# Oracle

Connecting to an Oracle database is probably more complicated than it could or should be.

## **Oracle Account**

First of all, create an Oracle Account on www.oracle.com. This is required to download the software.

## **Download Software**

Download the following packages (use the most recent version you can find - it will connect to older database versions):

# Instant Client Downloads for Microsoft Windows 32-bit

You must accept the Oracle Technology Network License Agreement to download this software. Subject to the Oracle Technology Network License Agreement for Oracle Instant Client software, licensees are authorized to use the version of Oracle Instant Client downloaded from this Oracle Technology Network webpage to provide third party training and instruction on the use of Oracle Instant Client.

Accept License Agreement | Decline License Agreement

See the Instant Client Home Page for more information about Instant Client.

The installation instructions are at the foot of the page.

#### Version 12.2.0.1.0

Instant Client Package - Basic: All files required to run OCI, OCCI, and JDBC-OCI applications <u>instantclient-basic-nt-12.2.0.1.0.zip (7</u>1,881,824 bytes) (cksum - 3943816961) The 12.2 Basic package requires the Microsoft Visual Studio 2013 Redistributable.

Instant Client Package - Basic Lite: Smaller version of the Basic, with only English error messages and Unicode, ASCII, and Western European character set support

The 12.2 Basic Light package requires the Microsoft Visual Studio 2013 Redistributable.

Instant Client Package - JDBC Supplement: Additional support for XA, Internationalization, and RowSet operations under JDBC

Instant Client Package - SQL\*Plus: Additional libraries and executable for running SQL\*Plus with Instant Client

Instant Client Package - SDK: Additional header files and an example makefile for developing Oracle applications with Instant Client

Instant Client Package - ODBC: Additional libraries for enabling ODBC applications - **Updated** 9/22/2017

instantclient-odbc-nt-12.2.0.1.0-2.zip (730,779 bytes) (cksum - 2384457566)

Instant Client Package - Tools: Includes Data Pump, SQL\*Loader and Workload Replay Client instantclient-tools-nt-12.2.0.1.0.zip (953,250 bytes) (cksum - 3613837252)

Instant Client Package - Precompiler: Additional files for "proc" binary and related files to precompile a Pro\*C application and demo

# Unpack

Unpack all of the files to one directory.

### It will look something like this:

^	Name	Änderungsdatum	Тур	Größe
	鷆 help	21.10.2018 09:53	Dateiordner	
	퉬 network	21.10.2018 10:18	Dateiordner	
	퉬 vc14	21.10.2018 10:13	Dateiordner	
basiciite-nt-12.	adrci.exe	21.10.2018 10:12	Anwendung	18 KB
basic-nt-12.2.0.	adrci.sym	21.10.2018 10:12	SYM-Datei	13 KB
t_12_2	BASIC_LITE_README	13.02.2017 18:40	Datei	1 KB
odbc-nt-12.2.0.	BASIC_README	21,10.2018 10:12	Datei	1 KB
sqlplus-nt-12.2.	💷 genezi.exe	21.10.2018 10:12	Anwendung	51 KB
p	genezi.sym	21.10.2018 10:12	SYM-Datei	28 KB
basiclite-nt-12.	🔹 glogin.sql	21.10.2018 10:15	dbForge Studio fo	1 KB
basic-nt-12.2.0.	🚳 oci.dll	21.10.2018 10:12	Anwendungserwe	1.270 KB
sqipius-nt-12.2.	oci.sym	21.10.2018 10:12	SYM-Datei	403 KB
≡	Socijdbc12.dll	21.10.2018 10:12	Anwendungserwe	108 KB
	ocijdbc12.sym	21,10,2018 10:12	SYM-Datei	24 KB
	ociw32.dll	21,10,2018 10:12	Anwendungserwe	346 KB
erk (A:)	ociw32 sym	21.10.2018 10:12	SVM-Datei	39 KB

# Set Path and Environment Variable

Set ORACLE\_HOME to the directory in which the client resides:

Systemvariablen		
Variable	Wert	^
NUMBER_OF_P	4	
ORACLE_HOME	C:\Oracle\instantclient_12_2	
OS	Windows_NT	
Path	$INTEL_DEV_REDIST%redist/intel64$	~

Set the path to also include this directory:

Syste	emvariable bearbeiten
Name der Variablen: Wert der Variablen:	Path          ROOT%\bin;C:\Oracle\instantclient_12_2         OK

# Install ODBC Driver

Install the ODBC driver, using the following command:

Install Oracle ODBC Driver	
c:\Oracle\instantclient_12_2\odbc_install.exe	

## Create tnsnames.ora

Oracle requires a tnsnames.ora file, in the directory ORACLE\_HOME\network\admin

An example tnsnames.ora file, which can connect to two services (two databases) is shown below:

#### tnsnames.ora

```
test_database =
   (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = TCP)(HOST = my-oracle-db)(PORT = 1521))
    )
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SID = test_database)
    )
prod_database =
   (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = TCP)(HOST = my-oracle-db)(PORT = 1521))
    )
    (CONNECT_DATA =
      (SERVER = DEDICATED)
      (SID = prod_database)
)
```

## **Test Connectivity**

#### With a cmd, run the following command:

#### **Test Connectivity**

c: \Oracle \instantclient\_12\_2 \sqlplus.exe username@test\_database

You will get asked for a password, and should be able to connect to the database. From there, you will be able to run some selects, stored procedures to verify connectivity. If you have more than one service (database) configured, test each of them.

## **ODBC Connection**

#### Now create the ODBC connections.

The following dialog shows the settings for the test\_database entry above. Note: setting the ODBC connection to Read-Only is recommended, if the jtel system will only read from the database.

Data Source Name test		est data	base				OK	
Description test		and database					Cancel	
The provident test		est dat					Help	
TNS Service Name			name			Test Connecti		
User ID user						isernami		
Application	Oracle	Worka	arounds	SQLServer N	ligration			
Enable Re	sult Sets		/ Ena	ble Query Time	eout 🗸	Read-Only Co	nnection V	•
Enable Clo	sing Curso	ors [	Ena	ble Thread Saf	ety 🗸			
Batch Autocommit Mode			Co	nmit only if all s	tatements	succeed		*
Numeric Settings			Us	Use Oracle NLS settings			~	

# ODBC Connections - jtel TEL Server

Now create the ODBC connections in the jtel Telephony Server as usual, if you require these to be opened by the server when it starts. Otherwise, you can connect to the data source later using the Open DSN function within the call flow.