UAPLX Direct Number Assignment

Operations Manual

NEC NEC Unified Solutions, Inc.

June 2007 NDA-30047, Revision 7

Liability Disclaimer

NEC Unified Solutions, Inc. reserves the right to change the specifications, functions, or features, at any time, without notice.

NEC Unified Solutions, Inc. has prepared this document for the exclusive use of its employees and customers. The information contained herein is the property of NEC Unified Solutions, Inc. and shall not be reproduced without prior written approval

from NEC Unified Solutions, Inc.

NEAX and Dterm are registered trademarks of NEC Corporation.

© 2007 NEC Unified Solutions, Inc.

MS-DOS, Microsoft, Windows, Windows NT, and Windows 2000 are registered trademarks of Microsoft Corporation. Microsoft Windows 95, Microsoft Windows 98, and Microsoft Windows XP are trademarks of Microsoft Corporation.

Red Hat, the Red Hat "Shadow Man" logo, RPM, Maximum RPM, the RPM logo, Linux Library, PowerTools, Linux Undercover, RHmember, RHmember More, Rough Cuts, Rawhide and all Red Hat-based trademarks and logos are trademarks or registered trademarks of Red Hat, Inc. in the United States and other countries.

Linux is a registered trademark of Linus Torvalds.

All other brand or product names are or may be trademarks or registered trademarks of, and are used to identify products or services of, their respective owners.

Contents

| Introduction | 1-1 |
|------------------------------|-----|
| UAPLX Direct Number Overview | |
| How This Guide is Organized | |
| Using this Guide | |
| | |

| Configuring Direct Number Assignment | 2-1 |
|--|-----|
| Overview | 2-1 |
| Step 1: Configuring the APM Application Configuration file | 2-2 |
| Step 2: Configuring Primary Configuration Parameters | 2-2 |
| Step 3: Designating OAI Facilities | 2-3 |
| Step 4: Configuring Secondary OAI Configuration Parameters | 2-3 |

| MAT Assignments | 3-1 |
|---|-----|
| Overview | 3-1 |
| Making Function Key Assignments | 3-1 |
| AOKC COMMAND: (Assignment of OAI Key Codes) AKYD COMMAND: (Assignment of Dterm Function Key) | |

ii Contents

Figures

| Title | Page |
|-------------------------------------|---|
| Installation Requirements | 1-4 |
| OAI Function Key Assignment. | 3-2 |
| OAI Function Key Assignment Example | 3-4 |
| | Title Installation Requirements OAI Function Key Assignment OAI Function Key Assignment Example |

iv Figures

Tables

| Table | Title | Page |
|-------|--|------|
| 2-1 | APM Application Configuration file information | 2-2 |
| 2-2 | APM Configuration Entry screen entries | 2-2 |
| 2-3 | NEAX2400 facilities for Direct Number Assignment | 2-3 |
| 2-4 | OAI-Conf command entries | 2-4 |

vi Tables

Introduction

The UAPLX Direct Number Assignment Operations Manual provides the information you need to manage the Direct Number Assignment software.

Chapter Topics

- UAPLX Direct Number Overview
- Using this Guide

UAPLX Direct Number Overview

UAPLX Direct Number Assignment is a software supplement to the Medical Center System (MCS) that enables hospital admitting personnel to retrieve DID telephone numbers from the MCS database.

With Direct Number Assignment a DID number for a new patient can be obtained by pressing a function key on the Dterm. When the function key is pressed, Direct Number Assignment accesses the MCS database of DID numbers, retrieves the next available one on the list, and displays it on the Dterm LCD panel. Admitting personnel can either accept the number and enter it into the patient's record or reject the number. Once a DID number is accepted, it is placed into "Offered and Accepted" status in the MCS database. Only after the DID number has been implemented by the PBX is it considered to be in "Active" status.

To Use Direct Number Assignment

- Step 1 Press the Dterm function key that is assigned to Direct Number Assignment. An available DID number displays on the Dterm LCD panel, followed by the notation "ACCEPT?"
- Step 2 Do one of the following:
 - Press 1# to accept the displayed DID number. (Then enter the accepted DID number to the patient record.)
 - —Press **0#** to cancel the DID request. The function key assigned to Direct Number Assignment, or nothing. If you do not press a key, Direct Number Assignment will time-out and reject the number.

If the number is accepted, Direct Number Assignment marks it as offered and accepted. If the number is not accepted, the number remains available. After the transaction, Direct Number Assignment clears the Dterm display.

If any entry other than 1# or 0# is made, Direct Number Assignment displays the message "1=YES 0=NO" and awaits a correct entry.

How This Guide is Organized

Chapter 1 This chapter provides a brief overview of Direct Number Assignment and *Introduction* outlines the actual manual organization.

Chapter 2 Configuring Direct Number Assignment This chapter contains the information that should be entered in the configuration file for Direct Number Assignment.

Chapter 3 MAT Assignments This chapter describes how to make Function Key assignments.

Using this Guide

This guide provides specific field entries that need to be made during the installation and configuration of Direct Number Assignment. In addition to this guide, use instructions in the following manuals for this installation:

- Applications Manager (APM) Installation Manual—Contains step-by step instructions for installing the software from the release media.
- Applications Manager (APM) Operations Manual—Explains how applications like Direct Number Assignment are configured in the APM environment using the entries and values provided in this chapter.
- *NEAX2400 System Manuals*—Give very detailed explanations about the assignments that need to be made through the Maintenance Administration Terminal (MAT) commands on the NEAX2400.

The installation and set up of Direct Number Assignment involves the following sequence of steps:



- The RPM is didAlloc-<version>.i386.rpm.
- MCS must be installed first.
- The installed directory is /oai/app/didAlloc.
- Step 1 Install Direct Number Assignment software from the release media.

-Log into the APM Platform Management Menu.

- -Select the Installation of Applications/Packages command.
- -Follow the instructions provided in the *APM Installation Manual* to complete this part of the installation.
- Step 2 Modify the application configuration as necessary.
 - Direct Number Assignment is configured during installation with default settings.

 - Use the instructions provided in the APM Operations Manual to make the entries contained in this section.
- Step 3 Configure MAT Assignments.
 - —Several data settings must be assigned at the NEAX2400 Maintenance Administration Terminal (MAT) before Direct Number Assignment will function.
 - -Refer to Chapter 3, "MAT Assignments" for specifies necessary commands and the values at which they are to be set.
 - —Use the instructions provided in the NEAX2400 IMS System Manuals to make the entries contained in this section.

Figure 1-1 lists the installation requirements for Direct Number Assignment.



1-5 Introduction

1-6 Introduction

Configuring Direct Number Assignment

This chapter contains the information that should be entered in the configuration file for Direct Number Assignment.



Refer to the "APM Operations Manual" for specific instructions on what these parameters mean and how to make these entries.

Chapter Topics • Overview

• Step 1: Configuring the APM Application Configuration file

- Step 2: Configuring Primary Configuration Parameters
- Step 3: Designating OAI Facilities
- Step 4: Configuring Secondary OAI Configuration Parameters

Overview

This chapter provides detailed procedures for configuring Direct Number in the APM, designating OAI Facilities, and configuring secondary OAI Configuration parameters.



Entries for parameters that are marked with an asterisk (*) should be made exactly as they are shown; all other entries in this chapter serve as examples only.

After installation, the UAPLX Direct Number Assignment application may be configured using the Application Configuration on the APM System Administration Menu.

- Step 1 Enter the APM option from the APM Platform Management Menu.
- Step 2 Enter the System Administrator password at the APM password screen.
- *Step 3* Enter the Application Configuration option from the System Administration menu.

Step 1: Configuring the APM Application Configuration file

Table 2-1 contains information used to add Direct Number Assignmentto the APM Application Configuration file.

Table 2-1 APM Application Configuration file information

| Parameters | Entries | Descriptions |
|---------------------|---------|---|
| OAI Application | Y(es) | Indicates whether or not (Yes or No) Direct Number Assignment communicates with the NEAX2400 using OAI processes. |
| CRT Application | N(o) | Indicates whether or not (Yes or No) Direct Number Assignment requires a terminal screen that is of the same type as the one used by the APM. |
| Communication Queue | N(o) | Indicates whether or not (Yes or No) this non-OAI application needs an IPC queue to communicate with other process. |

Step 2: Configuring Primary Configuration Parameters

On the APM Configuration Entry screen, make the entries indicated in Table 2-2 for each Direct Number Assignment parameter.

Table 2-2 APM Configuration Entry screen entries

| Parameters | Entries | Descriptions |
|----------------------|--|---|
| Application Name | Direct Number Assistant | Specifies the name to be displayed in the APM menus. This name is displayed however it is entered here; i.e., capital letters, lower case, etc. |
| Executable Filename | /oai/app/ didAlloc/ bin/ didAlloc | Indicates the path name of the executable file. |
| Group | (make no entry) | Indicates that Direct Number Assignment does not belong to a group. |
| Response Mode | l(gnore) | Indicates the action that the APM is to take with Direct Number Assignment should a member of the group terminate. |
| Initialization Batch | Y(es) | Indicates whether or not (Yes or NO) Direct Number Assignment is to be initialized automatically when the OAI system is initialized. |

| Parameters | Entries | Descriptions |
|--------------------|-----------|--|
| Termination Mode | M(essage) | Indicates how the APM is to notify Direct Number Assignment to terminate. |
| Standard Output | /dev/null | Indicates where any output is sent. |
| Number of Restarts | 10 | Indicates how many times the APM may restart Direct Number Assignment after it terminates erroneously. |

Step 3: Designating OAI Facilities

According to instructions in the *APM Operations Manual*, designate the NEAX2400 facilities for Direct Number Assignment shown in Table 2-3 using the **Facilities** command on the Configuration Entry screen.

| Table 2-3 NEAX2400 facilities for Direct Number Assignment | | | |
|--|------|----------------------|--|
| | MRFI | Mode Release (I) | |
| | MSF | OAI Mode Set | |
| | TCFD | Terminal Control (D) | |
| | MRFR | Mode Release (R) | |
| | NTF | Number Transfer | |
| | TCFI | Terminal Control (I) | |



The same MSF Op-Code that is specified here in the APM must be assigned to Direct Number Assignment the NEAX MAT. For more information, see Chapter 3, "MAT Assignments".

This code defaults to 130 with the autoconfiguration utility.

Step 4: Configuring Secondary OAI Configuration Parameters

Using the **OAI-Conf command** on the APM Configuration Entry screen, make the entry shown for each of the parameters shown in Table 2-4. Use the instructions provided for this option in the *APM Operations Manual.*

| Table 2-4 OAI-Conf command entries |
|------------------------------------|
|------------------------------------|

| Parameters | Entries | Descriptions |
|-----------------------|--------------------|--|
| Database Name #1 | (make no entry) | |
| Database Name #2 | (make no entry) | |
| Timeout Value #1 | 30 | Indicates the length of time, in seconds, that Direct Number Assignment waits for a response to a displayed message. |
| Timeout Value #2 | 1 | |
| Tenant Number | 1 | Specifies the number of the tenant that Direct Number Assignment serves. |
| Source Link Name | OAI1TCP | Identifies the port on the source side of the communication link. |
| Destination Link Name | PBX1TCP | Identifies the port on the destination side of the communication link. |
| Association Recovery | 30 | Designates the number of seconds Direct Number Assignment will wait before trying to re-establish an association with the NEAX that has been released. |

This completes the configuration of Direct Number Assignment in the APM. Continue on to Chapter 3, "MAT Assignments" to make the necessary MAT assignments.

З MAT Assignments

This chapter describes how to make Function Key assignments.

Chapter Topic • Overview

• Making Function Key Assignments

Overview

This guide assumes that data settings that affect the operation of all OAI software on a system-wide basis have already been assigned on the NEAX Maintenance Administration Terminal (MAT). Such settings include, for instance, system index values and assignment of Interface I/O Port Data in the Interface Processor (IP).



Refer to the following manuals for more information about these system data settings and the MAT commands described in this chapter for Direct Number Assignment.

- "OAI Module Installation Manual" for the NEAX2400 IMS
- "NEAX2400 IMS Command Manual"
- "NEAX2400 IMS Job Specification Manual"
- "NEAX2400 IMS Programming Manual"

Making Function Key Assignments

A function key on every Dterm that is to be used to access Direct Number Assignment must be assigned to the Mode Set Facility number (Op-Code) that was configured for Direct Number Assignment in the APM.



Refer to Chapter 2, "Configuring Direct Number Assignment" for more information.

ASYD SYS1 Index 4 bit 4=1

 The MSF facility and its Op-Code are assigned to one of the 14 OAI Key Codes in the MAT using the AOKC command. Second, each of these OAI Key Codes corresponds to an AKYD Function Key Index (FKI) value which is then assigned to the specific Dterm function key. This process is illustrated in Figure 3-1.





A knowledge of the Dterm stations in the NEAX system and which ones will be set up to access Direct Number Assignment is necessary for using the following two commands:

- AOKC COMMAND: (Assignment of OAI Key Codes)
- AKYD COMMAND: (Assignment of Dterm Function Key)

AOKC COMMAND: (Assignment of OAI Key Codes)

This command is first used to associate the MSF facility and its Op Code that was configured in the APM for Direct Number Assignment to one of the OAI Key Codes in the MAT.

- *Step 1* Enter an unused **OAI Key Code**, from 1 to 14. To determine what Key Codes are available for assignment, use the LOKC command to list the AOKC Key Codes that are already assigned.
- Step 2 Enter the type of facility using the value that designates the MSF.
- *Step 3* Enter the same **MSF Op-Code** that was configured for Direct Number Assignment in the APM. Retrieve it using the Providers command on the APM Configuration Entry screen.

AKYD COMMAND: (Assignment of Dterm Function Key)

Step 1 Enter the same tenant number that is configured for the application in the APM Application Configuration option.

Refer to Tenant #1 in Table 2-4 on page 2-3 in Chapter 2.



- *Step 2* Enter the station number of the Dterm on which the function key is being assigned.
- *Step 3* Enter a Dterm function key to the **MAT Function Key Index** that in turn corresponds to the previously assigned OAI Key Code.



In the OAI Function Key Assignment example (Figure 3-2), the MSF was selected in the APM Application Configuration and its Op-Code was determined to be #130. MSF #130 is assigned through the AOKC command to an OAI Key Code. The Key Code to which it is assigned in this example is #10. The Dterm function key that is to be used to access Direct Number Assignment is configured as function key #8. Since OAI Key Code #10 corresponds in the PBX to MAT Function Key Index #43, Dterm function key #8 is assigned to Function Key Index #43 using the AKYD command. Thus, whenever a phone user presses function key #8 on any assigned Dterm, MSF 130 initiates communication with Direct Number Assignment for display of the next available number.

Direct Number Assignment is now installed and ready to be initialized. Enter the APM Operations Menu and initialize Direct Number Assignment through the **Non-CRT Application** command, according to instructions provided in the *APM Operations Manual*. For additional information or support on this NEC Unified Solutions product, contact your NEC Unified Solutions representative.



UAPLX Direct Number Assignment Operations Guide

NDA-30047, Revision 7