Cleo® Host Interface for SNA V9.1
Quick Start Guide
Ethernet
CONVERSANT® V8/R9
Installing from a CPIO Image

Read this section first!

This Quick Start Guide contains information about installing the 6.0.7.14 version of the Cleo SNA for Avaya's CONVERSANT V8/R9 Version 9.1 Software using an Ethernet adapter, the Synchronous Host Interface Package, and the CleoSDIP Package on a Unixware 7 Operating System.

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 6.0.7.14 Installation

Installation of a Cleo Enterprise Networking product requires that you obtain a License file(license.conf). The License file is available from Cleo Communications' Sales Department at (866)444-2536.

Software Prerequisites

- UnixWare 7.1.1
- CONVERSANT V8/R9
- Voice@Work or Script Builder

Hardware Prerequisites

- Intel PRO/100+ Ethernet PCI Adapter (MAP 40P)
- Force Computers Intel 2114 Ethernet Compact PCI Adapter (UCS 1000)

Installing the Ethernet UNIX Network Driver

1. Login as *root*.

2. At the command prompt, type:

3. `ifconfig –a | grep ether`
   Look for an entry that has "ether" followed by the ethernet adapter's 12 digit MAC address. If this entry is present, then the Ethernet UNIX network driver has been installed. Proceed to *Installing the Cleo SNA Software from CD* on page 8.

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

4. Install the CONVERSANT V8/R9 "Ethernet Driver" software, using "netcfg".
   At the command prompt, type:

   `# netcfg`

   netcfg will display "***Network Configuration Manager".*** For navigating around the screens use **TAB and ARROW KEYS**

5. The *netcfg* window displays 3 buttons: ***Hardware, Protocol, and View,*** on the top on the left-hand side. Use the **TAB** key, if necessary, to move to and highlight the ***Hardware*** menu item. Use the **DOWN ARROW** key to see the following menu:
   Add new LAN adapter
   (Remove network device)
   (Modify hardware configuration)
   (View hardware configuration)
   (Test Network Connectivity)
   (Switch to backup)
   (Revert to Primary)
   Exit

6. Use the **DOWN ARROW** key and choose **ADD NEW LAN adapter**. A screen will appear with a list of adapters that should include
   *Ethernet-Force Computers Intel 2114 - PCI …
   Use the **DOWN ARROW** key, if necessary, to choose the Ethernet-Force Computers entry. Use the **TAB KEY** to position the cursor on the **CONTINUE** button and press **ENTER**.

7. After awhile, the ***"Add Protocol"*** screen will appear.

8. Use the **DOWN ARROW** key and choose **TCP/IP** and then use the **TAB** key to move onto the **ADD** button and press **ENTER**. The "***Internet Protocol Configuration***" screen will appear. It will have the following fields:
   Host name
   DHCP client <> Yes <> No
   Domain Name
   IP address
   Netmask
   Broadcast address
   Default router
   [Advanced Options]

9. The ***Host name*** entry should be filled automatically with the value used in the ***uname*** command
   Ignore the ***DHCP client*** and ***Domain Name*** entries.
   Fill out the ***IP address***(eg. 10.1.66.34)
   Fill out the ***Netmask***(eg. 255.255.255.254)
   Fill out the ***Broadcast address***(eg. 10.1.66.255)
   Fill out the ***Default Router***(eg. 10.1.1.1)

10. Fill in all fields and use the **TAB** key to move to the ***"Advanced Options"*** menu item. Press **ENTER** and the ***"Advanced Configuration"*** menu will appear. Use the **TAB** key to move to the ***"Pseudo ttys"*** entry. Replace the current value with the value **256**. Use the **TAB** key to move to the **OK** button and press **ENTER**.

11. The ***"Internet Protocol Configuration"*** screen will reappear. Use the **TAB** key to move to the **OK** button and press **ENTER**.

12. After awhile, the "***Network Configuration Manager***" screen will appear with:
    The following product was successfully modified
    TCP/IP
    Ethernet-Force Computers Intel 2114 - PCI…
    With the cursor on the **OK** button, press **ENTER**. The first window will reappear with the display:
    HW Ethernet-Force Computers Intel 2114 - PCI…
    **** - TCP/IP***

13. The cursor will be on the ***Hardware*** menu item. Use the **DOWN ARROW** key. A menu window will appear. Choose **EXIT**

Installing the Cleo SNA Software

1. Log in as *root.*

2. If the "/voice1/cleo" directory does not already exist, create the directory to contain the Cleo Host Interface Software.

   ```
   # cd /voice1

   # mkdir cleo

   # chmod 777 cleo
   ```

3. After downloading and unzipping the CPIO image of the Cleo Host Interface binary Software, move the resulting file(CleoSNAV891cpio.Z) to the Avaya Conversant V8 system and place it in the /voice1/cleo directory, and uncompress the file.

   ```
   # cd /voice1/cleo

   # uncompress CleoSNAV891cpio.Z
   ```

4. Use the following command to move the Cleo Host Interface Software from the CleoSNAV891cpio file.

   ```
   # cpio -ivBcdum < CleoSNAV891cpio
   ```

****

Updating Cleo Software

If you already have Cleo SNA software installed, including the **synchost and either vssnadip, Csnhdip, Cleosndip, Cleosdip** packages, and only want to upgrade to the new **V 9.1** package, you can follow the **UPGRADE ONLY INSTRUCTIONS**, that follow, to finish the update, without removing the previous version.

If you already have Cleo SNA software installed, and want to re-install all of the Cleo SNA software, you will need to remove the existing packages by following the **REMOVE PREVIOUS VERSIONS OF CLEO**

SOFTWARE INSTRUCTIONS, below, before proceeding on to the **Installing Cleo SNA Package section** to re-install the Cleo SNA software.

In order to determine if you only need to upgrade to the new **CleoSDIP** Version 9.1 package, instead of doing a complete install, run the following command

pkginfo | grep cleosna

If no output results from the command, you need to do a full installation by proceeding to the **Installing the Cleo SNA Package section.**

If the command resulted in information showing that the **cleosna** package is already installed, you may be able to do an upgrade only. However, run the following command

pkginfo | grep synchost

If no output results from the command, you need to do a full installation by proceeding to the **Installing Cleo SNA Package section.**

If the command resulted in information showing that the **synchost** package is already installed, you only need to upgrade to the new **CleoSDIP** by following the **UPDATE ONLY INSTRUCTIONS** below.

UPGRADE ONLY INSTRUCTIONS

stop_vs

stop_hi

pkgadd –d /voice1/cleo/CleoSDIP

REBOOT…to determine if reboot is necessary see NOTE: below…

start_hi (if no re-boot was performed)

start_vs (if no re-boot was performed)

NOTE: A re-boot will be necessary if tuning is done when installing CleoSDIP. If no tuning is performed, then NO re-boot is necessary

The criteria for CleoSDIP performing tuning and requiring a reboot is:

- if there was no old **vssnadip, Csnahdip, Cleosndip, Cleosdip** found already installed. In that case CleoSDIP will do tuning, so a reboot will be necessary.
- If vssnadip (v8.4 or older) is found, then tuning will be performed and the system will require a re-boot.

The criteria for CleoSDIP NOT performing tuning and requiring a reboot is:

- If CleoSDIP is already installed and this is a re-install of CleoSDIP.
- If **vssnadip**(v8.5 or newer), **Csnahdip, Cleosndip, Cleosdip** was already installed on the system, no tuning will be done and NO re-boot will be necessary.

UPGRADE is now complete

****

REMOVE PREVIOUS VERSIONS OF CLEO SOFTWARE INSTRUCTIONS

stop_vs

stop_hi

pkgrm Cleosdip

pkgrm Cleosndip

pkgrm Csnahdip

pkgrm vssnadip

pkgrm synchost

pkgrm cleosna

The Removal of previous versions of Cleo Software is now complete. Proceed on to the **Installing the Cleo SNA Package section**.

Installing the Cleo SNA Package

Start the installation of the SNA Package

```
# pkgadd -d /voice1/cleo/cleosna
```

Installing the Synchronous Host Interface Package

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

   ```
   # stop_vs
   ```

   ```
   NOTE: Ignore any SNA license errors at this time.
   ```

2. Install the Synchronous Host Interface by entering the following command:

   ```
   # pkgadd -d /voice1/cleo/synchost
   ```

Installing the CleoSDIP (Voice System HOST DIP Using SNA) Software

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

   ```
   # stop_vs
   ```

   ```
   # stop_hi
   ```

2. Install **CleoSDIP** by entering the following command:

   ```
   # pkgadd -d /voice1/cleo/CleoSDIP
   ```

Note: When CleoSDIP is installed, kernel tuning may take place and the kernel will be re-built. Kernel tuning will not be necessary if Version 8.5 of the vssnadip package is already installed and you are upgrading to

Version 9.1 of CleoSDIP.

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

Instructions for Installing the License

1. Cleo Communications will email you a license file, "license.conf". Place the license file on the CONVERSANT V8/R9 system(eg. /tmp/license.conf). Cleo Communications will also assign a Serial Number for your system. The Serial number will be included with your software CD, or can be obtained by calling Cleo Technical Support. You will be asked to enter your Cleo Serial Number when running the ***snaaddlic*** command.

2. Install the license file by entering the following command:

```
# /opt/sna/bin/snaaddlic

Please enter the Cleo SNA Serial Number

nnnnnn

Enter the full path name of the license file to install:

/tmp/license.conf      (use own path if other than /tmp)

NOTE: You will see the contents of your license
displayed at this point.

Do you wish to continue?(y/n): y
```

Instructions for Displaying/Modifying the Cleo Serial Number

1. If you have already entered the Cleo Serial Number while installing the License, you can move on to the next Section ***"Basic Instructions for Configuring the Ho st Interace for Cleo SNA Ethernet"***

2. In order to display the current Cleo Serial Number, please enter the following command:

```
# /opt/sna/bin/cleoserial –r

The Cleo SNA Serial Number has a value of

          ==➔ 123456 ➔==
```

3. In order to modify the current Cleo Serial Number or store it on the system for the first time, please enter the following command:

```
# /opt/sna/bin/cleoserial –w 123456

Please confirm that you want to change the Cleo
SNA Serial Number to the value

          ==➔ 123456 ➔==

?[y/n]

y
```

Basic Instructions for Configuring the Host Interface for Cleo SNA Ethernet

Installation of the Cleo SNA Ethernet software and Unix Driver is now complete. To configure the Cleo SNA Ethernet software for 3270 sessions, please use the ***"snaconfig"*** program.

The "snaconfig" program can be run in 2 different ways to update the Cleo SNA Software's configuration.

OPTION #1 consists of editing the **SNA ETHERNET** CONFIGURATION TEXT file(/etc/opt/sna/snaeth.txt) and then running the "***snaconfig***" program to update the Cleo SNA Software's configuration.

OPTION #2 consists of running the "***snaconfig***" program, specifying command line parameters to update the Cleo SNA Software's configuration.

OPTION #1

Running *"snaconfig"* after editing the SNA ETHERNET CONFIGURATION TEXT file

1. If the SNA Software is running, then Stop the SNA Software by entering the following commands:

```
# stop_vs

# stop_hi
```

2. Edit the default SNA ETHERNET CONFIGURATION TEXT(/etc/opt/sna/snaeth.txt) file supplying your Host system's specific parameters. Note: See Appendix A. for a definition of the Host Configuration Parameters in the **SNA ETHERNET** CONFIGURATION TEXT file. See Appendix B. for the file's

default values.

3. Update the Cleo SNA Software's configuration using the following command:

```
# snaconfig -E

where -E specifies Ethernet configuration
```

4. If this is a new installation, then go to the "**System Shutdown**" section.

5. If you are modifying an existing System configuration and need to restart the SNA Software, then enter the following commands:

```
# start_hi

# start_vs
```

OPTION #2

Running *"snaconfig"* using parameters from the COMMAND LINE

1. If the SNA Software is running, then Stop the SNA Software by entering the following commands:

```
# stop_vs

# stop_hi
```

2. Run the ***"snaconfig"*** command specifying the appropriate Host

   Parameters to create or modify current settings:

   snaconfig -E [-P 1 | 2 | 3 | 4] [-MX dddd]

[-XS0xnnnnnnnn] [-XR 0xnnnnnnnn]

[-LSAP nn] [-RSAP nn]

[-M xxxxxxxxxxxx] [-FLIP Y | N] [-SESS d]

Where

-E specifies **SNA over ETHERNET**

-P 1 | 2 | 3 | 4 specifies **PORT # 1, 2, 3, or 4**

-MX dddd specifies **MAXDATA** decimal

-XS 0xnnnnnnnn specifies **8 digit** hexadecimal
IDBLK/NUM 0xnnnnnnnn to send

-XR 0xnnnnnnnn specifies **8 digit** hexadecimal
IDBLK/NUM 0xnnnnnnnn to recv

-LSAP nn specifies **2 digit** hexadecimal
LOCAL SAP

-RSAP nn specifies **2 digit** hexadecimal
REMOTE SAP

-M xxxxxxxxxxxx specifies **12 digit** hexadecimal
REMOTE MAC ADDRESS

-FLIP Y | N specifies **FLIP** the **MAC ADDRESS** bytes.
NOTE: Flipping is sometimes necessary when going from an Ethernet to Token Ring network

-SESS *d* specifies the **NUMBER** of **LUs**

NOTE:

APPENDIX A. has parameter descriptions for configuring the SNA Software for Ethernet using the "***snaconfig***" command. **APPENDIX B.** has the default values for the Configuration file. **APPENDIX C.** has examples of configuring the SNA Software for Ethernet.

EXAMPLE:

snaconfig -E -M 400000001234

(to specify 128 LUs using all of the default Host system parameters, except use REMOTE MAC ADDRESS 400000001234 instead of 400000000000)

3. If this is a new installation , then go to the "**System Shutdown**" section.

4. If you are modifying an existing System's configuration, and need to restart the SNA Software, then enter the following commands:

```
# start_hi

# start_vs
```

System Shutdown

1. Use the UNIX `shutdown` command to shut down the system.

```
# cd /

# shutdown
```

2. When the shutdown is complete, reboot the system.

Removing SNA Software

1. Login in as *root*

2. Teminate any running instances of the 3270 product by entering the following command:

   ```
   # /opt/sna/bin/stop_hi
   ```

3. Remove the Cleo software packages by entering the following commands:

   ```
   # pkgrm CleoSDIP

   # pkgrm synchost

   # pkgrm cleosna

   # pkgrm cleodocs     (optional package that may not
                        have been installed.)
   ```

4. Perform an orderly shutdown(eg. **/etc/shutdown**) and reboot the system.

APPENDIX A.

HOST CONFIGURATION PARAMETERS

The PARAMETERS defined in the "/etc/opt/sna/snasdlc.txt, /etc/opt/sna/snatkrn.txt, and /etc/opt/sna/snaeth.txt" file are:

NOTE: There should be NO spaces around the "=" signs in the /etc/opt/snaxxxx.txt files.

SNA_TYPE=S | T | E

Where **S**=SNA over SDLC

T=SNA over TOKEN RING

E=SNA over ETHERNET

PORT_NUM=1 | 2 | 3 | 4

Where **1** corresponds to

SDLCP0 for SDLC (note the Link Station will be **SDLCL0**)

TRSAP0 for Token Ring (note the Link Station will be **TRL0**)

ETSAP0 for Ethernet (note the Link Station will be **ETHL0**)

2 corresponds to

SDLCP1 for SDLC (note the Link Station will be **SDLCL1**)

TRSAP1 for Token Ring (note the Link Station will be **TRL1**)

ETSAP1 for Ethernet (note the Link Station will be **ETHL1**)

3 corresponds to

SDLCP2 for SDLC (note the Link Station will be **SDLCL2**)

TRSAP2 for Token Ring (note the Link Station will be **TRL2**)

ETSAP2 for Ethernet (note the Link Station will be **ETHL2**)

4 corresponds to

SDLCP3 for SDLC (note the Link Station will be **SDLCL3**)

TRSAP3 for Token Ring (note the Link Station will be **TRL3**)

ETSAP3 for Ethernet (note the Link Station will be **ETHL3**)

MAXDATA=dddd

Where **dddd** is the decimal value for MAXDATA

XIDS=0xnnnnnnnn

Where **0xnnnnnnnn** is the 8 digit Hexadecimal

IDBLK/NUM to send

XIDR=0xnnnnnnnn

Where **0xnnnnnnnn** is the 8 digit Hexadecimal

IDBLK/NUM to receive

LINE_TYPE=LEASED | SWITCHED **(SDLC ONLY)**

DUPLEX=HALF | FULL **(SDLC ONLY)**

ENCODING=NRZ | NRZI **(SDLC ONLY)**

CONSTANT_RTS=Y | N **(SDLC ONLY)**

POLL_ADDR=hh **(SDLC ONLY)**

Where **hh** is the 2 digit Hexadecimal Polling Address(eg. C1)

LOCAL_SAP=hh **(Token Ring & Ethernet ONLY)**

REMOTE_SAP=hh **(Token Ring & Ethernet ONLY)**

Where **hh** is the 2 digit Hexadecimal Remote **SAP**

MAC_ADDR=xxxxxxxxxxxx **(Token Ring & Ethernet ONLY)**

Where **xxxxxxxxxxxx** is the 12 digit Hexadecimal Remote Mac Address

FLIP=Y | N **(Ethernet ONLY)**

Where **Y** will flip the MAC_ADDR bytes.

SESS=d

Where **d** is the total number of LUs to use.

APPENDIX B.

DEFAULT VALUES for SNA ETHERNET CONFIGURATION TEXT FILE

SNA_TYPE=E

PORT_NUM=1

MAXDATA=1929

XIDS=0x05DFFFFF

XIDR=

LOCAL_SAP=04

REMOTE_SAP=04

MAC_ADDR=400000000000

FLIP=Y

SESSIONS=128

APPENDIX C.

EXAMPLES

snaconfig -E

This results in the Cleo SNA Software being configured for the default **SNA over ETHERNET** connection for 128 LUs.

snaconfig -E -SESS 32

This results in the Cleo SNA Software being configured for the default **SNA over ETHERNET** connection for 32 LUs.

Use "vi" to edit the /etc/opt/sna/snaeth.txt file to change the " MAC_ADDR=400000000000" to "MAC_ADDR=400000001234"

snaconfig -E

This results in the Cleo SNA Software being configured for the default **SNA over ETHERNET** connection, using a MAC ADDRESS of "400000001234" instead of "400000000000" for 128 LUs.

OR

The same result could be done by doing the following to modify the current SNA ETHERNET CONFIGURATION text file:

snaconfig -E -M 400000001234

OR

The same result could be done by doing the following to completely recreate the SNA ETHERNET CONFIGURATION text file:

snaconfig -E -P 1 -MX 1929 -XS 0x05DFFFFF -LSAP 04 -RSAP 04 -M 400000001234 -FLIP Y -SESS 128

APPENDIX D.

NEW "H" COMMANDS "hispy" and "cleoispy"

The "hispy" command allows a developer to interactively "spy" and "interact" with an assigned Host Session. As well as "capture" new Host Screens.

The "cleoispy" command is identical to "hispy", except that FUNCTION KEYS are not needed to execute the PF1-PF24, and PA1-PA3, 3270 commands. This should help developers dialing into the Avaya IR R1 system using emulators that do not support Function Keys.

The "hispy" or "cleoispy" command can be executed from the Solaris Sparc 8 command line as follows:

hispy n

cleoispy n

(Where: "n" is a single Host Session ID or Host Session ID range (eg. 0-10)

The **"hispy" and "cleoispy"** command will do the following for each Host Session ID specified:

1. Display the following message and then launch "sb_te" with the appropriate arguments to allow the user to **CAPTURE** any screen displayed by simply entering an **"ESC B"** key sequence.

2. The **CAPTURED** screen is **APPENDED** to the Screen Capture file of the Voice@Work or Script Builder application's screen capture file(s)

   /vs/data/host/appl.sc & appl.nam for V@W

/att/trans/sb/appl/appl.sc for Script Builder

of the Application currently assigned to the specified Host Session ID.

NOTE: If **NO** screen capture file(s) exist, for the Application, any Screen Captures will be placed in new screen file(s)

/vs/trans/appl.sc

/vs/trans/appl.nam (for Voice@Work only)

3. The **CAPTURED** screen can then be used later, by the Application Developer, to define Screen Identifiers and Fields of the screen and call flow **recovery, login, logout, or transaction** processing.

4. When the user is placed into the **sb_te** program by the **"hispy/cleoispy"** program, all the features of **"sb_te"** are available to **NAVIGATE** through the Host Application screens, **AND CAPTURE SCREENS** along the way.

5. When finished **INTERACTING/CAPTURING** screens in **sb_te,** use the **CTRL-X** key sequence to exit from the currently specified Host Session ID.

6. The **hispy/cleoispy** command will exit after the Last/Only Host Session ID is exited with the **CTRL-X** key sequence.

7. The **hispy/cleoispy** command can be entered **NO MATTER WHAT STATE** an **ASSIGNED** Host Session ID is in.

8. When the **hispy/cleoispy** command is processing an **ASSIGNED** Host Session ID, the **HOST DIP**(/vs/bin/vrs/agdip3270) is not able to access that Host

Session ID.

9. The **hispy/cleoispy** command is mainly intended to help Application Developers debug problems with the Host Interface portion of Voice Applications.

   Therefor, **hispy/cleoispy** will allow the Developer full freedom to manipulate a Host Session ID. If such manipulation results in placing a Host Session ID in an "awkward/broken/confused" state, please feel free to use the **hfree/hassign** commands to **FIX** such problems.

10. The **hspy** command is still available to simply display the current screen of an assigned Host Session ID.

11. Typical uses of **"hispy/cleoispy"** are :

    - Capture an **UNRECOGNIZED** error screen that was never encountered before.

    - Capture screen(s) that were never encountered before until a non-common call flow was taken by the caller.

    - Navigate through Host Application Screens, capturing screens along the way, to define a **"recovery"** sequence to add to the current Application.

    - Test/develop Host call flows during development.

APPENDIX E.

Host DIP PARAMATERS Configuration File

/vs/etc/default/agdip3270

The Host DIP Parameters Configuration File, contains parameters that can change how the Host DIP operates.

The /vs/etc/default/agdip3270 configuration file is read each time the Host DIP is started/re-started.

The Host DIP is started/restarted whenever:

The system is rebooted

"start_vs" is run

"start_hi" is run

The agdip3270 process is killed while Voice System is active

Some of the Host DIP Parameters are either turned on or off by specifying "YES" or "NO" as a value for the parameter.

The default version of the Host DIP Parameters Configuration File is shown below:

/vs/etc/default/agdip3270

```
#
# Default values for the "agdip3270" daemon
process.

# SESSIONS_TO_START determines how many sessions
will be sending or
# getting screens at any one time per host3270
board.
# The default is to have the maximum of 32 sessions
concurrently
# interacting with the host.
SESSIONS_TO_START=32

# LOGOFF_TIMEOUT specifies the maximum amount of
time stop_vs will
# wait for any active sessions to be logged out
when the voice system
# is being stopped.
LOGOFF_TIMEOUT=60

# MAX_NUMBER_OF_LUS specifies the maximum number of
LUS that
# can be configured for a system.
MAX_NUMBER_OF_LUS=32

#it allows the host dip to send reset key when the
lu is input inhibited; and
#the host dip to send system request key when the
screen is SSCP or UNOWNED.
# DEFAULT IS NO
AUTORESET_LUS=NO

# The amount of time to pause after getting a
response from the host.
# This parameter is only in effect during the
login, logout, or
```

```
# recover sequences.
# No pausing is done while the LU is handling a
call.
# Setting this parameter to zero, will turn off
pausing completely.
PAUSE_BETWEEN_SCREENS=5

# The number of RECOVERY RETRIES to do before Doing
A POWER OFFON.
# Will do the POWER OFFON every multiple of this
many RECOVERY RETRIES.
RETCOUNT_TODO_POWEROFF=5

# The amount of STAGGER time between RECOVERING LUS
to be RESSTARTED.
#STAGGER_BETWEEN_RETRIES=5

# Whether or NOT to do a POWER OFFON sequence
instead of a SYS REQ AID KEY.
# Default is NO Set to YES To use POWEROFF.
#SYSREQ_IS_POWEROFF=NO

# Do Special UNFORMATTED SCREEN HANDLING.  Some
UNFORMATTED screens do not
# allow a CLEAR KEY.  To work around this problem
define a SCREEN with a
# FIELD NAME that has as part of the name the
string "unformat_f".
# When a SCREEN with a FIELD NAME CONTAINING
"unformat_f" is encountered,
# the DIP does a ERASE TO END OF FIELD command and
then positions the
# cursor at 1,1.
# Default is NO
#DO_UNFORMAT_SCR_SPECIAL=YES

# Do EOF(Erase to End of Field) from Beginning of
current field.  To do
# this must name a field with the string
"EOF_begin" imbedded in the name.
```

```
# Default is NO
#DO_EOF_BEGIN_FIELD=YES

# Do EOF from where cursor is in current field.  To
do this must name a
# field with the string "EOF_current" inbedded in
the name.
# Default is NO
#DO_EOF_CURRENT_FIELD=YES

# Do HARDFAIL recovery logic.  Default is YES.
#HARD_FAIL_RECOVERY=NO

# HARDFAIL Retry Timer.  Default is 300 seconds.

#HARDFAIL_RETRY_TIME=600

# WRONG SCREEN ACTION.  If encounter a WRONG
SCREEN, If
#     ACTION = 0 Handle as always
#     ACTION = 1 Send Screen even if on wrong screen
#     ACTION = 2 Force LU into recovery
#WRONG_SCREEN_ACTION=1

# IF Need to do RESERVE of LU across Applications
while processing 1
# transaction, then set
# DO_VXML_MULTIPLE_TRANS=1
# This means exiting an application during a call
won't leave transaction state.
# DEFAULT is DO_VXML_MULTIPLE_TRANS=0
#DO_VXML_MULTIPLE_TRANS=1

#
# IF doing 5250 and need to use AID KEY PAGE UP,
USE SELPEN AID KEY instead
# and set PGUP_IS_SELPEN=1.  Default is
PGUP_IS_SELPEN=0
#PGUP_IS_SELPEN=1
```

```
# IF doing 5250 and need to use AID KEY PAGE DOWN,
USE ATTENTION AID KEY instead
# and set PGDWN_IS_ATTN=1  Default is
PGDWN_IS_ATTN=0
#PGDWN_IS_ATTN=1

# If doing 5250 and need to use TABs.  For example
to TAB out of a field
# in order to do a Function Key.  Then Turn on PA1
to be N TABs,
# PA2 to be N TABs, and PA3 to be N TABS.  The
default for all 3 options
# is OFF, a value of zero(0).
#PA1_IS_TAB = 1
#PA2_IS_TAB = 2
#PA3_IS_TAB = 3

# If doing 5250 and need to filter out all
attributes, but unprotected fields,
# set FILTER_ATTR=1.  Default is FILTER_ATTR=0
#FILTER_ATTR=1

# NOTE NOTE NOTE NOTE:  IF DOING ANY OF THE
UNCOMMENTED NEW FEATURES,
#                       MUST INCLUDE THEM IN THE
ORDER SHOWN!!!!
```

APPENDIX F.

NEW CLEO EXTERNAL FUNCTIONS TO RESERVE and RELEASE LUs

Cleo has developed 2 External Functions that can be used by an IVR Designer Host Application to allow an Application Developer the ability to reserve a Host Session and then determine when to release the Host Session(LU).

The 2 External Functions were originally developed for use with VXML applications that have a need to use an IVR Designer Host Application, by invoking CallScript to activate the Host Application. The Host Application uses the External Function Ret2vxml.

When the IVR Designer Host Application is called, the VXML application can pass arguments. One of the arguments could indicate to the Voice Application that it needs to Reserve a Host Session(LU) or Release a Host Session(LU).

If a Reserve Host Session(LU) is not done, then each time the Host Application is invoked, a different Host Session(LU) could be used and the Host Application would have to navigate back to the "transaction" based screen each time it is invoked.

To allow an IVR Designer Host Application to use the same Host Session(LU) when it is called multiple times by a VXML Application, the following 2 External Functions were developed.

Cleo External Function Cleoresrvlu

The ***Cleoresrvlu*** function instructs the Cleo Host DIP(DIP0) to reserve a Host Session(LU) for the input application name and voice channel, until a ***Cleorelslu*** function is called.

A successful call to this function results in the Host Session(LU) being exclusively associated with the caller's input voice channel, and the Host Session(LU) is returned to the caller.

The ***Cleoresrvlu*** function is called with the following arguments:

Hostapp(In/Str) – Name of IVR Designer Host Application.

Channel (In/Number) = Voice Channel

LUnum (Out/Number) = LU number/Host Session reserved.

Cleo External Function Cleorelslu

The *Cleorelslu* function instructs the Cleo Host DIP(DIP0) to release a Host Session(LU) for the input voice channel. A successful call to this function results in the Host Session(LU) being released.

The *Cleorelslu* function if called with the following arguments:

Channel (In/Number) = Voice Channel

Copying External Functions Cleoresrvlu and Cleorelslu to IVR Designer Desktop

The *Cleoresrvlu* and *Cleorelslu* functions reside on the Cleo Host Interface CD and are also located in the /cleo/install directory on the AIR system.

The following files need to be ftp'd to the IVR Designer Desktop, in order to use these external functions with an IVR Designer Host Application. The files on the AIR system are:into the directory

C:\Program Files\Avaya\Avaya IVR Designer\ExtFuncs

/cleo/install/Cleoresrvlu.bmp

/cleo/install/Cleoresrvlu.ef

/cleo/install/Cleorelslu.bmp

/cleo/install/Cleorelslu.ef

These files need to be placed in the following directory on the IVR Designer Work Station PC:

C**:\Program Files\Avaya\Avaya IVR Designer\ExtFuncs**