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**QAD SOLUTIONS**

*Manufacturing Applications*

# **Decision Support Installation Guide Windows Servers**



78-0568B  
Decision Support Version 3.3  
MFG/PRO eB, eB2  
September 2002

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## What Is in This Guide

Use this guide to install your release of Decision Support (DS) Version 3.3 on Intel-based and Digital Alpha Windows systems. 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

## Audience

These instructions are for the MFG/PRO system administrator who manages the MFG/PRO database and is familiar with Windows operating systems, 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.

## Decision Support Conversions

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

▶ See Chapter 5, “Converting an Existing DS Database,” on page 61.

## 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.

<b>If you see:</b>	<b>It means:</b>
monospaced text	A command or file name.
<i>italicized</i> monospaced text	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

### Database Server

- Operating System: Windows NT Server 4.0.
- Progress Software: Version 9.1B server is required. You need to know the path to the installation directory for the DS installation program.

▶ See “DS with the AppServer” on page 12.

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

- Disk Space: The database server should have approximately 100 MB of space available for the DS databases.

### MFG/PRO

MFG/PRO eB or eB2 must be already installed and configured.

### Windows Clients

- Operating System: Windows 95B or higher, Windows 98, Windows NT 4.0 or higher
- 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
dsemply	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 copies 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 Windows NT, XP, or 2000 server and the DS clients can be deployed on Windows 98, NT, ME, XP, or 2000 machines.

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

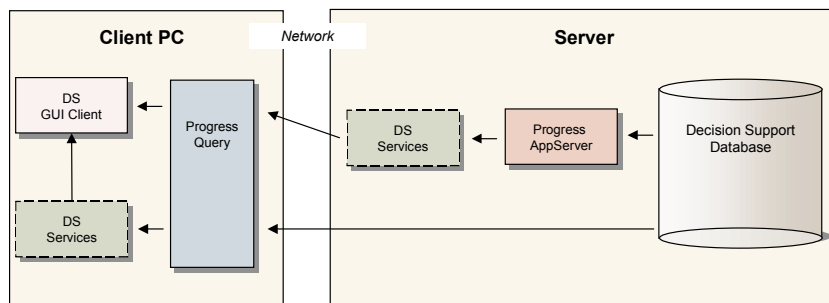
DS supports GUI client deployment using the Progress AppServer. The AppServer lets client applications request server processing, reducing the number of records carried over the network. This results in dramatic performance benefits across both local-area networks (LANs) and wide-area networks (WANs). 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.

### 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*.

- Set up an AppServer instance on the machine where you will install the DS engine. To set up an AppServer instance, use the instructions in the Progress AppServer documentation.
- 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. You can use the Progress ProControl utility to start the AppServer.
- 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 these steps to prepare for the DS installation.

- 1 If you are planning to use the Progress AppServer, install it using the Progress documentation.
- 2 Determine the following information.
  - a The DS engine and client installation directories. Be sure you have full read, write, and execute permissions for these directories.
  - b 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 engine application code.

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

# DS Engine Installation for Progress

This chapter contains Decision Support (DS) engine installation instructions for Progress database environments.

*Install the Decision Support Engine* 16

*Change the Services File* 25

*Start the Decision Support Servers* 26

*Start the Decision Support Engine* 29

## Install the Decision Support Engine

Complete these steps to install the DS engine:

- 1 Insert the Decision Support Engine (Progress Only) CD-ROM in the CD-ROM drive.
- 2 Run the `setup.exe` program using the Windows Explorer or the Start menu.

`CDROMDrive:\setup.exe`

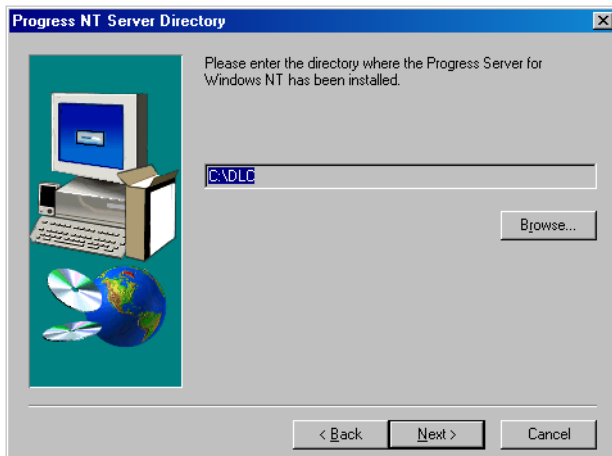
- 3 The following window advises you to quit all other applications before continuing the installation. Do so, then click Next to continue.



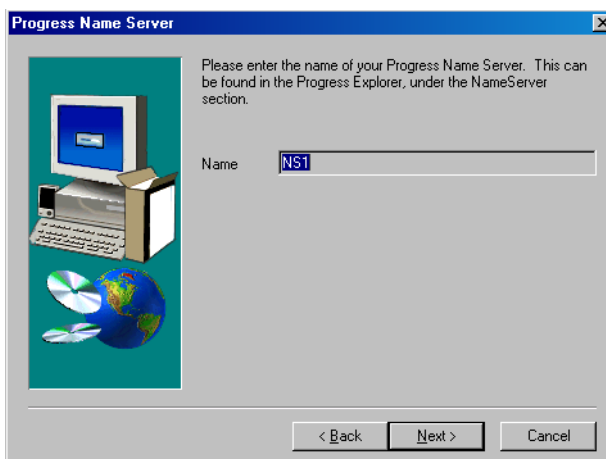
- 4 Specify the destination folder for the DS engine files. Generally, this should be a new folder that the setup creates for the installation. You cannot use spaces in the folder name.



- 5 Specify your Windows server's Progress directory in the following window. You can use the Browse button to search for the directory.



- 6 Enter the name of the Progress Name Server.



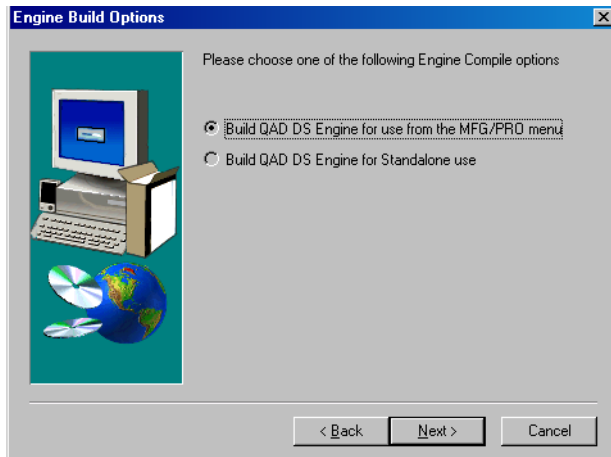
7 The following window lets you select whether you want to build the DS engine for use with MFG/PRO or for use as a stand-alone application.

- If you build the DS engine for use with MFG/PRO you can run the DS engine from both the MFG/PRO menu and as a stand-alone application. This option requires that you have MFG/PRO source code available for the installation procedure to use when compiling the DS engine application code.

To compile the DS engine for use with MFG/PRO, click Build QAD DS Engine for use from the MFG/PRO menu. QAD recommends this option to enable the full range of DS functionality and configuration possibilities.

- If you build the DS engine for stand-alone use, you cannot launch the DS engine or its functions from the MFG/PRO menu. This includes the batch update and purge functions, as well as any DS generated reports.

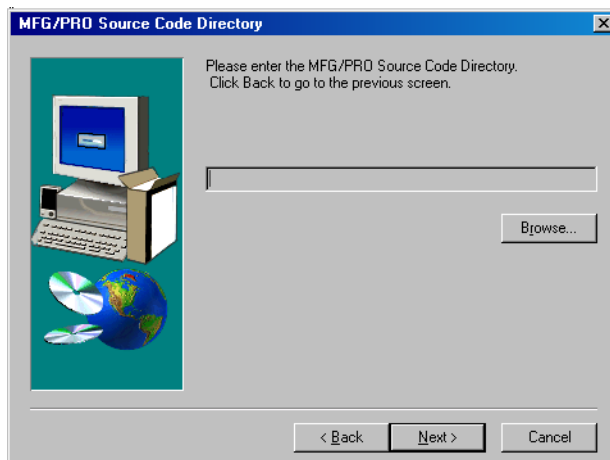
To compile the DS engine for stand-alone use, click Build QAD DS Engine for Standalone use.



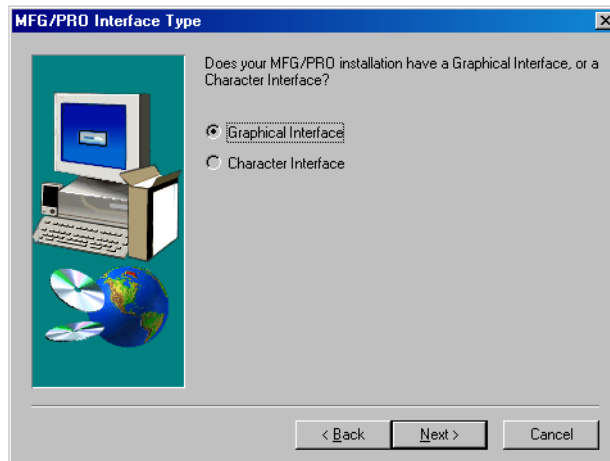
- 8 If you chose the Build QAD DS Engine for use from the MFG/PRO menu option, enter the full path to the directory containing the MFG/PRO source code. You can use the Browse button to select this directory.

Depending on whether you purchased unencrypted MFG/PRO source code, this can either be the `xrc` or `src` subdirectory.

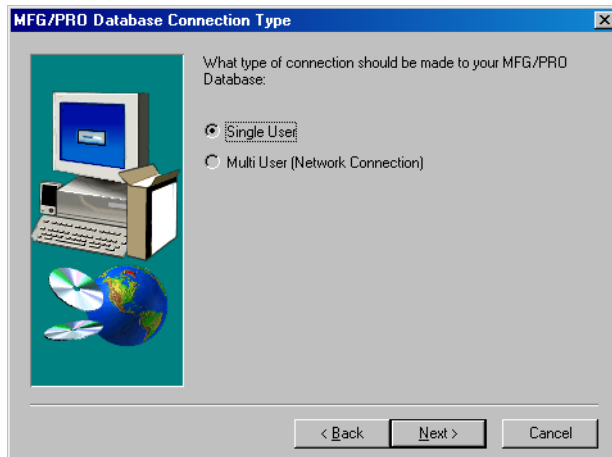
- In MFG/PRO eB, code is located below the MFG/PRO language code directory, below the MFG/PRO database server installation directory.
- In MFG/PRO eB2, the `xrc` or `src` directory is directly below the MFG/PRO database server installation directory.



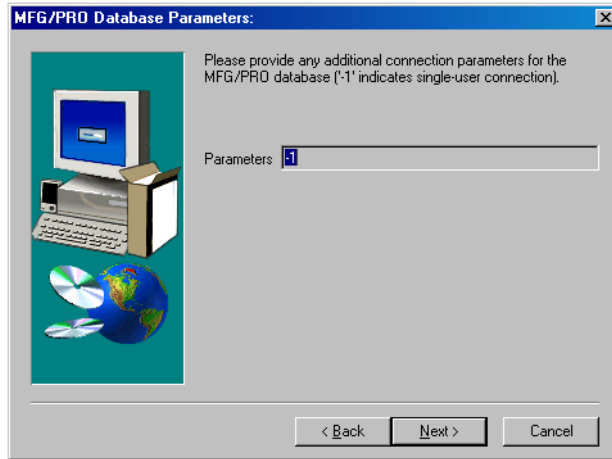
- 9 Indicate whether the MFG/PRO source code is for the Windows or character interface.



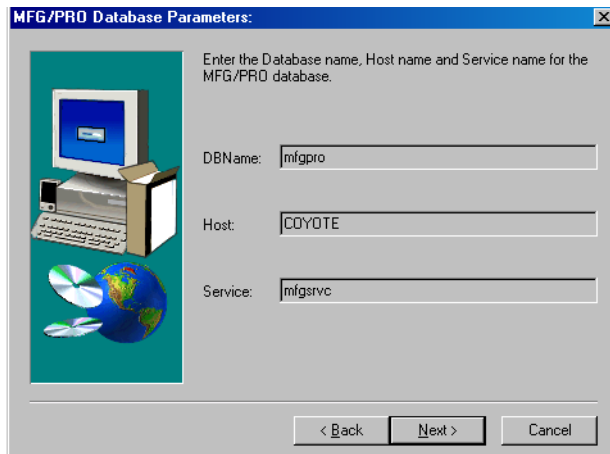
- 10 Indicate the type of database connection you want to use.



- 11 Enter any additional connection parameters. In the example, -1 means that the connection is a single user connection. You can add other parameters as needed.



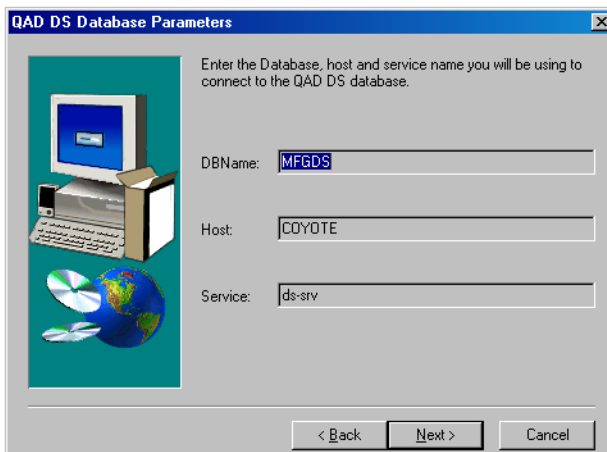
- 12 Complete the MFG/PRO Database Parameters window using the following table.



Field	Enter
DBName	The physical database name of a main MFG/PRO database. The database server for this database must be started for the DS engine code to compile correctly.
Host	The name of the machine where the MFG/PRO database is located.
Service	The service name of the MFG/PRO database.

- 13 Complete the QAD DS Database Parameters window. In the Host field, enter the name of the machine where you are installing the DS engine. In the Service field, enter the service name you want to use for the DS database.

**Important** You must create an entry in the `services` file on both the DS server and client machines that matches the name you specify in the Services field.



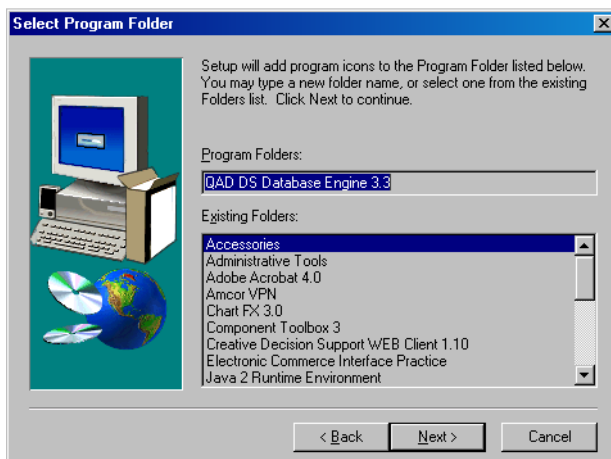
▶ See “Deploying Decision Support” on page 10.

- 14 If you are implementing the Progress AppServer in your DS environment, enter the service name you want to use for the AppServer. If you are not implementing the AppServer, accept the default and click Next to continue.

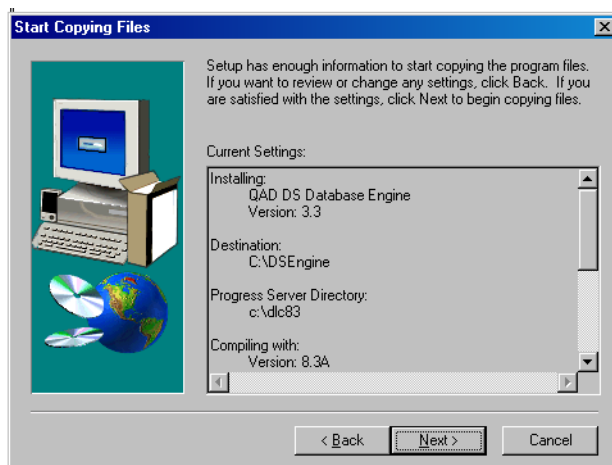
**Important** If you are implementing the AppServer, you must create an entry in the `services` file on both the DS server and client machines that matches the service name you specify in the Services field.



- 15 Enter the Windows program folder where you want the DS engine icons stored.



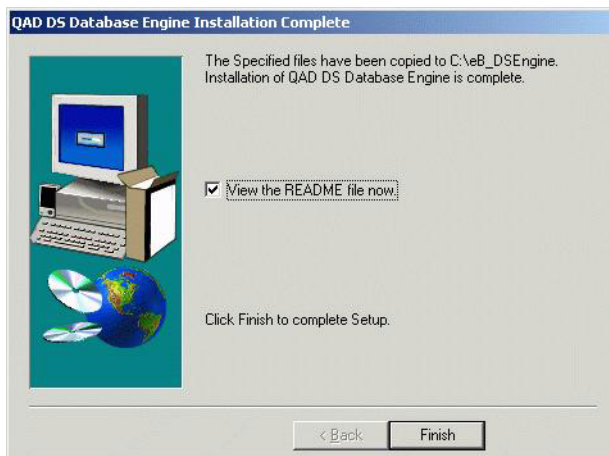
- 16 The next window displays the DS engine environment and prompts you to make last-minute changes. Click Back to make changes to previous screens. Click Next to begin the DS engine installation.



The DS engine installation process loads the DS schema, compiles the DS engine code, and loads the default DS system data.

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.

- 17 When the installation is complete, the DS engine is added to the list of Windows desktop applications. Click the README file check box to launch release notes that list changes between DS releases.



- 18** If problems occur during the installation, an error window displays. Review the error log `dssetup.log` located in your working directory. Correct any problems, remove 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.

## Change the Services File

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

**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** Locate your `services` file. Use the instructions appropriate for your operating system.
  - For Windows NT — `c:\winnt\system32\drivers\etc`
  - For Windows 95 or 98 — `c:\windows\system`

If your `services` file is not in one of these directories, use the Find function on your system's Start menu.

- 2** Open the `services` file in a text editor such as Notepad.
- 3** In the `services` file, enter the service name of your DS database. The following example uses the default DS database service name.

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

- 4** If you are using the AppServer in your environment, enter the name of your AppServer service into the `services` file. The default entry for the AppServer is `dsappserv`.

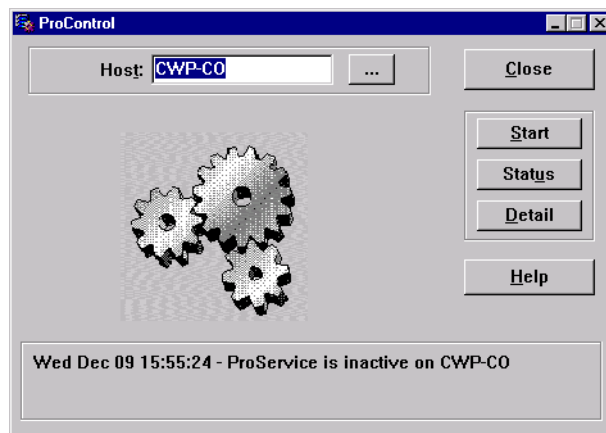
```
dsappserv 2501/tcp
```

## Start the Decision Support Servers

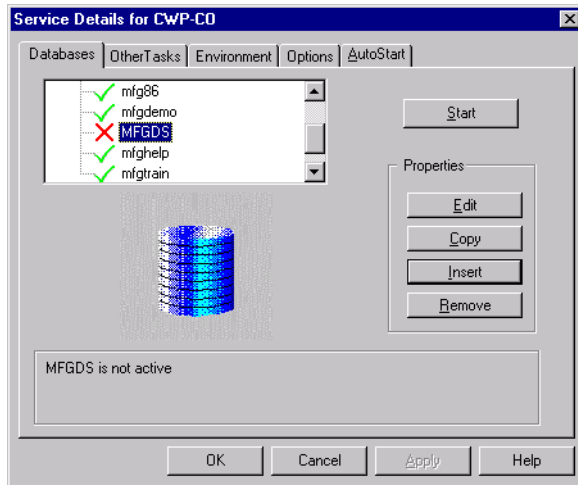
Use the following steps to start the DS database server and, if applicable, the DS AppServer.

- 1 From your Progress server machine's Start menu, select the Progress programs menu and choose ProControl.

**Note** If you have more than one version of Progress installed, use the version that you used when installing DS.



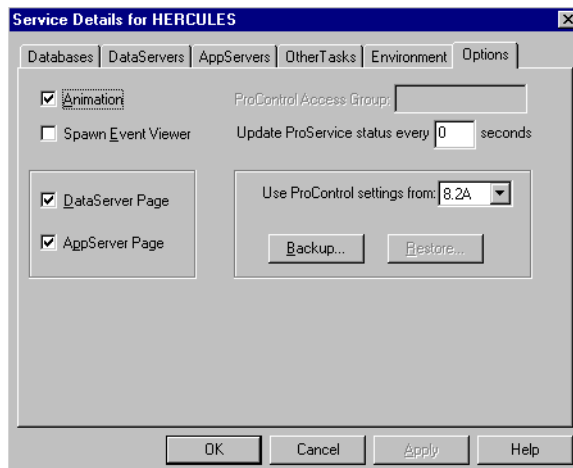
- 2 A display at the bottom of the window indicates whether ProControl is active or inactive. Click Start to activate ProControl.
- 3 Click Detail. An entry for your DS database is listed. The database is inactive, represented by a red X.



- 4 To activate the DS database, highlight it and click Start.
 

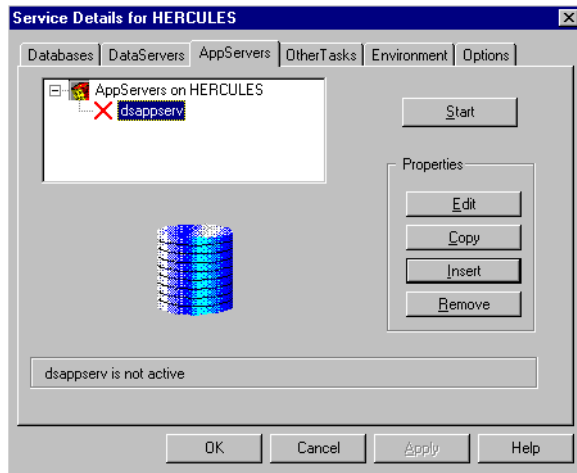
**Note** If you receive the error message cannot find (.lk) file, check the `services` file for the DS entries.
- 5 ProControl indicates that the database is active by displaying a green check.
- 6 If you have not done so already, set ProControl to activate automatically. In turn, this starts the DS database server.
  - a From your machine's Start menu, select Settings|Control Panel.
  - b Double-click Services, highlight the ProService entry, and choose Startup.
  - c In the Startup Type frame of the Service window, choose Automatic and click OK. ProControl activates automatically during your next system startup.
  - d Alternatively, if you want to start only the DS database server, use the Start DS Database Server shortcut on the Windows Start menu. Double-clicking this shortcut starts the DS database server.

- 7 If you are implementing the AppServer in your DS environment, complete the following instructions to start the DS AppServer.
  - a If you do not see an AppServer tab among the other tabs in ProControl Details window, click the Options tab and click the AppServer Page option.



- b When ready, click OK.
- c In the ProControl main window, click Detail. The AppServers tab displays in the Service Details window.
- d Click the AppServers tab and start the DS AppServer service by clicking the start button.

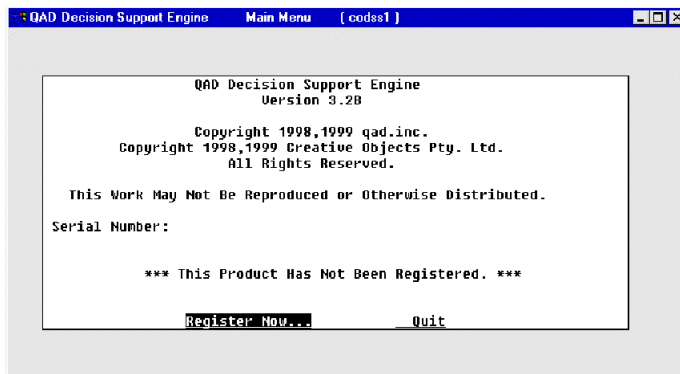
**Note** To start the AppServer automatically when you start the machine, click the Edit button and select Autostart.



## Start the Decision Support Engine

Use the following instructions to start the DS engine for the first time and register the product.

- 1 With your DS database server running, select Start|Programs|QAD DS Database Engine. The following registration window displays.



- 2 Select Register Now and enter the MFG/PRO DSS serial number included with your DS software.



- 8 To add users for other DS applications, click ADD and enter the appropriate application code:
- DSS Client — CHUI version of the DS client
  - QAD DSS Windows Client — GUI version of the DS client
  - MFG/PRO DSS — The DS engine

**Note** If you plan to install any of these clients, add user IDs for them now. Make note of the user IDs for use during client installation.



# DS Client Installation

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

<i>Installing DS Clients for Progress</i>	<b>34</b>
<i>Performing a Network Installation</i>	<b>40</b>
<i>Configuring GUI Clients for the AppServer</i>	<b>44</b>
<i>Running Decision Support from MFG/PRO</i>	<b>44</b>

## Installing DS Clients for Progress

Complete this section to install DS GUI and character clients for Progress database environments.

**Note** The installation process is identical for GUI and character clients; only some of the titles on the screens are different. The screens illustrated in this guide are for a GUI install.

### 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 40 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 25 for instructions.

## Installation

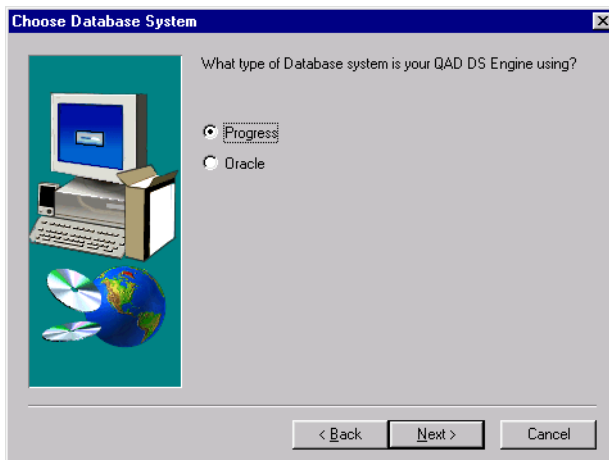
- 1 Insert the Decision Support Character or GUI Client CD-ROM in the CD-ROM drive.
- 2 Run the `setup.exe` program using the Windows Explorer or the Start menu.

`CDROMDrive:\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 Click the Progress radio button to indicate the DS Engine was installed with a Progress database.

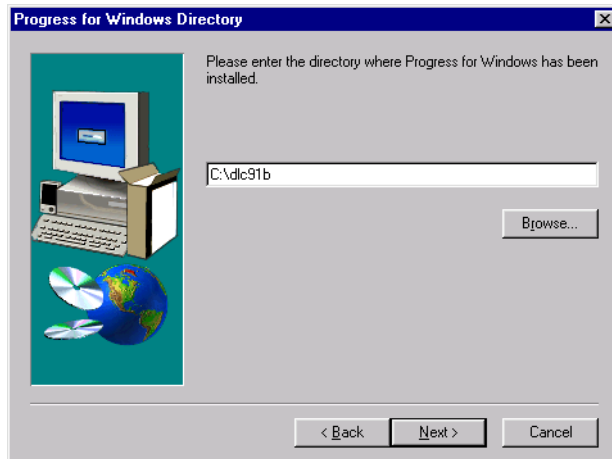


- 5 Specify the destination folder for the DS client files. Generally, this should be a new folder that the setup creates for the installation. You cannot use spaces in the folder name.

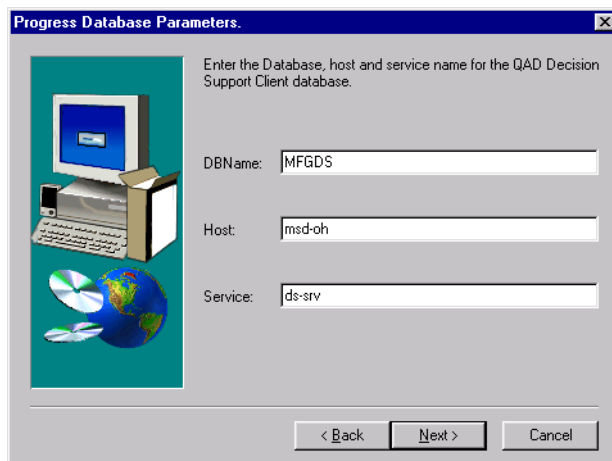


- 6 Specify the Progress directory containing the Progress Query product in the following window. You can use the Browse button to search for the directory.

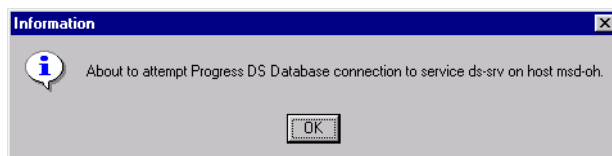
**Important** The Progress Query client must be installed locally on the client machine.



- 7 Enter the physical database name, host machine name, and service name of your DS database.

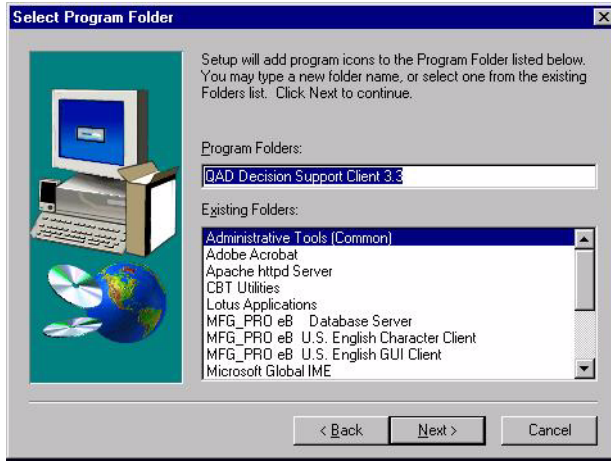


- 8 The following message may display. Click OK to continue.

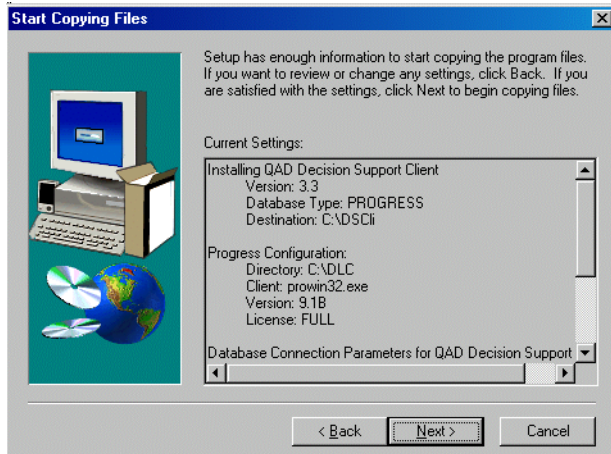


If the connection fails, you must correct the error before you can continue.

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



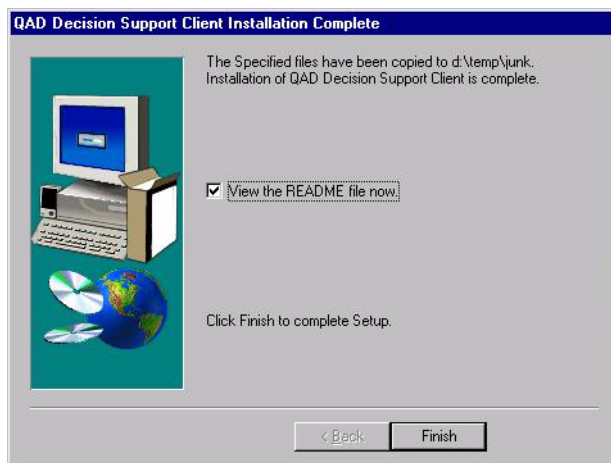
- 10 The next window displays the client setup environment and prompts you to make last-minute changes. Click Back to make changes to previous screens. Click Next to begin the DS client installation.



The DS client installation process compiles the DS client 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 `dscli.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 NT file server in your network.

Use the instructions in either “Installing DS Clients for Progress” on page 34 or “Performing a Network Installation” on page 40 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.

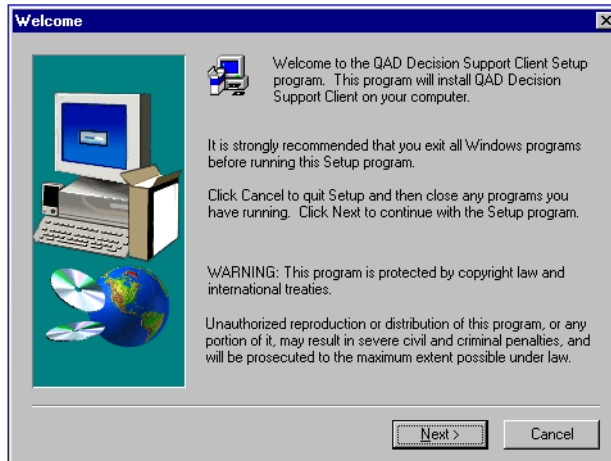
- Second, from each client PC, access the DS GUI client installation directory you created during the initial installation. Then, run the network installation program to download the DS GUI client code and files.

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

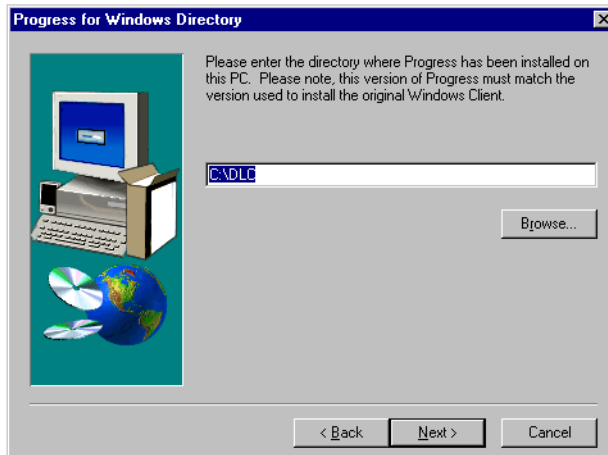
- 1 Perform the DS GUI Client installation on a PC that is accessible to all of the other PCs where you want to install the GUI client.  
Make a note of the directory where you install the DS GUI client.
- 2 From a DS GUI client PC, access the directory where you installed the DS GUI client. For example, 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
```

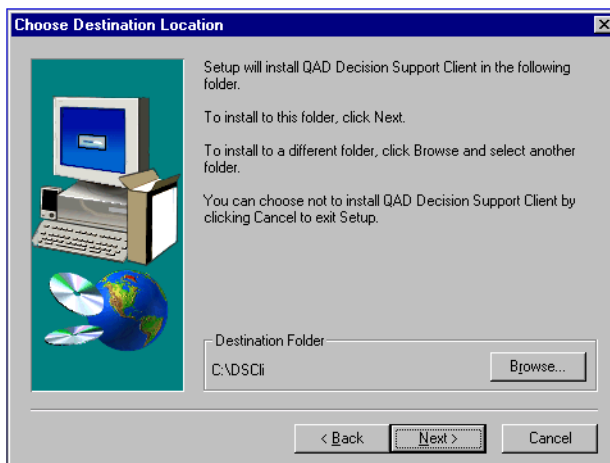
- 4 At the Welcome window, click Next.



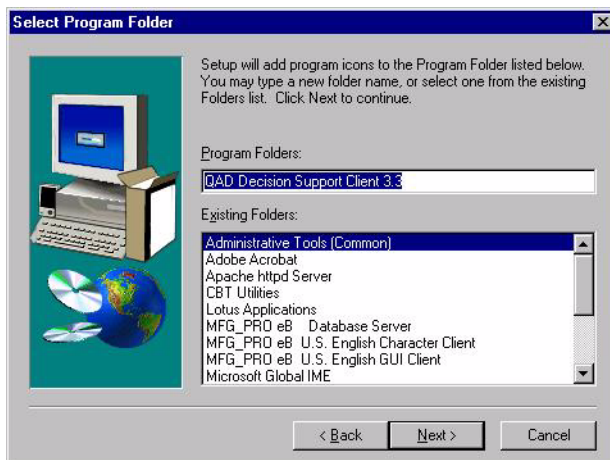
- 5 Enter the path to the local Progress installation directory. You can use the Browse button to select a directory. When ready, click Next.



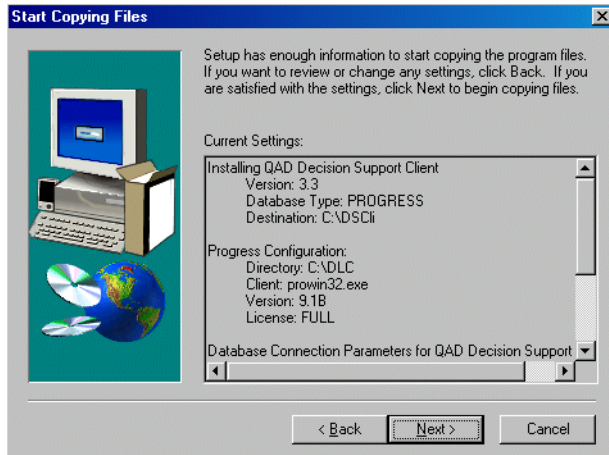
- Specify the directory where you want to install the DS GUI client files and click Next.



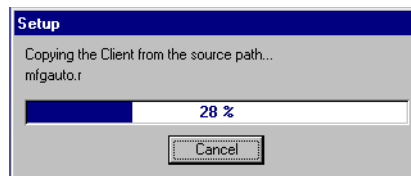
- Specify the folder where you want the DS GUI client shortcuts created and click Next.



- 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.



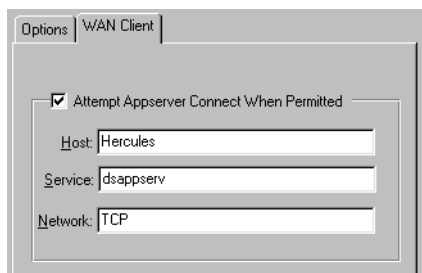
- 9 Click Finish to complete the DS GUI client installation.



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

## Configuring GUI Clients for the AppServer

- 1 Start the DS GUI client by double clicking the client icon.
- 2 If you have not added any DS client users, log in using the `admin` password and user ID.
- 3 Select 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 3 on page 30.

- 4 Check the Attempt Appserver Connect When Permitted option.
- 5 In the Host field, enter the name of the machine where the DS AppServer is located.
- 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 database is located in 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.

- 5 Press End to exit Menu System Maintenance.

**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
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	<code>codss.p</code>

- 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 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 icons must be modified.

- 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 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 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.

**Example** In the previous example, the DS GUI client (codss.p) and the DS Update programs were added to the MFG/PRO menu.

For clients using either the DS GUI Client or the DS engine Update program, modify the `PROPATH` variable in the initialization file used by the MFG/PRO client startup icon to contain the DS engine directories.

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

## Add DS Application Code to 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 46.

You must locate both the DS compiled code (extension `.r`) 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.

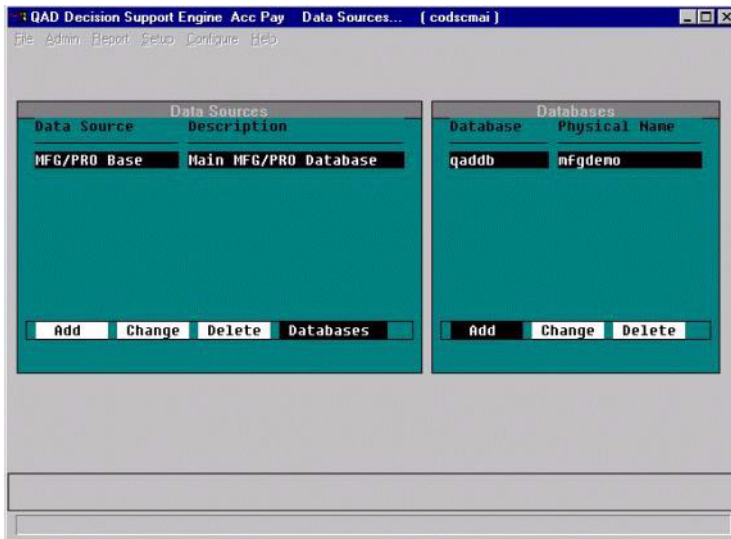
**Important** DS application code sometimes uses the same program name for two different functions. For example, a DS engine program and a DS client program can have the same name, but two different functions. If you are adding a DS engine program and a DS client program with the same name to the MFG/PRO menu, see Step 3 on page 50 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.
  - 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.
  - c** Copy the DS application code from the DS environment into the two-letter subdirectory you created.
- 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 46 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.
  - c** Copy the DS application code from the DS environment into the two-letter subdirectory you created and rename it.
- 4** Check the MFG/PRO menus to verify the menu assignments.

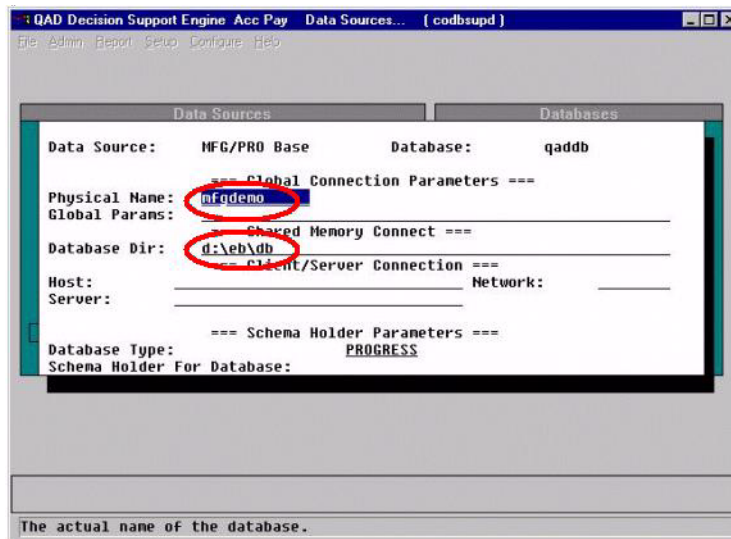
## Configure Data Source in DS

In order to test data being transferred from MFG/PRO, you need to configure the data source. Use the following steps:

- 1** In a DSS engine session, choose the Configure menu.
- 2** Choose Data source. The following screen displays.



- 3 Tab to the Databases button and press Enter.
- 4 In the Databases frame, click Add and define the information appropriate for your MFG/PRO database.





# Help, Documentation, and Library Installation

This chapter contains installation instructions for Decision Support (DS) online help, documentation, and libraries.

*Install Decision Support Online Help*   **54**

*Install Decision Support Documentation*   **55**

*Install the Decision Support Demo Library*   **56**

*Install Additional Decision Support Libraries (Optional)*   **58**

## 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.  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	To load the <code>dshelp.fhd</code> file, enter the following directory path.  <code>DSEngineInstallDir\help\dshelp.fhd</code>  To load language-specific help from the <code>fieldhlp.fhd</code> file, enter the following directory path.  <code>DSEngineInstallDir\help\fieldhlp.fhd</code>  <b>Note:</b> <code>DSEngineInstallDir</code> refers to your DS engine installation directory.
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.

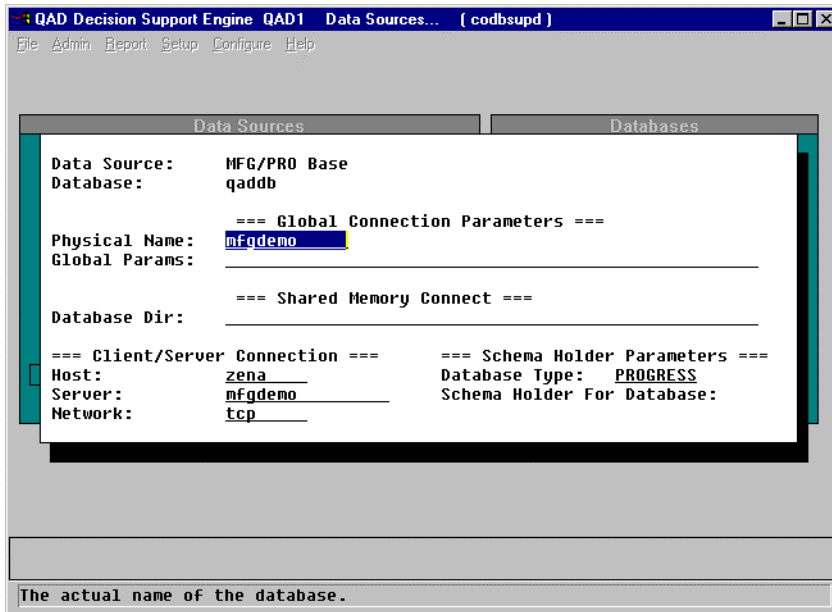
## Install the Decision Support Demo Library

Use the following instructions to install the DS Demonstration Library:

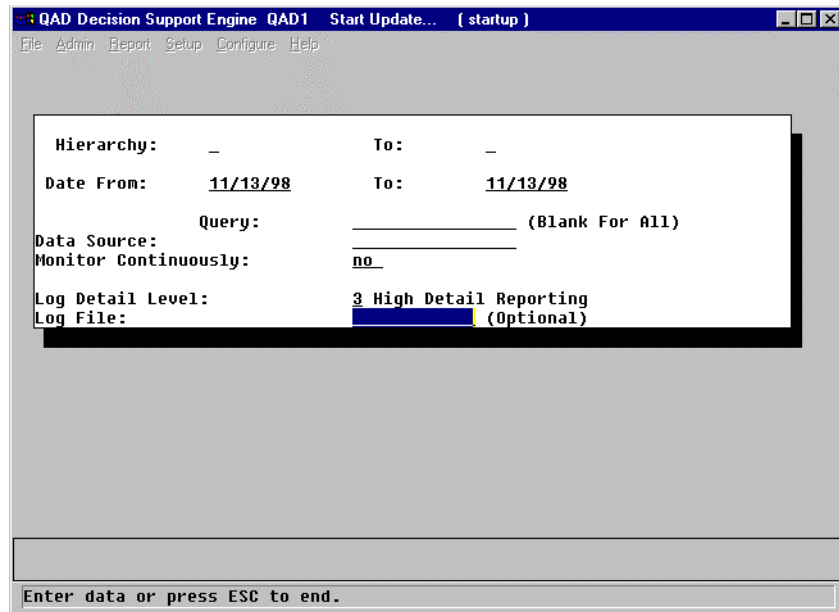
- 1 Log into the DS engine, select Setup, select Library, and choose Install Library.
- 2 In the File to Load field, enter `demo.lib`.
- 3 A confirmation window indicates that this library has data sources. Select OK.

▶ For more information on configuring data sources, see *External Interface Guide: Decision Support*.

- 4 A confirmation window prompts you to replace the default MFG/PRO data source with one of your own.  
If you have previously configured MFG/PRO databases using the Configure Data Sources function, enter Yes and choose the MFG/PRO database associated with the library you will use.  
If you select No, another confirmation window displays indicating that the MFG/PRO base data source needs to be modified after the load. Select Yes.
- 5 Select OK to load the library.
- 6 When the load completes, select OK.
- 7 Open the Configure menu, select Data Sources and choose Databases. From the Databases window, choose Change.
- 8 Modify the settings to point to your MFG/PRO database.



- 9 Press Go to create a connection to your MFG/PRO database.
- 10 Once the database is connected, select the Admin menu from the Decision Support Engine window and choose Start Update. This extracts information from the database to populate the DS database.
- 11 In the Start Update window, leave the Hierarchy and To fields blank and press Go.



- 12 Once the load is complete, view the data using your DS client.

## Install Additional Decision Support Libraries (Optional)

Additional DS libraries are available. Each library is provided with an automated installation script.

- 1 On a DS client, insert the Decision Support Library CD-ROM in the CD-ROM drive and run `setup.exe`.
- 2 The following window advises you to quit all other applications before continuing the installation. Do so, then choose Next to continue.



- 3 Specify the destination folder. This must be the same folder where you installed the DS engine.
- 4 When the installation is complete, click the box to view the README file, which contains release notes that list the changes between DS releases.
- 5 Note the name of the library files and follow the library's instructions or see *External Interface Guide: Decision Support* to complete the setup.



# 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*    **62**

*Converting from DS 2.08 to 3.3*    **62**

*Converting from DS 3.1 or Higher to 3.3*    **63**

*Conversion Notes*    **64**

## 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
- `32cto33` to convert DS 3.2C 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 such as Notepad.
- 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 Decision Support menu, 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 64 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 64 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 62.

- 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.