Project management – integrated into Outlook

InLoox 6.x configuration guide for Oracle Server

An InLoox Whitepaper

Published: March 2011

You can find up-to-date information at **http://www.inloox.com**

Contents

General information

This document describes the steps to configure and start-up an ORACLE SQL Server (express/standard/Enterprise) with InLoox. Moreover a suitable system configuration to use InLoox is described. For the example a Windows server 2003 is used as platform. This configuration guide is also valid for Windows of 2000 servers.

SQL server Installation

Obtaining an ORACLE SQL Server

1. If you do not have an ORACLE Server license as well as an appropriate installation medium, **ORACLE Express Server** is available under the following address free of charge:

   http://www.oracle.com/technology/products/database/xe/index.html

   Important: Please note that the off-line replication is not possible with ORACLE. If you like to use the InLoox offline availability, a **Workgroup**, **Standard** or **Enterprise Edition** of Microsoft SQL Server is necessary. You can find a feature overview of the SQL server versions under: http://www.microsoft.com/germany/sql/editionen/default.mspx

Initial installation of ORACLE SQL Server on a Windows Server

1. ORACLE offers extensive documentation initial considerations before installation and installation guides in the appropriate download regions on their homepage.
2. Please note that for using InLoox another character set than the standard is necessary on installation.

Data base character set: AL32UTF8

Country-specific character set: AL16UTF16

Alternative 1: Creation of a schema / a user on an existing database

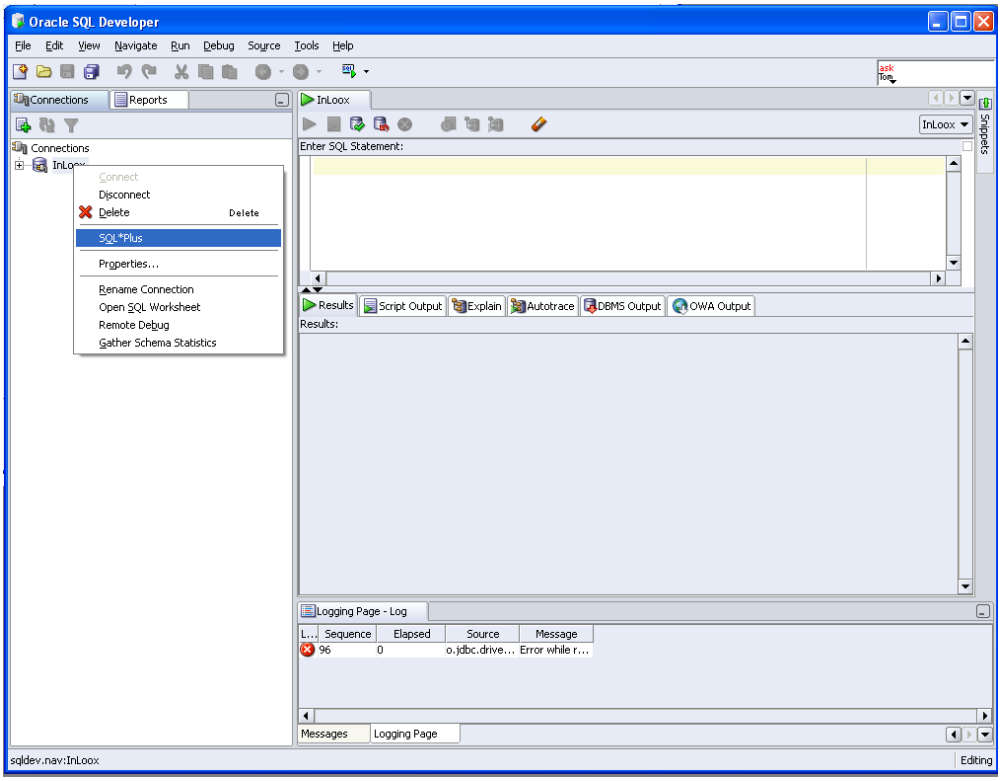
On an existing database you can create a new schema and assign a separate Tablespace.

Requirement:

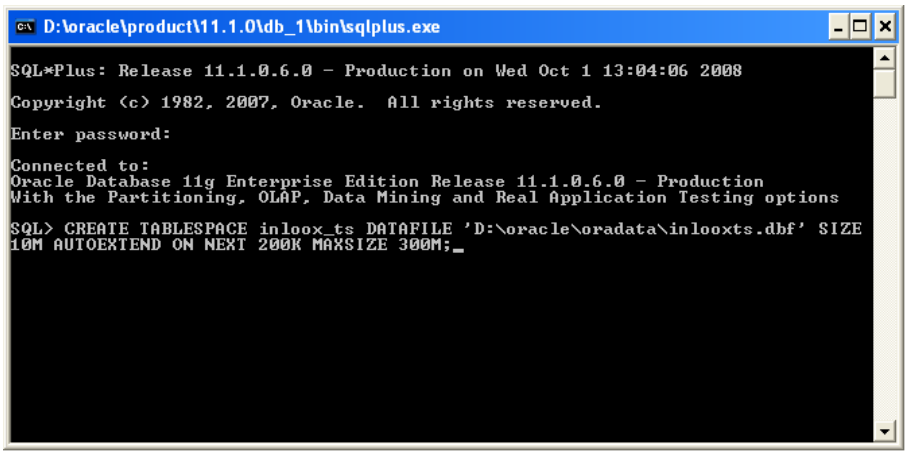
The containing data base has to use the character set: AL32UTF8

Proceed as follows:

1. Connect to the database with SQLPlus (e.g. from SQLDeveloper)

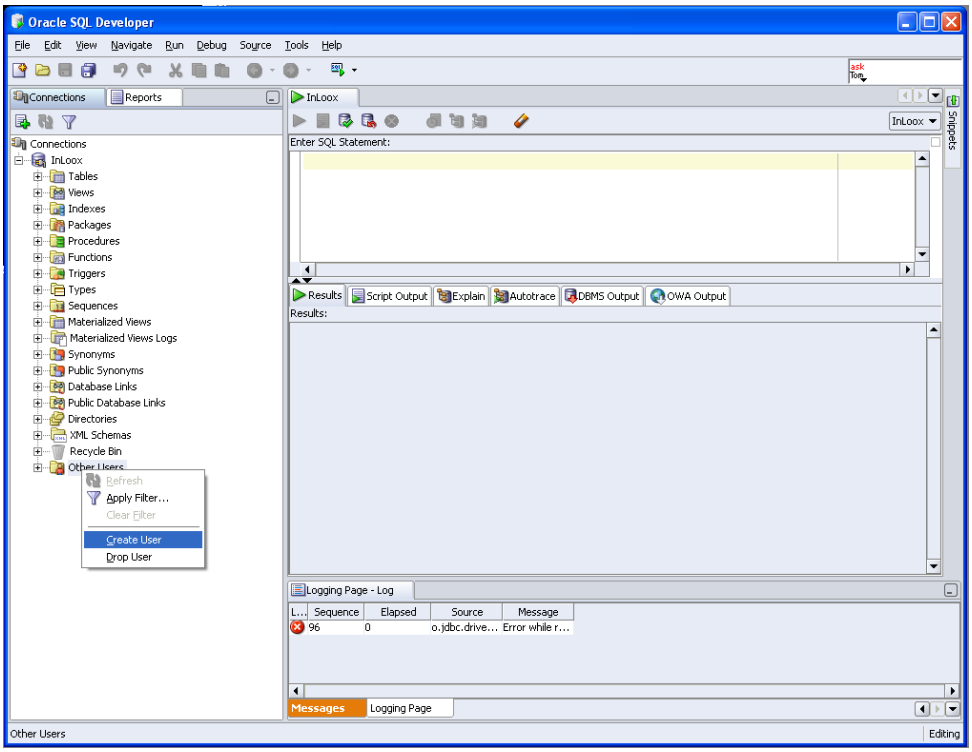


2. Create a Tablespace. The example shows the creation of a Tablespace, which has an initial size of 10 megabyte and can increase up to 300 megabyte in 200K steps.

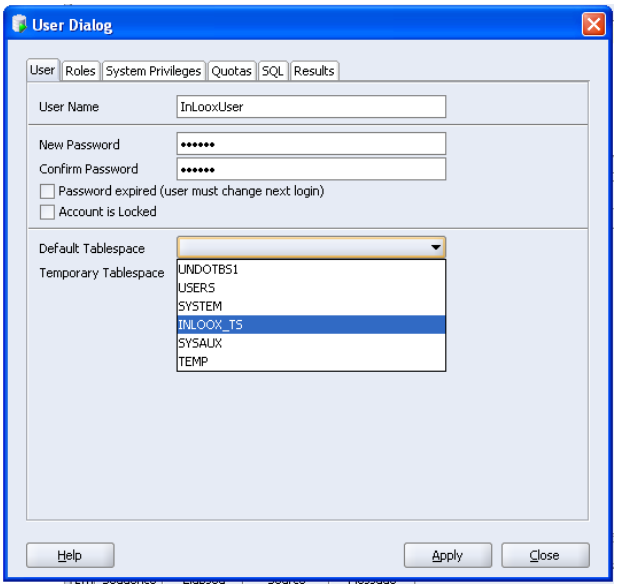



```
CREATE TABLESPACE inloox_ts DATAFILE 'c:\oracle\oradata\ora\inlooxts.dbf'
SIZE 10M AUTOEXTEND ON NEXT 200K  MAXSIZE 300M;
```

3. Create a new user



4. Assign the created Tablespace to the user

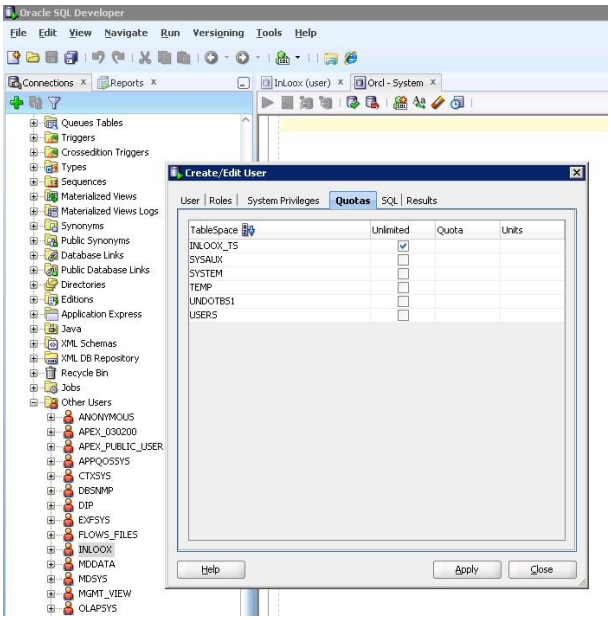


5. Set the permissions

   - Create, update and delete of tables (creation of columns is necessary)
   - Insert, update and delete from data records

   The needed permissions are - Create Session, Create Table, Create Type

6. Set the quota for the tablespace to unlimited



The database user name can be arbitrary.

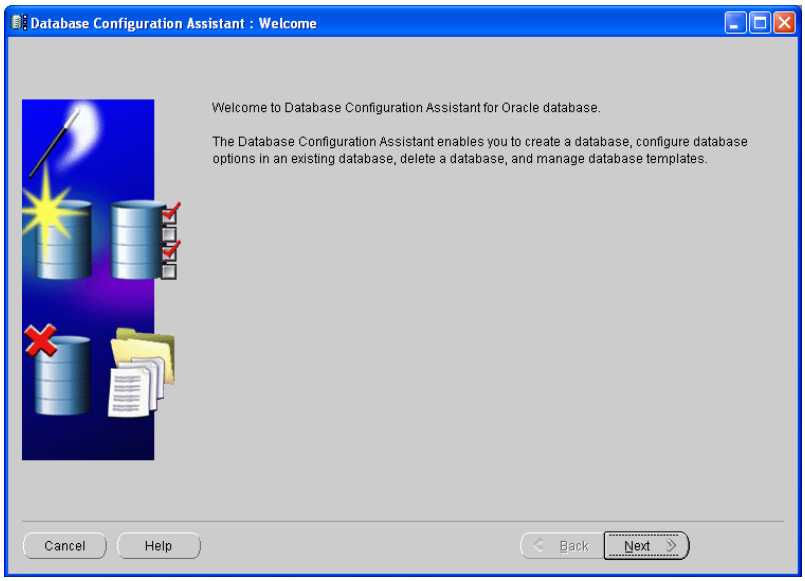
At the installation you need:
- Server name
- SID
- User name
- Password

Alternative 2: Create a data base for InLoox

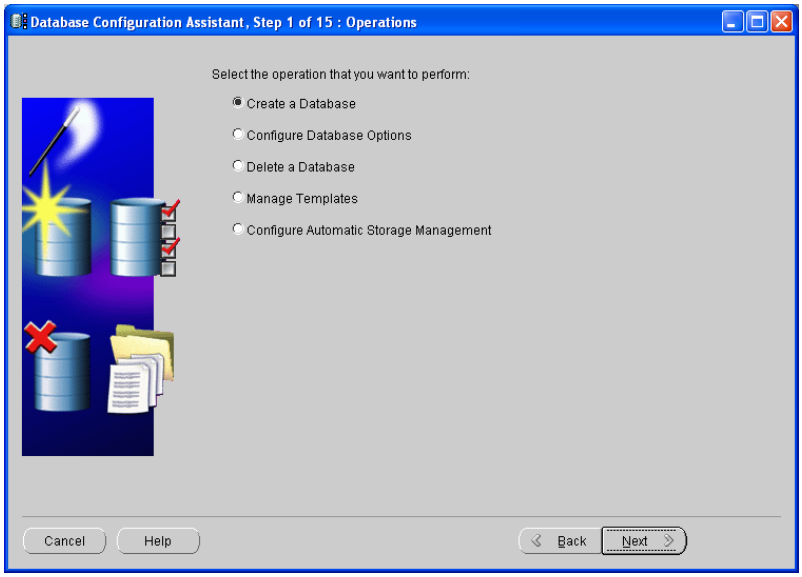
Note that ORACLE Express Edition allows only one database or database instance. Thus the description for creating a new instance is only valid for the Standard and Enterprise version.

To create a new instance, proceed as follows:

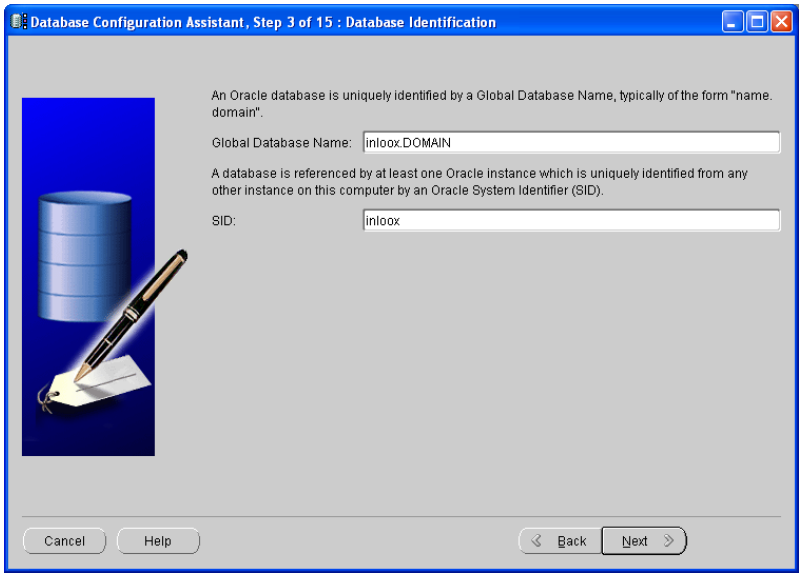
1. Click on: **Start** - > **All programs** - > **Oracle** - > **Configuration and migration tools** „Database Configuration Assistant “



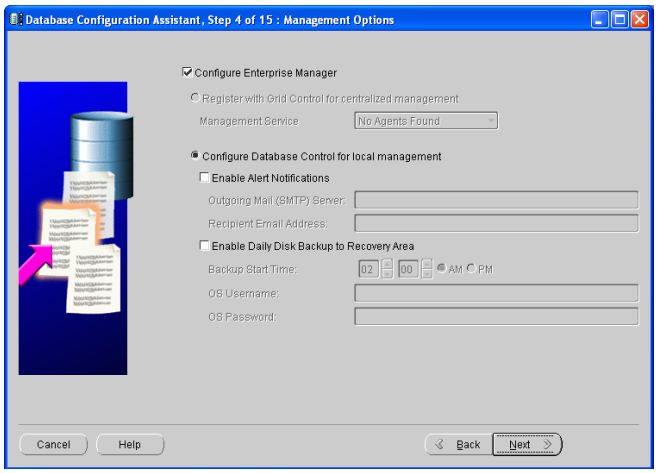
2. Select **Create a Database**.

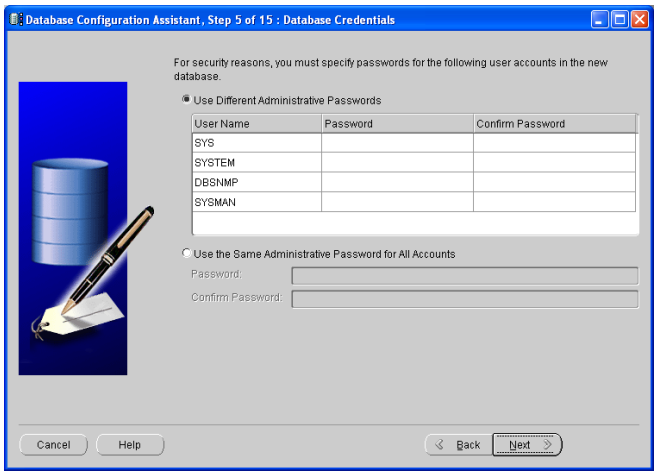


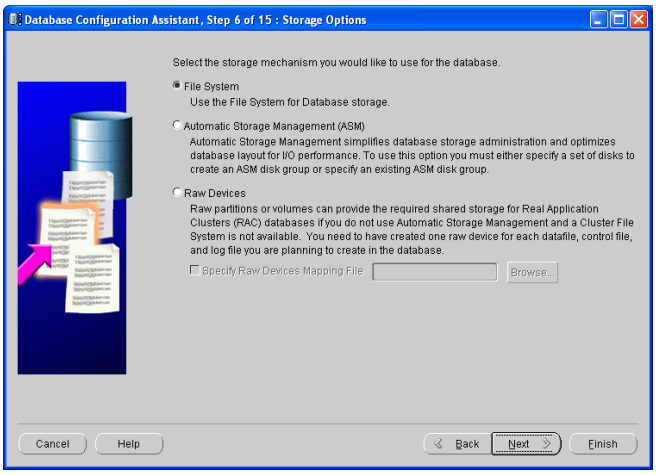
3. Select a name for the database (normally NameOfDB.YourDomain), as well as the names for the instance. The instance name is normally the first part of the global database name.

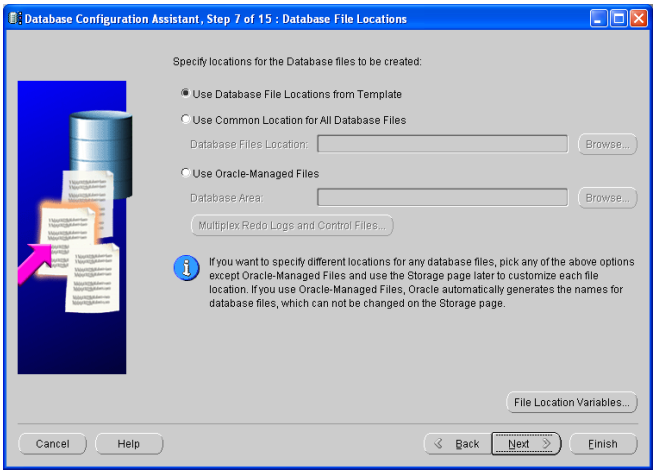


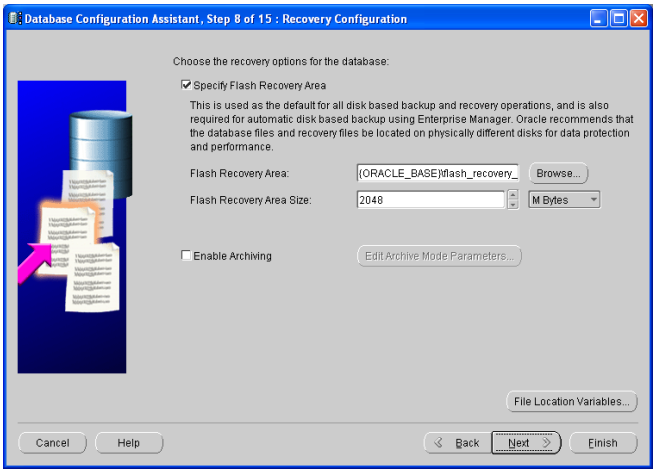
4. Configure the steps 4-9 according to your requirements. Illustrated as example by following Screenshots.

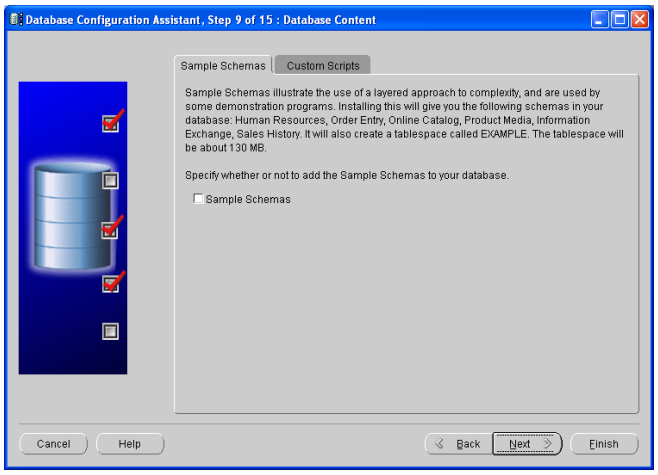




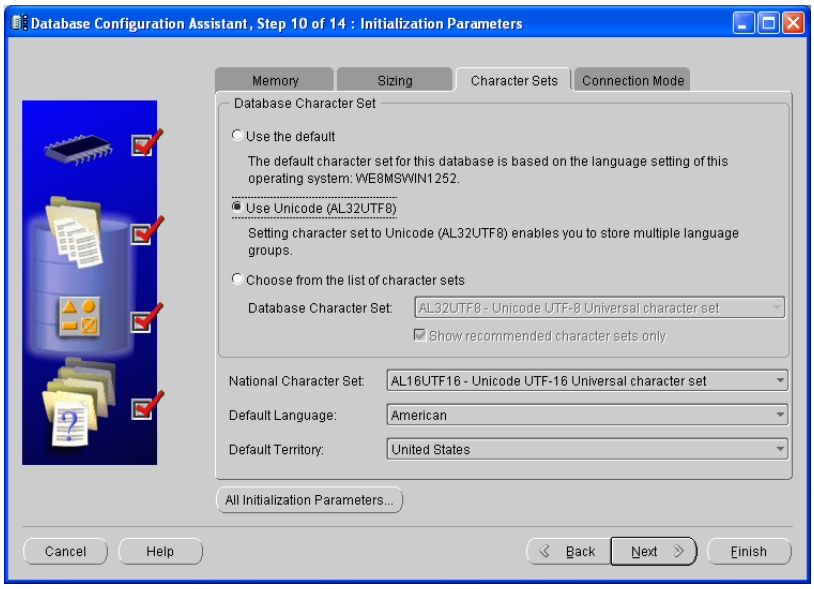

Database Configuration Assistant, Step 6 of 15 : Storage Options
Select the storage mechanism you would like to use for the database.
File System
Use the File System for Database storage.
Automatic Storage Management (ASM)
Automatic Storage Management simplifies database storage administration and optimizes database layout for I/O performance. To use this option you must either specify a set of disks to create an ASM disk group or specify an existing ASM disk group.
Raw Devices
Raw partitions or volumes can provide the required shared storage for Real Application Clusters (RAC) databases if you do not use Automatic Storage Management and a Cluster File System is not available. You need to have created one raw device for each datafile, control file, and log file you are planning to create in the database.
Specify Raw Devices Mapping File
Browse...
Cancel
Help
Back
Next
Finish


Database Configuration Assistant, Step 7 of 15 : Database File Locations
Specify locations for the Database files to be created:
Use Database File Locations from Template
Use Common Location for All Database Files
Database Files Location:
Browse...
Use Oracle-Managed Files
Database Area:
Browse...
Multiplex Redo Logs and Control Files...
If you want to specify different locations for any database files, pick any of the above options except Oracle-Managed Files and use the Storage page later to customize each file location. If you use Oracle-Managed Files, Oracle automatically generates the names for database files, which can not be changed on the Storage page.
File Location Variables...
Cancel
Help
Back
Next
Finish

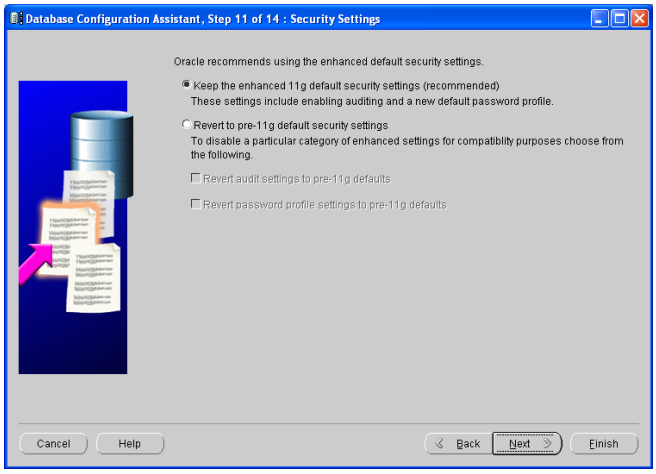

Database Configuration Assistant, Step 8 of 15 : Recovery Configuration
Choose the recovery options for the database:
Specify Flash Recovery Area
This is used as the default for all disk based backup and recovery operations, and is also required for automatic disk based backup using Enterprise Manager. Oracle recommends that the database files and recovery files be located on physically different disks for data protection and performance.
Flash Recovery Area:
{ORACLE_BASE}\flash_recovery_
Browse...
Flash Recovery Area Size:
2048
M Bytes
Enable Archiving
Edit Archive Mode Parameters...
File Location Variables...
Cancel
Help
Back
Next
Finish

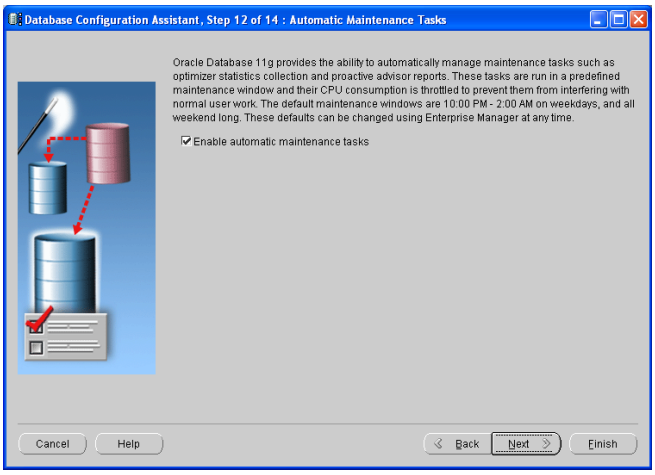


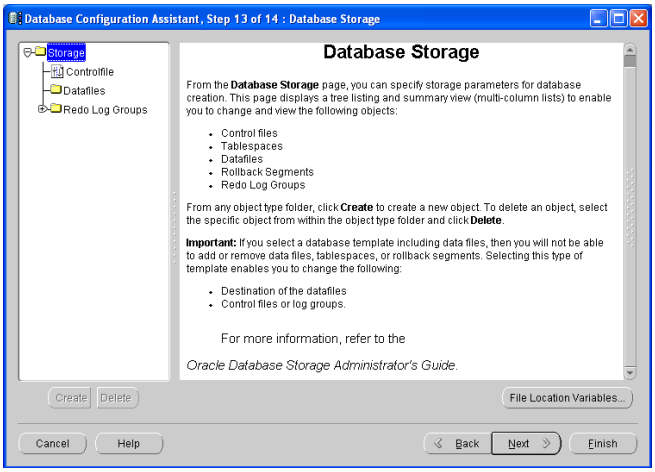
5. At step 10 you have to change the settings for the character set, since InLoox uses **Unicode**!

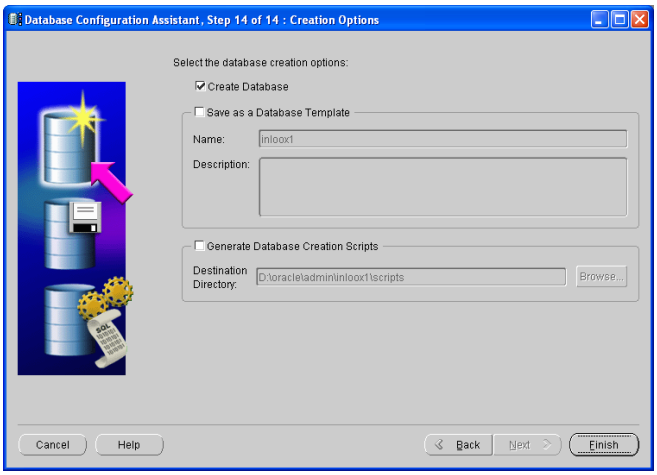


6. Configure the steps 11-14 according to your requirements. Illustrated as example by following Screenshots.




Database Configuration Assistant, Step 12 of 14 : Automatic Maintenance Tasks
Oracle Database 11g provides the ability to automatically manage maintenance tasks such as optimizer statistics collection and proactive advisor reports. These tasks are run in a predefined maintenance window and their CPU consumption is throttled to prevent them from interfering with normal user work. The default maintenance windows are 10:00 PM - 2:00 AM on weekdays, and all weekend long. These defaults can be changed using Enterprise Manager at any time.
Enable automatic maintenance tasks
Cancel
Help
Back
Next
Finish


Database Configuration Assistant, Step 13 of 14 : Database Storage
Storage
Controlfile
Datafiles
Redo Log Groups
Database Storage
From the Database Storage page, you can specify storage parameters for database creation. This page displays a tree listing and summary view (multi-column lists) to enable you to change and view the following objects:
Control files
Tablespaces
Datafiles
Rollback Segments
Redo Log Groups
From any object type folder, click Create to create a new object. To delete an object, select the specific object from within the object type folder and click Delete.
Important: If you select a database template including data files, then you will not be able to add or remove data files, tablespaces, or rollback segments. Selecting this type of template enables you to change the following:
Destination of the datafiles
Control files or log groups.
For more information, refer to the
Oracle Database Storage Administrator's Guide.
Create
Delete
File Location Variables...
Cancel
Help
Back
Next
Finish


Database Configuration Assistant, Step 14 of 14 : Creation Options
Select the database creation options:
Create Database
Save as a Database Template
Name:
inloox1
Description:
Generate Database Creation Scripts
Destination Directory:
D:\oracle\admin\inloox1\scripts
Browse...
Cancel
Help
Back
Next
Finish

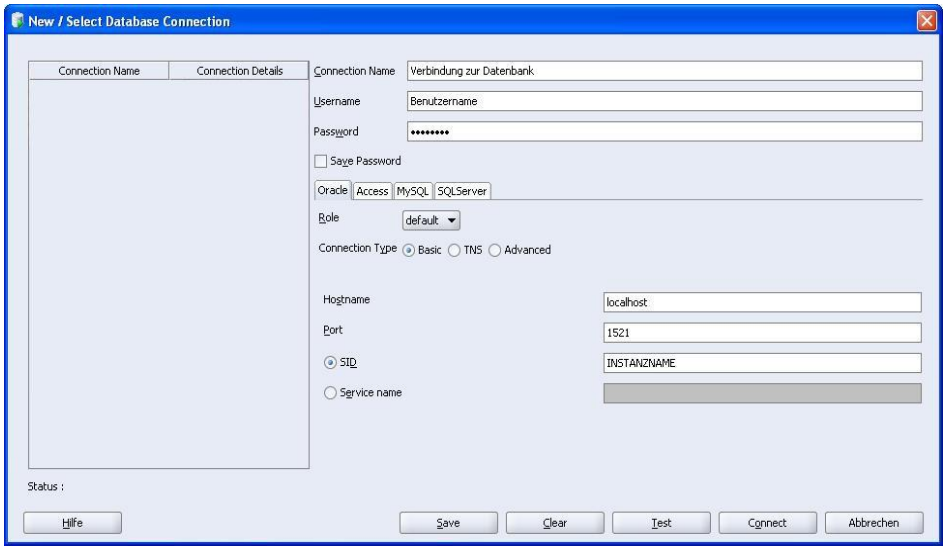
Examine the installation

Check if Oracle SQL Server service is running after installation:

1. Double click in the “System Control” on “Administration”
2. Double click on „Services“
3. Here you should find the following 3 services (when using an instance) with status “Started“:
   - OracleJobSchedulerINSTANCENAME
   - OracleServiceINSTANCENAME
   - OracleOraDbVERSION_home1TNSListener

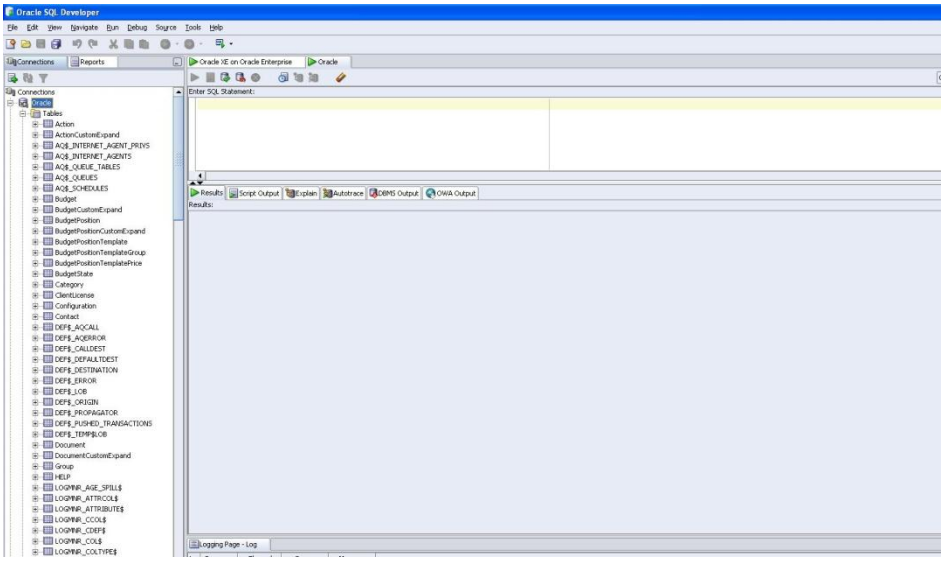
INSTANCENAME = the name you assigned for the ORACLE instance

VERSION = version of the installed ORACLE of product e.g. 11g



1. Try to connect using SQL Developer

2. Click on Tables to see a list of present tables



Opening ports

Please note, that opening ports can lead to a **safety risk** in your network. Examine the necessary safety precautions in advance, before opening any ports!

1. Make sure that the ports of the database server are not *blocked*. Examine the firewall settings of the **server** as well as of the **network hardware.**

   The standard port of ORACLE SQL Server is: **1521**

Ways to connect to the InLoox database

There are two possibilities for a connection between an InLoox client and the database.

1. Oracle (direct) - standard
2. Oracle (client)

Fundamentals

In the guide above the following Oracle configuration was used for InLoox:

Global database name:	InLoox.Domain
SID:	InLoox

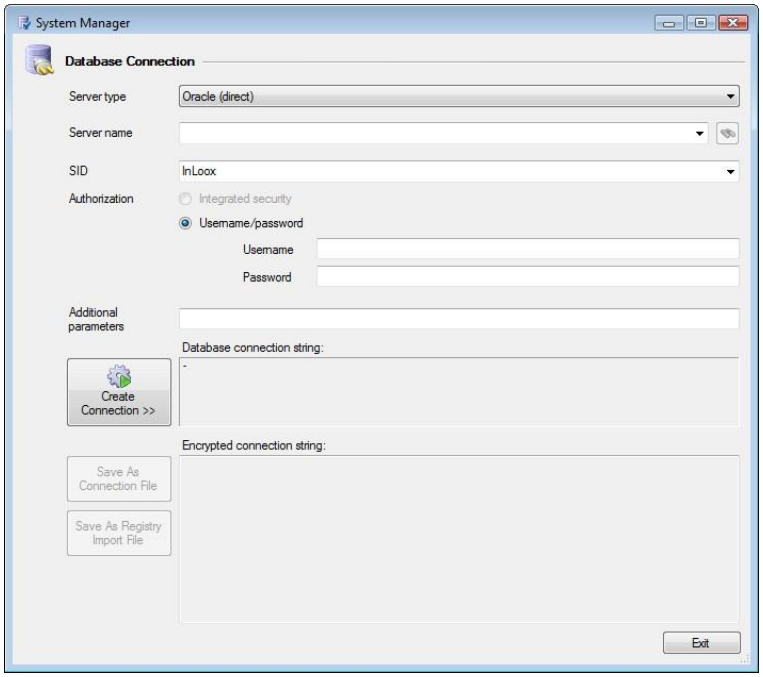
Thus the file „tnsnames.ora“(to find in the file <ORACLE_HOME>/network/admin) was created with the following entries:

```
INLOOX =
 (DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP)(HOST = Server.Domain)(PORT = 1521))
  (CONNECT_DATA =
   (SERVER = DEDICATED)
   (SERVICE_NAME = inloox.domain)
  )
 )
```

Oracle (direct)

The Direct mode is the standard setting of InLoox. All necessary files and settings are installed by InLoox. Furthermore only the SID of the Oracle instance is needed.

The connection key can be generated with the tool “System Manager” or directly with the Setup.



Oracle (client)

For this way of connection the Oracle-Client has to be installed on the computers, where InLoox should be executed.

In contrast to the Direct-Mode the name of the service is needed here (InLoox.Domain).

This connection key can only be generated with the “System Manager” tool.