Personal Communications
AS/400 and 3270 for OS/2

IBM

Tell Me About OS/2 Access Feature

Version 4.1

SC31-8257-00

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Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 17.

First Edition (March 1996)

This edition applies to Version 4.1 of Personal Communications and to all subsequent releases and modifications until otherwise indicated in new editions or technical newsletters. Make sure you are using the correct edition for the level of the product.

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About This Book

This book describes OS/2 Access Feature and shows you how you can use it as a communications subsystem for Personal Communications to provide connections, such as ISDN or X.25, that Personal Communications does not have.

Related Information

More detailed information about installation and configuration is available in the online helps.

The following documentation is also available:

Personal Communications Information Notebook, which includes online versions of:

- *Personal Communications Up and Running*
- *Personal Communications Reference*
- *Personal Communications Programmer's Guide*

Communications Server for OS/2 Warp Up and Running, GC31-8189

Personal Communications for OS/2 and CM/2: Product Differentiation Guide, GG24-2546

The windows in this book are representative of ones that you might see while working with Personal Communications and OS/2 Access Feature. Minor variations could occur between what you see on your display and what is in the book.

The OS/2 Access Feature windows use "Communications Manager" to mean OS/2 Access Feature.

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Acronyms Used in This Book

ACDI	Asynchronous Communications Device Interface
API	Application Programming Interface
APPC	Advanced-Program-to-Program Communications
APPN	Advanced Peer-to-Peer Networking
CM/2	Communications Manager/2
CPI-C	Common Programming Interface for Communications
DLU	Dependent Logical Unit
EHLLAPI	Emulator High Level Language Application Programming Interface
ESP	Extended Service Point
FFST/2	First Failure Support Technology/2
IEEE	Institute of Electrical and Electronics Engineers
ILU	Independent Logical Unit
IP	Internet Protocol
ISDN	Integrated-Services Digital Network
LAN	Local Area Network
LUA	Conventional LU Application
MPTS	Multi-Protocol Transport Services
NAU	Network Accessible Unit
NCP	Network Control Program
PU	Physical Unit
SAP	Service Access Point
SNA	Systems Network Architecture
SRPI	Server-Requester Programming Interface
SSCP	System Services Control Program
TCP	Transmission Control Protocol
UPM	User Profile Management
VTAM	Virtual Telecommunications Access Method
WAN	Wide Area Network

What Is the OS/2 Access Feature?

OS/2 Access Feature, based on the popular Communications Manager/2 (CM/2), is included in the Personal Communications package; it is also shipped as part of the IBM Communications Server product.

OS/2 Access Feature provides local and wide area connection support, APPN end node support, 32-bit APIs, and SNA network support and systems management. If you are familiar with CM/2, you will recognize that OS/2 Access Feature is virtually an updated CM/2 1.11, except that it does not have APPN network node and gateway support. Furthermore, OS/2 Access Feature does not have 3270 or 5250 emulators; these are provided by Personal Communications, as are the EHLLAPI and SRPI APIs.

The following list describes the main OS/2 Access Feature functions:

Communication features

Support for a wide variety of LAN and WAN connectivities. In addition, OS/2 Access Feature supports SNA communication over IP networks and SNA networks and socket applications communication over SNA and IP networks.

OS/2 Access Feature also provides support for:

- The ability to communicate with multiple hosts on separate logical links through unique PU connections.
- Dynamic SNA control-point switching, which provides the capability to keep LU-LU sessions active and allow control-point name changes when a VTAM/NCP composite node takes over SSCP sessions currently owned by another VTAM/NCP node.
- Data security, which provides basic and enhanced security support at session and conversation levels.
- SNA data compression at the session level, which increases throughput for large amounts of data across communication links.

Programming support

A wide range of 32-bit and 16-bit APIs provide convenient ways for application programs on your workstation to use OS/2 Access Feature functions, and allow application programs to communicate with those on other workstations.

APPN end node support

Lets you take advantage of APPN network nodes such as the IBM Communications Server. An APPN network allows automatic locating of partner applications and dynamic, optimized route selection.

Subsystem management

Lets you view the status of communication links with other workstations, the host, the gateway workstation, or printers. You can also use subsystem management to start and stop communication on these links.

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Remote operations (ROPs)

Lets a host operator send OS/2 commands to your workstation if your network is managed from a host location.

This function is available to workstations that have either a direct SNA link to a host computer or a LAN connection to a server. Workstations with LAN connections receive host operator commands through the ROPS Extended Service Point (ESP).

When the ROPs function is installed, it appears as a pair of program objects *(Remote Operations Service* and *Service Point Application Router)* within the OS/2 Access Feature folder on your desktop.

Problem determination aids

Help you gather and process data so you can identify problems.

FFST/2 (First Failure Support Technology/2)

Gives you a set of programs to help with problem determination. It includes a dump formatter, message log formatter, system error log, and message console. When it is installed, an FFST/2 folder is created on your desktop.

User Profile Management

Provides logon-logoff support for 5250 emulation and can also be used to provide security for APPC connections.

The *What's New* page in the OS/2 Access Feature *Information Notebook* describes the functions that have been added or enhanced since CM/2 1.11.

Why Would I Use OS/2 Access Feature?

Some of the reasons you might choose to run Personal Communications over OS/2 Access Feature are that you require connection types such as X.25 or ISDN, or that you want to run APPC or CPI-C applications concurrently with your emulator sessions.

The following APIs and connection types are not provided by Personal Communications but can be used when you run Personal Communications over OS/2 Access Feature. Therefore, if you have an application that requires any of the following APIs or connection types, you should install OS/2 Access Feature:

APIs	**Connections**
APPC	X.25
CPI-C	ISDN
LUA	
ACDI	

For example, the following IBM applications are just a few of the many applications that require CM/2 or OS/2 Access Feature:

Customer Information Control System/2 (CICS/2)
LAN to LAN Wide Area Network Program (LTLW)
Database 2/2 (DB2/2)
TCP/IP (over X.25)
LAN Distributed Platform (LANDP)
NetView DM
Print Services Facility (PSF/2)

If you are unsure, ask your system administrator if you need to use an ISDN or X.25 connection, or if you have an application that requires one of the OS/2 Access Feature APIs.

If you decide to install OS/2 Access Feature, you can either:

Run Personal Communications over OS/2 Access Feature by configuring Personal Communications to use the LUA or LU6.2 APIs in OS/2 Access Feature.

The following pages describe how to configure and then run Personal Communications over OS/2 Access Feature.

Run Personal Communications parallel to, but independently of, OS/2 Access Feature.

Detailed information about running Personal Communications parallel to OS/2 Access Feature is provided in the *Personal Communications and CM/2 Product Differentiation Guide*.

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The following figure illustrates how you can run Personal Communications over, or independently of, OS/2 Access Feature in your workstation.

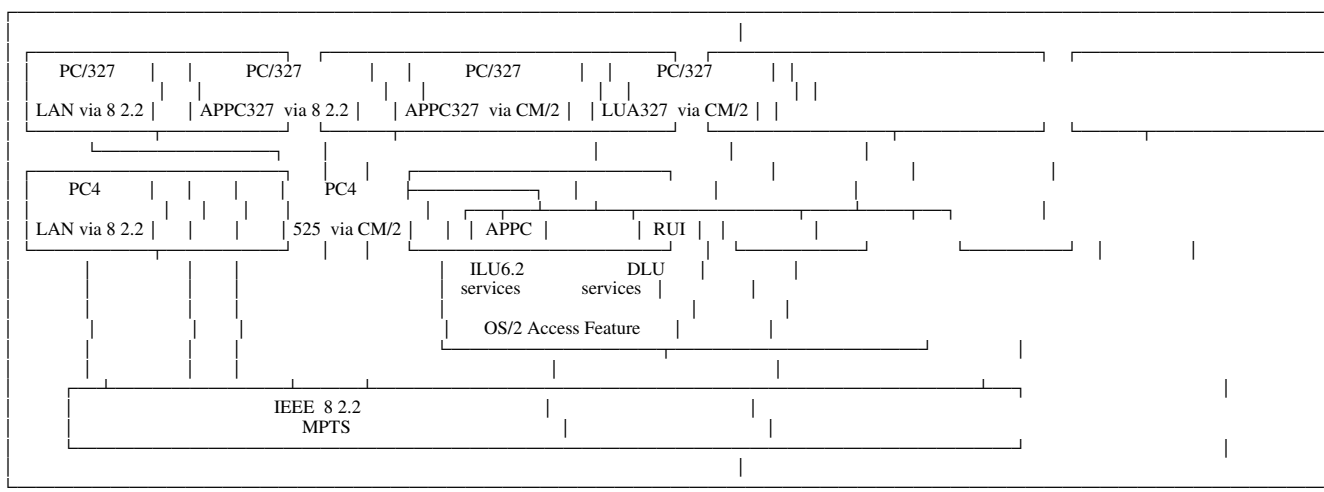

Figure 1. OS/2 Access Feature and Personal Communications Scenarios

Note: To run Personal Communications and OS/2 Access Feature independently on the same workstation, it is necessary to use different local SAPs. Because the SAP in both products is X'04' by default, you need to change one of them. To change the SAP in Personal Communications, click *Configure* from the Communication menu, make sure *LAN* and *LAN via IEEE 802.2* are highlighted and then click *Configure...*. When the Customize Communications window appears, click *Configure Link...* and then click *Advanced...* in the IEEE 802.2 window. Then select a different value, such as 08, from the Local SAP list.

How Do I Install OS/2 Access Feature?

If you are installing OS/2 Access Feature or upgrading a CM/2 configuration to OS/2 Access Feature, you need to install the following products, which are provided in this package, in this order:

1 Multi-Protocol Transport Services (MPTS)

For LAN connections, configure MPTS with the IEEE 802.2 protocol.

For SNA Phone Connect or other switched connections such as ISDN or asynchronous, install MPTS.

For TCP/IP facilities, configure MPTS with the TCP/IP protocol.

For SNA over TCP/IP or Sockets over SNA, configure the TCP/IP Sockets access in MPTS.

The online helps provide additional information.

The configuration program in OS/2 Access Feature verifies that MPTS is installed, but *it does not verify that MPTS is properly configured*.

2 OS/2 Access Feature

You can install OS/2 Access Feature from diskettes or a code server. You can install by using either the menus or response files (CID). To install OS/2 Access Feature from diskettes, insert the first diskette in the diskette drive. If you are installing from drive A:, type A:\cmsetup and press Enter. To view the CMSETUP command parameters, type CMSETUP ? and then press Enter.

Detailed information about installation and configuration, including information about using a response file, is available in the online help and from the Setup page in the OS/2 Access Feature *Information Notebook*.

Note: If you intend to use the Personal Communications 5250-via-CM/2 attachment, you need OS/2 User Profile Management Services (UPM), as well as OS/2 Access Feature's APPC API. When you install OS/2 Access Feature and configure it for 5250 emulation, however, UPM is not installed by default. It might already have been installed by another application, such as OS/2 LAN Requester but, if not, you must select it when you install OS/2 Access Feature. To do this, click *Select* in the Install window and then select *UPM* in the Additional Functions window.

3 Personal Communications for OS/2

Detailed information about installation and configuration is available in *Personal Communications Up and Running*, the online helps, and the *Information Notebook*.

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Upgrading CM/2 to OS/2 Access Feature

To upgrade CM/2 to OS/2 Access Feature:

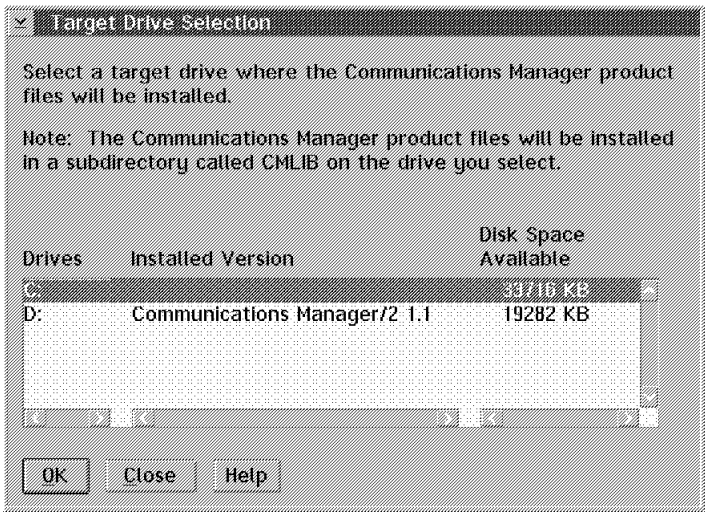
1 Insert the OS/2 Access Feature installation diskette. If you are installing from drive A:, type A:\cmsetup and press Enter.

The Installation Notes window appears.

2 Click *Continue*.

The Target Drive Selection window appears.

Note: In the following windows, “Communications Manager” and “Communications Server 4.0” mean OS/2 Access Feature.



3 Select the Drive where CM/2 is installed and then click *OK*.

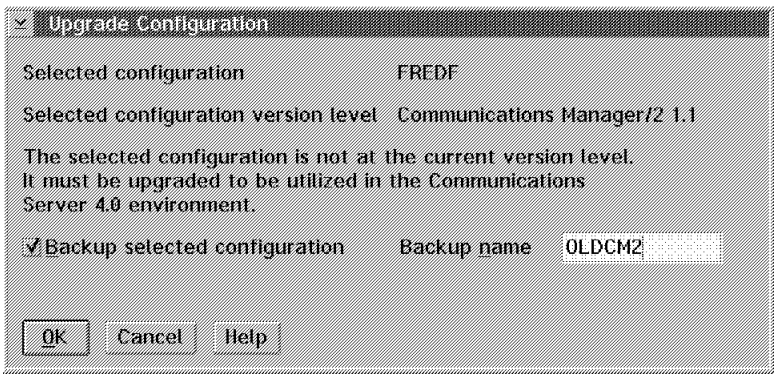
The Communications Manager Setup window appears.

4 Click *Installation*.

The Open Configuration window appears.

5 Type the configuration name or select the configuration you want to upgrade, and then click *OK*.

The Upgrade Configuration window appears.



OS/2 Access Feature automatically converts a CM/2 configuration to a newer format used with OS/2 Access Feature. It is recommended that you keep a backup copy in case you ever need to use the configuration with CM/2.

6 To back up your existing CM/2 configuration, check the *Backup selected configuration* check box, type the *Backup name*, and then click *OK*.

A message appears, telling you that your configuration has been upgraded.

7 Click *OK*.

The Install window appears.

8 Click *Select* if you want to install additional functions.

9 When the Install Additional Functions window appears, select all the functions you want to install and then click *OK*.

The Create Folders window appears.

10 Select a folder option and check the check box if you want to autostart OS/2 Access Feature and then click *OK*.

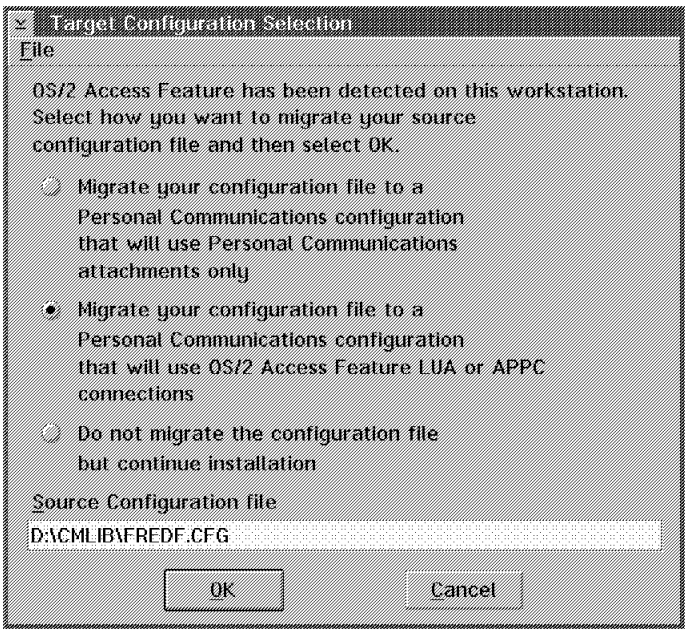
11 Close the Communications Manager Completion window and then install Personal Communications before you shut down your workstation.

Installing Personal Communications

To install and then run Personal Communications over OS/2 Access Feature:

1 Insert Personal Communications Diskette 1 (Installation). If you are installing from drive A:, type A:\install and then press Enter.

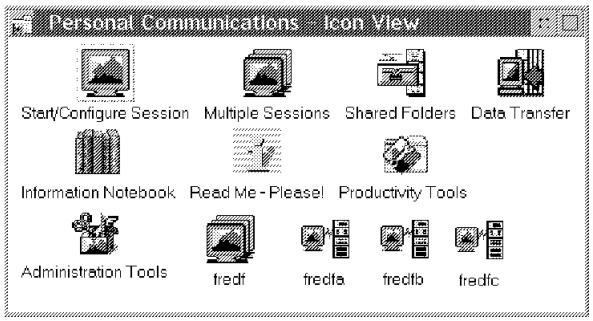
The Target Configuration Selection window appears.



2 Click the second radio button and then click *OK*.

3 Continue Personal Communications installation, as described in *Up and Running* and the online help.

When installation is complete, the Personal Communications folder contains the standard icons, as well as an icon for each emulator session that has been migrated and a multiple-session icon that you can double-click to start all of the sessions at once. The corresponding batch file and workstation profiles are stored in the Personal Communications PRIVATE subdirectory.



4 Shut down and restart your workstation.

To start the migrated sessions, double-click the appropriate session icon or, to start them all, the multiple-session icon.

The migrated sessions will use the Personal Communications LUA3270 via CM/2 attachment. This attachment needs a separate OS/2 Access Feature LU for each session, and the migration process will have created as many as are necessary. The next section explains how to configure an additional OS/2 Access Feature LU and Personal Communications session.

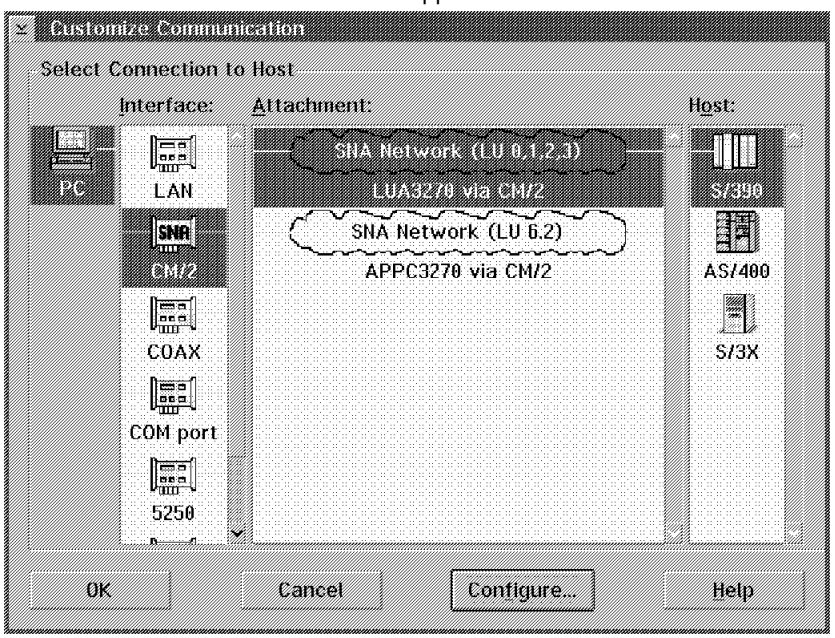
Configuring an Additional Personal Communications Session

If you want an additional session, you must first add an LU to the OS/2 Access Feature configuration, which provides the LUA interface. You can do this at the same time as you configure the new session, as shown in the following example of a 3270 emulator session that uses a token-ring connection.

1 Either double-click the *Start/Configure Session* icon in the Personal Communications folder or click *Run the Same* from the File menu in an active session window.

2 Click *Configure* on the Communication menu.

The Customize Communication window appears.

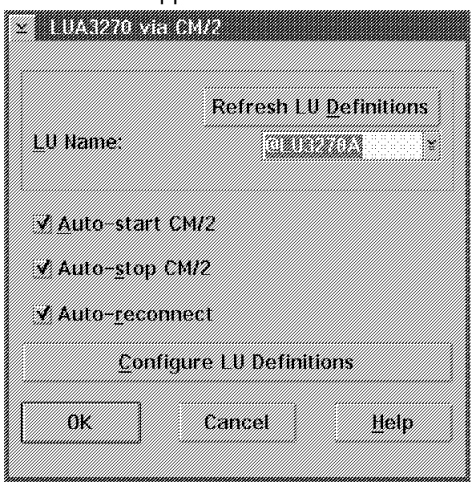


3 Make sure that *CM/2*, *LUA3270 via CM/2*, and *S/390* are highlighted and then click *Configure...*.

The Customize Configuration - 3270 Host window appears.

4 Change any of the session parameters if you want to and then click *Configure Link...*.

The LUA3270 via CM/2 window appears.



Note that Personal Communications created an LU for each emulator session; these are shown in the LU Name list.

5 Click *Configure LU Definitions*.

A Personal Communications help window appears, telling you the basic steps you need to perform in order to change the OS/2 Access Feature configuration. You can change the size and location of this window and leave it on your screen as you proceed through the OS/2 Access Feature configuration.

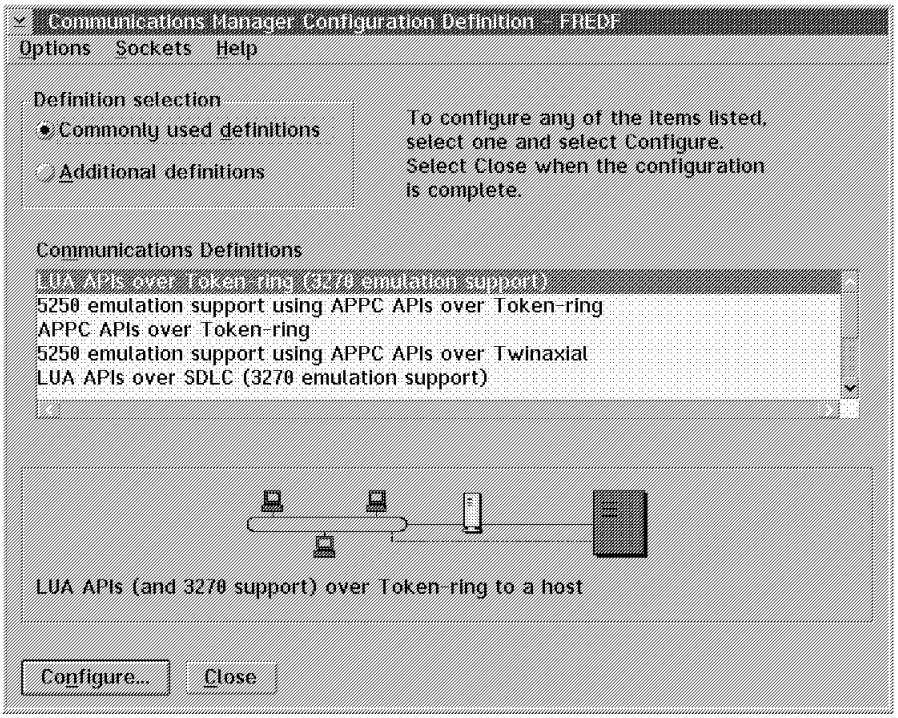
The Communications Manager Setup window appears.

6 Click *Setup*.

The Open Configuration window appears.

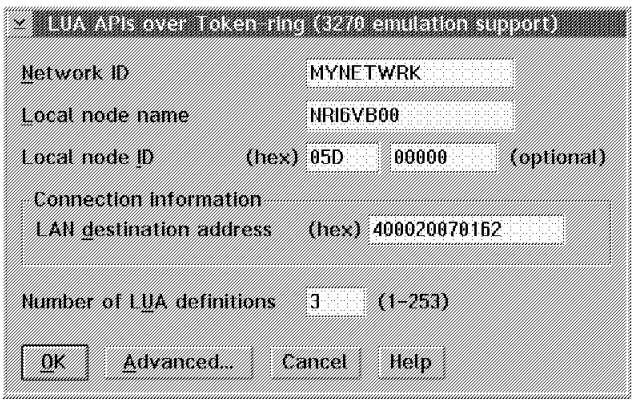
7 Type a configuration name, or select the configuration you want to change, and then click *OK*.

The Communications Manager Configuration Definition window appears.



8 In the Communications Definitions list, double-click *LUA APIs over Token-ring (3270 emulation support)*.

The LUA APIs over Token-ring (3270 emulation support) window appears.

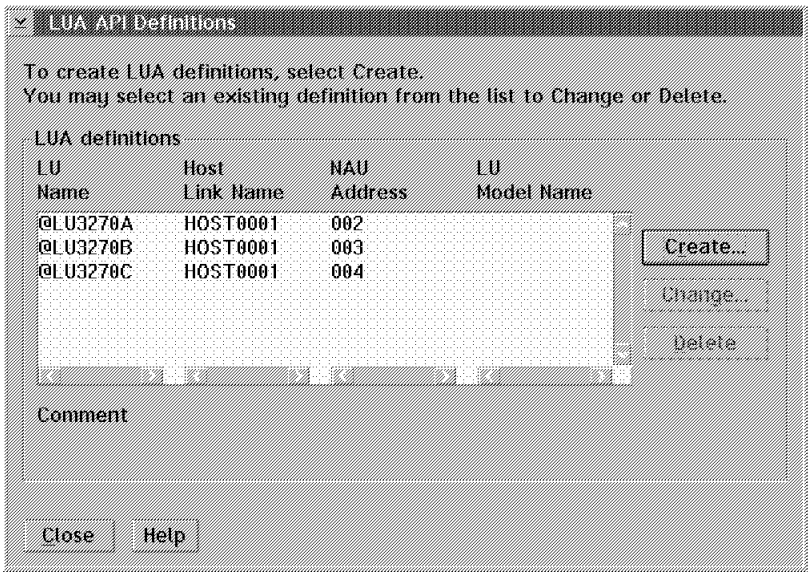


9 Click *Advanced*.

The Communications Manager Profile List window appears.

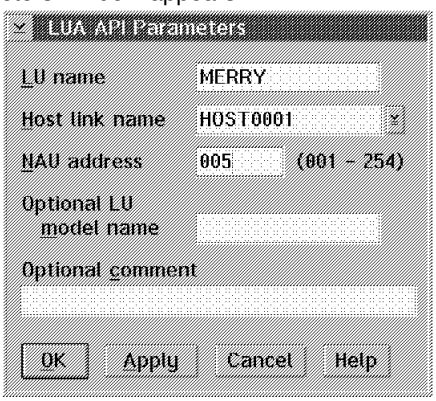
10 Double-click *SNA LUA APIs (and 3270 support)*.

The LUA API Definitions window appears.



11 Click *Create* to add a session (or, if you want to change or delete one, highlight it and click *Change* or *Delete*).

The LUA API Parameters window appears.



12 Type an LU name and an NAU address for each session you want to add and then click *Apply*. When you have finished, click *OK*.

13 Click *Close* until you exit Communications Manager Setup and you are returned to the Personal Communications LUA3270 via CM/2 window.

14 Click *Refresh LU definitions*.

The list of LU Names should reflect the changes you made.

15 Select the LU that you want to use for the new session and then click *OK* until you return to your session window.

   A message appears to tell you that, because you have changed your configuration, the session will be disconnected and then reconnected with the new definitions.

16 Click *OK*.

You have now completed changing the Personal Communications and OS/2 Access Feature configurations.

Can I Use CM/2 1.1 Instead?

If you already have CM/2 1.1 (or higher) on your workstation, you might decide not to upgrade to OS/2 Access Feature. Instead, you can migrate your CM/2 configuration during Personal Communications installation and then run Personal Communications over CM/2 instead. However, if your CM/2 configuration does not have an APPC or LUA API definition, you must create one in CM/2 Setup before you can run Personal Communications over CM/2.

For example, to create an LUA API definition:

1. Modify your CM/2 configuration file, using Communications Manager Setup.
2. When the Communications Manager Configuration Definition window appears, select *Configure any profile or feature* from the Options menu.

   The Communications Manager Configuration List window appears.
3. Double-click *SNA LUA APIs*.

   The LUA API Definitions window appears.
4. Click *Create*.

   The LUA API Parameters window appears.
5. Type an LU Name and NAU address for each LU you want to create and then click *Apply*; you need an LU for each emulator session. When you have finished, click *OK*.
6. Click *Close* until you exit Communications Manager Setup.

Note: Personal Communications does not automatically migrate some of the emulator-related settings in your CM/2 configuration. If you want to migrate that information, you need to use response files. Refer to the *Personal Communications Reference* or the online *Information Notebook* for more information about migrating specific information from CM/2 configurations.

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