Upload Prerequisites Procedures and Setup

This chapter provides the following information to enable you to plan and upload Native Service Point software to your NetView or NetMaster:

- System requirements
- Upload procedure prerequisites
- Uploading Native Service Point software
- Configuring Cisco routers
- Building a list of routers
- Setting up automatic update of router status

System Requirements

Use an IBM PC or compatible to upload CiscoWorks Blue Native Service Point software from a PC running IBM OS/2 or DOS to either an MVS, VM, or VSE host. This section describes the software and hardware requirements for the PC used to upload the CiscoWorks Blue Native Service Point software and the mainframe host requirements.

Software Requirements for the PC

You must have the following operating system and software on your PC to upload Native Service Point software to your mainframe host.

- DOS or OS/2
- 3270 session with a mainframe host and file transfer capabilities (IND\$FILE)

- TSO session capability from your PC if your host is MVS
- CMS session capability from your PC if your host is VM
- CICS session capability from your PC if your host is VSE

Hardware Requirements for the PC

To upload Native Service Point software to your mainframe host, your PC must meet the following minimum hardware requirements:

- IBM PC-compatible 386 or higher
- 4 MB of RAM
- A serial port and/or a network interface card that provides network connectivity for the PC.

Host and Router Requirements

To use Native Service Point in your network, your mainframe host computer and Cisco routers must meet the following requirements:

- The host computer must be running:
 - NetView for MVS 1.3 or higher
 - VM 2.3 or higher and be compatible with NetView 1.3
 - VSE 2.3 or higher and be compatible with NetView 1.3
 - Sterling NetMaster 3.1 or higher
- Cisco IOS Release 11.0 or higher must be running on Cisco routers in your network.

Upload Procedure Prerequisites

Before you upload Native Service Point software to your MVS, VM, or VSE host, the following prerequisites must be met:

- VTAM must be configured for Cisco routers
- The Cisco router configuration must have the **sna host** command configured
- Routers must be verified from NetView

If these prerequisites are not met, you can still upload the Native Service Point software to a host, but you will not be able to view, access, or edit any router configurations.

Configuring the VTAM Connection

To access a Cisco router by using Native Service Point from your NetView console, the Cisco router must be connected to the VTAM host. The MVS, VSE, or VM programmer should define the service point name (SPname) for each Cisco router in the VTAM configuration.

For each router in your network, add the following lines to your VTAM configuration, making sure you substitute the router name, IDBLK, and IDNUM variables for each router:

```
SWDRTRS VBUILD TYPE=SWNET
ROUTER_NAME PU ADDR=01
                                                            х
PUTYPE=2
                                                            х
IDBLK=idblock number,
                                                            х
IDNUM=id number.
                                                            х
DISCNT=(NO),
ISTATUS=ACTIVE,
IRETRY=YES,
MAXOUT=7,
                                                            x
PASSLIM=5,
MAXPATH=4
SERVICE_POINT_NAME LU LOCADDR=locaddr,ISTATUS=status
```

Syntax Description

Following is the syntax description for the router name, IDBLK, and IDNUM variables:

The idblock number that will be sent to the host during connection establishment. The block number 05D is recommended for routers. The XID value is 8 hexadecimal digits that include both Block and ID numbers. For example, if the XID value is 05D00001, the Block number is 05D and the ID number is 00001.
The ID number for the router.

Example

Following is an example of a VTAM configuration for a router called *glendusk* with a service point name *glendusk*.

Note The router host name and service point name (SPname) can be identical or different. The service point name must be eight characters or less.

SWDRTRS VBUILD TYPE=SWNET	х
GLENDUSK PU ADDR=01 X	x
PUTYPE=2 X	x
IDBLK=05D	х
IDNUM=BB000	х
DISCNT=(NO)	х
ISTATUS=ACTIVE	x
IRETRY=YES	x
MAXOUT=7	x
PASSLIM=5	x
MAXPATH=4	x
GLENDUSK LU LOCADDR=02. ISTATUS=INACTIVE	x

Configuring Cisco Routers

Your Cisco routers must be configured and connected to your network according to the instructions provided in the Cisco documentation. For detailed information about configuring Cisco routers, refer to the documentation list in the About This Guide section in this manual.

To access your Cisco routers by using Native Service Point, the following requirements should be met.

Your router's configuration must have the following specified:

- Router host name
- Enable password

In addition, your router's configuration must contain the commands shown in the section Minimum Router Configuration for Using Native Service Point.

If your routers are attached remotely to another router and require RSRB definitions, also use the additional **sna host** commands for RSRB that are described later in this chapter.

Note If your routers' software also contains DSPU, you can add the **dspu host** commands to your routers' configuration. For information on the dspu host commands, refer to your router software documentation.

Minimum Router Configuration for Using Native Service Point

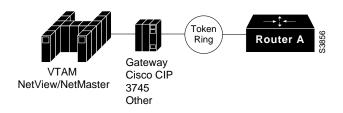
You can use Native Service Point to access your routers if each router's configuration contains the following commands:

sna host host-name xid-snd xid rmac remote-mac [rsap rsap-addr] [lsap local-sap] [focalpoint]

sna enable-host [**lsap** *lsap-addr*] sna start [resource-name]

These commands are sufficient if a router is directly connected to the host Token Ring and the router PU sends the XID directly to the Token Ring in a Source Route Bridging (SRB) frame. RSRB definitions are not used in this situation. See Figure 1-1 for an example.

Figure 1-1 Router Attached to a Host Token Ring



Syntax Description

Following is the syntax description for the **sna host** command:

numbers. For example, if the XID value is 05D00001, the Block number is 05D and the ID number is 00001. The MAC address of the remote gateway, for example CIP or 3745 rsap remote-sap [Optional] Specifies the SAP address used by the SNA to establish connection with the remote hose by the SNA to establish connection with the remote host.		
connection establishment. The XID value is 8 hexadecimal digits and include both Block and II numbers. For example, if the XID value is 05D00001, the Block number is 05D and the ID number is 00001. The MAC address of the remote gateway, for example CIP or 3745 rsap remote-sap [Optional] Specifies the SAP address used by the SNA to establish connection with the remote hos lsap local-sap [Optional] Specifies the the local SAP address used by the SNA to establish connection with the remote host. focalpoint Specifies that the host link will be used for the focal	host-name	The specified SNA host.
example CIP or 3745 rsap remote-sap [Optional] Specifies the SAP address used by the SNA to establish connection with the remote hose by the SNA to establish connection with the remote host. [Optional] Specifies the the local SAP address used by the SNA to establish connection with the remote host. [Optional] Specifies the the local SAP address used by the SNA to establish connection with the remote host.	xid-snd xid	connection establishment. The XID value is 8 hexadecimal digits and include both Block and ID numbers. For example, if the XID value is 05D00001, the Block number is 05D and the ID
SNA to establish connection with the remote hose lsap local-sap [Optional] Specifies the the local SAP address use by the SNA to establish connection with the remothost. focalpoint Specifies that the host link will be used for the focal specifies that the local saperatory.	rmac mac	5
by the SNA to establish connection with the remo- host. focalpoint Specifies that the host link will be used for the foc	rsap remote-sap	[Optional] Specifies the SAP address used by the SNA to establish connection with the remote host.
·	lsap local-sap	[Optional] Specifies the the local SAP address used by the SNA to establish connection with the remote host.
	focalpoint	Specifies that the host link will be used for the focal point support.

Example

The following command defines a link to an SNA host:

sna host CNM01 xid-snd 05dbb000 rmac 4001.3745.1088 rsap 4 lsap 4 focalpoint

Syntax Description

Following is the syntax description for the **sna enable-host** command:

lsap	[Optional] Activate a local SAP as an upstream SAP, for both receiving connectIn attempts and for starting connectOut attempts.
local-sap	Local SAP. The default is 12.

Example

The following example enables SNA on the interface and specifies that the local SAP 4 will be used for the session to the host:

```
sna enable-host lsap 4
```

Syntax Description

Following is the syntax description for the **sna start** command:

Example

The following example initiates a connection to CNM01:

```
sna start CNM01
```

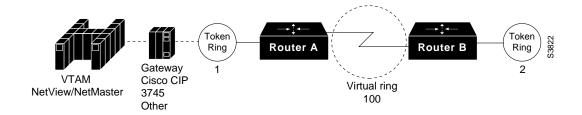
Router Configuration for Using RSRB Link

This section explains **sna host** commands you add to your router's configuration if the following situation exists:

- Router B is remotely attached through a virtual ring and requires RSRB definitions. Router B sends RSRB frames.
- Router Bmust be configured as a PU attache d to a remote Token Ring that in turn, is accessible through the virtual ring.

Figure 1-2 and Figure 1-3 show the physical and logical views of the router PUs attached to a remote Token Ring.

Figure 1-2 Physical View of Router PU Attached to a Remote Token Ring



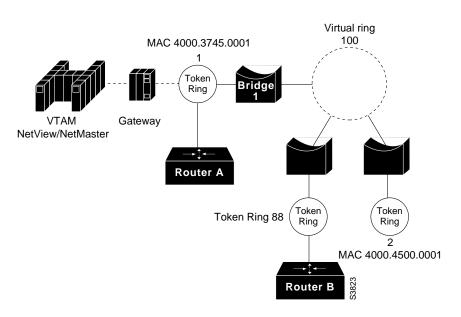


Figure 1-3 Logical View of Router Attached to a Remote Token Ring

Router A's configuration contains the following router commands:

sna host host-name **xid-snd** xid **rmac** remote-mac [**rsap** rsap-addr] [**lsap** local-sap] [focalpoint]

sna enable-host [lsap lsap-addr] sna start [resource-name]

Router B's configuration contains the following router commands:

sna host host-name **xid-snd** xid **rmac** remote-mac [**rsap** rsap-addr] [**lsap** local-sap] [focalpoint]

sna rsrb enable-pu [lsap local-sap]

Example

The following example shows the defintion for a SNA host with CMP? and a connection to be established across an RSRB link:

```
sna rsrb 88 1 100 4000.4500.0001
sna rsrb enable-host lsap 10
sna host ibm3745 xid-snd 06500001 rmac 40 00.3745.0001 lsap 10
```

Syntax Description

Following is the syntax description for the **sna host** command:

host-name	The specified SNA host.
xid-snd xid	The XID that will be sent to the host during connection establishment. The XID value is 8 hexadecimal digits that include both Block and ID numbers. For example, if the XID value is 05D00001, the Block number is 05D and the ID number is 00001.
rmac remote mac	The MAC address of the remote host gateway.
rsap rsap-addr	[Optional] Specifies the SAP address used by the SNA to establish connection with the remote host. The default is 4.
lsap local-sap	[Optional] Specifies the the local SAP address used by the SNA to establish connection with the remote host.
focalpoint	Specifies the host link that will be used for the focal point support.

Verifying Routers from NetView

Verify that routers in your network can be viewed from NetView. Use the following command at any command input prompt:

D Net, $ID = router_name$

The router's status should display as ACTIV.

Verifying Routers from NetMaster

Verify that the routers in your network can be viewed from NetMaster. Use the following command at any command input prompt:

D router name

The router's status should display as ACTIV.

Uploading Native Service Point Software

This section provides instructions on uploading Native Service Point for NetView and NetMaster:

- Uploading Native Service Point for NetView to an MVS host
- Uploading Native Service Point for NetView to a VMS host
- Uploading Native Service Point for NetView to a VM host
- Uploading Native Service Point for NetMaster to an MVS host

Uploading Native Service Point for NetView to an MVS Host

Follow these instructions to upload Native Service Point CLISTs, panels, and .SEQ files for NetView to an MVS host.

- **Step 1** Insert the Native Service Point diskette into your PC's diskette drive.
- Step 2 Log in to a TSO session using 3270. In the TSO session, make sure you are in the TSO command mode (ISPF option 6) or TSO (no ISPF).
- **Step 3** At the DOS or OS/2 command prompt in another window, enter the drive letter of the drive where the diskette is located. For example, if you are at the C:\ prompt in DOS and the diskette is in drive A, enter the following command and press Return:

C:\ **a:**

Step 4 At the DOS or OS/2 prompt, enter the following command to upload the CLISTs and panels for MVS:

mvsuload drive host_session_identifier

For example, if your diskette is located in drive A and the host session identifier is A. enter:

mvsuload a a

The CLISTs and panel members are uploaded in a BINARY and NOCRLF format to the MVS host by using the SEND command.

Step 5 Upload .SEQ files to the MVS host in a binary mode.

The record format (RECFM) of the receiving file must be a fixed block (FB) with a record size (LRECL) of 80.

The following message is displayed, indicating that the .SEQ files are being uploaded to the MVS host:

```
A:CISCOSCL.SEQ x:CISCOSCL.SEQ LRECL(80) RECFM(F)
A:CISCOSPL.SEQ x:CISCOSPL.SEQ LRECL(80) RECFM(F)
A:CISCOSPL.SEQ
```

The Native Service Point files are copied to the MVS host.

Step 6 On your host session, using the ISPF option 3.4, enter the following command to search for the files you uploaded:

```
prefix.cisco*
```

The prefix is your TSO ID prefix as specified in your profile.

The following message is displayed, indicating the files that are available:

```
prefix CISCOSCL.SEQ CLISTS/ROUTINES
prefix CISCOSPL.SEQ Panels
```

CISCOSCL.SEQ contains the CLISTs and CISCOSPL.SEQ contains the panels.

Step 7 In the first line, press Tab to place the cursor before the first file (CISCOSCL.SEQ) and enter the following command:

receive inds(/)

Step 8 When prompted, press Enter.

The PDS is created.

Step 9 Press Tab to place the cursor before the file on the next line (CISCOSPL.SEQ) and enter the following command and press Enter:

- Step 10 When prompted, press Enter.
- **Step 11** After the files are received, press PF3 and Enter to refresh the option 3.34 list.

The following files are displayed:

```
Dataset
                     Contents
prefix.CISCO.CLISTS CLISTS/ROUTINES
prefix.CISCO.PANELS Panels
prefix.CISCOSCL.SEQ Sequential Dataset
prefix.CISCOSPL.SEQ Sequential Dataset
```

Step 12 Contact your MVS programmer to move the Native Service Point CLISTS to the user's CLIST (DSICLD) library and the the Native Service Point panels into the user's PANEL (CNMPNL1) library.

You are now ready to build a list of routers for accessibility through NetView and set up the automatic update of routers' status. After those steps are completed, the NetView operator is now ready to use Native Service Point to access, view, edit and manage the routers and their configurations from within NetView.

Uploading Native Service Point for NetView to a VM Host

Follow these instructions to upload Native Service Point CLISTs, panels, and .SEQ files for NetView to a VM host.

Note If you want to use a different method for uploading the CLISTS, panels, and .SEQ files, use the following rules for transferring these members: BINARY, NOCRLF, RECFM(FB), and LRECL(80).

- **Step 1** Insert the Native Service Point diskette into your PC's diskette drive.
- **Step 2** Log in to a CMS session using 3270.
- **Step 3** At the DOS or OS/2 command prompt in another window, enter the drive letter of the drive where the diskette is located. For example, if you are at the C:\ prompt in DOS and the diskette is in drive A, enter the following command and press Return:

a:

Step 4 At the DOS or OS/2 prompt, enter the following command to upload the CLISTs and panels for VM:

mvuload drive host_session_identifier

For example, if you place your diskette in drive A and the host session identifier is A, enter:

mvuload a a

The CLISTs and panel members are uploaded in a BINARY and NOCRLF format to the VM host by using the SEND command.

- **Step 5** After the members are uploaded to your CMS A disk, verify that nine CLISTs and 27 panels are available on the disk.
- **Step 6** Contact your VM programmer to move the Native Service Point CLISTS to the user's CLIST (DSICLD) library and the the Native Service Point panels into the user's PANEL (CNMPNL1) library.

You are now ready to build a list of routers for accessibility through NetView and set up the automatic update of routers' status. After those steps are completed, the NetView operator is now ready to use Native Service Point to access, view, edit and manage the routers and their configurations from within NetView.

Uploading Native Service Point for NetView to a VSE Host

Follow these instructions to upload Native Service Point CLISTs and panels for NetView to a VM host.

Note If you want to use a different method for uploading the CLISTS and panels, use the following rules for transferring these members: BINARY, NOCRLF, RECFM(FB), and LRECL(80).

- **Step 1** Insert the Native Service Point diskette into your PC's diskette drive.
- **Step 2** Log into a CICS session using 3270.
- Step 3 At the DOS or OS/2 command prompt in another window, enter the drive letter of the drive where the diskette is located. For example, if you are at the C:\ prompt in DOS and the diskette is in drive A, enter the following command and press Return:

vseuload drive host_session_identifier

For example, if you place your diskette in drive A and the host session identifier is A, enter:

vseuload A A

The CLISTs and panel members are uploaded in a BINARY and NOCRLF format to the VSE host by using the SEND command.

- **Step 4** After the members are uploaded to your CMS A disk, verify that nine CLISTs and 27 panels are available on the disk.
- **Step 5** Contact your VSE programmer to move the Native Service Point CLISTS to the user's CLIST (DSICLD) library and the the Native Service Point panels into the user's PANEL (CNMPNL1) library.

You are now ready to build a list of routers for accessibility through NetView and set up the automatic update of routers' status. After those steps are completed, the NetView operator is now ready to use Native Service Point to access, view, edit and manage the routers and their configurations from within NetView.

Uploading Native Service Point for NetMaster to an MVS Host

Follow these instructions to upload Native Service Point NCLs, panels, and .SEQ files for NetMaster to an MVS host. You will need the assistance of your MVS programmer to complete this procedure by moving the panels to the user's PANEL (CNMPNL1) library and renaming the \$NWRUNCM NCL procedure as \$NWRUNCX.

Note The \$NWRUNCX routine does not exist in NetMaster.The **rtrcmd** and **rtroper** commands in Native Service Point call the \$NWRUNCX routine. The following procedure includes steps that require the programmer to rename the \$NWRUNCM routine to \$NWRUNCX and update the \$NWRUNCX routine to change UCASE to NOUCASE. This step is required to ensure that router data is not converted from lowercase to uppercase.

- **Step 1** Insert the Native Service Point diskette into your PC's diskette drive.
- **Step 2** Log into a TSO session using 3270. In the TSO session, make sure you are in the TSO command mode (ISPF option 6) or TSO (no ISPF).

Step 3 At the DOS or OS /2 command prompt in another window, enter the drive letter of the drive where the diskette si located. For example, if you are at the C:\ prompt in DOS and the diskette is in drive A, enter the following command and press Return:

a:

Step 4 At the DOS or OS/2 prompt, enter the following command to upload the NCLs and panels to MVS:

mvslodn drive host_session_identifier

For example, if you place your diskette in drive A and the host session identifier is A, enter:

mvslodn a a

The NCLs and panel members are uploaded in a BINARY and NOCRLF format to the MVS host by using the **SEND** command.

Step 5 Upload .SEQ files to the MVS host in a binary mode.

The record format (RECFM) of the receiving file must be a fixed block (FB) with a record size (LRECL) of 80.

The following message is displayed, indicating that the .SEQ files are being uploaded to the MVS host:

```
SEND
      A:CISCONCL.SEQ
                       x:CISCONCL.SEQ LRECL(80) RECFM(F)
SEND
      A:CISCONPL.SEQ
                       x:CISCONPL.SEQ LRECL(80) RECFM(F)
```

The Native Service Point files are copied to the MVS host.

Step 6 On your host session, using the ISPF option 3.4, substitute your TSO ID for *prefix* and enter the following command to search for the files you uploaded:

```
prefix.cisco*
```

The prefix is your TSO ID prefix as specified in your profile.

The following message is displayed, indicating the files that are available:

```
Dataset
              Contents
prefix CISCONCL.SEQ
prefix CISCONPL.SEQ
```

CISCONCL.SEQ are NCL procedures and CISCONPL.SEQ are panels.

Step 7 In the first line, press Tab to place the cursor before the first file (CISCONCL.SEQ) and enter the following command:

receive inds(/)

Step 8 When prompted, press Enter.

The PDS is created.

Step 9 Press Enter and then press Tab to place the cursor before the file on the next line (CISCONPL.SEQ). Enter the following command and press Enter:

- Step 10 When prompted, press Enter.
- **Step 11** After the files are received, press PF3 and Enter to refresh the option 3.4 list.

The following files are displayed:

```
Contents
prefix.CISCO.NCLPROCS
prefix.CISCO.PNLBCKUP
prefix.CISCONCL.SEQ
prefix.CISCONPL.SEQ
```

CISCO.NCLPROCS contains the NCL procedures and jobs, CISCO.PNLBCKUP contains the reproed panels, CISCONCL.SEQ contains NCL procedures and jobs unloaded to PDS, and CISCONPL.SEQ contains panels.

- **Step 12** Enter B to view the data sets.
- **Step 13** Contact your MVS programmer to complete Steps 14 through 18.
- Step 14 In the NCL procedures library, copy all the procedures except the PNLALLOC and PNLRESTR JOBS (available in the CISCO.NCLPROCS) to the NetMaster panels library.

Step 15 Edit the following statement using PNLRESTR and restore the panels to the NetMaster PANLUSR VSAM data set:

```
//PNLS DD DSN=NETMASTR.V3101.PANLUSR, DISP=SHR
//PNLSIN DD DSN=XXXXX.CISCO.PNLBCKUP, DISP=OLD
```

- **Step 16** Make a copy of the \$NWRUNCM NCL procedure and rename it as \$NWRUNCX.
- **Step 17** Change the UCASE to NOUCASE to ensure that the router data is not converted to uppercase.

Any changes in the NMMODS member should also be added to the \$NWRUNCX routine. Other changes to the \$NWRUNCX are optional. Do not use the sequence numbers in NMMODS. Use f (find) to locate the statements that need modifications.

Following is the sample output of the contents of a \$NWRUNCX NCL procedure:

```
>>CHANGE
                                                          00010000
-* NAME
          : $NWRUNCM
                                                EWR0XX
                                                        *00100000
>>TO
                                                          00100100
           : $NWRUNCX
-* NAME
                                                         *00101000
                                                EWR0XX
                                                         *00110000
                                                          00120000
>>ADD
-* Modify DATE : 29-JUN-1995
*00231000
-* SHRVARS=(RTRHCOPY, SV32TXT, SYSMSG)
*00232000
                                                          *00233000
>>ADD
                                                           01161000
-* JUL 95 Modified. Add RTRHCOPY to suppress output
H.Liberty*01170000
>>BEFORE
                                                           01170100
-* JUN 92
              CREATION.
                                                           B.YUNG
*01171000
                                                           01210000
                                                           01220000
>>CHANGE (REQUIRED)
 &CONTROL UCASE NOSHRVARS
                                                           01280000
                                                           01280100
 &CONTROL NOUCASE NOSHRVARS (Need lower case for router)
01280200
                                                           01280300
                                                           01300000
>>ADD
```

```
&IF .&RTRHCOPY NE .NO &THEN +
                                    -* Modified by HJL
03920000
>>BEFORE
                                                          03921000
   &WRITE DATA=EW0019 &WK1
                                                          03930000
                                                          03940000
>>ADD
  &IF .&RTRHCOPY NE .NO &THEN +
                                    -* Modified by HJL
04190000
>>BEFORE
                                                          04191000
                                     -* WRITE THE HIERARCHY
    &WRITE DATA=EW0020 &WK
04200000
                                                          04201000
                                                          04210000
>>ADD
  &IF .&RTRHCOPY NE .NO &THEN +
                                    -* Modified by HJL
04300000
>>BEFORE
                                                          04301000
   &WRITE DATA=EW0020 &WK
                                     -* WRITE THE HIERARCHY
04310000
>>ADD
                                                          04320000
  &IF .&RTRHCOPY NE .NO &THEN +
                                    -* Modified by HJL
04540000
                                                          04541000
>>BEFORE
   &WRITE LOG=YES DATA=EWR003 MESSAGE TEXT
04550000
                                                          04560000
                                                          04570000
>>ADD
  &IF .&RTRHCOPY NE .NO &THEN +
                                  -* Modified by HJL
04800000
>>BEFORE
                                                          04801000
    &WRITE LOG=YES DATA=EWR004 &WK4
04810000
                                                          04811000
>>ADD
                                                          04820000
                                    -* Modified by HJL
  &IF .&RTRHCOPY NE .NO &THEN +
05111000
>>BEFORE
                                                          05111100
  &WRITE LOG=YES DATA=EW0018 *END* -* DISPLAY TERMINATION MSG
05112000
```

Step 18 Save the changes to the \$NWRUNCX NCL procedure.

You are now ready to build a list of routers for accessibility through NetMaster and set up the automatic update of routers' status. After those steps are completed, the NetMaster operator is now ready to use Native Service Point to access, view, edit and manage the routers and their configurations from within NetMaster.

Building a List of Routers

To view, access, and manage all of the routers in your network from NetView or NetMaster, build a list of accessible routers by editing the RTRSINIT CLIST (NetView) or RTRSINIT procedure (NetMaster).

Building a List of Routers for Netview

Follow this procedure to build a list of routers for the NetView version of Native Service Point.

- **Step 1** Using a text editor, access the RTRSINIT CLIST.
- Step 2 Enter the following line for each router you want to access from Native Service Point:

&RTRLSTn = 'SPname [domain] [host name]'

SPname is the service point name of the router, domain is the NetView name of the domain where the router is located, and host name is the router's host name as defined in the router's configuration.

The SPname is required. The domain name and host name are optional if your router is located within the local domain, but specifying these arguments is recommended.

The single quote before and after the SPname or before the SPname and after the host name is required.

- **Step 3** Repeat step 2 for each router you want to access from Native Service Point.
- Step 4 If you want to define more than 28 routers for accessibility via Native Service Point (the maximum default value), add the following statement by substituting the number of routers:

&MAXNUM = number of routers

For example, if you have 55 routers you want the NetView operator to access, enter the following command:

&MAXMUM = 55

Step 5 Save the RTRSINIT CLIST.

Building a List of Routers for NetMaster

Follow this procedure to build a list of routers for the NetMaster version of Native Service Point.

- **Step 1** Using a text editor, access the RTRSINIT NCL procedure.
- **Step 2** Enter the following line for each router you want to access via Native Service Point:

&RTRLSTn = &STR SPname [domain] [host name]

SPname is the service point name of the router, domain is the NetView name of the domain where the router is located, and host name is the router's host name as defined in the router's configuration.

The SPname is required. The domain name and host name are optional if your router is located within the local domain, but specifying these arguments is recommended.

- **Step 3** Repeat step 2 for each router you want to access via Native Service Point.
- **Step 4** If you want to define more than 28 routers for accessibility via Native Service Point (the maximum default value), add the following statement by substituting the number of routers:

&MAXNUM = number_of_routers

For example, if you have 55 routers you want the NetMaster operator to access, enter the following command:

&MAXNUM = 55

Step 5 Save the RTRSINIT NCL procedure.

Setting Up Automatic Update of Router Status

To enable Native Service Point to automatically obtain and provide an updated status of your routers, the domains where they are located, and information of any operators that are logged in to the routers, your programmer needs to add certain commands to the NetView automation table or the NetMaster MSGPROC procedure.

Editing the NetView Automation Table

If you use NetView, your programmer should complete this procedure to ensure that the latest status about your routers is available to you in Native Service Point.

Step 1 Add the following commands to the NetView automation table:

```
IF MSGID='IST5901' & TEXT=MESSAGE
THEN EXEC (CMD('RTR590E' MESSAGE)) DISPLAY(Y) NETLOG(Y);
```

Step 2 If the IST5901 message already exists in the automation table, add the following commands *before* the existing entry your automation table:

```
IF MSGID='IST5901' & TEXT=MESSAGE
THEN EXEC (CMD('RTR590E' MESSAGE)) DISPLAY(Y) NETLOG(Y)
CONTINUE(Y);$
```

Step 3 Save the updated automation table.

Editing the NetMaster MSGPROC Procedure

If you use NetMaster, your programmer should complete this procedure to ensure that the latest status about your routers is available to you in Native Service Point.

Step 1 Add the following commands to the MSGPROC procedure of the operator who will receive the VTAM messages:

```
.M#IST590I
.M#5D90I
  &NODE = &STR &5
&NODECONN = &STR &2
                                        -* SAVE THE NODE Name
                                         -* GET THE NODE Status
                                         -* Call Update status
  RTR590E &NODE &NODECONN
  &GOTO .LOOP
                                           -* NEXT MESSAGE
```

Step 2 If the IST5901 message already exists in the procedure, add the following commands *after* the label in your MSGPROC procedure.