

Oracle® Enterprise Single Sign-on
Logon Manager
How-To: Configuring ESSO-LM Event Logging
with the IBM DB2 Database
Release 11.1.1.2.0
20412-01

Release 11.1.1.2.0

20412-01

Copyright © 2010, Oracle. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free.

Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software--Restricted Rights (June 1987). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites.

You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for:

(a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

Table of Contents

| | |
|--|----|
| 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 for IBM DB2 Database Support | 5 |
| Overview | 5 |
| Step 1: Install and Configure the IBM DB2 Database | 6 |
| Step 2: Set Up the Event Log Data Table | 6 |
| Step 3: Installing the Database Event Extension Component for ESSO-LM..... | 15 |
| Step 4: Configuring ESSO-LM Event Logging for Database Support | 16 |
| Step 5: Testing Your Event Logging Configuration..... | 18 |

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/E15624_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.](#)

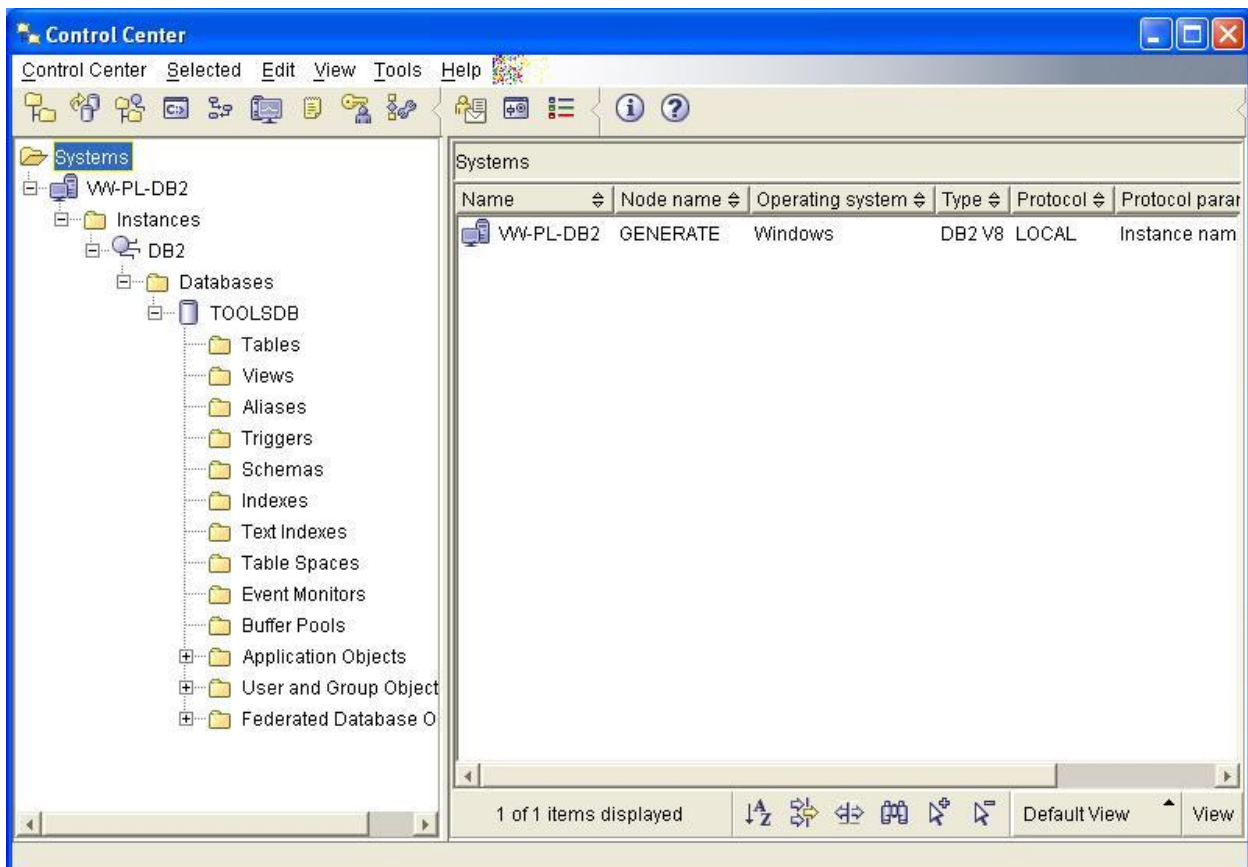
Step 1: Install and Configure the IBM DB2 Database

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.

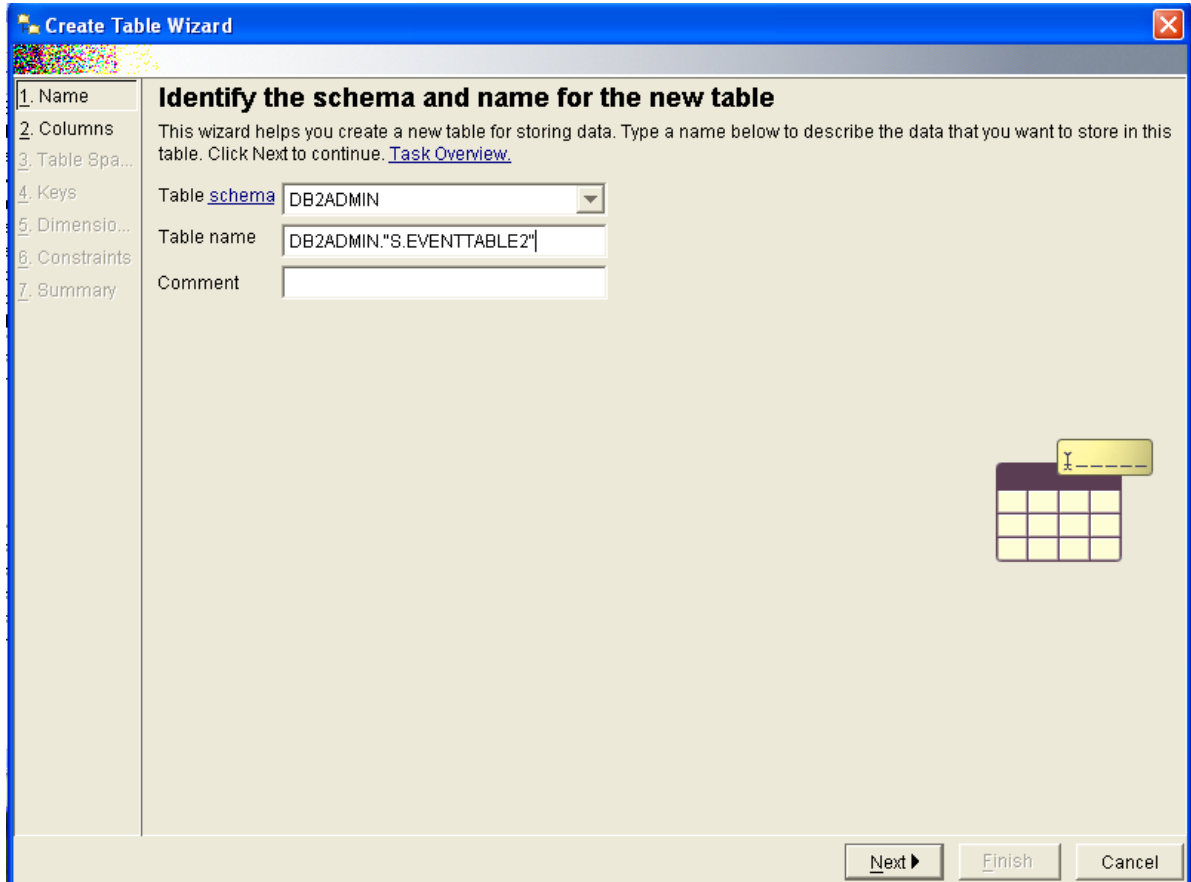
Step 2: Set Up the Event Log Data Table

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:

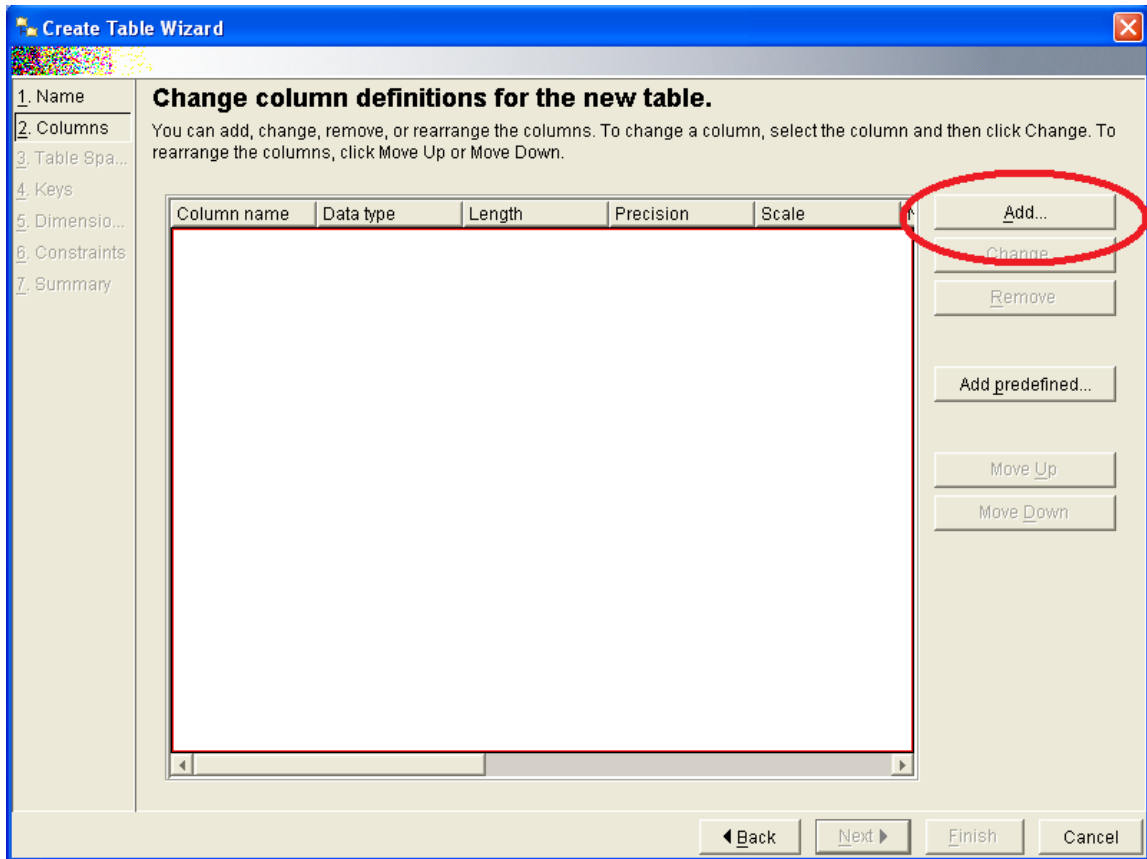
1. Launch the IBM DB2 Control Center application. By default, the application is located in `C:\Program Files\IBM DB2\General Administration Tools`.



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. These columns are:
- Event log data columns `FieldX`, where `X` is the column ID ranging from 1 to 10.
 - The `AppName`, `Category`, `TimeStamp`, and `Type` system data 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: []
- LOB unit: Bytes
- Precision: []
- Scale: []
- LOB option: Logged Bit data Compact

Nullable

Default: []

Comment: []

System default compression

Generate column contents

Identity

Initial value: [0] Increment: [1]

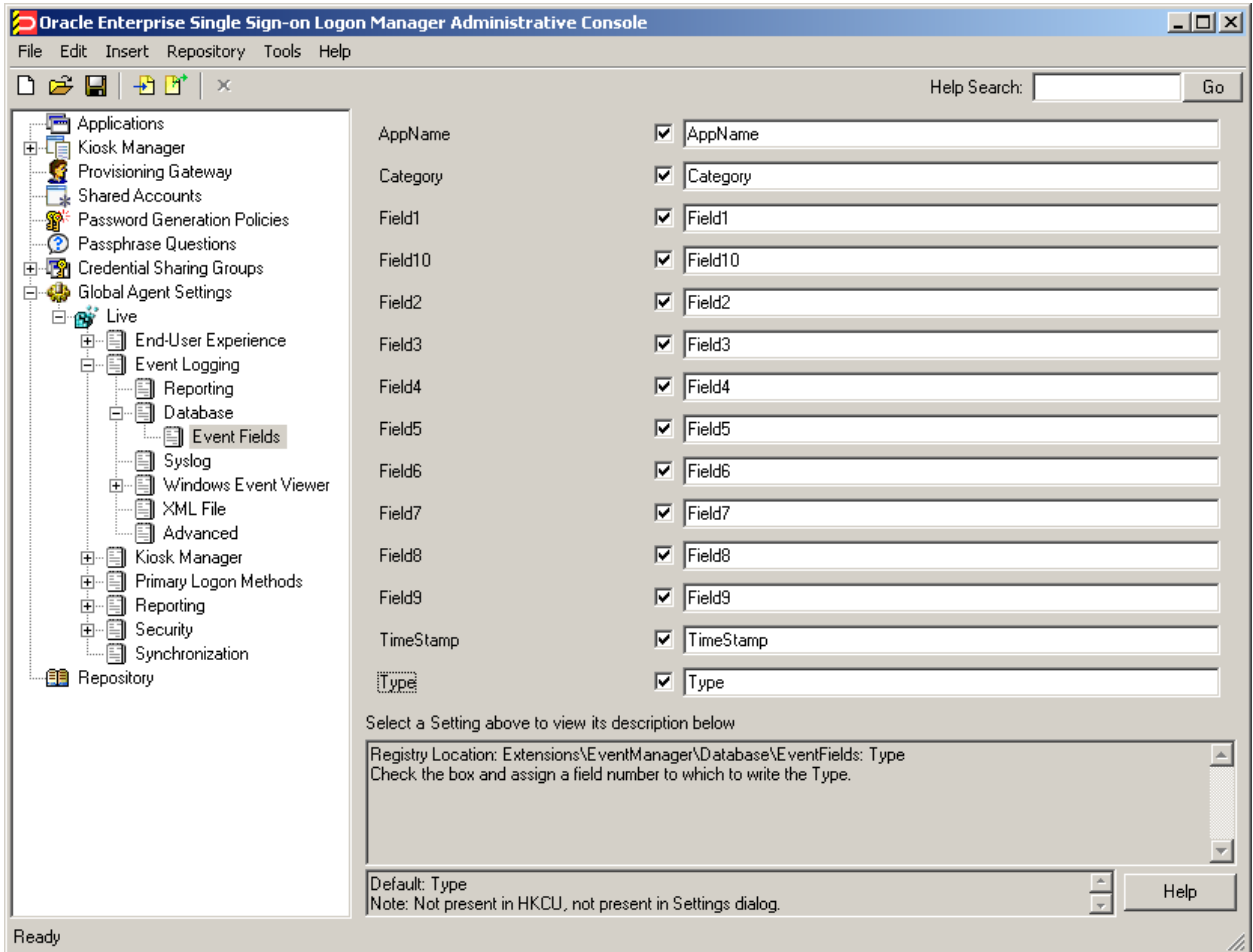
Cache value: [20] By default

Formula

[]

OK Cancel Apply Help

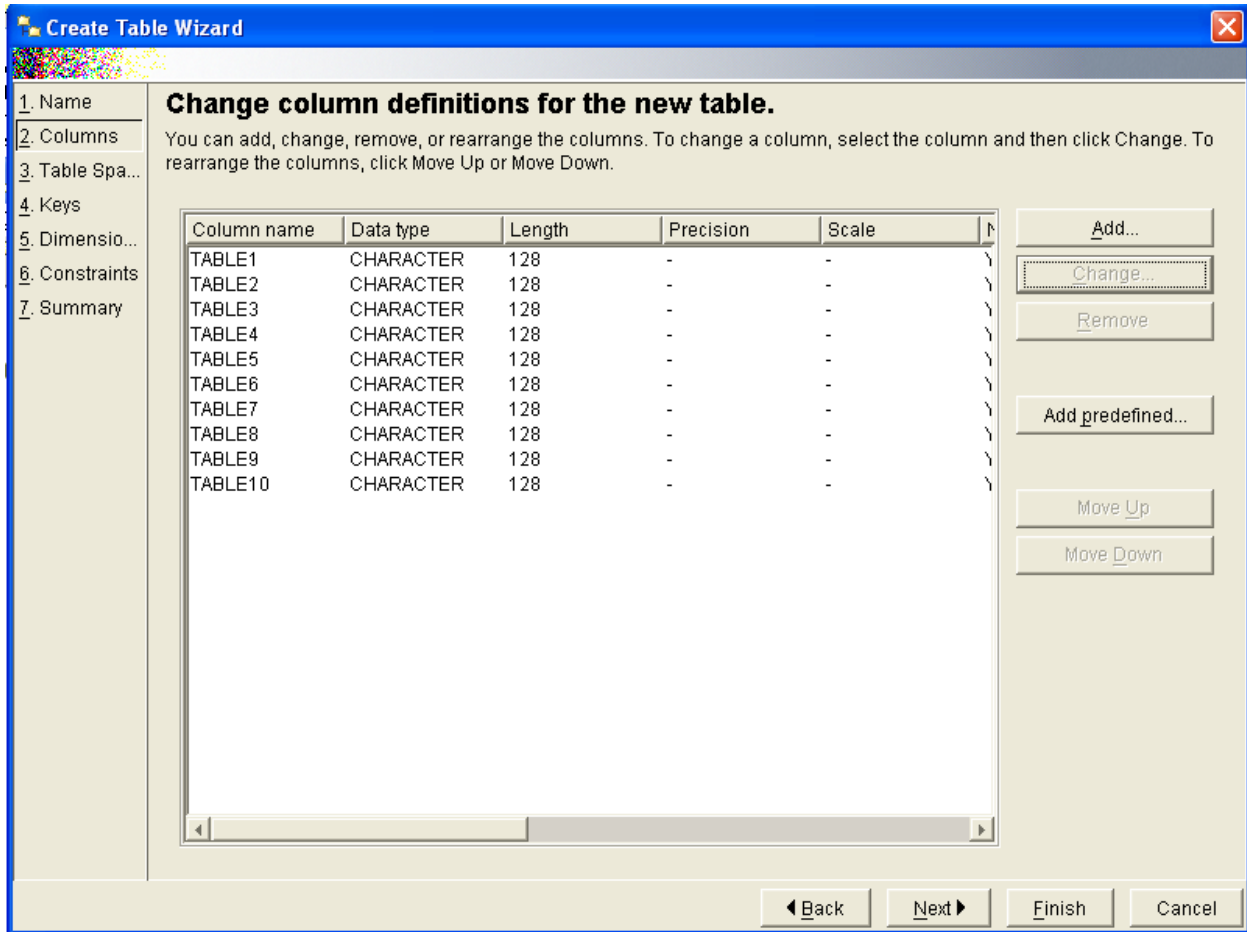
- II. Name the column. These column names will correspond to event log field names shown below that you will configure later in this document using the ESSO-LM Administrative Console.



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.

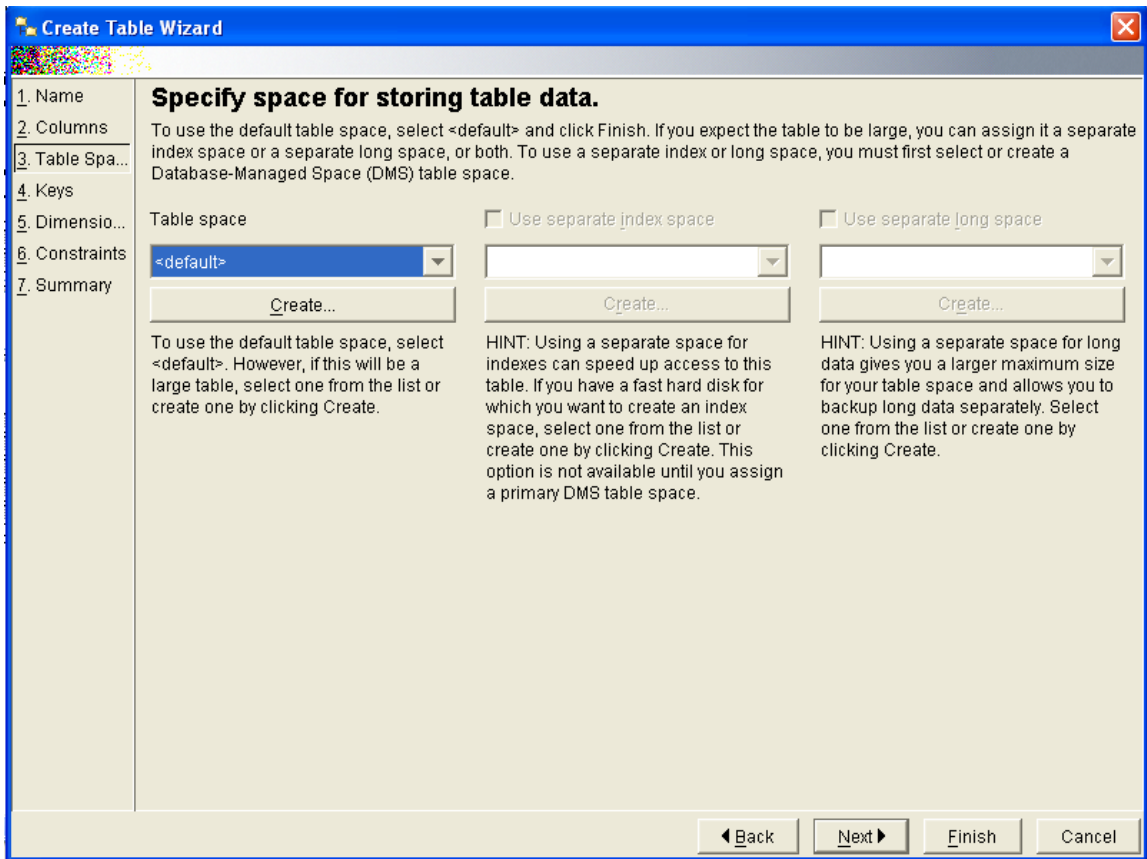
- III. Select **CHARACTER** as the data type.
- IV. Set the data length to 128.
- V. When you have populated the appropriate fields, click **Apply**, then **OK**.

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



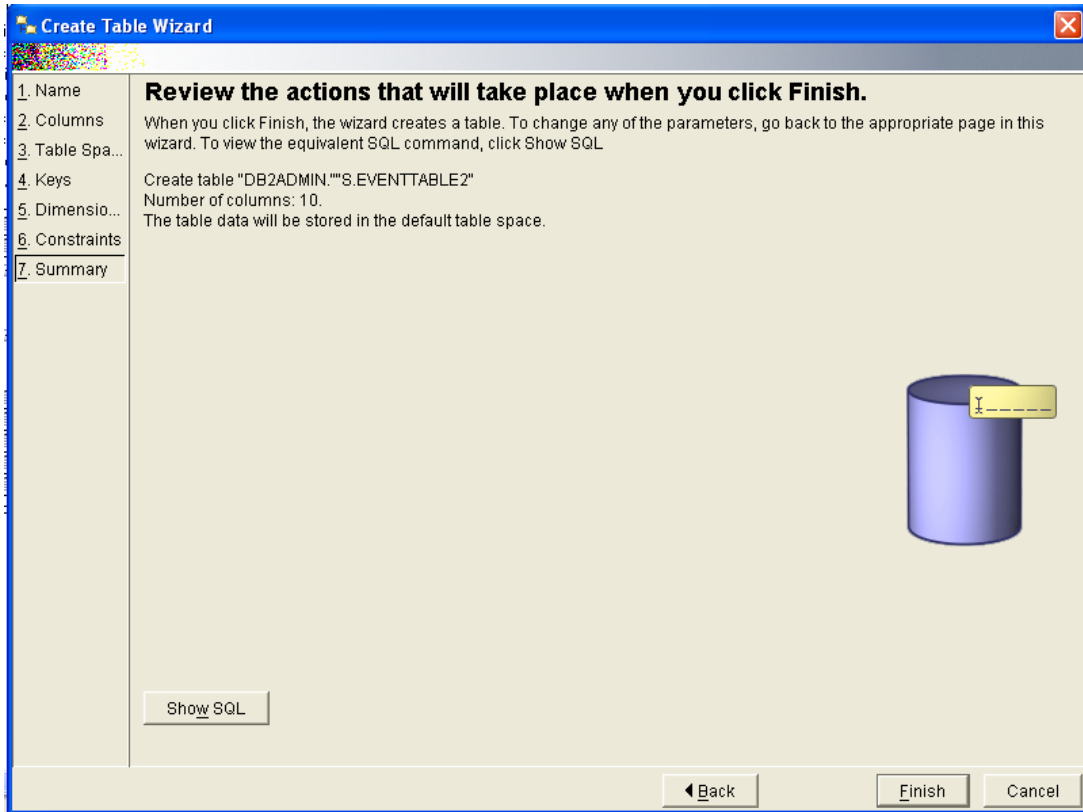
- d. If you need to make any changes, select the desired column in the list and click **Change**. When the table configuration is complete, click **Next**.

- 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**.



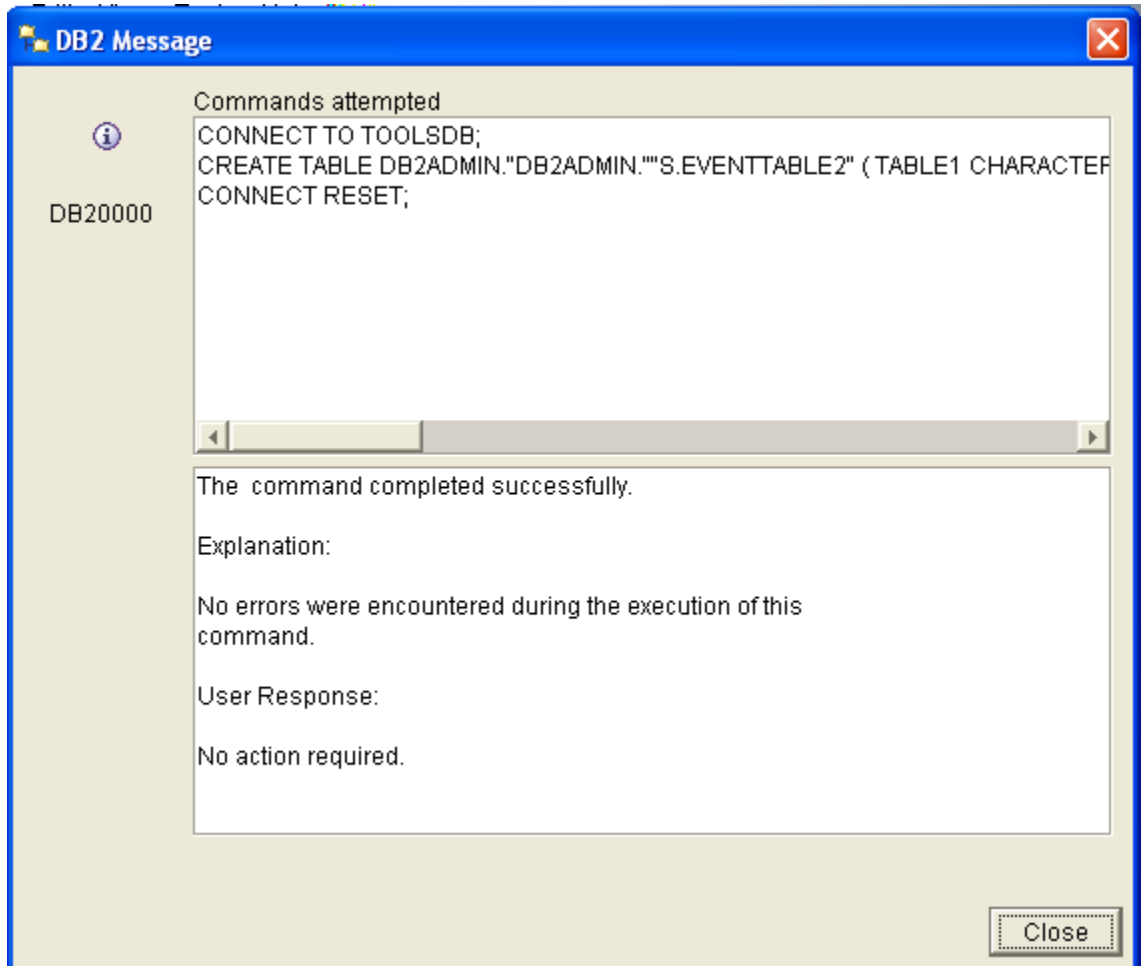
- f. For the remainder of the wizard, click **Next** to accept the defaults presented in each screen.

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.

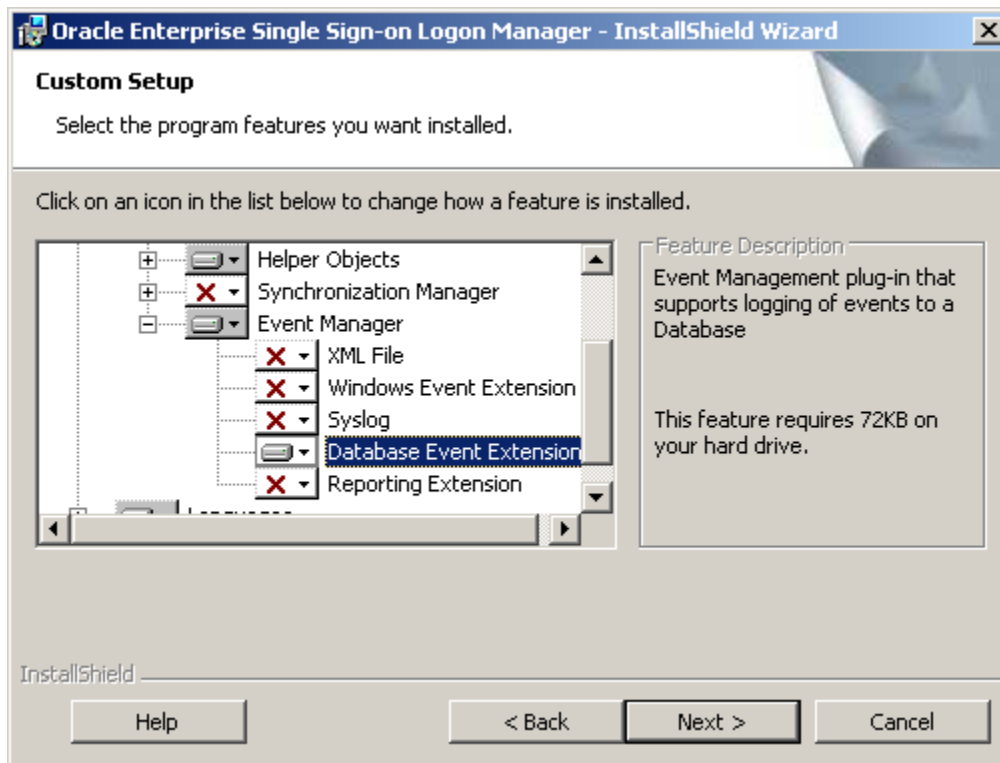
- h. Monitor the table creation process by checking the database log. When the table has been created successfully, the log will show the following:



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 “Custom Setup” dialog, expand **Extensions** → **Event Manager**.
7. Under the **Event Manager** node, click the button next to **Database Event Extension** and select **This feature will be installed on local hard drive** from the context menu.

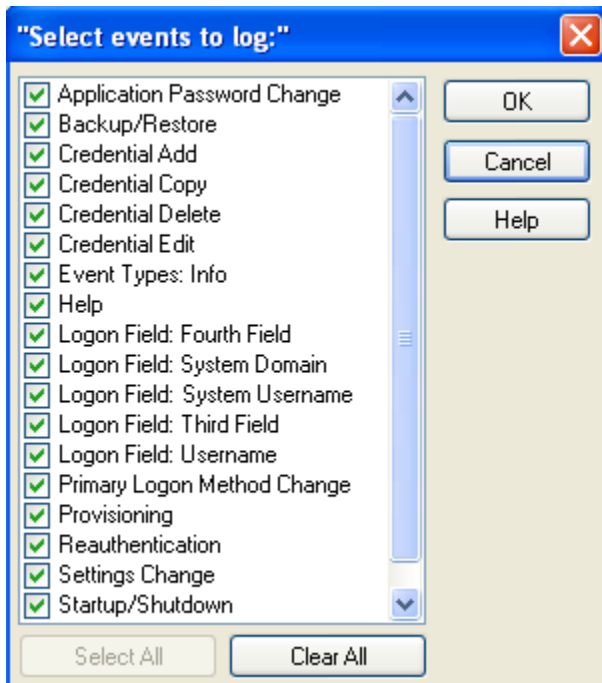


8. Click **Next**; then, in the dialog that follows, click **Install** and wait for the installation to complete.
9. When the installation completes successfully, click **Finish**.

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]** → **Event Logging**.
3. Select the check box next to Select events to log and click the **Set [...]** button.
4. In the "Select 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.

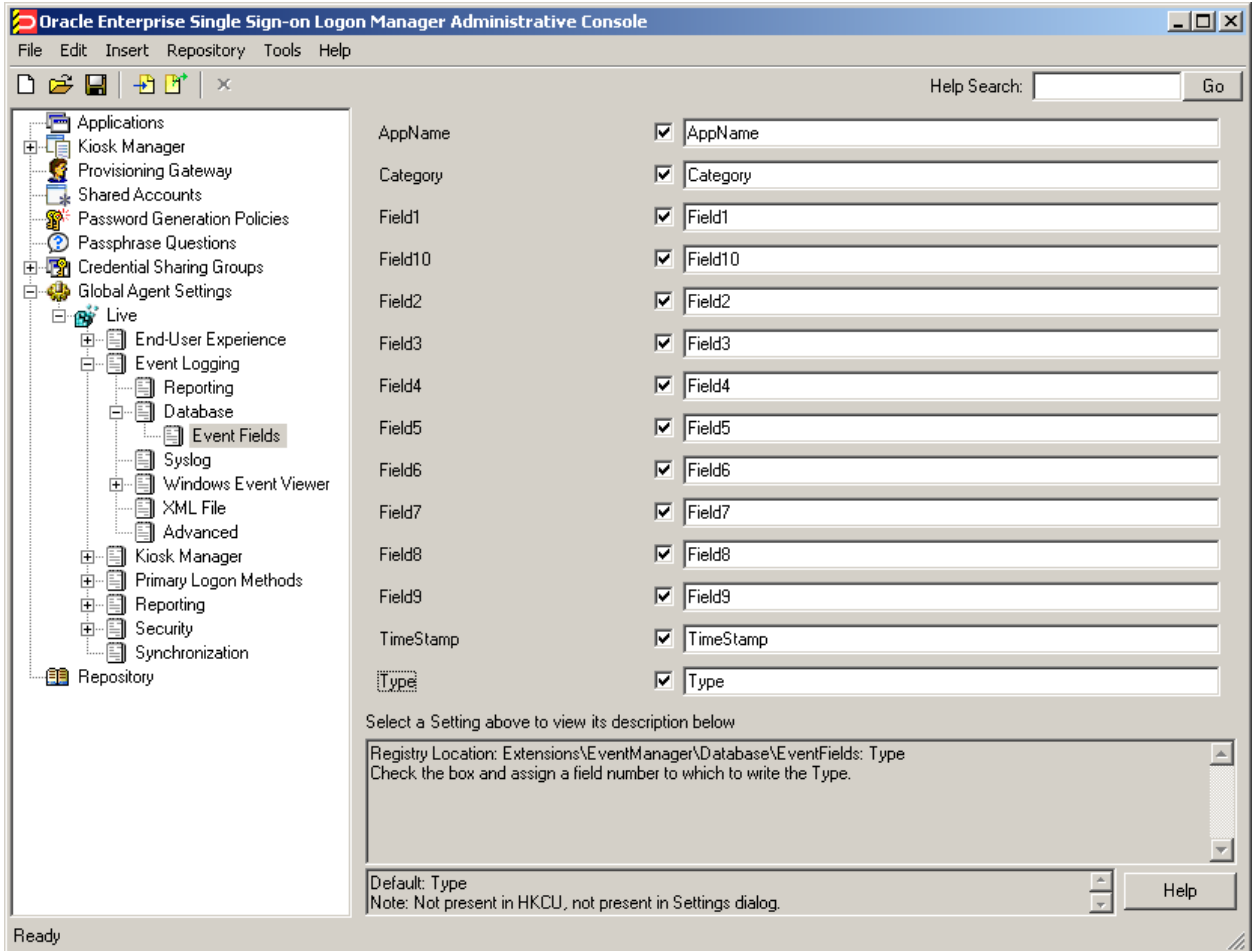


5. Under the **Event Logging** node in the tree, select **Database** and configure ESSO-LM as follows:

| | |
|-----------------------------|--|
| 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 with a numeric ID (**Field1**, **Field2**, etc.) , 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.

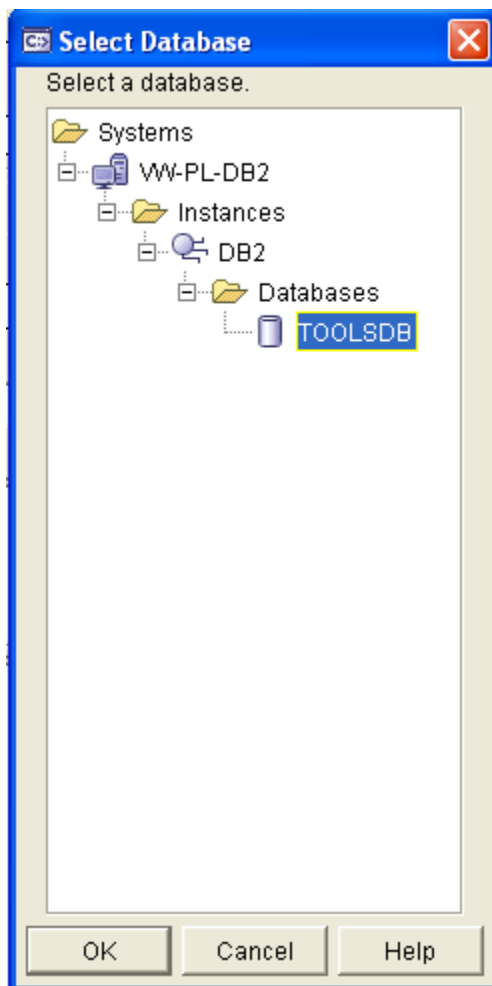


8. When finished, push the modified configuration set to your directory or write them to the local registry, whichever option suits your environment.
9. Proceed to the next section to test your event logging configuration.

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.

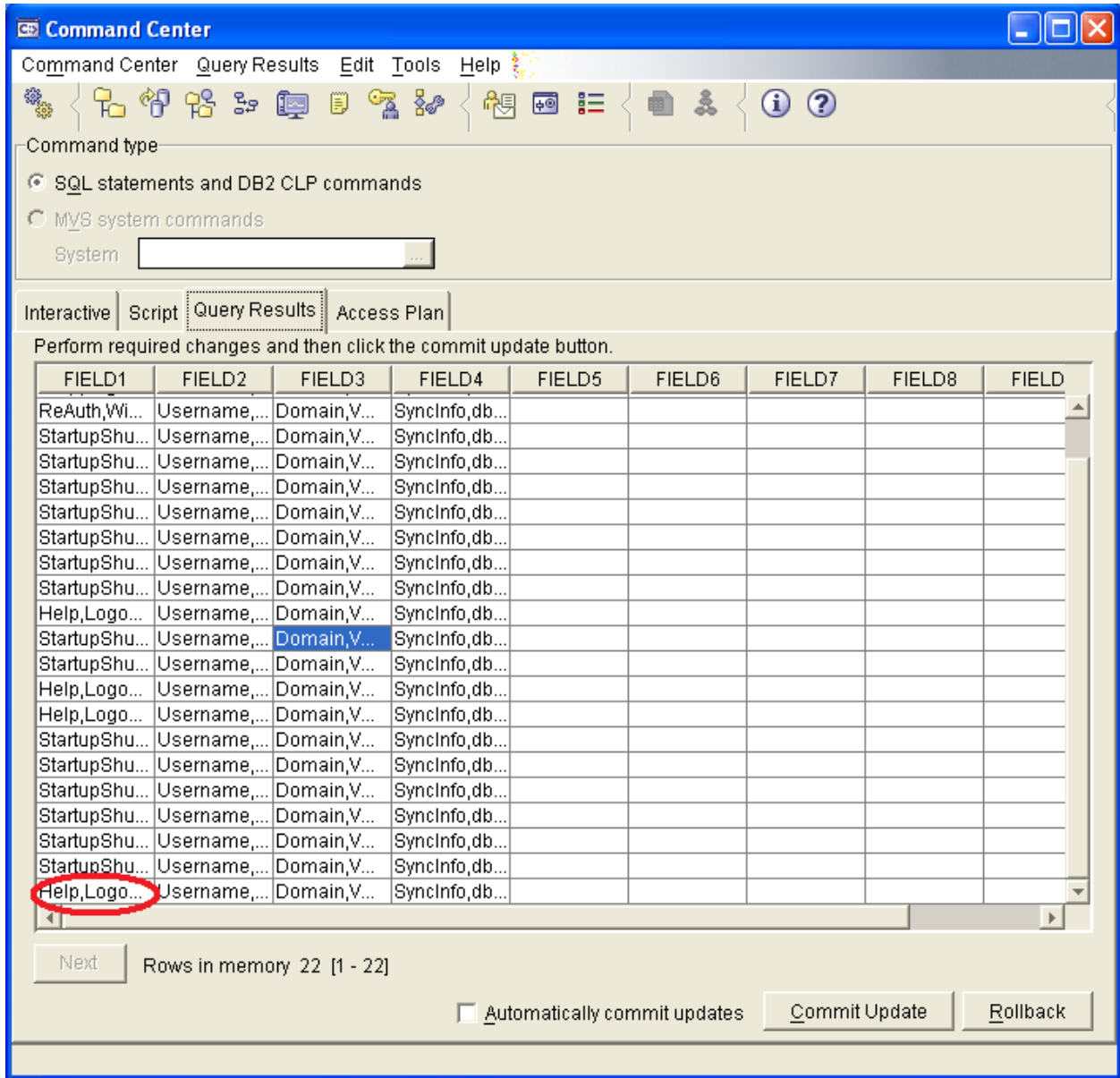
1. Open the Logon Manager and click **Help**.
2. Start the IBM DB2 Command Center. Typically, the shortcut is located in **Start → Program Files → IBM DB2 → Command Line Tools**.
3. Under **Database Connection**, click the ellipsis [...] button.
4. In the “Select a Database” dialog, navigate to the target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



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

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

- 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.