Call Agent Configuration Management

Configuration of the Call Agent and the rest of the components that compose the Communication Server 2000 - Compact (CS 2000 - Compact) is completed by Nortel Networks installation technology personnel.

Configuration of services and adding services is completed by telephone operating company personnel.

Refer to *CS 2000 Configuration Management*, NN10105-511 in North America, NN10188-511, NN10201-511 and NN10193-511 in International solutions for information about adding and configuring services for the CS 2000 - Compact.

IP addressing scheme

The Call Agent and the other call processing nodes in the Communications Server LAN (CS LAN) are provisioned in a private, call processing, subnet of the CS LAN. The other call processing nodes include STORM, Gateway Controllers, SAM21 Shelf Controllers, UAS, Media Server, USP or USP - Compact, and one Ethernet interface of the CS 2000 Core Manager or CBM. A second Ethernet interface, not connected to the call processing subnet, is required on the CS 2000 Core Manager or CBM to the OAM&P subnet that is typically connected to the telephone operating company LAN.

As part of the IP addressing guidelines, the addresses 172.16.0.0 to 172.31.255.255 have been set aside to address the CS-LAN call processing subnet. These IP addresses are Class B addresses. For a scalable network with multiple CS LANs, a 20 bit subnet mask is used. A 20 bit subnet mask allows 256 subnets with 4096 usable addresses.

The first 13 of these subnets are reserved as call processing subnets. These call processing subnets are 172.16.0.0/20, 172.16.16.0/20, 172.16.32.0/20 ... 172.16.192.0/20. Due to a limitation with call processing application running on the Call Agent, the 172.16.0.0 subnet cannot be used.

Nortel Networks recommends using the 172.16.16.0/20 subnet for the first call processing subnet. Refer toTable Call Agent IP addresses for an example.

Use the following information for assistance with reconfiguring Call Agent IP addresses. Contact Nortel Networks support personnel for assistance with reconfiguring IP addresses.

Call Agent IP addresses

Description	Offset	Example	Datafilled	Location
Unit 0, Link 0	-7	172.16.16.65	no	NET1 on rear transition module of Unit 0 SAM21 shelf.
Unit 0, Link 1	-6	172.16.16.66	no	NET2 on rear transition module of Unit 0 SAM21 shelf.
Unit 0	-5	172.16.16.67	at CS 2000 SAM21 Manager	This is the logical address of Unit 0.
Unit 1, Link 0	-4	172.16.16.68	no	NET1 on rear transition module of Unit 1 SAM21 shelf.
Unit 1, Link 1	-3	172.16.16.69	no	NET2 on rear transition module of Unit 1 SAM21 shelf.
Unit 1	-2	172.16.16.70	at CS 2000 SAM21 Manager	This is the logical address of Unit 1.
IRM (inactive)	-1	172.16.16.71	no	This is the logical address of the inactive call processing application.
IRM (active)	last octet is divisible by 8	172.16.16.72	no	This is the logical address of the active call processing application.

The following figure shows and example of the **QueryIP** command and the IP addresses used by a Call Agent card.

```
CallAgent      SYS      CON      APPL              Unit: 0
   .            .        .        .

CoreMtc                    Jam:  Link0:  Link1: BLnk: FC: Appl:
 0 Quit        Unit0  Inact  no    . Inact . Act     .   .   insync .
 2 CAMtc       Unit1  Act    no    . Inact . Act     .   .   insync .
 3 Sys
 4 Con
 5 Appl
 6              Query IP Address report for unit 0:
 7
 8              Description              IP Address
 9              localptp                 192.168.1.1
10              localport0               47.1.226.9
11              localport1               47.1.226.10
12              localblade               47.1.226.11
13 LogQuery    activeirm                47.1.226.16
14 Alarm       inactiveirm              47.1.226.15
15 QueryIP     mateptp                  192.168.1.2
16             mateport0                47.1.226.12
17 Help        mateport1                47.1.226.13
18 Refresh     mateblade                47.1.226.14
   mtc
Time  14:29  >
```

Since Unit 0 is the local unit providing the information, Unit 0 is the local unit number.

This figure shows that Unit 0 is the inactive Call Agent.

The localblade is the IP address of the inactive Call Agent.

The Point To Point (PTP) links carry backup messaging between the two Call Agent cards. A private local area network (LAN) is established between the two cards and uses the 192.168.1.0/31 subnet. These links use a channel on the fiber channel connection between the faceplates of the Call Agent cards.

Reconfigure NTP service

Reconfiguration of the Network Time Protocol (NTP) for the Call Agent requires a reconfiguration of the NTP server at the CS 2000 SAM21 Manager client for all cards in the SAM21 shelf. Refer to "Reconfigure NTP service" in *SAM21 Shelf Controller Configuration Management*, NN10111-511 for information about reprovisioning the NTP server at the CS 2000 SAM21 Manager client.

Once the NTP server address has been reconfigured at the CS 2000 SAM21 Manager, both Call Agents need to be rebooted to receive the new NTP configuration and start syncing to the new sources. To avoid a call processing service impact, perform the following procedure.

At the active Call Agent Manager

1   Jam the inactive Call Agent from the CAMtc level.

>   **Jam**

The command completes when a minor JInact alarm is raised. If the command fails, ensure this is the active Call Agent unit.

At the CS 2000 SAM21 Manager client

2   Lock the inactive Call Agent and wait for the lock to complete.

3   Unlock the inactive Call Agent and monitor the Unlock from the States tab of the Card View window.

At the active Call Agent Manager

4   Release the Jam on the inactive Call Agent.

>   **RelJam**

The command completes when the JInact alarm clears.

5   Synchronize the call processing application from the Appl level.

>   **Sync**

The call processing application begins to synchronize and indicates completion when the Appl flag changes to "insync ."

6   Drop synchronization of the call processing application.

>   **DpSync**

The command completes when the Appl flag changes to "nosync /."

At the MAP

7   Perform steps LIMITED_PRESWACT, NORESTARTSWACT, and POSTSWACT at the BCSUPDATE level. Refer to manual upgrade path in *Upgrading the Call Agent*, NN10065-461 for information about these steps. Help is also available at the BCSUPDATE level with the **HELP** command.

Continue after completing all the commands and the Call Agent Manager indicates the call processing application is "insync ."

At the active Call Agent Manager (activity has changed)

8   Jam the newly inactive Call Agent.

At the CS 2000 SAM21 Manager

9   Lock and Unlock the newly inactive Call Agent.

10   This procedure is complete.

At the active Call Agent Manager

11   Release the Jam on the inactive Call Agent.