

IBM EDMSuite OnDemand for OS/390

Client Installation Guide

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Fifth Edition (June, 1999)

This document serves as a reference guide for IBM and customer personnel regarding the installation of the OnDemand for OS/390 Client.

The changes for this edition are summarized under **Summary of Changes to This Manual** in the **Introducing IBM EDMSuite OnDemand for OS/390** chapter. Editorial changes that have no technical significance are not noted.

This edition applies to IBM EDMSuite OnDemand for OS/390 Server Version 2 Release 1.

This document is provided for the exclusive use of customers implementing IBM's OnDemand for OS/390. Comments on the use of content of this document may be addressed to:

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IBM EDMSuite OnDemand for OS/390

Client Installation Guide

Table of Contents

I.Introducing IBM EDMSuite OnDemand for OS/390	4
A.The OnDemand for OS/390 System	4
B.About this Installation Guide	4
C.Summary of Changes to This Manual	4
II.OnDemand for OS/390 Client Requirements	6
A.OS/2 Client Requirements	6
B.Windows Client Requirements	6
III.Preparing for Installation of the OnDemand Client	7
A.Obtaining the OnDemand Client - FTP Site Information	7
B.Installation Overview	7
C.Disk Space Requirements	9
D.Operating System	9
E.TCP/IP Communications Support	10
F.Installation Checklist	10
IV.Installing OS/2 Client Software	11
A.Overview	11
B.Installing the OS/2 Client	11
C.Installing Software on a Network	13
V.Installing Windows Client Software	14
A.Overview	14
B.The Windows 16-bit Client	16
C.The Windows 32-bit Client	19
D.Installing Software on a Network	22
VI.Configuring OnDemand for OS/390	25
A.Command Line Parameters (Required for OD/390)	25
B.Time Zone (Windows 16-bit Client and OS/2 Client)	30
C.Connecting to Server Short or Long Running Tasks (Short or Long Sockets)	31
D.Installing User Defined Files (32-bit Client)	33
E.Mapping AFP fonts	37
VII.Customizing OnDemand for OS/390	51
A.External Applications and Dynamic Link Libraries	51
B.The Document Sciences "CompuView Navigator" v 2.1 and above (Metacode support)	55
C.Related Documents	59
VIII.Related IBM Offerings	62
A.CD-ROM Creation	62

I. Introducing IBM EDMSuite OnDemand for OS/390

IBM EDMSuite *OnDemand for OS/390* enables the automatic capture, index, archive, retrieval, presentation, and output of large volumes of computer generated documents and other data.

A. The OnDemand for OS/390 System

As a key component of IBM's Enterprise Document Management Suite (EDMSuite), OnDemand for OS/390® provides the foundation for an affordable, automated electronic solution to manage long and short term archival, retrieval, presentation, and distribution of computer generated reports, computer output to laser disk (*COLD*) and other business related documents.

The Base Server System of OnDemand for OS/390 captures the output from S/390 line of business applications directly from tape, spool or other sources. Indexing information, such as customer name or account number, is automatically extracted and stored into IBM's DataBase 2 (DB2®). These index structures provide quick access to stored information. The actual data is compressed, stored and made immediately available for on-line access. OnDemand for OS/390 archived data is available for access via OnDemand Clients on personal computers, Internet browsers, 3270 workstations, and other applications that may access the information via Application Program Interfaces (API's). OnDemand for OS/390 leverages standard S/390 subsystems for communications, transaction management, security, and storage management. The storage management capability of OnDemand for OS/390 balances users' needs for quick access to information with the organization's objectives of minimizing costs.

B. About this Installation Guide

This manual is intended to serve as a guide for the various tasks required to install the OnDemand for OS/390 Client. It contains step-by-step instructions as well as prerequisite planning information.

C. Summary of Changes to This Manual

1. First Edition (January, 1999) for "IBM EDMSuite OnDemand for OS/390 V2R1"

2. Second Edition (January, 1999) for "IBM EDMSuite OnDemand for OS/390 V2R1"

- i. Changed the "Adhoc CDROM Mastering Process" chapter to "Related IBM Offerings" "CD-ROM Creation" is now a section of this chapter.
- ii. Added the "Installing User Defined Files" section of "Configuring OnDemand for OS/390" chapter.

This section also describes how to automate the installation process to start the server as a short running task (short sockets) for optimum performance in an OS390 environment.

3. Third Edition (March, 1999) for "IBM EDMSuite OnDemand for OS/390 V2R1"

- i. Added an explanation of the client install process from the cdrom built by the Adhoc CDROM Mastering Process.

- 4. Fourth Edition (May, 1999) for "IBM EDMSuite OnDemand for OS/390 V2R1"**
 - i. Added an explanation for installing versions of Adobe Acrobat Exchange not included with OD/390 (Adobe Acrobat Exchange 3.01, 4.0). This is in the "Windows 16-bit Client" and the "Windows 32-bit Client" sections of "Installing Windows Client Software."
 - ii. OnDemand Client zip files are now available only from a secure ftp site. Documentation will continue to be available from the non-secure ftp site. See the "Preparing for Installation of the OnDemand Client" chapter.
 - iii. Added additional command line parameters to the "Configuring OnDemand for OS/390" chapter.
 - iv. Added the /A OS/2 abort-on error command line parameter to the "Configuring OnDemand for OS/390" chapter.
 - v. Added the "External Applications and Dynamic Link Libraries" section to the "Configuring OnDemand for OS/390" chapter.
- 5. Fifth Edition (June, 1999) for "IBM EDMSuite OnDemand for OS/390 V2R1"**
 - i. Added an "Installation Checklist" section to the "Preparing for Installation of the OnDemand Client" chapter.

II. OnDemand for OS/390 Client Requirements

A. OS/2 Client Requirements

The OnDemand OS/2 client runs under IBM OS/2 Version 3.0 or later and IBM OS/2 Warp Connect. The OS/2 client requires the following hardware and software:

- w A physical connection to the network, such as a Token Ring or Ethernet network adapter.
- w A minimum of 16 MB of memory.
- w An 80486, 33 MHz or faster processor.
- w A super-VGA display and adapter with a minimum resolution of 800x600 is recommended.
- w A minimum of 50 megabytes of free hard disk space.
- w For OS/2 Version 3.0 or later, the IBM TCP/IP Version 2.0 Base kit is required.
- w For OS/2 Warp Connect, the standard Warp Connect TCP/IP support is required.

B. Windows Client Requirements

The OnDemand Windows client runs under Microsoft Windows 3.1 or later, Windows 95, and Windows NT 4.0. The Windows client requires the following hardware and software:

- w A physical connection to the network, such as a Token Ring or Ethernet network adapter.
- w A minimum of 16 MB of memory. An additional 8 MB is required to view PDF documents.
- w An 80486, 33 MHz or faster processor.
- w A super-VGA display and adapter with a minimum resolution of 800x600 is recommended.
- w A minimum of 50 megabytes of free hard disk space.
- w For Windows 3.1, a Windows-compatible TCP/IP socket program, such as IBM TCP/IP for DOS Version 2.1.1 or later is required.
- w For Windows 95 and Windows NT 4.0, the standard TCP/IP support is required.

III. Preparing for Installation of the OnDemand Client

A. Obtaining the OnDemand Client - FTP Site Information

The OnDemand Client software is distributed from a secure ftp site. Customers who have purchased the OnDemand for OS/390 "Client Server Enablement" feature may download the latest supported client from the secure ftp site. The OnDemand Administrator may request the ip address, userid, and password for the ftp site in one of two ways:

- w Send a note to "od390@us.ibm.com" requesting the information, or
- w Open an incident by calling the IBM support center. Be sure the operator opens the incident to ODQA at call center 146. Please supply in the incident either an e-mail address or a physical address where the information can be mailed.

Please include the following information in the request:

Customer Name: _____

Customer Number: _____

Primary Customer Contact (OnDemand Administrator): _____

Primary Customer Contact Telephone: _____

Primary Customer Contact e-mail address _____

Secondary Customer Contact (optional): _____

Secondary Customer Contact Telephone (optional): _____

Secondary Customer Contact e-mail address (optional): _____

Mailing Address (if physical mailing of password information is preferred):

B. Installation Overview

The OnDemand Client software is distributed from the ondemand390 ftp site. Please see the readme.txt file on the ftp site for more information. The ftp site contains seven zip files:

ADOBE.ZIP	Adobe Acrobat Exchange - for PDF document viewing, install separately
WIN16LOC.ZIP	full local 16-bit Windows client
WIN32LOC.ZIP	full local 32-bit Windows client
OS2LOC.ZIP	full local OS/2 client
WIN16NET.ZIP	network 16-bit Windows client
WIN32NET.ZIP	network 32-bit Windows client
OS2NET.ZIP	network OS/2 client

Transfer the desired zip files to a file server. The client may then be installed and run in several ways. Throughout this manual, the term **installation source directory** may refer to the local pc

source directory, the file server source directory, or a user-created cdrom source directory, depending on the installation method used.

When creating a source installation directory tree, whether it be on a local pc, a file server, or for a user-created installation cd-rom, it is suggested that the following source directory names be used to avoid confusion, as these directory names will be used throughout this manual:

<u>directory</u>	<u>zip file</u>
\adobe	adobe.zip
\win16	win16loc.zip
\win32	win32loc.zip
\os2	os2loc.zip
\netwin16	win16net.zip
\netwin32	win32net.zip
\netos2	os2net.zip

1. Local Install

A local Install will install the OnDemand Client software and control files directly to the PC that will be running the Client. There are three methods for installing the client to a local PC.

i. Install from a local PC to the same local PC

- FTP** the desired client zip file(s) from the ondemand390 ftp site to a file server for distribution to multiple clients. Then transfer the zip file from the file server into its own temporary subdirectory on the local pc.
- Unzip the file using the -d parameter to create the directory structure .
example: pkunzip win32loc.zip -d
- Install from the resulting source directory into another directory on the pc.
- Delete the temporary files if desired.

ii. Install from user created CD-ROM to PC

You may want to create your own "Installation cdrom" with one or more of the OnDemand Clients. This would allow you to install the client to a pc from the cdrom. This must be done from a pc that is set up to support a cdrom writer and software.

- FTP** the desired zip files from the ondemand390 ftp site to the local pc that supports the cdrom mastering hardware and software. Place each zip file into its own subdirectory. Use the suggested directory names listed above for the various clients.
- Create a source installation cdrom - Unzip each of the desired clients into a separate subdirectory, including Adobe Acrobat Exchange if pdf files will be viewed. **Be sure to use the -d parameter to create the directory structure (ex: pkunzip win32loc.zip -d).** Then burn a cdrom of all "install directories" that you unzipped.
- Install from the source installation cdrom to the pc - The local PC must support a CD-ROM drive. From the PC, run SETUP (Win 32) or INSTALL (Win16 or OS/2) from the directory that contains the full client for your operating system.

iii. Install from LAN Server to PC

- a. Create a source installation directory for each desired client, including Adobe Acrobat Exchange if pdf files will be viewed from the client. Use the suggested directory names listed above for the various clients.
- b. **FTP** the desired zip file from the ondemand390 ftp site to the file server, placing each zip file into its own subdirectory created in step a.
- c. Unzip each of the desired Clients into its own directory. **Be sure to use the -d parameter to create the directory structure (ex: pkunzip win32loc.zip -d).**
- d. Install from the file server to the PC. From the local PC, run SETUP (Win 32) or INSTALL (Win16 or OS/2) from the installation directory on the LAN Server where you unzipped the zip file.

2. Network Install

A Network Install will allow multiple PC's to run the client from a LAN server. The OnDemand Client software and control files are first installed on a LAN Server, then the OnDemand Client control files are installed on each PC. The procedure for installing the OnDemand Client for Network use is as follows:

- i. Install (do not copy) the full LOCAL Client (Local Install) from the CD-ROM that you created (see the "Install from CD-ROM to PC" section) or from the file server source directory to the file Server destination directory. Use the suggested directory names listed above for the various clients.
- ii. Create source directories on the LAN Server for each desired NETWORK client. Use the suggested directory names listed above for the various clients. FTP the desired network clients into their own subdirectory. Then unzip the network client zip file. **Be sure to use the -d parameter to create the directory structure (ex: pkunzip win32net.zip -d).**
- iii. From the client PC, run INSTALL or SETUP in the LAN Server (or installation cdrom) Network Directory.

No program files are copied to the client PC. The PC runs a copy of the OnDemand Client programs from a LAN Server. When the OnDemand Client is started on the PC, the OnDemand programs are loaded from the LAN Server into memory on the PC. OnDemand allocates temporary work space on the local PC for data and resources when the user selects items for viewing. OnDemand saves any run-time options the user changes in a copy of ARS.INI in the Windows directory on the client PC.

C. Disk Space Requirements

If the source and destination directories will be on one pc, you will need about 120 MB for the install process. After the client has been installed, the source directory and the zip file may be deleted. The client will then require about 30 MB if all files are installed. Additional free disk space will be required to store the temporary files for each document being viewed by OnDemand. If installed from a file server or cdrom, the OnDemand client code will require about 30 MB.

D. Operating System

Installation of the operating system is the responsibility of the customer.

E. TCP/IP Communications Support

Installation and configuration of TCP/IP support is the responsibility of the customer.

F. Installation Checklist

The following list is intended to serve as a guide of the major installation tasks and the usual order of those tasks.

1. **Request ftp site information needed to download client files.**
2. **Download the desired files (OnDemand Client, Adobe Acrobat Exchange) in binary format.**
3. **Create an installation source directory for each file (Windows 16-bit Client, Windows 32-bit Client, OS/2 Client, Adobe Acrobat Exchange) on the file server.**
4. **Place the zip file into the source directory. Unzip the file using the -d parameter.**
5. **From the destination pc, connect to the file server to run SETUP or INSTALL.**
6. **Install Adobe Acrobat Exchange if pdf documents will be viewed (Windows only).**
7. **Install the desired client for that operation system.**
8. **Add the **REQUIRED** OD/390 command-line parameters.**
9. **Start the client and update the server information from the logon dialog.**
10. **Uncheck the "Attempt Unified Logon" checkbox (22015 or higher Windows client) at the "update servers" dialog unless this option is needed for a specific purpose.**

IV. Installing OS/2 Client Software

A. Overview

The client PC must be running OS/2 Version 3.0 or later or OS/2 WARP Connect to install the OnDemand client.

1. Disk Space Requirements

If the source and destination directories will be on one pc, you will need about 120 MB for the install process. After the client has been installed, the source directory and the zip file may be deleted. The client will then require about 30 MB if all files are installed. Additional free disk space will be required to store the temporary files for each document being viewed by OnDemand. If installed from a file server or cdrom, the OnDemand client code will require about 30 MB.

2. Installation Drives and Directories

The installation program lets you choose the target drive to install components. The default drive is C.

- w The default installation directories for the OS/2 client are \ARSOS2 (for the client programs, temporary files, and AFP codepage maps), and \PSFONTS (for the outline font files).
- w Language DLL and help files are installed in the \ARSOS2\LOCALE\&I directory. The &I part of the path name shows the locale, for example, **ENU** for the US English version of OnDemand.

B. Installing the OS/2 Client

The client software may be installed from a temporary source directory on the local pc, from a source directory on a file Server, or from a source installation cdrom that you created. Please see the earlier chapter "**Preparing for Installation of the OnDemand Client**" for more details on setting up the source directories for the installation process.

For maximum performance, it is recommended that the client be set up to start the server as a short running task (short sockets). This can be done manually, as explained in the "Connecting to Server Short or Long Running Tasks" section of the "Configuring OnDemand for OS/390" chapter, or automatically if using the Windows 32-bit client, as explained in the "Installing User Defined Files" section of that same chapter.

1. Install OnDemand software

- i. Make sure that TCP/IP is started on the PC if the installation will be from a file server on the network, and that you know the location of the INSTALL program (local pc, file server, or cdrom).
- ii. From an OS/2 Window or OS/2 Full Screen, type "**G:\os2install**" where G is the letter assigned to the drive that contains the INSTALL program.
- iii. At the "OnDemand Installation Information" window, select Continue.
- iv. At the "Install" window, select OK.

- v. At the "Install - directories" window, select the following components:
 - a. Language for the Client component.
 - b. IBM Core Fonts.
 - c. Sonoran Metric Outline Fonts - if your reports require these fonts (8 MB).
- vi. Select the drive to which you wish to install OnDemand. It is recommended that you do not change the directory name (ARSOS2).
- vii. When complete, the installation program displays a message indicating successful installation.
- viii. Exit the installation program.

2. Add Command Line Parameters (Required)

Several command line parameters **MUST** be added to insure that the OnDemand Client for OS/390 works properly. Follow these steps:

- i. Single Click with the **right** mouse button on the OnDemand icon in the OnDemand for OS/2 folder to bring up the menu.
- ii. Left Click on "Settings" (Warp v.3) or "Properties" (Warp v.4).
- iii. At the **Settings or Properties** window, add the command line parameters to the end of the text in the **Parameters** entry field. **Important** - Do not delete the existing line. Make sure you add the following parameters to the end of the existing text:

/Q /O 1 /9

The **Parameters** entry field should now look like this, depending on the language you installed:

/1 C:\ARSOS2\LOCALE\ENU /Q /O 1 /9

- iv. Close the folder by double clicking on the system icon in the upper left hand corner of the folder.

3. Logon to a Server

To start OnDemand for the first time, you must add Server Information. You may want to use OnDemand on-line Help for a more detailed explanation.

- i. Double click on the OnDemand icon to start the program.
- ii. At the **Logon to a Server** window, select the **Update Server** button.
- iii. At the **Update Servers** window, update the following:

Server entry field: Type the name of the OnDemand Server.

Host Name entry field: Type the TCP/IP host name alias, fully-qualified host name, or IP address.

Protocol: Select TCP/IP.

Port: Verify the TCP/IP port number. This is the TCP/IP port number that the OnDemand listener program monitors for client program requests. The default port for OnDemand for OS/390 is 3017. Consult your OnDemand Administrator.

Select the Add button, then close the Update Servers window.

4. Add Icon for the Stand-Alone AFP Viewer (Optional)

This may be useful for displaying a file without running the OnDemand client.

- i. Make sure the OnDemand for OS/2 folder is open on the OS/2 desktop.
- ii. Open the OS/2 System folder.
- iii. Open the Templates folder.
- iv. Click on the "Program" icon with the right mouse button and drag the icon to the OnDemand folder. A new program icon will be created, and the "Program - Settings" (Warp v.3) or "Program - Properties" (Warp v.4) folder will be displayed:
 - a. For **Warp Version 3** at the Program - Settings folder:
 - 1) At the "Program" tab, type the Path and File name:
C:\ARSOS2\FODWINVW.EXE
 - 2) At the "General" tab, type a title:
AFP Viewer
 - 3) Close the "Program - Settings" folder by double clicking on the system icon in the upper left hand corner of the folder. You should see the viewer icon displayed in the OnDemand for OS/2 folder.
 - b. For **Warp Version 4** at the Program - Properties folder:
 - 1) At the "Program" tab, type the Path and File name:
C:\ARSOS2\FODWINVW.EXE
 - 2) At the "Icon" tab, type a title:
AFP Viewer
 - 3) Close the "Program - Properties" folder by double clicking on the system icon in the upper left hand corner of the folder. You should see the viewer icon displayed in the OnDemand for OS/2 folder.

C. Installing Software on a Network

OnDemand software and fonts may be installed on a LAN Server, allowing other PC's on the network to run the software and access the fonts from the server. Setting up OnDemand in this way requires approximately 2 MB of disk space on the individual PC's.

Before you can run OnDemand from a LAN Server, you must install OnDemand network software on the individual PCs. If you plan to use outline fonts with OnDemand and ATM does not already exist on the individual PCs, you must install ATM on the PCs.

V. Installing Windows Client Software

A. Overview

The OnDemand Client for OS/390 may be installed directly from a temporary source directory on the local pc, from a source directory on a file Server, or from an installation source cdrom that you created. Either Software Installer (for 16-bit software), or InstallShield (for 32-bit software) will be invoked. The installation program allows you to select the components that you want to install on the PC:

- w The Windows client software
- w Adobe Type Manager (ATM) for Windows 3.1, Windows 95/98, or Windows NT
- w Outline fonts (requires ATM)

Based on your installation selections, the installation program may create or modify program groups, icons, shortcuts, folders, and initialization files.

1. Operating Environments

OnDemand provides 16-bit and 32-bit Windows client software and 16-bit and 32-bit versions of Adobe Type Manager. The table below shows the typical installation choices:

Client Software Components and Operating Environments:

Component	Windows 3.1	Windows 95/98	Windows NT 4.0
OnDemand Client	16-bit	32-bit	32-bit
Adobe Type Manager	16-bit	32-bit	32-bit

2. Disk Space Requirements

If the source and destination directories will be on one pc, you will need about 120 MB for the install process. After the client has been installed, the source directory and the zip file may be deleted. The client will then require about 30 MB if all files are installed. Additional free disk space will be required to store the temporary files for each document being viewed by OnDemand. If installed from a file server or cdrom, the OnDemand client code will require about 30 MB.

3. Installation Drives and Directories

The installation program lets you choose the target drive to install components. The default drive is C.

- w The default installation directories for the 16-bit client are \ARS (for Windows client programs, temporary files, and AFP codepage maps), and \PSFONTS (for the outline font files).
- w The default installation directories for the 32-bit client are \ARS32 (for Windows client programs, temporary files, and AFP codepage maps), and \PSFONTS (for the outline font files).

- w Language DLL and help files are installed in the \ARS\LOCALE\&I (16-bit) or \ARS32\LOCALE\&I (32-bit) directory. The **&I** part of the path name shows the locale, for example, **ENU** for the US English version of OnDemand.

4. Adobe software provided by OnDemand

i. Adobe Type Manager and Windows 3.1

If you are using Windows 3.1 and ATM Version 2.02 or later, do not install the version of ATM provided with the Windows client unless you first remove ATM as the system driver. To remove ATM as the system driver, edit the SYSTEM.INI file in the Windows directory and then restart Windows.

- a. Make a back up copy of SYSTEM.INI.
- b. Edit SYSTEM.INI and change the following lines:

Locate this Statement	Change the Statement to
system.drv=atmsys.drv	system.drv=system.drv
atmsys.drv=system.drv	;atmsys.drv=system.drv

The installation program changes SYSTEM.INI back to its original state.

- c. Restart Windows before installing OnDemand.

ii. Adobe Type Manager and Windows NT

OnDemand now includes ATM 4.0 for Windows NT starting with the 2.2.0.13 client.

iii. Adobe PDF Viewing Software (Adobe Acrobat Exchange) for Windows

OnDemand for OS/390 supports the viewing of PDF documents using Adobe Acrobat Exchange for both 16-bit Windows (Windows 3.1) and 32-bit Windows (Windows 95/98 and Windows NT). Adobe Acrobat Exchange 3.0 is available from the OnDemand for OS/390 FTP site as an Adobe.zip file. See the sections for the Windows 16-bit Client or the Windows 32-bit Client for more detailed installation instructions.

PDF viewing is not supported with the OS/2 client.

B. The Windows 16-bit Client

The client software may be installed from a temporary source directory on the local pc, from a source directory on a file Server, or from an installation source cdrom that you created. Please see the earlier chapter “**Preparing for Installation of the OnDemand Client**” for more details on setting up the source directories for the installation process.

For maximum performance, it is recommended that the client be set up to start the server as a short running task (short sockets). This can be done manually, as explained in the "Connecting to Server Short or Long Running Tasks" section of the "Configuring OnDemand for OS/390" chapter, or automatically if using the Windows 32-bit client, as explained in the "Installing User Defined Files" section of that same chapter.

Adobe Acrobat Exchange is included for the viewing of PDF documents. Adobe Acrobat should be installed before OnDemand. If not, there is one extra step that must be done to set up the client. See the following section.

1. Installing Adobe Acrobat Exchange (for PDF document viewing)

Adobe Acrobat Exchange 3.0 is available for the OnDemand Client as an Adobe.zip file. Unzip this file into a temporary (source) directory and install from this source directory to the pc. The source directory and the Adobe.zip file may be deleted after Exchange is successfully installed.

Note: When the version of Adobe Acrobat Exchange 3.0 supplied with OnDemand is installed, the Acrobat Exchange Plug_ins are automatically selected for installation by the Setup or Install procedure by default. If you are installing a different, or later version of Adobe Acrobat Exchange (3.01, or 4.0) be sure to select the Acrobat Exchange plug-ins for installation, or OnDemand will not be able to display PDF documents.

- i. Installing Adobe Acrobat Exchange before the OnDemand client.
 - a. Select Run from the File menu of Program Manager. In the Command Line entry field, type **d:\adobe\setup** (or use Browse) where **d** is the letter assigned to the drive that contains the INSTALL program.
 - b. Select OK. The software installation program starts.
 - c. At the Select Components window, make sure the following are selected (they should appear checked by default):
 - 1) Acrobat Exchange Files
 - 2) Acrobat Exchange Plug-ins
 - d. The installation program will install Adobe Acrobat Exchange into the **c:\acrobat3\exch16** directory by default. You may change the drive letter.
 - e. Restart Windows after Adobe Acrobat Exchange has been installed.
 - f. When OnDemand is installed, the **arspdfpi.api** file will automatically be installed in the **\acrobat3\exch16\plug_ins** directory.
- ii. Installing Adobe Acrobat Exchange after the OnDemand client has been installed.

If OnDemand has already been installed, Adobe Acrobat Exchange can still be installed. The last step must be done manually. Copy the **arspdfpi.api** file from the **\ars\pdf** folder (or the folder into which you installed OnDemand) into the **\acrobat3\exch16\plug_ins** directory, and pdf viewing should be enabled.

2. Installing the Windows 16-bit Client

- i. Install OnDemand software.
 - a. Make sure that TCP/IP is started on the PC if the installation will be from a file server on the network, and that you know the location of the INSTALL program if it resides on the LAN Server.
 - b. Select **Run** from the File menu of Program Manager. In the Command Line entry field, type **d:\win16\install** (or use Browse) where **d** is the letter assigned to the drive that contains the INSTALL program.
 - c. Select **OK**. The software installation program starts. Follow the instructions on the screen. You may need to select check boxes and choose the **Continue** button on successive screens to specify the components to install.
 - d. At the **Install** window, select **OK**.
 - e. At the **Install - directories** window, select the following components:
 - 1) Language for the Client component.
 - 2) Adobe Type Manager if not already installed (see the previous chapter).
 - 3) IBM Core Fonts.
 - 4) Sonoran Metric Outline Fonts if your reports require these fonts (8 MB).
 - f. Select the drive to which you wish to install OnDemand.
- ii. Add Command Line Parameters (**Required**)

Several command line parameters **MUST** be added to insure that the OnDemand Client for OS/390 works properly. Follow these steps:

- a. Single Click on the OnDemand icon in the OnDemand Program Group to highlight the icon.
- b. Select the File / Properties... pull down.
- c. At the **Program Item Properties** window, add the command line parameters to the end of the text in the **Command Line:** entry field. **Important** - Do not delete the existing line. Make sure you add the following parameters to the end of the existing text:

/Q /O 1 /9

The Command Line: entry field should now look like this, depending on the language you installed:

C:\ARSIARSGUI.EXE /1 C:\ARS\LOCALE\ENU /Q /O 1 /9

See the "Configure OnDemand for OS/390" section for a more detailed explanation of the parameters.

iii. Logon to a Server.

To start OnDemand for the first time, you must add Server Information. You may want to use OnDemand on-line Help for a more detailed explanation.

- a. Double click on the OnDemand icon to start the program.
- b. At the **Logon to a Server** window, select the **Update Server** button.
- c. At the **Update Servers** window, update the following:

Server entry field: Type the name of the OnDemand Server.

Host Name entry field: Type the TCP/IP host name alias, fully-qualified host name, or IP address.

Protocol: Select TCP/IP.

Port: Verify the TCP/IP port number. This is the TCP/IP port number that the OnDemand listener program monitors for client program requests. The default port for OnDemand for OS/390 is 3017. Consult your OnDemand Administrator.

- d. Select the Add button, then close the Update Servers window.

iv. Add Icon for the Stand-Alone AFP Viewer (Optional).

- a. Make sure the OnDemand Program Group is highlighted.
- b. Click "File / New" to open the "New Program Object" window.
- c. Select "Program Item" and click OK.
- d. At the "Program Item Properties" window:
 - 1) Description: AFP Viewer
 - 2) Command Line: c:\ars\fldwinvw.exe
 - 3) Working Directory: c:\ars
 - 4) Click on OK
- e. You should see the AFP Viewer Icon in the OnDemand Program Group.

C. The Windows 32-bit Client

The client software may be installed from a temporary source directory on the local pc, from a source directory on a file Server, or from an installation source cdrom that you created. Please see the earlier chapter “**Preparing for Installation of the OnDemand Client**” for more details on setting up the source directories for the installation process.

For maximum performance, it is recommended that the client be set up to start the server as a short running task (short sockets). This can be done manually, as explained in the "Connecting to Server Short or Long Running Tasks" section of the "Configuring OnDemand for OS/390" chapter, or automatically if using the Windows 32-bit client, as explained in the "Installing User Defined Files" section of that same chapter.

Adobe Acrobat Exchange is included for the viewing of PDF documents. Adobe Acrobat should be installed before OnDemand. If not, there is one extra step that must be done to set up the client. See the following section.

1. Installing Adobe Acrobat Exchange (for PDF document viewing)

Adobe Acrobat Exchange 3.0 is available for the OnDemand Client as an Adobe.zip file. Unzip this file into a temporary (source) directory and install from this source directory to the pc. The source directory and the Adobe.zip file may be deleted after Exchange is successfully installed.

Note: When the version of Adobe Acrobat Exchange 3.0 supplied with OnDemand is installed, the Acrobat Exchange Plug_ins are automatically selected for installation by the Setup or Install procedure by default. If you are installing a different, or later version of Adobe Acrobat Exchange (3.01, or 4.0) be sure to select the Acrobat Exchange plug-ins for installation, or OnDemand will not be able to display PDF documents.

- i. Installing Adobe Acrobat Exchange before the OnDemand client.
 - a. Select Run from the File menu of Program Manager. In the Command Line entry field, type **d:\adobe\setup** (or use Browse) where **d** is the letter assigned to the drive that contains the INSTALL program.
 - b. Select OK. The software installation program starts.
 - c. At the Select Components window, make sure the following are selected (they should appear checked by default):
 - 1) Acrobat Exchange Files
 - 2) Acrobat Exchange Plug-ins
 - d. The installation program will install Adobe Acrobat Exchange into the **c:\acrobat3\exchange** directory by default. You may change the drive letter.
 - e. Restart Windows after Adobe Acrobat Exchange has been installed.
 - f. When OnDemand is installed, the **arspdf32.api** file will automatically be installed in the **acrobat3\exchange\plug_ins** directory.
- ii. Installing Adobe Acrobat Exchange after the OnDemand client has been installed.

If OnDemand has already been installed, Adobe Acrobat Exchange can still be installed. The last step must be done manually. Copy the **arspdf32.api** file from the **\ars32\pdf** folder (or the folder into which you installed OnDemand) into the **\acrobat3\exchange\plug_ins** folder, and pdf viewing should be enabled.

2. Installing the Windows 32-bit Client

- i. Install OnDemand software. To automatically install the 32-bit client using "short sockets," please refer to the "Installing User Defined Files" section of the "Configuring OnDemand for OS/390" chapter before starting the installation.
 - a. Make sure that TCP/IP is started on the PC if the installation will be from a file server on the network, and that you know the location of the SETUP program if it resides on the LAN Server.
 - b. Select **Run** from the Start menu. In the Open box, type **d:\win32\setup** (or use Browse) where **d** is the letter assigned to the drive that contains the SETUP program.
 - c. Select OK. The software installation program starts. Follow the instructions on the screen. You may need to select check boxes and choose the **Next** button on successive screens to specify the components to install.
 - d. At the **OnDemand32 Working Directory** window, either accept the default Destination Folder directory, or select a new Folder directory.
 - e. At the **OnDemand32 Installation Components and SubComponents** window, check the **Client**, **Common**, and **Adobe Type Manager** (if not already installed) check boxes. These options will not appear in the window if they have been installed. Notice the disk space requirements at the bottom of the window. Select the **Change** button to choose which language(s) to install. The Change button is active when Client or Common are highlighted.
 - f. At the **OnDemand32 Outline Fonts Directory** window, select the default directory, or select a different directory by editing the entry field. The default is recommended (C:\PSFONTS).
 - g. If you are automatically updating the Windows registry to set up the client for short sockets, you will see the message: "Registry Editor dialog: Information in c:\ars32 (the destination directory) \ shortsoc.reg (the .reg file) has been successfully entered into the registry."
 - h. The Adobe Type Manager (ATM) installation will start. If you install ATM, restart Windows.
- ii. Add Command Line Parameters (**Required**)

Several command line parameters **MUST** be added to insure that the OnDemand Client for OS/390 works properly. The OnDemand SETUP installation process will create an OnDemand folder on the Windows 95/98 or Windows NT desktop that will include a shortcut icon for the OnDemand program. OnDemand may also be started from the Windows Start button at the bottom of the screen. The parameters must be set for the method that will be used to start OnDemand.

Note: If the parameters are set for the shortcut icon method, they are not automatically set for the Start button method. Follow these steps for the process that will be used to start the program:

a. To add command line parameters to an OnDemand **Shortcut** Icon:

- 1) Click on the OnDemand shortcut icon with the right mouse button to open the menu.
- 2) Select **Properties**.
- 3) Select the **Shortcut** tab.
- 4) Add the command line parameters to the end of the text in the **Target** entry field.
Important - Do not delete the existing line. Make sure you add the following parameters to the end of the existing text:

/Q /O 1 /9

The Target box should now look like this, depending on the language you installed:

C:\ARS32\ARSGUI32.EXE /1 C:\ARS32\LOCALE\ENU /Q /O 1 /9

- 5) Click the OK button to save the changes.

See the "Configure OnDemand for OS/390" section for a more detailed explanation of the parameters.

b. To add command line parameters to OnDemand from the Windows Start button:

- 1) Select Start / Settings / Taskbar
- 2) At the Taskbar Properties window, select the "Start Menu Programs" tab
- 3) In the Customize Start Menu group, click on the "Advanced" button
- 4) In the Start Menu folder, find the OnDemand folder and open it
- 5) Click on the OnDemand program icon with the right mouse button, and select "Properties"
- 6) Select the **Shortcut** tab.
- 7) Add the command line parameters to the end of the text in the **Target** entry field.
Important - Do not delete the existing line. Make sure you add the following parameters to the end of the existing text:

/Q /O 1 /9

The Target box should now look like this, depending on the language you installed:

C:\ARS32\ARSGUI32.EXE /1 C:\ARS32\LOCALE\ENU /Q /O 1 /9

- 8) Click the OK button to save the changes.

See the "Configure OnDemand for OS/390" section for a more detailed explanation of the parameters.

iii. Logon to a Server

To start OnDemand for the first time, you must add Server Information. You may want to use OnDemand on-line Help for a more detailed explanation.

- a. Double click on the OnDemand icon to start the program.
- b. At the **Logon to a Server** window, select the **Update Server** button.
- c. At the **Update Servers** window, update the following:

Server entry field: Type the name of the OnDemand Server.

Host Name entry field: Type the TCP/IP host name alias, fully-qualified host name, or IP address.

Protocol: Select TCP/IP

Port: Verify the TCP/IP port number. This is the TCP/IP port number that the server program monitors for client program requests. The default port for OnDemand for OS/390 is 3017. Consult your OnDemand Administrator.

- d. Uncheck the "Attempt Unified Logon" checkbox (22015 or higher Windows client) at the "update servers" dialog unless this option is needed for a specific purpose.
- e. Select the Add button, then close the Update Servers window

iv. Add Icon for the Stand-Alone AFP Viewer (Optional).

- a. Open the OnDemand folder.
- b. Single click with the right mouse button on a blank part of the open folder to open the menu.
- c. Select "New" then "Shortcut" to open the "Create Shortcut" window.
- d. At the Command Line entry field, type "C:\ARS32\FTDWINVW.EXE" where C is the drive where OnDemand was installed. Then click on "Next" then "Finish."
- e. The AFP Viewer will appear in the OnDemand folder.
- f. To rename the icon, right click on the icon to bring up the menu, then select "Rename."
- g. Rename the shortcut (AFP Viewer), then "Enter"

D. Installing Software on a Network

OnDemand software and fonts may be installed on a LAN Server, allowing other PC's on the network to run the software and access the fonts from the server. Setting up OnDemand in this way requires approximately 2 MB of disk space on the individual PC's.

Before you can run OnDemand from a LAN Server, you must install OnDemand network software on the individual PCs. If you plan to use outline fonts with OnDemand and ATM does not already exist on the individual PCs, you must instal ATM on the PCs.

To install the OnDemand Client for network use, follow these steps:

1. Install OnDemand on the LAN Server

- i. Run the INSTALL or SETUP program from the WIN16 or WIN32 source directories on the CD-ROM or the file server. Follow the installation procedure described previously. This will be a complete install of the local client to the LAN server.
- ii. When the installation program starts, select the OnDemand client(s) for the language(s) that you want to install on the server. If you plan to use outline fonts with OnDemand, select ATM and the fonts.
- iii. Verify the drive assignment and directories. When installing OnDemand software on a server, the directories typically reside on a local hard drive. For example:

Local (Misc.) Directory	C:\APPS\ARS	(C: \APPS\ARS32 for WIN32)
Client Directory	C:\APPS\ARS	
IBM Fonts Directory	C:\APPS\ARS\FONTS	
Outline Fonts Directory	C:\PS\FONTS	
Data Directory	C:\APPS\ARS\DATA	
Resource Directory	C:\APPS\ARS\RES	
Print Directory	C:\APPS\ARS\PRINT	

2. Copy (do not install) the Network directories from the CD-ROM to the LAN Server.

Create source directories on the LAN Server for each desired NETWORK client. FTP the desired network clients into their own subdirectory. Then unzip the network client zip file. **Be sure to use the -d parameter to create the directory structure (ex: pkunzip win32net.zip -d).**

This step is not necessary if the network software will be installed directly from the CD-ROM that you created to the client PC. However, in most cases the client network software will be installed from the LAN Server to the client PC.

3. Install OnDemand network software on the PC

- i. From the client PC, run INSTALL or SETUP from the NETWORK directory on the LAN Server.
- ii. Select the OnDemand client that you want to access from the PC.
- iii. Verify the drive assignments and directories. Make sure that the Network Code Directory identifies the drive and directory on the LAN Server where the OnDemand software was installed. The other directories typically reside on the local hard drive. For example:

Local (Misc) Directory	C:\ARS	(C: \ARS32 for WIN32)
Network Code Directory	N:\ARS	
Data Directory	C:\ARS\DATA	
Resource Directory	C:\ARS\RES	
Print Directory	C:\ARS\PRINT	

N = network drive where OnDemand software was installed in step 1.

4. Install ATM on the PC

- i. From the client PC, run INSTALL or SETUP from the network directory on the LAN Server.

- ii. When the installation program starts, select ATM.

ATM will be installed in the Windows directory on the local hard drive. However, ATM can access outline fonts that reside on a LAN server.

- iii. Verify the drive assignments and directories

Make sure that the Local (Misc) Directory, Data Directory, Resource Directory, and Print Directory identify the drive and directory on the PC where you installed the OnDemand network software in step 3.

Make sure that the Client Directory, IBM Fonts Directory and the Outline Fonts Directory identify the drive and directory on the LAN Server where you installed the OnDemand software in step 1. For example:

Local (Misc) Directory	C:\ARS	(C: \ARS32 for WIN32)
Client Directory	N:\ARS	
IBM Fonts Directory	N:\ARS\FONTS	
Outline Fonts Directory	N:\PSFONTS	
Data Directory	C:\ARS\DATA	
Resource Directory	C:\ARS\RES	
Print Directory	C:\ARS\PRINT	

N = network drive where OnDemand software was installed in step 1.

5. Add Command Line Parameters

Refer to the Installation section for the version of the Windows Client you are installing (16-bit or 32-bit).

VI. Configuring OnDemand for OS/390

A. Command Line Parameters (Required for OD/390)

This section contains a description of the parameters recognized by OnDemand. A section explaining the required parameters for OnDemand for OS/390 is also included.

1. Parameter Syntax

The following syntax rules apply to command line parameters:

- w At least one space character must follow the executable name.
- w A parameter is identified by a slash followed immediately by a single character.
- w The parameter character is not case sensitive.
- w The associated parameter value, if any, begins with the first non-space character following the parameter character and ends with the last non-space character preceding the next parameter or the end of the command line.
- w If a slash character is to be included in the parameter value, two consecutive slash characters must be specified.
- w Keyword parameter values are not case sensitive.
- w Unrecognized parameters are ignored.
- w If the same parameter appears more than once, the last occurrence is used.

2. Parameters

The following parameters are recognized by the OnDemand Client.

Product Title — /T name

If this parameter is specified, OnDemand replaces the default product title at the top of the main OnDemand window and on a number of menu items. This title takes precedence over a title supplied in a Product Information File.

Example: C:\ARS32\ARSGUI32 /T Joe's Windows Application

Logon Server Name — /S name

If this parameter is specified, OnDemand uses the value as the server name for the initial user logon. The name must be one of the server names defined in the ARS.INI file.

This parameter may be used in combination with the Logon User ID and Logon Password parameters to logon the user during initialization. If all three parameters are specified and are valid, the initial Logon dialog box is not displayed.

Example: C:\ARS32\ARSGUI32 /S pikes /U user1 /P pass1

Logon User ID — /U id

If this parameter is specified, OnDemand uses the value as the user id for the initial user logon.

This parameter may be used in combination with the Logon Server Name and Logon Password parameters to logon the user during initialization. If all three parameters are specified and are valid, the initial Logon dialog box is not displayed.

Example: C:\ARS32\ARSGUI32 /S pikes /U user1 /P pass1

Logon Password — /P password

If this parameter is specified, OnDemand uses the value as the password for the initial user logon.

This parameter may be used in combination with the Logon Server Name and Logon User ID parameters to logon the user during initialization. If all three parameters are specified and are valid, the initial Logon dialog box is not displayed.

Example: C:\ARS32\ARSGUI32 /S pikes /U user1 /P pass1

Change Password — /C new password

If this parameter is specified, OnDemand changes the password for the user after a successful logon. This parameter can only be specified if the /S, /U, and /P parameters have also been specified.

Example: C:\ARS32\ARSGUI32 /S pikes /U user1 /P pass1 /C newpass

Folder Name — /F name

If this parameter is specified, OnDemand uses the value as the folder name of the initial folder to be opened. If the value is a valid folder name, the initial Open a Folder dialog box is not displayed.

This parameter may be used in combination with the Logon Server Name, Logon User ID, Logon Password, Disable Logoff and Password Change, and Maximum Open Folders parameters to limit a user to operations with a single folder on a single server.

Example: C:\ARS32\ARSGUI32 /F Credit Card Statements

Maximum Open Folders — /O number (must be set to /O 1 for OD/390)

If this parameter is specified, OnDemand limits the number of open folders to no more than the indicated value. This parameter may be used in combination with the Free Memory When Folder Closed parameter to cause folder information to be refreshed from the server each time that a folder is opened.

Example: C:\ARS32\ARSGUI32 /O 1 /Q

Window Placement — /W placement

If this parameter is specified, OnDemand displays the main window as indicated by the placement. The placement must be one of the following:

- w **Z** to indicate that the main window is to be zoomed (maximized).
- w **I** to indicate that the main window is to be iconized (minimized).
- w **N** to indicate that the main window is not to be displayed (made invisible). This option should be specified only if OnDemand is to be manipulated with the DDE interface.
- w **x,y,w,h** to indicate the main window placement, where
 - **x** is the left origin in percent of the screen width.
 - **y** is the top origin in percent of the screen height.
 - **w** is the width in percent of the screen width.
 - **h** is the height in percent of the screen height.

If this parameter is not specified or if no placement value is specified, the main window appears as it did when OnDemand was last terminated.

Example: C:\ARS32\ARSGUI32 /W 5,10,90,80

Enable DDE Interface — /I number,path,resid

If this parameter is specified, OnDemand enables the Dynamic Data Exchange interface and prepares to accept commands from another application.

number, **path**, and **resid** are interpreted as follows:

- w **number** must be an integer between 1 and 5. It indicates the number of DDE-application switch menu items to be provided. The default value is 1.
- w **path** specifies the fully-qualified name of a resource DLL containing a bitmap for toolbar buttons to be associated with the DDE-application switch menu items. The size of the bitmap depends on the number of menu items. Each button requires a 16 X 15 pel image. If there is a single menu item, the bitmap should be 16 X 15; if two menu items, 16 X 30; and so forth.
- w **resid** specifies the bitmap resource identifier within the DLL. It must be an integer value.

Example: C:\ARS\ARSGUI32 /I 3,C:\MYAPP\BITMAP.DLL,81

Client Exits DLL — /E path

If this parameter is specified, OnDemand enables Client Exits. The path is a fully-qualified name for a Windows DLL containing the Client Exits entry points.

Example: C:\ARS\ARSGUI32 /E C:\CLIENT\CLIEXT.DLL

Disable Exit — /K

If this parameter is specified, OnDemand disables the Exit menu item.

Example: C:\ARS\ARSGUI32 /K

Disable Logoff or Password Change — /X

Use the **X** parameter to indicate if OnDemand disables logoff or a change to the logon password as follows:

- w If **X** is specified with no options, OnDemand disables the Logoff and Change Logon Password menu items.
- w If **X** is specified with the **L** option, OnDemand disables the Logoff menu item.
- w If **X** is specified with the **P** option, OnDemand disables the Change Logon Password menu item.

Example: C:\ARS32\ARSGUI32 /X

Disable Update Servers — /Y

If this parameter is specified, OnDemand disables the Update Servers button on the Logon dialog box.

Example: C:\ARS32\ARSGUI32 /Y

Disable Close Folder — /Z

If this parameter is specified, OnDemand disables the Close Folder menu item, the Close Folder button on the Search Criteria and Document List dialog box, and the Close menu item on the system menu of the Search Criteria and Document List dialog box.

Example: C:\ARS32\ARSGUI32 /Z

Disable Anticipation — /V

If this parameter is specified, OnDemand does not attempt to anticipate the next user request, such as displaying the Logon dialog box after initialization or displaying the Open Folder dialog box after the current folder is closed.

Example: C:\ARS32\ARSGUI32 /V

Disable User Confirmation — /B

If this parameter is specified, OnDemand does not request confirmation of the user's action when there is an open document during folder close, logoff, or exit.

Example: C:\ARS32\ARSGUI32 /B

Free Memory When Folder Closed — /Q (Required for OD/390)

If this parameter is specified, OnDemand frees all memory associated with a folder when it is closed and refreshes the folder information from the server when it is reopened.

Example: C:\ARS32\ARSGUI32 /Q

Abort on Error — /A (2.2.0.15 and higher OS/2 Client only)

If this parameter is specified, the logon dialog will NEVER be shown. The correct server name, userid, and password must be supplied with command line options (/S, /U, /P).

- w If the login fails due to an invalid userid or password, the OS/2 client displays the message "The User ID or Password is not valid for the server". When the OK button is pressed, the client exits with a return code of 11.
- w If the host is not responding, the client displays the message "Connection cannot be established for the xyz server" where xyz is the server name. When the OK button is pressed, the client exits with a return code of 12.
- w If the password has expired and the "/X" option is not used, the password change dialog will be displayed. If the "/X" or "/X P" option is specified and the password is expired, the client exits with a return code of 13.
- w If the server name given by the "/S" option is not defined in the client's server list, the client exits with a return code of 14.

If the logon is successful, the final return code will be 0. If there are other problems that are not listed above, the final return code will be 1.

Example: C:\ARSOS2\ARSGUI /A

3. Required Command Line Parameters for OnDemand for OS/390

Several command-line parameters are required for the OnDemand Client for OS/390. The following is a description of these parameters. See the "Add Command Line Parameters" section of "Installing Windows Client Software" or "Installing OS/2 Client Software" for the setup procedure.

Maximum Open Folders — /O 1

OnDemand for OS/390 limits the number of open folders to one.

Free Memory When Folder Closed — /Q

OnDemand for OS/390 frees all memory associated with a folder when it is closed and refreshes the folder information from the server when it is reopened.

Additional OnDemand for OS/390 Parameters — /9

Add a Note dialog box

The "Public Note" checkbox is checked and disabled. All notes in OnDemand for OS/390 are Public. The "Note can be copied to another server" checkbox is checked and disabled. This allows Notes to be saved with the ad-hoc cdrom feature.

Print

From the Document Hitlist, Server print is enabled, Local and LAN print are disabled. While viewing the document, Local, LAN, and Server print are all enabled.

B. Time Zone (Windows 16-bit Client and OS/2 Client)

Add the time zone parameter to AUTOEXEC.BAT for Windows 3.1 and CONFIG.SYS for OS/2. The following line is an example for Eastern Savings Time and Eastern Daylight Time:

SET TZ=EST5EDT

* Note: Timestamps are always stored with respect to GMT. Your PC will default to PST (Microsoft is in Seattle) which is 8 hours different from GMT. The Time Zone (TZ) parameter will appear when viewing notes. It can be set to one of the following:

Atlantic: SET TZ=AST
Eastern: SET TZ=EST5EDT
Central: SET TZ=CST6CDT
Mountain: SET TZ=MST7MDT
Pacific: SET TZ=PST8PDT

C. Connecting to Server Short or Long Running Tasks (Short or Long Sockets)

When the OnDemand Client is installed, the client is set up to start the server as a long running task (long sockets). For maximum performance, it is recommended that the default setting be changed by following the procedure outlined below. "DISCONNECT = 1" is the parameter for short sockets and "DISCONNECT = 0" for long sockets (default). For an explanation on how to set up the installation source directory and .REG file to automatically update the 32-bit Windows registry for short sockets at installation, see the "Installing User Defined Files" section of this chapter.

1. OS/2 Client

- i. Start the OS/2 Client and cancel out of the Logon screen without signing on to the server.
- ii. Press **ctr + alt + i** to start the ini editor.
- iii. In the top section [Categories] select 'Servers.'
- iv. In the middle section 'Key Names =' enter 'DISCONNECT' in upper case with no quotes.
- v. In the bottom section '=Value' enter 1 for short sockets or 0 for long sockets
- vi. Select 'Add/Change' and then 'ok' for the various OS/2 messages to close the ini editor.

2. Windows 16-bit Client

- i. Edit the ars.ini file in the \windows directory.
- ii. In the [Servers] section, add the entry 'DISCONNECT=1' (no quotes) for short sockets and 'DISCONNECT=0' for long sockets.

3. Windows 32-bit Client

To set up a Windows 95 or NT system for short sockets, you must edit the Windows System Registry (REGEDIT). This should be done with caution by someone familiar with editing the Windows Registry.

- i. The OnDemand client must first be installed on the PC.
- ii. Edit the Registry File by going to Start / Run / Browse / Windows and opening REGEDIT.
- iii. Open the following folders in regedit:
 - HKEY_CURRENT_USER
 - Software
 - IBM
 - OnDemand32
 - Common
 - Servers
- iv. Click on 'Servers' on the left side of the screen, and you should see entries for 'Default' and 'SERVERS' on the right of the screen.
- v. Click on the right side of the screen with the right mouse button.
- vi. Select **New > String Value**
- vii. Enter the string **Disconnect**

- viii. Double click on Disconnect to bring up a window, then enter 1 for short sockets or 0 for long sockets.
- ix. Close REGEDIT.

D. Installing User Defined Files (32-bit Client)

User defined files can be stored in the OnDemand 32-bit client installation source directory tree on the file server, the local pc, or the user-created installation cdrom. Any files (and subdirectories of files) stored in this directory are copied along with the OnDemand client files when the client is installed on a pc. The following types of user-defined files can be stored in the installation directory tree:

- w Adobe Type 1 Font files. These files are copied to the \psfonts directory tree on the user's pc.
- w Registry files. These files are imported into the Registry on the user's pc. A WinNT user must have the proper permissions set up to allow the registry to be updated in this manner.

Important: It is easy to accidentally destroy important data and render a system completely unusable by importing Registry files. Be careful when using this function.

- w Windows files. These files are copied into the base Windows directory tree on the user's pc.
- w Miscellaneous client files. These files are copied into the \ars32 directory tree on the user's pc.

1. Adding Subdirectories to the Installation Source Directory

All user-defined files must be stored in the **CUSTOM** subdirectory tree of the OnDemand 32-bit client installation directory tree. The custom subdirectory must be created by the user. The client zip files do not contain the custom subdirectory, or the psfonts, registry, windows, or files subdirectories that can be created in the custom subdirectory described later in this section. When creating a source installation directory tree, whether it be on a local pc, a file server, or for a user-created installation cd-rom, it is suggested that the following source directory names be used for the 32-bit client to avoid confusion:

<u>directory</u>	<u>zip file</u>
\adobe	adobe
\win32	win32loc.zip - local client
\netwin32	win32net.zip - network client

Therefore, the subdirectory tree for the local 32-bit client should look like this, with the custom subdirectory at the same level as the ars subdirectory:

```
\win32
  \ars
  \atm302
  \atm40nt
  \atm40w95
  \custom
  \font
  etc.
```

2. Adding User-Defined Files to the \Custom directory

- i. Create a CUSTOM directory at the same level as the ARS directory. For example: \win32\custom.
- ii. Add one or more of the following subdirectories to the CUSTOM directory. The subdirectories you add will depend on the type of user-defined files you want to copy to the client pc's.

Note: If a subdirectory is created without placing any files in it, the following message will be displayed during the installation process: "An error occurred during the move data process: -1". However, the installation process should still work correctly.

w custom\psfonts

To hold Adobe Type 1 Font files (file type PFB). If necessary, add a PFM subdirectory (custom\psfonts\pfm) to hold the PFM files. The OnDemand installation program copies these files and subdirectories to the \psfonts directory tree on the user's pc.

w custom\registry

To hold Registry files (file type REG). These files will be imported into the Registry on the user's PC. Registry files typically comprise a selected branch of the Registry exported using a Registry editor. A WinNT user must have the proper permissions set up to allow the registry to be updated in this manner.

Warning: It is easy to accidentally destroy important data and render a system completely unusable by importing Registry files. Be careful when using this function.

w custom\windows

To hold Windows files. Files in the custom\windows directory are copied to the base Windows directory on the user's PC. (The installation program detects the name of the base Windows directory on the user's pc.) If necessary, add subdirectories. For example, if you plan to distribute Windows 32-bit system files, add a SYSTEM32 (custom\windows\system32) subdirectory. Files in the custom\windows\system32 directory will be copied to the \windows\system32 directory on the user's pc.

w custom\files

To hold miscellaneous OnDemand client files. If necessary, add subdirectories. For example, if you plan to distribute AFP font files, add a FONT subdirectory (custom\files\font). Files in the custom\files\font directory will be copied to the \ars32\font\directory on the user's pc. The OnDemand installation program copies these files and subdirectories to the \ars32 directory tree on the user's pc.

- iii. After creating the custom directories, store files in the individual subdirectories. For example, store Adobe Type 1 Font files (PFB) that you want to be copied to a user's PC into the custom\psfonts directory. Store the PFM files in the custom\psfonts\pfm directory.

After the CUSTOM directory tree is set up, the next time the OnDemand 32-bit client installation program is run all of the files stored in the CUSTOM directory are copied to the user's PC. Any REG files will be automatically imported into the Registry.

3. Preparing the Installation Source Directory to Automatically Install Short Sockets

For optimum performance, it is recommended that the client be set up to connect to the OnDemand for OS/390 server as a short running task (short sockets). To do this, the Windows registry must be updated either manually as described in the "Connecting to Server Short or Long Running Tasks" section of this chapter, or the installation process may be prepared to update the 32-bit Windows registry automatically as part of the install as described earlier in this section of the chapter.

Warning: It is easy to accidentally destroy important data and render a system completely unusable by importing Registry files. Be careful when using this function. Make sure this process is thoroughly tested before proceeding.

There is a sample .REG file (**SHORTSOC.REG**) included with the OnDemand for OS/390 Client that can be used to update the registry to set the "DISCONNECT=1" parameter for short sockets. It can be found in the \sample\reg directory. To prepare the install process to automatically update the registry for short sockets, follow these steps:

- i. Create a custom\registry directory as described in the "Adding User-Defined Files to the \Custom directory" section above.
- ii. Copy the shortsoc.reg file from the \sample\reg directory and place it in the \custom\registry directory of the installation source directory tree structure.
- iii. Test this process thoroughly with sample installations before using this process in your company's environment.

If the installation source directory tree structure is set up for the automatic registry update, the following message will be displayed during the installation process:

**Registry Editor Dialog: Information in c:\ars32 (or the destination directory)
\shortsoc.reg has been suggestfully entered into the registry.**

Note: A WinNT user must have the proper permissions set up to allow the registry to be updated in this manner.

E. Mapping AFP fonts

OnDemand needs to map the AFP fonts with which your document was created to fonts that can be displayed on your workstation. For OnDemand to map the best matching outline fonts to display your AFP document, it needs to know certain characteristics about the fonts that were used to create your document. Mapping AFP fonts to outline fonts is done with the IBM-supplied font definition files installed as part of OnDemand. These files are stored in the \ARS\FONT directory (ARS32\FONT for 32-bit Windows and ARSOS2\FONT for OS/2) you specified when you installed OnDemand. You may edit them using any workstation editor. The shipped version of the font definition files maps the IBM core Interchange (Latin only), compatibility, coordinated, Sonoran, and Data1 fonts for you.

If your document uses an AFP font whose family (familyname) isn't installed on your workstation, you can use the ALIAS.FNT file (one of the font definition files installed with OnDemand) to substitute that font familyname with a different one. The ALIAS.FNT file remaps several of the AFP fonts to IBM Core Interchange fonts. If you have any outline fonts installed on your workstation, you may want to remove or comment out the font familyname substitutions in the ALIAS.FNT file. The "Alias File" section of this chapter provides more information about using the ALIAS.FNT file.

The IBM Core Interchange fonts (shipped with OnDemand) are in Type 1 outline format. These fonts are delivered in three type families: Times New Roman, Helvetica, and Courier. Each type family is provided in these character set groups:

Latin The Latin group is available in 4 typefaces: roman medium, roman bold, italic medium, and italic bold.

Symbols The Symbols group is available in 2 typefaces: roman medium and roman bold.

Because the IBM Core Interchange fonts are also available for printing with PSF/2; version 2 of SF/MVS, PSF/VM, and PSF/VSE; and PSF/6000, they help standardize fonts across applications and installations.

If you created your documents with only the unmodified IBM fonts, you won't need to remap fonts to use OnDemand.

1. When You Need to Map Fonts

If you are using fonts that are not defined to OnDemand, if you have modified the IBM AFP fonts, or if you have created your own AFP fonts, you need to define those fonts in the font definition files in order for documents using those fonts to display correctly with OnDemand.

- w If you created a new coded font (or renamed one), you will need to define the coded font in the Coded Font file (ICODED.FNT or CODED.FNT).
- w If you created a new character set, you have to define it in the Character set definition file (CSDEF.FNT).
- w If you created a new code page, you have to define it in the Code Page Definition file (CPDEF.FNT).
- w If you have created a new code page, or modified a code page by moving characters, you have to create a new Code Page Map file (cp_id.CP).

If you only have modified an existing IBM font component, you may not need to perform any of the above steps. For example, if you have only deleted code points in the IBM code page, the font files supplied with OnDemand can be used.

2. Files Supplied for Mapping Fonts

The following types of files for font support are installed by default in the following subdirectories under the directory in which OnDemand was installed:

OnDemand Font Files and Directories			
File	File Name	Subdirectory	Description
Coded Font Files	ICODED.FNT CODED.FNT ¹ ICODED.CHS ² ICODED.CHT ³ ICODED.JPN ⁴ ICODED.KOR ⁵	\FONT	Specifies which AFP code page and AFP font character set make up the coded font.
Character Set definition file	CSDEF.FNT CSDEF.CHS ² CSDEF.CHT ³ CSDEF.JPN ⁴ CSDEF.KOR ⁵	\FONT	Defines AFP character set attributes, such as point size. It also maps the font character set to its font global identifier.
Code Page definition file	CPDEF.FNT CPDEF.CHS ² CPDEF.CHT ³ CPDEF.JPN ⁴ CPDEF.KOR ⁵	\FONT	Maps each AFP code page to a Windows character set ⁶ and indicates which Code Page Map file for OnDemand to use.
Code Page Map file	cpgid.CP	\FONT\MAPS	Defines character identifier mappings. It matches the IBM code page character identifiers and their hexadecimal code points with a corresponding character identifier and ASCII code point representing a Windows ANSI or SYMBOL character set. ⁶
Alias File	ALIAS.FNT	\FONT	Maps AFP font type families to Type 1 or TrueType outline font family names.
<p>Note:</p> <ol style="list-style-type: none"> 1. CODED.FNT is an optional file. A sample can be found in the SAMPLES subdirectory of the \ARS\FONT (ARS32\FONT) directory. The CODED.FNT file is meant to contain coded fonts you have created. 2. Code page and character set files for the Simplified Chinese client. 3. Code page and character set files for the Traditional Chinese client. 4. Code page and character set files for the Japanese client. 5. Code page and character set files for the Korean client. 6. The Windows term "character set" is roughly equivalent to the AFP term "code page." 			

3. Steps for Mapping Your Fonts

After reading the rest of this chapter to determine which font files you need to modify, follow these steps:

- i. Gather the information needed to define the fonts in the font definition files. This information is described in the following sections of this chapter.
- ii. Make backup copies of any of the following font definition files that you plan to modify:
 - w CSDEF.FNT
 - w CPDEF.FNT
 - w ICODED.FNT
 - w ALIAS.FNT

Note: Backup copies of these files should be made so that you have an unmodified copy in the event something happens to your modified copy that makes in inoperable.
- iii. Install any other outline fonts you are planning to use with OnDemand. (The *Adobe Type Manager User Guide* provides information about installing fonts with ATM).
- iv. If you have created or modified a code page, use the BLDCPMAP REXX program to build the codepage map file:
 - a. Determine which Windows character set (ANSI or SYMBOL) is a suitable match for the AFP code page.
 - b. Substitute any non-matching characters in the code page map file or ALIAS.FNT file if necessary. (Refer to the "Code Page Map Files" topic and the "Code Page Map File REXX Program for Building a Code Page Map File" topic for information about code page map files and the code page map file program respectively).
 - c. Edit the CPDEF.FNT file and add your code page name, code page identifier, and the best matching Windows character set name for the fonts you are using.

Note: If you are specifying the SYMBOL Windows character set, the font familyname used with the code page must be a symbol font.
- v. If you have created a new character set, edit the CSDEF.FNT file and add your character set name in the [CHARSET] section. Specify the correct attributes for your font in CSDEF.FNT. Add the appropriate information in the [FGID} section of the file if you are naming a new font global identifier.
- vi. If you have created a coded font, create or edit he CODED.FNT file and add your coded font.

Syntax Rules for Font Definition Files

Syntax rules for OnDemand font definition files are as follows:

- w A semicolon (;) in the first column of any of these files will cause the line to be treated as a comment statement and ignored.

- w Section headers within files are enclosed in brackets [] and must **not** be removed or changed.
- w All values are case insensitive.
- w If a parameter value is invalid and a default value exists, it will be substituted.
- w All parameters are positional.
- w Blanks are allowed between parameter values.

4. Coded Font File

The IBM Coded Font file (ICODED.FNT) maps AFP coded fonts to their AFP character sets and AFP code pages. Two Coded Font files can be used with OnDemand:

ICODED.FNT This file contains definitions for approximately 2500 IBM-supplied coded fonts.

CODED.FNT You can create this optional file to define a list of any coded fonts you have created. If you create a CODED.FNT file, you must place it in the \ARS\FONT directory. A sample of this file can be found in the SAMPLES subdirectory of the \ARS\FONT directory.

If a CODED.FNT file exists in the \ARS\FONT subdirectory, it is searched first for the coded fonts used in an AFP file. If the coded font name is not found in CODED.FNT or if CODED.FNT does not exist, only the OnDemand-supplied ICODED.FNT file will be searched.

Example of CODED.FNT File
<pre>X?A155N2 = C?A155N1 ,T1DCDCFS X?AE10 = C?S0AE10 ,T1S0AE10 X?GT10 = C?D0GT10 ,T1D0BASE X?ST15 = C?D0ST15 ,T1D0BASE X?A0770C = C?A07700 ,T1DCDCFS X?A0770I = C?A07700 ,T1GI0361 X0T550C = C0T05500 ,T1DCDCFS</pre>

Coded Font File Rules

- w A question mark (?) can be used as the wild-card character only for the second character in the coded font name and the character set name. This allows all the character rotations of the coded fonts to be handled with one entry for searching.
 - Note:** A sequential search is performed for the coded font, and the first match is used (including the wild-card character).
- w After the coded font name, the character set name must be listed first, followed by the code page name.
- w The character set and code page **must** be separated by a comma.

5. Character Set Definition File

The Character Set Definition file specifies the character set attributes and font global identifier of the font. It is split into 2 sections, one for character sets [CHARSET] and one for font global identifiers [FGID].

Example of [CHARSET] section in Character Set Definition File
<pre>[CHARSET] ;charset = fgid,height,width,strikeover,underline C?A055A0 = 30711,110,73,0,0 C?A055B0 = 30712,120,80,0,0 C?A055D0 = 30714,140,93,0,0 C?A055F0 = 30716,160,107,0,0 C?A055H0 = 30718,180,120,0,0 C?A055J0 = 30720,200,133,0,0 C?A055N0 = 30724,240,160,0,0 C?A055T0 = 30730,300,200,0,0 C?A055Z0 = 30736,360,240,0,0 C?A05560 = 30706,60,40,0,0 DEFAULT = 2308,80,0</pre>

The first section identified by the section header [CHARSET] lists each AFP font character set and its corresponding attributes:

- w Font global identifier (FGID)
- w Font height
- w Font width
- w Strikeover
- w Underline

Character Set Definition File Attribute Values for [CHARSET]			
Attribute	Possible Values	Shipped Default	Description
Fgid	IBM-defined FGID or your own defined FGID within this range: 3840 to 4095 or 65260 to 65534	2308	A unique value that identifies the type family, typeface, and sometimes the point size of the character set.
Height	1 to 980	80	The vertical size of the character set (minimal baseline-to-baseline value) expressed in tenths of a point. For example, a 9-point font would have a height of 90.
Width	0 to 99 (currently ignored)	0	The average horizontal size of the characters in 1440th of an inch. Currently, 0 is always used because Windows determines an appropriate font width based on the font height.
Strikeover	1 (means yes) 0 (means no)	0	A font whose characters all have a line, parallel to the character baseline, placed over the middle of the character.
Underline	1 (means yes) 0 (means no)	0	A font whose characters all have a line, parallel to the character baseline, placed under the character.

The second section, identified by the section header [FGID], lists each font global identifier and its corresponding attributes:

- w Font type families
- w Style
- w Weight
- w Italic

Example of [FGID] section in Character Set Definition File
<pre>[FGID] ;fgid = familyname, style, weight, italic 230=Gothic,MODERN,MED,0 416=Courier,MODERN,MED,0 2304=Helvetica,SWISS,MED,0 2308=TimesNewRoman,ROMAN,MED,0 4407=SonoranSerif,ROMAN,MED,0 4555=SonoranSerif,ROMAN,MED,0 33207,SonoranSansSerif,SWISS,MED,1 33207=SonoranSansSerif,SWISS,BOLD,1</pre>

Character Set Definition File Attribute Values for [FGID]			
Attribute	Description	Possible Values	Shipped Default
Familyname ¹	An outline font name or an AFP type family name. This name appears on the ATM Control Panel if you have the font installed on your workstation.	Any Adobe Type 1 font name or AFP type family name.	TimesNewRoman
Style ²	The same as a Windows "family." It is approximately equivalent to type family plus typeface style in AFP fonts.	SWISS ³ ROMAN ⁴ SCRIPT ⁵ MODERN ⁶ DISPLAY ⁷	ROMAN
Weight	The degree of boldness of a typeface caused by different thickness of the strokes that form a graphic character.	LIGHT MED BOLD	MED
Italic	A font whose characters slant to the right.	1 (means yes) 0 (means no)	0
<p>Note:</p> <ol style="list-style-type: none"> "Familyname" is the same as "type family" in AFP fonts and "typeface name" in Windows. "Style" is the same as Windows "family" and is roughly equivalent to "typeface style" and "type family" in AFP fonts. SWISS is a proportionally spaced font, without serifs. ROMAN is a proportionally spaced font, with serifs. SCRIPT is a fixed-pitch font designed to look like handwriting. MODERN is a fixed-pitch font, with or without serifs. DISPLAY is a decorative font. 			

Character Set Definition File Rules

- w Parameters must be separated by a comma. The previous Character Set tables list the possible values, and shipped default values for each parameter.
 - w In the [CHARSET] section of the file, only **fgid** and **height** (point size) are required.
 - w In the [FGID] section of the file, only the type **familyname** and **style** are required.
 - w A question mark (?) can be used as the wild-card character only for the second character in the character set name. This allows all the character rotations of the coded fonts to be handled with one entry while searching.
- Note:** A sequential search is performed for the character set, and the first match is used (including the wild-card character).
- w The [CHARSET] section must come before the [FGID] section.
 - w You can set a default character set. The default character set that is defined in the file must be the last entry in the [CHARSET] section.
 - w If you add your own AFP font character set to the [CHARSET] section, you must assign it a font global identifier. Font global identifiers you create must be in the

ranges of 3840 to 4095, or 65260 to 65534. If the new character set has the same familyname, style, weight, and italic attributes as an existing character set, you may use the same font global identifier; otherwise, you must add a unique font global identifier to the [FGID] section.

6. Coded Page Definition File

The Code Page Definition file maps the IBM AFP code page name to its code page global identifier [CPGID] and to a Windows character set. The section header [CODEPG] is followed by a list of AFP code pages and their parameters. The first parameter in each line is the AFP code page global identifier that maps to a Code Page Map file. (The "Code Page Map Files" topic provides information about mapping code pages). The second parameter is the Windows character set that you decide is the best match for you AFP codepage. The last line gives the default parameter values to be used when a default is required.

Example of Code Page Definition File	
[CODEPG]	
;codepage	= cpig, wincp
T1DCDCFS	= 1003,ANSI
T1DEBASE	= 2058,ANSI
T1D0BASE	= 2063,ANSI
T1D0GP12	= 2085,ANSI
T1GI0395	= 2079,ANSI
T1GPI363	= 2066,SYMBOL
T1V10037	= 37,ANSI
T1V10273	= 273,ANSI
T1000290	= 290,ANSI
T1000310	= 310,ANSI
T1000423	= 423,ANSI
T1000905	= 905,ANSI
DEFAULT	= 361,ANSI

Code Page Definition File Attribute Values		
Attribute	Possible Values	Shipped Default
Code Page Global Identifier	IBM-defined CPGID or your own defined CPGID within this range: 65260 to 65534	361
Windows Character set	ANSI or SYMBOL	ANSI

Code Page Definition File Rules

- w Parameters must be separated by a comma. The "Code Page Definition File Attribute Values" table (above) lists the possible values and shipped default values for each parameter.
- w Only the first Parameter (code page identifier) is required.
- w If you create your own codepage, you must assign it a unique code page identifier. Leading zeros are not valid. (You may use an IBM code page global identifier, but only if the character-to-hexadecimal code mapping is the same for your code page).

- w You can set a default code page. The default codepage that is set within the file must be the last entry in the file.

7. Code Page Map Files

OnDemand provides one Code Page Map file for each AFP code page supplied with PSF and the Data1 and Sonoran licensed programs. These files are installed in their own subdirectory (MAPS) under the \ARS\FONT (\ARS32\FONT) directory. The file is named for its code page global identifier (CPGID) and has a file extension of .cp (for example, 2063.cp is the file name for the T1D0BASE code page map; its CPGID is 2063). Each file contains the character identifiers (and associated EBCDIC hexadecimal code points) for an IBM code page, and maps them to character identifiers (and associated ASCII code points) for a Windows ANSI or SYMBOL character set.

Example of Code Page Map File			
;T1000395 to ANSI			
SP010000	40	SP010000	20
LA150000	42	LA150000	E2
LA170000	43	LA170000	E4
LA130000	44	LA130000	E0
SP180000	8B	SP180000	BB
SM560000	8C	SM560000	89
SA000000	8D	SP100000	2D
LI510000	8E	NOMATCH	00
LF570000	87	NOMATCH	00
SM190000	90	SM190000	B0
LJ010000	91	LJ010000	6A
LF510000	A0	NOMATCH	00
;;;;;;;;;	;	SD150000	5E
;;;;;;;;;	;	SD130000	60
;;;;;;;;;	;	LT630000	FE

Code Page Map File Rules

- w Parameters must be separated by blanks.
- w "NOMATCH" means there is not a matching character in the Windows character set.
- w The "NOMATCH" hexadecimal code of 00 is mapped to the undefined code point. When a document contains a character that does not exist in the Windows character set, that character cannot be displayed on the screen. If the character has not been remapped in the code page Map file or the Alias file, the undefined code point character will be displayed as a blank character. (See the "Alias File" topic for information about remapping code points).
- w The string of semi-colons (;;;;;;;;;) means this line is ignored as a comment. It also indicates the Windows code page contains a character that does not exist in the IBM code page. The code point for a Windows character not found in the IBM code page can be used for replacing NOMATCH characters.

Code Page Map File REXX Program for Building a Code Page Map File

OnDemand supplies a sample Restructured Extended Executor Language (REXX) program (BLDCPMAP.REX) you can use to create Code Page Map files. This program executes in MVS, VM, or OS/2 REXX environments. The REXX program is in the SAMPLES subdirectory of the \ARS\FONT (ARS32\FONT) directory. (The ARS or ARS32 directory is the directory in which you installed OnDemand).

The BLDCPMAP.REX program requires a host AFP code page and one of the Windows character set files: ANSI.WCP or SYMBOL.WCP. These files can also be found in the SAMPLES subdirectory. The program's output is a Code Page Map file that maps the characters in the host code page to matching characters in the Windows character set so it can be used with OnDemand. It also identifies how many unmatched characters there are in the code page so that you can determine which Windows character set (ANSI or SYMBOL) contains the most matching characters. Matching is done using graphic character identifiers.

If you are going to use the BLDCPMAP.REX EXEC on your MVS or VM system, ensure that you upload it as an ASCII file with carriage return and line feed (CR/LF) as specified in the BLDCPMAP.REX file prologue.

On a VM system, the BLDCPMAP.REX.EXEC must be run from the command line rather than from a file listing.

Setting up to Build a Code Page Map File

You can either transfer the BLDCPMAP REXX program and the Windows character set file to your host system and run the program there, or you can transfer your AFP code pages to your workstation and run the program under OS/2 (if you have REXX installed on your workstation). You can use any file transfer program that handles standard host record format files and ASCII CR/LF line endings, with or without ASCII EBCDIC translation. (We recommend using the Communication Manager File Transfer Program).

If you transfer the REXX program and the Windows character set files (these files have an extension of .WCP) to your MVS or VM host system, they must be translated from ASCII to EBCDIC and CR/LF must indicate a new line. All of the files transferred to the host system must be human-readable. If you transfer your AFP code pages to your OS/2

workstation, you **must** specify a **binary** format. If the file transfer is not correct, a REXX error occurs when you run the BLDCPMAP program.

On your OS/2 workstation, rename the BLDCPMAP.REX file to BLDCPMAP.CMD and ensure that REXX is installed. On your VM host system, the file type for the BLDCPMAP file must be EXEC. On your MVS system, the program may be run explicitly with the EXEC command or implicitly by member name if the partitioned data set containing the BLDCPMAP program was previously allocated to your system file that contains execs (usually SYSEXEC or SYSPROC). If the REXX program is named correctly, you can run the program without parameters to get the correct syntax of the command. You can also list the prologue for the EXEC for syntax.

When you run the BLDCPMAP program, and you have selected which Code Page Map file you want to use with OnDemand, place that Code Page Map file in the MAPS subdirectory of the \ARS\FONT (ARS32\FONT) directory of the directory in which you

installed OnDemand. Update the CPDEF.FNT file in the \ARS\FONT directory. In order for OnDemand to find the Code Page Map file, it must be named as follows:

```
code-page-global-identifier.CP
```

For more information about using the Code Page Map file, refer to the "Code Page Map Files" topic. For more information about the BLDCPMAP program (for example, the syntax for running the program), refer to the prologue in the BLDCPMAP.REX file.

8. Alias File

The Alias File contains 2 sections: one section for font familyname aliases [FONT] and one section for character identifier aliases [CHARID].

The first section, identified by the section header [FONT], lists the font familyname aliases. Font familyname aliases allow you to change all of the requested instances of a font familyname (as defined in the Character Set Definition file) to another font familyname. For example, this file is used to change all requests for the SonoranSerif font (which may not exist on the workstation) to requests for the TimesNewRoman font (which is one of the core fonts shipped with OnDemand) as shown in the "Example of [FONT] section in Alias File" table.

ATM is the supported font program. However, TrueType fonts can be used with OnDemand, but fidelity and character mapping will likely be incorrect. As a backup, a second font (TrueType) can be specified after the Type 1 font name. If the Type 1 font is not found, the TrueType font will be used to display your document.

Note:

Be aware that font familyname remapping, especially to TrueType fonts, can cause some misalignment of text characters since the display font is not the same as the font used to create the AFP document. The font familyname can be found listed in the ATM Control Panel. Remapping of one font familyname to a different font familyname with very different characteristics (such as STYLE) may mean a matching font cannot be found. You will receive an error message if either font substitute cannot be found.

Example of [FONT] section in Alias File

```
; ***** Requested font = Type 1 font, TrueType font *****  
Book=TimesNewRoman,Times New Roman  
CourierOverstrike=Courier,Courier New  
SonoranSerif=TimesNewRoman,Times New Roman  
SonoranSansSerif=Helvetica,Arial  
Text=Courier,Courier New
```

The second section, identified by the section header [CHARID], lists the character identifier aliases. Character identifier aliases (also known as glyph identifiers) allow you to change all of the requested instances of a character to another character. For example, since the Windows ANSI character set does not contain the ff ligature (LF510000), it is not mapped to a character in the code page map files. Instead, it is mapped to NOMATCH 00. If you want to map all occurrences of LF510000 - NOMATCH pair to a lower case f, you could do this in the [CHARID] section of the ALIAS.FNT file with the following entry:

```
LF5100000=LG0100000
```

If you want to change one specific character for one specific code page, you may remap the character on that code page to another character as shown in the "Code Page Map File" example.

The Alias file is checked only when a NOMATCH 00 is found in a character mapping.

Note:

Using the Alias file for more than a few character substitutions is not recommended as program performance will be affected. If a lot of character substitutions are needed, it is better to make those changes directly to the mappings in the Code Page Map files you are using.

Example of [CHARID] section in Alias File

```
[CHARID]  
LF5100000=LF0100000  
SA0000000=SP320000,SP100000
```

Alias File Rules

- w For family name aliases, all requests for the first family name in the Character Set Definition file have the second family name substituted for them. If the second family name is not found, the TrueType font (the third family name) is requested.
- w Only 2 family name substitutes per line are allowed (to the right of the equal sign), and they must be separated by a comma.

- w If multiple mappings are listed in the file for the same familyname, only the first match is used.
- w The Alias file is processed sequentially and is **not** chained. For example, if "Century Schoolbook" is set equal to "Times," and "Times" is set equal to "TimesNewRoman," "Century Schoolbook" will **not** be set to "TimesNewRoman."
- w Blanks in family names are treated as characters. For example, "Times New Roman" is not the same font as "TimesNewRoman."
- w The [CHARID] section of the Alias file is only used if the second character identifier is NOMATCH 00.
- w The character identifier that you want modified in the [CHARID] section must be followed by an equal sign and the character identifier to which it is to be changed. A character remap occurs when the modified character identifier (the character to the left of the equal sign in the [CHARID] section) matches the first character identifier of a non-matching pair in the Code Page Map file.
- w Several character identifiers (substitute char id) may be listed to the right of the equal sign separated by commas. The first substitute character identifier is substituted for the modified character identifier unless it doesn't exist in the Windows font. If it doesn't exist, the next substitute character identifier is used. If none of the substitute character identifiers exist, the undefined code point is used. If you want to examine the contents of the Windows character sets, list the .WCP files in the SAMPLES subdirectory of the \ARS\FONT (ARS32\FONT) directory.
- w A maximum of 4 substitute character identifiers are allowed.

9. Support for TrueType Fonts

OnDemand supports Type 1 fonts installed under Adobe Type Manager (ATM). Type 1 outline fonts are supplied with OnDemand and provide better fidelity in general than mapping to TrueType fonts. These fonts are installed in the fonts directory you specified when you installed OnDemand (the default directory is \PSFONTS). The installed OnDemand type 1 outline fonts and their PC file names are as follows:

FONT NAME	PC FILE NAME
TIMESNEWROMAN	tnr*.*
HELVETICA	helv*.*
COURIER	cou*.*
BOLDFACE	bfc*.*
COURIERAPL2	apl*.*
GOTHICTEXT	got*.*
LETTERGOTHIC	lgo*.*
OCR_A	ocr_a*.*
PRESTIGE	prs*.*

TrueType Fonts

OnDemand queries ATM when the OnDemand viewer is started. If ATM is not available, or the Type 1 font you requested cannot be found, OnDemand uses TrueType fonts. If you don't install and use ATM, you may use TrueType fonts to display your documents. To use TrueType fonts, you must do the following:

- a. If ATM is installed, it must be disabled, removed, or the Type 1 fonts installed with OnDemand must be removed (if they are not used by other applications on your workstation). You can use ATM to remove these fonts.
- b. To disable the check for ATM and the error message generated, you must edit the ARS.INI file in the Windows directory to add the following line in the [Misc] stanza:

```
TTONLY=TRUE
```

To request a specific TrueType font, use the second font substitution family name in the ALIAS.FNT file as described in the "Alias File" topic.

TrueType Font Substitution Problems

Make sure that the TrueType font you have requested is installed on your workstation. Font substitutions that occur when fonts are not available may cause unexpected results when displaying your files. For example, Courier New is requested in the ALIAS.FNT file and is available with Windows 3.1, but is not available on WIN-OS2 3.1, but can be installed.

VII. Customizing OnDemand for OS/390

The OnDemand Client may be customized through the use of OLE (Object Linking and Embedding) Controls, DDE (Dynamic Data Exchange) interfaces, command line parameters, or by creating a Product Information File. This chapter will give a general description of External Applications and Dynamic Link Libraries, and then will explain topics that relate specifically to the OnDemand for OS/390 client. See one of the following OnDemand Customization Guides for more information:

- OLE Control and 32-bit GUI Customization Guide and Reference
- Windows 16-bit Customization Guide
- OS/2 Customization Guide

A. External Applications and Dynamic Link Libraries

For Windows 95/NT, OnDemand provides menu and toolbar extensions that allow an end user to invoke another Windows application, or execute a function in a Dynamic Link Library (DLL). This facility is activated by placing information into the Windows system registry. If, during initialization, OnDemand detects this information, it adds menu items and toolbar buttons. When the user chooses one of these menu items or clicks one of these toolbar buttons, OnDemand invokes the associated application or calls the associated entry point in a DLL.

Caution: You could accidentally destroy your Windows setup by modifying the wrong entries. This task should be performed by someone very familiar with a Windows 95/NT system.

OnDemand looks in the Windows system registry for the following Keys and string values:

<u>Key</u>	<u>Value Name</u>	<u>Value Data</u>
HKEY_CURRENT_USER		
or		
HKEY_CURRENT_LOCAL_MACHINE		
- Software		
- IBM		
- OnDemand32		
- Client		
ExternalApps	Apps	a1[,a2][,a3][,a4][,a5]
a1	Path	application path
	MenuText	menu item text
	BitmapDLL	toolbar button bitmap DLL path
	BitmapResid	toolbar button bitmap res id
	Folders	folder name[folder name]...
	ExcludeFolders	folder name[folder name]...
	Doc	1 0
	CopyDoc	ASIS ASCII
	Parameter	parameter data
ExternalDlls	Dlls	d1[,d2][,d3][,d4][,d5]
d1	Path	DLL path
	Function	function name
	MenuText	menu item text
	BitmapDLL	toolbar button bitmap DLL path
	BitmapResid	toolbar button bitmap res id
	Folders	folder name[folder name]...
	ExcludeFolders	folder name[folder name]...
	Doc	1 0
	CopyDoc	ASIS ASCII
	Parameter	parameter data

A maximum of five applications and five DLL's may be specified. They may be divided between the **HKEY_CURRENT_USER** and **HKEY_LOCAL_MACHINE** keys. The key names a1, ..., a5 and d1, ..., d5 may be any string. The values, which must be string values, are interpreted as follows:

- w **Path** specifies the path for the application or DLL. This value must be provided and should be fully-qualified or in the execution path.
- w **Function** specifies the name of an entry point in the DLL specified with **Path**. This value must be provided for a DLL. It is not relevant for an application.
- w **MenuText** specifies the text to appear on the associated menu item under the OnDemand Window menu. This value is optional. If not provided, the menu item is blank.
- w **BitmapDLL** specifies the path for a DLL containing a bitmap resource to be used for a toolbar button to be associated with the application or DLL. This DLL may be the same as or different from any DLL specified for a **Path** DLL or another **BitmapDLL** DLL.
- w **BitmapResid** specifies the resource id of the bitmap within the DLL specified for **BitmapDLL**. This value is ignored if **BitmapDLL** is not specified and optional if it is. If not provided, a value of 0 is assumed.
- w **Folders** specifies one or more names of OnDemand folders. If multiple names are provided, they must be separated by a backslash ('\') character. An asterisk (*) may be used as a wildcard character in the last position of the name. This is equivalent to listing all folder names beginning with the characters preceding the asterisk.

The associated menu item, and corresponding toolbar button, is enabled whenever: 1) a document is being viewed and the folder associated with the active document is one of the specified folders, or 2) a document is not being viewed and the current folder is one of the specified folders.

This value is optional. If the **ExcludeFolders** value is provided, this value is ignored. If neither is provided, a folder name test is not performed before enabling the menu item and toolbar button.

- w **ExcludeFolders** specifies one or more names of OnDemand folders. The syntax is the same as the **Folders** value.

The associated menu item, and corresponding toolbar button, is enabled whenever: 1) a document is being viewed and the folder associated with the active document is **not** one of the specified folders, or 2) a document is **not** being viewed and the current folder is **not** one of the specified folders.

This value is optional. If not provided, enablement is controlled by the **Folders** value.

- w **Doc** may be specified as **1** or **0**. If **1**, the associated menu item, and corresponding toolbar button, is enabled only when a document is being viewed. This value is optional. If not provided, a value of **0** is assumed.
- w **CopyDoc** indicates that a copy of one of more documents is to be provided to the external application or DLL and specifies the type of data to be provided. If the value is **ASIS**, the document data is in its native format. If the value is **ASCII**, the document data is converted to an ASCII file.

If the end user chooses the associated menu item or corresponding toolbar button when a document is being viewed, the data provided is for the active document. If the folder document list is being displayed, the data is a concatenation of all documents selected in the document list.

This value is optional. If not provided, no document is provided to the external application or DLL.

- w **Parameter** specifies a maximum of 255 characters to be passed as parameter data to the external application or DLL. This value is optional. If not provided, no parameter data is passed to the external application or DLL.

The following is an example of the **required** registry entries:

<u>Key</u>	<u>Value Name</u>	<u>Value Data</u>
HKEY_CURRENT_USER		
- Software		
- IBM		
- OnDemand32		
- Client		
	ExternalApps Apps	KensApp,Edith
	KensApp Path	C:\KENS DIR\KEN
	MenuText	Ken's Application
	BitmapDLL	C:\RES DLLS\RES DLL1.DLL
	BitmapResid	27
	Doc	1
	Edith Path	E:\EDITH\EDITH.EXE
	MenuText	Edith's Spreadsheet Stuff
	Folders	Edith Folder
	ExternalDlls Dlls	MyFunc
	MyFunc Path	D:\MUFUNC\MYFUNC.DLL
	Function	MyFuncEntryPoint
	MenuText	My Function
	BitmapDLL	D:\MYFUNC\MYFUNC.DLL
	BitmapResid	14
	CopyDoc	ASIS ASCII
	Parameter	Parameter Data

For an Application: If the user chooses a menu item or clicks a toolbar button associated with an application, OnDemand invokes the application with the command line:

application path /F folder /P page /T test /A attrvalue /D fields /N filename /R data

Where:

- w **application path** is the path specified with the **Path** value in the registry.
- w **folder** is the name of the active folder or, if a document is being displayed, the folder associated with that document. If no folder is open, the /F parameter is not provided.
- w **page** is the current page of the document being viewed. If no document is being viewed or if the active folder window is being displayed, the /P parameter is not provided.
- w **text** is the currently selected text in the document being viewed or the document list of the active folder. The format of the text is the same as that obtained by copying it to the

clipboard. It may contain tab and newline characters. If no such text exists, the **/T** parameter is not provided.

- w **attrvalue** is the attribute/value pair associated with the current page of the document being viewed. The attribute and value are separated by a tab character. If no such attribute/value pair exists, the **/A** parameter is not provided.
- w **fields** is a set of folder field name/value pairs associated with the document being viewed. Each pair contains the name of a folder field and, separated by a tab character, the value of that field for the document. The pairs are separated by a newline character. If no such text exists, the **/T** parameter is not provided.
- w **filename** is the fully-qualified path and filename of document data as describe for the **CopyDoc** registry entry. If the **CopyDoc** entry is not specified or no data is available, the **/N** parameter is not provided.
- w **data** is the parameter data specified for the **Parameter** registry entry. If the **Parameter** entry is not specified, the **/R** parameter is not provided.

For a DLL: If the user chooses a menu item or clicks a toolbar button associated with a DLL, OnDemand calls the entry point (function) specified with the Function value in the registry. This function must be of the following type:

```
typedef void ( WINAPI * ArsExternalDIIFunction )
    ( long  page_number,
      char * pFolderName,
      char * pSelectedText,
      char * pAttributeAndValue,
      char * pFieldsAndValues,
      char * pFilename,
      char * pParameterData );
```

Where:

- w **page_number** is the current page of the document being viewed. If no document is being viewed or if the active folder window is being displayed, this value is 0.
- w **pFolderName** is a pointer to a null-terminated character string containing the name of the active folder or, if a document is being displayed, the folder associated with that document. If no folder is open, this value is NULL.
- w **pSelectedText** is a pointer to a null-terminated character string containing the currently selected text in the document being viewed or the document list of the active folder. The format of the text is the same as that obtained by copying it to the clipboard. It may contain tab and newline characters. If no such text exists, this value is NULL.
- w **pAttributeAndValue** is a pointer to a null-terminated character string containing the attribute/value pair associated with the current page of the document veing viewed. The attribute and value are separated by a tab character. If no such attribute/value pair exists, this value is NULL.
- w **pFieldsAndValues** is a pointer to a null-terminated character string containing a set of folder field name/value pairs associated with the document being viewed. Each pair contains the name of a folder field and, separated by a tab character, the value of that field for the

document. The pairs are separated by a newline character. If no such text exists, this value is NULL.

- w **pFilename** is a pointer to a null-terminated character string containing the fully-qualified path and filename of document data as described for the **CopyDoc** registry entry. If the **CopyDoc** entry is not specified or no data is available, this value is NULL.
- w **pParameterData** is a pointer to a null-terminated character string containing the parameter data specified for the **Parameter** registry entry. If the **Parameter** entry is not specified, this value may be NULL or point to an empty string.

B. The Document Sciences "CompuView Navigator" v 2.1 and above (Metacode support)

For Windows 95/NT, OnDemand provides menu and toolbar extensions that allow an end user to invoke another Windows application, or execute a function in a Dynamic Link Library (DLL). This facility is activated by placing information in the Windows system registry. If, during initialization, OnDemand detects this information, it adds menu items and toolbar buttons. When the user chooses one of these menu items or clicks one of these toolbar buttons, OnDemand invokes the associated application or calls the associated entry point in a DLL. See the "External Applications and Dynamic Link Libraries" chapter of the **OLE Control and 32-bit GUI Customization Guide and Reference** for additional information.

Metacode documents can be captured by OnDemand for OS/390, retrieved by the Windows 32-bit client, and displayed on the CompuView Navigator (CVN) viewer. The OnDemand client will automatically invoke the CVN viewer to display the Document CCIF (Composite CompuSet Intermediate File - .ccf extension). This section describes the procedure to enable this function.

1. Install CompuView Navigator

Install the "CompuView Navigator" on your 32-bit Windows system following the instructions in the CompuView Navigator *Installation and User Guide*.

2. Edit the Windows Registry

To edit the Windows Registry, you must first start REGEDIT, the registry editor.

Caution: You could accidentally destroy your Windows setup by modifying the wrong entries. This task should be performed by someone very familiar with a Windows 95/NT system.

- i. Start REGEDIT by using the Start / Run / Browse command, and locate regedit in the c:\Windows directory.
- ii. Open the following folders in the "left" window by clicking on the + in front of the folder names. The Regedit screen should look like this, with the "Client" folder highlighted:

- My Computer		Name Data
+HKEY_CLASSES_ROOT		(Default) (value not set)
- HKEY_CURRENT_USER		
- Software		
- IBM		
- OnDemand32		
- Client		
External Files		
List		
Misc		
Preferences		

- iii. Create an "ExternalApps" folder under the "Client" folder.
 - a. With "Client" highlighted, click on the right window with the right mouse button to bring up a menu.
 - b. Select **New => Key** with the left mouse button.
 - c. A new folder (key) is created under "Client" in the left window. Rename it "ExternalApps" (no space, no quotation marks, and capital E and A) then hit "Enter."
- iv. Create an "Apps" string value in "ExternalApps"
 - a. With the "ExternalApps" folder highlighted, click on the right window with the right mouse button to bring up a menu.
 - b. Select **New => String Value**.
 - c. Name the entry "Apps"
 - d. Double click on "Apps" to bring up the "edit string" window.
 - e. Enter "CompuView Navigator" in the "Value data:" entry field, and click "OK."

**** TIP **** Do not add quotation marks to the string, or you will end up with 2 sets of quotation marks instead of one. REGEDIT will insert these for you.

The registry should now look like this:

- My Computer	Name	Data
+HKEY_CLASSES_ROOT	(Default)	(value not set)
- HKEY_CURRENT_USER	Apps	"CompuView Navigator"
- Software		
- IBM		
- OnDemand32		
- Client		
External Files		
ExternalApps		
List		
Misc		
Preferences		

- v. Create a "CompuView Navigator" folder under "ExternalApps."
 - a. With the "ExternalApps" folder highlighted, click on the right window with the right mouse button to bring up a menu.
 - b. Select **New =>Key** with the left mouse button.
 - c. A new folder (key) is created under "ExternalApps" in the left window. Rename it "CompuView Navigator." This value must be spelled exactly as entered under "Data" in step "iv" above.

vi. **Path** - Create a "Path" string value in "CompuView Navigator. "

Path specifies the path for the application. This value must be provided and should be fully-qualified, or in the execution path.

- a. With the "CompuView Navigator" folder highlighted, click on the right window with the right mouse button to bring up a menu.
- b. Select **New => String Value**.
- c. Name the entry "Path"
- d. Double click on "Path" to bring up the "edit string" window.
- e. Enter "C:\COMSET\SYSTEMWIN32\IDR.EXE" in the "Value data:" entry field, where **C:\COMSET\SYSTEMWIN32** is the path of CompuView Navigator, and click "OK."

vii. **MenuText** - Create a "MenuText" string value in the "CompuView Navigator" folder.

MenuText specifies the text to appear on the associated menu item under the OnDemand Window menu. This value is optional. If not provided, the menu item is blank.

- a. With the "CompuView Navigator" folder highlighted in the left window, click on the right window with the right mouse button to bring up a menu.
- b. Select **New => String Value**.
- c. Name the entry "MenuText" with no space between Menu and Text.
- d. Double click on "MenuText" to bring up the "edit string" window.
- e. Enter "CompuView Navigator" in the "Value data:" entry field and click "OK."

viii. **Folders** - Create a "Folder" string value in the "CompuView Navigator" folder.

Folders specifies one or more names of OnDemand folders. If multiple names are provided, they must be separated by a backslash (\) character. An asterisk (*) may be used as a wildcard character in the last position of the name. This is equivalent to listing all folder names beginning with the characters preceding the asterisk.

- a. With the "CompuView Navigator" folder highlighted in the left window, click on the right window with the right mouse button to bring up a menu.
- b. Select **New => String Value**.
- c. Name the entry "Folders".
- d. Double click on "Folders" to bring up the "edit string" window.
- e. Enter the names or names of the folder(s) containing the Metacode documents and click "OK."

The associated menu item is enabled whenever: 1) a document is being viewed and the folder associated with the active document is one of the specified folders, or 2) a document is not being viewed and the current folder is one of the specified folders.

Note: Selecting an enabled "CompuView Navigator" menu item while in the folder without adding a "Doc" entry will cause unexpected results. It is therefore also

necessary to add a "Doc" string value to disable this menu item while at the Search screen. Please see the next item.

- ix. **Doc** - Create a "Doc" string value in the "CompuView Navigator" folder.

Doc may be specified as **1** or **0**. If **1**, the associated menu item is enabled only when a document is being viewed. This value is optional. If not provided, a value of **0** is assumed. Set this value to **1** for the CompuView Navigator.

- a. With the "CompuView Navigator" folder highlighted in the left window, click on the right window with the right mouse button to bring up a menu.
- b. Select **New => String Value**.
- c. Name the entry "Doc".
- d. Double click on "Doc" to bring up the "edit string" window.
- e. Enter a string of **1** and click "OK."

With **CompuView Navigator** highlighted, the Registry should look like this when you have finished:

<ul style="list-style-type: none"> - My Computer +HKEY_CLASSES_ROOT -HKEY_CURRENT_USER - Software - IBM - OnDemand32 - Client External Files - ExternalApps CompuView Navigator List Misc Preferences 	<table border="0"> <thead> <tr> <th style="text-align: left;"><u>Name</u></th> <th style="text-align: left;"><u>Data</u></th> </tr> </thead> <tbody> <tr> <td>(Default)</td> <td>(value not set)</td> </tr> <tr> <td>Path</td> <td>C:\COMSET\SYSTEM\WIN32\IDR.EXE"</td> </tr> <tr> <td>MenuText</td> <td>"CompuView Navigator"</td> </tr> <tr> <td>Folders</td> <td>"Foldname"</td> </tr> <tr> <td>Doc</td> <td>"1"</td> </tr> </tbody> </table>	<u>Name</u>	<u>Data</u>	(Default)	(value not set)	Path	C:\COMSET\SYSTEM\WIN32\IDR.EXE"	MenuText	"CompuView Navigator"	Folders	"Foldname"	Doc	"1"
<u>Name</u>	<u>Data</u>												
(Default)	(value not set)												
Path	C:\COMSET\SYSTEM\WIN32\IDR.EXE"												
MenuText	"CompuView Navigator"												
Folders	"Foldname"												
Doc	"1"												

You will also see an entry for "CompuView Navigator" in the OnDemand "Windows" pull-down menu. Selecting the Windows / CompuView Navigator menu pull-down will start the CVN. It is not necessary to invoke CVN in this manner, since OnDemand will automatically start CVN when it detects a .CCF file extension. In fact, you may receive an error message if you attempt to start CVN manually from the menu pulldown while a document hitlist is displayed in OnDemand.

C. Related Documents

For Windows 95/NT, OnDemand provides menu and toolbar extensions that allow an end user to retrieve and view a document related to the document currently being viewed. This facility is activated by placing information in the Windows system registry. If during initialization, OnDemand detects this information, it adds menu items and toolbar buttons. When the user chooses one of these menu items or clicks one of these toolbar buttons, OnDemand retrieves the related document and displays it along with the original document.

A typical application for Related Documents is a credit card folder containing monthly statements. The end user views a customer's statement which has a line for each credit card transaction. The user selects (highlights) a transaction number on one of these lines, then selects a menu pull-down item or clicks a toolbar button. OnDemand then searches the related document in the same folder for the customer's account number and selected transaction number, then displays the transaction documents alongside the statement. Related documents must be in the same folder.

OnDemand looks in the Windows system registry for the following keys and string values:

<u>Key</u>	<u>ValueName</u>	<u>Data</u>
+ HKEY_CURRENT_USER or - HKEY_LOCAL_MACHINE - Software - IBM - OnDemand32 - Client		
RelatedDocs	Related	r1[,r2][,r3][,r4][,r5][,r6][,r7][,r8][,r9][,r10]
r1	MenuText	menu item text
	BitmapDLL	toolbar button bitmap DLL path
	BitmapResid	BitmapResid
	Folders	folder name[folder name]...
	ExcludeFolders	folder name[folder name]...
	RelatedFolder	related folder name (must be same folder)
	Fields	field information
	Arrange	V H M C U
r2...		

A maximum of ten Related Documents may be specified. They may be divided between the HKEY_CURRENT_USER and HKEY_LOCAL_MACHINE keys. The key names r1, ..., r10 may be any string. The values, which must be string values, are interpreted as follows:

- w **MenuText** specifies the text to appear on the associated menu item under the OnDemand Window menu. This value is optional. If not provided, the menu item is blank.
- w **BitmapDLL** specifies the path for a DLL containing a bitmap resource to be used for a toolbar button to be associated with the Related Documents. This value is optional. If not provided, a toolbar button will not be created.
- w **BitmapResid** specifies the resource id of the bitmap within the DLL specified for **BitmapDLL**. This value is ignored if **BitmapDLL** is not specified and optional if it is. If not provided, a value of 0 is assumed.

- w **Folders** specifies the folder which contains the document to be viewed and the related document. Enter only one folder here, as OnDemand for OS/390 currently supports one open folder at a time.

The associated menu item and corresponding toolbar button are enabled whenever 1) a document is being viewed and the folder associated with the active document is one of the specified folders, or 2) a document is not being viewed and the current folder is one of the specified folders.

This value is optional. If the ExcludeFolders value is provided, this value is ignored. If neither is provided, a folder name test is not performed before enabling the menu item and toolbar button.

- w **ExcludeFolders** is optional and should **not** be included for OnDemand for OS/390.
- w **RelatedFolders** specifies the name of an OnDemand folder which contains a document related to the document being viewed. In OnDemand for OS/390 this must be the same name as the **Folders** name.
- w **Fields** specifies information describing the document to be retrieved from the related folder. This information is used to perform a search of the folder. The folder fields are first initialized to their default operator and values. The fields specified here are then set to the operator and values requested. The first document in the document list resulting from the search is considered to be the related document.

The information has the following format:

fieldname=operator\value1; ... ;fieldname=operator\value1

Where:

- w *fieldname* is the name of a field defined for the related folder.
- w *operator* is the search operator to be used for the field. In OnDemand for OS/390 it must be:
 - LK** for like
- w *value1* is the first or only value to be used for the field. It may be any string, including an empty string, and may contain the following substitution character.
 - %s** These characters are replaced by any text which the user has currently selected In the original document.
- w **Arrange** specifies the arrangement of the document windows after the related document is brought into view. The value must be one of the following:
 - V** for tiled vertically
 - H** for tiled horizontally.
 - M** for maximized with the related document overlaying the original.
 - C** for cascaded.
 - U** for left to the user's specification via the **Maintain Document Arrangement** menu item.

The following is an example of the required registry entries:

<u>Key</u>	<u>ValueName</u>	<u>Data</u>
+ HKEY_CURRENT_USER		
or		
- HKEY_LOCAL_MACHINE		
- Software		
- IBM		
- OnDemand32		
- Client		
RelatedDocs	Related	Credit,Students
Credit	MenuText	Transaction Detail
	BitmapDLL	C:\RESDLLS\RESDLL1.DLL
	BitmapResid	27
	Folders	Credit Card Statements
	RelatedFolder	Credit Card Statements
	Fields	Account=lk\%;Transaction=lk\%
	Arrange	v
Students	MenuText	Grades
	BitmapDLL	C:\RESDLLS\RESDLL1.DLL
	BitmapResid	56
	Folders	Student Information
	RelatedFolder	Student Information
	Fields	ID=lk\%;Document Type=lk\GRADES
	Arrange	h

VIII. Related IBM Offerings

Related IBM offerings are separately-orderable and chargeable optional capabilities. These offerings can be fully-integrated with OnDemand for OS/390.

A. CD-ROM Creation

The adhoc cdrom mastering component may be implemented if this option has been ordered.

1. Overview

The OnDemand for OS/390 adhoc cdrom mastering component is a workstation based process that can create a cdrom containing any data that has been stored in the OnDemand system and is available to the OnDemand Client. The cdrom's are built from a Windows 95 or NT client workstation using the standard OnDemand GUI. The user opens a folder and does a normal query for documents. The user then selects the cdrom pull-down from the file menu to make a cdrom from all documents in the hitlist. The current limit of documents that can be placed into a single folder (from one hitlist) is about 20,000 to 40,000 depending on the size of the documents.

i. CDROM Mastering Process Steps

After selecting the cdrom mastering process, the following steps will occur:

- a. Clean
 - 1) All files on the staging area hard drive are erased.
- b. Setup
 - 1) Required directories (folders) are written to the staging area.
- c. Fetch
 - 1) A bulk retrieve call is made to the server to fetch all of the documents selected.
 - 2) All documents are retrieved and placed in the hard disk staging area.
 - 3) Annotations can be retrieved if that option is selected.
- d. Index
 - 1) The documents are then reindexed on the staging area.
- e. Stage
 - 1) The required viewing and retrieval GUI software is copied to the staging area.

The resulting cdrom is completely stand alone and requires only a Windows 95 or Windows NT system in order to run it.

ii. Connecting to the CDROM

If the OnDemand Client has already been installed on the pc, all that must be done is to set up the cdrom as a local server. If the client has not been installed on the pc, the files needed to install the client are included on the cdrom that was created in the mastering

process. The 32-bit Windows client can be installed to the pc from this cdrom by selecting "Setup" from the cdrom.

2. HW and SW Requirements

The OnDemand for OS/390 adhoc cdrom mastering process is supported for Windows 95 and Windows NT. The basic hardware and software requirements listed in the **OnDemand for OS/390 Client Requirements** chapter in this guide apply to the cdrom mastering process with the following additions:

- i. Hardware
 - a. A 1 GB logical drive must be available on the workstation to stage the cdrom files. The mastering process will wipe the logical drive clean before starting the process. Double check the drive letter in the "Mastering Process Options" dialog pull-down before starting the process.
 - b. Any cdrom writer that is Windows 95/NT compatible should work. All that is needed is to copy the files from the staging area to the cdrom.
- ii. Software
 - a. Windows 95 or Windows NT
 - b. OnDemand client level 2.2.0.13 or above.
 - c. Any cdrom creation software. Please note that some software will create a cdrom in a format readable by 32-bit Windows operating systems only. If you desire to connect to the client with an OS/2 or Windows 3.1 client, make sure the cdrom creation software will create the cdrom in standard PC CD-ROM (ISO 9660) format so the cdrom can be read by those operating systems.

3. Installation and Setup

- i. Install the OnDemand Client

If you have not already done so, install the OnDemand for OS/390 Client to the workstation that will be performing the cdrom mastering process. Make sure the workstation has a 1 GB logical drive free to serve as the staging area for the cdrom mastering process.
- ii. Copy 2 CDROM Files
 - a. Copy the arsmstr.ini file from the \Win32\Ars directory on the installation cdrom to the \Windows directory. This file is NOT automatically installed when the Client is installed, but it is delivered on the installation cdrom.
 - b. Copy the arsmst32.dll from the \Win32\Ars directory on the installation cdrom to the \Ars32 directory (or into whatever directory you installed the OnDemand Client).

Copying these 2 files to the proper directories will cause the 2 cdrom mastering pull-down options to appear on the File Menu of the OnDemand Client.

4. Adhoc CDROM Mastering Function

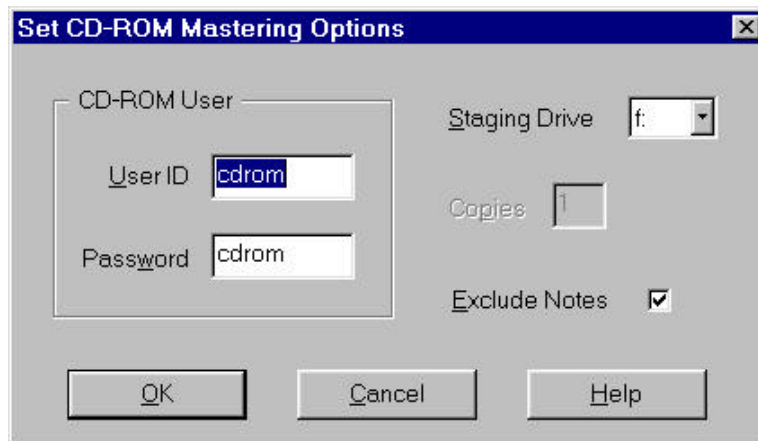
When your OnDemand Client is setup to include the cdrom option, the File menu will contain 2 new items for cdrom mastering:

- i. CD-ROM Mastering...
 - w The **CD-ROM Mastering...** command is used to display the CD-ROM Mastering dialog box that allows you to place customer accounts and reports on a CD-ROM.
- ii. Set CD-ROM Mastering Options...
 - w The **Set CD-ROM Mastering Options...** command is used to display the Set CD-ROM Mastering Options dialog box that allows you to select options for CD-ROMS where you will place customer accounts and reports.

Caution: Be sure to check the staging drive field in the Set CD-ROM Mastering Options dialog box before you start to ensure that this points to the blank logical drive (staging area) where you wish to build the cdrom. This drive will be erased and you will lose any data that is on this drive.

5. Building a CDROM with OnDemand

- i. Set CD-ROM Mastering Options
 - a. Select the "Set CD-ROM Mastering Options" pull down from the File menu to display the Set CD-ROM Mastering Options dialog box.



- b. CD-ROM User

Enter a userid and password for the cdrom you are building. You will use this userid and password to logon to the cdrom local server when you open it.

- 1) User ID - Enter a userid that is up to 8 characters long. This is a required field.
- 2) Password - Enter up to a 64-character password. This is an optional field.

c. Staging Drive

Enter the drive where you will store the information that will be placed on the CD-ROM. **You must ensure that the drive is empty because OnDemand will erase any files on the drive before it retrieves the documents you have selected to place on the CD-ROM.** You must also ensure that the drive is large enough (1 GB recommended) to contain all of the information that will be placed on the cdrom (a maximum of 650 MB).

d. Copies

This option is disabled and set to 1. It is recommended that you burn the cdrom (by copying the files from the staging area) with your own cdrom writing software after all files are copied to the staging area and you have exited from the OnDemand client. Therefore, do not set the number of copies from OnDemand, but rather from your own cdrom mastering software.

e. Exclude Notes

Check this box if you do not want to include the notes associated with the information when the CD-ROM is built. Leave this box blank if you want to include the notes associated with the documents when the CD-ROM is built.

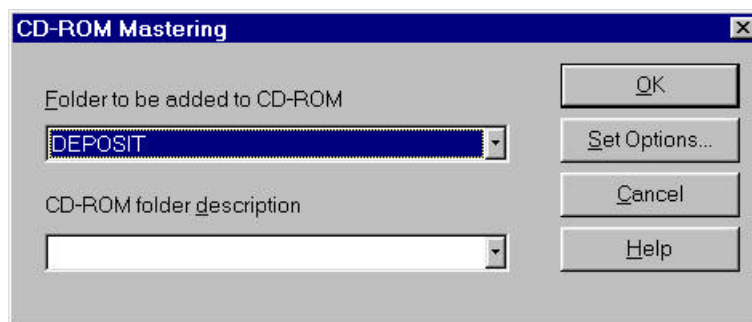
ii. Retrieve the Documents to the Staging Drive

a. Build a document hitlist on the search screen which contains all desired documents for the folder you are creating.

1) **Append checkbox** - The wildcard character is not currently supported for OnDemand for OS/390, and a minimum number of characters are also required to be entered in a search field. It may therefore be necessary to check the "Append" checkbox and to perform several searches to build the desired document list.

2) The default maximum number of hits for a single search is 210. This value can be increased through the administration system (RADM) for the purpose of creating the cdrom. Since 40,000 hits is the practical limit for building a cdrom, this should be the maximum value set. Your OnDemand Administrator can set this value for you. It should be set back to the default value for your location after the cdrom has been built.

b. After the desired document list has been created, select the "CD-ROM Mastering" pull down on the File menu. The CD-ROM Mastering dialog box will appear.



Note: OnDemand places the documents on the CD-ROM in the order that the documents appear in the document list. You can use the **Sort** Document List... command button on the Search Criteria and Document List dialog box to rearrange the sequence of the documents before you build the CD-ROM.

- c. The "Folder to be added to CD-ROM" entry field will default to the name of the open folder.
- d. Enter a unique name in the "Name to be assigned to CD-ROM" entry field for every folder that is added to the CD-ROM. After the current document list is built for the current folder, you will have the option of adding another folder of documents to the staging drive.
- e. Select the OK button to start the CD-ROM Mastering process. OnDemand will issue status messages as the CD-ROM is built.
- f. After the documents from the first folder have been copied to the staging drive, you will be presented with a series of options. The following dialog boxes will appear:
 - 1) Proceed with the mastering of volume AOD00000000?
 - i) **Yes** - This will end the mastering process that copies data to the staging area. You can then start the process of burning the cdrom (see section C). No other dialog boxes will appear if "Yes" is selected.
 - ii) **No** - Select No if you wish to add one or more additional folders to the staging area. After selecting No, the next dialog (ii) will appear.
 - iii) **Cancel** - This is the same as Yes.
 - 2) Do you wish to add another folder?
 - i) **Yes** - Yes will allow you to add additional folders and documents to the staging area. After selecting "YES", exit the Search Criteria dialog and open the next folder you wish to copy to the staging area. Repeat steps 1 - 6 until all desired folders and documents have been copied to the staging area. The third dialog will not appear if "Yes" is selected.
 - ii) **No** - Selecting "No" will bring up the next dialog.
 - 3) Cancel the mastering process?
 - i) **Yes** - Select "Yes" if all desired folders and documents have been retrieved to the staging area. Proceed with step "C".
 - ii) **No** - This will take the user back to the first dialog (i).
- iii. Build the CD-ROM

The final step is to copy all files from the staging area disk to the cdrom. Any cdrom writer (recorder) with cdrom writing software should work.

Note - Some software will create a cdrom in a format readable by 32-bit Windows operating systems only. If you desire to connect to the client with an OS/2 or Windows 3.1 client, make sure the cdrom creation software will create the cdrom in a format that can be read by those operating systems.

6. Installing the OnDemand Client to the pc from the adhoc cdrom

If the user will require the ability to connect to the OS/390 server in addition to the cdrom, the complete OnDemand client should be installed as described earlier in this manual. The cd-rom can then be set up as a local server from the "Logon to a Server dialog." See the following section on "Setting Up the CD-ROM as a Local Server."

If the user will only require the ability to connect to the cdrom to view documents and will not need to connect to the OS/390 server, the necessary client install files are contained on the cdrom that was mastered by the adhoc cdrom process. Simply run the setup.exe located in the \install directory of the cdrom. Running setup will setup an OnDemand shortcut in an OnDemand CD-ROM folder that points to the cdrom, install several DLL's, and set up the registry. Once the client is started, enter the User ID and Password that were entered in the "Set CD-ROM Mastering Options" dialog when the cdrom was created. The "Update Servers" button is disabled because the cdrom client cannot connect to the OS/390 server if the client installation is done from this cdrom.

**** Note: Only the 32-bit Windows client is available from the mastered cdrom.**

7. Setting Up the CD-ROM as a Local Server

- i. Add the CD-ROM to the list of OnDemand Servers.
 - a. Start the OnDemand client to open the "Logon to a Server" dialog box.
 - b. Choose the "Update Servers" button on the "Logon to a Server" dialog box. The "Update Servers" dialog box appears.
 - c. Type a name into the server entry field that will be used to select the CD-ROM drive. For example: if the drive letter of your workstation's CD-ROM is f:, the name for your server could be CD-ROM-F. When you have more than one CD-ROM drive, make sure you distinguish between the drives.
 - d. Select "Local" from the "Protocol" pull-down list.
 - e. Enter the drive letter associated with your CD-ROM drive (ex: f:) in the "Directory" entry field. Be sure to include the ":" after the drive letter.
 - f. Select the "Add" button to include the server in your list of server choices.

If you do not want to add the server, choose the "Close" button before you use the "Add" button to return to the "Logon to a Server" dialog box.
 - g. Select the "Close" button to close the "Update Servers" dialog box and return to the "Logon to a Server" dialog box.
- ii. Connect to the CD-ROM as a Local Server
 - a. Start the OnDemand client to open the "Logon to a Server" dialog box.
 - b. At the "Logon to a Server" dialog box, select the name of your cdrom server.
 - c. Enter the User ID and Password that were entered in the "Set CD-ROM Mastering Options" dialog when the cdrom was created.
 - d. OnDemand should run as if connected to the OS/390 Server with minor exceptions. Please see the "Considerations for OnDemand for OS/390" section below.

8. Additional Considerations

i. OnDemand for OS/390 Considerations

The following items apply to the OnDemand for OS/390 CD-ROM Implementation.

- a. Wild Cards - When connected to the cdrom as a local server, the user may enter a "*" to retrieve all documents for the folder. A blank search field will also act like a wild card.
- b. "Like" search operator - When connected to the OS/390 server, entering a "123" will behave the same as entering a "123*" when connected to the CD-ROM local server.
- c. The OnDemand for OS/390 default value for number of documents to retrieve to the document hitlist is 210. This value can be increase for the cdrom process by the OnDemand for OS/390 Administrator.
- d. NODX and PAGE report types - To retrieve these report types, enter either the fully qualified search key value to retrieve a specific document, or leave the field blank to retrieve all hits. The "Like" search operator does not behave the same for these report types when connected to the cdrom as when connected to the OS/390 server.
- e. Logical Views - To retrieve Public (Global) logical views to the cdrom, the user building the staging area should be signed on as a "Not Authorized" user. Please see your OnDemand for OS/390 Administrator to update your UPT (User Profile Table) through the OnDemand Administration system (RADM).

ii. CD-ROM Local Server Considerations

The following items apply to all OnDemand CD-ROM Local Server implementations (not OS/390 specific).

- a. The Help Buttons do not presently work in the "**Set CD-ROM Mastering Options**" and "CD-ROM Mastering dialogs".
- b. The "Logical And / Or" group box does not appear when connected to the CD-ROM local server.