Configuring Cisco VCO/4K ICC−T1 for FXO and FXS LS and GS Circuits

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Introduction

This document explains how to configure the Interface Controller Card (ICC) −T1 for Foreign Exchange Office (FXO) and Foreign Exchange Station (FXS) Loop Start (LS) and Ground Start (GS) circuits. The ICC is a high−capacity network interface engine that employs a midplane architecture which enables the network to connect with a series of I/O modules specific to different network interface requirements.

Prerequisites

Requirements

Readers of this document should have knowledge of these topics:

- How to program a VCO/4K switch
- Telephony analog signaling, such as FXS and FXO LS and GS circuits

Components Used

This document is applicable on Cisco VCO/4K with ICC−T1 spans running release 5.1.4 or later.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Configuration Steps

In order to configure an ICC−T1 span for FXO and FXS LS and GS circuits, perform these steps.

1. With the Card Maintenance Screen, shown in this example, take the entire ICC (all 16 spans) Out of Service (OOS). In order to do this, enter 1,1,xx, where xx is an integer between seven and 21 inclusively and set the status to **O** to issue the **C** command.

```
C A R D  M A I N T E N A N C E
```

```
R       L       S       CARD TYPE         V.RV     S
----------      ---------------------  ------------
1       1       1-1     Network  Bus      1.02     A
1       1       1-2     Tone Generator    1.25     A
1       1       2-1     Network Bus                O
1       1       2-2     Tone Generator             O
1       1       7- 8    Port Prompt/Record         O
1       1       9-1-1   SPC-CPA                    O
1       1       21-1-1  ICC-T1             5.>2    M
1       1       21-1-2  ICC-T1  PRI/NI2    5.>2    M
1       1       21-1-3  ICC-T1             5.>2    M

ADD,    DELETE, CHANGE  STATUS  (A,D,C,P):  _   _     _   ______ ____________________
AND     PORT    DEFINITION:  208   Out   Of    4088  Time-Slots  Allocated
1-64    ________    ________    ________    ________  ________    ________   _______
65-128  ________    ________    ________    ________  ________    ________   _______
```

2. Go into the Card Summary Screen, shown in this example, and use **Next Screen** and **Next Field** in order to move the cursor to the span you want to configure.

```
C   A    R    D     S   U    M    M    A    R  Y

LOCATION        UNUSED  DISP
R       L       S       CARD    TYPE      STATUS  PORTS   CARD
------------    ---------------------   -------- ------  ----
1       1       1-1     Network Bus          A      0       _
1       1       1-2     Tone Generator       A      1       _
1       1       2-1     Network Bus          O      0       _
1       1       2-2     Tone Generator       O      1       _
1       1       7-8     Port Prompt/Record   O      0       _
1       1       9-1-1   SPC-CPA              O      0       _
1       1       21-1-1  ICC-T1               M      0       _
1       1       21-1-2  ICC-T1  PRI/NI2      M      1       _
1       1       21-1-3  ICC-T1               M      1       _
_       _       ______  ________________________  _   ___     _
_       _       ______  ________________________  _   ___     _
_       _       ______  ________________________  _   ___     _
_       _       ______  ________________________  _   ___     _
_       _       ______  ________________________  _   ___     _
_       _       ______  ________________________  _   ___     _


#00  Thu  Aug  16,  2007  8:04  Not  An  Allowed Character  Key
```

3. Press any letter on the keyboard followed by the **Enter** key in order to enter the Trunk Configuration Screen.
4. Use the **Tab** key to move the cursor down to Port 1, and use **Next Field** to go to the Signaling Type (`SIG. TYPE`).

```
ICC     PROGRAMMABLE    TRUNK   CONFIGURATION

SPAN    LOCATION:       R,L,S   1       1       21-1-1  STATUS: Maintenance
CARD    TYPE:   ICC-T1  SPAN    TYPE:   SF      CODE:   AMI
TXGAIN: 0db     TXCLCK: SCLK    SLIP:   255     ALM:    SYS     LENG:   0-133
RXGAIN: 0db     RFCLCK: LOOP    OOF:    17

            TRUNK                   GROUP       SIG.    IMPULSE
PORT        NAME            GROUP       NAME        TYPE     RULE    COS     LAW
----    ----------      -----   ----------  -----   -------  -----   -----
1           T1              2       ICC-FXO     FXOLS       0       2       Mu
2           T1              2       ICC-FXO     FXOLS       0       2       Mu
3           T1              2       ICC-FXO     FXOLS       0       2       Mu
4           T1              2       ICC-FXO     FXOLS       0       2       Mu
5           T1              2       ICC-FXO     FXOLS       0       2       Mu
6           T1              2       ICC-FXO     FXOLS       0       2       Mu
7           T1              2       ICC-FXO     FXOLS       0       2       Mu
```

```
8           T1            2       ICC-FXO     FXOLS      0       2       Mu

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```

5. Use **Select** in order to configure the port, as shown in this table.

VCO4K Setting	FAR END EQ. Setting
FXOLS	FXSLS
FXSLS	FXOLS
FXOGS	FXSGS
FXSGS	FXOGS

6. You have two options in order to reactivate the ICC. The first is to go back to the Card Maintenance Screen and follow the guidelines in Step 1, but replace Status **O** with **A**. You can also physically reseat the ICC. Once the ICC comes back up, the span that was changed runs the new protocol.

Related Information

- **Voice Technology Support**
- **Voice and Unified Communications Product Support**
- **Recommended Reading: Troubleshooting Cisco IP Telephony**
- **Technical Support & Documentation − Cisco Systems**

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