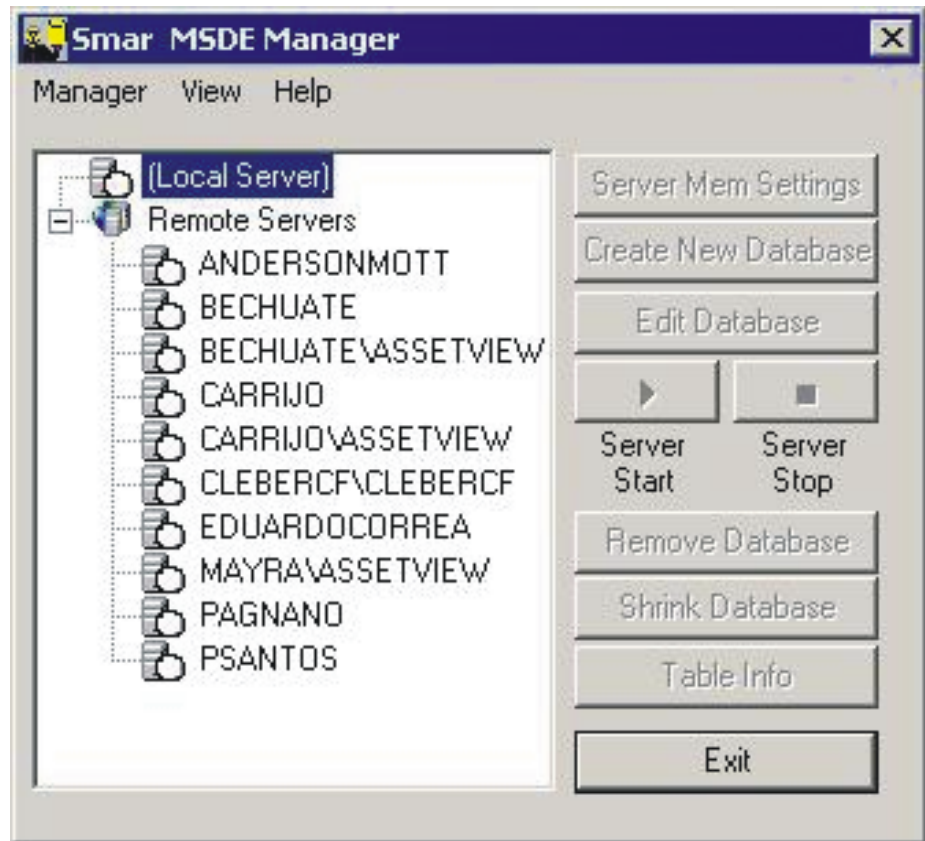


- MSDE Manager

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MSDE Manager



JUN / 04
MSDE Manager
VERSION 7.1



FOUNDATION



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MSDE Manager

Introduction to MSDE Manager

The MSDE Manager allows you to manipulate and configure databases when data logging to MSDE 7.0 and MSDE 2000 databases. In addition, if no MSDE installation is detected, the MSDE Manager prompts you to install MSDE 2000 or MSDE 7.0. Although MSDE is fully compatible with MS SQL server, it has the following limitations:

- The maximum database size is 2 GB.
- If more than five client connections are open at the same time, the performance level begins to decrease.

MSDE Requirements

MSDE (Microsoft Data Access Engine) is an MS SQL Server-compatible database engine with enhanced database server functionality. The TrendWorX SQL Data Logger supports both MSDE 7.0 and MSDE 2000.

MSDE 2000, which is the newer version of MSDE, has enhanced performance and uses less memory and CPU capacity at the expense of hard disk space. MSDE requires a minimum of 32 MB of RAM for proper operation. More memory may be required depending on the data-logging load.

Starting MSDE Manager

To start the MSDE Manager from the Windows **Programs** menu, select **Smar > ProcessView**, then **Tools**, and then **MSDE Manager**, as shown below.

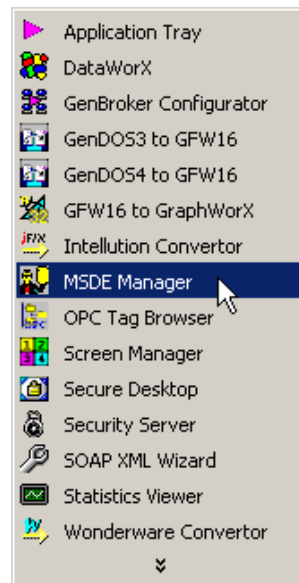


Figure 1. Starting MSDE Manager

Alternatively, you can start the MSDE Manager by selecting **MSDE Manager** from the **Tools** menu within the ProcessView Configurator applications, such as the TrendWorX Configurator. Using the MSDE manager, you can perform several data-logging and administrative functions to the underlying MSDE server. Upon startup, the MSDE Manager will detect the MSDE installation. If it is not installed, you will be prompted to install MSDE 2000 or MSDE 7.0. MSDE 2000 is selected by default. Currently the MSDE Manager supports the **Windows authentication security model (Trusted Connection)** for establishing connections to MSDE servers locally or remotely, on MS Windows NT 4.0 and MS Windows 2000 installations. On Windows 95, 98, and Millennium, the

MSDE installation uses "sa" as default user name with no password. In addition, you must enable automatic startup of MSDE for Windows 95, 98, and Millennium once the installation is completed and the system is rebooted.

Once the MSDE Manager starts up and detects MSDE installation, the MSDE Manager screen will open, as shown below. As you can see, the MSDE Manager has a "tree" view that shows a list of all available MSDE servers.

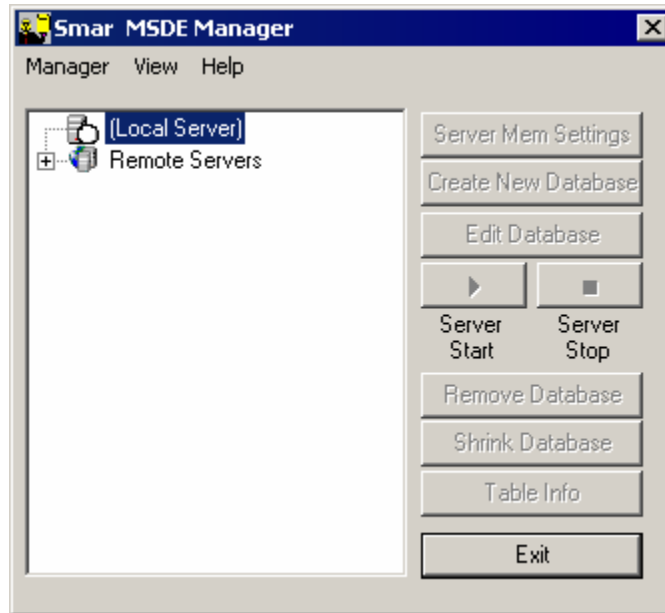


Figure 2. MSDE Manager Screen

You can then expand any node (local or remote) to retrieve more information by double-clicking on the selected node. The MSDE Manager will display a message asking you to confirm the connection, as shown below.

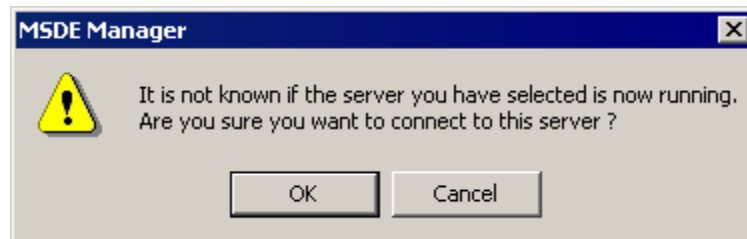


Figure 3. Connection Confirmation

When you click **OK**, the MSDE Manager will expand the node displaying more information, as shown below. The MSDE Manager is now connected to the desired MSDE server.

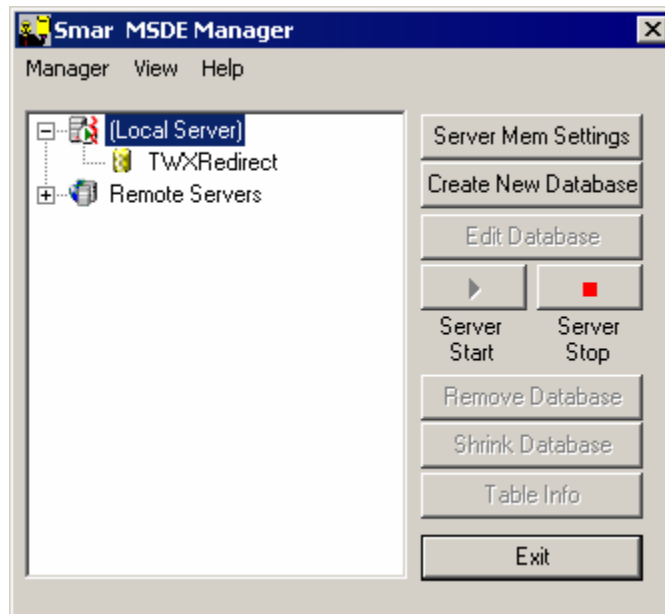


Figure 4. Connection to MSDE Server

Menus

The menu bar of the MSDE Manager, shown below, contains the following menus:

- Manager menu
- View menu
- Help menu



Figure 5. Menu Bar

Manager Menu

Select the **Exit** command on the **Manager** menu to close out of the MSDE Manager.

View Menu

Select **Refresh View** on the **View** menu to refresh the entire tree view of the MSDE Manager screen.

Choosing **Select Language** on the **View** menu opens the **Select Language** dialog box, shown below. Once you select a desired language, the MSDE Manager will load the corresponding resource .dll (if available) so that its user interface will be localized to the desired language.

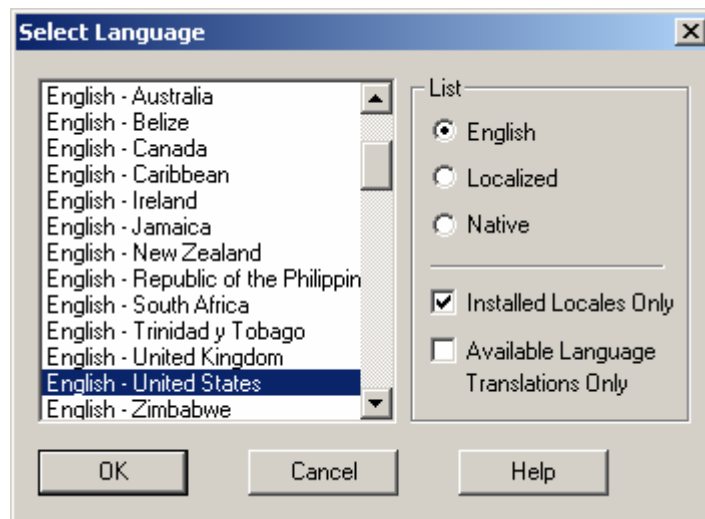


Figure 6. Select Language Dialog Box

Help Menu

Selecting **Help Topics** from the **Help** menu opens the online **Help** documentation for the MSDE Manager.

Selecting **About** from the **Help** menu opens the **About Box**, which displays information about the application.

Using MSDE Manager

Once the MSDE Manager is connected to the desired MSDE Server, you can do the following:

- Adjust MSDE server memory settings.
- Create a new MSDE database.
- Edit an existing database.
- Start an MSDE server.
- Stop an MSDE server.
- Remove an existing database.
- Shrink a database.
- Retrieve tables from the selected database.

Adjusting MSDE Server Memory Settings

To adjust the MSDE server memory settings, click the **Server Mem Settings** button. This opens the MSDE **Server Memory Settings** dialog box, shown below, which allows you to set the minimum and maximum amounts of memory that will be allocated to the currently selected server.

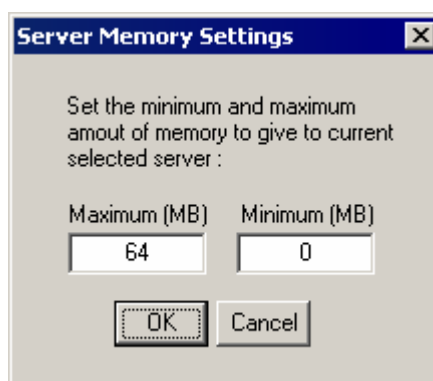


Figure 7. Server Memory Settings

By default, when MSDE server is installed, it will use all available PC memory in a dynamic way. This means that when another applications are requesting more memory, the MSDE server will free used memory resources so that they can be made available to Windows. However, this may decrease performance. In general, it is recommended that the **Maximum** value setting is no more than one-third or two-thirds of the total available PC total memory. When you have configured the settings, click **OK**.

In addition, MSDE servers will use both physical RAM as well as virtual RAM (paging file). It is strongly recommended that you make sure that the PC on which the MSDE server is installed has sufficient virtual RAM (paging file) available. In most cases, this should be about two times the size of the total RAM installed on the PC.

Note

Once the new server memory settings are applied, it is suggested that you stop and start the selected MSDE server.

Creating a New MSDE Database

To create a new database for a selected MSDE server, click the **Create New Database** button. This opens the **Set Database Options** dialog box, shown below, which allows you to configure the new database.

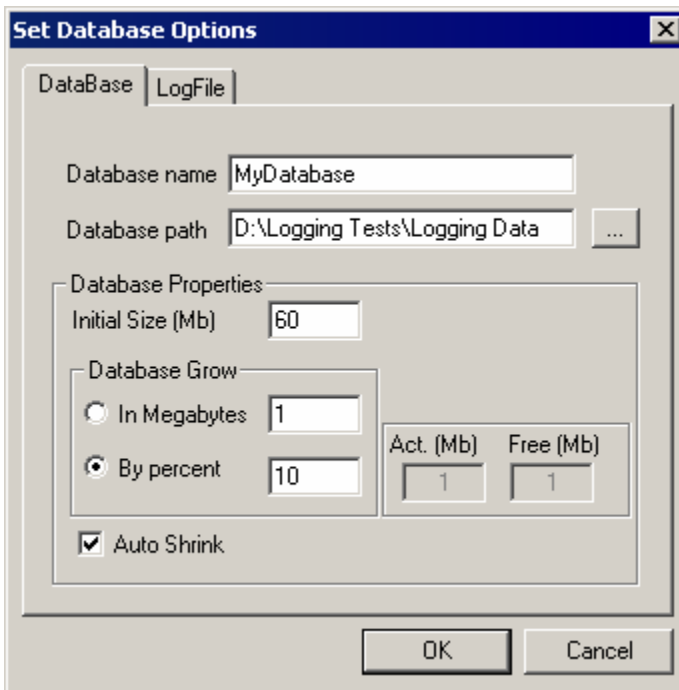


Figure 8. Set Database Options Dialog Box: Database

Enter a name for the new database, and select a path for the database. Under the **Database Properties** section, specify an initial size for the database, which should be as large as possible.

You can also specify a database growth option (in MB or as a percentage of the total size). MSDE servers are capable of growing the database on the fly to store more data. However, if this operation is performed frequently, the overall system performance may decrease. Choosing an initially large database size and a corresponding database growth option can drastically improve system performance.

Log File Settings

You can also modify the settings for the database transaction log file using the **Log File** tab of the **Set Database Options** dialog box, shown below. Again, a sufficient initial size setting can greatly improve performance. The default options should be adequate for most data-logging applications with a small to medium size load. Click OK to create the database. The "tree" of the MSDE Manager screen will refresh to display the new database.

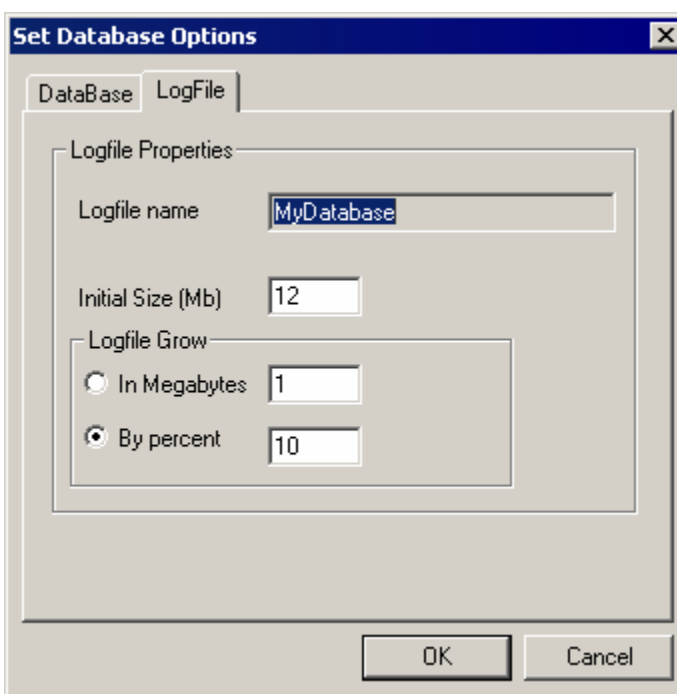


Figure 9. Set Database Options Dialog Box: Log File Tab

Editing an Existing Database

To edit an existing database, select the database in the tree view of the MSDE Manager, and then click the **Edit Database** button. This opens the **Set Database Options** dialog box, shown below, which is similar to the database creation dialog box. This dialog box shows the actual database size as well as the amount of free database space.

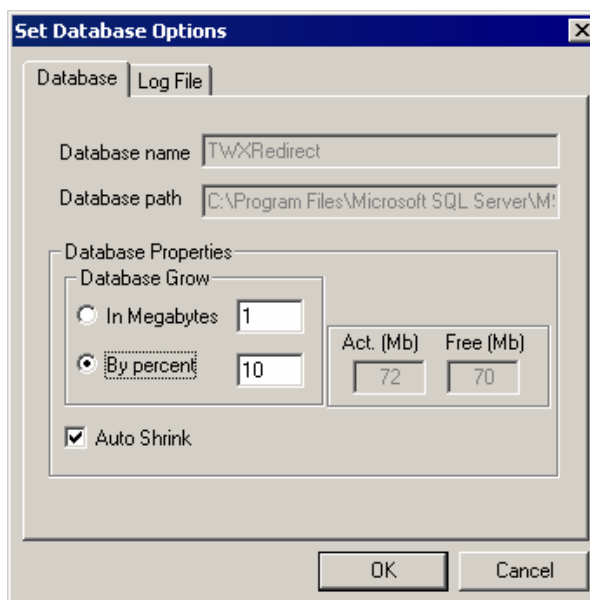


Figure 10. Set Database Options Dialog Box

Starting an MSDE Server

To start an MSDE server, select the MSDE server in the tree view of the MSDE Manager, and then click the **Server Start** button.

Note
Starting an MSDE server immediately after it has stopped it may occasionally result in the MSDE server displaying some error messages. If this happens, you should wait for a moment and then try again.

Stopping an MSDE Server

To stop an MSDE server, select the MSDE server in the tree view of the MSDE Manager, and then click the **Server Stop** button.

Note
Stopping an MSDE server immediately after it has started may occasionally result in the MSDE server displaying some error messages. If this happens, you should wait for a moment and then try again.

Removing an Existing Database

To remove an existing database, select the database in the tree view of the MSDE Manager and then click the **Remove Database** button. A message will prompt you to confirm that you want to remove the database, as shown below. Click **OK** to remove the database.

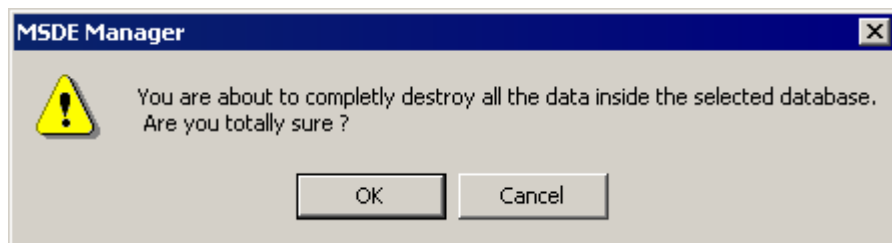


Figure 11. Warning Message

Shrinking a Database

To shrink an existing database, select the database in the tree view of the MSDE Manager and then click the **Shrink Database** button. This opens the **Shrink Database** dialog box, shown below. If **Reorganize database data** is checked, the shrink operation will also reorganize the location of the data within the database files.

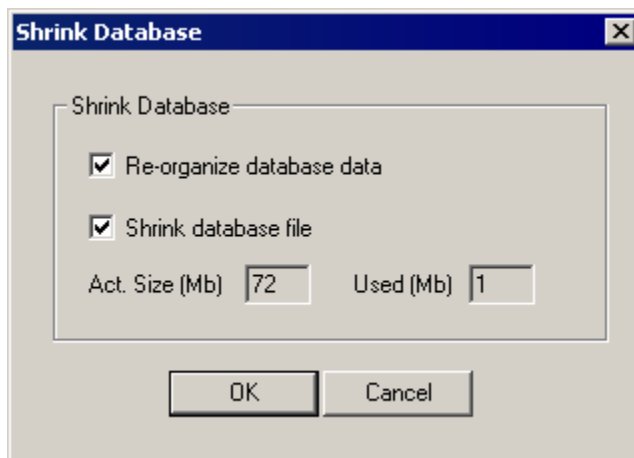


Figure 12. Shrink Database Dialog Box

Table Information

To retrieve all tables within an existing database, select the database in the tree view of the MSDE Manager and expand the view to display all tables in the database, as shown below.

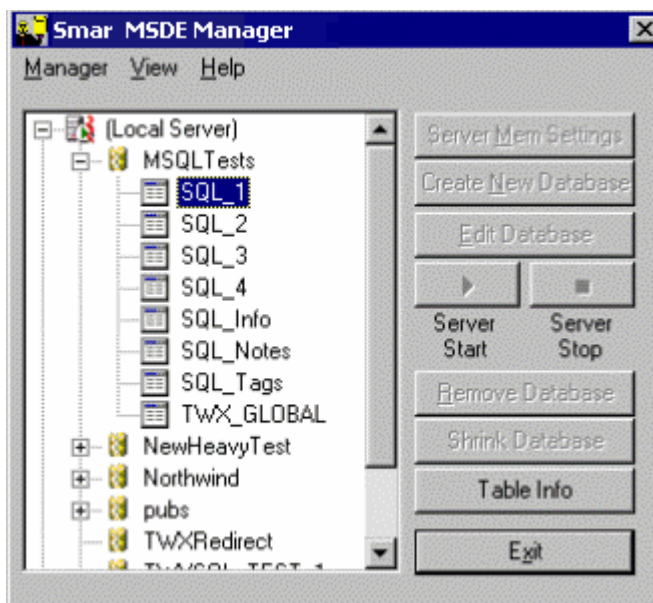


Figure 13. Database Tables

To get information about a specific table, select the table and then click the **Table Info** button. This opens the **Table Information** dialog box, shown below, which displays information about the currently selected table.

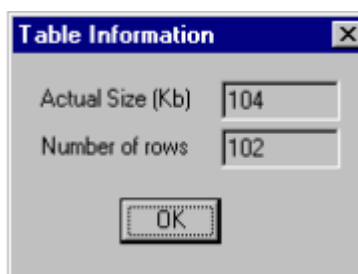


Figure 14. Table Information Dialog Box

Exiting MSDE Manager

You can exit the MSDE Manager by clicking the **Exit** button in the MSDE manager screen.

OLE Automation Support

The MSDE Manager is an OLE Automation-enabled, dialog-based application that can be started within Visual Basic for Applications (VBA) or OLE Automation-enabled applications. To start MSDE Manager through OLE Automation using VBA code, do the following:

Add references to your project to the "MSDEManager" object by browsing to the "ProcessView\bin\MSDE Manager.exe" path, as shown below.

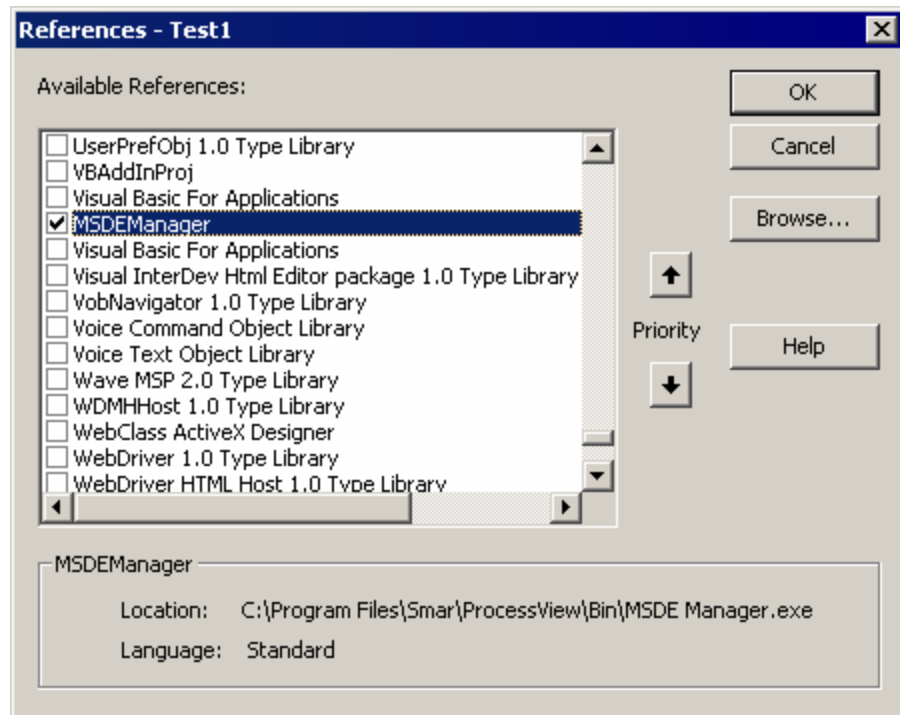


Figure 15. References

Use the following code:

```
' Declare a variable of MSDE Manager object type
Dim MyMsde As New MSDEManager.MSDEManager
' Create the object
Set MyMsde = CreateObject("MSDEManager.Application")
' Make it visible
MyMsde.Visible = True
```

MSDE Manager exposes a single OLE Automation property:

Visible

By setting it to TRUE or FALSE, it shows or hides the MSDE Manager dialog.

Note

MSDE Manager is an OLE Automation dialog-based application. If MSDE Manager is started through OLE Automation, the dialog is not destroyed when the **Exit** button is clicked. Instead it is simply hidden. The dialog will be destroyed when all OLE Automation clients of the MSDE Manager release their references to it.