Release Notes For Versant/ODBC On Windows

Release 7.0.1.4

VERSANT

Versant History, Innovating for Excellence

In 1988, Versant's visionaries began building solutions based on a highly scalable and distributed object-oriented architecture and a patented caching algorithm that proved to be prescient.

Versant's initial flagship product, the Versant Object Database Management System (ODBMS), was viewed by the industry as the one truly enterprise-scalable object database. Leading telecommunications, financial services, defense and transportation companies have all depended on Versant to solve some of the most complex data management applications in the world. Applications such as fraud detection, risk analysis, simulation, yield management and real-time data collection and analysis have benefited from Versant's unique object-oriented architecture.

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CHAPTER 1   *Release Notes*

This Chapter gives a brief overview of the Versant/ODBC driver

The Chapter covers the following details:

- Description of Release
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Description of Release

Versant/ODBC 7.0.1, when used with Versant ReVind(Versant/SQL) 7.0.1, allows any ODBC 3.0 compliant, commercial, off-the-shelf tool to access VERSANT databases.

ODBC lets you work with "data sources" that hide the details of an actual DBMS computer system network, and computer operating system. That way the form, content, and location of the data is immaterial to the client application using ODBC interfaces that are serviced through the corresponding Versant drivers.

With Versant ReVind(VSQL) and the Versant/ODBC option, Versant databases can be accessed using a common database programming interface.

For ODBC-based applications typically written in C or C++, this common interface insulates client Windows applications from needing to know any database-specific details—or network details beyond the TCP/IP address associated with the database server. As described in the next chapter, some configuration activity is required for each ODBC database in terms of its:

- Network Configuration
- Database Driver Configuration

If client applications will deal with more than one data source, a "data sources" manager service makes sense for ODBC, for which the Windows ODBC Administrator control panel serves well.

The ODBC API conformance level is core, level 1 and most of level 2. This support includes outer joins, positioned updates, union operations, ODBC-compatible scalar functions, and extended data types. The SQL language conformance is extended SQL grammar.

Versant/ODBC has been tested with tools such as CrystalReports, Microsoft Visual Basic and Microsoft Access.

System Requirements

Versant/ODBC Release 7.0.1 has the following system requirements:

- Windows 2000 Server with Service Pack 4, or
- Windows 2000 Advanced Server with Service Pack 4, or
- Windows XP Professional with Service Pack 2, or
- Windows Server 2003
- Microsoft TCP/IP for Windows must be installed

- Minimum disk space of 1 megabytes for installation and 12 MB for Temporary Files for installation.
- Runtime memory of 0.5 megabytes.

Capabilities of the Drivers

Versant/ODBC functions are made available through drivers on Windows. The ODBC driver will allow any 32-bit, ODBC compliant application to access a Versant data source that you configure using the ODBC Administrator.

With this driver, you will be able to login as user `vsqldba` on the Versant ReVind server machine without first creating an operating-system user named `vsqldba`. User `vsqldba` is the Versant ReVind equivalent of a "super user" for SQL tables. Only user `vsqldba` (or the database's recorded dba account), for example, can use an ODBC tool to run the SQL `GRANT` command to add users and give them `SELECT`, `INSERT`, `UPDATE`, and `DELETE` privileges.

Restrictions and Suggestions

See the release notes for Versant ReVind for any restrictions and suggestions it has to offer.

Installation

This Chapter gives a detailed explanation on how to install Versant/ODBC driver on 'Windows Machine'.

The Chapter explains the following in detail:

- Assumptions
- Installation Procedures
- Configuring the Network
- Configuring Data Sources
- Installation Troubleshooting

Assumptions

These installation instructions assume the following:

- You have already installed / or are installing Versant database software on your database server machine.
- You have already installed / or are installing Versant ReVind(VSQL) on your Versant ReVind server machine.
- You have created at least one database that you want to access using Versant/ODBC.

Versant, Versant ReVind, and Versant/ODBC do not need to be installed on the same machine. For example, you may install Versant/ODBC on a Windows machine and then use Versant ReVind installed on a Solaris machine to access a Versant database on a HP machine.

Following are the steps required to install Versant/ODBC.

Installation Procedures

1. Respond to prompts.

Respond to the queries presented by the installation program.

The installation program will automatically install the Microsoft ODBC Administrator Utility, if it is not present

The installation program invokes the Microsoft ODBC Administrator utility so that the names of the Versant data sources (in ODBC terms, a Versant database would be called a "data source") can be added. Alternately, you can invoke the ODBC Administrator at a later time to add Versant data sources. See the following section "Configuring a Versant database as a ODBC data source" for more information.

During the install process, if an error is encountered indicating that an ODBC DLL could not be updated as it is in use, first try to continue. If the installation program does continue, then you are ok. However, if an error causes your installation to abort, follow the instructions in the section "Installation Trouble Shooting."

2. Configure your ODBC network files.

Follow the steps listed in the following section "Configuring the Network".

3. Optionally configure your ODBC data sources.

This step is only required if you have not already configured your data sources in step 2 or if you want to add additional data sources. See the following section "Configuring Data Sources" for details.

Configuring the Network

This section describes the steps for configuring a Versant/ODBC client system to allow remote access to Versant ReVind.

These instructions assume that Versant ReVind has already been installed on a remote machine and that the services daemon on that machine, `dhserver,` is running.

For additional information, see Versant ReVind *Release Notes* manual.

Add Versant ReVind server host to your host file.

Edit your network hosts file to enter the host name and address of each Versant ReVind server machine that you will want to use.

On Windows 2000, your host file is probably:

`c:\winntXX\system32\drivers\etc\hosts`

Open the hosts file and add an entry for each server machine. The general syntax is:

tcp_address host_name `sqlhost.versant.com`

For example, for a Versant ReVind server host named sqlhost, the entry in the hosts file might be:

`129.75.137.100sqlhost sqlhost.versant.com`

Configuring Data Sources

After completing the installation of Versant/ODBC and configuring the network, the Microsoft ODBC Administrator can be used to add a Versant database as an ODBC data source. Versant/ODBC can only connect to Versant databases that have been setup as ODBC data sources.

1. Start the ODBC Administrator.

Invoke the Microsoft ODBC Administrator from your ODBC client machine. By default, the ODBC Administrator is started from the Control Panel program group.

2. Select and add the VERSANT driver.

In the Installed Drivers list box, click on the VERSANT driver, and then click on the Add Data Source button.

The Versant ODBC Setup dialog box will appear.

3. Provide information about your data source.

In the Setup dialog box, enter the following information.

Data Source Name

A local name for the Versant database through which connections will be established later. The ODBC Administrator program uses this name to distinguish among the various sources of data.

This information is mandatory.

Description

An optional description of the data source.

Host

The name of the Versant ReVind server machine.

The Versant ReVind host name is not necessarily the same as the Versant database server host.

Database

The name of the Versant database to be accessed.

User ID

The user name for Versant ReVind access.

Password

The password helps authenticate the user.

If the host name, database name, user name or password are omitted, users of ODBC applications will be asked to enter that information just before the application uses the Versant/ODBC driver to try to connect to a Versant database.

Installation Troubleshooting

This section attempts to list the typical problems that may be encountered during installation and configuration. The resolutions listed are the most likely of a set of possible resolutions.

Interpreting Error Numbers

Versant ReVind will raise errors from both Versant ReVind and the Versant database management system.

Error numbers greater than zero are Versant ReVind errors.

Error number less than -310,000 indicate Versant errors, but to get the actual Versant error number, you need to multiply by -1 and then subtract 310,000:

VERSANT error = (-1 * error_number) - 310,000

For example, if an association being traversed does not locate a persistent object, the Versant error 5006 ("Cannot find the object") is returned as Versant ReVind error -315,006. To obtain the actual Versant error:

VERSANT error = (-1)(-315006) - 310000 = 5006

Error Number 19: "Invalid string or buffer length"

If you get error number 19: Invalid string or buffer length, then you are trying to use a 16-bit application to access an ODBC datasource defined using the 32-bit Versant/ODBC driver.

In general, most 16-bit applications can use the 32-bit Versant driver without any errors, but there seems to be some 16-bit applications that encounter this error upon a connection request.

Versant ReVind server host entry required in the hosts file

If the entry for the Versant ReVind remote host is missing from the hosts file on the Versant/ODBC client system, Versant/ODBC will abort, performing an illegal operation. Typically, the remote hosts entries need to be specified in the files listed below.

On Windows 2000:

```
c:\winntXX\system32\drivers\etc\hosts
```

32 bit driver connection problem

If your application pops an empty dialog box when you try to connect to a database, it may be because your 2000 login username is not on the access list of the database. The solution is to use the Versant `dbuser` utility to add your Windows 2000 login username to the user list of the database.

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