CBM 800 Administration and Security

This document describes the administration and security features and operating procedures for the CBM.

Administration and security strategy

The CBM provides security and administration management for the Computing Module (CM).

Administration and security procedures

Use the CBM to perform the following tasks:

- back up data on a Sun server
- fully back up file systems on a Sun server
- restore data on a Sun server
- fully restore a system on a Sun server
- backup and restore
- erase the contents of a CD/DVD on a Sun server
- configure automated data backups on a Sun server
- add a file system using the makelv command
- increase the size of a file system on Sun server
- add or remove a program from the maintenance class users" access
- connect to the CM passthru
- create logical volume in datavg
- add or remove a maintenance user
- add or remove a passthru user
- enable or disable Telnet
- enable or disable FTP
- add group membership to a maintenance user

- transfer files as a passthru user using FTPProxy
- transfer files as a core user using FTPProxy
- start an SCFT client session
- transfer files from the Core using SCFT
- transfer files to the Core using SCFT
- remove a file from the Core using SCFT
- display help for SCFT
- list volumes on the Core using SCFT
- configure the time zone on a Sun server
- configure daylight savings time parameters on a Sun server
- change a user password on a Sun server
- change a passthru user password
- set the threshold for file systems on a Sun server
- start an application
- start the application group
- stop an application
- stop the application group
- stop and restart an application
- offline an application
- offline the application group
- establish a modem connection
- increase the size of a file system on a Sun server
- display the CLLI from the command line
- display the CLLI from BILLMTC

Performing a data backup on a Sun server (SN06.2 or greater)

Application

Use this procedure to perform a data backup on a Sun server (t1400 or Netra 240) running the SN06.2 or greater release of the Succession Server Platform Foundation Software (SSPFS).

Note 1: For systems running the SN05 or SN06 release of the SSPFS, use procedure Performing a full backup of Oracle data on a Sun server (pre-SN06.2) on page 91 in this document.

Note 2: The data backup is not required for the Core Billing Manager (CBM) product family.

ATTENTION
It is recommended that provisioning activities be put on hold during the time of the data backup.

Prerequisites

This procedure has the following prerequisites:

- you must be running SSPFS SN06.2 or greater
- you need a blank 4mm Digital Data Storage (DDS-3) tape of 125m and 12 GB to store the data (t1400 only)
- you need one or more blank DVD-RW of 4.7 GB to store the data (Netra 240 only) - please note that the backup utility limits the storage to 2 GB per DVD-RW

Note: To re-use a DVD-RW, refer to procedure Erasing the contents of a CD/DVD on a Sun server on page 15 in this document.

ATTENTION
The database must be in sync with the Communication Server 2000 and the MG 9000 Manager (if present). Therefore, ensure you have an image of both before you proceed. Performing a restore from the Oracle database alone may cause data mismatches at the Communication Server 2000 and the MG 9000 Manager (if present).

Action

Perform the following steps to complete this procedure.

At the Sun server

1 Insert the blank tape or DVD-RW into the drive.

At your workstation

2 Telnet to the server by typing

> **telnet <server>**

and pressing the Enter key.

where

server
is the IP address or hostname of the Sun server on which you are performing the backup

3 When prompted, enter your user ID and password.

4 Change to the root user by typing

$ **su - root**

and pressing the Enter key.

5 When prompted, enter the root password.

If you are using	Do
a tape	step 6
a DVD-RW	step 7

6 Rewind the tape by typing

mt -f /dev/rmt/0 rewind

and pressing the Enter key.

7 Backup the data by typing

$ **/opt/nortel/sspfs/bks/bkdata**

and pressing the Enter key.

Example response:

```
Backup Completes Successfully
```

If you are using	Do
a tape	step 8
a DVD-RW	step 9

8 Verify the backup on tape was successful as follows:

a List the content of the tape by typing

```
# tar tvf /dev/rmt/0
```

and pressing the Enter key.

Example response:

```
-rw-rw-rw- root/other  1291264 2003-10-01
15:58 oracle.dmp
-rw-rw-rw- root/other     8192 2003-10-01
15:58 critdata.cpio
```

b Remove the tape from the drive, label it, write-protect it, and store it in a safe place.

9 Verify the backup on DVD-RW was successful as follows:

a List the content of the DVD-RW by typing

```
# tar tvf /cdrom/*bkdata*/*.tar
```

and pressing the Enter key.

Example response:

```
-rw-rw-rw- root/other  1291264 2003-10-01
15:58 oracle.dmp
-rw-rw-rw- root/other     8192 2003-10-01
15:58 critdata.cpio
```

b Remove the DVD-RW from the drive, label it, and store it in a safe place.

10 You have completed this procedure.

Performing a full backup of file systems (SN06.2 or greater)

Application

Use this procedure to perform a full backup of the file systems on a Sun server (t1400 or Netra 240) running the SN06.2 or greater release of the Succession Server Platform Foundation Software (SSPFS).

Note: For system running the SN05 or SN06 release of the SSPFS, use procedure Performing a full backup of file systems (pre-SN06.2) on page 99 in this document.

Prerequisites

This procedure has the following prerequisites:

- you must be running SSPFS SN06.2 or greater
- you must perform a data backup prior to performing this procedure (refer to procedure Performing a data backup on a Sun server (SN06.2 or greater) on page 45 in this document, if required)

  Note: The data backup is not required prior to this procedure for the Core Billing Manager (CBM) product family.

- you need a blank 4mm Digital Data Storage (DDS-3) tape of 125m and 12 GB to store the data (T1400 only)
- you need one or more blank DVD-RW of 4.7 GB to store the data (Netra 240 only) - please note that the backup utility limits the storage to 2 GB per DVD-RW

  Note: To re-use a DVD-RW, refer to procedure Erasing the contents of a CD/DVD on a Sun server on page 15 in this document.

Action

At the Sun server

1 Insert a blank tape or DVD-RW into the drive.

At your workstation

2 Telnet to the Sun server by typing

> **`telnet <server>`**

and pressing the Enter key.

where

server
is the IP address or host name of the server on which you are performing the backup

3 When prompted, enter your user ID and password.

4 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

5 When prompted, enter the root password.

If you are using	Do
a tape	step 6
a DVD-RW	step 7

6 Rewind the tape by typing

```
# mt -f /dev/rmt/0 rewind
```

and pressing the Enter key.

7 Backup the file systems by typing

```
# /opt/nortel/sspfs/bks/bkfullsys
```

and pressing the Enter key.

Example response:

```
Backup Completed Successfully
```

Note: If you are using DVD-RW, you may be prompted to insert another blank DVD.

If you are using	Do
a tape	step 8
a DVD-RW	step 9

8 Verify the backup to tape was successful as follows:

a List the content of the tape by typing

```
# gtar tvf /dev/rmt/0
```

and pressing the Enter key.

b Eject and remove the tape from the drive, label it, write-protect it, and store it in a safe place.

9 Verify the backup to DVD was successful as follows:

a List the content of the DVD by typing

```
# gtar tvf /cdrom/*bkfullsys*/*.tar
```

and pressing the Enter key.

b Remove the DVD from the drive, label it, and store it in a safe place.

10 You have completed this procedure.

Performing a data restore on a Sun server (SN06.2 or greater)

Application

Use this procedure to restore data from a backup tape or DVD-RW on a Sun server (t1400 or Netra 240) running the SN06.2 or greater release of the Succession Server Platform Foundation Software (SSPFS).

Note 1: For systems running the SN05 or SN06 release of the SSPFS, use procedure Restoring application data to the Oracle database (pre-SN06.2) in this document.

Note 2: The data restore is not required for the Core Billing Manager (CBM) product family.

Prerequisites

This procedure has the following prerequisites:

- you must be running SSPFS SN06.2 or greater
- you need the tape or the DVD-RW on which the data was backed up

Action

Perform the following steps to complete this procedure.

At the Sun server

1 Insert the backup tape or DVD-RW into the drive.

At your workstation

2 Telnet to the server by typing

> **`telnet <server>`**

and pressing the Enter key.

where

server
is the IP address or host name of the Sun server on which you are performing the data restore

3 When prompted, enter your user ID and password.

4 Change to the root user by typing

$ **`su - root`**

and pressing the Enter key.

5 When prompted, enter the root password.

6 Stop the server applications that run on the server.

For	Refer to
SESM, SAM21EM and NPM server applications	Stopping the SESM server application Stopping the SAM21 Manager server application Stopping the NPM server application
MG 9000 Manager and mid-tier server applications	the MG9000 Security and Administration document, NN10162-611, if required

7 Restore the database by typing

$ **`/opt/nortel/sspfs/bks/rsdata`**

and pressing the Enter key.

8 Remove the backup tape or the DVD-RW from the drive, and store it in a safe place.

9 Verify that the database is restored properly.

10 Start the server applications that run on the server.

For	Refer to
SESM, SAM21EM and NPM server applications	Starting the SESM server application Starting the SAM21 Manager server application Starting the NPM server application
MG 9000 Manager and mid-tier server applications	the MG9000 Security and Administration document, NN10162-611, if required

11 You have completed this procedure.

Performing a full system restore on a Sun server (SN06.2 or greater)

Application

Use this procedure to perform a full system restore from a backup tape or DVD-RW on a Sun server (t1400 or Netra 240) running the SN06.2 or greater release of the Succession Server Platform Foundation Software (SSPFS).

Note: For systems running the SN05 or SN06 release of the SSPFS, use procedures Restoring root file systems (pre-SN06.2) on page 111 and Restoring non-root file systems (pre-SN06.2) on page 115 in this document.

Use one of the methods below according to your office configuration.

- Simplex configuration (one server) on page 1
- High-availability configuration (two servers) on page 2

Note: Only the Simplex configuration (one server) is applicable to perform a full system restore from tape on a t1400 server.

Prerequisites

This procedure has the following prerequisites:

- you must be running SSPFS SN06.2 or greater
- you need the backup tape or DVD-RW

Action

Perform the following steps to complete this procedure.

Simplex configuration (one server)

At the server console

1 Log in to the Sun server through the console (port A) using the root user ID and password.

2 Bring the system to the OK prompt by typing

```
# init 0
```

and pressing the Enter key.

3 Insert SSPFS CD disk#1 into the CD/DVD drive.

4 At the OK prompt, restore the system by typing

```
OK boot cdrom - restore
```

and pressing the Enter key.

5 When prompted, accept the software license restrictions by typing

ok

and pressing the Enter key.

The system reboots.

6 When prompted, insert the backup tape or Volume 1 of the backup DVD-RW into the drive.

The restore process can run for several minutes and may prompt you for additional Volumes that were generated during the full system backup to DVD-RW.

7 Restore the data. Refer to procedure Performing a data restore on a Sun server (SN06.2 or greater) in the ATM/IP Security and Administration document, NN10402-600, if required.

Note: The data restore is not required for the Core Billing Manager (CBM) product family.

8 Once the data restore is complete, reboot the system by typing

init 6

and pressing the Enter key.

9 You have completed this procedure.

High-availability configuration (two servers)

At the console connected to the inactive node

1 Log in to the inactive node through the console (port A) using the root user ID and password.

2 Bring the system to the OK prompt by typing

init 0

and pressing the Enter key.

At the console connected to the active node

3 Log in to the active node through the console (port A) using the root user ID and password.

4 Bring the system to the OK prompt by typing

init 0

and pressing the Enter key.

5 Insert SSPFS CD disk#1 into the CD/DVD drive.

6 At the OK prompt, restore the system by typing

```
OK boot cdrom - restore
```

and pressing the Enter key.

7 When prompted, accept the software license restrictions by typing

```
ok
```

and press the Enter key.

The system reboots.

8 When prompted, insert Volume 1 of the backup DVD-RW into the drive.

The restore process can run for several minutes and may prompt you for additional Volumes that were generated during the full system backup to DVD-RW.

9 Restore the data. Refer to procedure Performing a data restore on a Sun server (SN06.2 or greater) in the ATM/IP Security and Administration document, NN10402-600 if required.

Note: The data restore is not required for the Core Billing Manager (CBM) product family.

10 Once the data restore is complete, reboot the system by typing

```
# init 6
```

and press the Enter key.

11 Re-image the inactive node using the active node's image. Refer to procedure "Cloning the image of one node in a cluster to the other node" in the ATM/IP Security and Administration document, NN10402-600, if required.

12 You have completed this procedure.

Erasing the contents of a CD/DVD on a Sun server

Application

Use this procedure to erase the contents of a CD/DVD on a Sun server (Netra 240), when you want to re-use the CD/DVD.

Prerequisites

None

Action

Perform the following steps to complete this procedure.

At the Sun server

1 Insert the CD/DVD you want to erase into the drive.

At your workstation

2 Telnet to the Sun server by typing

> **`telnet <server>`**

and pressing the Enter key.

where

server
is the IP address or hostname of the Sun server

3 When prompted, enter your user ID and password.

4 Erase the contents of the CD/DVD by typing

$ **`cdrw -b all`**

and pressing the Enter key

Note: You can also use the “fast” and “session” arguments. For more details, refer to the man pages by typing **`man cdrw`**.

5 Remove the CD/DVD from the drive.

6 You have completed this procedure.

Configuring automated data backups on a Sun server

Application

Use this procedure to view or change the configuration settings for an automated data backup on a Sun server. The automated backup backs up Oracle and critical data.

Note: Log SPFS320 is generated when an automated data backup fails, and when the backup failure is cleared and the backup completes successfully. Refer to the Succession Fault Management Logs Reference document, NN10275-909 for log details.

Prerequisites

None

Action

Perform the following steps to complete this procedure.

At your workstation

1 Telnet to the Sun server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the Sun server on which you want to configure automated data backups

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Access the command line interface by typing

```
# cli
```

and pressing the Enter key.

Response

```
Command Line Interface
 1 - View
 2 - Configuration
 3 - Other

 X - exit

select -
```

6 Enter the number that corresponds to the “Configuration” option in the menu.

Example response

```
Configuration
 1 - NTP Configuration
 2 - Apache Proxy Configuration
 3 - DCE Configuration
 4 - OAMP Application Configuration
 5 - CORBA Configuration
 6 - IP Configuration
 7 - DNS Configuration
 8 - Syslog Configuration
 9 - Database Configuration
10 - NFS Configuration
11 - Bootp Configuration
12 - Restricted Shell Configuration
13 - Security Services Configuration
14 - Login Session
15 - Location Configuration
16 - Cluster Configuration
17 - Succession Element Configuration
18 - snmp_poller (SNMP Poller Configuration)

 X - exit

Select -
```

7 Enter the number that corresponds to the “Database Configuration” option in the menu.

Example response

```
Database Configuration
 1 - change_db (Change Database Host)
 2 - change_orabackup (Configure database
     backup)

 X - exit

select -
```

8 Enter the number that corresponds to the “change_orabackup” option in the menu.

Example response

```
===Executing “change_orabackup”

Current setting:
Automated Backup Enabled N
Backup Time      6:00 Hours

Enable Automated backup (default: N):
```

9 When prompted, enter **Y** to enable automated backup or press the Enter key to accept the default value (`N`) to disable automated backup.

Example response

```
Set backup hour to: (default: 22):
```

10 When prompted, enter the time you want the automated backup to occur, or press the Enter key to accept the default value.

Example response

```
New settings:
Automated Backup Enabled   Y
Backup Time               22:00 Hours

Enter “ok” to commit changes
Enter “quit” to exit
Enter anything else to re-enter settings
```

11 Commit the changes by typing

ok

and pressing the Enter key.

Example response

```
===″change_orabackup″ completed successfully
```

Note: If enabled, automated backup will start within the first 45 seconds of the backup hour. If the backup hour is set to the current hour, automated backup will occur 24 hours from the current hour.

12 Exit each menu level of the command line interface to eventually exit the command line interface, by typing

`select - x`

and pressing the Enter key.

13 You have completed this procedure.

Adding a file system using the makelv command

Application

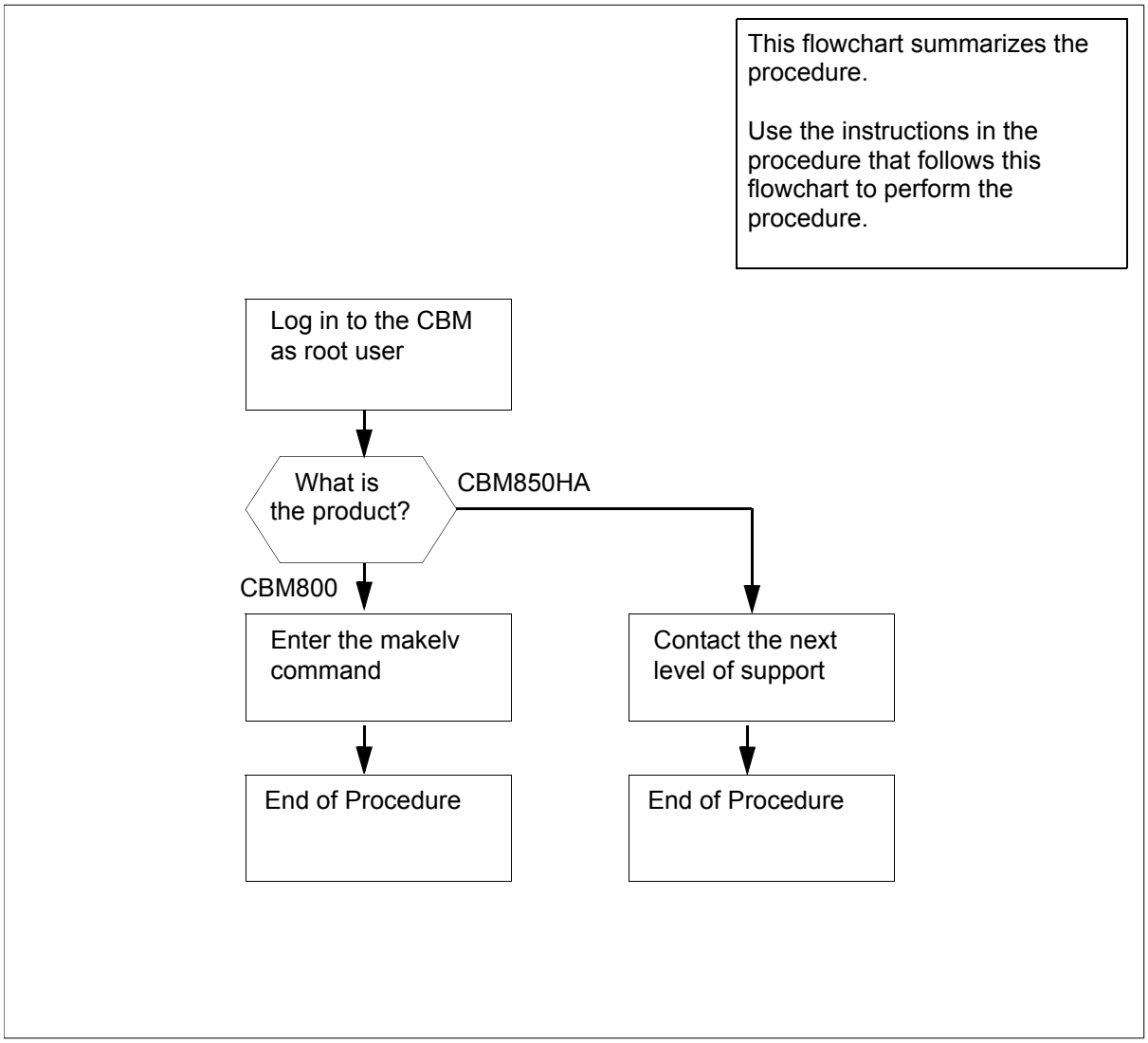
Use this procedure to create a new file system on the CBM product using the makelv command.

You must have root user privileges to perform this procedure.

Action

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

Summary of adding a file system using the makelv command



Adding a file system using the makelv command

At the local or remote VT100 terminal

1 Complete the steps for the CBM product.

If you have	Do
a CBM800	step 2
a CBM850HA	contact the next level of support

2 Log in to the CBM as the root user.

3 Add a file system by typing

`# makelv <file system name><file system size>`

and pressing the Enter key.

where

file system name
is the mount point of the file system to be created

file system size
is the size of the file system in MegaBytes

4 You have completed this procedure.

Increasing the size of a file system on a Sun server

Application

Use one of the following procedures to increase the size of a file system on a Succession Server Platform Foundation Software (SSPFS)-based server:

- Simplex configuration (one server) on page 162
- High-availability configuration (two servers) on page 165

It is recommended you perform this procedure during off-peak hours.

The Succession Server Platform Foundation Software (SSPFS) creates file systems to best fit the needs of applications. However, it may be necessary to increase the size of a file system.

Not all file systems can be increased. The table below lists the file systems that cannot be increased, and lists examples of those that can be increased.

SSPFS file systems

Cannot be increased	Can be increased (examples)
/ (root)	/data
/var	/opt/nortel
/opt	/data/oradata
/tmp	/audio_files
	/PROV_data
	/user_audio_files
	/data/qca
	/data/mg9kem/logs

During the time file systems are being increased, writes to the file system are blocked, and the system activity increases. The more size that is added to the file system, the greater the impact on performance.

Prerequisites

Before you perform this procedure, verify that the file system is full or nearly full and that its content is valid application data. Remove any unneeded files or files generated in error that could be taking up disk space.

Action

Perform the following steps to complete this procedure.

Simplex configuration (one server)

At your workstation

1 Telnet to the Sun server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the Sun server that has the file system you want to increase

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Access the command line interface by typing

```
# cli
```

and pressing the Enter key.

Example response

```
Command Line Interface
 1 - View
 2 - Configuration
 3 - Other

 X - exit

select -
```

6 Determine which file system to increase by checking the current disk capacity utilization as follows:

a Enter the number that corresponds to the “View” option in the menu.

Example response

```
View
  1 - sspfs_soft (Display Software
      Installation Level Of SSPFS)
  2 - chk_sspfs (Check SSPFS Processes)
  3 - sw_conf (The software configuration of
      the znc0s0jx)
  4 - cpu_util (Overall CPU utilization)
  5 - cpu_util_proc (CPU utilization by
      process)
  6 - port_util (I/O port utilization)
  7 - disk_util (Filesystem utilization)

  X - exit

select -
```

b Enter the number that corresponds to the “disk_util” option in the menu.

Example response

```
=== Executing "disk_util"

Filesystem             kbytes    used   avail capacity  Mounted on
/dev/md/dsk/d2       4129290 1892027 2195971    47%    /
/proc                      0       0       0     0%    /proc
fd                         0       0       0     0%    /dev/fd
mnttab                     0       0       0     0%    /etc/mnttab
/dev/md/dsk/d8       2053605  155600 1836397     8%    /var
swap                 3505488      40 3505448     1%    /var/run
swap                  524288     448  523840     1%    /tmp
/dev/md/dsk/d11      5161437 1428691 3681132    28%    /opt
/dev/md/dsk/d23      2031999   34313 1936727     2%    /PROV_data
/dev/md/dsk/d24      2031999  169042 1801998     9%    /audio_files
/dev/md/dsk/d20      3080022  294615 2723807    10%    /data
/dev/md/dsk/d25       949455  440344  452144    50%    /user_audio_files
/dev/md/dsk/d21      3080022  275962 2742460    10%    /opt/nortel
/dev/md/dsk/d22     12386331 10337214 1925254    85%    /data/oradata
/dev/md/dsk/d26       122847    1041  109522     1%    /data/qca

=== "disk_util" completed successfully
```

7 Determine the appropriate size for the file systems based on your specific needs.

8 Exit each menu level of the command line interface to eventually exit the command line interface, by typing

`select - x`

and pressing the Enter key.

9

ATTENTION
Once you increase the size of a file system, you cannot decrease it.

Increase the size of the file system by typing

`# filesys grow -m <mount_point> -s <size>{m,g}`

Where

mount_point
is the name associated with the file system

- /data
- /opt/nortel
- /data/oradata
- /PROV_data
- /audio_files
- /user_audio_files
- /data/qca
- /data/mg9kem/logs

size
is the size in megabytes (m) or gigabytes (g) you obtained in step 7

Example
`# filesys grow -m /data -s 512m`

Note: The example above increases the “/data” file system by 512 megabytes (MB).

10 You have completed this procedure.

High-availability configuration (two servers)

ATTENTION
During this procedure, the cluster will be running without a standby node. The duration is estimated at approximately one hour.

At your workstation

1 Telnet to the inactive node of the server cluster by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the physical IP address of the inactive node in the server cluster

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Ensure the cluster is in a good state as follows:

a Run the udstat command by typing

```
# udstat
```

and pressing the Enter key.

If the system response contains “nodaemon”, “offline”, “down, “not mounted”, contact your next level of support. Otherwise, proceed to the next step.

b Run the ubmstat command by typing

```
# ubmstat
```

and pressing the Enter key.

If the system response is other than “ClusterIndicatorSTBY”. contact your next level of support. Otherwise, proceed to the next step.

c Run the CheckConfiguration command by typing

CheckConfiguration

and pressing the Enter key.

If the system response is other than “Checking local cluster configuration against <other node>, contact your next level of support. Otherwise, proceed to the next step.

At the Inactive node

6

ATTENTION
Once you increase the size of a file system, you cannot decrease it.

Increase the size of the desired file system by typing

GrowClusteredFileSystem.ksh <mount_point> <size>{m,g}

Where

mount_point
is the name associated with the file system, for example

- /data
- /opt/nortel
- /data/oradata
- /PROV_data
- /audio_files
- /user_audio_files
- /data/qca
- /data/mg9kem/logs

size
is the size in megabytes (m) or gigabytes (g)

Example
GrowClusteredFileSystem.ksh /data/qca 10m

Note: The example above increases the “/data/qca” file system by 10 megabytes (MB).

7 Reboot the Inactive node by typing

```
# init 6
```

and pressing the Enter key.

8 Wait for the Inactive node to reboot, then log in again using its physical IP address.

9 Telnet to the active node of the Sun server cluster by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the physical IP address of the active node in the Sun server cluster

10 When prompted, enter your user ID and password.

11 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

12 When prompted, enter the root password.

At the Active node

13 Stop the cluster by typing

```
# StopCluster
```

and press the Enter key.

This action causes a cluster failover and makes the active node inactive, and the inactive node active.

At the newly Active node

14 Clone the other node using procedure Cloning the image of one node in a cluster to the other node on page 221 in this document.

15 You have completed this procedure.

Adding or removing a program from the maintenance class users' access

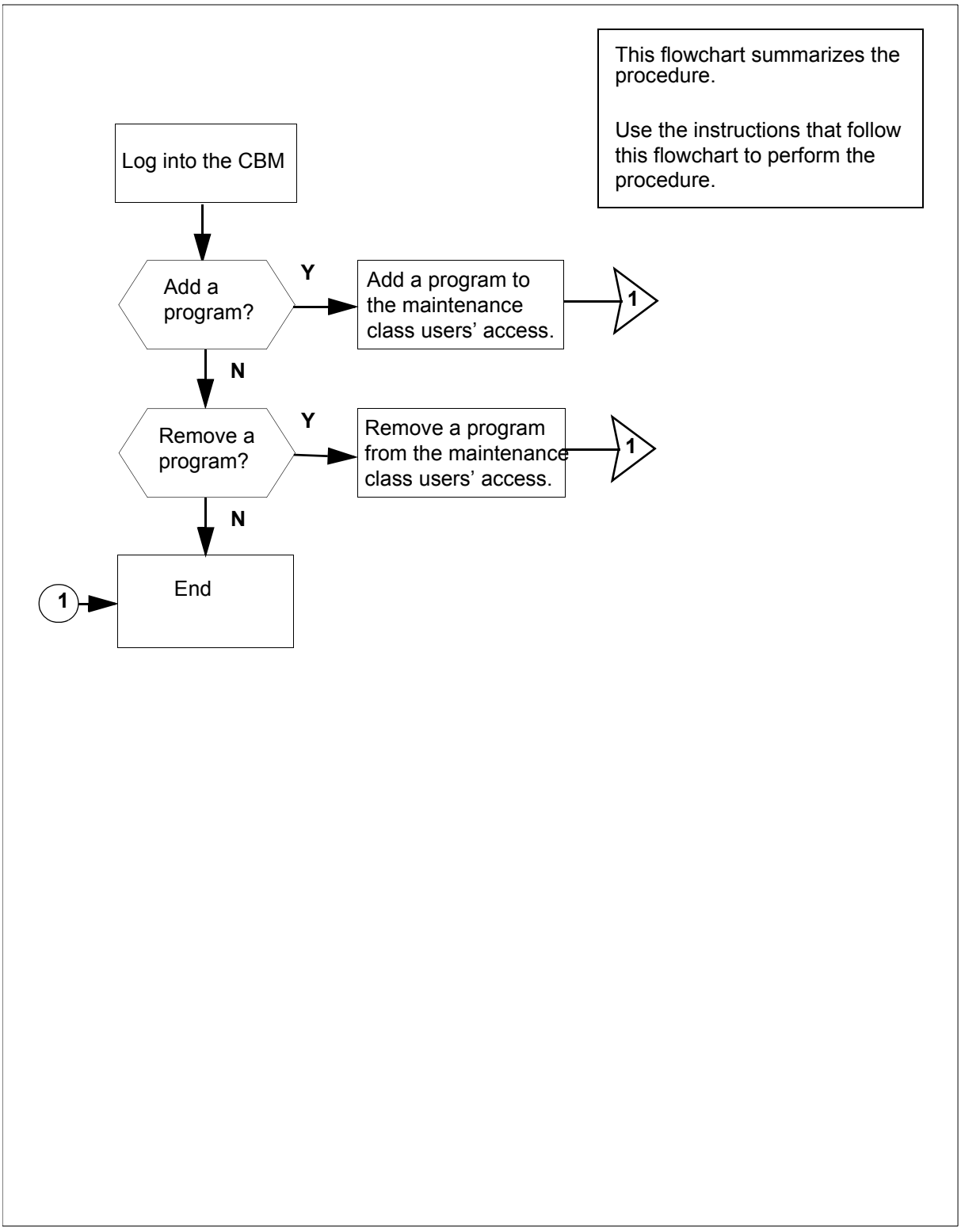
Application

Use this procedure to add or remove a program from the maintenance class users' access. This procedure must be performed by the root user.

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 adding or removing a program from the maintenance class users' access



Adding or removing a program to/from the maintenance class users' access

At the local or remote VT100 console

1 Log into the CBM as the root user

a using telnet, by typing:

```
telnet <IP address>
```

b using secure shell protocol (SSH), by typing:

```
# ssh -1 root <IP address>
```

and pressing the Enter key.

where

IP address
is the IP address of the CBM

2 When prompted, enter the root password.

3 Use the following table to determine your next step.

If you want to	Do
add a third party program to the maintenance class users' access	step 4
remove a third party program from the maintenance class users' access	step 5

4 Add a third party program to the maintenance class users' access by typing

```
# custprog -a <program name>
```

and pressing the Enter key.

where

program name
is the location where the program is stored on the CBM

Note: The full path is required for the program name.

5 Remove a third party program from the maintenance class users' access by typing

```
# custprog -d <program name>
```

and pressing the Enter key.

where

program name
is the name used in the maintenance class user's restrict shell

6 You have completed this procedure.

Connecting to the CM passthru

Application

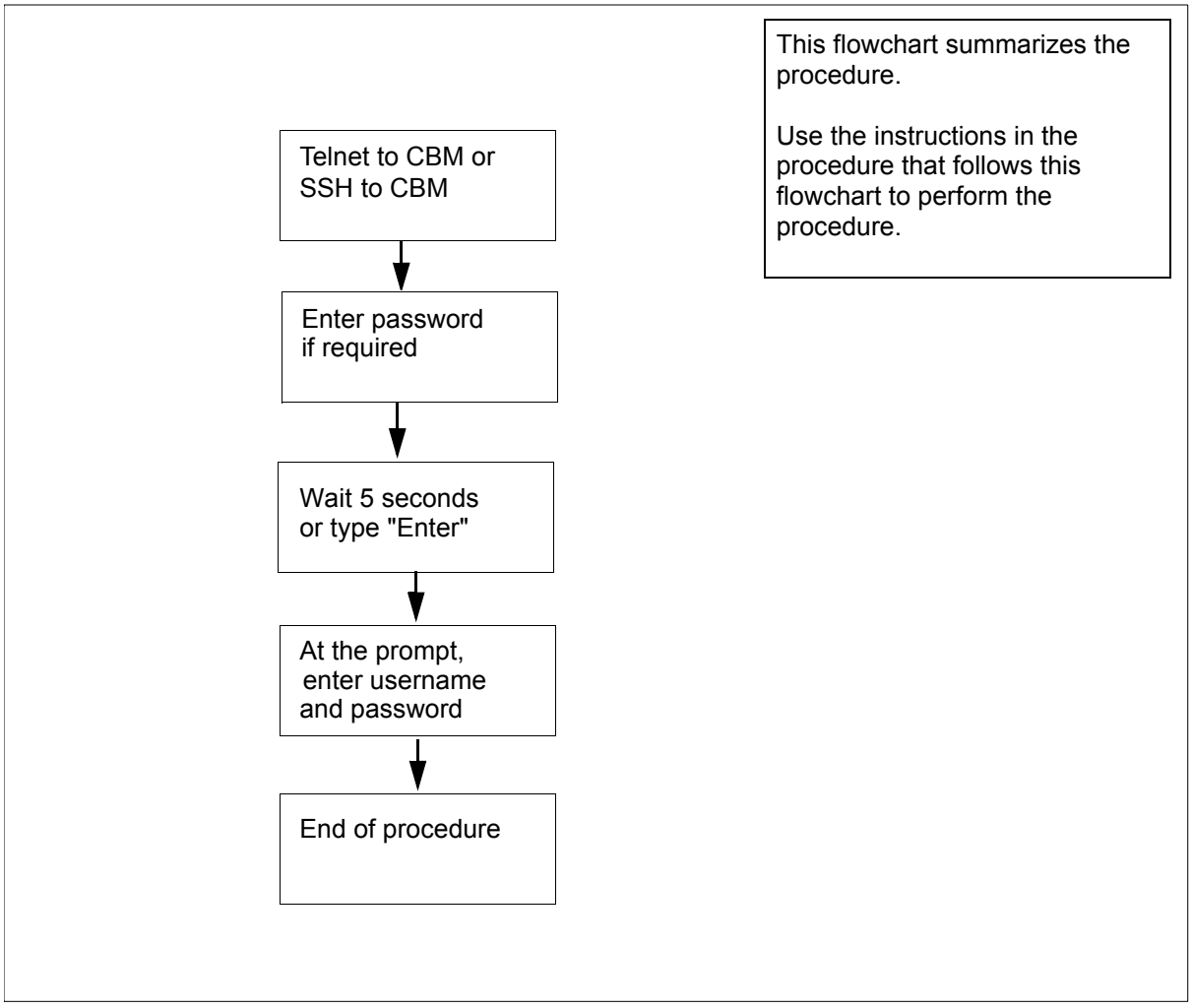
Use this procedure to access the CM through the CBM as a passthru user.

To configure a passthru user, use procedure Adding or removing a passthru user on page 1 in this document.

Action

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

Summary of connecting to the core passthru



Connecting to the CM passthru

At the workstation

1 Log in to the CBM as a passthru user.

If you	Do
use telnet	step a
use SSH	step b

a Telnet to the CBM by typing

`> telnet <IP address>`

and pressing the Enter key.

where

<IP address>
is the IP address of the CBM.

Continue with step 2.

b Open an SSH session by typing

`> ssh-l<passthru userID><IP address>`

and pressing the Enter key.

where

<IP passthru userID>
is the IP address of the CBM.

2 If you are prompted for a password, enter your password.

Note: The following response is only displayed when the pasthru user is configured as "password required". Otherwise, the connection will be directly forwarded to the Core login prompt.

Response:

```
This is a passthru user.
Please type "Ctrl+p" and Enter for changing your password.
type "Enter" or wait for 5 seconds to continue.
```

3 Wait 5 seconds to continue or continue immediately by typing

> Enter

and pressing the Enter key.

Example response:

```
Trying to complete connection. Please wait...
*********************************************

   WARNING...WARNING...WARNING...WARNING.

 ......In LINEMODE, To Enter into BREAK.....
  Press ^B, Type the Command and Press <Enter>
   Example:  ^Bhx <Enter>

*********************************************
Telnet LINEMODE.
Enter username and password
MIB variable CharOptionAllowed must be set first
to allow CHAR MODE.
>
```

4 At the prompt, enter the username and password for core login.

5 You have completed this procedure.

Adding or removing a maintenance user

Purpose

Use this procedure to add or remove a maintenance class user.

Application

Use this procedure to add or remove a maintenance class user. This procedure must be performed by the root user.

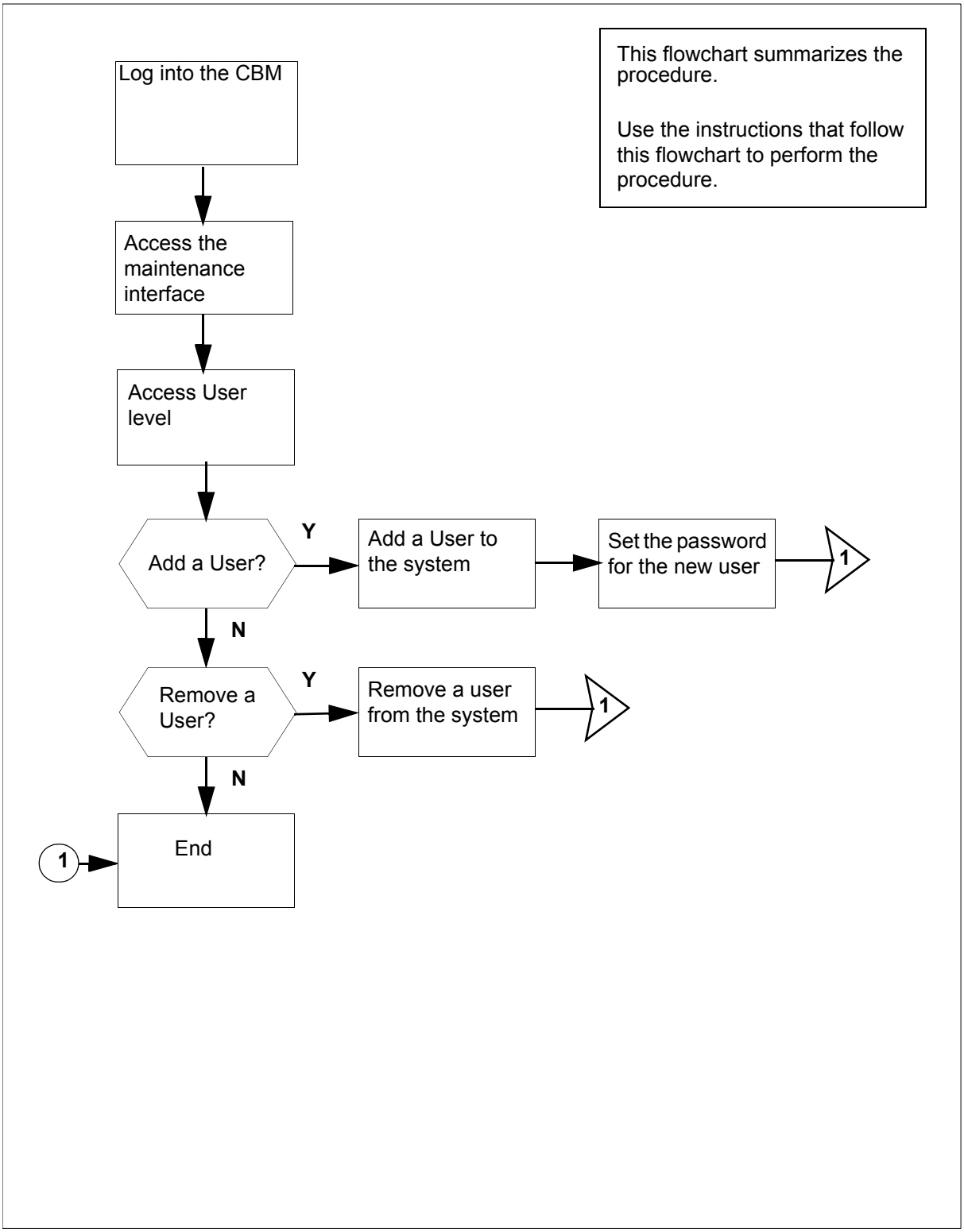
ATTENTION

For the current release, there is *no limit* to the number of telnet sessions allowed for maintenance and passthru users.

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 Adding or removing a maintenance user



Adding or removing a maintenance user

At the local or remote VT100 console

1 Log into the CBM as the root user.

2 Access the maintenance interface:

 # cbmmtc

3 Access the User level:

> user

Response:

```
 CBM   MATE   NET   APPL   SYS   HW   CLLI: CTAT1
  .     -      .      .    Host: TAK2_svr
                             Active
User
 0 Quit
 2            Maintenance users
 3 PassThru   anonymous
 4            certuser
 5            image
 6            maint
 7            mgems
 8            npm
 9            npmftp
10             patcher
11             pfrs
12 Up            poller
13 Down            ptm
14            sam21cm
15                Maintenance Users 1 to 12 of 13
16
17 Help
18 Refresh
  root
Time  12:54  >
```

4 Use the following table to determine your next step.

If you want to	Do
add a user	step 5
remove a user	step 10

5 Add a maintenance class user:

> add <userID>

where

<userID> is the userID of the new user

Note: To activate a user, you need to set the password. Use the change command to set the password.

6 Set password for the user:

> change <userID>

where

<userID> is the userID of the user for whom you are setting the password

Note: If no userID is specified, the system changes the password of the root user.

7 Enter the password for the new user, and press the Enter key.

The password must be at minimum a six-character string containing at least one alphabetic character, and at least one numeric or special character. Although a password can contain more than eight characters, only the first eight characters are processed.

8 Enter the password again.

9 Press Enter again to continue.

If you	Do
want to add another user	step 5
do not want to add another user	step 12

10 Remove a user:

> delete <userID>

where

<userid>
is the userID of the new user

```
Are you sure you want to delete this user?
Do you wish to proceed?
Please confirm ("YES", "Y", "NO", or "N"):
```

11 Confirm that you want to delete the user:

> y

If you	Do
want to delete another user	step 10
do not want to delete another user	step 12

12 Exit the maintenance interface:

> quit all

13 You have completed this procedure.

Adding or removing a passthru user

Application

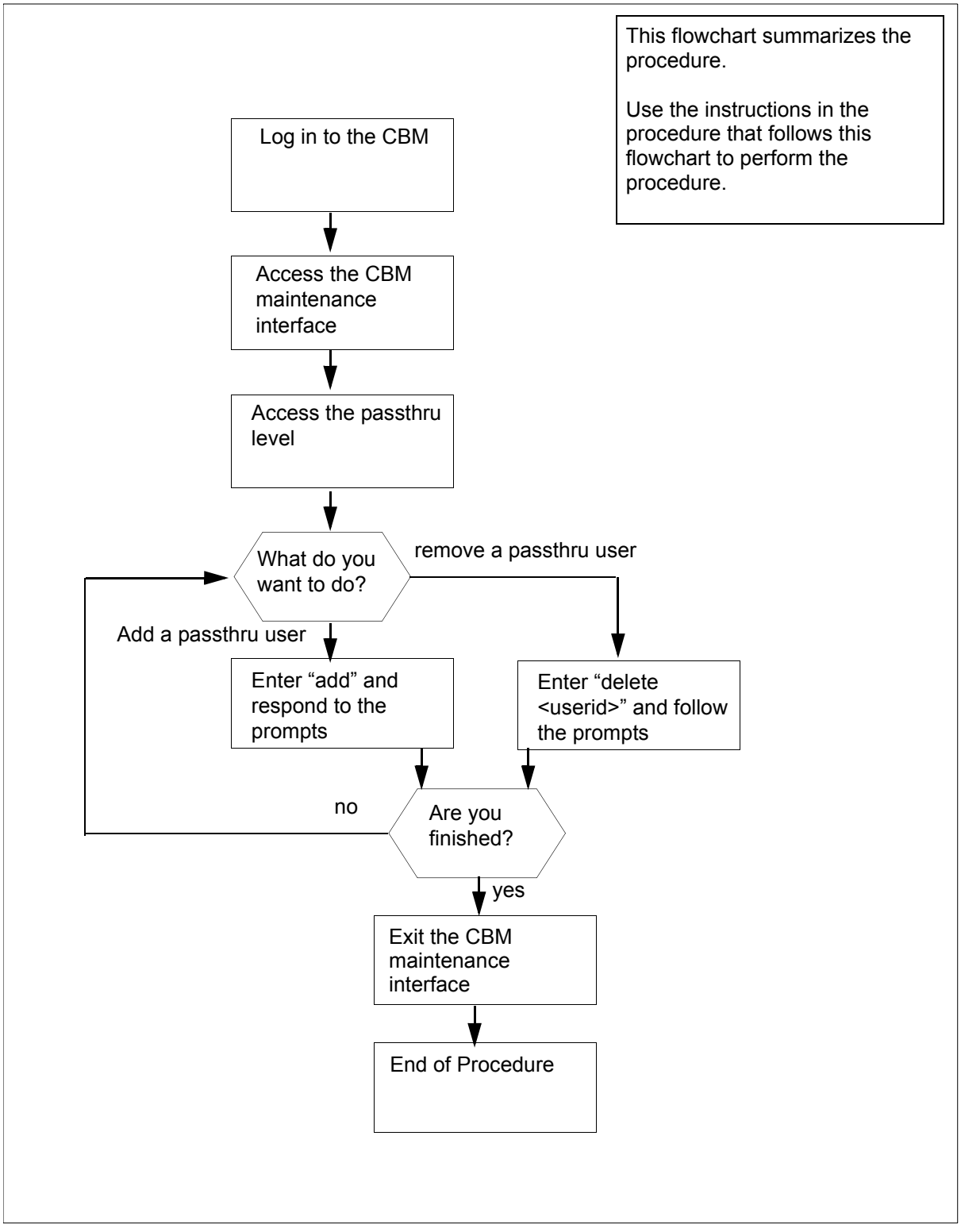
Use this procedure to add or remove a passthru user.

You must have root user privileges to perform this procedure.

Action

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

Summary of adding or removing a passthru user



Adding or removing a passthru user

At the CBM

1 Log in to the CBM as root user.

2 Access the CBM maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the passthru level by typing

```
# passthru
```

and pressing the Enter key.

Example response:

```
 CBM  MATE  NET  APPL  SYS  HW  CLLI: CTAT1
  .    -     .     .Host: TAK2_svr
                        Active
PassThru
 0 Quit
 2    UserName RealName  Passthru Action FTP CM
 3    tester1 TEST     telnet cm       Yes
 4                   PassThru Users: 1 to 1 of 1
 5
 6
 7
 8
 9
10
11
12 Up
13 Down
14
15
16
17 Help
18 Refresh  Add - Command complete
  root
Time  12:58  >
```

4 Use the following table to determine your next step.

If you want to	Do
add a passthru user	step 5
delete a passthru user	step 16

5 Add a passthru user by typing

> **add**

and pressing the Enter key.

6 When prompted, type the user name for the new user and press the Enter key.

Note: The user name must not be more than 8 characters. The user name can include lowercase letters, numbers, or the '.' , '_', or '-' characters.

7 When prompted, type the real name for the passthru user and press the Enter key.

8 When prompted, type the Telnet command arguments for the passthru user, and press the Enter key.

Note: Type "cm" for the Core passthru.

9 When prompted, indicate whether a password is required, and press the Enter key.

Response:

```
Enter Y to confirm, N to reject, or E to edit
```

10 Confirm the data you entered by typing Y or N and pressing the Enter key.

If you indicated a password	Do
is required	step 11
is not required	step 15

11 When prompted to set the initial password, press the Enter key.

12 When prompted, type the new password for the user and press the Enter key.

13 When prompted, re-type the password and press the Enter key.

14 When prompted, press the Enter key to continue.

The system returns you to the passthru level.

15 Use the following table to determine your next step.

If you	Do
want to add another user	step 5
do not want to add another user	you have completed this procedure

16 Delete a passthru user by typing

> **delete <userid>**

and pressing the Enter key.

where

<userid>
is the userID of the user you are deleting

Example response:

```
9
10            Delete PassThru User
11            PassThru user to be deleted:
12 Up
13 Down          Username: coreusr1
14               Name: core user1
15               Action: telnet core
16
17 Help       Do you wish to proceed?
18 Refresh   Please confirm (“YES”,”Y”,or”N”,)
root
Time  00:40  >
```

17 When prompted, confirm you want to delete the user by typing

> **Y**

and pressing the Enter key.

18 Use the following table to determine your next step.

If you	Do
want to delete another user	step 16
do not want to delete another user	step 19

19 Exit the CBM maintenance interface by typing

quit all

and pressing the Enter key.

20 You have completed this procedure.

Setting up local user accounts on a Sun server

Application

Use this procedure to add local user accounts on a Sun server and assign them to user groups. Also use this procedure to assign existing user accounts to user groups (see User groups on page 9).

ATTENTION

If upgrading from a release prior to SN06, existing users must be assigned to primary group “succssn” for login access, and to one or more Secondary user groups on page 9 to specify the operations the user is authorized to perform (see step 13 of this procedure).

If you choose to centrally manage your user accounts, refer to procedure “Adding new users” in the Integrated EMS Security and Administration document, NN10336-611.

User groups

Users of the Nortel Networks OAM&P client applications must belong to the primary user group “succssn” for login access. Users must also belong to one or more secondary user groups listed in the table below, which specify the operations a user is authorized to perform.

Secondary user groups

trkadm	lnadm	mgcadm	mgadm	emsadm
trkrw	lnrw	mgcrw	mgrw	emsrw
trksprov	lnsprov	mgcsprov	mgsprov	emssprov
trkmtc	lnmtc	mgcmtc	mgmtc	emsmtc
trkro	lnro	mgcro	mgro	emsro

A secondary user group consists of

- a user group domain
- a user group operation

User group domain

A user group domain defines the range of applications to which a user group applies. The user group domains are listed in the table below.

Domain	Application mapping
trk	trunks, trunk-based services, small trunking gateways (port level), carrier-based services
ln	line services, line cards, small line gateways (port level)
mgc	CS2K, CS3K, USP, GWC, SAM21, IMS, 3PC, Storm, CS 2000 SAM21 Manager, CS 2000 GWC Manager
mg	small and large gateways such as UAS, line gateways, trunk gateways
ems	SDM, MDM, MDP, KDC, device manager, NPM

User group operation

A user group operation dictates the operations a user can perform using the Nortel Networks OAM&P client applications. The user group operations are listed in the table below.

Operation	User role mapping
adm (administration)	Can reconfigure, access all functions, setup fundamental configuration, commission (add, delete, rehome), base frames and systems (SAM21 frames, call servers, large gateways), and run service-impacting diagnostics. The adm user can also do rw, sprov, mtc, and ro user operations.
rw (read/write)	Can view and change configuration and status, commission and reconfigure elements (GWCs, cards, shelves). The rw user can also do sprov, mtc, and ro user operations.
sprov (subscriber provisioning)	Can view status and configuration and change provisioning data, but cannot change maintenance state or do base component configuration. The sprov user can also do ro user operations.

Operation	User role mapping
mtc (maintenance)	Can view status and configuration, make changes to status, and run service-impacting diagnostics. The mtc user can also do ro user operations.
ro (read-only)	Can view status and configuration, but cannot make changes.

When assigning users to secondary user groups, use the tables that follow, which provide a mapping between commands and secondary user groups. The list of the available tables is as follow:

Node provisioning operations

Command	User group				
	mgcadm	mgcrw	mgcmtc	mgcsprov	mgcro
Disassociate a media gateway (MG) from a gateway controller (GWC)		x			
Associate an MG with a GWC		x			
Change the provisioning data for an MG		x			
Query site info					x

Node provisioning operations

Command	User group				
	mgcadm	mgcrw	mgcmtc	mgcsprov	mgcro
Query a GWC					x
Query an MG					x
change MG GWCEM data		x			
Get policy enforcement point (PEP) server data					x
Query a GWC PEP connection					x
Get dynamic quality of service (DQoS) policies data					x
Add or change a network address translations (NAT) device		x			
Query a NATdevice					x
Add, change, delete a media proxy (MP)		x			
Add, change, delete resource usage (RU)		x			
Query RU					x
Add, change, delete limited bandwidth links (LBL)		x			
Query LBL					x
Display call agent identification (ID)					x
Set or change call agent ID		x			
Change root middleboxes		x			
Add, modify, or decommission a SAM21 network element		x			
Reprovision a SAM21 node		x			
Configure IPoA services, ATM PMC addresses		x			
View alarms, cards, subnet, shelf, mate shelf, mate card					x
Lock/unlock a card			x		
Perform diagnostics			x		
Modify provisioning		x			

Node provisioning operations

Command	User group				
	mgcadm	mgcrw	mgcmtc	mgcsprov	mgcro
Perform a swact			x		
Firmware flash			x		
Assign/unassign services		x			

Audit operations

Command	User group				
	mgcadm	mgcrw	mgcmtc	mgcsprov	mgcro
Configure audit	x				
Run audit	x				
Get audit description					x
Get audit configuration					x
Get list of registered audits					x
Retrieve audit report					x
Take action on problem	x				

Carrier provisioning operations

Command	User group				
	trkadm	trkrw	trkmtc	trksprov	trkro
Add carrier		x			
Delete carrier		x			
Get endpoint					x
Get carrier					x
Get carrier by filter					x

Alarm operations

Command	User group				
	emsadm	emsrw	emsmtc	emssprov	emsro
View/filter alarms					x

Internet transparency operations

Command	User group				
	mgcadm	mgcrw	mgcmtc	mgcsprov	mgcro
Query NAT					x
Query media proxy					x
Change associated NAT		x			

Trunk provisioning operations

Command	User group				
	trkadm	trkrw	trkmtc	trksprov	trkro
Get tuple					x
Get tuple range					x
Get CM CLLI					x
Add tuple		x			
Replace tuple		x			
Delete tuple		x			
List all tuples	x				
Suspend application	x				
Restore application	x				

Trunk maintenance operations

Command	User group				
	trkadm	trkrw	trkmtc	trksprov	trkro
Post by trunk CLLI					x
Maintenance by trunk CLLI			x		
Post by gateway					x
Maintenance by gateway			x		
Post by carrier					x
Maintenance by carrier			x		
D-channel Post by trunk CLLI					x
D-channel maintenance by trunk CLLI			x		
ICOT			x		
Set CM CLLI			x		
Set Auto Refresh					x

ADSL provisioning operations

Command	User group				
	lnadm	lnrw	lnmtc	lnsprov	lnro
Get subscriber					x
Add subscriber				x	
Add cross connection				x	
Modify subscriber				x	
Modify cross connection				x	
Delete subscriber				x	
Delete cross connection				x	

Line provisioning operations

Command	User group				
	lnadm	lnrw	lnmtc	lnsprov	lnro
ECHO, QX75, QBB, QBERT, QCM, QCOUNTS, QCPUGNO, QDCH, QDN, QDNA, QGRP, QHLR, QIT, QLEN, QLRN, QLT, QMODEL, QMSB, QPHF, QPRIO, QSCONN, QSCUGNO, QSIMR, QSL, QTOPSPOS, QTP, QWUCR					x
QCUST, QDNSU, QDNWRK, QHA, QHASU, QHU, QLENWRK, QLOAD, QMADN, QNCOS, QPDN	x				
All other supported commands for line provisioning				x	

Line maintenance operations

Command	User group				
	lnadm	lnrw	lnmtc	lnsprov	lnro
Validate line using DN CLLI					x
Validate line using TID CLLI					x
Get line post info					x
Busy line			x		
Return line to service			x		
Force release line			x		
Installation busy line			x		
Cancel deload			x		
Get CM CLLI					x
Get endpoint state					x
GetGwlp					x

V5.2 provisioning operations

Command	User group									
	trkadm	trkrw	trkmtc	trksprov	trkro	lnadm	lnrw	lnmtc	lnsprov	lnro
Add, delete, modify V5.2 interface		x					x			
View all V5.2 interfaces					x					x
View signalling channel information entry, update list (V5Prov)					x					x
Add, modify, delete signalling channel information entry (V5Prov)		x					x			
View ringing cadence mapping, update list (V5Ring)					x					x
Add, modify, delete ringing cadence mapping (V5Ring)		x					x			
View signalling characteristic profile, update list (V5Sig)					x					x
Add, delete, modify signalling characteristic profile (V5Sig)		x					x			
View carrier-to-interface and interface-to-carrier mappings					x					x

Patching operations

Command	User group				
	emsadm	emsrw	emsmtc	emssprov	emsro
apply, remove, activate, deactivate, audit, restart, and image from the NPM GUI or CLUI	x				
Software image from MG 9000 Manager GUI		x			

Prerequisites

To perform this procedure, you need to have the root user ID and password to log in to the server.

Action

Perform the following steps to complete this procedure.

At your workstation

1 Telnet to the Sun server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the Sun server

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Use the following table to determine your next step.

If you are	Do
adding a new user	step 6
assigning an existing user to secondary user groups	step 11

6 Add the user to the primary user group “succssn” by typing

```
# useradd -g succssn <userid>
```

and pressing the Enter key.

where

userid
is a variable for the user name

7 Create a password for the user you just added by typing

```
# passwd <userid>
```

and pressing the Enter key.

where

userid
is the user name you added in the previous step

8 When prompted, enter a password of at least three characters.

Note: It is not recommended to set a password with an empty value. Use a minimum of three characters.

9 When prompted, enter the password again for verification.

10 Proceed to step 13.

11 Determine which groups the user currently belongs to by typing

```
# groups <userid>
```

and pressing the Enter key.

where

userid
is a variable for the user name

12 Note the user groups the user currently belongs to.

13 Assign the user to one or more secondary user groups by typing

```
# usermod -g succssn -G <groupA,groupB,...>
<userid>
```

and pressing the Enter key.

where

groupA, groupB,...
are the secondary user groups (see table Secondary user groups on page 9) and any other user groups you noted in step 12 to which the user already belonged (include comma between groups, but no space)

userid
is a variable for the user name

Example input for a user who can perform line and trunk maintenance operations

```
# usermod -g succssn -G lnmtc,trkmtc johndoe
```

Note: The usermod command overwrites any previous user groups. Therefore, anytime you enter this command, specify all the user groups for the user.

14 You have completed this procedure.

Transferring files as a passthru user using FTPProxy

Application

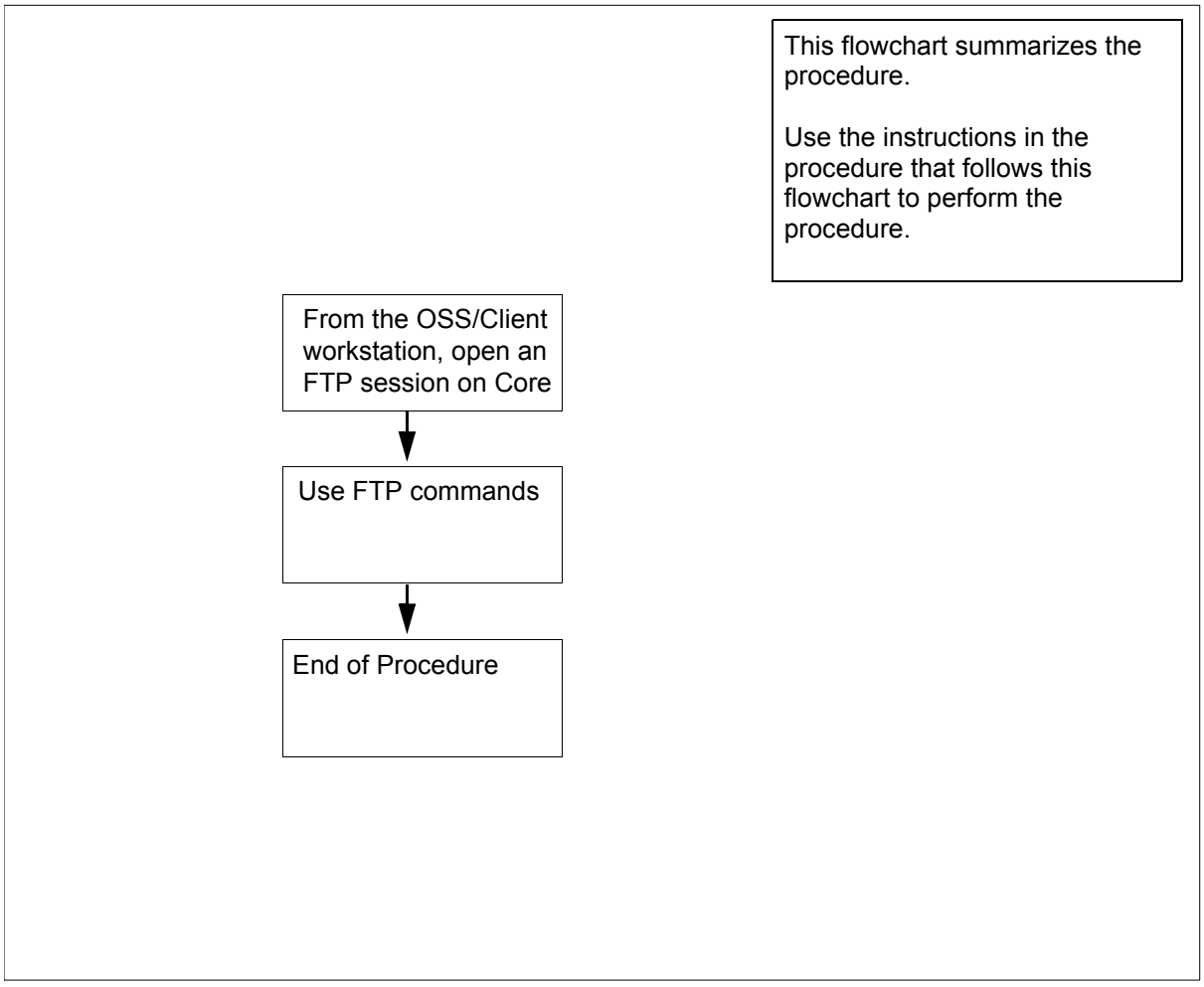
Use this procedure to transfer files between the OSS machine and the Core using the FTPProxy application. Use this procedure if you have passthru user privileges.

If you have core user privileges (mgcadm, mgcrw, mgcsprov, mgcmtce,and mgcro), refer to Transferring files as a core user using FTPProxy on page 1 in this document.

Action

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

Summary of transferring files as a passthru user using FTPProxy



Transferring files as a passthru user using FTPProxy

At the OSS/Client workstation

1 Open an FTP session.

a Log in to the CBM by typing

```
> ftp <IP address>
```

and pressing the Enter key.

where

<IP address>
is the IP address of the CBM.

b At the prompt, enter your userID.

c At the prompt, enter you password.

The FTPProxy application authenticates your userID and password and logs you in to the Core.

2 Use the commands in the table to transfer files.

If you want to	At the ftp> prompt, type the following command and press the enter key
transfer files in ASCII mode	ascii
transfer files in Binary mode	bin
get a file from the Core	get < filename on Core >
put a file to the Core from the OSS/client machine	put <filename on client machine>
list files on the Core - type	ls
- or type	dir
view the current directory on the core	pwd
log out of the ftp session	bye

3 You have completed this procedure.

Transferring files as a core user using FTPProxy

Application

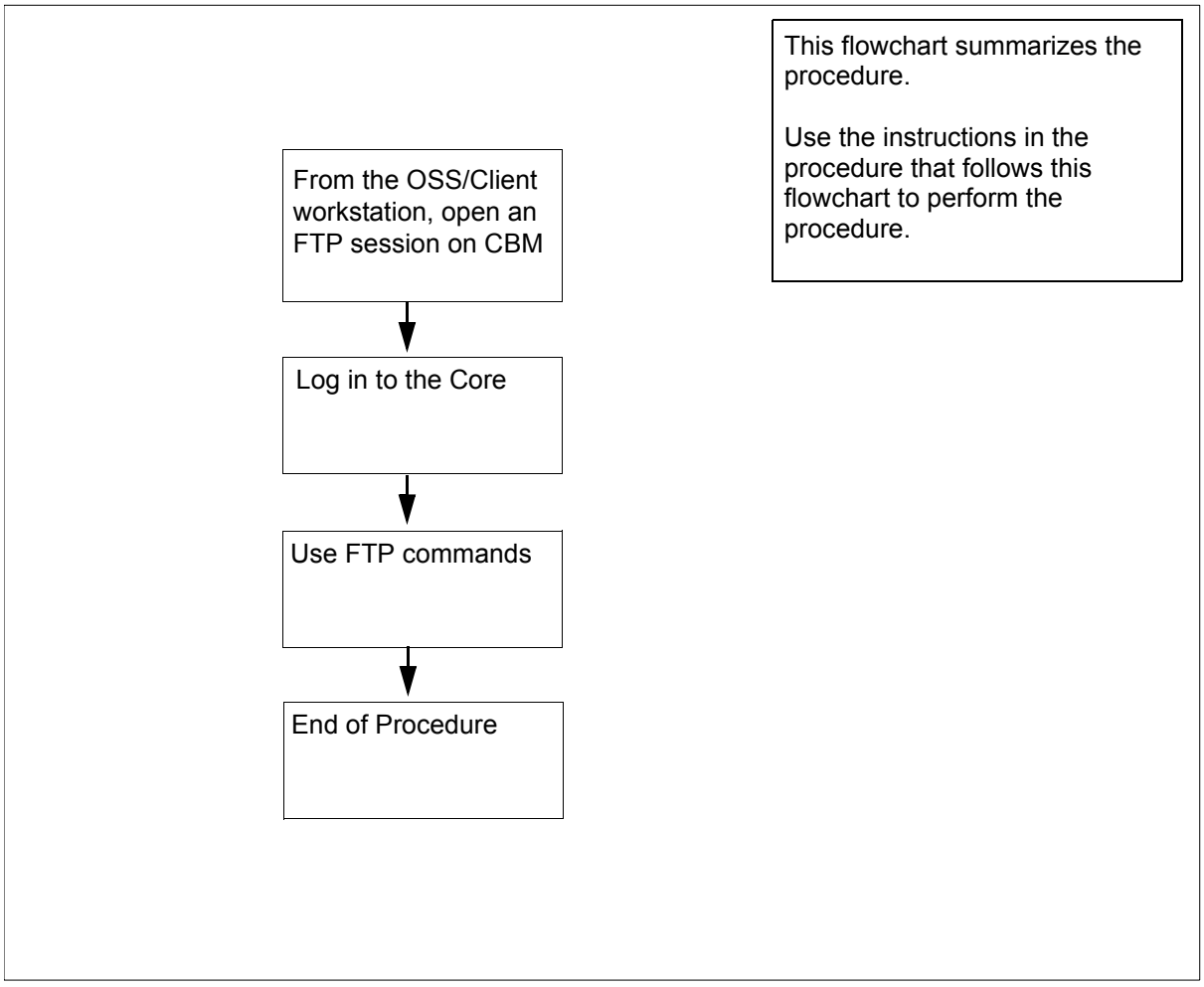
Use this procedure to transfer files between the OSS machine and the Core using the FTPProxy application. Use this procedure if you have core user privileges. Core user privileges include mgcadm, mgcrw, mgcsprov, mgcmtce,and mgcro.

If you have passthru user privileges, refer to Transferring files as a passthru user using FTPProxy on page 1 in this document.

Action

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

Summary of transferring files as a core user using FTPProxy



Transferring files as a core user using FTPProxy

At the OSS/Client workstation

1 Log in to the CBM.

a Open an FTP session by typing

```
> ftp <IP address>
```

and pressing the Enter key.

where

<IP address>
is the IP address of the CBM.

b At the prompt, enter your userID.

c At the prompt, enter you password.

The FTPProxy application authenticates your userID and password and logs you in to the CBM.

2 At the ftp> prompt, log in to the Core by typing

```
ftp>   site cm
```

and pressing the Enter key.

The command logs you in to the Core.

3 Use the commands in the table to transfer files.

If you want to	At the ftp> prompt, type the following command and press the enter key
transfer files in ASCII mode	ascii
transfer files in Binary mode	bin
get a file from the Core	get < filename on Core >
put a file to the Core from the OSS/client machine	put <filename on client machine >
list files on the Core - type	ls
- or type	dir
view the current directory on the core	pwd
log out of the ftp session	bye

4 You have completed this procedure.

Starting an SCFT client session

Application

Use this procedure to start an SSH Core File transfer (SCFT) session.

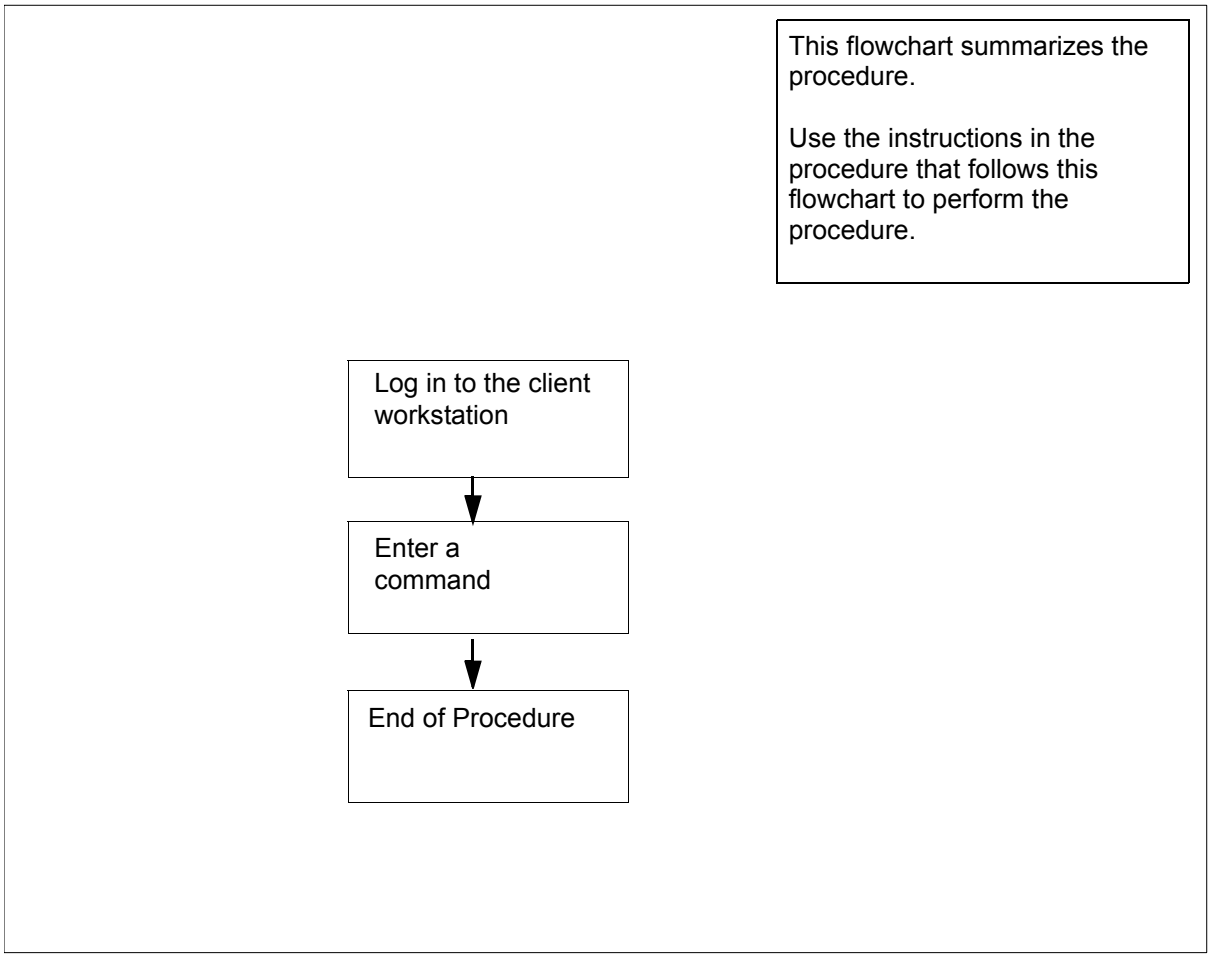
You must perform this procedure from the client workstation running UNIX or Linux with the SSH and the CMFT script installed.

You must have root user privileges on the core module to perform this procedure.

Action

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

Summary of starting an SCFT client session



Starting an SCFT client session

At the client workstation

1 Enter a command. Refer to the following procedures in this document:

- Displaying help for SCFT on page 1
- Listing volumes on Core using SCFT on page 1
- Removing a file from Core using SCFT on page 1
- Transferring files from Core using SCFT on page 1
- Transferring files to Core using SCFT on page 1

2 You have completed this procedure.

Transferring files from Core using SCFT

Application

Use this procedure to transfer files from the Core using SSH Core File transfer (SCFT).

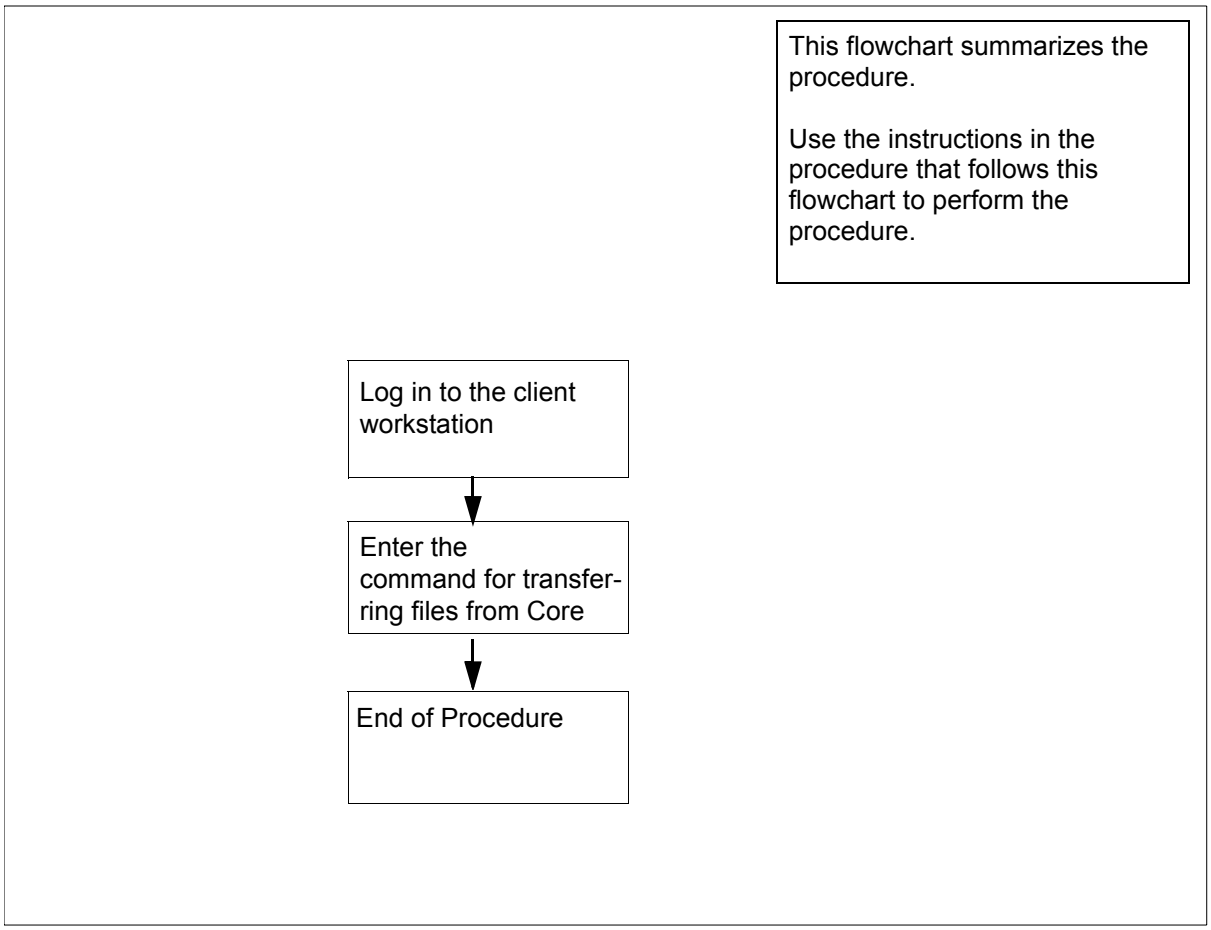
You must perform this procedure from the client workstation running UNIX or Linux with the SSH and the CMFT script installed.

You must have root user privileges on the core module to perform this procedure.

Action

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

Summary of transferring files from core using SCFT



Transferring files from core using SCFT

At the client workstation

1 Go to the next step depending on the command type you use.

If you use	Do
ssh commands	step 2
cmft commands	step 4

2 Transfer files from a specific volume on the core by typing

```
> ssh <user>@<host> "scft <-b|-a> < -s reclen>
-g /<volume>/<CBMfile>" > <localfile>
```

and pressing the Enter key.

where

user
is the user name you are using to log on to the CBM

host
is the name or IP address of the CBM

b
is used with get or put to specify binary format

a
is used with a file transfer to specify ASCII format

reclen
is the length of the records in the file being transferred

volume
is the name of the CBM volume on the core from which the file to be downloaded is located.

CBM*file*
is the full name (including the directory path) of the CBM file on the Core from which the copy originates.

localfile
is the name of the local file the copy is going to including the directory path

Example entry:

```
ssh root@host1 "scft -b -s 1024 -g /sfdev/file1"
> /localdir/localfile
```

Example response:

```
Opened Connection to Core


Command complete
```

3 You have completed this procedure.

4 Transfer files from a specific volume on the core by typing

`> cmft <-b|-a> < -s reclen> <user>@<host>:`

`/<volume>/<CBMfile> <localfile>`

and pressing the Enter key.

where

user
is the user name you are using to log on to the CBM

host
is the name or IP address of the workstation

b
is used with get or put to specify binary format

a
is used with a file transfer to specify ASCII format

reclen
is the length of the records in the file being transferred

volume
is the name of the volume on the core

CBM*file*
is the name of the Core file the copy is coming from including the directory path

localfile
is the name of the local file the copy is going to including the directory path

Example entry:

```
cmft root@host1:/sfdev/file1/localdir
/localfile
```

Example response:

```
Opened Connection to Core

Command complete
```

5 You have completed this procedure.

Transferring files to Core using SCFT

Application

Use this procedure to transfer files to the Core using SSH Core File transfer (SCFT).

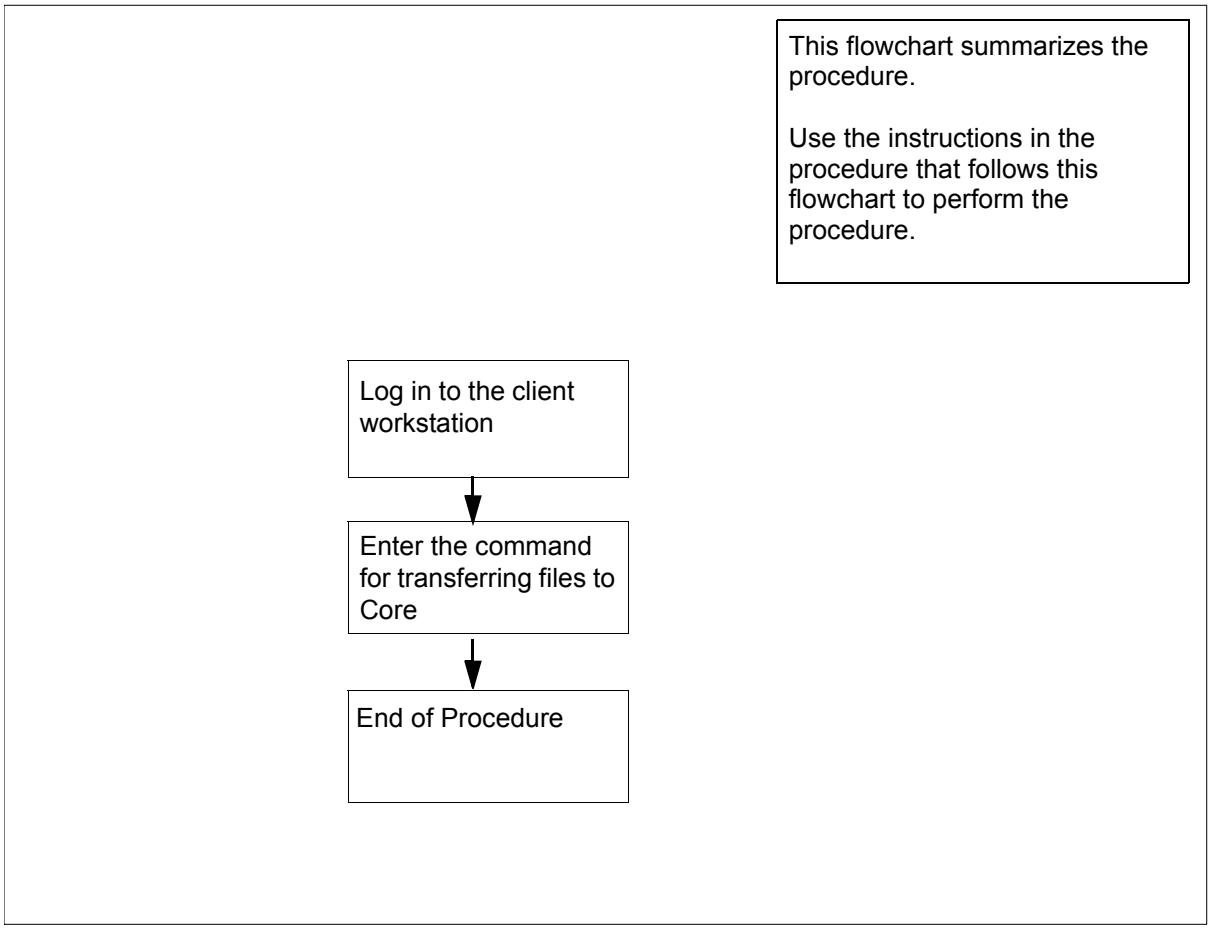
You must perform this procedure from the client workstation running UNIX or Linux with the SSH and the CMFT script installed.

You must have root user privileges to perform this procedure.

Action

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

Summary of transferring files to core using SCFT



Transferring files to core using SCFT

At the client workstation

1 Go to the next step depending on the command type you use.

If you use	Do
ssh commands	step 2
cmft commands	step 4

2 Transfer files to a specific volume on the core by typing

```
> ssh <user>@<host> "scft <-b|-a> < -s reclen>
-p /<volume>/<CBMfile>" < <localfile>
```

and pressing the Enter key.

where

user
is the user name you are using to log on to the CBM

host
is the name or IP address of the CBM

b
is used with get or put to specify binary format

a
is used with a file transfer to specify ASCII format

reclen
is the length of the records in the file being transferred

volume
is the name of the volume on the core

CBM*file*
is the name of the CBM Core file the copy is going to including the directory path

localfile
is the name of the local file the copy is coming from including the directory path

Example entry:

```
ssh root@host1 "scft -b -s 1024 -p /sfdev/file1"
< /localdir/localfile
```

Example response:

```
Opened Connection to Core


Command complete
```

3 You have completed this procedure.

4 Transfer files to a specific volume on the core by typing

`> cmft <-b|-a> < -s reclen> <localfile> <user>@<host>:/<volume>/<CBMfile>`

and pressing the Enter key.

where

b
is used with get or put to specify binary format

a
is used with a file transfer to specify ASCII format

reclen
is the length of the records in the file being transferred

localfile
is the name of the local file the copy is coming from including the directory path

user
the user name you are using to log on to the CBM

host
the name or IP address of the CBM

volume
is the name of the volume on the workstation

CBM*file*
is the name of the Core file the copy is going to including the directory path

Example entry:

`cmft /localdir/localfile root@host1:/sfdev /file1`

Example response:

```
Opened Connection to Core


Command complete
```

5 You have completed this procedure.

Removing a file from Core using SCFT

Application

Use this procedure to remove a file from the Core using SSH Core File transfer (SCFT).

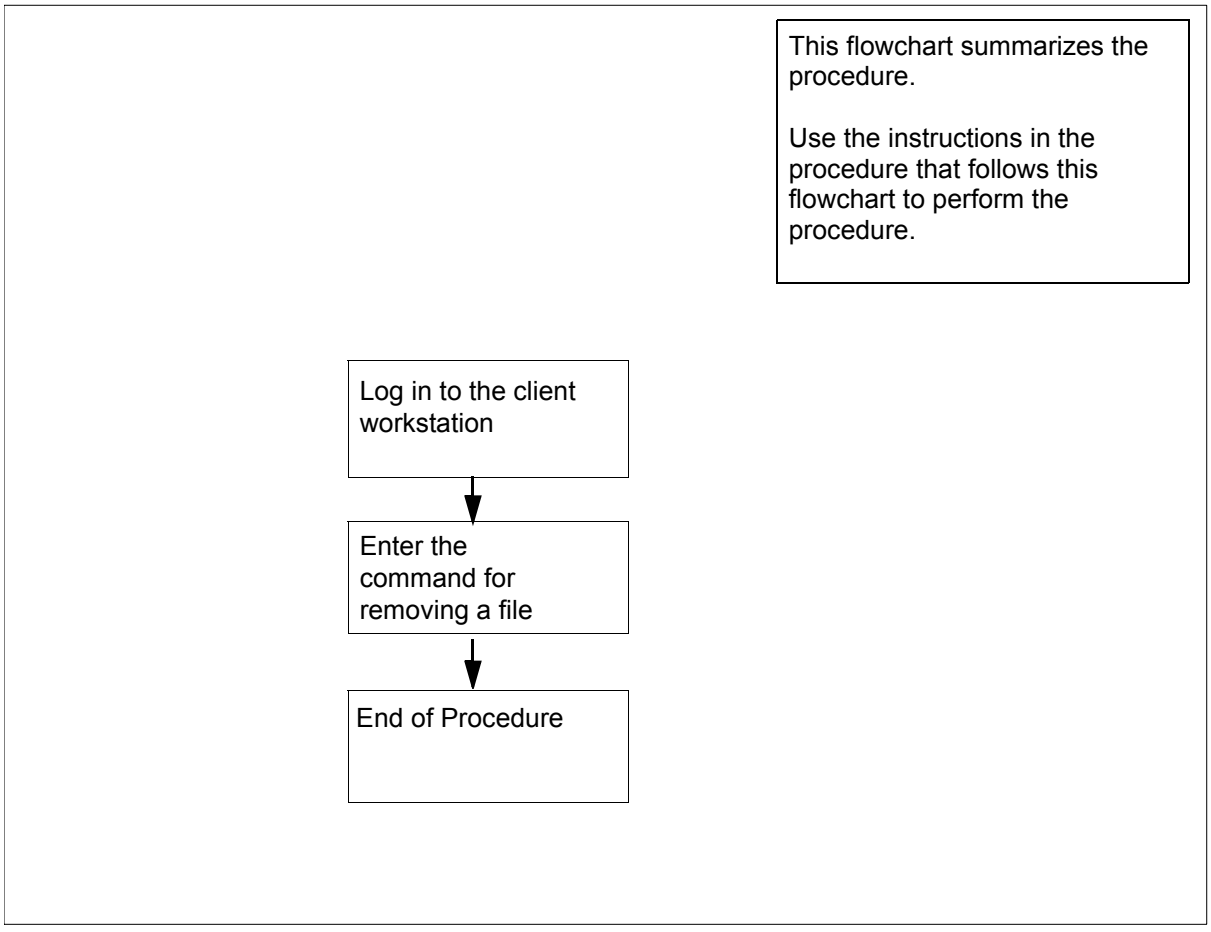
You must perform this procedure from the client workstation running UNIX or Linux with the SSH and the CMFT script installed.

You must have root user privileges to perform this procedure.

Action

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

Summary of removing a file from core using SCFT



Removing a file from core using SCFT

At the client workstation

1 Go to the next step depending on the command type you use.

If you use	Do
ssh commands	step 2
cmft commands	step 4

2 Remove a file in a specific volume on the core by typing

`> ssh <user>@<host>"scft -r /<volume>/ <filename>"`

and pressing the Enter key.

where

user
is the user name you are using to log on to the CBM

host
is the name or IP address of the core

volume
is the name of the volume on the core

filename
is the name of the CBM Core file being removed including the directory path

Example response:

```
Opened Connection to Core


Command complete
```

3 You have completed this procedure.

4 Remove a file in a specific volume on the core by typing

`> cmft -r <user>@<host>:/<volume>/<filename>`

and pressing the Enter key.

where

user
is the user name you are using to log on to the CBM

host
is the name or IP address of the core

volume
is the name of the volume on the CBM

filename
is the name of the CBM Core file being removed including the directory path

Example response:

```
Opened Connection to Core


Command complete
```

5 You have completed this procedure.

Displaying help for SCFT

Application

Use this procedure to display help during an SSH Core File transfer (SCFT) session.

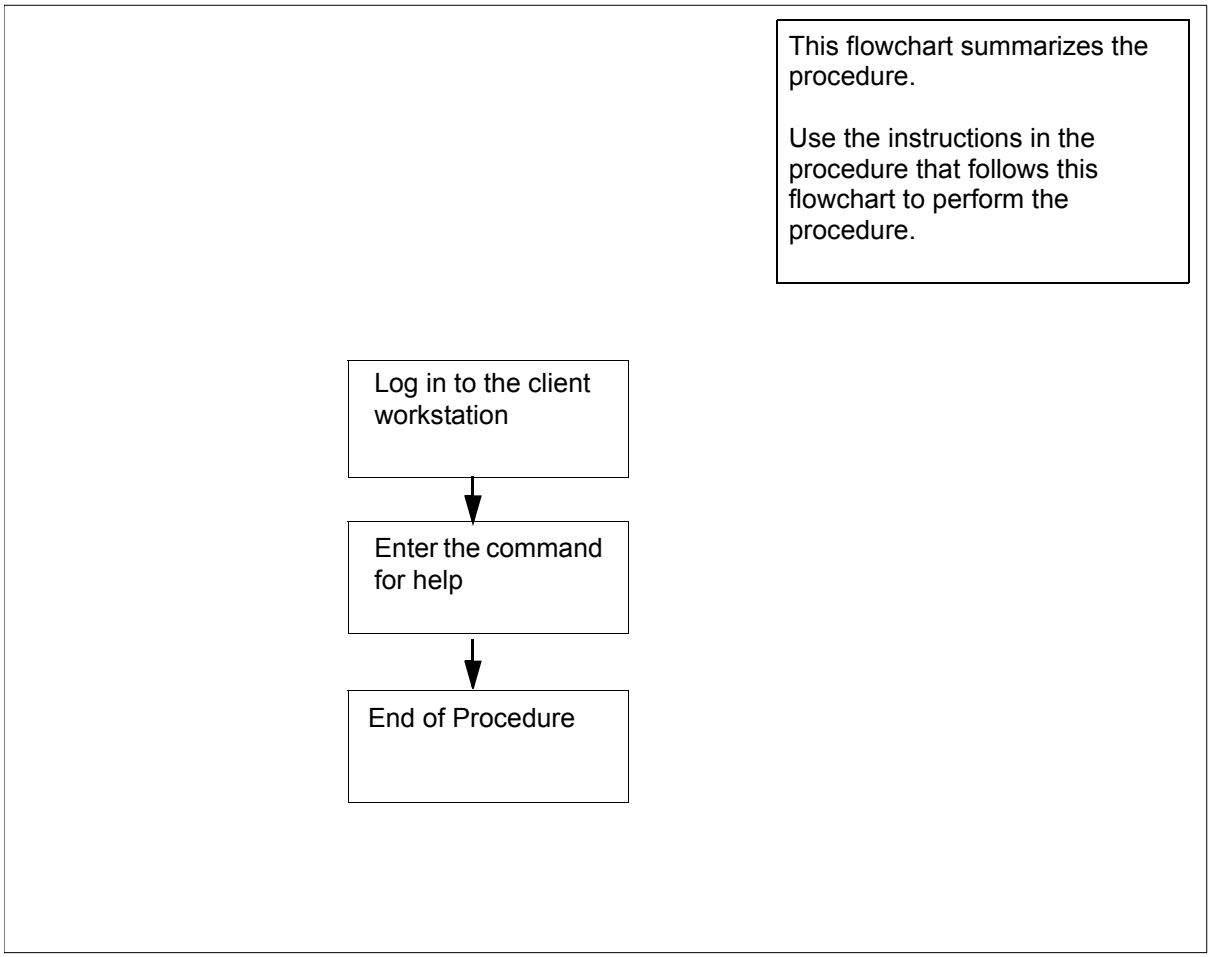
You must perform this procedure from the client workstation running UNIX or Linux with the SSH and the CMFT script installed.

You must have root user privileges to perform this procedure.

Action

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

Summary of displaying help for SCFT



Displaying help for SCFT

At the client workstation

1 Go to the next step depending on the command type you use.

If you use	Do
ssh commands	step 2
cmft commands	step 4

2 Display help text by typing.

```
> ssh <user>@<host> "scft -h"
```

and pressing the Enter key.

where

user
the user name you are using to log on to the CBM

host
the name or IP address of the CBM

Response:

```
Command complete


SCFT Help:

<-n hostname><-a><-b><-s record length>
<-p filename><-h><-l volume><-g filename>
<-r filename>

-n: Hostname of Core
-b: Binary Transfer
-a: Ascii Transfer
-s: Specify the record length to be used for the
file being transferred
-p: Put a file on the Core
-h: Help
-l: List the directory on the Core
-g: Get a file from the Core
-r: Remove a file on the Core
```

3 You have completed this procedure.

4 Display help text by typing.

> cmft - h

and pressing the Enter key.

Response:

```
  -l  -- To list a volume on the Core
  -r  -- To remove a file from the Core
  -h  -- To get this help information
  -s  -- To set the record length for the file
being transferred
  -b  -- Use with a get or put to specify binary
format
  -a  -- Use with a file transfer to specify
ASCII format
       NOTE:  one or the other can be used not
both.  Default is binary

 int  -- An integer representing the record
size.
 user -- the user name you wish to log on to the
CBM with.
     This is optional. If not entered the userid
you are executing this script with will be used.

          eg.   root
 host --  the name or ip address of the cbm you
wish to log on to.
          eg.   ##.###.###.## or HOSTNAME

 file1 -- name of the file the copy is coming
from including directory path
 file2 -- name of the file the copy is going to
including directory path
      NOTE: Only one of the files can have the
host name present.
             This would be the file that is or
will be on the CBM.
       NOTE: the local files can also have an
extension
            Allowable extensions are .bin[##],
.txt[##], $df and $patch
           .txt is Ascii with a specified record
length
             .bin is Binary with a specified
record length
          $df and $patch are Binary with record
```

```
length of 128
 vol  -- the name of the volume on the SDM, you
wish to list or
          '/' to list all volume
 examples:
    To put a binary file with record length 1024
from local file /bin/data1
     to core file /volume/data:
           cmft -b -s 1024 /bin/data1
root@HOSTNAME:/volume/data1
   To get a file from the core file /volume/data
to a local file data:
           cmft root@HOSTNAME:/volume/data1
/bin/data1
     To list the volume names on the core:
           cmft -l root@HOSTNAME:/
     To list the files in the sfdev volume:
cmft -l root@HOSTNAME:/sfdev
```

5 You have completed this procedure.

Listing volumes on Core using SCFT

Application

Use this procedure to list volumes on the Core during SSH Core File transfer (SCFT) session.

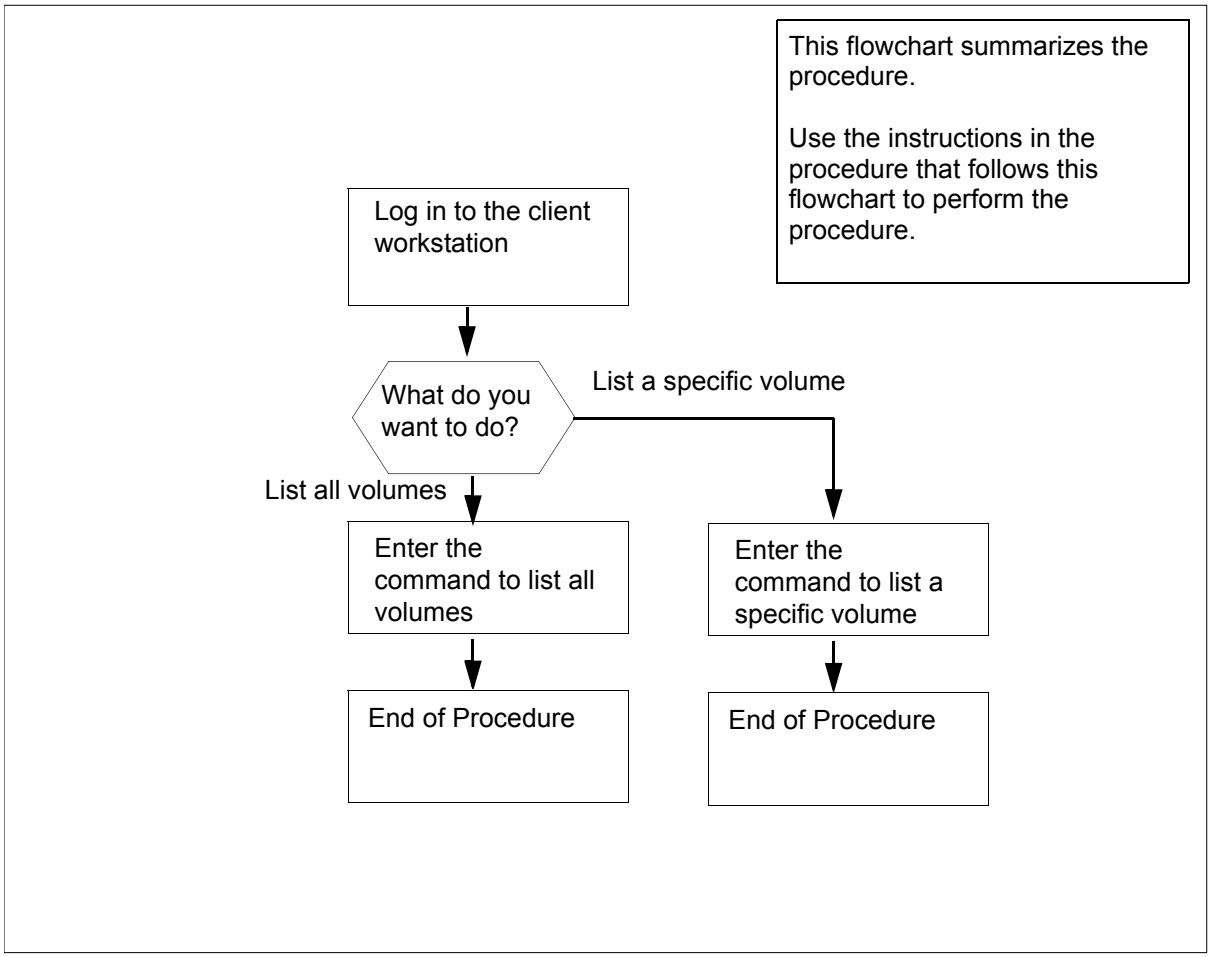
You must perform this procedure from the client workstation running UNIX or Linux with the SSH and the CMFT script installed.

You must have root user privileges to perform this procedure.

Action

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

Summary of listing volumes on Core using SCFT



Listing volumes on Core using SCFT

At the client workstation

1 Go to the next step depending on the type of command you use.

If you use	Do
ssh commands	step 2
cmft commands	step 6

2 Use the following table to determine your next step.

If you want to	Do
list all volumes	step 3
list a specific volume	step 4

3 List all volumes on the Core by typing

`> ssh <user>@<host>"scft -1 /"`

and pressing the Enter key.

where

user
the user name you are using to log on to the CBM

host
the name or IP address of the CBM

Example response:

```
SFDEV
S01DIMAGE
S00DIMAGE1
S00DAMA
S01DPMLOADS
S01DPERM
S01DDLOG
S01DTEMP


Command complete
```

If you	Do
want to list a specific volume	step 4
do not want to list a specific volume	you have completed this procedure

4 List a specific volume on the Core by typing

`> ssh <user>@<host>"scft -1 /<volume>"`

and pressing the Enter key.

where

user
the user name you are using to log on to the core

host
the name or IP address of the workstation

volume
is the name of the volume on the core

Example response:

```
LOGIN STDFAULT
IOC$
MSCDINV$
CMSHELF$
EADASOM$DATAFILL
NNASST$
OFCENG
VRDATA$
OM CONFIG
OFCOPT
OFCVAR
OFCSTD
NNASST
DATASIZE
OMKEYORD$INFO$FILE
PML


Command complete
```

5 You have completed this procedure.

6 Use the following table to determine your next step.

If you want to	Do
list all volumes	step 7
list a specific volume	step 8

7 List all volumes on the Core by typing

`> cmft -1 <user>@<host>:/`

and pressing the Enter key.

where

user
the user name you are using to log on to the CBM

host
the name or IP address of the CBM

Example response:

```
SFDEV
S01DIMAGE
S00DIMAGE1
S00DAMA
S01DPMLOADS
S01DPERM
S01DDLOG
S01DTEMP


Command complete
```

If you	Do
want to list a specific volume	step 8
do not want to list a specific volume	you have completed this procedure

8 List a specific volume on the Core by typing

`> cmft -1 <user>@<host>:/<volume>`

and pressing the Enter key.

where

user
the user name you are using to log on to the CBM

host
the name or IP address of the CBM

volume
is the name of the volume on theCBM

Example response:

```
LOGIN STDFAULT
IOC$
MSCDINV$
CMSHELF$
EADASOM$DATAFILL
NNASST$
OFCENG
VRDATA$
OM CONFIG
OFCOPT
OFCVAR
OFCSTD
NNASST
DATASIZE
OMKEYORD$INFO$FILE
PML


Command complete
```

9 You have completed this procedure.

Configuring the time zone on a Sun server

Application

Use this procedure to configure the time zone on a Sun server.

Prerequisites

None

Action

Perform the following steps to complete this procedure.

At your workstation

1 Telnet to the Sun server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the Sun server on which you want to configure the time zone

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Access the command line interface by typing

```
# cli
```

and pressing the Enter key.

Example response

```
Command Line Interface
 1 - View
 2 - Configuration
 3 - Other

 X - exit

select -
```

6 Enter the number that corresponds to the “Configuration” option in the menu.

Example response

```
Configuration
 1 - NTP Configuration
 2 - Apache Proxy Configuration
 3 - DCE Configuration
 4 - OAMP Application Configuration
 5 - CORBA Configuration
 6 - IP Configuration
 7 - DNS Configuration
 8 - Syslog Configuration
 9 - Database Configuration
10 - NFS Configuration
11 - Bootp Configuration
12 - Restricted Shell Configuration
13 - Security Services Configuration
14 - Login Session
15 - Location Configuration
16 - Cluster Configuration
17 - Succession Element Configuration
18 - snmp_poller (SNMP Poller Configuration)

 X - exit


Select -
```

7 Enter the number that corresponds to the “Location Configuration” option in the menu.

Example response

```
Location Configuration
 1 - Chg_tz (Change Timezone
 2 - sys_loc (System Location)

 X - exit

select -
```

8 Enter the number that corresponds to the “chg_tz” option in the menu.

Example response

```
=== Executing “chg_tz”

WARNING: Changing the timezone will require a
reboot

Current setting:
Timezone:       US/Eastern

Enter the timezone for this host <default:
US/Eastern>:
```

9 When prompted, enter the correct time zone and press the Enter key.

Example response

```
New setting:
Timezone:       US/Eastern

Enter “ok” to commit changes
Enter “quit” to exit
Enter anything else to re-enter settings
```

10 When prompted, confirm the change by typing

ok

and pressing the Enter key.

11 Exit each menu level of the command line interface to eventually exit the command line interface, by typing

`select - x`

and pressing the Enter key.

12 You have completed this procedure.

Changing a user password on a Sun server

Application

Use this procedure to change a user password on a Sun server.

ATTENTION

User accounts and passwords are not automatically propagated to the second server in a high-availability (two-server) configuration. Therefore, account management activities such as setting up users, removing users, and changing passwords, must be performed on both servers.

Prerequisites

None

Action

Perform the following steps to complete this procedure.

At your workstation

1 Telnet to the Sun server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the Sun server

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Change the password for a specific user by typing

passwd <userid>

and pressing the Enter key.

where

userid
is a variable for the user's login identification

6 When prompted, enter a password of at least three characters.

Note: It is not recommended to set a password with an empty value. Use a minimum of three characters.

7 When prompted, enter the password again for verification.

8 You have completed this procedure.

Changing a passthru user password

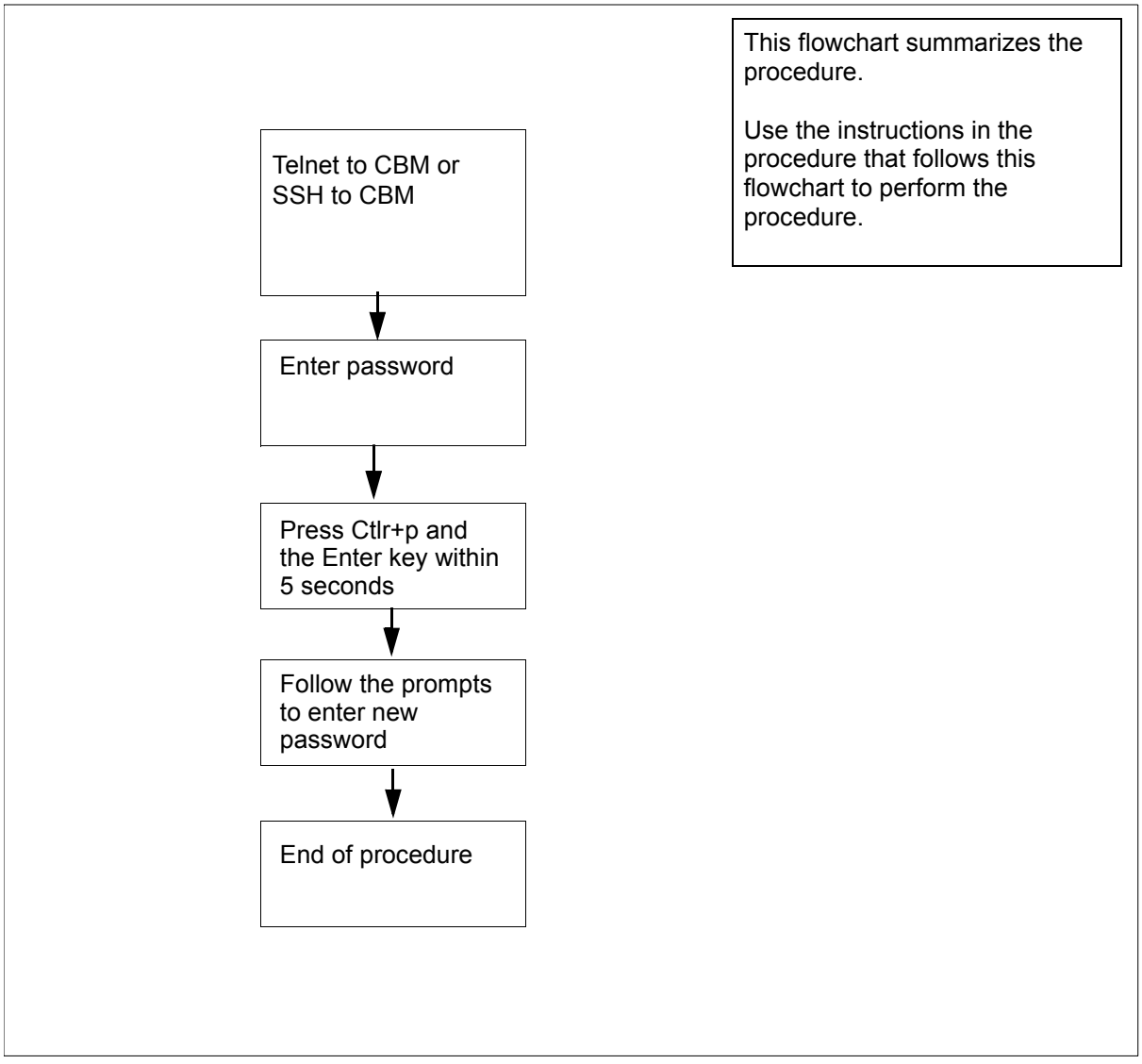
Application

Use this procedure to change a password for a passthru user who is configured as "password required".

Action

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

Summary of changing a passthru user password



Changing a passthru user password

At the workstation

1 Log in to the CBM as a passthru user.

If you	Do
use telnet	step a
use SSH	step b

a Telnet to the CBM by typing

```
> telnet <IP address>
```

and pressing the Enter key.

where

<IP address>
is the IP address of the CBM.

Continue with step 2.

b Open an SSH session by typing

```
> ssh-l<passthru userID><IP address>
```

and pressing the Enter key.

where

<IP passthru userID>
is the IP address of the CBM.

2 At the prompt, enter your password.

Note: The following response is only displayed when the pasthru user is configured as "password required". Otherwise, the connection will be directly forwarded to the Core login prompt.

Response:

```
This is a passthru user.

Please type "Ctrl+p" and Enter for changing your password.

type "Enter" or wait for 5 seconds to continue.
```

3 Open the password change session by pressing the Ctrl and p keys at the same time and then pressing the Enter Key.

Note: you must complete this step within 5 seconds or the connection will be forwarded to the Core login prompt.

4 At the prompt, enter the old password and press the Enter key.

5 At the prompt, enter the new password and press the Enter key.

6 At the prompt, re-type the new password and press the Enter key.

7 You have completed this procedure.

Setting the threshold for file systems on a Sun server

Application

Use this procedure to change the default threshold for a file system on a Sun server. The default threshold is 90%. An alarm is raised when the file system exceeds the specified threshold, and log SPFS350 is generated.

Prerequisites

None

Action

Perform the following steps to complete this procedure.

At your workstation

1 Telnet to the Sun server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the Sun server on which you are setting the file system threshold

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Set the threshold by typing

filesys update -m <mount_point> -a <threshold>

and pressing the Enter key.

Where

mount_point
is the directory of the file system you are setting the threshold for

threshold
is 0 to 99% (default is 90%)

Example
filesys update -m /data -a 80

The example above sets the threshold for the /data file system to 80%.

6 You have completed this procedure.

Starting an application

Application

Use this procedure to start (return to service) a CBM software application.

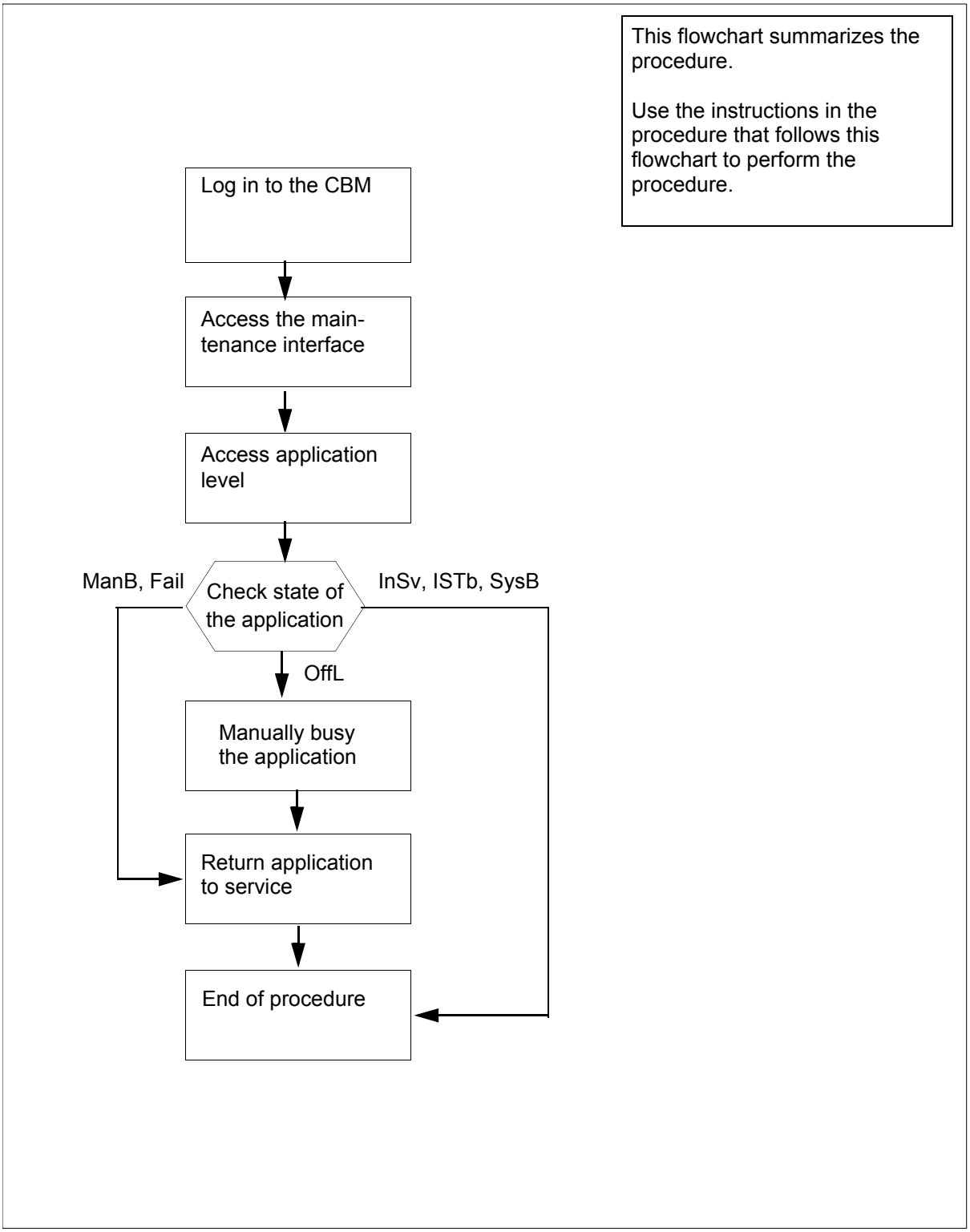
> ***Note:*** For CBM850, you must perform this procedure on the active server.

Only perform this procedure when the application group is in service (InSv, ISTb, SysB).

Action

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

Summary of starting an application



Starting an application

At the local or remote VT100 terminal

1 Log in to the CBM as the root user or a maint class user.

2 Access the maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the application level by typing

```
> appl
```

and pressing the Enter key.

4 Check the state of the application group, as displayed directly above the individual applications.

If	Do
the group is OffL	step 5
the group is ManB, Fail	step 6
the group is InSv, ISTb, SysB	step 7

5 Busy the software application group by typing.

```
> bsy <n>
```

where

n
is the number next to the application you want to busy

and pressing the Enter key.

Example response:

```
Bsy application - Command complete.
```

6 Return the application group to service by typing.

```
> rts <n>
```

where

n
is the number next to the application you want to return to service

and pressing the Enter key.

Response:

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

Response:

```
Application RTS - Command complete.
```

7 You have completed this procedure.

Starting the application group

Application

Use this procedure to start (return to service) CBM software applications.

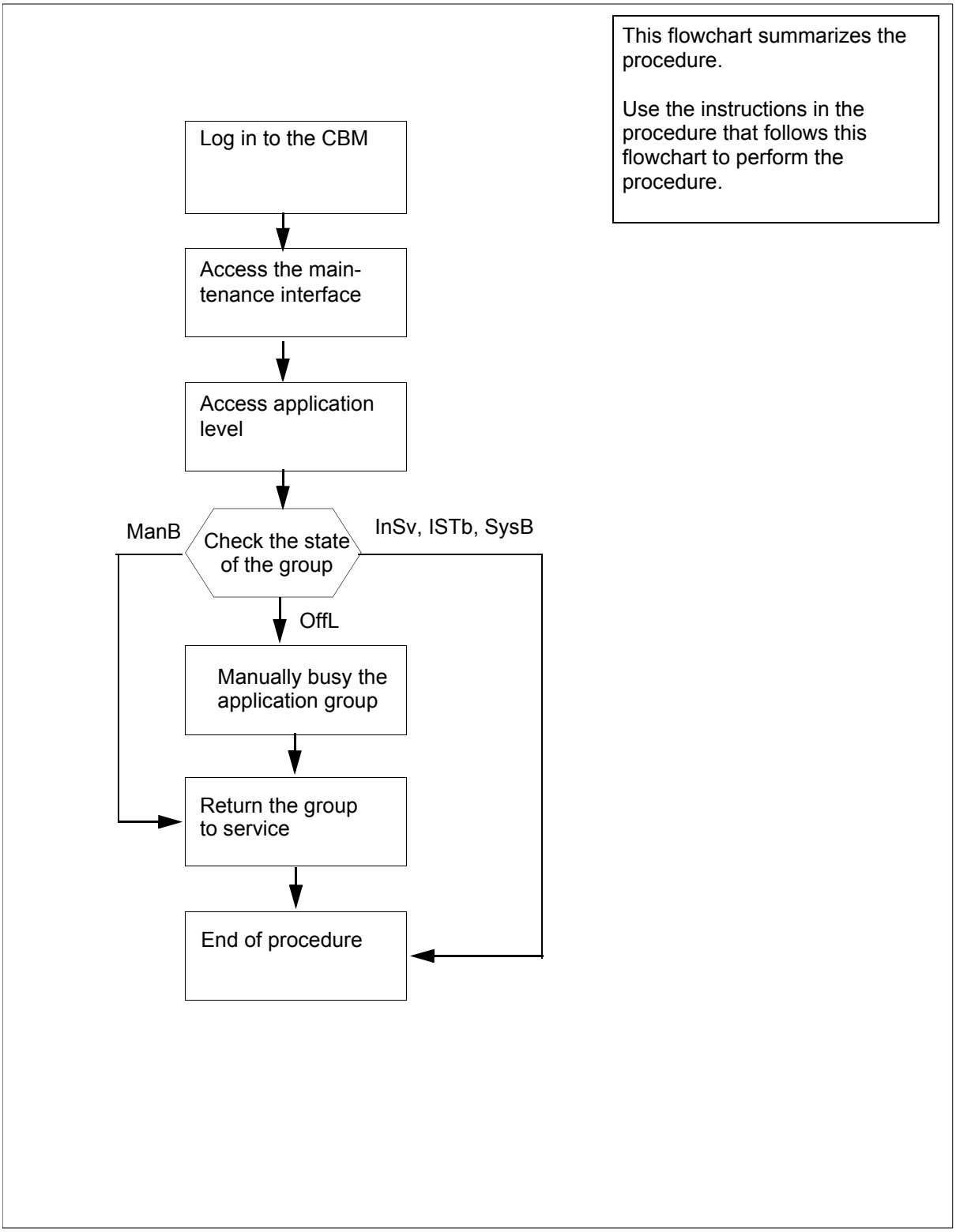
Note: For CBM850, you must perform this procedure on the active server.

Action

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

Note: This procedure does not affect offline applications. Offline applications can be started after the application group is returned to service.

Summary of starting the application group



Starting the application group

At the local or remote VT100 terminal

1 Log in to the CBM as the root user or a maint class user.

2 Access the maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the application level by typing

```
> appl
```

and pressing the Enter key.

4 Check the state of the application group, as displayed directly above the individual applications.

If	Do
the group is OffL	step 5
the group is ManB	step 6
the group is InSv, ISTb, SysB	step 7

5 Busy the software application group by typing.

```
> bsy group
```

and pressing the Enter key.

Response:

```
Bsy Group - Command complete.
```

6 Return the application group to service by typing.

```
> rts group
```

and pressing the Enter key.

Response:

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

Response:

```
RTS GROUP - Command complete.
```

7 You have completed this procedure.

Stopping an application

Application

Use this procedure to stop (manually busy) a CBM software application.

Note: For CBM850, you must perform this procedure on the active server.

You cannot stop an application when the application group is offline.

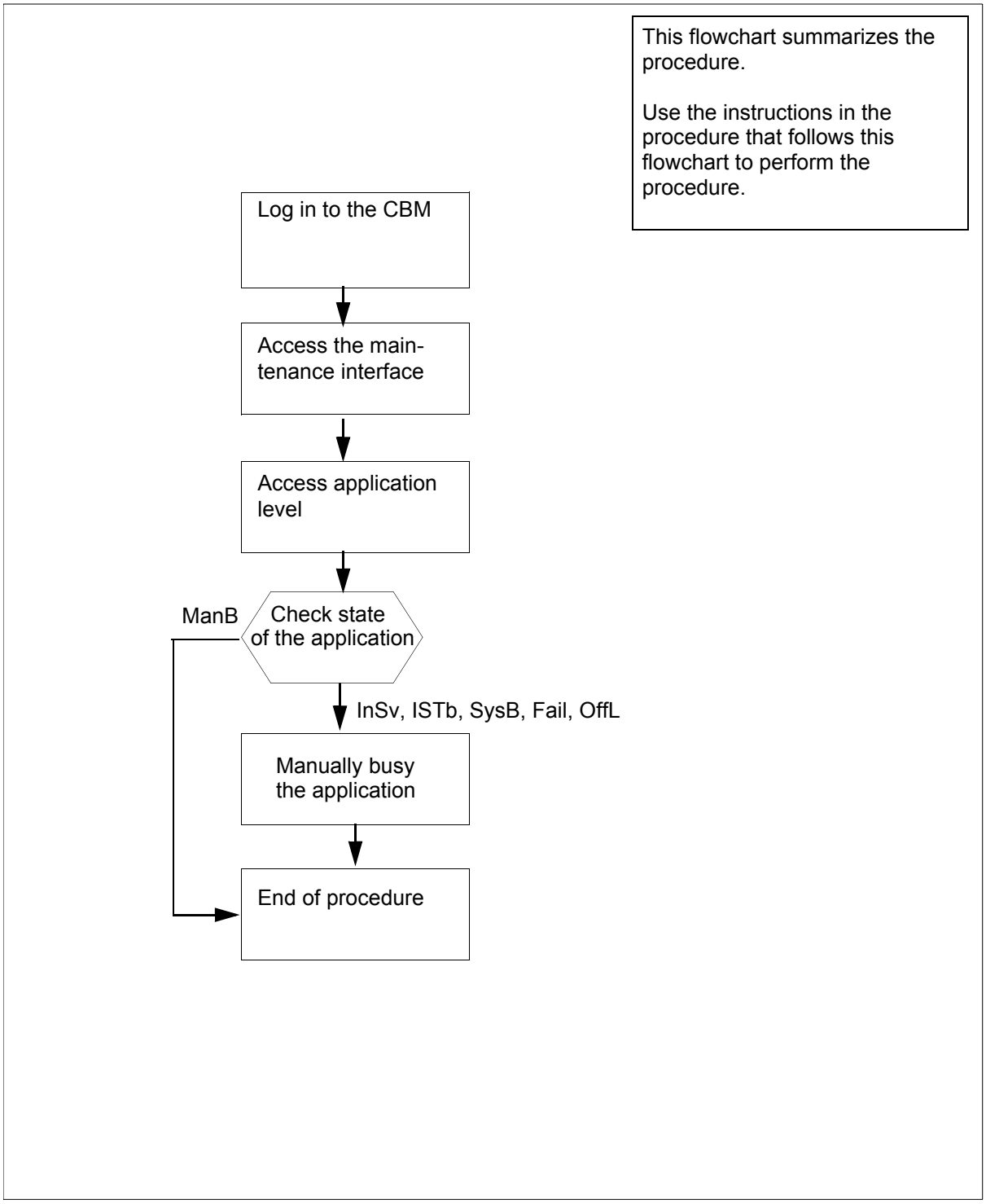
An application in the manually busy (ManB) state raises a minor alarm. If the group state was in service (InSv), the group state changes to in service trouble (ISTb).

Manually busy is a transitional state. Operations to the application group state or to the server impact an application that is in the ManB state.

Action

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

Summary of stopping an application



Stopping an application

At the local or remote VT100 terminal

1 Log in to the CBM as the root user or a maint class user.

2 Access the maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the application level by typing

```
> appl
```

and pressing the Enter key.

4 Check the state of the application group, as displayed directly above the individual applications.

If	Do
the application is OffL, InSv, ISTb, SysB, Fail	step 5
the application is ManB	step 7

5 Busy the software application group by typing.

```
> bsy <n>
```

where

n
is the number next to the application you want to busy

and pressing the Enter key.

Example response:

```
Bsy application: 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 application as shown performs an orderly shutdown and can take up to 16 seconds.*

If	Do
prompted to confirm the busy	step 6
no prompt	step 7

6 Confirm the Busy command by typing.

> y

and pressing the Enter key.

After you confirm the Bsy command, the following is displayed:

Response:

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

Response:

```
Bsy application - Command complete.
```

7 You have completed this procedure.

Stopping the application group

Application

Use this procedure to stop (manually busy) CBM software applications.

Note: For CBM850, you must perform this procedure on the active server.

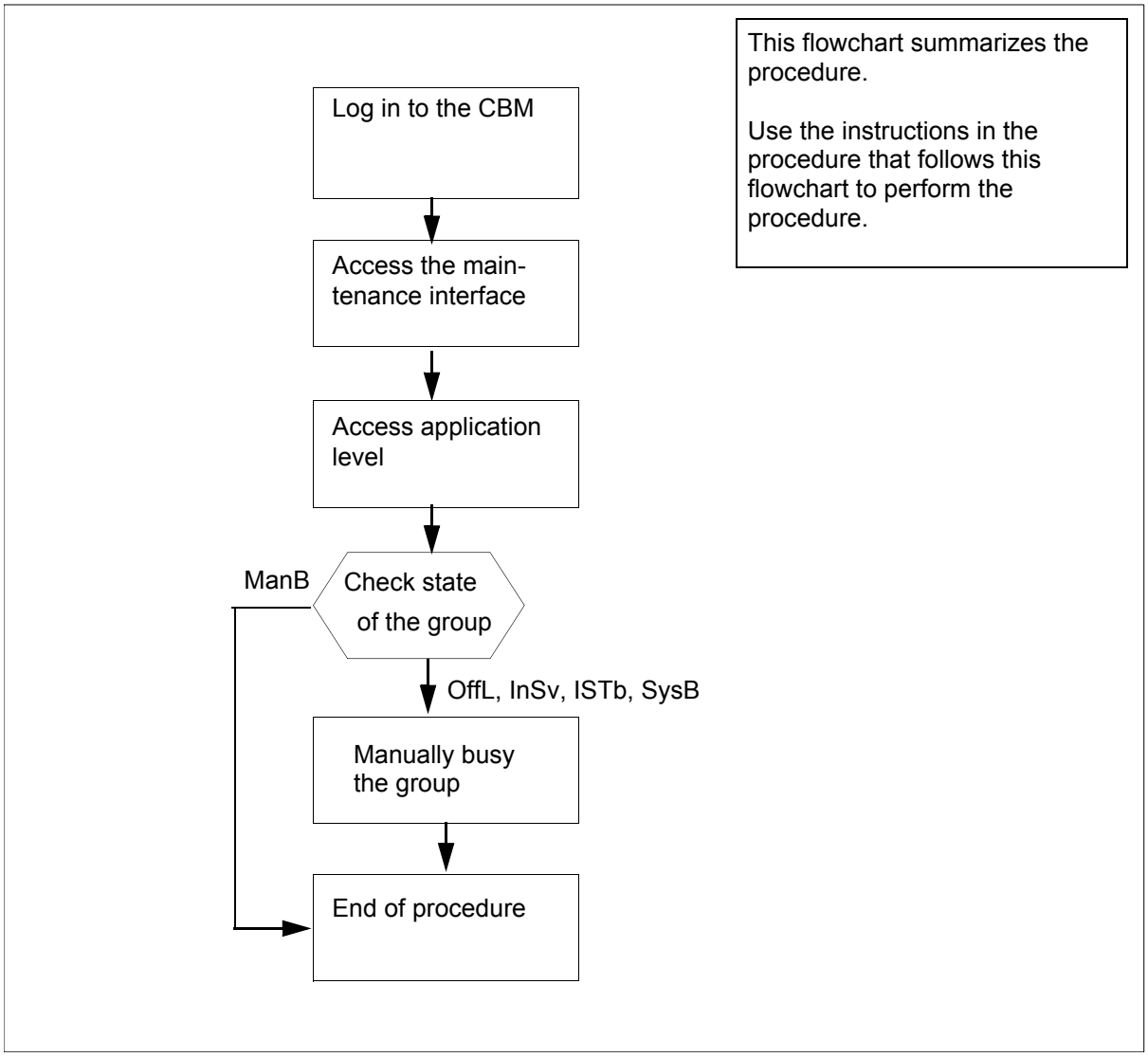
This procedure prevents an individual application from providing service.

Action

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

Note: This procedure does not affect offline applications. You can change offline applications to manually busy after this procedure is complete.

Summary of stopping the application group



Stopping the application group

At the local or remote VT100 terminal

1 Log in to the CBM as the root user or a maint class user.

2 Access the maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the application level by typing

```
> appl
```

and pressing the Enter key.

4 Check the state of the application group, as displayed directly above the individual applications.

If	Do
the group is ManB	step 7
the group is any other state	step 5

5 Busy the software application group by typing.

> bsy group

and pressing the Enter key.

Response:

```
Bsy Group: The group 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 application group as shown performs an orderly shutdown and can take up to 16 seconds.*

If	Do
prompted to confirm the busy	step 6
no prompt	step 7

6 Confirm the Busy command by typing.

> y

and pressing the Enter key.

After you confirm the Bsy command, the following is displayed:

Response:

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

Response:

```
Bsy Group - Command complete.
```

7 You have completed this procedure.

Stopping and restarting an application

Application

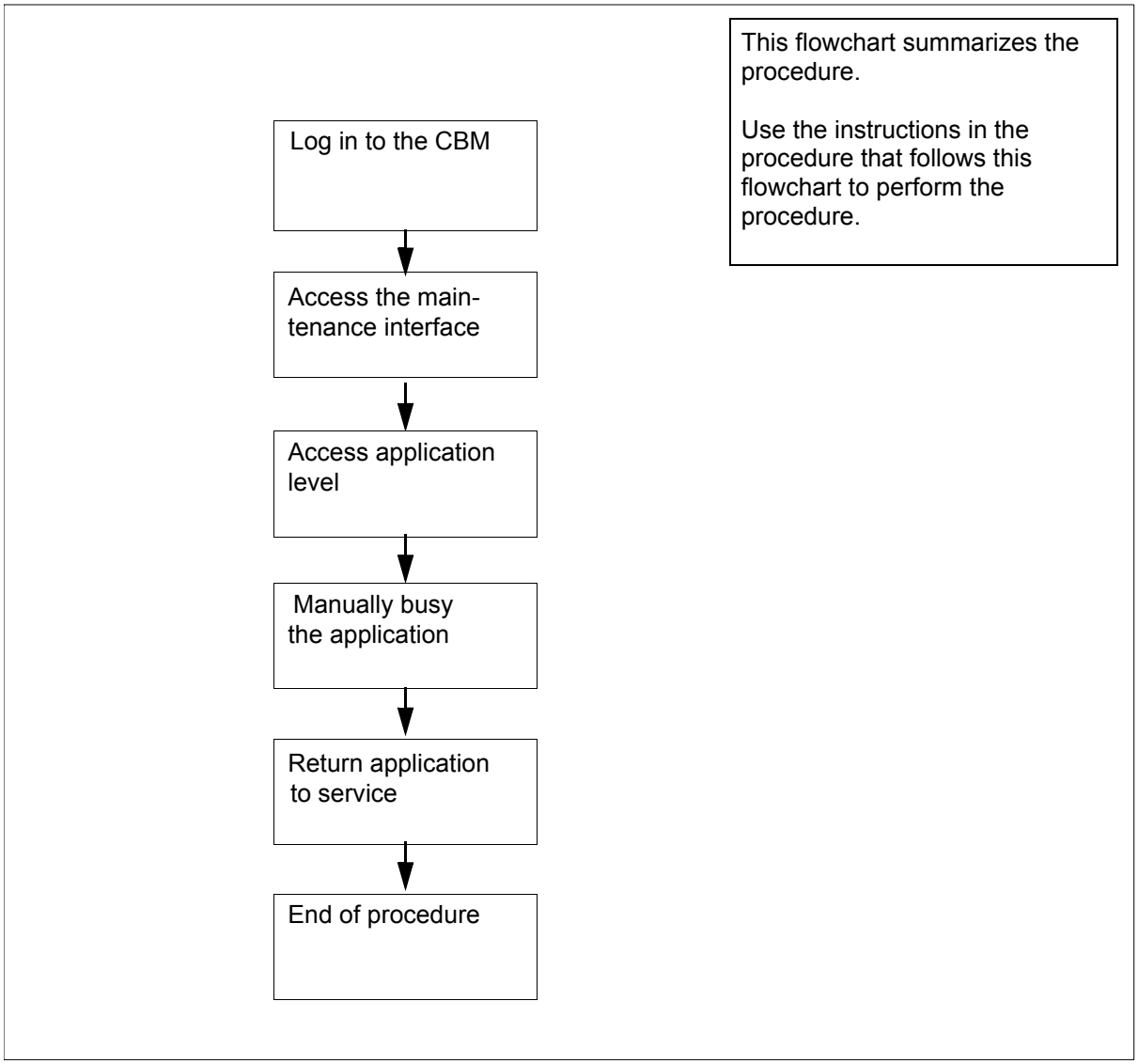
Use this procedure to stop (manually busy) and restart (return to service) CBM software applications.

Note: For CBM850, you must perform this procedure on the active server.

Action

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

Summary of stopping and restarting an application



Stopping and restarting an application

At the local or remote VT100 terminal

1 Log in to the CBM as the root user or a maint class user.

2 Access the maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the application level by typing

```
> appl
```

and pressing the Enter key.

4 Busy the software application group by typing.

> bsy <n>

where

n
is the number next to the application you want to busy

and pressing the Enter key.

Example response:

```
Bsy application: 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 application as shown performs an orderly shutdown and can take up to 16 seconds.*

5 Confirm the Busy command by typing.

> y

and pressing the Enter key.

After you confirm the Bsy command, the following is displayed:

Response:

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

Response:

```
Bsy application - Command complete.
```

6 Return the application to service by typing

> rts <n>

where

n
is the number next to the application you want to return to service

and pressing the Enter key.

Response:

```
RTS application - Command initiated.
```

Response:

```
RTS application - Command complete.
```

7 You have completed this procedure.

Offlining an application

Application

Use this procedure to offline a CBM software application.

Note: For CBM850, you must perform this procedure on the active server.

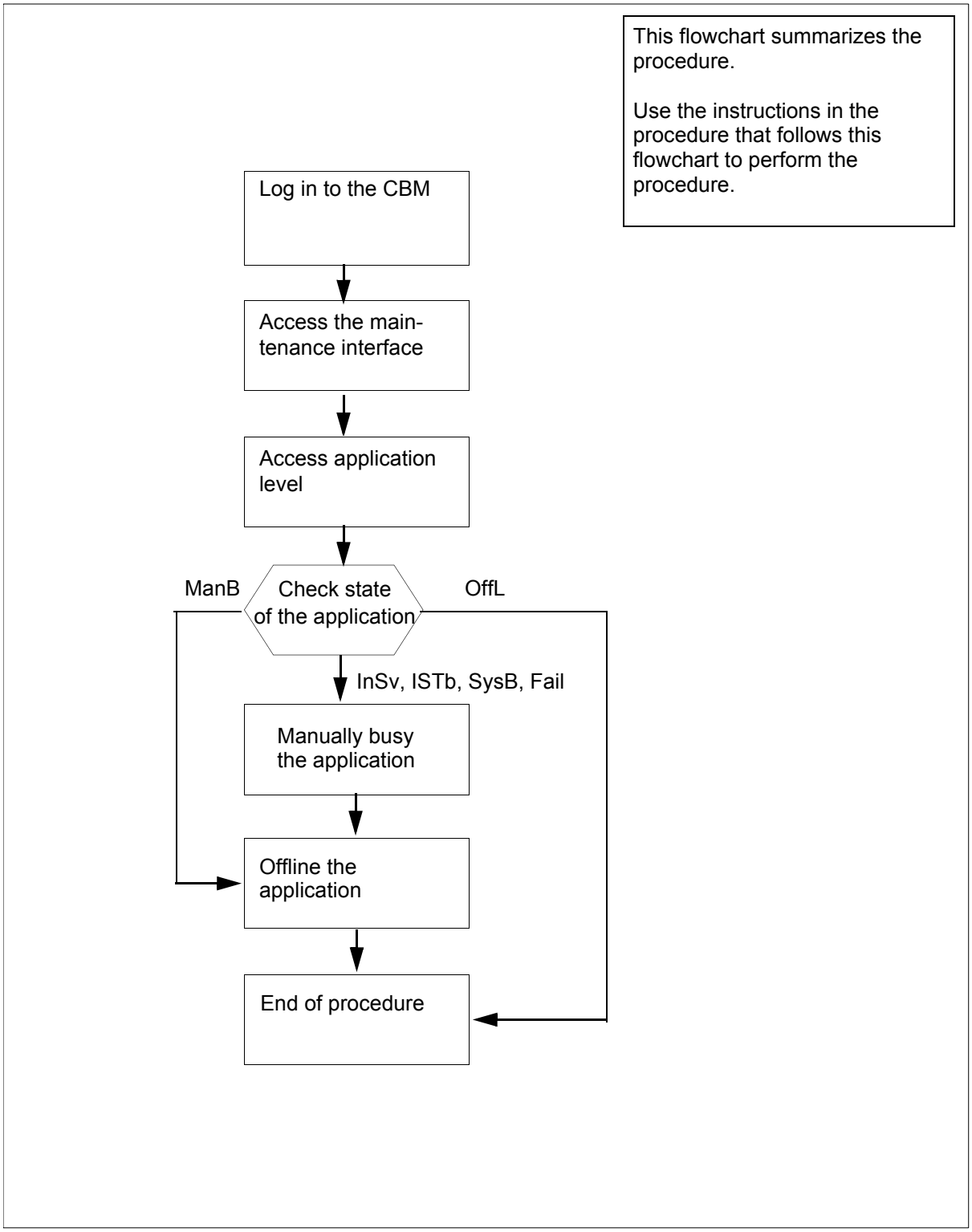
Once an application is offline, the application state does not change when a server reboots or the application group state changes.

An offline application clears any alarms for the application.

Action

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

Summary of offlining an application



Offlining an application

At the local or remote VT100 terminal

1 Log in to the CBM as the root user or a maint class user.

2 Access the maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the application level by typing

```
> appl
```

and pressing the Enter key.

4 Check the state of the application group, as displayed directly above the individual applications.

If	Do
the group is InSv, ISTb, SysB, Fail	step 5
the groups is ManB	step 7
the group is OffL	step 8

5 Busy the software application group by typing.

```
> bsy <n>
```

where

n
is the number next to the application you want to busy

and pressing the Enter key.

Example response:

```
Bsy application: 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 application as shown performs an orderly shutdown and can take up to 16 seconds.*

6 Confirm the Busy command by typing.

```
> y
```

and pressing the Enter key.

After you confirm the Bsy command, the following is displayed:

Response:

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

Response:

```
Bsy application - Command complete.
```

7 Offline the application by typing

`> offl <n>`

where

n
is the number next to the application you want to offline

and pressing the Enter key.

Response:

```
OffL application - Command complete.
```

8 You have completed this procedure.

Offlining the application group

Application

Use this procedure to offline the application group.

Note: For CBM850, you must perform this procedure on the active server.

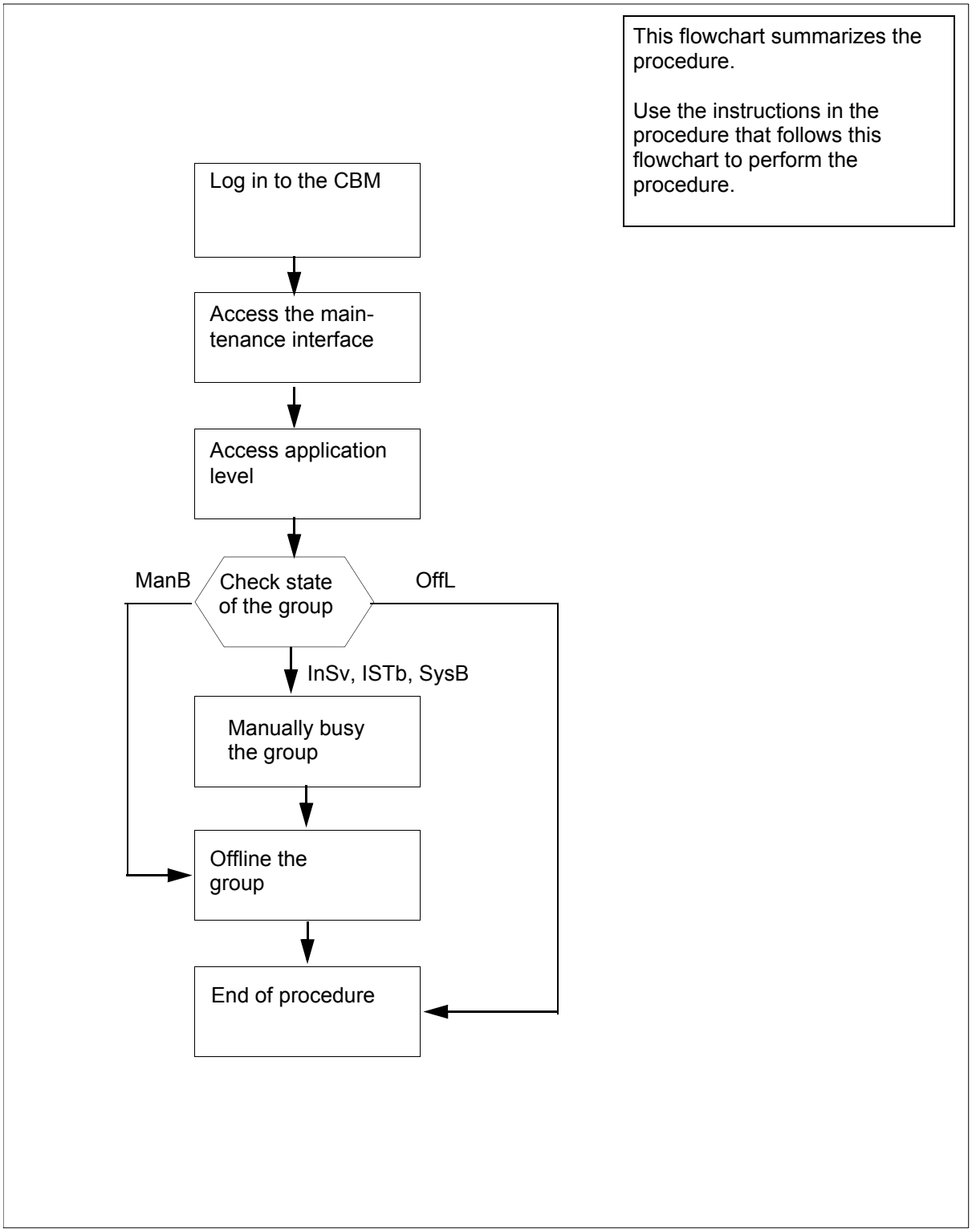
This procedure prevents an individual application from providing service.

Action

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

Note: After this procedure, the application group is in an offline state and the individual application states are ManB. Applications that were previously offline remain offline.

Summary of offlining the application group



Offlining the application group

At the local or remote VT100 terminal

1 Log in to the CBM as the root user or a maint class user.

2 Access the maintenance interface by typing

```
# cbmmtc
```

and pressing the Enter key.

3 Access the application level by typing

```
> appl
```

and pressing the Enter key.

4 Check the state of the application group, as displayed directly above the individual applications.

If	Do
the group is InSv, ISTb, SysB	step 5
the groups is ManB	step 7
the group is OffL	step 8

5 Busy the software application group by typing.

```
> bsy group
```

and pressing the Enter key.

Example response:

```
Bsy Group: The group 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 application group as shown performs an orderly shutdown and can take up to 16 seconds.*

6 Confirm the Busy command by typing.

```
> y
```

and pressing the Enter key.

After you confirm the Bsy command, the following is displayed:

Response:

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

Response:

```
Bsy Group - Command complete.
```

7 Offline the application group by typing

`> offl group`

and pressing the Enter key.

Response:

```
OffL Group - Command complete.
```

8 You have completed this procedure.

Increasing the size of a file system on a Sun server

Application

For this procedure, contact your next level of support.

Displaying the CLLI from the command line

Use the following procedure to display the Common Language Location Identifier (CLLI) of the Core from the command line.

Prerequisites

This procedure requires access to the Core and Billing Manager through a telnet session.

Procedure

From any workstation or console

1 Access the Core and Billing Manager (CBM).

From the command line

2 Display the CLLI of the Core by typing

```
# clli
```

and pressing the Enter key.

Response

The system displays the CLLI of the Core.

Example

```
EAST_CS01
```

3 You have completed this procedure.

Displaying the CLLI from BILLMTC

Use the following procedure to display the Common Language Location Identifier (CLLI) of the Core from the Billing Maintenance (billmtc) interface.

Prerequisites

This procedure requires access to the Core and Billing Manager through a telnet session.

Procedure

From any workstation or console

1 Access the Core and Billing Manager (CBM).

2 Access the billing maintenance by typing

```
# billmtc
```

and pressing the Enter key.

Response

The billing maintenance interface opens.

From any level of BILLMTC

3 Display the CLLI of the Core by typing

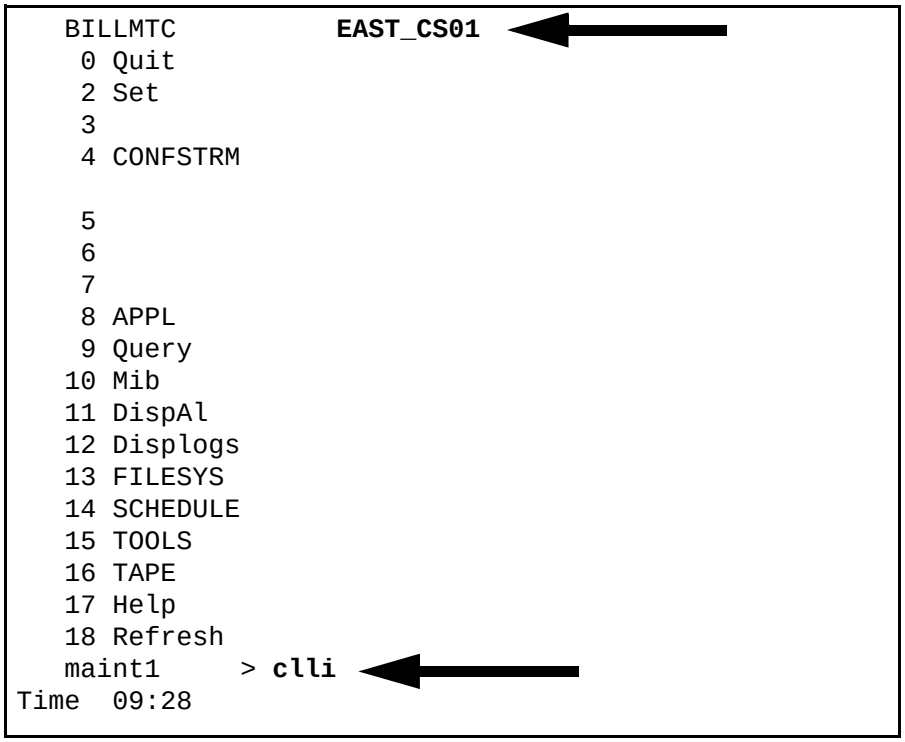
> clli

and pressing the Enter key.

Response

BILLMTC displays the CLLI at the top of the screen.

Example



4 You have completed this procedure.