TS ODBC DataServer[TM]
Installation and Activation Guide

Version 8.9.0

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INTRODUCTION

The TS ODBC DataServer provides access to Thoroughbred data from third party applications. The DataServer is shipped in 2 models: Single-Tier and Multiple-Tier. This manual will detail how to install Single-Tier and Multiple-Tier client components, the Multiple-Tier server component, and the TS ODBC DataServer Expose Utility. In addition, the method for activating the server component of the Multiple-Tier system is detailed.

> **NOTE:** To install the TS ODBC Gateway for Windows, refer to the Multiple-Tier instructions. In this environment, the client software will be loaded on the Windows Server system. The server software will be loaded on either a Windows or UNIX server.

- In the Single-Tier model of TS ODBC DataServer, the Client and Server elements of the system and the Expose utility all reside on the same platform.

- In the Multiple-Tier model of TS ODBC DataServer, the ODBC driver resides on the client platform, which is connected via a LAN to the server platform, where the server component and the Expose Utility reside.

During the installation of the client software, both the Single-Tier and Multiple-Tier ODBC drivers will be installed. Activation is only required for the server component of the Multiple-Tier installations.

Client Platforms Supported

The Single-Tier and Multiple-Tier Client software are 32-bit and 64-bit and support Microsoft Windows 10, Windows 11, Windows Server 2016, Windows Server 2019, Windows Server 2022, UNIX, and Linux.

Server Platforms Supported

The server component software of TS ODBC DataServer is available on various UNIX platforms, Linux, Windows Server 2016, Windows Server 2019, and Windows Server 2022. Please call your Thoroughbred Sales Representative for a list of available servers.

Installation Guidelines

Single-Tier

Please refer to *How to install the TS ODBC DataServer Client* and *How to Install TS ODBC DataServer Expose Utility*.

Multiple-Tier

First install the Server software (see *How to Install the Multiple-Tier Server*). This must be done before installing the Client on each workstation (see *How to Install the TS ODBC DataServer Client*).

Refer to Chapter 4, *Activation*, for details on activating the server. Lastly, to install the Expose Utility refer to *How to Install TS ODBC DataServer Expose Utility.*

INSTALLING/UPGRADING THE MULTIPLE-TIER SERVER

UNIX/Linux Server

Note: If you are installing or upgrading the server and loading into the same directory as a previous version, you must stop any currently executing tfodbcd process. Otherwise, the install/upgrade will not be successful.

To install the TS ODBC DataServer Server software, perform the following steps:

1. Create the base directory for the Server software. For example, you may wish to install the software in the directory /usr/local/tsodbc. Log in as root, then perform the following:

    ```
    cd /usr/local
    mkdir tsodbc          : make the tsodbc directory (if necessary)
    cd tsodbc
    ```

2. Move the downloaded product file into the tsodbc directory. Copy the distribution media to the system using cpio. This example is for SCO OpenServer. Substitute the appropriate directory path value for your environment.

    ```
    umask 0
    cpio -icvBmud < TSOD
    ```
    (for Linux use **−ivBmud** above.)

3. If this is an upgrade and there is a TS ODBC DataServer server component loaded, you must first remove the file **tbredodbc**.*nn* from the **/usr/lib/basic** directory if at least one of the following conditions is true:

    *   You are increasing the maximum number of connections in the same version of the TS ODBC DataServer.

    *   You are changing the current TS ODBC DataServer serial number.

4. Run the script **install** in your Server software base directory (for example, **usr/local/tsodbc**).

    ```
    cd /usr/local/tsodbc
    ./install
    ```

After you enter **./install**, the system will display the Installation Setup screen:

```
*********************************************************************
*                                                                   *
*                                                                   *
*                   TS ODBC DataServer Installation Setup           *
*                                                                   *
*                                                                   *
*********************************************************************

     Enter the software serial number (provided on media label):
            (          -  )


```

Enter the software serial number (provided on media label):

Type the serial number from the media label and press the **Enter** key. If you type an invalid value, the system will generate the message:

INVALID SSN. RETRY? (Y/N):

Y You can enter a valid value. If the **install** utility does not accept the software serial number printed on the label, please contact your Thoroughbred dealer.

N The **install** utility will return to the operating system prompt. It will not install or upgrade the TS ODBC DataServer.

After the **install** utility validates the serial number, it will display the following message:

Installing TS ODBC DataServer, Please Wait…

Then, after some time elapses, the **install** utility displays the following message:

TS ODBC DataServer Installation part 1 completed successfully.

The **install** utility will return to the operating system prompt.

The installation of the server component is now complete. To start the server, execute the following.

```
cd /usr/local/tsodbc              : move to install directory
./tfodbcd
```

Proceed to *How to Install the TS ODBC DataServer Client* to load the Multiple-Tier Client.

Windows Server

NOTE: All Thoroughbred Window based products prior to Version 8.8.0 must first be uninstalled and then the 8.9.0 release installed. If you are upgrading a pre 8.7.0 release, **BEFORE** continuing with this installation, please see the Uninstalling section of this manual for instructions to properly prepare your system for 8.9.0.

Contents of the Server Software

The server software contains the following utilities:

- **Server Activation**. This is the process to activate the server. Refer to the Activating section.

- **Process Viewer -** This utility will produce a list of the processes associated with the server.

System Requirements

Before you install the server software, check that you have the following:

- A computer system with a 486 processor or better.

- A hard disk, with a minimum of 10 Mb of disk space free (if all components are installed).

- A working network connection. The client and server must be able to access each other by both name and TCP/IP address. To verify this, use the "ping" command.

- Enabled *Thoroughbred Environment*.

Installing the Server Software

Prior to installing the software, take note of the following:

- Before installation begins, ensure that there are no memory resident tasks that could affect installation. This includes the Microsoft Office Toolbar and Windows Explorer. Both programs will lock DLL's that may be updated during the installation process.

- Ensure you are logged on as the 'Administrator'.

Should you have problems after installation, (for example Thoroughbred ODBC Query from the client system will not connect to a data source), verify the network connection as specified in System Requirements.

Installing the Files to Your Hard Drive

All installations and activations must be run with Administrator privileges. Once fully installed and activated the products can be run using standard user accounts.

1. **Login** using an **Administrator** account.

2. We recommend closing all unnecessary applications before running the installation.

3. Extract the contents of the **tsod_svr.zip** file and run **setup.exe.**

4. The **InstallShield Wizard** will start the installation process. You can exit this installation at anytime by selecting the **Cancel** button.

User Information

Enter your Name, Company and serial number supplied on the distribution media.

Choose Destination Location

Type and enter or browse and enter the path to the location for the installation. The default destination folder is C:\Program Files (x86)\TSODBC. **We strongly recommend installing into the default folder.**

NOTE: If you are installing on Windows desktop workstation or Windows Server class machine you must install into the Program Files (x86) folder.

Once the Wizard completes, the TS ODBC DataServer service will need to be started. From the **Start Menu**, select **Control Panel → Administrative Tools → Services**. Locate the TS ODBC DataServer Manager service. Click the **Start** button. A Service Control dialog will display while the system starts the service. Once started, the status field will be changed to "Started".

UNINSTALLING

IMPORTANT: The 8.9.0 release cannot be combined with any other versions prior to 8.8.0. All pre 8.8.0 products must first be uninstalled and then the 8.9.0 release installed. The instructions to uninstall will disable all Thoroughbred Windows based products.

The following describes how to properly uninstall a previous release of TS ODBC DataServer to prepare the system for the 8.9.0 installation.

These instructions assume you had previously installed using the default folder C:\Program Files (x86)\TSODBC4NT. The folder names may vary slightly depending upon which products you have installed, the release and where the products were originally installed.

- Login using an **Administrator** account.

- Backup your application data and programs.

- From the Control Panel select the option to remove TS ODBC DataServer.
  Files not installed by the setup or files that have changed since the setup was run are not removed.
  If you have already uninstalled other Thoroughbred products some the following files will no longer exist. Erase the following folders and files:
  C:\Program Files (x86)\TSODBC4NT
  C:\Windows\Tsi.ini
  C:\Windows\tsiconst.ini
  C:\Windows\TBRED86.BAS

- We recommend running a reliable registry cleaner at this point.

- Reboot your system.

INSTALL THE TS ODBC DATASERVER CLIENT (WINDOWS)

Contents of the Client Software

The Client software contains the following components:

- **Thoroughbred ODBC Administrator**. This is always installed and is used to configure data sources once the Expose Utility has been run.

- **Thoroughbred ODBC Query -** This utility is used to test the data source.

- **ODBC Driver and System files**. Both the Single-Tier and the Multiple-Tier Clients include a 32-bit driver. Both drivers are loaded during the client software installation.

System Requirements

You must have the following:

- An IBM or 100% compatible PC, with 486 processor or better.

- A hard disk, with a minimum of 10 Mb of disk space free (if all components are installed).

- The TS ODBC Data Server requires name resolution to allow forward and reverse resolution of server and client names. The details of implementation are beyond the scope of this manual. Please contact your Network Administrators or Thoroughbred Consulting Services for assistance in this area.

- For Multiple-Tier versions of TS ODBC DataServer:

  1. TCP/IP software on the client system must be **WINSOCK-compliant**. The 32-bit driver is **WSOCK32.DLL** and should reside in the **\WINNT\SYSTEM32** directory for Windows. **Note**: TCP/IP must be fully installed. Just copying the WINSOCK DLL will not be sufficient.

  2. A working network connection to a host with TCP/IP. The client and host must be able to access each other by both name and TCP/IP address. To verify this, use the "ping" command.

Installing the Client Software

Prior to installing the software, take note of the following:

- Re-start Windows (all versions) before installing to be sure that there are no memory resident tasks that could affect installation. This includes the Microsoft Office Toolbar and Windows Explorer. Both programs will lock DLL's that may be updated during the installation process.

- When installing on Windows ensure you are logged on as the 'Administrator.

Should you have problems after installation, (for example Thoroughbred ODBC Query will not connect to a data source), verify the network connection as specified in System Requirements, item number 2 above.

All installations and activations must be run with Administrator privileges. Once fully installed and activated the products can be run using standard user accounts.

1. **Login** using an **Administrator** account.

2. We recommend closing all unnecessary applications before running the installation.

3. See the Executable Setup Table below to locate the setup for your operating system platform. Follow the displayed instructions.

Component	Operating System	Application Architecture	Download File Name	Executable
Client	Workstation	32-bit	setup.exe	setup.exe
Client	Workstation	64-bit	setup.exe	setup.exe
Client	Server	32-bit	setup.zip	setup_32_gw.exe
Client	Server	64-bit	setup.zip	setup_64_gw.exe
Server	Server	32-bit	tsod_srv.zip	Setup.exe
Expose Utility	Win10+, W2K16+	N/A	odbc_expose.zip	setup_exp_7plus.exe

   NOTE: For download files that end in .zip, extract the files into separate directories and run .exe file in the extracted folders.

4. The **InstallShield Wizard** will start the installation process. You can exit this installation at anytime by selecting the **Cancel** button.

User Information

Enter your Name and Company.

Choose Destination Location

Type and enter or browse and enter the path to the location for the installation. The default destination folder is C:\Program Files (x86)\TSODBC. **We strongly recommend installing into the default folder.**

NOTE: If you are installing on Windows desktop workstation or Windows Server class machine you must install into the Program Files folder.

To complete the installation, you will need to do the following:

Establish a connection
Set the SERVER.MAP file
Set the IPLINPUT DEV and CNF statements

For information about setting up your Thoroughbred System files, please see the Basic Customization and Tuning Guide available on your product CD or online at www.tbred.com.

INSTALL THE TS ODBC DATASERVER CLIENT (UNIX/LINUX)

The TS ODBC DataServer provides access to Thoroughbred data from ODBC-enabled applications. This document will detail the components and installation steps for the TS ODBC DataServer client for UNIX/Linux.

Contents of the Client Software

The following driver files are included in the product:

- libtfodbcst.so - Single-Tier Driver Library

- libtfodbcsS.so - Single-Tier Setup Library

- libtfodbccl.so - Multi-Tier Driver Library

- libtfodbccS.so - Multi-Tier Setup Library

System Requirements

Client Platforms Supported

- Linux kernel 2.4.20 and later -- verify with uname -a

- unixODBC 2.2.8 and later -- verify with odbcinst -j

Server Platforms Supported

The server component software of TS ODBC DataServer is available on various UNIX/Linux platforms and Windows. Please call your Thoroughbred Sales Representative for a list of available servers.

Installing the Client Software

1. Load the Drivers

The driver files may be installed in any directory, for example /usr/local/lib. The following examples assume the downloaded product file has been copied into /usr/local/lib

```
cd /usr/local/lib
cpio -ivBud <TSLNX
```

2. Build Entries in odbcinst.ini

Add a section to **odbcinst.ini** for each driver you want to use. Locate the odbcinst.ini on your system by executing the odbcinst command (which is supplied as part of the unixODBC package) as follows:

```
odbcinst -j
```

The system will return information similar to the following:

```
unixODBC 2.2.10
DRIVERS............: /etc/odbcinst.ini
SYSTEM DATA SOURCES: /etc/odbc.ini
USER DATA SOURCES..: /root/.odbc.ini
```

The **odbcinst.ini** file will be stored in the directory referenced by the 'DRIVERS' line.

The logical name for a driver is enclosed in brackets at the beginning of a section. This name will be used when defining Data Sources. Insert the following information into the odbcinst.ini file to add the Thoroughbred ODBC drivers to the system:

```
[TSODBCST]
Description = TS ODBC DataServer for unixODBC (Single-Tier)
Driver = /usr/local/lib/libtfodbcst.so
Setup = /usr/local/lib/libtfodbcsS.so
FileUsage = 1

[TSODBCCL]
Description = TS ODBC DataServer for unixODBC (Multi-Tier)
Driver = /usr/local/lib/libtfodbccl.so
Setup = /usr/local/lib/libtfodbccS.so
FileUsage = 1
```

3. Define Data Sources

You can define Data Sources manually by editing **odbc.ini**. Refer to the 'SYSTEM DATA SOURCES' line of the odbcinst command output for the **odbc.ini** file location on your system. The following is a sample Multi-Tier definition:

```
[SERVER]
Description = ODBC Test DataSource
Driver = TSODBCCL
HOST = your.server.com
UID = abc
```

In this example, SERVER is the name of the definition. It **must match** a name you created using the ODBC Expose Utility. This name is **case sensitive**.

The **Description** is a required keyword and should describe the Data Source.

The **Driver** keyword is also **required** and must match a driver that you have defined in odbcinst.ini.

The **HOST** keyword is **required** for **Multi-Tier** connections.

The following are **optional** keywords recognized by the TS ODBC drivers.

> **UID**   A Dictionary-IV operator code may be stored for login.
>
> **PWD**   The password associated with the listed UID.
>
> **HOST** A URL used to connect to a remote TS ODBC DataServer.
>
> **PORT** The port number to use for remote conections.

Security

The drivers are not capable of presenting dialogs for such things as logins and passwords. If a Dictionary-IV operator code and password is required it must be provided in the **odbc.ini** file or by the ODBC client you are using. LINK passwords and Record Access passwords are not allowed in this version.

Additional Resources

Refer to the TS ODBC Reference Manual for details about the ODBC Expose Utility.

The ODBCConfig program, if available, is an X-Windows client useful for maintaining Data Source configurations. The setup library must have been installed for the program to work. The program's sole purpose is to display and edit the **odbc.ini** and **odbcinst.ini** files. It cannot handle the password and translation features of the TS ODBC drivers.

You can find more information about unixODBC at www.unixODBC.org.

HOW TO INSTALL TS ODBC DATASERVER EXPOSE UTILITY

Before you install the TS ODBC DataServer Expose Utility component, make sure you have:

- Installed the TS ODBC DataServer Single-Tier or Multiple-Tier software

- Installed the Thoroughbred Environment, version 8.7.0 or above

- Defined a device line in the appropriate IPL file for a hierarchical directory

- Defined data file formats and links in Dictionary-IV

- Defined the terminal device to use Thoroughbred Windows

To install the Single-Tier version of TS ODBC DataServer Expose Utility, please refer to the section titled *Single-Tier*. To install the Multiple-Tier version, please refer to the section titled *Multiple-Tier*.

Single-Tier/Windows Server

Use the following procedure to install the Single-Tier and Windows Server versions of TS ODBC DataServer Expose Utility:

Installation

All installations and activations must be run with Administrator privileges. Once fully installed and activated the products can be run using standard user accounts.

1. **Login** using an **Administrator** account.

2. **Extract the contents of the odbc_expose.zip file and run setup.exe.**

3. The **InstallShield Wizard** will start the installation process. You can exit this installation at anytime by selecting the **Cancel** button

4. Following the completion of the InstallShield process, start Thoroughbred Basic, type **RUN "INSTALL"**, and press the **Enter** key. When prompted to enter a Module Code or S, enter **S** to initiate a Selective install.

5. Follow the on-screen instructions to install the Single-Tier and Windows Server versions of TS ODBC DataServer Expose Utility. For more information on installation conventions, please refer to appropriate Thoroughbred installation documentation (Thoroughbred Environment for Windows Supplemental Guide with Installation).

Multiple-Tier/UNIX Server

Use the following procedure to install the Multiple-Tier version of TS ODBC DataServer:

1. Logon to the server system.

2. Determine the location of the data dictionary (IDDBD) that contains the definitions of the data you plan to expose to ODBC (for example, /usr/lib/basic/IDL4).

3. Move the downloaded product file into the IDL4 directory. Copy the distribution media to the system using cpio.

   ```
   umask 0
   cpio -icvBmud <TSODBC
   ```
   (for Linux use **–ivBmud** above.)

4. Start Thoroughbred Basic, type **RUN "INSTALL"**, and press the **Enter** key. When prompted to enter a Module Code or S, enter **S** to initiate a Selective install.

Follow the on-screen instructions to install the Multiple-Tier version of TS ODBC DataServer Expose Utility. For more information on installation conventions, please refer to appropriate Thoroughbred Dictionary-IV installation documentation.

ACTIVATING

To complete the installation, the TS ODBC DataServer server component must be activated. The following procedure outlines the steps for a successful activation.

UNIX Server

1. Move to the directory where the server component was loaded. Execute the tfodbca program.

```
cd /usr/local/tsodbc
./tfodbca
```

2. The system will display a screen similar to the following:

```
**********************************************************************
*                                                                    *
*                                                                    *
*                  TS ODBC DataServer Activation Process             *
*                                                                    *
*                                                                    *
**********************************************************************

          This system contains a temporary installation of
          TS ODBC DataServer.

          You have less that '30' days before the number
          of active users is restricted to 3.

               SSN = XXXXXXXXX-XX

            Installation code = XXXXXXXXX

          Do you want to enter the Activation Key(Y/N):N
```

Until you enter a valid Activation Key, the system will operate as a temporary installation. Before you contact Thoroughbred Software International make sure you have the following information handy.

- Your Dealer Code

- The software serial number, which is found on the label on the distribution media or on the displayed Activation screen.

- The Installation Code, which is also displayed on the Activation screen.

To get an Activation Key you can:

- Visit our web page, www.tbred.com, and select the Activations option.

- Call Thoroughbred Software International at (800) 524-0430 or (732) 560-1377 and follow the prompts to obtain an Activation Key.

- Send a fax to Thoroughbred Software International at (732) 560-1594.

  Note: Please make sure that you include your fax number in the message so that Thoroughbred Software International can fax the Activation Key back to you.

After Thoroughbred Software International provides the Activation Key, you must enter the value using the following procedure.

When the system prompts:

Do you want to enter the Activation Key?(Y/N):

Type **Y** and press the **Enter** key. The following message will be displayed:

Enter Activation Key:

Type the Activation Key you received from Thoroughbred Software International and press the **Enter** key. The following message will be displayed:

Performing final installation of TS ODBC DataServer…

After some time elapses the following message will be displayed:

TS ODBC DataServer Installation part 2 completed successfully.

Windows Server

From the Start menu, select the **Thoroughbred Software** program group. Select **TS ODBC DataServer Activation**. The following screen will display:

Until you enter a valid Activation Key, the system will operate as a temporary installation. Before you contact Thoroughbred Software International make sure you have the following information handy.

- Your Dealer Code

- The software serial number, which is found on the label on the distribution media or on the displayed Activation screen

- The Installation Code, which is also displayed on the Activation screen

To get an Activation Key you can:

- Visit our web page, www.tbred.com, and select the Activations option

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- Send a fax to Thoroughbred Software International at (732) 560-1594

  Note: Please make sure that you include your fax number in the message so that Thoroughbred Software International can send the Activation Key to you.

After Thoroughbred Software International provides the Activation Key, you must enter the value using the following procedure.

Enter the Key in the **Enter Activation Key** field and click the **Authorize** button.

Following a successful activation, the system responds with this screen:

Click **OK**. The server is now activated.

If an invalid Activation key is entered, the following screen will display:

Click **OK.** The system will return to the main Activation window.

To verify that the server is activated, execute the Server Activation program. The following screen will display:

Click **OK** to close the window.