
06	SKI	F3	
07	SKI	F4	
08	SKI	MENU	
09	ODN	5000	
10	ODN	5000	
11	ODN	5000	
13	FCN	TNS	

14	FCN	CAD
15	FCN	TNS
16	FCN	TNS
17	FCN	TNS
18	FCN	TNS
19	FCN	TNS
20	FCN	TNS
21	FCN	TNS
22	FCN	TNS
23	FCN	TNS
24	FCN	TNS
25	FCN	TNS
26	FCN	TNS
27	FCN	TNS
28	FCN	TNS
29	FCN	TNS
30	FCN	TNS
31	FCN	TNS
32	FCN	TNS
33	FCN	TNS
34	FCN	TNS
35	FCN	TNS
36	FCN	TNS
37	FCN	TNS
38	FCN	TNS
39	FCN	TNS
40	FCN	TNS

DIR = 5001

KEY	KTYPE	VALUE	DIG
00	PGM		
01	FCN	TNS	
02	FCN	TNS	
03	FCN	CNF	
04	SKI	F1	
05	SKI	F2	
06	SKI	F3	
07	SKI	F4	
08	SKI	MENU	
09	ODN	5001	
10	ODN	5001	
11	ODN	5001	
13	FCN	TNS	
14	FCN	CAD	
15	FCN	TNS	
16	FCN	TNS	
17	FCN	TNS	
18	FCN	TNS	
19	FCN	TNS	
20	FCN	TNS	
21	FCN	TNS	
22	FCN	TNS	
23	FCN	TNS	
24	FCN	TNS	
25	FCN	TNS	
26	FCN	TNS	
27	FCN	TNS	
28	FCN	TNS	
29	FCN	TNS	
30	FCN	TNS	
31	FCN	TNS	
32	FCN	TNS	
33	FCN	TNS	
34	FCN	TNS	
35	FCN	TNS	
36	FCN	TNS	
37	FCN	TNS	
38	FCN	TNS	
39	FCN	TNS	
40	FCN	TNS	

DIR = 5002

KEY	KTYPE	VALUE	DIG
00	PGM		
01	FCN	TNS	
02	FCN	TNS	
03	FCN	CNF	
04	SKI	F1	
05	SKI	F2	
06	SKI	F3	
07	SKI	F4	
08	SKI	MENU	
09	ODN	5002	
10	ODN	5002	
11	ODN	5002	
13	FCN	TNS	
14	FCN	CAD	
15	FCN	TNS	
16	FCN	TNS	
17	FCN	TNS	
18	FCN	TNS	
19	FCN	TNS	
20	FCN	TNS	
21	FCN	TNS	
22	FCN	TNS	
23	FCN	TNS	
24	FCN	TNS	
25	FCN	TNS	
26	FCN	TNS	
27	FCN	TNS	
28	FCN	TNS	
29	FCN	TNS	
30	FCN	TNS	
31	FCN	TNS	
32	FCN	TNS	
33	FCN	TNS	
34	FCN	TNS	
35	FCN	TNS	
36	FCN	TNS	
37	FCN	TNS	
38	FCN	TNS	
39	FCN	TNS	
40	FCN	TNS	

END

E1-QSIG Route Data Blk, Protocol Side User

<•RODAP:ROU=9;

ROUTE DATA

ROU	TYPE	VARC	VARI	VARO	FILTER
9	SL60	H'00000010	H'15400000	H'06004010	NO

END

E1-QSIG Route Data Blk, Protocol Side Network

<•RODAP:ROU=9;

ROUTE DATA

ROU	TYPE	VARC	VARI	VARO	FILTER
9	SL60	H'00000010	H'15400000	H'06204010	NO

END

List of System Equipment

<•SYEDP:LIM=1;

SYSTEM EQUIPMENT DATA

EQU	BOARDID	TYPE	DIR	ROU/TRU
001-0-00-00	71	SL 63		1/001-01
001-0-00-01	71	SL 63		1/001-02
001-0-00-02	71	SL 63		1/001-03
001-0-00-03	71	SL 63		1/001-04
001-0-00-04	71	SL 63		1/001-05
001-0-00-05	71	SL 63		1/001-06
001-0-00-06	71	SL 63		1/001-07
001-0-00-07	71	SL 63		1/001-08
001-0-00-08	71	SL 63		1/001-09
001-0-00-09	71	SL 63		1/001-10
001-0-00-10	71	SL 63		1/001-11
001-0-00-11	71	SL 63		1/001-12
001-0-00-12	71	SL 63		1/001-13
001-0-00-13	71	SL 63		1/001-14
001-0-00-14	71	SL 63		1/001-15
001-0-00-15	71	SL 63		1/001-16
001-0-00-16	71	SL 63		1/001-17
001-0-00-17	71	SL 63		1/001-18
001-0-00-18	71	SL 63		1/001-19
001-0-00-19	71	SL 63		1/001-20
001-0-00-20	71	SL 63		1/001-21
001-0-00-21	71	SL 63		1/001-22
001-0-00-22	71	SL 63		1/001-23
001-0-00-23	71	-		
001-0-10-00	102	AD 0		
001-0-10-01	102	AD 0		
001-0-10-02	102	AD 0		
001-0-10-03	102	AD 0		
001-0-10-04	102	AD 0		
001-0-10-05	102	AD 0		
001-0-10-06	102	AD 0		
001-0-10-07	102	AD 0		
001-0-10-08	102	AD 0		
001-0-10-09	102	AD 0		
001-0-10-10	102	AD 0		
001-0-10-11	102	AD 0		
001-0-10-12	102	AD 0		
001-0-10-13	102	AD 0		
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001-0-10-19	102	AD 0		
001-0-10-20	102	AD 0		
001-0-10-21	102	AD 0		
001-0-10-22	102	AD 0		
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001-0-10-24	102	AD 0		
001-0-10-25	102	AD 0		
001-0-10-26	102	AD 0		
001-0-10-27	102	AD 0		
001-0-10-28	102	AD 0		
001-0-10-29	102	AD 0		
001-0-10-30	102	AD 0		
001-0-10-31	102	AD 0		
001-0-20-00	71	SL 63		2/001-01
001-0-20-01	71	SL 63		2/001-02
001-0-20-02	71	SL 63		2/001-03
001-0-20-03	71	SL 63		2/001-04

001-0-20-04	71	SL 63	2/001-05
001-0-20-05	71	SL 63	2/001-06
001-0-20-06	71	SL 63	2/001-07
001-0-20-07	71	SL 63	2/001-08
001-0-20-08	71	SL 63	2/001-09
001-0-20-09	71	SL 63	2/001-10
001-0-20-10	71	SL 63	2/001-11
001-0-20-11	71	SL 63	2/001-12
001-0-20-12	71	SL 63	2/001-13
001-0-20-13	71	SL 63	2/001-14
001-0-20-14	71	SL 63	2/001-15
001-0-20-15	71	SL 63	2/001-16
001-0-20-16	71	SL 63	2/001-17
001-0-20-17	71	SL 63	2/001-18
001-0-20-18	71	SL 63	2/001-19
001-0-20-19	71	SL 63	2/001-20
001-0-20-20	71	SL 63	2/001-21
001-0-20-21	71	SL 63	2/001-22
001-0-20-22	71	SL 63	2/001-23
001-0-20-23	71	-	
001-0-30-00	71	SL 63	3/001-01
001-0-30-01	71	SL 63	3/001-02
001-0-30-02	71	SL 63	3/001-03
001-0-30-03	71	SL 63	3/001-04
001-0-30-04	71	SL 63	3/001-05
001-0-30-05	71	SL 63	3/001-06
001-0-30-06	71	SL 63	3/001-07
001-0-30-07	71	SL 63	3/001-08
001-0-30-08	71	SL 63	3/001-09
001-0-30-09	71	SL 63	3/001-10
001-0-30-10	71	SL 63	3/001-11
001-0-30-11	71	SL 63	3/001-12
001-0-30-12	71	SL 63	3/001-13
001-0-30-13	71	SL 63	3/001-14
001-0-30-14	71	SL 63	3/001-15
001-0-30-15	71	SL 63	3/001-16
001-0-30-16	71	SL 63	3/001-17
001-0-30-17	71	SL 63	3/001-18
001-0-30-18	71	SL 63	3/001-19
001-0-30-19	71	SL 63	3/001-20
001-0-30-20	71	SL 63	3/001-21
001-0-30-21	71	SL 63	3/001-22
001-0-30-22	71	SL 63	3/001-23
001-0-30-23	71	-	
001-0-40-00	52	TL 45	4/001-01
001-0-40-01	52	TL 45	4/001-02
001-0-40-02	52	TL 45	4/001-03
001-0-40-03	52	TL 45	4/001-04
001-0-40-04	52	TL 45	4/001-05
001-0-40-05	52	TL 45	4/001-06
001-0-40-06	52	TL 45	4/001-07
001-0-40-07	52	TL 45	4/001-08
001-0-40-08	52	TL 45	4/001-09
001-0-40-09	52	TL 45	4/001-10
001-0-40-10	52	TL 45	4/001-11
001-0-40-11	52	TL 45	4/001-12
001-0-40-12	52	TL 45	4/001-13
001-0-40-13	52	TL 45	4/001-14
001-0-40-14	52	TL 45	4/001-15
001-0-40-15	52	TL 45	4/001-16
001-0-40-16	52	TL 45	4/001-17
001-0-40-17	52	TL 45	4/001-18
001-0-40-18	52	TL 45	4/001-19
001-0-40-19	52	TL 45	4/001-20
001-0-40-20	52	TL 45	4/001-21
001-0-40-21	52	TL 45	4/001-22
001-0-40-22	52	TL 45	4/001-23
001-0-40-23	52	TL 45	4/001-24
001-0-50-00	31	OL 1	5011
001-0-60-00	69	-	
001-0-60-01	69	-	
001-0-60-02	69	-	

001-0-60-03	69	-	
001-0-70-00	42	-	
001-0-70-01	42	-	
001-0-70-02	42	-	
001-0-70-03	42	-	
001-0-70-04	42	-	
001-0-70-05	42	-	
001-0-70-06	42	-	
001-0-70-07	42	-	
001-0-70-08	42	-	
001-0-70-09	42	-	
001-0-70-10	42	-	
001-0-70-11	42	-	
001-0-70-12	42	-	
001-0-70-13	42	-	
001-0-70-14	42	-	
001-0-70-15	42	-	
001-0-70-16	42	-	
001-0-70-17	42	-	
001-0-70-18	42	-	
001-0-70-19	42	-	
001-0-70-20	42	-	
001-0-70-21	42	-	
001-0-70-22	42	-	
001-0-70-23	42	-	
001-0-70-24	42	-	
001-0-70-25	42	-	
001-0-70-26	42	-	
001-0-70-27	42	-	
001-0-70-28	42	-	
001-0-70-29	42	-	
001-0-70-30	42	-	
001-0-70-31	42	-	
001-1-00-00	52	TL 45	5/001-01
001-1-00-01	52	TL 45	5/001-02
001-1-00-02	52	TL 45	5/001-03
001-1-00-03	52	TL 45	5/001-04
001-1-00-04	52	TL 45	5/001-05
001-1-00-05	52	TL 45	5/001-06
001-1-00-06	52	TL 45	5/001-07
001-1-00-07	52	TL 45	5/001-08
001-1-00-08	52	TL 45	5/001-09
001-1-00-09	52	TL 45	5/001-10
001-1-00-10	52	TL 45	5/001-11
001-1-00-11	52	TL 45	5/001-12
001-1-00-12	52	TL 45	5/001-13
001-1-00-13	52	TL 45	5/001-14
001-1-00-14	52	TL 45	5/001-15
001-1-00-15	52	TL 45	5/001-16
001-1-00-16	52	TL 45	5/001-17
001-1-00-17	52	TL 45	5/001-18
001-1-00-18	52	TL 45	5/001-19
001-1-00-19	52	TL 45	5/001-20
001-1-00-20	52	TL 45	5/001-21
001-1-00-21	52	TL 45	5/001-22
001-1-00-22	52	TL 45	5/001-23
001-1-00-23	52	TL 45	5/001-24
001-1-10-00	102	AD 0	
001-1-10-01	102	AD 0	
001-1-10-02	102	AD 0	
001-1-10-03	102	AD 0	
001-1-10-04	102	AD 0	
001-1-10-05	102	AD 0	
001-1-10-06	102	AD 0	
001-1-10-07	102	AD 0	
001-1-10-08	102	AD 0	
001-1-10-09	102	AD 0	
001-1-10-10	102	AD 0	
001-1-10-11	102	AD 0	
001-1-10-12	102	AD 0	
001-1-10-13	102	AD 0	
001-1-10-14	102	AD 0	

001-1-10-15	102	AD	0	
001-1-10-16	102	AD	0	
001-1-10-17	102	AD	0	
001-1-10-18	102	AD	0	
001-1-10-19	102	AD	0	
001-1-10-20	102	AD	0	
001-1-10-21	102	AD	0	
001-1-10-22	102	AD	0	
001-1-10-23	102	AD	0	
001-1-10-24	102	AD	0	
001-1-10-25	102	AD	0	
001-1-10-26	102	AD	0	
001-1-10-27	102	AD	0	
001-1-10-28	102	AD	0	
001-1-10-29	102	AD	0	
001-1-10-30	102	AD	0	
001-1-10-31	102	AD	0	
001-1-20-00	77	KL	1	5000
001-1-20-01	77	KL	1	5001
001-1-20-02	77	KL	1	5002
001-1-20-03	77	KL	1	5003
001-1-20-04	77	KL	1	5006
001-1-20-05	77	KL	1	5007
001-1-22-00	87	EL	6	5004
001-1-22-01	87	EL	6	5005
001-1-30-00	27	-		
001-1-30-01	27	TL	30	11/001-01
001-1-30-02	27	TL	30	11/001-02
001-1-30-03	27	TL	30	11/001-03
001-1-30-04	27	TL	30	11/001-04
001-1-30-05	27	TL	30	11/001-05
001-1-30-06	27	TL	30	11/001-06
001-1-30-07	27	TL	30	11/001-07
001-1-30-08	27	TL	30	11/001-08
001-1-30-09	27	TL	30	11/001-09
001-1-30-10	27	TL	30	11/001-10
001-1-30-11	27	TL	30	11/001-11
001-1-30-12	27	TL	30	11/001-12
001-1-30-13	27	TL	30	11/001-13
001-1-30-14	27	TL	30	11/001-14
001-1-30-15	27	TL	30	11/001-15
001-1-30-17	27	TL	30	11/001-16
001-1-30-18	27	TL	30	11/001-17
001-1-30-19	27	TL	30	11/001-18
001-1-30-20	27	TL	30	11/001-19
001-1-30-21	27	TL	30	11/001-20
001-1-30-22	27	TL	30	11/001-21
001-1-30-23	27	TL	30	11/001-22
001-1-30-24	27	TL	30	11/001-23
001-1-30-25	27	TL	30	11/001-24
001-1-30-26	27	TL	30	11/001-25
001-1-30-27	27	TL	30	11/001-26
001-1-30-28	27	TL	30	11/001-27
001-1-30-29	27	TL	30	11/001-28
001-1-30-30	27	TL	30	11/001-29
001-1-30-31	27	TL	30	11/001-30
001-1-40-00	57	-		
001-1-40-01	57	SL	60	9/001-01
001-1-40-02	57	SL	60	9/001-02
001-1-40-03	57	SL	60	9/001-03
001-1-40-04	57	SL	60	9/001-04
001-1-40-05	57	SL	60	9/001-05
001-1-40-06	57	SL	60	9/001-06
001-1-40-07	57	SL	60	9/001-07
001-1-40-08	57	SL	60	9/001-08
001-1-40-09	57	SL	60	9/001-09
001-1-40-10	57	SL	60	9/001-10
001-1-40-11	57	SL	60	9/001-11
001-1-40-12	57	SL	60	9/001-12
001-1-40-13	57	SL	60	9/001-13
001-1-40-14	57	SL	60	9/001-14
001-1-40-15	57	SL	60	9/001-15

001-1-40-17	57	SL 60	9/001-17
001-1-40-18	57	SL 60	9/001-18
001-1-40-19	57	SL 60	9/001-19
001-1-40-20	57	SL 60	9/001-20
001-1-40-21	57	SL 60	9/001-21
001-1-40-22	57	SL 60	9/001-22
001-1-40-23	57	SL 60	9/001-23
001-1-40-24	57	SL 60	9/001-24
001-1-40-25	57	SL 60	9/001-25
001-1-40-26	57	SL 60	9/001-26
001-1-40-27	57	SL 60	9/001-27
001-1-40-28	57	SL 60	9/001-28
001-1-40-29	57	SL 60	9/001-29
001-1-40-30	57	SL 60	9/001-30
001-1-40-31	57	SL 60	9/001-31
001-1-50-00	57	-	
001-1-50-01	57	SL 60	10/001-01
001-1-50-02	57	SL 60	10/001-02
001-1-50-03	57	SL 60	10/001-03
001-1-50-04	57	SL 60	10/001-04
001-1-50-05	57	SL 60	10/001-05
001-1-50-06	57	SL 60	10/001-06
001-1-50-07	57	SL 60	10/001-07
001-1-50-08	57	SL 60	10/001-08
001-1-50-09	57	SL 60	10/001-09
001-1-50-10	57	SL 60	10/001-10
001-1-50-11	57	SL 60	10/001-11
001-1-50-12	57	SL 60	10/001-12
001-1-50-13	57	SL 60	10/001-13
001-1-50-14	57	SL 60	10/001-14
001-1-50-15	57	SL 60	10/001-15
001-1-50-17	57	SL 60	10/001-17
001-1-50-18	57	SL 60	10/001-18
001-1-50-19	57	SL 60	10/001-19
001-1-50-20	57	SL 60	10/001-20
001-1-50-21	57	SL 60	10/001-21
001-1-50-22	57	SL 60	10/001-22
001-1-50-23	57	SL 60	10/001-23
001-1-50-24	57	SL 60	10/001-24
001-1-50-25	57	SL 60	10/001-25
001-1-50-26	57	SL 60	10/001-26
001-1-50-27	57	SL 60	10/001-27
001-1-50-28	57	SL 60	10/001-28
001-1-50-29	57	SL 60	10/001-29
001-1-50-30	57	SL 60	10/001-30
001-1-50-31	57	SL 60	10/001-31
001-1-60-00	7	TL 1	7/001-01
001-1-60-01	7	TL 1	7/001-02
001-1-60-02	7	TL 1	7/001-03
001-1-60-03	7	TL 1	7/001-04
001-1-62-00	8	TL 12	6/001-01
001-1-62-01	8	TL 12	6/001-02
001-1-62-02	8	TL 12	6/001-03
001-1-62-03	8	TL 12	6/001-04
001-1-63-00	26	TL 22	8/001-01
001-1-63-01	26	TL 22	8/001-02
001-1-63-02	26	TL 22	8/001-03

END

Cisco 2621 Gateway Configuration

The following is the configuration of the Cisco 2621 voice gateway connected to the Ericsson MD-110 PBX E1 QSIG interface.

Cisco 2621 Voice Gateway Version Information

```
Cisco_2621# show version
```

```
Cisco Internetwork Operating System Software
IOS (tm) C2600 Software (C2600-JS-M), Version 12.2(1), RELEASE SOFTWARE (fc2)
Copyright (c) 1986-2001 by cisco Systems, Inc.
Compiled Fri 27-Apr-01 11:41 by cmong
Image text-base: 0x80008088, data-base: 0x81370678

ROM: System Bootstrap, Version 12.1(3r)T2, RELEASE SOFTWARE (fc1)

Cisco_2621 uptime is 8 hours, 45 minutes
System returned to ROM by power-on
System image file is "flash:c2600-js-mz.122-1"

cisco 2621 (MPC860) processor (revision 0x200) with 59392K/6144K bytes of memory
.
Processor board ID JAD051516Q2 (2900569055)
M860 processor: part number 0, mask 49
Channelized E1, Version 1.0.
Bridging software.
X.25 software, Version 3.0.0.
SuperLAT software (copyright 1990 by Meridian Technology Corp).
TN3270 Emulation software.
Primary Rate ISDN software, Version 1.1.
2 FastEthernet/IEEE 802.3 interface(s)
16 Serial network interface(s)
2 Channelized E1/PRI port(s)
32K bytes of non-volatile configuration memory.
16384K bytes of processor board System flash (Read/Write)

Configuration register is 0x2102
```

Cisco 2621 Voice Gateway Sample Configuration

```
Cisco_2621# show running-config
```

```
Building configuration...

Current configuration : 1640 bytes
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname Cisco_2621
!
no logging buffered
logging rate-limit console 10 except errors
enable password cisco
!
memory-size iomem 15
voice-card 1
!
ip subnet-zero
!
!
no ip finger
no ip domain-lookup
!
```



```
!  
line con 0  
  exec-timeout 0 0  
  transport input none  
line aux 0  
  exec-timeout 0 0  
line vty 0 4  
  exec-timeout 0 0  
  login  
line vty 5 15  
  exec-timeout 0 0  
  login  
!  
scheduler allocate 3996 1000  
end
```

Caveats

- The **isdn contiguous-bchan** command may be necessary in the Cisco 2621 to support ETSI QSIG channel mapping standard.