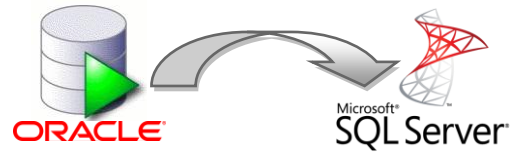


# ORA2SQL Migrator Instructions



The ORA2SQL Migrator is a utility for migrating PANTHEON databases from Oracle Database to MS SQL Server. The package **MgrORA2SQL.7zip** contains the executable *MgrORA2SQL.exe*, the library *oci.dll* and the scripts *MigrateSupportObjects.sql*, *MigrateVerifyA.sql* and *MigrateVerifyB.sql*.

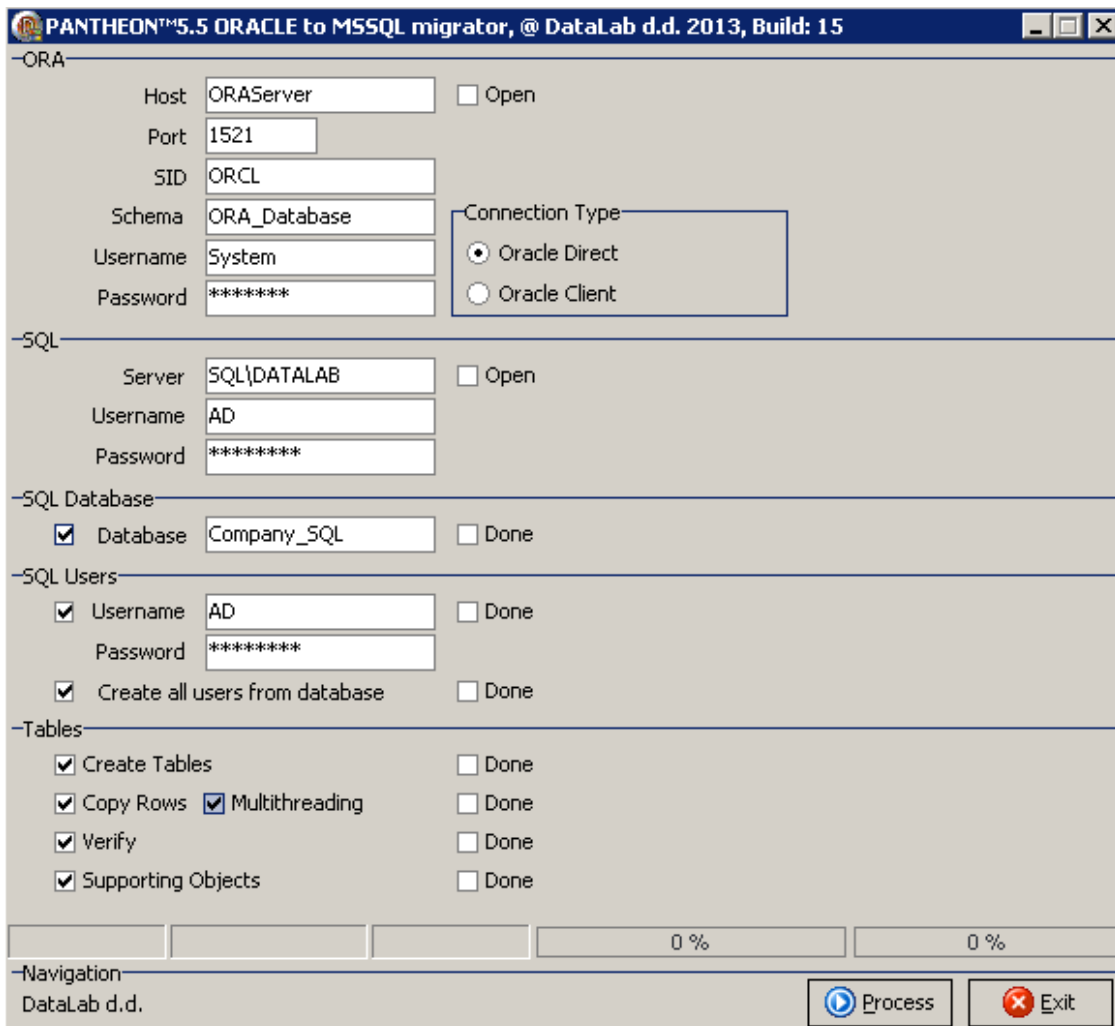
Requirements for a successful migration from Oracle Database to MS SQL Server are:

1. a running MS SQL Server instance (recommended are newer version like 2008 R2 or similar)
2. the ORA2SQL Migrator with its required files (*MigrateSupportObjects.sql*, *MigrateVerifyA.sql*, *MigrateVerifyB.sql* and *oci.dll* must be in the same folder as *MgrORA2SQL.exe*).

## A Basic Example and Documentation

The utility has a single window containing all parameters. At the bottom are progress indicators and buttons for starting the migration and closing the utility after migration is finished.

Enter database connection parameters into the ORA and SQL sections. ORA can be a different server than the SQL one, meaning you don't need to be running both databases on the same machine.



### TIP:

It is recommended that you manually check migrated data after completing everything. On the MS SQL version of PANTHEON also check larger data sets in various modules (e.g. user authorizations, invoice reports, trial balance, payroll, etc.) and compare them with data in the Oracle version.

## Parameters

- **ORA**
  - **Host:** the server where Oracle Database with a PANTHEON database is running.
  - **Port:** the port where Oracle Database is responding.
  - **SID:** the system identifier or Oracle Database. This is by default XE for the Express edition and ORCL for all other editions.
  - **Schema:** the name of the "database". Oracle Database cannot have multiple databases on one server, therefore it uses the concept of schemas that are like additional users on the Oracle Database instance.
  - **Username:** the username of a Oracle Database users with sufficient privileges for creating users and adding schemas. Usually this is *sys*.
  - **Password:** the password associated with the username.
  - **Connection Type**
    - **Oracle Direct:** connect through the Oracle client integrated into the ORA2SQL Migrator.
    - **Oracle Client:** connect through a separately installed Oracle client. Usually, Oracle Install Client is enough.
- **SQL**
  - **Server:** the SQL Server instance where the migrated database will be stored. Enter the host and the proper instance if you are using one.
  - **Username:** the username for connecting to the SQL Server instance. It can be a PANTHEON user or SQL Server's *sa* user.
  - **Password:** the password associated with the username.
- **SQL Database**
  - **Database:** the name of the destination database on the SQL Server instance (can be changed)
- **SQL Users**
  - **Username:** the username on the SQL Server
  - **Password:** the password associated with the username
  - **Create all users from database:** if checked, all users from the original database will be transferred (created) on the SQL Server instance.
- **Tables**
  - **Create Tables:** creating tables
  - **Copy Rows:** creating rows
  - **Multithreading:** copy and transfer up to 8 tables at once (faster migration)
  - **Verify:** verifying migrated database after migration
  - **Supporting Objects:** creating other predefined supporting objects

The checkboxes allow you to perform a partial migration, but it is recommended to do as much as possible in one go.

Start the migration with **Process** button. Depending on the amount of data, this can last up to over few hours. The progress bars give you an estimate how far the process is complete (do not interrupt the process).

## What is migrated and steps that have to be done manually

- Migrated are all PANTHEON and user-defined tables with all PANTHEON and user-defined.
- Migrated are all user-defined reports. If any Oracle-specific features are used in SQLEXP() you have to migrate them manually.
- Migrated are all user-defined ARES DPAs. Any Oracle-specific SQL statements have to be migrated manually.
- If you are using ZEUS, you have to delete old cubes and after Pantheon upgrade you have to create and process new cubes.

### IMPORTANT:

An **error log** is generated after the migration (in the same folder as migrator). Check the log for any reported errors!

After the migration, you **must upgrade the migrated database with an SQL version of PANTHEON** and check PANTHEON's upgrade log. Upgrade the migrated database by logging on to a **different database and upgrade the migrated database** from there.

If the migration was somehow interrupted (power outage, network problem, etc.), you must **start the whole process from the beginning!**