

**Oracle® Enterprise Single Sign-on  
Logon Manager**

How-To: Configuring ESSO-LM Event Logging  
with Microsoft SQL Server 2005

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# Table of Contents

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Table of Contents.....	3
Introduction .....	4
About This Guide.....	4
Prerequisites .....	4
Terms and Abbreviations .....	4
Accessing ESSO-LM Documentation .....	4
Configuring ESSO-LM Event Logging with MS SQL Server 2005 .....	5
Overview .....	5
Step 1: Install and Configure MS SQL Server 2005 .....	6
Step 2: Set Up the Event Log Data Table .....	6
Step 3: Installing the Database Event Extension Component for ESSO-LM.....	9
Step 4: Configuring ESSO-LM Event Logging for Database Support .....	10
Step 5: Testing Your Event Logging Configuration.....	12

# Introduction

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## About This Guide

This document describes how to configure ESSO-LM to store event log data in an MS SQL Server 2005 database and how to prepare a database instance for this scenario. The instructions in this guide are based on Microsoft SQL Server 2005.

## Prerequisites

Readers of this document should have a solid understanding of the MS SQL Server 2005 database and the ESSO-LM Administrative Console. Information on ESSO-LM event logging is provided in the ESSO-LM Administrative Console Help.

## Terms and Abbreviations

The following table describes the terms and abbreviations used throughout this guide:

Term or Abbreviation	Description
ESSO-LM	Enterprise Single Sign-On
Agent	ESSO-LM client-side software
Console	ESSO-LM Administrative Console

## Accessing ESSO-LM Documentation

We continually strive to keep ESSO-LM documentation accurate and up to date. For the latest version of this and other ESSO-LM documents, visit [http://download.oracle.com/docs/cd/E21040\\_01/index.htm](http://download.oracle.com/docs/cd/E21040_01/index.htm).

# Configuring ESSO-LM Event Logging with MS SQL Server 2005

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## Overview

In order to configure ESSO-LM to store event log data in a table in an MS SQL Server 2005 database, you must complete the following steps:

1. If you have not already done so, [install and configure MS SQL Server 2005](#) as described in the vendor's documentation.
2. [Set up the event log data table.](#)
3. [Install the \*\*Database Event Extension\*\* component for ESSO-LM.](#)
4. [Configure ESSO-LM to store its event log data in the table you created.](#)
5. [Test your event logging configuration.](#)

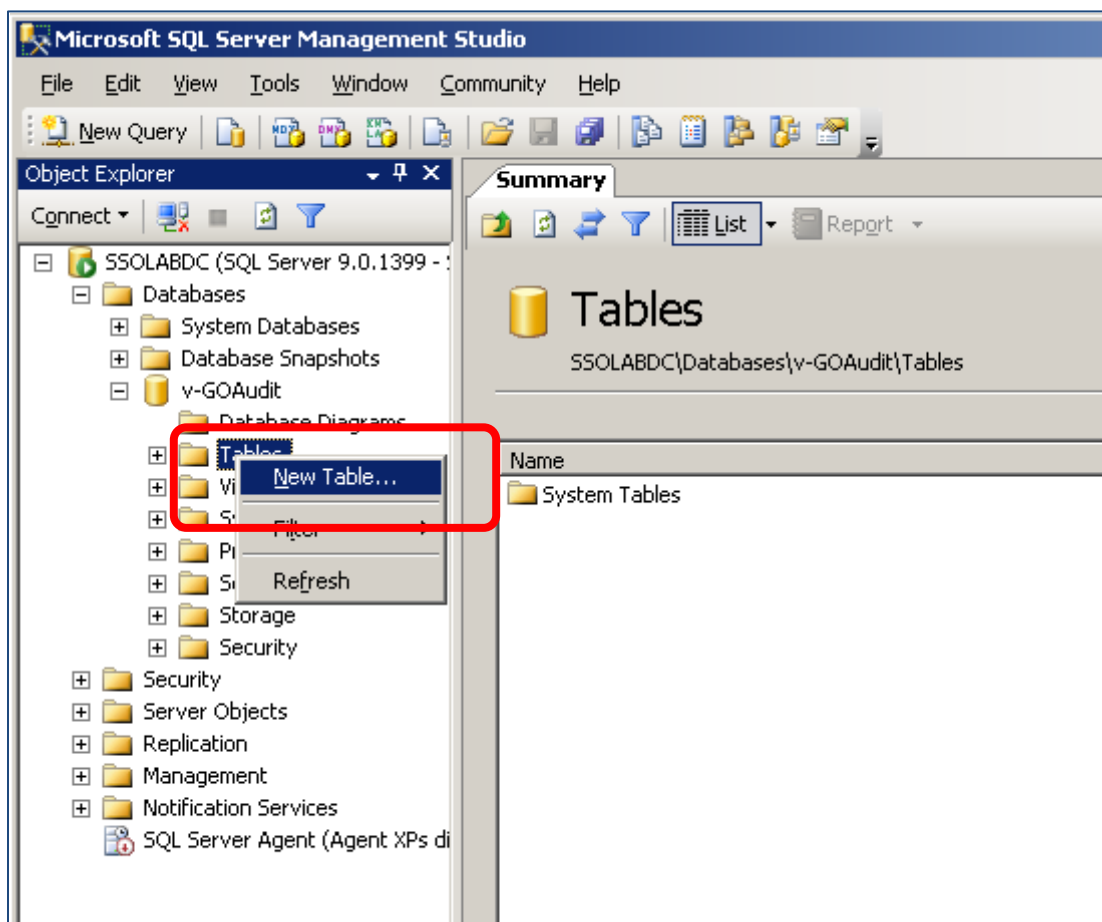
## Step 1: Install and Configure MS SQL Server 2005

Before you begin configuring ESSO-LM event logging, install and configure an instance of the MS SQL Server 2005 database as described in the vendor's documentation, if you have not already done so. Unless your environment dictates otherwise, select the "Typical" installation scenario when prompted by the installer.

## Step 2: Set Up the Event Log Data Table

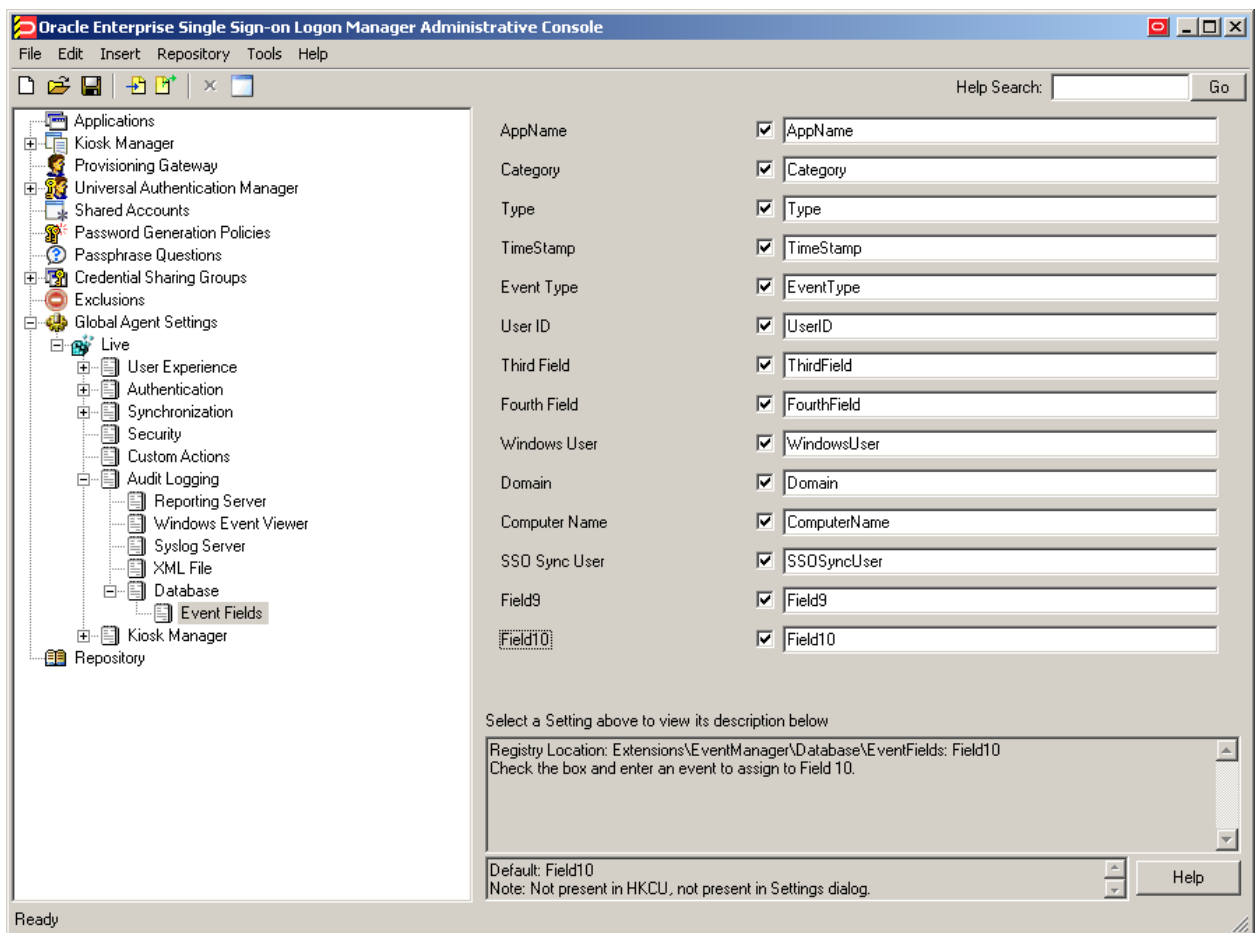
Before ESSO-LM can store event log data in the database, you must set up a table that will store the data. The steps are as follows:

1. Launch the SQL Server Management Studio application and navigate the left-hand tree to expand the database of your choice.
2. Within the selected database, create a table that will store ESSO-LM event log data:
  - a. Under the selected database, right-click **Tables** and select **New Table...** from the context menu. MS SQL Server creates a table with a default name (e.g. Table\_1).



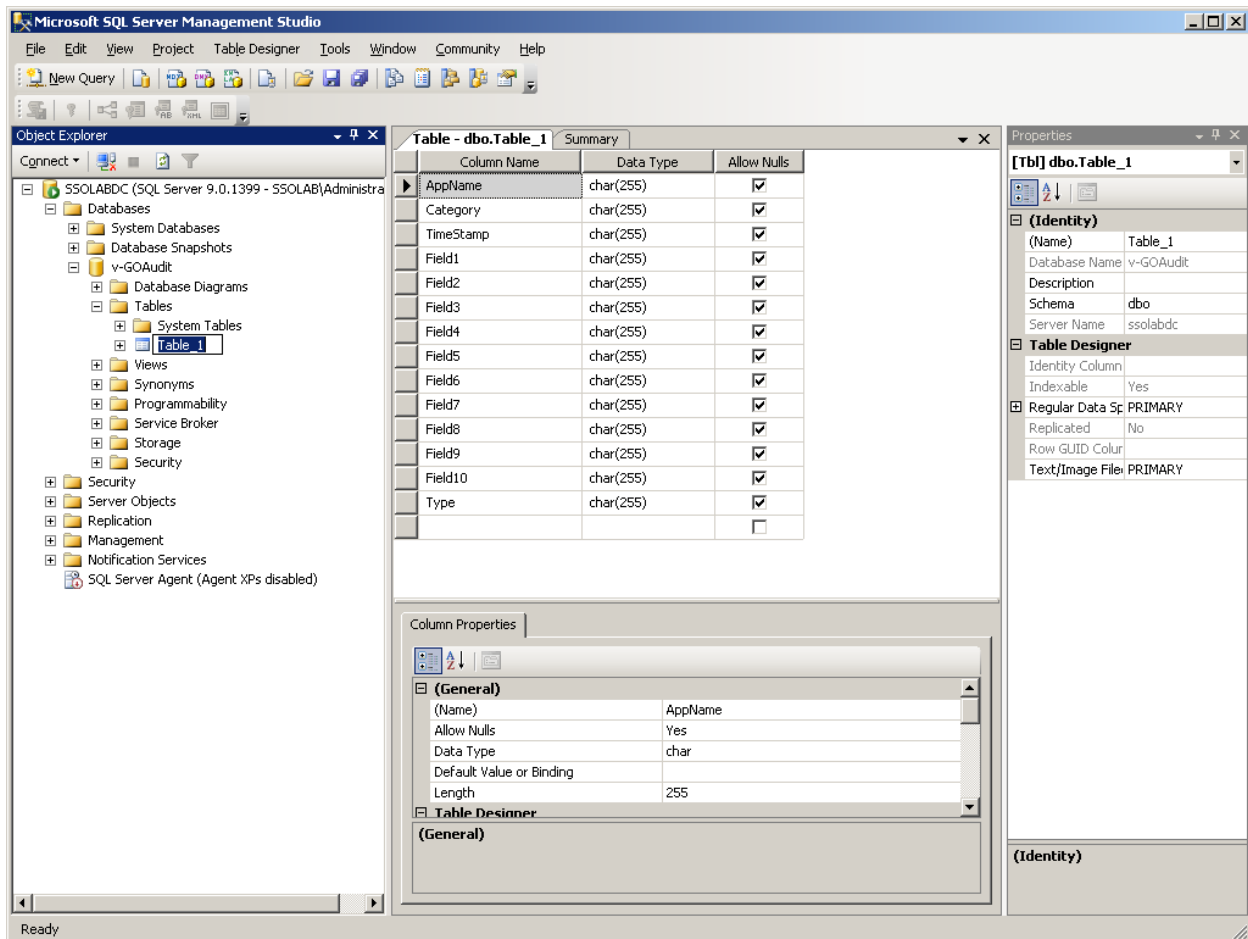
- b. Rename the table as desired using the **Name** field in the **Properties** pane on the right-hand side. You will supply this table name to ESSO-LM later in this document.
- c. Set up the required table columns. For each required column, do the following:
  - I. Name the column. These column names will correspond to event log field names shown below that you will configure later in this document using the ESSO-LM Administrative Console.

**Caution:** Each event log field *must* have a corresponding column with an *identical* name in the event log data table. Otherwise, event data will not be recorded.



- II. Select **char** as the data type.
- III. Set the data length to 255.
- IV. Enable the **Allow Nulls** option.
- V. When you have finished, save your changes (**File → Save Table**).

When complete, the table configuration will look as follows:

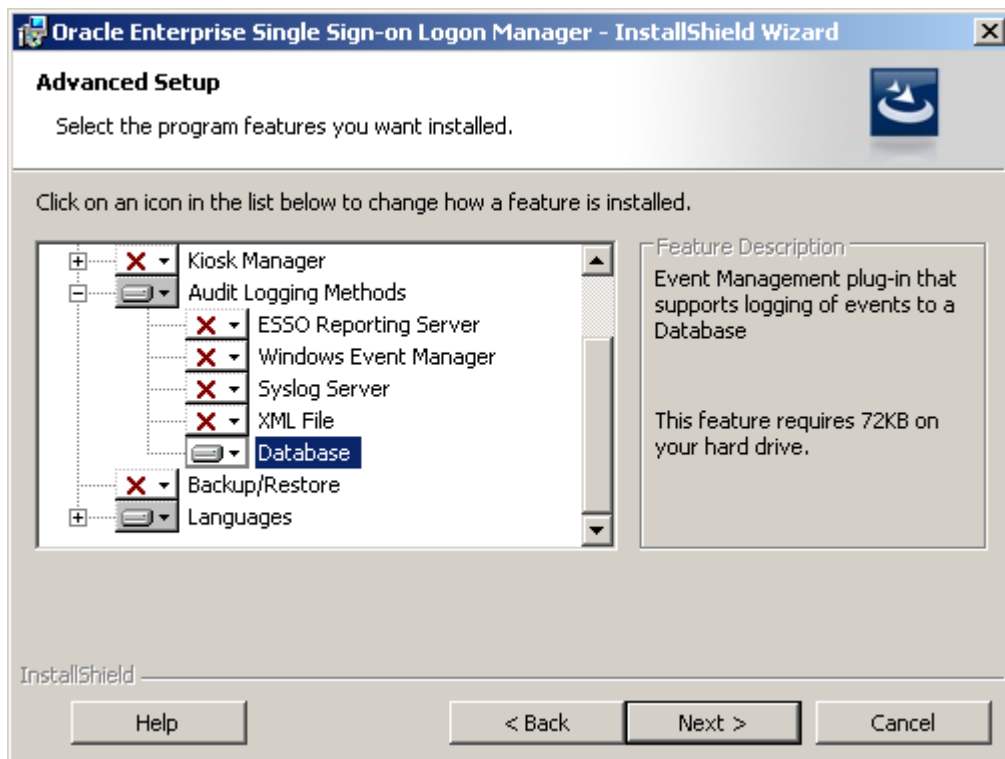




### Step 3: Installing the Database Event Extension Component for ESSO-LM

The Database Event Extension component must be installed in order for ESSO-LM to store event log data in the database. To install the component, do the following:

1. Click **Start** → **Settings** → **Control Panel**.
2. In the **Control Panel**, double-click the **Add/Remove Programs** icon.
3. In the **Add/Remove Programs** applet, navigate to the **ESSO-LM Agent** entry and click **Change**.
4. In the ESSO-LM Agent installer, click **Next**.
5. In the “Program Maintenance” dialog, select **Modify** and click **Next**.
6. In the “Advanced Setup” dialog, expand the **Audit Logging Methods** node.
7. Under the **Audit Logging Methods** node, click the button next to **Database** and select **This feature will be installed on local hard drive** from the context menu.

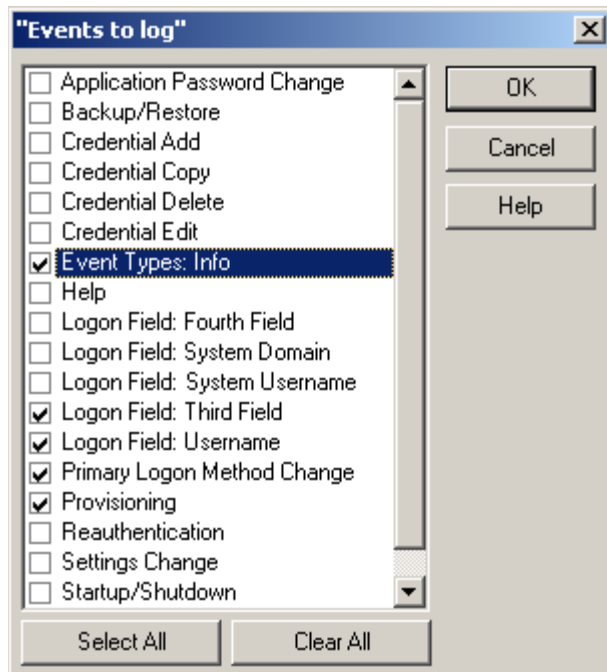


8. Click **Next**; then, in the dialog that follows, click **Install** and wait for the installation to complete.
9. When the installation completes successfully, click **Finish**.

## Step 4: Configuring ESSO-LM Event Logging for Database Support

1. Launch the ESSO-LM Administrative Console and load your current configuration set.
2. In the tree, navigate to **Global Agent Settings** → **[Current Configuration Set]** → **Audit Logging Methods**.
3. Select the check box next to the **Events to log** option and click the [...] button.
4. In the "Events to log" dialog, select the types of events you want to log.

**Warning:** You must select the **Event Types: Info** item; otherwise, no data will be logged.

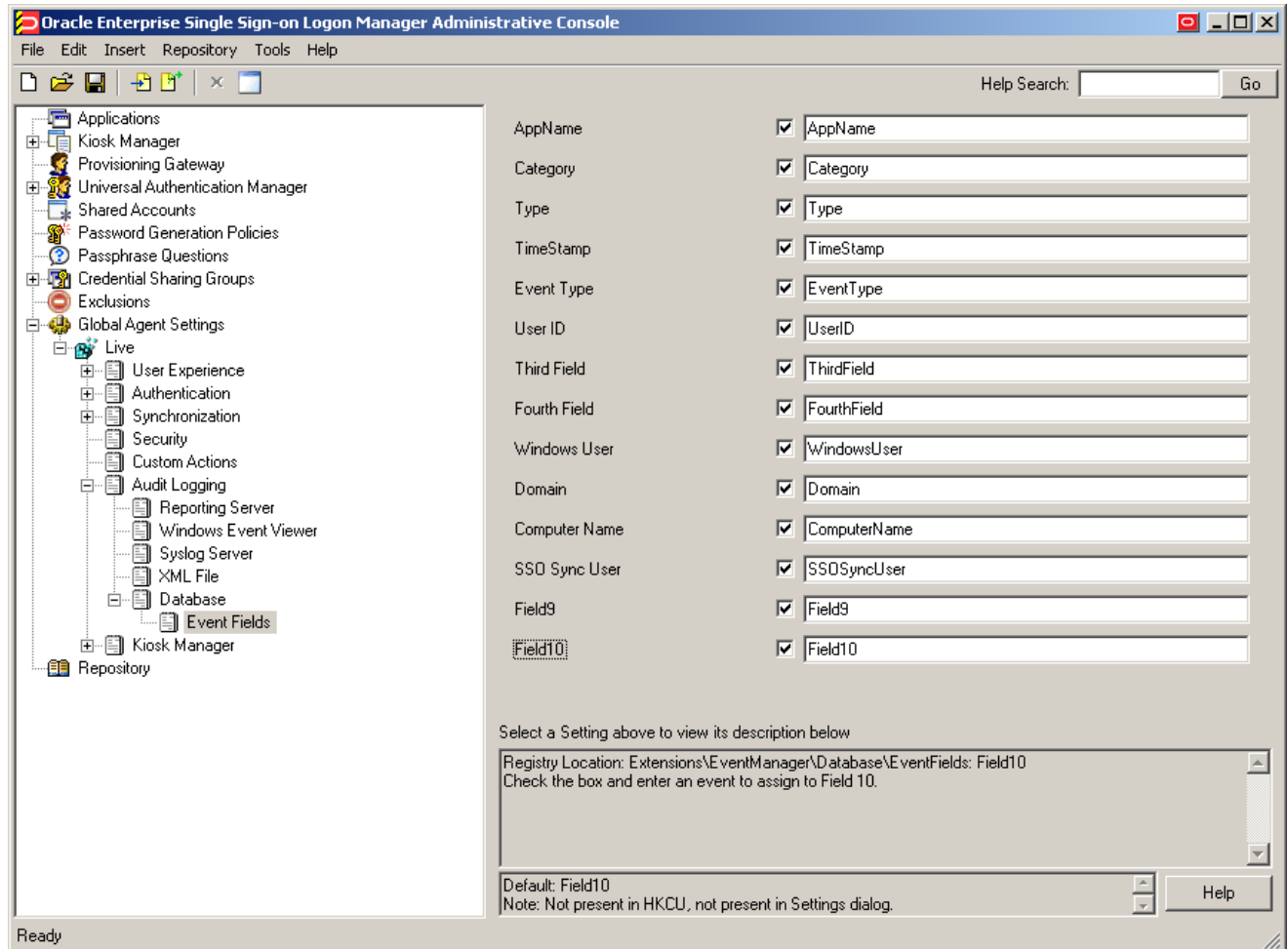


5. Under the **Event Logging** node in the tree, select **Database** and configure ESSO-LM as follows:

<b>Cache Retry Interval</b>	Set to the desired retry interval. See Console Help for more information.
<b>Default Server</b>	URL to your database server instance. This will be <b>Server1</b> .
<b>Default Table</b>	Name of the event log data table created earlier in this document. ( <b>Table_1</b> in our example)
<b>Extension Location</b>	Absolute path to DatabaseExt.dll, including file name.
<b>Log Which Events?</b>	Configure to exactly match the event types chosen in step 4.
<b>Servers</b>	Provider=<SQL_provider_name>;Password=<SQL_admin_user_password>;User ID=<SQLadmin_user_name>;Data Source=<database_name>

6. Under the **Database** node in the tree, select **Event Fields**.
7. For each field, enter the name of the corresponding column in the event log data table.  
The names must match the column names you set in step **2c** on pages 9 and 10 of this document.

**Warning:** Do not alter the values of the **AppName**, **Category**, **TimeStamp**, and **Type** parameters.

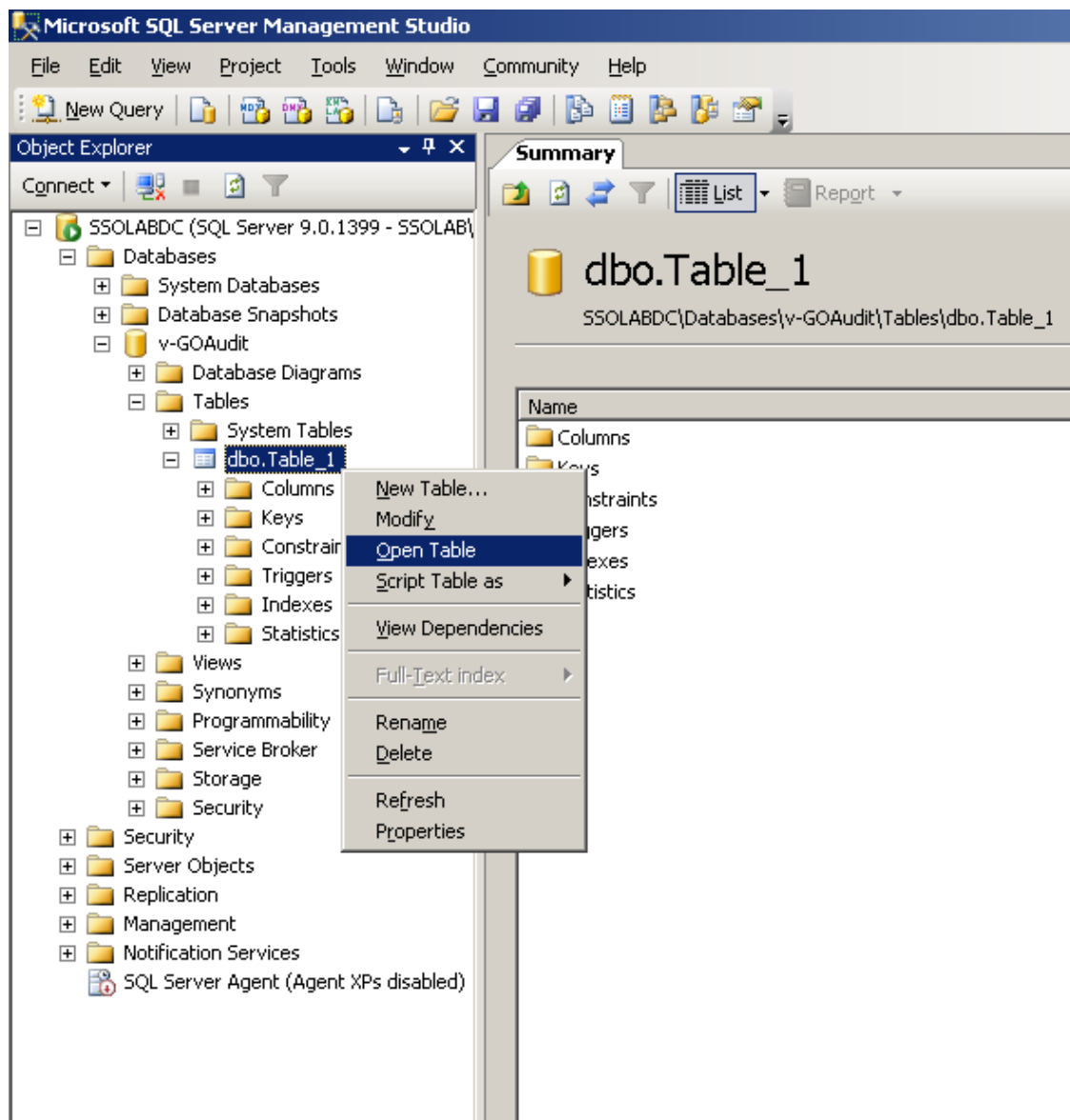


8. When finished, push the modified configuration set to your directory or write them to the local registry, whichever option suits your environment.
9. Proceed to the next section to test your event logging configuration.

## Step 5: Testing Your Event Logging Configuration

This simple test procedure allows you to check whether ESSO-LM is properly logging event data to the database. In our example, you will press the **Help** button in the Logon Manager and check the database to see if the button press is logged.

1. Open the Logon Manager and click **Help**.
2. Start the Microsoft SQL Server Management Studio application. Typically, the shortcut is located in **Start → Program Files → Microsoft SQL Server 2005**.
3. In the left-hand tree, navigate to the event log data table.
4. Right-click the event log data table and select **Open Table** from the context menu.



The Microsoft SQL Server Management Studio will display all ESSO-LM events that have been logged in the database so far. The **Help** button press event should appear near or at the end of the list, as shown below.

Table - dbo.Table_1 Summary							
	AppName	Category	TimeStamp	Field1	Field2	Field3	Field4
	NULL	Feature	11/19/2008 11:13:39 AM	StartupShutdown,Startup	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/19/2008 2:14:43 PM	ReAuth,WinAuth SUCCESS	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/19/2008 2:14:48 PM	ReAuth,WinAuth SUCCESS	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/19/2008 2:15:16 PM	StartupShutdown,Shutdown	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/24/2008 4:00:29 PM	StartupShutdown,Startup	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/24/2008 4:02:40 PM	ReAuth,WinAuth SUCCESS	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	Avent	Logon	11/24/2008 4:02:41 PM	username,rad	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	Avent	Logon	11/24/2008 4:03:51 PM	username,rad	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/24/2008 4:03:58 PM	ReAuth,WinAuth SUCCESS	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	Avent	Logon	11/24/2008 4:04:04 PM	username,rad	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/24/2008 4:04:18 PM	StartupShutdown,Shutdown	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/26/2008 2:21:31 PM	StartupShutdown,Startup	Username,administrator	Domain,SSOLAB	SyncInfo,admini...
	NULL	Feature	11/26/2008 2:25:43 PM	ReAuth,WinAuth SUCCESS	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Credential	11/26/2008 2:26:04 PM	add,Acrobat Reader	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Credential	11/26/2008 2:26:05 PM	add,GoldMine	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Feature	11/26/2008 2:26:08 PM	StartupShutdown,Startup	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Feature	11/26/2008 2:26:54 PM	Help,Logon Manager	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Feature	11/26/2008 2:27:00 PM	StartupShutdown,Shutdown	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Feature	11/26/2008 2:28:18 PM	StartupShutdown,Startup	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Feature	11/26/2008 3:08:48 PM	StartupShutdown,Shutdown	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
	NULL	Feature	11/26/2008 3:09:41 PM	StartupShutdown,Startup	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
►	NULL	Feature	11/26/2008 3:13:34 PM	Help,Logon Manager	Username,FerdinandP	Domain,SSOLAB	SyncInfo,Ferdin...
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL