CARLI I-Share Oracle 10g/ODBC New Installation Guide: Windows (64 bit) & Access (32 bit)

I. Introduction

Before You Start…

- These instructions cover a *NEW* installation of Oracle 10g on a Windows 7 (64-bit) workstation that has a 32-bit version of Microsoft Access 2010 or higher.

- These instructions assume that no previous version of Oracle has been installed on the PC. If your PC has an existing version of Oracle, please contact the CARLI Office before you begin this installation process.

- A CARLI Oracle Account (username and password) is required before installation and to run MS Access reports or Strawn Utilities. Your library's Director or I-Share Liaison should request an Oracle username/password for each individual staff member by filing a Work Request Online (WRO). For more information, see http://www.carli.illinois.edu/products-services/i-share/reports/starting-access-reports .

- If you run into problems at any point please **stop** and seek assistance from CARLI. The CARLI website contains a frequently asked questions list for Oracle installations. You may also contact CARLI staff at support@carli.illinois.edu.

- The **Oracle 10g** client replaces any pre-existing Oracle 10 and earlier clients on the PC.

- CARLI's servers require that the Oracle 10g client on the PC use encryption. If your campus uses Oracle clients to connect to other local Oracle databases, the encryption set up required to connect to CARLI servers may impede connections to local Oracle databases. Before proceeding with this installation, consult your local IT staff and CARLI, if necessary.

- Make sure that the Windows login used during this installation has **Local Administrator** rights before you begin. Consult your local IT Department if you are unsure or do not have Local Administrator rights.

- Once the uninstall process has started, **do not** leave it unattended or start working on a different application until you have completed the process. Doing either may cause the application to freeze and require a reboot to resolve. Rebooting at the wrong time could greatly complicate the uninstall process.

- Shutdown all other applications. Temporarily disable any PC firewall & virus software during installation.

- If you are running **Norton AntiVirus 2006** or later, linking in Section VI *will not work* by default. Read Microsoft's Knowledge Base Article 329820 (http://support.microsoft.com/kb/329820) for help. Otherwise, consult with your IT department.

- The *Ex Libris Automation Tool* is designed and tested for use with **Voyager**. If you have **non-Voyager applications** that use Oracle/ODBC check with your IT Department before proceeding, as this tool will uninstall existing Oracle applications.

- Supported software versions: Windows 7 (32-bit preferred, 64-bit acceptable); Microsoft Access 2010 and up (32-bit version only). For other versions of Windows or Access, check the CARLI website for specific instructions.

Why all the reboots?

For a cleaner and faster uninstall (and install) process. Rebooting the PC…

- …just before critical work helps minimize services competing for system resources.
- …then shutting down all other programs minimizes program fragments and memory leaks.
- …after making registry changes ensures that the link between PC files and previous registry data no longer exists.

How do I know which versions I'm using?

To check whether your version Windows runs as 32-bit or 64-bits, choose from the following according to the operating system.

Windows 10, option 1

1. Select the Windows menu button
2. Select the settings button
3. Select the System icon
4. Select the About option in the navigation pane.
5. Check the System Type value. It will state either a 32-bit or 64-bit operating system.

Windows 10, option 2

1. Select the Windows menu button
2. Find and Select the Windows System folder
3. Select the Control panel icon
4. Select the System icon
5. Check the System Type value. It will state either a 32-bit or 64-bit operating system.

Windows 8

1. Select the Windows menu button
2. Select the PC settings tile (a gear)
3. Select the PC and devices option in the navigation pane
4. Select the PC info option in the navigation pane.
5. Check the System Type value. It will state either a 32-bit or 64-bit operating system.

Windows 7

1. Select the Windows menu button
2. Select the Control panel icon
3. Select the System icon
4. Check the System Type value. It will state either a 32-bit or 64-bit operating system.

To check whether your version of Access runs as 32-bit or 64-bits, do one of the following according to the application version.

Access 2010 and later

1. Open Microsoft Access
2. Select Open Other Files
3. Select Account
4. Select the About Access button
5. At the top of the About Microsoft Access window, you will find either 32-bit or 64-bit at the end of the line stating Microsoft Access 201X (X for the last digit in the version).

Access 2007

1. Open Microsoft Access
2. Select the Microsoft Office button in the upper left corner
3. Select Resources
4. Select About

II. Downloading the Oracle 10g Client Package

Before You Start

The .zip download requires 500MB free space. The installation requires **an additional** 500MB free space. In addition to the .zip file there are two other files to download.

Instructions

1. Download the package and the two additional files

    a. Go to the CARLI website*:*
       http://www.carli.illinois.edu/products-services/i-share/execute#10g

    b. Click on the link to download the file appropriate for the PC's Operating System:

       Version 10203 for *Windows Vista*™ or *Windows 7*™ (10203_client_vista-win7.zip)

    c. Save the .zip file to your PC.

        i. Be sure to remember where you save the file. The Desktop may be a good choice for ease of locating the file later.

        ii. Do not select Open at this time.

    d. Wait for the download to complete. This file (over 400MB) may take several minutes to download completely.

    e. Right click and "Save As" to download the two additional files from the CARLI website to your PC:

        i. **ExLibrisOracle.rsp**

        ii. **sqlnet.ora**

    f. Save the two files to your PC.

        i. Be sure to remember where you save the files. The Desktop may be a good choice for ease of locating the files later.

        ii. Do not select to open them.

2. Extract the package

    a. Create a new folder on your PC that will be used when you will extract the .zip package in the next step. CARLI recommends naming the folder **C:\Oracle10g**.
       Warning: DO NOT create this new folder within an existing \oracle\ folder!

    b. Extract the downloaded file to the new folder you just created, for example: **C:\Oracle10g**.
       NOTE: The extraction process may take several minutes.

        i. The *WinZip* software is commonly used for this process. Windows 7 and above also has a built-in extraction program.

ii. Check with your IT department if you are unsure which program to use or how to extract a .zip file.

iii. Ensure that you preserve the folder names when you extract the file to the new directory. (In *WinZip* you check the **Use folder names** option.)

iv. If you use the Window built-in extractor, be sure to type the name of the folder you created. Accepting the default folder name may hinder later installation steps.

Figure 2-1. Extraction using Windows built-in file extractor. Change whatever the default is to C:\Oracle10g. Then choose Extract.
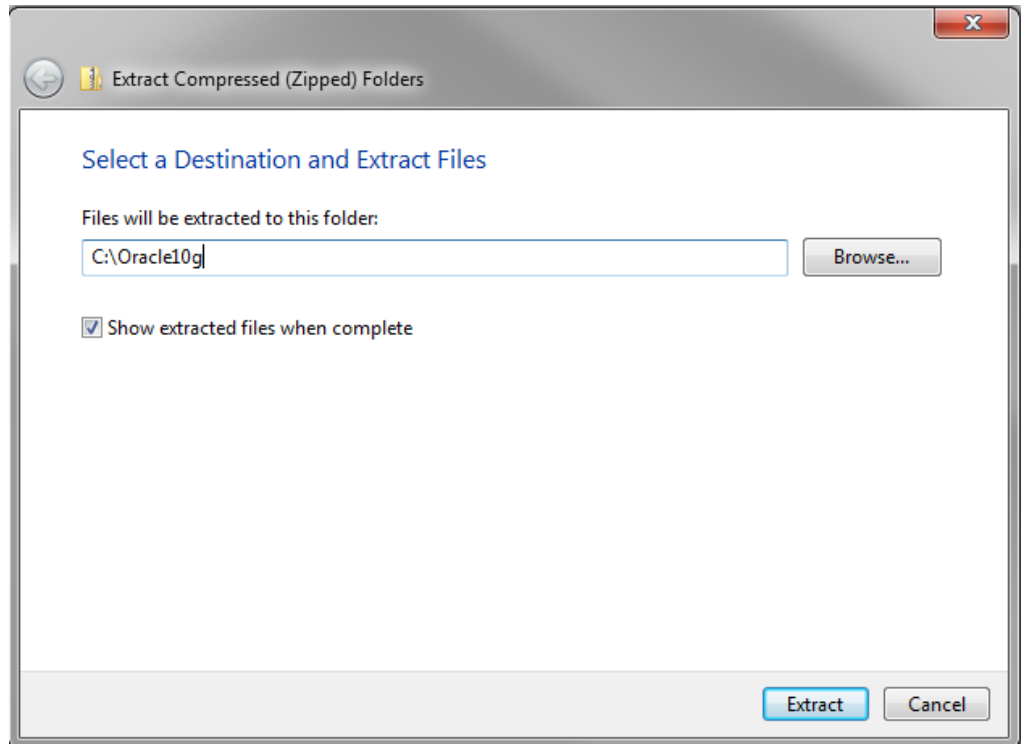
3. Install the ExLibrisOracle.rsp file that you downloaded from the CARLI website to your PC.

   a. Locate, but do not open, the **ExLibrisOracle.rsp** file that you downloaded from the CARLI website to your PC.

   b. Open a file explorer window and navigate to the following folder:
      C:\Oracle10g\10203_client_vista-win7\response

   d. Copy and paste (or move) the **ExLibrisOracle.rsp** file that you downloaded from the CARLI website into the \response\ subfolder to replace the existing file of the same name.

   e. When prompted to replace the existing file, say **Yes**.

   ## The Oracle 10g ODBC package is ready to install!

III. Installing Oracle 10g

Before You Start

Be sure that you have the Oracle 10g installation for your version of Windows, supplied by CARLI from Ex Libris. See section **II. Downloading the Oracle 10g Client Package** for more information.

Be sure that the Oracle installation files are in the folder you created. E.g., C:\Oracle10g\10203_client_vista-win7 (Not in C:\Oracle10g\10203_client_vista-win7\10203_client_vista-win7).

Be sure that the ExLibrisOracle.rsp file from the CARLI website is in the response subfolder where the installation files are. E.g., C:\Oracle10g\10203_client_vista-win7\response

Be sure that you log on to the computer with administrative rights to install software and update the computer, and that you run the command prompt "As Administrator."

Installing Oracle 10g for Windows (64-bit)

1. Restart your computer

2. Log on to the PC as an Administrator and ensure that there are no open programs.

3. For the Microsoft Windows 7 environment only, run the BEAT tool as Administrator from the command line as follows:
   a. Select **Start > All Programs > Accessories > Command Prompt**.

   b. Right click on **Command Prompt**.

   c. Click **Run as administrator**. If you receive a "User Account Control" warning, choose **Yes** to proceed. The command line window opens.

   d. Change the directory (cd) to the location of the unzipped files.
      `Type cd \Oracle10g\10203_client_vista-win7`

Figure 3-1. Command prompt running as administrator. Change directories as shown.
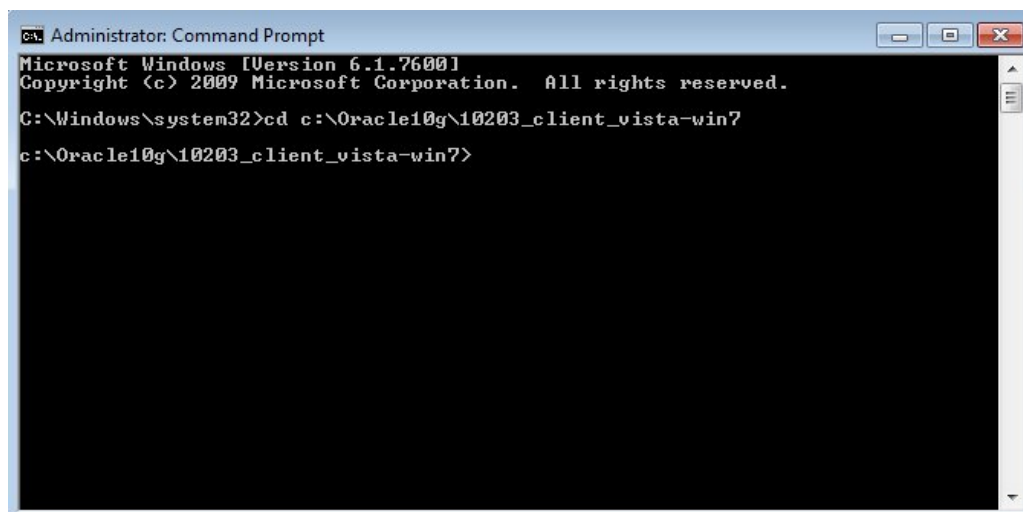
e. Run **BEAT-win7.bat** from the command line:
   Type BEAT-win7.bat

Figure 3-2. Run BEAT-win7.bat at the command prompt.
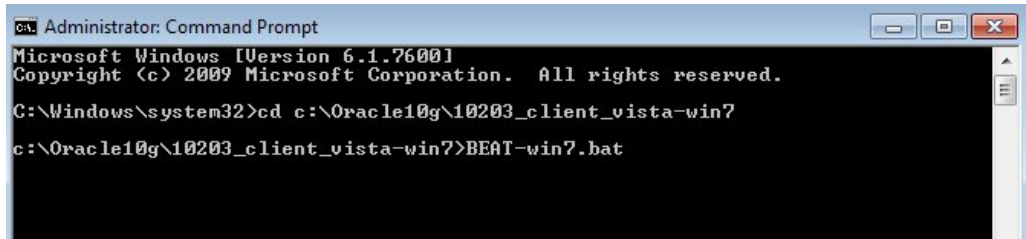
4. When the "Brian's ExLibris Automation Tools (BEAT) menu opens, select option **3**, Install Oracle 10i Client. (This is a typo in the program; it will actually install Oracle 10g.)

5. When it asks "Are you sure you want to install?" Type **Y** to proceed. Some text will scroll by in the command line window

   If the Oracle Universal Installer Welcome screen does not appear, but the BEAT program prompts to Press any key to continue, you will need to restart the installation. Press a key, and quit BEAT.

   If the Oracle Universal Installer Welcome screen appears, select **Next** to continue.

Figure 3-3. Universal Installer Welcome screen. The Oracle installer is a java application.
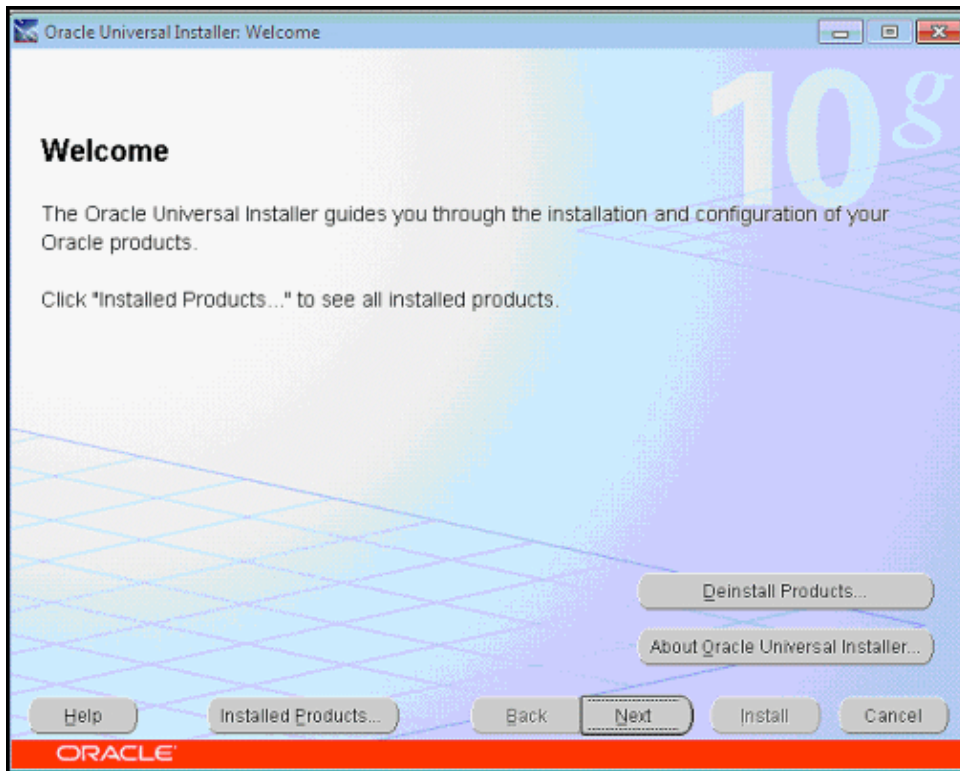
6. When the Available Product Components screen appears, select the check box for "Show all components, including required dependencies." Scroll through the list to verify that these three boxes are checked in the list:

> Oracle Windows Interfaces 10.2.0.1.0
> Oracle ODBC Driver 10.2.0.3.0
> Oracle Net 10.2.0.3.0

Figure 3-4. The Available Product Components screen with designated options checked. Visible here are the Oracle ODBC Driver and Oracle Net.
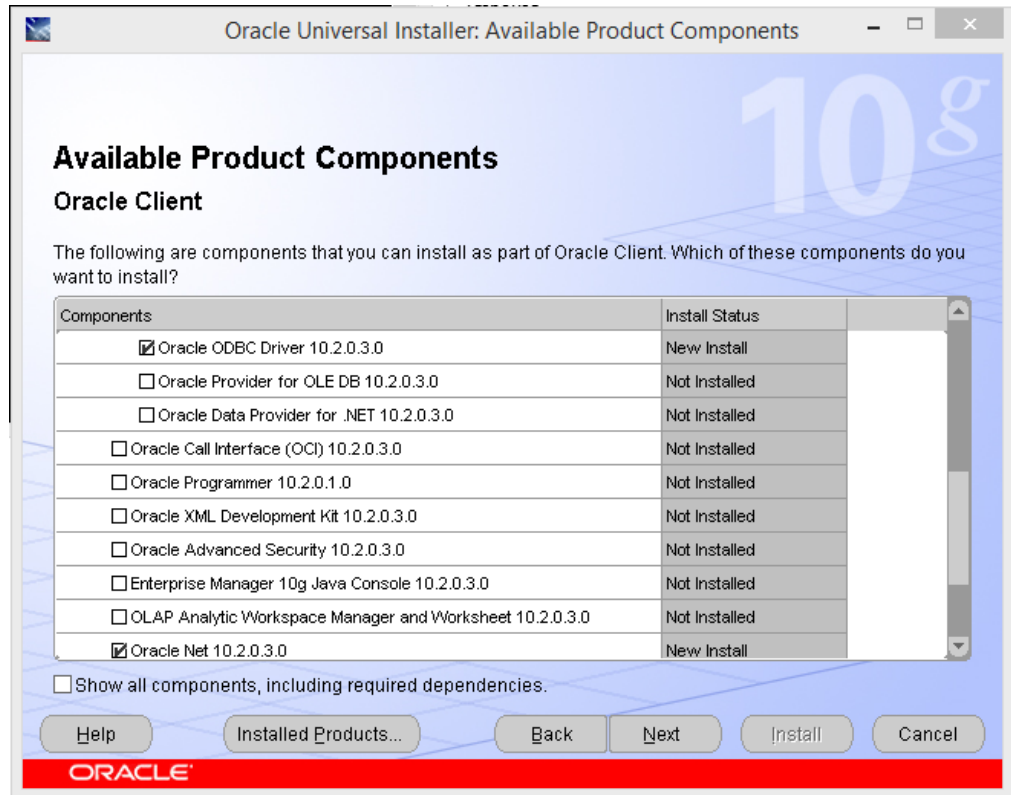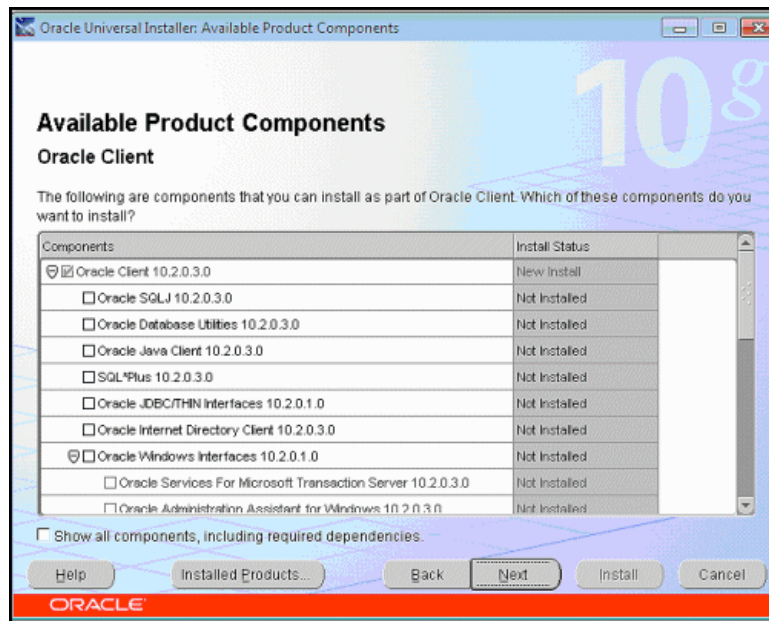
Figure 3-5. Example of an Available Product Components screen with nothing checked. Scroll through the list and manually select the three components mentioned above.

7.   Select **Next**. The Product-Specific Prerequisite Checks screen displays. The operating system version check fails and display the Status "Error". This is okay. Select the check box to the right of the highlighted error message. Select the check box for checking service pack requirements as well. If the status for both checks reads as "user verified," (Figure 3-7) then select **Next** to continue with the installation.

Figure 3-6. The Product-Specific Prerequisite Checks screen. Manually select the check boxes to clear the error messages.
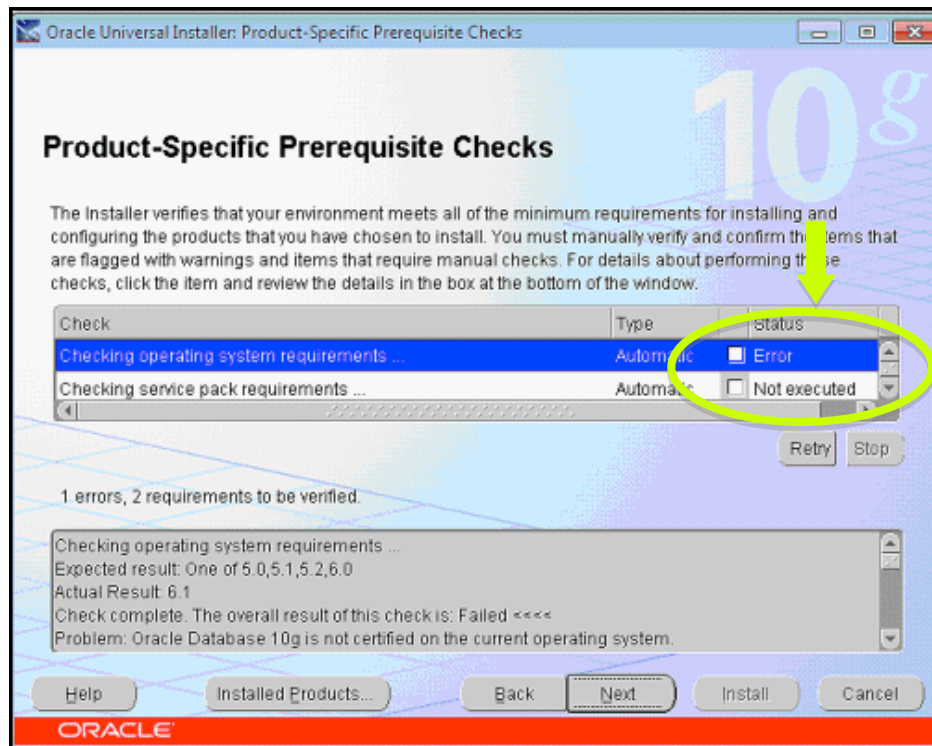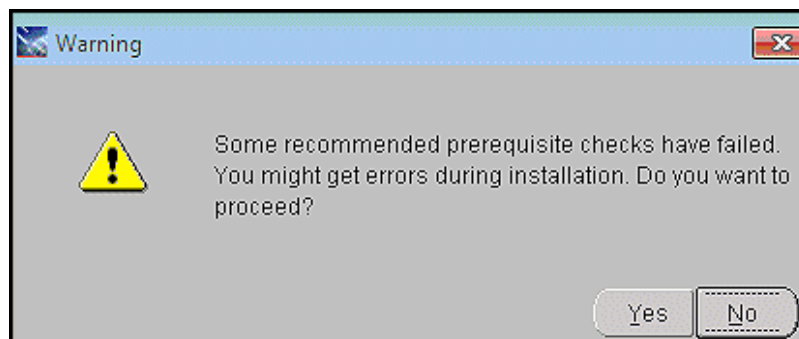
Figure 3-7. The pre-requisite check screen with user verified results.
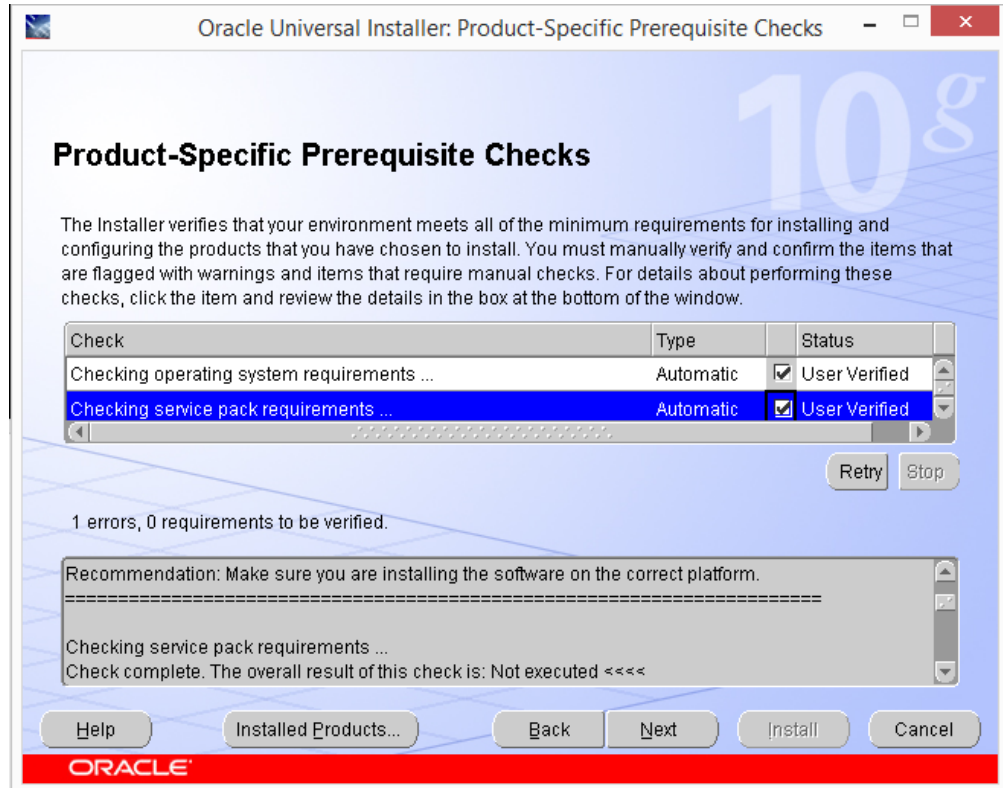
8. You may receive an additional warning message that prerequisite checks have failed. Select **Yes** to proceed.

Figure 3-8. A prerequisite warning message. Choose Yes to continue the installation.

9. On the Summary screen, Click Install. The installation takes a few minutes. A patch is also installed on a new screen. When installation has completed, the Oracle Net Configuration Assistant: Welcome screen displays.

If the Oracle Net Configuration Assistant does not display: Some libraries have reported that not all of the necessary Oracle components are installed during the automatic installation process. In order to get all the needed components, go back and repeat Section III for Windows 7 installations, but manually put a check mark by all of the components in the list in step 6 before clicking Next and moving on to step 7; do not just rely on the check mark next to "Oracle Client 10.2.0.3.0" at the top to mean everything in the hierarchy underneath it will be installed.

When the Oracle Net Configuration Assistant displays, select the box for **Perform typical configuration** check box and click **Next**.

Figure 3-9. Oracle Net Configuration Assistant screen. Choose to perform a typical configuration.
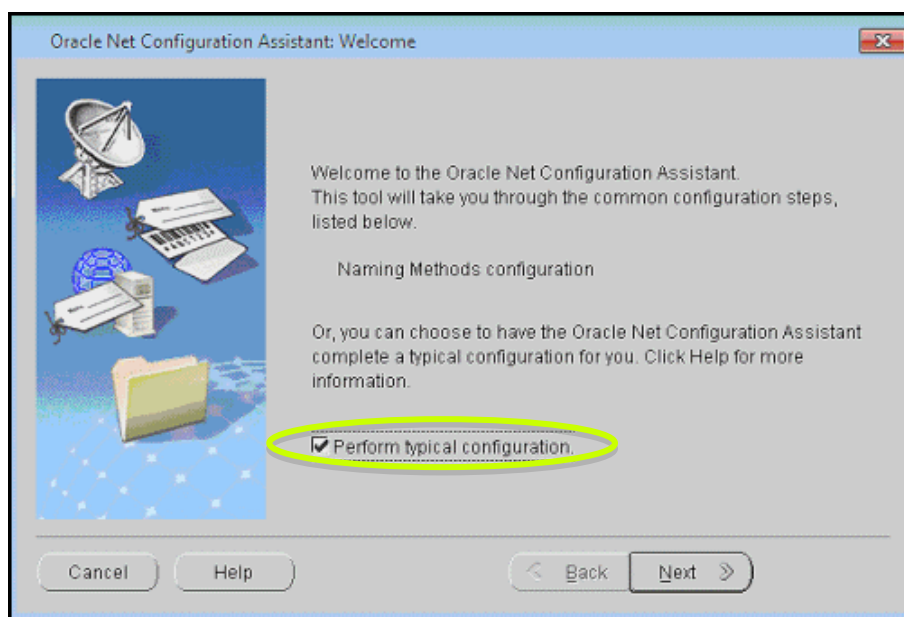
10. Select **Next** on the second Welcome screen.

11. Select **Finish** when the Oracle Net Configuration Complete screen displays.

12. Select **Exit** when the End of Installation screen displays.

13. Select **Yes** when prompted with the exit warning.

14. In the command line box, press any key to continue.

15. Type **Q** to quit the BEAT tool.

16. Type **exit** at the command line prompt to close the command line program.

Oracle 10g ODBC is now successfully installed on Windows!

IV. Oracle/ODBC Configuration

Before You Start

These instructions cover a *NEW* installation of Oracle 10g on a workstation with no other Oracle instances installed. If your institution uses Oracle for other applications, and your workstation carries other versions of Oracle, you should consult with your information technology staff before configuring Oracle 10g.

These instructions will configure your PC to run queries/reports against a copy of your library's production databases, allowing you to run the CARLI Reports Access database or to use the Gary Strawn tools. Reports and queries can also be run against the Training databases; for configuration instructions to Training databases, see the document "Reporting Against the Voyager Training Databases" on the CARLI website.

Part 1: Configuring the Oracle Service Name

1. Restart your computer

    a. Login to the PC as an Administrator.

    b. Ensure there are no open programs. Temporarily disable any PC firewall or virus software.

2. Install the sqlnet.ora file that you downloaded from the CARLI website to your PC.

    a. Locate the **sqlnet.ora** file that you downloaded from in section II.

    b. Open a file explorer window and navigate to the oracle installation folder, specifically: **C:\Oracle\product\10.2.0\client\NETWORK\ADMIN**

    c. Copy and paste **sqlnet.ora** into \ADMIN\ subfolder to replace the file of the same name.

    d. When prompted to replace the existing file, say **Yes**.
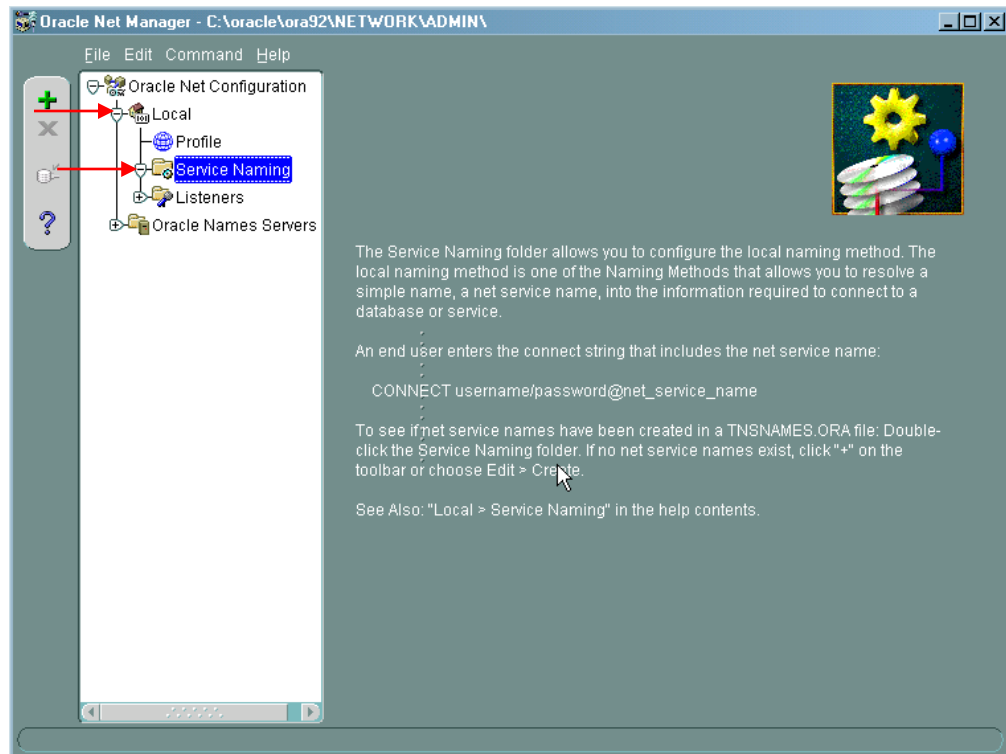
3. Open Oracle Net Manager
    Select **Start** > **Programs** > **Oracle-OraClient10g_home** > **Configuration and Migration Tools** > **Net Manager**. Net Manager may take a few moments to open.

Figure 4-1. Oracle Net Manager's location on the Windows menu.
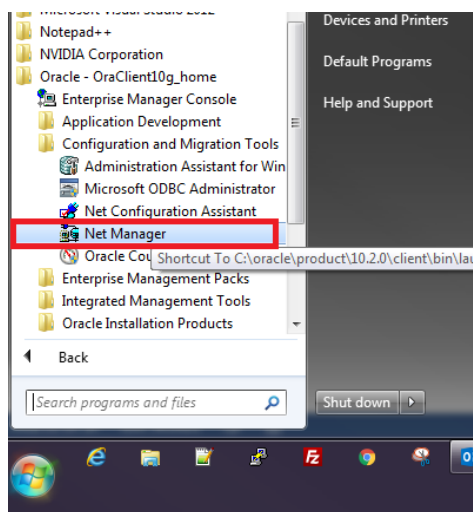
4. When Net Manager opens, you should expand the configuration tree. Locate and select the plus for the Local folder. Then locate and select the plus for the Service Naming folder.

Figure 4-2. Oracle Net Manager, locate the buttons to expand the configuration tree.
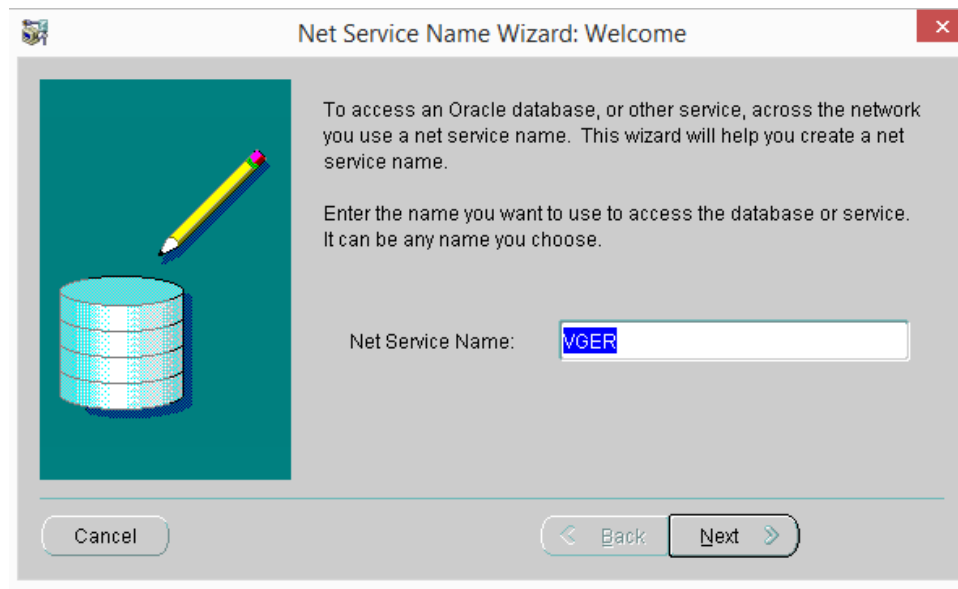

5. Highlight the **Service Naming** folder. Then select the **Edit** menu followed by **Create**.

Figure 4-3. Oracle Net Manager, create a new service name with **Edit > Create**.
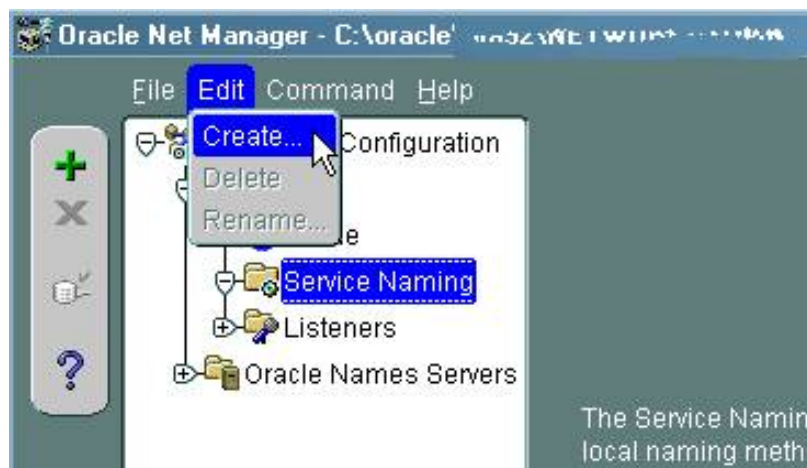
6. The Net Service Name Wizard, page 1 of 5 appears. Enter **VGER** for the **Net Service Name** and then click **Next.**
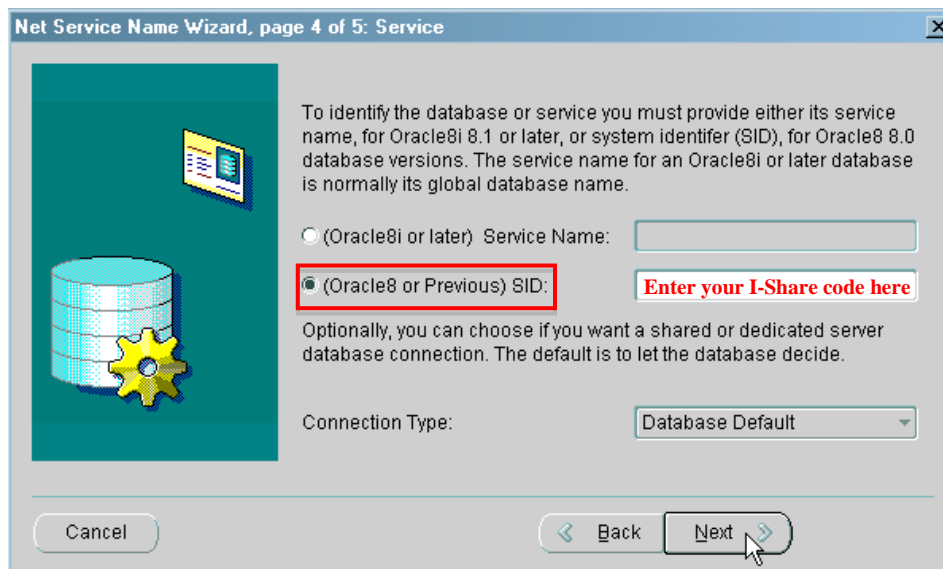
Figure 4-4. Net Service Name Wizard, enter the name with **VGER**.

7. On Net Service Name Wizard, page 2 of 5, choose choose **TCP/IP (Internet Protocol)** and click **Next**.

8. On Net Service Name Wizard, page 3 or 5, enter **reports.carli.illinois.edu** for the Host Name, and keep the default Port Number of **1521**. Then click **Next**.

9. On Net Service Name Wizard, page 4 of 5, choose **(Oracle8 or Previous) SID**. In the SID box, enter your library's three-letter I-Share code in uppercase letters. For example: SXU or RSH. See Appendix A for a list of I-Share library three-letter codes. Keep the default Connection Type of "Database Default". Then click **Next**.

Figure 4-5. Net Service Name Wizard, enter your library's three letter code in all caps using the SID option.

10. On Net Service Name Wizard, page 5 of 5, click Test.

11. A database test will begin immediately using the default "scott/tiger" username and password. You will see a message "invalid username or password".
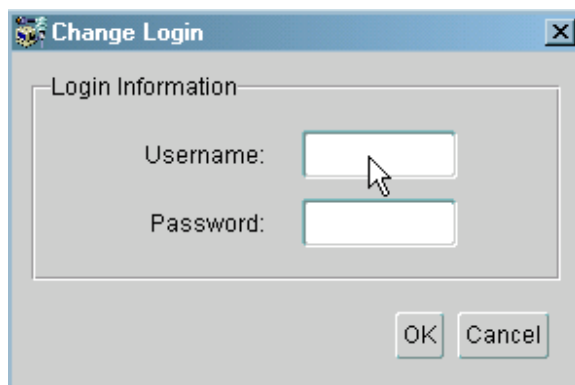
Figure 4-6. Connection test screen. Username "scott" doesn't exist in your database.
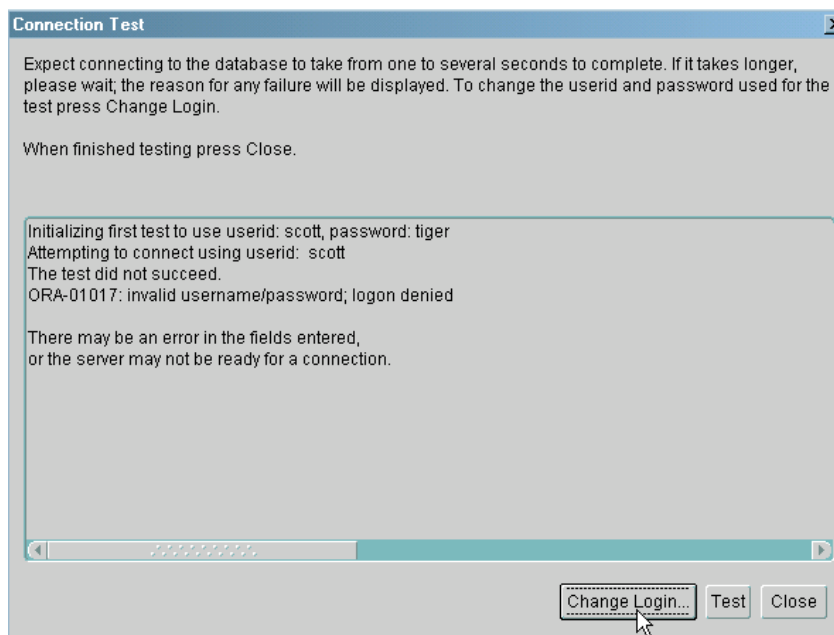
12. Click the **Change Login** button.

13. Enter your Oracle username and password (not your Voyager operator ID), and click **OK**. Oracle usernames and passwords are case-sensitive. Enter them exactly as assigned by CARLI.

Figure 4-7. Connection test login screen. Enter your oracle credentials.



14. On the Connection Test screen, select **Test**.

If you are using the correct username and password, then you should see the message "The connection test was successful."

If the test was unsuccessful, try the test again, making sure the Oracle username and password were entered correctly. Also, please review the settings listed above.

If the test continues to be unsuccessful, click **Close** and **Cancel** at the Test Service screen and contact the CARLI Office for assistance. A failed test may indicate a problem with your network configuration, your Oracle installation, or your PC configuration. You may also wish to verify that your Oracle account name and password are correct on a workstation where Oracle is already working.

15. If the test was successful, close the Connection Test window by selecting **Close**, then select **Finish** to complete the Net Service Name Wizard.

Figure 4-8. Net Manager with a successfully configured service name.
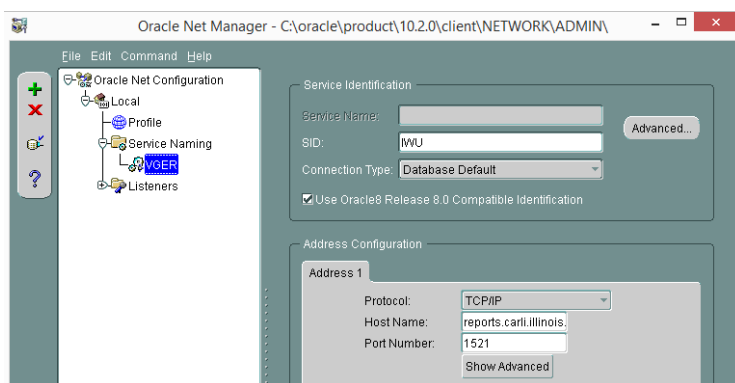
16. From the Net Manager screen, choose **File > Save Network Configuration** to save your work.

17. Exit Net Manager by choosing **File > Exit**

Oracle 10g is now successfully configured on Windows 7!

Part 2: Configuring the 32-bita Microsoft ODBC Administrator

These instructions cover configuration of the ODBC Administrator only in 64-bit Windows environments. Instructions for Windows 32-bit systems are available on the CARLI website.
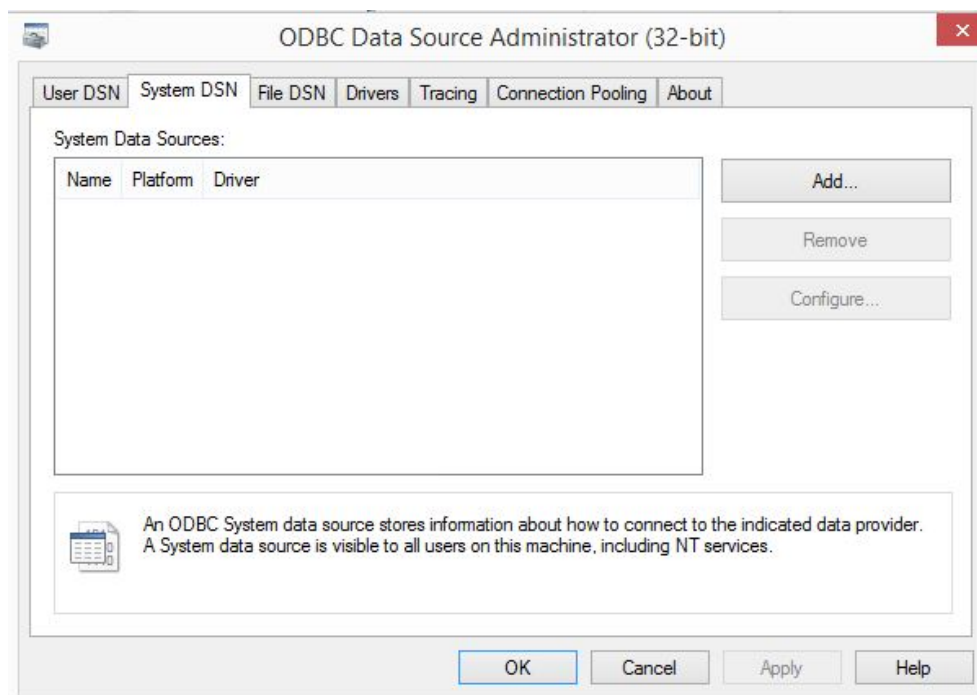
18. Open a file explorer window, and navigate to the C:\Windows\SysWOW64\ folder.

Figure 4-9. File explorer window open to C:\Windows\SysWOW64\. This image also highlights the file you need, odbcad32.exe.web
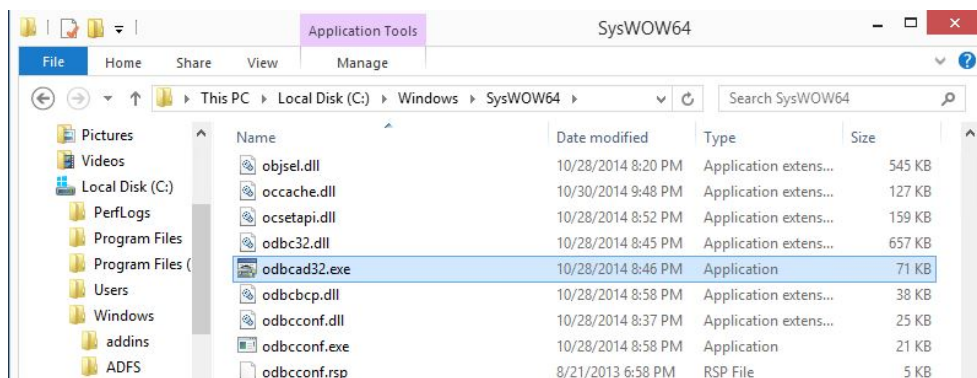

19. Locate the file for the 32-bit ODBC Administrator, **odbcad32.exe** and open the program.

20. Open the **System DSN tab** (the 2nd tab)

Figure 4-10. The 32-bit ODBC Administrator application, set to the System tab.

21. Click **Add** to create a new Name. Choose the "**Microsoft ODBC for Oracle**" driver type and click **Finish**.

Figure 4-11. New Data Source driver list, find Microsoft ODBC for Oracle.
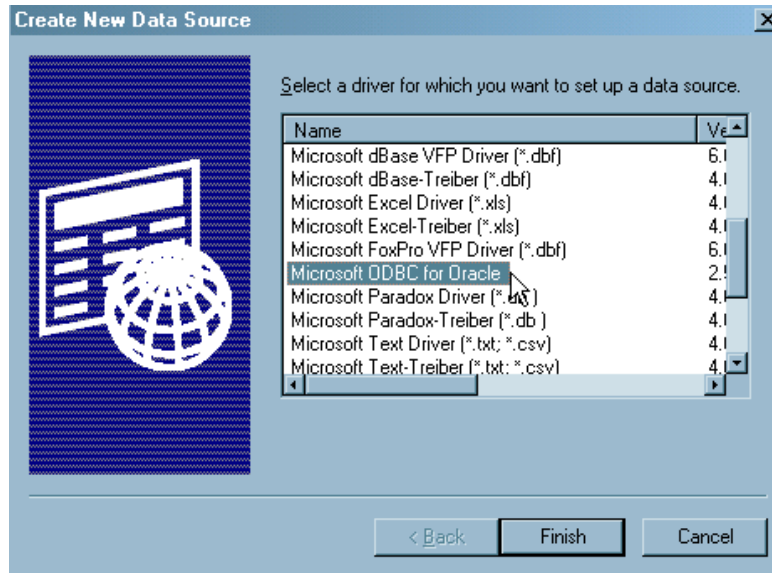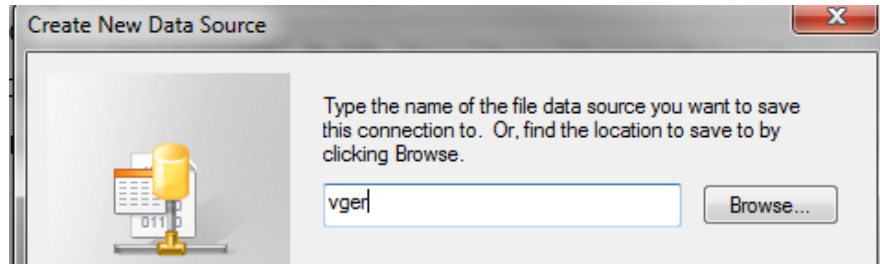

22. In the **Microsoft ODBC for Oracle Setup** box that appears, enter these values:
      [Data Source Name] **eisreport**
      [Description] **Voyager Production Reporting**
      [User Name] **<your Oracle username>**
      [Server] **VGER**
   and Click **OK** to close the Setup box. The System Data Source has now been added.

Figure 4-12. Microsoft ODBC for Oracle setup screen.
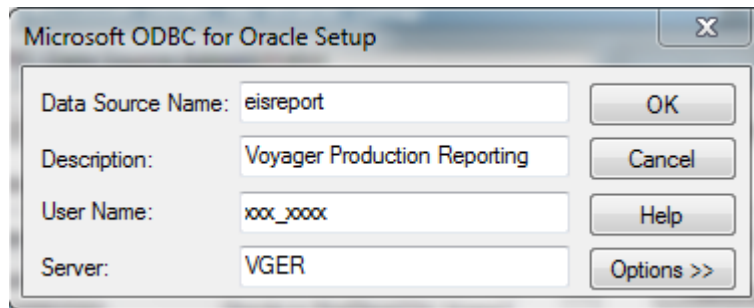
23. Next, test the ODBC connection by creating a File DSN entry.
   a. Open the **File DSN** tab (the 3rd tab) and select **Add**.

   b. Select type **Microsoft ODBC for Oracle** and select **Next**.

   c. Name this New Data Source **vger** and select **Next**.

Figure 4-13. Creating a File Data Source, enter "vger" (or any name) for the test.

   d. Click **Finish**.

   e. In the **Microsoft ODBC for Oracle Connect** box that appears enter these values and select **OK**:
   [User Name] **<your Oracle username>**
   [Password] **<your Oracle password>**
   [Server] **VGER**

Figure 4-14. Using the file data source name to test the connection.
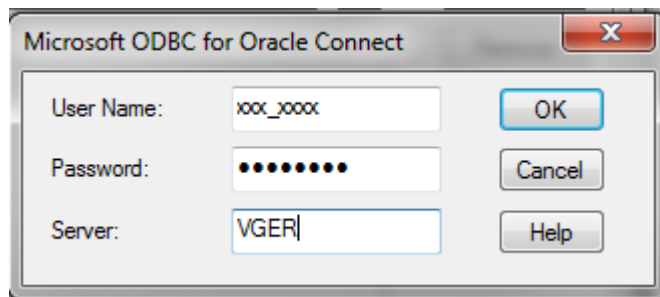
f. If the box disappears and you find yourself back at the third tab, the test was successful. If you receive an error message, please check the values you entered and try again. Also, check the values created in the System DSN created above and try again. If the error message persists, contact the CARLI Office for assistance.

Figure 4-15. If the file data source test works, you'll return to the ODBC Administrator screen without any errors.
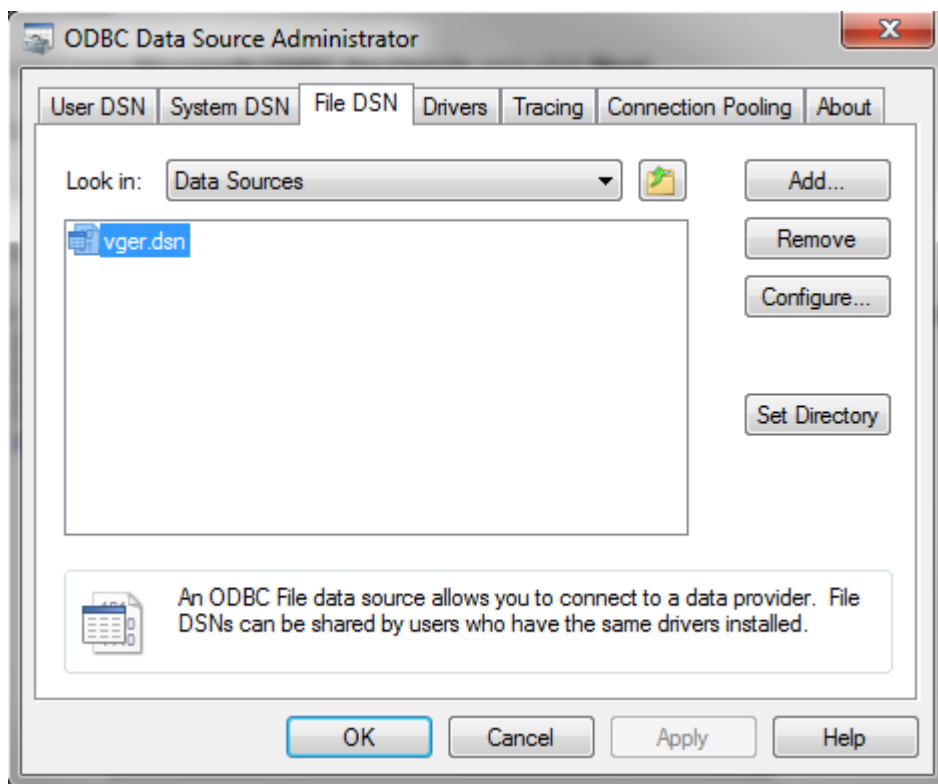
g. If all was successful, delete the File DSN you just created by highlighting the name **VGER** and clicking **Remove**.   Answer **Yes** when asked if you are sure you want to remove the data source.

24. Exit the **ODBC Data Source Administrator** by clicking **OK**.

Your workstation is now successfully configured to connect to Voyager over Oracle 10 ODBC!

V. Link the CARLI_Reports.mdb File

Before You Start

These instructions cover installation of a freshly installed or downloaded copy of the CARLI_Reports_20XX.mdb database file, and configuring that file to run queries and reports against your library's production Voyager database.

CARLI strongly recommends that you use the latest version of the CARLI Reports file in place of the generic **Reports.mdb** file. As of this writing the latest file is **CARLI_reports_2016a.mdb** file. **CARLI_reports_20XX.mdb** files include the shared SQL and reports prepared by CARLI staff and I-Share library staff, along with Ex Libris' pre-packaged reports that I-Share libraries may find useful.

If you already have a previous CARLI_Reports.mdb file from another workstation, you may be able to continue using that .mdb without any additional configuration. If the .mdb file does not work, simply try relinking it according to the instructions below. The CARLI website also includes instructions for copying queries from your old file into the new database file.

These instructions apply only to workstations running 32-bit versions of Microsoft Access 2010 and later. If your institution only offers 64-bit Office, check with the CARLI office for alternative options. At this time, Office 365 installations of Access are not supported.

## Instructions for MS Access 2010 or later

1. Open your new CARLI_Reports database file. If you are prompted with a security warning, select Enable Content.

Figure 5-1. Access provides a security warning about the macros and scripts that make the reports database more effective. Choose to enable the content.
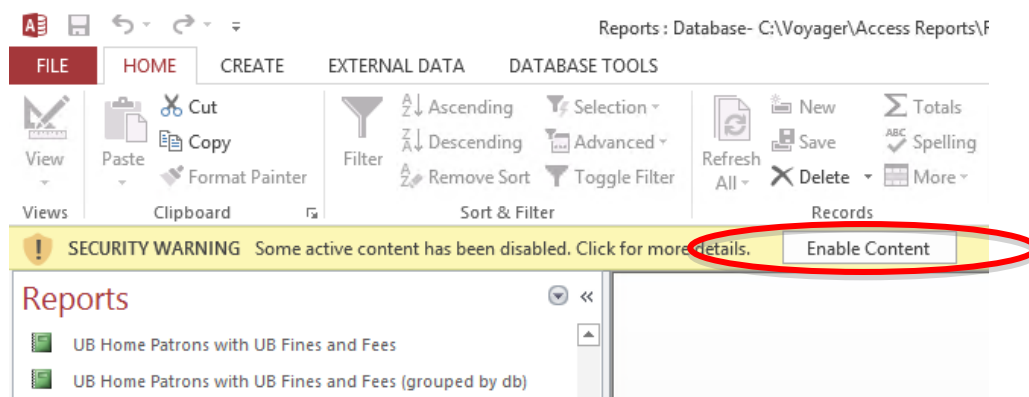
2. Enable Access to run the table linking macros by selecting **File > Options**, then select **Trust Center** in the navigation pane, and finally select the **Trust Center Settings…** button.

Figure 5-2. Access Options window, choose Trust Center, then Trust Center Settings.
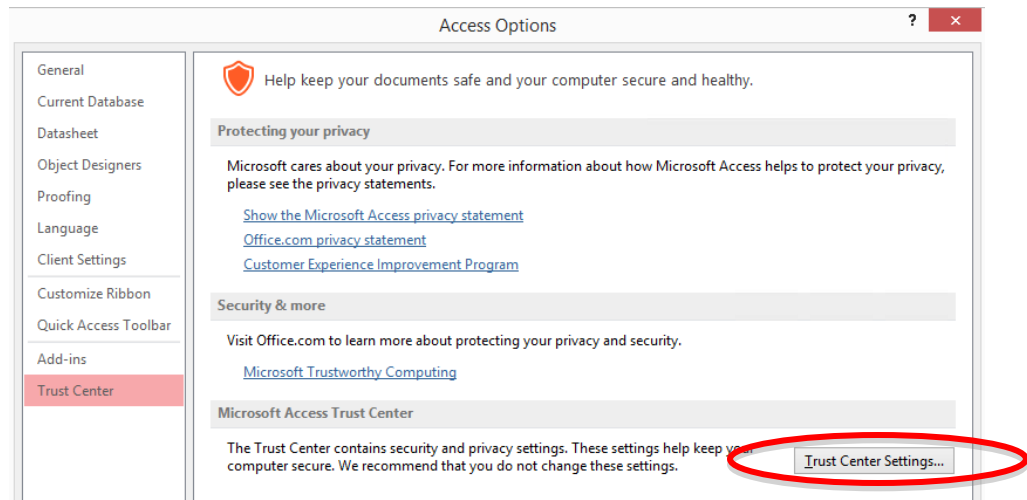
3. Select **Macro Settings** in the navigation pane. Then, select the button next to **Enable all macros**. Select **OK** to close the Trust Center, then select **OK** again to close Access Options.
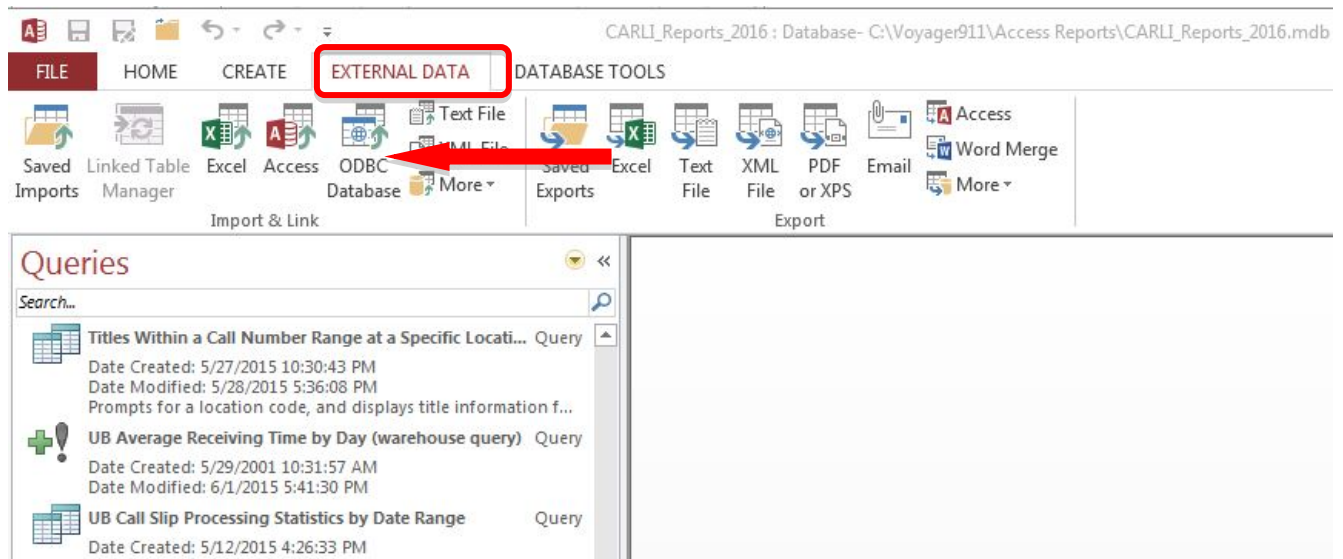
Figure 5-3. Access Trust Center, choose Macro Settings, then Enable all Macros.
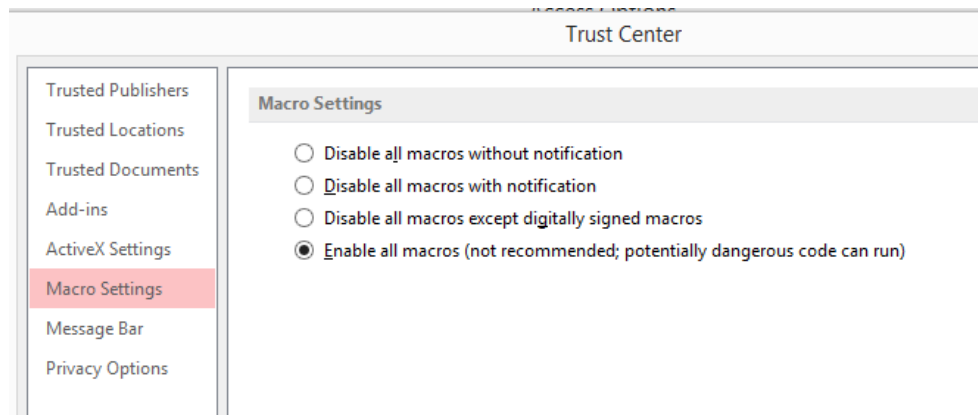

4. Exit and restart MS Access.

5. Open the CARLI_Reports.mdb and begin linking tables by selecting **External Data > ODBC Database**.

Figure 5-4. Begin linking the database from the External Data ribbon.


6. On the Get External Data-ODBC Database screen, select **Link to the data source by creating a linked table**, then select **OK**.

Figure 5-5. The Get External Data wizard screen, choose to link to the data source.
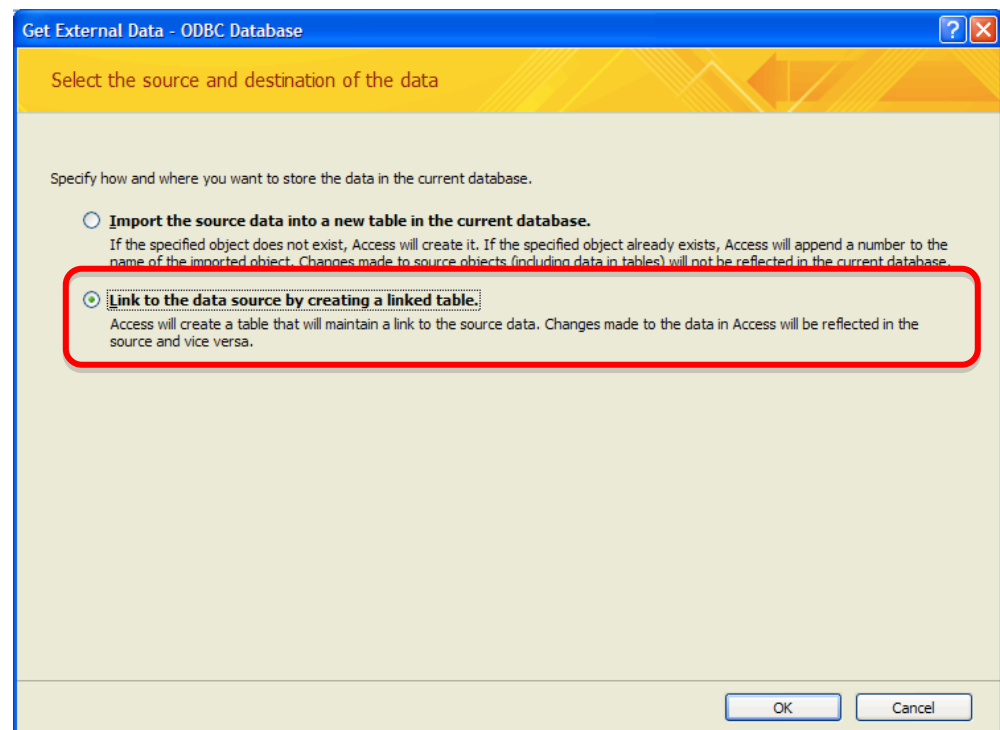
7. On the Select Data Source screen, select the **Machine Data Source** tab, then locate and choose **eisreport**, and click **OK**.

> Figure 5-6. The Select Data Source screen should show you the data source name that you created in section IV part 2. If not, you may be on a 64-bit version of Access.
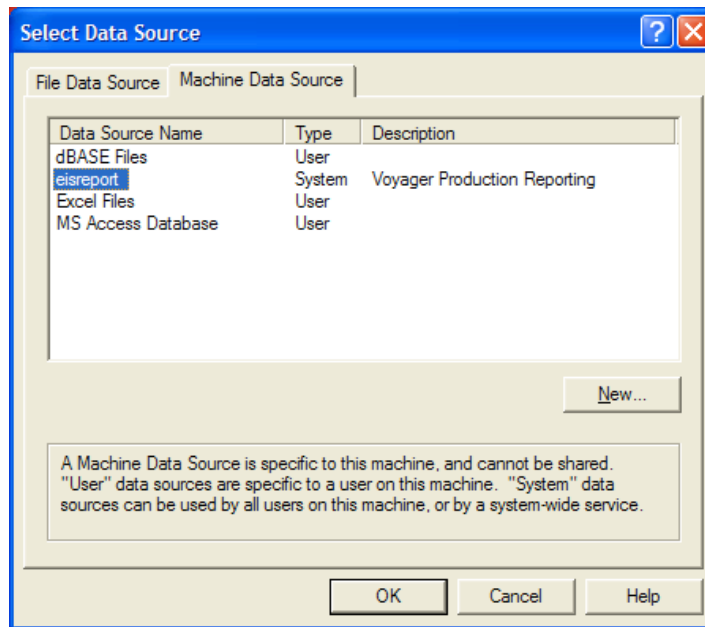
8. When the Microsoft ODBC for Oracle Connect screen appears, enter these values and select **OK**.

> [User Name] **<your Oracle username>**
> [Password] **<your Oracle password>**
> [Server] **VGER**

> Figure 5-7. The Microsoft ODBC for Oracle Connect screen prompts for your Oracle credentials.
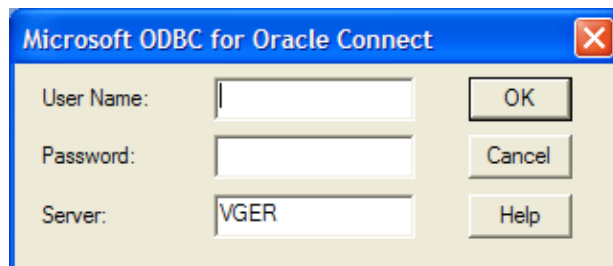
NOTE: It may take a few minutes before the next screen appears.

9. When the Link Tables screen appears, choose **Deselect All**. Wait for the button to refresh, and select **OK**.

Figure 5-8. The Link Tables window; when you choose Deselect All, the button may stay dimmed for a few moments.
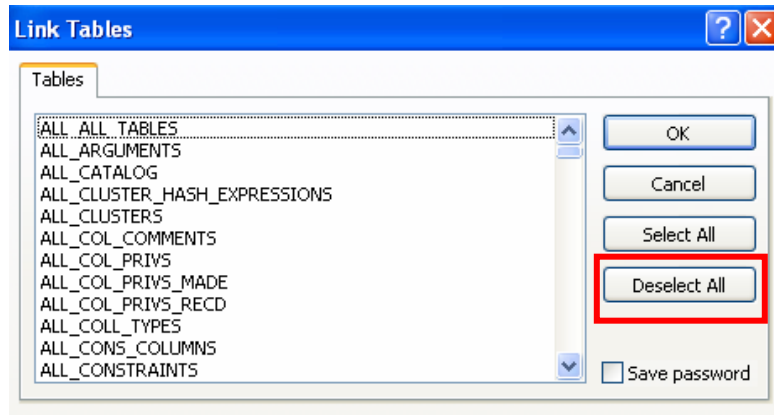
10. Go to the Access navigation pane, and change the listing to Forms; Select the drop-down arrow, then locate **Forms** on the list.

Figure 5-9. Access Navigation Pane provides a list of different objects in the database. Select the down arrow to choose different categories. Choose Forms.
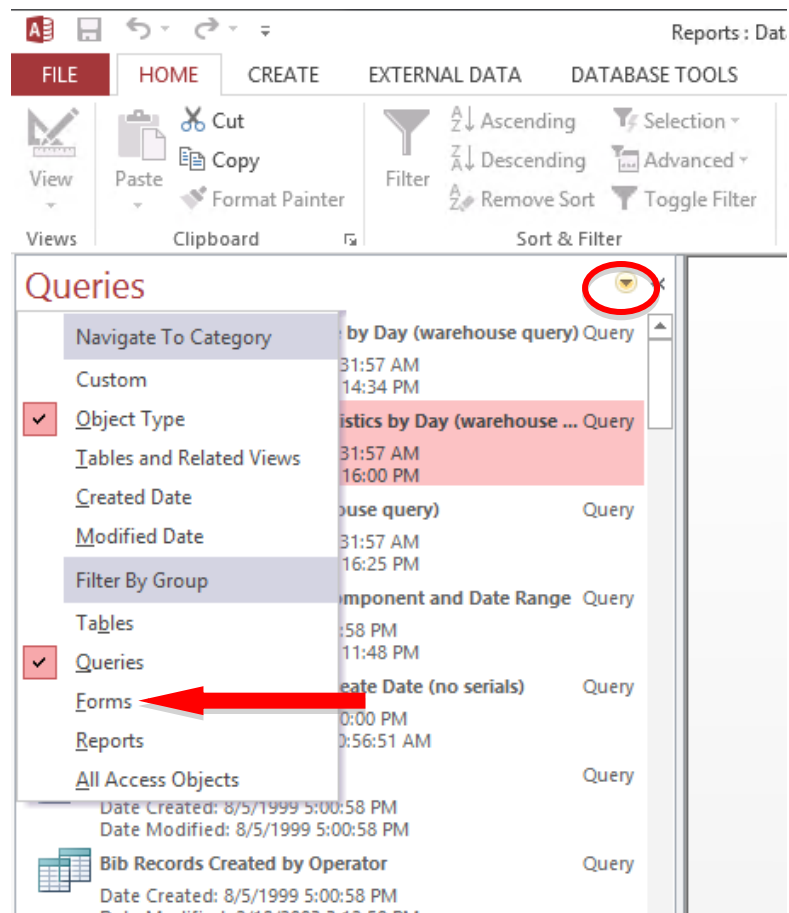
11. Locate and open the **Build database links to Voyager** form.

Figure 5-10. Open the Build database links to Voyager form.

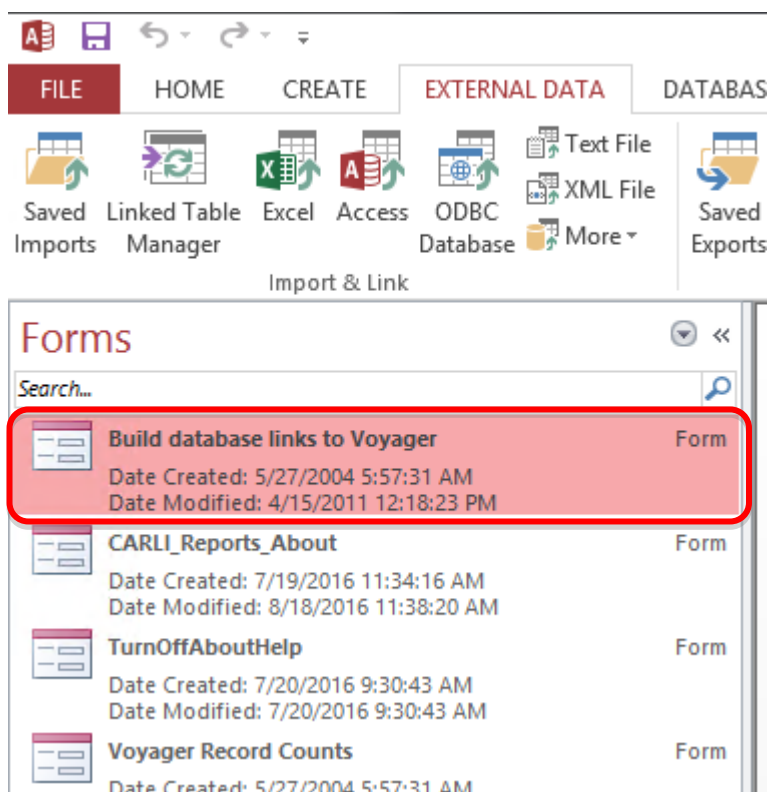12. In the **Build database links to Voyager** form, enter the following values. Remember that values are case-sensitive.

ODBC Name	eisreport
Connect String	VGER
DB User ID (remove dbread**)**	*<your Oracle Username>*
Password (remove existing *s)	*<your Oracle Password>*
Tablespace*	**XXX**DB
Relink checkbox	Checked

***Where **XXX** represents your I-Share Voyager three-letter code in uppercase letters. See Appendix A.

13. Click **Connect**. The status window of the form will list each table as it is successfully linked. The linking process may take several minutes.

If you receive "error!" statements followed by "Process stopped too many errors!," click Close and repeat steps 11-12 again, carefully checking the information being entered. If you continue to receive error messages, contact the CARLI Office for assistance.

Figure 5-11. The Build database links to Voyager form, with the status box showing that all tables have been linked.

14. When the linking completes the status window will return to the first table; you may scroll to the end to see if the message "Linking Completed" appears. Select **Close** to close the build links form.

The CARLI Reports database is now successfully linked! You may now run queries and reports against the database.

Appendix A

LIBRARY	CODE	LIBRARY	CODE
Abraham Lincoln Pres Lib & Museum	ALP	MacMurray College	MMC
Adler University	ADL	McHenry County College	MHC
Augustana College	AUG	McKendree University	MCK
Aurora University	ARU	Meadville Lombard Seminary	MLS
Benedictine University	BEN	Millikin University	MIL
Black Hawk College	BHC	Monmouth College	MON
Bradley University	BRA	Moody Bible Institute	MBI
Carl Sandburg College	CSC	Morton College	MRT
Catholic Theological Union	CTU	National-Louis University	NLU
Chicago State University	CSU	The Newberry Library	NBY
College of DuPage	COD	North Central College	NCC
Columbia College	COL	North Park University	NPU
Concordia University Chicago	CON	Northeastern Illinois University	NEI
Danville Area Community College	DAC	Northern Illinois University	NIU
DePaul University	DPU	Northern Seminary	NBT
Dominican University	DOM	Oakton Community College	OAK
Eastern Illinois University	EIU	Olivet Nazarene University	ONU
Elmhurst College	ELM	Parkland College	PRK
Eureka College	ERK	Principia College	PRC
Governors State University	GSU	Quincy University	QCY
Greenville College	GRN	Richland Community College	RCC
Harper College	WRH	Robert Morris University	RMC
Heartland Community College	HRT	Roosevelt University	ROU
Illinois Central College	ICC	Rush University	RSH
Illinois College	ILC	Saint Francis Medical Ctr College of Nursing	SFM
Illinois Eastern Community Colleges	IEC	Saint Xavier University	SXU
Illinois Institute of Technology	IIT	Sauk Valley Community College	SVC
Illinois Math & Science Academy	IMS	School of the Art Institute Chicago	SAI
Illinois State Library	ISL	South Suburban College	SSC
Illinois State University	ISU	Southeastern Illinois College	SEI
Illinois Valley Community College	IVC	Southern Illinois University Carbondale	SIC
Illinois Wesleyan University	IWU	Southern Illinois University Edwardsville	SIE
JKM Library	JKM	Southern Illinois University School of Medicine	SIM
John Wood Community College	JWC	Southwestern Illinois College	SWI
Joliet Junior College	JOL	Spertus Institute of Jewish Studies	SCJ
Judson University	JUD	Trinity Christian College	TRN
Kankakee Community College	KCC	Trinity International University	TIU
Kishwaukee College	KIS	Triton College	TRT
Knox College	KNX	University of Illinois at Chicago	UIC
Lake Forest College	LFC	University of Illinois at Springfield	UIS
Lewis & Clark Community College	LAC	University of Illinois at Urbana-Champaign	UIU
Lewis University	LEW	University of Saint Francis	USF
Lincoln Christian College & Seminary	LCC	University of St. Mary of the Lake	SML
Lincoln College	LNC	Western Illinois University	WIU
Lincoln Land Community College	LLC	Wheaton College	WHE

CARLI Revision History

Current revision: 4/9/2018
8/9/2017
1/25/2017
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