

**Cleo® Host Interface for SNA
Quick Start Guide
Ethernet
CONVERSANT® V7
Installing from a CPIO Image**

Read this section first!

This Quick Start Guide contains information about installing the 4.1.3.4 version of the Cleo SNA for Avaya's CONVERSANT V7 software, the SNA over Ethernet software, the Synchronous Host Interface Package, and the Cleo Host Interface Package(vssnadip).

Important!

Read this document before installing and using the Cleo software. Refer to your Cleo SNA documentation for additional usage information. If you have questions about installing and using this product, contact CLEO Communications Technical Support between the hours of 8:30 A.M. and 5:00 P.M. (EST/EDT) at: 1.866.444.2536 or supportmi@cleo.com.



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Cleo SNA Ethernet 4.1.3.4 Installation

Software Prerequisites

- UnixWare 2.1.2
- CONVERSANT V7
- Script Builder or Voice@Work
- Cleo CPIO image software package files placed in the /voice1/cleo directory on the IVR.

Hardware Prerequisites

- Intel PRO/100+ PCI Ethernet Adapter

Note: If it is necessary to install the Ethernet Adapter hardware in your Conversant system, refer to the Ethernet LAN Circuit Card section of the Conversant System manual, version 7.0 (MAP/xx Maintenance)

CPIO IMAGE CONVENTIONS

Instructions in this document assume that the CPIO Image of the Cleo Host Interface software has been downloaded and that the CPIO image has been unzipped, resulting in the file(CleoSNAV7cpio.Z). The CleoSNAV7cpio.Z binary Unix Compressed file then has to be moved to the Avaya Conversant V7 IVR system and placed in a directory called /voice1/cleo that was created in the IVR's voice1 directory, using the following commands.

```
Login as "root"
```

```
# cd /voice1
```

```
# mkdir cleo
```

Then the Cleo Host Interface Software needs to be uncompressed, by issuing the following commands:

```
# cd /voice1/cleo
```

```
# uncompress CleoSNAV7cpio.Z
```

Then the Cleo Host Interface Software needs to be moved from the CleoTNAV7cpio cpio file, by issuing the following commands:

```
# cd /voice1/cleo
```

```
# cpio -ivBcdum < CleoSNAV7cpio
```

The following is a list of all the Cleo software packages available in the CPIO image:

```
vssnadipv7.img  
synchostv7.img  
sibv7.img  
tkrnv7.img  
tkrnv7ethintelpro100.img  
tkrnv7ethsmc.img  
sna128luv7.img
```

mgmtv7.img
cleo3270v7.img
cleoHTEv7.img
netmanv7.img

QUICK START INSTALLATION CHOICES

1. **FULL NEW INSTALLATION of Cleo Host Interface – SNA/Ethernet**

Proceed to Section “FULL NEW INSTALLATION”

2. **FULL UPGRADE OF EXISTING INSTALLATION of Cleo Host Interface – SNA/Ethernet**

Remove all existing Cleo Packages(See Appendix A)

Proceed to Section “FULL NEW INSTALLATION”

3. **ONLY UPGRADE EXISTING INSTALLATION of Cleo Host Interface – SNA/Ethernet**

Proceed to Section “ONLY UPGRADE vssnadip”

ONLY UPGRADE CLEO HOST INTERFACE(vssnadip)

If you are upgrading only the Cleo Host Interface vssnadip package you can issue the following pkgadd command to install it without removing the previous version.

```
pkgadd -d /voice1/cleo/vssnadipv7.img
```

The kernel will be rebuilt as a result of the pkgadd. Shutdown the system and reboot.

The **vssnadip** Package places enhancements to the Host DIP processing on the Conversant System. Please see the Release Notes for details of these enhancements.

The UPGRADE is COMPLETE!

FULL NEW INSTALLATION

Installing the Ethernet UNIX Network Driver

1. Login as *root*.
2. At the command prompt, type:

```
ifconfig -a
```
3. Look for the `eeE0` entry. If this entry is present, then the Ethernet UNIX network driver has been installed. Proceed to *Installing the Ethernet Link Level* on page 6.

If the driver is not present, go to step 4 below.

4. Install the CONVERSANT V7.0 “Ethernet Driver” software, using “`niccfg`”. For more detailed instructions, see the “Ethernet PCI Circuit Card – Installing the Ethernet PCI Driver” section of Chapter 2 of the CONVERSANT MAP/xx Maintenance manual, version 7.0.
5. At the command prompt, type:

```
/etc/confnet.d/configure -i
```
6. Choose the `eeE_0` device.
7. Enter the UNIX *system name*.
8. Enter the UNIX *ip address*.
9. Enter *info*.
10. Enter the netmask information.

For example: `netmask 0xff000000 BROADCAST 10.255.255.255.-trailers`

11. Answer “No” to the question about being a *gateway*.

12. Rebuild the kernel:

```
/etc/conf/bin/idbuild -B
```

Installing the Ethernet Link Level with Intel PRO 100+ PCI Ethernet Adapter

1. Log in as *root*.
2. At the command prompt type:

```
# pkgadd -d /voice1/cleo/tkrnv7ethintelpro100.img
```

The packages that are available are displayed, and you are prompted to select the packages you wish to install.

3. Press **Enter** to specify all.
4. The software is installed from the image file. After all the Link Level files are installed, the installation script makes sure that the required STREAMS drivers are installed — STREAMS is a standardized UNIX communication technology that is used by the Cleo software. New drivers are added to the kernel. This step may take several minutes.

Installing the Ethernet Link Level with SMC 8013 ISA Ethernet Adapter

1. Login in as *root*.
2. At the command prompt type:

```
# pkgadd -d /voice1/cleo/tkrnv7ethsmc.img
```

The packages that are available are displayed, and you are prompted to select the packages you wish to install.

3. Press **Enter** to specify all.
4. The software is installed from the image file. After all the Link Level files are installed, the installation script makes sure that the required STREAMS drivers are installed -- STREAMS is a standardized UNIX communication technology that is used by the Cleo software. New drivers are added to the kernel. This step may take several minutes.

Installing the SNA Level

1. Install the SNA Level package by entering the following command, and following the pkgadd instructions:

```
# pkgadd -d /voice1/cleo/sna128luv7.img
```

2. The installation script automatically performs required kernel tuning, and information is added to the kernel configuration. You are then asked to verify or change the current SDLC Frame Size.

The value specified for the SDLC Frame Size must match the value of the MAXDATA parameter in the NCP Gen at the host (the Cleo software will not operate if the SDLC Frame Size and the MAXDATA value do not match).

3. Make any required changes.

The cleohw.cfg utility informational message appears.

4. Press **Enter** to continue.

5. At this point, the kernel must be linked. The system will prompt you to link the kernel now.

6. Enter **Yes**.

The kernel is linked. This will take several minutes. When the link process is finished, press **Enter** to continue.

Installing Feature Packages

1. Install the Feature Level 1 package (ID: cleo_3270) by entering the following command:

```
# pkgadd -d /voice1/cleo/cleo3270v7.img
```

2. Install the Feature Level 1 package (ID: cleo_mgmt) by entering the following command:

```
# pkgadd -d /voice1/cleo/mgmtv7.img
```

3. Install the Feature Level 2 package (ID: cleo_hte) (HLLAPI Terminal Emulator) by entering the following command:

```
# pkgadd -d /voice1/cleo/cleoHTEV7.img
```

4. Install the Feature Level package (ID: cleo_netman) by entering the following command:

```
# pkgadd -d /voice1/cleo/netmanv7.img
```

Installing the Synchronous Host Interface Package for Cleo SNA Ethernet

1. Enter the following command to install the Synchronous Host Interface:

```
# pkgadd -d /voice1/cleo/synchostv7.img
```

Installing the vssnadip (Voice System Using SNA3270) CLEO HOST INTERFACE Software

1. If the voice system is currently running, then stop the voice system by entering the following commands:

```
# stop_vs
```

```
# comstop
```

2. Install vssnadip by entering the following command:

```
# pkgadd -d /voice1/cleo/vssnadipv7.img
```

3. Installation of the SNA 3270, Synchronous Host Interface and vssnadip components is complete.

Note: DO NOT reboot the UNIX operating system at this time. You must first complete *Configuring the Host Interface for Cleo SNA Ethernet* before rebooting the system.

Configuring the Host Interface for Cleo SNA Ethernet

Installation of the Cleo SNA Ethernet software is now complete. To configure the Cleo SNA Ethernet software, please refer to the "Host Configuration" section in Chapter 3, "Voice System Administration," of the CONVERSANT[®] System, Version 7.0 Administration Manual.

Briefly, here is the sequence of commands:

1. Run "cvis_menu"
2. Select "Configuration Management"
3. Select "Host Configuration"
4. Select "Token Ring Protocol"
5. Select "Add"
 - Enter Connection Name: **TKR1**
 - Enter Adapter Device Name: **eeE_0**
 - Enter Local SAP Address: **04 (default) - Host Network Value**
 - Enter Remote SAP Address: **04(default) - Host Network Value**
 - Enter Node ID to Send: **8 digit Host Network Value**
 - Enter Remote Network Address: **12 digit Network Mac Value**
 - Enter LU: **2-129 for 128 LUs**
6. Save the Configuration

NOTE: It is common for SNA Ethernet connections to a Host Mainframe to require a byte flipping of the "Remote Network Address". That is, it may be necessary to reverse the bit order of each byte of the "Remote Network Address" before entering it above.

NOTE (continued):

The reverse bit ordering conversion can be performed as follows:

1. List the Remote Network Address as 6 bytes, each byte representing 2 Hexadecimal digits.
2. Swap the order of the 2 digits of each byte.
3. Convert each digit according to the following:

0 → 0	8 → 1
1 → 8	9 → 9
2 → 4	A → 5
3 → C	B → D

4 → 2	C → 3
5 → A	D → B
6 → 6	E → 7
7 → E	F → F

EXAMPLE:

Original Address:	02 00 8C 4E 00 4F
Swap Digits:	20 00 C8 E4 00 F4
Convert Digits:	40 00 31 72 00 F2

System Shutdown

1. Use the UNIX `shutdown` command to shut down the system.
2. When the shutdown is complete, reboot the system.

APPENDIX A.

REMOVING Cleo Host Interface Software

1. Login in as *root*.
2. Stop the Voice System

```
# /vs/bin/util/stop_vs
```
3. If the *vssnadip* package has been installed, to remove the package, do so by entering the following command:

```
# pkgrm vssnadip
```
4. Terminate any running instances of the 3270 product by entering the following command:

```
# /vs/bin/util/stop_hi
```
5. Remove the Cleo software packages(including any supplements), in the following order by entering the following commands:

```
# pkgrm netman
# pkgrm cleoHTE
# pkgrm cleo3270
# pkgrm mgmt
# pkgrm sna128lu
# pkgrm tkrn
```
6. Shutdown the system
7. Reboot the system.