DEFINITY® Communications System Manager IV Applications Administration

— UNIT 2 —
Getting Started with Manager IV

UNIT 2 - Getting Started with Manager IV

Overview

Unit 2, Getting Started, is designed to provide an introduction to the general procedures and conventions used with Manager IV. Utilizing the *Getting Started With DEFINITY™ Manager IV* guide, we will learn how to use Manager IV's general capabilities. In addition, a brief review of some common UNIX commands will be conducted.

Objectives

Upon completion of Unit 2, you will be able to:

- Describe Manager IV in terms of hardware and software.
- Access Manager IV.
- Describe a service request.
- Use the service request processes.
- Access and utilize the UNIX shell.

— LESSON 1 —
Manager IV Description

Lesson Contents

List of Figures

LESSON 1 - Manager IV Description

Overview

Lesson 1 provides details of the hardware and software configuration of Manager IV.

Objectives

Upon completion of Lesson 1, you will be able to:

- List the types and numbers of products Manager IV will support.
- List supported terminals types.
- Identify the databases involved in a Manager IV environment.
- List the items available at the various levels of the Manager IV command hierarchy.

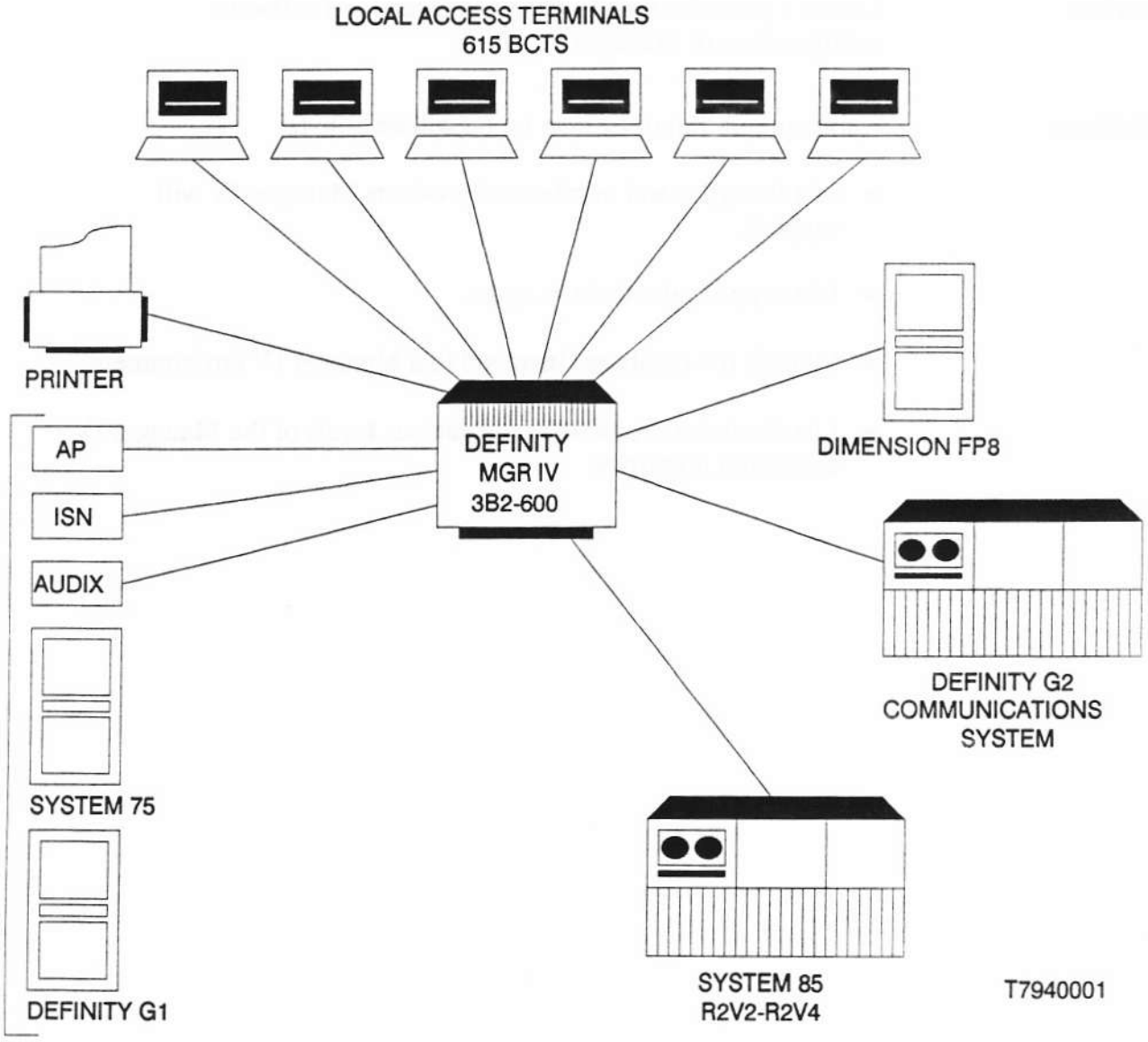

Figure 2-1 – A Sample Manager IV Configuration

Configuration

See Figure 1

Hardware

- Manager IV resides on the 3B2 600 computer.
- Supports a wide range of products.
  - All connections are dial-up using standard modems and 3B2 600 tty ports. These ports may be shared with UNIX programs and/or co-resident applications.
  - Because of the mirror image databases, a combined maximum of 15 DEFINITY™ Generic 2, System 85, or Dimension FP 8 switches can be administered by one Manager IV. Whether or not this maximum can be achieved depends on the size of the switches. The total number, network wide, of stations allowed is 32,000 and of trunks 12,000. The configuration of the Manager IV host computer is also a determining factor as to whether or not these numbers can be reached.
  - There is also a supported limit of 30 adjunct products per Manager IV.

Hardware (cont)

Manager IV supports up to six simultaneous users on a variety of terminals. The terminal types currently supported are:

- 615 BCT
- 630 MTG
- 4410
- 4425
- 513 BCT
- VT 100

A large variety of printers can be used with Manager IV as long as they are compatible with the UNIX print spooler. For information on a particular printer, contact the NCSC (National Customer Service Center).

Software

In the Manager IV environment there are two databases that are accessed.

- The first is the database in the Manager IV host processor, the 3B2 600. It is the CORE database and contains information about the network it is intended to manage. It includes product names, addresses and dial-up telephone numbers as well as a description of each product and any DCS, ETN or number portability networks involved. In the case of G2s, System 85s, or Dimension FP8s, it also includes a copy of the switch translations, variously referred to as the mirror image or the product image database. This product image is initially created when a switch tape is converted by TRACS to a 3B2 tape and then installed in Manager IV. Additional, non-switch data can also be manually entered into the database.

- The second database is the one contained in the products themselves and is referred to as the switch or product database. It contains the standard product required information and is remotely accessed by Manager IV.

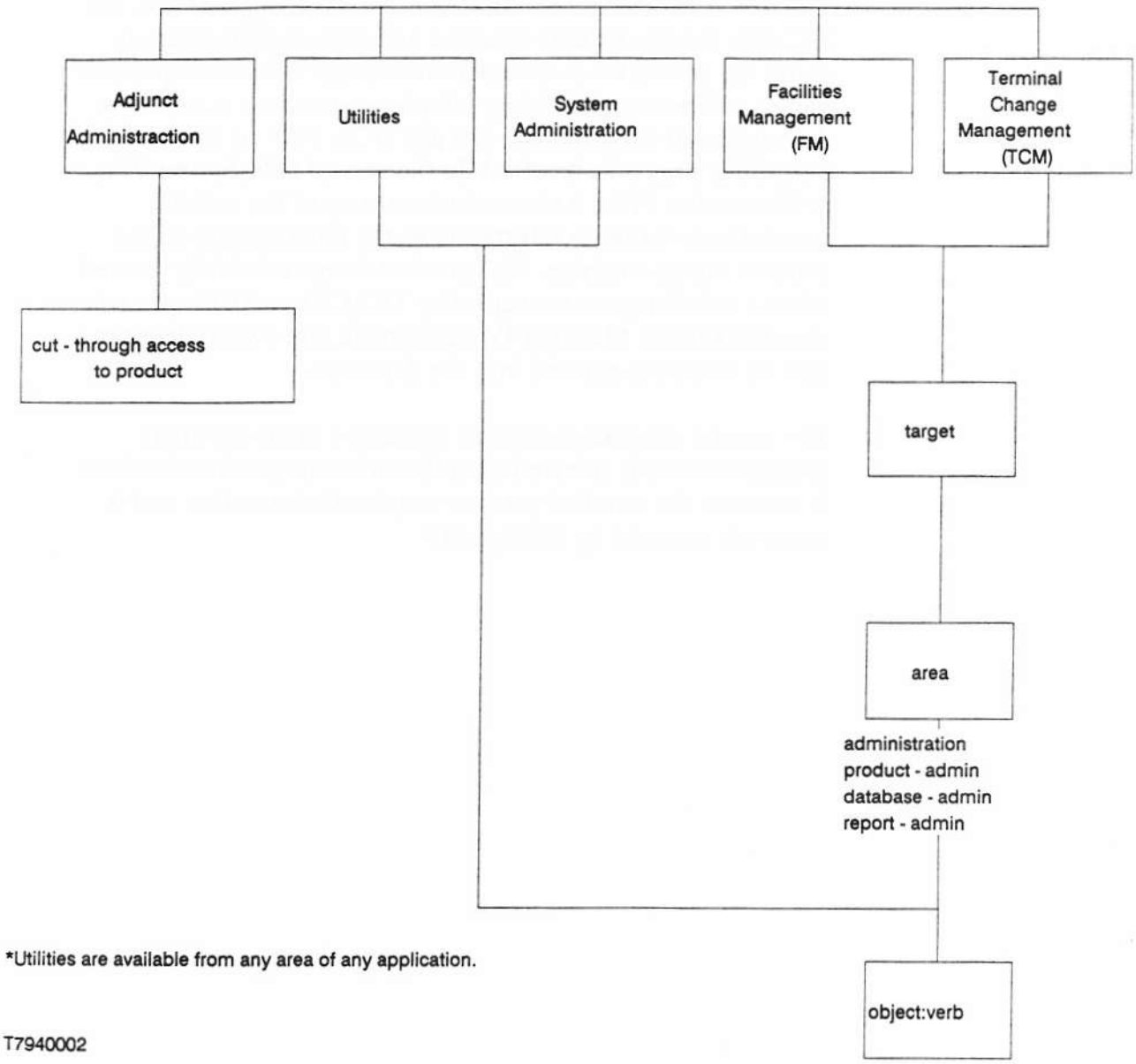

Figure 2-2 – Manager IV Command Path Hierarchy

Software (cont)

The Manager IV programs and databases are accessed via a hierarchical command path as shown in Figure 2.

- Access to the various parts of the command path is available based on:
  - login permissions.
  - product types that make up the network.
  - product type currently being administered.

All movement through the command path is controlled by a Manager IV program called the SMUE. This System Management User Executive performs all user interface functions. It presents the terminal user with all menus, forms, reports, help messages, and error messages.

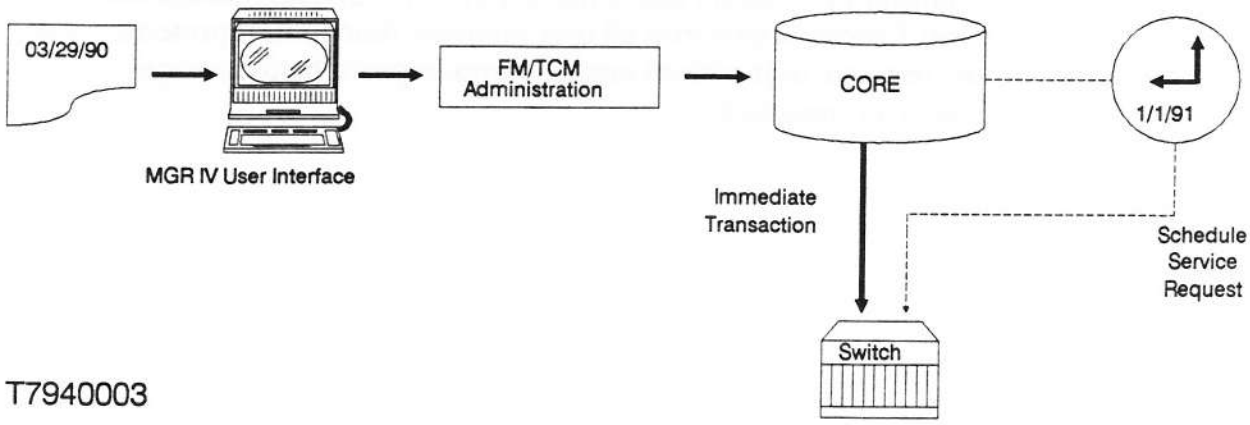

Figure 2-3 – Flow of a Manager IV Command

How Manager IV Commands Work

Figure 3 shows how the hardware and software work together to allow the user to input Manager IV commands. The change in the Manager IV (CORE) database is always immediate. The change in the switch database will occur:

- immediately after the Manager IV database has been updated if this was an immediate transaction, or
- at a later scheduled date and time if the transaction was via a scheduled service request.

Before you can execute any transaction that updates the switch, you must:

- schedule a service request, or
- establish a connection to the switch.

Lesson Review

1. Define a Manager IV target.

_____

2. How many DEFINITY™ G1s can be administered by one Manager IV?

_____

3. List 3 terminal types supported by Manager IV.

_____

4. In which database is the DEFINITY™ G2 mirror image contained?

_____

5. Below what level can the Manager IV utilities be *no longer* accessed?

_____

– LESSON 2 –
Using Manager IV

Lesson Contents

List of Figures

LESSON 2 - Using Manager IV

Overview

This lesson explains how to access and use DEFINITY™ Manager IV. It covers the use of escape sequences, function keys, on-line help, transaction screens, and the structure of the command path.

Objectives

On completion of Lesson 2, using the *Getting Started Guide*, the student will be able to:

- Log on and off Manager IV.
- Locate and use the *Function Keys and Escape Sequences* table to perform Manager IV tasks.
- Access and describe the four types of on-line help:

  Short Help (ESC)(?) OR (F-4)

  Expanded Help ESC BANG = (ESC)(SHIFT 1)

  Command Help ESC V

  Escape Sequence Help ESC R

- Select a command path.

Logging On

Logging on gives you access to Manager IV. To log on, you need the following:

- Login ID
- Password

Using the Login and password provided by your instructor, locate Using Manager IV in the *Getting Started* manual and login at your terminal.

Logging Off

Logging off terminates you communications link with the Manager IV processor. To log off of Manager IV:

- Enter **bye** at any command path prompt.

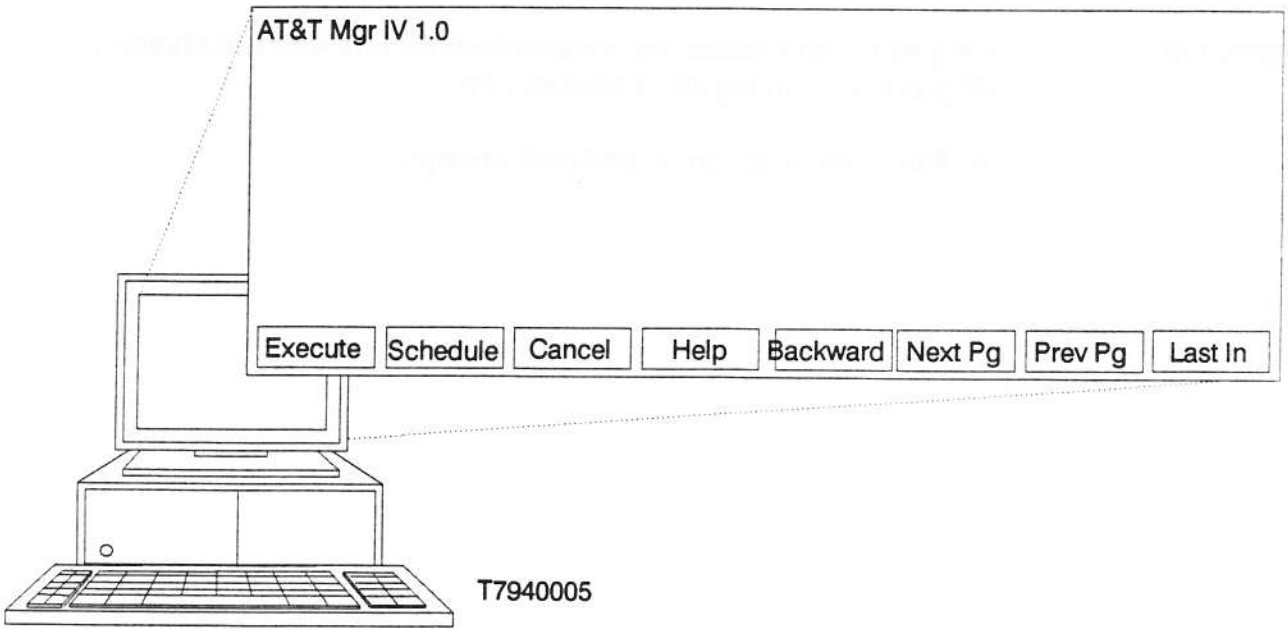

Figure 2-4 – Screen-Labeled Function Keys

Screen-Labeled Keys

- The eight most frequently used escape sequences are assigned dedicated screen labled function keys.
- Figure depicts the eight screen-labeled keys.
- Press the function key **[F1]** through **[F8]** on the keyboard that corresponds to the function you want to perform.

Note: Screen-labeled keys are supported only on AT&T terminals.

To:	Use Function Key	Use Escape Sequence
Cancel the information entered and return cursor to last prompt	[F3] (CANCEL)	[ESC] - [c]
Change to another target		[ESC] - [t]
Clear all data entries		[ESC] - [K]
Clear data in the present field		[ESC] - [k]
Create a scrapbook model		[ESC] - [M]
Create a global scrapbook model		[ESC] - [G]
Display short help	[F4] (HELP)	[ESC] - [?]
Display expanded help		[ESC] - [!]
Display command help		[ESC] - [v]
Display function keys and escape sequences		[ESC] - [r]
Execute a transaction	[F1] (EXECUTE)	[ESC] - [e]
Move cursor to next field		[ESC] - [l]
Move to next page	[F6] (NEXT PAGE)	[ESC] - [n]
Move to previous page	[F7] (PREV PAGE)	[ESC] - [p]
Print copy of screen		[ESC] - [P]
Recall a scrapbook model file		[ESC] - [m]
Recall a global scrapbook model file		[ESC] - [g]
Recover your last data input	[F8] (LAST IN)	[ESC] - [i]
Recover your last data output		[ESC] - [o]
Redraw your screen		[ESC] - [d]
Reset function keys		[ESC] - [f]
Return cursor to previous field or level in command path	[F5] (BACKWARD)	[ESC] - [b]
Return cursor to top level in command path		[ESC] - [h]
Schedule a command for executiion at a later time	[F2] (SCHEDULE)	[ESC] - [s]
Undo all entries on screen		[ESC] - [U]
Undo entry at current field		[ESC] - [u]

Escape Sequences

- An escape sequence is a combination of two keystrokes that perform a specific function.
- To use an escape sequence, first press **[ESC]** and then press the second key in the sequence. *(Do NOT press the two simultaneously.)*
- The second key in an escape sequence may be an upper or lower case letter or a special character.

On-line Help

Short Help

- Available for command path prompts.
- Displays valid entries in transaction fields.

Expanded Help

- Available for command path and transaction field.
- Provides a long list of encodes.
- Provides detailed descriptions.

Command Help

- Available for **object-verb** pairs.
- States purpose.
- Defines prerequisites.
- Displays cautions.
- Displays notes.
- Defines postrequisites.

Escape Sequence Help

- Lists all escape sequences, function keys, and their use.

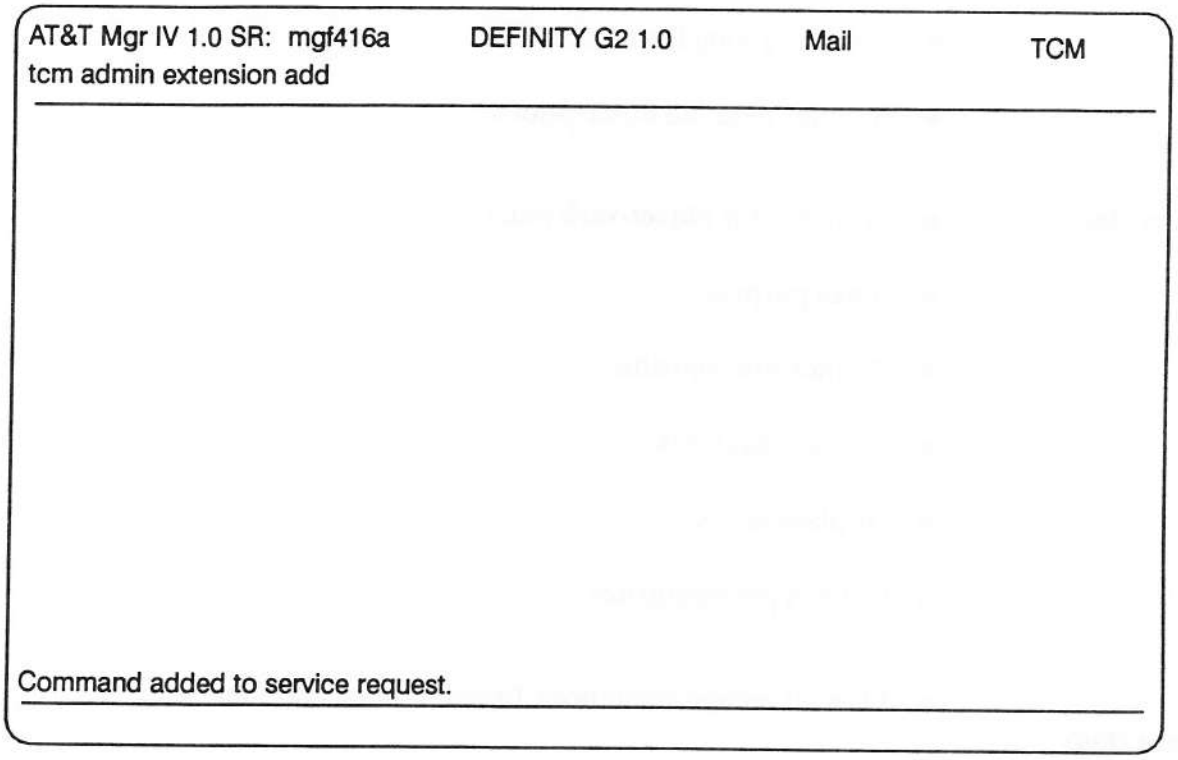

Figure 2-5 – Sample Screen

Status Information

The top two lines of the screen contain information about your current status within the system. This information changes as you access different elements of Manager IV. The first line is organized as follows:

- **System identification** - The Manager IV release number.
- **Service Request number**- If you are in the Service Request (SR) mode, the number assigned it will display.
- **Mail message** - "MAIL" appears if you have unread mail in your mailbox.
- **Switch type** - The type and version of the switch you are administering for example, "DEFINITY™ G2 1.0".
- **Connection** - "CON" indicates that you are connected to the switch.
- **Target** - The Product ID for the product you are administering.

The second line of the screen, the Command History Line, reflects your movement through the Manager IV command Hierarchy. The Command History Line serves three purposes:

- To display the last command entered on the command line.
- To notify you when a command will take longer than two seconds to respond.
- To display the current page number of the form displayed.

System Messages

- Confirms that a transaction is being processed, or
- Indicates that an error condition exists.

Using Transaction Screens

You perform transactions by making entries on transaction screens. The following features are common to all Manager IV transaction Screens.

Dynamic Transaction Screens

Some screens are dynamic - which means that some field entries can cause additional fields to appear or existing fields to disappear.

Data Fields and Entry restrictions

The fields on a transaction screen may be required, optional, or display only.

- **Required** - You must make an entry here before you can move the cursor to the next field.
- **Optional** - You choose whether or not to make an entry before moving the cursor to the next field.
- **Display-Only** - Cannot make an entry here. These fields show system information only.

Typing Ahead

Once you are familiar with the entries needed for a complete command path, you can type in a string of entries using the type-ahead method. This allows you to:

- Enter a complete command path from the first prompt, thereby avoiding all other prompts.
- Enter the remainder of a command path from any prompt in the path.

Abbreviating Entries

When entering a command path, you need only type enough letters of each part of the command path to distinguish it from other valid entries. For example, a list of valid entires for the verb might be:

add

change

display

remove

In this example, you need only enter the first letter of the verb selected. In other command paths you may have to enter more characters. For example, when entering extension at the object prompt, you must type **exten** to make it unique from other choices.

Exercise

Using the *Getting Started* guide, complete the following exercises.

1. Using your student login, log on and off Manager IV.

2. Explain how to display Short Help.

3. Explain how to display Expanded Help.

4. Match the **on-line help type** on the left with the **definitions and keys** on the right. Write the letter in the space provided.

On-Line	Definitions and Keys
C Escape Sequence	A. Display the valid entries for your current position in Manager IV. [Esc]? or [F4 HELP]
D Command	B. Display long lists of valid codes or more detailed descriptions. [Esc] [!]
B Expanded	C. Display the valid escape sequences and function keys. [Esc] [r]
A Short	D. Display information on the use of specific commands. [Esc] [v]

– Lesson 3 –
Accessing the UNIX Shell

Lesson Contents

LESSON 3 - Accessing the UNIX Shell

Overview

Lesson 3 covers how to access the *UNIX* operating system. Certain *UNIX* capabilities may be restricted depending on the level of access assigned to an individual user.

Objectives

On completion of Lesson 3, the student will be able to:

- Access the *UNIX* shell.
- Read a mail message.
- Display the current date and time.

Accessing the UNIX Shell

The command **shell create** gives you access to the *UNIX* shell, where you can take advantage of standard *UNIX* utilities like mail, news, etc.

Leaving the UNIX Shell

To return to Manager IV from the *UNIX* shell, type **exit** or **[Ctrl] [d]** (hold down the control key while typing a d).

Mail

If you have new mail, the message "MAIL" appears on the top of your screen when you log in. *Always check your mail.* To read your mail:

First use the command **shell create**

At the *UNIX* prompt (**$**) type **mail**

Follow instructions in the *UNIX System V User's Guide* to save, delete, or skip your mail messages.

For more information on *UNIX* commands, see the *UNIX System V User's Guide.*

Exercise

Using *the Getting Started* manual, complete the following exercises.

1. Access the *UNIX* shell and return to Manager IV.
2. Access the *UNIX* shell and read your mail.
3. To display the date and time at the *UNIX* prompt type **date.**
4. Return to Manager IV. What command did you use?

Exercise

Using your *Facilities Management Operations* guide, complete the following exercises.

1. Create a Service Request and schedule it for two weeks from today at 10:00 pm. Add the following trunk group.

   Trunk Group Number _____

   Dial Access Code _____

   Trunk Type **19**

   ELL _____

2. Add two more trunks to your trunk group.

   ELL _____

   ELL _____

3. Remove the trunk group just created and end your Service Request.

4. Modem pools pair _____ and _____ trunk groups. The _____ transaction administers _____ and _____ trunk groups, their attributes and pairing of trunks in a group.

5. List the prerequisites to the **d-channel add** transaction.

Course Introduction

COURSE INTRODUCTION

This course provides training on the tasks required to perform system administration with Manager IV, using TCM (Terminal Change Management) and FM (Facilities Management) modes, as well as how to access and interpret Manager IV reports.

COURSE OUTLINE

Unit One - Service Requests and TCM (Terminal Change Management)

Lesson 1A - Service Requests

Lesson 1B - Extensions and Terminals

Lesson 1C - Call Distribution

Lesson 1D - Modeling

Lesson 1E - Displaying and Troubleshooting Service Requests

Lesson 1F - Terminal Change Management Reports

Unit Two - FM (Facilities Management)

Lesson 2A - Network Feature Administration

Lesson 2B - Trunk Group and Modem Pool Administration

Lesson 2C - Network Routing

Lesson 2D - Controlling Network Use

Lesson 2E - Facilities Management Reports

Lesson 2F - ISDN

COURSE OUTLINE

Unit Three - System Administration

Lesson 3A - User Administration

Lesson 3B - Monitoring System Activity

Lesson 3C - Target Administration

Lesson 3D - Hardware and Database Administration

Lesson 3E - Using the Logs

Lesson 3F - Maintenance PROCS

Course Objectives

Upon successful completion of this course, the student will be able to:

- **Administer voice and data terminals using TCM (Terminal Change Management)**
- **Administer trunks and trunk facilities using FM (Facilities Management)**
- **Administer the Manager IV system**
- **Utilize the Manager IV document(s)**

OH I-1

COURSE OBJECTIVES

Upon successful completion of this course the student will be able to:

- Administer voice and data terminals using TCM (Terminal Change Management)
- Administer trunks and trunk facilities using FM (Facilities Management)
- Administer the Manager IV system
- Utilize the Manager IV document(s)

UNIT 1

Service Requests and TCM (Terminal Change Management)

Unit 1 Objectives

Upon successful completion of this unit the student will be able to:

- **Create a Service Request**
- **Display Service Request Reports**
- **Administer Extensions and Terminals**
- **Administer Automatic Call Distribution**
- **Display and Interpret Available TCM Reports**
- **Administer Manager IV Scrapbook and Clipboard**

UNIT INTRODUCTION

This unit explains how to administer Manager IV Service Requests and discuss Terminal Change Management. The unit will explain extensions and terminals, Automatic Call Distribution, the Scrapbook and Clipboard, and Terminal Change Management reports.

UNIT OBJECTIVES

Upon successful completion of this unit the student will be able to:

- Create a Service Request
- Display Service Request Reports
- Administer Extensions and Terminals
- Administer Automatic Call Distribution
- Display and interpret available TCM Reports
- Administer Manager IV Scrapbook and Clipboard

LESSON 1A

Service Requests

Lesson 1A Objectives

Upon successful completion of this lesson the student will be able to:

- **Create a Service Request**
- **Display Service Request Reports**

OH 1A-1

LESSON INTRODUCTION

This lesson explains how to run a Service Request

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Create a Service Request
- Display Service Request Reports

Service Requests

Running a Service Request consists of the following:

- **Recordkeeping and Control**
  - **Service Request Worksheet**
- **Executing a Service Request**
  - **Opening a Service Request**
  - **Closing a Service Request**
  - **Checking Scheduled Entries**
  - **Displaying Scheduled Entries**
  - **Appending to a Service Request**
  - **Removing Transactions from a Service Request**
  - **Rescheduling a Service Request**
  - **Scheduling a Daily Tape Run**
- **Daily Follow-up Procedures**
  - **Service Request Follow-up for Administrators**
  - **Service Request Follow-up for Users**
  - **Displaying Service Requests**

OH 1A-2

DISCUSSION

Running Service Requests

Getting Started with Manager IV

Administering a Service Request consists of the following:

° Recordkeeping and Control

It is very important to keep careful track of Service Requests. You should always ensure that updates to switch translations are correctly downloaded, that the DEFINITY® Manager IV database is synchronized with the switch, and that "pending" transactions are kept to a minimum.

- Service Request Worksheet

  To assist all users in maintaining records of their Service Request processing, a sample Service Request Worksheet is included. You can use this sample as a model for creating your own worksheet designed to meet the needs at your site.

DISCUSSION

Running Service Requests (continued)

° Administering a service Request

Use this procedure to execute a Service Request for downloading to the switch. This sequence represents "normal" or daily operations common to all users.

- Opening a Service Request (CREATE)
- Closing a Service Request END
- Checking Scheduled Entries
- Displaying Scheduled Entries
- Appending to a Service Request
- Removing Transactions from a Service Request
- Rescheduling a Service Request
- Scheduling a Daily Tape Run AFTER SAT REG RUN

° Daily Follow-up Procedures

The Service Request administrator and all users who enter Service Requests should perform these recommended daily follow-up procedures to check that Service Requests have been processed completely and correctly.

- Service Request Follow-up for Administrators

  Every morning without fail the status of all Service Requests in the system should be checked using the *service-request report* or *service-request display* command.

DISCUSSION

Running Service Requests (continued)

- Service Request Follow-up for Users

  It is important for all users to keep careful records and accounts of their Service Request processing. Manager IV provides several tools to help you follow the progress of a Service Request once it's been scheduled.

  - Checking Mail
  - Checking Results Files
  - Removing Results Files and Mail

- Displaying Service Requests

  Use *service-request display* to display a list of pending and failed Service Requests. A pending Service Request is a service request that has not yet been downloaded to the product. A failed Service Request is a Service Request that attempted to download, but was not completely successful.

  - Selecting a Non-detailed Service Request Display
  - Selecting a Detailed Service Request Display

Creating a Service Request

```
AT&T Mgr IV 1.0                    DEFINITY GZ.1      Mail          gZ
tcm admin service-request create                                Page 1 of 1


          THE SCHEDULED TIME IS IN THE TARGET'S TIME ZONE


     Service Request Number: ncs072500


                Due Date: 08/25/91    Due Time: 12:00


     After this command has executed, you will be in service
     request mode. All transactions will be automatically
     added to this service request until you complete the
     request with the service-request:end command.


End of Form
```

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OH 1A-3

PRACTICE EXERCISE

Getting Started with Manager IV

1. Opening and Scheduling a Service Request

Open a Service Request and schedule the Service Request to download two weeks from today.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens look like when properly filled out. If the screen looks different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The three major areas of Running a Service Request are:

- Recordkeeping and Control
- Executing a Service Request
- Daily Follow-up Procedures

Recordkeeping and Control

- It is very important to keep careful track of Service Requests. You should always ensure that updates to switch translations are correctly downloaded, that the DEFINITY® Manager IV database is synchronized with the switch, and that "pending" transactions are kept to a minimum.
  - Service Request Worksheet

Executing a Service Request

- Use this procedure to execute a Service Request for downloading to the switch. This sequence represents "normal" or daily operations common to all users.
  - Opening a Service Request
  - Closing a Service Request
  - Checking Scheduled Entries
  - Displaying Scheduled Entries
  - Appending to a Service Request
  - Removing Transactions from a Service Request
  - Rescheduling a Service Request
  - Scheduling a Daily Tape Run

LESSON SUMMARY

Daily Follow-up Procedures

° The Service Request administrator and all users who enter Service Requests should perform these recommended daily follow-up procedures to check that Service Requests have been processed completely and correctly.

- Service Request Follow-up for Administrators
- Service Request Follow-up for Users
- Displaying Service Requests

LESSON 1B

Extensions and Terminals

Lesson 1B Objectives

Upon successful completion of this lesson the student will be able to:

- **Administer analog stations**
- **Perform GTA (General Terminal Administration)**
- **Administer Multi-line stations**
  - **Call Appearance**
  - **Feature Buttons**
- **Copy like extensions**
- **Administer add-on modules**
- **Swap a terminal**
- **Change a terminal type**
- **Assign a Class of Service**

OH 1B-1

LESSON INTRODUCTION

This lesson will explain how to administer Manager IV extensions and terminals.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Administer analog stations
- Perform GTA (General Terminal Administration)
- Administer Multi-line stations
  - Call Appearance
  - Feature Buttons
- Copy like extensions
- Administer add-on modules
- Swap a terminal
- Change a terminal type
- Assign a Class of Service

Administering Extensions and Terminals

Administering extensions and terminals consists of the following:

- **Assigning analog extensions and terminals**
  - **Copying like extensions**
  - **Changing features and attributes of an extension**
- **Adapting terminals**
  - **GTA (General Terminal Administration)**
- **Non-analog terminals**
  - **Assigning non-analog terminals**
  - **Assigning set IDs**
  - **Call appearances**
  - **BRI (Basic Rate Interface)**
  - **Defining straight line sets**
  - **Add-on modules**

OH 1B-2

DISCUSSION

Administering Extensions and Terminals

DEFINITY® Manager IV Terminal Change Management Operations Guide

Administering extensions and terminals consist of the following:

° Assigning analog extensions and terminals

Assigning analog extensions and terminals allows an extension line number to be assigned to an analog terminal and the features and attributes of the analog terminal to be defined.

- Copying like extensions

  Copying like extensions allows an existing extension's features and attributes to be copied to other terminals so that re-entering the same information can be avoided.

- Changing features and attributes of an extension

  This allows change to the features and attributes of the extension.

DISCUSSION

Administering Extensions and Terminals (continued)

° Adapting terminals

This ability expands the kinds of terminals within the system and permits greater flexibility in terminal assignment.

- General Terminal Administration

  GTA (General Terminal Administration) is a set of transactions that manually define the characteristics of any multi-appearance voice or data terminal that may be brought forward into a DEFINITY® Communications System Generic 2 switch.

° Non-analog terminals

- Assigning non-analog terminals

  This assigns a non-analog terminal and defines its terminal attributes and button features.

- Assigning set IDs

  The Set ID identifies the individual terminals in the system administered through TCM.

DISCUSSION

Administering Extensions and Terminals (continued)

- Call appearances

  A Call Appearance is a position on a voice terminal from which the terminals extension number can be accessed.

- BRI (Basic Rate Interface) data line appearances

  DEFINITY® Communications System Generic 2 provides data line capability that allows for separation of voice and data calls through the administration of a Prime Data Line on a BRI terminal. The Data Line feature implies designating a call appearance as a prime Data Line appearance or Non-prime Data appearance. Both Prime and Non-prime data appearances can be used exclusively for data calls.

- Defining straight line sets

  A Straight-Line Set is an analog terminal described to the switch as a Multi-function terminal without buttons.

- Add-on modules

  Various modules that interact with user terminals can also be administered through commands that fall in this task group. These modules are in fact pieces of equipment that are added directly to the terminal itself.

System Class of Service

```
AT&T Mgr IV 1.0  SR: ncs072500    DEFINITY GZ.1                    gZ
tcm admin class-of-service add                          Page  1 of  2

 Class of Service:

                                  Features:
                      Select one or more of the following:
          ACD (UCD) Member                    Leave Word Calling-orig
          ACD (UCD) Override                  Leave Word Calling-term
          ACD Queue Status Display            Malicious Call Trace Control
          Automatic Callback                  Override
          Call Forward-Busy Don't Answer      Priority Calling
          Call Forward-Don't Answer           Priority Paging/Call Park
          Call Forward-Follow Me              Ring Ping Immediate
          Call Forward-Off Net                Send All Calls
          Call Hold                           SMDR Account Code Required
          Calling Number Display              Stop Hunt
          Call Waiting                        Timed Recall Exempt
          Data Protection
                                              Transfer/Conf-Three Way
```

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```
AT&T Mgr IV 1.0  SR: ncs072500    DEFINITY GZ.1                    gZ
tcm admin class-of-service add                          Page  2 of  2

 Class of Service: 1
                                Restrictions:
                      Select one or more of the following:
        APLT Off Net                        Misc Trunk Restriction Group 1
        ARS Toll Restricted                 Misc Trunk Restriction Group 2
        DID/APLT Restriction                Misc Trunk Restriction Group 3
        Inward                              Misc Trunk Restriction Group 4
        Manual Line Termination             Misc Trunk Restriction Group 5
        Origination                         Misc Trunk Restriction Group 6
        Outward                             Misc Trunk Restriction Group 7
        Terminal to Terminal                Misc Trunk Restriction Group 8
        Termination                         All
        Toll Restricted

                          Code Restriction Level:
                      Facility Restriction Level:


                                   ISDN Routing: 1
End of Form
```

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OH 1B-3

PRACTICE EXERCISE

DEFINITY® Manager IV Terminal Change Management Operations Guide

1. Assigning a System Class of Service

Using the Manager IV Terminal Change Management Operations Guide and a Manager IV terminal, assign a System Class of Service.

2. Assigning Analog Extensions and Terminals

Using the Manager IV Terminal Change Management Operations Guide, and a Manager IV terminal, assign one Analog extension and one 2500 terminal using Manager IV TCM. Let Manager IV assign the Equipment Line Locations. Ask the instructor for assistance, if necessary.

3. Assigning Non-analog Extensions and Terminals

Using the Manager IV Terminal Change Management Operations Guide, and a Manager IV terminal, assign one Non-analog extension and one 7406dc terminal using Manager IV TCM. Let the Manager IV assign the Equipment Line Locations. Ask the instructor for assistance, if necessary.

Adding a Terminal

```
AT&T Mgr IV 1.0  SR: gorkatest    DEFINITY G2.1                    gZ
tcm admin terminal add                                  Page  3 of  3

03:                    06:                    14:
04:                    07:                    15:
05:                                           16:
                       13:
02:AMW 2343                                   24:
                                              17:
                                              25:
                                              18:
                                              26:
                                              19:
                                              27:
                                              20:
                                              28:
                                              21:
                                              29:
                                              22:
                                              30:
                                              23:

End of Form
```

BC1008A\oh1b10.scr

OH 1B-10

EXERCISE REVIEW

The instructor will review what the screens look like when properly filled out. If the screens looks different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two major areas of Manager IV extensions and terminals are:

- Assigning analog extensions and terminals
- Administering non-analog terminals

Assigning analog extensions and terminals

- Assigning analog extensions and terminals assigns an extension line number for an analog terminal, as well as define the features and attributes of the analog terminal
- Copying like extensions
- Changing the features and attributes of an extension

Administering Non-analog terminals

- GTA (General Terminal Administration)
- Adapting terminals
- Assigning non-analog terminals
- Assigning set IDs
- Call Appearance
- BRI (Basic Rate Interface)
- Defining straight line sets
- Add-on modules

LESSON 1C

Call Distribution

Lesson 1C Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Administer ACD (Automatic Call Distribution) features**
- **Administer ACD groups**
- **Associate incoming trunk groups with specific ACD groups or splits**
- **Associate specific announcements with specific trunk groups or splits**

OH 1C-1

LESSON INTRODUCTION

This lesson explains and discusses Automatic Call Distribution. The lesson covers ACD administration, Call Vectoring and associated trunk groups.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Administer ACD features
- Administer ACD groups
- Associate incoming trunk groups with specific ACD groups or splits
- Associate specific announcements with specific trunk groups or splits

Call Distribution

Administering ACD (Automatic Call Distribution) consists of the following:

- **Administering ACD Group Members**
  - **Displaying ACD groups**
  - **Adding ACD group members**
  - **Adding ACD groups**
- **Administering ACD Recorded Announcements**
  - **Assigning Announcement Information**
  - **Administering ACD lamps**
  - **Assigning ACD terminating trunk groups**

OH 1C-2

DISCUSSION

Administering ACD

DEFINITY® Manager IV Terminal Change Management Operations Guide

Administering ACD (Automatic Call Distribution) and Call Vectoring consists of the following:

- ACD permits calls to terminate directly to the agent in a prearranged group whose terminal has been idle the longest. ACD also incorporates the capabilities of EUCD (Enhanced Uniform Call Distribution).
- Administering ACD Group Members
  - Use the **acd-members** and the **acd-grp** commands to administer facilities for ACD group members.
    - Displaying ACD Groups
    - Adding ACD groups
    - Adding ACD group members
- Administering ACD Recorded Announcements
  - ACD is available with a unique first and second common announcement to be used for incoming calls to inform callers of a delay. Each ACD group can be provided with the announcement.
    - Assigning Announcement Information

Call Distribution

- Administering ACD groups
  - Removing an ACD group
  - Changing an ACD group
- Administering ACD Announcements
  - Adding an ACD announcement unit
  - Removing an ACD announcement unit
  - Changing ACD announcement data
- Administering ACD Members
  - Adding, changing, and removing ACD agents
- Administering Terminating Trunk Groups with ACD
  - Adding a terminating trunk group from an ACD split
  - Changing terminating trunk group attributes
- Administering Call Vectoring

OH 1C-3

DISCUSSION

Administering ACD Groups (continued)

- Assigning ACD terminating trunk groups

  An ACD group can receive calls from various trunk types: DID (Direct Inward Dialing), non-DID, private switched, network, and dial repeating or automatic tie trunks. An ACD group can also receive calls from other system terminals or attendants.

- Administering ACD Group Members
  - Removing an ACD Group
  - Changing an ACD Group
- Administering ACD Announcements
  - The **acd-announcements** command is used to add, change, display, or remove ACD recorded announcement data.
- Administering ACD Members
  - The **acd-members** command is used to add, display, or remove ACD agents from an ACD split.
- Administering Terminating Trunk Groups with ACD
  - The **term-trk-grps change** command is used to terminate a trunk group to an ACD split, as well as to define whether the trunk group has priority termination, and whether it is measured by CMS (Central Management System).
- Call Vectoring

  The Call Vectoring feature is an enhanced and flexible way of processing incoming calls to the AT&T System 85 R2V4 or DEFINITY® Communications System Generic 2 switches. It defines the processing of incoming calls to ACD splits in a way that provides additional flexibility over existing methods.

Adding an ACD Group

```
AT&T Mgr IV 1.0  SR: ncs072500     DEFINITY G2.1                    g2
tcm admin acd-grp add                                    Page  1 of  1

                        ACD - SPLIT CHARACTERISTICS

      ACD Split No.:

    SPLIT CHARACTERISTICS                SPLIT SUPERVISOR AND CHARACTERISTICS

         Split Size:                       Multiple Call Handling? n
Queuing Trunk Group:                             Auto Available? n
          Hunt Type: 0 (CIRCULAR)       Supervisor Extension No.:
         Split Type: 0 (REGULAR)
     Machine Number: 0
Outflow/Queue Level:
                                                 LAMP CONTROL CIRCUIT

                                                    Board Index:
                                                  Circuit Index:
```

BC1008A\oh1c4.scr

OH 1C-4

PRACTICE EXERCISE

DEFINITY® Manager IV Terminal Change Management Operations Guide

1. Adding an ACD Split

Using the Manager IV Terminal Change Management Operations Guide, and a Manager IV terminal, add an ACD Split and assign two members, one supervisor and one non-supervisor extension.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens look like when properly filled out. If the screens looks different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two major areas of Manager IV Call Distribution are:

- Automatic Call Distribution
- Call Vectoring

Automatic Call Distribution

Administering ACD (Automatic Call Distribution) consists of the following:

- ACD permits calls to terminate directly to the agent in a prearranged group whose terminal has been idle the longest. ACD also incorporates the capabilities of EUCD.
- Administering ACD Group Members
- Administering ACD Recorded Announcements
- Administering ACD Groups
- Administering ACD Announcements
- Administering ACD Members
- Administering Terminating Trunk Groups with ACD

Call Vectoring

- The Call Vectoring feature is an enhanced and flexible way of processing incoming calls to the AT&T System 85 R2V4 or DEFINITY® Communications System Generic 2 switches. It allows you to define the processing of incoming calls to ACD splits in a way that provides additional flexibility over existing methods.

LESSON 1D

Modeling

Lesson 1D Objectives

Upon successful completion of this lesson the student will be able to:

- **Create a Personal Model**
- **Retrieve Data from a Model**
- **Remove a Model**
- **Use a Model**
- **Recover last Input and Output**

OH 1D-1

LESSON INTRODUCTION

This lesson covers the use of the Manager IV modeling features, Scrapbook and Clipboard.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Create a Personal Model
- Retrieve Data from a Model
- Remove a Model
- Use a Model
- Recover last Input and Output

Modeling

Administering DEFINITY® Manager IV Modeling consists of the following:

- **Using the Scrapbook feature**
  - **Creating a new Personal Model**
  - **Retrieve Data from a Model**
  - **Removing a Model**
  - **Using Global Models**
- **Using the Clipboard Feature**
  - **Recovering Last Input**
  - **Recovering Last Output**

OH 1D-2

DISCUSSION

Administering Modeling

DEFINITY® Getting Started with Manager IV

Administering DEFINITY® Manager IV Modeling consists of the following:

° Using the Scrapbook feature

Scrapbook creates model transactions. A model is a saved copy of a transaction screen that has entries in some or all of its data fields.

- Creating a new Personal Model
- Retrieve Data from a Model
- Removing a Model
- Using Global Models

° Using the Clipboard Feature

Clipboard allows entering repetitive data to be avoided by copying entries on one transaction screen to the same fields on the next screen

- Recovering Last Input
- Recovering Last Output

PRACTICE EXERCISE

DEFINITY® Getting Started with Manager IV Guide

1. Creating a Personal Model

Using the DEFINITY® Getting Started with Manager IV Guide and a Manager IV terminal, create a personal model for a 7406dc terminal with three call appearance buttons, and at least three other button assignments that you would use.

2. Using a Model

Using the DEFINITY® Getting Started with Manager IV Guide and a Manager IV terminal, use the information in the previously created model to add a 7406dc terminal to an extension.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two major areas of Manager IV Modeling are:

- Using the Scrapbook feature
- Using the Clipboard Feature

Using the Scrapbook feature

- Creating a new Personal Model
- Retrieve Data from a Model
- Removing a Model
- Using Global Models

Using the Clipboard Feature

- Recovering Last Input
- Recovering Last Output

MODELING FEATURES: SCRAPBOOK AND CLIPBOARD

This section covers the use of the Manager IV modeling features, Scrapbook and Clipboard. Both features help you reduce the entry of repetitive data while performing transactions. Scrapbook allows you to save permanent files of transaction data for repeated or later use, while Clipboard lets you recover your most recent transaction data for immediate use. You can choose which feature is most helpful for the transactions you are performing.

Use the verb **add** with the appropriate objects in constructing model transactions. For example, if you want a model for trunk group administration, use the **trk-grp add** transaction in your model, rather than using the verbs **display** or **change**. This way, you can be assured that all fields will be populated in the model when you want to use it.

Using The Scrapbook Feature

Scrapbook lets you create model transaction screens. A model is a saved copy of a transaction screen that has entries in some or all of its data fields. A single model copies the entire transaction, even if it includes multiple screens.

Manager IV allows you to create models for your own use (personal models), or global models for all users to access. Data saved from the screens can then be read into the same or similar transaction screens when you access them later.

Procedure: Creating a New Personal Model

1. Enter a command path to access a transaction screen using the **add** verb. When the screen appears, enter information into the appropriate data fields.
2. To create a model of your current screen, press (ESC) - (M).
   - The prompt "Save fields on model name (RETURN to abort):" appears at the bottom of your screen.
3. At the model name prompt, enter a name for the model file and press (RETURN). The file name can consist of a maximum of 14 alphanumeric or special characters and can be either upper- or lowercase characters. One of three possible responses occurs:
   - If "model <xxx> saved" appears (where xxx is the file you specified) you have executed the transaction successfully. The model is saved in directory "scrap."
   - If you are prompted "replace current one?," the name you specified already exists. Type **y** to overwrite the existing model, or type **n** and enter a different name at the model prompt to create a new model.
   - If "Cannot Create" appears, contact your Manager IV System Administrator.

Procedure: Retrieving Data From a Model

Model files appear in your "scrap/" directory. Follow the procedure below to use a personal model you created.

1. Use the appropriate object and the **add** verb to access a transaction screen.
2. To read the model file into the screen, press (ESC) - (m).
   - The prompt "Recover fields from model name (RETURN to abort):" appears at the bottom of your screen.

3. At the model name prompt, enter the name of the model file you want to recall and press (RETURN).
   - The fields on your current screen fill with the appropriate entries from the model file.
4. You can customize the screen by changing entries in applicable fields.
5. Execute or save your transaction screen by pressing (EXECUTE) or (ESC) - (e).

Procedure: Changing a Model

To change a model file, follow this procedure:

1. Use the appropriate object and verb to access a transaction screen.
2. Read a model file into the screen by pressing (ESC) - (m).
   - The prompt "Recover fields from model name (RETURN to abort):" appears at the bottom of your screen.
3. At the model name prompt, enter the name of the selected model file and press (RETURN).
   - The fields on your current screen fill with the entries from the model file.
4. To change the original model file, type over the entries you want to change. Press (RETURN) to skip over entries.
5. Press (ESC) - (M).
   - The prompt "Save fields in model name (RETURN to abort):" appears on the bottom of your screen.
6. Reenter the name of the original model file, and press (RETURN).
   - The "replace current one?" prompt appears on your screen.
7. You can either replace the existing file or specify a new name for the file you just created.
   - To confirm the update and replace the file, enter **y** at the "replace current one?" prompt, and press (RETURN). The old model file is now updated with the new data.
   - To keep your original model file unchanged, enter **n** at the "replace current one?" prompt. Then enter a new name at the model name prompt. This new model contains the changes you have made.

Procedure: Removing a Model

It is important to clean up your files periodically by removing models no longer in use. To remove a model file, follow this procedure:

1. Enter **results remove** and press (RETURN).
2. Enter **scrap/** followed by the name of the scrapbook model file you want to remove in the Results File Name field.
3. Press (EXECUTE) or (ESC) - (e).

Procedure: Using Global Models

When you create model files using ESC - M, the model is stored in your "scrap" directory and only you can access it. Manager IV also has a global model capability that allows you to create a model that is accessible to all users. If you have several Manager IV users, they can all use the same models to input similar data.

Global models are stored in the directory "gscrap." They work the same way as other scrapbook models, but the escape sequences used to create and recall them are different.

Prerequisite: To use global modeling, your System Administrator must first add the **gscrap** directory to the **etc/profile**.

See: Chapter 2, "User Administration" in the *DEFINITY® Manager IV System Administration* manual for instructions on administering the global modeling feature.

- To create a global model, use the escape sequence ESC - G.
- To recall an existing global model, use the escape sequence ESC - g.

Follow the procedures above to change and remove a model, substituting ESC - G for ESC - M, and substituting ESC - g for ESC - m. Remember that global model files are stored in the directory "gscrap."

Using The Clipboard Feature

With Clipboard, you can avoid entering repetitive data by copying entries on one transaction screen to the same fields on the next screen you call up. Unlike Scrapbook, which creates permanent model files of specific transaction screens, Clipboard consists of a temporary input and output file that carries data field entries between the same or similar transaction screens. The system automatically stores the input and output of the most current executed transaction. With each execution of a transaction, the input and output files are overwritten.

Clipboard is especially useful in recovering from transaction errors. For example, if a transaction fails, you can use Clipboard to recall your original entries on a new screen. You can then retype the necessary corrections to the screen before running the transaction again.

The following procedures demonstrate how to create a Clipboard file and read it into the next screen you call up.

Procedure: Recovering Your Last Input

This procedure uses (ESC) - (i) to read a file of the last input into your current transaction screen. If your current screen is not exactly the same as your previous one, only the relevant entries are read into the corresponding fields. Also, if you are reading data from or to a multipage screen, you still only need to use the Clipboard command once.

Note: Clipboard recovers the data entered on only the *last* transaction you executed.

1. Enter a command path to access a transaction screen.
2. Enter information into the appropriate data fields.
3. Execute the transaction.
4. Enter a command path for the same or similar transaction screen and press (RETURN).
   - The appropriate screen appears.
5. To read the Clipboard file into the current screen, press (ESC) - (i).
   - The data entered on your last transaction screen fills the appropriate fields on your current screen.
6. Modify the data on the screen(s) if necessary.
7. Execute the transaction.

Procedure: Recovering Your Last Output

This procedure uses (ESC) - (o) to read the data output from your last transaction immediately into your current transaction screen. If your current screen is not exactly the same as your previous one, only the relevant data reads into the corresponding fields. Also, if you are reading from or to a multi-page screen, you still need to use the Clipboard command only once.

Note: Clipboard recovers the output or display from only the *last* transaction you executed.

1. Enter a command path for a transaction that, when executed, creates screen output or a display. For example, enter the **display** verb for a specific object.
2. Enter information into the appropriate data fields.
3. Execute the transaction.
   - The system responds by displaying output data.
4. Enter a command path for the same or similar transaction, and press (RETURN). For example, enter the **add** or **change** verb for the same object you just displayed.
   - The appropriate screen appears.
5. To read the Clipboard file into your new screen, press (ESC) - (o).
   - The appropriate data output from your last transaction fills the appropriate fields on your current screen.
6. Modify the data on your screen if necessary.
7. Execute the transaction.

LESSON 1E

Displaying and Troubleshooting Service Requests

Lesson 1E Objectives

Upon successful completion of this lesson the student will be able to:

- **Display the Service Request Transactions**
- **Troubleshoot Service Request Failures**

OH 1E-1

LESSON INTRODUCTION

This lesson discusses and explains how to display Manager IV Service Request transactions and how to troubleshoot failed Service Requests.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Display the Service Request Transactions
- Troubleshoot Service Request Failures

Displaying Service Requests

Displaying Manager IV Service Request transactions consists of the following:

- **Selecting a non-detailed Service Request display**
- **Selecting a detailed Service Request display**

OH 1E-2

DISCUSSION

Displaying Manager IV Service Requests

DEFINITY® Getting Started with Manager IV Guide

Displaying Manager IV Service Request transactions consists of the following:

° Displaying Manager IV Service Requests

Use *service-request display* to show a list of pending and failed Service Requests. A pending Service Request is a Service Request that has not yet been downloaded to the product. A failed Service Request is a Service Request that attempted to download, but was not successfully completed.

- Selecting a Non-detailed Service Request Display

  The non-detailed display lists the Service Request number, the scheduled due date, and the status of each pending queue entry for each transaction in the Service Request.

- Selecting a Detailed Service Request Display

  The detailed display lets you view the actual contents of each pending queue entry in the Service Request. You have the option of choosing the detailed display in the form, of your original input screens and field entries, pending queue entries, or both of these forms together.

Troubleshooting Service Requests

Troubleshooting Manager IV Service Requests consists of the following:

- **Common causes for Service Request failures**
  - **Communication errors**
  - **Failure to connect to the switch**
  - **Equipment or feature that is being administered is in use**
  - **Internal PBX problems**
  - **The Manager IV database and switch are not synchronized**
- **What happens when a Download Fails**

- **Correcting Service Request failures**
  - **Daily Follow-up Procedures**
  - **Results Display**
  - **Service Request Display**

OH 1E-3

DISCUSSION

Troubleshooting Manager IV Service Requests

Troubleshooting Manager IV Service Requests consists of the following:

° Common Causes for Service Request Failures

- Communication errors
- Failure to connect to the switch
- Equipment or feature that is being administered is in use
- Internal PBX problems
- The Manager IV database and switch are not synchronized
- Failed download

  When a Service Request fails, some or all of the transaction changes in the Service Request are not downloaded to the switch. The failed PQ (Pending Queue) "product" transaction or entries are marked with a status of **f** (failed).

° Correcting Service Request failures

- Daily follow-up procedures
- Results display
- Service Request display

Troubleshooting Service Requests

- **Error Correction Strategies**
  - **Communications Errors**
  - **Failure to Connect to Switch**
  - **Equipment or Feature in Use**
    - **Recovering from Equipment-in-use Errors**
  - **Database Synchronization Errors**
    - **Fixing the Error and Re-running the Service Request**
    - **Removing Failed or Pending Service Requests**
    - **When a Service Request is Removed**
    - **Removing Pending Transactions in the Service Requests**

OH 1E-4

DISCUSSION

Troubleshooting Manager IV Service Requests (continued)

- Error correction strategies
  - Communications Errors
    - Noise on the line between Manager IV and the switch or between the users terminal and Manager IV.
    - Line drops where the connection between Manager IV and the user's terminal is broken, or the connection between Manager IV and the switch is broken.
  - Failure to Connect to Switch
    - The switch responds with a busy signal because the called port is busy when the connection is attempted.
    - The switch login sequence fails because the switch is busy running its own jobs.
    - Manager IV can not connect to the switch due to equipment problems.

DISCUSSION

Troubleshooting Manager IV Service Requests (continued)

- Equipment or Feature in Use

  This type of error condition occurs when a facility or trunk feature that you are trying to administer is in use at the time the switch translation is attempted.

- Database Synchronization Errors

  Database synchronization errors occur when the Manager IV database and the switch do not contain matching data. This can mean that although the data checks performed by Manager IV accept the transaction, the transaction still fails at the switch because the switch does not match the Manager IV database.

  - Fixing the Error and Re-running the Service Request

  - Removing Failed or Pending Service Requests

    Use this method when you cannot isolate and resolve an Service Request error and you want to undo its effects so that you can create a new one.

  - When a Service Request is Removed

    When the *service-request remove* command runs, Manager IV looks for failed or pending PQ entries, removes them, and places the corresponding Manager IV database information with the associated SPQ (Shadow Pending Queue) records.

DISCUSSION

Troubleshooting Manager IV Service Requests (continued)

- Removing Pending Transactions in the Service Requests

  This method of recovery is used when you determine that a pending or failed Service Request should be corrected by a method other than re-scheduling or rerunning the Service Request.

- When Pending-Queue Cleanup Runs

  The *pending-queue cleanup* command removes all of the Service Requests PQ and SPQ records and unlocks all of the Manager IV database records locked by the Service Request.

PRACTICE EXERCISE

Getting Starting with Manager IV

1. Displaying Service Requests Transactions

Using the DEFINITY® Getting Started with Manager IV Guide and a Manager IV terminal, display the Service Request used in the previous lessons.

2. Troubleshooting a Failed Service Request

Using the DEFINITY® Getting Started with Manager IV Guide and a Manager IV terminal, troubleshoot a failed Service Request used in the previous lessons.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens look like when properly filled out. If the screen looks different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The four major areas of displaying and troubleshooting Service Requests are:

- Displaying Service Requests
- Common Causes for Service Request Failures
- Correcting Service Request failures
- Error Correction Strategies

Displaying Service Requests

- Selecting a non-detailed Service Request display
- Selecting a detailed Service Request display

Common Causes for Service Request Failures

- Communication errors
- Failure to connect to the switch
- Equipment or feature that is being administered is in use
- Internal PBX problems
- The Manager IV database and switch are not synchronized

- Failed download

Correcting Service Request failures

- Daily Follow-up Procedures
- Results Display
- Service Request Display

LESSON SUMMARY

Error Correction Strategies

- Communications Errors
- Recovering from Communications Errors
- Changing the Status of an Service Request

° Failure to Connect to Switch

° Equipment or Feature in Use

- Recovering from Equipment-in-use Errors

° Database Synchronization Errors

- Fixing the Error and Re-running the Service Request
- Removing Failed or Pending Service Requests
- When a Service Request is Removed
- Removing Pending Transactions in the Service Requests
- When Pending-Queue Cleanup Runs

LESSON 1F

Terminal Change Management Reports

Lesson 1F Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Display and interpret TCM reports**
- **Schedule TCM Reports**

OH 1F-1

LESSON INTRODUCTION

This lesson explains how to display and interpret Terminal Change Management reports. The lesson also discusses the various types of Terminal Change Management reports.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Display and interpret TCM reports
- Schedule TCM Reports

TCM Reports

Accessing and interpreting Manager IV TCM reports consists of the following:

- **TCM Reports**
- **Reports are available for:**
  - **Dialing plan**
  - **System wide features**
  - **Extensions and terminals**
  - **Switch equipment**
- **Report Directory**

OH 1F-2

DISCUSSION

Manager IV TCM Reports

DEFINITY® Manager IV Terminal Change Management Operations Guide

Accessing and Interpreting Manager IV TCM reports consists of the following:

- TCM Reports

  These are designed to give you detailed information about your system. Reports can be used before you begin a task to obtain specific details needed for that task, they can also be used to verify changes that have been made.

- Available Reports

  Reports are available for the following task groups

  - dialing plan
  - system wide features
  - extensions and terminals
  - switch equipment

  Most reports cover a wider range than displays. If you were looking for information on which extensions had controlled restriction group numbers, for example, instead of all information about a specific extension number, you would save time by requesting a report.

DISCUSSION

Manager IV TCM Reports (continued)

° Report Directory

Each TCM report is included in this directory. The reports are arranged alphabetically by report name. Each entry includes the following:

- Path
- Purpose
- Selected Options
- Sort Order
- Sample Output

Producing a TCM Report

```
AT&T Mgr IV 1.0  SR: ncs072500    DEFINITY GZ.1                    gZ
tcm report-admin extension report                          Page  1 of  1




     Enter Extension(s): 2345




To send the report to a file or printer, use the schedule command (<esc>s).
End of Form
```

BC1008A\oh1f3.scr

OH 1F-3

PRACTICE EXERCISE

DEFINITY® Manager IV Terminal Change Management Opertions Guide

1. Producing a Report

Using the Manager IV Terminal Change Management Operations Guide, and a Manager IV terminal, schedule a TCM report that you would use on-the-job.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The three major areas of Manager IV TCM Reports are:

- TCM Reports
- Available Reports
- Report Directory

TCM Reports

- TCM reports are designed to give you detailed information about your system. Reports can be used before you begin a task to obtain specific details needed for that task, they can also be used to verify changes that have been made.

Available Reports

- Reports are available for the following task groups
  - dialing plan
  - system wide features
  - extensions and terminals
  - switch equipment

Report Directory

- Each TCM report is included in this directory. The reports are arranged alphabetically by report name. Each entry includes the following:
  - Path
  - Purpose
  - Selected Options
  - Sort Order
  - Sample Output

UNIT 2

FM (Facilities Management)

Unit 2 Objectives

Upon Successful completion of this unit, the student will be able to:

- **Administer network features**
- **Administer trunks and trunk groups**
- **Administer Authorization Codes**
- **Administer trunk queueing**
- **Display and interpret FM reports**

OH 2-1

UNIT INTRODUCTION

This unit explains and discusses the administrative functions within Manager IV Facilities Management.

UNIT OBJECTIVES

Upon successful completion of this unit the student will be able to:

- Administer network features
- Administer trunks and trunk groups
- Administer Authorization Codes
- Administer trunk queueing
- Display and interpret FM reports

LESSON 2A

Network Feature Administration

Lesson 2A Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Change the System Class of Service**

OH 2A-1

LESSON INTRODUCTION

This lesson explains the administration of the Network Features for Manager IV.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Change the System Class of Service

Network Feature Administration

- Types of Features
  - Standard Features
  - Optional Network features
- System Class of Service
  - System features
  - ACD (Automatic Call Distribution)
  - Attendant switch features
  - Call detail recording
  - ARS (Automatic Route Selection)
  - AAR (Automatic Alternate Routing)
  - Uniform network numbering plan
  - Trunk verification by terminal
  - Abbreviated dialing
  - ACA (Automatic Circuit Assurance)
  - Call coverage
  - Administrable alarms

OH 2A-2

DISCUSSION

Network feature administration

DEFINITY® Manager IV Facilities Management Operations Guide

Network Feature Administration consists of the following:

° Types of Features

Network features span the telecommunications system. They are available to users everywhere a switch is connected to your network. There are two types of network features:

- Standard Features

  System Class of Service administers a wide variety of switch features. Using one transaction, system-level translations that determine the basic configuration of a switch and its place within a specific network architecture can be defined.

- Optional Network features

  CAS (Centralized Attendant Service), Call Distribution and Tenant Services. Optional features are purchased separately, either at the time of the switch purchase or at later upgrades. FM administers the hardware and software, for example, trunk groups and lamps, and defines other parameters of these network features.

Network Feature Administration

- **Dialing Plan**
  - **Changing the definition of the first dialed digit using first-digit.**
  - **Using the five-digit dialing to establish the prefix/thousands digit combination to be used for five digit dialing.**
  - **Use the command station-no-steering to associate a steering code with a dial access code.**
  - **Establish feature dial access codes with the TCM command dial-access-codes.**
- **Station Number Steering**
- **Programmable Intercept Treatment**
- **Synchronizing the PBX Clock**

OH 2A-3

DISCUSSION

Network Feature Administration (continued)

° System Class of Service

System Class of Service defines the features and characteristics of a particular switch in a telecommunications network.The following is a list of some of the features that System Class of Service controls:

- System features
  - DCS
  - Call vectoring
  - Multi-function terminal
- Automatic Call Distribution
  - Call MS
  - Abandon call search
- Attendant switch features
  - Remote access to attend
  - Trunk-to-trunk call
- Call detail recording
- Automatic route selection
- Automatic Alternate Routing
- Uniform network numbering plan
- Trunk verification by terminal
- Abbreviated dialing
- ACA (Automatic Circuit Assurance)
- Call coverage
- Administrable alarms

DISCUSSION

Network Feature Administration (continued)

° Dialing Plan

The dialing plan used by your network was set up at system initialization. This section explains tasks that relate to administering your system's dialing plan.

In a DCS (Distributed Communications System) environment a uniform dial plan is used where the numbering scheme used in the network is consistent across switches. Tasks in this group include:

- Changing the definition of the first dialed digit using **first-digit**.
- Using **five-digit dialing** to establish the prefix/thousands digit combination to be used for five digit dialing.
- Use the command **station-no-steering** to associate a steering code with a dial access code.
- Establish feature dial access codes with the TCM command **dial-access-codes**.

° Station Number Steering

The **station-no-steering** transaction creates an association between a steering code and an RNX or DAC (Dial Access Code). By entering a steering code, you can assign a block of 1,000 stations or a block of 10,000 stations to a trunk or feature DAC or to an RNX.

° Programmable Intercept Treatment

Programmable intercept treatment allows you to specify the treatment of calls that cannot be completed; it can be based on the source of the call and/or the course of the intercept.

DISCUSSION

Network Feature Administration (continued)

° Synchronizing the PBX Clock

The Manager IV system clock should always be synchronized with the switch clock so that scheduled testing and routing schedules are synchronized. The switch time is what is changed. If a switch fails for any period of time, its clock may be out of sync with Manager IV's clock.

Displaying System Class of Service

```
AT&T Mgr IV 1.0  SR: ncs072500     DEFINITY GZ.1                    gZ
fm admin sys-cos display                                    Page  1 of  6


 SYSTEM FEATURES

            Call Waiting Enabled? y          Standard Network Enabled? y
            Cache Memory Enabled? n            Multi-Premises Enabled? y
          Music On Hold Enabled? n                       DCS Enabled? n
       Tandem Tie Trunks Enabled? y                      DCIU Enabled? y
Multi-Function Terminal Enabled? y           Multi-Machine Node Type:
                    ISDN Enabled? y
          Call Vectoring Enabled? y            Switch belongs to CAS? n
          Tenant Service Enabled? n

 AUTOVON INTERFACE
       Switch Belongs to AUTOVON? n
```

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```
AT&T Mgr IV 1.0  SR: ncs072500     DEFINITY GZ.1                    gZ
fm admin sys-cos display                                    Page  2 of  6


 SYSTEM FEATURES (continued)

                      Home NPA: 303          Trunk to Trunk Transfer? y
                Dial 1 for Toll: 0         Common Control Duplicated? n
                  Digits Chimed: 0     Remote Access Shared With LDN?
               Digits Forwarded: 4     Demand Print Password Required? n
               Call-Control FRL: 0    Info. For Terminal Dialed Calls? y
             Loudspeaker Paging: 1                    Combined CC/TMS? y
                                     Universal Attendant Conference? n
              BRI Service SPID? n
        BRI Service SPID Number:

 AUTOMATIC CALL DISTRIBUTION (ACD/UCD)

  Abandoned-Call Search Enabled? n       Supervisor Console Number:
 Call Management System Enabled? n                   Warning Tone? n
         ACD Lookhead Interflow? n
```

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OH 2A-4

PRACTICE EXERCISE

DEFINITY® Manager IV Facilities Management Operations Guide

1. Displaying System Class of Service

Using the DEFINITY® Manager IV Facilities Management Operations Guide and a Manager IV terminal, Display System Class of Service 1. Determine which System Features are display only.

When finished, have the instructor check the screens for the proper information

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If the screen looks different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The six major areas of Manager IV Network Feature Administration are:

- Types of Features
- System Class of Service
- Dialing Plan
- Station Number Steering
- Programmable Intercept Treatment
- Synchronizing the PBX Clock

Types of Features

- Standard Features
- Optional Features

System Class of Service

- Changing System Class of Service

Dialing Plan

- Administering first dialed digits
- Administering five digit dialing
- Dial Access Codes

Station Number Steering

- Station-no-steering

Programmable Intercept Treatment

- Setting Programmable Intercept Parameters

Synchronizing the PBX Clock

LESSON 2B

Trunk Group and Modem Pool Administration

Lesson Objectives

Upon successful completion of this lesson the student will be able to:

- **Display/add/change/remove a trunk**
- **Display/add/change/remove a trunk group**

OH 2B-1

LESSON INTRODUCTION

This lesson will explain administration of trunk groups and modem pools.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Display/add/change/remove a trunk
- Display/add/change/remove a trunk group

Trunk Group and Modem Pool Administration

Trunk Group Administration consists of the following:

- **Trunk and trunk group administration**
  - **Trunk and trunk group commands**
  - **Performing trunk and trunk group commands**
  - **Trunk group reports**
  - **DEFINITY® Communications System Generic 2 and AT&T System 85 trunk types**
- **Modem pool administration**
  - **Administering modem pools on DEFINITY® Communications System Generic 2 and AT&T System 85**

OH 2B-2

DISCUSSION

Trunk group administration

DEFINITY® Manager IV Facilities Management Operations Guide

Trunk Group Administration consists of the following:

° Trunk and Trunk Group Administration

This section explains how to administer trunks and trunk groups with Manager IV. Manager IV assists in the administration of trunks and trunk groups by providing the *trk-grp* and *trk* transactions.

- Trunk and Trunk Group Commands

  Individual trunks are administered with the *trk* object. Trunk groups are administered with the trk-grp object. The verbs supported are: *add, display, change,* and *remove* . Trunks are moved with the *trk move* command.

- Performing Trunk and Trunk Group Commands

  · Add trunks and trunk groups

  There are a number of things to consider when you add trunk groups to your system.

  · How to Display trunks and trunk groups

DISCUSSION

Trunk Group Administration (continued)

- Change trunks and trunk groups

  The *trk-grp change* transaction allows you to modify the attributes associated with any trunk group. You are not permitted to change the individual trunk members attributes with this command.

- Remove trunks and trunk groups

  The *trk-grp remove* command allows a trunk group to be removed only if has no member trunks. If trunk members are present, you must first use the *trk remove* command to remove the trunk members from the group.

- Move trunks

  You can move up to 30 trunks to a new trunk group with the *trk move* command. The new trunk group number entered must be of a compatible trunk type so that the trunks are still on the correct circuit pack type for the new trunk group.

- Trunk Group reports

  Many FM managers keep hard copy reports on trunk groups for easy reference.

- DEFINITY® Communications System Generic 2 and AT&T System 85 Trunk Types

DISCUSSION

Trunk Group Administration (continued)

° Modem Pool Administration

Modems, which convert digital signals to analog signals and vice versa, are used when data terminals and personal computers are communicating with other computers which are remote or not part of your digital switch network.

Modem Pooling eliminates the need for a dedicated modem for every data terminal that requires access to analog facilities. When modem pooling, modems are grouped into pools for switched access when required.

- Administering Modem Pools on DEFINITY® Communications System Generic 2 and AT&T System 85

  The *modem-pool* transaction administers analog and digital trunk groups, their attributes and pairing of trunks in a group.

  · Add Modem Pool Trunks

  · Display Modem Pool Trunks

  · Change Modem Pool Trunks

  · Remove Modem Pool Trunks

  · Adding Additional Trunks to Modem Pool

Adding a Trunk Group

```
AT&T Mgr IV 1.0  SR: ncs072500     DEFINITY GZ.1                    gZ
fm admin trk-grp add                                        Page  1 of  8

                        TRUNK GROUP ADMINISTRATION

            Trunk Group No.: 18
          Dial Access Code:                    Dial Access Restrict? n
              Trunk Type: 19                         CO Line Pickup? n
           Signaling Type: 1          Access/Egress to Public Network? n
     Bearer Capability COS: 4

                Trunk Name:

  ROUTE ADVANCE DATA

              Trunk Group 1:                         Trunk Group 3:
              Trunk Group 2:                         Trunk Group 4:

   AUTOMATIC CIRCUIT ASSURANCE

    Long Holding Time (hrs): 0              Short Referral Level: 0
  Short Holding Time (secs): 0
End of Page 1
```

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```
AT&T Mgr IV 1.0  SR: ncs072500     DEFINITY GZ.1                    gZ
fm admin trk-grp add                                        Page  2 of  8

                        TRUNK GROUP ADMINISTRATION

            Trunk Group No.: 18

  GENERAL TRUNK PARAMETERS

           DS-1 Pad Group: 0                  Timed Recall Level: 0
    Disconnect Supervision? n                          Balance? n
        Redial Delay Timer: 0
                                             Battery Reversal? n
            Touch Tone In? n
           Touch Tone Out? n                   Hybrid Balance: 1

         Timed Recall Time: 0

  STATION MESSAGE DETAIL RECORDING (SMDR)

               SMDR Active? n

End of Page 2
```

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OH 2B-3

PRACTICE EXERCISE

DEFINITY® Manager IV Facilities Management Operations Guide

1. Adding a Trunk Group

Using the Manager IV Facilities Management Operations Guide, and a Manager IV terminal, add a Trunk Group with one member.

2. Adding Trunk Group Members

Using the Manager IV Facilities Operations Guide, and a Manager IV Terminal, add two members to the previously added trunk group.

When finished, have the instructor check the screens for the proper information.

Adding a Trunk Group Member

```
AT&T Mgr IV 1.0  SR: ncs072500    DEFINITY GZ.1                    gZ
fm admin trk add                                          Page  1 of  Z

                          TRUNK GROUP ADMINISTRATION

Enter only one of the following fields

                Trunk Group No.:
              Dial Access Code: 1

End of Page 1
```

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OH 2B-6

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two major areas of Manager IV Trunk Group and Modem Pool Administration are:

- Trunk and Trunk Group Administration
- Modem Pool Administration

Trunk and Trunk Group Administration

- Trunk and Trunk Group Commands
- Intergrated Telemarketing Service
- Performing Trunk and Trunk Group Commands
- Trunk Group reports
- DEFINITY® Communications System Generic 2 and AT&T System 85 Trunk Types

Modem Pool Administration

- Administering Modem Pools on DEFINITY® Communications System Generic 2 and AT&T System 85

LESSON 2C

Network Routing

Lesson 2C Objectives

Upon successful completion of this lesson the student will be able to:

- **Assign ARS patterns to Home NPA (Numbering Plan Area)**
- **Display/add/change an ARS pattern**
- **Assign ARS patterns to area codes (NPAs)**

OH 2C-1

LESSON INTRODUCTION

This lesson will explain Network Routing with Manager IV. The lesson will also explain how to administer ARS.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Assign ARS pattern to Home NPA (Numberin Plan Area)
- Display/add/change an ARS pattern
- Assign ARS patterns to area codes (NPAs)

Network Routing

Network Routing consists of the following:

- **ARS (Automatic Route Selection)**
  - **Administering ARS**
  - **Assigning patterns to NPAs (Numbering Plan Area)**
  - **Foreign NPA Commands**
  - **Adding New Trunk Groups to ARS Patterns**
- **ARS International Call Routing**
  - **Administering ARS International Call Routing**

OH 2C-2

DISCUSSION

Network Routing

DEFINITY® Manager IV Facilities Management Operations Guide

Network Routing consists of the following:

° ARS (Automatic Route Selection)

The ARS feature provides alternate routing for calls using the public network. The feature is controlled by a group of software tables, and it collects and interprets enough dialed digits to route the call using these tables.

- Administering ARS

  Administering ARS consists of the following:

  · Adding an ARS pattern to the database

  · Changing an ARS pattern

  · Displaying ARS patterns

  · Inserting an ARS preference

  · Removing an ARS preference

- Assigning patterns to NPAs (Numbering Plan Area)

  ARS patterns can be assigned to the local (home) NPA or to non-local (foreign) NPAs. The home NPA must have been defined via the *sys-cos* transaction.

DISCUSSION

Network Routing (continued)

- Assigning ARS patterns to the Home NPA

- Foreign NPA Commands

  The *fnpa* transaction administers ARS patterns for foreign NPA code combinations. The verbs supported are; *add, display,* and *change*.

  - 3-Digit Routing
  - 6-Digit Routing
  - 3-Digit and 6-Digit Routing
  - Assigning ARS patterns to Foreign NPAs
  - Displaying ARS patterns assigned to Foreign NPAs
  - Changing ARS patterns assigned to Foreign NPAs
  - Administering the 6-Digit Routing Table
  - Assign 6-Digit routing patterns
  - Display 6-Digit routing patterns
  - Change 6-Digit routing patterns
  - Administering ARS Toll Tables

DISCUSSION

Network Routing (continued)

- Adding New Trunk Groups to ARS Patterns

  Use this procedure (*ars-pattern insert*) to add new trunk groups to ARS routing patterns. You may need to do this when performance reports indicate that current engineering is not adequate or when there is increased call volume to an area.

  - Administering ARS Schedules

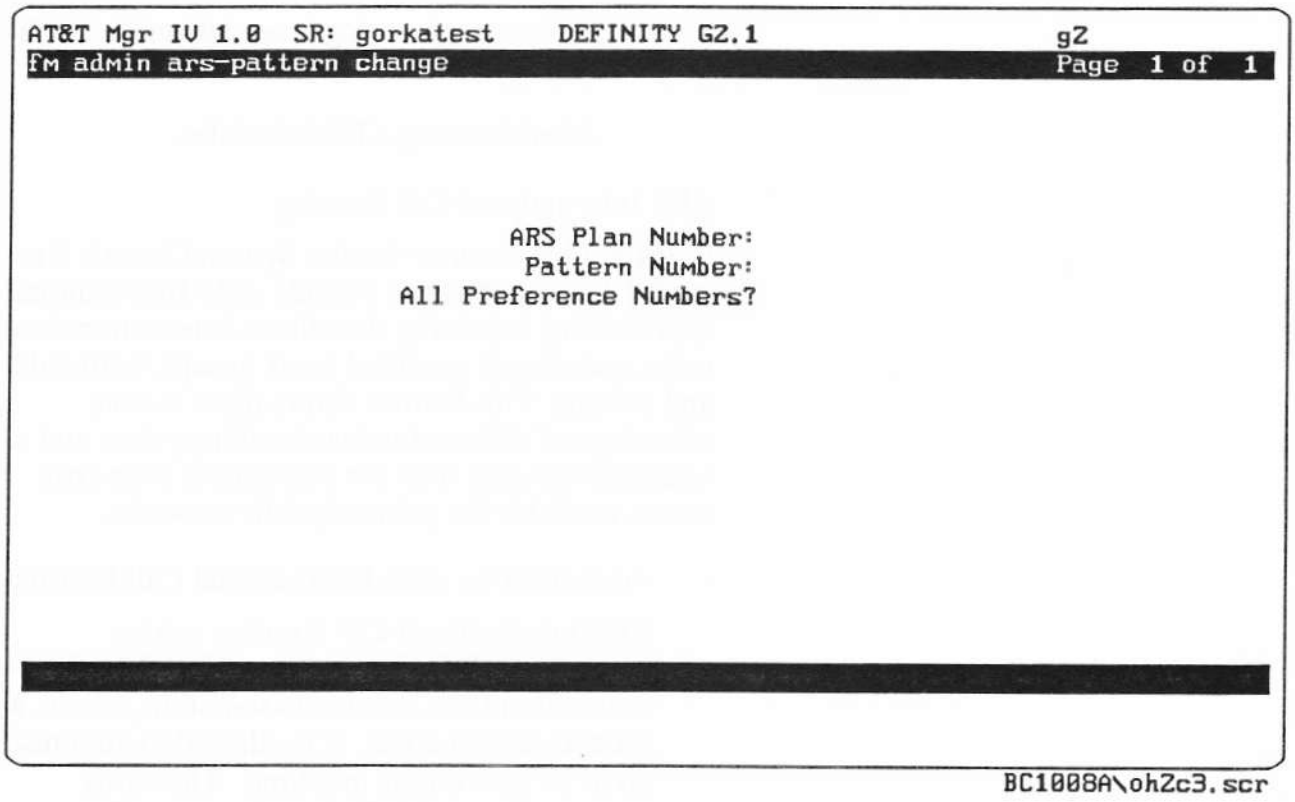
° ARS International Call Routing

DEFINITY® Communication System Generic 2 and AT&T System 85 R2V4 provide ARS International Call Routing capability that allows international calls to be routed over specified trunk groups, both public and private. This feature allows users to take advantage of different network calling prices and route international calls over the most direct least-cost routes available for private/public networks.

- Administering ARS International Call Routing

  ARS International Call Routing can be administered via the *ars-international-routing* transaction from the database-admin, admin, and product-admin areas. It is allowed to administer up to 20 call routing at a time. The verbs supported are *add, display, change,* and *remove.*

Changing an ARS Pattern



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OH 2C-3

PRACTICE EXERCISE

DEFINITY® Manager IV Facilities Management Operations Guide

1. Displaying an ARS Pattern

Using the Manager IV Facilities Management Operations Guide and a Manager IV terminal, display an ARS pattern.

2. Displaying ARS patterns assigned to FNPA and an HNPAs

Using the Manager IV Facilities Management Operations Guide and a Manager IV terminal, display an ARS pattern assigned to an FNPA and an HNPA..

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screen(s) should look like when properly filled out. If the screen(s) look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two major areas of Manager IV Network Routing are:

- ARS (Automatic Route Selection)
- ARS International Routing

Automatic Route Selection

- Administering ARS
- Assigning patterns to Area Codes NPAs (Numbering Plan Area)
- Foreign NPA Commands
- Adding New Trunk Groups to ARS Patterns

ARS International Call Routing

- Administering ARS International Call Routing

LESSON 2D

Controlling Network Use

Lesson 2D Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Add authorization codes**
- **Display/add/change/remove freelists**
- **Activate system and trunk queueing**

OH 2D-1

LESSON INTRODUCTION

This lesson will explain how to control network use. The lesson will cover adding authorization codes, activating system and trunk queuing, and blocking calls to area codes and area code and office codes.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Add authorization codes
- Display/add/change/remove freelists
- Activate system and trunk queueing

Controlling Network Use

Controlling Network Use consists of the following:

- **Facility Restriction Levels**
- **Administering authorization codes**
  - **Adding authorization codes**
- **Miscellaneous trunk restriction groups**
  - **Assigning miscellaneous restrictions**
  - **Displaying miscellaneous restrictions**
  - **Changing miscellaneous restrictions**
  - **Removing miscellaneous restrictions**
- **Tandem and trunk to trunk access**
  - **Adding restricted entries**
  - **Adding trunk restrictions**
- **Freelist**

OH 2D-2

DISCUSSION

Controlling network use

DEFINITY® Manager IV Facilities Management Operations Guide

Controlling Network Use consists of the following:

- Facility Restriction Levels

  FRLs (Facility Restriction Levels) define network calling privileges. One of eight FRLs is assigned to trunks and extensions to control who can make calls on what trunk. FRLs are assigned to the extension class of service by the TCM application and to trunks by the FM application.

- Administering Authorization Codes

  You can add, change, display, or remove authorization codes with the command *auth-code*. This command is also available in TCM. Before authorization codes can be used on a switch, they must be enabled via *sys-cos*. In Manager IV, you can assign authorization codes to FRLs in several switches with one transaction by using a target group as a target.

  - Adding Authorization Codes

Controlling Network Use

- **Call Restriction**
  - **Blocking Calls to an Area Code**
  - **Blocking Calls to Specific Area Code and Office Code Combinations**
  - **Blocking Calls to Specific DDD Numbers**
  - **Changing Blocking to Specific DDD Numbers**
- **Queuing**
  - **Trunk Group Queuing**
  - **Adding Queuing to your System**

OH 2D-3

DISCUSSION

Controlling Network Use (continued)

- Miscellaneous trunk restriction groups

  You can assign trunk groups to MTRGs (Miscellaneous Trunk Restriction Groups) in order to restrict access.

  - Assigning miscellaneous restrictions
  - Displaying miscellaneous restrictions
  - Changing miscellaneous restrictions
  - Removing miscellaneous restrictions

- Tandem and trunk to trunk access

  Manager IV allows you to administer restricted dial entry numbers that restrict trunk to trunk and tandem trunk access. Trunk to trunk restrictions prevent the attendant from inadvertently connecting the two trunks. Tandem tie restrictions prevent incoming tie trunks on private networks from connecting to trunk facilities within the switch.

  - Adding restricted entries
  - Adding trunk restrictions

- Freelist

  A freelist is a list of telephone numbers that any user of your network is free to call. The freelist overrides access levels assigned with allowed codes. For each of your network's switches, this list can include area codes, office codes, or service codes accessible to all. Each freelist can contain up to 10 codes.

DISCUSSION

Controlling Network Use (continued)

° Call restriction

Restricting calls means controlling the calls made by those who use your network. Tasks within this subgroup include blocking calls to an area code, an area code/office code combination, or specific DDD (Direct Distance Dialing) numbers, removing such restrictions, and also displaying what restrictions have been assigned.

- Blocking calls to an area code
- Blocking calls to specific area code and office code combinations
- Blocking calls to specific DDD numbers
- Changing blocking to specific DDD numbers

° Queuing

The queuing feature provides a waiting list for incoming/outgoing calls when all the accessible routes for completing a call are busy. This feature increases the efficiency of trunk usage for both on-network and off-network calls. It is especially useful during peak periods when, because of excess traffic, outgoing calls would otherwise repeatedly receive intercept signals.

- Trunk group queuing

  Manager IV allows you to determine whether or not the Queuing feature can be used, either on a switch-by-switch or on a network-wide basis.

  · Types of queuing

DISCUSSION

Controlling Network Use (continued)

- Adding queuing to your system

  Use this procedure to activate the queuing feature on a switch and then to assign queuing parameters to specific trunk groups originating at the switch.

  - Prerequisites
  - Activating system queuing
  - Assigning queuing information to a trunk group

Blocking Calls to an Area/Office Code

```
AT&T Mgr IV 1.0  SR: gorkatest     DEFINITY GZ.1                    gZ
fm admin restriction add                                  Page  1 of  1


      NPA                          NPA                          NPA
     Area  Office  7-10           Area  Office  7-10           Area  Office  7-10
     Code   Code  Digits          Code   Code  Digits          Code   Code  Digits
      201    838  2343


End of Form
```

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OH 2D-4

PRACTICE EXERCISE

DEFINITY® Manager IV Facilities Management Operations Guide

1. Blocking Calls to an Area/Office Code

Using the Manager IV Facilities Management Operations Guide and a Manager IV terminal, restrict all calls to an area code.

2. Assigning Queuing Information to a Trunk Group

Using the Manager IV Facilities Management Operations Guide and a Manager IV terminal, assign queuing to a trunk group so that the trunk group has Off-Hook/Priority Queuing.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know which areas to review.

LESSON SUMMARY

The five major areas of Controlling Network Use are:

- Facility Restriction Levels
- Miscellaneous trunk restriction groups
- Freelist
- Call restriction
- Queuing

Facility Restriction Levels

- Administering Authorization Codes

Miscellaneous Trunk Restriction Groups

- Assigning Miscellaneous Restrictions
- Displaying Miscellaneous Restrictions
- Changing Miscellaneous Restrictions
- Removing Miscellaneous Restrictions

Freelist

Call Restriction

- Blocking Calls to an Area Code
- Blocking Calls to Specific Area Code and Office Code Combinations
- Blocking Calls to Specific DDD Numbers
- Changing Blocking to Specific DDD Numbers

Queuing

- Trunk Group Queuing
- Adding Queuing to your System

LESSON 2E

FM (Facilities Management) Reports

Lesson 2E Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Display and interpret available FM reports**
- **Schedule FM Reports**

OH 2E-1

LESSON INTRODUCTION

This lesson explains how to access, display, and interpret Facilities Management reports.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Display and interpret available FM reports
- Schedule FM Reports

Accessing and interpreting FM reports

Accessing and interpreting FM reports consists of the following:

- **Available Reports**
- **Generating FM reports**
  - **Producing Reports**
- **Report Directory**

OH 2E-2

DISCUSSION

Accessing and interpreting FM reports

DEFINITY® Manager IV Facilities Management Operations Guide

Accessing and interpreting FM reports consists of the following:

° Available Reports

Reports are available for the following task groups: Administering Network Features, Administering Transmission Facilities, Defining Network Routing, Controlling Network Use, and Testing and Maintaining Transmission Facilities.

° Generating FM reports

Manager IV gives great flexibility in producing reports by providing three options for their production. Any of the following can be done:

- View the report on-line
- Send the report to the printer to get a paper copy
- Schedule the report to be produced at a later time.

DISCUSSION

Accessing and interpreting FM reports (continued)

- Producing Reports

  The procedure for producing reports is the same for all reports. The most important point to remember is that reports are accessed from the report administration area, not from the administration area in which most of the work is performed.

° Report Directory

  Each FM report is included in this directory. The reports are arranged alphabetically by report name.

Producing a Report

```
AT&T Mgr IV 1.0  SR: gorkatest    DEFINITY G2.1                    gZ
fm report-admin trk-grp-summary report                    Page  1 of  1




            Enter Trunk Group No.(s): 19




To send the report to a file or printer, use the schedule command (<esc>s).
End of Form
```

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OH 2E-3

PRACTICE EXERCISE

DEFINITY® Manager IV Facilities Management Operations Guide

1. Producing a Report

Using the Manager IV Facilities Management Operations Guide, and a Manager IV terminal, schedule an FM report that you would use on the job.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The three major areas of Manager IV FM Reports are:

- Available Reports
- How to Generate FM Reports
- Report Directory

Available Reports

How to Generate FM Reports

- Producing Reports

Report Directory

LESSON 2F

ISDN

Lesson 2F Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Add an NPA-NXX designator**

OH 2F-1

LESSON INTRODUCTION

This lesson explains the ISDN feature, Bearer Capability Class of Service and the administration of D-Channel groups.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Add an NPA-NXX designator

ISDN

Manager IV TCM ISDN consists of the following:

- **ISDN (Intergrated Services Digital Network)**
  - **BRI (Basic Rate Interface)**
  - **PRI (Primary Rate Interface)**
- **TCM ISDN transactions**
  - **Assigning an LDN and NPA-NXX designator to an attendant console.**
  - **Associating the NPA-NXX-designator to an extension.**
  - **Providing for two more requirements, bearer capability and ISDN routing.**
- **Console equipment transactions**
- **NPA-NXX designator**
  - **Adding an NPA-NXX Designator**
- **ISDN (Intergrated Services Digital Network) advantage features**

OH 2F-2

DISCUSSION

ISDN

DEFINITY® Manager IV Facilities Management Operations Guide

Manager IV TCM ISDN consists of the following:

° ISDN (Intergrated Services Digital Network)

This feature allows you to connect to both public and private networks that use the current ISDN standards. The ISDN concept is a world-wide standard for integrating voice and data networks.

- BRI (Basic Rate Interface)

  This provides for station direct interface. With BRI, each station has its own interface that sends and receives control and signaling messages.

- PRI (Primary Rate Interface)

  This provides an ISDN interface for switches. The interface covers network connections, switch-to-host computer connections, and host computer-to-network connections.

ISDN

- ISDN code-set mapping
  - Recommended mapping
  - Codeset mapping commands
  - Performing codeset mapping
- Network specific facility in DEFINITY® Communications System Generic 2
  - Network specific facility value
  - Network specific facility commands
  - Performing NSF assignment commands
- Bearer capability class of service
  - Bearer capability COS (Class of Service) commands
- D-Channel administration
  - Prerequisites
  - D-channel group
  - D-channel group commands
  - Performing D-channel group commands

OH 2F-3

DISCUSSION

Manager IV TCM ISDN (continued)

° TCM ISDN Transactions

These are transactions that are necessary to administer ISDN on the switch using TCM.

- Assigning an LDN and NPA-NXX designator to an attendant console.
- Associating the NPA-NXX-designator to an extension.
- Providing for two more requirements, bearer capability and ISDN routing.

° Console Equipment Transactions

This transaction assigns an LDN and a NPA-NXX designator to an attendant console.

- Add, remove, change, or display console equipment

° NPA-NXX Designator

This transaction assigns an NPA-NXX and its thousands digit to an NPA-NXX designator. This allows you to assign the NPA-NXX designator instead of having to assign each NPA-NXX-X to an extension or attendant console.

- Adding an NPA-NXX Designator

  This is used to assign an NPA (area code), an NXX (local exchange), and a thousands digit to an NPA-NXX designator.

DISCUSSION

ISDN (continued)

° ISDN (Intergrated Services Digital Network) advantage features

The ISDN advantage feature is a telemarketing application supported on a AT&T 6538/39 multi-tasking display terminal equipped with a DCP (Digital Communications Protocol) feature board and an adjunct AT&T digital DCP voice telephone.

° ISDN code set mapping

DEFINITY® Communications System Generic 2 switch provides codeset/codepoint mapping capability that allows for backward compatibility with the other AT&T products. This mapping feature implies reformatting the ISDN incoming or outgoing messages according to the ISDN message structure defined in ISDN PRI (Primary Rate Interface) specifications.

The ISDN message structure is determined by the assigned codeset. A codeset is comprised of 128 IEs (Information Elements) carrying specific information related to terminal capabilities, lamp and ring code information, button and switch hook state changes, data rates, etc. Each IE is assigned a numeric value (codepoint) used as the IE identifier in a mapping table.

- Recommended mapping

  To make a complete CS7 available, all CS7 IEs must be mapped to CS6.

DISCUSSION

ISDN (continued)

- DEFINITY® Communications System Generic 2 database update via codeset mapping transaction

  The **codeset-mapping** transaction can be accessed from the admin and product-admin areas under the FM application. This transaction updates or retrieves the specified mapping information from the DEFINITY® Communications System Generic 2 only. The Manager IV product image database is not affected.

- Codeset mapping commands

  The **codeset-mapping** transaction supports the verbs: **add, display, list,** and **remove.** With a verb selected, the appropriate input screen is invoked. The **add, display, list, remove** screens contain optional and required fields. The required information is determined by the type of mapping selected.

  - Add a specified mapping

    To add a mapping for an incoming or outgoing message, use the **codeset-mapping add** command. The system requires you to populate the fields associated with the type of mapping you select.

  - Display a specified mapping

    You can use the **codeset-mapping display** command to display one codepoint to codepoint or codepoint to nothing mapping. DEFINITY® Communications System Generic 2 allows you to specify one codepoint mapping at a time. The **codset-mapping display** input screen displays the fields that must be populated with the mapping parameters.

DISCUSSION

ISDN (continued)

- List Specified Mappings

  You can use the **codeset-mapping list** command to display all codepoint to codepoint, codepoint to nothing, codeset to codeset, and/or codeset to nothing mappings. DEFINITY® Communications System Generic 2 allows you to perform selection by populating the appropriate field or combination of fields in the **codeset-mapping list** input screen.

- Remove specified mapping

  The **remove** command allows you to remove all mappings for a specified codeset map number, incoming/outgoing message, mapped from codeset number, and mapped from information element. To remove a specified mapping, enter the **codset-mapping remove** command.

- Performing codeset mapping

  You can update or retrieve the mapping information by directly accessing DEFINITY® Communications System Generic 2 via the **connection create** command or scheduled Service Requests. To optimize switch resources, and because of restrictions imposed on port access, scheduling **codeset-mapping** transactions in Service Requests is preferred over direct port access.

DISCUSSION

ISDN (continued)

- Add codset/codepoint mappings
- Display codepoint mapping from the DEFINITY® Communications System Generic 2 switch
- List codeset/codepoint mapping from the DEFINITY® Communications System Generic 2 switch

° Network specific facility in DEFINITY® Communications System Generic 2

Manager IV provides the ISDN NSF (Network Specific Facility) feature which allows you to specify which switch service is used for incoming and outgoing calls. To specify the switch service, you need to assign the NSF value to the IE. The ISDN message structure is determined by the assigned set of 128 IEs. Assigning the NSF value implies encoding and storing the ISDN network related information in the Information Element.

- Network specific facility value
  - ISDN network service value

    This is a new unique value for the ISDN network service. Any number within a range of **1-115** is valid.

DISCUSSION

Network Specific Facility (continued)

- ISDN network definition - comprized of three fields:

  The *Parameterized/Binary* field is used to define the parameterized or binary ISDN network definition. The facility which does not have the parameters associated with it in the information element is defined as binary. parameterized ISDN network denotes the facility having the parameters associated with it in the NSF information element.

  The *Feature/Service* field denotes the requested facility as a feature or a service.

  The *Facility Coding Value* field describes the encodes used to specify the Service or Feature selected.

  The **Parameter Definition** defines or qualifies the service or feature identified as Parameterized. On the screen, you are allowed to make the parameter entries in the parameter ID field. The parameter ID is comprised of 7 fields concatenated into a single field. You are allowed to enter any alphanumeric or punctuation character. You can use this field to save some meaningful information. Leading or embedded blanks or dashes are not permitted.

DISCUSSION

Network Specific Facility (continued)

- Network specific facility commands

  The **network-spec-facility** transaction can be accessed from the admin, database-admin, and product admin areas under the FM application. This transaction administers the Network Service Value and associated fields. The verbs supported are: **add, display, change,** and **remove.**

  - Add NSF Assignment

    To assign a value to the NSF Information Element, Use the **network-spec-facility add** command. The system requires you to populate the fields associated with the type of ISDN Network Definition you select.

  - Display NSF Assignment

    You can use the **network-spec-facility display** command to display the NSF information. The *network-spec-facility display* input screen allows you to display the NSF assignment information by the ISDN network service value.

  - Change NSF assignment

    You are allowed to change the parameter ID value by entering the *network-spec-facility change* command. This command can change the values in the parameter ID field only. Therefore, you can apply the *change* command to the parameterized facility only. If you try to use this command with the binary facility, the error message will be displayed.

DISCUSSION

Network Specific Facility (continued)

- Remove NSF assignment

  To remove the NSF assignment, enter the *network-spec-facility remove* command. If the ISDN network facility has been previously assigned in the *ars-pattern* or *aar-pattern* transaction, the *remove* command fails. As a result, the error message will be displayed.

- Performing NSF assignment commands

  All data entered via the *network-spec-facility* transaction will be stored in the Manager IV database. You can update or retrieve the NSF assignment information by directly accessing the DEFINITY® Communication System Generic 2 switch or by scheduling Service Requests. To optimize usage of the switch resources, and because of the restrictions imposed on port access, scheduling *network-spec-facility* transactions in Service Requests is preferred over direct port access.

- Bearer Capability Class of Service

  This transaction allows capabilities common to a class of facilities, such as analog line and trunks, digital lines and trunks and automatic route selection/automatic alternate routing routine preferences, to be defined.

DISCUSSION

D-Channel Administration (continued)

- Bearer Capability COS (Class of Service) Commands
  - Bearer Capability COS add
  - Bearer Capability COS display
  - Bearer Capability COS change
  - Bearer Capability COS remove

° D-Channel administration

The ISDN PRI facilities require transporting data/voice/video and signaling information via two different kinds of channels: B-channels and D-channel, respectively. Manager IV supports carrying the signaling of a group of up to 478 B-channels over one D-channel, provided the DCB (D-channel Backup) is present.

- Prerequisites

  To successfully administer *d-channel* transaction, the following procedures must be performed prior to entering the *d-channel add* command:

  - Add carriers to the Manager IV and switch databases.
  - Assign the traditional and universal packs.
  - Specify ISDN SIGNALING *23B+D*, APPLICATION TYPE *5* (ISDN/PRI), and interface identifier through the *ds1-isdn* transaction.

DISCUSSION

D-Channel Administration (continued)

- D-channel group

  A D-channel group is a set of D-channels. The set may contain one primary D-channel or two D-channels (primary and secondary). There may be up to 255 D-channel groups in the system.

- D-channel group commands

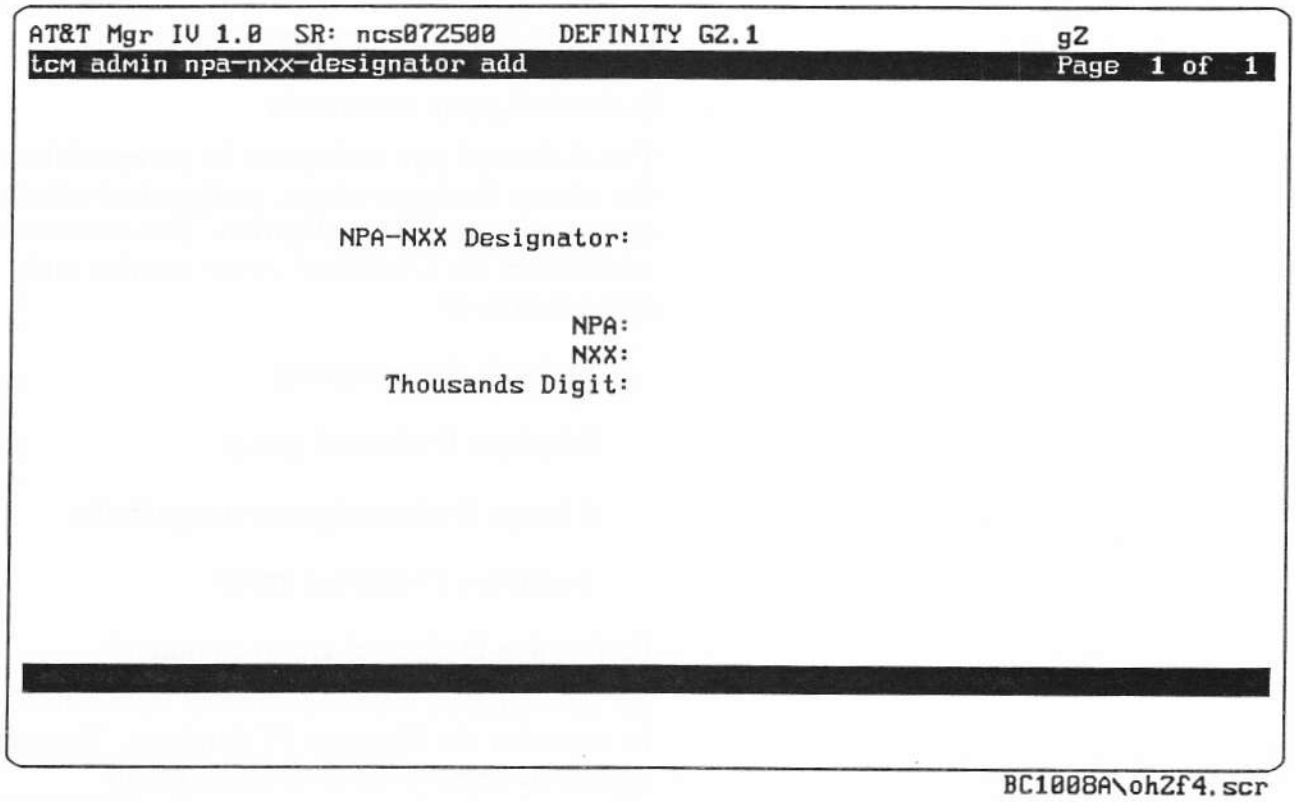
  The *d-channel* transaction can be accessed from the admin, database-admin, and product-admin areas under the FM application. This transaction administers the D-channel group number and associated fields.

  - Add a D-channel group
  - Display a D-channel group
  - Change D-channel group assignments
  - Remove a D-channel group

- Performing D-channel group commands

  All data entered via the *d-channel* transaction will be stored in the Manager IV database. You can update or retrieve the D-channel group Information by directly accessing the DEFINITY® Communications System Generic 2 switch or by scheduling Service Requests.

Adding a NPA-NXX Designator



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OH 2F-4

PRACTICE EXERCISE

DEFINITY® Manager IV Facilities Management Operations Guide

Adding an NPA-NXX Designator

Using the Manager IV Terminal Change Management Operations Guide and a Manager IV terminal, assign an area code, local exchange, and a thousands digit to an NPA-NXX designator.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screen looks like when properly filled out. If the screen looks different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The eight major areas of Manager IV ISDN are:

- ISDN
- TCM ISDN transactions
- NPA-NXX designator
- ISDN (Intergrated Services Digital Network) advantage features
- NSF (Network Specific Facility) in DEFINITY® Communications System Generic 2
- ISDN code set mapping
- Bearer Capability Class of Service
- D-channel administration

ISDN

- ISDN (Intergrated Services Digital Network)
- BRI (Basic Rate Interface)
- PRI (Primary Rate Interface)

TCM ISDN Transactions

- Assigning an LDN and NPA-NXX designator to an attendant console.
- Associating the NPA-NXX-designator to an extension.
- Providing for two more requirements, bearer capability and ISDN routing.

Console Equipment Transactions

- Add, remove, change, or display console equipment

NPA-NXX Designator

- Adding an NPA-NXX Designator

LESSON SUMMARY

ISDN Code-Set Mapping

- Recommended mapping
- DEFINITY® Communications System Generic 2 database update via codeset mapping transaction
- Codeset mapping commands
  - Add a specified mapping
  - Display a specified mapping
  - List specified mappings
  - Remove specified mapping
- Performing codeset mapping
  - Add codset/codepoint mappings
  - Display codepoint mapping from the DEFINITY® Communications System Generic 2 switch
  - List codeset/codepoint mapping from the DEFINITY® Communications System Generic 2 switch

Network Specific Facility in DEFINITY® Communications System Generic 2

- Network Specific Facility value
  - ISDN network service value
  - ISDN network definition - comprized of three fields:
- Network Specific Facility commands
  - Add NSF assignment
  - Display NSF assignment
  - Change NSF assignment
  - Remove NSF assignment
- Performing NSF assignment commands

LESSON SUMMARY

Bearer Capability Class of Service

- Bearer Capability COS (Class of Service) commands
  - Bearer Capability COS add
  - Bearer Capability COS display
  - Bearer Capability COS change
  - Bearer Capability COS remove

D-Channel Administration

- Prerequisites
  - Add carriers to the Manager IV and switch databases.
  - Assign the traditional and universal packs.
  - Specify ISDN SIGNALING *23B+D*, APPLICATION TYPE *5* (ISDN/PRI), and interface identifier through the *ds1-isdn* transaction.
- D-Channel group
- D-Channel group commands
  - Add a D-channel group
  - Display a D-channel group
  - Change D-channel group assignments
  - Remove a D-channel group
- Performing D-channel group commands

UNIT 3

System Administration

Unit 3 Objectives

Upon Successful completion of this unit, the student will be able to:

- **Access the UNIX® Operating System shell from Manager IV**
- **Administer user logins**
- **Monitor system activity through transaction logs**
- **Manage Service Request activity**
- **Administer product descriptions**
- **Administer target groups**
- **Shut down and reboot Manager IV**
- **Back-up Manager IV databases**

OH 3-1

UNIT INTRODUCTION

This unit explains the different Manager IV system administration functions. The unit will explain how to perform these operations.

UNIT OBJECTIVES

Upon successful completion of this unit the student will be able to:

- Access the UNIX shell from Manager IV
- Administer User logins
- Monitor system activity through transaction logs
- Manage Service Request activity
- Administer product descriptions
- Administer target groups
- Shut down and reboot Manager IV
- Back-up Manager IV databases

LESSON 3A

User Administration

Lesson 3A Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Add/remove/change a Manager IV login**
- **Set administrator and user class permissions**

OH 3A-1

LESSON INTRODUCTION

This lesson explains how to set administrator and user class permissions. The lesson also explain how to administer Manager IV logins.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Add/remove/change a Manager IV login
- Set administrator and User class permissions

User Administration

User administration consists of the following:

- **User classes**
  - **System administration classes**
  - **Application user classes**
- **Modify user logins**
  - **Making screen entries**
  - **Displaying system logins**
- **Adding logins**
  - **Adding a login to the UNIX® Operating System**
  - **Designating user access to Manager IV**
  - **Changing a login**
  - **Removing a login**

OH 3A-2

DISCUSSION

User administration

DEFINITY® Manager IV System Administration Guide

User Administration consists of the following:

° User Classes

In Manager IV, the capabilities of each user are defined by a user class. Any user can be assigned one or more user classes that permit or restrict access to selected applications and commands.

- System Administration Classes

A System Administrator, should use the login **smsa**, which was added to the system during installation. This login enables most of your regular administrative tasks to be performed.

DISCUSSION

User Administration (continued)

- Application User Classes

  When a new user to the Manager IV database is added via *system-administration login add*, user privileges are defined by the class of login assigned.

  - Administration permissions
  - TCM user class permissions
  - FM user class permissions
  - Maintenance and multi-node transaction permissions
  - User class permissions for service personnel

° Modify user logins

To assign logins and privileges to the users under administration, a profile must be configured for each user to define the user's access options and limitations within Manager IV.

- Making Screen entries
- Displaying System Logins

DISCUSSION

User Administration (continued)

- Adding Logins
  - Adding a login to the UNIX® Operating System
  - Designating user access to Manager IV
    - Access to the restricted UNIX® shell
  - Changing a login
    - Changing a password
    - Maintenance passwords
  - Removing a login
    - Removing a Manager IV login
    - Removing a login from the UNIX® Operating System

PRACTICE EXERCISE

DEFINITY® Manager IV System Administration Guide

1. Adding a Login to Manager IV

Using the Manager IV System Management Operations Guide and a Manager IV terminal, add a new login to UNIX® and Manager IV user ID for a 615 terminal, with a printer, user class (tcm-1, fm1), with access to DEFINITY® Communications System Generic 2, no other products to be accessed, user access to UNIX® shell.

2. Removing a Login

Using the Manager IV System Management Operations Guide and a Manager IV terminal, remove the previously added UNIX® and Manager IV login.

3. Change User Class

Using the Manager IV System Management Operations Guide and a Manager IV terminal, change the Manager IV user class within the login.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The three major areas of user administration are:

- User classes
- Administering user logins
- Adding logins

User Classes

- System Administration Classes
- Application User Classes

Administering User Logins

- Making Screen entries
- Displaying System Logins

Adding Logins

- Adding a login to the UNIX® Operating System
- Designating user access to manager IV
- Removing a login
- Changing a login

LESSON 3B

Monitoring System Activity

Lesson 3B Objectives

Upon Successful completion of this lesson, the student will be able to:

- **Display/activate/deactivate transaction logs**
- **Managing Service Request activities**
  - **Display/remove results files**
  - **Change Service Request status**
- **Perform a pending flag cleanup**

OH 3B-1

LESSON INTRODUCTION

This lesson explains how to monitor Manager IV system activity. The lesson will cover monitoring Service Requests and transaction logs. The lesson also explains how to perform a pending flag clean-up.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Display/activate/deactivate transaction logs
- Manage Service Request activities
  - Display/remove results files
  - Change Service Request status
- Perform a pending flag cleanup

Monitoring System Activity

Monitoring System Activity consists of the following:

- **Managing the Transaction Log**
  - **Displaying All Logged-In System Users**
  - **Displaying Transaction Logs**
- **Managing Service Request Activities**
  - **Listing All Scheduled Entries**
  - **Displaying Selected Scheduled Entries**
  - **Reporting on Service Request Status**
  - **Displaying Results Files**
  - **Removing a Results File**
  - **Changing Service Request Status**
  - **Service Request Cleanup**
  - **Backing Up PBX Downloads**
  - **Service Request Log**

OH 3B-2

DISCUSSION

Monitoring system activity

DEFINITY® Manager IV System Administration Guide

Monitoring System Activity consists of the following:

° The Transaction Log

The transaction log is the best method for keeping track of system use and the type of transactions being used. Transaction logs detail the activities of Manager IV users.

- Displaying All Logged-In System Users
- Displaying Transaction Logs

DISCUSSION

Monitoring System Activity (continued)

- Managing Service Request Activities
  - Listing All Scheduled Entries
  - Displaying Selected Scheduled Entries
  - Reporting on Service Request Status
  - Displaying Results Files
  - Remove a Results File
  - Changing Service Request Status
  - Service Request Cleanup
  - Backing Up PBX Downloads
  - Service Request Log

    The Service Request log contains an entry describing the status and history of every executed Service Request.

Display Transaction Logs

```
/port/display

ncsc            ——          12:38:29     —          START

ncsc            ——          12:41:16     —          START

ncsc            ——          12:44:14     —          START

ncsc            ——          12:47:02     —          START

ncsc            ——          12:48:04     2          SUCCESS
/port/display

ncsc            ——          12:48:39     3          ERROR
/port/change

ncsc            ——          12:51:17     —          START

smlab3>
```

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OH 3B-3

PRACTICE EXERCISE

DEFINITY® Manager IV System Administration Guide

1. Display Transaction Logs

Using the Manager IV System Administration Guide and a Manager IV terminal, display your login in the transaction log.

2. Displaying Scheduled Entries

Using the Manager IV System Administration Guide and a Manager IV terminal, display all scheduled entry information.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two major areas of Monitoring System Activity are:

- Managing the Transaction Log
- Managing Service Request activities

The Transaction Log

- Displaying All Logged-In System Users
- Activating Transaction Logs
- Deactivating Transaction Logs
- Displaying Transaction Logs

Managing Service Request Activities

- Listing All Scheduled Entries
- Displaying Selected Scheduled Entries
- Reporting on Service Request Status
- Displaying Results Files
- Remove a Results File
- Changing Service Request Status
- Service Request Cleanup
- Backing Up PBX Downloads
- Service Request Log

LESSON 3C

Target Administration

Lesson 3C Objectives

Upon successful completion of this lesson the student will be able to:

- **Add a supported product**
- **Add a cut-through access to a product**
- **Add a target group**

OH 3C-1

LESSON INTRODUCTION

This lesson explains Manager IV target administration.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Add a supported product
- Add a cut-through access to a product
- Add a target group

Target Administration

Target Administration consists of the following:

- **Product and corporate descriptions**
  - **Listing products**
  - **Displaying Manager IV database file names**
  - **Adding a supported product**
  - **Adding cut-through access to a product**
- **Target group transactions**
  - **Adding a target group**
  - **Displaying, or removing a target group**

OH 3C-2

DISCUSSION

Target administration

DEFINITY® Manager IV System Administration Guide

Target Administration consists of the following:

° Product and corporate descriptions

This section contains procedures that you are expected to use, but does not include information on all the commands available for the *product* object.

- Listing products
- Displaying Manager IV database file Names
- Adding a supported product
- Adding cut-through access to a product

° Target group transactions

A target group is a set of PBXs belonging to the same corporation. A single switch may belong to more than one target group. Through the use of a new identifier, users will be able to update several PBXs at one time for certain multi-node transactions.

- Adding a target group
- Displaying, or removing a target group

Adding a Product

```
AT&T Mgr IV 1.0
system-administration product add                                Page  1 of  3

Product ID: obione                    Corporation ID: obiwanZ

        Product Location: 6162 S. Willow Dr.
                          Englewood, CO 80111

            Product Type: SYS85
                 Release: Z          Version: 4          Issue: 1.0

 Equipment Serial Number:
       DOSS Order Number: 123456789
     Port Phone Number 1: dedicated
     Port Phone Number 2:
           Security Code: 123456

SWITCH FEATURES -          Call Vectoring?     Tenant Services?

Asgnd. Modules:


End of Page 1
```

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```
AT&T Mgr IV 1.0
system-administration product add                                Page  2 of  3

Product ID: obione                    Corporation ID: obiwanZ

     Distributed Communications System (DCS) ID:

             Electronic Tandem Network (ETN) ID:


                          Product Time Zone: EST
            Daylight Savings Time During Summer? y

                     Non-Blocking Indicator: n

                   TCM Administrator's Login:
                    FM Administrator's Login:

              Directory Update for this product? n

NOTES:

End of Page 2
```

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OH 3C-3

PRACTICE EXERCISE

DEFINITY® Manager IV System Administration Guide

1. Adding a Product

Using the Manager IV System Administration Guide and a Manager IV terminal, add the product given to you by the instructor.

1. Adding a Target Group

Using the Manager IV System Administration Guide and a Manager IV terminal, add a target group.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two major areas of Target Administration are:

- Product and corporate descriptions
- Target group transactions

Product Descriptions

- Listing Products
- Displaying Manager IV Database File Names
- Adding a Supported Product
- Adding Cut-Through Access to a Product

Target Group Transactions

- Adding a Target Group
- Displaying, or Removing a Target Group

LESSON 3D

Hardware and Database Administration

Lesson 3D Objectives

Upon successful completion of this lesson the student will be able to:

- **Access bradm help menus**

OH 3D-1

LESSON INTRODUCTION

This lesson explains how to administer Manager IV hardware. The lesson will cover shutting down and re-booting Manager IV and Manager IV database administration.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Access *bradm* help menus

Hardware and Database Administration

Hardware Administration consists of the following:

- **Shutting down and rebooting Manager IV**
  - **Shutting down and rebooting Manager IV**
- **Administering product access ports**
  - **Displaying product access port attributes**
  - **Displaying users connected to products**
  - **Adding a port**
  - **Enabling a port**
  - **Disabling a port**

Manager IV database administration consists of the following:

- **Backing up Manager IV databases**
  - **Scheduling back ups**
  - **Restoring the CORE database**

OH 3D-2

DISCUSSION

Hardware administration

DEFINITY® Manager IV System Administration Guide

Hardware Administration consists of the following:

- Administering product access ports

  Although enabling and disabling ports is usually the responsibility of the installation team, occasionally the System Administrator will have to perform these tasks.

  - Displaying product access port attributes
  - Displaying users connected to products
  - Adding a port
  - Enabling a port
  - Disabling a port

- Shutting down and rebooting Manager IV

  The **startsm** and **stopsm** commands enable you to shut down Manager IV without affecting any other applications on your processor.

  - Shutting down and rebooting Manager IV

DISCUSSION

Hardware administration (continued)

Manager IV Database Administration consists of the following:

° Backing up Manager IV databases

Software maintenance conducted regularly by the Manager IV System Administrator includes administering the transaction logs and backing up databases to tape. Journaling, or storaging of information on backup tapes, is a critical part of the recovery process. If you fail to do full backups (*full_dump*) weekly and incremental backups (*log_dump*) as necessary, your system **CANNOT** be restored adequately.

- Scheduling back ups
  - · Backing up the Manager IV database
  - · Backing up the UNIX database
    - + Performing a tape run
- Restoring the CORE database

PRACTICE EXERCISE

DEFINITY® Manager IV System Administration Guide

1. Accessing the bradm Help Menu

Using the Manager IV System Administration Guide and a Manager IV terminal, access the *bradm* help menu.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens look like when properly filled out. If the screens look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The two areas of Manager IV Hardware Administration are:

- Shutting Down and Rebooting Manager IV
- Administer Product Access Ports

Shutting Down and Rebooting Manager IV

- Shutting Down and Rebooting Manager IV

Administering Product Access Ports

- Displaying Product Access Port Attributes
- Displaying Users Connected to Products
- Adding a Port
- Enabling a Port
- Disabling a Port

The two major areas of Manager IV Database Administration are:

- Backing Up Manager IV Databases
- Recovering Manager IV Databases

Backing Up Manager IV Databases

- Scheduling Back Ups

Recovering Manager IV Databases

- Restoring the CORE Database

LESSON 3E

Using the Logs

Lesson 3E Objectives

Upon successful completion of this lesson the student will be able to:

- **Display the product connection log**
- **Produce and interpret dclog reports**

OH 3E-1

LESSON INTRODUCTION

This lesson explains how to use the Manager IV logs.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Display the product connection log
- Produce and interpret **dclog** reports

Using the Logs

Using Manager IV Logs consists of the following:

- **Accessing Manager IV Logs**
- **Monitoring the Error Logs**
- **Manager IV Log Message Formats**
  - **System Error Log**
  - **System Administrator Log**
  - **Product Connection Log**
  - **Dispatcher Log**
  - **Information Log**
  - **Data Communication Log Report**
  - **Data Communication Log Format**
- **Displaying Error Messages**

OH 3E-2

DISCUSSION

Using Manager IV logs

DEFINITY® Manager IV System Administration Guide

Using Manager IV Logs consists of the following:

- Accessing Manager IV logs

  All logs are kept in a directory called $LOG. You can **cd** to the **$LOG** directory and list its contents if necessary to see what logs are available.

- Monitoring the error logs
- Manager IV log message formats
  - System error log
  - System administrator log
    - Viewing the system administrator log
  - Product connection log
    - Displaying the product connection log
  - Dispatcher log
  - Information log
  - Data communication log report
  - Data communication log format
    - Producing dclog reports
- Displaying error messages

PRACTICE EXERCISE

DEFINITY® Manager IV System Administration Guide

1. Displaying a Product Connection Log

Using the Manager IV System Administration Guide and a Manager IV terminal, display a product connection log.

When finished, have the instructor check you results.

EXERCISE REVIEW

The instructor will review what the screen should look like when the command has been properly executed. If the screen look different or if problems were experienced with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The three major areas of Manager IV logs are:

- Accessing Manager IV logs
- Monitoring Manager IV logs

Accessing Manager IV Logs

Monitoring the Error Logs

- Defining the problem
- Manager IV log message formats
- System administrator log
- System error log
- System administrator log
- Product connection log
- Dispatcher log
- Information log
- Data communication log report
- Data communication log format

LESSON 3F

Maintenance PROCS

Lesson 3F Objectives

Upon successful completion of this lesson the student will be able to:

- **Busy out or release busied trunks**

OH 3F-1

LESSON INTRODUCTION

This lesson explains how to busy out trunks using Manager IV maintenance procedures.

LESSON OBJECTIVES

Upon successful completion of this lesson the student will be able to:

- Busy out or release busied trunks

Busying out Trunks and Trunk Groups

Busying out and releasing a trunk and trunk group using the Manager IV maintenance procedures consist of the following:

- **Maintenance (Proc Mode)**
- **Maintenance procedures**
  - **General switch proc 600**
  - **General switch proc 601**
  - **Network area procs 620, 630 and 631**
  - **Maint-1 or all users**
  - **Proc restriction file**
  - **Modes of operation**
- **Administering maintenance procs**
  - **Proc mode help facility**
  - **Connect to the switch**

OH 3F-2

DISCUSSION

Busying out Trunks and Trunk Groups (continued)

Busying out and releasing a trunk and trunk group using the Manager IV Maintenance Procedures consist of the following:

° Maintenance (Proc Mode)

This is the Manager IV application which allows the switch to be maintained by running maintenance related tasks.

° Maintenance procedures

The maintenance tasks can be accessed from the Manager IV SMUE (System Management User Executive) via the system's procs (procedures) identified by three-digit numbers.

- General switch proc 600

  Provides status information about the entire switch or about switch components that can affect the entire switch.

- General switch proc 601

  Provides environmental failure history log information, resolve environmental alarms and test cabinets for environmental failures.

- Network area procs 620, 630 and 631

  Deal with the digital network and its peripherals.

- Maint-1 or all users

  To access proc mode, you need to be assigned as a *main-1* or *all* class user via the **system-administration login add** or **system-administration login change** commands.

Busying out Trunks and Trunk Groups

- Proc mode screens
  - Proc ID line
  - Selection menu
  - Proc fields area
  - Status line
  - Message/help line
  - Command line
  - Function keys (F1 through F8)
- Proc mode commands
- Examine alarms and errors in basic mode
- Isolating the problem in basic mode
  - Proc 620 test 2 (command line)
  - Proc 620 test 2 (activity field entry)

OH 3F-3

DISCUSSION

Busying out Trunks and Trunk Groups (continued)

- Proc restriction file

  Manager IV provides a default Proc Restriction file which restricts you to the maintenance procs only.

- Modes of operation

  Proc mode supports two modes of operation: *basic* and *enhanced*. Basic mode is a built-in Proc Mode functionality that allows you to connect and maintain the switch.

  Enhanced mode is supported only if the SSB (Switch Support Base) package is delivered with the Proc Mode basic functionality.

° Administering maintenance Procs

In proc mode, you can access the maintenance procs via the "Procedure Mode" screens.

- Proc mode help facility
- The help facility contains all information necessary to administer and maintain the switch in proc mode. Via the help facility, you can display the procs by using the <F6 FIELD> function key.
- Connect to the switch

  Proc mode allows you to directly connect to all switch types via the *proc run* command, thus minimizing load on the Manager IV.

DISCUSSION

Busying out Trunks and Trunk Groups (continued)

- Proc mode screens

  Proc mode is a screen-based application that facilitates your interactive session with the switch via prompts, error messages and help messages.

  - Proc ID line
  - Selection menu
  - Proc fields area
  - Status line
  - Message/help line
  - Command line
  - Function keys (F1 through F8)

- Proc mode commands

  The "procedure mode" screens allow you to enter commands to run procs.

- Examine alarms and errors in basic mode

  Use proc 600 test 1 to examine the error log.

- Isolating the Problem in Basic Mode

  To isolate the problem, run the maintenance test as indicated in proc 600 test 1 field 15.

  - Proc 620 test 2 (command line)

    Use test 2 to run tests on the selected circuit or range of circuits.

  - Proc 620 test 2 (activity field entry)

PRACTICE EXERCISE

DEFINITY® Manager IV System Administration Guide

1. Busing Out a Trunk Group

Using the DEFINITY® Manager IV System Administration Guide and a Manager IV terminal, busy out the assigned trunk group.

2. Release a Busied Trunk Group

Using the DEFINITY® Manager IV System Administration Guide and a Manager IV terminal, release the busied trunk group previously busied out.

When finished, have the instructor check the screens for the proper information.

EXERCISE REVIEW

The instructor will review what the screens should look like when properly filled out. If screens look different or if there where problems with the exercise, let the instructor know what areas to review.

LESSON SUMMARY

The three major areas of Maintenance Procedures are:

- Maintenance (proc mode)
- Maintenance procedures
- Administering maintenance procs

Maintenance (proc mode)

Maintenance procedures

- General switch proc 600
- General switch proc 601
- Network area procs 620, 630 and 631
- Maint-1 or all users
- Proc restriction file
- Modes of operation

Administering maintenance procs

- Proc mode help facility
- Connect to the switch
- Proc mode screens
  - Proc ID line
  - Selection menu
  - Proc fields area
  - Status line
  - Message/help line
  - Command line
  - Function keys (F1 through F8)
- Proc mode commands
- Examine alarms and errors in basic mode
- Isolating the problem in basic mode