

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

How-To: Configuring ESSO-LM Event Logging
with the IBM DB2 Database

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Introduction

About This Guide

This document describes how to configure ESSO-LM to store event log data in an IBM DB2 database and how to prepare a database instance for this scenario. The instructions in this guide are based on IBM DB2 version 8.2.

Prerequisites

Readers of this document should have a solid understanding of the IBM DB2 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	Oracle Enterprise Single Sign-on Logon Manager
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.

Configuring ESSO-LM Event Logging for IBM DB2 Database Support

Overview

In order to configure ESSO-LM to store event log data in a table in an IBM DB2 database, you must complete the following steps:

1. If you have not already done so, [install and configure the IBM DB2 database](#) as described in the vendor's documentation. Use the "Typical" installation scenario when prompted.
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.](#)

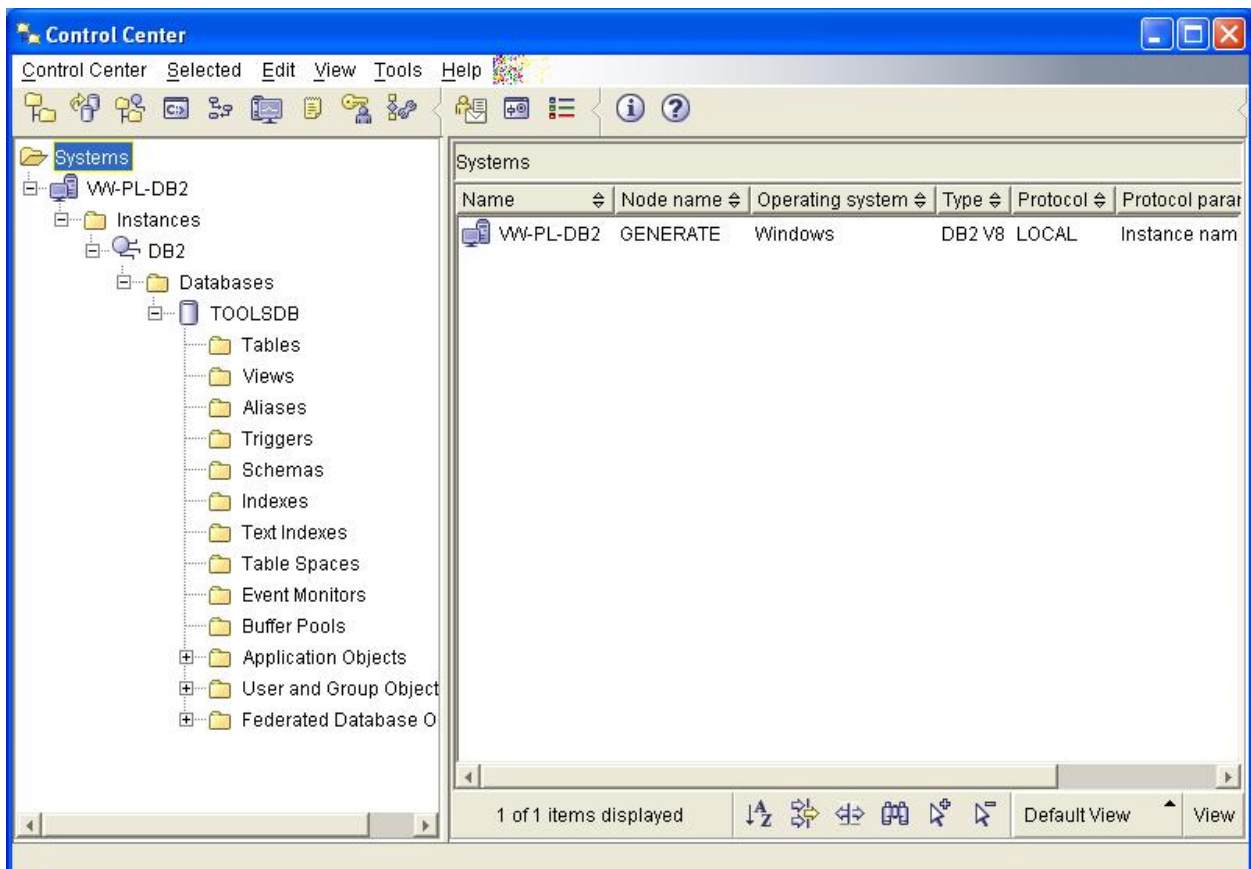
Step 1: Install and Configure the IBM DB2 Database

Before you begin configuring ESSO-LM event logging, install and configure an instance of the IBM DB2 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.

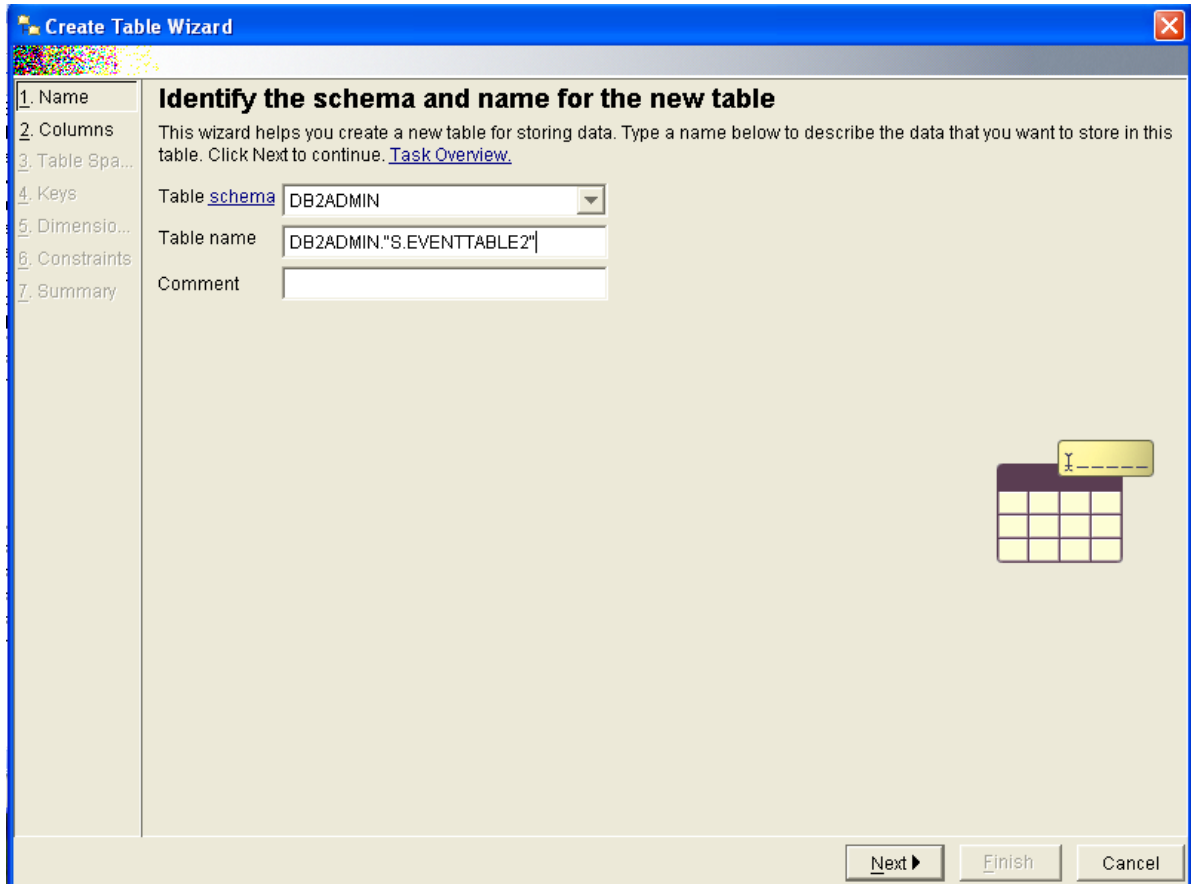
Step 2: Set Up the Event Log Data Table

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:

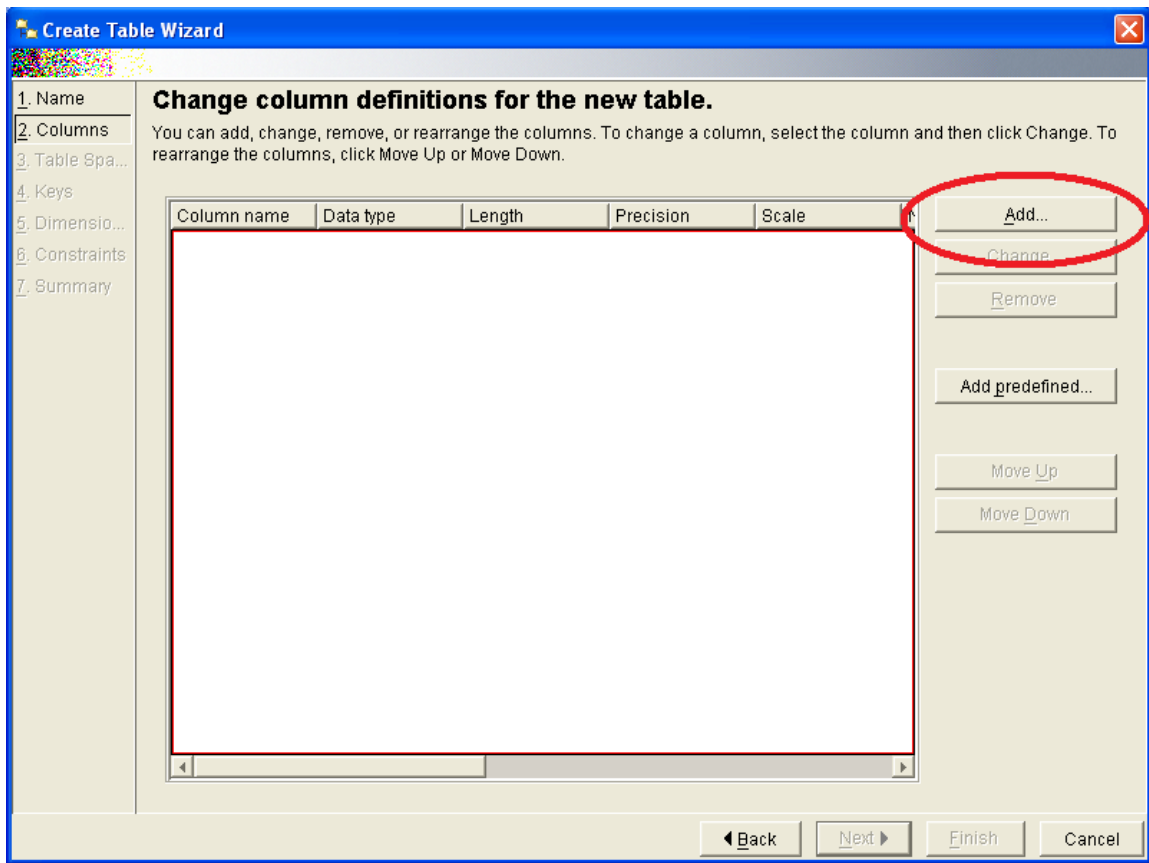
1. Launch the IBM DB2 Control Center application. By default, the application is located in `C:\Program Files\IBM DB2\General Administration Tools`.



2. Within the database of your choice, create a table that will store ESSO-LM event log data:
 - a. Under the selected database, right-click **Tables** and select **Create...** from the context menu.
 - b. In the “Create Table Wizard” that appears, name the table in accordance with the vendor’s naming schema, then click **Next**.



- c. Set up the required table columns. For each required column, do the following:
 - I. In the “Change column definitions for the new table” dialog, click **Add**.



The "Add Column Dialog" appears.

Add Column

Column name: Table1

Datatype: CHARACTER

Datatype characteristics:

- Length: 1
- LOB unit: Bytes
- Precision:
- Scale:
- LOB option: Logged, Compact, Bit data

Nullable

Default:

Comment:

System default compression

Generate column contents

Identity

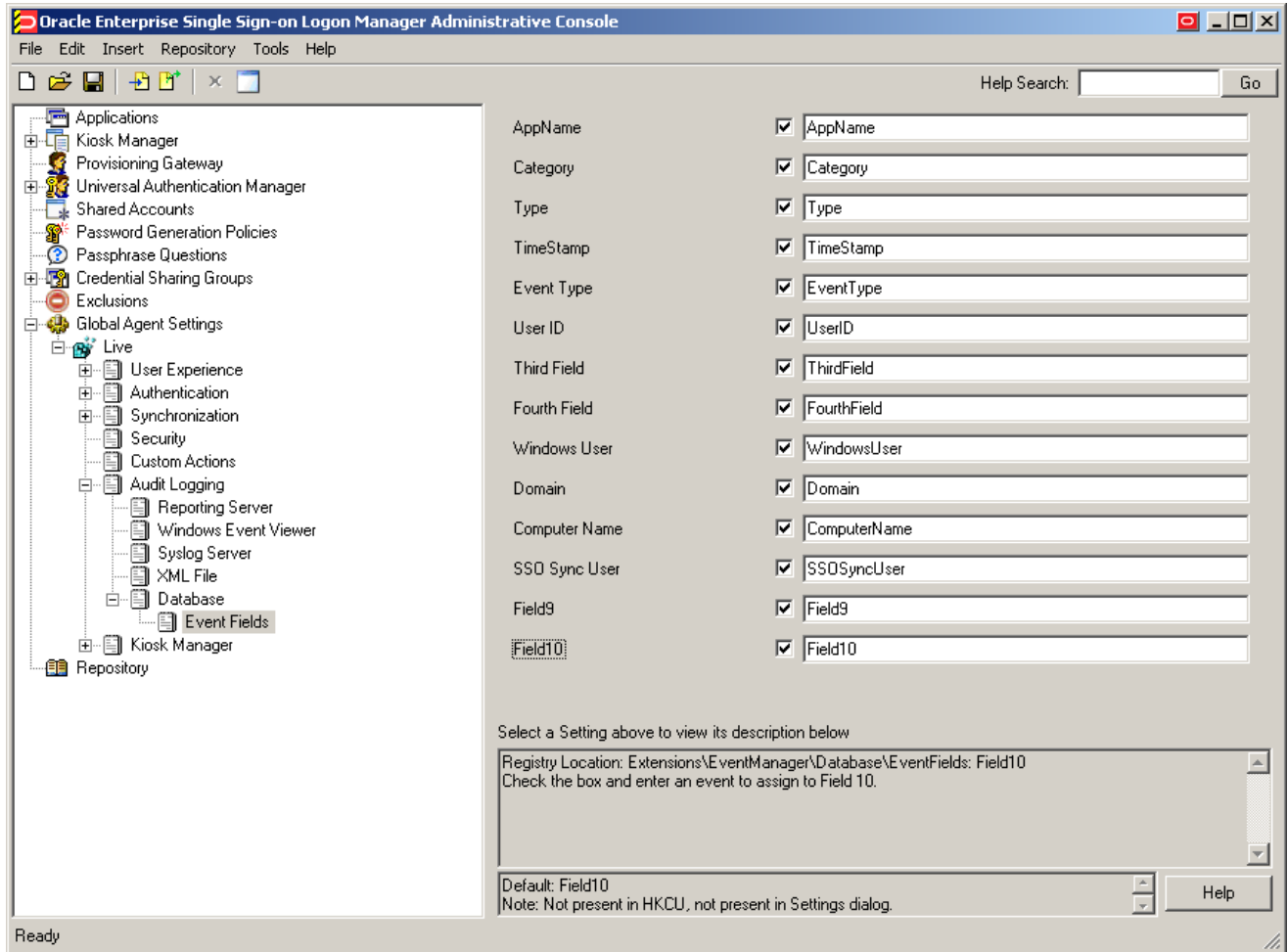
Initial value: 0, Increment: 1

Cache value: 20, By default

Formula:

OK, Cancel, Apply, Help

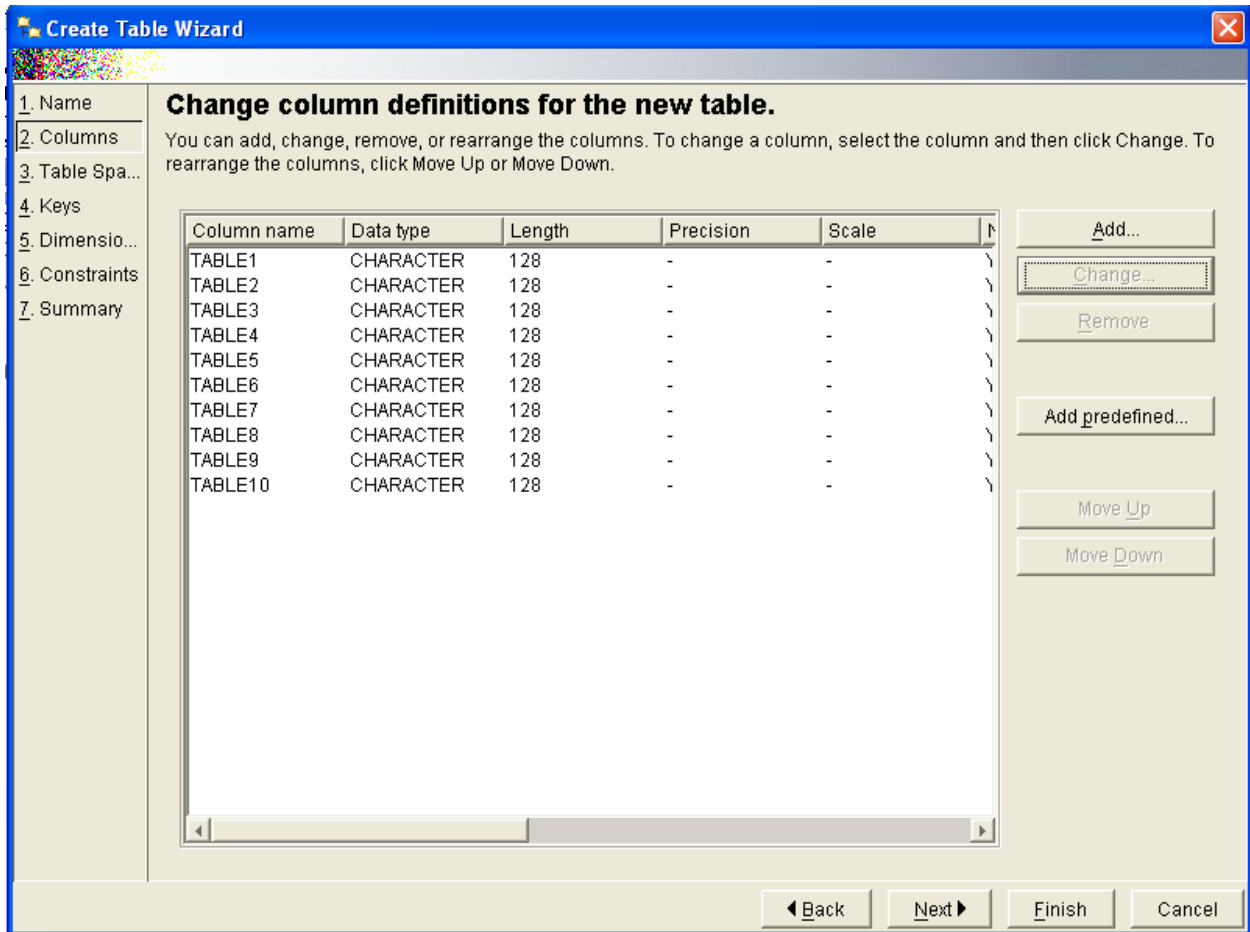
- II. Name the column. These column names will correspond to event log field names shown below that you will configure later in this document using the ESSO-LM Administrative Console.



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.

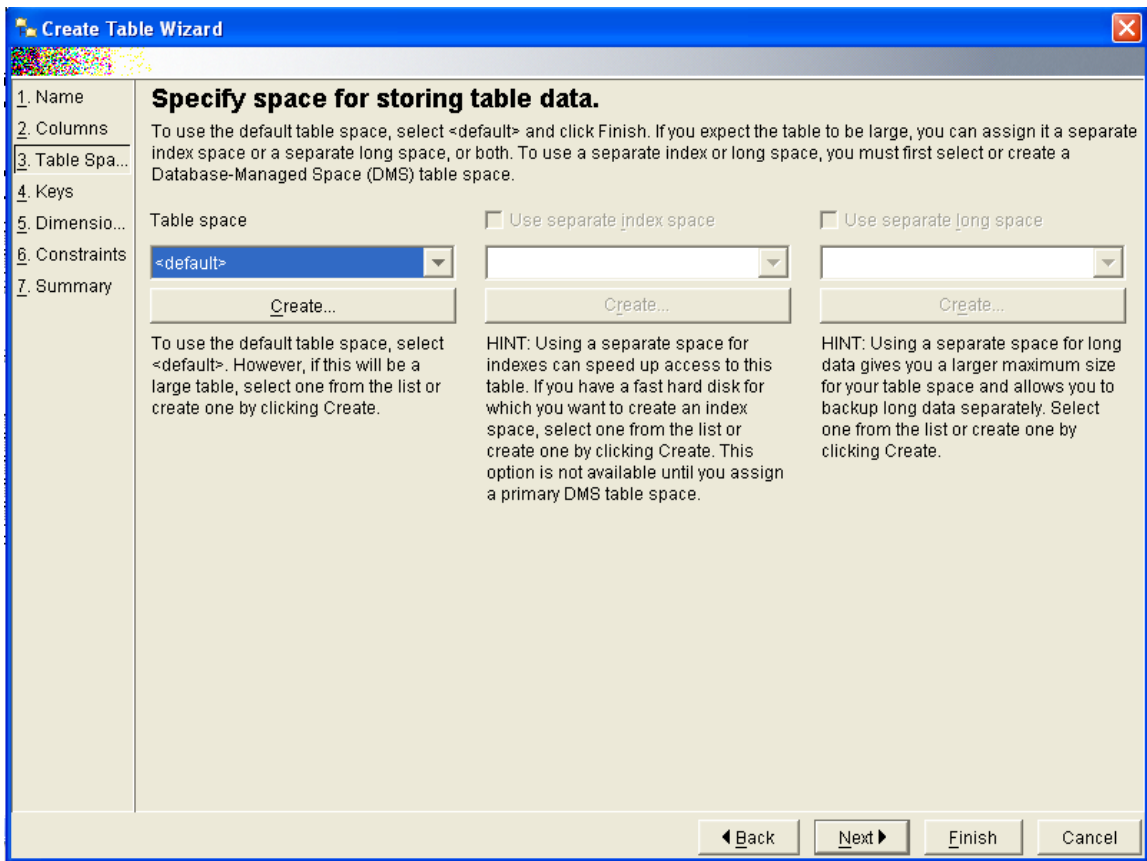
- III. Select **CHARACTER** as the data type.
- IV. Set the data length to 128.
- V. When you have populated the appropriate fields, click **Apply**, then **OK**.

When you have finished, the table configuration will look as follows:



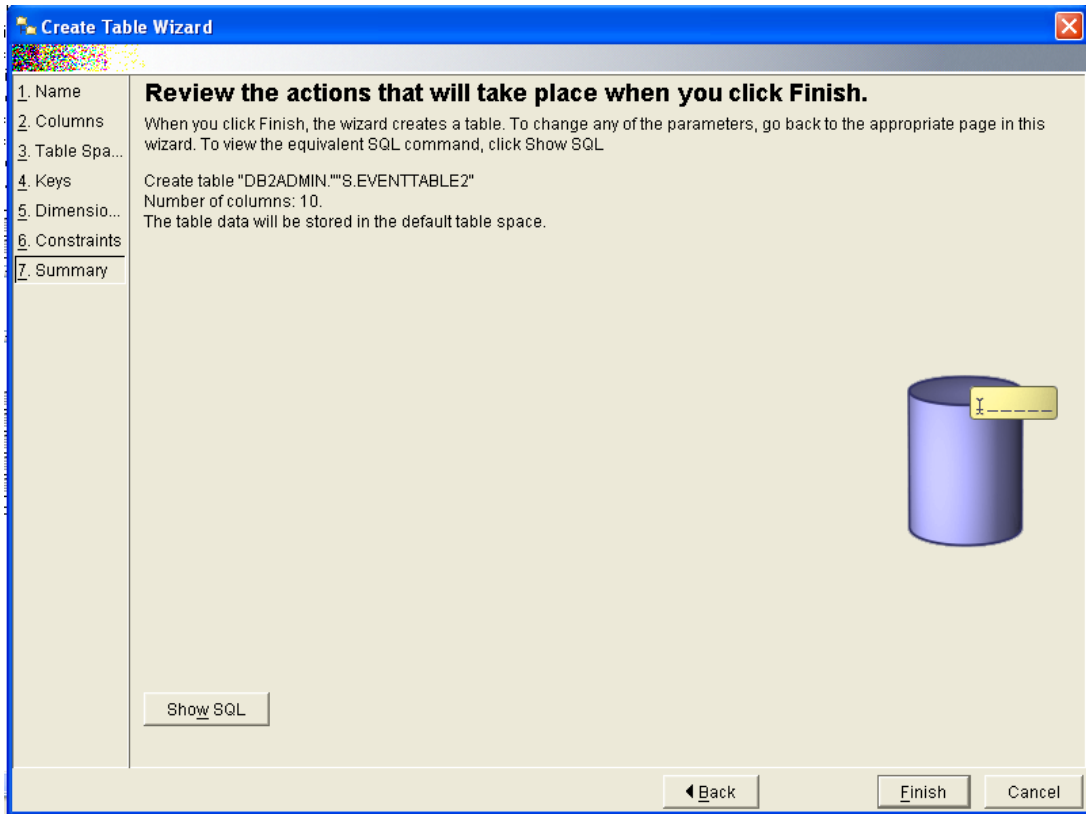
- d. If you need to make any changes, select the desired column in the list and click **Change**. When the table configuration is complete, click **Next**.

- e. When prompted to configure the table space, make a selection that is most appropriate to the level of ESSO-LM event logging required by your environment, then click **Next**.



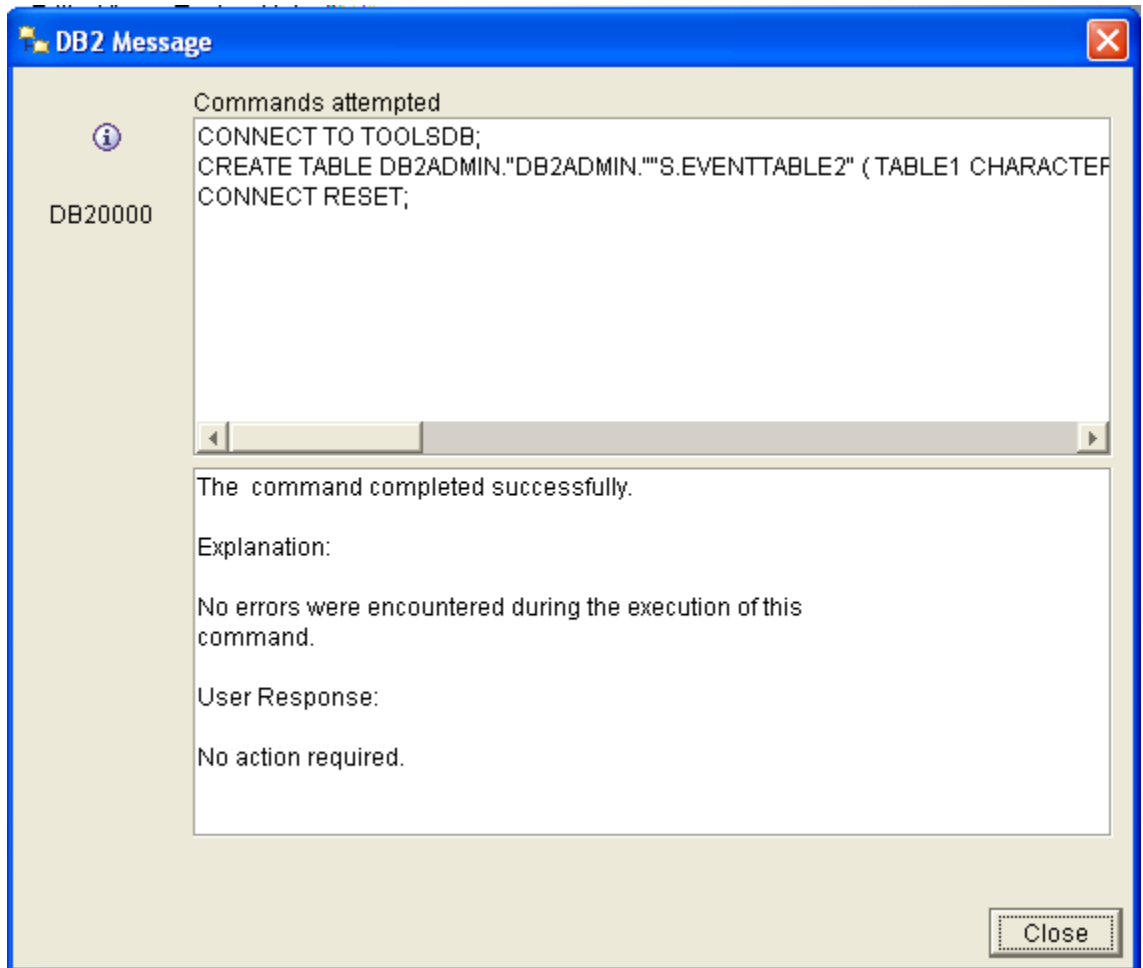
- f. For the remainder of the wizard, click **Next** to accept the defaults presented in each screen.

g. In the configuration summary dialog, click **Finish**.



The table is created. Depending on the speed of your system, this can take a few moments.

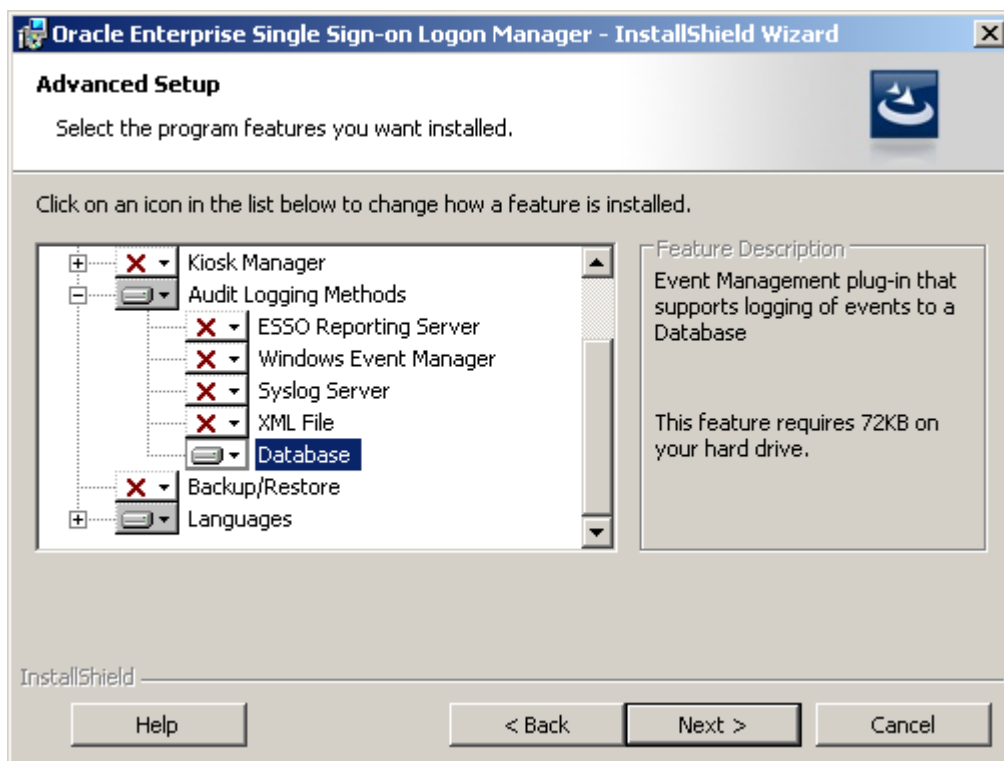
- h. Monitor the table creation process by checking the database log. When the table has been created successfully, the log will show the following:



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

The Database Even 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 Event Extension** and select **This feature will be installed on local hard drive** from the context menu.

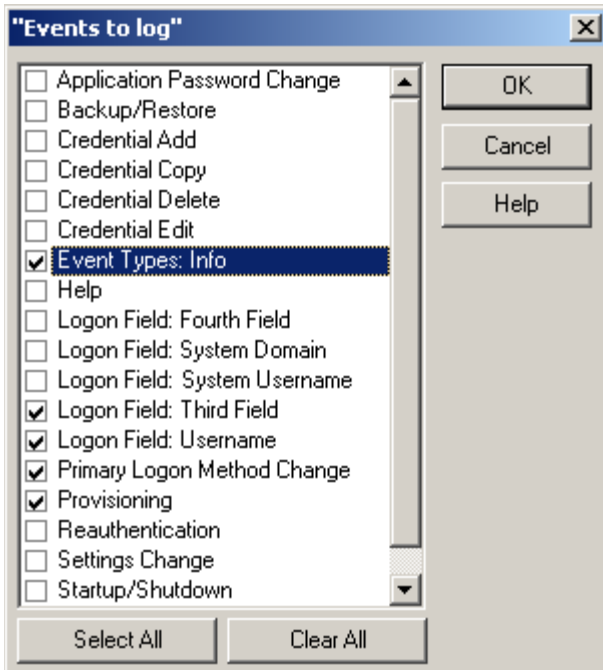


8. Click **Next**; then, in the dialog that follows, click **Install** and wait for the installation to complete.
9. When the installation completes successfully, click **Finish**.

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** → **Database**.
3. Select the check box next to **Events to log** 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.

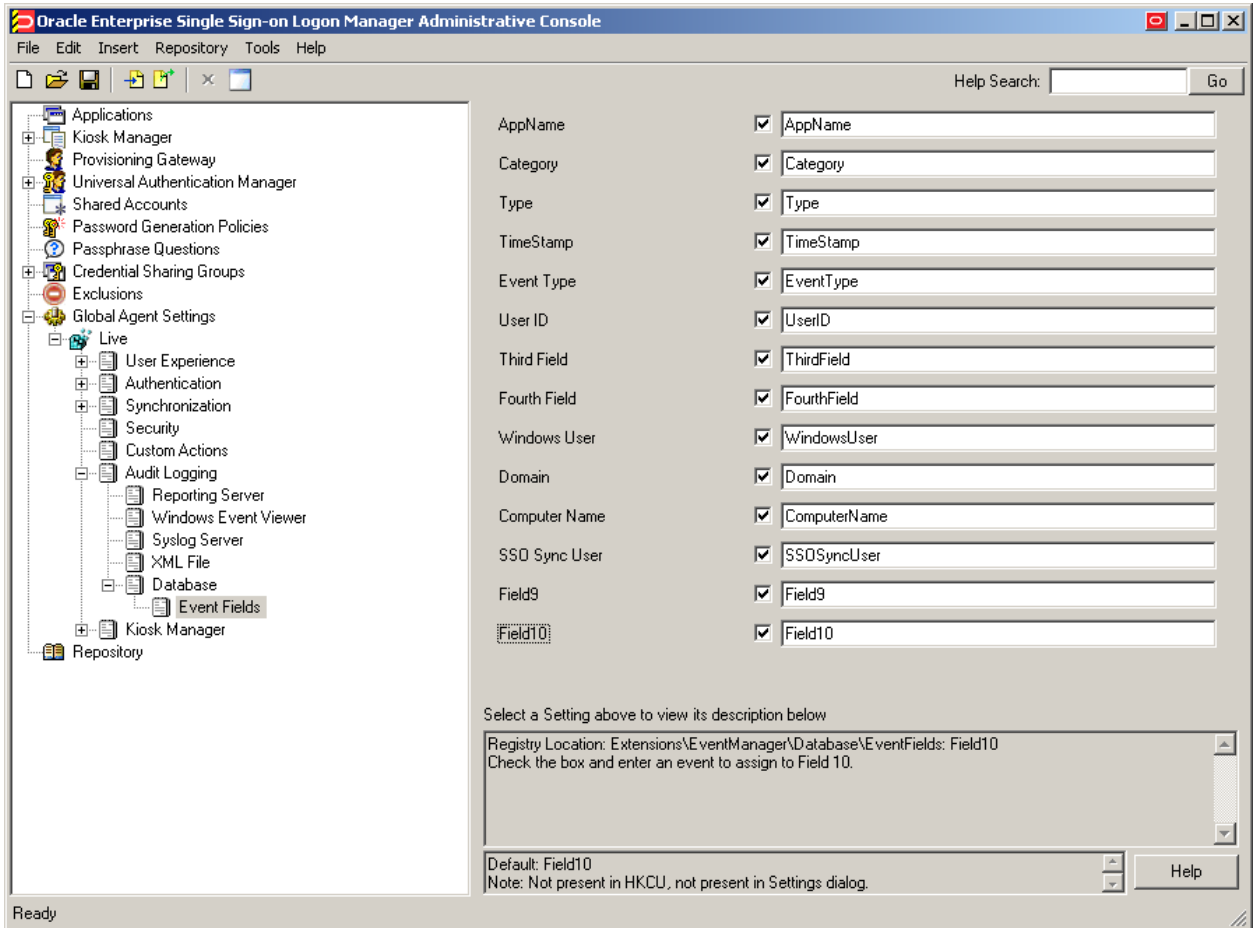


5. Under the **Event Logging** node in the tree, select **Database** and configure ESSO-LM as follows:

Cache Retry Interval	Set to the desired retry interval. See Console Help for more information.
Default Server	URL to your database server instance.
Default Table	Name of the event log data table created earlier in this document. (DB2ADMIN . "S . EVENTTABLE2" in our example)
Extension Location	Absolute path to DatabaseExt .dll, including file name.
Log Which Events?	Configure to exactly match the event types chosen in step 4.
Servers	Provider=<db2_provider_name>;Password=<db2_admin_user_password>;User ID=<db2admin_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 page 11 of this document.

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

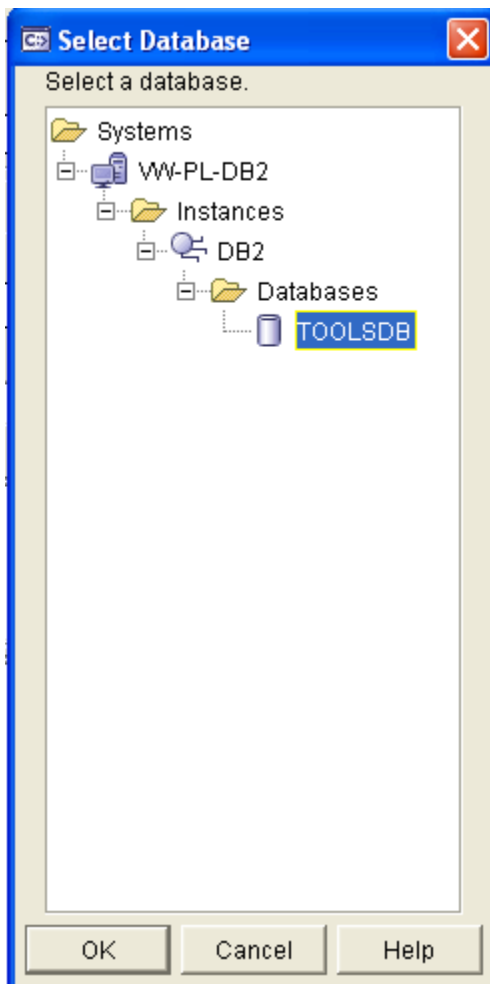


8. When finished, push the modified configuration set to your directory or write them to the local registry, whichever option suits your environment.
9. Proceed to the next section to test your event logging configuration.

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.

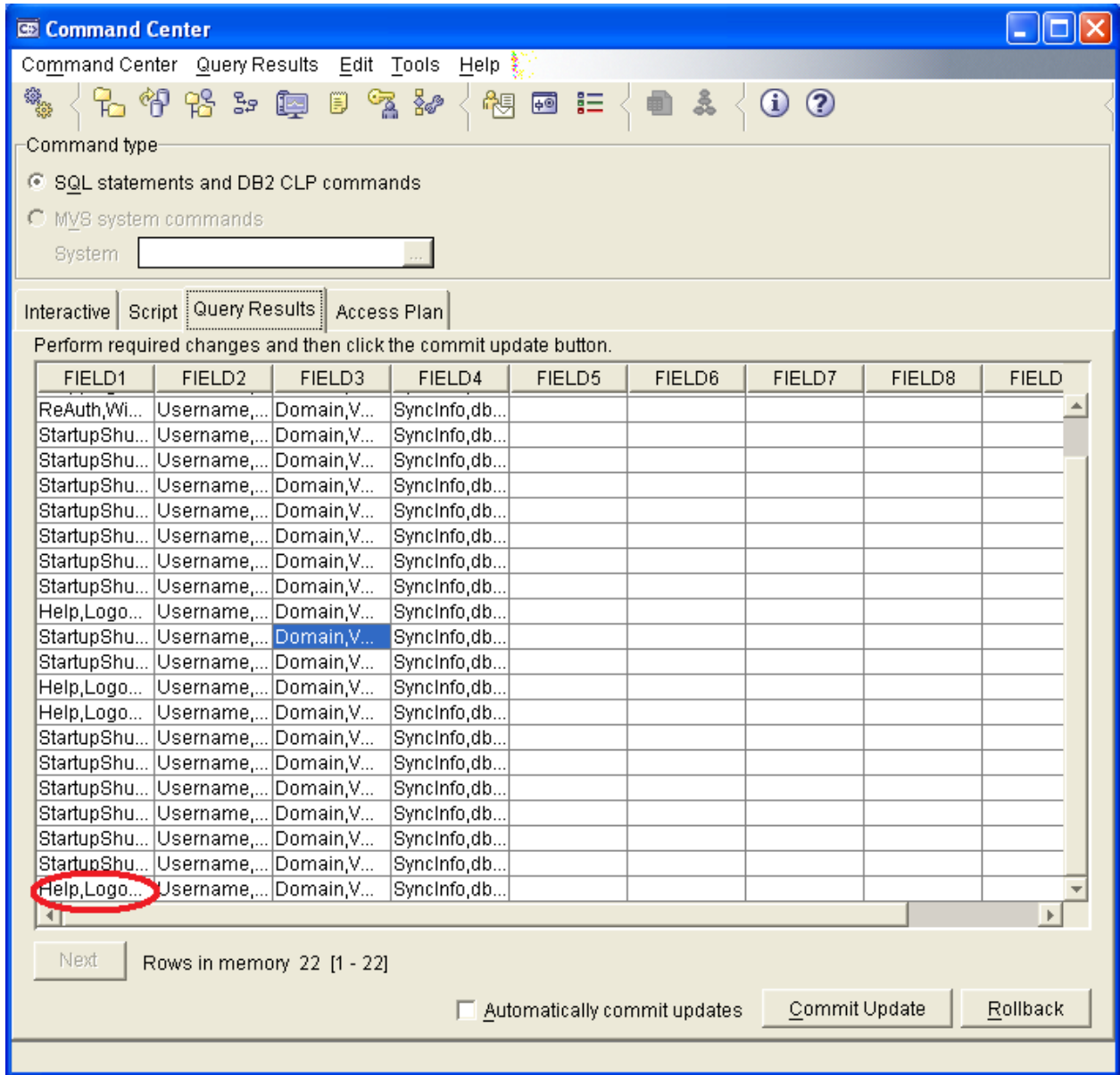
1. Open the Logon Manager and click **Help**.
2. Start the IBM DB2 Command Center. Typically, the shortcut is located in **Start → Program Files → IBM DB2 → Command Line Tools**.
3. Under **Database Connection**, click the [...] button.
4. In the “Select a Database” dialog, navigate to the target database and click **OK**.



5. Click **OK**.
6. Under **Command**, enter the following, then press **Enter**:

```
SELECT * FROM <name_of_event_log_data_table>;
```

7. The Command Center displays 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.



If the **Help** button press event does not appear, retrace your steps and check your database and ESSO-LM configurations.