IBM SPSS Data Access Pack Installation Instructions for Linux

IBM®

Contents

Overview

Introduction

IBM SPSS products are distributed with a set of technologies for accessing data from a variety of file types and databases. This guide is primarily for system administrators who are installing an IBM SPSS product for use in a networked computer environment, and who need to provide end users with access to databases on remote servers.

The IBM® SPSS® Data Access Pack deploys DataDirect Connect and ConnectXE for ODBC, which provides a comprehensive set of individual, database-specific drivers that use ODBC to deliver reliable connectivity to all major data stores, from relational databases to flat-file data.

Note: These data access technologies are "closed"—they can be used only with IBM SPSS products. If you want to access databases with other applications, you may require a more general solution.

Deploying a Data Access Technology

Connect ODBC. Either the administrator or the end user can install the appropriate Connect ODBC drivers. (Connect ODBC does not have a server component.) The drivers must be installed on the computer that is accessing the data—the computer where the IBM SPSS server product is running, the end user's desktop computer, or both.

Figure 1-1
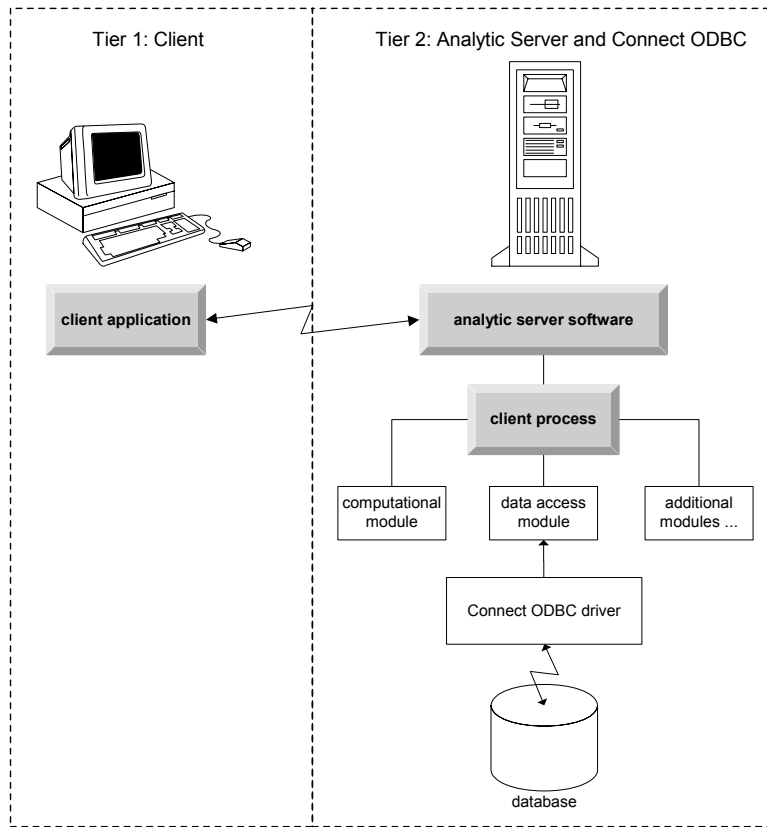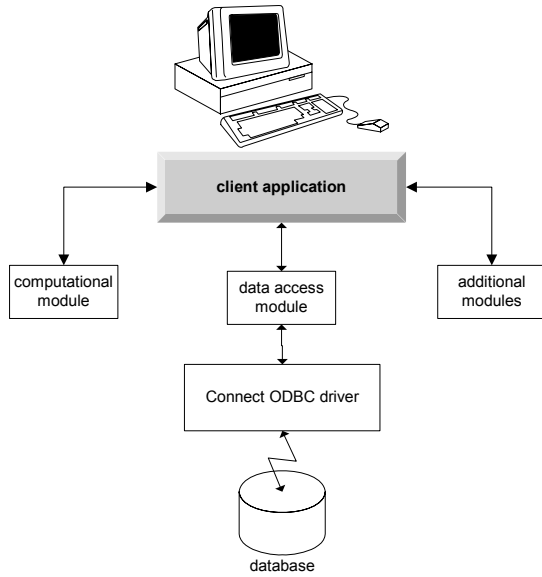*Connect ODBC in distributed analysis mode*

Figure 1-2
Connect ODBC in local analysis mode

ODBC Data Sources

When you install Connect ODBC, you install one or more ODBC drivers. Before you can use an installed driver, you must create and configure an ODBC data source for that driver.

An ODBC data source consists of two essential pieces of information: the **ODBC driver** that will be used to access the data and the **location of the database** that you want to access. The database can reside on any networked computer. The ODBC driver and data source have to reside on the computer that is accessing and processing the data. Depending on the type of IBM SPSS application that you are using, that can be either an end user's desktop computer or a remote server.

Location of ODBC Data Sources for Desktop Products

If your IBM SPSS product is a classic **desktop** application, where all data access and processing occurs on the end user's desktop computer, then the ODBC data source has to be installed and configured on the end user's desktop computer.

Location of ODBC Data Sources for Distributed Architecture Products

If your IBM SPSS product uses **distributed architecture**, then the correct location for ODBC data sources depends on how the product is being run. IBM SPSS distributed architecture products can be configured to access and process data on a remote server (distributed analysis mode) or on the end user's desktop computer (local analysis mode).

- **Working in distributed analysis mode.** The ODBC data source has to be installed and configured on the remote server. This data source is created using the ODBC driver (Connect ODBC) that the administrator installed on the server.

- **Working in local analysis mode.** The ODBC data source has to be installed and configured on the end user's desktop computer. This data source is created by the end user using the ODBC driver installed on his desktop computer, or it is imported from sources created by the administrator.

- **Working in both modes.** If end users need to access data from the database in both modes, the ODBC data source has to be installed and configured on both the remote server and the desktop computer.

Connect ODBC Installation Instructions

This chapter provides the details of installing Connect ODBC at your site and connecting to your database.

What You Need to Run Connect ODBC

Make sure that the computer meets the software requirements for the drivers you plan to install.

■ If your application was built with 32-bit system libraries, you must use 32-bit drivers. If your application was built with 64-bit system libraries, you must use 64-bit drivers.

■ When using DataDirect Connect or Connect XE for ODBC, the database you are connecting to can be either 32-bit or 64-bit enabled.

To determine if additional software is required for a particular driver, see the DataDirect home page at *http://www.datadirect.com/index.ssp*.

Installation Steps for Connect ODBC

Connect ODBC consists of a set of drivers, and should be installed on the computer where you will create data sources. The location depends on what type of IBM SPSS product you are installing and how it will be used. For more information, see the topic Deploying a Data Access Technology in Chapter 1 on p. 1. *Do not install the IBM® SPSS® Data Access Pack in the same directory as another IBM SPSS product*.

Drivers for all supported operating systems are available in an eAssembly provided with your IBM SPSS product. They are also available on a separate DVD.

Note: In order to install the Connect ODBC drivers, you must be running as root.

Install the Driver

▶ Run the installer by executing the following command:

./<installer_name>

where <installer_name> is the installer *.bin* file.

▶ Follow the instructions that appear on the screen. Please be sure to note the target location. You will need to navigate to this location after the installer finishes.

▶ Once the installer has finished, navigate to the target location specified during the installation.

▶ Uncompress the file for the IBM SPSS Data Access Pack. For example, uncompress odbc32v61_linux.tar.gz.

▶ Extract the *TAR* file. This extracts all files required to run the ODBC drivers.

Important: The *TAR* file must be extracted to a location that is accessible by all intended users of the IBM SPSS Data Access Pack on the current machine.

▶ Configure the ODBC environment. From the directory where you extracted the files, run ./setodbcpath.sh. This will set the ODBC home directory to the current directory.

▶ Add an instruction to run /<Connect ODBC install dir>/odbc.sh from the script that launches your IBM SPSS application.

Note: For IBM® SPSS® Statistics users, this is accomplished by editing *statsenv.sh* (located in the *bin* directory under the directory where SPSS Statistics is installed) and changing the line with MERANT_ENVIRONMENT_SCRIPT so that it points to the directory where Connect ODBC is installed.

DataDirect Product Documentation

DataDirect's product documentation for Connect ODBC can be found under the directory where you extracted the files.

Note: The documentation can also be accessed from the DataDirect home page at *http://www.datadirect.com/index.ssp*.

Updating Your Installation

Installing a newer version of a driver or client from the IBM SPSS Data Access Pack does not uninstall earlier drivers. Instead, it makes the newly-installed software available to you. The newly-installed software must be manually configured; the configuration of your earlier driver is not transferred. If your earlier driver is working properly and meets your needs, it is best not to upgrade to a new version. Only update when you require support for a database that was previously unsupported, or when you require an enhancement.

Connecting to Your Database with Connect ODBC

Connect ODBC is a set of ODBC drivers; when you install it, you install drivers. Before you can use an installed driver you must create and configure an ODBC data source for that driver. The ODBC data source must be created on the computer that will be accessing the data. For more information on where to create your ODBC data sources, see Deploying a Data Access Technology, on p. 1. The available Connect ODBC drivers will be labelled IBM SPSS OEM when displayed in an ODBC administrator. For more information about configuring ODBC data sources, see the section on Configuring the Product on UNIX/Linux in the DataDirect Connect Series for ODBC User's Guide (provided with the DataDirect documentation that is installed with the IBM® SPSS® Data Access Pack).

Important: If you are creating a data source that will be used by a server product, then you should create a System data source, not a User data source.

If you have a system administrator, ask him or her about configuring Connect ODBC.

What End Users Need to Know

For IBM SPSS server products and distributed analysis mode, end users need to know:

■ The names and descriptions of Connect ODBC data sources that have been configured on the remote computer for use with the server product.

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Glossary

analytical server. A computer configured for, and dedicated to, rapidly executing commands from analytical applications.

distributed analysis mode. A client application that is accessing and processing data on a remote server using the IBM SPSS analytic server technology.

local analysis mode. A client application that is accessing and processing data on the end user's desktop computer.

ODBC. Stands for Open Database Connectivity; a specification for a low-level interface that defines a standard set of routines with which an application can access data in a data source.

ODBC data source. A named collection of information that consists of two essential pieces: the ODBC driver that will be used to access the data and the location of the database that you want to access.

IBM SPSS Server. An IBM SPSS product that distributes client requests for resource-intensive operations to powerful analytic server software.

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