

*Industry-specific*

**QAD SOLUTIONS**

*Manufacturing Applications*

# **Decision Support Installation Guide**

## **UNIX Servers**



78-0569B  
Decision Support Version 3.3  
MFG/PRO eB, eB2  
September 2002

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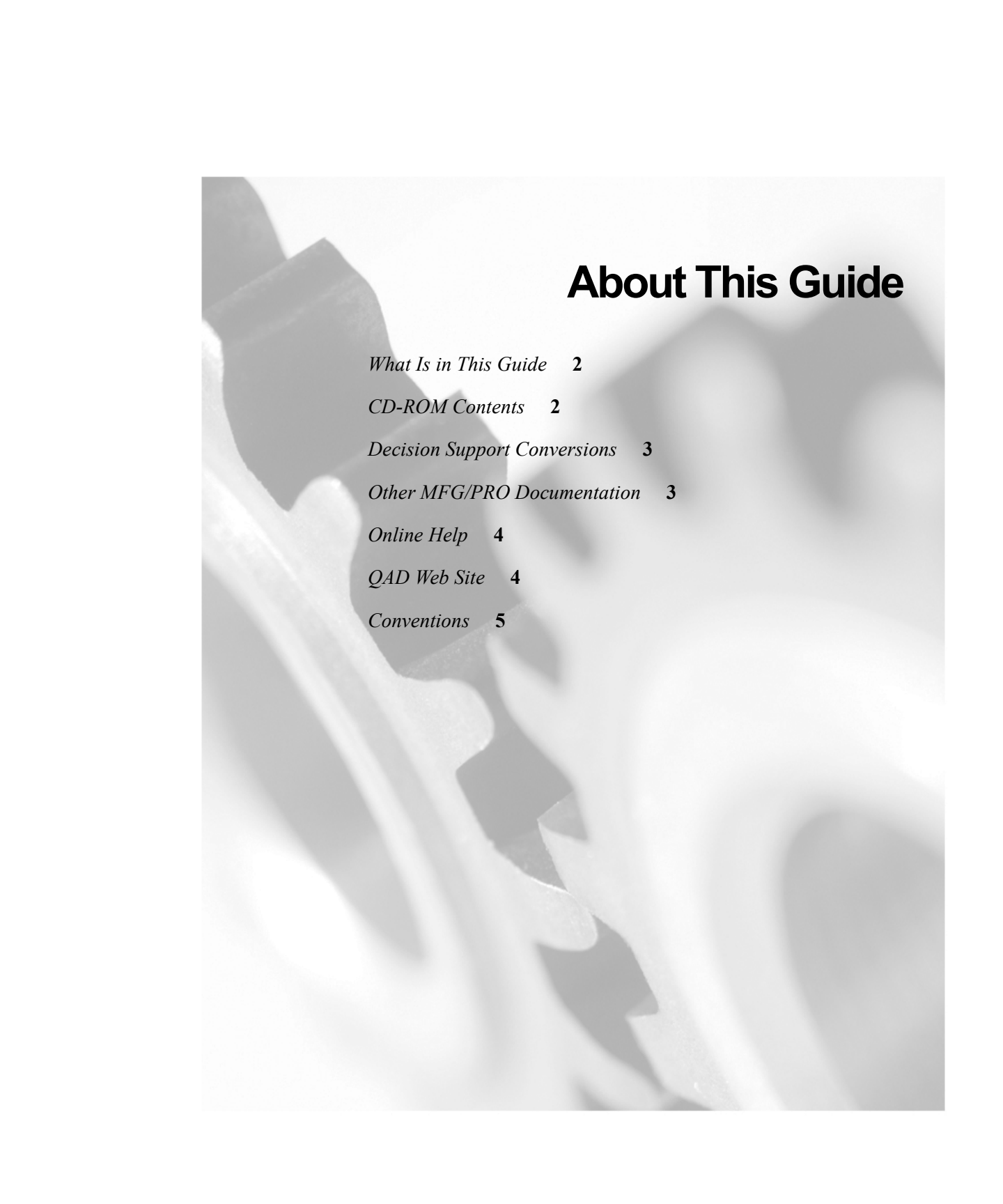
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## What Is in This Guide

Use this guide to install Decision Support (DS) Version 3.3 on all UNIX systems for MFG/PRO eB and MFG/PRO eB2. DS consists of the DS engine as well as graphical user interface (GUI) and character user interface (CHUI) clients.

Use the instructions in this guide to:

- Install the DS engine
- Install DS clients
- Install the DS online help
- Install DS libraries
- Install DS documentation

**Note** Some of the installation screens illustrated in the guide may reference an older version of DS. The installation script has not changed and these screens still apply to Version 3.3 of DS.

## Audience

These instructions are for the MFG/PRO system administrator who manages the MFG/PRO database and is familiar with the UNIX operating system, the Windows operating system (if implementing DS GUI clients), Progress software, networking, and Progress databases.

## Installation Errata

In addition to these instructions, you may receive a supplementary errata sheet with changes and additional instructions. Check your product package. Also check the QAD Web site.

## CD-ROM Contents

The DS CD-ROMs you received for the engine and client each contain a `cdrom` directory. The following sections briefly describe the contents of this directory.

## Decision Support Engine CD-ROM

- Installation script (`install`)
- Supporting files (`mfgds.ini` and `ds33.cpio`)
- Subdirectories (`lib` and `bin`)

## Decision Support Client CD-ROM

- Installation script (`install`)
- Supporting files (`dscli.ini` and `cli33.cpio`)
- Subdirectories (`lib` and `bin`)

## Decision Support Conversions

Programs for converting Decision Support Versions 2.08, 3.1, and 3.2 to the current release are included in the Decision Support engine installation.

▶ See “Converting an Existing DS Database” on page 67.

## Other MFG/PRO Documentation

- For MFG/PRO software installation instructions, refer to the appropriate installation guide for your system.
- For conversion information, refer to the *Conversion Guide*.
- For instructions on navigating the Windows and character environments:
  - For 8.6 and 9.0, refer to the *User Interface Guide*.
  - For MFG/PRO eB and eB2, see *User Guide Volume 1: Introduction*
- For instructions on navigating the Network User Interface (NetUI) and Desktop environments:
  - For 9.0, refer to *Network User Interface Guide* or *User Guide: eB Desktop*.
  - For MFG/PRO eB and eB2, see *User Guide: QAD Desktop*.

- For information on using the software, refer to the *User Guides*. CIM Interface information changes by MFG/PRO version:
  - For 8.6 and 9.0, see *User Guide Volume 11: Manager Functions*.
  - For MFG/PRO eB and eB2, see *User Guide Volume 9: Manager Functions*.

*User Guide Volume 6: Master Data* in MFG/PRO eB2 was titled *Master Files* in earlier releases.

- To view documents online in PDF format, see the *Documents on CD* and *Supplemental Documents on CD*.

**Note** Installation guides are not included on *Documents on CD*. Printed copies are packaged with your software. Electronic copies of the latest versions are available on the QAD Web site.

## Online Help

MFG/PRO has an extensive online help system. Help is available for most fields found on a screen. Procedure help is available for most programs that update the database. Most inquiries, reports, and browses do not have procedure help.

For information on using the help system in the different MFG/PRO environments, refer to the books related to navigating the user interface listed in “Other MFG/PRO Documentation” on page 3.

## QAD Web Site

QAD’s Web site provides a wide variety of information about the company and its products. You can access the Web site at:

<http://www.qad.com>

For MFG/PRO users with a QAD Web account, product documentation is available for viewing or downloading at:

<http://support.qad.com/documentation/>

You can register for a QAD Web account by accessing the Web site and clicking the Accounts link at the top of the screen. Your customer ID number is required. Access to certain areas is dependent on the type of agreement you have with QAD.

Most user documentation is available in two formats:

- Portable document format (PDF). PDF files can be downloaded from the QAD Web site to your computer. You can view them with the free Adobe Acrobat Reader. A link for downloading this program is also available on the QAD Web site.
- HTML. You can view user documentation through your Web browser. The documents include search tools for easily locating topics of interest.

Features also include an online solution database to help MFG/PRO users answer questions about setting up and using the product. Additionally, the QAD Web site has information about training classes and other services that can help you learn about MFG/PRO.

## Conventions

### Menu and Book References

This guide applies to multiple versions of MFG/PRO. A number of menus have been reorganized during these various release. Differences in menu numbers are noted, when necessary, using the following convention:

Country Code Maintenance (2.14.1; 2.13.3.1 in eB)

The initial menu number identifies the program in the most recent release. The second menu number applies to the release specified and all earlier releases.

In addition, some book titles have changed. References to these books use the title from the most recent release.

## Interface

MFG/PRO is available in several interfaces. The specific interfaces available vary by MFG/PRO release. To standardize presentation, the documentation uses the following conventions:

- MFG/PRO screen captures show the Windows interface.
- References to keyboard commands are generic. For example, choose Go refers to:
  - The forward arrow in Desktop
  - F2 in the Windows interface
  - F1 in the character interface

In the character and Windows interfaces, the Progress status line at the bottom of a program window lists the main UI-specific keyboard commands used in that program. In Desktop, alternate commands are listed in the right-click context menu.

For complete keyboard command summaries for each MFG/PRO interface, refer to the appropriate chapters of the books listed in “Other MFG/PRO Documentation” on page 3.

## Typographic

This document uses the text or typographic conventions listed in the following table.

| If you see:                       | It means:                                                                                                        |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|
| monospaced text                   | A command or file name.                                                                                          |
| <i>italicized monospaced text</i> | A variable name for a value you enter as part of an operating system command; for example, <i>YourCDROMDir</i> . |
| indented command line             | A long command that you enter as one line, although it appears in the text as two lines.                         |
| <b>Note</b>                       | Alerts the reader to exceptions or special conditions.                                                           |
| <b>Important</b>                  | Alerts the reader to critical information.                                                                       |
| <b>Warning</b>                    | Used in situations where you can overwrite or corrupt data, unless you follow the instructions.                  |

# Installation Overview

This chapter presents basic topics that you should understand before beginning a Decision Support (DS) installation or conversion.

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## System Requirements

### Progress Versions

The DS installation program requires Progress 9.1D or higher. You will need to know the path to the Progress installation directory for the DS installation program.

DS also requires the availability of the Progress Quoter utility at run time. The system path, not the Progress path, must include the directory containing this utility. The DS installation program modifies the system path during the installation session, but permanent modification of the path on each DS client is required.

◆ See “Deploying Decision Support” on page 11.

If you are implementing DS GUI clients, configure DS to use the Progress AppServer for the best performance. For this configuration, the Progress AppServer 9.1D or higher must be installed on the same server as the DS engine.

### MFG/PRO Versions

DS Version 3.3 is supported on MFG/PRO eB and eB2. The installation program requires access to encrypted MFG/PRO source code. You must know the MFG/PRO installation directory path for the DS installation program. You must also know the physical database name and path for at least one of your MFG/PRO databases (mfgempty is preferred).

### Disk Space

The installation program verifies that at least 20 MB of space is available in your selected installation directory. Make sure to provide plenty of room for Decision Support data storage. Start with 100 MB to 1 GB and evaluate disk usage after 30 to 60 days of normal DS use.

To check the disk space in kilobytes available for all disks, at the UNIX prompt enter: `bd f`.

Windows Clients

- Operating System: Windows 98, NT 4.0 or higher, ME, XP, or 2000
- Disk Space: Approximately 10 MB of available space
- Progress Software: Local Progress Query installation

**Note** For DS GUI clients to function correctly, Progress Query must be installed locally. Do not attempt to run the Progress software from a remote machine.

Decision Support Databases

Before you create the DS database, the installation script first creates a set of empty and initialized databases upon which the DS database is based. You should make a backup of these databases in case you need to restore the system. Table 1.1 lists the databases created during the DS engine installation.

| Database | Description                                                                                                                         |
|----------|-------------------------------------------------------------------------------------------------------------------------------------|
| dsemtpy  | Empty Decision Support database, with standard database schema, but no data. Used as base for all other Decision Support databases. |
| ds       | Initialized Decision Support database. Includes Decision Support menus, messages, and other default data.                           |

Table 1.1  
Decision Support  
Databases

**Warning** Do *not* use these databases directly. Always use the copies of them as the working DS databases.

The DS database contains the following disk files:

- A database file (extension .db)
- A before-image file (extension .bi)
- A database log file (extension .lg)

For example, a database called mfgds includes: mfgds.db, mfgds.bi, and mfgds.lg. Be sure to include all of the database files whenever you move, back up, or restore a database.

## Decision Support Architecture

The DS engine and database are deployed on a UNIX server and the DS clients can be deployed on Windows 98, NT, ME, XP, 2000 and UNIX machines.

The system supports Progress versions 9.1D+. You can implement both character user interface (CHUI) and graphical user interface (GUI) clients in the same DS environment.

DS supports GUI client deployment using the Progress AppServer. The AppServer lets client applications request server processing, reducing the number of records carried over the network. This results in dramatic performance benefits across both local-area networks (LANs) and wide-area networks (WANs). Operations that require intensive processing—such as shuffles and filters—also perform faster when using the Progress AppServer.

The DS architecture includes a *DS Services* layer that lets DS GUI clients operate both with and without the AppServer. The DS Services layer is installed on both the DS client and server to enable both client side (local) and server side (AppServer) processing.

- When the AppServer is present, the DS GUI client uses the DS Services layer on the server to access the AppServer and perform processing on the server.
- When the AppServer is not present, the DS GUI client uses the DS Services layer on the client to access the DS database directly.

Figure 1.1 illustrates how data moves from the DS database to the DS GUI client via the DS Services layer both with and without the AppServer present.

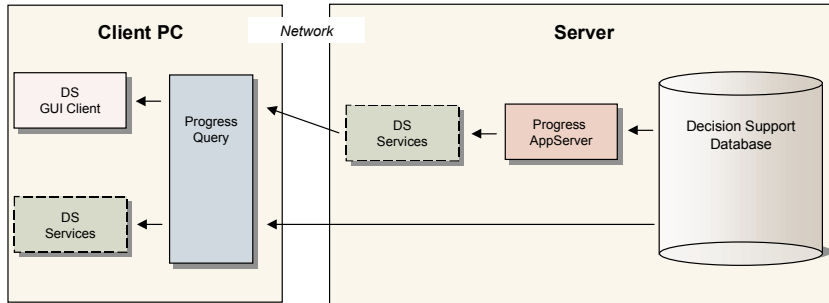


**Fig. 1.1**  
DS Services Layer  
Architecture

**Note** The DS Services layer is only used by GUI clients. The DS CHUI client does not use DS Services.

## Deploying Decision Support

When deploying DS in your environment, you should consider the following issues:

- Whether to install the DS engine and database on the MFG/PRO server
- Whether to implement the AppServer

### Deploying the DS Engine and Database

Depending on your network infrastructure, the number of Progress licenses, and expected user loads, you may want to deploy the DS engine and database on the same or on a different server than the MFG/PRO databases.

#### Single Server Installation

Installing the DS engine and database on the same server as the MFG/PRO databases offers the following advantages:

- Quicker updates. Because the MFG/PRO databases from which the DS database gets its data are on the same machine, no records are transmitted over the network making updates substantially faster.

- Reduced Progress license requirements. Because DS is a module of MFG/PRO, you can use the same Progress licenses for both MFG/PRO and DS.

A single server installation is recommended for most environments. However, when multiple DS and MFG/PRO sessions are run simultaneously against a single server, system performance can suffer for both applications. If a heavy DS user load is expected, you may want to consider a multiple server installation.

### Multiple Server Installation

Installing the DS engine and database on a separate server from the MFG/PRO databases offers the following advantages:

- Separate resources for each application. DS and MFG/PRO users do not share a single server and will not affect each other.
- Separate reporting and operational systems. Because of administration and security concerns, you may want keep the reporting system (DS) separate from the operational system (MFG/PRO).

A multiple server installation requires a better network infrastructure since the DS update process must move numerous MFG/PRO database records across the network. Also, extra Progress licenses are required for the DS engine and database server.

### Deploying the Progress AppServer

Depending on your Progress version and whether you are implementing DS GUI clients, you may want to implement DS with or without the Progress AppServer.

#### DS Without the AppServer

If you are not implementing GUI DS clients, install and configure DS without the Progress AppServer.

**Note** If you are implementing GUI DS clients, QAD recommends configuring DS using the Progress AppServer to improve GUI client performance.

## DS with the AppServer

QAD recommends configuring DS using the Progress AppServer to optimize performance for DS GUI clients running over both LANs and WANs. Your environment must use Progress Version 9.1B or higher to implement the AppServer.

### Installing the AppServer

To achieve optimum performance for DS GUI clients in an AppServer environment, you must install the AppServer on the same machine as the DS engine and database. Having the DS database and AppServer on the same machine reduces the number of records moving across the network.

### AppServer Licensing

DS does not require that you have an equal number of AppServer and DataServer licenses. For example, you can combine a five-user AppServer license with a 32-user DataServer license.

DS lets you manage the users and hierarchies that can use AppServer connections to provide enhanced performance. For example, you can configure GUI clients accessing the DS server over a WAN to use AppServer connections. Similarly, access to hierarchies with large amounts of data can be configured to use AppServer connections.

To configure AppServer connections for users and hierarchies, use the DS engine application. For detailed instructions, see the System Administration section of the Decision Support Engine chapter in *External Interface Guide: Decision Support*

### Implementing the AppServer

The following list is a summary of the tasks required to configure DS to use the AppServer. Instructions to complete most of these tasks are included in this guide. However, the last two tasks are performed in the DS engine application and are explained in *External Interface Guide: Decision Support*.

- Install the AppServer on the machine where you will install the DS engine. To install the AppServer, follow the installation instructions provided by Progress.

- Install the DS engine. During the installation, take note of the service name you specify for the Progress AppServer. The default is `dsappserv`.
- Register the WAN product in the DS engine registration screen.
- Modify the `services` file on the DS engine server and DS clients to include the AppServer service name.
- Start the DS AppServer service on the DS engine server.
- Install the DS clients and configure the GUI client WAN options in the DS client Options menu.
- In a DS engine session, specify the DS clients for which you want to enable AppServer connections. For complete instructions, see *External Interface Guide: Decision Support*.
- In a DS engine session, specify the hierarchies for which you want to enable AppServer connections. For complete instructions, see *External Interface Guide: Decision Support*.

## Preliminary Setup

Use this section to prepare for the DS installation.

### Creating the Installation User

Complete these steps to create the user under which the DS installation runs.

To install the DS software, you must create a group called `qad` and a user called `mfg` on your database server. The DS installation and maintenance programs store pertinent information under this user's home directory. This strategy enables QAD scripts to find data about installed products automatically and reliably. Also, you can maintain your system without having to log on as the root user ID.

- 1 Start your UNIX system administration utility.

**Important** Use the utilities provided with your UNIX system since they typically handle a shadow password file.

**2** Create a group called `qad`.

- a** This group does not require a specific group ID (gid). If possible, try to use gid 65535 because this is the gid of the files on QAD CD-ROMs.
- b** To verify that the group has been created successfully, type the following command at the system prompt:

```
grep ^qad /etc/group
```

- c** The output should resemble the following but may vary depending on your system.

```
qad: :65535:
```

**3** Create a user called `mfg`.

- a** If possible, specify user ID 65535 because this is the user ID of the files on QAD CD-ROMs.
- b** Assign the Korn login shell to this user. All of the scripts delivered on a QAD CD-ROM use Korn shell syntax.
- c** Use any standard file system location for the user; it is not important where this user is created. However, make sure the `$HOME` environment variable is set, because the scripts and programs that access this user directory reference this variable.
- d** Assign the standard umask of 022 to maintain permissions and security.
- e** To verify that the user was created with the proper values, type the following command at your system prompt:

```
grep ^mfg /etc/passwd
```

- f** The output should resemble the following but may vary depending on your system.

```
mfg:*:65535:65535:login:,,,:/home/mfg:/user/bin/ksh
```

- 4 Create a directory called `cfg` under the home directory of user `mfg`. This directory is *mandatory* for storing important installation and configuration information. The directory must have read, write, and execute permissions (`rxwx`) for the owner group and others.
  - a Log on as user `mfg`.
  - b To verify that the directory has been created successfully, type the following command at the system prompt:
 

```
ls -ld $HOME/cfg
```
  - c The output should resemble the following but may vary depending on your system:
 

```
drwxrwxrwx 7 mfg qad 1024 Jun 18 11:03 cfg
```
- 5 Now that the user and group have been created, here are some optional but useful things that you can add to the user's profile (`.profile`).

| Profile Setting                               | Description                                                                      |
|-----------------------------------------------|----------------------------------------------------------------------------------|
| <code>PROPATH=\${PROPATH:-YourPROPATH}</code> | Sets a default <code>PROPATH</code> .                                            |
| <code>DLC=\${DLC:-YourProgressDir}</code>     | Sets a default Progress directory.                                               |
| <code>PATH=\$PATH:\$DLC/bin</code>            | Adds the default Progress / <code>bin</code> subdirectory to the execution path. |

- 6 Set the terminal type to a Progress-supported terminal such as `vt100`.

**Important** During the installation, you will need to log on as the super-user (also known as `root`) to mount the CD-ROMs, then log on again as `mfg` to execute the DS installation scripts.

## Verifying System Prerequisites

Complete these steps to verify the prerequisite information for you installation:

- 1 If you are planning to use the Progress AppServer, install it using the Progress documentation.
- 2 Determine the following information:
  - a DS engine and client installation directories. Be sure you have full read, write, and execute permissions for these directories.
  - b The location of the Progress installation directory.
- 3 Locate the registration codes for the DS engine and, if necessary, Progress AppServer (WAN) products. The DS registration codes are shipped with your product package.
- 4 Make sure the server for a main MFG/PRO database—such as production, training, or demonstration—is started. The DS installation scripts use an MFG/PRO main database to compile the DS application code.

**Important** During the installation, be sure to specify this database when prompted for an MFG/PRO database.



The background of the page is a grayscale image of several interlocking gears. The gears are of different sizes and are positioned in a way that creates a sense of depth and mechanical complexity. The lighting is soft, highlighting the teeth of the gears.

## Chapter 2

# DS Engine Installation for Progress

This chapter contains DS engine installation instructions for Progress database environments.

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*Monitor the Engine Install Script*    **25**

*Change the Services File*    **29**

## Mount the Engine CD-ROM

Use these instructions to mount the DS engine CD-ROM:

- 1 Log on as the root user ID.
- 2 Make a CD-ROM directory if it does not already exist. These instructions refer to this directory as `/cdrom`.
- 3 Insert the Decision Support Engine CD-ROM into the CD-ROM drive.
- 4 Mount the CD-ROM. The mount command differs from system to system. The following are the commands for mounting a CD-ROM on two common systems.

| Hardware   | Mount Command                                                                                                                                                                                 |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sun        | <code>volcheck cdrom</code>                                                                                                                                                                   |
| HP         | <code>-F cdfs -r /dev/dsk/YourCDROMDevice<br/>/YourCDROMDrive</code>                                                                                                                          |
| All others | Refer to your hardware system documentation or vendor for requirements to mount a CD-ROM in ISO-9000 format. You may be able to type <code>man mount</code> to determine the correct command. |

## Run the Engine Install Script

Use these instructions to run the DS engine installation script.

**Note** Some of the installation screens illustrated in the chapter reference an older version of DS. The installation script has not changed and the screens and prompts apply to Version 3.3 of DS.

- 1 Log on as user `mfg`.
- 2 Start the installation script from the `cdrom` directory.  
`./install`
- 3 Enter the directory where you want to install the DS engine.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>           qqqqqqqqqq      aaaa      dddddddddd         qqqqqqqqqqqqqqqq  aaaaaaaa  dddddddddd         qq      qq      aaa  aaa      ddd      ddd         qq      qq      aaa  aaa      ddd      ddd         qq      qq      aaa  aaa      ddd      ddd         qq      qq      aaaaaaaaaaaaaa  ddd      ddd         qq      qq      aaaaaaaaaaaaaaaa  ddd      ddd         qqqqqqqqqqqqqqqq  aaaa      aaaa  dddddddddd         qqqqqqqqqqqqqqqq  aaaa      aaaa  dddddddd           qq </pre> | <p>QAD Decision Support Engine Version 3.2C01 Installer</p> <p>Enter the full path to the directory where you want the product installed [default = /qad/mfgds] :</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- 4 Enter the directory containing your Progress database server software.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <pre>           qqqqqqqqqq      aaaa      dddddddddd         qqqqqqqqqqqqqqqq  aaaaaaaa  dddddddddd         qq      qq      aaa  aaa      ddd      ddd         qq      qq      aaa  aaa      ddd      ddd         qq      qq      aaa  aaa      ddd      ddd         qq      qq      aaaaaaaaaaaaaa  ddd      ddd         qq      qq      aaaaaaaaaaaaaaaa  ddd      ddd         qqqqqqqqqqqqqqqq  aaaa      aaaa  dddddddddd         qqqqqqqqqqqqqqqq  aaaa      aaaa  dddddddd           qq </pre> | <p>QAD Decision Support Engine Version 3.2C01 Installer</p> <p>Enter Progress installation directory [default = /usr/dlc]:</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|

- 5 When prompted, confirm the version of your Progress software.
- 6 Enter the directory where your MFG/PRO database servers are located.

```

      qqqqqqqqqq      aaaa      dddddddd
      qqqqqqqqqqqqqq  aaaaaaa  dddddddddd
      qq      qq      aa      aa      dd      dd
      qq      qq      aa      aa      dd      dd
      qq      qq      aa      aa      dd      dd
      qq      qq      aaaaaaaaaa  dd      dd
      qq      qq      aaaaaaaaaa  dd      dd
      qqqqqqqqqqqqqq  aaaa      aaaa  dddddddddd
      qqqqqqqqqqqqqq  aaaa      aaaa  dddddddd
      qq
    
```

QAD Decision Support Engine Version 3.2C01 Installer

Enter MFG/PRO installation directory  
[default = ]:

- 7 Enter the full path to the directory containing the MFG/PRO source code. Depending on whether you purchased unencrypted source code, this can either be the `xrc` or `src` subdirectory.
  - In MFG/PRO eB, code is located below the MFG/PRO language code directory, below the MFG/PRO database server installation directory.
  - In MFG/PRO eB2, the `xrc` or `src` directory is directly below the MFG/PRO database server installation directory.

```

      qqqqqqqqqq      aaaa      dddddddd
      qqqqqqqqqqqqqq  aaaaaaa  dddddddddd
      qq      qq      aa      aa      dd      dd
      qq      qq      aa      aa      dd      dd
      qq      qq      aa      aa      dd      dd
      qq      qq      aaaaaaaaaa  dd      dd
      qq      qq      aaaaaaaaaa  dd      dd
      qqqqqqqqqqqqqq  aaaa      aaaa  dddddddddd
      qqqqqqqqqqqqqq  aaaa      aaaa  dddddddd
      qq
    
```

QAD Decision Support Engine Version 3.2C01 Installer

Enter MFG/PRO encrypted source directory (xrc)  
[default = ]: █

- 8 Enter the path to and name of an MFG/PRO main database (production, demonstration, training, and so on).

**Important** A database server must be started for the database you specify. If a server is not running, the DS engine code will not compile correctly.

```

      qq qq qq qq qq      aaaa      dddddddddd
      qq qq qq qq qq qq qq qq      aaaaaaaa      dddddddddd
      qq qq      qq qq      aaa      aaa      ddd      ddd
      qq qq      qq qq      aaa      aaa      ddd      ddd
      qq qq      qq qq      aaa      aaa      ddd      ddd
      qq qq      qq qq      aaaaaaaaaaaaaa      ddd      ddd
      qq qq      qq qq      aaaaaaaaaaaaaa      ddd      ddd
      qq qq qq qq qq qq qq qq      aaaa      aaaa      dddddddddd
      qq qq qq qq qq qq qq qq      aaaa      aaaa      dddddddd
      qq qq

```

QAD Decision Support Engine Version 3.2C01 Installer

Enter the MFGPRO physical database name  
[default = mfgempty]:

- 9 Enter the name you want to use for your initial DS database. These instructions refer to this database using the default database name, mfgds.

```

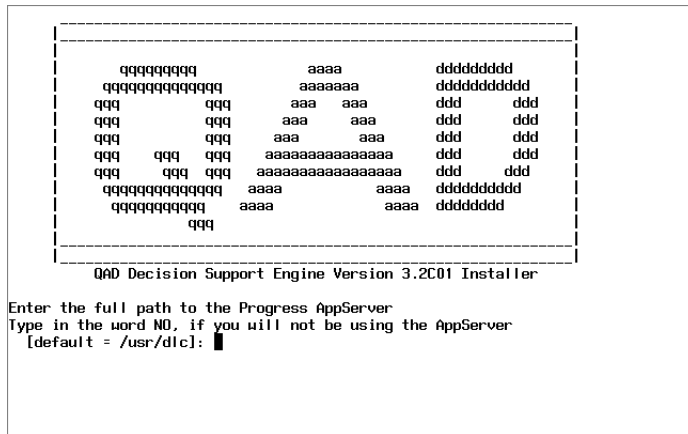
      qq qq qq qq qq      aaaa      dddddddddd
      qq qq qq qq qq qq qq qq      aaaaaaaa      dddddddddd
      qq qq      qq qq      aaa      aaa      ddd      ddd
      qq qq      qq qq      aaa      aaa      ddd      ddd
      qq qq      qq qq      aaa      aaa      ddd      ddd
      qq qq      qq qq      aaaaaaaaaaaaaa      ddd      ddd
      qq qq      qq qq      aaaaaaaaaaaaaa      ddd      ddd
      qq qq qq qq qq qq qq qq      aaaa      aaaa      dddddddddd
      qq qq qq qq qq qq qq qq      aaaa      aaaa      dddddddd
      qq qq

```

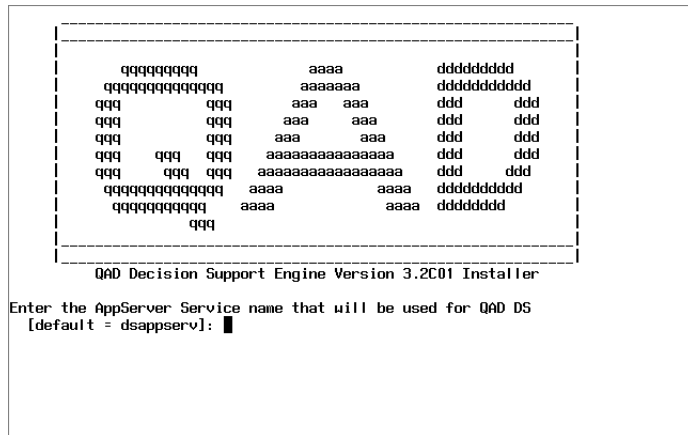
QAD Decision Support Engine Version 3.2C01 Installer

Enter the Desired mfgds physical database name  
[default = mfgds]:

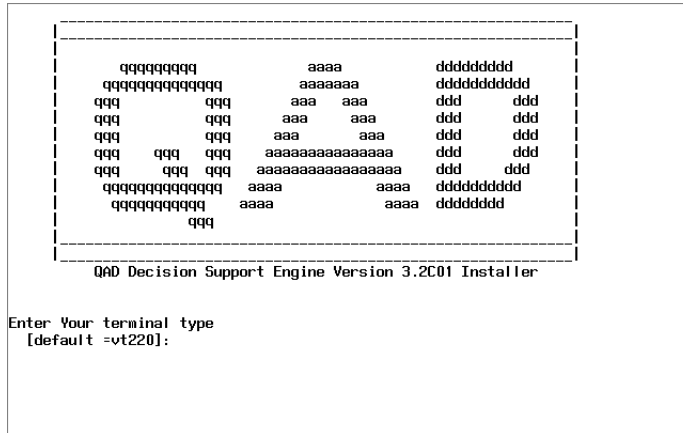
- 10** If you are implementing the Progress AppServer in your DS environment, enter the full path to the AppServer. If you are not implementing the AppServer, enter No at this prompt.



- 11 If you are implementing the AppServer, enter the service name you want to use for the DS AppServer. These instructions refer to this service using the default, `dsappserv`. If you are not implementing the AppServer, skip this step.



- 12** Enter your terminal type or accept the default.



- 13** At the confirmation screen, verify that the variables for your installation environment are set correctly. Choose Yes to begin the installation, or choose No to return to the first installation prompt and reenter any incorrect information.

## Monitor the Engine Install Script

Use these instructions to monitor the DS engine installation script and perform any additional steps.

To install the DS engine and build the DS database, the installation script completes the following tasks:

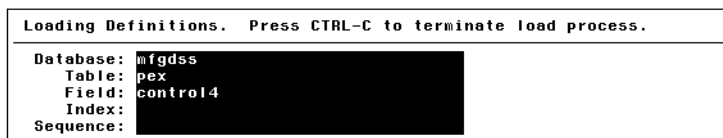
- 1** Determines available disk space. If less than 20 MB, the program exits.
- 2** Displays the following prompt:  
Expand media now?  
This is the first point where modifications are made to your disks.  
Choose Yes to continue or No to abort the installation.
- 3** Modifies the PATH, PROPATH, and DLC environment variables.
- 4** Creates the initial DS database (mf\_gds).

**5** Installs the `dsemt` schema.

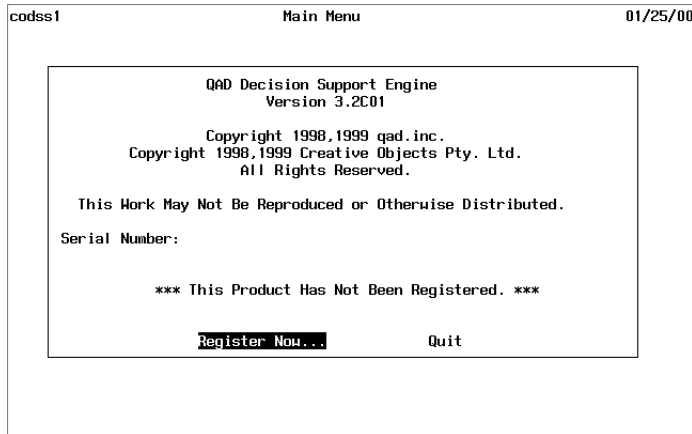
If you do not have a full Progress license, the script stops at this point and lets you load the DS schema using the Progress Data Dictionary. In this case, use the following instructions to load the DS schema:

- a** In the Progress Data Dictionary, choose the Admin menu and select Load Data Definitions.
- b** In the Load Data Definitions screen, change the default `.df` file to `mfgds.df`. Figure 2.1 shows the DS schema being loaded.

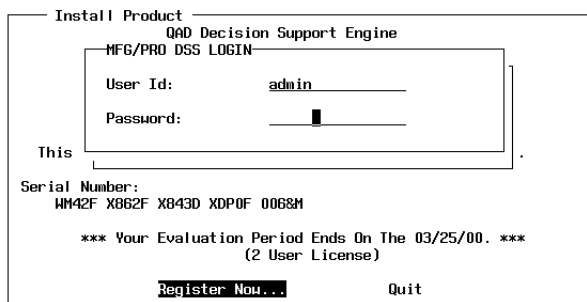
**Fig. 2.1**  
Loading DS  
Schema



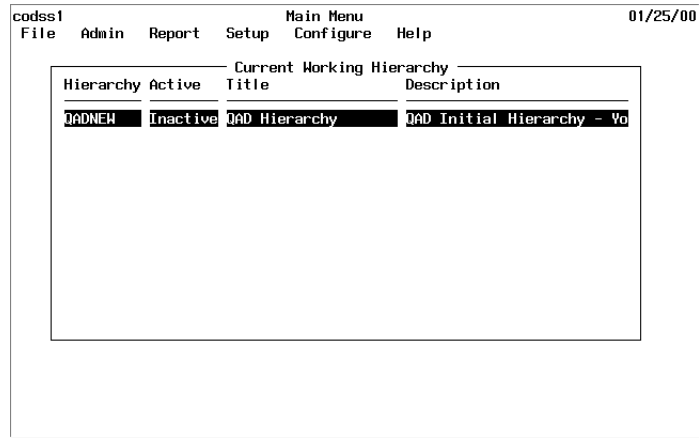
- c** When the load is complete, exit the dictionary and quit the Progress editor. The install script resumes where it left off.
- 6** Compiles the DS engine application code source.
- If errors occur while the DS engine code is compiling, an error dialog displays. Click OK to continue with the installation. When the installation competes, check the `progerr` file in the `build` subdirectory below the DS engine installation directory to resolve the compile errors.
- 7** Moves the resulting compiled code to the `object` and `services/object` subdirectories below the DS engine installation directory.
- 8** Uses the `mfgds` database to create `dsemt`.
- 9** Loads the DS data files.
- 10** When prompted, register DS and, if applicable, the AppServer products (WAN) by choosing the Register Now button and entering the DS product serial numbers. The serial numbers appear on a separate sheet of paper included in the shrink-wrapped package containing the DS software.



- 11 An initialization screen displays, confirming the installation. Choose OK.
- 12 In the MFG/PRO DSS LOGIN frame, enter admin in the User ID and Password fields.



- 13 Once you accessed the DS engine main menu, press Enter to access the File menu and choose Exit. The installation script creates a default DS hierarchy called QADNEW.



Depending on whether you implemented the AppServer, the installation process creates the following DS scripts.

| Script                   | Description                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>Apsstart.ds</code> | If you implemented the Progress AppServer in your DS environment, this script starts the DS AppServer.<br><b>Note:</b> Start the AppServer before you start the DS database server. |
| <code>Apsstop.ds</code>  | If you implemented the Progress AppServer in your DS environment, this script stops the DS AppServer.                                                                               |
| <code>start.ds</code>    | Starts a DS database server process that multiple users can access.                                                                                                                 |
| <code>stop.ds</code>     | Stops the DS database server process.                                                                                                                                               |
| <code>client.ds</code>   | Launches a stand-alone DS engine session against the database server process started by the <code>start.ds</code> script.                                                           |

## Change the Services File

Use the following instructions to modify the `services` file to include entries for your DS servers.

If you implemented the AppServer, complete steps 1 and 2. If you did not, complete only step 1.

**Note** The following socket numbers are examples only and may not be available on your system. Be sure to assign available sockets to your DS services.

- 1 The UNIX installation process creates a service name, `ds-srv`, for the DS database. Edit the `services` file located in the `etc` directory to include an entry for this service. Failing to modify the `services` file prevents the `start.ds` script from working.

Use the following service entry as an example:

```
ds-srv 2500/tcp
```

**Important** The `services` file on the DS client machines must also contain an entry for this service.

- 2 The UNIX installation process creates a service name, `dsappserv`, for the DS AppServer. Edit the `services` file located in the `etc` directory to include an entry for this service. Failing to modify the `services` file prevents the `apsstart.ds` script from working.

Use the following service entry as an example:

```
dsappserv 2501/tcp
```



# DS Client Installation

This chapter contains installation instructions for both graphical user interface (GUI) and character user interface (CHUI) DS clients.

*Installing CHUI Clients*    **32**

*Installing GUI Clients*    **38**

*Performing a Network Installation*    **43**

*Configuring GUI Clients for the AppServer (Optional)*    **48**

*Running Decision Support from MFG/PRO*    **49**

## Installing CHUI Clients

Use this section to install the DS CHUI client on UNIX machines. This section contains the following tasks.

- Mount the Client CD-ROM on page 32
- Run the Client Install Script on page 33
- Monitor the Client Install Script on page 36
- Modify the Client PROPATH on page 37

**Note** Some of the installation screens illustrated in the chapter reference an older version of DS. The installation script has not changed and the screens and prompts apply to Version 3.3 of DS.

### Mount the Client CD-ROM

Use these instructions to mount the DS CHUI client CD-ROM:

- 1 Log on as the root user ID.
- 2 Make a CD-ROM directory if it does not already exist. These instructions refer to this directory as `/cdrom`.
- 3 Insert the Decision Support Client CD-ROM into the CD-ROM drive.
- 4 Mount the CD-ROM. The mount command differs from system to system. The following are the commands for mounting a CD-ROM on two common systems.

| Hardware   | Mount Command                                                                                                                                                                                 |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sun        | <code>volcheck cdrom</code>                                                                                                                                                                   |
| HP         | <code>-F cdfs -r /dev/dsk/YourCDROMDevice<br/>/YourCDROMDrive</code>                                                                                                                          |
| All others | Refer to your hardware system documentation or vendor for requirements to mount a CD-ROM in ISO-9000 format. You may be able to type <code>man mount</code> to determine the correct command. |

## Run the Client Install Script

Use these instructions to run the DS CHUI client installation script:

- 1 Log on as user `mfg`.
- 2 Start the installation script from the `cdrom` directory.  
`./install`
- 3 Enter the directory where you want to install the DS CHUI client.

```

          qqqqqqqqqq          aaaa          dddddddddd
        qqqqqqqqqqqqqqqqqq      aaaaaaaa      dddddddddd
      qq      qq      aa      aa      ddd      ddd
      qq      qq      aa      aa      ddd      ddd
      qq      qq      aa      aa      ddd      ddd
      qq      qq      aaaaaaaaaaaaaa      ddd      ddd
      qq      qq      aaaaaaaaaaaaaa      ddd      ddd
      qq      qq      aaaaa          aaaa      dddddddddd
      qq      qq      aaaa          aaaa      dddddd
      qq      qq

```

QAD Decision Support Client Version 3.2C01 Installation Script ....

Enter the full path to the directory where you want the product installed [default = /dscli] :

**Important** QAD recommends that you install the DS engine, client, and libraries in different directories.

- 4 Enter the directory where your Progress software is located.

```

          qqqqqqqqqq          aaaa          dddddddddd
        qqqqqqqqqqqqqqqqqq      aaaaaaaa      dddddddddd
      qq      qq      aa      aa      ddd      ddd
      qq      qq      aa      aa      ddd      ddd
      qq      qq      aa      aa      ddd      ddd
      qq      qq      aaaaaaaaaaaaaa      ddd      ddd
      qq      qq      aaaaaaaaaaaaaa      ddd      ddd
      qq      qq      aaaaa          aaaa      dddddddddd
      qq      qq      aaaa          aaaa      dddddd
      qq      qq

```

QAD Decision Support Client Version 3.2C01 Installation Script ....

Enter Progress installation directory  
 [default = /usr/dlc]: █

- 5 When prompted, confirm the version of your Progress software.
- 6 Enter the directory where your MFG/PRO database servers are located.

```

          qqqqqqqqqq          aaaa          dddddddddd
        qqqqqqqqqqqqqqqqqq    aaaaaaaa    dddddddddd
      qqqq      qqqq      aaa  aaa    ddd    ddd
      qqqq      qqqq      aaa  aaa    ddd    ddd
      qqqq      qqqq      aaa  aaa    ddd    ddd
      qqqq      qqqq      aaaaaaaaaaaaaaaa    ddd    ddd
      qqqq      qqqq      aaaaaaaaaaaaaaaa    ddd    ddd
      qqqqqqqqqqqqqqqqqq    aaaa          aaaa    dddddddddd
      qqqqqqqqqqqqqqqqqq    aaaa          aaaa    dddddddd
          qqqq

```

QAD Decision Support Client Version 3.2C01 Installation Script ....

Enter MFG/PRO installation directory  
[default = ]: █

- 7 Enter the full path to the directory containing the MFG/PRO source code. Depending on whether you purchased unencrypted source code, this can either be the `xrc` or `src` subdirectory.
  - In MFG/PRO eB, code is located below the MFG/PRO language code directory, below the MFG/PRO database server installation directory.
  - In MFG/PRO eB2, the `xrc` or `src` directory is directly below the MFG/PRO database server installation directory.

```

          qqqqqqqqqq          aaaa          dddddddddd
        qqqqqqqqqqqqqqqqqq    aaaaaaaa    dddddddddd
      qqqq      qqqq      aaa  aaa    ddd    ddd
      qqqq      qqqq      aaa  aaa    ddd    ddd
      qqqq      qqqq      aaa  aaa    ddd    ddd
      qqqq      qqqq      aaaaaaaaaaaaaaaa    ddd    ddd
      qqqq      qqqq      aaaaaaaaaaaaaaaa    ddd    ddd
      qqqqqqqqqqqqqqqqqq    aaaa          aaaa    dddddddddd
      qqqqqqqqqqqqqqqqqq    aaaa          aaaa    dddddddd
          qqqq

```

QAD Decision Support Client Version 3.2C01 Installation Script ....

Enter MFG/PRO encrypted source directory (xrc)  
[default = ]: █

- 8** Enter the path to and name of an MFG/PRO main database (production, demonstration, training, and so on).

**Important** A database server must be started for the database you specify. If a server is not running, the DS client code will not compile correctly.

```

      qqqqqqqqqq      aaaa      ddddddddd
      qqqqqqqqqqqqqq  aaaaaaa  dddddddddddd
      qq      qq      aaa   aa   ddd      ddd
      qq      qq      aaa   aa   ddd      ddd
      qq      qq      aaa   aa   ddd      ddd
      qq      qq      aaaaaaaaaaaaaaa  ddd      ddd
      qq      qq      aaaaaaaaaaaaaaa  ddd      ddd
      qqqqqqqqqqqqqq  aaaa      aaaa  ddddddddd
      qqqqqqqqqqqq  aaaa      aaaa  dddddddd
      qq

```

QAD Decision Support Client Version 3.2C01 Installation Script ....

Enter the MFGPRO physical database name  
[default =mfgempty]: █

- 9** Enter the name of your DS database. These instructions use the default database, `mfgds.db`.

**Important** The DS database must be started for the DS client code to compile correctly.

```

      qqqqqqqqqq      aaaa      dddddddddd
      qqqqqqqqqqqqqq      aaaaaaaa      dddddddddd
      qq      qq      aaa      aa      ddd      ddd
      qq      qq      aaa      aa      ddd      ddd
      qq      qq      aa      aa      ddd      ddd
      qq      qq      qq      aaaaaaaaaaaaaaaaaa      ddd      ddd
      qq      qq      qq      aaaaaaaaaaaaaaaaaa      ddd      ddd
      qqqqqqqqqqqqqq      aaaa      aa      dddddddddd
      qqqqqqqqqqqq      aaaa      aa      dddddddd
      qq

```

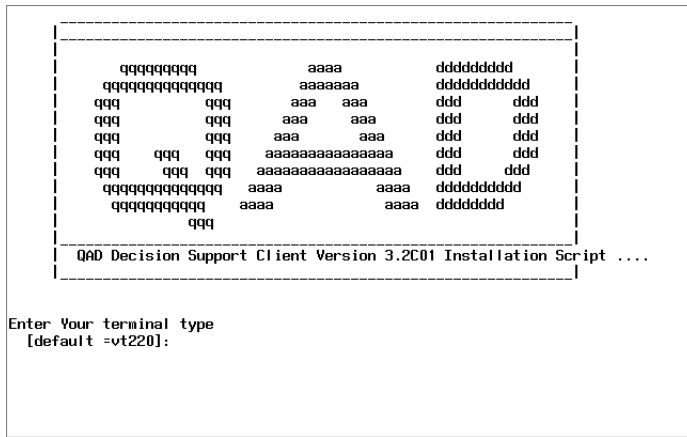
QAD Decision Support Client Version 3.2C01 Installation Script ....

Enter the name of your DS database  
[default = mfgds]: █

- 10** Enter the full path to your DS database.

Decision Support Installation Guide — UNIX

- 11



- 12

## Monitor the Client Install Script

Use these instructions to monitor the DS CHUI client installation script and perform any additional steps the script may require.

During the installation, the script completes the following tasks:

- 1

## Expand media now?

This is the first point where modifications are made to your disks.  
Enter Yes to continue or No to abort.

- 3

**Important** You must make additional changes to the PROPATH on each DS client. See “Modify the Client PROPATH” on page 37.

#### 4 Compiles the DS client code.

If errors occur while the DS client code is compiling, an error dialog displays. Click OK to continue with the installation. When the installation completes, check the `dscli.log` file in the `log` subdirectory below the DS client installation directory to resolve the compile errors.

#### 5 Moves the resulting compiled code to the `object` and `services/object` directories.

#### 6 The installation process creates a client application startup script, `client.dscli`. The client startup script launches a stand-alone DS client session against the database server process started by the `start.ds` script.

## Modify the Client PROPATH

Use these instructions to modify the PROPATH on each DS client machine. You must modify the PROPATH whether you are running DS as a stand-alone application or from within the MFG/PRO menus.

If you plan to run DS programs from the MFG/PRO menu, you must also modify the PROPATH in the MFG/PRO client startup scripts and icons. For instructions, see “Running Decision Support from MFG/PRO” on page 49.

- 1 Ensure that the first entry is the user’s current working directory (`.`).
- 2 Add the following directories to the PROPATH for each DS client, where *home* is DS client installation directory.
  - Current Directory (`.`)
  - `home/services/object`
  - `home/services/runtime`
  - `home/object`
  - `home/runtime`
  - `home/libs`

For example:

```
PROPATH=.,home/services/object,home/services/runtime,
home/object,home/runtime,home/libs
```

## Installing GUI Clients

Use this section to install the DS GUI client on Windows machines. Basic installation consists of the following tasks:

- Preliminary Setup on page 39
- Run the Client Installation on page 39

Additional installation options are described in the following sections:

- Performing a Network Installation on page 38
- Configuring GUI Clients for the AppServer (Optional) on page 48

### Performing a Network Installation

To reduce the amount of time it takes to install multiple DS GUI clients, you can perform a network installation. A network installation consists of two basic steps:

- First, perform an initial DS GUI client installation on a file server or on a client PC that you can access from the other PCs you want to set up. QAD recommends using an existing Windows NT file server in your network.

Use the instructions in this section to perform the initial DS GUI client installation. During the initial installation, the DS GUI client code is compiled.

- Second, from each client PC, access the DS GUI client installation directory you created during the initial installation. Then, run the network installation program to download the DS GUI client code and files.

Use the instructions in “Performing a Network Installation” on page 43 to set up each DS GUI client.

**Important** Because the DS GUI client code is compiled using the Progress software on the PC where you perform the initial client installation, subsequent DS GUI client PCs must have the same version of Progress. If the versions of Progress do not match, the DS GUI client will not run. Be sure to select a machine with the appropriate Progress version installed as the first DS GUI client.

## Preliminary Setup

Before beginning client installation, complete the following:

- Verify that the client machine `services` file includes the DS database and, if applicable, AppServer service names and socket numbers.
- Check that Progress Query 9.1D or higher is installed on the client machine.
- Make sure the server for the DS database is started.

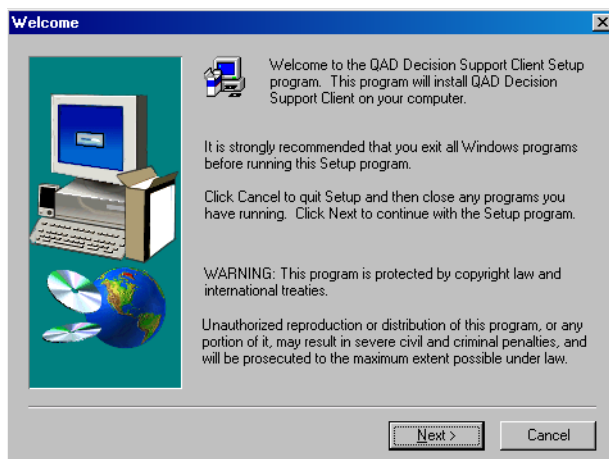
♦ See “Change the Services File” on page 29.

## Run the Client Installation

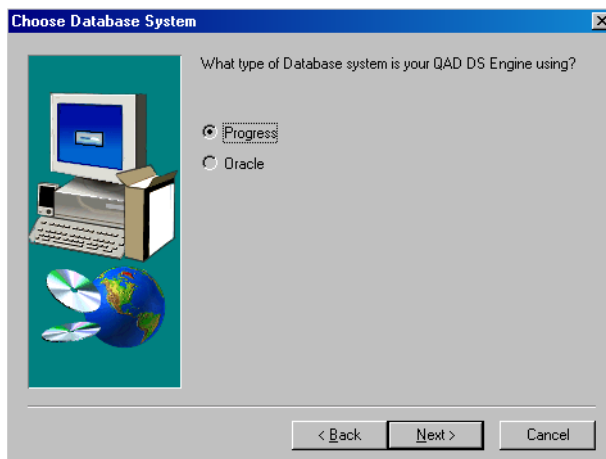
- 1 Insert the Decision Support Client CD-ROM in the CD-ROM drive.
- 2 Run the `setup.exe` program for the GUI client using the Windows Explorer or the Start button.

`DriveLetter:\setup.exe`

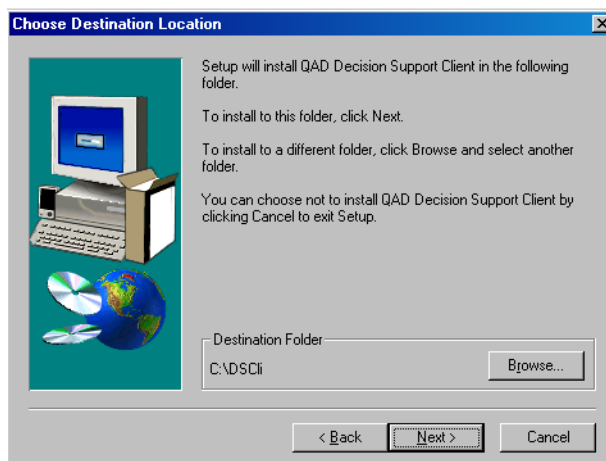
- 3 The following window advises you to quit all other applications before continuing the installation. Do so, then click Next to continue.



- 4 In the Choose Database System window, select Progress; then click Next to continue.

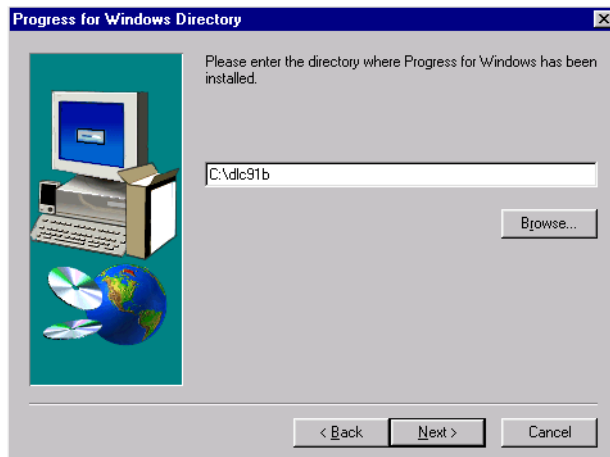


- 5 Specify the destination folder for the DS client files. Generally, this should be a new folder that the setup creates for the installation. You cannot use spaces in the folder name.

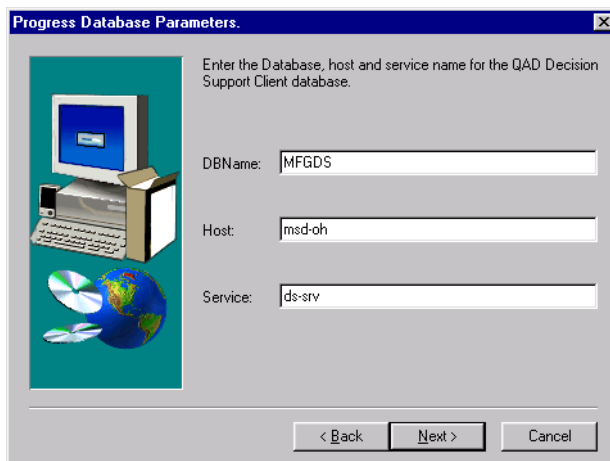


- 6 Specify the Progress directory containing the Progress Query product in the following window. You can use the Browse button to search for the directory.

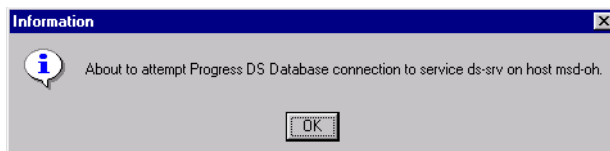
**Important** The Progress Query client must be installed locally on the client machine.



- 7 Enter the connection details for the DS database.

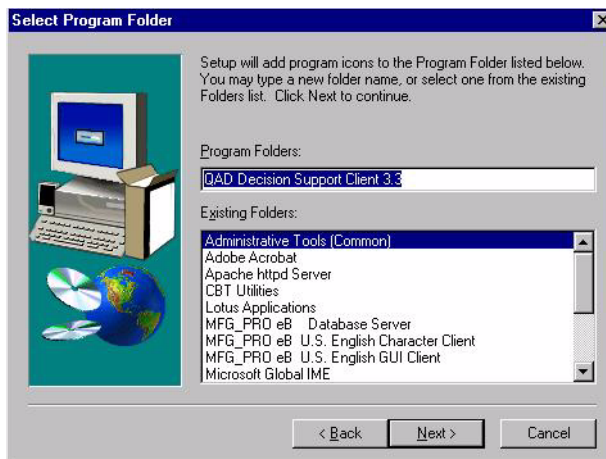


- 8 The following message may display. Click OK to continue.

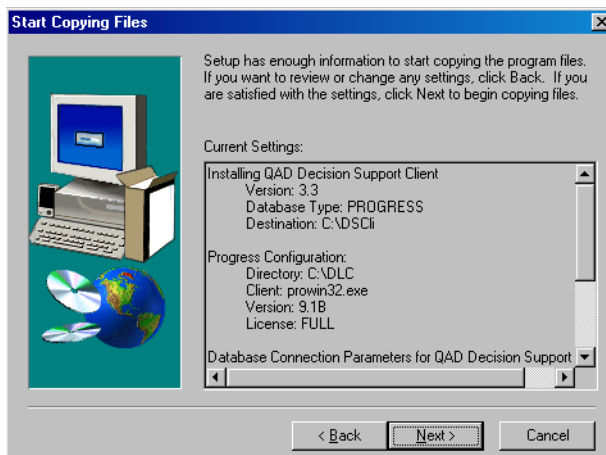


If the connection fails, correct the error before you continuing.

- 9 If the connection succeeds, enter the Windows program folder where you want the DS client icon stored.



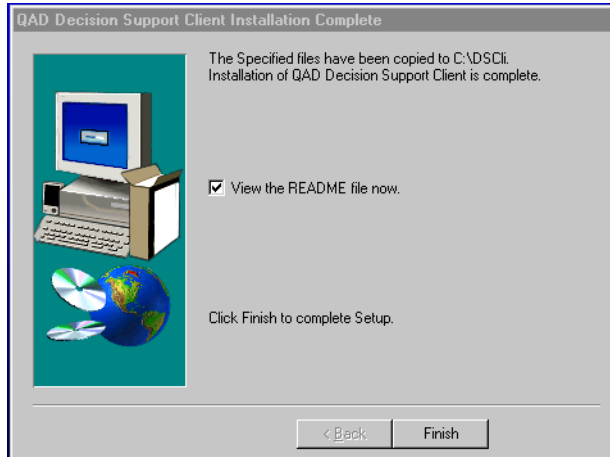
- 10 The next window displays the client setup environment, and prompts you to make last-minute changes. Click Back to make changes to previous screens. Click Next to begin the DS client installation.



The DS client installation script compiles the DS engine code and loads the default DS system data.

If errors occur while the DS client code is compiling, an error dialog displays. Click OK to continue with the installation. When the installation complete, check the `dsccli.log` file in the `log` subdirectory below the DS client installation directory to resolve the compile errors.

- 11 When the installation completes, the DS client is added to the list of Windows desktop applications. Click the View the README file now check box to launch release notes that list the changes between DS releases.



- 12 If problems occur during the installation, an error window displays. Review the error log `dssetup.log` located in your working directory. Correct any problems, delete the files created during your previous installation, and rerun the installation.  
To remove the installation, using the Windows Explorer or the Start menu, select Control Panel|Add/Remove Programs.
- 13 Start the DS client by double-clicking its icon in the Windows Start menu.

## Performing a Network Installation

During a Decision Support (DS) GUI client installation, the installation process builds and compiles the DS GUI client. This increases the time required to install the DS client. To avoid compiling the DS client code during each client installation, you can perform a network DS GUI client installation. A network installation consists of two basic steps:

- First, perform an initial DS GUI client installation on a file server or on a client PC that you can access from the other PCs you want to set up. QAD recommends using an existing Windows file server in your network.

Use the instructions in “Installing GUI Clients” on page 38 to perform the initial DS GUI client installation. The instructions in this section assume you have already completed the initial DS GUI client installation.

**Note** You can perform full GUI client installations on each client machine using the instructions in the appropriate section.

- Second, from each client PC, access the DS GUI client installation directory you created during the initial installation. Then, run the network installation program to download the DS GUI client code and files.

Use the following instructions to run the network installation program and set up each DS GUI client:

- 1 Perform the DS GUI Client installation on a PC that is accessible to all of the other PCs where you want to install the GUI client.

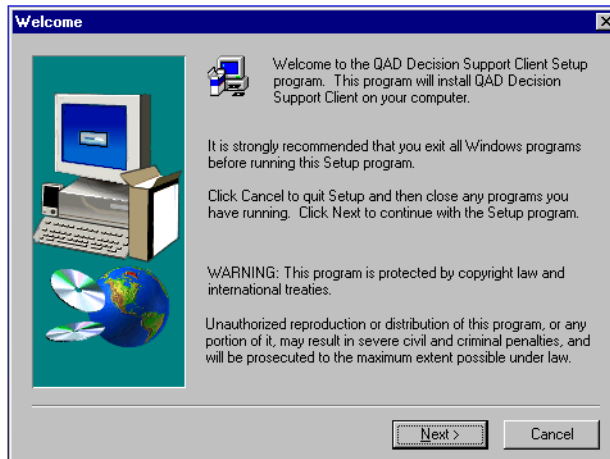
Make a note of the directory where you install the DS GUI client.

- 2 From a DS GUI client PC, access the directory where you installed the DS GUI client. For example, these instructions assume the client was installed in `C:\DSCLI` and that the other client PCs map this directory as `H:\DSCLI`.

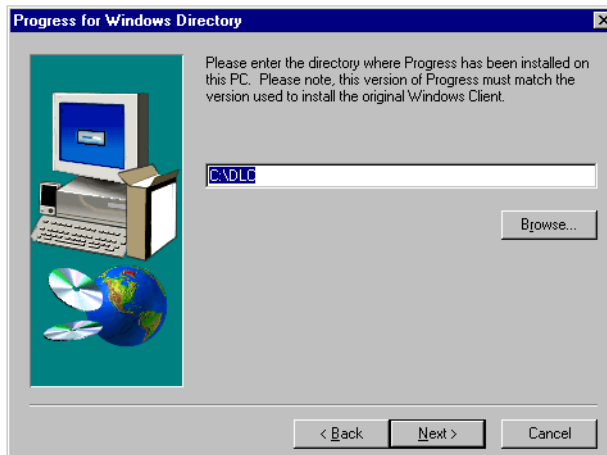
- 3 Run the `setup.exe` located in the `INSTALL` subdirectory. For example:

```
H:\DSCLI\INSTALL\SETUP.EXE
```

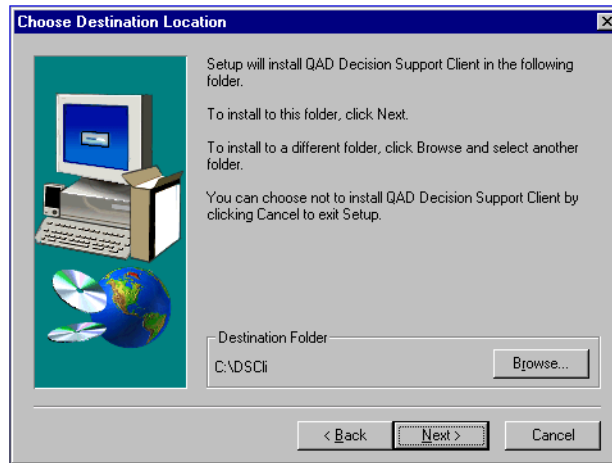
- 4 At the Welcome window, click Next.



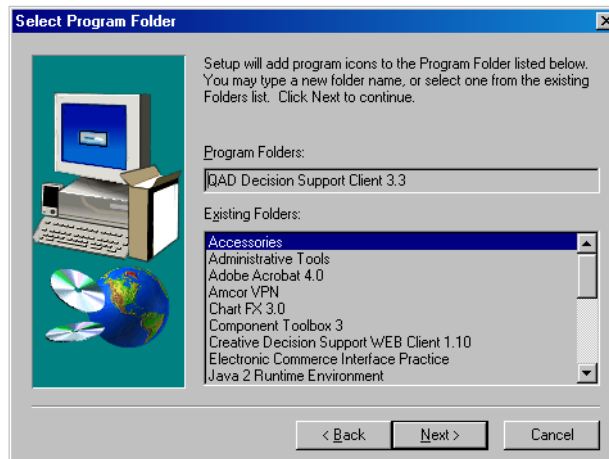
- 5 Enter the path to the local Progress installation directory. You can use the Browse button to select a directory. When ready, click Next.



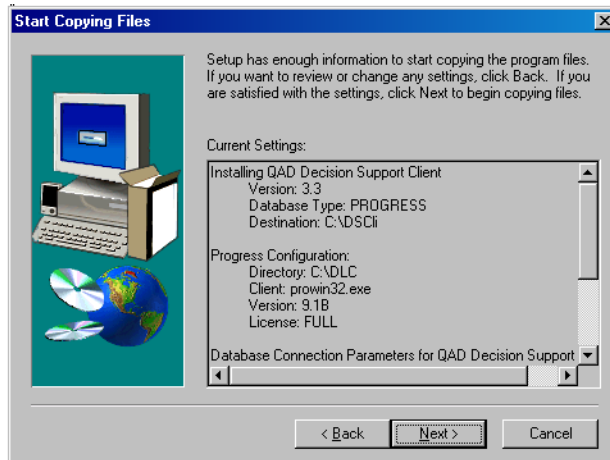
- 6 Specify the directory where you want to install the DS GUI client files and click Next.



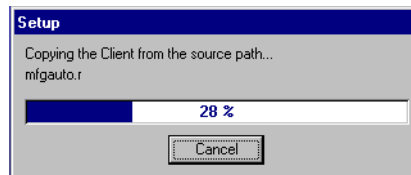
- 7 Specify the folder where you want the DS GUI client shortcuts created and click Next.



- 8 At the Start Copying Files window, verify that the installation information is correct. If the information is incorrect, click Back to make changes to your previous entries. If the information is correct, click Next.



As the files are copied, the following status window displays:



- 9 Click Finish to complete the DS GUI client installation.

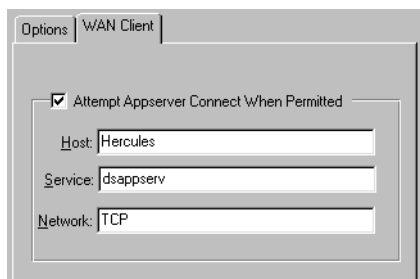


- 10 Repeat steps 2 through 9 to set up each DS GUI client.

## Configuring GUI Clients for the AppServer (Optional)

If you are implementing the AppServer, complete the following instructions to set up your DS GUI clients to access the DS AppServer:

- 1 Start the DS GUI client by double-clicking the client icon.
- 2 If you have not added any DS users, login using `admin` as the user ID and password.
- 3 Open Setup|Options and click the WAN Client tab.



**Note** If the WAN Client Tab is not active, you must register the WAN product. See step 10 on page 26.

- 4 Check the Attempt Appserver Connect When Permitted option.
- 5 In the Host field, enter the name of the machine where the DS AppServer service is running.
- 6 In the Service field enter the DS AppServer service name. The default name is `dsappserv`.
- 7 In the Network field, enter TCP.

## Running Decision Support from MFG/PRO

Use the instructions in the following sections to run DS from within MFG/PRO.

### Modify the MFG/PRO Server Startup Scripts

There are several methods of starting Progress database applications such as MFG/PRO. Which one you use determines what you must do to start the DS database when you start your MFG/PRO session. In general, you need the following information:

- Logical database name
- A connection mode
- A database type
- Location of the database
- Any connection parameters

The logical database name for your DS database is `mfgdss`. The database type is Progress, and the location of the database is in the `database` subdirectory below the DS engine installation directory.

The connection mode (single or multiuser) and the connection parameters depend on your installation and needs.

You can use QAD's MFG/UTIL program to add the DS database to your MFG/PRO startup parameters. Refer to your MFG/PRO installation guide for details on using MFG/UTIL.

## Add DS to MFG/PRO Menus

Adding DS to the MFG/PRO menus enables the DS report programs to run, and provides a home menu location for anchoring DS-generated reports. If you are completing this step after an installation, you must exit your initial DS session first.

- 1 Start MFG/PRO and run Menu System Maintenance (36.4.4).
- 2 Skip the language code field. Enter the menu number with periods between each menu level. Select a location that suits your intended use. If you have a blank line on the Main Menu (for instance, menu 0) or on a submenu (for example, the Sales Orders/Invoices menu 7), you can assign the DS menu there. Press Go.
- 3 Enter the program details and press Go when ready. Use the following table as a guide.

| Field           | Description                                                                                                                                                                                            |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sel             | This field is the menu number associated with DS.                                                                                                                                                      |
| Selection Label | This is the label name for this menu selection, such as DS Browser.                                                                                                                                    |
| Exec File       | This is the function to be executed when this menu selection is chosen. This may be the name of a Progress program (for example, <code>codssup.p</code> ), or it may be the menu number for a submenu. |

- 4 Repeat steps 2 and 3 for each DS user-level program. You can use the following example as a guide.

**Example** In the following tables, a DS submenu is added to the MFG/PRO Sales Orders/Invoices menu. Then the DS GUI Client (`codss.p`) and the DS Update (`codssup.p`) programs are added to the submenu.

- Add a new DS menu item to the Sales Orders/Invoices menu using Menu System Maintenance (36.4.4). Once you add the DS Menu entry, exit Menu System Maintenance.

| Field       | Value |
|-------------|-------|
| Language ID | us    |
| Menu        | 7     |
| Sel         | 10    |

| Field           | Value   |
|-----------------|---------|
| Selection Label | DS Menu |
| Exec File       | 7.10    |

- Add the DS GUI client program to the DS menu.

| Field           | Value         |
|-----------------|---------------|
| Language ID     | us            |
| Menu            | 7.10          |
| Sel             | 1             |
| Selection Label | DS GUI Client |
| Exec File       | codss.p       |

- Add the DS Update program to the DS menu.

| Field           | Value     |
|-----------------|-----------|
| Language ID     | us        |
| Menu            | 7.10      |
| Sel             | 2         |
| Selection Label | DS Update |
| Exec File       | codssup.p |

## Modify the MFG/PRO Client Startup Scripts and Icons

DS engine and DS client programs require different PROPATH values. Depending on the programs you are launching—DS engine programs, client programs, or both—the PROPATH in the MFG/PRO client startup scripts or icons must be modified.

Using the instructions appropriate for the type of client that will run DS programs, modify the MFG/PRO startup scripts or icons.

### MFG/PRO Windows Clients

- 1 Right-click the MFG/PRO client startup icon and select Properties.
- 2 In the Properties dialog, select the Shortcut tab.
- 3 In the Target field, locate the `-ini` parameter and record the name of and path to the MFG/PRO initialization file:
  - For MFG/PRO Windows GUI clients, the initialization file is `progress.svg` or `progress.vga` depending on the client's display.
  - For MFG/PRO Windows character clients, the initialization file is `progress.chr`.
- 4 Open the initialization file in a text editor and locate the `PROPATH` variable.
  - For Windows GUI clients, modify the `PROPATH` variable in the `[Startup]` section of the initialization file.
  - For Windows character clients, modify the `PROPATH` variable in the `[WinChar Startup]` section of the initialization file.
- 5 Add the directories listed in Table 3.1 to the existing `PROPATH`.  
*DSInstallDir* refers to the DS installation directory that contains the DS programs you want to launch. For example, if you are modifying the MFG/PRO startup icon to call DS client programs from the MFG/PRO menu, *DSInstallDir* is the DS client installation directory.

**Table 3.1**  
DS PROPATH  
Elements

#### PROPATH Elements Required to Run DS from the MFG/PRO Menu

- 
- Current working directory (.)
  - *DSInstallDir*\services\object
  - *DSInstallDir*\services\runtime
  - *DSInstallDir*\object
  - *DSInstallDir*\runtime
  - *DSInstallDir*\libs
  - *DSInstallDir*\climages (For DS client programs only)

The following example is for an MFG/PRO session from which DS engine programs are launched.

```
PROPATH=.,Existing MFG_PRO PROPATH,
        DSInstallDir\services\object,
        DSInstallDir\services\runtime,
        DSInstallDir\object,DSInstallDir\runtime,
        DSInstallDir\libs
```

The following example is for an MFG/PRO session from which DS client programs are launched.

```
PROPATH=.,Existing MFG_PRO PROPATH,
        DSInstallDir\services\object,
        DSInstallDir\services\runtime,
        DSInstallDir\object,DSInstallDir\runtime,
        DSInstallDir\libs,DSInstallDir\climages,
```

**6** Save your changes and close the text editor.

### MFG/PRO UNIX Character Clients

**1** Access the MFG/PRO database server directory and open the MFG/PRO client startup script you want to modify in a text editor.

```
cd /DBServerInstallDir/
vi client.Production
```

**2** Add the directories listed in Table 3.2 to the existing PROPATH.

*DSInstallDir* refers to the DS installation directory that contains the DS programs you want to launch. For example, if you are modifying the MFG/PRO startup icon to call DS client programs from the MFG/PRO menu, *DSInstallDir* is the DS client installation directory.

#### **PROPATH Elements Required to Run DS from the MFG/PRO Menu**

- Current working directory (.)
- *DSInstallDir*/services/object
- *DSInstallDir*/services/runtime
- *DSInstallDir*/object
- *DSInstallDir*/runtime
- *DSInstallDir*/libs
- *DSInstallDir*/climages (For DS client programs only)

**Table 3.2**  
DS PROPATH  
Elements

The following example is for an MFG/PRO session from which DS engine programs are launched.

```
PROPATH=.,Existing MFG_PRO PROPATH,
        DSInstallDir/services/object,
        DSInstallDir/services/runtime,
        DSInstallDir/object,DSInstallDir/runtime,
        DSInstallDir/libs
```

The following example is for an MFG/PRO session from which DS client programs are launched.

```
PROPATH=.,Existing MFG_PRO PROPATH,
        DSInstallDir/services/object,
        DSInstallDir/services/runtime,
        DSInstallDir/object,DSInstallDir/runtime,
        DSInstallDir/libs,DSInstallDir/climages,
```

### 3 Save your changes and close the text editor.

**Example** In the previous example, the DS Character Client Browse (codssbr.p), DS Menu (codss.p), and DS Update (codssup.p) programs were added to the MFG/PRO menu.

Because the DS browse program uses the DS client and the DS menu and update programs use the DS engine, the required PROPATH values are different. Therefore, two different MFG/PRO user startup scripts or icons, must be created or a Progress program must be set up to set the appropriate PROPATH values before initiating the DS functions.

For clients using the DS character client browse, modify the PROPATH variable in the MFG/PRO UNIX character client script.

```
PROPATH=.,Existing MFG_PRO PROPATH,
        DSClientInstallDir/services/object,
        DSClientInstallDir/services/runtime,
        DSClientInstallDir/object,
        DSClientInstallDir/runtime,
        DSClientInstallDir/libs,
        DSClientInstallDir/climages,
```

For clients using the DS engine Menu and Update programs:

- Copy the UNIX character client script and modify the `PROPATH` variable to contain the DS engine directories.

```
PROPATH=.,Existing MFG_PRO PROPATH,
        DSEngineInstallDir/services/object,
        DSEngineInstallDir/services/runtime,
        DSEngineInstallDir/object,
        DSEngineInstallDir/runtime,
        DSEngineInstallDir/libs
```

- Modify the `PROPATH` variable in the Windows client icons.

```
PROPATH=.,Existing MFG_PRO PROPATH,
        DSEngineInstallDir\services\object,
        DSEngineInstallDir\services\runtime,
        DSEngineInstallDir\object,
        DSEngineInstallDir\runtime,
        DSEngineInstallDir\libs
```

## Add the DS Application Code to the MFG/PRO Directory Structure

Use the following instructions to copy the DS application code for the DS programs you want to run from the appropriate DS installation directory into the MFG/PRO directory structure:

- 1 Locate the DS application code for the programs you entered as Exec File values in step 3 on page 50.

You must locate both the DS compiled code (extension `.x`) and the DS source code (extension `.p`).

- For DS engine programs, the compiled code is located in the `object` subdirectory below the DS engine installation directory. The source code is located in either the `src` or `runtime` subdirectories below the DS engine installation directory.
- For DS client programs, the compiled code is located in the `object` subdirectory below the DS client installation directory. The source code is located in either the `src` or `runtime` subdirectories below the DS client installation directory.

- 2 Use the following steps to copy the DS application code—both the compiled and source code—from the DS installation directories into the MFG/PRO environment.

**Important** DS application code sometimes uses the same program name for two different functions. For example, a DS engine program and a DS client program can have the same name, but two different functions. If you are adding a DS engine program and a DS client program with the same name to the MFG/PRO menu, see step 3 on page 56 to change one of the program names.

- a Access the MFG/PRO language-code subdirectory for your environment. This subdirectory is located below the MFG/PRO database server directory.

```
cd /DBServerInstallDir/us
```

- b If one does not already exist, create a new subdirectory below the language-code directory that corresponds to the first two letters of the DS program name. In the previous examples, each of the DS programs began with `co`, so you would create a `co` subdirectory.

```
mkdir /DBServerInstallDir/us/co
```

- c Copy the DS application code from the DS environment into the two-letter subdirectory you created.

```
cp /DSEngineInstallDir/object/codss.r  
/DBServerInstallDir/us/co
```

```
cp /DSEngineInstallDir/src/codss.p  
/DBServerInstallDir/us/co
```

- 3 If you are adding DS engine and client programs with the same name to the MFG/PRO menu structure, use the following instructions to change the name of the DS client application code.

- a Change the name of the Exec File value you entered in step 3 on page 50 to make it unique. For example, `xxcodss.p`.

- b If one does not already exist, create a new subdirectory below the language code directory that corresponds to the first two-letters of the modified DS program name.

```
mkdir /DBServerInstallDir/us/xx
```

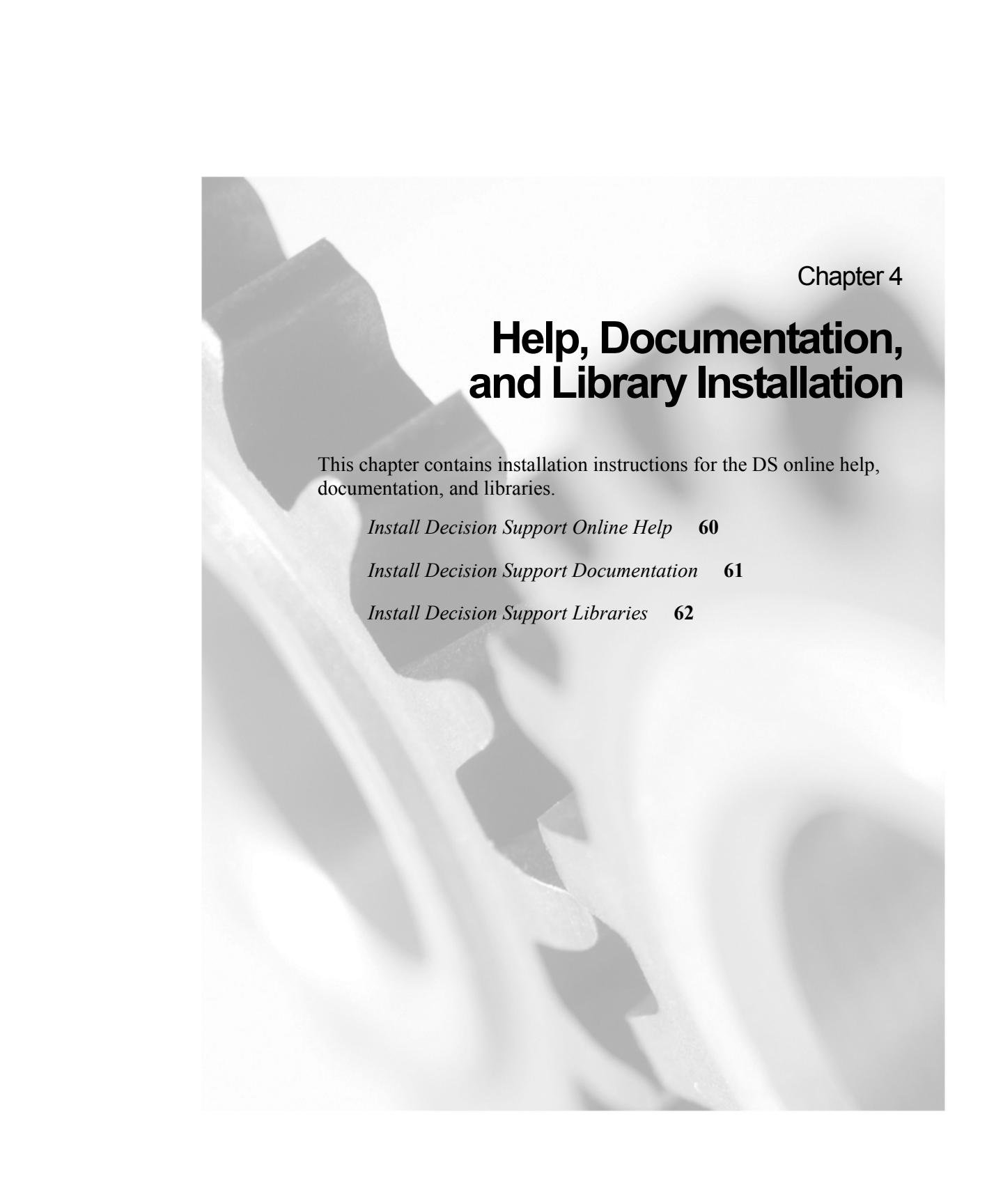
- c Copy the DS application code from the DS environment into the two-letter subdirectory you created and rename it.

```
cp /DSEngineInstallDir/object/codss.r  
   /DBServerInstallDir/us/xx/xxcodss.r
```

```
cp /DSEngineInstallDir/src/codss.p  
   /DBServerInstallDir/us/xx/xxcodss.p
```

- 4 Check the MFG/PRO menus to verify the menu assignments.



The background of the page is a grayscale image of several interlocking gears. The gears are of different sizes and are positioned in a way that creates a sense of depth and mechanical complexity. The lighting is soft, highlighting the teeth of the gears and creating subtle shadows.

## Chapter 4

# Help, Documentation, and Library Installation

This chapter contains installation instructions for the DS online help, documentation, and libraries.

*Install Decision Support Online Help*    **60**

*Install Decision Support Documentation*    **61**

*Install Decision Support Libraries*    **62**

## Install Decision Support Online Help

DS online help is supplied in two help files (extension `.fhd`) located in the `help` subdirectory below the DS engine installation directory.

- `dshelp.fhd`: This file contains DS online help in English. You do not need to include a language code when you load this help file.
- `fieldhlp.fhd`: This file contains DS online help for all of the languages in Table 4.1. When loading this help file, you must include a language code to indicate the language for which you want to load help.

**Table 4.1**  
Translated DS Help

| Language             | Code | Language              | Code |
|----------------------|------|-----------------------|------|
| Chinese (Simplified) | CH   | Korean                | KO   |
| Spanish (Castilian)  | CS   | Spanish (Latin)       | LS   |
| Czech                | CZ   | Norwegian             | NO   |
| Dutch                | DU   | Polish                | PL   |
| French               | FR   | Portuguese            | PO   |
| German               | GE   | Swedish               | SW   |
| Hungarian            | HU   | Turkish               | TU   |
| Italian              | IT   | Chinese (Traditional) | TW   |
| Japanese             | JP   |                       |      |

Complete the following instructions to load DS online help:

- 1 Start an MFG/PRO session and make sure no other users are logged on.
- 2 Open Field Help Load (36.4.19).
- 3 Complete the fields according to the following table.

| Field     | Enter                                                                                                                                                                                                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Language  | If you are loading the <code>dshelp.fhd</code> file, leave this field blank.<br><br>If you are loading the <code>fieldhlp.fhd</code> file, enter the two-letter language code for the translated help you want to load. For a list of language codes, see Table 4.1. |
| Field     | Leave these fields blank.                                                                                                                                                                                                                                            |
| Procedure | Leave these fields blank.                                                                                                                                                                                                                                            |

| Field                               | Enter                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status                              | Leave these fields blank.                                                                                                                                                                                                                                                                                                                                                                                                    |
| Text Type                           | Leave these fields blank.                                                                                                                                                                                                                                                                                                                                                                                                    |
| Field Help Load File                | <p>To load the <code>dshelp.fhd</code> file, enter the following directory path:</p> <p><code>DSEngineInstallDir/help/dshelp.fhd</code></p> <p>To load language-specific help from the <code>fieldhlp.fhd</code> file, enter the following directory path:</p> <p><code>DSEngineInstallDir/help/fieldhlp.fhd</code></p> <p><b>Note:</b> <code>DSEngineInstallDir</code> refers to your DS engine installation directory.</p> |
| Skip loading help with lower status | Enter Yes.                                                                                                                                                                                                                                                                                                                                                                                                                   |

- 4 Press Go to begin the load. Exit Field Help Load when finished.

## Install Decision Support Documentation

Use the following instructions to install *External Interface Guide: Decision Support*. This document is found on the Supplemental Documents on CD in PDF format. You need the free Adobe Acrobat Reader to view it online. You can also print single pages, a range of pages, or the entire document.

If you do not have Acrobat Reader installed, you can download the viewer from the Adobe Systems Incorporated Web site:

<http://www.adobe.com/>

You can use the Supplemental Documents on CD in two ways:

- Copy the documentation to a local or networked hard drive. To make the contents available on a network, copy the files, make a shortcut to `welcome_supplemental_CD.pdf`, and instruct users to copy the shortcut and map a network connection to the location of the files.

**Important** Be sure to maintain the CD directory structure when you copy the files. Otherwise, the links from the Welcome page to the documents will not work properly.

- View, search, and print documents directly from the CD. You can either use the Welcome page to navigate to a document or launch individual files.

## Install Decision Support Libraries

The Decision Support Library CD-ROM contains a directory with the following contents:

- Installation script, `install`
- Supporting files, `dslib.ini` and `dslib.cpio`
- Subdirectories, `/lib` and `/bin`

### Run the Library Installation

- 1 Mount the Decision Support Library CD-ROM using the instructions in “Mount the Engine CD-ROM,” on page 20.
- 2 On your database server, log on as user `mfg`.
- 3 Change to the CD-ROM directory and launch the library installation script.

```
cd cdrom
./install
```

- 4 When prompted, enter the following information:
  - The Progress installation directory.
  - The terminal type of the installation session. The default is based on your `TERM` environment variable.
- 5 When prompted, enter the full path name of the directory where you want to install the Decision Support Library. QAD recommends that you install DS libraries in a different directory than the DS engine and client directories. Choose Finish when you are ready.
- 6 At the following prompt, choose Yes to continue the installation or No to abort. The variable `DSLlibInstallDir` refers to your DS library installation directory.

```
Expand the media to DSLlibInstallDir now (y/n)?
```

- 7 At the following prompt, specify Yes to remove the temporary directories used by the DS library installation script.

```
Cleanup the /tmp/dslib stage directory (y/n)?
```

- 8 Review the DS library installation log file for installation errors.

```
vi DSLibInstallDir/log/dslib.log
```

## Implement the Library in Your Environment

To complete the DS library installation, you must implement the library files in your DS environment. Before beginning the implementation, make sure that you know path and file name for each DS library you want to implement.

- 1 Start the DS database.

```
run ./start.ds
```

- 2 Start the DS engine.

```
start ./client.ds
```

- 3 Login using admin for user ID and password.

- 4 Run the Install Library program.

- a Choose Library from the DS Setup menu.

- b Choose Install Library from the Library submenu. The Load Details frame displays.

- 5 Enter the path and file name for each DS library. For example, to load the Sales Library, enter the following command and press Enter.

```
DSLlibInstallDir/newsales.lib
```

- 6 A message displays informing you that you need to create a new data source or accept the data source from the library. Choose OK.

- 7 A second message displays, giving you the opportunity to replace the library data source with one of your own. Choose No. This enables the program to create the library data source. You can edit the data source later.

- 8 The following prompt displays if library records have the same name as default components in Decision Support. Choose OK.

Record naming overlaps are addressed

The content of the components in the libraries and the default product is identical; the following steps enable the current library contents to overwrite existing content.

- a Press End to exit from the Name Changes selection window.
- b The following message appears, stating that you have not renamed the first component. Choose Yes All to enable the overwrite.

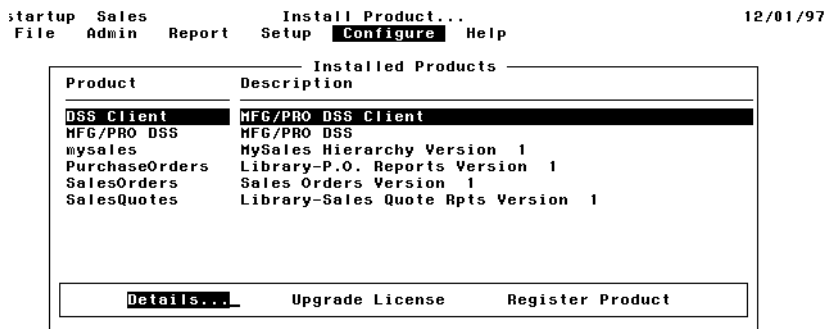
Replace all existing component content

- 9 At the following prompt, choose OK. Selecting No returns you to the Installed Products selection window.

Load the library

- 10 Repeat steps 4 through 9 until all libraries are loaded. Figure 4.1 is the Install Products Programs screen showing the complete suite of installed DS libraries.

**Fig. 4.1**  
Install Products  
Program



- 11 Press End to exit the Install Library program and return to the Decision Support screen.

## Deleting the QAD Hierarchy

To finish installation of the libraries, delete the QAD1 hierarchy, which the installation process created to enable access to the menus.

- 1 Choose Delete Hierarchy from the File menu.  
Ensure that QAD1 is the current file name in the upper left corner of the screen. If not, reopen the QAD1 hierarchy in Open Hierarchy.
- 2 Choose OK.



# Converting an Existing DS Database

This chapter contains step-by-step instructions for converting earlier Decision Support (DS) databases to Version 3.3. In this section, the term *former* refers to your previous version of DS, and *new* refers to your new version.

*Conversion Utilities*    **68**

*Converting from DS 2.08 to 3.3*    **68**

*Converting from DS 3.1 or Higher to 3.3*    **69**

*Conversion Notes*    **70**

## Conversion Utilities

If you are upgrading your DS software, use the appropriate database conversion utility in the `convert` subdirectory of the DS engine installation directory:

- `208to33` to convert DS 2.08 to 3.3
- `31to33` to convert DS 3.1 to 3.3
- `32bto33` to convert DS 3.2B to 3.3
- `32c1to33` to convert DS 3.2C01 to 3.3
- `32c2to33` to convert DS 3.2C02 to 3.3
- `32c3to33` to convert DS 3.2C03 to 3.3

Open the appropriate subdirectory of the `convert` directory and read the instructions in the `ReadMe` file.

The conversion utilities take the data stored in your former DS database and dump it in the new format required for loading into DS Version 3.3. This data can then be loaded into an empty DS 3.3 database.

## Converting from DS 2.08 to 3.3

Use the following instructions to convert from DS Version 2.08 to Version 3.3:

- 1 Start a command line session and change to the directory that applies to your conversion.  

```
cd \convert\208to33
```
- 2 Open the `Start` script in this directory in a text editor.
- 3 Edit the script to point to the Progress (DLC) directory and your DS 2.08 database. Do this by modifying `DLC` and `DS208DB` environment variables.
- 4 To begin the conversion, run the `Start` script.
- 5 Enter the directory where you want your former version's data dumped. To dump the data currently in your hierarchies, enter Yes in the corresponding field.

- 6 Press Enter to begin the dump.
- 7 When the dump is complete, your dump directory contains the .d files from your former Decision Support database. These files are ready to load into your new Decision Support database.
- 8 To load the .d files, make a copy of the Decision Support Version 3.3 empty database. This database is created during the Version 3.3 installation.
- 9 Start a single-user Progress session against this copy.
- 10 From the Progress Editor, select Data Administration and choose Load Data.
- 11 Select all tables to load.
- 12 Enter your dump directory.
- 13 After the load is complete, your new database contains all your former Decision Support data.

See “Conversion Notes” on page 70 for additional considerations.

## Converting from DS 3.1 or Higher to 3.3

All of the later conversions follow a simple dump and load process.

- 1 Make sure that the `convert` directory is included in the `PROPATH`.
- 2 Start a single-user Progress session against the older database.
- 3 Run `codump.p` from the Progress Editor. This program dumps the data from the former database into relevant .d files.
- 4 When the dump completes, exit the Editor.
- 5 To load the .d files, make a copy of the Decision Support Version 3.3 empty database. This database is created during the Version 3.3 installation.
- 6 Start a single-user Progress session against this copy.

- 7 From the Progress Editor, select Data Administration and choose Load Data and Definitions; then select Table Contents (.d).  
In a GUI session, choose Data Administration|Admin|Load Data and Definitions|Table Contents (.d).
- 8 Select all tables to load.
- 9 After the load is complete, your new database contains all your former Decision Support data.

See “Conversion Notes” on page 70 for additional considerations.

## Conversion Notes

Depending on your installation setup and data, you may need to consider the following:

- During conversion, the passwords for admin and guest are reset to admin and guest. After conversion, you should reset these to your required passwords. All other users will have their current passwords.
- In Version 3.2, the periods for calendars were modified to include a top level where the period was the name of the calendar. The conversion utility modifies this automatically.
- Any include files used by formulas in the older version of DS must be moved to the LIBS directory of 3.3.

## Converting Date Expressions

In Version 3.3., date expression set up using *date-from* or *date-to* as the result were replaced with *user-date*. The conversion utility does not convert these expressions. If this problem exists, a duplicate variable name error occurs when using date expressions for views.

To avoid this problem, you must ensure that any include files referencing *date-from* and *date-to* are modified to reference *user-date*.

## Converting Tracking Information

When converting from Decision Support Version 2.08, the conversion utility does not automatically convert tracking information. However, tracking information is converted automatically when updating from Version 3.1. In Version 3.3, this results in the Decision Support engine not recognizing that some, or all, of the data in your Version 2.08 database was previously processed and does not need to be updated again.

The same data will be extracted twice and duplicate records will be created if:

- You answered Yes to the Dump Extract Data prompt during your conversion.
- You use the Start Update routine with dates that overlap those for data already contained in your Decision Support 2.08 database.

The following example outlines the procedure required to convert tracking data after completing a Decision Support Version 2.08 to 3.3 conversion.

**Example** A Decision Support Version 2.08 database contains data for 10 hierarchies with records from January 1, 1997, to April 1, 1998. To convert the hierarchy data and have Decision Support track all the data loaded this year, complete the following steps:

- 1 During the conversion, answer Yes when prompted to dump hierarchy data.
- 2 Load the dumped data into your Decision Support Version 3.3 database.
- 3 Start the Decision Support engine and connect to your new Decision Support database.
- 4 Start an Update for all hierarchies. In the Date From field enter January 1, 1998. In the Date To field enter the current date. Because the conversion process brings no tracking information over from your former Decision Support database, this step creates a record of hierarchical data between the dates entered. After this step, the hierarchy data becomes temporarily incorrect.

▶ For more information, see “Conversion Utilities” on page 68.

- 5 When the update is complete, start a purge for all hierarchies. Set the Date From field to January 1, 1998, and the Date To field to the current date.
- 6 The new database now contains your former data from January 1, 1997, to December 31, 1997, and new data after that.

**Note** Do not update dates for these hierarchies before January 1, 1998. This causes duplicate data to be extracted.