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**SECUR™**

## **Back Office Database Guide**

### **Core**



This manual describes maintenance of the database that is used by the OMX SECUR Back Office Server on Microsoft® Windows NT™ and 2000™ operating systems.

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*Table 1:* Document History

Version:	Created	Comments
1	February 2003	Database maintenance was moved to this document from the Back Office User's Guide. The structure was reorganized. The chapter <i>Migration to MS SQL Server</i> and the section <i>Back Office Server and Watchdog</i> were added. Reviewed by Lars Nygren.
2	April 2003	Added a few sentences about house-keeping
5	February 2006	OMex branding applied. General review and updates by Jenny Billing and Ylva Lindahl (SQL Server)
6	May 2006	Updated date and version for the 19.0-0200 release.

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# 1 Introduction

This entire manual is a core manual. It provides procedures and instructions related to the database that the OMX SECUR Back Office Application uses.

A new user is recommended to read this *Introduction* chapter first.

## Overview

This chapter contains an overview of how to use the manual, how to start and stop the OMX SECUR Back Office Application and related applications.

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## Startup Procedures:

- Back Office Client Main Window
- Exiting

## Related Applications

- OMex Product Design Application
- OMX SECUR Clearing Office Application

## Manual Tips

- How to Use this Manual
- Manual Conventions

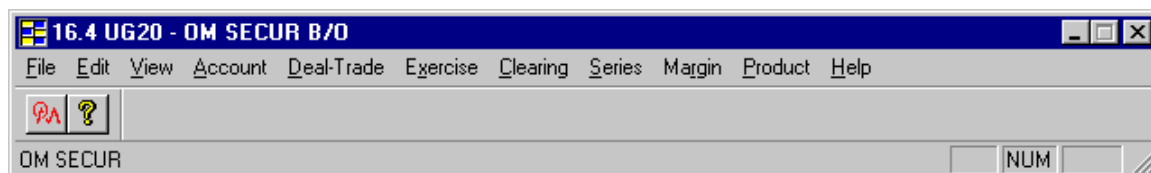
*To top of chapter 1.*

## 1.1 OMX SECUR Back Office Client

The purpose of the OMX SECUR Back Office Client (BO) is to cover activities needed by clearing member personnel in an efficient and user-friendly way. It includes functions such as retrieving information provided by the central system and requesting exercises on positions.

### 1.1.1 Back Office Client Main Window

Figure 1: Back Office Client Main Window

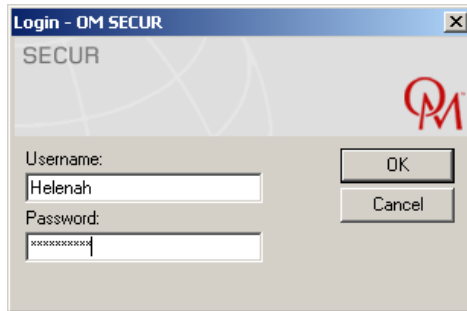


## 1.1.2 Logging In

Use this procedure to log in to the BO Client:

1. Switch on the PC.
2. In Windows Login dialog enter your Windows username and password
3. On Windows **Start** menu, choose **Programs** ⇒ **OMX SECUR** ⇒ **Back Office for <Application Title>**.

*Result:* The **OMX SECUR** splash screen is presented followed by the **OMX SECUR Login** dialog.



4. In **OMX SECUR Login** dialog enter your Windows **Username** and **Password**.

⇒ **OK**

**Note:** The BO Client uses Windows **Username** and **Password**.

*Result:* If the login was successful, the **OMX SECUR B/O** main menu appears Figure 1: .

To top of chapter 1.

## 1.1.3 Exiting

To exit the BO Client, choose **File** ⇒ **Exit**

## 1.2 OMX SECUR Back Office Server and Watchdog

The OMX SECUR Back Office Server (BO Server) is installed as a service with no automatic start. To handle starting and restarting of the BO Server, a Watchdog was installed at the same time as the Server. It is installed as a service with automatic startup.

### 1.2.1 Stopping BO Server and Watchdog

Perform one of the following procedures to stop the BO Server and Watchdog:

## Actions for Windows 2000

1. Select **Start** ⇒ **Settings** ⇒ **Control Panel** ⇒ **Administrative Tools** ⇒ **Services**.  
*Result:* The **Services** window opens displaying service items.
2. Select the **Back Office Watchdog** item ⇒ **Stop** on the right-click menu.  
*Result:* The Watchdog stops.
3. Select the **Back Office Server <instance>** item ⇒ **Stop** on the right-click menu.  
*Result:* The BO Server <instance> stops.
4. Close the **Services** window.

*To top of chapter 1.*

### 1.2.2 Starting Automatically

The BO Server is started and restarted automatically by the Watchdog process. The Watchdog is restarted when the computer is restarted. The user does not need to perform any actions to run the Server.

The first time the server starts, it downloads all active trades, all accounts, yesterday's information and today's instruments into the database. This may take some time.

**Note:** We strongly recommend that the first startup take place outside trading hours since the download can affect the performance of potential trading applications sharing the same physical connection.

### 1.2.3 Viewing Startup Progress

The progress of the startup can be followed in the server log file:

```
Bo_srv_<INSTANCE>_<NODE>.LOG
```

The log file is located in the **Logfiles** directory, specified in the **Folder** dialog. When the startup process is complete, the BO Server prints "**Init is complete. Doing the main loop.**"

## 1.3 Related OMX Applications

### 1.3.1 OMex Product Design Application

The purpose of the Product Design application (PD) is to define and store permanent data required for trading such as financial products, members, fees, events, trading rules and processes. The data is stored in the Common Database CDB. Information about trades, accounts and positions are not included.

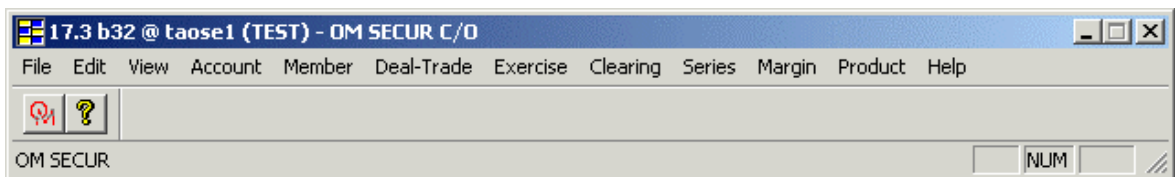
Figure 2: Product Design Application Main Window



### 1.3.2 OMX SECUR Clearing Office Application

The purpose of the Clearing Office application (CO) is to cover activities needed by Clearing Office personnel in an efficient and user-friendly way. It includes functions such as retrieving information provided by the central system, registering trades, clearing and settlement. Data about trades, accounts and trades are stored in the Clearing Database.

Figure 3: Clearing Office Application Main Window



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## 1.4 Manual Features

### 1.4.1 How to Use this Manual

This manual is intended as a self-tutorial with brief explanations of the fields and functions available in the application. Its organization complies with the main menu options and does not correlate to specific use cases. The manual can be used on-screen or printed. On-screen clickable links are provided to speed up browsing and finding information.

Table 2: Manual Structure

Chapter	Section	Sub-Section	Body
<p>Each chapter relates to a main menu option and describes activities included. In the beginning of the chapter an overview of its sub-menu options is presented. Then a number of clickable links to various chapter parts are provided, such as:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Procedures</li> <li><input type="checkbox"/> Windows and dialogs</li> <li><input type="checkbox"/> Right-click menus</li> <li><input type="checkbox"/> Field description</li> <li><input type="checkbox"/> Tables</li> <li><input type="checkbox"/> More fact information</li> </ul> <p>The main part of the chapter is divided into sections that deal with a specific sub-menu option or a specific function.</p>			

Each section is divided into sub-sections of various types to present information relevant to the specific sub-menu option or the specific function. On each page there is a link to the chapter top to provide quick access to other parts of the document.	
... Window	Description of a window Figure Tables: <i>Search Filters</i> – how to specify the window search area to display desired items <i>List Columns</i> – descriptions of all fields in the window listed in alphabetical order <i>Action Buttons</i> – what happens when the button is selected
... Dialog	Description of a dialog Figure Tables: <i>Input Specifiers</i> – how to specify the dialog input fields to create a new item <i>Action Buttons</i> – what happens when the button is selected
... Right-Click Menu	Description of a right-click menu Figure Table: <i>Menu Options</i> – what happens when an item in the list is selected followed by selection of a right-click menu option
Procedure	Instruction steps for a certain activity
About ...	Certain facts are described in detail

To top of chapter 1.

## 1.4.2 Manual Conventions

Table 3: lists the conventions used in this manual:

Table 3: Manual Conventions

Convention	Description
First Capital	Indicates application names such as names of menus, windows, options, fields and buttons.
<i>Italic</i>	Indicates references to chapters and sections in the manual.
Computer style	Indicates computer text input or output in command line windows; file or directory names.
<b>Label style</b>	Indicates software buttons in the application.
<b>Field style</b>	Indicates a field, menu, menu option or window name used by the application.
Value style	Indicates values that can be presented by the application in dialogs and lists.
<b>[Key]</b>	Indicates hardware keys

Convention	Description
	<p><b>Example:</b></p> <p><b>[Enter]</b> indicates the enter key on the keyboard.</p>
<variable>	Indicates a document variable that must be replaced with its proper value.
⇒	<p>Indicates a sequence of choices.</p> <p><b>Example:</b></p> <p>“Choose <b>Deal-Trade</b> ⇒ <b>Synthetic Delivery</b> ⇒ <b>Confirm</b> button.”</p> <p>This sequence is the same as “Choose <b>Deal-Trade</b> on the main menu, then choose <b>Synthetic Delivery</b> on the sub-menu and finally click the <b>Confirm</b> button in the window that opened.”</p>
<a href="#">Contents</a>	Clickable link to the Contents list.
<i>To top of chapter 1.</i>	Clickable link to the chapter top.
<input type="checkbox"/> How to Use this Manual <input type="checkbox"/> Manual Conventions <input type="checkbox"/> Manual Structure	Clickable links to chapter parts.

*To top of chapter 1.*

## 2 Database Maintenance

**Note:** All procedures described in this chapter affect the database used by the OMX SECUR Back Office Server (BO Server) and should normally be used only upon recommendation from OMX.

### Overview

This chapter describes some database maintenance activities:

- All Databases
- MS Access Database
- MS SQL Server Database Migration

### [Contents](#)

#### Procedures:

- Refreshing the Database
- Replacing the Database Completely
- Configuring the BO Server for Automatic Compressing
- Initiating Manual Compressing
- Creating the Database
- Creating Tables and Indexes
- Creating an ODBC Data Source
- Creating a New Login
- Reconfiguring the BO Server
- Importing the MS Access Database
- MS SQL Server Database Maintenance

#### Figures:

- Load/Reload Dialog
- Command Prompt Window, Command Line
- Command Prompt Window, Result
- Database Properties Window, General Tab
- Database Properties Window, Data Files Tab
- Database Properties Window, Transaction Log Tab
- SQL Query Analyzer Window
- SQL Server Login Properties Window, General Tab
- SQL Server Login Properties Window, Server Roles Tab
- SQL Server Login Properties Window, Database Access Tab
- Registry Editor

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## 2.1 All Databases

The procedure in this section can be performed on either an MS Access database or an MS SQL Server database if this database for some reason has become corrupt.

### 2.1.1 Refreshing the Database via BO Client

Use the OMX SECUR Back Office Application to perform this procedure.

Figure 4: Load/Reload Dialog



Use this procedure to refresh the database used by the BO Server:

1. Choose **Series** ⇒ **Load/Reload** window.  
*Result:* The **Load/Reload** window appears Figure 4: .
2. Choose desired actions in the **Action** scroll list:
  - a) Select “restart the OMX SECUR B/O Server” ⇒ **Send**.  
*Result:* This operation restarts the BO Server.
  - b) Select “reload trades from a date” ⇒ **Send**.  
*Result:* This makes the **Date** and **Commodity** fields editable. Enter the date from which you want to load trades. The trades from the specified date up to the current date are reloaded. You can choose to select a specific commodity or all commodities. By selecting a commodity, only trades placed on derivative series for this commodity will be reloaded. This saves time compared to reloading all trades.

**Note:** This operation disconnects all clients from the server when the server reloads the trades and lets clients reconnect after the reload.

  - c) Select “reload all accounts” ⇒ **Send**.  
*Result:* This operation restarts the server and reloads all accounts during startup. It is not necessary to use this function to reload accounts that have been added during the day. These are automatically downloaded when the user chooses **Search** in the **Account Detail**

window and when the server is started.

d) Select “**reload payments from a date**” ⇒ **Send**.

e) Enter the date from which you want to reload payments. The payments from the specified date up to the current date are reloaded.

*Result:* This operation restarts the server and thereby disconnects all clients during the restart. The clients are automatically reconnected again once the server has started.

f) Select “**reload instruments**” ⇒ **Send**.

*Result:* This operation restarts the server and reloads all instruments during startup. The clients will therefore be disconnected during this operation but they will be reconnected automatically when the server is restarted.

g) Select “**reload trading statistics from a date**” ⇒ **Send**.

h) Enter the date from which you want to reload trading statistics. The trading statistics from the specified date up to the current date are reloaded.

*Result:* This operation restarts the server and thereby disconnects all clients during the restart. The clients are automatically reconnected again once the server is started.

i) Select “**reload deliveries from a date**” ⇒ **Send**.

j) Enter the date from which you want to reload deliveries. The deliveries from the specified date up to the current date are reloaded.

*Result:* This operation restarts the server and thereby disconnects all clients during the restart. The clients are automatically reconnected again once the server is started.

k) Select “**reload margin requirements from a date**” ⇒ **Send**.

l) Enter the date from which you want to reload margin requirements. The margin requirements from the specified date up to the current date are reloaded.

*Result:* This operation restarts the server and thereby disconnects all clients during the restart. The clients are automatically reconnected again once the server has started.

m) Select “**reload non trading days**” ⇒ **Send**.

*Result:* This operation restarts the server and reloads all non-trading days during startup. The clients will therefore be disconnected during this operation but they will be reconnected automatically when the server is restarted.

## 2.1.2 About housekeeping

The built-in housekeeping facility cleans out old records in the BO database. The number of days specified (at installation of the BO server) for storing records might however not be exactly complied with, since housekeeping is not performed if current day or next day is a non-trading day. In this respect only Saturday and Sunday are considered non-trading days.

## 2.2 MS Access Database

The procedures in this section can be performed only on an MS Access database.

### 2.2.1 Replacing the Database Completely

In some serious malfunction situations a complete replacement of the database may be necessary. Perform the procedure from a DOS **Command Prompt** window.

Figure 5: Command Prompt Window, Command Line

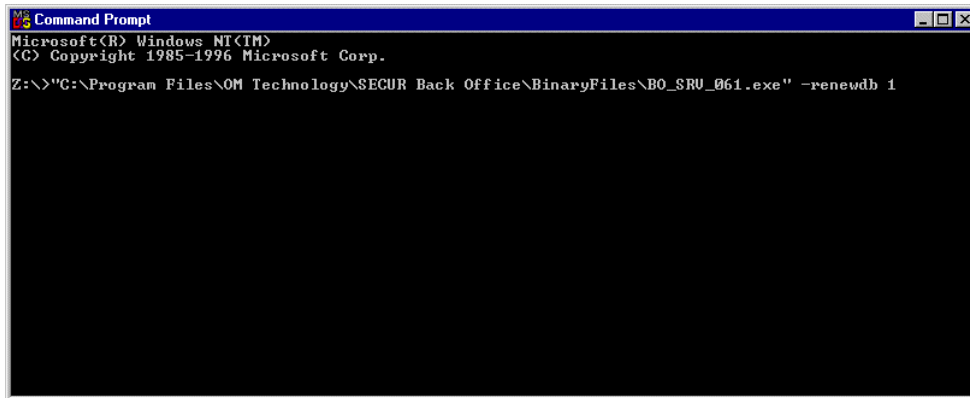


Figure 6: Command Prompt Window, Result



*To top of chapter 2.*

Use this procedure to replace the entire MS Access database used by the BO Server:

1. Open the folder in which the BO Server executable resides.
2. Open a DOS **Command Prompt** window on your machine.
3. Drag and drop the server executable file into the DOS **Command Prompt** window Figure 5: . If the path name includes spaces enclose all of it in double quotes:
  - a) Add a space and the argument `-renewdb`.
  - b) Add a space and the instance number of the database to be replaced.

- Press **[Enter]** Figure 6: .

*Result:* A confirmation/warning dialog is displayed. Select the desired option.

- |   |                                                                                                      |
|---|------------------------------------------------------------------------------------------------------|
| Y | All content in the current BO database is deleted and will be replaced upon a subsequent BO restart. |
| N | The renewal is aborted and the current database left as is.                                          |

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## 2.2.2 Configuring the BO Server for Automatic Compressing

**Note:** All actions described should be performed only after confirmation by OMX authorized personnel.

To reduce the size of the database, the BO Server can be configured to compress the database on a weekly basis. The compression will be executed the night between Saturday and Sunday. The format of the compressed database depends on the compressing engine utilized. Modify the configuration variables as described below. Use the Windows **Registry Editor**.

Use this procedure to configure the BO Server to automatically compressing the database:

- Choose **Start** ⇒ **Run** and type `regedit` ⇒ **OK**.

*Result:* The **Registry Editor** opens Figure 14: .

- Select path:

[HKEY\_LOCAL\_MACHINE\SOFTWARE\OM\OM  
SECUR\BackOffice\*<instance>*]

- ⇒ **Modify** on the right-click menu for the listed variables and change the **Data** values:

Variable	Data
CL_BOS_DB_COMPRESS	'TRUE'
CL_BOS_DB_COMPRESS_OPTIONS	Engine options to select:
	1 Jet OLEDB: Engine Type=1
	2 Jet OLEDB: Engine Type=2
	3 Jet OLEDB: Engine Type=3
	4 Jet OLEDB: Engine Type=4
	5 Jet OLEDB: Engine Type=5
	<not set> use the latest Jet Engine version installed on the machine

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## 2.2.3 Initiating Manual Compressing

Configure the BO Server as described above. Perform the instruction below to start compressing the MS Access database to reduce its size.

**Note:** This operation may take quite a lot of time depending on the size of the database.

Open a DOS **Command Prompt** window to execute the following command:

```
am -appl omex -inst <exchange name> bo_SRV <instance> COMPRESS DB
```

---

**Example:**

```
am -appl omex -inst HKEEX bo_SRV 1 COMPRESS DB
```

*Result:* The BO Server is stopped and restarted by the Watchdog process. At this startup the BO Server compresses the database.

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## 2.3 MS SQL Server Database Migration

The procedures described below are recommended for very large databases if problems have appeared. Contact OMX personnel first to receive the mandatory file:

```
create_mssql_bopc_db.sql
```

By installing an MS SQL Server, the BO Server can use an MS SQL Server database instead of an MS Access database. The BO Server will connect to the new database via Windows Open DataBase Connectivity (ODBC) tool. The MS SQL Server can be installed on the BO Server node or any other connected node.

The procedures below are described for MS SQL 2000.

**Note:** Before starting the installation stop the BO Server using the **Service** tool as described in 1.2.1.

### 2.3.1 Creating the Database

Use the **SQL Server Enterprise Manager** to create a new MS SQL Server database.

Figure 7: Database Properties Window, General Tab

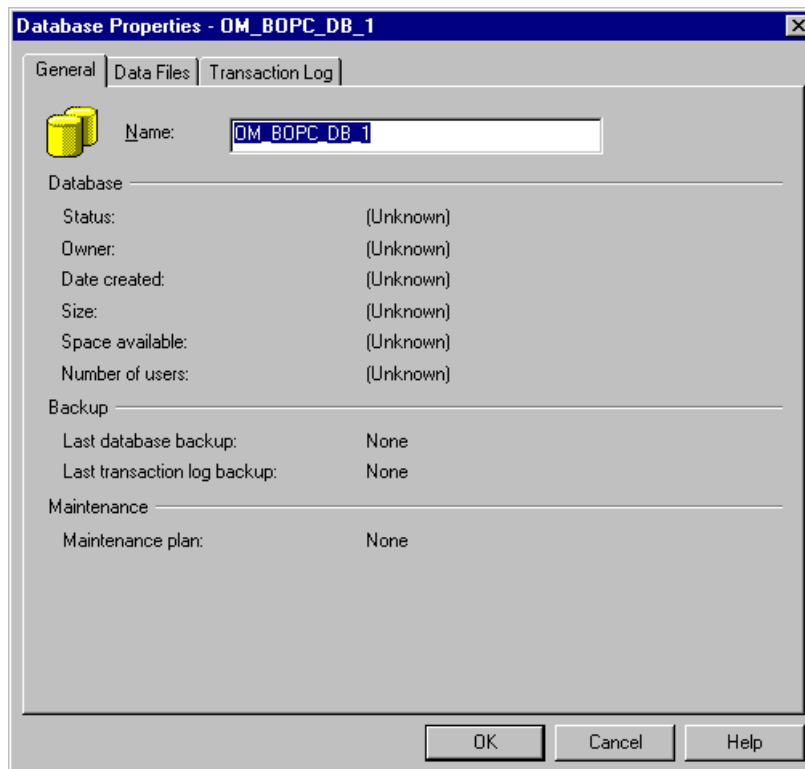


Figure 8: Database Properties Window, Data Files Tab

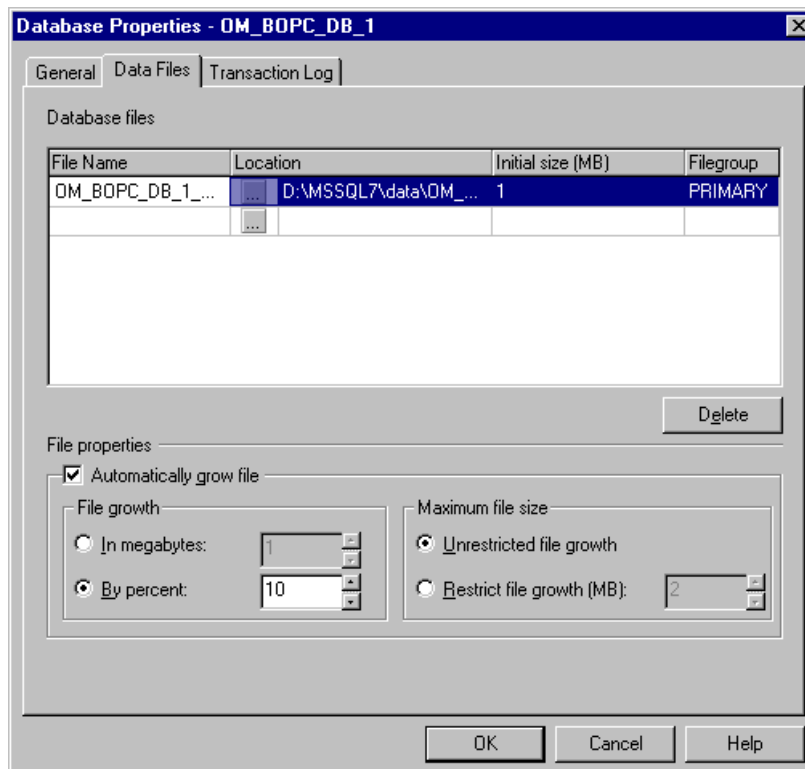
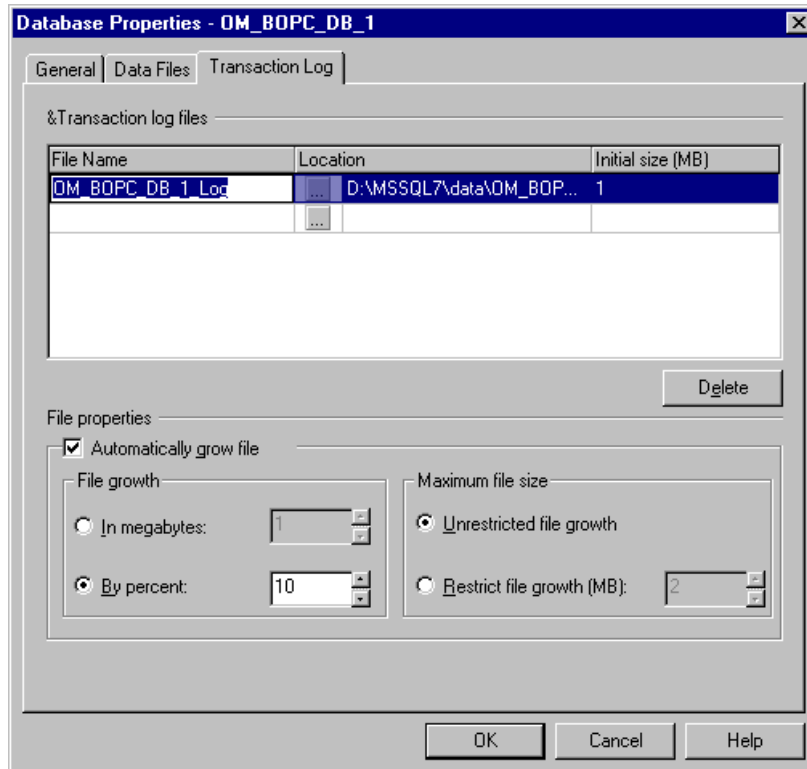


Figure 9: Database Properties Window, Transaction Log Tab



Perform the procedure to create the MS SQL Server database:

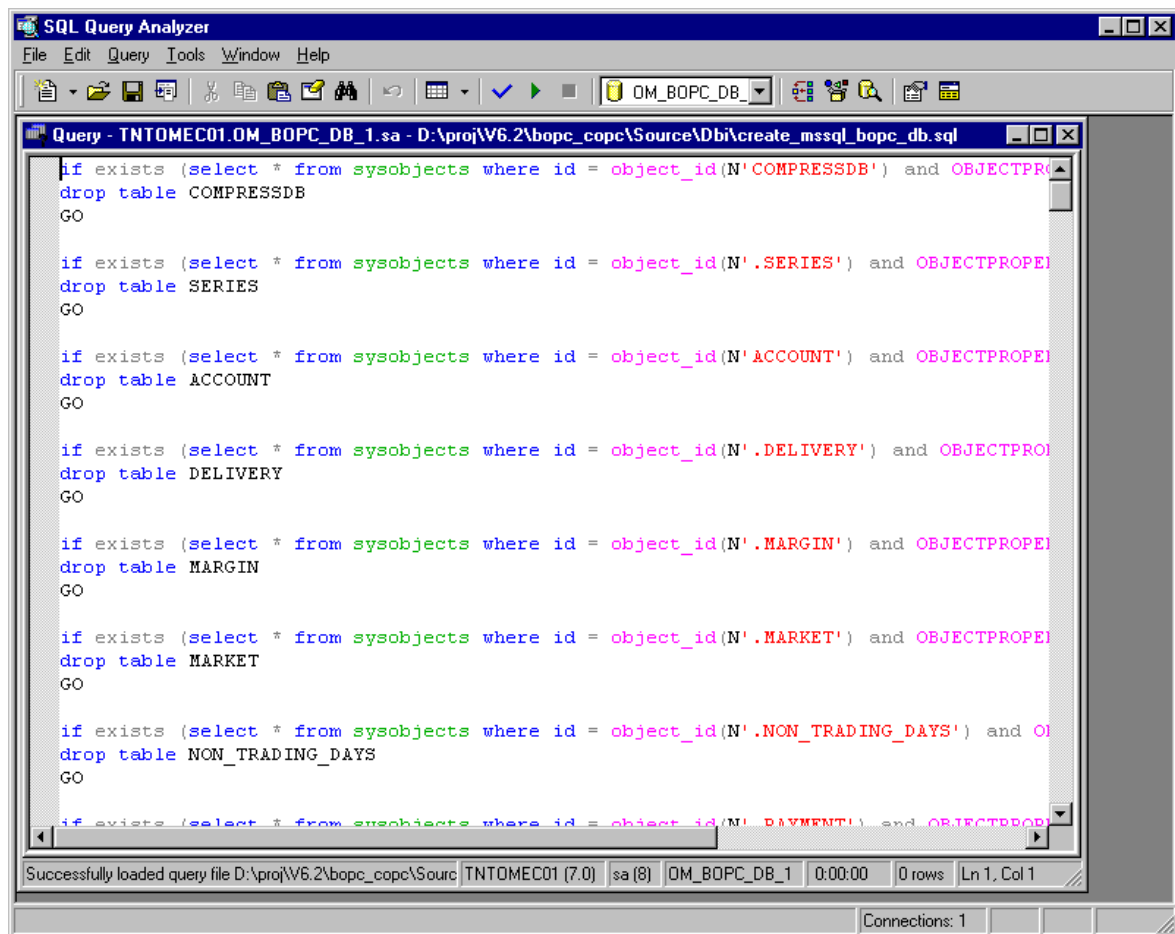
1. Choose the **SQL Server Enterprise Manager** ⇒ **Databases** ⇒ **New Database**.
2. Choose the **General** tab.  
*Result:* The **General** view opens Figure 7: .
3. As **Name** specify <database name> as shown in Figure 7: .
4. Choose the **Data Files** tab.  
*Result:* The **Data Files** view opens Figure 8: .
5. Specify a **Location** for the database file or accept the default as shown in Figure 8: .
6. Choose the **Transaction Log** tab.  
*Result:* The **Transaction Log** view opens Figure 9: .
7. Specify a **Location** for the log file or accept the default as shown in Figure 9: .
8. ⇒ **OK**.  
*Result:* The created database appears in the tree in the **SQL Server Enterprise Manager** window.

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## 2.3.2 Creating Tables and Indexes

Use the **SQL Query Analyzer** to create tables and indexes for the new database.

Figure 10: SQL Query Analyzer Window



Perform the procedure to create tables and indexes:

1. Choose the **SQL Query Analyzer**.
2. In the top drop-down list select the new database **<database name>**.
3. Open the file **create\_mssql\_bopc\_db.sql**. (The file was provided from OMX on request).
4. To execute the SQL script ⇒ **Query** ⇒ **Execute**.  
*Result:* The tables and indexes are created.

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## 2.3.3 Creating an ODBC Data Source

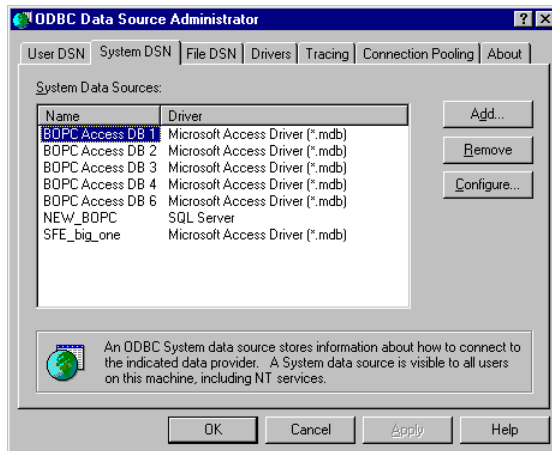
The new database **<database name>** must be defined as a data source **<data source name>** for Windows ODBC tool. These names can be the same or different.

Perform the procedure to create an ODBC data source:

1. Choose **Control Panel Administrative Tools** ⇒ **Data Sources**

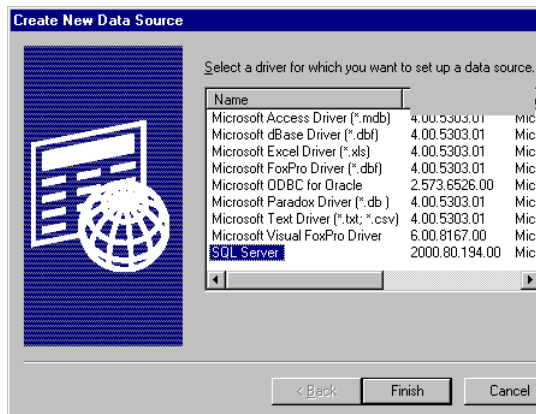
(ODBC) window ⇒ **System DSN** tab.

*Result:* The **System DSN** view opens listing all available MS Access and SQL Server databases.



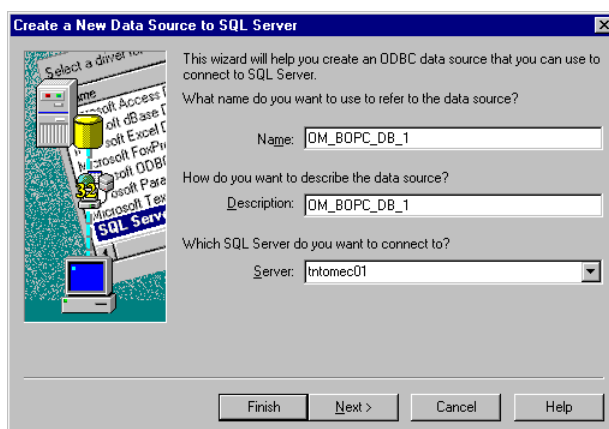
2. ⇒ **Add** to add the new data source as a system DSN.

*Result:* The **Create New Data Server** view opens.



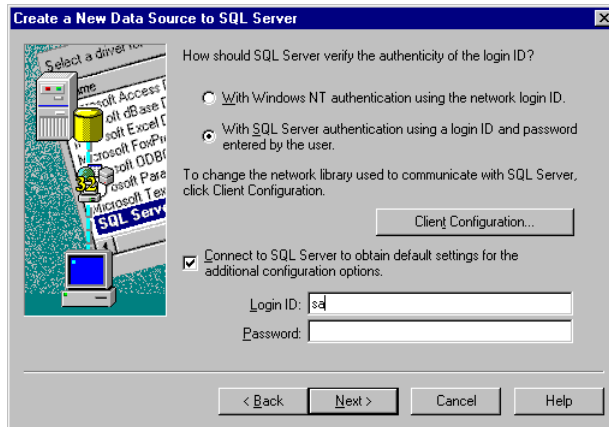
3. Select the **SQL Server** driver ⇒ **Finish**.

*Result:* The **Create a New Data Source to SQL Server** window opens.



4. As **Name** enter **<data source name>** for the new data source and specify **Description** and **Server** ⇒ **Next**.

*Result:* The next view opens.



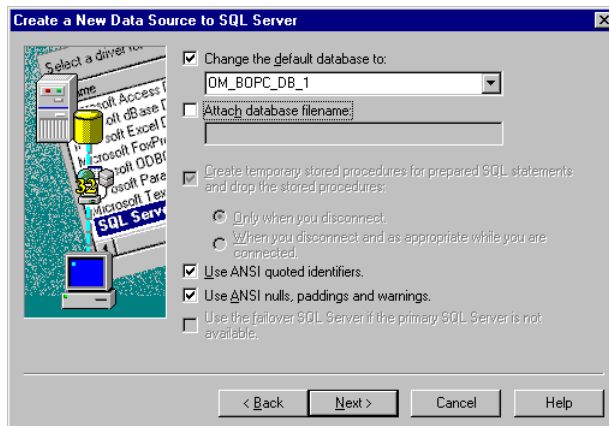
5. Enter the default SQL Server login authentication:

**Login ID** = sa

**Password** = <blank>

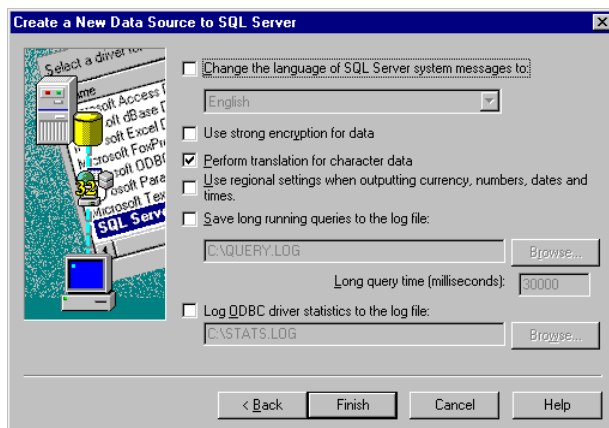
⇒ **Next.**

*Result:* The next view opens.



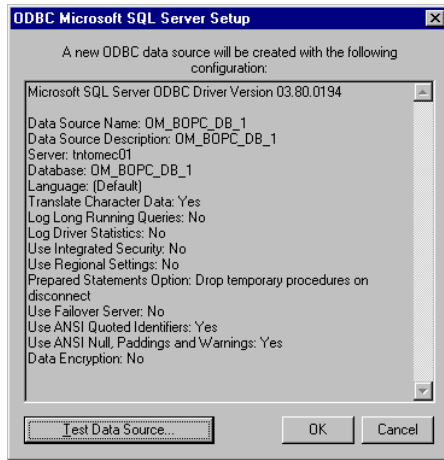
6. Select the created database <database name> in the drop-down list ⇒ **Next.**

*Result:* The new database is connected to the new data source. The next view opens.



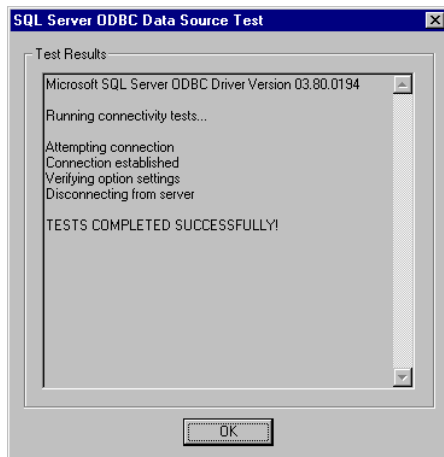
7. Accept the default settings in this window ⇒ **Finish**.

*Result:* The **ODBC Microsoft SQL Server Setup** window opens listing the selected options.



8. ⇒ **Test Data Source** to test the ODBC data source.

*Result:* The **Server ODBC Data Source Test** information box opens.



9. ⇒ **OK**.

*Result:* The entered data is tested.

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### 2.3.4 Creating a New Login Authentication

It is recommended that the default SQL Server login authentication be replaced with a specific authentication for the BO Server to use. Use the **SQL Server Enterprise Manager** to create the new authentication.

Figure 11: SQL Server Login Properties Window, General Tab

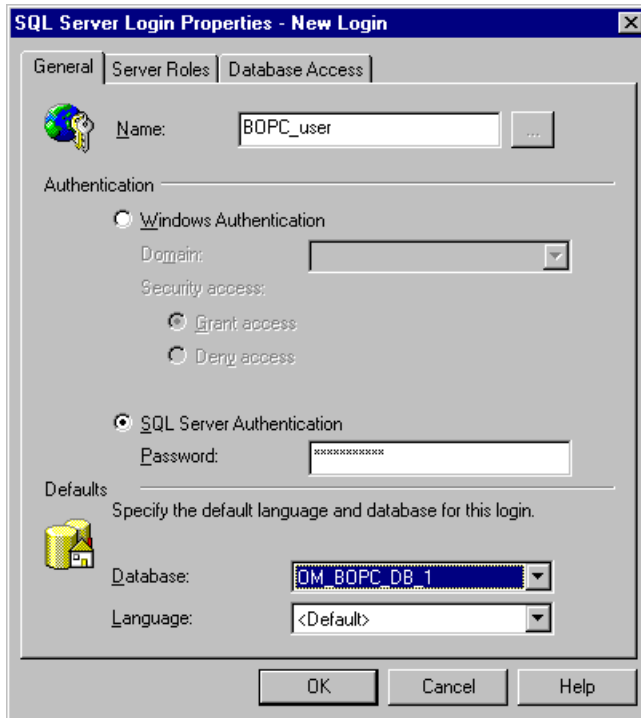


Figure 12: SQL Server Login Properties Window, Server Roles Tab

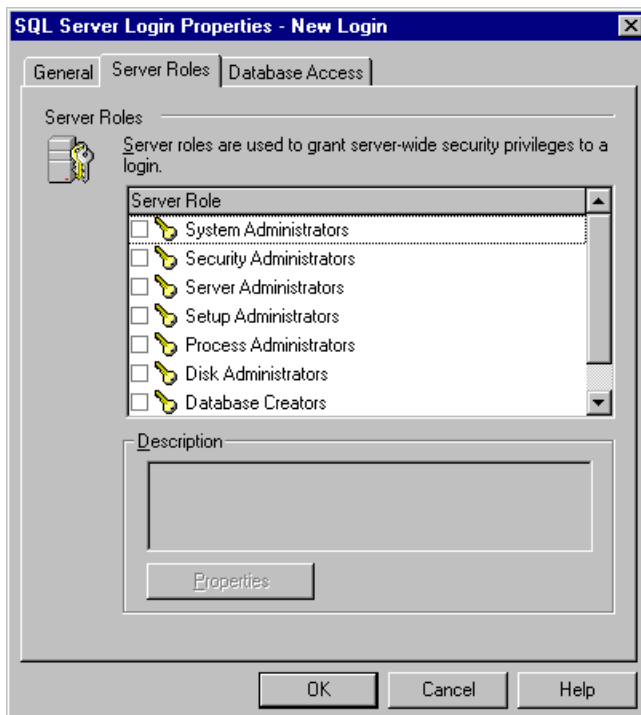
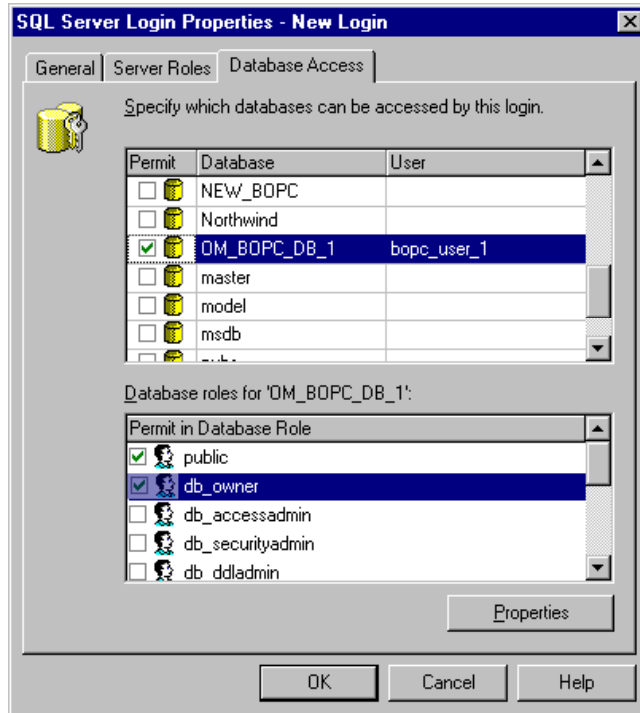


Figure 13: SQL Server Login Properties Window, Database Access Tab



Perform the procedure to create a new SQL Server login authentication for the BO Server:

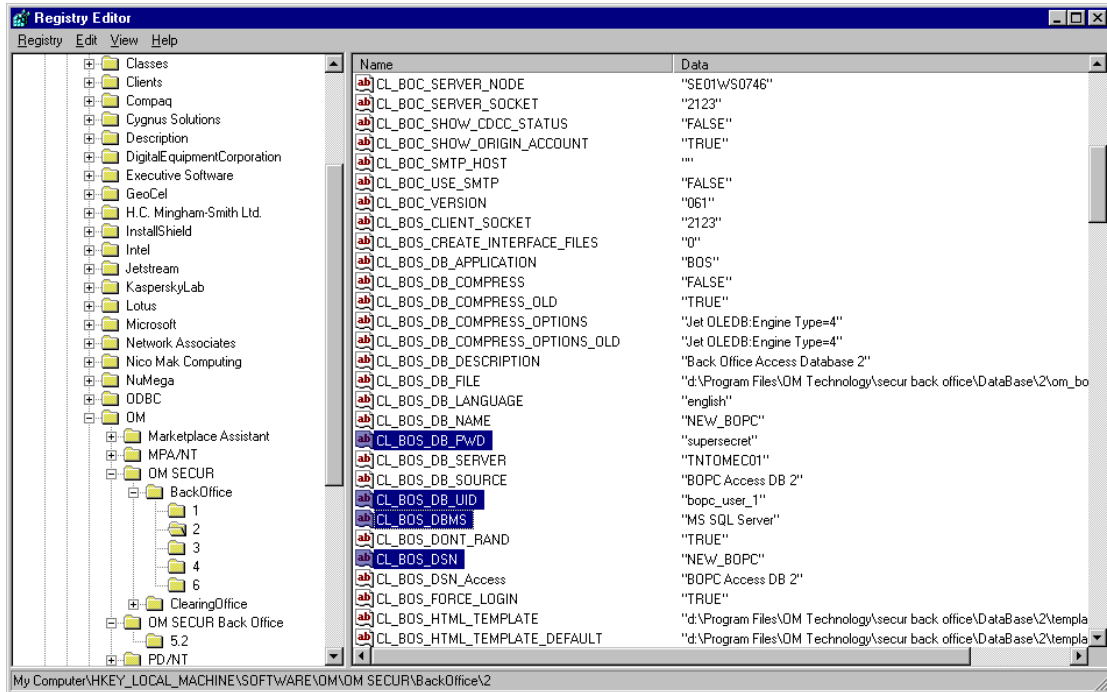
1. Choose the **SQL Server Enterprise Manager**.  
*Result:* The tree view opens.
2. Select the <SQL Server node name> ⇒ **Security Logins** on the right-click menu ⇒ **New Login** ⇒ **General** tab.  
*Result:* The **General** view opens Figure 11: .
3. As **Name** specify a new login identity, specify a new **Password** and as **Database** select <database name> ⇒ **Server Roles** tab.  
*Result:* The **Server Roles** view opens Figure 12: .
4. No specific **Server Role** need to be specified ⇒ **Database Access** tab.  
*Result:* The **Database Access** view opens Figure 13: .
5. Check desired options. Make sure the **db\_owner** is checked so that the BO Server can act as a database owner.
6. ⇒ **OK** when you are satisfied with the settings.

*To top of chapter 2.*

## 2.3.5 Reconfiguring the BO Server

Install a BO Server if not already installed. Modify or add the configuration variables described below. Use the Windows **Registry Editor**.

Figure 14: Registry Editor



Use this procedure to reconfigure the BO Server to use the created MS SQL Server database:

1. Choose **Start** ⇒ **Run** and type `regedit` ⇒ **OK**.  
*Result:* The **Registry Editor** opens Figure 14: .
2. Select path:  
`[HKEY_LOCAL_MACHINE\SOFTWARE\OM\OM SECUR\BackOffice\<instance>]`
3. ⇒ **Modify** on the right-click menu for the listed variables and change the **Data** values:

Variable	Data
CL_BOS_DSN	<data source name> as defined in 2.3.3 step 4.
CL_BOS_DBMS	<MS SQL Server> the same as selected in 2.3.4 step 2.

4. ⇒ **New** on the right-click menu for any white space in the window ⇒ **String Value** and add the listed variables:

Variable	Data
CL_BOS_DB_UID	<login identity> as defined in 2.3.4 step 3.
CL_BOS_DB_PWD	<login password> as defined in 2.3.4 step 3.

CL\_BOS\_DB\_APPLICATION  
ON

**Note:** This application name is displayed in the **SQL Server Enterprise Manager Current Activity** window.

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### 2.3.6 Importing the MS Access Database

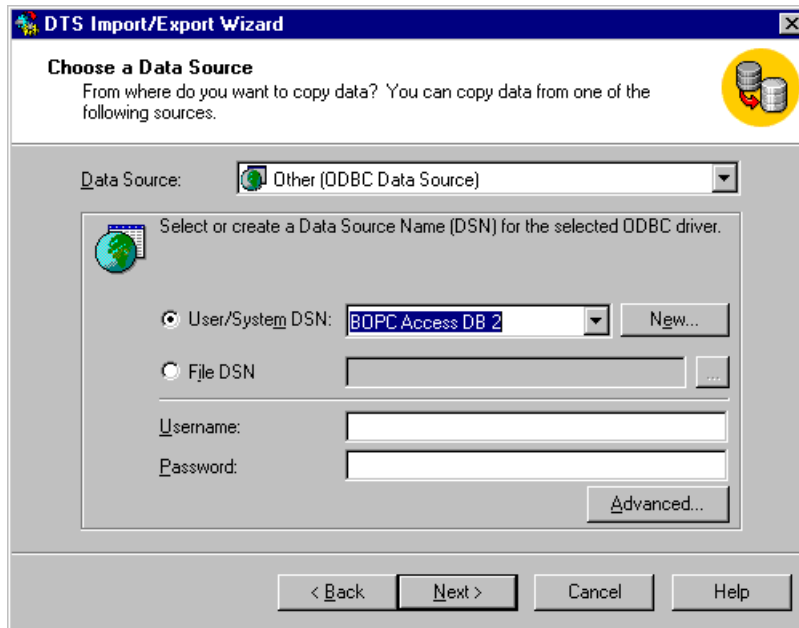
The modified BO Server can start with an empty database. However it is recommended to import the existing MS Access database into the empty MS SQL Server database. This will reduce the startup time dramatically since less data needs to be reloaded from the central system.

Perform the procedure to import the MS Access database into the MS SQL Server database.

1. Choose the **SQL Server Enterprise Manager**.  
*Result:* The tree view opens.
2. Select the created database ⇒ **All Tasks** on the right-click menu ⇒ **Import Data**.  
*Result:* The **Data Transformation Services (DTS) Import/Export Wizard** opens.



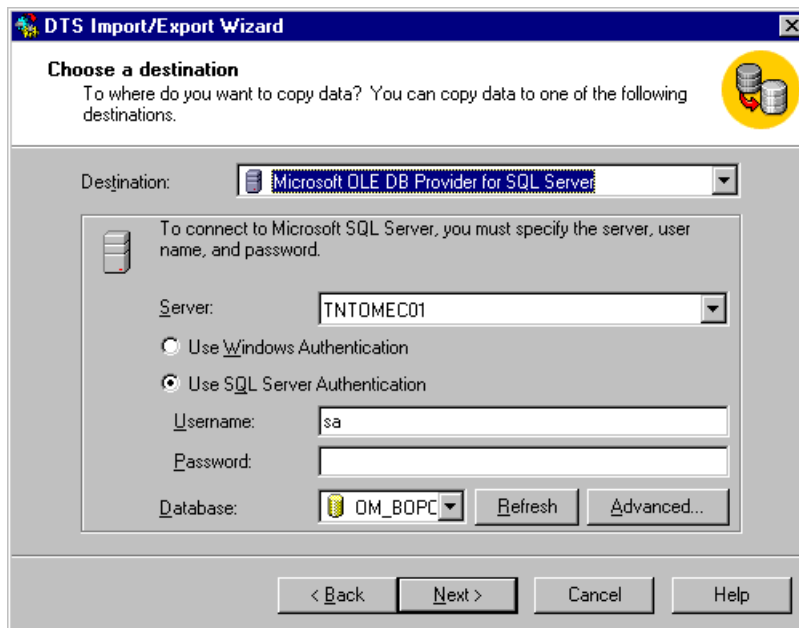
3. ⇒ **Next**.  
*Result:* The next view opens.



4. Select **Data Source** and **User/System DSN** to specify the old MS Access database. Normally the latter value would be **BOPC Access DB <instance>**.

⇒ **Next.**

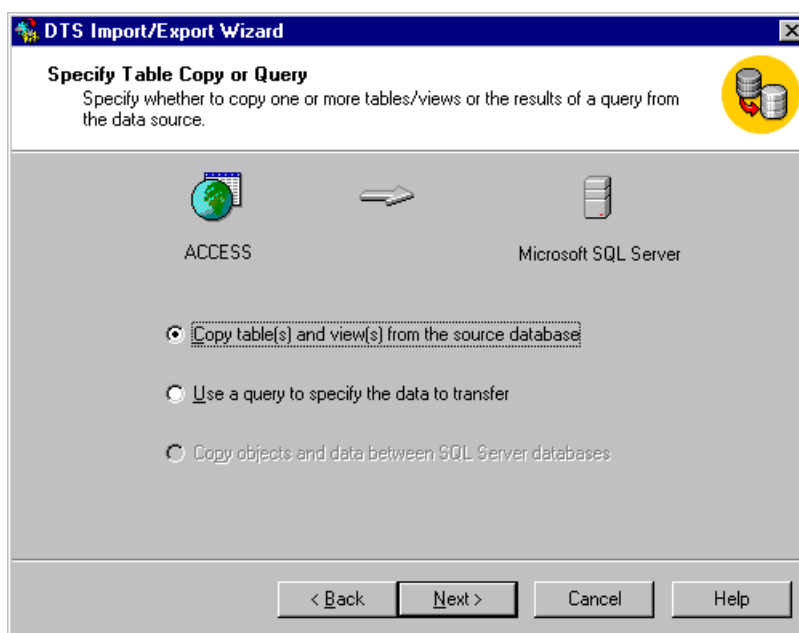
*Result:* The next view opens.



5. Select **Destination** properties related to the created MS SQL Server database.

⇒ **Next.**

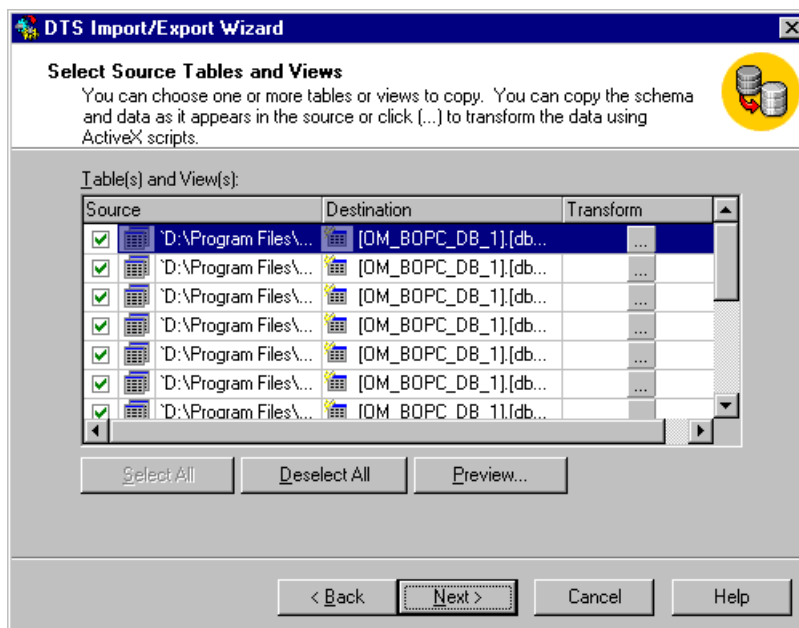
*Result:* The next view opens.



6. Choose the **Copy table(s) and view(s) from the source database** option.

⇒ **Next.**

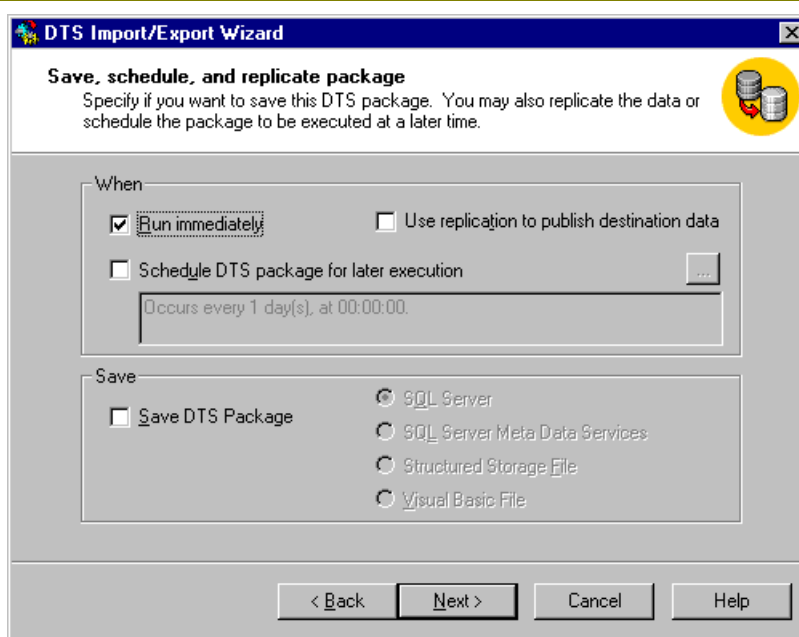
*Result:* The next view opens.



7. Select all **Table(s) and View(s)** in the list ⇒ **Select All.**

⇒ **Next.**

*Result:* The next view opens.



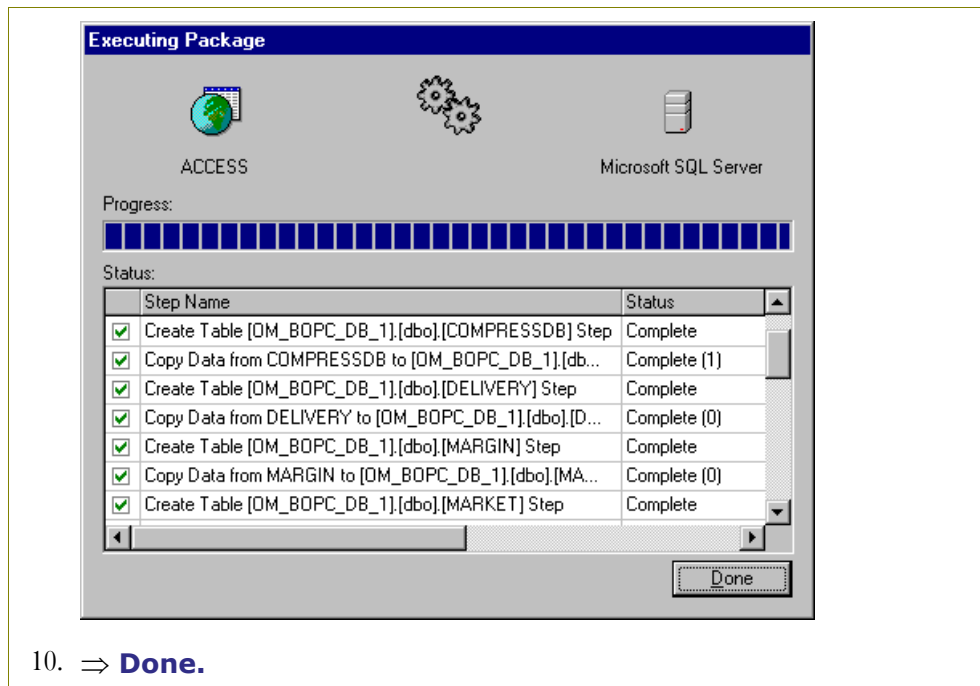
- Specify whether to run the **DTS Package** immediately or to schedule for later execution.



- Check the **Summary** to make sure that the data is correct.

⇒ **Finish.**

*Result:* The **Executing Package** information view opens showing the progress of the importation from the MS Access database into the created MS SQL Server database.



10. ⇒ **Done.**

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### 2.3.7 MS SQL Server Database Maintenance

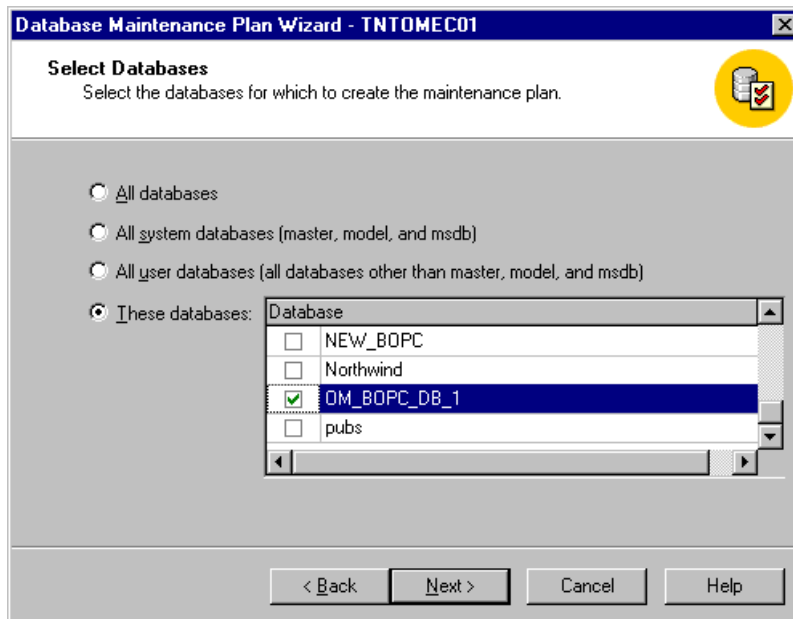
It is recommended to create a database maintenance plan, which means to schedule automatic jobs to be performed regularly, such as backing up the database and truncating log files. Use the **Database Maintenance Plan** tool to create such a plan.

1. Choose the **SQL Server Enterprise Manager**.  
*Result:* The tree view opens.
2. Select the created database ⇒ **All Tasks** on the right-click menu **Database Maintenance Plan**.  
*Result:* The **Database Maintenance Plan Wizard** opens.



3. ⇒ **Next.**

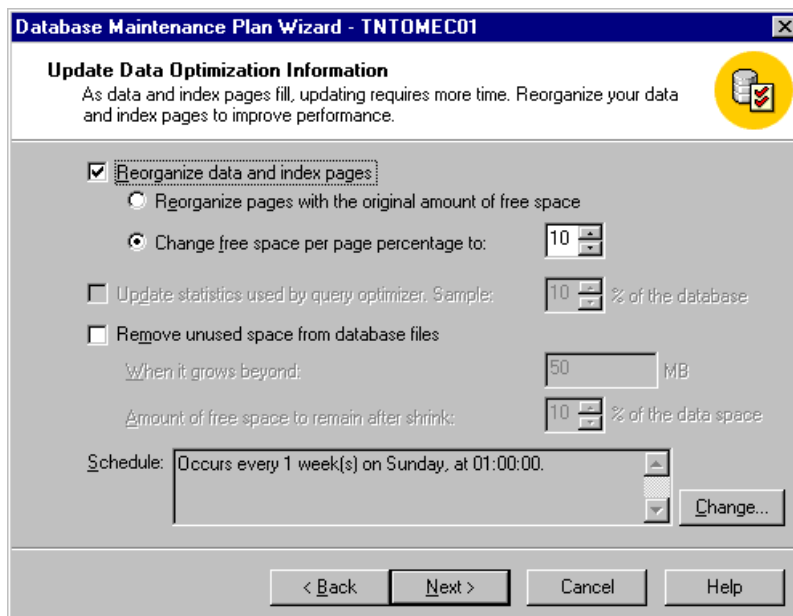
*Result:* Next view opens.



4. In the **Database** list check the created database **<database name>** and the system databases **<Master>** and **<Temp>** for maintenance.

⇒ **Next.**

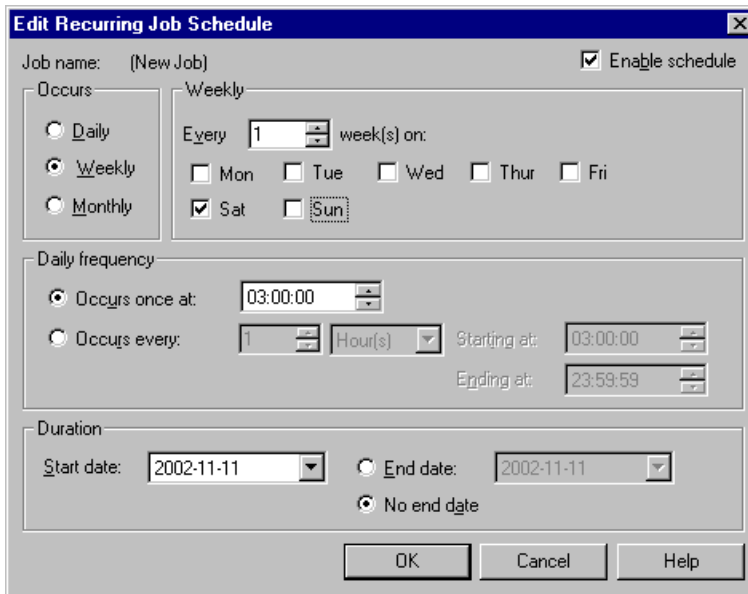
*Result:* Next view opens.



5. Choose the **Reorganize data and index pages** and **Change free space per page percentage to** options to improve performance.

To schedule the reorganization ⇒ **Change.**

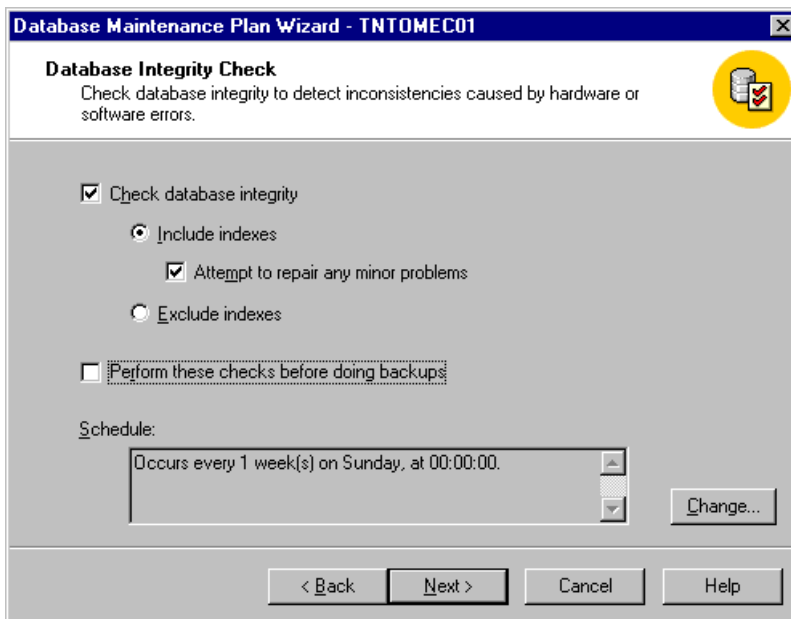
*Result:* The **Edit Recurring Job Schedule** dialog opens.



- Schedule the job to be executed weekly at 03:00 Sunday mornings ⇒ **OK.**

⇒ **Next.**

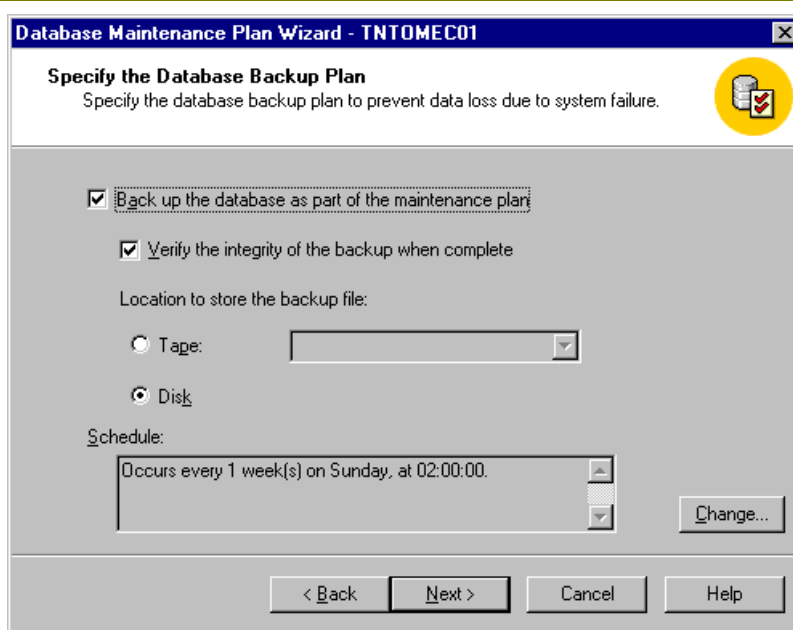
*Result:* Next view opens.



- Choose **Check database integrity**, **Include indexes** and **Attempt to repair any minor problems**.

⇒ **Next.**

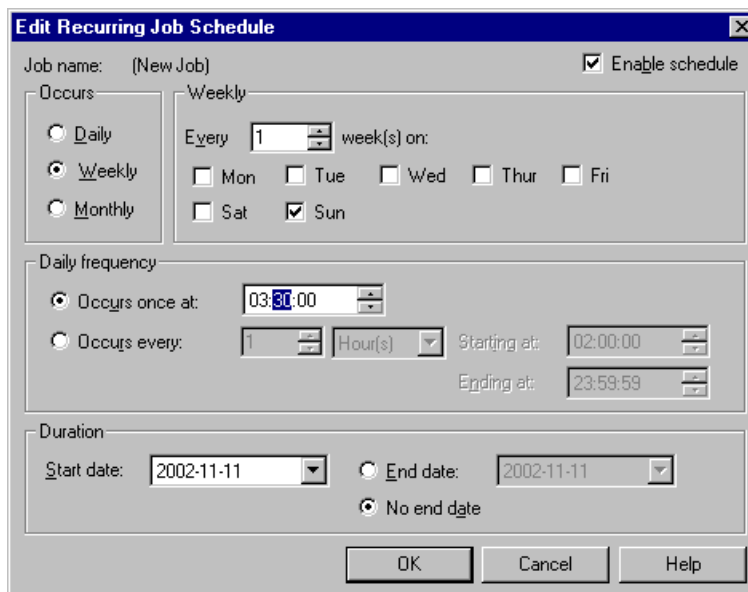
*Result:* Next view opens.



8. A backup of the database is not mandatory, since it is always possible to reload the information from the central system. However if disk space is available it is recommended that at least the master database is backed up.

To schedule the backup ⇒ **Change**.

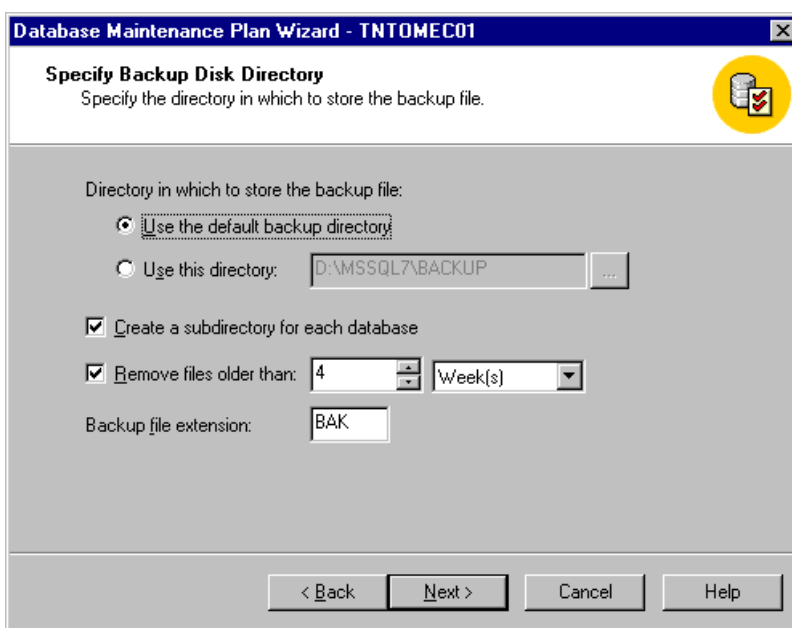
*Result:* The **Edit Recurring Job Schedule** dialog opens.



9. Schedule the job to be executed weekly at 03:30 Sunday mornings ⇒ **OK**.

⇒ **Next**.

*Result:* Next view opens.

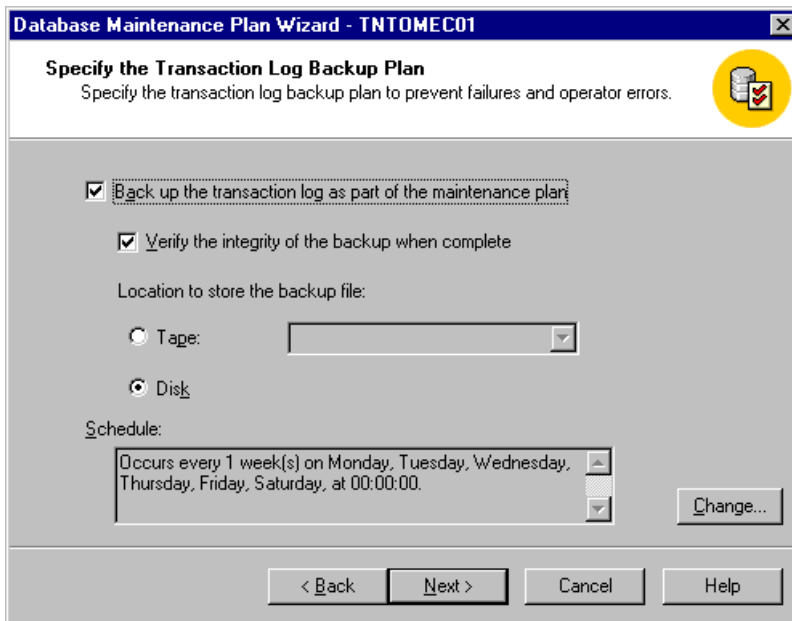


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10. Choose options for storing the database backups and for how long to keep them.

⇒ **Next.**

*Result:* Next view opens.



11. Choose options for backing up the transaction log file ⇒ **Change.**

*Result:* The **Edit Recurring Job Schedule** dialog opens.

**Edit Recurring Job Schedule**

Job name: (New Job)  Enable schedule

Occurs:  Daily  Weekly  Monthly

Weekly: Every 1 week(s) on:  
 Mon  Tue  Wed  Thur  Fri  
 Sat  Sun

Daily frequency:  
 Occurs once at: 03:45:00  
 Occurs every: 1 Hour(s) Starting at: 00:00:00 Ending at: 23:59:59

Duration:  
 Start date: 2002-11-11  End date: 2002-11-11  No end date

OK Cancel Help

12. Schedule the job to be executed weekly at 03:45 Tuesday, Wednesday, Thursday, Friday and Saturday mornings ⇒ **OK**.

⇒ **Next.**

*Result:* Next view opens.

**Database Maintenance Plan Wizard - TNTOMEC01**

**Specify Transaction Log Backup Disk Directory**  
 Specify the directory in which to store the transaction log backup file.

Directory in which to store the backup file:  
 Use the default backup directory  
 Use this directory: D:\MSSQL7\BACKUP

Create a subdirectory for each database  
 Remove files older than: 4 Week(s)  
 Backup file extension: TRN

< Back Next > Cancel Help

13. Choose options for storing the transaction log backups and how long to keep them.

⇒ **Next.**

*Result:* Next view opens.

The screenshot shows the 'Reports to Generate' step of the Database Maintenance Plan Wizard. The title bar reads 'Database Maintenance Plan Wizard - TNTOMEC01'. The main heading is 'Reports to Generate' with a sub-instruction: 'Specify the directory in which to store the reports generated by the maintenance plan.' There are three checked options: 'Write report to a text file in directory:' with the path 'D:\MSSQL7\LOG\' and a browse button; 'Delete text report files older than:' with a value of '4' and a unit of 'Week(s)'; and 'Send e-mail report to operator:' with an empty field and a browse button. An unchecked option 'Send e-mail report to operator:' is also present. A 'New Operator...' button is located below the email options. At the bottom are navigation buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

14. Choose options for storing the reports generated by the maintenance plan.

⇒ **Next.**

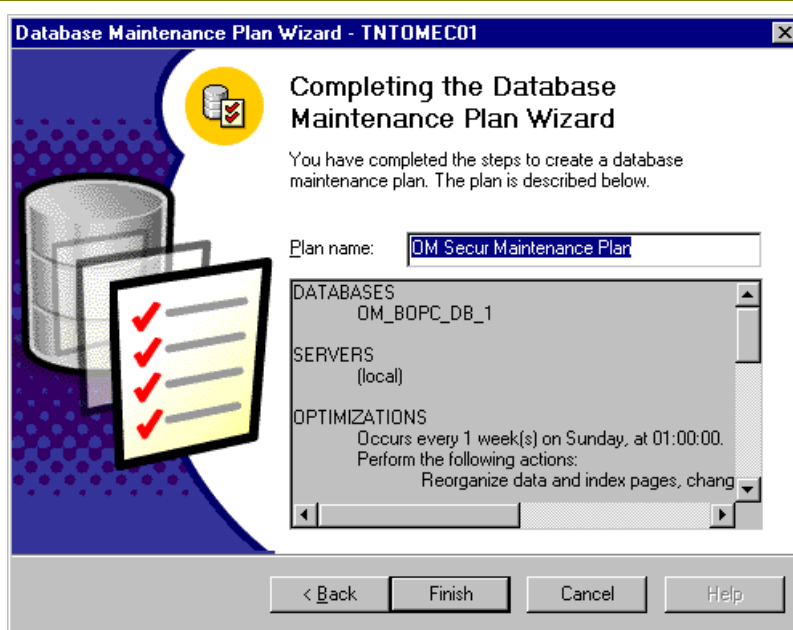
*Result:* Next view opens.

The screenshot shows the 'Maintenance Plan History' step of the Database Maintenance Plan Wizard. The title bar reads 'Database Maintenance Plan Wizard - TNTOMEC01'. The main heading is 'Maintenance Plan History' with a sub-instruction: 'Specify how you want to store the maintenance plan records.' There are two sections: 'Local server' and 'Remote server'. Under 'Local server', there are two checked options: 'Write history to the msdb.dbo.sysdbmaintplan\_history table on this server' and 'Limit rows in the table to:' with a value of '1000' and the text 'rows for this plan'. Under 'Remote server', there is an unchecked option 'Write history to the server:' with an empty field and a browse button. Below it is a checked option 'Limit rows in the table to:' with a value of '10000' and the text 'rows for this plan'. At the bottom are navigation buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

15. Choose options for storing the maintenance plan history.

⇒ **Next.**

*Result:* Next view opens.



16. Specify a name for the maintenance plan.

⇒ **Finish.**

*Result:* The database maintenance plan was completed and saved.

17. Make sure that the **SQL Server Agent** has started and configure it to start automatically.