CS 2000 Core Manager Configuration Management

Configuration management strategy

The Succession network configuration management strategy is to offer solutions on a pre-configured basis. All components within these pre-defined configurations and components not included can be ordered separately. Trends will be monitored to determine additional configuration requirements.

Customer documentation provides information on installation, configuration, and upgrades for base functionality and software applications that run on the CS 2000 Core Manager.

Tools and utilities

Preside Management for Succession Solutions (Preside MSS) includes the CS 2000 Core Manager and Multi-Service Data Manager (MDM) that together share all network fault, configuration, accounting, performance, and security (FCAPS) tasks. The CS 2000 Core Manager is responsible for FCAPS tasks related to Communication Server 2000, SPM, IW-SPM, and the media gateway suite (MG).

The SDMConfig level contains commands to commission the CS 2000 Core Manager. The SWIM level contains commands to list and execute software configuration programs.

Commissioning tool

The commissioning tool at the SDMConfig level is used to commission or recommission the components of the CS 2000 Core Manager. To use the tool, you must log on to the as a root user, and enter the **SDMCONFIG** command. The system displays the SDMConfig level and the commissioning status of the components of the CS 2000 Core Manager. The following figure shows an SDMConfig level display.

SDMConfig level display

```
  SDM     CON    512    NET    APPL    SYS     HW    CLLI: SNM0
  ISTb     .     . .    ISTb   ISTb    ISTb    ISTb  Host: wcary2p3
   M            . .                     M       M          Fault Tolerant
SDMConfig
 0  Quit
 2  Add          #  Commissioning Step      Status / Value
 3  Change       1  Passwords               Commissioned
 4  Delete       2  Login Greeting          wcary2p3 Console
 5               3  Time Zone               Eastern U.S.: Colombia <Cut -5>
 6  Next         4  Date & Time             Thu Aug 29, 2002 13:42:05
 7  Prev         5  Hostname                wcary2p3
 8               6  CLLI and Location Code  SNM0: 1 A 2 3
 9  List         7  Network Security        Commissioned
 10 Step         8  Ethernet Connectivity   Commissioned
 11              9  DS512 Connectivity      Commissioned
 12 Up           10 X25 Connectivity        Uncommissioned
 13 Down         11 Gateway IP Address      47.135.213.1
 14              12 Core Communication Path Commissioned
 15                                  Commissioning Steps: 1 to 12 of 17
 16
 17 Help      Use Up or Down to scroll through the list, and the Step #
 18 Refresh   command to go to a particular commissioning step.

 Time 13:42  >
```

Note: This figure shows an *example* of a screen display at the SDMConfig level. The numbers assigned to the components in the list of commissioning steps can vary by release.

The following table lists command options for the commissioning steps.

Command options for the commissioning steps

If you want to	Enter
Scroll backward through the list of Commissioning steps	**u** (up)
Scroll forward through the list of Commissioning steps	**d** (down)
Select a component to commission	**step <n>** *where:* **<n>** is the number of the commissioning step assigned to the component that you want to commission ***Note:*** The numbers assigned to components in the list of commissioning steps can vary by release.

After you select a component to commission, the system displays the SDMConfig screen for that component. Use the command options in the following table to commission the component.

Note: The commands in the table are for general reference. When commissioning a component or components of the CS 2000 Core Manager, use the specific procedures listed in table Commissioning procedures in the Configuration management procedures subsection.

Command options for commissioning a component (Sheet 1 of 2)

If you want to	Enter
Change a value for a component	**c** (change)
Accept the default value for a component	Press the Enter key
Confirm a change	**y** (yes)
Reject or abort a change	**n** (no), *or* **abort** ***Note:*** The **abort** command can be used at any time during the procedure.
Edit a change	**e** (edit)

Command options for commissioning a component (Sheet 2 of 2)

If you want to	Enter
Continue with (select) the next commissioning step	**n** (next)
Return (go back to) the previous screen	**p** (previous)
Display the list of available commissioning steps	**l** (list), or **9** *or* **q** (quit), or **0**
Quit the commissioning program	**quit all**

Configuration management procedures

For configuration management procedures, refer to the specific modules in the Configuration section CS 2000 Core Manager component.

Commissioning procedures

The following table lists the names and locations (sections) of the procedures in this document that use the commissioning tool.

Commissioning procedures (Sheet 1 of 2)

Component	Procedure	Section
Date & Time	• "Changing the system date or time"	Security and Administration
DCE	• "Adding a NULL or an NTP time provider on a DCE server" • "Configuring a CS 2000 Core Manager in a DCE cell" • "Removing a CS 2000 Core Manager from a DCE cell"	Configuration
DS512 Connectivity	• "Changing DS512 connectivity"	Configuration
Edge Nodes	• "Commissioning or decommissioning edge node monitoring" • "Adding or removing edge nodes, or configuring edge node monitoring parameters"	Configuration

Commissioning procedures (Sheet 2 of 2)

Component	Procedure	Section
Ethernet Connectivity	• "Changing the Ethernet IP address"	Configuration
Hostname	• "Changing the hostname"	Configuration
Login Greeting	• "Changing the Login Greeting"	Configuration
Network Time Protocol	• "Commissioning or decommissioning Network Time Protocol"	Configuration
Passthru Users	• "Adding or removing Passthru users"	Security and Administration
Password	• "Changing a user password"	Security and Administration
Time Zone	• "Changing the system time zone and daylight savings time parameters	Security and Administration
X25 Connectivity	• "Commissioning or recommissioning X.25 connectivity" • "Decommissioning X.25 ports [on UMFIO or SYNC module]"	Upgrades Configuration

Adding a log device using logroute

Application

Use this procedure to add the following log devices using the Log Delivery Application Commissioning Tool (logroute):

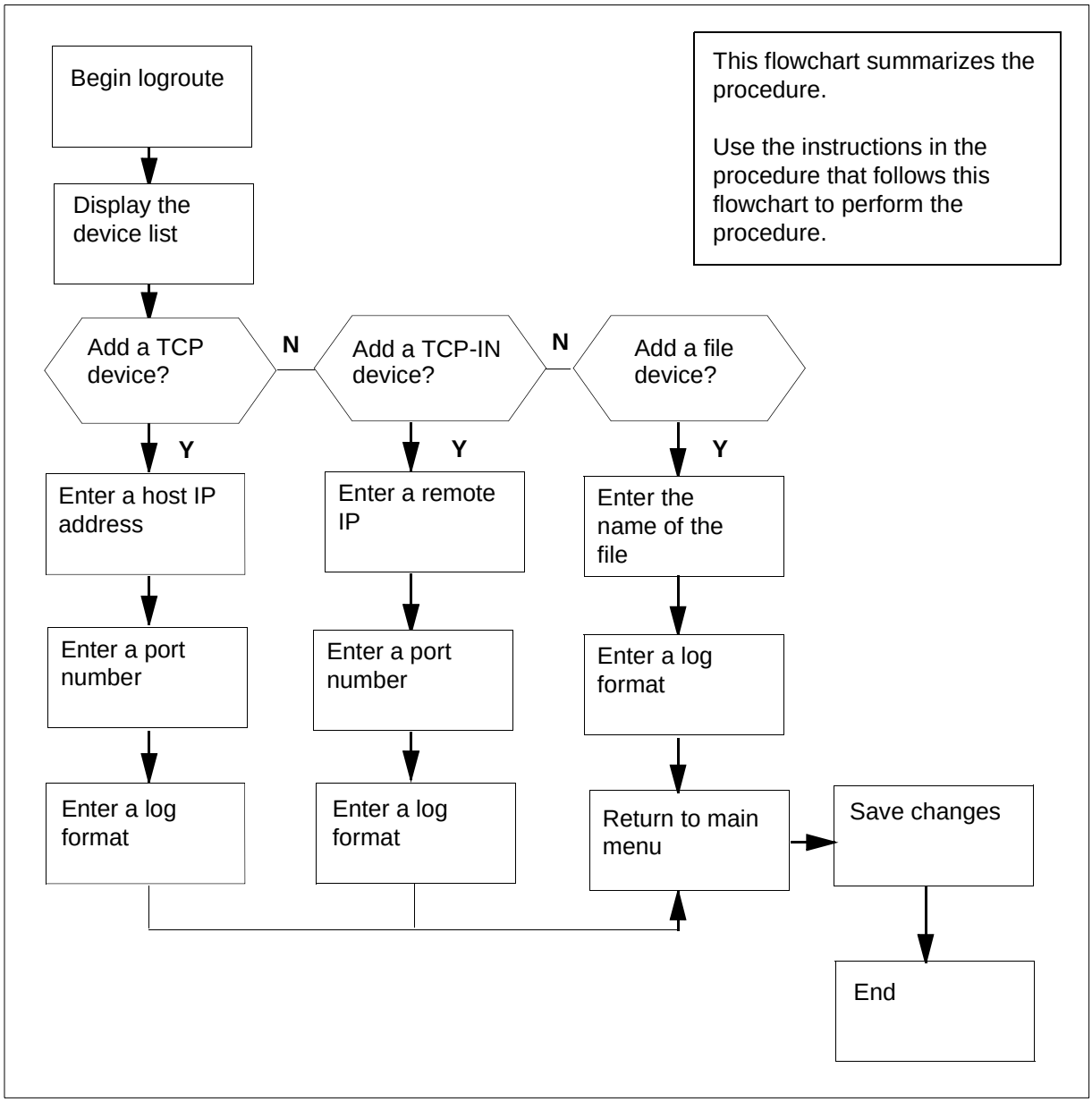
- a TCP device (an IP and port address on the network)
- a TCP-IN device (a port on the CS 2000 Core Manager)
- a file device (a file on the CS 2000 Core Manager)

The devices can be accessed either from a local or from a remote location (console). To access the devices from a remote console, refer to the procedure “Accessing a TCP or TCP-IN log device from a remote location” in the Fault section.

Action

The following flowchart provides a description of the procedure. Use the instructions in the step-action procedure that follows the flowchart to perform the task.

Summary of adding a device using Logroute



Adding a device using logroute

At the CS 2000 Core Manager

1 Log in to the CS 2000 Core Manager.

2 Begin the logroute application by typing

```
# logroute
```

and pressing the Enter key.

The Logroute Main Menu screen appears.

At the logroute application screen

3 Change the parameters of an item in the logroute menu by typing

```
> c
```

and pressing the Enter key.

Response:

```
Enter number of main menu option ==>
```

4 Display the device list by typing

```
> 1
```

and pressing the Enter key.

The Device List screen appears.

5 Begin to add a log device by typing

```
> a
```

and pressing the Enter key.

Response:

```
Enter device type (t - TCP, i - TCPIN, f - file)
==>
```

6 Use the following table to determine your next step.

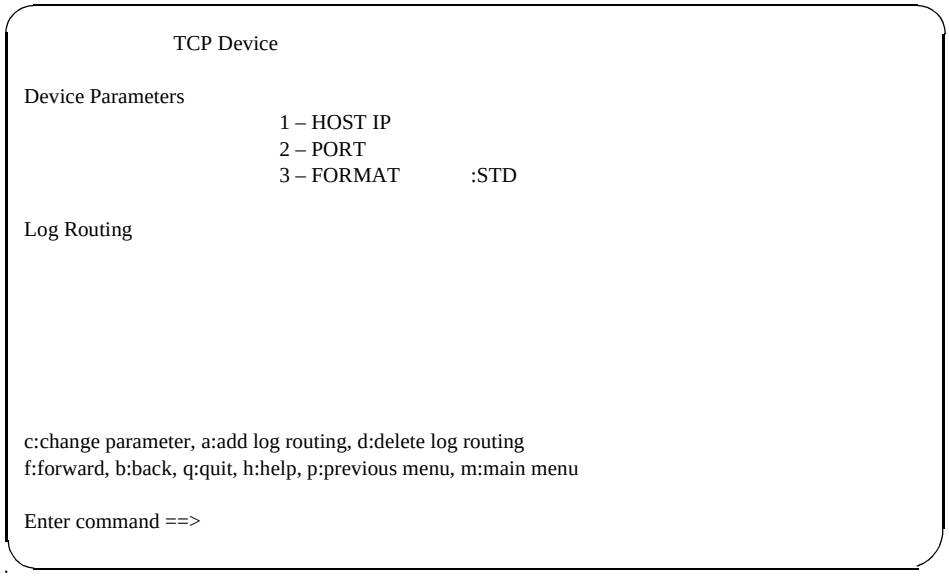
If you want to add a	Do
TCP device	step 7
TCP-IN device	step 17
a file device	step 28

7 Add a TCP device by typing

> t

and pressing the Enter key.

Response:



8 Specify the first device parameter by typing

> c

and pressing the Enter key.

Response:

```
Enter number of device parameter to change ==>
```

9 Define the Host IP address by typing

> 1

and pressing the Enter key.

Response:

```
Enter host IP address (###.###.###.###) ==>
```

10 Enter a host IP address and press the Enter key.

11 Specify the second device parameter by typing

> c

and pressing the Enter key.

Response:

```
Enter number of device parameter to change ==>
```

12 Define the port number at the previously specified IP address by typing

> 2

and pressing the Enter key.

13 Enter a port number from the range displayed, and press the Enter key.

Note: If you use the Logreceiver tool on the CS 2000 Core Manager, use port numbers in the range of 5001 to 32767.

14 Use the following table to determine your next step.

If you	Do
want to change the log format	step 15
do not want to change the log format	step 35

15 Enter the option number for the format parameter by typing

> c

and pressing the Enter key.

Response:

```
Enter number of device parameter to change ==>
```

16 Define the log format by typing

> 3

and pressing the Enter key.

Response:

```
Enter format type (STD or SCC2) ==>
```

Note: The default is STD.

If you	Do
want to change the log format	type scc2, press the Enter key, and go to step 35
do not want to change the log format	step 35

17 Add a TCP-IN device by typing

> i

and pressing the Enter key.

Response:

```
                    TCP–IN Device

Device Parameters
                              1 – REMOTE IP      : any
                              2 – PORT                    :
                              3 – FORMAT                  : STD

Log Routing




c:change parameter, a:add log routing, d:delete log routing
f:forward, b:back, q:quit, h:help, p:previous menu, m:main menu

Enter command ==>
```

18 Change the remote IP parameter by typing

> c

and pressing the Enter key.

Response:

```
Enter number of device parameter to change ==>
```

19 Enter the option number for the remote IP parameter by typing

> 1

and pressing the Enter key.

Example response:

```
Enter host IP address (###.###.###.###) or a for
any ==>
```

20 Enter an authorized host IP address, and press the Enter key.

21 Use the following table to determine your next step.

If you	Do
want to change the port parameter	step 22
do not want to change the port parameter	step 25

22 Change the port parameter by typing

> c

and pressing the Enter key.

23 Enter the option number for the port parameter by typing

> 2

and pressing the Enter key.

24 Enter a valid port number, and press the Enter key.

25 Use the following table to determine your next step.

If you	Do
want to change the log format	step 26
do not want to change the log format	step 35

26 Change the format parameter by typing

> c

and pressing the Enter key.

Response:

```
Enter number of device parameter to change ==>
```

27 Enter the option number for the log format parameter by typing

> 3

and pressing the Enter key.

Response:

```
Enter format type (STD or SCC2) ==>
```

Note: The default is STD.

If you	Do
want to change the log format	type scc2, press the Enter key, and go to step 35
do not want to change the log format	step 35

28 Add a file device by typing

> f

and pressing the Enter key.

Response:

```
                File

Device Parameters
                          1 – FILENAME      :
                          2 – FORMAT        : STD


Log Routing









c:change parameter, a:add log routing, d:delete log routing
f:forward, b:back, q:quit, h:help, p:previous menu, m:manin menu

Enter command ==>
```

29 Specify the first device parameter by typing

> c

and pressing the Enter key.

Response:

```
Enter number of device parameter to change ==>
```

30 Define a filename by typing

> 1

and pressing the Enter key.

Response:

```
Enter file name ==> /data/logs/
```

31 Enter the name of the file where the logs will be stored, and press the Enter key.

Response:

```
Enter command ==>
```

32 Use the following table to determine your next step.

If you	Do
want to change the log format	step 33
do not want to change the log format	step 35

33 Specify the second device parameter by typing

> c

and pressing the Enter key.

Response:

```
Enter number of device parameter to change ==>
```

34 Define the log format by typing

> 2

and pressing the Enter key.

Response:

```
Enter format type (STD or SCC2) ==>
```

Note: The default is STD.

If you	Do
want to change the log format	type scc2, press the Enter key, and go to step 35
do not want to change the log format	step 35

35 Use the following table to determine your next step.

If you	Do
want to add more devices	press p, the Enter key, and go to step 5
do not want to add more devices	step 36

36 Return to the main menu by typing

```
> m
```

and pressing the Enter key.

37 Save the changes you have made by typing

```
> s
```

and pressing the Enter key.

Response:

```
Save data completed -- press return to continue
```

38 Press the Enter key to continue.

39 Exit the Logroute application by typing

```
> q
```

and pressing the Enter key.

40 You have completed the procedure.

Commissioning or decommissioning Network Time Protocol (NTP)

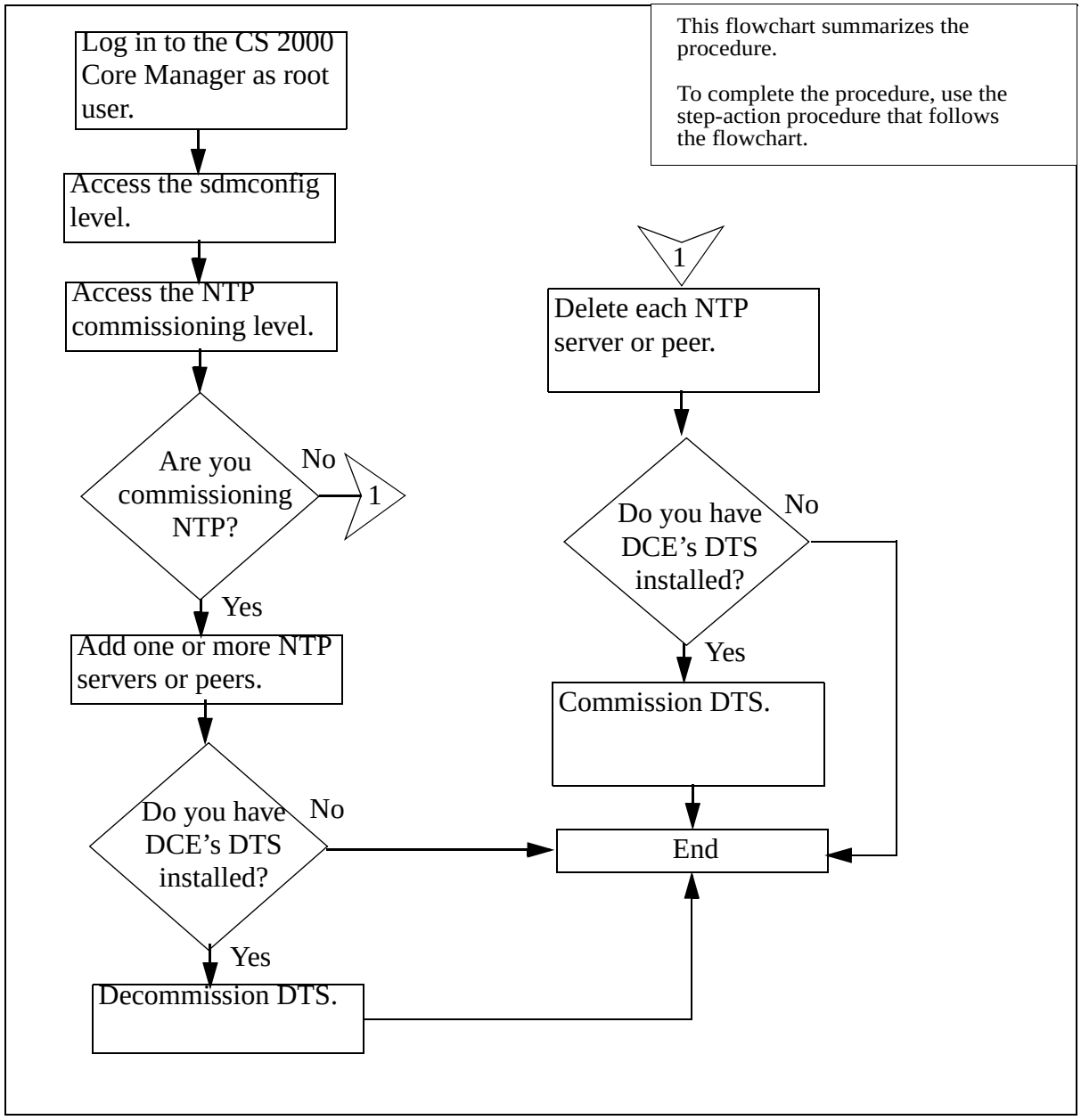
Use this procedure to commission or decommission Network Time Protocol (NTP) on the CS 2000 Core Manager.

Note: If you have a DCE's Distributed Time Service (DTS) commissioned, you will be prompted to remove it once you have commissioned NTP. For this, you will need a DCE administrator password.

Flowchart procedure

The following flowchart summarizes the software upgrade. To complete the procedure, use the instructions in the step-action procedure that follow the flowchart.

Summary of Commissioning or decommissioning NTP



Commissioning or decommissioning NTP

At the local VT100 console

1 Log into the CS 2000 Core Manager as a root user.

2 Access the CS 2000 Core Manager configuration level by typing

```
# sdmconfig
```

and pressing the **Enter** key.

3 Access the NTP commissioning step level by typing

```
> step <#>
```

and pressing the **Enter** key.

where

<#>
is the number next to the Network Time Protocol commissioning step.

Note: Use Up (12) or Down (13) to scroll through the list until you see the Network Time Protocol commissioning step.

If you are	Do
commissioning NTP	step 4
decommissioning NTP	step 8

4 Add an NTP server or peer by typing

```
> add
```

and pressing the **Enter** key.

a When prompted, select the type of host you want to add by typing

```
> 1 (to add a server) or 2 (to add a peer)
```

and pressing the **Enter** key.

Note: A peer can act as a server.

b When prompted, enter a description for that server or peer.

c When prompted, enter the host name for that server or peer.

d When prompted, enter the IP address for that server or peer.

Note: You can add a maximum of 20 server or peers.

5 When prompted, confirm the add command by typing

```
> y
```

and pressing the **Enter** key.

Response:

```
Synchronization in progress, may take up to 10
mins.
```

If you	Do
have DTS installed	step 6
do not have DTS installed	step 4

6 When prompted, enter your DCE administrator password and remove DTS.

7 Use the following table to determine your next step.

If you	Do
want to add more NTP servers or peers	step 4
do not want to add more NTP servers or peers	you have completed this procedure

8 Remove each of the NTP servers or peers by typing

```
> delete <#>
```

and pressing the **Enter** key.

where

<#>
is the number next to the NTP server or peer.

Note: You can also delete an NTP server or peer using its hostname or IP address.

9 When prompted, confirm the delete command by typing

> y

and pressing the **Enter** key.

Note: If you are deleting the last NTP server or peer on the list and you have DCE installed on your system, you will be prompted to setup DCE's DTS. For this, you will need a DCE administrator password.

If you	Do
want to delete another NTP server or peer	step 8
do not want to delete another NTP server or peer	you have completed this procedure

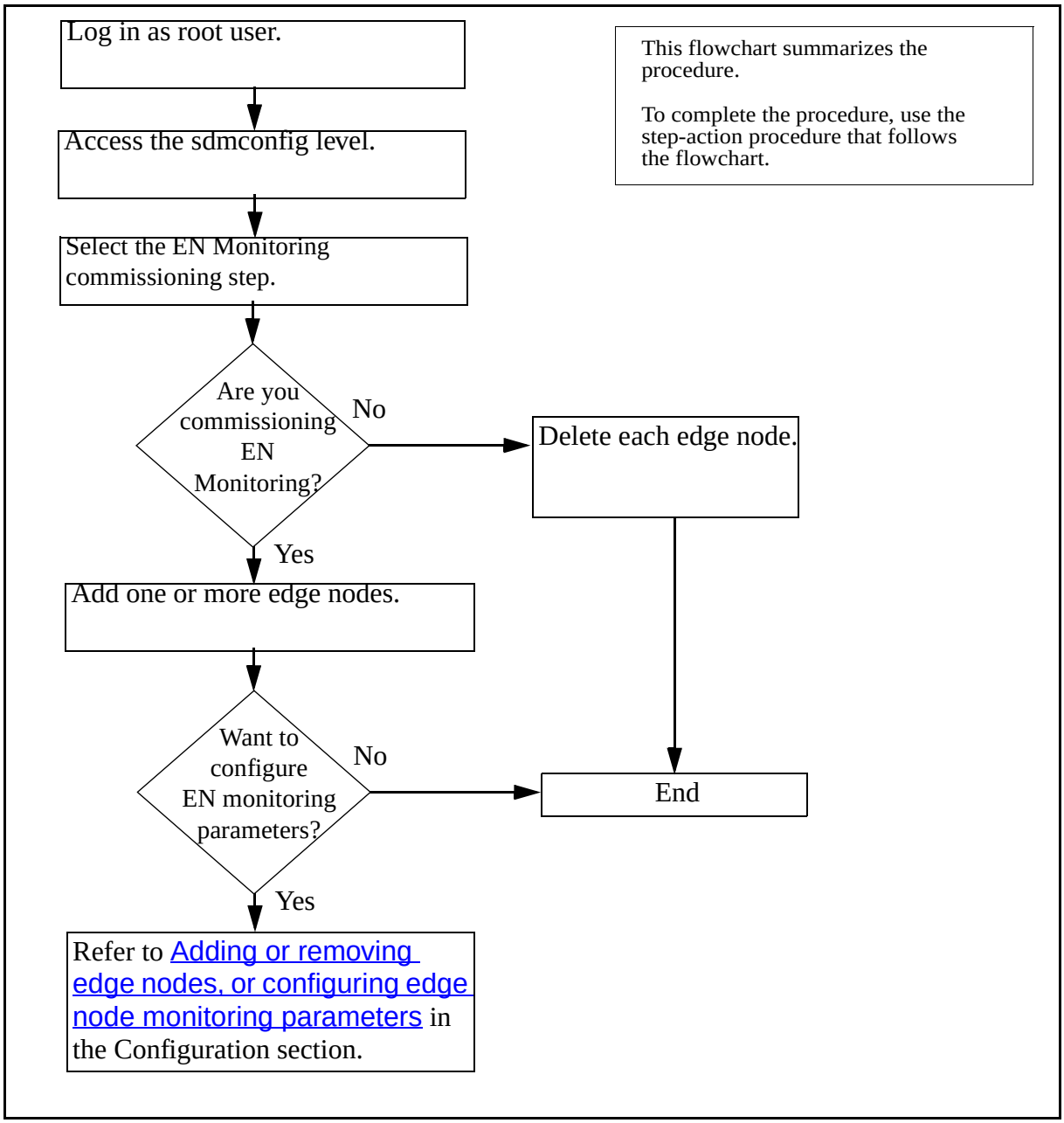
Commissioning or decommissioning edge node monitoring

Use this procedure to commission or decommission edge node monitoring. When edge node monitoring is commissioned, the CS 2000 Core Manager can detect failures on active ethernet interfaces and switch the ethernet connection to the other domain.

Flowchart procedure

The following flowchart summarizes the process. To complete the procedure, use the instructions in the step-action procedure that follow the flowchart.

Summary of Commissioning or decommissioning edge node monitoring



Commissioning or decommissioning edge node monitoring

At the workstation or console

1 Log into the CS 2000 Core Manager as a root user.

2 Access the configuration level by typing

```
# sdmconfig
```

and pressing the **Enter** key.

3 Access the Edge Node Monitoring commissioning step level by typing

```
> step <#>
```

and pressing the **Enter** key.

where

<#>
is the number next to the Edge Node Monitoring commissioning step.

Note: Use Up (12) or Down (13) to scroll through the list until you see the Edge Node Monitoring commissioning step.

If you are	Do
commissioning edge node monitoring	step 4
decommissioning edge node monitoring	step 5

4 Add an edge node by typing

```
> add
```

and pressing the **Enter** key.

a Enter the logical ethernet number for the edge node, and press the Enter key.

b Enter a description for the edge node, and press the Enter key.

c Enter the IP address for the edge node, and press the Enter key.

d Confirm the add command by typing

> y

and pressing the **Enter** key.

Response

```
Add NODE - Command complete.
```

Note: You can change the values for an edge node at any time using the Change command.

If you	Do
want to add another edge node	step 4
configure the monitoring parameters for the edge nodes	refer to procedure Adding or removing edge nodes, or configuring edge node monitoring parameters in the Configuration section
do neither of the above actions	you have completed this procedure

5 Remove each of the edge nodes by typing

> delete node <#>

and pressing the **Enter** key.

where

<#>
is the number next to the edge node.

6 When prompted, confirm the delete command by typing

> y

and pressing the **Enter** key.

If	Do
you have another edge node to remove	step 5
all edge nodes are removed	you have completed this procedure

Installing and configuring the log delivery application

The following procedure outlines the steps that must be performed to install and configure the log delivery application on the CS 2000 Core Manager.

For full operation, the log delivery application requires installation of the following application filesets:

- Log delivery service
- Log delivery service client
- Generic data delivery
- Passport Log Streamer (only required for Succession offices where the CS 2000 Core Manager needs to communicate with the Preside MDM for fault data)

Note: The Passport Log Streamer application fileset requires the pserver application to be installed on the Preside MDM server. Ensure the pserver application is installed and configured on the Preside MDM server prior to upgrading the CS 2000 Core Manager. Refer to the Preside MDM information for instructions on how to install and configure the pserver application.

Prior to performing this procedure ensure there are no disk faults on the CS 2000 Core Manager.

1 Use the following table to determine your first step.

If you are installing and configuring the Log delivery application for	Do
a PT-AAL1 or UA-AAL1 Succession office	step 2
any other Succession office	step 4

2 Obtain the IP address for each of the two nodes that constitute the Preside MDM.

3 Obtain the port number for the pserver application on each of the Preside MDM nodes.

Note: The port numbers are those the Passport Log Streamer application on the CS 2000 Core Manager, will connect to.

4 Install the Log delivery application.

a Log into the CS 2000 Core Manager using the root user ID and password.

b Use the following table to determine your next step.

If the filesets are	Do
on tape	insert the tape labeled CS2E0006 6.x (1 of 1) in slot 2 or 13, and continue with substep c ***Note:*** Wait until the tape drive stabilizes (yellow LED is off) before you proceed.
in a directory	obtain the directory path where the filesets are located, and continue with substep c

c Access the Apply level of the CS 2000 Core Manager maintenance interface and display the list of filesets contained in the source location (tape or directory) by typing

```
# sdmmtc apply <x>
```

and pressing the Enter key.

where

<x> is either the number that corresponds to the tape drive (0 if tape is in slot 2, or 1 if tape is in slot 13), or the path of the source directory

d Select the filesets required for the Log delivery application by typing

```
> select <fileset_number>
```

and pressing the Enter key.

where

fileset_number is the number next to each of the following filesets:

- Log Delivery Service
- Log Delivery Service Client
- Generic Data Delivery
- Passport Log Streamer (only required for Succession offices where the CS 2000 Core

Manager needs to communicate with the Preside MDM for fault data)

Note: If you are a PT-AAL1 or UA-AAL1 Succession office, you may also want to select the CS 2000 Core Manager-to-MDM Connectivity fileset. Although it is not a required fileset for the Log delivery application, CS 2000 Core Manager-to-MDM Connectivity provides you with remote login access to the Preside MDM nodes.

e Install the filesets by typing

```
> apply <fileset_number>
```

and pressing the Enter key.

where

fileset_number is the number next to each of the filesets you selected in the previous step

f Confirm the apply command by typing

```
> y
```

and pressing the Enter key.

Note: The Generic Data Delivery application is automatically brought into service.

If you	Do
installed the Passport Log Streamer fileset	step 5
did not install the Passport Log Streamer fileset	step 6

5 Configure the Passport Log Streamer application as follows:

Note: If you previously had the Succession log delivery service application fileset installed and configured the values will default to those already defined. You can accept the default value by pressing the Enter key.

a When prompted, enter the IP address for the first Preside MDM node, then the second.

b When prompted, enter the port number configured for the pserver application on the first Preside MDM node, then the second.

Example response

```
No previous MDM filters defined.
Do you want to receive MDM logs? [y/n]
```

Note: If MDM filters were previously defined, they will be displayed.

c When prompted, indicate whether you want to receive MDM logs.

If	Do
y (yes)	substep d
n (no)	substep e

d When prompted, enter the host name of the first Preside MDM node, then the second.

Example response

```
No previous passport filters defined.
Do you want to specify Passport filters?
[y/n]
```

Note: If Passport filters were previously defined, they will be displayed.

e When prompted, indicate whether you want to specify Passport log filters.

If	Do
y (yes)	substep f
n (no)	substep h

f When prompted, type the number of filters you want to specify, and press the Enter key.

g When prompted, enter a name for each of the Passport filters, for example, p15ka, p6480_u.

h When prompted, confirm the data you entered by typing

```
> y
```

and pressing the Enter key.

Response

```
Saving new configuration data...
```

6

ATTENTION

If you installed and configured the Passport Log Streamer application fileset, ensure the Preside MDM is installed, configured, and in service before continuing with this procedure.

Bring the Log delivery service application and the Passport Log Streamer application into service.

a Access the Application (Appl) level by typing

```
> appl
```

and pressing the Enter key.

b Busy the application filesets by typing

```
> bsy <fileset_number>
```

and pressing the Enter key.

where

fileset_number is the number next to the following application filesets:

- Log delivery service
- Passport Log Streamer (if installed)

c Return the application filesets to service by typing

```
> rts <fileset_number>
```

and pressing the Enter key.

where

fileset_number is the number next to the application filesets you busied in the previous step

Once the application fileset is returned to service, the system retrieves any current log records. To view or store log

records, see procedure “Displaying or storing log records using log receiver” in the Fault section.

Note: If the application fileset has been out of service for an extended period of time, the system retrieves any older log records that are available prior to any current log records. However, for Passport Log Streamer application, once it returns to service, the system retrieves only the current log records.

7 You have completed this procedure.

Commissioning the Log Delivery CM configuration file

Application

Use this procedure to commission the Log Delivery computing module (CM) configuration file parameters. When the Log Delivery service is first installed, it receives all logs in the CM log stream by default. The CM configuration file parameters do not require change unless you wish to modify the incoming global log stream. Use the CM configuration file menu in the Logroute commissioning tool to add or delete log reports to or from the incoming CM log stream.

Note: To have any commissioning changes in the CM configuration file take effect, you must perform the following action:

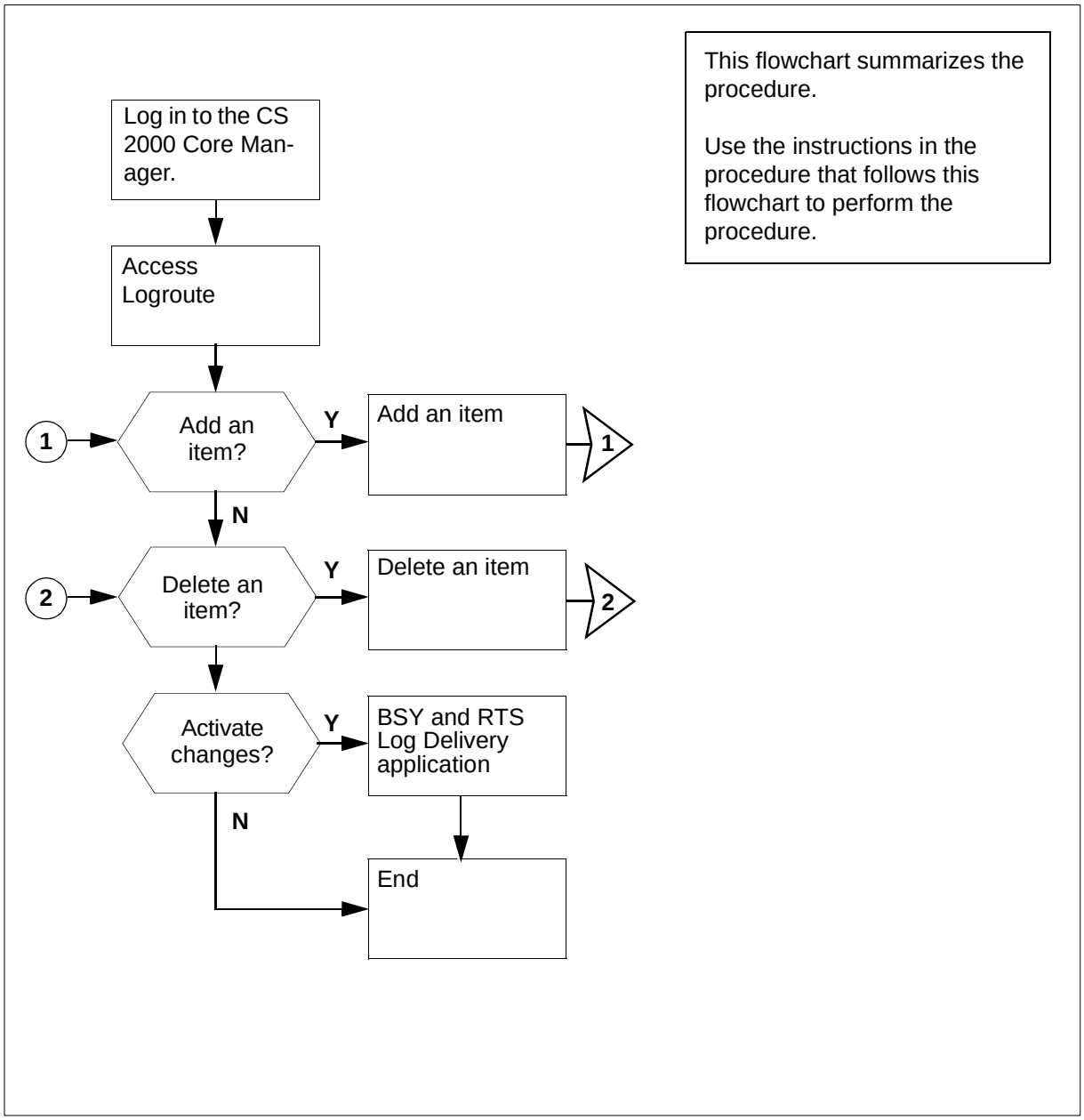
- save the changes in the Logroute tool
- busy the Log Delivery application
- return the Log Delivery application to service

The Log Delivery application is not available for a short period of time while you busy the application, and return the application to service.

Action

The following flowchart provides an overview of the procedure. Use the instructions in the step-action procedure that follows the flowchart to perform the task.

Summary of Commissioning the log delivery CM configuration file



Commissioning the log delivery CM configuration file

At the local or remote VT100 console

1 Log in to the CS 2000 Core Manager as the root user, or a maint class user.

2 Access the logroute commissioning tool by typing

`# logroute`

and pressing the Enter key.

Response:

```
                    Logroute Main Menu


          1 - Device List
          2 - Global Parameters
          3 - CM Configuration File


c:change menu,    q:quit,    h:help,    s:save changes

Warning: You must save, then BSY and RTS the Log Delivery
======== application for any changes to take effect.

Enter command ==>
```

3 Access the change menu by typing

`> c`

and pressing the Enter key.

Response:

```
Enter number of main menu option:
```

4 Enter the option number for CM Configuration File by typing

> 3

and pressing the Enter key.

The following display shows an example response where one log report (CM 100) has been deleted from the incoming CM log stream.

Response:

```
CM Config File

1 - DEL CM 100

f:forward, b:back a:add item, d:delete item
q:quit, h:help, m:main menu

Enter command ==>
```

5 Use the following table to determine your next step.

If you want to	Do
add an item to the list	step 6
delete an item from the list	step 10
return to the main menu	step 13

6 Enter the menu option for adding an item by typing

> a

and pressing the Enter key.

Response:

```
Enter - a: addrep or d: delrep (or n for NOCMLOGS ==>
```

7 Enter the letter associated with a log addition or a log deletion by typing

> <n>

and pressing the Enter key.

where

<n>
is “a” for a log addition (addrep), or “d” for log deletion (delrep)

Response:

```
Enter log identifier (“log_type”, or “log_type
log_number”) ==>
```

8 Enter the log identifier by typing

> <log identifier>

and pressing the Enter key.

where

<log identifier>
is the log type, or log type and number to be added or deleted.

Note: If the log name and log number are both present, they must be separated by a space. In the following response, all PM logs were deleted by typing d pm.

Response:

```
                    CM Config File

            1 - DEL CM 100
            2 - DEL PM


f:forward, b:back, a:add item, d:delete item,
q:quit, h:help, m:main menu

Enter - a: addrep or d: delrep (or n for NOCMLOGS) ==>
```

9 Use the following table to determine your next step.

If you	Do
want to make more changes to the CM log stream list	step 5
do not want to make more changes to the CM log stream list	step 13

10 Enter the menu option for deleting an item from the log stream list by typing

> d

and pressing the Enter key.

Response:

```
Enter item number to delete ==>
```

11 Enter the number of the item you want to delete from the list by typing

> *<n>*

and pressing the Enter key.

where

<n>
is the number of the item from the list that you want to delete.

12 Use the following table to determine your next step.

If you	Do
want to make more changes to the CM log stream list	step 5
do not want to make more changes to the CM log stream list	step 13

13 Return to the Logroute Main Menu by typing

> m

and pressing the Enter key.

14 Use the following table to determine your next step.

If you	Do
want to save the changes	step 15
do not want to save the changes	step 23

15 Save the values you entered by typing

> s

and pressing the Enter key.

Note: After you save the changes you made to the CM log stream, the changes must be activated. Busy and return the log delivery application to service to have the changes take effect.

Response:

```
                    Logroute Main Menu


          1 - Device List
          2 - Global Parameters
          3 - CM Configuration File


c:change menu,    q:quit,    h:help,    s:save changes

Warning: You must save, then BSY and RTS the Log Delivery
======== application for any changes to take effect.

Save completed -- press return to continue
```

16 Press the enter key to continue.

17 Exit the Logroute tool by typing

> q

and pressing the Enter key.

18 Use the following table to determine your next step.

If you	Do
want to activate the values you saved	step 19
do not want to activate the values you saved	step 24

19 Access the Application level by typing

`# sdmmtc appl`

and pressing the Enter key.

Example response:

```
# Application                                  State
1 Table Access Service                           .
2 Log Delivery Service                           .
3 OM Access Service                              .
4 Secure File Transfer                           .
5 Enhanced Terminal Access                       .
6 Exception Reporting                            .
                  Applications showing: 1 to 6 of 6
```

20 Busy the Log Delivery Service by typing

`> bsy <n>`

and pressing the Enter key.

where

<n>
is the number next to the Log Delivery Service

Response:

```
The application is in service.
This command will cause a service interruption.
Do you wish to proceed?
Please confirm (“YES”, “Y”, “NO”, or “N”):
```

Note: Busying the Log Delivery Service performs an orderly shutdown and can take up to 2 min.

21 Confirm the Busy command by typing

> y

and pressing the Enter key.

Response:

```
Application Bsy - Command initiated.
Please wait. . .

Application Bsy - Command submitted.
```

22 Return the Log Delivery Service to service by typing

> rts *<n>*

and pressing the Enter key.

where

<n>
is the number of the Log Delivery Service (from step 19)

Response:

```
Application RTS - Command initiated.
Please wait. . .

Application RTS - Command submitted.
```

23 Exit the maintenance interface by typing

> quit all

and pressing the Enter key.

Go to step 26.

24 Exit the CM Config File menu without saving any of the values you have entered by typing

> q

and pressing the Enter key.

Response:

```
Parameters have changed, do you want to save changes
(y/n)?
```

Note: If you did not enter any changes, the message above will not appear. Go to step 26.

25 Indicate that you do not want to save your changes by typing

> n

and pressing the Enter key.

26 You have completed this procedure.

Commissioning Log Delivery global parameters

Application

Use this procedure to commission the Log Delivery global parameters. The online Log Delivery commissioning tool called Logroute controls Log Delivery global parameters. The Log Delivery global parameters apply to all Log Delivery output devices and are separate from device-specific parameters.

The Logroute tool allows you to customize the following global parameters:

- buffer size (number of logs)
- reconnect time-out value (secs)
- lost logs threshold (number of lost logs before the system generates a design log) Note: This parameter is for Nortel personnel only.
- ASCII line delimiter and log delimiter characters
- the number of days to keep log files

ATTENTION
Any settings changed by the LogDelivery application and the logroute tool will not affect Generic Data Delivery settings or the logs in the /gdd volume.

The global parameters are set to default values at initial installation and should not require modification. If the global parameters do require modification, the ranges and default for each numeric parameter are as follows:

- buffer size (number of logs): range is 50 to 300, default is 150
- reconnect time-out value (secs): range is 1 to 3600, default is 15
- lost logs threshold: range is 1 to 300, default is 100 (-1 turns this option off)
- number of days to keep log files: range is 1 to 45, default is 5
- maximum size of a log file (Meg): range is 5 to 300, default is 40
- maximum size action: values are STOPDEV, CIRCULATE, and ROTATE

The maximum size action parameter allows you to configure the action the system performs when the file reaches its maximum size. The STOPDEV value tells the file device to save the data in separate files

every 12 hours. When the file created at each 12 hour rotation is full, the system stops writing log data to the file. The system loses any log data generated from the time the system stops writing to the file to the start of a new file at the next rotation.

The ROTATE value tells the file device to save the data in separate files every 12 hours. When the file created at each 12 hour rotation is full, the system creates another file to continue saving any log data. The system does not wait until the next 12 hour rotation to create a new file.

The CIRCULATE value tells the file device to save the data in separate files every 12 hours. When the file reaches its maximum size, the system saves the new log data by overwriting the earliest data in the file.

The remaining global parameters are represented by ASCII character codes. For more information on these parameters including their ranges, see the Logroute help menu. The values for the global parameters represented by ASCII character codes are as follows:

- incoming end of line character: default is 10 which corresponds to a line feed character (go to the next line)
- outgoing end of line characters: default is 10 13 which represents a line feed (go to the next line) followed by a carriage return
- start of log characters: default is 10 13 which represents a line feed (go to the next line) followed by a carriage return
- end of logs characters: default is 10 13 which represents a line feed (go to the next line) followed by a carriage return

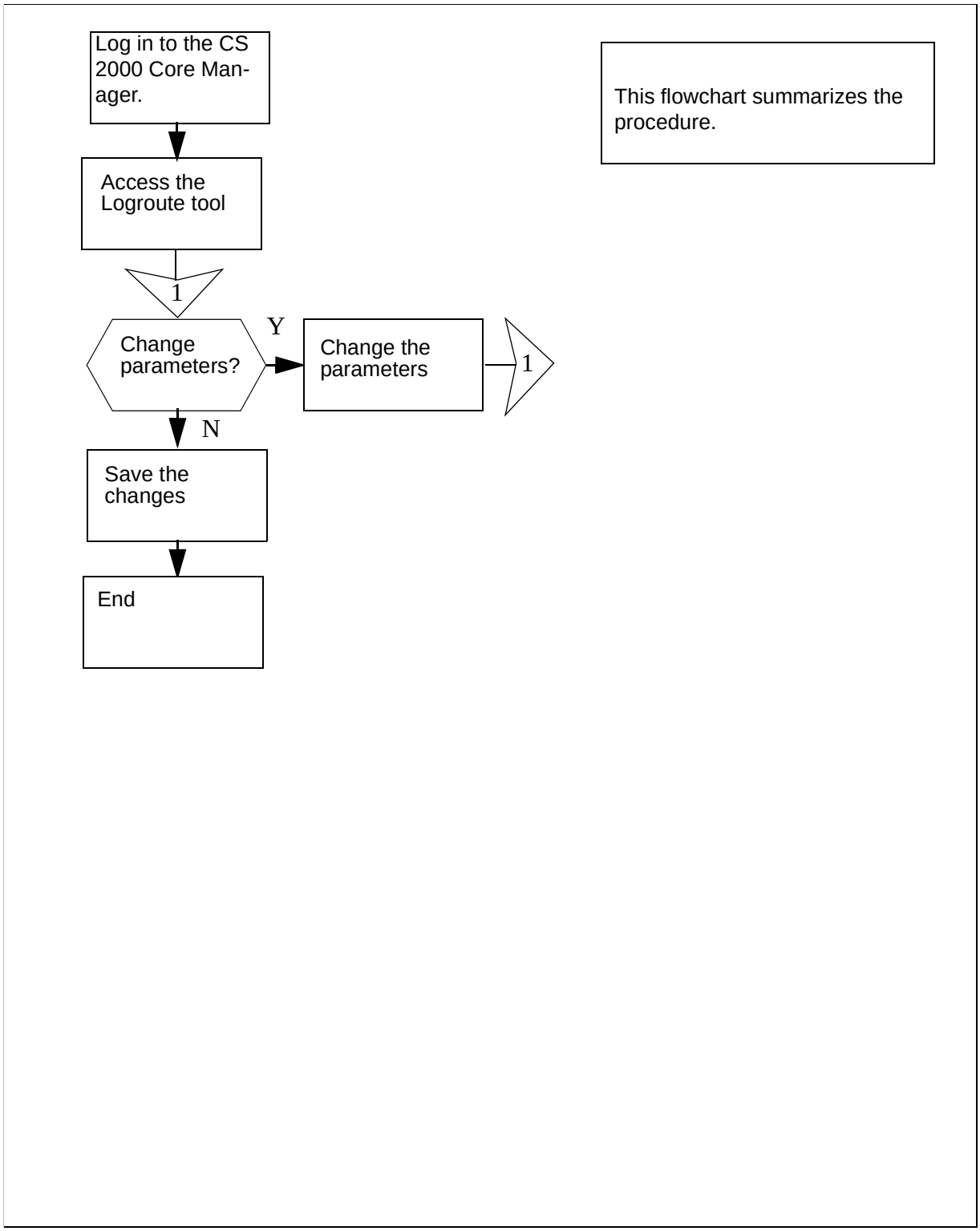
Note 1: Any changes in commissioning take effect immediately. You do not have to busy and return the Log Delivery application to service for the changes to take effect.

Note 2: You can modify the TCPend device, IP address and host port number without deleting the device.

Action

The following flowchart provides an overview of the procedure. Use the instructions in the step-action procedure that follows the flowchart to perform the task.

Summary of commissioning Log Delivery global parameters



Commissioning Log Delivery global parameters

At the local or remote VT100 console

1 Log in to the CS 2000 Core Manager as the root user, or a maint class user.

2 Access the Logroute commissioning tool by typing

```
# logroute
```

and pressing the Enter key.

Response:

```
                        Logroute Main Menu

              1 - Device List
              2 - Global Parameters
              3 - CM Configuration File




c:change menu,    q:quit,    h:help,   s:save
changes

Enter command ==>
```

Note: For help on Logroute commands, type h. To scroll down the help menu, type f. To scroll back through the help menu, type b. To quit the help menu, type p. To quit out of the Logroute tool, type q at the Logroute Main Menu.

3 Access the change menu by typing

```
> c
```

and pressing the Enter key.

Response:

```
Enter number of main menu option:
```

4 Enter the option number for Global Parameters by typing

> 2

and pressing the Enter key.

Response:

```
                        Global Parameters

1 - Buffer size (number of logs)      : 150
2 - Reconnect time-out value (secs)    : 15
3 - Lost logs threshold (NT only)     : 100
4 - Incoming end of line character    : 10
5 - Outgoing end of line characters   : 10 13
6 - Start of log characters           : 10 13
7 - End of logs characters            : 10 13
8 - Number of days to keep log files  : 5



c:change item,  q:quit, h:help, m:main

Enter command ==>
```

Note: This display shows the default values for the Global Parameters menu.

5 Select the change item option by typing

> c

and pressing the Enter key.

Response:

```
Enter number of global parameter change ==>
```

6 Enter the menu number of the parameter you want to change by typing

> <n>

and pressing the Enter key.

where

<n>
is the menu number of the global parameter you want to change.

Note: The following display shows an example response for changing the buffer size parameter.

Example response:

```
                              Global Parameters


1 - Buffer size (number of logs)      : 150
2 - Reconnect time-out value (secs)    : 15
3 - Lost logs threshold (NT only)     : 100
4 - Incoming end of line character    : 10
5 - Outgoing end of line characters   : 10 13
6 - Start of log characters           : 10 13
7 - End of logs characters            : 10 13
8 - Number of days to keep log files  : 5
9 - Maximum size of a log file        : 40
10 - Maximum size action              : STOPDEV



c:change item,  q:quit, h:help, m:main

Enter buffer size (range - 50 to 300) ==>
```

Note: The log and line delimiters (incoming and outgoing end of line characters, and start and end of log characters) must be entered as decimal or hexadecimal ASCII code. See the Help menu for details.

7 Enter a value. The changed value appears on the Global Parameter menu.

8 Use the following table to determine your next step.

If you	Do
want to change another global parameter	step 5
do not want to change another global parameter	step 9

9 Return to the Logroute Main Menu by typing

```
> m
```

and pressing the Enter key.

10 Use the following table to determine your next step.

If you	Do
want to save your changes	step 11
do not want to save your changes	step 14

11 Save the values you entered by typing

```
> s
```

and pressing the Enter key.

Response 1:

```
Warning: Some log devices will be restarted. Do
you wish to proceed?
```

Response 2:

```
Warning: All log devices will be restarted. Do
you wish to proceed?
```

12 Confirm you want to proceed by typing

> y

and pressing the Enter key.

Response:

```
                    Logroute Main Menu

            1 - Device List
            2 - Global Parameters
            3 - CM Configuration File

c:change menu,    q:quit,    h:help,   s:save
changes

  Save data complete -- press return to continue

 Enter command==>
```

13 Press the enter key, and exit the Logroute tool by typing

> q

and pressing the Enter key.

Go to step 16.

14 Exit the Logroute tool without saving your changes by typing

> q

and pressing the Enter key.

Response:

```
Parameters have been changed, do you want to
save changes (y/n)?
```

15 Indicate you do not want to save your changes by typing

> n

and pressing the Enter key.

Response:

```
                          Logroute Main Menu

              1 - Device List
              2 - Global Parameters
              3 - CM Configuration File


c:change menu,    q:quit,    h:help,   s:save
changes

Save data to database not completed -- press
return to continue

Enter command ==>
```

16 Press the Enter key to continue. The system exits from the Logroute tool and returns you to the restricted shell.

17 You have completed this procedure.

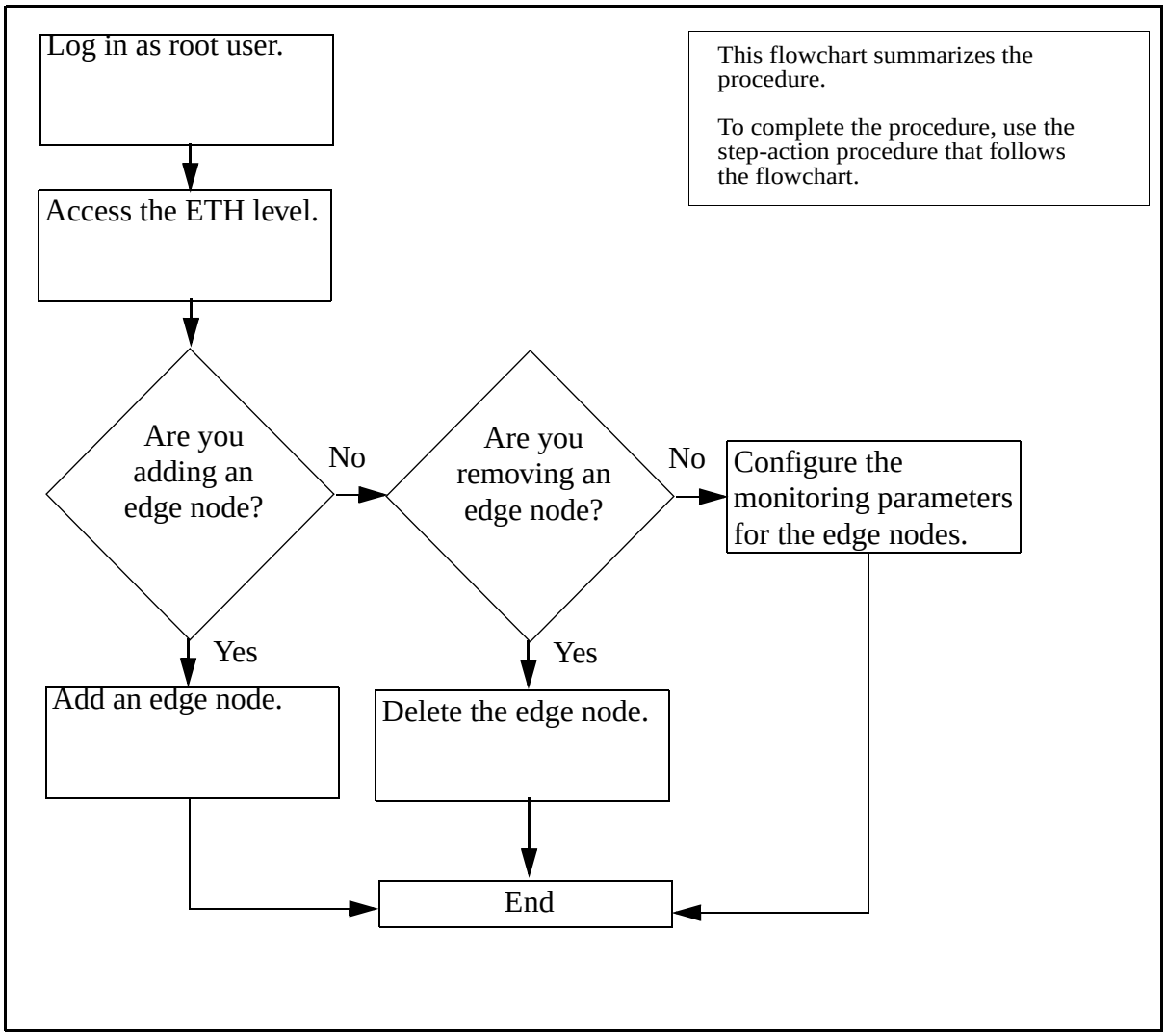
Adding or removing edge nodes, or configuring edge node monitoring parameters

Use this procedure to add or remove edge nodes, or configure the monitoring parameters for the edge nodes.

Flowchart procedure

The following flowchart summarizes the procedure. To complete the procedure, use the instructions in the step-action procedure that follow the flowchart.

Summary of adding or removing edge nodes, or configuring edge node monitoring parameters



Adding or removing edge nodes, or configuring edge node monitoring parameters

At the workstation or console

1 Log into the CS 2000 Core Manager as a root user.

2 Access the ethernet (Eth) level by typing

```
# sdmmtc eth
```

and pressing the **Enter** key.

If you want to	Do
add an edge node	step 3
remove an edge node	step 4
configure the monitoring parameters for the edge nodes	step 6

3 Add an edge node by typing

```
> add node
```

and pressing the **Enter** key.

a Enter the logical ethernet number for the edge node, and press the Enter key.

b Enter a description for the edge node, and press the Enter key.

c Enter the IP address for the edge node, and press the Enter key.

d Confirm the add command by typing

> y

and pressing the **Enter** key.

Response:

```
Add NODE - Command complete.
```

Note: You can change the values for an edge node at any time using the Change command.

If you	Do
want to add another edge node	step 3
configure the monitoring parameters for the edge nodes	step 6
do neither of the above actions	you have completed this procedure

4 Remove the edge node by typing

> delete node <#>

and pressing the **Enter** key.

where

<#>
is the number next to the edge node you want to delete.

5 When prompted, confirm the delete command by typing

> y

and pressing the **Enter** key.

Response:

```
Delete NODE - Command complete.
```

If you	Do
want to remove another edge node	step 4
configure the monitoring parameters for the edge nodes	step 6
do neither of the above actions	you have completed this procedure

6 Configure the edge node monitoring parameters by typing

> <command>

and pressing the Enter key.

where

<command>
is either

- Period to specify the time interval a ping is sent (default is 1 second),
- Failures to specify the maximum number of failures before the link is considered failed and the active link is switched over to the other domain (default is 3 failures), or
- Timeout to specify the maximum time period a reply is received from a ping before the ping is considered failed (default is 1 second)

Example

Assuming you set the parameters as follows:

- Period = 2 seconds
- Failures = 3
- Timeout = 1 second

A ping will be sent every 2 seconds (Period). A ping reply must be received within 1 second (timeout) or the ping will be considered failed. When the number of failed pings reaches 3 (Failures), the link is considered failed and the active link is switched over to the other domain.

Note: When a ping is considered failed, a new ping is sent even if the time interval, which is 2 seconds in the example, has not yet elapsed.

7 Enter the new value and press the Enter key.

Response:

```
<command> - Command complete.
```

If you	Do
want to set another parameter	step 6
do not want to set another parameter	you have completed this procedure

Adding or removing an NTP server or peer

Use this procedure to add or remove a Network Time Protocol (NTP) server or peer.

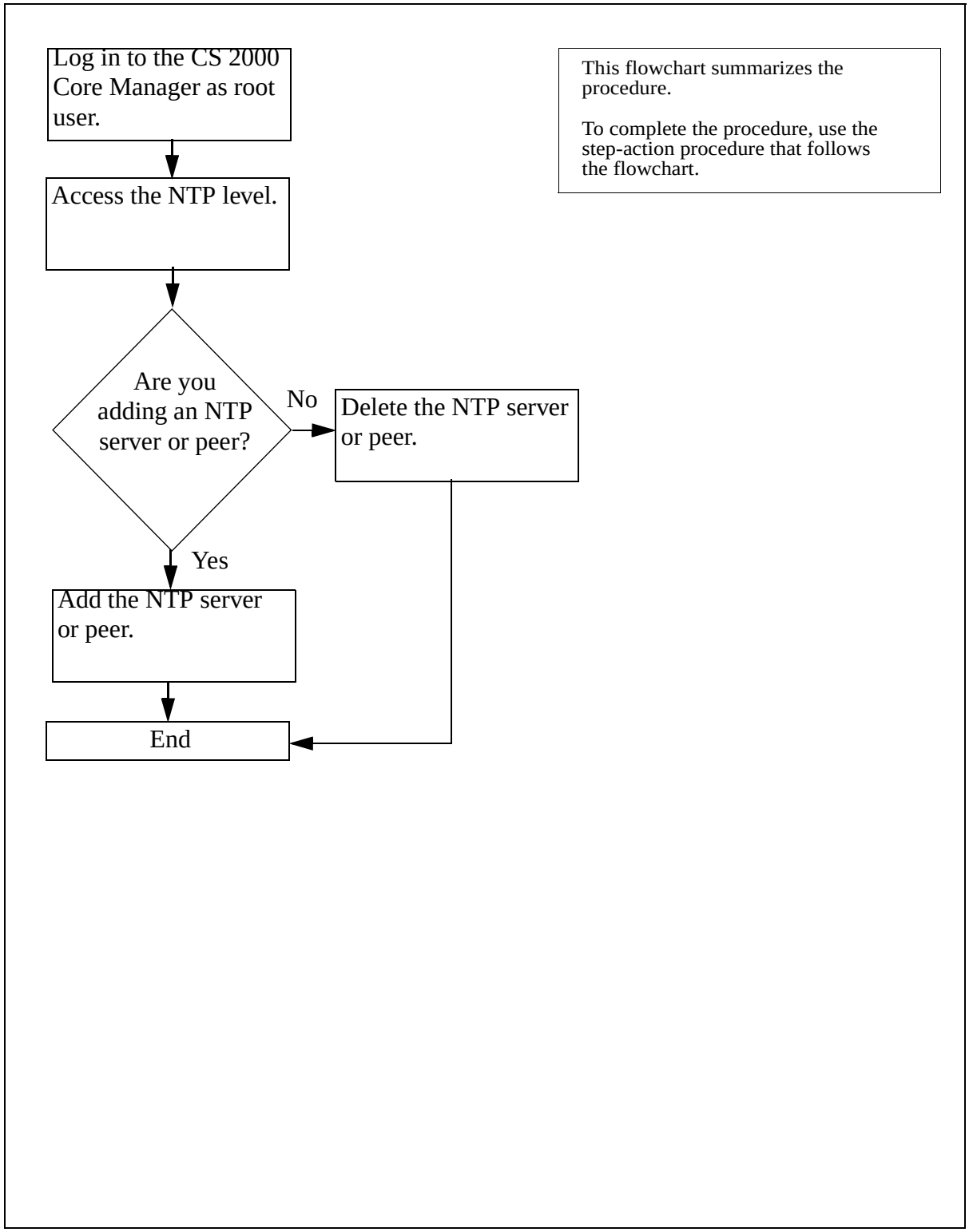
Note 1: You can add a maximum of 20 NTP servers or peers.

Note 2: If you have DCE installed on your system and are deleting the last NTP server or peer, you will be prompted to setup DCE's DTS. For this, you will need a DCE administrator password.

Flowchart procedure

The following flowchart summarizes the software upgrade. To complete the procedure, use the instructions in the step-action procedure that follow the flowchart.

Summary of adding or removing an NTP server or peer



Adding or removing an NTP server or peer

At the local VT100 console

1 Log into the CS 2000 Core Manager as a root user.

2 Access the NTP level by typing

```
# sdmmtc ntp
```

and pressing the **Enter** key.

If you want to	Do
add an NTP server or peer	step 3
remove an NTP server or peer	step 5

3 Add an NTP server or peer by typing

```
> add
```

and pressing the **Enter** key.

a When prompted, select the type of host you want to add by typing

```
>1 (to add a server) or 2 (to add a peer)
```

and pressing the **Enter** key.

Note: A peer can act as a server.

b When prompted, enter a description for that server or peer.

c When prompted, enter the host name for that server or peer.

d When prompted, enter the IP address for that server or peer.

4 When prompted, confirm the add command by typing

> y

and pressing the **Enter** key.

Response:

```
Synchronization in progress, may take up to 10
mins.
```

Note: You can add a maximum of 20 NTP servers or peers. If you attempt to add more than 20, an error message is displayed.

If you	Do
want to add another NTP server or peer	step 3
do not want to add another NTP server or peer	you have completed this procedure

5 Remove the NTP server or peer by typing

> delete <#>

and pressing the **Enter** key.

where

<#>
is the number next to the NTP server or peer you want to remove.

Note: You can also delete an NTP server or peer using its hostname or IP address.

6 When prompted, confirm the delete command by typing

> y

and pressing the **Enter** key.

Note: If you are deleting the last NTP server or peer on the list and you have DCE installed on your system, you will be prompted to setup DCE's DTS. For this, you will need a DCE administrator password.

If you	Do
want to delete another NTP server or peer	step 5
do not want to delete another NTP server or peer	you have completed this procedure

Installing the ETA application server software on the CS 2000 Core Manager

Use the following procedure to install a software image from a digital audio tape (DAT). This procedure applies to an initial installation of the CS 2000 Core Manager server software only.

You must have root user access to the CS 2000 Core Manager to perform this procedure.

SWIM provides the user interface for local CS 2000 Core Manager software installation and maintenance. You can access SWIM from the CS 2000 Core Manager maintenance interface.

Installing the ETA application software on the CS 2000 Core Manager

At the local or remote VT100 console

1 Log into the CS 2000 Core Manager as root user.

2 Access the maintenance interface by typing

```
# sdmmtc
```

and pressing the Enter key.

3 Access the SWIM level by typing

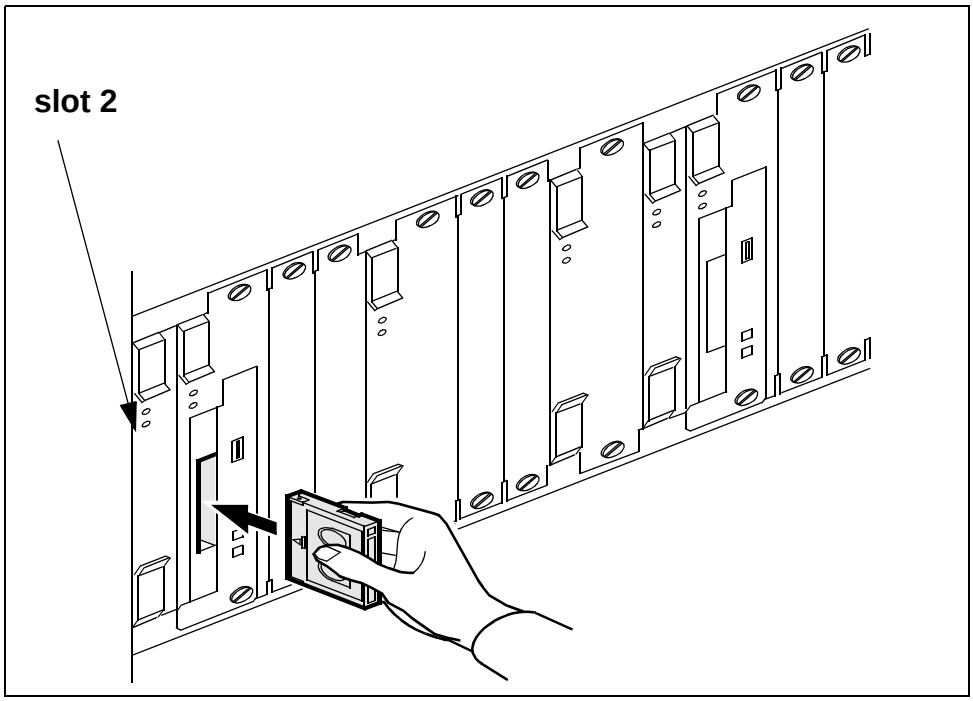
```
> swim
```

and pressing the Enter key.

4 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	insert the CS2E0006 6.x (1 of 1) tape in slot 2 as shown in the following figure, then go to step 5 ***Note:*** Wait until the tape drive stabilizes (yellow LED is off) before you proceed.
a directory	step 5

Inserting the tape into the domain 0 tape drive (slot 2)



5 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	list the filesets by typing apply 0 and pressing the Enter key
a directory	list the filesets by typing apply <directory path> and pressing the Enter key

6 Select the Enhanced Terminal Access fileset by typing

`> select <n>`

and press the Enter key.

where

<n>
is the number next to the Enhanced Terminal Access fileset

7 Apply the selected fileset by typing

`> apply`

and pressing the Enter key.

8 Confirm the Apply command by typing

> y

and pressing the Enter key.

9 You have completed this procedure. Refer to the procedure Configuring the ETA application server software in the Configuration section.

Configuring the ETA application server software

The following procedure provides instructions on how to configure the ETA application server software using SWIM.

Configuring the ETA application server software

At the CS 2000 Core Manager:

1 Log into the CS 2000 Core Manager as the root user.

2 Access the CS 2000 Core Manager maintenance interface by typing

```
# sdmmtc
```

and pressing the Enter key.

The system displays the top menu level of the Maintenance interface.

3 Access the SWIM level by typing

```
> swim
```

and pressing the Enter key.

4 Select the Config option in the SWIM menu by typing

```
> config
```

and pressing the Enter key.

The system displays the Config menu that lists the filesets available for configuration.

Example response:

```
# Fileset Description       Status
1 Enhanced Terminal Access  Unconfigured
2 Secure File Transfer      Secure and Normal
FTP Access
3 Exception Reporting       Configured
```

5 Execute the unconfigured interactive configuration scripts by typing

`> config <n>`

and pressing the Enter key.

where

<n>
is the number next to Enhanced Terminal Access

If DCE has been commissioned, the following prompt appears:

```
Please enter the DCE administrator id:
[sdm_admin]
```

If DCE is	Do
commissioned	press the Enter key - you have completed this procedure
not commissioned	step 6

6 The system prompts you to enter a DCE administrator name. To accept the default DCE account (sdm_admin), press the Enter key, or enter another DCE administrator account.

Example response:

```
Enter the password for the DCE administrator
sdm_admin:
```

Note: You can also type another DCE account with administrative privileges (cell_admin), as described at the beginning of this procedure.

7 Enter the DCE administrator password.

The system configures Enhanced Terminal Access and returns you to the Config menu level.

8 Exit the CS 2000 Core Manager maintenance interface by typing

`> quit all`

and pressing the Enter key.

9 Log out from the CS 2000 Core Manager by typing

`# exit`

and pressing the Enter key.

10 You have completed this procedure.

Starting the ETA server on the CS 2000 Core Manager

The ATA and ETA clients run on any remote workstation that is configured in the DCE cell. Along with the ETA server on the CS 2000 Core Manager, the ATA and ETA clients provide secure terminal access to the MAP/CI terminal and the CS 2000 Core Manager sessions. ATA and ETA clients cannot access the ETA server until the ETA server is installed.

Note: Before you begin this procedure, you must complete the installation procedures described in Installing the ETA application server software on the CS 2000 Core Manager.

Starting the ETA server on the CS 2000 Core Manager

At the local or remote VT100 console

1 Log into the CS 2000 Core Manager as the maint user.

2 Access the maintenance interface by typing

`maint: sdmmtc`

and pressing the Enter key.

3 Access the application (Appl) level by typing

`> appl`

and pressing the Enter key.

4 Locate the Enhanced Terminal Access application.

Example of the application menu level

```
# Application                  State
1 Table Access Service         InSv
2 Operation Measurements       ISTb
3 Log Delivery Service         InSv
4 Enhanced Terminal Access     OffL
```

5 If Enhanced Terminal Access is not InSv, as shown in step 4, then busy it by typing

`> bsy <n>`

and pressing the Enter key.

where

n
is the number next to the Enhanced Terminal Access application.

6 Start the ETA application by typing

`> rts <n>`

and pressing the Enter key.

where

n
is the number next to the ETA application

Note: The state of Enhanced Terminal Access shown at the application level must be InSv. The Enhanced Terminal Access application is dependent on the DCE service on the CS 2000 Core Manager. If DCE is not in service, then Enhanced Terminal Access will be off-line.

7 You have completed this procedure.

Configuring a CS 2000 Core Manager in a DCE cell

Application

CAUTION
Risk of inoperable DCE applications

IBM DCE Version 3.1 has changed and no longer provides the executables for the NTP and NULL time providers that are required to configure the time source for the DCE machines. IBM's DCE version 2.0 did contain these executables. IBM documentation explains this change in "Chapter 26. Inter-operation with Network Time Protocol" of the "IBM DCE Version 3.1 for AIX and Solaris: Administration Guide--Core Components," at http://www-4.ibm.com/software/network/dce/library/publications/dce31aix.html.

Proper operation of the DCE cell requires that these time-provider executables are running on the DCE server machines.

Nortel Networks provides NULL and NTP time providers that can be added to DCE servers. To add a provider, refer to “Adding a NULL or NTP time provider on a DCE server” in the Configuration section.

ATTENTION
You must be a trained Distributed Computing Environment (DCE) system administrator with experience in DCE administration procedures to perform this procedure.

ATTENTION
If you use the default sdm_admin or cell_admin account, the system sends the administrative user’s password in clear text across the network when you perform the following action: use telnet to access the CS 2000 Core Manager from another computer. Nortel Networks recommends that you execute the command from a computer attached to the CS 2000 Core Manager console port to maintain password security.

ATTENTION

If the default sdm_admin account you are using does not exist, you can continue this procedure using the cell_admin account. You can leave this procedure to create an sdm_admin account, and return to this procedure. To create an sdm_admin account, use the Distributed Computing Environment Creating SDM administration account procedure.

ATTENTION

Nortel Networks recommends that you configure all your CS 2000 Core Manager nodes within the same DCE cell. CS 2000 Core Manager client applications using DCE cannot communicate with CS 2000 Core Manager nodes configured in a different DCE cell.

When you install a CS 2000 Core Manager, you must configure the CS 2000 Core Manager in the DCE cell to function correctly. This procedure requires that the DCE cell is in operation.

Use either of the following DCE accounts to perform this procedure:

- sdm_admin account (default), or any other account that is in the sdm-admin DCE group
- cell_admin account (master administrator)

If you are using the sdm_admin account, or any other account that is part of the sdm-admin group (to be referred to and used as the sdm_admin account), you must know the password created during the procedure “Creating an administration account” in the Security section. If you are using the cell_admin account, you must know the password chosen by the administrator when the cell was first commissioned.

Both the sdm_admin and the cell_admin accounts have the required privileges to make changes to the DCE cell. However, the sdm_admin account functions as a sub administrator. The sdm_admin account has limited privileges for the purpose of performing CS 2000 Core Manager-related administration tasks within the DCE cell.

Refer to the DCE Creating SDM administration account procedure for details about the following items:

- how to create an sdm_admin account
- which activities the sdm_admin account can perform

If the default sdm_admin account you use to perform this procedure does not exist, you can use the cell_admin account instead. You also can exit this procedure and perform the following action:

- go to the DCE Creating an SDM administration account procedure to create the sdm_admin account
- continue this procedure after you have created the sdm_admin account

To configure the CS 2000 Core Manager in a DCE cell, you must perform the following action:

- log on as the root user to the CS 2000 Core Manager you want to configure
- provide an account name of a DCE administrator account (sdm_admin or an equivalent account name), its password, and all other parameters required when running the “sdmconfig” program.

Note 1: You cannot commission DCE until after you have commissioned the LAN. If you try to commission DCE before commissioning the LAN, the system displays an error message. For information about LAN commissioning, refer to the Commissioning SDM-LAN connectivity procedure in this document.

Note 2: If you are configuring NTP with DCE on the CS 2000 Core Manager, the Distributed Time System (DTS) component of DCE will not be configured. Therefore, it is recommended that you configure NTP before you configure DCE.

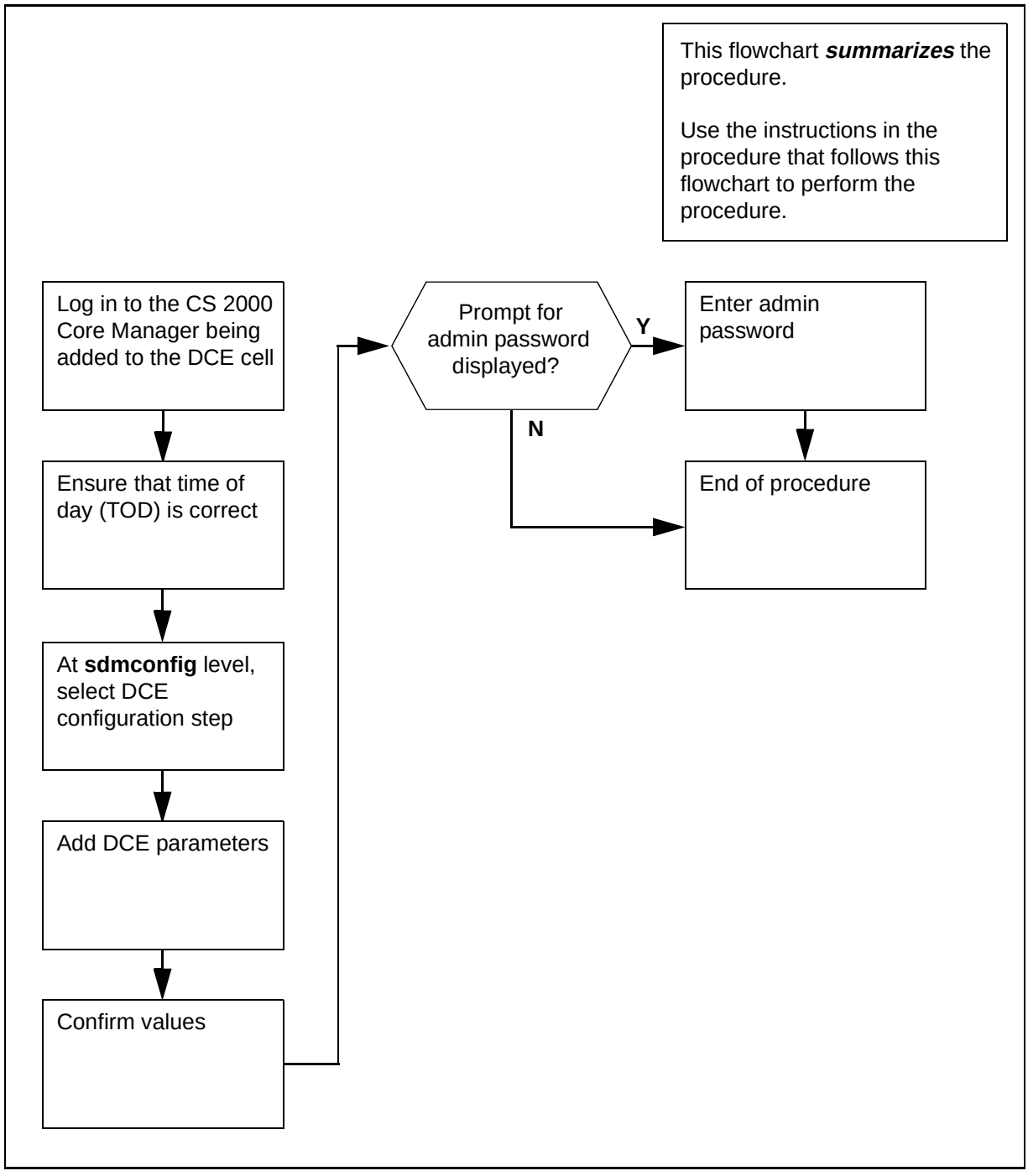
Interval

Perform this procedure when you want to configure or reconfigure the CS 2000 Core Manager in a DCE cell.

Action

The following flowchart provides an overview of the procedure. Use the instructions in the step-action procedure that follows the flowchart to perform the task.

Summary of Configuring a CS 2000 Core Manager in a DCE cell



Configuring a CS 2000 Core Manager in a DCE cell

At the local or remote VT100 console

1 Log in as the root user to the CS 2000 Core Manager you are adding to the DCE cell.

2 Display the time of day (TOD) of the CS 2000 Core Manager by typing

```
# date
```

and pressing the Enter key.

3 Compare the TOD displayed in step 2 with the TOD obtained from a reference time signal, adjusted for the CS 2000 Core Manager time zone. A reference time signal can be obtained either from a machine with an operating NTP server or from a public time service offered by radio or telephone in your area.

After you have compared the TODs, refer to the following table to determine your next step.

If the TOD	Do
is within 5 min. of the reference time	step 5
is *not* within 5 min. of the reference time	step 4

4 Set the TOD of the CS 2000 Core Manager to the time provided by the reference time signal by typing

```
> date <mm><dd><HH><MM>
```

and pressing the Enter key.

where:
<mm> = month
<dd> = day
<HH> = hour
<MM> = minute

5 Start the commissioning tool by typing

```
# sdmconfig
```

and pressing the Enter key.

The system displays the Commissioning Status Menu.

6 Select the DCE configuration step from the status menu by typing

`> step <n>`

and pressing the Enter key

where:

<n>
is the menu number next to the DCE configuration option.

Response:

The system displays the DCE configuration screen.

7 The following table describes the required information for DCE commissioning parameters. Ensure that you know the information in the table, and go to step 8.

Note: The order in which the fields are prompted can vary from the order shown in the table.

Field name	Mandatory	Description
DCE cell name	Yes	
DCE administrator principal name	Yes	
Password for DCE administrator	Yes	
Hostname of the master security server	Yes	
Hostname of the master CDS server	Yes	
IP address of the master security server	Yes	
IP address of the master CDS server	No	Required only if hostname of security and CDS servers are different

Field name	Mandatory	Description
LAN profile name for the CS 2000 Core Manager	Yes	The name of the DCE LAN profile that supports the part of the cell where the CS 2000 Core Manager exists. The LAN profile defines the local DTS servers that provide time synchronization for DCE nodes. For a small DCE cell, you can select the default LAN profile (lan-profile). All nodes in the cell use the same set of local DTS servers.
Alarm masters failure	Yes	
Alarm replica failures	Yes	
Minimum number of DTS servers	No	Required only if NTP is not configured

8 Begin adding DCE by typing

> add

and pressing the Enter key.

System response:

The system displays a prompt for each DCE parameter.

If you want to	Do
add a parameter	type the required info for the parameter, and press the Enter key. When you have entered the information of all required parameters, go to step 9.
acknowledge any information or warning messages	press the Enter key, and continue with the procedure
exit the procedure at any time	type **abort**, and press the Enter key

9 When you have entered the information for all required parameters, the system displays a message that prompts you to confirm the values.

Example system response:

```
Currently, there are no configured DCE components.
Attempting to add components: rpc sec_cl cds_cl dts_cl

          Cell name:                 sdm.ver.net
          Administrator principal:   cell_admin
          Security server hostname:  wcary2pj
          Security server IP:        47.135.213.68
          CDS Server hostname:       wcary2pj
          LAN profile:               lan-profile
          Alarm masters failure:     Y
          Alarm replica failures:    N
          Min DTS servers:           3

Proceed with these values?
Enter Y to confirm, N to reject, or E to edit:

>
```

If you want to	Do
confirm (proceed with) the values	go to step 10
reject the values	type **n**, and press the Enter key. To repeat the procedure, return step 7. To exit the procedure, type **abort** or **quit all**.
edit (change) a value or values	type **e**, and press the Enter key. Change the values, and repeat this step (step 9).

10 Confirm the values by typing

> y

and pressing the Enter key.

If the system	Do
displays a prompt for administrator password	enter the password, press the Enter key, and go to step 11
does not display a prompt for an administrator password	step 11

11 Refer to the following table to determine your next step.

If the system	Do
detects an abnormal condition that requires extra parameters to be entered, and displays a warning message	press the Enter key, enter the information for the extra parameters (pressing the Enter key after each entry), and return to step 9
displays other warning messages	press the Enter key
displays the message "`Add - Command complete.`"	wait for the DCE status to change *from* "**-**" *to* "**.**", and go to step 12

12 You have completed this procedure.

Adding a NULL or an NTP time provider on a DCE server

Application

Use this procedure to commission a NULL or NTP time provider for your CS 2000 Core Manager.

ATTENTION
You must be a trained Distributed Computing Environment (DCE) system administrator who knows DCE administration procedures to perform this procedure.

ATTENTION
The NULL and NTP provider tools should be added only to a system that is operating a DTS server. The tools are not required for systems that operate a DTS client. Before you can add the tools, the following fileset be installed on the CS 2000 Core Manager: “DCE DTS Time providers for global server” (SDM_DTS_PROVIDERS.dts-19.X.X.X.tape).

ATTENTION
This procedure is valid only for machines that are running DCE 3.1 or 3.2 that are configured as DTS servers (*not* providers).

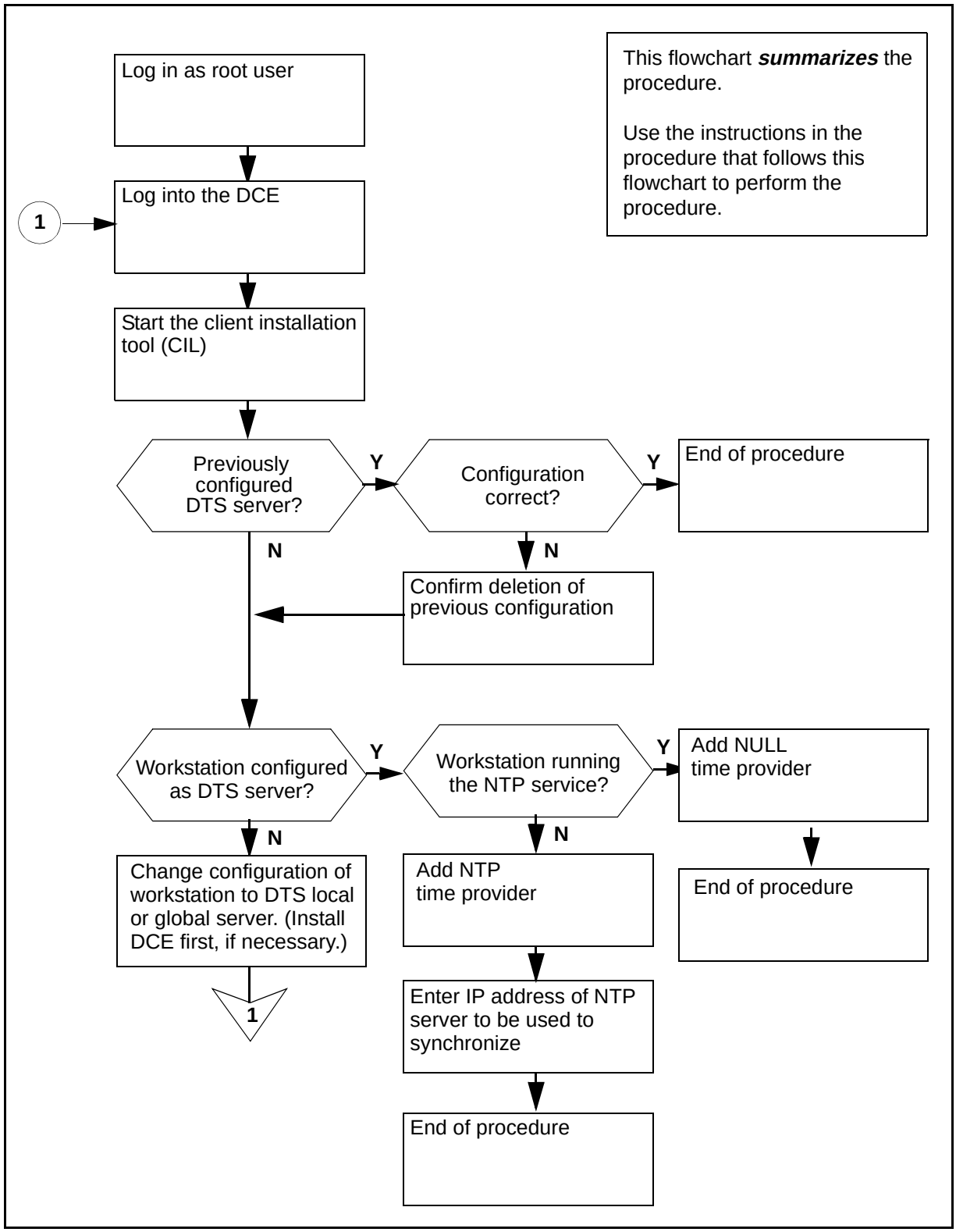
Prerequisite

Before running this procedure, you must install the client installer and launcher (CIL). Refer to the procedure “Installing CIL on a client workstation.”

Action

The following flowchart provides an overview of the procedure. Use the instructions in the step-action procedure that follows the flowchart to perform the task.

Adding a NULL or an NTP time provider on a DCE server



Adding a NULL or an NTP provider on a DCE server

At the workstation where the DTS server is operating

1 Log into the workstation as root user.

2 Log into the DCE by typing

```
# dce_login cell_admin
```

and pressing the Enter key.

3 Enter the cell_admin password and press the Enter key.

4 Start the client installation tool (CIL) by typing

```
> /sdm/cil
```

and pressing the Enter key.

Response:

The system prompts you to enter the IP address of the CS 2000 Core Manager DTS Provider fileset

5 At the prompt, enter

```
> <ip_address>
```

and press the Enter key.

where:
<ip_address> is the address of the CS 2000 Core Manager where the DTS Provider fileset is installed

Response:

The system displays the list of client filesets on the CS 2000 Core Manager.

6 Select the DTS Provider fileset by typing

```
> select <n>
```

and pressing the Enter key.

where:
<n> is the number of the DTS Provider fileset to be added

7 Apply the selected fileset by typing

> apply

and pressing the Enter key.

Response:

The system displays the IBM License Service agreement and limitations and the following prompt.

```
Do you agree with the above limitations, and do you
have a valid license to run IBM Distributed Computing
Environment for Solaris Base Services on this machine?
[Y/N]
```

8 Confirm the acceptance of the IBM License Service agreement by typing

> y

and pressing the Enter key.

Response:

The system determines if a DTS server was previously configured on the workstation, and displays the appropriate message.

If the system displays a message that starts with...	Do
"A DTS time provider was previously configured..."	step 9
Any other message	step 11

9 The system displays the details of the current configuration for the DTS time provider, including the type or provider (NULL or NTP) and any relevant parameters, and prompts you to erase the previous DTS (DCE) server configuration. After you have examined the details of the current configuration, refer to the following table to determine your next step.

If the configuration is	Do
correct	type **n**, press the Enter key, and go to step 10
incorrect, or if you are unsure	type **y**, and go to step 11

10 The system displays the following response:

```
No modifications made to DTS time provider
configuration.

SDM Client software installation done.
```

Go to step 18.

11 The system determines whether the workstation is configured as a DTS global or local server, and displays the appropriate message. Refer to the following table to determine your next step.

If the system displays a message that starts with...	Do
"This machine is running a DTS server..."	step 12
"This machine is running a DTS client..."	type **n**, and press the Enter key. Using DCE configuration commands, change the DTS configuration of this machine to a DTS local or global server, and return to step 2.
"This machine isn't running any DTS software at the moment..."	type **n**, and press the Enter key. Install and configure DCE on the workstation. Configure DTS to be a global or local server, and return to step 2.

12 The system determines whether NTP is configured and operational on the workstation, and displays the appropriate message. Refer to the following table to determine your next step.

If the system displays a message that starts with...	Do
"The NTP daemon (xntpd) is currently running on this machine..."	step 13
"Select the type of DTS time provide you want to configure..."	step 15

13 The system displays the following prompt:

```
The NTP daemon (xntpd) is currently running on this machine.
It appears that the daemon is working properly.
The command 'ntpq -p' shows at least one server that has a
good stratum and an offset of less than 10 seconds.
The NTP DTS time provider (dts_ntp_provider) cannot co-exist
with an NTP daemon, but the NULL DTS time provider
(dts_null_provider) can, and is recommended.

Do you want to proceed with the installation of NULL DTS
time provider [Y/N]?
```

14 To confirm the installation of the NULL time provider, enter

> y

and press the Enter key.

Response:

```
Installation of NULL DTS time provider completed
successfully.

SDM Client software installation done.
```

Go to step 18.

15 The system displays the following prompt:

```
Select the type of DTS time provider that you want
to configure:
1 - NTP (recommended), provides time synchronization for DCE
by contacting a remote NTP server. You will need to provide
by the hostname or address of the NTP server later.
2 - NULL, provides time synchronization for DCE by
using the local clock of this machine as the reference.
Should only be used if the local clock is synchronized
to a reference signal via some mechanism. Otherwise, never
setup more than one NULL time provider in a cell, nor put
machines that are synchronized via NTP in that cell.
```

16 To select an NTP time provider, enter

> 1

and press the Enter key.

Response:

```
Enter the hostname or IP address of the NTP server that
will be used to synchronize, or “abort” to exit:
```

17 Enter

> <ip_address>

and press the Enter key.

where:
<ip_address> is the address of the NTP server with which you want to synchronize

Response:

```
Installation of NTP DTS time provider completed
successfully.

SDM Client software installation done.
```

18 You have completed this procedure.

Configuring or reconfiguring a node within a DCE cell

Application

CAUTION
Risk of inoperable DCE applications

IBM DCE Version 3.1 has changed and no longer provides the executables for the NTP and NULL time providers that are required to configure the time source for the DCE machines. IBM's DCE version 2.0 did contain these executables. IBM documentation explains this change in "Chapter 26. Interoperation with Network Time Protocol" of the "IBM DCE Version 3.1 for AIX and Solaris: Administration Guide--Core Components," at http://www-4.ibm.com/software/network/dce/library/publications/dce31aix.html.

Proper operation of the DCE cell requires that these time-provider executables are running on the DCE server machines. IBM does provide "sample" .c files that can be compiled into executables. These executables must then be added to the system and configured in a way that ensures they are always running. The details of this process are not fully explained in the IBM documentation.

Be aware that CS 2000 Core Manager applications requiring DCE will not successfully configure into a 3.1 cell without the dts_ntp_provider or dts_null_provider binaries present. In their absence, DCE applications will be inoperable. You may contract with Nortel Global Professional services to install and configure the DCE cell. Their installation includes the proper configuration for the required time-provider executables.

ATTENTION
You must be a trained Distributed Computing Environment (DCE) system administrator to perform this procedure.

ATTENTION
This procedure does not apply if you are configuring a DCE master server. To configure a DCE master server, refer to your DCE vendor's documentation.

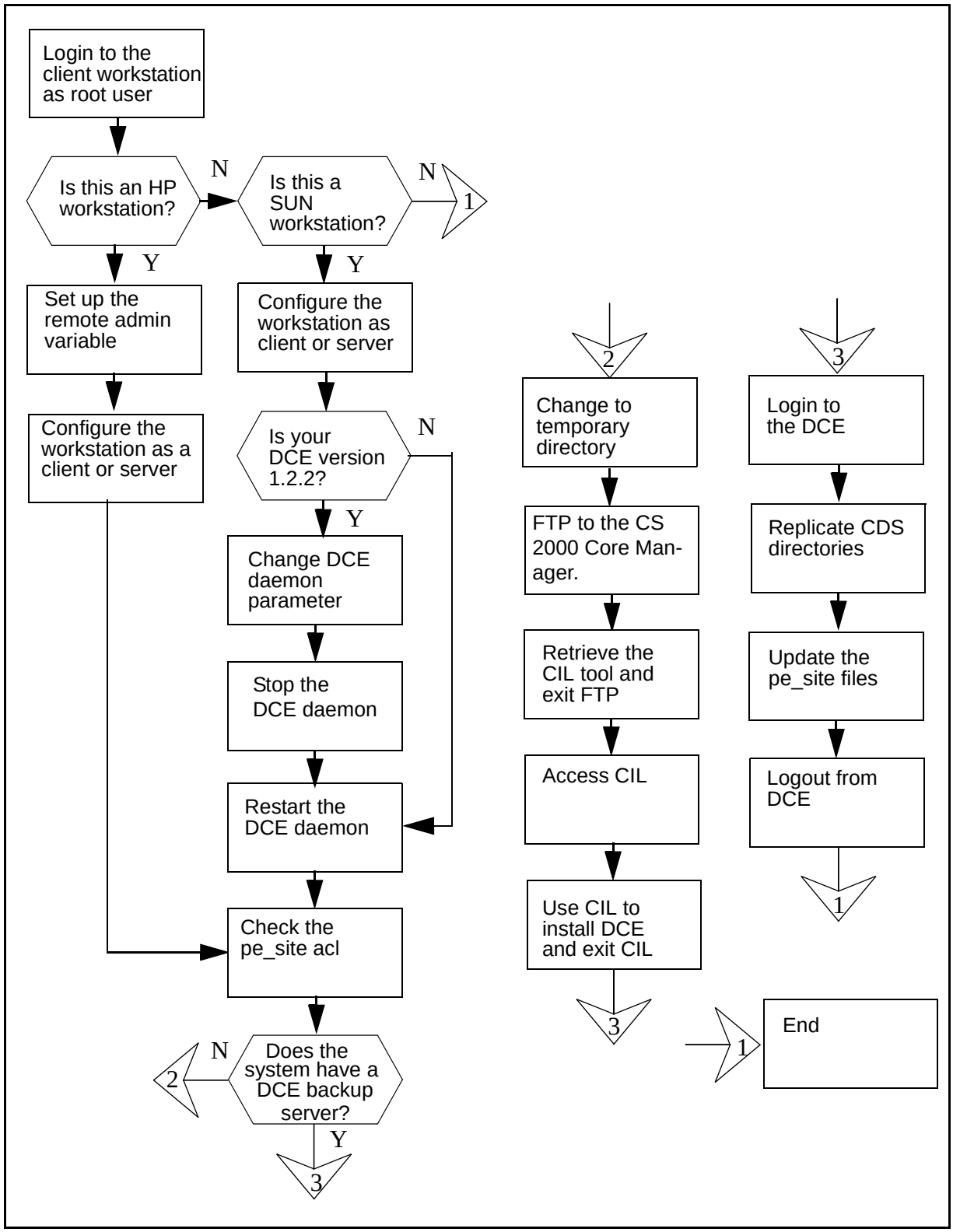
Use this procedure to configure a new node or to reconfigure an existing node within a DCE cell. This procedure updates the pe_site file for each client or server within a DCE cell. The pe_site file contains the IP addresses and other binding information for both master server and backup server.

This procedure also replicates the CDS directories that a CS 2000 Core Manager application needs from the master server to the backup server.

Action

The flowchart that follows provides a summary of this procedure. Use the instructions in the step action procedure that follows the flowchart to perform the routine maintenance procedure.

Summary of configuring or reconfiguring a node within a DCE cell



Configuring or reconfiguring a node within a DCE cell

At the client workstation

1 Login to the client workstation as a root user.

2 Determine the operating system on the workstation by typing

> uname

and pressing the Enter key.

Example response:

HP-UX

3 Use the following table to determine your next step.

If the O/S you are running is	Do
HP-UX	step 4
SunOS	step 9
Other	step 43

4 Determine your login shell by typing

> finger root

and pressing the Enter key.

Example response:

```
Login name: root          In real life:  000-Admin (0000)
Directory: /users/root Shell: /bin/csh
On since Jul 29 09:20:37 on pts/0 from bmerh7b
45 minutes Idle Time
No unread mail
No Plan.
```

5 Use the following table to determine your next step.

If the shell you are running is	Do
shell = csh	step 6
shell = ksh or sh	step 7

6 Set up the remote administration capability by typing

> setenv REMOTE_ADMIN y

and pressing the Enter key.

Go to step 8.

7 Set up the remote administration capability by typing

```
> export REMOTE_ADMIN=y
```

and pressing the Enter key.

8 Follow your vendor's instruction to configure the HP workstation as a DCE client or server within the DCE cell.

Go to step 15.

9 Follow your vendor's instructions to configure the SUN workstation as a DCE client or server within the DCE cell.

10 Use the following table to determine your next step.

If the DCE version you are using is	Do
DCE 1.1	step 11
DCE 1.2.2	step 12

11 Modify the DCE daemon startup option. Use a text editor to edit the file setup_state located in the /opt/dcelocal/etc/ directory. Change the line startup_dced=" to startup_dced='-b -x' and save the file.

Go to step 13.

12 Modify the DCE daemon startup option. Use a text editor to edit the file cfgarg.dat located in the /opt/dcelocal/etc/ directory. Add **-r** to the end of the line starting with "`dced:`": for example, `dced: -b -r -t1440`. Save the file.

13 Stop the DCE daemon by typing

`> /etc/init.d/dce stop`

and pressing the Enter key.

DCE 1.2.2 Example response:

```
Gathering current configuration information...
Stop of DCE host, wmers06t, will now begin.
Stopping the DTS client...
The DTS client was stopped successfully.
Stopping the Directory client...
The Directory client was stopped successfully.
Stopping the Security client...
The Security client was stopped successfully.
Stopping RPC...
RPC was stopped successfully.
Gathering component state information...

           Component Summary for Host: wmers06t
     Component      Configuration State   Running State
Security client         Configured         Not Running
RPC                     Configured         Not Running
Directory client        Configured         Not Running
DTS client              Configured         Not Running

The component summary is complete.
Stop of DCE Host, wmers06t, was successful.
Stop completed successfully.
```

14 Start the DCE daemon by typing

> /etc/init.d/dce start

and pressing the Enter key.

DCE 1.2.2 Example response:

```
Gathering current configuration information...
Start of DCE host, wmers06t, will now begin.
Starting RPC...
RPC was started successfully.
Starting the Security client...
The Security client was started successfully.
Starting the Directory client...
Contacted the directory server.
Waiting up to 60 minutes for DCED registration to be
functional.
The Directory client was started successfully.
Starting the DTS client...
The DTS client was started successfully.

           Component Summary for Host: wmers06t
     Component      Configuration State   Running State
Security client         Configured           Running
RPC                     Configured           Running
Directory client        Configured           Running
DTS client              Configured           Running

The component summary is complete.
Start of DCE Host, wmers06t, was successful.
Start completed successfully.
```

15 Start the DCE control program (dcecp) by typing

> dcecp

and pressing the Enter key.

16 Check the pe_site acl at the prompt by typing

dcecp> acl show /.:/$_h/config/hostdata/pe_site

and pressing the Enter key.

Example response:

```
{unauthenticated ---r-}
{user hosts/bmerye6d/self cdprw}
{group subsys/dce/dced-admin -dprw}
{any_other ---r-}
```

17 Use the following table to determine your next step.

If the line “group sub-sys/dce/dced-admin... ”	Do
did not show on the display	step 18
is shown on the display	step 19

18 Add dced-admin acl to pe_site by typing

```
dcecp> acl modify / .
:/$_h/config/hostdata/pe_site -add {group
subsys/dce/dced-adm}
```

and pressing the Enter key.

19 Check the number of DCE backup servers by typing

```
dcecp> registry catalog
```

and pressing the Enter key.

Example response:

```
/.../sdmver.bnr.ca/subsys/dce/sec/bmerye6d
/.../sdmver.bnr.ca/subsys/dce/sec/bmerha86
```

Note: Each line represents one DCE server that is currently configured to your system.

20 Use the following table to determine your next step.

If the number of DCE backup servers on the system is	Do
greater than 1	step 21
1	step 43

21 Determine if the DCE tool box exists by typing

```
> ls -l /sdm/bin/replicate_cds_dirs
```

and pressing the Enter key.

22 Use the following table to determine your next step.

If the DCE tool box is	Do
not present	step 23
present	step 34

23 Change to the temporary directory by typing

`# cd /tmp`

and pressing the Enter key.

Note: You can change to any directory as long as it is a directory where you can download new files.

24 Open a connection to a CS 2000 Core Manager which has at least SDMN0011 software installed. Open a file transfer protocol (FTP) connection by typing

`# ftp <ip-address>`

and pressing the Enter key.

where

<ip-address>
is the IP address of the CS 2000 Core Manager.

25 Log in to the CS 2000 Core Manager as an anonymous user by typing

`Name: anonymous`

and pressing the Enter key.

26 The system prompts you to enter a password. Press the Enter key to continue the procedure.

27 Retrieve the CIL program by typing

`ftp> get cil`

and pressing the Enter key.

28 Quit the connection to the CS 2000 Core Manager by typing,

`ftp> quit`

and pressing the Enter key.

29 Make the CIL program executable by typing

`# chmod +x cil`

and pressing the Enter key.

30 Start the CIL tool by typing,

`# ./cil`

and pressing the Enter key.

Response:

```
            SDM CLIENT SOFTWARE INSTALLATION

Enter the IP address or hostname of the SDM that
you want to download the client software from.

SDM's Address:
```

31 At the CIL menu, connect to the CS 2000 Core Manager by typing

`cil> <sdm_name>`

and pressing the Enter key.

where

<sdm_name>
is the IP address or the host name of the CS 2000 Core Manager.

32 Select the DCE tools fileset to install on the client workstation by typing

`cil> select <n>`

and pressing the Enter key.

where

<n>
is the entry number of the DCE tools fileset on the list.

Note: To deselect any fileset, select the fileset a second time. To deselect all filesets, enter select none.

33 Install the DCE tools fileset by typing

`cil> apply`

and pressing the Enter key.

The CIL tool automatically closes after it installs the DCE tools fileset

34 Log in to the DCE using the userID of the administrator by typing

> dce_login *<administrator_name>*

and pressing the Enter key.

where

<administrator_name>
is the user name of the DCE administrator.

35 Enter the administrator password.

36 Access the /sdm/bin directory by typing

> cd /sdm/bin

and pressing the Enter key.

37 Create the cds_cache_wan entry on the hostdata profile by typing

> ./create_cds_cache_wan_hostdata

and pressing the Enter key.

Response:

```
cds_cache_wan host data entry created.
Returning dced to normal mode.
```

38 Update the pe_site by typing

> ./update_pe_site

and pressing the Enter key.

Response:

```
Gathering information. Data retrieved from DCE
security registry database, proceeding...
```
Security registry pe_site data update is complete.

39 Replicate CDS directories by typing

> ./replicate_cds_dirs

and pressing the Enter key.

Response:

```
The directories from master CDS
server/clearinghouse
“/.../sdm/ver.bnr.ca/bmerye6d will be
replicated to the following replicas:
“/.../sdmver.bnr.ca/bmerya86_ch”

Do you want to continue? [y]
```

40 Confirm the command by typing

```
> y
```

and pressing the Enter key.

Response:

```
Directory /.:/hosts has been replicated in
replica CDS bmerha86_ch
Directory /.:/subsys has been replicated in
replica CDS bmerha86_ch
Directory /.:/subsys/dce has been replicated in
replica CDS bmerha86_ch
Directory /.:/subsys/NT has been replicated in
replica CDS bmerha86_ch
CDS replica directory completed
```

41 Logout of DCE by typing

```
> exit
```

and pressing the Enter key.

42 Logout of the client workstation by typing

```
# exit
```

and pressing the Enter key.

43 You have completed this procedure.

Installing the CS 2000 Core Manager-to-MDM connectivity software

Application

This procedure provides instructions on how to install the CS 2000 Core Manager-to-MDM connectivity software application fileset using the Software Inventory Manager (SWIM). The CS 2000 Core Manager-to-MDM connectivity software provides Ethernet connectivity between the CS 2000 Core Manager and the Preside MDM.

ATTENTION
Prior to installing the CS 2000 Core Manager-to-MDM connectivity software, ensure the CS 2000 Core Manager platform filesets are installed, and the CS 2000 Core Manager is up and running.

ATTENTION
Prior to installing the CS 2000 Core Manager-to-MDM connectivity software, ensure both Preside MDMs are configured within the common LAN and are available.

ATTENTION
You must have the root passwords for access to the CS 2000 Core Manager, the two MDMs, the Passport 15000-MSS, and the two Passport 6480s.

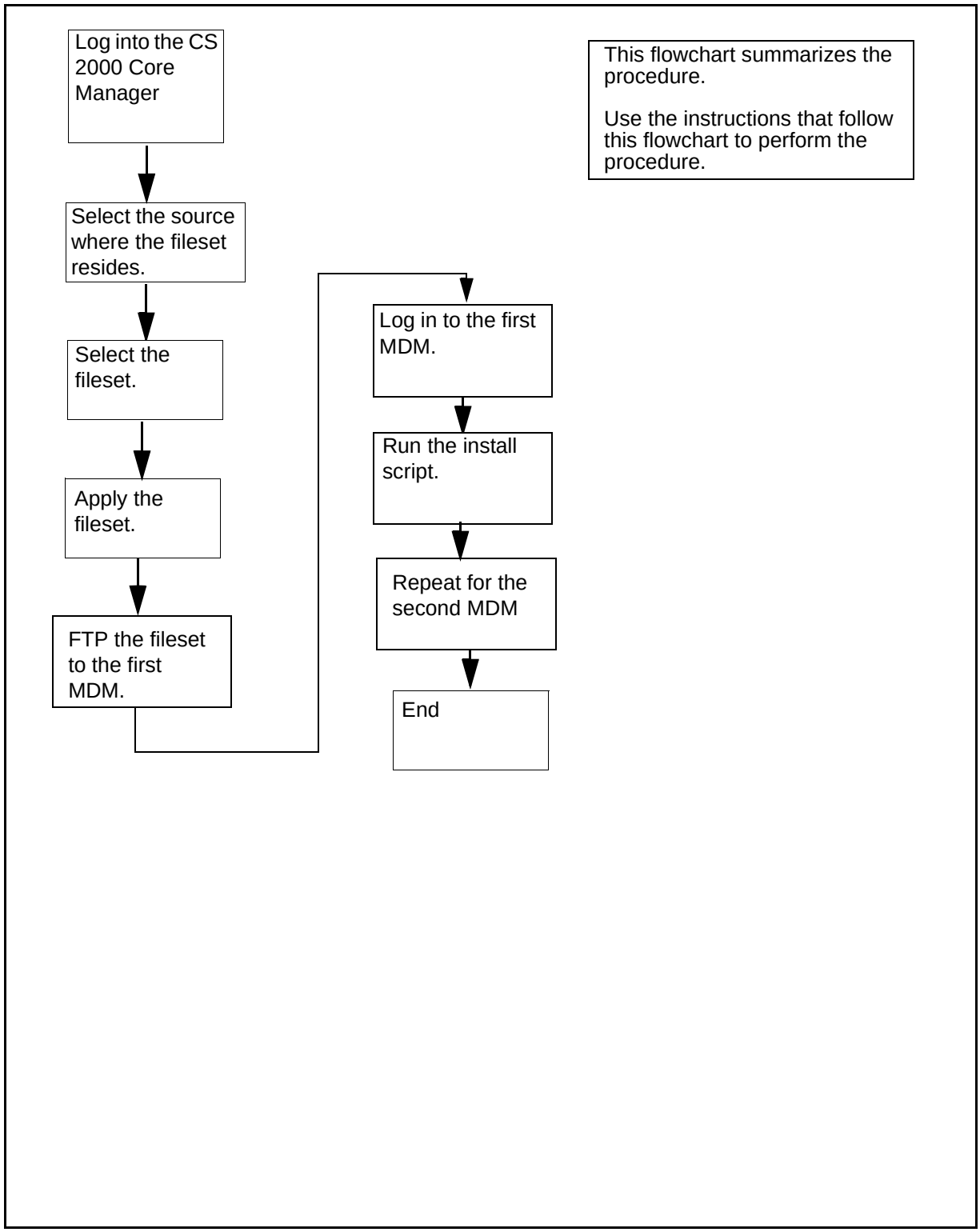
Interval

Perform this procedure when you are installing the CS 2000 Core Manager-to-MDM connectivity software for the first time, or for subsequent upgrades.

Action

The flowchart that follows provides a summary of this procedure. Use the instructions in the step action procedure that follows the flowchart to perform the installation procedure.

Summary of installing the CS 2000 Core Manager-to-MDM connectivity software



Installing the CS 2000 Core Manager-to-MDM connectivity software

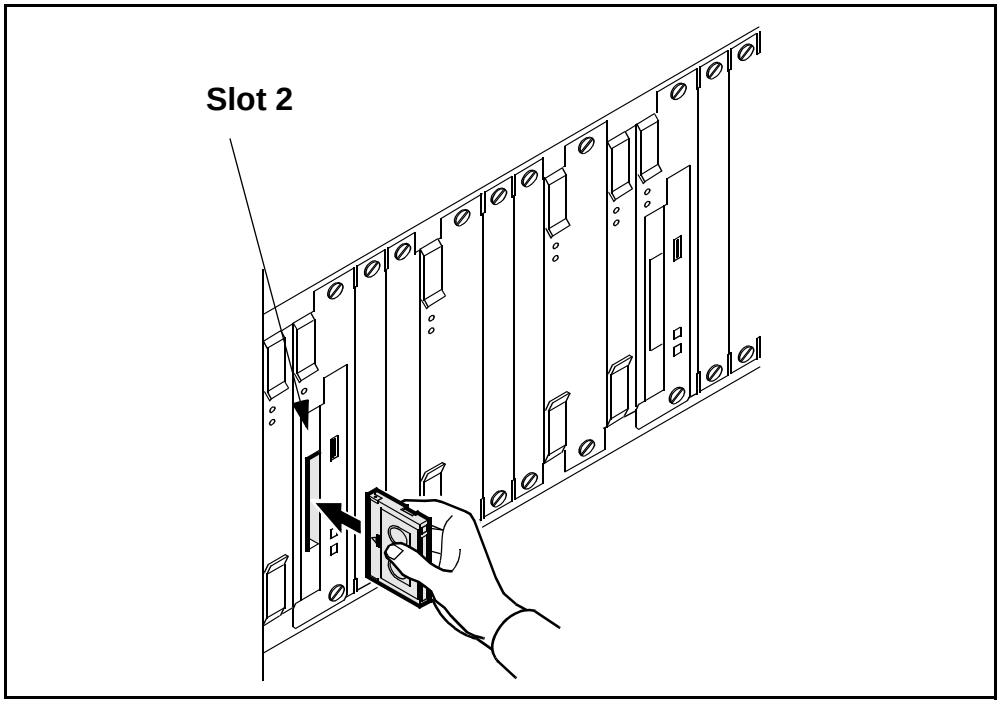
At the local or remote VT100 console:

1 Log into the CS 2000 Core Manager as root user.

2 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	insert the CS2E0006 6.x (1 of 1) tape in slot 2 as shown in the following figure, then go to step 3
a directory	step 3

Inserting the tape into the domain 0 tape drive (slot 2)



3 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	list the filesets by typing apply 0 and pressing the Enter key
a directory	list the filesets by typing apply <directory path> and pressing the Enter key

4 Select the CS 2000 Core Manager-to-MDM connectivity fileset by typing

`> select <n>`

and press the Enter key.

where

<n>
is the number next to the CS 2000 Core Manager-to-MDM connectivity fileset

5 Apply the selected (highlighted) fileset by typing

`> apply`

and pressing the Enter key.

6 Confirm the Apply command by typing

`> y`

and pressing the Enter key.

7 Verify that there is a compressed tar file named “passport_access.tar.Z” at the /sdm/mdm directory.

8 Open an FTP session to Preside MDM #1.

9 Change the local directory to /sdm/mdm and the remote directory to /tmp.

10 Set the transfer mode to binary and send the file to the remote location.

11 Log in to the Preside MDM as root.

12 Verify that the intended fileset is in the /tmp directory.

13 Uncompress the file and untar the contents into the /tmp/install directory.

14 Verify that the /tmp/install directory has an install script and a tar file named “mdm_access.tar.”

15 Go to the /tmp/install directory and run the install script "./install."

16 At the system prompt, type

> 1

and press the Enter key.

Note: When you accept this option, the script installs the fileset at the /opt/preauth location. If there is a prior installation or the directory is in use, the script removes the old content and installs the fileset.

17 Repeat steps 8 through 16 for Preside MDM #2.

18 You have completed this procedure.

Configuring CS 2000 Core Manager-to-MDM connectivity

Application

ATTENTION
You must have a local account with the same user name, user password, and home directory on each of the Preside MDMs. Locate the login information in the /etc/passwd file on both of the Preside MDMs. This document uses {$HOME} to represent the path of your home directory on the Preside MDM.

ATTENTION
The NMS software must be installed on both of the Preside MDMs. You must have a valid NMS passport account and password and have at least one valid group that is associated with the account.

ATTENTION
Your {$HOME} directory must contain a MagellanNMS directory. Please refer to Passport NTPs for additional details.

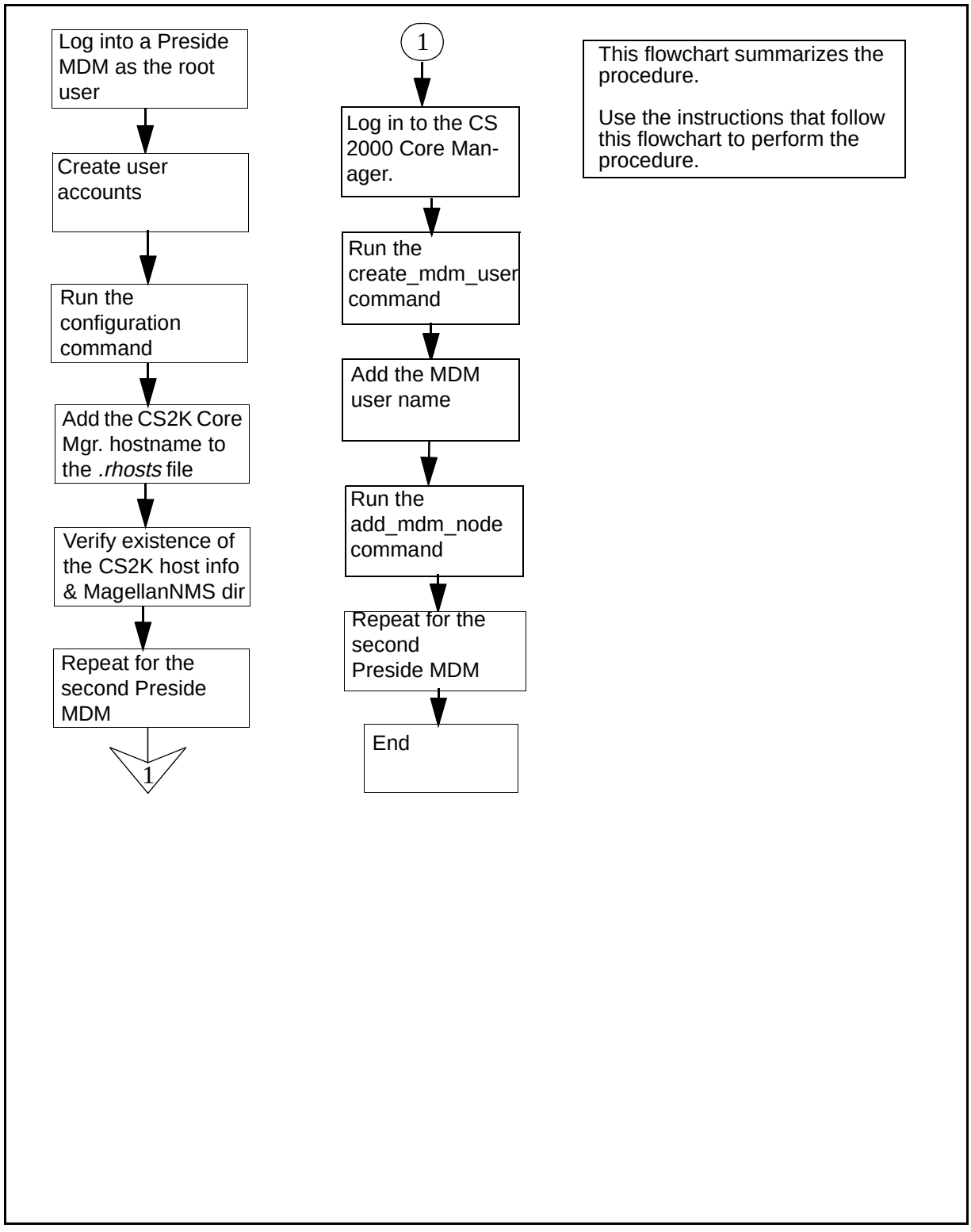
Interval

Perform this procedure when you are configuring CS 2000 Core Manager-to-MDM connectivity for the first time, or for subsequent upgrades.

Action

The following flowchart provides an overview of the procedure. Use the instructions in the step-action procedure that follows the flowchart to perform the task.

Summary of configuring CS 2000 Core Manager-to-MDM connectivity



Configuring CS 2000 Core Manager-to-MDM connectivity

At the local or remote VT100 console

1 Log in as the root user to a Preside MDM.

2 Create a user account, which comprises a user name, password, and home directory, for each user who needs access to the Preside MDMs.

a Begin by typing the following commands:

```
> csh
> setenv DISPLAY <ip>:0.0
```

where

<ip>
is the IP address of the host you want the Preside MDM GUI to be displayed on.

```
> admintool
```

b Select Edit->Add

c Enter a distinct User name.

d Select a preferred Login shell.

e Select “Normal Password...” for the Password option, and enter a new password. Enter the new password a second time for verification.

f Select “Create Home Dir” and enter the full path of the home directory for the user account in the “Path” box.

g Select “OK”

If you	Do
have another user account to create	substep b
do not have another user account to create	substep h

h Select File->Exit.

3 Access the .rhosts file in your $HOME directory. If the file does not exist, create it.

4 Add the following line into the .rhosts file:

```
<CS2K core manager hostname> +
```

Example
wcary2qp +

5 Check the /.rhosts file in your home directory to verify the existence (based on the above example) of the line wcary2qp +. Check the /etc/hosts file to verify the existence (based on the above example) of the line 47.135.213.55 wcary2qp.

6 Verify that your home directory contains a MagellanNMS directory. If not, create one by typing

```
> mkdir MagellanNMS
```

and pressing the Enter key.

7 At the shell prompt, run the configuration command

```
/opt/preauth/admin/bin/config_preauth
```

and press the Enter key. Follow the instructions provided.

Note 1: Every time this command is run, make sure to enter the user name after the command prompt so that any existing setting is sourced into the memory.

Note 2: During the initial configuration, a warning message displays for each missing configuration file as a reminder that the file is required.

8 Repeat steps 1 through 6 for the second Preside MDM.

9 Log in to the CS 2000 Core Manager as the root user.

10 At the command prompt, run the command

```
./create_mdm_user
```

and press the Enter key.

11 Enter the MDM user name for the Preside MDMs that you just configured.

12 Repeat steps 9 through 11 to add more users' names. These names must be created first in step 1.

13 At the command prompt, run the command

```
./add_mdm_node
```

and press the Enter key.

14 Follow the interactive prompts, and enter the IP address and host name of the first (or second) MDM.

15 Repeat steps 13 through 14 to configure the second Preside MDM (up to 4 MDMs) into the database.

16 You have completed this procedure.

Installing the SFT server software

The following procedure provides instructions on how to install the Secure File Transfer (SFT) server software using SWIM.

Application

There are two filesets for the SFT application: the server, and the client filesets.

Use the following procedure to install the SFT server fileset from either a digital audio tape (DAT) or from a CS 2000 Core Manager hard disk drive.

Note: The following procedure applies to an initial installation of the SFT fileset only. You must have root user access to the CS 2000 Core Manager to perform this procedure.

Action

The SWIM package provides the user interface (UI) for local CS 2000 Core Manager software installation and maintenance. You can access SWIM from the CS 2000 Core Manager maintenance interface (sdmmtc).

ATTENTION
Before you can perform an installation using SWIM, you must have the CS 2000 Core Manager base software installed on the CS 2000 Core Manager.

ATTENTION
If you use the DCE-based SFT application, make sure that the CS 2000 Core Manager is configured in the DCE cell before performing this procedure. Refer to the procedure Configuring a CS 2000 Core Manager in a DCE cell in the Configuration section.

To add the SFT server, you must have a DCE account with administrative privileges.

ATTENTION

Risk of revealing the administrative user password.
If you use telnet to access the CS 2000 Core Manager remotely, and use the default sdm_admin or cell_admin “master administrator” account to add the SFT server, the system sends the password of the administrative user in clear text across the network. To prevent this security risk, Nortel Networks recommends that you execute the command from a terminal attached to the CS 2000 Core Manager console port.

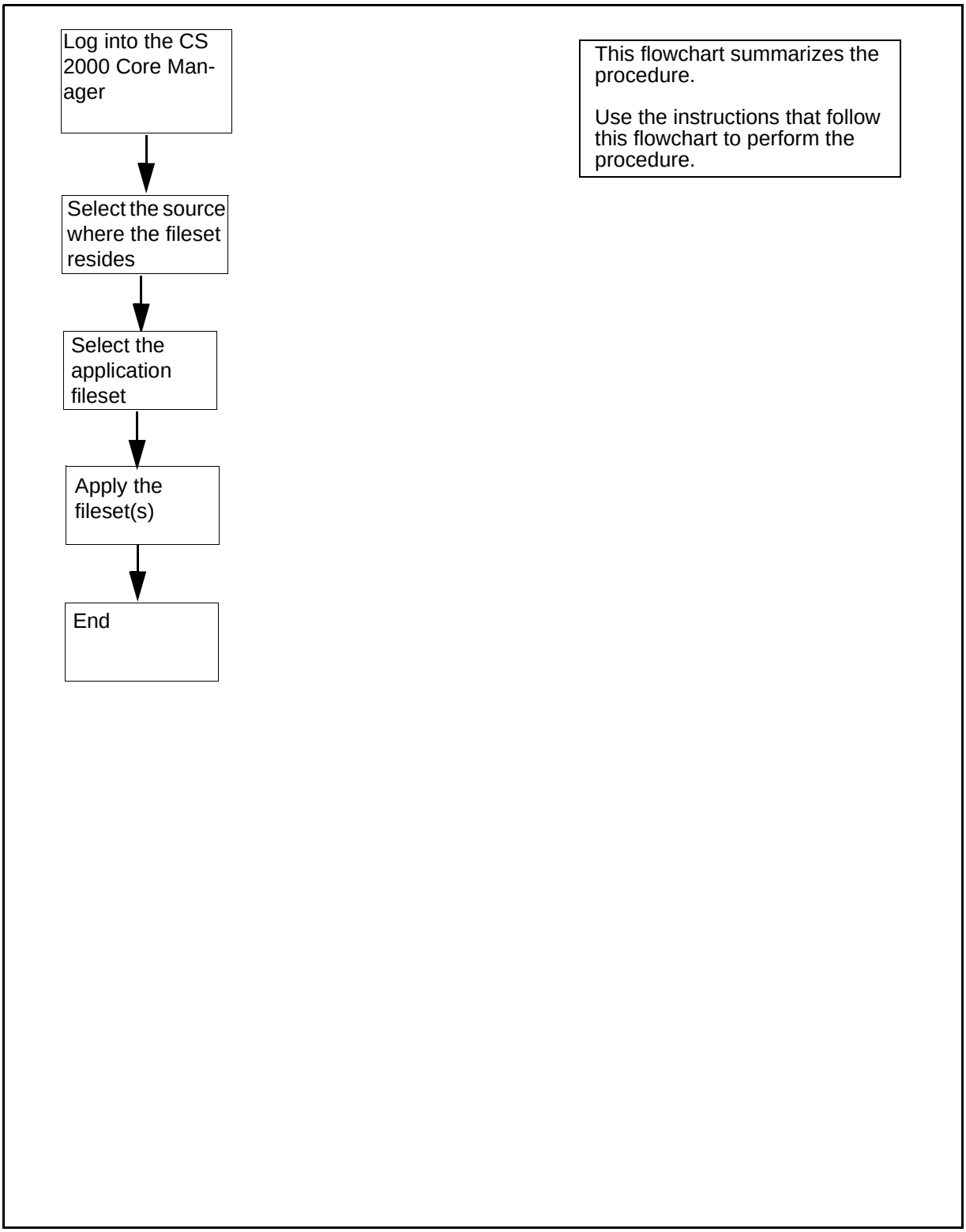
The DCE administrator account can create a sub-administrator account with privileges to add only CS 2000 Core Manager servers. You can use the sub-administrator account to log in to DCE to change the SFT server to DCE mode.

The sub-administrator account requires the following privileges:

- quota to create principals
- add permission for the CS 2000 Core Manager server organization
- add permission for the sdm-servers-using-cds group
- insert and modify access control list (ACL) permissions on the /.:/subsys/NT/SDM CDS directory

The following flowchart summarizes the installation procedure for the SFT server software. To complete the procedure for installing the SFT server software, perform the step-action procedures that follow the flowchart.

Summary of Installing the SFT server software



Installing the SFT server software

At the local or remote VT100 console

1 Log into the CS 2000 Core Manager as root user.

2 Access the maintenance interface by typing

```
# sdmmtc
```

and pressing the Enter key.

3 Access the SWIM level by typing

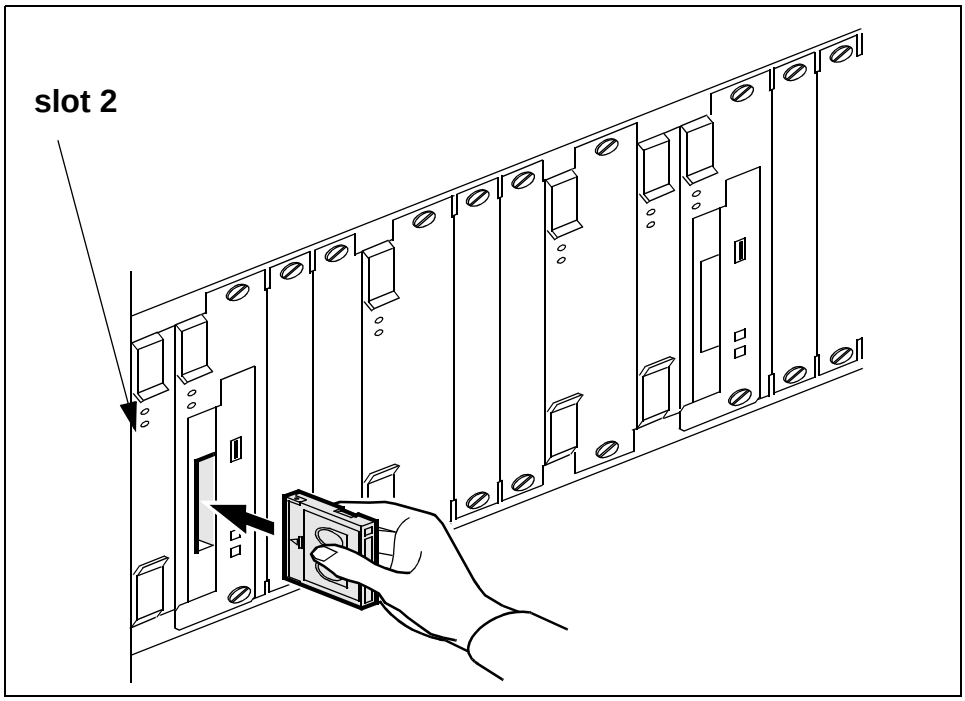
```
> swim
```

and pressing the Enter key.

4 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	insert the CS2E0006 6.x (1 of 1) tape in slot 2 as shown in the following figure, then go to step 5 ***Note:*** Wait until the tape drive stabilizes (yellow LED is off) before you proceed.
a directory	step 5

Inserting the tape into the domain 0 tape drive (slot 2)



5 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	list the filesets by typing apply 0 and pressing the Enter key
a directory	list the filesets by typing apply <directory path> and pressing the Enter key

6 Select the SFT fileset by typing

`> select <n>`

and press the Enter key.

where

<n>
is the number next to the SFT fileset

7 Apply the selected fileset by typing

`> apply`

and pressing the Enter key.

8 Confirm the Apply command by typing

> y

and pressing the Enter key.

9 You have completed this procedure.

Configuring the SFT server application software

The following procedure provides instructions on how to configure the SFT server application software using SWIM. Only configure the software if the CS 2000 Core Manager did not configure the software when you applied the fileset using procedure Installing the SFT server software in the Configuration section.

Application

When configuring SFT, you can enable or disable the following FTP options on the SFT server:

- anonymous FTP access to the SDM *(Anon)*
- normal FTP access to the SDM and CM *(Normal)*
- DCE-secured FTP access to the SDM and CM *(Secured)*

Each option can be enabled (**Y**) or disabled (**N**) independently of the other options. The following table lists the possible combination of options for SFT FTP configuration.

Possible combination of options for SFT FTP (Sheet 1 of 2)

FTP Configuration	Enabled FTP option(s)	Disabled FTP option(s)
`Anon:Y;Normal:Y;Secured:Y`	Anonymous Normal Secured	
`Anon:Y;Normal:Y;Secured:N`	Anonymous Normal	Secured
`Anon:Y;Normal:N;Secured:N`	Anonymous	Secured Normal
`Anon:N;Normal:N;Secured:N`		Secured Anonymous Normal
`Anon:N;Normal:N;Secured:Y`	Secured	Anonymous Normal
`Anon:N;Normal:Y;Secured:Y`	Normal Secured	Anonymous

Possible combination of options for SFT FTP (Sheet 2 of 2)

FTP Configuration	Enabled FTP option(s)	Disabled FTP option(s)
`Anon:Y;Normal:N;Secured:Y`	Anonymous Secured	Normal
`Anon:N;Normal:Y;Secured:N`	Normal	Anonymous Secured

When you set SFT access on the CS 2000 Core Manager, you are configuring all FTP type interaction with the CS 2000 Core Manager. SFT in secure access mode provides a secure operating environment. Anonymous or normal FTP access provides standard FTP access, which is insecure, to the CS 2000 Core Manager. To avoid sending login, password, and files unsecured over the network, enable *secured* mode and use the SFT client.

ATTENTION
Nortel Networks recommends that you configure the CS 2000 Core Manager server to secure access. Using a non-secure mode can compromise the security of the CS 2000 Core Manager.

The following table describes the different SFT FTP accesses.

SFT access (Sheet 1 of 2)

Access type	Description
Anonymous FTP	Anonymous FTP access allows client workstations to access the CS 2000 Core Manager by logging in as *anonymous*, or *ftp*. The client workstation does not require a root user name and password. The client workstation only has access to the CS 2000 Core Manager, and to limited directories and software. If you do not have DCE installed on your network, and you are confident with your current security, you can use the anonymous FTP mode. The anonymous FTP access is enabled by default on the CS 2000 Core Manager. To disable anonymous FTP access, use Procedure , Configuring the SFT server, on page 122.

SFT access (Sheet 2 of 2)

Access type	Description
Normal FTP	Normal FTP access allows client workstations to access the CS 2000 Core Manager and the CM using the user names other than *anonymous* or *ftp*. The password is required for the login. If you do not have DCE installed on your network, and you are confident with your current security, you can use the normal FTP mode. To enable or disable normal FTP access, use Procedure , Configuring the SFT server, on page 122.
DCE-secured FTP	DCE-secured FTP access allows client workstations to access the CS 2000 Core Manager and CM using the SFT client software in a DCE-secure environment. If you have DCE installed on your network, you can take advantage of the login encryption, and use the secure access mode. To enable or disable DCE-secured FTP, use Procedure , Configuring the SFT server, on page 122.

Action

The following procedure describes how to configure the server application software for DCE or FTP mode using SWIM.

To configure the SFT server to DCE mode, you must have a DCE account with administrative privileges. This restriction does not apply if you do not use DCE mode.

To perform this procedure, you must first install the CS 2000 Core Manager platform maintenance software and the SFT software

package. You must have root user access to the CS 2000 Core Manager.

ATTENTION

If you use the sdm_admin account to perform this procedure, and the sdm_admin account does not exist, you can use the cell_admin account instead. You also can exit the procedure, and go to the procedure “Creating a DCE user” to create an sdm_admin account. Return to this procedure after you have created an sdm_admin account.

ATTENTION

Risk of revealing the administrative user password.
If you use telnet to access the CS 2000 Core Manager remotely, and use the default sdm_admin or cell_admin “master administrator” account to configure the SFT server to DCE mode, the system sends the password of the administrative user in clear text across the network. To prevent this security risk, Nortel Networks recommends that you execute the command from a terminal attached to the CS 2000 Core Manager console port.

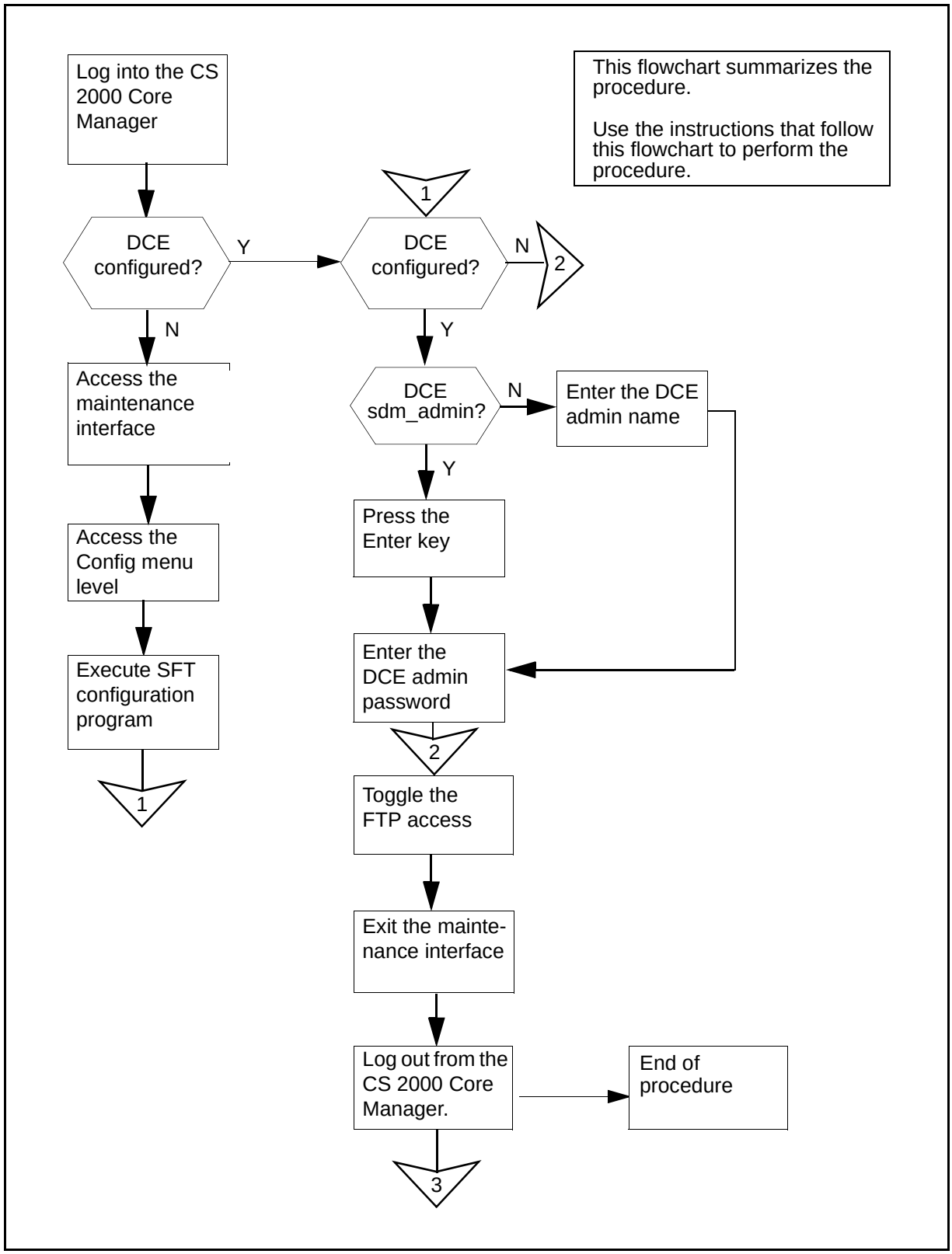
The sdm_admin, and the cell_admin accounts have the required privileges to make changes to the DCE cell. However, the sdm_admin account functions as a sub-administrator account with limited privileges. The sdm_admin account only performs administrative tasks related to the CS 2000 Core Manager within the DCE cell.

The sub-administrator account requires the following privileges:

- quota to create principals
- the ability to add permission for the CS 2000 Core Manager server organization
- the ability to add permission for the sdm-servers-using-cds group
- the ability to insert and modify access control list (ACL) permissions on the /.:/subsys/NT/SDM CDS directory

Use the following procedure to configure the SFT server using SWIM. To complete the configuration, perform the step-action procedures that follow the flowchart.

Summary of Configuring the SFT server application software



Configuring the SFT server

At the local or remote VT100 console:

1 Log into the CS 2000 Core Manager as root user.

2 Access the SWIM level of the maintenance interface by typing

`# sdmmtc swim`

and pressing the Enter key.

The system displays the top menu level of the maintenance interface.

3 Select the Config option from the SWIM menu by typing

`> config`

and pressing the Enter key.

The system displays the Config menu that lists the filesets available for installation and the SFT status.

Example response:

```
Filter: OFF

#  Fileset Description          Status
-------------------------------------------------
1  Enhanced Terminal Access     Configured

2  OM Delivery                  Configured

3  SDM Billing Application      Configured

4  Secure File Transfer         Anon:N;Normal:Y;Secure:Y

          Configuration programs: 1 to 4 of 4
```

4 Execute the unconfigured interactive configuration scripts by typing

`> config <n>`

and pressing the Enter key.

where

<n>
is the number of the fileset you want to configure.

5 Use the following table to determine your next step.

If DCE is	Do
not commissioned	step 8
commissioned	step 6

6 When prompted to enter a DCE administrator name, press the Enter key to accept the default DCE account (sdm_admin), or enter another DCE administrator account.

Example response:

```
Enter the password for the DCE administrator
sdm_admin:
```

Note: You can also type another DCE account with administrative privileges (cell_admin), as described at the beginning of this procedure.

7 When prompted, enter the DCE administrator password.

Example response:

```
                        SECURE FILE TRANSFER ACCESS

Type the corresponding # to toggle the FTP access.

Type "Commit" to apply the configurations shown in the "New" column.

Type "Quit" to exit.

WARNING:Changing the SFT access will cause any current transfers to be interrupted.

#    FTP access                                  Current          New
-------------------------------------------------------------------------
1    Anonymous FTP access to the SDM             DISABLED         ENABLED

2    Normal FTP access to the SDM and CM         ENABLED          DISABLED

3    DCE-secured FTP access to the SDM and CM    ENABLED          ENABLED

SFT config >
```

Note: If you do not have DCE installed on your CS 2000 Core Manager, the system only displays options 1 and 2 on the terminal. Option 3 is not available.

8 Toggle the FTP access by typing

> *<n>*

and pressing the Enter key.

where

<n>
is the number beside the FTP access in the list

When the number is typed, the corresponding value in the “New” column will be toggled to indicate the changes that you made. The number can be typed in multiple times.

Note: If the SFT application is either manually busy (ManB) or offline (Offl), the system displays a warning message on the terminal. The message indicates that the CS 2000 Core Manager will restart the application to change the SFT mode. Continue this procedure by typing y, and pressing the Enter key.

If you want to	Do
apply the changes	type **commit**, press the Enter key, and go to step 9
discard the changes	type **quit**, press the Enter key, and go to step 9

9 Exit the maintenance interface by typing

> quit all

and pressing the Enter key.

10 Log out from the CS 2000 Core Manager by typing

 # exit

and pressing the Enter key.

11 You have completed this procedure.

Configuring the SFT client

ATTENTION
The DCE administrator must create and configure the DCE user accounts before a user can access the SFT servers using the SFT clients. If you are using SFT in FTP (non-DCE) mode, ignore this section.

Configuring the SFT client consists of the following three steps:

- creating a DCE user
- setting an ERA value for the CS 2000 Core Manager userID
- setting the SFT permission

Creating a DCE user account

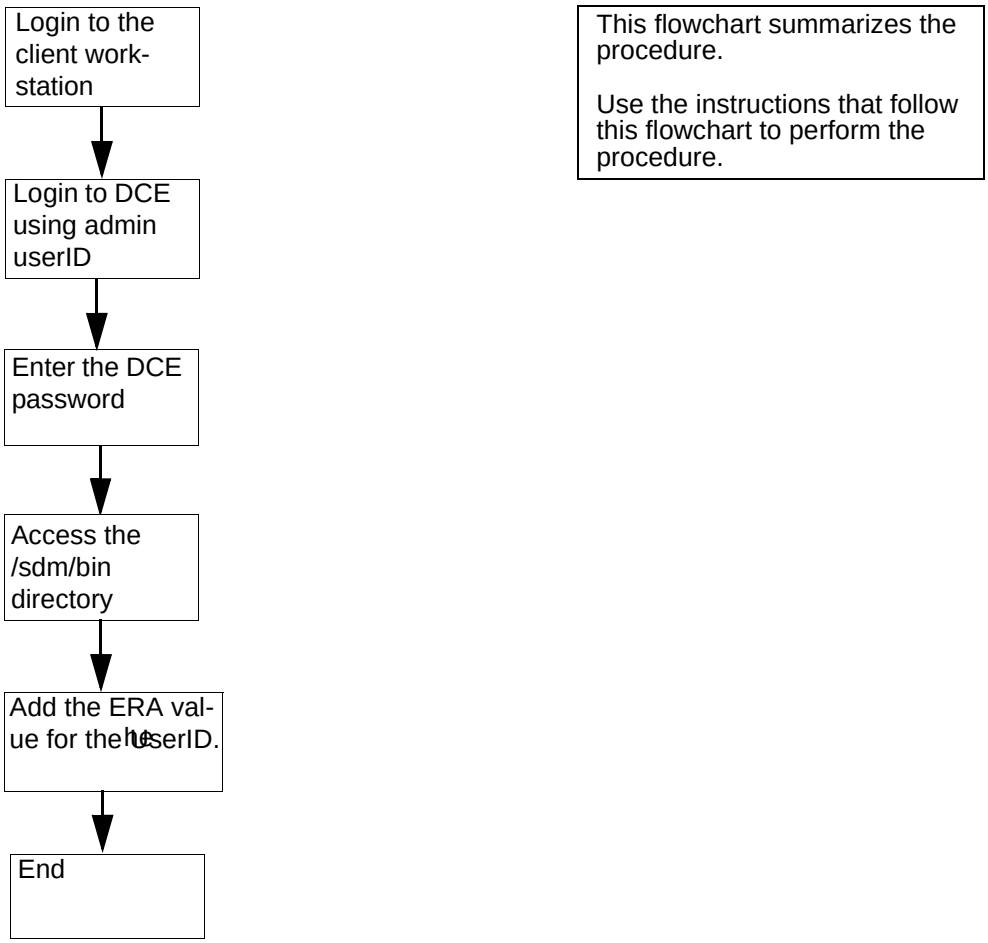
For a full description of this procedure, see “Creating a DCE user” in the Security and Administration section. A user cannot access SFT until this procedure is performed.

Setting the ERA value for the CS 2000 Core Manager userID

You must set an ERA value for the SFT client CS 2000 Core Manager userID. Use the add_sdm_userid command. When an SFT client accesses the CS 2000 Core Manager, the SFT server obtains the ERA value for that client CS 2000 Core Manager userID, and uses it to connect the client to the CS 2000 Core Manager.

Use the following procedure to set an ERA value for an CS 2000 Core Manager userID. The following flowchart summarizes the procedure. To complete the procedure for setting an ERA value for the CS 2000 Core Manager userID, perform the step-action procedures that follow the flowchart.

Summary of Setting an ERA value for the CS 2000 Core Manager userID



Setting an ERA value for the CS 2000 Core Manager userID

At the client workstation:

1 Log in to the client workstation.

2 Log in to DCE using the userID of the administrator by typing

> dce_login *<administrator_name>*

and pressing the Enter key.

where

<administrator_name>
is the userID for the administrator account that you are using.

3 When prompted, enter the administrator password.

4 Access the /sdm/bin directory by typing

> cd /sdm/bin

and pressing the Enter key.

5 Add the ERA value for the CS 2000 Core Manager userID by typing

> ./add_sdm_userid *<principal_name>* *<sdm_userid>*

and pressing the Enter key.

where

<principal_name>
is the principal name of the DCE user account.

<sdm_userid>
is the CS 2000 Core Manager userID.

Note: The CS 2000 Core Manager userID must correspond to an existing CS 2000 Core Manager UNIX account. This account must reside on all of the CS 2000 Core Manager nodes that you need to access. You cannot use SFT to access the CS 2000 Core Manager without this CS 2000 Core Manager UNIX account. You can use either the root or maint account. To use a different account that does not exist, the system administrator with root access privileges must create one.

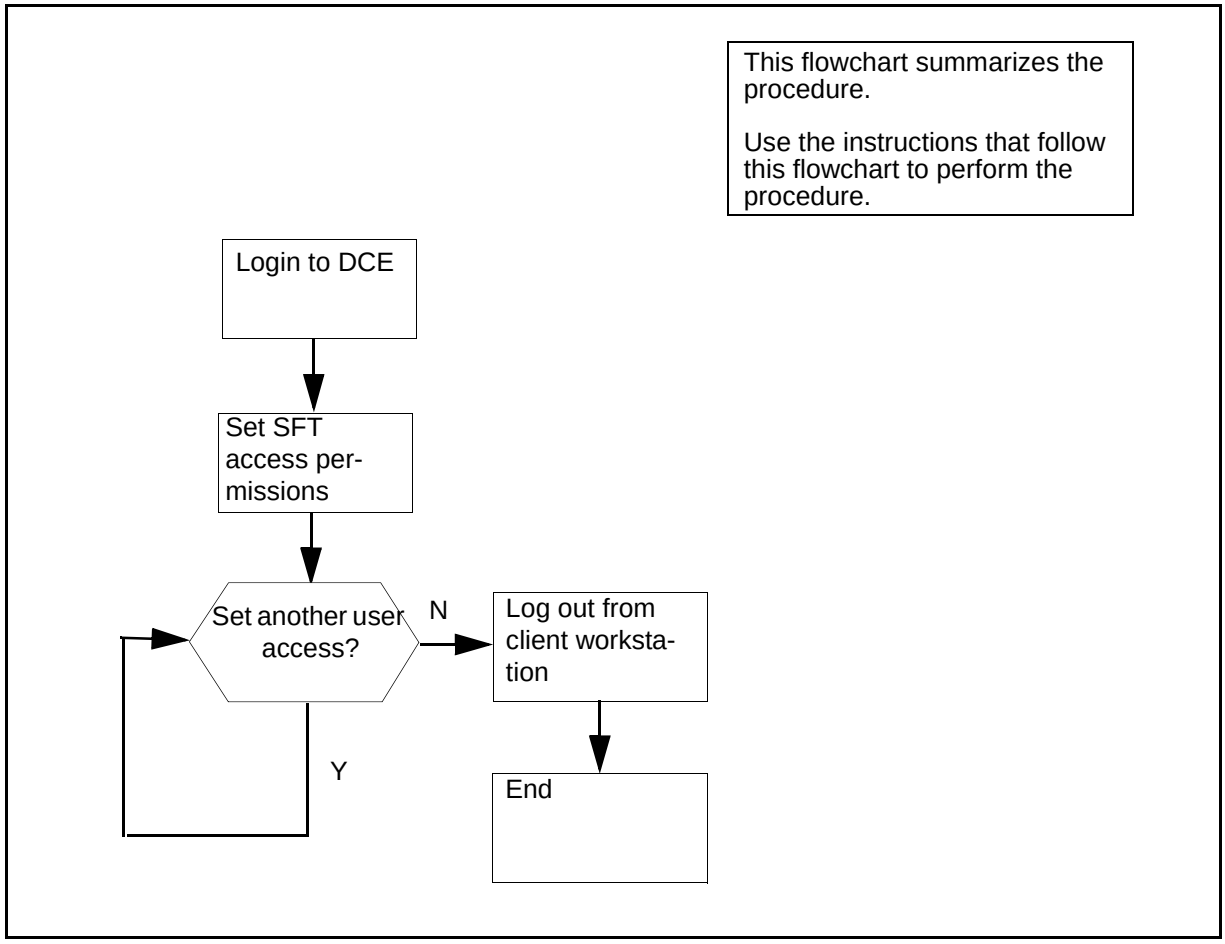
6 You have completed this procedure.

Setting the SFT access permission

Use the following procedure to set the SFT access permissions for an SFT client. The following flowchart summarizes the procedure. To complete the procedure, perform the step-action procedures that follow the flowchart.

Note: The default permission is “none”. If you do not perform this procedure, the user will not have access to SFT

Summary of Setting the SFT access permission



Setting the SFT access permissions

At a UNIX prompt on the client workstation:

1 Log in to DCE as the DCE administrator by typing

`# dce_login <administrator_name>`

and pressing the Enter key.

where

<administrator_name>
is the userID for the administrator account that you are using.

2 When prompted, enter the administrator password.

3 Access the /sdm/bin directory by typing

`# cd /sdm/bin`

4 Set the SFT client access permissions for the user by typing

`# ./set_sft_access <DCE_principal> <SFT_permission> <type_of_access>`

and pressing the Enter key.

where

<DCE_principal>
is the DCE userID whose access permissions you are changing.

<SFT_permission>
is the access permission level for the user. Values are as follows:

<type_of_access>
is none to indicate access is not permitted to the SFT services (default value), sdm_only to indicate access is permitted to the CS 2000 Core Manager, or sdm_cm, to indicate access is permitted to both the CS 2000 Core Manager and the CM.

5 Continue the procedure depending on if you want to set SFT access for another user.

If you	Do
need to set SFT access for another user	step 4
do not need to set SFT access for another user	step 6

6 Log out from the client workstation by typing

```
# exit
```

and pressing the Enter key.

7 You have completed this procedure.

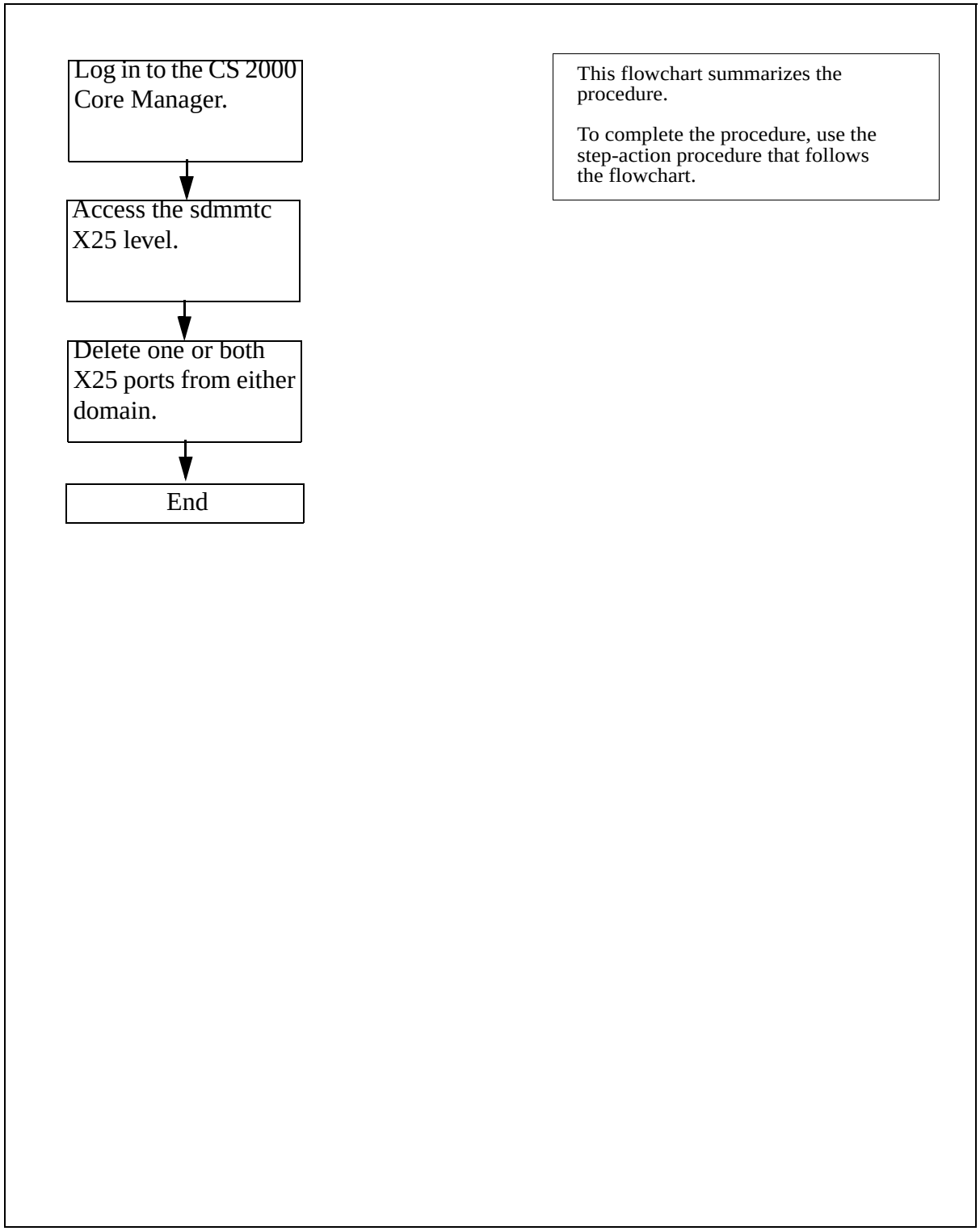
Decommissioning X.25 ports

Use this procedure to decommission one or both X.25 ports on an UMFIO/X25 (NTRX50NN) or SYNC X25 (NTRX50FY) module.

Flowchart procedure

The following flowchart summarizes the procedure. Use the instructions in the step-action procedure that follow the flowchart to complete the procedure.

Summary of Decommissioning X.25 ports



Decommissioning X.25 ports

At the local VT100 console

1 Log into the CS 2000 Core Manager as a root user.

2 Access the X.25 level by typing

```
# sdmmtc x25
```

and pressing the **Enter** key.

3 Delete one or both X.25 ports from either domain by typing

```
> delete <parameters>
```

and pressing the **Enter** key.

where

<parameters>
is the domain number of the X.25 module (0 or 1), and the port number of the X.25 module when decommissioning a single port (0 or 1) - see examples below.

Example input for both ports:

```
delete 0
```

Example input for one port:

```
delete 0 1
```

Example response:

```
This action will delete the X25 configuration of
domain 0 port 1. The X25 daemon needs to be
restarted for this activity to take effect.

Do you wish to proceed?
Please confirm (‘YES’, ‘Y’, ‘NO’, ‘N’)
```

4 When prompted, confirm you want to delete the specified X25 configuration by typing

```
> y
```

and pressing the Enter key.

Example response:

```
Delete 0 1 - Command submitted.
```

Once the delete command is complete, the port or ports you decommissioned will show a status of “OffL -” (offline)

5 You have completed this procedure.

Installing CIL on a client workstation

Application

Use this procedure to install the client installer and launcher (CIL) tool on a client workstation. Repeat the procedure for each client workstation.

You must know the following information to perform this procedure:

- the platform of the client workstations
- the internet protocol (IP) address and root password of the client workstations
- the root user password of the CS 2000 Core Manager
- the client software fileset names

ATTENTION

The SFT client software allows you to access SFT servers running in DCE mode. If you have configured all of your servers to FTP mode, use standard FTP client software, and ignore this section.

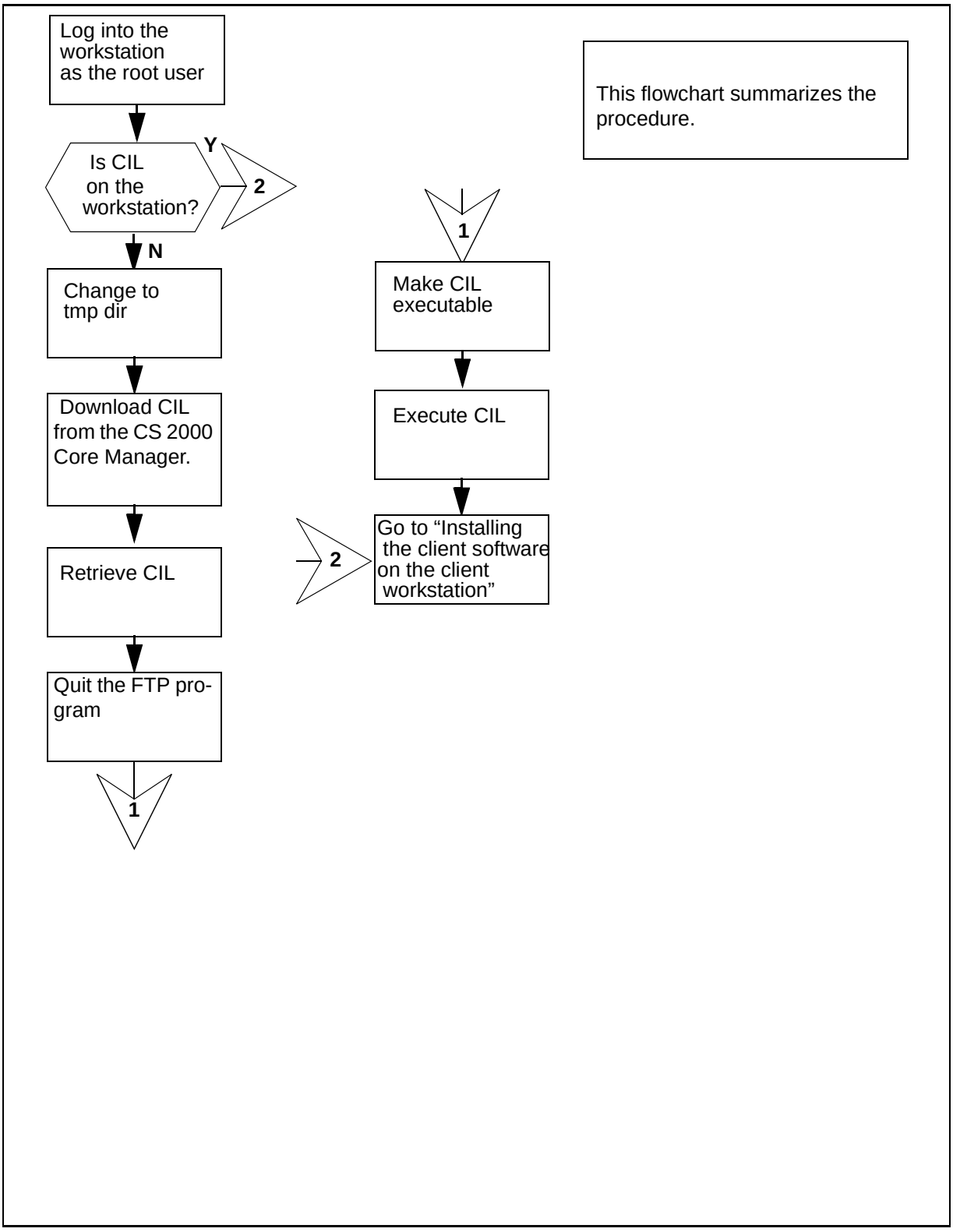
Interval

Perform this procedure when you are installing the CIL tool on a client workstation for the first time.

Action

The flowchart that follows provides a summary of this procedure. Use the instructions in the step action procedure that follows the flowchart to perform the procedure.

Summary of installing CIL on a client workstation



Installing CIL on a client workstation

At the local or remote VT100 console

1

CAUTION

Risk of revealing the administrative user password

If you use telnet to access the client workstation remotely, and use the default sdm_admin or cell_admin account to execute the DCE control program (dcecp) commands, the system sends the administrative user password in clear text across the network. To prevent this, Nortel Networks recommends that you execute the commands from a terminal attached to the workstation console port.

Log into the client workstation as the root user.

2 Change to the temporary directory by typing

```
# cd /tmp
```

and pressing the Enter key.

Note: You can change to any directory as long as it is a directory where you can download new files.

3 Open a file transfer protocol (FTP) connection to a CS 2000 Core Manager by typing

```
# ftp <ip-address>
```

and pressing the Enter key.

where

<ip-address> is the IP address of the CS 2000 Core Manager.

4 Log into the CS 2000 Core Manager as an anonymous user by typing

```
Name: ftp
```

and pressing the Enter key.

5 When prompted for a password, press the Enter key to continue the procedure.

6 Retrieve the CIL program by typing

```
ftp> get cil
```

and pressing the Enter key.

7 Quit the connection to the CS 2000 Core Manager by typing

```
ftp> quit
```

and pressing the Enter key.

8 Make the CIL program executable by typing

```
# chmod +x cil
```

and pressing the Enter key.

9 You have completed this procedure. Proceed to Installing client software on a client workstation in the Configuration section.

Installing the Base Maintenance Interface software

The following procedure provides instructions on how to install the Base Maintenance Interface software on the CS 2000 Core Manager.

Installing the Base Maintenance Interface software

At the local or remote VT100 console

1 Log into the CS 2000 Core Manager as root user.

2 Access the maintenance interface level by typing

```
# sdmmtc
```

and pressing the Enter key.

3 Access the SWIM level by typing

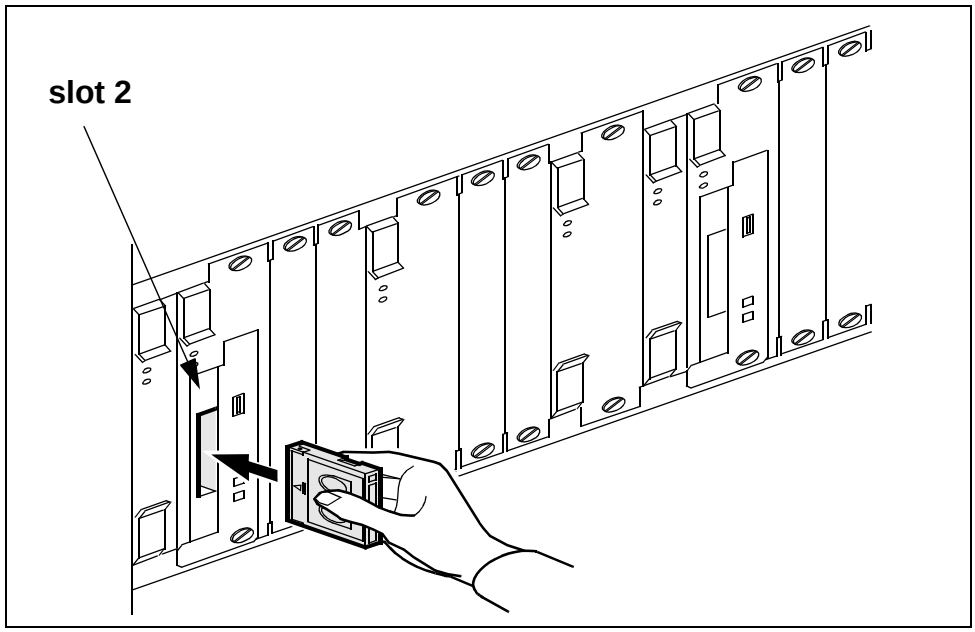
```
> swim
```

and pressing the Enter key.

4 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	insert the CS2E0006 6.x (1 of 1) tape in slot 2 as shown in the following figure, then go to step 4 ***Note:*** Wait until the tape drive stabilizes (yellow LED is off) before you proceed.
a directory	step 4

Inserting the tape into the domain 0 tape drive (slot 2)



5 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	list the filesets by typing apply 0 and pressing the Enter key
a directory	list the filesets by typing apply <directory path> and pressing the Enter key

6 Select the SDM Base Maintenance Interface fileset by typing

`> select <n>`

and pressing the Enter key.

where

<n>
is the number next to the SDM Base Maintenance Interface fileset

7 Apply the selected fileset by typing

`> apply`

and pressing the Enter key.

8 Confirm the Apply command by typing

> y

and pressing the Enter key.

9 Press the Enter key to continue.

10 Access the Application level and verify the installation by typing

> appl

and pressing the Enter key.

Example response:

```
 # Application                                  State
 1 Log Delivery Service                         .
 2 OM Access Service                            .
 3 Table Access Service                         .
 4 Exception Reporting                          .
 5 ObjectStore Database Svc                     .
 6 OSS Comms Svcs                               .
 7 OSS and Application Svcs                     .
 8 Secure File Transfer                         .
 9 Enhanced Terminal Access                     .
10 Base Maintenance Interface                   .

                  Applications showing: 1 to 10 of 15
```

In this example, the Appl level lists the SDM Base Maintenance Interface as fileset number 10. The “.” value for the State column indicates that the application was automatically put in service (InSv).

11 Exit the CS 2000CS 2000 Core Manager maintenance interface by typing

> quit all

and pressing the Enter key.

12 You have completed this procedure.

Installing client software on a client workstation

Application

Use this procedure to install client software on the client workstation using the client installer and launcher (CIL) tool. Make sure you install the CIL tool on the client workstation before you install the client software. Refer to procedure Installing CIL on a client workstation in the Configuration section.

ATTENTION
The Client Common Resources fileset must be installed before installing the client filesets.

Action

Perform this procedure when you are installing client software on the client workstation for the first time, or installing the latest version of the client software on the client workstation.

Installing client software on a client workstation

At the client workstation

1 Access the tmp directory where the CIL tool exists by typing

```
# cd /tmp
```

and pressing the Enter key.

2 Invoke CIL by typing

```
# ./cil
```

and pressing the Enter key.

Response:

```
            SDM CLIENT SOFTWARE INSTALLATION

Enter the IP address or hostname of the SDM that
you want to download the client software from.

SDM's Address:
```

3 When prompted, connect to the CS 2000 Core Manager by typing

SDM's Address: <*sdm*_name>

and pressing the Enter key.

where

<sdm_name>
is the IP address or the host name of the CS 2000 Core Manager

Example *response:*

```
        SDM CLIENT SOFTWARE INSTALLATION

After you enter 'Apply', the selected filesets
are FTPed from the SDM to the /tmp directory.
The filesets are then installed into the /sdm
directory. Type 'Help' for a list of commands.
Type 'Quit' to exit this program.

Client software source: the SDM at bmerye6b
   # Fileset Name
   1 ata_client_17.0.8.0.tar.Z
   2 sft_client_17.0.8.0.tar.Z
   3 eta_client_17.0.8.0.tar.Z
   4 clientcommon_17.0.8.0.tar.Z
   5 logdelivery_client_17.0.8.0.tar.Z
                    Client Software: 1 to 5 of 5

cil>
```

4 Use the following table to determine your next step.

If the Client Common Resources fileset is	Do
not installed	step 5
installed	step 7

5 Select the Client Common Resources fileset by typing

`cil> select <n>`

and pressing the Enter key.

where

<n>
is the number next to the Client Common Resources fileset

Note: To deselect any filesets, select the fileset a second time. To deselect all filesets, type *select none.*

6 Install the selected fileset by typing

`cil> apply`

and pressing the Enter key.

7 Select the filesets to install on the client workstation by typing

`cil> select <n>`

and pressing the Enter key.

where

<n>
is the number next to the fileset you want to install.

Note: To deselect any filesets, select the fileset a second time. To deselect all filesets, type *select none*.

8 Install the selected fileset by typing

`cil> apply`

and pressing the Enter key.

9 You have completed this procedure.

Installing the logreceiver tool on a client workstation

Application

Use this procedure to install the logreceiver tool on a workstation. The procedure accesses the logreceiver software stored on the CS 2000 Core Manager to which the workstation can connect, and installs it in a specified directory location on the workstation.

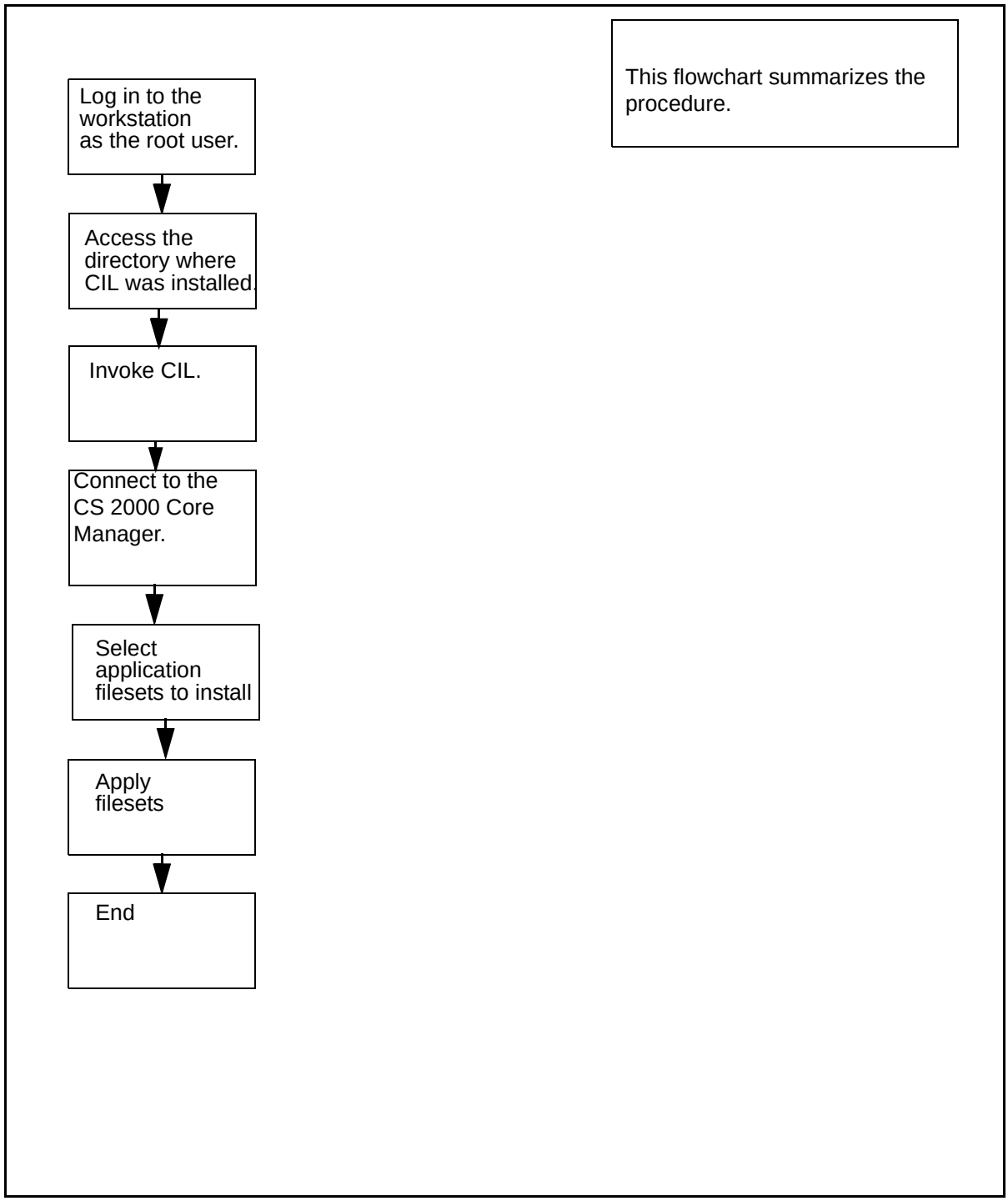
ATTENTION

You must install the CIL tool on the client workstation before you install the logreceiver tool. Refer to Installing CIL on a client workstation in the Configuration section.

Action

The flowchart that follows provides a summary of this procedure. Use the instructions in the step action procedure that follows the flowchart to perform the procedure.

Summary of Installing the logreceiver tool on a client workstation



Installing the logreceiver tool on a client workstation

At the local or remote VT100 console

1

CAUTION

Risk of revealing the administrative user password

If you use telnet to access the client workstation remotely, and use the default sdm_admin or cell_admin account to execute the DCE control program (dcecp) commands, the system sends the administrative user password in clear text across the network. To prevent this, Nortel Networks recommends that you execute the commands from a terminal attached to the workstation console port.

Log in to the client workstation as the root user.

2 Access the tmp directory where the CIL tool exists by typing

```
# cd /tmp
```

and pressing the Enter key.

3 Make the CIL program executable by typing

```
# chmod +x cil
```

and pressing the Enter key.

4 Invoke CIL by typing

```
# ./cil
```

and pressing the Enter key.

Response:

```
            SDM CLIENT SOFTWARE INSTALLATION

Enter the IP address or hostname of the SDM that
you want to download the client software from.

SDM's Address:
```

5 At the CIL menu, connect to the CS 2000 Core Manager by typing

SDM's Address: <*sdm*_name>

and pressing the Enter key.

where

<sdm_name>
is the IP address or the host name of the CS 2000 Core Manager.

Response:

```
        SDM CLIENT SOFTWARE INSTALLATION

After you enter 'Apply', the selected filesets
are FTPed from the SDM to the /tmp directory.
The filesets are then installed into the /sdm
directory. Type 'Help' for a list of commands.
Type 'Quit' to exit this program.

Client software source: the SDM at bmerye6b
   # Fileset Name
   1 ata_client_17.0.8.0.tar.Z
   2 sft_client_17.0.8.0.tar.Z
   3 eta_client_17.0.8.0.tar.Z
   4 clientcommon_17.0.8.0.tar.Z
   5 logdelivery_client_17.0.8.0.tar.Z
                     Client Software: 1 to 5 of 5
```

6 Use the following table to determine your next step.

If the Client Common Resources fileset is	Do
not installed	step 7
installed	step 9

7 Select the Client Common Resources fileset by typing

cil> select <*n*>

and pressing the Enter key.

where

<n>
is the number next to the Client Common Resources fileset

8 Install the selected fileset by typing

`cil> apply`

and pressing the Enter key.

9 Select the logdelivery_client fileset by typing

`cil> select <n>`

and pressing the Enter key.

where

<n>
is the number next to the logdelivery_client fileset on the list.

Note: To deselect any filesets, select the fileset a second time. To deselect all filesets, type select none.

10 Install the selected fileset by typing

`cil> apply`

and pressing the Enter key.

11 Exit the CIL tool by typing

`cil> quit`

and pressing the Enter key.

12 You have completed this procedure.

Installing and configuring OM Delivery software

This procedure provides instructions on how to install and configure the OM Delivery (OMD) application. It is assumed that the CS 2000 Core Manager platform and AIX operating system have already been installed.

If you are installing the OM Delivery application for the first time, ensure that the OM Access and Table Access applications are installed and in service on your CS 2000 Core Manager before executing this procedure.

Use the following procedure to install or upgrade the OMD application.

Installing and configuring OM Delivery software

At the local or remote VT100 console

1 Log into the CS 2000 Core Manager as root user.

2 Access the maintenance interface by typing

```
# sdmmtc
```

and pressing the Enter key.

3 Access the SWIM level by typing

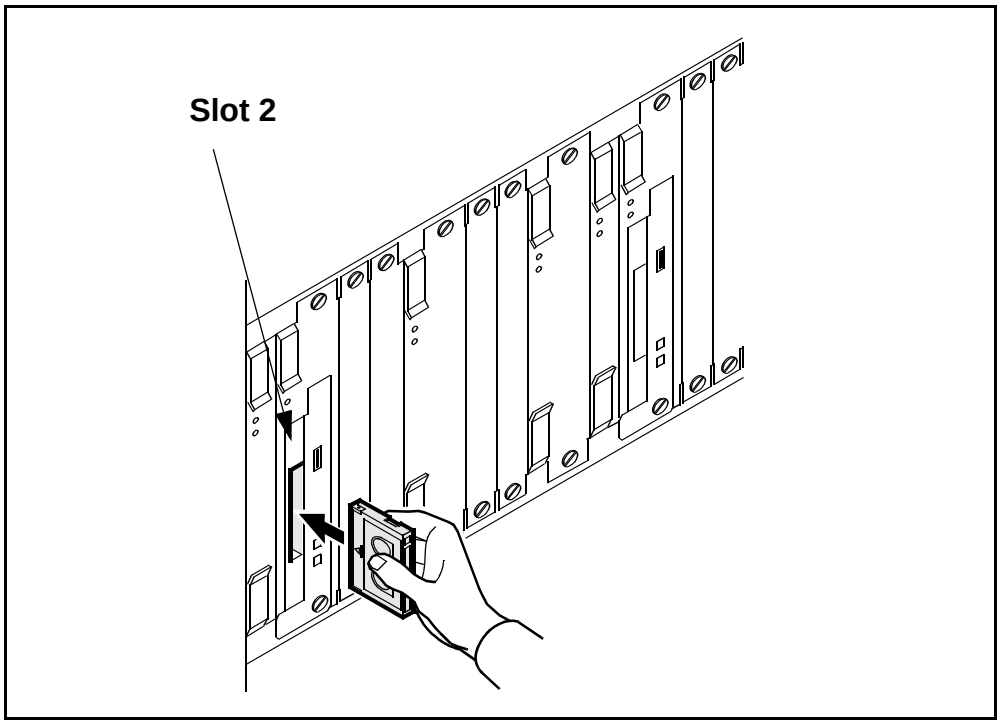
```
> swim
```

and pressing the Enter key.

4 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	insert the CS2E0006 6.x (1 of 1) tape in slot 2 as shown in the following figure, then go to step 5 ***Note:*** Wait until the tape drive stabilizes (yellow LED is off) before you proceed.
a directory	step 5

Inserting the tape into the domain 0 tape drive (slot 2)



5 Use the following table to determine your next step.

If you are installing the software from	Do
a tape	list the filesets by typing apply 0 and pressing the Enter key
a directory	list the filesets by typing apply <directory path> and pressing the Enter key

6 Select the OM Delivery fileset by typing

`> select <n>`

and press the Enter key.

where

<n>
is the number next to the OM Delivery fileset

7 Apply the selected (highlighted) fileset by typing

`> apply`

and pressing the Enter key.

8 Confirm the Apply command by typing

`> y`

and pressing the Enter key.

9 Use the following table to determine your next step.

If the application	Do
installed with no errors	step 10
installed with errors or failed to install	record any error information, and contact your next level of support

10 Return to the SWIM level by typing

`> quit`

and pressing the Enter key.

11 Access the Config level by typing

`> config`

and pressing the Enter key.

12 Begin configuration for OM Delivery by typing

`> config <n>`

and pressing the Enter key.

where

`<n>`
is the number next to the OM Delivery fileset

Response:

```
Are the MDM and SDM integrated? [y/n]:
```

13 Use the following table to determine your next step.

If you are configuring OM Delivery for	Do
a PT-AAL1 or UA-AAL1 Succession office	type y, press the Enter key, and continue with step 14
any other Succession office	type n, press the Enter key, and go to step 18

14 Configure OM Delivery as follows:

a When prompted, enter the IP address of the first MDM (for example, 47.70.176.226), and press the Enter key.

b When prompted, enter the host name of the first MDM (for example, bpves001), and press the Enter key.

c When prompted, enter the IP address of the second MDM (for example, 47.149.48.175), and press the Enter key.

d When prompted, enter the host name of the second MDM (for example, bpves923), and press the Enter key.

e When prompted, enter the port for 5-minute PM data from the appropriate PMSP running on the MDM (for example, 1646), and press the Enter key.

f When prompted, enter the port for 30-minute PM data running on the appropriate PMSP running on the MDM (for example, 1647), and press the Enter key.

The system prompts you to indicate whether you want to use custom connection retry settings.

g Use the following table to determine your next step.

If you	Do
want to use custom connection retry settings	type y, press Enter, and continue with step 15
do not want to use custom connection retry settings	type n, press Enter, and go to step 16

15 Enter your retry settings as follows:

Note: Retry setting values are in seconds. Values higher than 300 seconds are not recommended as they may adversely affect recovery time.

a When prompted, enter the first connection retry interval (for example 2), and press the Enter key.

b When prompted, enter the number of retry attempts at that interval (for example 10), and press the Enter key.

c When prompted, enter the second connection retry interval (for example 10), and press the Enter key.

d When prompted, enter the number of retry attempts at that interval (for example 40), and press the Enter key.

e When prompted, enter the third connection retry interval (for example 60), and press the Enter key.

16 Use the following table to determine your next step.

If the data is	Do
correct	type y, and go to step 18
not correct	type n, and go to step 17

17 Use the following table to determine your next step.

If you	Do
want to restart the configuration process	type y, and return to step 14
do not want to restart the configuration process	type n, and go to step 18

18 Exit the maintenance interface by typing

```
> quit all
```

and pressing the Enter key.

19 You have completed this procedure.

Removing an ETA server

Use this procedure to remove an ETA server. When the ETA application is not required on the CS 2000 Core Manager, you must release the resources that were claimed by the application server.

Application

Removing an ETA server requires two steps

- remove the ETA server from the DCE cell, then
- remove the ETA server from the CS 2000 Core Manager

You can also use this procedure to clear problems with an application server. It might be necessary to remove an ETA server from the DCE cell, then recreate the server using the config command under the SWIM menu. For information on server installation, refer to Installing the ETA application server software on the CS 2000 Core Manager of this section.

Problems with an application server include the following:

- the server identifies a mismatch resulting from a change to the switch Common Language Location Identifier (CLLI)
- the server cannot authenticate itself because of key tab problems. This may occur if the CS 2000 Core Manager data files are restored from a backup tape
- the server is unable to authenticate itself because its password has expired. This may occur if the server is OffL or ManB for an extended period of time.

Action

ATTENTION

You can use either the sdm_admin or the cell_admin account to perform this procedure. If you use the default sdm_admin account to perform this procedure, and the default account does not exist, you can use the cell_admin account instead. You also can exit the procedure, and go to the DCE Creating a DCE user procedure to create an sdm_admin account. Return to this procedure after you have created an sdm_admin account.

CAUTION
Risk of revealing the administrative user password

If you use telnet to access the CS 2000 Core Manager remotely, and use the default sdm_admin or cell_admin account to execute the DCE control program (dcecp) commands, the administrative user password is sent in clear text across the network. To prevent this potential security risk, Nortel Networks recommends that you execute the commands from a terminal physically attached to the CS 2000 Core Manager console port.

To perform this procedure, you must have a DCE account with administrative privileges and root user access to the CS 2000 Core Manager.

Removing an ETA server

At the local or remote VT100 console

1 Log into the CS 2000 Core Manager as the root user.

2 Log into DCE by typing

`# dce_login <DCE_admin_user>`

and pressing the Enter key.

where

DCE_admin_user
is the administrator userID.

3 Enter your DCE password, and press the Enter key.

4 Invoke the DCE control program (dcecp) by typing

```
> dcecp
```

and pressing the Enter key.

5 List the key tables in the CS 2000 Core Manager by typing

```
dcecp> key catalog -simplename
```

and pressing the Enter key.

6 Use the following table to determine your next step.

If the list	Do
contains the eta key table	step 7
contains the eta key table	step 12

7 List the principals that are supported by the key table by typing

```
dcecp> key list eta
```

and pressing the Enter key.

8 Ensure the list from the command executed in step 7 contains entries that follow the format: /.../cell name/sdm/clli/principal name.

where

cell name
is the cell in which the CS 2000 Core Manager resides.

clli
is the Common Language Location Identifier (CLLI) of the switch to which the CS 2000 Core Manager is connected.

principal name
is the userID of the server.

9 Determine whether the principal name of all members in the list is the same, and that it corresponds to the eta-server.

If all principle names are	Do
identical	step 11
not identical	step 10

10 Remove the entries for the principal in the key table by typing

dcecp>key remove eta -member /.../<*cell_name*>/sdm/<*clli*>/eta-server

and pressing the Enter key.

where

cell_name
is the cell in which the CS 2000 Core Manager resides

clli
is the Common Language Location Identifier (CLLI) of the switch to which the CS 2000 Core Manager is connected.

11 Delete the key table by typing

dcecp> key delete eta

and pressing the Enter key.

12 Remove the principal for the CS 2000 Core Manager application server by typing

dcecp> principal delete sdm/<*clli*>/eta-server

and pressing the Enter key.

where

clli
is the CLLI of the switch to which the CS 2000 Core Manager is connected.

13 Exit dcecp by typing

dcecp> exit

and pressing the Enter key.

14 Log out from DCE by typing

> exit

and pressing the Enter key.

Next, remove the ETA server and client filesets from the CS 2000 Core Manager.

15 Access the maintenance interface by typing

 # sdmmtc

and pressing the Enter key.

16 Access the SWIM level by typing

> swim

and pressing the Enter key.

17 Select the filesets to delete by typing

`> select <x> <y> <z>`

where

x
is the number next to the ETA fileset

y
is the number next to the ETA client fileset

z
is the number next to the ATA client fileset.

and pressing the Enter key.

18 Delete the filesets by typing

`> 8 or remove`

and pressing the Enter key.

19 Confirm that you want to delete the filesets by typing

`> y`

and pressing the Enter key.

Note: You will need to re-install the filesets from the DAT if you wish to use the ETA server at a later date.

The system deletes the filesets, displaying a message when the removal is complete.

20 Exit the maintenance interface by typing

`> quit all`

and pressing the Enter key.

21 Log out from the CS 2000 Core Manager by typing

`> exit`

and pressing the Enter key.

22 You have completed this procedure.

Removing a CS 2000 Core Manager from a DCE cell

Application

ATTENTION
You must be a trained Distributed Computing Environment (DCE) system administrator who knows DCE administration procedures to perform this procedure.

ATTENTION
If you use the default cell_admin “master administrator” account (full removal only), the system sends the password of the administrative user in clear text across the network when you perform the following action: use telnet to access the CS 2000 Core Manager from another computer. Nortel Networks recommends that you execute the command from a computer attached to the CS 2000 Core Manager console port to maintain password security.

If you are taking the CS 2000 Core Manager out of service permanently, you must remove the CS 2000 Core Manager from the DCE cell. You can remove the CS 2000 Core Manager from the DCE cell if there is a DCE error that you cannot fix by other methods.

To perform this procedure, you must know the password created with the DCE cell to use the cell_admin DCE account (principal). The cell_admin DCE account has the required privileges to make changes to the DCE cell.

The cell_admin principal can also create a sub administrator account (default is sdm_admin) with limited privileges for the purpose of maintaining CS 2000 Core Managers in the DCE cell. If you decide to

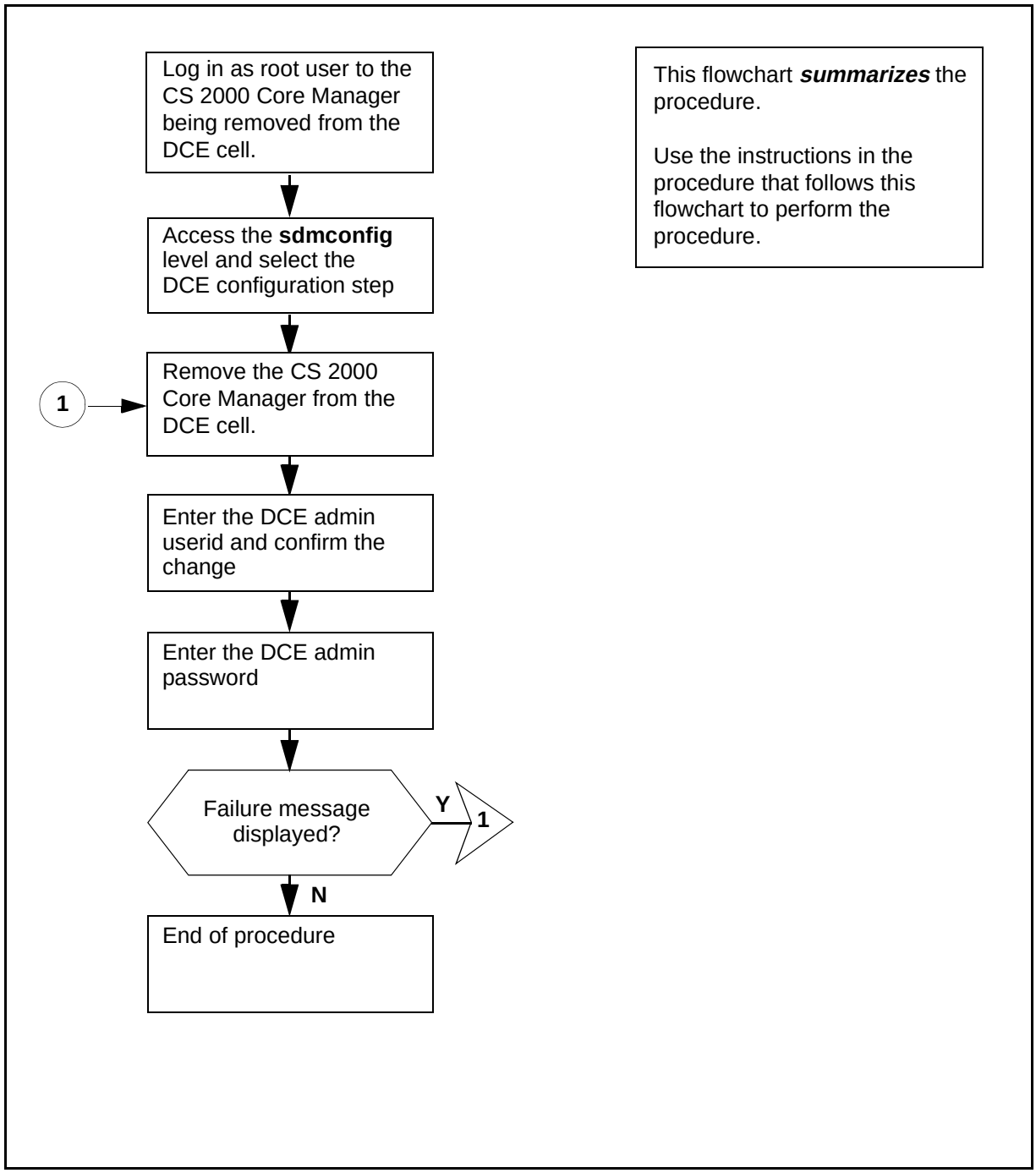
create a sub administrator account, refer to the Creating SDM administration account procedure in this section.

CAUTION
Possible failure to remove DCE
You cannot use the sdm_admin account to remove DCE from a CS 2000 Core Manager configured by the cell_admin account. The sdm_admin account does not have the privilege to remove the DCE. Use the cell_admin account to remove DCE under failure conditions.

Action

The following flowchart provides an overview of the procedure. Use the instructions in the step-action procedure that follows the flowchart to perform the task.

Summary of removing a CS 2000 Core Manager from a DCE cell



Removing a CS 2000 Core Manager from a DCE cell

At the local or remote VT100 console

1 Log in as root user to the CS 2000 Core Manager that you are removing from the DCE cell.

2 Start the commissioning tool by typing

```
# sdmconfig
```

and pressing the Enter key.

Response:

The system displays the Commissioning Status Menu.

3 Select the DCE configuration step from the status menu by typing

```
> step <n>
```

and pressing the Enter key.

where

<n>
is the menu number next to the DCE configuration option

Response:

The system displays the DCE configuration screen.

4 Delete DCE by typing

```
> delete
```

and pressing the Enter key.

Response:

The system displays a prompt for you to enter the DCE administrator **userid**.

5 Enter the DCE administrator **userid**, and press the Enter key.

Response:

The system displays a prompt for you to confirm the deletion of DCE.

6 To confirm the deletion, type

```
> y
```

and press the Enter key.

Response:

The system displays a response for you to enter the DCE administrator **password**.

7 Enter the DCE administrator **password**.

8 Refer to the following table to determine your next step.

If the system	Do
detects an abnormal condition, and displays a failure message	Under certain fault conditions it may be necessary to enter the delete command more than once to completely remove DCE. As long as the error message changes compared to the previous attempt, go to step 4.
displays other warning messages	press the Enter key
displays the message "`Delete - Command completed.`"	wait for the DCE status to change from "." to "-", and go to step 9

9 You have completed this procedure.

Removing an SFT server

Use this procedure to remove an SFT server. When the SFT application is not required on the CS 2000 Core Manager, you must release the resources that were claimed by the application server.

Removing an SFT server requires two steps:

- remove the SFT server from the DCE cell
- remove the SFT server from the CS 2000 Core Manager.

You can also use this procedure to clear problems with an application server. It might be necessary to remove an SFT server from the DCE cell, then recreate the server using the config command under the SWIM menu. For information on server installation, refer to “Installing the server application software on the CS 2000 Core Manager server using SWIM” of this section.

Problems with an application server include the following:

- the server identifies a mismatch resulting from a change to the switch Common Language Location Identifier (CLLI)
- the server cannot authenticate itself because of key tab problems. This may occur if the CS 2000 Core Manager data files are restored from a backup tape
- the server is unable to authenticate itself because its password has expired. This may occur if the server is OffL or ManB for an extended period of time.

ATTENTION

You can use either the sdm_admin or the cell_admin account to perform this procedure. If you use the default sdm_admin account to perform this procedure, and the default account does not exist, you can use the cell_admin account instead. You also can exit the procedure, and go to the DCE Creating a DCE user procedure to create an sdm_admin account. Return to this procedure after you have created an sdm_admin account.

CAUTION
Risk of revealing the administrative user password
If you use telnet to access the CS 2000 Core Manager remotely, and use the default sdm_admin or cell_admin account to execute the DCE control program (dcecp) commands, the administrative user password is sent in clear text across the network. To prevent this potential security risk, Nortel Networks recommends that you execute the commands from a terminal physically attached to the CS 2000 Core Manager console port.

To perform this procedure, you must have a DCE account with administrative privileges and root user access to the CS 2000 Core Manager.

Removing an SFT server

At the local or remote VT100 console

1 Log into the CS 2000 Core Manager as the root user.

2 Log into DCE using the administrator userID by typing

`# dce_login <DCE_admin_user>`

and pressing the Enter key.

where

DCE_admin_user
is the administrator userID.

3 Enter your DCE password, and press the Enter key.

4 Invoke the DCE control program (dcecp) by typing

`> dcecp`

and pressing the Enter key.

5 List the key tables in the CS 2000 Core Manager by typing

`dcecp> key catalog -simplename`

and pressing the Enter key.

6 Determine whether the key table list contains a key table called eta.

If the list	Do
contains the sft key table	step 7
does not contains the sft key table	step 12

7 List the principals that are supported by the key table by typing

```
dcecp>key list sft
```

and pressing the Enter key.

8 The list from the command executed in step 7 must contain entries that follow the format: /.../cell name/sdm/clli/principal name.

where

cell name
is the cell in which the CS 2000 Core Manager resides.

clli
is the Common Language Location Identifier (CLLI) of the switch to which the CS 2000 Core Manager is connected.

principal name
is the userID of the server.

9 Determine whether the principal name of all members in the list is the same, and that it corresponds to the sft-server.

If all principal names are	Do
identical	step 11
not identical	step 10

10 Remove the entries for the principal in the key table by typing

```
dcecp> key remove sft -member
/.../<cell_name>/sdm/<clli>/sft-server
```

and pressing the Enter key.

where

cell_name
is the cell in which the CS 2000 Core Manager resides

clli
is the Common Language Location Identifier (CLLI) of the switch to which the CS 2000 Core Manager is connected.

11 Delete the key table by typing

`dcecp> key delete sft`

and pressing the Enter key.

12 Remove the principal for the CS 2000 Core Manager application server by typing

`dcecp> principal delete sdm/<clli>/sft-server`

and pressing the Enter key.

where

clli
is the CLLI of the switch to which the CS 2000 Core Manager is connected.

13 Exit dcecp by typing

`dcecp> exit`

and pressing the Enter key.

14 Log out from DCE by typing

`> exit`

and pressing the Enter key.

15 Access the maintenance interface by typing

`# sdmmtc`

and pressing the Enter key.

16 Access the SWIM level by typing

`> swim`

and pressing the Enter key.

17 Select the filesets to delete by typing

`> select <x> <y>`

and pressing the Enter key.

where

x
is the number next to the SFT fileset

y
is the number next to the SFT client fileset

18 Delete the filesets by typing

`> 8 or remove`

and pressing the Enter key.

19 Confirm that you want to delete the filesets by typing

```
> y
```

and pressing the Enter key.

The system deletes the filesets, displaying a message when the removal is complete.

Note: You will need to re-install the filesets from the DAT if you wish to use the SFT server at a later date.

20 Exit from the maintenance interface by typing

```
> quit all
```

and pressing the Enter key.

21 Log out from the CS 2000 Core Manager by typing

```
> exit
```

and pressing the Enter key.

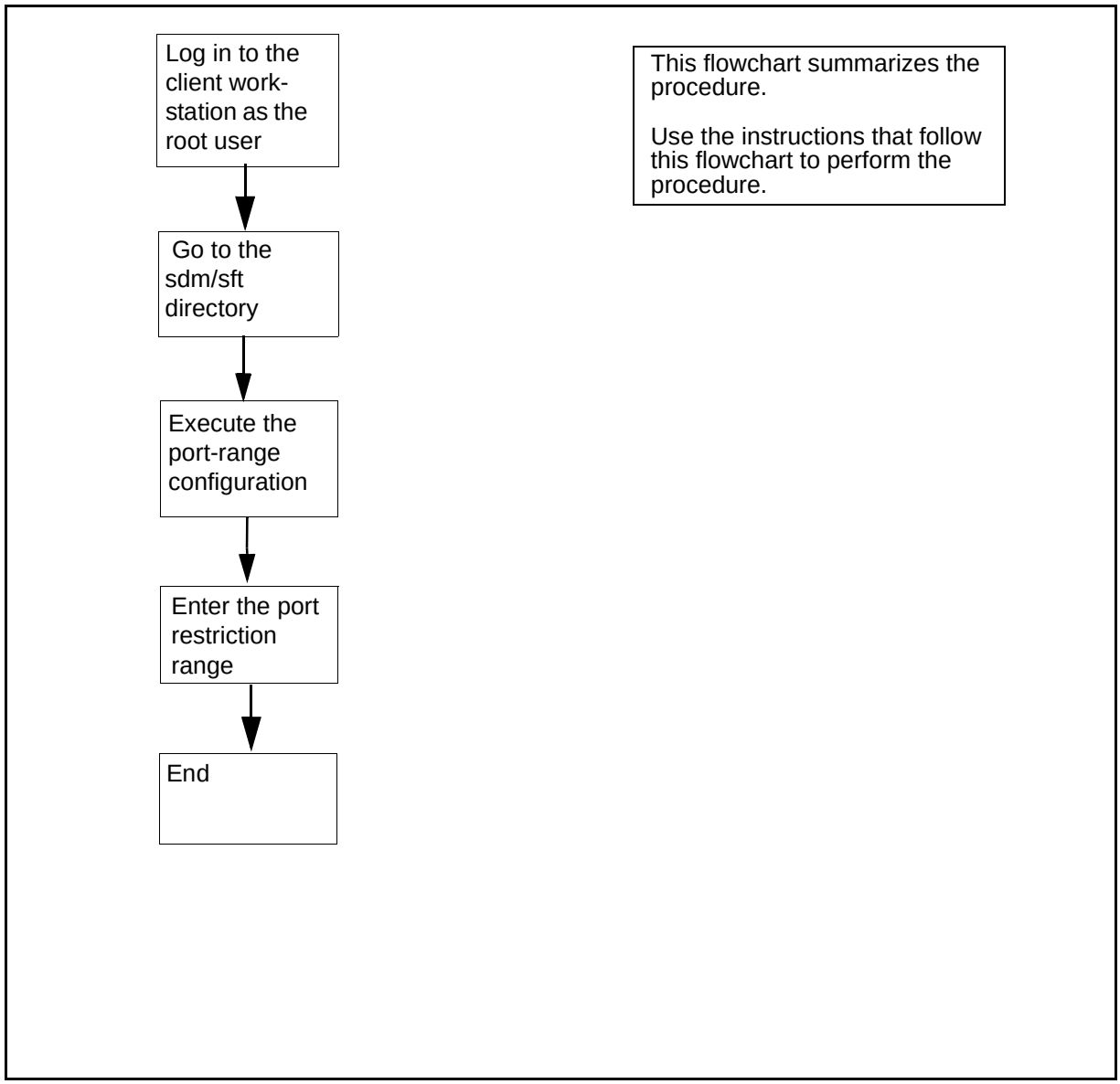
22 You have completed this procedure.

Restricting the SFT port range

Use the following procedure to restrict the Secure File Transfer (SFT) client reverse connection ports on the client workstation.

The following flowchart summarizes the procedures for the client software package. To complete this procedure, perform the step-action procedures that follow the flowchart.

Summary of restricting the SFT port range



Restricting the SFT port range

At the local or remote VT100 console:

1 Log in to the client workstation as the root user.

2 Change to the SFT directory by typing

`# cd /sdm/bin`

and pressing the Enter key.

3 Execute the port range configuration script by typing

`# ./sft_port_range`

and pressing the Enter key.

Response:

```
      SECURE FILE TRANSFER PORT RANGE
CONFIGURATION

This configuration script allows you to restrict
the SFT Client reverse connection ports on the
client workstation.

The current port restriction range for the SFT
Client is:

    Range start: -
    Range end:   -
    (no port restriction range)

Set a new port restriction range by typing two
numbers (and pressing [Enter]) which represent
the start and end of the port restriction range.
To remove the port restriction, type ‘None’ and
press [Enter]. To quit this program, type ‘Quit’
and press [Enter].

Port restriction range:
```

4 Enter the port restriction range by typing

`Port restriction range: <a> <b>`

and pressing the Enter key.

where

a
is the start of the range of ports (must be greater than 1024).

b
is the end of the range for ports (must be less than 32 000).

Note 1: These values are not range checked. Make sure that these values range from 1024 to 32 000. Enter the lower value first.

Note 2: The range size is determined by the maximum number of simultaneous instances of the SFT client program that are expected to run on the machine where the client is installed. Nortel Networks recommends a range of at least 20 ports (b a >= 20).

5 Exit the program by typing

`> exit`

and pressing the Enter key.

6 You have completed this procedure.

Configuring the CS 2000 Core Manager to communicate with a call agent

This procedure describes how to add or change the Ethernet and LANCOMM IP addresses on the CS 2000 Core Manager to communicate with a call agent. It assumes that the latest software release is already installed on the CS 2000 Core Manager.

Prerequisites

Following are the prerequisites for successful configuration:

- you must have root access to the CS 2000 Core Manager
- table IPNETWRK must contain the LANCOMM stack IP address

Configuring the CS 2000 Core Manager to communicate with a call agent

At the CS 2000 Core Manager

1 Login to the CS 2000 Core Manager as the root user.

2 Access the Maintenance level of the maintenance interface by typing

```
# sdmmtc mtc
```

and pressing the Enter key.

3 Verify the state of the CS 2000 Core Manager under SDM in the top banner.

If the CS 2000 Core Manager is	Do
Offl or ManB	step 6
InSv or ISTb	step 4
SysB	contact your next level of support

4 Busy the CS 2000 Core Manager by typing

```
> bsy
```

and pressing the Enter key.

5 Confirm the busy command by typing

```
> y
```

and pressing the Enter key.

6 Access the Core level by typing

> core

and pressing the Enter key.

7 Use the following table to determine your next step.

If you are	Do
configuring the CS 2000 Core Manager for the first time	step 9
reconfiguring the CS 2000 Core Manager	step 8

8 Begin the change process by typing

> change

and pressing the Enter key.

Go to step 11.

9 Begin the add process by typing

> add

and pressing the Enter key.

10 When prompted, select the Ethernet communication path by typing

> 2

and pressing Enter

11 When prompted, enter the active ethernet IP address, and press Enter.

12 When prompted, enter the core's IPNETWORK IP address, and press Enter.

13 Confirm the action by typing

```
> y
```

and pressing the Enter key.

If	Do
you are ready to return the CS 2000 Core Manager to service	step 14
you need to perform other tasks on the CS 2000 Core Manager	you have completed this procedure

14 Access the maintenance level by typing

```
> mtc
```

and pressing Enter

15 Return the CS 2000 Core Manager to service by typing

```
> rts
```

and pressing the Enter key.

16 Verify that the core connectivity goes into service (indicated by a dot [.] under the State header).

If the core connectivity	Do
goes into service	you have completed this procedure
does not go into service	contact your next level of support

Deleting a file system on a CS 2000 Core Manager

Application

Use this procedure if you want to delete a file system that you previously have defined on the CS 2000 Core Manager.

At the local VT100 console

1 Log on to the CS 2000 Core Manager using the root user ID and password.

2 Access the root directory by typing

```
# cd /
```

and pressing the Enter key.

3

CAUTION

The following command will stop all processes that have open files in the designated file system (that is, in <file_system_name>).

Delete the file system by typing

```
# removelv -k <file_system_name>
```

and pressing the Enter key.

where:

<file_system_name>
is the name of the file system that you want to delete

Note: The file system name always must begin with a forward slash (/).

If you cannot remove the file system, contact your next level of support.

4 You have completed this procedure.

Configuring a CS 2000 Core Manager for fault forwarding

Application

A CS 2000 Core Manager can be configured to forward faults.

Action

Use the following procedure to configure a CS 2000 Core Manager for fault forwarding.

Configuring a CS 2000 Core Manager for fault forwarding

At the local or remote VT100 console

1 Access the CS 2000 Core Manager by using telnet (format: xx.xxx.xxx.xxx), and log in as either **maint** or **admin**.

2 Start the logroute tool by typing

```
# logroute
```

and pressing the Enter key.

3 Change menu by typing

```
> c
```

and pressing the Enter key.

4 List devices by typing

```
> l
```

and pressing the Enter key.

5 Add a device by typing

```
> a
```

and pressing the Enter key.

6 Add a TCP-IN device by typing

```
> i
```

and pressing the Enter key.

7 Configure the device and the appropriate parameter numbers by typing

```
> c
```

and pressing the Enter key.

8 Add log routing for all logs by typing the following command sequence

> a

> a

> all

and pressing the Enter key after each command entry.

Example SDM Logroute configuration:

```
                    TCP-IN Device

     Device Parameters

                           1 - REMOTE IP : any

                           2 - PORT : 8550

                           3 - FORMAT : STD


     Log Routing           4 - ADDREP ALL
```

9 You have completed this procedure.

Changing remote and local console connections with O-I

Application

Use the procedures in this section to change remote and local console connections with O-I.

Action

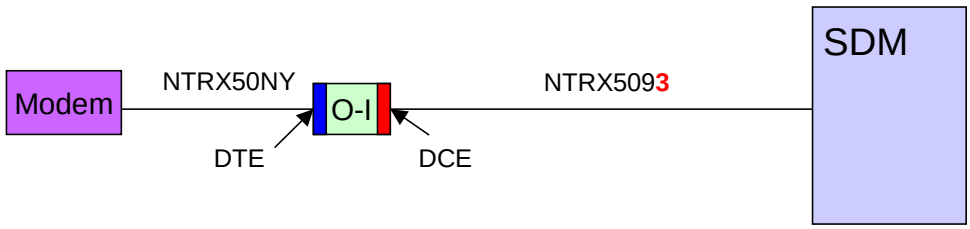
Refer to the following table to determine which procedure you should use to change console connections with O-I.

If you want to	Do
change from a remote to a local console connection	Procedure , Changing from a remote to a local console connection with O-I, on page 189
change from a local to a remote console connection	Procedure , Changing from a local to a remote console connection with O-I, on page 191

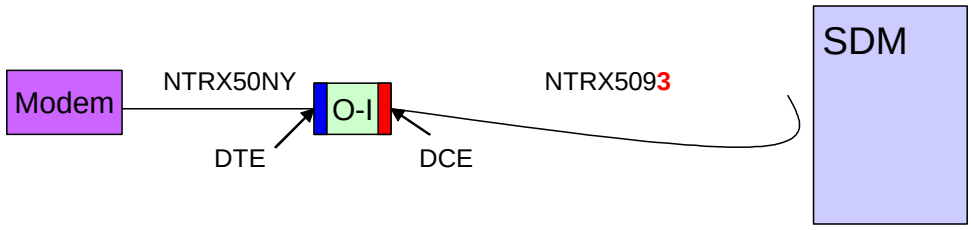
Changing from a remote to a local console connection with O-I

At the CS 2000 Core Manager

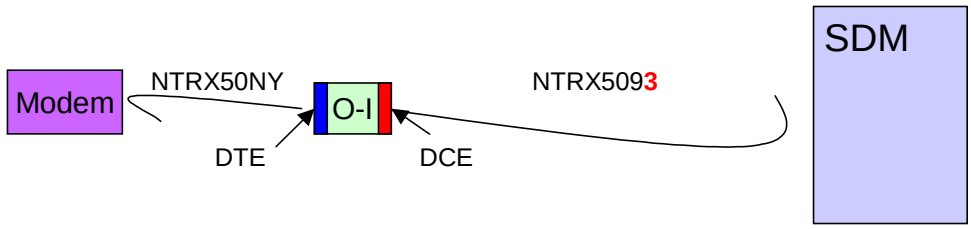
1 The following figure shows an existing remote console connection. Be sure that you are familiar with the configuration, then go to step 2.



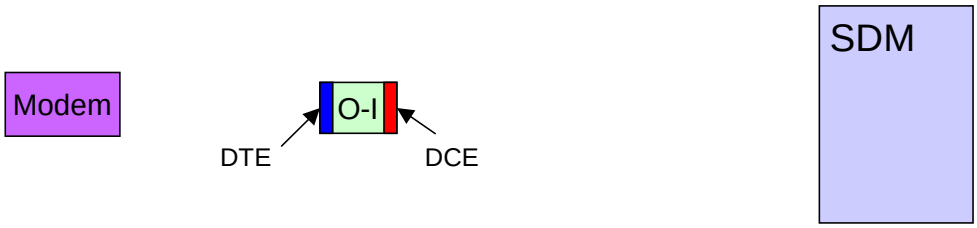
2 Disconnect the NTRX5093 from SP0.



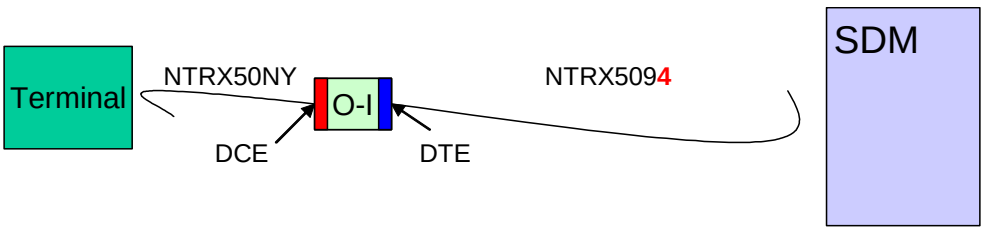
3 Disconnect the NTRX50NY from the modem.



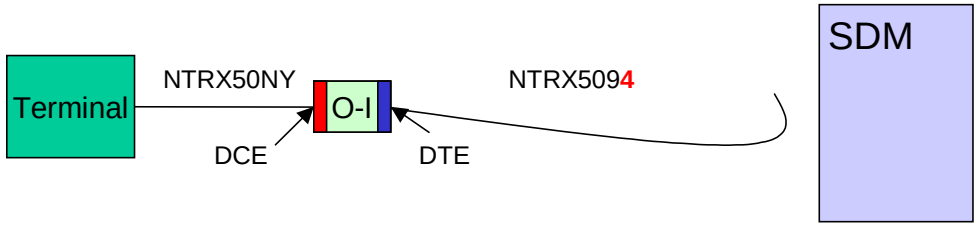
4 Disconnect NTRX50NY from the DTE side of the O-I, and NTRX5093 from the DCE side of the O-I.



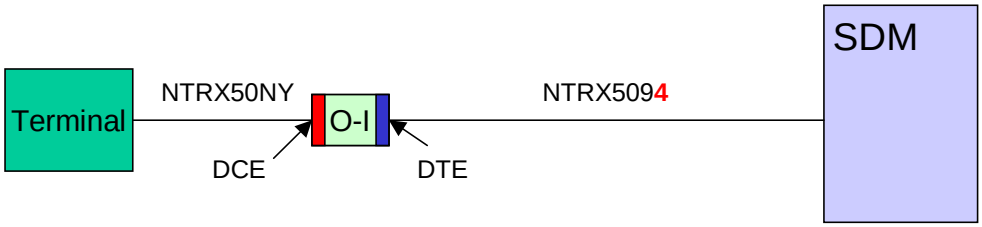
5 Connect the NTRX50NY to the DCE side of the O-I. Connect the NTRX5094 to the DTE side of the O-I.



6 Connect the NTRX50NY to the terminal.



7 Connect the NTRX5094 to SP0.

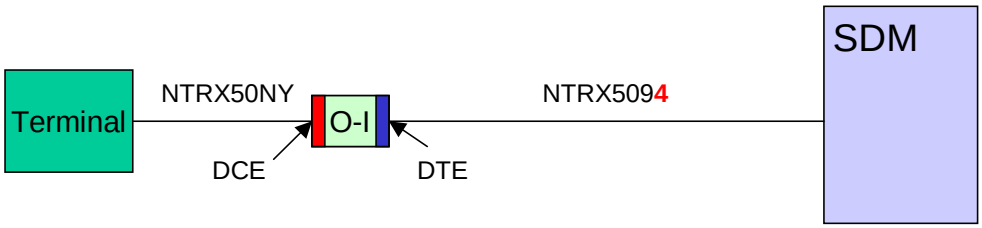


8 You have completed this procedure.

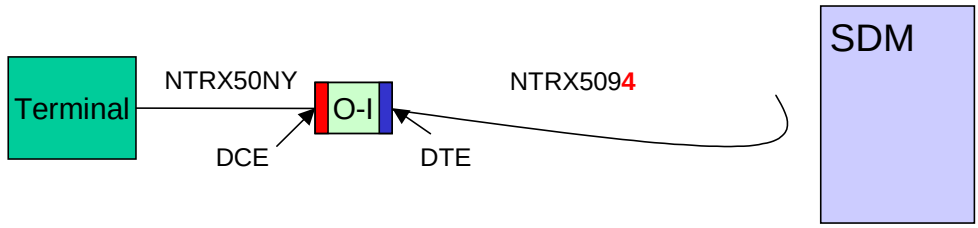
Changing from a local to a remote console connection with O-I

At the CS 2000 Core Manager

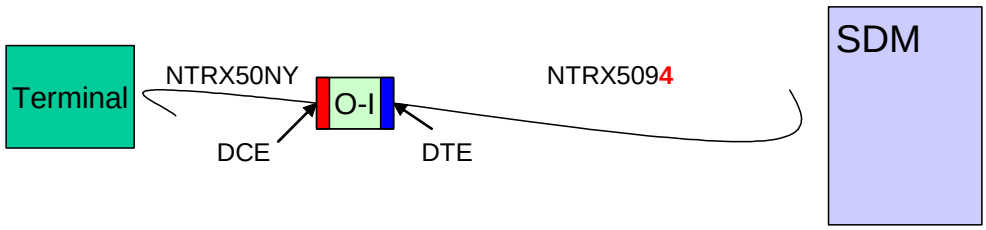
1 The following figure shows an existing local console connection. Be sure that you are familiar with the configuration, then go to step 2.



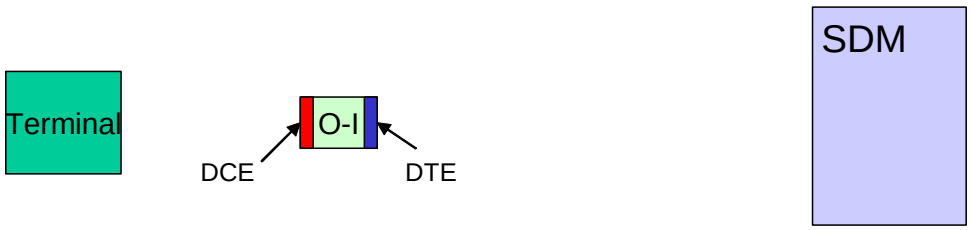
2 Disconnect the NTRX5094 from the SP0.



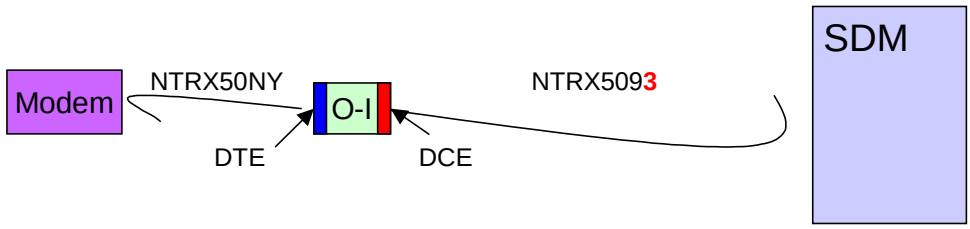
3 Disconnect the NTRX50NY from the terminal.



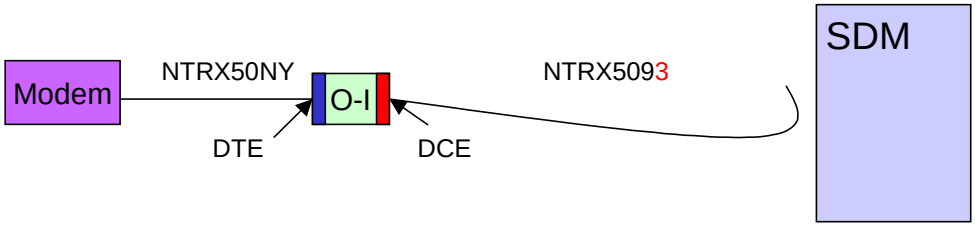
4 Disconnect NTRX50NY from the DCE side of the O-I and NTRX5094 from the DTE side of the O-I.



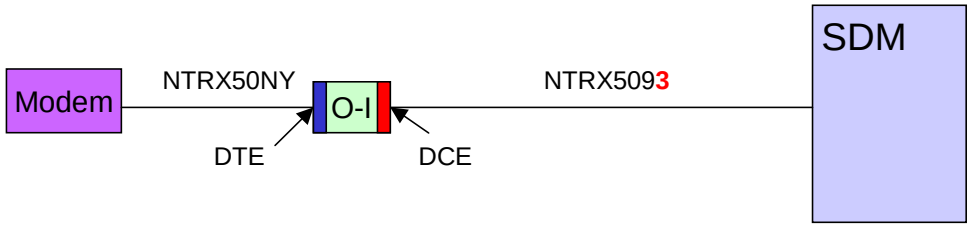
5 Connect the NTRX50NY to the DTE side of the O-I. Connect the NTRX5093 (SDM modem cable) to the DCE side of the O-I.



6 Connect the NTRX50NY to the modem.



7 Connect the NTRX5093 to SP0.



8 You have completed this procedure.