



Configuration Management

Configuration management strategy

Configuration of the SPM is controlled by entities called data schema tables. Individual tuples in the data schema tables allow for a variety of features and applications to be provisioned. This strategy is used for provisioning of circuit packs, lines, and trunks.

Tools and utilities

Data Schema

Data schema tables are accessed using the MAP display commands.

2 Configuration Management



Configuration management procedures

Provisioning a DLC RM

At the MAP level

1

If	Do
there are no DLCs provisioned	Procedure 2
there are two DLCs provisioned	It is not necessary to perform this procedure. Only 2 DLC RMs are required for the PRI application. Go to Procedure 59.

2 To add a DLC protection group, access table MNPRTGRP by typing

```
>TABLE MNPRTGRP
```

and pressing the Enter key.

3 Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

4 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table PMLOADS.

```
>ADD
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
GRPKEY:
```

```
>SPM 0 DLC_GRP 1
```

```

SELECTOR:
>DLC_GRP
SWCHMODE:
>NRVTV
ALRMCTRL:
>NOSPARE MJ RPT
>
TUPLE TO BE ADDED:
SPM 0 DLC_GRP 1 DLC_GRP NRVTV (NOSPARE MJ
RPT)$
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 5 Exit table MNPRTGRP by typing

```
>QUIT
```

and pressing the Enter key.

- 6 Access table MNNODE by typing

```
>TABLE MNNODE
```

and pressing the Enter key.

- 7 Position on the tuple for the SPM being modified by typing

```
>POS SPM <spm_no>
```

and pressing the Enter key.

where

spm_no
is the SPM number (0 to 63)

Example

```
>POS SPM 0
```

Example of MAP display

```

NODEKEY      ALIAS      NODEINFO
-----
SPM  0      SPM_0_0D      DMSCP 0 SYNC INTERNAL 15 (COT 60) (DTMF 60)
                        (ECAN 60) (TONESYN 60) (MF 60) $
                        (SYSB CR RPT) (MANB MJ RPT) (ISTB MN RPT)
                        (SYSBNA CR RPT) (MANBNA MJ RPT)
                        (COTLOW MN RPT) (DTMFLOW MN RPT)
                        (ECANLOW MN RPT) (TONESLOW MN RPT)
                        (MFLOW MN RPT) (CMRLOW MN RPT) $
                        (PRAB SPM250) $

```

- 8 Ensure the proper EXECs are datafilled for Table MNNODE.

Valid EXECs for offices

Office type	Valid EXEC
DMS100/200	PRAB SPMEX
DMS250	PRAB SPM250
DMS500	PRAB SPMEX

9

If the EXECs	Do
are datafilled properly	Procedure 25
not datafilled properly	Procedure 10

- 10 Change the tuple to the proper EXEC for the office by performing the following the following steps.

- a Begin the table change by typing
 - >CHA
 and pressing the enter key.
- b For each unchanged prompt, press the Enter key. The only value entered in this step should be the new value.

Example

This example changes the EXEC from (PRAB SPM250) to (PRAB SPMEX)

```
>CHA
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
ALIAS: SPM_0_0D
>
CLASS: DMSCP
>
FLOOR: 1
>
CLKMODE: SYNC
>
CLKREF: INTERNAL
>
LEDTIMER: 15
>
RSRUTLIM: COT 60
>
RSRUTLIM: DTMF 60
>
RSRUTLIM: ECAN 60
>
RSRUTLIM: TONESYN 60
>
RSRUTLIM: MF 60
>
RSRUTLIM:
>
ALRMCTRL: SYSB CR RPT
>
ALRMCTRL: MANB MJ RPT
>
ALRMCTRL: ISTB MN RPT
>
ALRMCTRL: SYSBNA CR RPT
```

```
>
ALRMCTRL: MANBNA MJ RPT
>
ALRMCTRL: COTLOW MN RPT
>
ALRMCTRL: DTMFLOW MN RPT
>
ALRMCTRL: ECANLOW MN RPT
>
ALRMCTRL: TONESLOW MN RPT
>
ALRMCTRL: MFLOW MN RPT
>
ALRMCTRL: CMRLOW MN RPT
>
EXECTAB: (PRAB SPM250)
```

>PRAB SPMEX

EXECTAB:

\$

Perform the following steps to activate the changes to EXECTAB in SPM 0:

- 1: MANBSY the CEM if it's not already MANBSY.
- 2: RTS the inactive CEM.
3. Perform an SPM SWACT
4. MANBSY the new inactive CEM
5. RTS the new inactive CEM.

TUPLE TO BE CHANGED:

```
SPM 0 SPM0_00D DMSCP 0 SYNC INTERNAL 15
(COT 60) (DTMF 60) (ECAN 60) (TONESYN 60)
(MF 60) $ (SYSB CR RPT) (MANB MJ RPT) (ISTB
MN RPT)(SYSBNA CR RPT) (MANBNA MJ
RPT)(COTLOW MN RPT) (DTMFLOW MN RPT)
(ECANLOW MN RPT) (TONESLOW MN RPT)
```

```
(MFLOW MN RPT) (CMRLOW MN RPT) (PRAB SPMEX)
$
```

```
ENTER Y TO CONFIRM, N TO REJECT OR E TO
EDIT.
```

```
>Y
```

```
TUPLE CHANGED
```

- 11** The following steps will activate the static data that was modified in Procedure 10.

- 12** Exit the table by typing

```
>QUIT
```

and pressing the Enter key.

- 13** Post the SPM being modified by typing

```
>POST SPM <spm_no>
```

and pressing the Enter key.

where

spm_no

is the number of the SPM being modified (0 to 63)

Example of MAP display

```
SPM   #   InSv  Class: DMSCP

Shlf0 SL A Stat  Shlf0 SL A Stat  Shlf1 SL A Stat  Shlf1 SL A Stat
DSP 0  1 A InSv  CEM 1  8 I InSv  ----- 1 - -----  ----- 8 - -----
----- 2 - -----  OC3 0  9 I InSv  ----- 2 - -----  ----- 9 - -----
----- 3 - -----  OC3 1 10 A InSv  ----- 3 - -----  ----- 10 - -----
----- 4 - -----  ----- 11 - -----  ----- 4 - -----  ----- 11 - -----
----- 5 - -----  ----- 12 - -----  ----- 5 - -----  ----- 12 - -----
----- 6 - -----  ----- 13 - -----  ----- 6 - -----  ----- 13 - -----
CEM 0  7 A InSv  ----- 14 - -----  ----- 7 - -----  ----- 14 - -----
```

- 14** Select the inactive CEM by typing

```
>SELECT <inactive_cem>
```

and pressing the Enter key.

where

inactive_cem

is the number of the inactive CEM

- 15** Busy the inactive CEM by typing

```
>BSY
```

- and pressing the Enter key.
- 16** Return the inactive CEM to service by typing
>RTS
 and pressing the Enter key.
- 17** Access the PROT level of the MAP by typing
>PROT
 and pressing the Enter key.

Example of MAP display

```

SPM   #   InSv
Prot Grp: CEM           Mode: N/A           Schema: N/A
Sh0  U R A Stat   Sh0  U R A Stat   Sh1  U R A Stat   Sh1  U R A Stat
  1  - - - - ----   8  1 S I InSv    1  - - - - ----   8  - - - - ----
  2  - - - - ----   9  - - - - ----   2  - - - - ----   9  - - - - ----
  3  - - - - ----  10  - - - - ----   3  - - - - ----  10  - - - - ----
  4  - - - - ----  11  - - - - ----   4  - - - - ----  11  - - - - ----
  5  - - - - ----  12  - - - - ----   5  - - - - ----  12  - - - - ----
  6  - - - - ----  13  - - - - ----   6  - - - - ----  13  - - - - ----
  7  0 W A InSv   14  - - - - ----   7  - - - - ----  14  - - - - ----

```

- 18** Perform a protection switch on the CEMs by typing
>MANUAL
 and pressing the Enter key.
- 19** Exit the protection level by typing
>QUIT
 and pressing the Enter key.
- 20** Select the previously active CEM by typing
>SELECT <inactive_cem>
 and pressing the Enter key.
 where
 inactive_cem
 is the number of the previously active CEM
- 21** Busy the CEM by typing
>BSY
 and pressing the Enter key.
- 22** Return the CEM to service by typing
>RTS

and pressing the Enter key.

- 23** Access the PROT level of the MAP by typing

>PROT

and pressing the Enter key.

Example of MAP display

```

SPM   #   InSv
Prot Grp: CEM           Mode: N/A           Schema: N/A
Sh0  U R A Stat   Sh0  U R A Stat   Sh1  U R A Stat   Sh1  U R A Stat
  1  - - - - -    8   1 S A InSv    1  - - - - -    8  - - - - -
  2  - - - - -    9  - - - - -    2  - - - - -    9  - - - - -
  3  - - - - -   10  - - - - -    3  - - - - -   10  - - - - -
  4  - - - - -   11  - - - - -    4  - - - - -   11  - - - - -
  5  - - - - -   12  - - - - -    5  - - - - -   12  - - - - -
  6  - - - - -   13  - - - - -    6  - - - - -   13  - - - - -
  7  0 W I InSv   14  - - - - -    7  - - - - -   14  - - - - -

```

- 24** Perform a protection switch by typing

>MANUAL

and pressing the Enter key.

- 25** Return to the CI level of the MAP by typing

>QUIT ALL

and pressing the Enter key.

- 26** Access table MNCKTPAK by typing

>TABLE MNCKTPAK

and pressing the Enter key.

- 27** Begin the table addition by typing

>ADD

and pressing the Enter key.

- 28** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table MNCKTPAK.

>ADD

CPKKEY:

>SPM 0 1 1

```
CPKTYPE :
>DLC
UNITNO :
>0
DLCGRPID :
>1
WKRSPR :
>WORKING
ALRMCTRL :
>SYSB CR RPT
ALRMCTRL :
>MANB MJ RPT
ALRMCTRL :
>ISTB MN RPT
ALRMCTRL :
>PROTFAIL CR RPT
ALRMCTRL :
>$
PEC :
>NTLX72AA
RELEASE :
>01
LOAD :
>DLC16CF
TUPLE TO BE ADDED :
SPM 0 0 1 DLC 1 1 WORKING ( SYSB CR RPT) (MANB
MJ RPT) (ISTB MN RPT) (PROTFAIL CR RPT) $
NTLX72AA 01 DLC16CF
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 29 The previous example adds a working DLC to Slot 1 of Shelf 1. The following example steps will add a spare DLC to Slot 7 of Shelf 1.
- 30 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 31 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table MNCKTPAK.

```
>ADD
CPKKEY:
>SPM 0 1 7
CPKTYPE:
>DLC
UNITNO:
>1
DLCGRP ID:
>1
WKRSPR:
>SPARE
ALRMCTRL:
>SYSB CR RPT
ALRMCTRL:
>MANB MJ RPT
ALRMCTRL:
>ISTB MN RPT
ALRMCTRL:
>PROTFAIL CR RPT
ALRMCTRL:
>$
PEC:
```

```
>NTLX72AA
```

```
RELEASE:
```

```
>01
```

```
LOAD:
```

```
>DLC16CF
```

```
TUPLE TO BE ADDED:
```

```
SPM 0 1 7 DLC 1 SPARE ( SYSB CR RPT) (MANB
MJ RPT) (ISTB MN RPT) (PROTFAIL CR RPT) $
NTLX72AA 01 DLC16CF
```

```
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
```

```
>Y
```

```
TUPLE ADDED
```

- 32** Exit table MNCKTPAK by typing

```
>QUIT
```

and pressing the Enter key.

- 33** Access table MNPRIIID by typing

```
>TABLE MNPRIIID
```

and pressing the Enter key.

- 34** Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

- 35** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table MNPRIIID.

```
>ADD
```

```
PRIIDKEY:
```

```
>SPM 0 1
```

```
INTID:
```

```
>1
```

```
TUPLE TO BE ADDED:
```

```
SPM 0 1 1
```

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

TUPLE ADDED

- 36 Exit table MNPRIID by typing

>QUIT

and pressing the Enter key.

At the equipment frame

- 37 Ensure ESD precautions are utilized. Verify that ESD wrist strap is connected properly.

- 38 Remove the NTLX60AA filler packs from the appropriate slots.

- 39 Insert the NTLX72AA DLC RMs in the appropriate slots.

At the MAP level

- 40 Post the SPM being modified by typing

>MAPCI;MTC;PM;POST SPM <spm_no>

and pressing the Enter key.

where

spm_no

is the number of the SPM being modified (0 to 63)

Example of MAP display

```
SPM    0 InSv  Class: DMSCP

Shlf0 SL A Stat  Shlf0 SL A Stat  Shlf1 SL A Stat  Shlf1 SL A Stat
DSP 0  1 A InSv  CEM 1  8 I InSv  DLC 0  1 A Offl  ----- 8 - ----
----- 2 - ----  OC3 0  9 I InSv  ----- 2 - ----  ----- 9 - ----
----- 3 - ----  OC3 1 10 A InSv  ----- 3 - ----  ----- 10 - ----
----- 4 - ----  ----- 11 - ----  ----- 4 - ----  ----- 11 - ----
----- 5 - ----  ----- 12 - ----  ----- 5 - ----  ----- 12 - ----
----- 6 - ----  ----- 13 - ----  ----- 6 - ----  ----- 13 - ----
CEM 0  7 A InSv  ----- 14 - ----  DLC 1  7 I Offl  ----- 14 - ----
```

- 41 Select the DLCs by typing

>SELECT DLC ALL

and pressing the Enter key.

- 42 Busy the DLCs by typing

>BSY ALL

and pressing the Enter key.

- 43 Confirm the BSY command by typing
>Y
and pressing the Enter key.
- 44 Load the DLCs with their software by typing
>LOADMOD ALL
and pressing the Enter key.
- 45 Confirm the LOADMOD command by typing
>Y
and pressing the Enter key.
- 46 Perform an out-of-service test on the DLCs by typing
>TST ALL
and pressing the Enter key.
- 47 Confirm the test by typing
>Y
and pressing the Enter key.
- 48 Return the DLCs to service by typing
>RTS ALL
and pressing the Enter key.
- 49 Confirm the RTS command by typing
>Y
and pressing the Enter key.
- 50 Perform an in-service test on the DLCs by typing
>TST ALL
and pressing the Enter key.
- 51 Confirm the TST command by typing
>Y
and pressing the Enter key.
- 52 Verify the DLCs are working properly. Monitor logs and the SPM for five minutes. If any problems arise, contact your next level of support.
- 53 Access the PROT level of the MAP by typing
>PROT
and pressing the Enter key.

Example of MAP display

```
SPM # ISTb Prot Grp: DLC_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 -- - - ---- 8 -- - - ---- 1 0 W A InSv 8 -- - - ----
2 -- - - ---- 9 -- - - ---- 2 -- - - ---- 9 -- - - ----
3 -- - - ---- 10 -- - - ---- 3 -- - - ---- 10 -- - - ----
4 -- - - ---- 11 -- - - ---- 4 -- - - ---- 11 -- - - ----
5 -- - - ---- 12 -- - - ---- 5 -- - - ---- 12 -- - - ----
6 -- - - ---- 13 -- - - ---- 6 -- - - ---- 13 -- - - ----
7 -- - - ---- 14 -- - - ---- 7 1 S I InSv 14 -- - - ----
```

- 54 Determine if the spare DLC is also inactive.
Note: In the example above, DLC 1 slot 7 of the upper shelf is inactive ("I" under the 'A' column) and is the spare DLC ("S" under the 'R' column).

- 55 Protection switch the active DLC with the inactive spare DLC by typing

```
>MANUAL <active_dlc> <spare_dlc>
```

and pressing the Enter key.

where

active_dlc

is the number of an active DLC

spare_dlc

is the number of the inactive spare DLC

Example

```
>MANUAL 0 1
```

- 56 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

- 57 Protection switch from the spare DLC back to the newly inactive DLC by typing

```
>MANUAL <spare_dlc> <inactive_dlc>
```

and pressing the Enter key.

where

spare_dlc

is the number of the spare DLC

inactive_dlc

is the number of the newly inactive DLC

Example

>MANUAL 1 0

- 58** Confirm the protection switch by typing

>Y

and pressing the Enter key.

- 59** You have completed this procedure. Return to the CI level of the MAP screen by typing

>QUIT ALL

and pressing the Enter key.



Configuration management procedures

Provisioning a DSP RM

At the MAP level

- 1 Determine the Protection status of the DSPs assigned to the SPM being modified. Verify that the RMID and the ProtWhomID fields are the same number for each of the DSPs by typing

```
>SPMRESMAN SPM <spm_no> DSP <dsp_no>
```

and pressing the Enter key.

where

spm_no

is the SPM number (0 to 63)

dsp_no

is the DSP number (0 to 27)

Example response of SPM with no protection switched DSPs

```
SPM 0
ProtGroup: 1
RMID      Activity ProtWhomID ProtGrp Safe to Change?
-----
DSP 0 23  ACTIVE      23       1       NO
DSP 1 24  ACTIVE      24       1       NO
DSP 2 25  ACTIVE      25       1       NO
DSP 3 26  INACTIVE    26       1       NO
```

Example response of SPM with protection switched DSPs:

```
SPM 0
ProtGroup: 1
RMID   Activity ProtWhomID ProtGrp Safe to Change?
-----
DSP 0 23 ACTIVE    25      1      NO
DSP 1 24 ACTIVE    24      1      NO
DSP 2 25 INACTIVE  26      1      NO
DSP 3 26 ACTIVE    23      1      NO
```

Note: In the second example above, DSP 0 was protection switched with the spare DSP (DSP 3), then DSP 2 (currently inactive) was protection switched with DSP 0. To get the DSPs in the proper state, first protection switch DSP 0 with DSP 2 and then protection switch DSP 3 with DSP 0.

2 Post the SPM by typing

```
>MAPCI;MTC;PM;POST SPM <spm_no>
```

and pressing the Enter key.

where

spm_no
is the SPM number (0 to 63)

Example of MAP display

```
SPM 0 InSv Loc: Site HOST Floor 1 Row AA FrPos 0
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
---- 1 ---- CEM 1 8 A InSv ---- 1 - ---- 8 ----
---- 2 ---- OC3 0 9 A InSv ---- 2 - ---- DSP 0 9 A InSv
---- 3 ---- OC3 1 10 I InSv ---- 3 - ---- DSP 1 10 A InSv
---- 4 ---- VSP 3 11 A InSv ---- 4 - ---- DSP 2 11 A InSv
---- 5 ---- VSP 2 12 A InSv VSP 4 5 A InSv DSP 3 12 I InSv
---- 6 ---- VSP 1 13 A InSv VSP 5 6 I InSv ---- 13 ----
CEM 0 7 I InSv VSP 0 14 A InSv ---- 7 - ---- 14 ----
```

Note: In this example DSP 3 in slot 12 of shelf 1 is the spare DSP and Inactive (I).

3 Select a DSP assigned to the SPM being modified by typing

```
>SELECT DSP <dsp_no>
```

and pressing the Enter key.

where

dsp_no
is the DSP number (0 to 27)

4 Enter the protection level of the MAP by typing

```
>PROT
```

and pressing the Enter key.

Example of MAP display

```
SPM 0 InSv
Prot Grp: DSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 --- -- 8 --- -- 1 --- -- 8 --- --
2 --- -- 9 --- -- 2 --- -- 9 0 W A InSv
3 --- -- 10 --- -- 3 --- -- 10 1 W A InSv
4 --- -- 11 --- -- 4 --- -- 11 2 W A InSv
5 --- -- 12 --- -- 5 --- -- 12 3 S I InSv
6 --- -- 13 --- -- 6 --- -- 13 --- --
7 --- -- 14 --- -- 7 --- -- 14 --- --
```

Note: In the example above, DSP 3 in slot 12 of the upper shelf is inactive ("I" under the 'A' column) and is the spare DSP ("S" under the 'R' column).

- 5 Determine there are any working DSPs that are protection switched using the results from the SPMRESMAN command in Procedure 1.

If	Do
no working DSP is protection switched	Procedure 10
any working DSP is protection switched	Procedure 6

- 6 Using the information gathered during Procedure 1, protection switch the DSP, indicated by the ProtWhomID field of the currently Inactive DSP, with the Inactive DSP by typing

```
>MANUAL <prot_dsp> <inactive_dsp>
```

and pressing the Enter key.

where

prot_dsp

is the number of the DSP in the inactive DSP's ProtWhomID field from Procedure 1

inactive_dsp

is the number of an inactive DSP

Example

```
>MANUAL 3 0
```

- 7 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter.

- 8 Determine the Protection status of the DSPs assigned to the SPM being modified by typing

```
>SPMRESMAN SPM <spm_no> DSP <dsp_no>
```

and pressing the Enter key.

where

spm_no

is the SPM number (0 to 63)

dsp_no

is the DSP number (0 to 27)

- 9 Using the output of Procedure 8, verify that the RMID and the ProtWhomID fields are the same number for each of the DSPs.

If the SPM has

Do

any protection switched DSPs

Procedure 6

no protection switched DSPs

Procedure 16

- 10 Ensure that the inactive DSP is the Spare. Then protection switch the inactive DSP with one of the active DSPs by typing

```
>MANUAL <active_dsp> <inactive_dsp>
```

and pressing the Enter key.

where

active_dsp

is the number of an active DSP from Procedure 2

inactive_dsp

is the number of the inactive DSP

Example

```
>MANUAL 0 3
```

- 11 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

Example of MAP display

```

SPM      0  InSv
Prot Grp: DSP_GRP 1      Mode: Non-revertive      Schema: m_for_n
Sh0 U R A Stat  Sh0 U R A Stat  Sh1 U R A Stat  Sh1 U R A Stat
1  - - - - - 8  - - - - - 1  - - - - - 8  - - - - -
2  - - - - - 9  - - - - - 2  - - - - - 9  0 W I InSv
3  - - - - - 10 - - - - - 3  - - - - - 10 1 W A InSv
4  - - - - - 11 - - - - - 4  - - - - - 11 2 W A InSv
5  - - - - - 12 - - - - - 5  - - - - - 12 3 S A InSv
6  - - - - - 13 - - - - - 6  - - - - - 13 - - - - -
7  - - - - - 14 - - - - - 7  - - - - - 14 - - - - -

```

- 12** Verify that the DSP performed the protection switch by viewing the MAP display screen. In the example in Procedure 11, DSP 0 in slot 9 of the upper shelf is now inactive (“I” under the ‘A’ column) and the spare DSP (“S” under the ‘R’ column) is now active.
- 13** Protection switch back to the original DSP by typing
>MANUAL <spare_dsp> <inact_dsp>
and pressing the Enter key.

where

spare_dsp

is the number of the newly active DSP

inact_dsp

is the number of the previously active DSP from Procedure 10

Example

>MANUAL 3 0

- 14** Confirm the protection switch by typing
>Y
and pressing the Enter key.

Example of MAP display

```

SPM # InSv
Prot Grp: DSP_GRP 1      Mode: Non-revertive      Schema: m_for_n
Sh0 U R A Stat  Sh0 U R A Stat  Sh1 U R A Stat  Sh1 U R A Stat
1  - - - - - 8  - - - - - 1  - - - - - 8  - - - - -
2  - - - - - 9  - - - - - 2  - - - - - 9  0 W A InSv
3  - - - - - 10 - - - - - 3  - - - - - 10 1 W A InSv
4  - - - - - 11 - - - - - 4  - - - - - 11 2 W A InSv
5  - - - - - 12 - - - - - 5  - - - - - 12 3 S I InSv
6  - - - - - 13 - - - - - 6  - - - - - 13 - - - - -
7  - - - - - 14 - - - - - 7  - - - - - 14 - - - - -

```

- 15** Verify that the DSP performed the protection switch by viewing the MAP display screen. In the example in Procedure 14, DSP 3

in slot 9 of the upper shelf is now inactive ("I" under the 'A' column) and is the spare DSP ("S" under the 'R' column).

- 16 Exit the PROT level by typing
`>QUIT`
and pressing the Enter key.
- 17 Select the spare DSP by typing
`>SELECT DSP <spare_dsp>`
and pressing the Enter key.
where
spare_dsp
is the number of the spare DSP
- 18 Busy the spare DSP by typing
`>BSY`
and pressing the Enter key.
- 19 Offline the spare DSP by typing
`>OFFL`
and pressing the Enter key.
- 20 Exit to the CI level of the MAP by typing
`>QUIT ALL`
and pressing the Enter key.
- 21 Access table MNCKTPAK by typing
`>TABLE MNCKTPAK`
and pressing the Enter key.
- 22 Position on the tuple that holds the information on the spare DSP by typing
`>POS SPM <spm_no> <shelf_no> <slot_no>`
and pressing the Enter key.
where
spm_no
is the SPM number (0 to 63)
shelf_no
is the shelf number (0 or 1)
slot_no
is the slot number (1 to 14)

Example

>POS SPM 0 1 12

- 23** Remove the tuple by typing

>**DEL**

and pressing the Enter key.

Note: It is recommended that the spare DSP is deleted and re-added as a working DSP. The final DSP tuple in table MNCKTPAK should be added as the spare DSP.

- 24** Confirm the deletion by typing

>**Y**

and pressing the Enter key.

- 25** Begin the table addition by typing

>**ADD**

and pressing the Enter key.

- 26** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table MNCKTPAK.

>**ADD**

CPKKEY:

>**SPM 0 1 12**

CPKTYPE:

>**DSP**

UNITNO:

>**3**

DSPGRPID:

>**1**

WKRSPR:

>**WORKING**

RSRTYPE:

>**COT 12**

RSRTYPE:

```

>DTMF 12
RSRTYPE:
>$
ALRMCTRL:
>SYSB CR RPT
ALRMCTRL:
>MANB MJ RPT
ALRMCTRL:
>ISTB MN RPT
ALRMCTRL:
>PROTFAIL CR RPT
ALRMCTRL:
>$
PEC:
>NTLX65BA
RELEASE:
>01
LOAD:
>DSP16CK
TUPLE TO BE ADDED:
SPM 0 1 12 DSP 3 1 WORKING (COT 12) (DTMF 12)
$ (SYSB CR RPT) (MANB MJ RPT) (ISTB MN RPT)
(PROTFAIL CR RPT) $ NTLX65BA      01 DSP16CK
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 27** Repeat steps 25 and 26 to add additional DSPs. Datafill the final DSP as a spare DSP. All others should be datafilled as working. When all DSPs have been datafilled, exit table MNCKTPAK by typing

```
>QUIT
```

and pressing the Enter key.

At the equipment frame

- 28** Remove the NTLX60AA filler modules from the appropriate slot(s).
- 29** Insert the new DSP (NTLX65) resource module(s) into the appropriate slot(s). Wait for the resource module(s) to pass the self test. This will take several minutes.

Note: The red and green LEDs will illuminate while the self test is being performed. The red LED will extinguish.

At the MAP level

- 30** Post the SPM being modified by typing
>MAPCI;MTC;PM;POST SPM <spm_no>
 and pressing the Enter key.

where

spm_no
 is the SPM number (0 to 63)

Example of MAP display

```
SPM 0 InSv Loc: Site HOST Floor 1 Row AA FrPos 0
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
----- 1 - ---- CEM 1 8 A InSv ----- 1 - ---- ----- 8 -----
----- 2 - ---- OC3 0 9 A InSv ----- 2 - ---- DSP 0 9 A InSv
----- 3 - ---- OC3 1 10 I InSv ----- 2 - ---- DSP 1 10 A InSv
----- 4 - ---- VSP 3 11 A InSv ----- 4 - ---- DSP 2 11 A InSv
----- 5 - ---- VSP 2 12 A InSv VSP 4 5 A InSv DSP 3 12 A Offl
----- 6 - ---- VSP 1 13 A InSv VSP 5 6 A InSv DSP 4 13 I Offl
CEM 0 7 I InSv VSP 0 14 A InSv ----- 7 - ---- ----- 14 -----
```

- 31** Select one of the new DSPs just added to the SPM by typing
>SELECT DSP <dsp_no>
 and pressing the Enter key.

where

dsp_no
 is the number of a newly added DSP (0 to 27)

- 32** Busy the selected DSP by typing
>BSY
 and pressing the Enter key.
- 33** Perform a RESETMOD on the DSP by typing
>RESETMOD FW

- and pressing the Enter key.
- 34 Load the DSP with the DSP software load by typing
>LOADMOD
and pressing the Enter key.
- 35 Perform an out-of-service test on the DSP by typing
>TST
and pressing the Enter key.
- 36 Return the DSP to service by typing
>RTS
and pressing the Enter key.

37

If	Do
additional DSPs were added	Procedure 31
no additional DSPs were added	Procedure 38

- 38 Verify the DSPs are working properly. Monitor logs and the SPM for five minutes. If any problems arise, contact your next level of support.
- 39 Access the PROT level of the MAP by typing
>PROT
and pressing the Enter key.

Example of MAP display

```
SPM # ISTb Prot Grp: DSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 -- - - ---- 8 -- - - ---- 1 -- - - ---- 8 -- - - ----
2 -- - - ---- 9 -- - - ---- 2 -- - - ---- 9 0 W A InSv
3 -- - - ---- 10 -- - - ---- 3 -- - - ---- 10 1 W A InSv
4 -- - - ---- 11 -- - - ---- 4 -- - - ---- 11 2 W A InSv
5 -- - - ---- 12 -- - - ---- 5 -- - - ---- 12 3 W A InSv
6 -- - - ---- 13 -- - - ---- 6 -- - - ---- 13 4 S I InSv
7 -- - - ---- 14 -- - - ---- 7 -- - - ---- 14 -- - - ----
```

- 40 Determine if the spare DSP is also inactive.
Note: In the example above, DSP 4 in slot 13 of the upper shelf is inactive ("I" under the 'A' column) and is the spare DSP ("S" under the 'R' column).

- 41 Protection switch an active DSP with the inactive spare DSP by typing
- ```
>MANUAL <active_dsp> <spare_dsp>
```
- and pressing the Enter key.
- where
- active\_dsp**  
is the number of an active DSP
- spare\_dsp**  
is the number of the inactive spare DSP
- Example
- ```
>MANUAL 0 4
```
- 42 Confirm the protection switch by typing
- ```
>Y
```
- and pressing the Enter key.
- 43 Protection switch from the spare DSP back to the newly inactive DSP by typing
- ```
>MANUAL <spare_dsp> <inactive_dsp>
```
- and pressing the Enter key.
- where
- spare_dsp**
is the number of the spare DSP
- inactive_dsp**
is the number of the newly inactive DSP
- Example
- ```
>MANUAL 4 0
```
- 44 Confirm the protection switch by typing
- ```
>Y
```
- and pressing the Enter key.
- 45 You have completed this procedure. Return to the CI level of the MAP screen by typing
- ```
>QUIT ALL
```
- and pressing the Enter key.





## Configuration management procedures

### Provisioning an SRM

#### *At the MAP level*

- 1 Access table PECINV by typing  
`>TABLE PECINV`  
and pressing the Enter key.
- 2 Determine if the NTLX44AA peccode has been previously datafilled by typing  
`>POS NTLX44AA`  
and pressing the Enter key.

---

| <b>If the tuple is</b> | <b>Do</b>   |
|------------------------|-------------|
| found                  | Procedure 6 |
| not found              | Procedure 3 |

---

- 3 Contact the next level of support and obtain the current baseline release and exceptions associated with the pack. Then add the NTLX44AA peccode to the table.
- 4 Begin the table addition by typing  
`>ADD`  
and pressing the Enter key.
- 5 Answer each of the prompts with the required datafill provided by the table range.

#### **Example**

This is an example of datafilling table PECINV.

```
>ADD
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```

>Y
PEC:
>NTLX44AA
SSYSBASE:
>SPMHW 01 $
SSYSBASE:
>$
TUPLE TO BE ADDED:
NTLX44AA (SPMHW 01 $) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 6 Exit table PECINV by typing

```
>QUIT
```

and pressing the Enter key.

- 7 Determine the location of the SRM loads by typing

```
>DISKUT;LF <disk_volume>
```

and pressing the Enter key.

where

**disk\_volume**

is the name of the SRM load volume

- 8 Exit the DISKUT level by typing

```
>QUIT ALL
```

and pressing the Enter key.

- 9 Access table PMLOADS by typing

```
>TABLE PMLOADS
```

- 10 Determine if the SRM load is present by typing

```
>POS srm_load_name
```

and pressing the Enter key.

where

**srm\_load\_name**

is the load name for the SRM

*Example*

```
>POS SYN16BK
```

| <b>If the SRM load is</b> | <b>Do</b>    |
|---------------------------|--------------|
| found                     | Procedure 13 |
| not found                 | Procedure 11 |

- 11 Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

- 12 Answer each of the prompts with the required datafill provided by the table range.

**Example**

This is an example of datafilling table PMLOADS.

```
>ADD
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
LOADNAME:
```

```
>SYN16BK
```

```
ACTFILE:
```

```
>SYN16BK_000001
```

```
ACTVOL:
```

```
>S00DSPM
```

```
BKPFIL:
```

```
>SYN16BK_000001
```

```
BKPVOL:
```

```
>S01DSPM
```

```
UPDACT: N
```

```
>
```

```
TUPLE TO BE ADDED:
```

```
SYN16BK
```

```
SYN16BK_000001 S00DSPM
```

```
SYN16BK_000001 S01DSPM N
```

---

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

TUPLE ADDED

- 13** Exit table PMLOADS by typing

>QUIT

and pressing the Enter key.

- 14** Access table MNPRTGRP by typing

>TABLE MNPRTGRP

and pressing the Enter key.

- 15** Begin the table addition by typing

>ADD

and pressing the Enter key.

- 16** Answer each of the prompts with the required datafill provided by the table range.

### Example

This is an example of datafilling table MNPRTGRP.

>ADD

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

GRPKEY:

>SPM 2 SRM\_GRP 1

SELECTOR:

>SRM\_GRP

SWCHMODE:

>NRVTV

SPARING:

>UNSPARED

TUPLE TO BE ADDED:

SPM 2 SRM\_GRP 1 SRM\_GRP NRVTV

UNSPARED

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

---

TUPLE ADDED

- 17 Exit table MNPRTGRP by typing  
**>QUIT**  
and pressing the Enter key.
- 18 Access table MNCKTPAK by typing  
**>TABLE MNCKTPAK**  
and pressing the Enter key.
- 19 Begin the table addition by typing  
**>ADD**  
and pressing the Enter key.
- 20 Answer each of the prompts with the required datafill provided by the table range.

### Example

This is an example of datafilling table MNCKTPAK.

**>ADD**

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

**>Y**

CPKKEY:

**>SPM 0 0 6**

CPKTYPE:

**>SRM**

UNITNO:

**>0**

SRMGRPID:

**>1**

WKRSPR:

**>WORKING**

ALRMCTRL:

**>SYSB CR RPT**

ALRMCTRL:

**>MANB MJ RPT**

ALRMCTRL:

---

```
>ISTB MN RPT
ALRMCTRL:
>HLDOVR MJ RPT
ALRMCTRL:
>HLDOVR24 CR RPT
ALRMCTRL:
>LOR MJ RPT
ALRMCTRL:
>$
BITSALM:
>LOS MJ RPT
BITSALM:
>AIS MJ RPT
BITSALM:
>OOF MJ RPT
BITSALM:
>MTIE MN RPT
BITSALM:
>TLD MJ RPT
BITSALM:
>BPV MN RPT
BITSALM:
>CRC MN RPT
BITSALM:
>$
BITSAINFO:
>DS1 ESF
BITSBINFO:
>DS1 ESF
BITSOUTINFO:
>$
```

**Note:** BITSOUTINFO is disabled for SP16.

PQL\_ARR :

>NA

**Note:** If SF is datafiled in the BITSAINFO and BITSBINFO, PQL\_ARRAY must be datafiled as STU.

REV:

>N

PEC:

>NTLX44AA

RELEASE:

>01

LOAD:

>SYN16CT

TUPLE TO BE ADDED:

```
SPM 0 0 6 SRM 0 1 WORKING (SYSB CR RPT) (MANB
MJ RPT) (ISTB MN RPT) (HLDOVR MJ RPT)
(HLDOVR24 CR RPT) (LOR MJ RPT) $ (LOS MJ RPT)
(AIS MJ RPT) (OOF MJ RPT) (MTIE MN RPT) (TLD
MJ RPT) (BPV MN RPT) (CRC MN RPT) $ DS1 ESF
DS1 ESF $ NA N NTLX44AA 01
SYN16CT
```

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

TUPLE ADDED

- 21 Exit table MNCKTPAK by typing

>QUIT

and pressing the Enter key.

### ***At the equipment frame***

- 22 Ensure ESD precautions are utilized. Verify that ESD wrist strap is connected properly.
- 23 Remove the NTLX60AA Filler packs from card slot 6 in the lower shelf (shelf 0) of the SPM being modified.
- 24 Insert the SRM in card slot 6 in the lower shelf (shelf 0) of the SPM being modified.

**Note:** Wait for the SRM to complete self test, which will take several minutes.

- 25 Connect the NTLX5110 cable assembly for the 15 pin and 9 pin DSUB connectors.

**At the MAP level**

- 26 Post the SPM to be updated by typing  
**>MAPCI;MTC;PM;POST SPM <spm\_no>**  
 and pressing the Enter key.  
 where

**spm\_no**

is the number of the SPM to be upgraded (0 to 63)

*Example of a MAP screen:*

```
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
----- 1 - ---- CEM 1 8 I InSv DLC 0 1 A InSv ----- 8 - ----
----- 2 - ---- OC3 0 9 A InSv ----- 2 - ---- DSP 0 9 A InSv
----- 3 - ---- OC3 1 10 I InSv ----- 3 - ---- DSP 1 10 A InSv
----- 4 - ---- ----- 11 - ---- ----- 4 - ---- DSP 2 11 A InSv
----- 5 - ---- ----- 12 - ---- ----- 5 - ---- DSP 3 12 A InSv
SRM 0 6 A OffL ----- 13 - ---- ----- 6 - ---- DSP 4 13 I InSv
CEM 0 7 A InSv ----- 14 - ---- DLC 1 7 I InSv ----- 14 - ----
```

- 27 Select the SRM by typing  
**>SELECT SRM 0**  
 and pressing the Enter key.
- 28 Busy the SRM by typing  
**>BSY**  
 and pressing the Enter key.
- 29 Load the SRM with the SRM software load by typing  
**>LOADMOD**  
 and pressing the Enter key.
- 30 Return the SRM to service by typing  
**>RTS**  
 and pressing the Enter key.
- 31 Access the BITS level of the MAP by typing  
**>BITS**  
 and pressing the Enter key.

### Example of MAP display

| LinkNo | BitsName | Status | State | SSM | AlmSev |
|--------|----------|--------|-------|-----|--------|
| 0      | BITSA    | InAct  | OffL  | NIL |        |
| 1      | BITSB    | InAct  | OffL  | NIL |        |
| 2      | BITSOUT  |        | Uneq  | NIL |        |

#### 32 Busy the links by typing

**>BSY <link\_no>**

and pressing the Enter key.

where

**link\_no**

is the link number (0 or 1)

#### 33 Return the links to service by typing

**>RTS <link\_no>**

and pressing the Enter key.

where

**link\_no**

is the link number (0 or 1)

#### 34 Repeat steps 32 and 33 for each BITS link.

#### 35 Ensure the BITS links are both InSv, and verify one link is ACTIVE and the other INACTIVE.

#### 36 If any BITS link or SRM alarms arise, clear them using the appropriate procedure.

#### 37 Return to the CI level of the MAP screen by typing

**>QUIT ALL**

and pressing the Enter key.

#### 38 In order to use the SRM for ESI timing, another SRM must be added on a separate SPM. Repeat steps 14 through 37 to add an SRM to another SPM.

**Note:** Although it essentially acts as a spare SRM, the second SRM should still be datafilled as working in Table MNCKTPAK.

#### 39 Access table SYNCLK by typing

**>TABLE SYNCLK**

and pressing the Enter key.

- 40** List the tuple in the table by typing  
**>LIST**  
 and pressing the Enter key.
- 41** Determine the current timing configuration for the SPM using the following table.

#### Timing configuration cross-reference

| Timing type     | Example tuple                         |
|-----------------|---------------------------------------|
| Master-external | 0 STRAT3 MASTEXT F1000 ANALOG T50 OFF |
| Master-internal | 0 STRAT3 MASTINT                      |
| OC3 line timing | 0 STRAT3 SLAVE SPM 32 OC3 SPM 33 OC3  |
| Slave           | 0 STRAT3 SLAVE DTC 0 0 0 DTC 1 0 0    |

- 42** Exit table SYNCLK by typing  
**>QUIT**  
 and pressing the Enter key.

**43**

| If the current timing configuration is | Do           |
|----------------------------------------|--------------|
| Master-External or Slave               | Procedure 44 |
| any other configuration                | Procedure 45 |

- 44** Drop synchronization on the MS clock by performing the following sequence of commands:

```
>MAPCI ;MTC ;MS ;CLOCK ;DPSYNC
```

This action will degrade SPM OC-3 SYNC performance.

Do you wish to continue?

```
>Y
```

```
Request to Drop Synchronization on Clock 1:
Submitted
```

```
Request to Drop Synchronization on Clock 1:
Passed
```

```
>QUIT ALL
```

- 45 Return to table SYNCLK by typing

```
>TABLE SYNCLK
```

and pressing the Enter key.

- 46

| If the current timing configuration is | Do           |
|----------------------------------------|--------------|
| Master-external                        | Procedure 47 |
| Master-internal                        | Procedure 48 |
| OC3 line timing                        | Procedure 49 |
| Slave                                  | Procedure 50 |

- 47 Change the timing configuration from Master-external to ESI timing by performing the following steps:

**Note:** The SPM numbers datafilled in table SYNCLK should match the numbers of the SPM in which the SRM were datafilled.

- a Begin the table change by typing

```
>CHA
```

and pressing the Enter key.

- b Modify the tuple as needed.

#### Example

This example changes the timing mode from Master-external to ESI timing.

```
>CHA
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
CLKTYPE: STRAT3
```

```
>
```

```
OFFCONF: MASTEXT
```

```
>SLAVE
```

```
LKO_PTYP:
```

```
>SPM
```

```
LKO_PNUM
```

```
>2
```

```
LKO_RMTYP
```

```
>SRM
```

```
LK1_PTYTYP
```

```
>SPM
```

```
LK1_PNUM
```

```
>3
```

```
LK1_RMTYP
```

```
>SRM
```

Perform a BUSY (BSYMS) and RTS (RTSMS) without OOBAND option to each MS to setup the new clock configuration.

TUPLE TO BE CHANGED:

```
0 STRAT3 SLAVE SPM 2 SRM SPM 33 SRM
```

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

```
>Y
```

```
TUPLE CHANGED
```

- c** Exit table SYNCLK by typing

```
>QUIT
```

and pressing the Enter key.

- d** Go to Procedure 51.

- 48** Change the timing configuration from Master-internal to ESI timing by performing the following steps:

**Note:** The SPM numbers datafilled in table SYNCLK should match the numbers of the SPM in which the SRM were datafilled.

- a** Begin the table change by typing

```
>CHA
```

and pressing the Enter key.

- b** Modify the tuple as needed.

#### **Example**

This example changes the timing mode from Master-internal to ESI timing.

```
>CHA
```

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

CLKTYPE: STRAT3

>

OFFCONF: MASTINT

>SLAVE

LKO\_PTYP:

>SPM

LKO\_PNUM

>2

LKO\_RMTYP

>SRM

LK1\_PTYP

>SPM

LK1\_PNUM

>3

LK1\_RMTYP

>SRM

Perform a BUSY (BSYMS) and RTS (RTSMS) without OOBAND option to each MS to setup the new clock configuration.

TUPLE TO BE CHANGED:

0 STRAT3 SLAVE SPM 2 SRM SPM 33 SRM

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

TUPLE CHANGED

- c** Exit table SYNCLK by typing

>QUIT

and pressing the Enter key.

- d** Go to Procedure 51.

- 49 Change the timing configuration from OC3 line timing to ESI timing by performing the following steps:

**Note:** The SPM numbers datafilled in table SYNCLK should match the numbers of the SPM in which the SRM were datafilled.

- a Begin the table change by typing  
>CHA  
and pressing the Enter key.
- b Modify the tuple as needed.

**Example**

This example changes the timing mode from OC3 line timing to ESI timing.

```
>CHA
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
CLKTYPE: STRAT3
>
OFFCONF: SLAVE
>SLAVE
LKO_PTYP: SPM
>
LKO_PNUM: 32
>2
LKO_RMTYP
>SRM
LK1_PTYP: SPM
>
LK1_PNUM: 33
>3
LK1_RMTYP
>SRM
TUPLE TO BE CHANGED:
0 STRAT3 SLAVE SPM 2 SRM SPM 3 SRM
```

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

TUPLE CHANGED

- c Exit table SYNCLK by typing

>QUIT

and pressing the Enter key.

- d Go to Procedure 51.

- 50 Change the timing configuration from Slave to ESI timing by performing the following steps:

**Note:** The SPM numbers datafilled in table SYNCLK should match the numbers of the SPM in which the SRM were datafilled.

- a Begin the table change by typing

>CHA

and pressing the Enter key.

- b Modify the tuple as needed.

### Example

This example changes the timing mode from Slave to ESI timing.

>CHA

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

CLKTYPE: STRAT3

>

OFFCONF: SLAVE

>

LKO\_PTYP: DTC

>SPM

LKO\_PNUM

>2

LKO\_RMTYP

>SRM

```

LK1_PTYP: DTC
>SPM
LK1_PNUM
>3
LK1_RMTYP
>SRM
TUPLE TO BE CHANGED:
0 STRAT3 SLAVE SPM 2 SRM SPM 33 SRM
ENTER Y TO CONFIRM, N TO REJECT OR E TO
EDIT.
>Y
TUPLE CHANGED

```

- c Exit table SYNCLK by typing

```
>QUIT
```

and pressing the Enter key.

51

---

| If the original configuration was | Do |
|-----------------------------------|----|
|-----------------------------------|----|

---

|                                    |              |
|------------------------------------|--------------|
| Master-External or Master-Internal | Procedure 52 |
|------------------------------------|--------------|

|                          |              |
|--------------------------|--------------|
| OC3 line timing or Slave | Procedure 59 |
|--------------------------|--------------|

---

- 52 Access the MS clock by typing

```
>MAPCI ;MTC ;MS
```

and pressing the Enter key.

- 53 Busy the slave MS by typing

```
>BSY <slave_ms>
```

and pressing the Enter key.

where

**slave\_ms**

is the number of the slave MS

- 54 Return the slave MS to service by typing

```
>RTS <slave_ms>
```

and pressing the Enter key.

---

where

**slave\_ms**

is the number of the slave MS

- 55** Switch the master clock to the mate MS by typing

**>SWMAST**

and pressing the Enter key.

- 56** Busy the new slave MS by typing

**>BSY <slave\_ms>**

and pressing the Enter key.

where

**slave\_ms**

is the number of the new slave MS

- 57** Return the new slave MS to service by typing

**>RTS <slave\_ms>**

and pressing the Enter key.

where

**slave\_ms**

is the number of the new slave MS

- 58** Switch back to the original master MS by typing

**>SWMAST**

and pressing the Enter key.

- 59** Access the Clock level of the MS by typing

**>MAPCI ;MTC ;MS ;CLOCK**

and pressing the Enter key.

## Example of MAP display

```

Message Switch Clock Shelf 0 Inter-MS Link 0 1
MS 0 . Master
MS 1 . Slave
Shelf 0 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2
Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
Chain | |
MS 0 - - . - - - - - - - - . - -
MS 1 - - . - - - - - - - - . - -
Card 02 Alm Stat %Adj Src | Car Stat Sp PM RMTyp SSM
MS 0 . . . Fr +05.5 Nil | Lk0 Smp - SPM 002 SRM PRS
MS 1 . . . Syn -03.0 Ms0 | Lk1 Idl - SPM 003 SRM DUS
Links Slipping: NA out of NA

```

- 60** Confirm the timing reference SRM and the SPMs just datafilled appear as references at the CLOCK level. Column "PM" should indicate SPM <number>, and column "RMTyp" should indicate SRM.
- 61** Initiate synchronization on the MS clock by typing  
**>SYNC**  
and pressing the Enter key.

## Example MAP display when SYNC command is entered

```

Message Switch Clock Shelf 0 Inter-MS Link 0 1
MS 0 . Master
MS 1 . Slave
Shelf 0 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2
Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
Chain | |
MS 0 - - . - - - - - - - - . - -
MS 1 - - . - - - - - - - - . - -
Card 02 Alm Stat %Adj Src | Car Stat Sp PM RMTyp SSM
MS 0 . . . Lkg +05.7 Lk0 | Lk0 Lck - SPM 002 SRM PRS
MS 1 . . . Syn -02.2 Ms0 | Lk1 Idl - SPM 003 SRM DUS
Links Slipping: NA out of NA

```

**Note:** The SYNC command may take several minutes to complete.

## Example MAP display when SYNC command is completed

```

Message Switch Clock Shelf 0 Inter-MS Link 0 1
MS 0 . Master . . .
MS 1 . Slave . . .
Shelf 0 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2
Card 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6
Chain | |
MS 0 - - . - - - - - . - -
MS 1 - - . - - - - - . - -
Card 02 Alm Stat %Adj Src | Car Stat Sp PM RMTyp SSM
MS 0 . . Syn +05.7 Lk0 | Lk0 Lck - SPM 002 SRM PRS
MS 1 . . Syn -03.0 Ms0 | Lk1 Idl - SPM 003 SRM DUS
Links Slipping: NA out of NA

```

- 62** For further assistance, contact the personnel responsible for the next level of support.
- 63** You have completed this procedure. Return to the CI level of the MAP screen by typing
- >QUIT ALL**
- and pressing the Enter key.





## Configuration management procedures

### Provisioning a VSP RM

#### At the MAP level

1

| If there are                                         | Do           |
|------------------------------------------------------|--------------|
| VSPs currently assigned to the SPM being modified    | Procedure 2  |
| no VSPs currently assigned to the SPM being modified | Procedure 23 |

2

Determine the Protection status of the VSPs assigned to the SPM being modified. Verify that the RMID and the ProtWhomID fields are the same number for each of the VSPs by typing

```
>SPMRESMAN SPM <spm_no> VSP <vsp_no>
```

and pressing the Enter key.

where

**spm\_no**  
is the SPM number (0 to 63)

**vsp\_no**  
is the VSP number (0 to 27)

#### Example response of SPM with no protection switched VSPs

```
SPM 0
ProtGroup: 1
RMID Activity ProtWhomID ProtGrp Safe to Change?

VSP 0 14 ACTIVE 14 1 NO
VSP 1 13 ACTIVE 13 1 NO
VSP 2 12 ACTIVE 12 1 NO
VSP 3 11 INACTIVE 11 1 NO
```

### Example response of SPM with protection switched VSPs:

```
SPM 0
ProtGroup: 1
RMID Activity ProtWhomID ProtGrp Safe to Change?

VSP 0 14 ACTIVE 12 1 NO
VSP 1 13 ACTIVE 13 1 NO
VSP 2 12 INACTIVE 11 1 NO
VSP 3 11 ACTIVE 14 1 NO
```

**Note:** In the second example above, VSP 0 was protection switched with the spare VSP (VSP 3), then VSP 2 (currently inactive) was protection switched with VSP 0. To get the VSPs in the proper state, first protection switch VSP 0 with VSP 2 and then protection switch VSP 3 with VSP 0.

#### 3 Post the SPM by typing

```
>MAPCI;MTC;PM;POST SPM <spm_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

### Example of MAP display

```
SPM 0 InSv Loc: Site HOST Floor 1 Row AA FrPos 0
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
---- 1 - ---- CEM 1 8 A InSv ---- 1 - ---- ---- 8 - ----
---- 2 - ---- OC3 0 9 A InSv ---- 2 - ---- DSP 0 9 A InSv
---- 3 - ---- OC3 1 10 I InSv ---- 3 - ---- DSP 1 10 A InSv
---- 4 - ---- VSP 3 11 A InSv ---- 4 - ---- DSP 2 11 A InSv
---- 5 - ---- VSP 2 12 A InSv VSP 4 5 A InSv DSP 3 12 I InSv
---- 6 - ---- VSP 1 13 A InSv VSP 5 6 I InSv ---- 13 ----
CEM 0 7 I InSv VSP 0 14 A InSv ---- 7 - ---- ---- 14 ----
```

**Note:** VSP 3 in slot 11 of lower shelf is Inactive (I)

#### 4 Select a VSP assigned to the SPM being modified by typing

```
>SELECT VSP <vsp_no>
```

and pressing the Enter key.

where

**vsp\_no**

is the VSP number (0 to 27)

#### 5 Enter the protection level of the MAP by typing

```
>PROT
```

and pressing the Enter key.

## Example of MAP display

```
SPM # ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
4 - - - - - 11 3 S I InSv 4 - - - - - 11 - - - - -
5 - - - - - 12 2 W A InSv 5 - - - - - 12 - - - - -
6 - - - - - 13 1 W A InSv 6 - - - - - 13 - - - - -
7 - - - - - 14 0 W A InSv 7 - - - - - 14 - - - - -
```

**Note:** In the example above, VSP 3 in slot 11 of the lower shelf is inactive ("I" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 6 Determine there are any working VSPs that are protection switched using the results from the SPMRESMAN command in Procedure 2.

| If                                     | Do           |
|----------------------------------------|--------------|
| no working VSP is protection switched  | Procedure 11 |
| any working VSP is protection switched | Procedure 7  |

- 7 Using the information gathered during Procedure 2, protection switch the VSP, indicated by the ProtWhomID field of the currently Inactive VSP, with the Inactive VSP by typing

```
>MANUAL <prot_vsp> <inactive_vsp>
```

and pressing the Enter key.

where

**prot\_vsp**

is the number of the VSP in the inactive VSP's ProtWhomID field from Procedure 2

**inactive\_vsp**

is the number of an inactive VSP

Example

```
>MANUAL 3 0
```

- 8 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter.

- 9 Determine the Protection status of the VSPs assigned to the SPM being modified by typing

```
>SPMRESMAN SPM <spm_no> VSP <vsp_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**vsp\_no**

is the VSP number (0 to 27)

- 10 Using the output of Procedure 9, verify that the RMID and the ProtWhomID fields are the same number for each of the VSPs.

---

**If the SPM has**

**Do**

---

any protection switched VSPs

Procedure 7

no protection switched VSPs

Procedure 17

---

- 11 Ensure that the inactive VSP is the Spare. Then protection switch the inactive VSP with one of the active VSPs by typing

```
>MANUAL <active_vsp> <inactive_vsp>
```

and pressing the Enter key.

where

**active\_vsp**

is the number of an active VSP from Procedure 3

**inactive\_vsp**

is the number of the inactive VSP

Example

```
>MANUAL 0 3
```

- 12 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

## Example of MAP display

```
SPM # ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
4 - - - - - 11 3 S A InSv 4 - - - - - 11 - - - - -
5 - - - - - 12 2 W A InSv 5 - - - - - 12 - - - - -
6 - - - - - 13 1 W A InSv 6 - - - - - 13 - - - - -
7 - - - - - 14 0 W I InSv 7 - - - - - 14 - - - - -
```

- 13** Verify that the VSP performed the protection switch by viewing the MAP display screen. In the example in Procedure 12, In the example above, VSP 3 in slot 11 of the lower shelf is active ("A" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 14** Protection switch back to the original VSP by typing

```
>MANUAL <spare_vsp> <inact_vsp>
```

and pressing the Enter key.

where

**spare\_vsp**

is the number of the newly active VSP

**inact\_vsp**

is the number of the previously active VSP from Procedure 11

Example

```
>MANUAL 3 0
```

- 15** Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

## Example of MAP display

```
SPM 0
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
 1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
 2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
 3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
 4 - - - - - 11 3 S I InSv 4 - - - - - 11 - - - - -
 5 - - - - - 12 2 W A InSv 5 - - - - - 12 - - - - -
 6 - - - - - 13 1 W A InSv 6 - - - - - 13 - - - - -
 7 - - - - - 14 0 W A InSv 7 - - - - - 14 - - - - -
```

- 16 Verify that the VSP performed the protection switch by viewing the MAP display screen. In the example in Procedure 15, In the example above, VSP 3 in slot 11 of the lower shelf is inactive ("I" under the 'A' column) and is the spare VSP ("S" under the 'R' column).
- 17 Exit the PROT level of the MAP by typing  
**>QUIT**  
 and pressing the Enter key.
- 18 Select the spare VSP by typing  
**>SELECT VSP <spare\_vsp>**  
 and pressing the Enter key.  
 where  
     **spare\_vsp**  
     is the number of the spare VSP
- 19 Busy the spare VSP by typing  
**>BSY**  
 and pressing the Enter key.
- 20 Offline the VSP by typing  
**>OFFL**  
 and pressing the Enter key.
- 21 Exit to the CI level of the MAP by typing  
**>QUIT ALL**  
 and pressing the Enter key.

22

| <b>If there are</b> | <b>Do</b>    |
|---------------------|--------------|
| no VSPs on the SPM  | Procedure 23 |
| any VSPs on the SPM | Procedure 31 |

23 Access table PMLOADS by typing

**>TABLE PMLOADS**

and pressing the Enter key.

24 Ensure that the appropriate loads for VSPs being added are properly datafilled. If they are not present, add them to the table.

**Note:** The DSP load contains the VSP, as well as the DSP software.

25 Exit table PMLOADS by typing

**>QUIT**

and pressing the Enter key.

26

| <b>If you</b>                          | <b>Do</b>    |
|----------------------------------------|--------------|
| are adding VSPs for the first time     | Procedure 27 |
| have previously added VSPs to this SPM | Procedure 31 |

27 Access table MNPRTGRP by typing

**>TABLE MNPRTGRP**

and pressing the Enter key.

28 Begin the table addition by typing

**>ADD**

and pressing the Enter key.

29 Answer each of the prompts with the required datafill provided by the table range.

**Example**

This is an example of datafilling table MNPRTGRP.

**>ADD**

GRPKEY:

**>SPM 0 VSP\_GRP 1**

```

SELECTOR:
>VSP_GRP
SWCHMODE:
>NRVTV
ALRMCTRL:
>NOSPARE MJ RPT
TUPLE TO BE ADDED:
SPM 0 VSP_GRP 1 VSP_GRP NRVTV NOSPARE MJ RPT
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 30 Exit table MNPRTGRP by typing

```
>QUIT
```

and pressing the Enter key.

- 31 Access table MNCKTPAK by typing

```
>TABLE MNCKTPAK
```

and pressing the Enter key.

- 32

| If you                                 | Do           |
|----------------------------------------|--------------|
| are adding VSPs for the first time     | Procedure 37 |
| have previously added VSPs to this SPM | Procedure 33 |

- 33 Position on the spare VSP assigned to the SPM being modified by typing

```
>POS SPM <spm_no> <shelf_no> <slot_no>
```

and pressing the Enter key.

where

**spm\_no**  
is the SPM number (0 to 63)

**shelf\_no**  
is the shelf number (0 or 1)

**slot\_no**  
is the slot number (1 to 14)

- 34 Delete the tuple for the spare VSP from table MNCKTPAK for the SPM being modified by typing  
**>DEL**  
and pressing the Enter key.
- 35 Confirm the deletion by typing  
**>Y**  
and pressing the Enter key.
- 36 Re-add the VSP that was just deleted as a working VSP.
- 37 Begin the table addition by typing  
**>ADD**  
and pressing the Enter key.
- 38 Answer each of the prompts with the required datafill provided by the table range.

#### **Example**

This is an example of datafilling table MNCKTPAK.

```
>ADD
CPKKEY :
>SPM 0 1 5
CPKTYPE :
>VSP
UNITNO :
>4
VSPGRPID :
>1
WKRSPR :
>WORKING
RSRTYPE :
>ECAN 260
RSRTYPE :
>$
ALRMCTRL :
>SYSB CR RPT
```

```

ALRMCTRL:
>MANB MJ RPT
ALRMCTRL:
>ISTB MN RPT
ALRMCTRL:
>PROTFAIL CR RPT
ALRMCTRL:
>$
PEC:
>NTLX66BA
RELEASE:
>01
LOAD:
>DSP16CK
TUPLE TO BE ADDED:
SPM 0 1 5 VSP 4 1 WORKING (ECAN 260) $ (SYSB
CR RPT) (MANB MJ RPT) (ISTB MN RPT) (PROTFAIL
CR RPT) $ NTLX66BA 01 DSP16CK
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

**Note 1:** The NTLX66AA and NTLX66BA VSPs can have 1 to 260 ECAN resources assigned. The NTLX85AA and NTLX86AA can have 1 to 336 ECAN resources assigned.

**Note 2:** The DSP load contains the NTLX66AA and NTLX66BA VSP, as well as the DSP software.

**Note 3:** The NTLX85AA and NTLX86AA use the COH load.

- 39** Repeat steps 37 and 38 to add additional VSPs. Datafill the final VSP as a spare VSP. All others should be datafilled as working. When all VSPs have been datafilled, exit table MNCKTPAK by typing

```
>QUIT
```

and pressing the Enter key.

**At the equipment frame**

- 40** Remove the NTLX60AA filler modules from the appropriate slot(s).
- 41** Insert the new VSP resource module(s) into the appropriate slot(s). Wait for the resource module(s) to pass the self test. This will take several minutes.

**Note:** The red and green LEDs will illuminate while the self test is being performed. The red LED will extinguish.

**At the MAP level**

- 42** Post the SPM being modified by typing  
**>MAPCI;MTC;PM;POST SPM <spm\_no>**  
 and pressing the Enter key.

```
SPM 0 InSv Loc: Site HOST Floor 1 Row AA FrPos 0
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
----- 1 - ---- CEM 1 8 A InSv ----- 1 - ---- ----- 8 - ----
----- 2 - ---- OC3 0 9 A InSv ----- 2 - ---- DSP 0 9 A InSv
----- 3 - ---- OC3 1 10 I InSv ----- 3 - ---- DSP 1 10 A InSv
----- 4 - ---- VSP 3 11 A Offl ----- 4 - ---- DSP 2 11 A InSv
----- 5 - ---- VSP 2 12 A InSv VSP 4 5 I Offl DSP 3 12 A InSv
----- 6 - ---- VSP 1 13 A InSv ----- 6 - ---- DSP 4 13 I InSv
CEM 0 7 I InSv VSP 0 14 A InSv ----- 7 - ---- ----- 14 - ----
```

**Note:** In the above example, VSP 4 was added to the SPM as the spare.

- 43** Select one of the offline VSPs by typing  
**>SELECT VSP <offl\_vsp>**  
 and pressing the Enter key.

where

**offl\_vsp**

is the number of an offline VSP

- 44** Busy the selected VSP by typing  
**>BSY**  
 and pressing the Enter key.
- 45** Perform a RESETMOD on the selected VSP by typing  
**>RESETMOD FW**  
 and pressing the Enter key.
- 46** Load the selected VSP with its software by typing  
**>LOADMOD**

and pressing the Enter key.

- 47 Test the selected VSP by typing

>TST

and pressing the Enter key.

- 48 Return the selected VSP to service by typing

>RTS

and pressing the Enter key.

| If                                   | Do           |
|--------------------------------------|--------------|
| additional VSPs need to be tested    | Procedure 43 |
| no additional VSPs need to be tested | Procedure 49 |

- 49 Enter the PROT level of the MAP by typing

>PROT

and pressing the Enter key.

```
SPM 0 ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - 8 - - - - 1 - - - - 8 - - - -
2 - - - - 9 - - - - 2 - - - - 9 - - - -
3 - - - - 10 - - - - 3 - - - - 10 - - - -
4 - - - - 11 3 W A InSv 4 - - - - 11 - - - -
5 - - - - 12 2 W A InSv 5 4 S I InSv 12 - - - -
6 - - - - 13 1 W A InSv 6 - - - - 13 - - - -
7 - - - - 14 0 W A InSv 7 - - - - 14 - - - -
```

Determine if the spare VSP is inactive.

**Note:** In the example above, VSP 4 in slot 5 of the upper shelf is inactive ("I" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 50

| If the SPM being modified originally had | Do           |
|------------------------------------------|--------------|
| any VSPs assigned to it                  | Procedure 51 |
| no VSPs assigned to it                   | Procedure 59 |

- 51 Protection switch an active VSP with the spare VSP by typing

>MANUAL <active\_vsp> <spare\_vsp>

and pressing the Enter key.

where

**active\_vsp**

is the number of an active VSP

**spare\_vsp**

is the number of the spare VSP

Example

```
>MANUAL 0 4
```

- 52** Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

- 53** Allow three minutes to pass before proceeding to the next step. The MAP terminal should eventually look similar to the following example:

```
SPM 0 ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 --- - ---- 8 --- - ---- 1 --- - ---- 8 --- - ----
2 --- - ---- 9 --- - ---- 2 --- - ---- 9 --- - ----
3 --- - ---- 10 --- - ---- 3 --- - ---- 10 --- - ----
4 -- - - ---- 11 3 W A InSv 4 -- - - ---- 11 -- - - ----
5 - - - - ---- 12 2 W A InSv 5 4 S A InSv 12 - - - - ----
6 - - - - ---- 13 1 W A InSv 6 - - - - ---- 13 - - - - ----
7 - - - - ---- 14 0 W I InSv 7 - - - - ---- 14 - - - - ----
```

- 54** Verify the VSP performed the protection switch by viewing the MAP terminal.

**Note:** In the example above, VSP 4 in slot 5 of the upper shelf is active ("A" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 55** Protection switch back from the spare VSP to the newly inactive VSP by typing

```
>MANUAL <spare_vsp> <inactive_vsp>
```

and pressing the Enter key.

where

**spare\_vsp**

is the number of the spare VSP

**inactive\_vsp**

is the number of the newly inactive VSP

Example

```
>MANUAL 4 0
```

```
SPM # ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
4 - - - - - 11 3 W A InSv 4 - - - - - 11 - - - - -
5 - - - - - 12 2 W A InSv 5 4 S I InSv 12 - - - - -
6 - - - - - 13 1 W A InSv 6 - - - - - 13 - - - - -
7 - - - - - 14 0 W A InSv 7 - - - - - 14 - - - - -
```

- 56 Verify the VSP performed the protection switch by viewing the MAP terminal.

**Note:** In the example above, VSP 4 in slot 5 of the upper shelf is inactive ("I" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 57

| If VSPs                                  | Do           |
|------------------------------------------|--------------|
| were added to the SPM for the first time | Procedure 58 |
| previously were assigned to the SPM      | Procedure 59 |

- 58 Repeat Steps 51 through 57 for each working VSP.

**Note:** Ensure that after all working VSPs have been protection switched, that the Spare VSP is Inactive.

- 59 Exit the the CI level of the MAP by typing

```
>QUIT ALL
```

and pressing the Enter key.

- 60 Using the information from your next level of support, add the entries associated with the SPM being modified into table SPMECAN.

- 61 If there are any ECAN requirements for the trunk groups assigned to the SPM(s) modified, add the ECAN option to the appropriate trunk sub groups in table TRKSGRP at this time.

- 62 You have completed this procedure.



## Configuration management procedures

### De-provisioning a DLC RM

#### *At the MAP level*

- 1 Determine the Protection status of the DLCs assigned to the SPM being modified. Verify that the RMID and the ProtWhomID fields are the same number for each of the DLCs by typing

```
>SPMRESMAN SPM <spm_no> DLC <dlc_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**dlc\_no**

is the DLC number (0 or 1)

#### Example response of SPM with no protection switched DLCs

```
SPM 0
ProtGroup: 1
 RMID Activity ProtWhomID ProtGrp Safe to Change?

DLC 0 8 ACTIVE 8 1 NO
DLC 1 9 ACTIVE 9 1 NO
```

#### Example response of SPM with protection switched DLCs:

```
SPM 0
ProtGroup: 1
 RMID Activity ProtWhomID ProtGrp Safe to Change?

DLC 0 8 ACTIVE 9 1 NO
DLC 1 9 ACTIVE 9 1 NO
```

**Note:** In the second example above, DLC 0 was protection switched with the spare DLC (DLC 1). To get the DLCs in the proper state, protection switch DLC 0 with DLC 1.

**2** Post the SPM by typing

```
>MAPCI;MTC;PM;POST SPM <spm_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**Example of MAP display**

```
SPM 0 InSv Class: DMSCP

Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
DSP 0 1 A InSv CEM 1 8 I InSv DLC 0 1 A InSv ----- 8 - ----
----- 2 - ---- OC3 0 9 I InSv ----- 2 - ---- ----- 9 - ----
----- 3 - ---- OC3 1 10 A InSv ----- 3 - ---- ----- 10 - ----
----- 4 - ---- ----- 11 - ---- ----- 4 - ---- ----- 11 - ----
----- 5 - ---- ----- 12 - ---- ----- 5 - ---- ----- 12 - ----
----- 6 - ---- ----- 13 - ---- ----- 6 - ---- ----- 13 - ----
CEM 0 7 A InSv ----- 14 - ---- DLC 1 7 I InSv ----- 14 - ----
```

**Note:** In this example DLC 1 in slot 7 of shelf 1 is the spare DLC and Inactive (I)

**3** Select a DLC assigned to the SPM being modified by typing

```
>SELECT DLC <dlc_no>
```

and pressing the Enter key.

where

**dlc\_no**

is the DLC number (0 to 1)

**4** Enter the protection level of the MAP by typing

```
>PROT
```

and pressing the Enter key.

**Example of MAP display**

```
SPM 0 InSv
Prot Grp: DLC_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 0 W A InSv 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
4 - - - - - 11 - - - - - 4 - - - - - 11 - - - - -
5 - - - - - 12 - - - - - 5 - - - - - 12 - - - - -
6 - - - - - 13 - - - - - 6 - - - - - 13 - - - - -
7 - - - - - 14 - - - - - 7 1 S I InSv 14 - - - - -
```

**Note:** In the example above, DLC 1 in slot 7 of the upper shelf is inactive ("I" under the 'A' column) and is the spare DLC ("S" under the 'R' column).

- 5 Determine if there are any working DLCs that are protection switched using the results from the SPMRESMAN command in Procedure 1.

| If                                     | Do           |
|----------------------------------------|--------------|
| no working DLC is protection switched  | Procedure 10 |
| any working DLC is protection switched | Procedure 6  |

- 6 Using the information gathered during Procedure 3, protection switch the DLC, indicated by the ProtWhomID field of the currently Inactive DLC, with the Inactive DLC by typing

```
>MANUAL <prot_dlc> <inactive_dlc>
```

and pressing the Enter key.

where

**prot\_dlc**

is the number of the DLC in the inactive DLC's ProtWhomID field from Procedure 1

**inactive\_dlc**

is the number of an inactive DLC

Example

```
>MANUAL 1 0
```

- 7 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter.

- 8 Determine the Protection status of the DLCs assigned to the SPM being modified by typing

```
>SPMRESMAN SPM <spm_no> DLC <dlc_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**dlc\_no**

is the DLC number (0 to 27)

9 Using the output of Procedure 8, verify that the RMID and the ProtWhomID fields are the same number for each of the DLCs.

10 Ensure that the inactive DLC is the Spare. Then protection switch the inactive DLC with the active DLC by typing

```
>MANUAL <active_dlc> <inactive_dlc>
```

and pressing the Enter key.

where

**active\_dlc**

is the number of the active DLC from

**inactive\_dlc**

is the number of the inactive DLC

Example

```
>MANUAL 0 1
```

11 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

### Example of MAP display

```
SPM 0 InSv
Prot Grp: DLC_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 -- - - - - - 8 -- - - - - - 1 0 S I InSv 8 -- - - - - -
2 -- - - - - - 9 -- - - - - - 2 -- - - - - - 9 -- - - - - -
3 -- - - - - - 10 -- - - - - - 3 -- - - - - - 10 -- - - - - -
4 -- - - - - - 11 -- - - - - - 4 -- - - - - - 11 -- - - - - -
5 -- - - - - - 12 -- - - - - - 5 -- - - - - - 12 -- - - - - -
6 -- - - - - - 13 -- - - - - - 6 -- - - - - - 13 -- - - - - -
7 -- - - - - - 14 -- - - - - - 7 1 W A InSv 14 -- - - - - -
```

12 Verify that the DLC performed the protection switch by viewing the MAP display screen. In the example in Procedure 11, DLC 0 in slot 1 of the upper shelf is now inactive ("I" under the 'A' column) and the spare DLC ("S" under the 'R' column) is now active.

13 Protection switch back to the original DLC by typing

```
>MANUAL <spare_dlc> <inact_dlc>
```

and pressing the Enter key.

where

**spare\_dlc**

is the number of the newly active DLC

**inact\_dlc**

is the number of the previously active DLC from Procedure 10

**Example**

```
>MANUAL 1 0
```

- 14** Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

**Example of MAP display**

```
SPM 0 InSv
 Prot Grp: DLC_GRP 1 Mode: Non-revertive Schema: m_for_n
 Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 -- - - - - - 8 -- - - - - - 1 0 W A InSv 8 -- - - - - -
2 -- - - - - - 9 -- - - - - - 2 -- - - - - - 9 -- - - - - -
3 -- - - - - - 10 -- - - - - - 3 -- - - - - - 10 -- - - - - -
4 -- - - - - - 11 -- - - - - - 4 -- - - - - - 11 -- - - - - -
5 -- - - - - - 12 -- - - - - - 5 -- - - - - - 12 -- - - - - -
6 -- - - - - - 13 -- - - - - - 6 -- - - - - - 13 -- - - - - -
7 -- - - - - - 14 -- - - - - - 7 1 S I InSv 14 -- - - - - -
```

- 15** Verify that the DLC performed the protection switch by viewing the MAP display screen. In the example in Procedure 14, DLC 3 in slot 1 of the upper shelf is now inactive ("I" under the 'A' column) and is the spare DLC ("S" under the 'R' column).

- 16** Exit the PROT level by typing

```
>QUIT
```

and pressing the Enter key.

- 17** Select the spare DLC by typing

```
>SELECT DLC <inactive_dlc>
```

and pressing the Enter key.

where

**inactive\_dlc**

is the number of the inactive DLC

- 18** Busy the inactive DLC by typing

```
>BSY
```

and pressing the Enter key.

- 19** Offline the inactive DLC by typing

```
>OFFL
```

and pressing the Enter key.

20

| <b>If you are removing</b> | <b>Do</b>    |
|----------------------------|--------------|
| the active DLC RM          | Procedure 21 |
| the spare DLC RM           | Procedure 24 |

21 Select the active DLC to be deleted by typing

**>SELECT DLC <active\_dlc>**

and pressing the Enter key.

where

**active\_dlc**

is the number of the active DLC to be removed (0 or 1)

22 Busy the DLC by typing

**>BSY FORCE**

and pressing the Enter key.

23 Offline the DLC by typing

**>OFFL**

and pressing the Enter key.

24 Exit to the CI level of the MAP by typing

**>QUIT ALL**

and pressing the Enter key.

***At the equipment frame***

25 Remove the DLC RM(s) from the appropriate slot (s)

26 Insert an NLTX60AA filler module in each unoccupied slot on the frame.

***At the MAP level***

27 Access table MNCKTPAK by typing

**>TABLE MNCKTPAK**

and pressing the Enter key.

28 Position on the DLC to be deleted by typing

**>POS SPM <spm\_no> <shelf\_no> <slot\_no>**

and pressing the Enter key.

where

**spm\_no**  
is the SPM number (0 to 63)

**shelf\_no**  
is the shelf number (0 or 1)

**slot\_no**  
is the slot number (1 to 14)

Example

```
>POS 0 1 7
```

**29** Remove the tuple by typing

```
>DEL
```

and pressing the Enter key.

**30** Confirm the deletion by typing

```
>Y
```

and pressing the Enter key.

**31** Repeat Steps 28 through 30 if both DLCs are being deleted.

**32**

---

| If you are removing | Do           |
|---------------------|--------------|
| both DLCs           | Procedure 42 |
| one DLC             | Procedure 33 |

---

**33** Re-add the remaining DLC to MNCKTPAK by performing the following steps:

**a** Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

**b** Answer each of the prompts with the required datafill provided by the table range.

**Example**

This is an example of datafilling table MNCKTPAK.

```
>ADD
```

```
CPKKEY :
```

```
>SPM 0 1 1
```

```
CPKTYPE :
```

```
>DLC
UNITNO:
>0
DLCGRPID:
>1
WKRSPR:
>WORKING
ALRMCTRL:
>SYSB CR RPT
ALRMCTRL:
>MANB MJ RPT
ALRMCTRL:
>ISTB MN RPT
ALRMCTRL:
>PROTFAIL CR RPT
ALRMCTRL:
>$
PEC:
>NTLX72AA
RELEASE:
>01
LOAD:
>DLC16CF
TUPLE TO BE ADDED:
SPM 0 1 1 DLC 0 1 WORKING (SYSB CR RPT)
(MANB MJ RPT) (ISTB MN RPT) (PROTFAIL CR
RPT) $ NTLX72AA 01 DLC16CF
ENTER Y TO CONFIRM, N TO REJECT OR E TO
EDIT.
>Y
TUPLE ADDED
```

**Note:** This step should only serve as an example. The actual datafill should be identical to the previous datafill of the DLC, except that it should be added as "WORKING".

- 34** Exit table MNCKTPAK by typing  
**>QUIT**  
 and pressing the Enter key.
- 35** Post the SPM being modified by typing  
**>MAPCI;MTC;PM;POST SPM <spm\_no>**  
 and pressing the Enter key.  
 where  
**spm\_no**  
 is the SPM number (0 to 63)

### Example of MAP display

```
SPM 0 InSv Class: DMSCP

Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
DSP 0 1 A InSv CEM 1 8 I InSv DLC 0 1 A Offl ----- 8 - ----
----- 2 - ---- OC3 0 9 I InSv ----- 2 - ---- ----- 9 - ----
----- 3 - ---- OC3 1 10 A InSv ----- 3 - ---- ----- 10 - ----
----- 4 - ---- ----- 11 - ---- ----- 4 - ---- ----- 11 - ----
----- 5 - ---- ----- 12 - ---- ----- 5 - ---- ----- 12 - ----
----- 6 - ---- ----- 13 - ---- ----- 6 - ---- ----- 13 - ----
CEM 0 7 A InSv ----- 14 - ---- ----- 7 - ---- ----- 14 - ----
```

- 36** Select the DLC by typing  
**>SELECT DLC <dlc\_no>**  
 and pressing the Enter key.  
 where  
**dlc\_no**  
 is the number of the DLC added in Procedure 33
- 37** Busy the DLC by typing  
**>BSY**  
 and pressing the Enter key.
- 38** Perform a RESETMOD on the DLC by typing  
**>RESETMOD FW**  
 and pressing the Enter key.
- 39** Load the DLC with the DLC software load by typing  
**>LOADMOD**  
 and pressing the Enter key.

- 40 Return the DLC to service by typing  
`>RTS`  
and pressing the Enter key.
- 41 Verify that the DLC is functioning properly. Monitor logs and the SPM for five minutes. If any problems arise, contact your next level of support.
- 42 You have completed this procedure. Return to the CI level of the MAP screen by typing  
`>QUIT ALL`  
and pressing the Enter key.



## Configuration management procedures

### De-provisioning a DSP RM

#### *At the MAP level*

- 1 Determine the Protection status of the DSPs assigned to the SPM being modified. Verify that the RMID and the ProtWhomID fields are the same number for each of the DSPs by typing

```
>SPMRESMAN SPM <spm_no> DSP <dsp_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**dsp\_no**

is the DSP number (0 to 27)

### Example response of SPM with no protection switched DSPs

```
SPM 0
ProtGroup: 1
 RMID Activity ProtWhomID ProtGrp Safe to Change?

DSP 0 23 ACTIVE 23 1 NO
DSP 1 24 ACTIVE 24 1 NO
DSP 2 25 ACTIVE 25 1 NO
DSP 3 26 INACTIVE 26 1 NO
```

### Example response of SPM with protection switched DSPs:

```

SPM 0
ProtGroup: 1
 RMID Activity ProtWhomID ProtGrp Safe to Change?

DSP 0 23 ACTIVE 25 1 NO
DSP 1 24 ACTIVE 24 1 NO
DSP 2 25 INACTIVE 26 1 NO
DSP 3 26 ACTIVE 23 1 NO

```

**Note:** In the second example above, DSP 0 was protection switched with the spare DSP (DSP 3), then DSP 2 (currently inactive) was protection switched with DSP 0. To get the DSPs in the proper state, first protection switch DSP 0 with DSP 2 and then protection switch DSP 3 with DSP 0.

#### 2 Post the SPM by typing

```
>MAPCI;MTC;PM;POST SPM <spm_no>
```

and pressing the Enter key.

where

**spm\_no**  
is the SPM number (0 to 63)

### Example of MAP display

```

SPM 0 InSv Loc: Site HOST Floor 1 Row AA FrPos 0
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
----- 1 - ---- CEM 1 8 A InSv ----- 1 - ---- ----- 8 - ----
----- 2 - ---- OC3 0 9 A InSv ----- 2 - ---- DSP 0 9 A InSv
----- 3 - ---- OC3 1 10 I InSv ----- 3 - ---- DSP 1 10 A InSv
----- 4 - ---- VSP 3 11 A InSv ----- 4 - ---- DSP 2 11 A InSv
----- 5 - ---- VSP 2 12 A InSv VSP 4 5 A InSv DSP 3 12 I InSv
----- 6 - ---- VSP 1 13 A InSv VSP 5 6 I InSv ----- 13 - ----
CEM 0 7 I InSv VSP 0 14 A InSv ----- 7 - ---- ----- 14 - ----

```

**Note:** In this example DSP 3 in slot 12 of shelf 1 is the spare DSP and Inactive (I)

#### 3 Select a DSP assigned to the SPM being modified by typing

```
>SELECT DSP <dsp_no>
```

and pressing the Enter key.

where

**dsp\_no**  
is the DSP number (0 to 27)

#### 4 Enter the protection level of the MAP by typing

```
>PROT
```

and pressing the Enter key.

### Example of MAP display

```
SPM 0 InSv
Prot Grp: DSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 0 W A InSv
3 - - - - - 10 - - - - - 3 - - - - - 10 1 W A InSv
4 - - - - - 11 - - - - - 4 - - - - - 11 2 W A InSv
5 - - - - - 12 - - - - - 5 - - - - - 12 3 S I InSv
6 - - - - - 13 - - - - - 6 - - - - - 13 - - - - -
7 - - - - - 14 - - - - - 7 - - - - - 14 - - - - -
```

**Note:** In the example above, DSP 3 in slot 12 of the upper shelf is inactive ("I" under the 'A' column) and is the spare DSP ("S" under the 'R' column).

- 5 Determine there are any working DSPs that are protection switched using the results from the SPMRESMAN command in Procedure 1.

| If                                     | Do           |
|----------------------------------------|--------------|
| no working DSP is protection switched  | Procedure 10 |
| any working DSP is protection switched | Procedure 6  |

- 6 Using the information gathered during Procedure 1, protection switch the DSP, indicated by the ProtWhomID field of the currently Inactive DSP, with the Inactive DSP by typing

```
>MANUAL <prot_dsp> <inactive_dsp>
```

and pressing the Enter key.

where

**prot\_dsp**

is the number of the DSP in the inactive DSP's ProtWhomID field from Procedure 1

**inactive\_dsp**

is the number of an inactive DSP

Example

```
>MANUAL 3 0
```

- 7 Confirm the protection switch by typing

```
>Y
```

and pressing the Enter.

- 8** Determine the Protection status of the DSPs assigned to the SPM being modified by typing

```
>SPMRESMAN SPM <spm_no> DSP <dsp_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**dsp\_no**

is the DSP number (0 to 27)

- 9** Using the output of Procedure 8, verify that the RMID and the ProtWhomID fields are the same number for each of the DSPs.

---

**If the SPM has**

**Do**

---

any protection switched DSPs

Procedure 6

no protection switched DSPs

Procedure 16

---

- 10** Ensure that the inactive DSP is the Spare. Then protection switch the inactive DSP with one of the active DSPs by typing

```
>MANUAL <active_dsp> <inactive_dsp>
```

and pressing the Enter key.

where

**active\_dsp**

is the number of an active DSP from Procedure 2

**inactive\_dsp**

is the number of the inactive DSP

Example

```
>MANUAL 0 3
```

- 11** Confirm the protection switch by typing

```
>Y
```

and pressing the Enter key.

### Example of MAP display

```

SPM 0 InSv
Prot Grp: DSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 -- - - - - 8 -- - - - - 1 -- - - - - 8 -- - - - -
2 -- - - - - 9 -- - - - - 2 -- - - - - 9 0 W I InSv
3 -- - - - - 10 -- - - - - 3 -- - - - - 10 1 W A InSv
4 -- - - - - 11 -- - - - - 4 -- - - - - 11 2 W A InSv
5 -- - - - - 12 -- - - - - 5 -- - - - - 12 3 S A InSv
6 -- - - - - 13 -- - - - - 6 -- - - - - 13 -- - - - -
7 -- - - - - 14 -- - - - - 7 -- - - - - 14 -- - - - -

```

- 12** Verify that the DSP performed the protection switch by viewing the MAP display screen. In the example in Procedure 11, DSP 0 in slot 9 of the upper shelf is now inactive ("I" under the 'A' column) and the spare DSP ("S" under the 'R' column) is now active.
- 13** Protection switch back to the original DSP by typing  
**>MANUAL <spare\_dsp> <inact\_dsp>**  
 and pressing the Enter key.

where

**spare\_dsp**

is the number of the newly active DSP

**inact\_dsp**

is the number of the previously active DSP from Procedure 10

Example

**>MANUAL 3 0**

- 14** Confirm the protection switch by typing  
**>Y**  
 and pressing the Enter key.

### Example of MAP display

```

SPM 0 InSv
Prot Grp: DSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 -- - - - - 8 -- - - - - 1 -- - - - - 8 -- - - - -
2 -- - - - - 9 -- - - - - 2 -- - - - - 9 0 W A InSv
3 -- - - - - 10 -- - - - - 3 -- - - - - 10 1 W A InSv
4 -- - - - - 11 -- - - - - 4 -- - - - - 11 2 W A InSv
5 -- - - - - 12 -- - - - - 5 -- - - - - 12 3 S I InSv
6 -- - - - - 13 -- - - - - 6 -- - - - - 13 -- - - - -
7 -- - - - - 14 -- - - - - 7 -- - - - - 14 -- - - - -

```

- 15** Verify that the DSP performed the protection switch by viewing the MAP display screen. In the example in Procedure 14, DSP 3

in slot 9 of the upper shelf is now inactive ("I" under the 'A' column) and is the spare DSP ("S" under the 'R' column).

16

| <b>If</b>                                          | <b>Do</b>    |
|----------------------------------------------------|--------------|
| the spare DSP needs to be changed to a working DSP | Procedure 17 |
| the new DSP will be added as a working DSP         | Procedure 27 |

17 Exit the PROT level by typing

```
>QUIT
```

and pressing the Enter key.

18 If re-allocating the resources or islands on the remaining DSPs is required, perform the appropriate procedures and return to this step.

19 Verify that the remaining DSPs are functioning properly.

20 Select the spare DSP by typing

```
>SELECT DSP <spare_dsp>
```

and pressing the Enter key.

where

**spare\_dsp**

is the number of a spare DSP

21 Busy the spare DSP by typing

```
>BSY
```

and pressing the Enter key.

22 Offline the spare DSP by typing

```
>OFFL
```

and pressing the Enter key.

23 Select a working DSP to be deleted by typing

```
>SELECT DSP <dsp_no>
```

and pressing the Enter key.

where

**dsp\_no**

is the number of an active DSP

- 
- 24 Busy the DSP by typing  
`>BSY FORCE`  
and pressing the Enter key.
  - 25 Offline the DSP by typing  
`>OFFL`  
and pressing the Enter key.
  - 26 Repeat Steps 23 through 25 for each DSP to be removed.
  - 27 Exit to the CI level of the MAP by typing  
`>QUIT ALL`  
and pressing the Enter key.

***At the equipment frame***

- 28 Remove the DSP RM(s) from the appropriate slot (s)  
**Note:** Leave the DSP located after the last in-service DSP assigned in its original slot. It will be used as the spare DSP.
- 29 Insert an NLTX60AA filler module in each unoccupied slot on the frame.

***At the MAP level***

- 30 Access table MNCKTPAK by typing  
`>TABLE MNCKTPAK`  
and pressing the Enter key.
- 31 Position on the DSP to be deleted by typing  
`>POS SPM <spm_no> <shelf_no> <slot_no>`  
and pressing the Enter key.

where

**spm\_no**  
is the SPM number (0 to 63)

**shelf\_no**  
is the shelf number (0 or 1)

**slot\_no**  
is the slot number (1 to 14)

Example

```
>POS 0 1 12
```

- 32 Remove the tuple by typing  
>DEL  
and pressing the Enter key.
- 33 Confirm the deletion by typing  
>Y  
and pressing the Enter key.  
**Note:** You will receive a warning about the last inactive unit in the DSP protection group when deleting the spare DSP. This warning can be ignored, as a new spare DSP will be added in Procedure 35.
- 34 Repeat Steps 31 through 33 for each DSP being deleted.
- 35 Re-add the spare DSP to the slot located after the last inservice DSP by performing the following steps.
  - a Begin the table addition by typing  
>ADD  
and pressing the Enter key.
  - b Answer each of the prompts with the required datafill provided by the table range.

### Example

This is an example of datafilling table MNCKTPAK.

```
>ADD
CPKKEY:
>SPM 0 1 11
CPKTYPE:
>DSP
UNITNO:
>3
DSPGRPID:
>1
WKRSPR:
>SPARE
RSRTYPE:
>COT 12
```

```
RSRTYPE :
>DTMF 12
RSRTYPE :
>$
ALRMCTRL:
>SYSB CR RPT
ALRMCTRL:
>MANB MJ RPT
ALRMCTRL:
>ISTB MN RPT
ALRMCTRL:
>PROTFAIL CR RPT
ALRMCTRL:
>$
PEC:
>NTLX65BA
RELEASE :
>01
LOAD:
>DSP16CK
TUPLE TO BE ADDED:
SPM 0 1 11 DSP 3 1 SPARE (COT 12) (DTMF
12) $ (SYSB CR RPT) (MANB MJ RPT) (ISTB MN
RPT) (PROTFAIL CR RPT) $ NTLX65BA 01
DSP16CK
ENTER Y TO CONFIRM, N TO REJECT OR E TO
EDIT.
>Y
TUPLE ADDED
```

**Note:** This step should only serve as an example. The actual datafill should be identical to the previous datafill of the DSP.

**36** Exit table MNCKTPAK by typing

```
>QUIT
```

and pressing the Enter key.

- 37** Post the SPM being modified by typing  
**>MAPCI;MTC;PM;POST SPM <spm\_no>**  
 and pressing the Enter key.  
 where  
**spm\_no**  
 is the SPM number (0 to 63)

### Example of MAP display

```

SPM 0 InSv Loc: Site HOST Floor 1 Row AA FrPos 0
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
----- 1 - ---- CEM 1 8 A InSv ----- 1 - ---- ----- 8 - ----
----- 2 - ---- OC3 0 9 A InSv ----- 2 - ---- DSP 0 9 A InSv
----- 3 - ---- OC3 1 10 I InSv ----- 2 - ---- DSP 1 10 A InSv
----- 4 - ---- VSP 3 11 A InSv ----- 4 - ---- DSP 2 11 I Offl
----- 5 - ---- VSP 2 12 A InSv VSP 4 5 A InSv ----- 12 - ----
----- 6 - ---- VSP 1 13 A InSv VSP 5 6 A InSv ----- 13 - ----
CEM 0 7 I InSv VSP 0 14 A InSv ----- 7 - ---- ----- 14 - ----

```

- 38** Select the new spare DSP by typing  
**>SELECT DSP <spare\_dsp>**  
 and pressing the Enter key.  
 where  
**spare\_dsp**  
 is the number of the DSP added in Procedure 35
- 39** Busy the DSP by typing  
**>BSY**  
 and pressing the Enter key.
- 40** Perform a RESETMOD on the DSP by typing  
**>RESETMOD FW**  
 and pressing the Enter key.
- 41** Load the DSP with the DSP software load by typing  
**>LOADMOD**  
 and pressing the Enter key.
- 42** Return the DSP to service by typing  
**>RTS**  
 and pressing the Enter key.

- 43 Verify that the DSPs are functioning properly. Monitor logs and the SPM for five minutes. If any problems arise, contact your next level of support.
- 44 Access the PROT level of the MAP by typing  
**>PROT**  
 and pressing the Enter key.

### Example of MAP display

```
SPM 0 ISTb Prot Grp: DSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 0 W A InSv
3 - - - - - 10 - - - - - 3 - - - - - 10 1 W A InSv
4 - - - - - 11 - - - - - 4 - - - - - 11 2 S I InSv
5 - - - - - 12 - - - - - 5 - - - - - 12 - - - - -
6 - - - - - 13 - - - - - 6 - - - - - 13 - - - - -
7 - - - - - 14 - - - - - 7 - - - - - 14 - - - - -
```

- 45 Determine if the spare DSP is also inactive.  
**Note:** In the example above, DSP 4 in slot 11 of the upper shelf is inactive ("I" under the 'A' column) and is the spare DSP ("S" under the 'R' column).
- 46 Protection switch an active DSP with the inactive spare DSP by typing  
**>MANUAL <active\_dsp> <spare\_dsp>**  
 and pressing the Enter key.  
 where  
**active\_dsp**  
 is the number of an active DSP  
**spare\_dsp**  
 is the number of the inactive spare DSP
- Example  
**>MANUAL 0 2**
- 47 Confirm the protection switch by typing  
**>Y**  
 and pressing the Enter key.
- 48 Protection switch from the spare DSP back to the newly inactive DSP by typing  
**>MANUAL <spare\_dsp> <inactive\_dsp>**  
 and pressing the Enter key.

where

**spare\_dsp**

is the number of the spare DSP

**inactive\_dsp**

is the number of the newly inactive DSP

Example

```
>MANUAL 2 0
```

- 49** You have completed this procedure. Return to the CI level of the MAP screen by typing

```
>QUIT ALL
```

and pressing the Enter key.



## Configuration management procedures

### De-provisioning an SRM

#### *At the MAP level*

- 1 Access table SYNCLK by typing  
`>TABLE SYNCLK`  
and pressing the Enter key.
- 2 List the tuples in the table by typing  
`>LIST ALL`  
and pressing the Enter key.

*Example of a MAP screen:*

```
CLKKEY CLKDATA OFFCDATA

0 STRAT3 SLAVE SPM 30 SRM SPM 32 SRM
```

3

| <b>If the SRM you are removing</b> | <b>Do</b>    |
|------------------------------------|--------------|
| appears in the table               | Procedure 4  |
| does not appear in the table       | Procedure 20 |

- 4 Drop synchronization on the MS clock by performing the following sequence of commands:

```
>MAPCI ;MTC ;MS ;CLOCK ;DPSYNC
```

This action will degrade SPM OC-3 SYNC performance.

Do you wish to continue?

```
>Y
```

```
Request to Drop Synchronization on Clock 1:
Submitted
```

```
Request to Drop Synchronization on Clock 1:
Passed
```

```
>QUIT ALL
```

- 5 Return to table SYNCLK by typing

```
>TABLE SYNCLK
```

and pressing the Enter key.

- 6

| <b>If you are changing the timing configuration to</b> | <b>Do</b>    |
|--------------------------------------------------------|--------------|
| Master-external                                        | Procedure 7  |
| Master-internal                                        | Procedure 8  |
| OC3 line timing                                        | Procedure 9  |
| Slave                                                  | Procedure 10 |

- 7 Change the timing configuration from ESI timing to Master-external by performing the following steps:

- a Begin the table change by typing

```
>CHA
```

and pressing the Enter key.

- b Modify the tuple as needed.

#### **Example**

This example changes the timing mode from ESI to Master-external timing.

```
>CHA
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
CLKTYPE: STRAT3
```

```
>
```

```
OFFCONF: SLAVE
```

```
>MASTEXT
```

```
EXTFREQ:
```

```
>F1000
```

```
EXTSEL:
```

```
>ANALOG
```

```
EXTTERM:
```

```
>T50
```

```
EXTALARM:
```

```
>OFF
```

```
Perform a BUSY (BSYMS) and RTS (RTSMS)
without OOBAND option to each MS to setup
the new clock configuration.
```

```
TUPLE TO BE CHANGED:
```

```
0 STRAT3 MASTEXT F1000 ANALOG T50 OFF
```

```
ENTER Y TO CONFIRM, N TO REJECT OR E TO
EDIT.
```

```
>Y
```

```
TUPLE CHANGED
```

**c** Go to Procedure 11.

**8** Change the timing configuration from ESI timing to Master-internal by performing the following steps:

**a** Begin the table change by typing

```
>CHA
```

and pressing the Enter key.

**b** Modify the tuple as needed.

### Example

This example changes the timing mode from ESI to Master-internal timing.

```
>CHA
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
CLKTYPE: STRAT3
```

```
>
```

```
OFFCONF: SLAVE
```

```
>MASTINT
```

Perform a BUSY (BSYMS) and RTS (RTSMS) without OOBAND option to each MS to setup the new clock configuration.

TUPLE TO BE CHANGED:

0 STRAT3 MASTINT

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

TUPLE CHANGED

- c Go to Procedure 11.
- 9 Change the timing configuration from ESI timing to OC3 line timing by performing the following steps:
- a Begin the table change by typing
    - >CHA
    - and pressing the Enter key.
  - b Modify the tuple as needed.

#### Example

This example changes the timing mode from ESI to OC3 line timing.

>CHA

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

CLKTYPE: STRAT3

>

OFFCONF: SLAVE

>

LKO\_PTYP: SPM

>

LKO\_PNUM: 2

>32

LK0\_RMTYP: SRM

>OC3

LK1\_PTYP: SPM

```

>
LK1_PNUM: 3
>33
LK1_RMTYP: SRM
>OC3
Perform a BUSY (BSYMS) and RTS (RTSMS)
without OOBAND option to each MS to setup
the new clock configuration.
TUPLE TO BE CHANGED:
0 STRAT3 SLAVE SPM 32 OC3 SPM 33 OC3
ENTER Y TO CONFIRM, N TO REJECT OR E TO
EDIT.
>Y
TUPLE CHANGED

```

**c** Go to Procedure 11.

**10** Change the timing configuration from ESI timing to Slave by performing the following steps:

**a** Begin the table change by typing

```
>CHA
```

and pressing the Enter key.

**b** Modify the tuple as needed.

### Example

This example changes the timing mode from ESI to slave timing.

```
>CHA
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
CLKTYPE: STRAT3
```

```
>
```

```
OFFCONF: SLAVE
```

```
>
```

```
LK0_PTYP:
```

```
>DTC
```

```
LK0_PNUM:
```

```
>0
```

```
LK0_CCT:
```

```
>0
```

```
LK0_REG:
```

```
>0
```

```
LK1_PTyp:
```

```
>DTC
```

```
LK1_PNUM:
```

```
>1
```

```
LK1_CCT:
```

```
>0
```

```
LK1_REG:
```

```
>0
```

Perform a BUSY (BSYMS) and RTS (RTSMS) without OOBAND option to each MS to setup the new clock configuration.

TUPLE TO BE CHANGED:

```
0 STRAT3 SLAVE DTC 0 0 0 DTC 1 0 0
```

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

```
>Y
```

TUPLE CHANGED

**c** Go to Procedure 11.

**11** Access the MS clock by typing

```
>MAPCI;MTC;MS
```

and pressing the Enter key.

**12** Busy the slave MS by typing

```
>BSY <slave_ms>
```

and pressing the Enter key.

where

**slave\_ms**

is the number of the slave MS

- 
- 13** Return the slave MS to service by typing  
`>RTS <slave_ms>`  
and pressing the Enter key.  
where  
**slave\_ms**  
is the number of the slave MS
- 14** Switch the master clock to the mate MS by typing  
`>SWMAST`  
and pressing the Enter key.
- 15** Busy the new slave MS by typing  
`>BSY <slave_ms>`  
and pressing the Enter key.  
where  
**slave\_ms**  
is the number of the new slave MS
- 16** Return the new slave MS to service by typing  
`>RTS <slave_ms>`  
and pressing the Enter key.  
where  
**slave\_ms**  
is the number of the new slave MS
- 17** Switch back to the original master MS by typing  
`>SWMAST`  
and pressing the Enter key.
- 18** Access the Clock level of the MS by typing  
`>MAPCI ;MTC ;MS ;CLOCK`  
and pressing the Enter key.
- 19** Initiate synchronization on the MS clock by typing  
`>SYNC`  
and pressing the Enter key.  
**Note:** The SYNC command may take several minutes to complete.
-

- 20** Return to the MAP level by typing

```
>QUIT ALL
```

and pressing the Enter key.

- 21** Post the SPM being modified by typing

```
>MAPCI;MTC;PM;POST SPM <spm_no>
```

and pressing the Enter key.

where

**spm\_no**

is the number of the SPM to modify (0 to 85)

*Example of a MAP screen:*

```
SPM 31 ISTb Loc: Site HOST Floor 1 Row P FrPos 2

Shlf1 Sl A Stat Shlf1 Sl A Stat Shlf2 Sl A Stat Shlf2 Sl A Stat
DSP 2 1 A Insv CEM 1 8 I Insv VSP 2 1 A Insv --- - 8 - ----
DSP 4 2 A Insv OC3 0 9 A Insv --- - 2 - ---- VSP 6 9 A Insv
--- - 3 I Insv OC3 1 10 I Insv --- - 3 - ---- --- - 10 - ----
--- - 4 I Insv --- - 11 - ---- --- - 4 - ---- --- - 11 - ----
--- - 5 - ---- --- - 12 - ---- --- - 5 - ---- --- - 12 - ----
SRM 0 6 A ISTb --- - 13 A Insv --- - 6 - ---- --- - 13 - ----
CEM 0 7 A Insv VSP 4 14 A Insv --- - 7 - ---- --- - 14 - ----
```

- 22** Select the SRM by typing

```
>SELECT SRM 0
```

and pressing the Enter key.

*Example of a MAP screen:*

```
SPM 31 SRM 0 Act InSv
Interface:
Loc : Row B FrPos 6 ShPos 6 ShId 0 Slot 6 Prot Grp : 1
Default Load: SYN16BF Prot Role: Working
```

- 23** Access the BITS level by typing

```
>BITS
```

and pressing the Enter key.

### Example of MAP display

```
SPM 2 SRM 0
LinkNo BitsName Status State SSM AlmSev
0 BITSA Act InSv NIL
1 BITSB InAct InSv NIL
2 BITSOUT Uneq NIL
```

- 24** Busy the links by typing  
**>BSY <link\_no>**  
 and pressing the Enter key.  
 where  
     **link\_no**  
     is the link number (0 or 1)
- 25** Offline the links by typing  
**>OFFL <link\_no>**  
 and pressing the Enter key.  
 where  
     **link\_no**  
     is the link number (0 or 1)
- 26** Repeat Steps 24 and 25 for each BITS link.
- 27** Return to the SRM level by typing  
**>QUIT**  
 and pressing the Enter key.
- 28** Determine the state of the SRM by looking at the final column of the first row of output in Procedure 22.
- | <b>If the SRM state is</b> | <b>Do</b>    |
|----------------------------|--------------|
| INSV                       | Procedure 29 |
| MANB                       | Procedure 30 |
| OFFL                       | Procedure 31 |
- 29** Busy the SRM by typing  
**>BSY**  
 and pressing the Enter key.
- 30** Offline the SRM by typing  
**>OFFL**  
 and pressing the Enter key.
- 31** Exit to the CI level of the MAP by typing  
**>QUIT ALL**  
 and pressing the Enter key.

- 32** Access table MNCKTPAK by typing

**>TABLE MNCKTPAK**

and pressing the Enter key.

- 33** Position on the SRM tuple by typing

**>POS SPM <spm\_no> 0 6**

and pressing the Enter key.

where

**spm\_no**

is the number of the SPM (0 to 63)

*Example of a MAP screen:*

```
SPM 32 0 6 SRM 0 1 WORKING (SYSB CR RPT) (MANB MJ RPT)
(ISTB MN RPT) (HLDOVR MJ RPT) (HLDOVR24 CR RPT) (LOR MJ RPT) $
(LOS CR RPT) (AIS MJ RPT) (OOF MJ RPT) (MTIE MN RPT)
(TLD MJ RPT) (BPV MN RPT) (CRC MN RPT) $ DS1 ESF DS1 ESF $ NA N
NTLX44AA 01 SYN16BF
```

- 34** Remove the tuple from datafill by typing

**>DELETE**

and pressing the Enter key.

- 35** Confirm the removal by typing

**>Y**

and pressing the Enter key.

- 36** Exit the table by typing

**>QUIT**

and pressing the Enter key.

- 37** Access table MNPRTGRP by typing

**>TABLE MNPRTGRP**

and pressing the Enter key.

- 38** Position on the SRM protection group tuple by typing

**>POS SPM <spm\_no> SRM\_GRP 1**

*Example of a MAP screen:*

```
SPM 32 SRM_GRP 1 SRM_GRP NRVTV UNSPARED
```

- 39** Remove the tuple by typing

**>DELETE**

- and pressing the Enter key.
- 40** Confirm the removal by typing  
>Y  
and pressing the Enter key.
- 41** Exit the table by typing  
>QUIT  
and pressing the Enter key.
- 42** Access table MNNODE by typing  
>TABLE MNNODE  
and pressing the Enter key.
- 43** Position on the SPM being modified by typing  
>POS SPM <spm\_no>  
and pressing the Enter key.

where

**spm\_no**

is the number of the SPM (0 to 63)

*Example of a MAP screen:*

```
SPM 31 OD2 DMSCP 1 SYNC INTERNAL 15 (COT 60) (DTMF 60)
(ECAN 60) (TONESYN 60) (MF 60) $ (SYSB CR RPT) (MANB MJ RPT)
(ISTB MN RPT) (SYSBNA CR RPT) (MANBNA MJ RPT) (COTLOW MN RPT)
(DTMFLOW MN RPT) (ECANLOW MN RPT) (TONESLOW MN RPT) (MFLOW MN RPT)
(CMRLOW MN RPT) $ $
```

- 44** Depending on the new timing configuration, it may or may not be necessary to modify this tuple.

---

**If the new timing configuration is**      **Do**

---

loop timing      Procedure 45

line timing      Procedure 47

---

- 45** Begin table modification by typing  
>CHA  
and pressing the Enter key.
- 46** For each unchanged prompt, press the Enter key. The only value entered in this step should be the new value.

**Example**

This example changes the timing mode from INTERNAL to LOOP.

**>CHA**

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

**>Y**

ALIAS: 0D2

>

CLASS: DMSCP

>

FLOOR: 1

>

CLKMODE: SYNC

>

CLKREF: INTERNAL

**>LOOP**

LEDTIMER: 15

>

RSRUTLIM: COT 60

>

RSRUTLIM: DTMF 60

>

RSRUTLIM: ECAN 60

>

RSRUTLIM: TONESYN 60

>

RSRUTLIM: MF 60

>

RSRUTLIM:

>

ALRMCTRL: SYSB CR RPT

>

ALRMCTRL: MANB MJ RPT

```
>
ALRMCTRL: ISTB MN RPT
>
ALRMCTRL: SYSBNA CR RPT
>
ALRMCTRL: MANBNA MJ RPT
>
ALRMCTRL: COTLOW MN RPT
>
ALRMCTRL: DTMFLOW MN RPT
>
ALRMCTRL: ECANLOW MN RPT
>
ALRMCTRL: TONESLOW MN RPT
>
ALRMCTRL: MFLOW MN RPT
>
ALRMCTRL: CMRLOW MN RPT
>
EXECTAB:
>
TUPLE TO BE CHANGED:
 SPM 31 0D2 DMSCP 1 SYNC LOOP 15 (COT 60)
(DTMF 60) (ECAN 60) (TONESYN 60) (MF 60) $
(SYSB CR RPT) (MANB MJ RPT) (ISTB MN
RPT)(SYSBNA CR RPT) (MANBNA MJ RPT)(COTLOW MN
RPT) (DTMFLOW MN RPT)
(ECANLOW MN RPT) (TONESLOW MN RPT)
(MFLOW MN RPT) (CMRLOW MN RPT) $ $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE CHANGED
```

**47** Exit table MNNODE by typing

**>QUIT**

---

and pressing the Enter key.

***At the equipment frame***

- 48** Ensure ESD precautions are utilized. Verify that ESD wrist strap is connected properly.
- 49** At the front of the SPM, disconnect the Dsub 9 pin (if attached) and 15 pin connectors from the front of the NTLX44xx in slot 6, lower shelf of the SPM being modified.
- 50** Remove the NTLX44AA from slot 6 of the lower shelf of the SPM being modified.
- 51** Insert a NTLX60AA Filler pack into slot 6 of the lower shelf of the SPM being modified.
- 52** If required, unwrap the transmit and receive leads, for the BITSA and BITSB timing sources, from the terminal strip of the NTLX5110 cable assembly. Remove any additional leads connected to the terminal strip. Use electrical tape to insulate the leads.
- 53** If required, remove from the frames and rack, the cables running from the timing sources to the SPM.
- 54** If required, remove the mounting screws securing the terminal strip to the SPME frame and remove the NTLX5110 cable assembly from the frame.
- 55** You have completed this procedure.



## Configuration management procedures

### De-provisioning a VSP RM

#### *At the MAP level*

1

| <b>If you are deleting</b>     | <b>Do</b>                                                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| all VSPs                       | Remove all ECAN options in table TRKSGRP from trunk sub-groups assigned to the SPM being modified.                          |
| one or more VSPs (but not all) | Modify table TRKSGRP so that the number of trunk sub-groups requiring the ECAN option does not overload the remaining VSPs. |

2 Determine the Protection status of the VSPs assigned to the SPM being modified. Verify that the RMID and the ProtWhomID fields are the same number for each of the VSPs by typing

```
>SPMRESMAN SPM <spm_no> VSP <vsp_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**vsp\_no**

is the VSP number (0 to 27)

### Example response of SPM with no protection switched VSPs

```

SPM 0
ProtGroup: 1
 RMID Activity ProtWhomID ProtGrp Safe to Change?

VSP 0 14 ACTIVE 14 1 NO
VSP 1 13 ACTIVE 13 1 NO
VSP 2 12 ACTIVE 12 1 NO
VSP 3 11 ACTIVE 11 1 NO
VSP 4 19 INACTIVE 19 1 NO

```

### Example response of SPM with protection switched VSPs:

```

SPM 0
ProtGroup: 1
 RMID Activity ProtWhomID ProtGrp Safe to Change?

VSP 0 14 ACTIVE 11 1 NO
VSP 1 13 ACTIVE 13 1 NO
VSP 2 12 ACTIVE 11 1 NO
VSP 3 11 INACTIVE 19 1 NO
VSP 4 19 ACTIVE 14 1 NO

```

**Note:** In the second example above, VSP 0 was protection switched with the spare VSP (VSP 4), then VSP 3 (currently inactive) was protection switched with VSP 0. To get the VSPs in the proper state, first protection switch VSP 0 with VSP 3 and then protection switch VSP 4 with VSP 0.

### 3 Post the SPM by typing

```
>MAPCI;MTC;PM;POST SPM <spm_no>
```

and pressing the Enter key.

where

**spm\_no**  
is the SPM number (0 to 63)

### Example of MAP display

```

SPM 0 InSv Loc: Site HOST Floor 1 Row AA FrPos 0
Shlf0 SL A Stat Shlf0 SL A Stat Shlf1 SL A Stat Shlf1 SL A Stat
----- 1 - ---- CEM 1 8 A InSv ----- 1 - ---- ----- 8 - ----
----- 2 - ---- OC3 0 9 A InSv ----- 2 - ---- VSP 0 9 A InSv
----- 3 - ---- OC3 1 10 I InSv ----- 3 - ---- VSP 1 10 A InSv
----- 4 - ---- VSP 3 11 A InSv ----- 4 - ---- VSP 2 11 A InSv
----- 5 - ---- VSP 2 12 A InSv VSP 4 5 A InSv VSP 3 12 I InSv
----- 6 - ---- VSP 1 13 A InSv VSP 5 6 I InSv ----- 13 - ----
CEM 0 7 I InSv VSP 0 14 A InSv ----- 7 - ---- ----- 14 - ----

```

**Note:** In this example VSP 3 in slot 12 of shelf 1 is the spare VSP and Inactive (I)

- 4 Select a VSP assigned to the SPM being modified by typing

```
>SELECT VSP <vsp_no>
```

and pressing the Enter key.

where

**vsp\_no**

is the VSP number (0 to 27)

- 5 Enter the protection level of the MAP by typing

```
>PROT
```

and pressing the Enter key.

### Example of MAP display

```
SPM 0 ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
4 - - - - - 11 3 W A InSv 4 - - - - - 11 - - - - -
5 - - - - - 12 2 W A InSv 5 4 S I InSv 12 - - - - -
6 - - - - - 13 1 W A InSv 6 - - - - - 13 - - - - -
7 - - - - - 14 0 W A InSv 7 - - - - - 14 - - - - -
```

**Note:** In the example above, VSP 4 in slot 5 of the upper shelf is inactive ("I" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 6 Determine there are any working VSPs that are protection switched using the results from the SPMRESMAN command in Procedure 2.

---

**If**

**Do**

no working VSP is protection switched

Procedure 11

any working VSP is protection switched

Procedure 7

- 7 Using the information gathered during Procedure 2, protection switch the VSP, indicated by the ProtWhomID field of the currently Inactive VSP, with the Inactive VSP by typing

```
>MANUAL <prot_vsp> <inactive_vsp>
```

and pressing the Enter key.

where

**prot\_vsp**

is the number of the VSP in the inactive VSP's ProtWhomID field from Procedure 2

**inactive\_vsp**

is the number of an inactive VSP

Example

```
>MANUAL 4 0
```

- 8** Confirm the protection switch by typing

```
>Y
```

and pressing the Enter.

- 9** Determine the Protection status of the VSPs assigned to the SPM being modified by typing

```
>SPMRESMAN SPM <spm_no> VSP <vsp_no>
```

and pressing the Enter key.

where

**spm\_no**

is the SPM number (0 to 63)

**vsp\_no**

is the VSP number (0 to 27)

- 10** Using the output of Procedure 9, verify that the RMID and the ProtWhomID fields are the same number for each of the VSPs.

**If the SPM has****Do**

any protection switched VSPs

Procedure 6

no protection switched VSPs

Procedure 17

- 11** Ensure the inactive VSP is the spare. Then protection switch it with an active VSP by typing

```
>MANUAL <active_vsp> <spare_vsp>
```

and pressing the Enter key.

where

**active\_vsp**

is the number of an active VSP

**spare\_vsp**

is the number of the spare VSP

Example

```
MANUAL 0 3
```

- 12** Confirm the protection switch by typing

>Y

and pressing the Enter key.

### Example of MAP display

```
SPM 0 ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
4 - - - - - 11 3 S A InSv 4 - - - - - 11 - - - - -
5 - - - - - 12 2 W A InSv 5 - - - - - 12 - - - - -
6 - - - - - 13 1 W A InSv 6 - - - - - 13 - - - - -
7 - - - - - 14 0 W I InSv 7 - - - - - 14 - - - - -
```

- 13** Verify the VSP performed the protection switch by viewing the MAP display from Procedure 12.

**Note:** In the example above, VSP 3 in slot 11 of the lower shelf is active ("A" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 14** Protection switch back to the original VSP by typing

>MANUAL <spare\_vsp> <inactive\_vsp>

and pressing the Enter key.

where

**spare\_vsp**

is the number of the spare VSP

**inactive\_vsp**

is the number of the previously active VSP

Example

>MANUAL 3 0

- 15** Confirm the protection switch by typing

>Y

and pressing the Enter key.

## Example of MAP display

```
SPM 0 ISTb
Prot Grp: VSP_GRP 1 Mode: Non-revertive Schema: m_for_n
Sh0 U R A Stat Sh0 U R A Stat Sh1 U R A Stat Sh1 U R A Stat
1 - - - - - 8 - - - - - 1 - - - - - 8 - - - - -
2 - - - - - 9 - - - - - 2 - - - - - 9 - - - - -
3 - - - - - 10 - - - - - 3 - - - - - 10 - - - - -
4 - - - - - 11 3 S I InSv 4 - - - - - 11 - - - - -
5 - - - - - 12 2 W A InSv 5 - - - - - 12 - - - - -
6 - - - - - 13 1 W A InSv 6 - - - - - 13 - - - - -
7 - - - - - 14 0 W A InSv 7 - - - - - 14 - - - - -
```

- 16 Verify the VSP performed the protection switch by viewing the MAP display from Procedure 15.
 

**Note:** In the example above, VSP 3 in slot 11 of the lower shelf is inactive ("I" under the 'A' column) and is the spare VSP ("S" under the 'R' column).
- 17 Exit the PROT level of the map by typing
 

```
>QUIT
```

 and pressing the Enter key.
- 18 Select the spare VSP for the SPM being modified by typing
 

```
>SELECT VSP <spare_vsp>
```

 and pressing the Enter key.
 

where

**spare\_vsp**  
is the number of the spare VSP
- 19 Busy the spare VSP for the SPM being modified by typing
 

```
>BSY
```

 and pressing the Enter key.
- 20 Offline the VSP for the SPM being modified by typing
 

```
>OFFL
```

 and pressing the Enter key.
- 21 Select a VSP to be removed by typing
 

```
>SELECT VSP <vsp_no>
```

 and pressing the Enter key.
- 22 Busy the selected VSP by typing
 

```
>BSY
```

- 
- and pressing the Enter key.
- 23** Offline the selected VSP by typing  
**>OFFL**  
and pressing the Enter key.
- 24** Repeat Steps 21 through 23 for each VSP to be removed.
- 25** Exit to the CI level of the MAP by typing  
**>QUIT ALL**  
and pressing the Enter key.
- 26** Access table MNCKTPAK by typing  
**>TABLE MNCKTPAK**  
and pressing the Enter key.
- 27** Position on the spare VSP by typing  
**>POS SPM <spm\_no> <shelf\_no> <slot\_no>**  
and pressing the Enter key.  
where
- spm\_no**  
is the SPM number (0 to 63)
  - shelf\_no**  
is the shelf number (0 or 1)
  - slot\_no**  
is the slot number (1 to 14)
- Example
- ```
>POS SPM 0 1 5
```
- 28** Delete the tuple for the spare DSP by typing
>DEL
and pressing the Enter key.
- 29** Confirm the deletion by typing
>Y
and pressing the Enter key.
- 30** Position on the VSP to be removed by typing
>POS SPM <spm_no> <shelf_no> <slot_no>
and pressing the Enter key.
where
-

spm_no
is the SPM number (0 to 63)

shelf_no
is the shelf number (0 or 1)

slot_no
is the slot number (1 to 14)

Example

```
POS SPM 0 0 11
```

- 31** Delete the tuple for the VSP by typing

```
>DEL
```

and pressing the Enter key.

- 32** Confirm the deletion by typing

```
>Y
```

and pressing the Enter key.

- 33** Repeat Steps 30 through 32 for each VSP to be deleted.

34

If you are removing	Do
all VSPs from the SPM being modified	Procedure 39
one or more (but not all) VSPs from the SPM being modified	Procedure 35

- 35** Re-add the spare VSP to the next available slot position after the last assigned working VSP.

- 36** Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

- 37** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table MNCKTPAK.

```
>ADD
```

```
CPKKEY:
```

```
>SPM 0 0 11
```

```
CPKTYPE :
>VSP
UNITNO :
>3
VSPGRPID :
>1
WKRSPR :
>SPARE
RSRTYPE :
>ECAN 260
RSRTYPE :
>$
ALRMCTRL :
>SYSB CR RPT
ALRMCTRL :
>MANB MJ RPT
ALRMCTRL :
>ISTB MN RPT
ALRMCTRL :
>PROTFAIL CR RPT
ALRMCTRL :
>$
PEC :
>NTLX66BA
RELEASE :
>01
LOAD :
>DSP16CK
TUPLE TO BE ADDED :
SPM 0 0 11 VSP 3 1 WORKING (ECAN 260) $ (SYSB
CR RPT) (MANB MJ RPT) (ISTB MN RPT) (PROTFAIL
CR RPT) $ NTLX66BA          01 DSP16CK
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
```

>Y

TUPLE ADDED

Note 1: The NTLX66AA and NTLX66BA VSPs can have 1 to 260 ECAN resources assigned. The NTLX85AA and NTLX86AA can have 1 to 336 ECAN resources assigned.

Note 2: The DSP load contains the NTLX66AA and NTLX66BA VSP, as well as the DSP software.

Note 3: The NTLX85AA and NTLX86AA use the COH load.

38 Exit table MNCKTPAK by typing

>QUIT

and pressing the Enter key.

At the equipment frame

39 At the front of the SPM being modified, remove the VSP RM(s) from the appropriate slot(s).

Note: Do not remove the VSP RM to be used as the spare VSP from its slot.

40 Insert NTLX60AA filler packs into the appropriate slots.

At the MAP level

41 Post the SPM being modified by typing

>MAPCI;MTC;PM;POST SPM <spm_no>

and pressing the Enter key.

where

spm_no

is the SPM number (0 to 63)

Example of MAP display

```
SPM   #  InSv  Loc: Site HOST Floor  1 Row AA FrPos  0
Shlf0 SL A Stat  Shlf0 SL A Stat  Shlf1 SL A Stat  Shlf1 SL A Stat
----- 1 - ----  CEM 1  8 A InSv  ----- 1 - ----  ----- 8 - ----
----- 2 - ----  OC3 0  9 A InSv  ----- 2 - ----  DSP 0  9 I InSv
----- 3 - ----  OC3 1 10 I InSv  ----- 3 - ----  DSP 1 10 A InSv
----- 4 - ----  VSP 3 11 I Offl  ----- 4 - ----  DSP 2 11 A InSv
----- 5 - ----  VSP 2 12 A InSv  ----- 5 - ----  DSP 3 12 A InSv
----- 6 - ----  VSP 1 13 A InSv  ----- 6 - ----  DSP 4 13 A InSv
CEM 0  7 I InSv  VSP 0 14 A InSv  ----- 7 - ----  ----- 14 - ----
```

Note: In the above example, VSP 3 was re-added as the spare VSP.

- 42 Select the spare VSP by typing
>SELECT VSP <spare_vsp>
 and pressing the Enter key.
 where
 spare_vsp
 is the number of the spare VSP
- 43 Busy the spare VSP by typing
>BSY
 and pressing the Enter key.
- 44 Perform a RESETMOD on the spare VSP by typing
>RESETMOD FW
 and pressing the Enter key.
- 45 Load the spare VSP with its software by typing
>LOADMOD
 and pressing the Enter key.
- 46 Return the spare VSP to service by typing
>RTS
 and pressing the Enter key.
- 47 Verify that the VSPs are all functioning properly. Allow five minutes before proceeding to the next step.
- 48 Return to the SPM level by typing
>QUIT
 and pressing the Enter key.

Example of MAP display

```

SPM   #   InSv  Loc: Site HOST Floor   1 Row AA FrPos   0
Shlf0 SL A Stat  Shlf0 SL A Stat  Shlf1 SL A Stat  Shlf1 SL A Stat
----- 1 - ----  CEM 1   8 A InSv  ----- 1 - ----  ----- 8 - ----
----- 2 - ----  OC3 0   9 A InSv  ----- 2 - ----  DSP 0   9 I InSv
VSP 8   3 I InSv  OC3 1  10 I InSv  ----- 3 - ----  DSP 1  10 A InSv
VSP 6   4 A InSv  VSP 3  11 I InSv  ----- 4 - ----  DSP 2  11 A InSv
----- 5 - ----  VSP 2  12 A InSv  ----- 5 - ----  DSP 3  12 A InSv
----- 6 - ----  VSP 1  13 A InSv  ----- 6 - ----  DSP 4  13 A InSv
CEM 0   7 I InSv  VSP 0  14 A InSv  ----- 7 - ----  VSP 7  14 A InSv

```

- 49 Select the VSPs assigned to the SPM being modified by typing
>SELECT VSP ALL

and pressing the Enter key.

- 50** Enter the PROT level of the MAP by typing

>PROT

and pressing the Enter key.

Example of MAP display

```
SPM   #   ISTb
Prot Grp: VSP_GRP 1      Mode: Non-revertive      Schema: m_for_n
Sh0  U R A Stat   Sh0  U R A Stat   Sh1  U R A Stat   Sh1  U R A Stat
 1  - - - - - - -   8  - - - - - - -   1  - - - - - - -   8  - - - - - - -
 2  - - - - - - -   9  - - - - - - -   2  - - - - - - -   9  - - - - - - -
 3  - - - - - - -  10  - - - - - - -   3  - - - - - - -  10  - - - - - - -
 4  - - - - - - -  11  3 S I InSv   4  - - - - - - -   11  - - - - - - -
 5  - - - - - - -  12  2 W A InSv   5  - - - - - - -   12  - - - - - - -
 6  - - - - - - -  13  1 W A InSv   6  - - - - - - -   13  - - - - - - -
 7  - - - - - - -  14  0 W A InSv   7  - - - - - - -   14  - - - - - - -
```

- 51** Determine if the spare VSP is also inactive using the MAP display from Procedure 50.

Note: In the example above, VSP 3 in slot 11 of the lower shelf is inactive ("I" under the 'A' column) and is the spare VSP ("S" under the 'R' column).

- 52** Protection switch an active VSP with the spare VSP by typing

>MANUAL <active_vsp> <spare_vsp>

and pressing the Enter key.

where

active_vsp

is the number of an active VSP

spare_vsp

is the number of the spare VSP

Example

>MANUAL 0 3

- 53** Confirm the protection switch by typing

>Y

and pressing the Enter key.

- 54** Protection switch back from the spare VSP to the currently inactive VSP by typing

>MANUAL <spare_vsp> <inactive_vsp>

and pressing the Enter key.

where

spare_vsp

is the number of the spare VSP

inactive_vsp

is the number of the newly inactive VSP

Example

>MANUAL 3 0

55 Confirm the protection switch by typing

>**Y**

and pressing the Enter key.

56 You have completed this procedure. Return to the CI level of the MAP screen by typing

>**QUIT ALL**

and pressing the Enter key.



Configuration management procedures

Provisioning an ISUP trunk

At the MAP level

- 1 Access table CLLI by typing
>TABLE CLLI
and pressing the Enter key.
- 2 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 3 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table CLLI.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
CLLI :
>SPMISUP
ADNUM :
>444
TRKGRSIZ :
>24
ADMININF :
>SPM_ISUP_TRUNK
TUPLE TO BE ADDED :
```

```
SPMISUP 444 24 SPM_ISUP_TRUNK
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 4 Exit table CLLI by typing
>QUIT
and pressing the Enter key.
- 5 Access table TRKGRP by typing
>TABLE TRKGRP
and pressing the Enter key.
- 6 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 7 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
GRPKEY:
>SPMISUP
GRPTYP:
>T2
TRAFSNO: 0
>
PADGRP: NPDGP
>
NCCLS: NCIT
>
TRAFCLS: NIL
>
```

```
SELSEQ: MIDL
>
DIGSOUT: 3
>0
TOLL:N
>
PRTNM: NPRT
>
SCRNCL: NSCR
>
SNPA:
>919
STS:
>919
ORIGSRCE: LCL
>
VDESEL: N
>
DIGREGEN:
>N
OPTION:
>$
TUPLE TO BE ADDED:
SPMISUP T2 0 ELO NCRT NIL MIDL 0 N NPRT NSCR
919 LCL N N $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 8** Exit table TRKGRP by typing
>QUIT
and pressing the Enter key.

- 9 Access table TRKSGRP by typing
>TABLE TRKSGRP
and pressing the Enter key.
- 10 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 11 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
SGRPKEY:
>SPMISUP 0
```

Note: The SPM handles ABBIT freezes to 1AESS switches differently than DTCs. The ABBITs are permanently frozen 'high'. If a site has trunks going to a 1AESS from both DTCs and SPMs, then the SPM trunks in that trunk group must be in a different trunk sub-group. Another TRKSGRP must be built with a different SGRPKEY (ex: 1) for the SPM to 1AESS. See the note below for the ABCNTL field and the note below on the ADJNODE field.

```
CARDCODE:
>DS1SIG
SGRPVAR:
>C7UP
DIR: 2W
>
ESUPR: N
>F
SAT:
>N
```

ECSTAT: UNEQ

>

ABCNTL: NONE

>**ACTIVEA**

Note: The SPM handles ABBIT freezes to 1AESS switches differently than DTCs. The ABBITs are frozen permanently high at "1" and the ABCTL field in table TRKSGRP must be set to NONE, instead of ACTIVEA, as it is in DTCs.

If the trunk group terminates to a 1AESS switch from an SPM, the ABCNTL field must be to NONE. Also see the note above for the SGRPKEY field and the note below on the ADJNODE field.

The ABCNTL field needs to be set to NONE prior to trunk members being added to table TRKMEM and C7TRKMEM. If the field is changed after the trunk members have been added to these tables, the tuples for the trunk members will need to be deleted and readded to these two tables.

PROTOCOL:

>**Q764**

CONTCHK:

>**THRL**

COTREQ: 0

>

ADJNODE:

>**ISUP**

Note: The ADJNODE field will be datafilled as ESS1A if ISUP ABBIT freeze is required. See the notes on the SGRPKEY field and the ABCTL field above.

OPTION:

>**\$**

TMRNAME:

>**NIL**

GLARETYP:

>**CIC**

TUPLE TO BE ADDED:

```
SPMISUP 0 DS1SIG C7UP 2W F N UNEQ ACTIVEA Q764  
THRL 10 ISUP $ NIL CIC
```

```
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
```

```
>Y
```

```
TUPLE ADDED
```

- 12 Exit table TRKSGRP by typing

```
>QUIT
```

and pressing the Enter key.

- 13 Access table TRKMEM by typing

```
>TABLE TRKMEM
```

and pressing the Enter key.

- 14 Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

- 15 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
CLLI :
```

```
>SPMISUP
```

```
EXTRKNM :
```

```
>1
```

```
SGRP :
```

```
>0
```

```
PMTYPE :
```

```
>SPM
```

```
SPMNO :
```

```
>16
```

```
SPMCKTNO :
```

```

>9
SPMCKTTS:
>1
TUPLE TO BE ADDED:
SPMISUP 1 0 SPM 16 9 1
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 16 Exit table TRKMEM by typing

```
>QUIT
```

and pressing the Enter key.

- 17 Access table ISUPDEST by typing

```
>TABLE ISUPDEST
```

and pressing the Enter key.

- 18 Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

- 19 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
DESTKEY:
```

```
>SPMISUP 0
```

```
ISUPROUT:
```

```
>C7RTESET1
```

```
TUPLE TO BE ADDED:
```

```
SPMISUP 0 C7RTESET1
```

```
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
```

```
>Y
```

TUPLE ADDED

- 20** Exit table ISUPDEST by typing
>QUIT
and pressing the Enter key.
- 21** Access table C7TRKMEM by typing
>TABLE C7TRKMEM
and pressing the Enter key.
- 22** Begin the table addition by typing
>ADD
and pressing the Enter key.
- 23** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

>ADD

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

MEMKEY:

>SPMISUP 1

CIC:

>444

TUPLE TO BE ADDED:

SPMISUP 1 444

ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.

>Y

TUPLE ADDED

- 24** Exit table C7TRKMEM by typing
>QUIT
and pressing the Enter key.
- 25** You have successfully completed this procedure.



Configuration management procedures

Provisioning a PRI-250 trunk

At the MAP level

- 1 Access table CLLI by typing
>TABLE CLLI
and pressing the Enter key.
- 2 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 3 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table CLLI.

```
>ADD  
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT  
>Y  
CLLI :  
>WITS1NISPM0  
ADNUM :  
>126  
TRKGRSIZ :  
>24  
ADMININF :  
>WITS_NI2_SPM0  
TUPLE TO BE ADDED :
```

```
WITS1NISPM0 126 24 WITS_NI2_SPM0
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 4 Exit table CLLI by typing

```
>QUIT
and pressing the Enter key.
```

- 5 Access table CLLICDR by typing

```
>TABLE CLLICDR
and pressing the Enter key.
```

Note: Table CLLICDR is required for PRI-250 trunks.

- 6 Begin the table addition by typing

```
>ADD
and pressing the Enter key.
```

- 7 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
CLLINAME:
>WITS1NISPM0
EXTNUM:
>126
TUPLE TO BE ADDED:
WITS1NISPM0 126
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 8 Exit table CLLICDR by typing

```
>QUIT
```

- and pressing the Enter key.
- 9** Access table TRKGRP by typing
>TABLE TRKGRP
and pressing the Enter key.
- 10** Begin the table addition by typing
>ADD
and pressing the Enter key.
- 11** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
GRPKEY:
>WITS1NISPM0
GRPTYP:
>PRA250
TRAFSNO: 0
>
PADGRP: NPDGP
>
NCCLS: NCIT
>
CUSTOMER: UCS
>
SELSEQ: MIDL
>
TRAFCLS: NIL
>
TIMEBIAS: 0
>
```

```

SNPA: 001
>
LTID
>PRI 10
ZONE: 0
>
FASTIDGT: 15
>
BCNAME:
>SPEECH
TSUSR: 160
>
OPTION:
>$
TUPLE TO BE ADDED:
  WITS1NISPM0 PRA250 0 NPDGP NCIT UCS MIDL NIL
  0 001 (PRI 10) $ 0 15 SPEECH 160 $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 12 Exit table TRKGRP by typing
>QUIT
 and pressing the Enter key.
- 13 Access table TRKSGRP by typing
>TABLE TRKSGRP
 and pressing the Enter key.
- 14 Begin the table addition by typing
>ADD
 and pressing the Enter key.
- 15 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

>ADD

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

SGRPKEY:

>WITS1NISPM0 0

CARDCODE:

>DS1SIG

SGRPVAR:

>ISDN

PSPDSEIZ: 15

>20

PARTDIAL: 15

>20

VERSION:

>87Q931

CRLENGTH:

>2

BCHNEG: N

>

BCHGLARE:

>STAND

IFCLASS:

>NETWORK

CONFIG:

>PT_PT

LOCATION:

>USER

SAT: N

>

ECSTAT: UNEQ

>

```
TRKGRDTM:
>25
L1FLAGS: N
>
PARMNAME:
>DEFAULT
PMTYPE:
>SPM
SPMNO:
>0
SPMCKTNO:
>21
SPMCKTTS:
>24
DCHRATE:
>64k
HDLCTYPE:
>HLDC
PMTYPE:
>$
OPTION:
>$
TUPLE TO BE ADDED:
WITS1NISPM0 0 DS1SIG ISDN 20 20 87Q931 2 N
STAND NETWORK PT_PT USER N UNEQ 25 N DEFAULT
SPM 0 21 24 64K HDLC $ $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 16** Exit table TRKSGRP by typing
>QUIT
and pressing the Enter key.

- 17 Access table TRKMEM by typing
>TABLE TRKMEM
and pressing the Enter key.
- 18 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 19 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
CLLI:
>WITS1NISPM0
EXTRKNM:
>1
SGRP:
>0
PMTYPE:
>SPM
SPMNO:
>0
SPMCKTNO:
>21
SPMCKTTS:
>1
TUPLE TO BE ADDED:
WITS1NISPM0 1 0 SPM 0 21 1
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 20 Exit table TRKMEM by typing
>QUIT
and pressing the Enter key.
- 21 Access table LTDEF by typing
>TABLE LTDEF
and pressing the Enter key.
- 22 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 23 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
LTKEY:
>PRI 10
LTAP:
>B
LTCLASS:
>PRA
NUMBCHNL:
>23
NUMCALLS:
>23
INCCALLS:
>12
OUTCALLS:
>11
:
>NTNAPRI
```

```

ISSUE :
>V1
PROFNAME :
>NIL
OPTION :
>NOPMD
OPTION :
>$
TUPLE TO BE ADDED :
PRI 10 B PRA 23 23 12 11 NTNAPRI V1 NIL
(NOPMD) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 24** Exit table LTDEF by typing

```
>QUIT
```

and pressing the Enter key.

- 25** Access table LTMAP by typing

```
>TABLE LTMAP
```

and pressing the Enter key.

- 26** Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

- 27** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
LTKEY :
```

```
>PRI 10
```

```

MAPTYPE :
>CLLI
CLLI :
>WITS1NISPM0
OPTION :
>TEI
TEI :
>0
OPTION
>$
TUPLE TO BE ADDED :
PRI 10 CLLI WITS1NISPM0 (TEI 0) $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 28** Exit table LTMAP by typing
>QUIT
 and pressing the Enter key.
- 29** Access table TRKGRP1 by typing
>TABLE TRKGRP1
 and pressing the Enter key.
- 30** Begin the table addition by typing
>ADD
 and pressing the Enter key.
- 31** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```

>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
CLLI :

```

```
>WITS1NISPM0
GRPTYP:
>PRA250
LCDDUR:
>0
SPARE1: N
>Y
SPARE2: N
>Y
SPARE3:
>0
SPARE4
>0
TUPLE TO BE ADDED:
WITS1NISPM0 PRA250 0 Y Y 0 0
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

32 Exit table TRKGRP1 by typing

```
>QUIT
```

and pressing the enter key.

33 You have successfully completed this procedure.



Configuration management procedures

Provisioning a PTS MF trunk

At the MAP level

- 1 Access table CLLI by typing
>TABLE CLLI
and pressing the Enter key.
- 2 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 3 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD  
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT  
>Y  
CLLI :  
>G0S3TIMF  
ADNUM :  
>109  
TRKGRSIZ :  
>24  
ADMININF :  
>SPM_MF_TO_SAGE  
TUPLE TO BE ADDED :
```

```
GOS3TIMF 109 24 SPM_MF_TO_SAGE
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 4 Exit table CLLI by typing
>QUIT
and pressing the Enter key.
- 5 Access table TRKGRP by typing
>TABLE TRKGRP
and pressing the Enter key.
- 6 Begin the table addition by typing
>ADD
and pressing the Enter key.
- 7 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
GRPKEY:
>GOS3TIMF
GRPTYP:
>TI
TRAFSNO: 0
>
PADGRP: NPDGP
>ELO
NCCLS: NCIT
>NCRT
TRAFCLS: NIL
>
```

```
PRTNM: NPRT
>
SCRNCL: NSCR
>
SNPA:
>613
STS:
>613
ORIGSRCE: LCL
>
VDESEL: N
>
DIGREGEN:
>N
OPTION:
>$
TUPLE TO BE ADDED:
GOS3TIMF TI 0 ELO NCRT NIL NPRT NSCR 613 613
LCL N N $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 8 Exit table TRKGRP by typing
>QUIT
and pressing the Enter key.
- 9 Access table TRKSGRP by typing
>TABLE TRKSGRP
and pressing the Enter key.
- 10 Begin the table addition by typing
>ADD
and pressing the Enter key.

- 11 Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

>ADD

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

SGRPKEY:

>G0S3TIMF 0

CARDCODE:

>DS1SIG

SGRPVAR:

>STD

DIR: 2W

>IC

IPULSTYP:

>MF

ISTARTSG:

>WK

OVLP: N

>

PSPDSEIZ: 15

>7

PARTDIAL:

>7

CCONT:

>NO

RNGBCK:

>NO

ESUPR: N

>

SAT:

```

>N
REMBSY:
>N
DIALMODE:
>C
ECSTAT: UNEQ
>
TUPLE TO BE ADDED:
GOS3TIMF DS1SIG STD IC MF WK N 7 7 NO NO N N
N C UNEQ $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED

```

- 12** Exit table TRKSGRP by typing

```
>QUIT
```

and pressing the Enter key.

- 13** Access table TRKMEM by typing

```
>TABLE TRKMEM
```

and pressing the Enter key.

- 14** Begin the table addition by typing

```
>ADD
```

and pressing the Enter key.

- 15** Answer each of the prompts with the required datafill provided by the table range.

Example

This is an example of datafilling table TRKGRP.

```
>ADD
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
CLLI:
```

```
>GOS3TIMF
```

```
EXTRKNUM:
```

```
>1
SGRP:
>0
PMTYPE:
>SPM
SPMNO:
>3
SPMCKTNO:
>97
SPMCKTTS:
>1
TUPLE TO BE ADDED:
GOS3TIMF 1 0 SPM 3 97 1
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE ADDED
```

- 16 Exit table TRKMEM by typing
>QUIT
and pressing the Enter key.
- 17 You have successfully completed this procedure.



Configuration management procedures

Regardless of trunk type, provisioning data is modified the same way. The following procedure gives an example for modifying a PTS MF trunk.

Modifying a trunk

At the MAP level

- 1 Access the table to modify by typing

```
>TABLE <table_name>
```

where

table_name

is the name of the table containing the tuple to be modified

and pressing the Enter key.

Example

```
>TABLE TRKGRP
```

- 2 Position on the tuple to modify by typing

```
>POS <tuple_key>
```

where

tuple_key

is the name of the tuple (typically the first entry)

and pressing the Enter key.

Example

This example positions on the tuple created for a PTS trunk in the Procedure , "Provisioning a PTS MF trunk," on page 135.

```
>POS G0S3TIMF
```

```
G0S3TIMF TI 0 ELO NCRT NIL NPRT NSCR 613 613  
LCL N N $
```

- 3 Begin the table modification by typing
>CHA
and pressing the Enter key.
- 4 For each unchanged prompt, press the Enter key. The only value entered in this step should be the new value.

Example

This example changes the SNPA code in table TRKGRP from 613 to 614.

```
>CHA
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
GRPTYP: TI
>
TRAFSNO: 0
>
PADGRP: ELO
>
NCCLS: NCRT
>
TRAFCLS: NIL
>
PRTNM: NPRT
>
SCRNCL: NSCR
>
SNPA: 613
>614
STS: 613
>
ORIGSRCE: LCL
>
VDESEL: N
```

```
>
DIGREGEN: N
>
OPTION: $
>
TUPLE TO BE CHANGED:
GOS3TIMF TI 50 ELO NCRT NIL NPRT NSCR 614 613
LCL N N $
ENTER Y TO CONFIRM, N TO REJECT OR E TO EDIT.
>Y
TUPLE CHANGED
```

- 5 Exit the table by typing
>QUIT
and pressing the Enter key.
- 6 You have successfully completed this procedure.



Configuration management procedures

De-provisioning an ISUP trunk

At the MAP level

- 1 Access table C7TRKMEM by typing
`>TABLE C7TRKMEM`
and pressing the Enter key.
- 2 Position on the tuple to remove by typing
`>POS clli`
and pressing the Enter key.
where
`cli`
is the CLLI identifier for the tuple

Example

```
>POS SPMISUP
```

- 3 Delete the tuple by typing
`>DEL`
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 4 Exit table C7TRKMEM by typing
`>QUIT`
and pressing the Enter key.
- 5 Access table ISUPDEST by typing
`>TABLE ISUPDEST`
and pressing the Enter key.
- 6 Position on the tuple to remove by typing
`>POS clli`
and pressing the Enter key.
where
cli
is the CLLI identifier for the tuple

Example

```
>POS SPMISUP
```

- 7 Delete the tuple by typing
`>DEL`
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL  
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT  
>Y  
TUPLE DELETED  
WARNING: CURRENTLY NOT POSITIONED
```

- 8 Exit table ISUPDEST by typing
`>QUIT`
and pressing the Enter key.
- 9 Access table TRKMEM by typing
`>TABLE TRKMEM`
and pressing the Enter key.

- 10** Position on the tuple to remove by typing

```
>POS clli
```

and pressing the Enter key.

where

```
    clli
```

is the CLLI identifier for the tuple

Example

```
>POS SPMISUP
```

- 11** Delete the tuple by typing

```
>DEL
```

and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
TUPLE DELETED
```

```
WARNING: CURRENTLY NOT POSITIONED
```

- 12** Exit table TRKMEM by typing

```
>QUIT
```

and pressing the Enter key.

- 13** Access table TRKSGRP by typing

```
>TABLE TRKSGRP
```

and pressing the Enter key.

- 14** Position on the tuple to remove by typing

```
>POS clli
```

and pressing the Enter key.

where

```
    clli
```

is the CLLI identifier for the tuple

Example

```
>POS GOS3TIMF
```

- 15** Delete the tuple by typing
>DEL
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
TUPLE DELETED
```

```
WARNING: CURRENTLY NOT POSITIONED
```

- 16** Exit table TRKSGRP by typing
>QUIT
and pressing the Enter key.
- 17** Access table TRKGRP by typing
>TABLE TRKGRP
and pressing the Enter key.
- 18** Position on the tuple to remove by typing
>POS c11i
and pressing the Enter key.
where
c11i
is the CLLI identifier for the tuple

Example

```
>POS SPMISUP
```

- 19** Delete the tuple by typing
>DEL
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 20 Exit table TRKGRP by typing

```
>QUIT
```

and pressing the Enter key.

- 21 Access table CLLI by typing

```
>TABLE CLLI
```

and pressing the Enter key.

- 22 Position on the tuple to remove by typing

```
>POS clli
```

and pressing the Enter key.

where

```
    clli
```

is the CLLI identifier for the tuple

Example

```
>POS SPMISUP
```

- 23 Delete the tuple by typing

```
>DEL
```

and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 24 Exit table CLLI by typing
>QUIT
and pressing the Enter key.
- 25 You have successfully completed this procedure.



Configuration management procedures

De-provisioning a PRI trunk

At the MAP level

- 1 Access table TRKGRP1 by typing
`>TABLE TRKGRP1`
and pressing the Enter key.
- 2 Position on the tuple to remove by typing
`>POS clli`
and pressing the Enter key.
where
`cli`
is the CLLI identifier for the tuple

Example

```
>POS WITSINISPM0
```

- 3 Delete the tuple by typing
`>DEL`
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 4 Exit table TRKGRP1 by typing
>QUIT
and pressing the enter key.
- 5 Access table LTMAP by typing
>TABLE LTMAP
and pressing the Enter key.
- 6 Position on the tuple to remove by typing
>POS ltgrp ltnum
and pressing the Enter key.
where
ltgrp
is logical terminal group.
ltnum
is logical terminal number (1-1022)

Example

```
>POS PRI 10
```

- 7 Delete the tuple by typing
>DEL
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
TUPLE DELETED
```

```
WARNING: CURRENTLY NOT POSITIONED
```

- 8 Exit table LTMAP by typing
>QUIT
and pressing the Enter key.
- 9 Access table LTDEF by typing
>TABLE LTDEF

and pressing the Enter key.

- 10** Position on the tuple to remove by typing

>POS ltgrp ltnum

and pressing the Enter key.

where

ltgrp

is logical terminal group.

ltnum

is logical terminal number (1-1022)

Example

>POS PRI 10

- 11** Delete the tuple by typing

>DEL

and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

>DEL

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

TUPLE DELETED

WARNING: CURRENTLY NOT POSITIONED

- 12** Exit table LTDEF by typing

>QUIT

and pressing the Enter key.

- 13** Access table TRKMEM by typing

>TABLE TRKMEM

and pressing the Enter key.

- 14** Position on the tuple to remove by typing

>POS c11i

and pressing the Enter key.

where

cli
is the CLLI identifier for the tuple

Example

```
>POS WITSINISPM0
```

- 15** Delete the tuple by typing
>DEL
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 16** Exit table TRKMEM by typing
>QUIT
and pressing the Enter key.
- 17** Access table TRKSGRP by typing
>TABLE TRKSGRP
and pressing the Enter key.
- 18** Position on the tuple to remove by typing
>POS cli
and pressing the Enter key.

where

cli
is the CLLI identifier for the tuple

Example

```
>POS WITSINISPM0
```

- 19** Delete the tuple by typing
>DEL

and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 20** Exit table TRKSGRP by typing

```
>QUIT
```

and pressing the Enter key.

- 21** Access table TRKGRP by typing

```
>TABLE TRKGRP
```

and pressing the Enter key.

- 22** Position on the tuple to remove by typing

```
>POS c11i
```

and pressing the Enter key.

where

cli

is the CLLI identifier for the tuple

Example

```
>POS WITS1NISPM0
```

- 23** Delete the tuple by typing

```
>DEL
```

and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
```

TUPLE DELETED

WARNING: CURRENTLY NOT POSITIONED

- 24** Exit table TRKGRP by typing

>QUIT

and pressing the Enter key.

- 25** Access table CLLICDR by typing

>TABLE CLLICDR

and pressing the Enter key.

Note: Table CLLICDR is required for PRI-250 trunks.

- 26** Position on the tuple to remove by typing

>POS clli

and pressing the Enter key.

where

cli

is the CLLI identifier for the tuple

Example

>POS WITSINISPM0

- 27** Delete the tuple by typing

>DEL

and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

>DEL

ENTER Y TO CONTINUE PROCESSING OR N TO QUIT

>Y

TUPLE DELETED

WARNING: CURRENTLY NOT POSITIONED

- 28** Exit table CLLICDR by typing

>QUIT

and pressing the Enter key.

-
- 29** Access table CLLI by typing
>TABLE CLLI
and pressing the Enter key.
- 30** Position on the tuple to remove by typing
>POS clli
and pressing the Enter key.
where
cli
is the CLLI identifier for the tuple

Example

```
>POS WITSINISPM0
```

- 31** Delete the tuple by typing
>DEL
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL  
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT  
>Y  
TUPLE DELETED  
WARNING: CURRENTLY NOT POSITIONED
```

- 32** Exit table CLLI by typing
>QUIT
and pressing the Enter key.
- 33** You have successfully completed this procedure.



Configuration management procedures

De-provisioning a PTS trunk

At the MAP level

- 1 Access table TRKMEM by typing
`>TABLE TRKMEM`
and pressing the Enter key.
- 2 Position on the tuple to remove by typing
`>POS clli`
and pressing the Enter key.
where
`ccli`
is the CLLI identifier for the tuple

Example

```
>POS GOS3TIMF
```

- 3 Delete the tuple by typing
`>DEL`
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 4 Exit table TRKMEM by typing
`>QUIT`
and pressing the Enter key.
- 5 Access table TRKSGRP by typing
`>TABLE TRKSGRP`
and pressing the Enter key.
- 6 Position on the tuple to remove by typing
`>POS c11i`
and pressing the Enter key.
where
cli
is the CLLI identifier for the tuple

Example

```
>POS GOS3TIMF
```

- 7 Delete the tuple by typing
`>DEL`
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
>Y
TUPLE DELETED
WARNING: CURRENTLY NOT POSITIONED
```

- 8 Exit table TRKSGRP by typing
`>QUIT`
and pressing the Enter key.
- 9 Access table TRKGRP by typing
`>TABLE TRKGRP`
and pressing the Enter key.

- 10 Position on the tuple to remove by typing

```
>POS clli
```

and pressing the Enter key.

where

cli

is the CLLI identifier for the tuple

Example

```
>POS GOS3TIMF
```

- 11 Delete the tuple by typing

```
>DEL
```

and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
TUPLE DELETED
```

```
WARNING: CURRENTLY NOT POSITIONED
```

- 12 Exit table TRKGRP by typing

```
>QUIT
```

and pressing the Enter key.

- 13 Access table CLLI by typing

```
>TABLE CLLI
```

and pressing the Enter key.

- 14 Position on the tuple to remove by typing

```
>POS clli
```

and pressing the Enter key.

where

cli

is the CLLI identifier for the tuple

Example

```
>POS GOS3TIMG
```

- 15** Delete the tuple by typing
>DEL
and pressing the Enter key.

Example

The example that follows deletes a tuple from the table.

```
>DEL
```

```
ENTER Y TO CONTINUE PROCESSING OR N TO QUIT
```

```
>Y
```

```
TUPLE DELETED
```

```
WARNING: CURRENTLY NOT POSITIONED
```

- 16** Exit table CLLI by typing
>QUIT
and pressing the Enter key.
- 17** You have successfully completed this procedure.



Configuration management procedures

Provisioning a span of ISUP trunks

At the MAP level

- 1 Follow the Procedure , “Provisioning an ISUP trunk,” on page 115 to provision a single ISUP trunk.
- 2 To add an additional ISUP trunk, first access table TRKMEM by typing
>TABLE TRKMEM
and pressing the Enter key.
- 3 Add an additional tuple to table TRKMEM exactly as the original tuple provisioned in the Procedure , “Provisioning an ISUP trunk”, with the following exceptions:
 - extrknum - Make this value different from the original tuple’s value. It is recommended that external trunk numbers are assigned sequentially.
 - spmckts - Make this value different from the original tuple’s value. It is recommended that circuit time slot numbers are assigned sequentially.

Example datafill for table TRKMEM

```
SPMISUP 2 0 SPM 16 9 2  
SPMISUP 3 0 SPM 16 9 3  
SPMISUP 4 0 SPM 16 9 4
```

- 4 Exit table TRKMEM by typing
>QUIT
and pressing the Enter key.
- 5 Access table C7TRKMEM by typing
>TABLE C7TRKMEM
and pressing the Enter key.

- 6** Add an additional tuple to table C7TRKMEM exactly as the original tuple provisioned in the Procedure , “Provisioning an ISUP trunk”, with the following exceptions:
- extrknum - Enter the value from Step 3 of this procedure.
 - cic - Make this value different from the original tuple’s value. It is recommended that CIC numbers are assigned sequentially.

Example

Example datafill for table IC7TRKMEM

SPMISUP 2 445
SPMISUP 3 446
SPMISUP 4 447

- 7** Exit table C7TRKMEM by typing
>QUIT
and pressing the Enter key.

8

If	Do
you need to add additional tuples	Procedure 2
you do not need to add additional tuples	Procedure 9

- 9** You have successfully completed this procedure.



Configuration management procedures

Provisioning a span of PRI-250 trunks

At the MAP level

- 1 Follow the Procedure , “Provisioning a PRI-250 trunk,” on page 123 to provision a single PRI trunk.
- 2 To add an additional PRI trunk, access table TRKMEM by typing
>TABLE TRKMEM
and pressing the Enter key.
- 3 Add an additional tuple to table TRKMEM exactly as the original tuple provisioned in the Procedure , “Provisioning a PRI-250 trunk”, with the following exceptions:
 - extrknum - Make this value different from the original tuple's value. It is recommended that external trunk numbers are assigned sequentially.
 - spmckts - Make this value different from the original tuple's value. It is recommended that circuit time slot numbers are assigned sequentially.

Example datafill for table TRKMEM

```
SPMISUP 2 0 SPM 16 9 2  
SPMISUP 3 0 SPM 16 9 3  
SPMISUP 4 0 SPM 16 9 4
```

4

If	Do
you need to add additional tuples	Procedure 3
you do not need to add additional tuples	Procedure 5

- 5 Exit table TRKMEM by typing
>QUIT

and pressing the Enter key.

- 6 You have successfully completed this procedure.



Configuration management procedures

Provisioning a span of PTS MF trunks

At the MAP level

- 1 Follow the Procedure , “Provisioning a PTS MF trunk,” on page 135 to provision a single PRI trunk.
- 2 To add an additional PTS trunk, access table TRKMEM by typing
>TABLE TRKMEM
and pressing the Enter key.
- 3 Add an additional tuple to table TRKMEM exactly as the original tuple provisioned in the Procedure , “Provisioning a PTS MF trunk,” on page 135, with the following exceptions:
 - extrknum - Make this value different from the original tuple’s value. It is recommended that external trunk numbers are assigned sequentially.
 - spmckts - Make this value different from the original tuple’s value. It is recommended that circuit time slot numbers are assigned sequentially.

Example datafill for table TRKMEM

```
SPMISUP 2 0 SPM 16 9 2  
SPMISUP 3 0 SPM 16 9 3  
SPMISUP 4 0 SPM 16 9 4
```

4

If	Do
you need to add additional tuples	Procedure 3
you do not need to add additional tuples	Procedure 5

- 5 Exit table TRKMEM by typing
>QUIT

and pressing the Enter key.

- 6 You have successfully completed this procedure.



Configuration management procedures

Procedure for relocating SPM Host Linksets

At the MAP level

- 1 Identify a provisioned ENET shelf / card to which the re-location is to be done.

The ENET shelf / card should be datafilled in table ENCDINV.

The card should be a DS_512_ INTERFACE card.

- 2 Post the ENET card and identify an unequipped port.

>MAPCI ;MTC ;ENET ;SHELF 0/1 ; CARD #

The specified port should not be equipped.

Note: An unequipped port is indicated by a “-” at the MAP (refer to the figure below).

```

CM      MS      IOD      Net      PM      CCS      Lns      Trks      Ext      APPL
CM Flt  Istb    1DDUOS  .      2 SPM    .      .      2C..    4 FSP    .
M      M
CARD      ENET      System  Matrix  Shelf 0 1 2 3
0 Quit      Plane 0      .      .      .      . - -
2          Plane 1      .      .      .      . - -
3 QueryEN_
4 Locate_   SHELF 00    Slot      1111111 11122222 22222333 333333
5 Deload_   123456 78 90123456 78901234 56789012 345678
6 Tst_      Plane 0      .      .      .. ..... ----- ..... . .
7 Bsy_      Plane 1      .      .      .. ..... ----- ..... . .
8 Rts_
9 Offl_     CARD 29    Front:    Back:    DS-512 Links
10          Xpt      I/F      0 1 2 3
11 RExtTst_ Plane 0      .      .      . - . .
12          Plane 1      .      .      . - . .
13          rts 0 link 0
14 Link_
15 System
16 Matrix
17 Card_
18 Trnsl_
TEAM26
Time 11:28 >

```

- 3 Use the change command on the tuple in table MNLINK to determine the MS ports corresponding to the linkset being relocated.
Do *not* enter 'Yes' when asked for confirmation
Note: POS on the tuple corresponding to the linkset to be relocated in table MNLINK. Issue a 'change' command.
- 4 Ensure that the MS ports corresponding to the linkset to be relocated are in Insv state.
>MAPCI;MTC;MS:SHELF;CARD #
The MS ports displayed in step 3 are to be in INSV state.
Note: The INSV MS port is indicated as a '.' on the MAP terminal.
- 5 Post the linkset to be relocated.
>MAPCI;MTC;NET;SHELF#;CARD#
Note: This posts the ENET card to which the linkset are connected.
- 6 Busy the linkset to be re-located.
>BSY 0 link #
>BSY 1 link #
Ensure that both links, from CEM0 and its corresponding mate-link from CEM1, are set to MANB state.
The links can be made busy at MAPCI level:
MAPCI;MTC;ENET;SHELF 0/1; CARD #;
- 7 Offline the linkset to be re-located.
>OFFL 0 link #
>OFFL 1 link #
Ensure that both links, from CEM0 and its corresponding mate-link from CEM1, are set to Offline state.
The links can be made offline at MAPCI level:
MAPCI;MTC;ENET;SHELF 0/1; CARD #;
- 8 Post the SPM and ensure the SPM is in INSV/ISTB state
>MAPCI;MTC;PM;POST SPM #
- 9 BSY, INB all the trunks connected to the linkset (note below) that is Offlined.
>MAPCI;MTC;TRKS;TTP; POST D SPM #

```
>POST S CFL
>BSY ALL
>POST D SPM #
>POST S MB
>BSY INB ALL
```

Observe the trunks connected to the linkset which is Offlined change to CFL state. The trunks should be set to MB state before they are set INB state.

Ensure that there are no trunks connected to the SPM which are in CFL state. All the trunks which were in CFL state earlier due to the relocation are to be in INB state.

Note: ALL the trunks on this SPM that were previously (prior to SPM Host Link Relocation) in CFL state will also be affected due to this step. They will all be taken MB and INB. This will not affect any CallP, as the trunks would already be in CFL state prior to this step.

- 10 Execute the 'change' command on the corresponding tuple in table MNLINK

```
>TABLE MNLINK
>pos SPM #
>cha < corresponding link characteristics >
```

Note the MS port data corresponding to the relocated linkset displayed.

Changing the shelf / card / slot properties of only one linkset at a time is allowed during a change operation.

Note: Contact the next level of support if

- the tuple change operation was not successful.
- or*
- SPM311 logs with error string as "Error in SPM Hostlink Relocation." are generated after the change command is executed.

- 11 Post the card on which the links were previously located.

```
>MAPCI;MTC;ENET;SHELF 0/1; CARD #;
```

Observe that the port corresponding to the link is now unequipped. An unequipped port is indicated by a "-" at the MAP (refer to the following figure).

```

CM      MS      IOD      Net      PM      CCS      Lns      Trks      Ext      APPL
CM Flt  Istb    1DDUOS  .      2 SPM   .      .      2C..    4 FSP   .
M
CARD      M
ENET      System  Matrix  Shelf 0 1 2 3
0 Quit    Plane 0  .      .      .      . - -
2         Plane 1  .      .      .      . - -
3 QueryEN_
4 Locate_ SHELF 00  Slot      1111111 11122222 22222333 333333
5 Deload_      123456 78 90123456 78901234 56789012 345678
6 Tst_      Plane 0  .      .      .      . - -
7 Bsy_      Plane 1  .      .      .      . - -
8 Rts_
9 Offl_     CARD 29  Front:   Back:   DS-512 Links
10         Xpt      I/F     0 1 2 3
11 RExTst_  Plane 0  .      .      .      . - -
12         Plane 1  .      .      .      . - -
13         rts 0 link 0
14 Link_
15 System
16 Matrix
17 Card_
18 Trnsl_
TEAM26
Time 11:28 >

```

- 12 Post the card to which the links have been relocated.
>MAPCI;MTC;ENET;SHELF 0/1; CARD #;
Observe that the link is now in Offline state. An Offline link is indicated by a "O" at the MAP (refer to the figure above).
- 13 Physically re-locate the link from CEM0. This link corresponds to the link on CEM0 of the linkset to be re-located.
- 14 Physically re-locate the link from CEM1. This link corresponds to the link on CEM1 of the linkset to be re-located.
- 15 BSY the MS ports corresponding to the relocated linkset (refer to step 9 and use the displayed information to determine the MS ports corresponding to the relocated links).
>MAPCI;MTC;MS;SHELF;CARD #
>BSY <0/1> port#
Ensure both MS ports are set to MANB state (indicated by a 'M' on the MAP display).
- 16 Busy the re-located linkset.
>BSY 0 link #
>BSY 1 link #
Observe that both links, from CEM0 and its corresponding mate-link from CEM1, are set to MANB state.

The links can be made busy at MAPCI level:

MAPCI;MTC;ENET;SHELF 0/1; CARD #;

- 17 RTS the re-located linkset.

>RTS 0 link #

>RTS 1 link #

Observe that both links, from CEM0 and its corresponding mate-link from CEM1, are set to INSV state.

- 18 RTS the MS ports corresponding to the relocated linkset.

>MAPCI;MTC;MS;SHELF;CARD#

>RTS <0/1> port #

Observe that both ports are set to INSV state (represented as a '.' on the MAP display.

Observe that the SPM is back to INSV state after the relocation.

- 19 RTS the trunks that are affected by the relocation (note below).

>MAPCI;MTC;TRKS;TTP;POST D SPM #

>POST S INB

>MB ALL

>POST D SPM #

>POST S MB

>RTS ALL

The trunks affected by the move are already set to INB state. The trunks are first set to MB state before they are RTSed.

Note: ALL the trunks on this SPM that were previously (prior to SPM Host Link Relocation) in INB or MB state will also be affected due to this step. Therefore, any trunks that had been intentionally placed into INB or MB state will now be brought back into service. Those chosen trunks need to be returned to their desired state (INB or MB).

- 20 You have successfully completed this procedure.

