ORACLE7 (TM) ODBC DRIVER
RELEASE NOTES

*** THIS IS IMPORTANT INFORMATION. ***
*** PLEASE DISTRIBUTE TO ALL SUPPORT AND TECHNICAL PEOPLE. ***

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Installation and Setup Procedures

Introduction

This document is intended to guide you as you install the Oracle7 ODBC Driver. Please read the entire document before beginning the installation process.

On-line help for Installation

Once the installation process is started, additional help will be available through the installation program's on-line help system. Simply press the "Help" button on any dialog box that the installation program (Installer) displays, and information on how to complete the dialog box will be displayed on the computer screen. For more information on how to use the Help System, please refer to the User Guide that came with your version of Microsoft Windows.

On-line help for Oracle7 ODBC Driver

Once the installation process is started, specific help for the Oracle7 ODBC Driver will be available. Simply select the Oracle7 ODBC Driver from the list of available driver and press the "Setup" button. A new dialog box will appear. Press the "Help" button for specific help for the Oracle7 ODBC Driver. For more information on how to use the Help System, please refer to the User Guide that came with your version of Microsoft Windows.

Topics discussed in this document include:
*   why the Oracle7 ODBC Driver is needed
*   what you should know before installing the Oracle7 ODBC Driver
*   what computer equipment (hardware) and computer programs (software) you will need before installing the Oracle7 ODBC Driver
*   step-by-step instructions on how to install the Oracle7 ODBC Driver
*   descriptions of advanced installation features
*   what is the ODBC Administrator and how to get the Oracle7 ODBC Driver version number

Why Do You Need The Oracle7 ODBC Driver?

The Oracle7 ODBC Driver is a special computer program that allows a wide variety of ODBC compliant database applications to work together with the Oracle7 database server. In simple terms, the Oracle7 ODBC Driver acts as a translator between the ODBC interface used by popular front end applications and the native interface to an Oracle7 database. For example, once the Oracle7 ODBC Driver is installed, you will be able to use popular front end applications such as Microsoft Access to manipulate information from your Oracle7 database.

What You Should Know Before Installing the Oracle7 ODBC Driver

This document assumes that you are already familiar with the Windows environment and specifically:
* using the mouse
* selecting menu items
* using the Help System
* entering information into dialog boxes
* pressing screen "buttons"

If you are not familiar with how to perform these functions within DOS or the Windows environment, please ask your Systems Administrator for instructions or consult your Windows User Guide.

Hardware and Software Requirements

Before installing the Oracle7 ODBC Driver, please make sure that your computer and network meet the following minimum requirements for hardware and software. If you are unsure of what the specifications of your system are, please consult your user manuals or ask your Network Administrator or computer dealer for details.

The term "Client" in this document refers to the computer used to request information from the Oracle7 database.

The term "Server" in this document refers to the computer used to store the Oracle7 database data.

Client Requirements

* An IBM-compatible personal computer attached to a network
* Microsoft Windows version 3.1 or later
* Either MS-DOS version 5.0 (or higher) or DR-DOS version 6 (or higher)
* A Hard Disk Drive with approximately 350 kilobytes of free space for the Oracle7 driver if ODBC Setup is already installed, or 1 megabyte of hard disk space for a full installation.
* A minimum of 2.5 megabytes of random-access memory (4 MB is recommended)
* Oracle SQL*Net for Windows V1 or V2 client network software (Note: Oracle SQL*Net must be installed prior to installing Oracle7 ODBC Driver because the ODBC Driver is dependent on Ora7win.DLL. Make sure that c:\orawin\bin is on your path where orawin is your default Oracle home for your Oracle Windows products.)

Server Requirements

* Networking protocol software supported by ORACLE SQL*Net for Windows (e.g. TCP/IP, SPX/IPX, etc...)
* An Oracle7 Server (This ODBC Driver is not compatible with ORACLE V6)

Installing the Oracle7 ODBC Driver

The Oracle7 ODBC driver Setup program (SETUP.EXE) is used to install the Oracle7 ODBC Driver.

The Setup program copies the Oracle7 ODBC Driver (SQORA7.DLL) and associated ODBC files to your Windows System directory. It also sets up the ODBC Administration program which allows you to add or delete ODBC drivers and data sources.

To Install the Oracle7 ODBC Driver

Please note that the Setup program requires that Microsoft Windows be running prior to starting the program.

From the DOS prompt:

1. Type win and press <enter>
    (Microsoft Windows will then be started)

From within Windows:

2. In the Windows Program Manager... select the "File" menu.
    (the File menu will then be displayed)

3. From the File menu... select the "Run" menu item
    (Windows will then display the Run dialog box (Windows v3.1)

4. Insert the Oracle7 ODBC Driver Install disk into either floppy drive A: or floppy drive B:

5. Type a:setup in the Command Line box (or type b:setup if the install disk is in drive B:)

6. Select the "OK" button
    (a dialog box that says "Initializing Setup..." will appear as the Setup program is loaded and started)

The Welcome Dialog Box

Once the Setup program is loaded and started, the Welcome Dialog is displayed.

7. Select the "Continue" button to begin the installation process
    (the Install Drivers dialog box will appear)

                              or

    Select the "Exit" button to abort the installation process and return to Windows.
    (a message box will appear that tells you that the installation has been aborted and gives you the option of resuming the installation or returning to Windows)

The Install Drivers Dialog Box

If the "Continue" button was selected, the Install Drivers dialog box will be displayed.

8. Select "Oracle7" from the list of available ODBC drivers

9. Select the "OK" button
    (The Copying Files dialog box is then displayed as Setup begins to transfer files to your Windows directory. When all the files have been installed, the Data Sources dialog box will be displayed.)

The Data Sources Dialog Box

When Setup finishes installing the driver files, the Data Sources dialog box is displayed.

If your system already has a previous version of an Oracle ODBC Driver (this ORACLE V6 specific ODBC Driver was named "Oracle" and was bundled with Access 1.1 and Visual Basic 3.0) set up as a data source, you have two options:

i) set up a new data source for Oracle7 and keep the ORACLE V6 ODBC Driver ("Oracle")
    If you choose this option you will be able to access data in either ORACLE V6 or
    Oracle7 databases.

ii) replace the ORACLE V6 data source(s) with Oracle7 data source(s)
    If you choose this option you will be able to access data only in Oracle7 databases.

Your Database Administrator will be able to advise you on which method should be used. If you are unsure which method would be best, or if you do not have the existing ORACLE V6 data source, set up a new data source for Oracle7. Please note that the Oracle7 ODBC Driver works only against an Oracle7 Server. To access ORACLE V6, you will need to acquire the Oracle ODBC Driver bundled with Access 1.1 and Visual Basic 3.0.

If you wish to setup a new data source for Oracle7:

10. Select the "Add" button on the Data Sources dialog box.
    (the Add Data Sources dialog box will appear)

11. Select the "Oracle7" data source name from the Installed ODBC Drivers list box

12. Select the "OK" button
    (the ODBC Oracle Setup dialog box will appear)

13. Enter the Data Source Name, Description, and ORACLE SQL*Net Connect String
    (if you are unsure of what information to enter, press the "Help" button on the dialog box or consult your Network Administrator)

    Note: Round brackets ( ), square brackets [ ], the equals sign =, and the semi-colon ;
    *   cannot be used as part of a Data Source Name*

    Examples: Data Source Name: Oracle7 or Company Data or Main Server
    *   Description: The Oracle7 ODBC Driver*
    *   Connect String: t:pepsi:ora*

14. Select the "OK" button
    (you will be returned to the Data Sources dialog box)

15. Select the "Close" button
    (a message box will appear telling you that the installation was completed successfully)

16. Select the "OK" button
    (Setup will end and you will be returned to the Windows Program Manager)

If you wish to change an ORACLE V6 data source to an Oracle7 data source:

10. Select the ORACLE V6 data source name from the Data Sources list box

11. Select the "Setup" button on the Data Sources dialog box.
    (the ODBC Oracle Setup dialog box will appear)

12. Write down on a sheet of paper the Data Source Name, the Description, and the ORACLE SQL*Net Connect String
    (you will need this information later)

13. Select the "OK" button
    (you will be returned to the Data Sources dialog box)

14. Select the "Delete" button
    (a message box will appear asking if you really want to delete the data source)

15. Select the "Yes" button
    (you will be returned to the Data Sources dialog box)

16. Select the "Add" button on the Data Sources dialog box.
    (the Add Data Sources dialog box will appear)

17. Select the "Oracle7" data source name from the Installed ODBC Drivers list box

18. Select the "OK" button
    (the ODBC Oracle Setup dialog box will appear)

19. Enter the Data Source Name, Description, and ORACLE SQL*Net Connect String
    (if you are unsure of what information to enter, press the "Help" button on the dialog box or consult your Network Administrator)

    Note: Other applications may be set up to use the Data Source Name that you wrote down in step #12. For this reason we suggest that you use the same Data Source Name. The Description and ORACLE SQL*Net Connect String may need to be changed. See your Database Administrator for details.

    Note: Round brackets ( ), square brackets [ ], the equals sign =, and the semi-colon ; cannot be used as part of a Data Source Name.

    Examples: **Data Source Name: Oracle7 or Company Data or Main Server**
    Description: The Oracle7 ODBC Driver
    Connect String: t:pepsi:ora

20. Select the "OK" button
    (you will be returned to the Data Sources dialog box)

21. Select the "Close" button
    (a message box will appear telling you that the installation was completed successfully)

22. Select the "OK" button
    (Setup will end and you will be returned to the Windows Program Manager)

Advanced Installation Features

The previous section described the basic steps required to install the Oracle7 ODBC Driver. This section outlines other installation features that are available from the Setup program. These options can be used at any time that you wish to make modifications to the existing ODBC setup. Simply run the SETUP.EXE program from the Windows Program Manager and select the appropriate options.

The Setup program allows you to:
* add a new data source
* modify an existing data source
* delete an existing data source

ODBC drivers can be removed from your system from the Windows Control Panel.

To Add an Oracle7 ODBC Data Source

1. In the Main group in the Program Manager window, double-click the Control Panel icon. In the Control Panel window, double-click the ODBC icon.

2. In the Data Sources dialog, choose the Add button.

3. In the Add Data Source dialog, select Oracle7 from the Installed ODBC Drivers list and choose the OK button.

4. Enter the name of the data source and its description.

   The Data Source name is a name by which you will identify the data source. For example, "Personnel Data". The description of the data source is used for additional information about the type of data in the data source. For example, "Hire date, salary history, and current review of all employees".

   > *Examples:*   *Data Source Name: Oracle7 or Company Data or Main Server*
   > *Description: The Oracle7 ODBC Driver*

5. Enter the data source's network connection string.

   > *Examples:*   *Connect String: t:pepsi:ora*

6. When all entries are made, choose the OK button to add the data source.

To Test your Oracle7 Connection (ODBCTST.EXE)

Once the Oracle7 ODBC Driver and SQL*Net for Windows are installed, you can test your connection to an Oracle7 Server with the provided ODBCTST program. Please be sure to create an Oracle7 ODBC data source prior to establishing a connection. To run ODBCTST:

1. In the Windows Program Manager... select the "File" menu.

2. From the File menu... select the "Run" menu item.

3. Type **a:odbctst** in the Command Line box (or type **b:odbctst** if the install disk is in drive B:).

4. Select the "OK" button.

To test your connection to an Oracle7 Server:

1. Select the "Connect" button.

2. Select a data source name from the Data Sources list box.

3. Select the "OK" button.

4. Enter a valid username and password.

5. Select the "OK" button.

A successful connection via ODBCTST ensures that the Oracle7 ODBC Driver is installed correctly and a connection to Oracle7 is readily available. Once connected to an Oracle7 Server, you may use the DBCTST program to execute SQL queries and view tables.

Note: If the package doesn't come with this test program and source codes, please download O7ODBC.EXE from Compuserve Oracle User Forum Library 22.

To Modify an Oracle7 ODBC Data Source

1. In the Main group in the Program Manager window, double-click the Control Panel icon. In the Control Panel window, double-click the ODBC icon.

2. In the Data sources dialog, select the data source from the Data Sources list and choose the Setup button.

3. Enter the data source's name, description and network connection string.

   Examples: *Data Source Name: Oracle7 or Company Data or Main Server*
   Description: The Oracle7 ODBC Driver
   Connect String: t:pepsi:ora

To Delete an Oracle7 ODBC Data Source

1. In the Main group in the Program Manager window, double-click the Control Panel icon. In the Control Panel window, double-click the ODBC icon.

2. Select the data source from the Data Sources list.

3. Choose the Delete button and then choose the Yes button to confirm the deletion.

To Remove the Oracle7 ODBC Driver from your System

1. In the Main group in the Program Manager window, double-click the Control Panel icon. In the Control Panel window, double-click the ODBC icon.

2. Choose the Drivers button. The Drivers dialog appears.

3.   Select the Oracle7 driver from the list.

4.   Choose the Delete button.

5.   You will be asked to confirm that you want to remove the driver and all the data
     sources that use the driver. Choose the Yes button.

ODBC Administrator

The ODBC Administrator is used to add, modify or delete data sources from your system. You can access
the ODBC Administrator from Windows in the Control Panel. You can also use the ODBC Administrator to
get the version number of the driver.

Oracle7 ODBC Driver version

To get the version number of your Oracle7 ODBC Driver, follow these steps:

1.   In the Main group in the Program Manager window, double-click the Control Panel
     icon. In the Control Panel window, double-click the ODBC icon to run the ODBC
     Administrator.

2.   In the ODBC Administrator, choose the Drivers button. A list of drivers will come up.

3.   Select Oracle7 from the ODBC Drivers list and choose the OK button.

4.   Choose the About button. A dialog box will appear showing the Oracle7 ODBC
     Driver information, including it's version number. (Driver, File Name, Description,
     Company, Version, Language, Creation Date and Size).

ODBCTST Source Code

The source code (source files, header files, resource files and make file) for the ODBCTST program is
located in the ODBCTST directory on the install disk. It is not installed during the Setup procedure, but
you may copy it to your hard drive. The source code is included as a reference only; it is not required to
run the Oracle7 ODBC Driver or the ODBCTST program. It is intended for advanced ODBC users and
programmers only. Unless you have a firm understanding of Foundation Classes, please do not attempt to
use or modify this code. The ODBCTST source code uses ODBC SDK APIs not ODBC Foundation Class
Libraries. To recreate the ODBCTST executable you must use the Microsoft Visual C++ version 1.5
compiler. To generate odbctst.exe, type the following statement at the command line:

        nmake /f odbctst.mak

For more information, please see the Microsoft Visual C++ documentation.

Note: If the package doesn't come with this test program and source codes, please download
O7ODBC.EXE from Compuserve Oracle User Forum Library 22.

Oracle7 ODBC Driver Upgrades and Maintenance Releases

Upgrades and maintenance releases for the Oracle7 ODBC Driver can be downloaded from the Oracle User
Group Forum in Compuserve. The files can be found in the Desktop and Server folder in the Library
section of the User Group Forum. Please read the license agreement before downloading the files.

Release Information

KNOWN ISSUES

Installer Deletes Files From Disk

Due to a bug in the Microsoft Setup program, installing the ODBC Driver from the Control Panel will delete the sqora7.dll and sqorast7.dll from your floppy disk. We recommend that you perform a complete installation every time you install an ODBC Driver. We have included backup copies of the two DLLs in the BACKUP directory on your floppy. If the DLLs are deleted, copy the DLLs from the BACKUP directory to the root directory on your floppy disk. Microsoft is aware of this bug.

Installer Overwrites Existing Driver Without Notification

The Oracle7 ODBC Setup program (used to install the driver) will automatically over-write any existing copy of the Oracle7 ODBC Driver residing in the directory where you are installing it. If you wish to retain the older copy of the Oracle7 ODBC Driver, it should be relocated to a different directory or copied to a floppy diskette prior to starting the installation. The filenames that need to be relocated are sqora7.dll and sqorast7.dll.

Date and Time default

If you use a DATE data type column and you don't specify a date component, the default date is the first day of the current month. If you use a DATE data type field and you don't specify a time component, the default time is 12:00:00am.

Time format

Oracle7 only stores hours, minutes and seconds. It does not store decimal for seconds. The valid time format is {t '10:20:43'}. If you show a BOUND column for data type DATE, the decimal time portion is returned (10:20:43.0) but it is not stored on the Oracle7 server.

Cannot retrieve dates in the BC era

The driver will let you insert a date in the BC era with "insert into table values (TO_DATE('0001-10-18 BC','YYYY-MM-DD BC'))", but it will return an error message "Numeric value out of range" when you retrieve the value. This is because the ODBC specification treats negative and zero year values as invalid.

Misleading error message for Full Year less than or equal to zero

As part of the ODBC specifications, values for a full year less than or equal to zero are invalid. If a value less than or equal to zero is inserted as a year, the error message "Full year must be between -4713 and +4713" will be returned. This message is misleading. Oracle7 allows a full year to be less than or equal to zero, but to comply to the ODBC specifications, the Oracle7 ODBC Driver doesn't.

Numeric truncation and rounding

Inserted numeric values are truncated and/or rounded without any notification to the user. e.g. 1) Inserting 123456.1256 into a data type of number(8,2) results in storing the value 123456.13 (the last 2 decimals are truncated and the second decimal is rounded up). 2) Inserting 123.45 into a data type of number(8,0) results in storing the value 123 (the two decimals are truncated).

Inserting LONG RAW

The insertion of a large amount of data (e.g. using Access with an OLE data type which is mapped to a LONG RAW) is limited by the amount of free memory on the user's machine.

LONG RAW and RAW are not searchable

The data types LONG RAW and LONG are NOT searchable. They cannot be used in: WHERE, GROUP BY, ORDER BY, CONNECT BY, or DISTINCT operator in SELECT statements.

Entering data into a LONG or RAW

When you enter character data into a LONG or RAW column, you must enter 2-digit pairs. Oracle7 treats the 2-digit pair as a 1-hex digit. (i.e. inserting 12345 would store 1234).

Valid Value Range Limited by Oracle7 BCD Data Format

Since Oracle7 stores real numbers in BCD format, with a limit of 22 characters, the valid numeric range is approximately 1e-129 to 1e+126. This means that a number may have a maximum of 126 digits when inserted.

Numeric Scale Values Can Now Exceed the Precision Values

With the ORACLE V6 ODBC driver (bundled with MS Access 1.1 and MS Visual Basic 3.0), scale values could not exceed the precision value for the number data type (i.e. number(precision, scale)). With the Oracle7 ODBC Driver, this limitation has been removed. For example, it is now possible to have a specification of "number(38,127)" with the scale exceeding the precision.

Precision Corrupted For Some Float Values

When a string of digits is inserted into a float field, they are first converted by the server to BCD format for storage. When they are retrieved, they are again converted from BCD format to float format. This conversion process is not always exact, so there is occasionally some small conversion error introduced (e.g. if the value 41.256 is inserted, the value retrieved is 41.256000000000001).

SQLProcedureColumns: Sorting is by COLUMN_NAME

Currently, the results from SQLProcedureColumns are sorted by COLUMN_NAME. The ODBC specifications specify that the sorting should be by COLUMN_TYPE. Correcting this would require extensive modifications to SQLProcedureColumns. This will be remedied in the next version of the Oracle7 ODBC Driver. The current sort order will not affect application programs that use the driver.

PacketSize Options

In order to send a specific packet size to the server, add the line "PacketSize=" to your ODBC.INI file. Only 1024, 2048, 4096 and 8192 are valid sizes (in bytes). When you add an ODBC Data Source, the line "PacketSize=2048" will be placed in your ODBC.INI file but only for TCP/IP servers ("t:" prefix). If there is no entry in your ODBC.INI file, then no PacketSize will be sent in the connection string.

Transactions are for DML

Transactions (COMMIT, ROLLBACK) are only for DML (e.g. alter table, etc.). If you perform a transaction for a non-DML, it won't return an error, but the transaction will not be performed.

Execution of DDL Statements

All DDL statements (CREATE, DROP, GRANT) which are prepared using Oracle are also executed by the server. The Oracle7 ODBC Driver has no control over this functionality and, therefore, any DDL statements prepared using the Oracle7 ODBC Driver will also result in execution of the statement.

Timestamp: decimal value on seconds

Inserting a decimal value on seconds for a Timestamp data type while using the Timestamp parameter will result in the decimal portion of the seconds to be truncated without reporting a truncation error. Example: insert into table values ({ts '1992-12-31 23:59:59:123'}) will result in storing the value '1992-12-31 23:59:59'.

WHERE clause is executed at Fetch time

The "WHERE" clause in an SQL Statement is not executed when SQLExecute is called. It is executed when SQLFetch is called. If there's an error in the "WHERE" clause of the SQL Statement, SQLExecute will return SQL_SUCCESS, but SQLFetch will return SQL_ERROR.

Auto commit

The driver sets the autocommit default to on. To turn autocommit off, call SQLSetConnectOption with SQL_AUTOCOMMIT_OFF as the 3rd parameter. Once the autocommit has been turned off, you must call SQLTransact to commit/rollback any transaction. When autocommit is set to off, only one user may update the same table at a time. The second user may experience an explicit lock. This is the normal situation.

Procedure/Function

Oracle Procedure does not have direct return value. If you are calling a procedure by this driver, please do not specify a place holder and equal sign before the call statement. But if you are calling a function, you have to have a place holder and equal sign. Otherwise, the driver will treat it as a procedure call.
When using a constant input parameter, the string must be enclosed in single quotes. If the string is not enclosed in single quotes, the driver treats it as an internal variable.
Example:
To call a procedure: *SQLExecDirect(hstmt, "{call proc_name('My_input_string', ?)}", len);*
To call a function: *SQLExecDirect(hstmt, "{?=call proc_name('My_input_string', ?)}", len);*
Note: Please check ODBC API online help for more detail about how to use SQLSetParam() to setup each place holder.

Scalar functions
There is no syntax checking for all Scalar functions. Internally, the driver converts all scalar function to Oracle function call and pass to the server. If there is a syntax error such as invalid parameter, the caller program would not get the error return code untill the program calls ODBC fetch data rouitine.

Mapping between C data type float/double and SQL data type number.

If a column data type is **FLOAT**, then when you retrieves the data in your program, if you don't know the value range or you know it is not between -3.5E38 and +3.5E38, use **DOUBLE** instead of **FLOAT**. For C data type **FLOAT** is 4 bytes and **DOUBLE** is 8 bytes. For Oracle 7 **FLOAT** can be either 4 bytes or 8 bytes. For Oracle database server 7.0.x, if you fetch a number which stored in a char string column and its value is not between -3.5E38 and +3.5E38. If your C data type is SQL_C_FLOAT, then you may get GPF. This bug has been fixed in Oracle 7 .1.x.

Data Dictionary view is not accessible in some Oracle 7.0.x version.

For some earlier version Oracle 7 database server, even if you have SELECT_ANY_TABLE privilege, you still can't access those DBA_ views. This problem has been corrected started from Oracle 7.1 version.

BUGS FIXED IN EACH PAST RELEASE

Version 1.10.0.1
*   The number of parameters allowed for stored procedures had been increased from 30 to 120.

*   The out of range error which occurs while converting SQL_C_CHAR data types to/from SQL_NUMBER data types has been fixed.

*   The data scrolling bug in Access has been fixed.

*   The memory leak bug has been fixed.

Version 1.11.0.0
*   The number of parameters allowed for stored procedures has been increased from 120 to 252.

*   Fixed GPF on SQLExecute after a SQLParamOptions call.

*   Fixed data truncation problem when using Microsoft Code Page translation dll.

*   Fixed GPF on SQLColAttributes after second connection.

*   Fixed GPF on SQLGetData after SQLGetTypeInfo in multi connect environment.

*   Add two driver finfoTypes SQL_CORRELATION_NAME and SQL_NON_NULLABLE_COLUMNS.

*   Fixed search pattern character % bug in catalog function.

APPLICATIONS LIMITATIONS

Microsoft Access 2.0 and 1.x

Connect, SQL Statements, Read, Write In order to update a table while using Access 1.1, the user must have at least one unique index set on that table on the server side before attaching to it in Access. Otherwise the table can be accessed for read-only, not updated. Access creates all tables, views, etc. in capital letters via the ODBC driver regardless of the string that is entered.

You can control the table types Access sends to an ODBC driver (SQLTables) by adding the following to your MSACCESS.INI under the [ODBC] section:

> [ODBC]
> AttachableObjects='TABLE'

This would only retrieve 'TABLE' type for SQLTables. Doing so will increase performance at connection time, as only tables will be looked for, not views, system tables, aliases or synonyms. If you omit this line, the default will includes all types (tables, views, system tables, aliases and synonyms).To list 2 or more types, you must enclose them in single quotes and separate them by commas.

For example, to list tables and views you would add the line:

```
[ODBC]
AttachableObjects='TABLE','View'
```

You can use the TransferDatabase Action macro to attach to a specific table. This will again increase the performance (i.e. decrease connect time) because Access will bypass getting a list of all tables on the database. The syntax is:

DoCmd TransferDatabase [transfertype], databasetype, databasename [, objectype], source, destination [, structureonly]

For further information, please refer to the white paper of Jet Database Engine ODBC Connectivity documentation.

Lotus 1-2-3 Release 4.0

Connect, SQL Statements, Read

To use Lotus 1-2-3 with ODBC Drivers, you must add the following section to your LOTUS.BCF file:

DN="ODBC"
DL="DLODBC"
DD="All ODBC Datasources";
To connect to Oracle7 with Userid and Password (UI, PW), you must add the following section to your LOTUS.BCF file. Substitute the name of your data source that you will be using with the 'Data Source Name' listed below.

DB="Data Source Name"
DN="ODBC"
AC=UI,PW;

Note that Lotus 1-2-3 does not allow spaces in Data Source Names. This is a limitation
with the Lotus DataLens Driver.

Column Names must be alphanumeric and cannot contain spaces (A-Z, a-z, 0-9 are
permissible).

A column name in your Oracle7 database table cannot have the same name as any cell address in Lotus 1-2-3. For example, your table cannot have column names like C1, D1, etc. because these are cell references in Lotus 1-2-3.

Problems with updating the database. Once a table is opened, you must select "Query | Update Database" in order to update a table. An error message comes up "Driver cannot perform this database operation". Lotus Corp. has been informed about this limitation.

The performance of the Oracle7 ODBC Driver with Lotus 1-2-3 R4.0 is slow due to issues in the ODBC design of Lotus 1-2-3 R4.0

Microsoft Query 1.0

Connect, SQL Statements, Read, Write

Problems with lowercase column names. MS Query will return the error "Invalid Column name" if you query a column that was created as lowercase. (e.g. "create table test ('col1' char(3))"). MS Query does a select with "select col1 from test" which looks for COL1 in uppercase. The proper SQL statement should be "select 'col1' from test" when a column is created as lowercase. The problem is MS Query uses delimited identifier character to identify column name which makes any later this column related command has to use the same delimited identifier as part of the column name. Microsoft has been informed about this limitation.

Visual Basic 3.0

Connect, SQL Statements, Read, Write

You can control the table types a Visual Basic application sends to an ODBC driver (SQLTables) by creating an initialization file (INI) with the same name as the application, and adding the following information:

> [ODBC]
> AttachableObjects='TABLE'

This would only retrieve 'TABLE' type for SQLTables. Doing so will increase performance at connection time, as only tables will be looked for, not views, system tables, aliases or synonyms. If you omit this line, the default will include all types (tables, views, system tables, aliases and synonyms).To list 2 or more types, you must enclose them in single quotes and separate them by commas. For example, to list tables and views in the Visual Basic application, VBTEST.EXE, create an initialization file called VBTEST.INI and add the following information:

> [ODBC]
> AttachableObjects='TABLE','View'

Similarly, you can control the table types Visual Basic 3.0 sends to an ODBC driver (SQLTables) by adding the following information to your VB.INI which is located in your Windows directory:

> [ODBC]
> AttachableObjects='TABLE'

This would only retrieve 'TABLE' type for SQLTables. If you omit this line, the default includes tables, views, system tables, aliases and synonyms. To list 2 or more types, you must enclose them in single quotes and separate them by commas. For example, to list tables and views in a Visual Basic Table List Box, add the following information:

> [ODBC]
> AttachableObjects='TABLE','VIEW'

For further information, please refer to the Visual Basic 3.0 documentation.

Problems with the sample application Visdata's Row finder. It does not recognize the last record when performing the find option. This is a problem with the application Visdata of Microsoft Visual Basic 3.0.

Problems with running a query through Query Builder in Visdata application. The error message: "Couldn't

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find 'SCOTT.MDB'. Error #3024" comes up and the query is terminated. This is a problem with the application Visdata of Microsoft Visual Basic 3.0. Microsoft has been informed of this limitation.

Programmer's notes for Visual Basic 3.0:

*   The Close function needs to be called whenever a dynaset or snapshot is not being used anymore. This will reduce the server cursor hold up.

*   If ODBC functions are called directly, after calling SQLAllocStmt to allocate a statement, SQLFreeStmt should be called to free up the cursor in the database server. The default number of cursors limit for Oracle7 is 50. This number can be altered by the DBA. Please refer to the DBA manual for more information on cursors limit.

*   If ODBC functions are called directly, all the necessary ODBC functions and constants have to be declared in the Visual Basic application.

*   The CreateDynaset function fetches bookmarks (primary keys) and a small amount of data around current scrolled to position (e.g. pagedown, goto last record, etc.). The CreateSnapshot function fetches all data up to the position scrolled to. Therefore, CreateDynaset can have faster response than CreateSnapshot at the beginning, but in general its performance will be slower for any scrolling command.

*   To use a dynaset with BeginTrans, CommitTrans, and Rollback, you must first create the dynaset. Otherwise, Visual Basic does not know where to execute the changes.

*   In early Visual Basic 3.0, the Rollback command does not allow you to restore changes. Please check Microsoft Compuserve Visual Basic Formu for "Microsoft Jet 2.0/Visual Basic 3.0 Compatibility Layer" document to correct this problem.

PowerBuilder 2.0a

Cannot Connect

PowerBuilder 2.0a performs an SQLExecDirect to create its own catalog file. The SQL Statement is built with ????? as data types. This is because PowerBuilder is trying to use a data type not supported by Oracle7 DBMS. Powersoft has been informed of this limitation and the workaround is to upgrade to PowerBuilder Version 3.0.

PowerBuilder 3.0

Connect, SQL Statements, Read, Write

There is a problem if a table or a column name is UPPERCASE. PowerBuilder converts all table names and columns names to lowercase. A table created as 'Create table newtab (col1 char)' is read through PowerBuilder as 'Select "col1" from "newtab"'. The table or column is not found as they are stored in uppercase as NEWTAB and COL1. This is a problem with PowerBuilder but Powersoft has provided the following workaround: in the PBODBC30.INI file, insert the line "IdentifierCase=3" under the heading "Oracle7".

ODBC Test 1.0

Connect, SQL Statements, Read, Write

When retrieving data from a LONG data type column that is longer than 298 characters or digits long, ODBC Test inserts the word "TRUNC" after every 298th character in the result set. This is a problem in ODBC Test 1.0. Microsoft has been informed of this limitation and there's currently no workaround.

Microsoft ODBC SDK version 2 sample program.

Some of the demo program stack space is too small which makes the program failed when connected with Oracle7 ODBC driver. Therefore, please rebuilds the program with at least 32KB stack space.

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