#### **Overview**

This article describes how to install an **Oracle Client** on your SQL Server machine, and link to **SACWIS database** instances to create report queries in SQL Server.

#### **Installing the Oracle Client**

**Important:** Please use at least **Oracle 10.2.0.1.0 Client** on your SQL Server machine. Since the linked server relies on Oracle OLEDB features, choose the **"Runtime"** installation as described below. The "InstantClient" installation might work, but we have not done a thorough comparison of Instant Client and the full client to verify that in this case.

- 1. Start installing the Oracle client software. On the **Select Installation Type** screen, select the **Runtime (213MB)** option as shown below.
- 2. Click the **Next** button.

🗟 Oracle Universal Installer: Select Installation Type
Select Installation Type
What type of installation do you want? C InstantClient (498KB) Installs Instant Client software. C Administrator (533MB) Installs the menorement console, menogement tools, networking services, util, basic client software.
Runtime (213MB)     Installs tools for developing applications, networking services and basic client software.
C Custom Enables you to choose individual components to install.
Product Languages)
Help Installed Products Back Next Install Cancel



On the **Specify Home Details** screen, Oracle will automatically fill in the information as shown below.

**Note:** Your installation directories may be different. The defaults should be sufficient.

🐱 Oracle	Universal Installer: Specify Home Details	
Spec	cify Home Details	
Enter or	r select a name for the installation and the full path where you want t	o install the product.
Na <u>m</u> e:	OraClient10g_home2	
P <u>a</u> th:	C:\oracle\product(10.2.0\client_2	Browse )
Help	Installed Products Back	Install Cancel

3. Click the **Next** button.



The **Product-Specific Prerequisite Checks** screen appears displaying verification of environment requirements.

😸 Oracle Universal Installer: Product-Specific Prerequisite Chec	ks			
<b>Product-Specific Prerequisite Checks</b> The Installer verifies that your environment meets all of the minimum r configuring the products that you have chosen to install. You must ma are flagged with warnings and items that require manual checks. For	requirements fo nually verify and details about p	or inst 1 conf	alling and firm the item	g
checks, click the item and review the details in the box at the bottom of	f the window.		Ptotuc	
Checking Oracle Home path for spaces	Automatic	R 8	Succeeded	
Checking for Oracle Home incompatibilities	Automatic	<b>1</b>	Succeeded	
			Retry	Stop
0 requirements to be verified.				
Actual Result: NEW_HOME Check complete. The overall result of this check is: Passed ===================================			=	C N
Help Installed Products Back	Next	(nsta		)

4. Click the **Next** button.



The **Summary** screen appears displaying a summary of what will happen during the installation.

🔀 Oracle Universal Installer: Summary
Summary Oracle Client 10.2.0.1.0
- Global Settings
Source: C:\Documents and Settings\anderv03.ODJFS\Desktop\10201_client_win32\client\stage\pro
Oracle Home: C:\oracle\product\10.2.0\client_2 (OraClient10g_home2)
Installation Type: Runtime
- Product Languages
English
Space Requirements
C:\ Required 241MB (includes 15MB temporary) : Available 12.07GB
-Agent Required Support Files 10.2.0.1.0
-Assistant Common Files 10.2.0.1.0
-Bali Share 1.1.18.0.0
Buildtools Common Files 10.2.0.1.0
ORACLE'

5. Click the **Install** button to start and complete the installation process.



The **Install** screen appears displaying the progress of the installation.

oracle Universal Installer: Install	
Install	
Installing Oracle Client 10.2.0.1.0	
Z Installation in progress	Oracle Database 10g: The Database for the Grid
Setup pending	Virtualization at every layer
Configuration pending	Policy-based provisioning
Extracting files to 'C:\oracle\product\10.2.0\client_2'.	Resource pooling
10%	
Stop installation	1
You can find a log of this install session at: C:\Program Files\Oracle\nventory\logs\installActions2008-06-03_10-19-	.25AM.log
Help Installed Broducts Back	Next Install Cancel
ORACLE	

6. Upon completion of the Oracle client installation, add entries to the **TNSNAMES.ORA file** as documented in the "SACWIS Ad-Hoc Connectivity Summary.pdf" document.



#### Linking to SACWIS Database Instances

The following example shows how to configure for ADHOC\_SACRPT. Substitute the appropriate name of your connect string in the example below.

- 1. Open Enterprise Manager.
- 2. Go to Security.
- 3. Right-click on **Linked Server**.
- 4. Select Create New Linked Server by filling in the information as shown below.

Linked Server Properties	s - New Linked Server	×			
General Security Server Options					
Li <u>n</u> ked server:	ADHOC_SACRPT				
Server type: C S <u>Q</u> L Server					
Other data source					
Provider name:	Microsoft OLE DB Provider for Oracle				
	Provider Options				
Prod <u>u</u> ct name:	Oracle				
<u>D</u> ata source:	ADHOC_SACRPT				
Pro <u>v</u> ider string:					
Location:					
<u>C</u> atalog:					
This is the entire provider st	ring.	j			
	OK Cancel Help				



5. Click the **Security** tab.

Linked Server Proper	ties - New Linked	Server			
General Security Serv	er Options				
Local server login to remote server login mappings:					
Local Login	Impersonate Remo	te User   Remote Pa	sswore		
<					
For a login not defined in	the list above, connec	ctions will:			
C Not be made					
<ul> <li>Be made without usi</li> </ul>	ng a security co <u>n</u> text				
C Be made using the log	gin's current <u>s</u> ecurity c	ontext			
Be made using this security context:					
<u>R</u> emote login:	linktest				
With <u>p</u> assword:	******				
	ОК	Cancel	Help		

For a Quick Test:

- 6. Select the radio button beside the last option, **Be made using this security context**.
- 7. In the **Remote login** field, enter your login (NOT "linktest").
- 8. In the **With password** field, enter your password.
- 9. Click the **OK** button.

Your connection has been completed. You can now query in SQL Server.

**Important:** This is the **LEAST SECURE** option. It lets anyone with access to your SQL Server connect to Oracle as you! Please **do not use this** for other than a quick test.

It is recommended that you select the first option, **Not be made**, and specifically map Local Logins (SQL Server Users) to Oracle user IDs and Passwords you already have.



#### **Querying in SQL Server**

1. Open **Query Analyzer** and type a query.

The sample query shown below is:

select \* from openquery (adhoc\_sacrpt, 'select \* from Agency')

🔨 S	QL Query Ana	alyzer						
Eile	<u>E</u> dit Query ]	ools <u>W</u> indow	<u>SQL Prompt</u> <u>H</u> elp					
1	• 🚅 🔒 🗄	X 🖻 🖬	🗹 🏘   🗠   I	□ -   ✔ ▶ =   🚺	master 💽 🔁 🚰 🔂 🔛			
- iii (	Query - JFS3	50072.maste	er.anderv03 - U	ntitled1*				
	select * f	rom openqu	aery(adhoc_sa	crpt,' <del>select</del> * fro	m Agency')		<	
<								
	AGENCY_I	D PARTY_ID	AGENCY_CODE	AGENCY_LOGO_CODE	AGENCY_NAME	AGENCY_REFERENCI	E_ID 🔼	
1	10000.0	10000.0	0001	NULL	Adams County Children Servi	NULL		
2	10001.0	10001.0	0002	NULL	Allen County Children Servi	NULL		
3	10002.0	10002.0	0003	NULL	Ashland County Department o	NULL		
4	10003.0	10003.0	0004	NULL	Ashtabula County Children S	NULL		
5	10004.0	10004.0	0005	NULL	Athens County Children Serv	NULL		
<							>	
Ť 🖩	Grids 🔝 Mes	sages						
Ouer	v batch complete				JF5350072 (8.0) anderv03 (54) master 0:1	00:00 529 rows Ln 1, 0	Iol 53	
							Connections: 1	NUM

**Note:** Using the SQL Server 4-part name (select \* from adhoc\_sacrpt..SACWIS.AGENCY) did not work; however, running the query via the **openquery** syntax (as shown in the example above) does work.

If you need additional information or assistance, please contact the SACWIS Help Desk.

