

ACC SNAPPlus2 Link Software User's Guide

Edition 4

HP 9000 Networking



Manufacturing Part Number: Z7485-90001

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1 **About ACC SNAPPlus2 Link Software**

Introduction

The ACC SNAPplus2 Link Software product allows Hewlett-Packard's HP-UX SNAPplus products to be used with SDLC over Multi-channel ACC Multiplexer products. This manual provides installation and configuration information that is specific to the SNA/ACC Software. Refer to the *ACC Error Guide* for information about SNA/ACC error codes.

The ACC SNAPplus2 Link Software product may be obtained for the 8-Channel HP-PB (NIO), the 8-Channel EISA, the 8-Channel PCI, and the 2-Channel HP-PB (NIO) interfaces.

NOTE

The ACC SNAPplus2 Link Software is needed when the SNAPplus2 Link is to be used with **SDLC** via multi-channel ACC. For SNA over X.25, only the X.25/ACC (ACC and X.25/9000 Link Software) and SNAPplus2 products are required.

When ACC SNAPplus2 Link Software is installed, the ACC interface supports SNAPplus2 running over SDLC, X25 or other protocols *simultaneously* on the same ACC multiplexer card.

Product Features

SNA/ACC software enables the use of HP-UX SNAplus2 products over SDLC via the multi-channel, multi-protocol ACC Interface.

The SNA/ACC product includes the following features:

- Installs with SD-UX utility *swinstall*
- Auto-Dial feature fully supported
- SNAplus2 communicates with ACC via either SDLC or X.25
- *snaacc_tool* utilities which provide debugging resources

Requirements and Considerations

OS Versions Supported

The ACC SNAPlus2 Link Software product supports HP-UX 11.0.

ACC Hardware Supported

The ACC Base Software product and the ACC and X.25/9000 Software Bundle product may be ordered to use with the following ACC hardware products:

- 8-Channel HP-PB (NIO) ACC Multi-channel Interface
- 8-Channel EISA ACC Multi-channel Interface
- 8-Channel PCI ACC Multi-channel Interface
- 2-Channel HP-PB (NIO) ACC Multi-channel Interface

Pre-requisite Software

You must have the following products already installed on your computer before you start the SNA/ACC installation procedure:

- SNAplus2, version 6.0
 - ACC Base Software, version 3.02 or later
- or
- ACC and X.25/9000 Software Bundle, version 3.02 or later

Usage

The SNAplus2 features can be used with multi-channel ACC products over SDLC and over X.25.

Using SNA Over SDLC

To use SNAplus2 over SDLC with the ACC cards, the SNAplus2 software product, the ACC Base Software and the ACC SNAplus2 Link Software must be installed on your system.

Using SNA Over X.25

To use SNAPplus2 over X.25 with the ACC cards, both the SNAPplus2 and the X.25/ACC products must be installed on your system. The SNA/ACC product is not required.

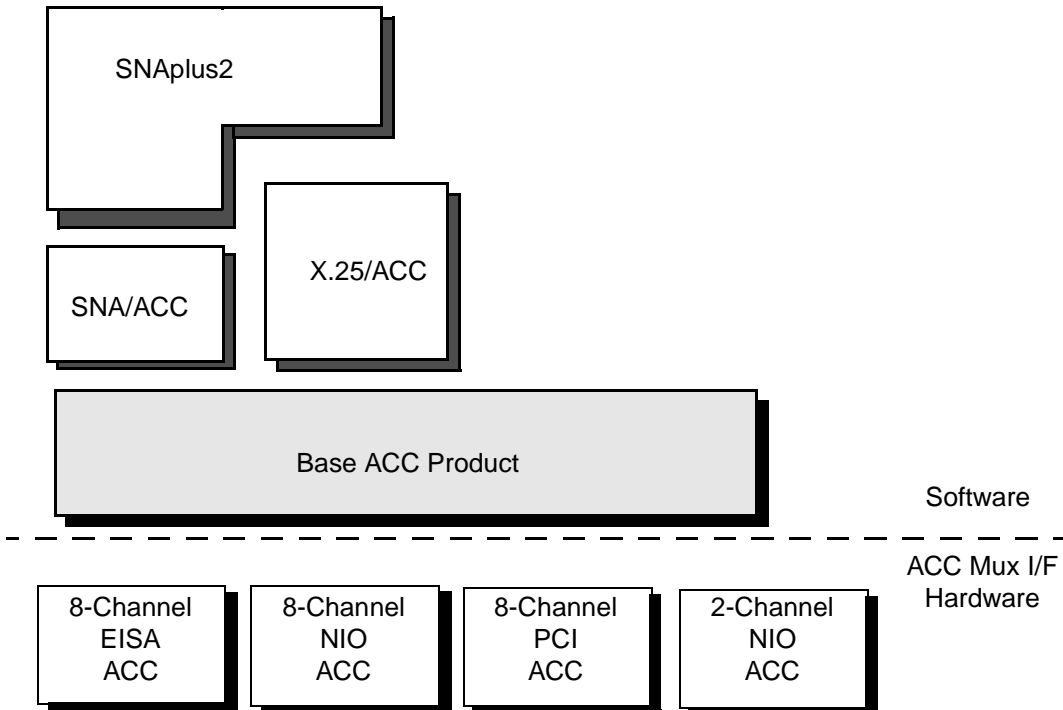
ACC Hardware Not a Pre-requisite

It is not a requirement that you install your ACC cards first before installing the pre-requisite ACC software mentioned above or the ACC SNAPplus2 Link Software. You may install the ACC software first, and then install your ACC cards later on.

However, in the case of the pre-requisite ACC software, if you install your ACC cards after this software has been installed, then you will need to do some configuration to update this installed ACC software to recognize these new cards. For details on this, refer to the *ACC Installation and Configuration Guide* that is provided with the ACC Base Software product, or the *X.25/ACC Installation and Configuration Guide* that is provided with the ACC and X.25/9000 Software Bundle product.

The SNAPplus2 Link with SNA/ACC

The diagram shown below illustrates the relationship between the SNAPplus2 product and the SNA/ACC software described in this document.



Supported Devices

HP-UX SNAPPlus2 Link software provides services with any compatible device conforming to IBM's Logical Unit types 0-3 and LU 6.2 architectures, which allows for APPC, LUA and CPI-C data exchanges in a Systems Network Architecture (SNA).

SNA/ACC provides HP-9000/SNAplus2 servers with expanded (multi-channel and multi-protocol) WAN access at conventional data rates via the HP-PB (NIO) 8-Channel and EISA 8-Channel ACC Multiplexer interfaces. It also provides high-rate WAN access via the HP-PB (NIO) 2-Channel interface and the 8-Channel PCI interface.

Mode of Operation

SNA/ACC supports the running of SNAPPlus2 Link in a client/server environment, provided the required LAN/9000 Series 700 or Series 800 software components, such as, the ARPA/Berkeley Sockets are configured.

Support for running SNAPPlus2 Link using QLLC via SNA/ACC requires installation of ACC and X.25/9000 software. Support for running SNAPPlus2 Link using SDLC via the Multi-protocol ACC Base System software and the ACC SNAPPlus2 link Software.

Data Rates

Data rates are available up to 76.8k baud for 8-channel ACC multiplexer cards using the HP-PB-standard backplane, or 128k baud for 8-channel cards installed in the EISA-standard backplane. The SNA/ACC product can be used at higher rates with high-speed ACC multiplexer cards, such as the 8-Channel PCI and 2-Channel ACC products with 512K baud capability.

References

For information on installing the ACC Base Software product and how to start up the ACC Subsystem, refer to the *ACC Installation and Configuration Guide*, which is provided with the ACC and X.25/9000 Software Bundle and the ACC Base Software products.

For information on using the utilities related to the ACC products, refer to the *ACC Utilities Reference Guide*.

For information on installing the X.25 protocol on ACC products, refer to the *X.25/ACC Installation and Configuration Guide*.

For information on SNA/ACC error codes and other ACC error, status, and warning messages, refer to the *ACC Error Guide*.

Introduction

This chapter describes how to install the ACC SNAPlus2 Link Software product using the *swinstall* utility.

NOTE

Successful completion of SNA/ACC software installation relies upon **PRIOR INSTALLATION OF THE ACC BASE SOFTWARE**. Use `swlist -l bundle` to confirm prior installation. You may disregard this if you are installing SNA/ACC concurrently with the ACC Base Software product.

The SNAplus2 Link product may be installed either before or after the SNA/ACC product. However, the SNAplus2 product must eventually be installed so that you can use its SAM SNAplus2 GUI to configure the SNA/ACC driver into system kernel.

If you intend to use SNAplus2 services over X.25/ACC, you must first install the ACC and X.25/9000 Software Bundle product or the ACC Base Software and the ACC X.25/9000 Link Software.

Software Installation

Running Swinstall

The SNA/ACC software is read from the HP-UX Application CD-ROM, in superuser mode, using the *swinstall* utility. The steps are shown below.

Step 1. Log in to the system as “root”.

Step 2. Place the media in a local or remote CD-ROM drive and mount the CD-ROM drive. For example:

```
% mkdir /cdrom  
% mount /dev/dsk/c1t1d0 /cdrom
```

Step 3. Run *.swinstall*, which behaves the same in the GUI interface as for the terminal interface. When the “Specify Source” box opens, select “Source Depot Type” to “Local CDROM”, or for a remote CD-ROM driver, select for “Network Directory/CDROM” and set “Source Host Name...”. Select “OK”.

Step 4. When you have made certain that the ACC Base Software or the ACC and X.25/9000 Software Bundle product is already installed, select the ACC SNAPplus2 Link Software item from the list of software bundles; open the “Actions” menu and select “Mark for Install”.

Step 5. When all items have been marked, select “Install (analysis)”; select “OK” and proceed.

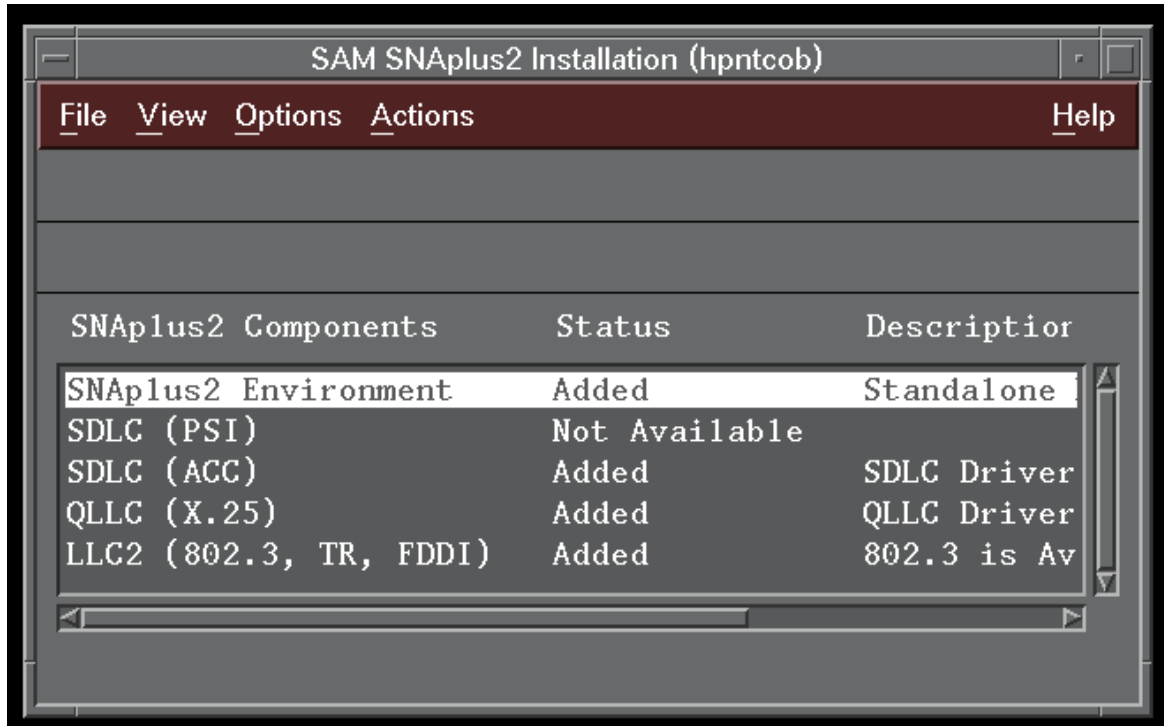
The “Install (analysis)” window allows you to track summary progress of the installation process. Use the “Logfile” feature to display a detailed status, which is logged to */var/adm/sw/swagent.log*.

Step 6. Exit *swinstall*.

Step 7. Run *sam* (see Figure 2-1). When the SAM GUI window opens, select and open the “Networking and Communications” window. When it opens, select and open the “SNAPplus2 Installation” window.

- Step 8.** Find the **SDLC (ACC)** item and double-click to execute the “Actions > Add Component” function. Repeat for the **QLLC (X.25)** item, if the status message reads *Not Added* (See screen illustration below).

Figure 2-1 **SNApplus2 Installation Using SAM**



- Step 9.** Click on “Yes” when SAM prompts you to exit, and click on “Yes” at the “Create New Kernel” prompt.

CAUTION

A final Confirmation message informs you that a new kernel will be rebuilt using the filesets installed, and the system will reboot. When you are ready, select “Yes”.

Software Identification

- The *what* utility can be run on */stand/vmunix* to show what version of drivers are actually generated into the system.
- If you need to check version status for ACC core firmware files installed on your system, use **what** on */opt/acc/sys*, */opt/acc/protocol*, and */opt/acc/<card-type>* directories.
- Use the SD utility **swverify** to check dependency relationships, file integrity and software states if needed.
- Once the system is up and running, the **zmntr** utility can be used to determine the revisions of firmware files that have been downloaded to the mux. Refer to the *ACC Utilities Reference Guide* for more information on the use of the *zmntr* utility.
- You can check to see that the SNA/ACC library *libsnaacc.a* is installed in the kernel along with the SNAPPlus2 libraries.

Installation Verification

If this is the first-time installation of an ACC card, the full procedure found in *ACC Installation and Configuration Guide*, Chapter 2, section “Installation Verification” can be used to verify that the ACC hardware and software have been properly installed and are functional. Otherwise skip that section and continue below.

Loopback Configuration Requirements

The ACC product provides a loopback protocol module which can be used to run a loopback test to exercise the ACC multiplexer card, any attached panel, and the specified port. The loopback test is run using the loopback test feature of the **zmntr** utility. (Refer to the *ACC Utilities Reference Guide*.)

The test requires the following:

- At least one ACC interface card must be installed into the system, and it must have a panel (or RS-232 cable if mux card is 2-Channel) attached.
- The ACC Base Software or the ACC and X.25/9000 Software Bundle product must be installed and the system must have been rebuilt and rebooted.

Loopback Configuration File

A loopback configuration file `/opt/acc/cfg/loopback.answ` is automatically created when the ACC Base Software was installed. It reflects the location of any ACC cards installed at the time *swinstall* was run. The *ttgen* utility is also automatically run on this file to create `/opt/acc/cfg/loopback.tmem`. Refer to *ACC Installation and Configuration Guide*, Chapter 2, if the ACC Mux cards have been moved within the system, or if additional cards have been added to the system.

Your ACC `.answ` file should look like the following:

```
#include "/opt/acc/cfg/ttgendefine"
ttgen
  Configuration
    system-name      "SNA/ACC Interface sample ttgen input file"
    program-zlu      100
    terminal-zlu      800
    logical-term      400
    physical-term     400
    buffer-pool       3000000
    logical-size      256
    queue-limit       200
    transmit-limit    100
    unack-limit       5000
    port-limit        20000
    E1T1-Port-Limit  100000
    node-entry        1

Interface-Definition
  <card-type> 0      <bus:slot> /opt/acc/<card-type>/loopback.zabs

Port-Definition
  Port 0:0 RS232 57600 Int SDLC X1 NRZ
  Port 0:1 RS232 57600 Ext SDLC X1 NRZ
  Port 0:2 RS232 57600 Int SDLC X1 NRZ
  Port 0:3 RS232 57600 Ext SDLC X1 NRZ
  Port 0:4 RS232 57600 Int SDLC X1 NRZ
  Port 0:5 RS232 57600 Ext SDLC X1 NRZ
  Port 0:6 RS232 57600 Int SDLC X1 NRZ
  Port 0:7 RS232 57600 Ext SDLC X1 NRZ

Terminal-Definition
  Term 600 0:0 HDLC.FRAME 0000h 0000h 41 0 0 0 0 "SNAPLUS device"
  Term 601 0:1 HDLC.FRAME 0000h 0000h 41 0 0 0 0 "SNAPLUS device"
*      ^^^ ^^^          ^^^^^          ^^
*  ZLU ____| |          |          |
*  mux:port____| |          |          |
*  poll word; use 0000h for
*  2-wire or 0080h for 4-wire_
*  application number; 41 for SNAplus2____|

Node-Definition
  Local-Node      123

End$
```

NOTE

Versions of SNA/ACC prior to B02.40 dynamically handled the creating of terminal definitions. Versions of SNA/ACC for 3.02 and above require the user to define terminals statically in the `.answ` files as illustrated in the example `.answ` file. You must add the Term entries to your `.answ` file and modify them appropriately for your configuration requirements.

Bringing Up ZCOM

Before any of the features of the ZCOM Mux Subsystem can be accessed, it must be started up by running **zmasterd** (located in `/opt/acc/bin`) with an appropriate **.tmem** file. The `/opt/acc/cfg/loopback.tmem` file should be used. Invoke `zmasterd` as follows:

```
% zmasterd cold /opt/acc/cfg/loopback.tmem
```

Messages indicating whether or not the ZCOM Mux subsystem was started successfully will be logged to the file `/var/opt/acc/log/XXX.tlog`, where `XXX` represents the day of the week, for example, `mon.tlog` and `tue.tlog`.

If any error is reported during the start up procedure, it may be necessary to stop the ZCOM subsystem by running:

```
% zmasterd stop
```

The error should then be addressed, and then the ZCOM subsystem should be restarted. Refer to the *ACC Error Guide* for detailed information about messages reported by `zmlog`.

SNA/ACC Software Verification

When it is determined that the ACC Multiplexer hardware and ACC Base Software are fully operational with no problems, the peer-to-peer test procedures in this section should be run to verify that the SNA/ACC installation is correct and the SNAplus2 software can work with it.

The SNAplus2 GUI, shown below (Figure 2-2), is convenient for this verification phase. If the SNAplus2 software is not running, issue the following command to manually start SNAplus2:

```
% /opt/sna/bin/snap start
```

SNAplus2 Configuration

Run the *xsnapadmin* program and set items found in the “Services” menu windows (Figure 2-2) per the following steps:

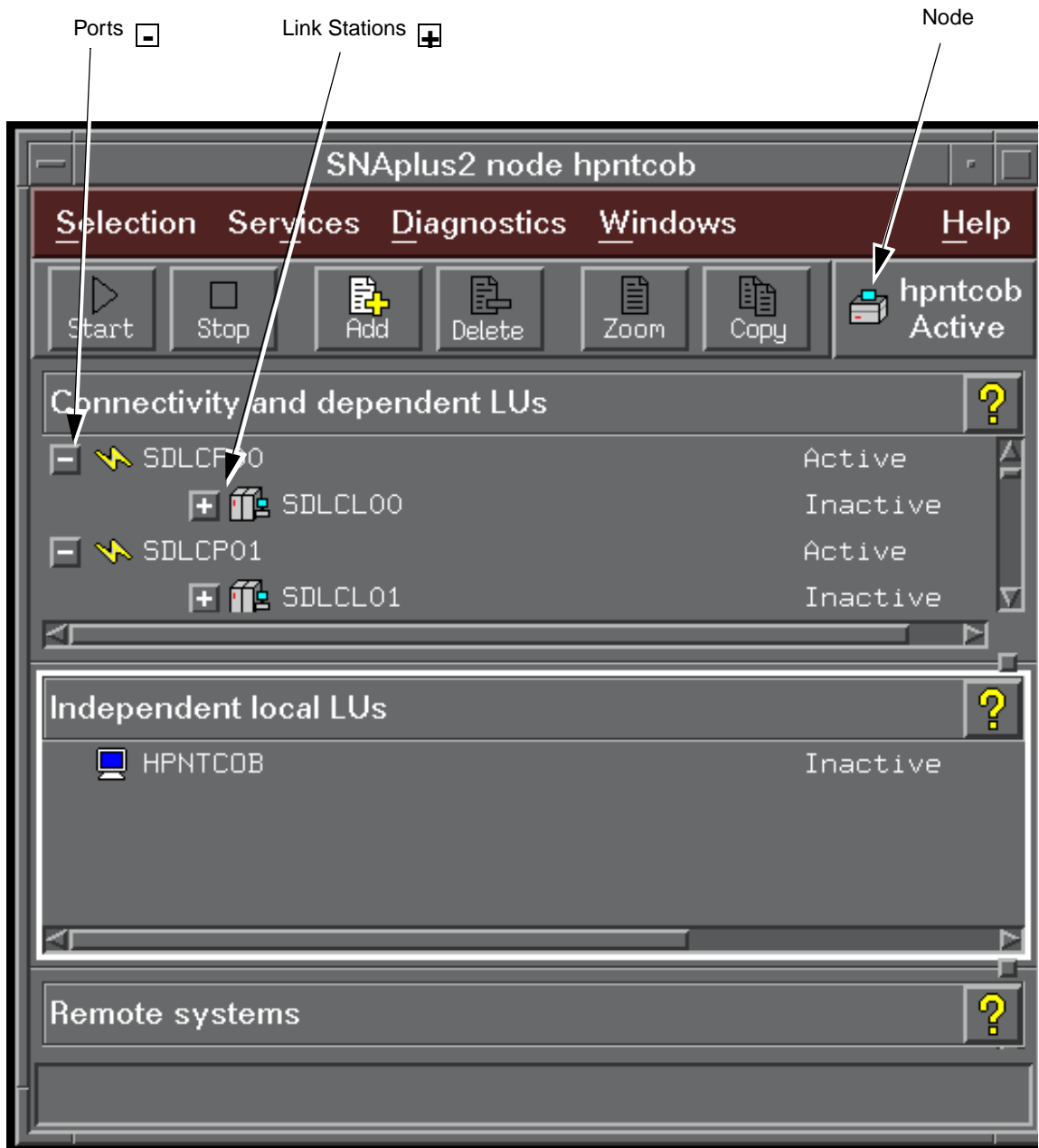
Step 1. Make the following selections under “Configure” in the *Node Parameters* window:

```
Control point name: USHWP01.<host_name>  
Control point alias: <host_name>  
Node ID: 05F FFFFF
```

Step 2. Make the following selections under “Connectivity” in the “*New Port*” window:

```
Port using: ACC SDLC card  
SNA port name: SDLCP0  
ACC SDLC card number: 0  
Port number: 0  
Initially active: depressed (red)  
Line details:  
Type: Leased line  
Link role: Secondary  
Encoding: NRZ  
Duplex setting: Half duplex
```

Figure 2-2 The *xsnapadmin* Screen (SNAPplus2 GUI)



Step 3. Make the following selections under “Connectivity” in the “*New Port*” window:

Port using: ACC SDLC card
SNA port name: SDLCP1
ACC SDLC card number: 0
Port number: 1
Initially active: depressed (red)
Line details:
Type: Leased line
Link role: Primary
Encoding: NRZ
Duplex setting: Half duplex

Step 4. Make the following selections under “Connectivity” in the “*New link station*” window:

Add link station to: SDLCP0
Name: SDLCL0
SNA port name: SDLCP0
Activation: By administrator
LU traffic: Dependent only
Local node ID: 05F FFFFF
Remote node ID: <blank> <blank>
Contact information:
Poll address: C1
Click on the “Advanced...” button. Select the following:
Max send BTU size: 265 (should be the default)
Host type: SNA
Send format 3 XID: depressed (red)
Don't send local node name: depressed (red)
Reactivate link station after failure: not depressed (grey)

Software Installation and Verification

Installation Verification

Step 5. Make the following selections under “Connectivity” in the “*New link station*” window:

Add link station to: SDLCP0
Name: SDLCL1
SNA port name: SDLCP1
Activation: By administrator
LU traffic: Independent only
Remote node... USHWP01.ACCP01
Contact information:
Poll address: C1

SNAPplus2 Over SNA/ACC Verification

Use the *xsnapadmin* program to activate the ports and link stations:

1. Activate the node first.
2. Activate the ports.
3. Activate the primary link station first. (Use the Zoom feature in the GUI if you need to configure a station as primary.)
4. Activate the primary link station first. (Use the Zoom feature in the GUI if you need to configure a station as primary.)
5. While the primary link station is “Starting”, activate the secondary link station.

In its “Connectivity and dependent LUs” section, the *xsnapadmin* screen should show the status of both ports and link stations as “Active” when the verification procedure has been successful.

3 Using SNAplus2 via SNA/ACC

Introduction

For a complete description of the communication formats, refer to the documents referenced on page 17 in Chapter 1 , “About ACC SNAPPlus2 Link Software,” of this manual.

Data transmitted at Level 2 over an SNAPplus2 link via ACC is in the SDLC format. When a QLLC link is used the data transmitted at Level 3 is framed into standard X.25 packet format.

The scope of this Chapter is confined to activation of the SNAPplus2 software, after which the ACC interface is merely a transparent or “pass-through” entity in the path.

Checking SNAplus2 Status

If the new kernel has booted successfully (Chapter 2, Section Software Installation, Step #8), the SNAplus2 software is probably running. Use the following command to check for the status of SNAplus2 on your system:

```
/opt/sna/bin/X11/xsnapadmin
```

NOTE

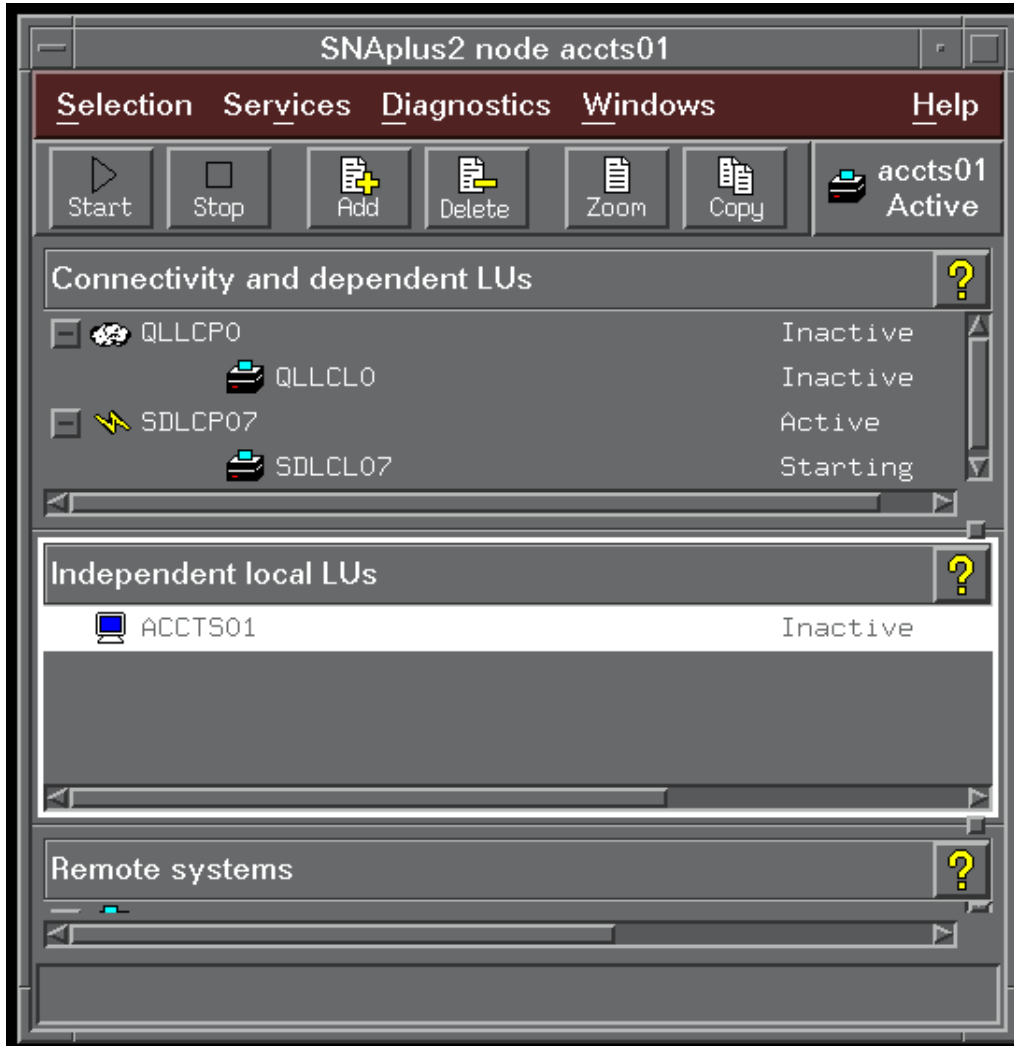
Use of *xsnapadmin* requires *Motif* interface software and a bit-mapped display to run X11. Use *snapadmin* as an alternative if necessary.

The *xsnapadmin* window appears as shown in Figure 3-1. If the SNAplus2 software is not running, issue the following command to manually start SNAplus2:

```
/opt/sna/bin/snap start
```

If this is unsuccessful, refer to the *HP-UX SNAplus2 Installation Guide* for detailed procedures.

Figure 3-1 *xsnapadmin* Window



A **Files, Utilities, and Daemons**

This appendix provides a sample of the SNAplus2 configuration file, which can be edited to reflect different host names, etc. on different systems. Note that editing this file is equivalent to running the *xsnapadmin* program.

sna_node.cfg File

```
/etc/opt/sna/sna_node.cfg--

[define_node_config_file]
major_version = 5
minor_version = 1
update_release = 1
revision_level = 18

[define_node]
node_name = <host_name>
description = ""
node_type = LEN_NODE
fqcp_name = USHWP01.<HOST_NAME>
cp_alias = <host_name>
mode_to_cos_map_supp = NO
mds_supported = YES
node_id = <05ffffff>
max_locates = 100
dir_cache_size = 255
max_dir_entries = 0
locate_timeout = 60
reg_with_nn = YES
reg_with_cds = YES
mds_send_alert_q_size = 100
cos_cache_size = 24
tree_cache_size = 40
tree_cache_use_limit = 40
max_tdm_nodes = 0
max_tdm_tgs = 0
max_isr_sessions = 1000
isr_sessions_upper_threshold = 900
isr_sessions_lower_threshold = 800
isr_max_ru_size = 16384
isr_rcv_pac_window = 8
store_endpt_rscvs = NO
store_isr_rscvs = NO
store_dlur_rscvs = NO
dlur_support = NO
pu_conc_support = NO
nn_rar = 128
ptf_flags = NONE
```

```
[define_sdlc_dlc]
dlc_name = SDLCO
description = ""
neg_ls_supp = YES
card_type = HP_ACC
initially_active = NO
adapter_number = 0
mu_credit = 4
stats_support = YES
num_ports = 8

[define_sdlc_port]
port_name = SDLCP0
description = ""
dlc_name = SDLCO
port_type = PORT_NONSWITCHED
port_number = 0
max_rcv_btu_size = 265
tot_link_act_lim = 1
inb_link_act_lim = 0
out_link_act_lim = 1
ls_role = LS_SEC
act_xid_exchange_limit = 10
nonact_xid_exchange_limit = 10
ls_xmit_rcv_cap = LS_TWA
max_ifrm_rcvd = 7
target_pacing_count = 7
max_send_btu_size = 265
address = 0x00
implicit_cp_cp_sess_support = NO
implicit_limited_resource = NO
implicit_deact_timer = 0
effect_cap = 9600
connect_cost = 0
byte_cost = 0
security = SEC_NONSECURE
prop_delay = PROP_DELAY_TELEPHONE
user_def_parm_1 = 0
user_def_parm_2 = 0
user_def_parm_3 = 0
initially_active = YES
idle_timer = 1000
idle_timer_retry = 60
np_rcv_timer = 1000
np_rcv_timer_retry = 30
write_timer = 1000
write_timer_retry = 5
link_conn_timer = 1000
link_conn_timer_retry = 60
pri_fdplx = NO
sec_fdplx = NO
```

Files, Utilities, and Daemons

sna_node.cfg File

```
use_rej = NO
spec_port_type = LEASED
max_xid_size = 256
max_retry_count = 10
opt1 = NONE
opt2 = NONE
linesp = 0
rcv_pool_size = 8
poll_wait = 1
hmod_data = ""
contact_timer = 3000
contact_timer_retry = 10
contact_timer2 = 10000
contact_timer_retry2 = 65535
disc_timer = 10000
disc_timer_retry = 2
nve_poll_timer = 100
nve_poll_timer_retry = 65535
nve_poll_timer2 = 500
nve_poll_timer_retry2 = 65535
no_resp_timer = 2000
no_resp_timer_retry = 10
rem_busy_timer = 2000
rem_busy_timer_retry = 10
rr_timer = 0
poll_frame = XID
poll_on_iframe = YES

[define_sdlc_port]
port_name = SDLCP1
description = ""
dlc_name = SDLCO
port_type = PORT_NONSWITCHED
port_number = 1
max_rcv_btu_size = 265
tot_link_act_lim = 1
inb_link_act_lim = 0
out_link_act_lim = 1
ls_role = LS_PRI
act_xid_exchange_limit = 10
nonact_xid_exchange_limit = 10
ls_xmit_rcv_cap = LS_TWA
max_ifrm_rcvd = 7
target_pacing_count = 7
max_send_btu_size = 265
address = 0x00
implicit_cp_cp_sess_support = NO
implicit_limited_resource = NO
implicit_deact_timer = 0
effect_cap = 9600
connect_cost = 0
```

```
byte_cost = 0
security = SEC_NONSECURE
prop_delay = PROP_DELAY_TELEPHONE
user_def_parm_1 = 0
user_def_parm_2 = 0
user_def_parm_3 = 0
initially_active = YES
idle_timer = 1000
idle_timer_retry = 60
np_rcv_timer = 1000
np_rcv_timer_retry = 30
write_timer = 1000
write_timer_retry = 5
link_conn_timer = 1000
link_conn_timer_retry = 60
pri_fdplx = NO
sec_fdplx = NO
use_rej = NO
spec_port_type = LEASED
max_xid_size = 256
max_retry_count = 10
opt1 = NONE
opt2 = NONE
linesp = 0
rcv_pool_size = 8
poll_wait = 1
hmod_data = ""
contact_timer = 3000
contact_timer_retry = 10
contact_timer2 = 10000
contact_timer_retry2 = 65535
disc_timer = 10000
disc_timer_retry = 2
nve_poll_timer = 100
nve_poll_timer_retry = 65535
nve_poll_timer2 = 500
nve_poll_timer_retry2 = 65535
no_resp_timer = 2000
no_resp_timer_retry = 10
rem_busy_timer = 2000
rem_busy_timer_retry = 10
rr_timer = 0
poll_frame = XID
poll_on_iframe = YES

[define_sdlc_ls]
ls_name = SDLCL0
description = ""
port_name = SDLCP0
adj_cp_name = <00000000000000000000000000000000>
adj_cp_type = HOST_XID3
```

Files, Utilities, and Daemons

sna_node.cfg File

```
address = 0xc1
auto_act_supp = NO
tg_number = 0
limited_resource = NO
solicit_sscp_sessions = YES
pu_name = SDLCL0
disable_remote_act = NO
default_nn_server = NO
dspu_services = NONE
dspu_name = <0000000000000000>
dlus_name = <0000000000000000000000000000000000>
bkup_dlus_name = <0000000000000000000000000000000000>
link_deact_timer = 0
use_default_tg_chars = YES
ls_attributes = SUPPRESS_CP_NAME
adj_node_id = <05ffffff>
local_node_id = <00000000>
cp_cp_sess_support = NO
effect_cap = 9600
connect_cost = 0
byte_cost = 0
security = SEC_NONSECURE
prop_delay = PROP_DELAY_TELEPHONE
user_def_parm_1 = 0
user_def_parm_2 = 0
user_def_parm_3 = 0
target_pacing_count = 7
max_send_btu_size = 265
ls_role = USE_PORT_DEFAULTS
initially_active = NO
react_timer = 30
react_timer_retry = 0
contact_timer = 3000
contact_timer_retry = 10
contact_timer2 = 10000
contact_timer_retry2 = 65535
disc_timer = 10000
disc_timer_retry = 2
nve_poll_timer = 100
nve_poll_timer_retry = 65535
nve_poll_timer2 = 500
nve_poll_timer_retry2 = 65535
no_resp_timer = 2000
no_resp_timer_retry = 10
rem_busy_timer = 2000
rem_busy_timer_retry = 10
rr_timer = 0
poll_frame = XID
poll_on_iframe = YES
opt1 = NONE
linesp = 0
```

```
hmod_data = ""

[define_sdlc_ls]
ls_name = SDLCL1
description = ""
port_name = SDLCP1
adj_cp_name = USHWP01.<REMOTE_HOST_NAME>
adj_cp_type = END_NODE
address = 0xc1
auto_act_supp = NO
tg_number = 0
limited_resource = NO
solicit_sscp_sessions = NO
pu_name = <0000000000000000>
disable_remote_act = NO
default_nn_server = NO
dspu_services = NONE
dspu_name = <0000000000000000>
dlus_name = <0000000000000000000000000000000000000000000000000000>
bkup_dlus_name = <0000000000000000000000000000000000000000000000000000>
link_deact_timer = 0
use_default_tg_chars = YES
ls_attributes = SNA
adj_node_id = <00000000>
local_node_id = <00000000>
cp_cp_sess_support = NO
effect_cap = 9600
connect_cost = 0
byte_cost = 0
security = SEC_NONSECURE
prop_delay = PROP_DELAY_TELEPHONE
user_def_parm_1 = 0
user_def_parm_2 = 0
user_def_parm_3 = 0
target_pacing_count = 7
max_send_btu_size = 265
ls_role = USE_PORT_DEFAULTS
initially_active = NO
react_timer = 30
react_timer_retry = 0
contact_timer = 3000
contact_timer_retry = 10
contact_timer2 = 10000
contact_timer_retry2 = 65535
disc_timer = 10000
disc_timer_retry = 2
nve_poll_timer = 100
nve_poll_timer_retry = 65535
nve_poll_timer2 = 500
nve_poll_timer_retry2 = 65535
no_resp_timer = 2000
```