



# **Project management – integrated into Outlook**

InLoox PM 7.x configuration guide for Oracle Server

An InLoox Whitepaper

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## General information

This document describes the steps to configure and start-up an ORACLE SQL Server (express/standard/Enterprise) with InLoox PM. Moreover a suitable system configuration to use InLoox PM 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 PM 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 PM 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.

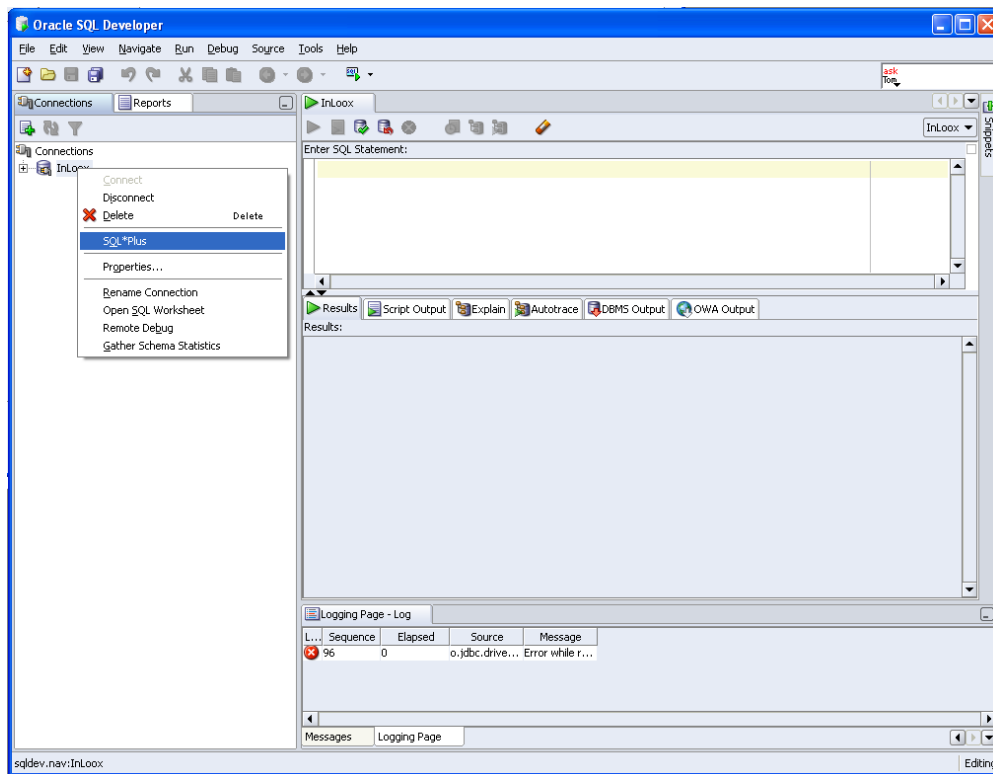
Requirement:



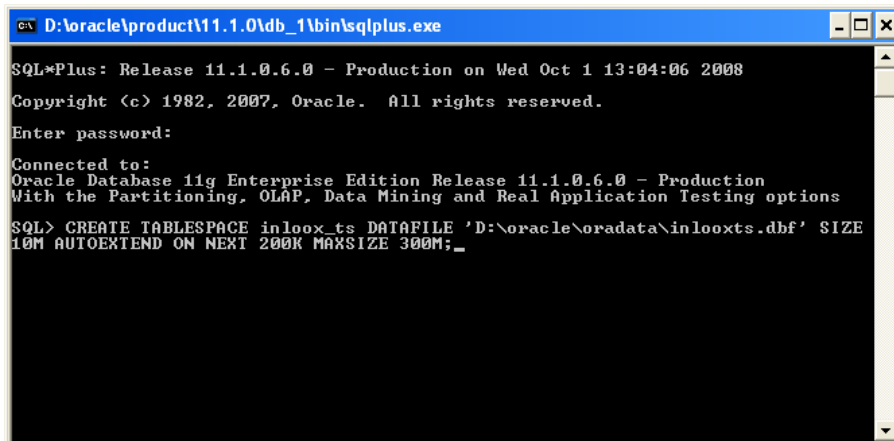
The containing data base has to use the character set: AL32UTF8

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.

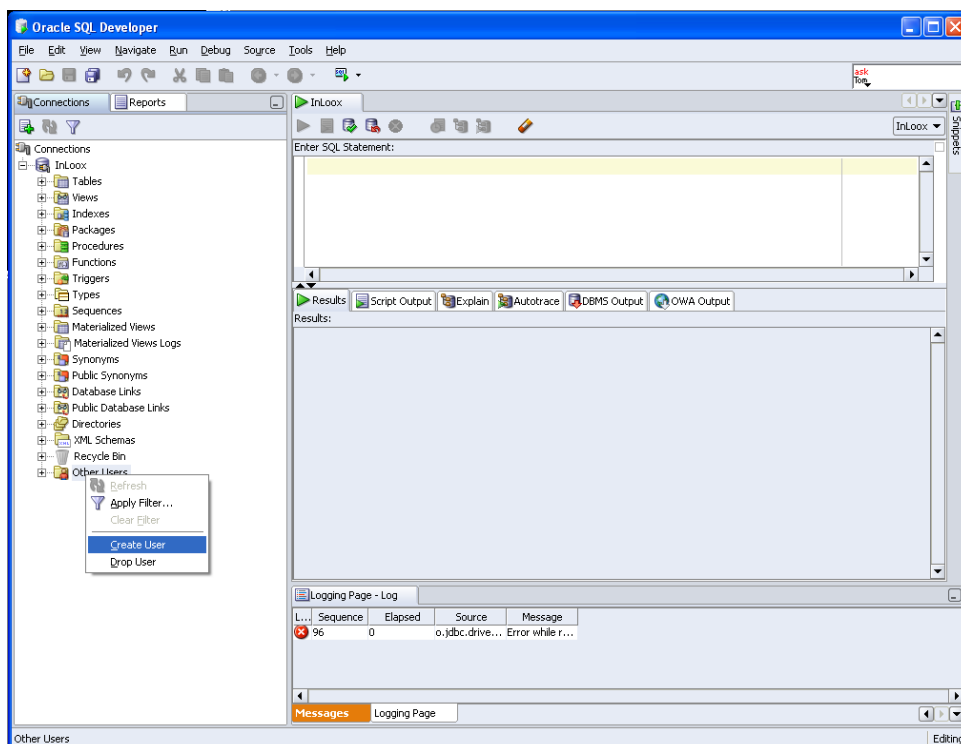


```
C:\D:\oracle\product\11.1.0\db_1\bin\sqlplus.exe

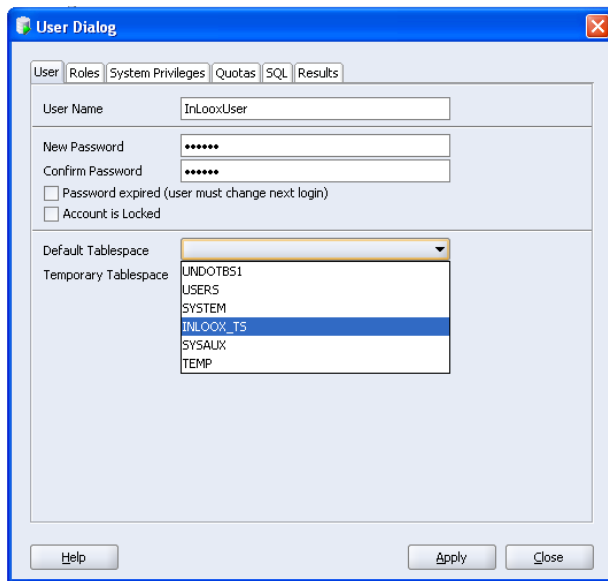
SQL*Plus: Release 11.1.0.6.0 - Production on Wed Oct 1 13:04:06 2008
Copyright (c) 1982, 2007, Oracle. All rights reserved.
Enter password:
Connected to:
Oracle Database 11g Enterprise Edition Release 11.1.0.6.0 - Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
SQL> CREATE TABLESPACE inloox_ts DATAFILE 'D:\oracle\oradata\inlooxts.dbf' SIZE
10M AUTOEXTEND ON NEXT 200K MAXSIZE 300M;_
```

```
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

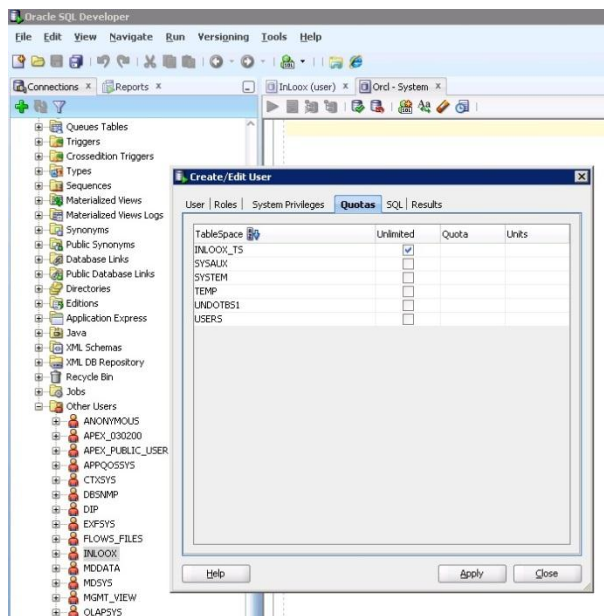


#### 5. Set the permissions

- 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:

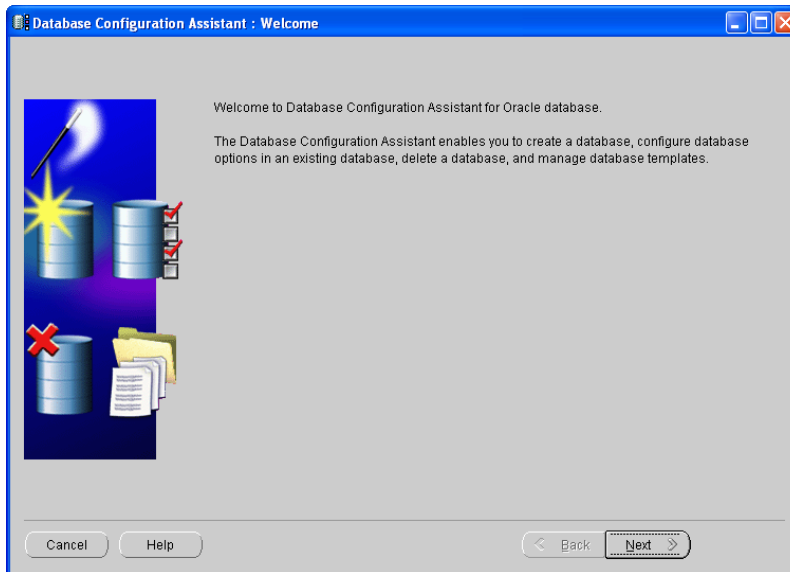
- Server name
- SID
- User name
- Password

## Alternative 2: Create a data base for InLoox PM

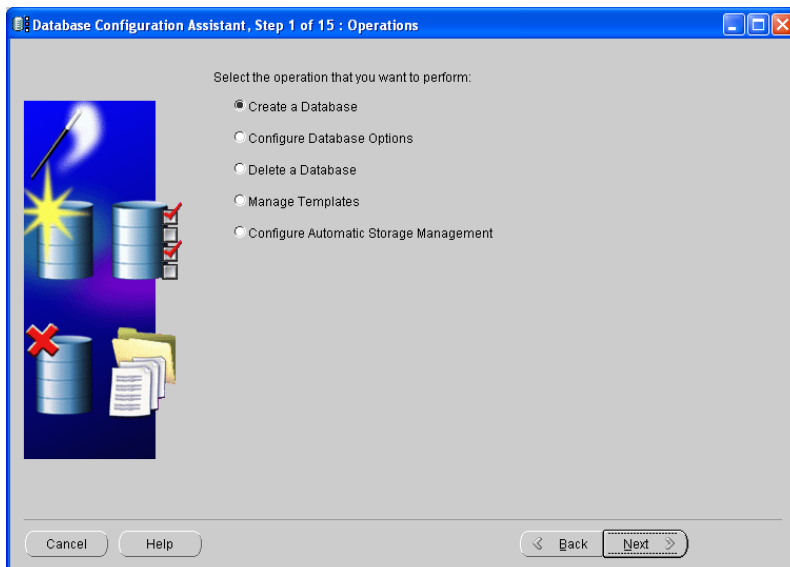
Note that ORACLE Express Edition allows only one database or database instance. Thus the description for creating a new instance is only valid for the Standard and Enterprise version.

To create a new instance, proceed as follows:

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

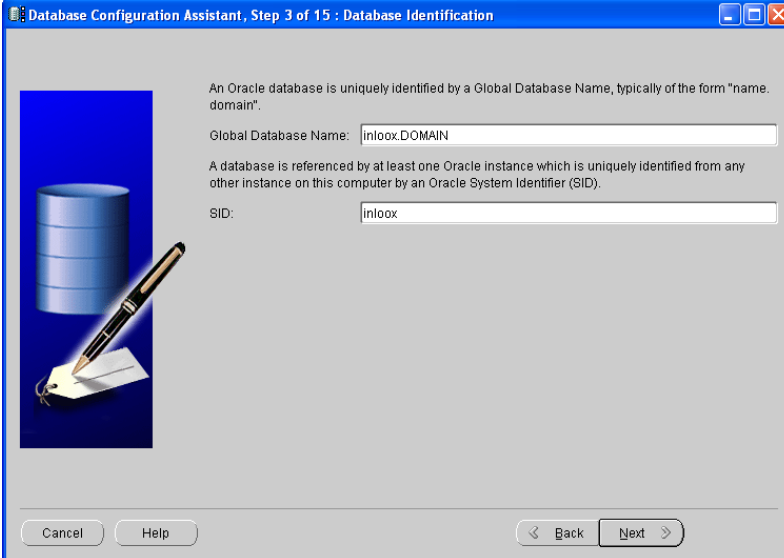


2. Select **Create a Database**.





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.



Database Configuration Assistant, Step 3 of 15: Database Identification

An Oracle database is uniquely identified by a Global Database Name, typically of the form "name.domain".

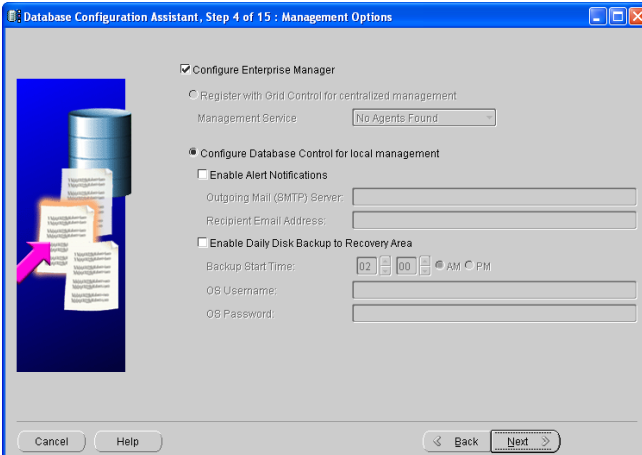
Global Database Name:

A database is referenced by at least one Oracle instance which is uniquely identified from any other instance on this computer by an Oracle System Identifier (SID).

SID:

Cancel Help Back Next

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



Database Configuration Assistant, Step 4 of 15: Management Options

☒ Configure Enterprise Manager

☐ Register with Grid Control for centralized management.

Management Service:

☒ Configure Database Control for local management

☐ Enable Alert Notifications

Outgoing Mail (SMTP) Server:

Recipient Email Address:

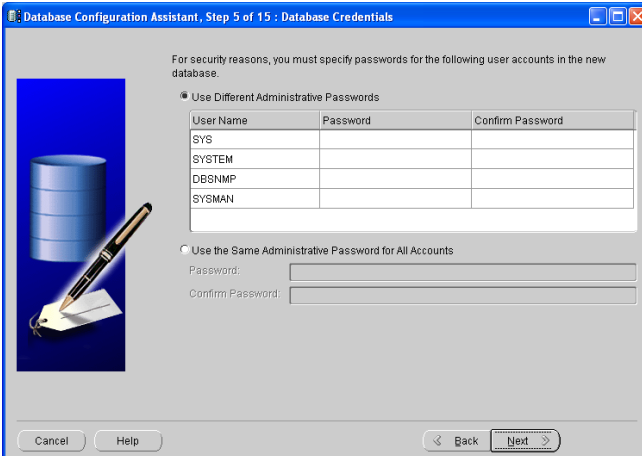
☐ Enable Daily Disk Backup to Recovery Area

Backup Start Time:  :  AM/PM

OS Username:

OS Password:

Cancel Help Back Next



Database Configuration Assistant, Step 5 of 15: Database Credentials

For security reasons, you must specify passwords for the following user accounts in the new database.

☒ Use Different Administrative Passwords

User Name	Password	Confirm Password
SYS		
SYSTEM		
DBSNMP		
SYSMAN		

☐ Use the Same Administrative Password for All Accounts

Password:

Confirm Password:

Cancel Help Back Next

**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


**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:

☐ **Use Oracle-Managed Files**  
Database Area:

 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.

**Database Configuration Assistant, Step 8 of 15 : Recovery Configuration**

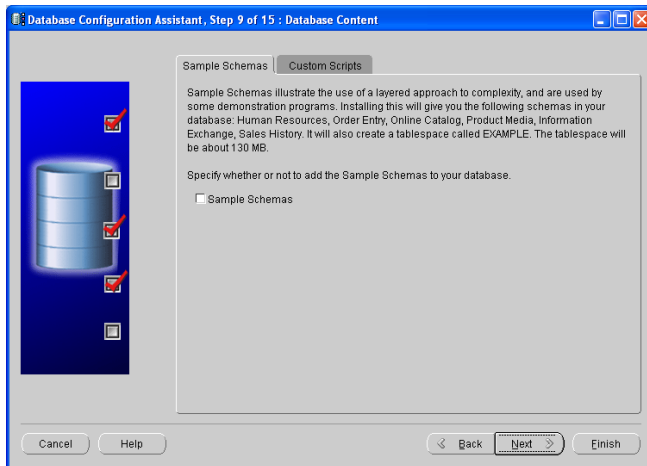
Choose the recovery options for the database:

☒ **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.

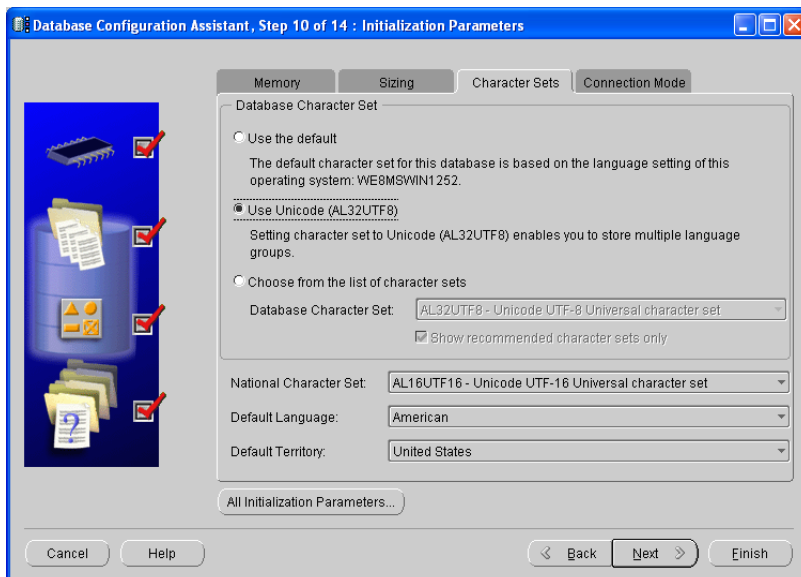
Flash Recovery Area:

Flash Recovery Area Size:

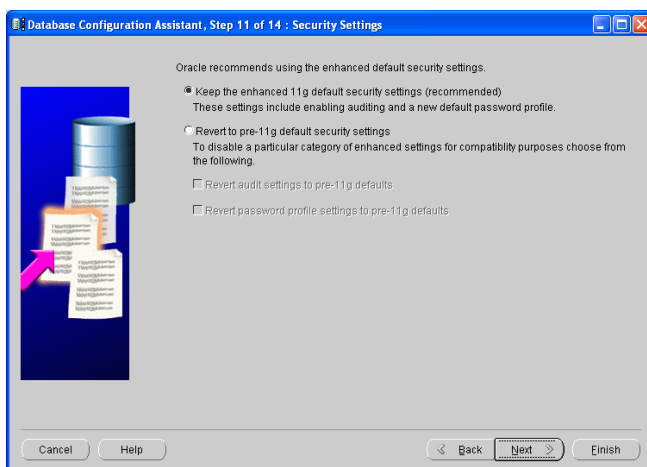
☐ **Enable Archiving**

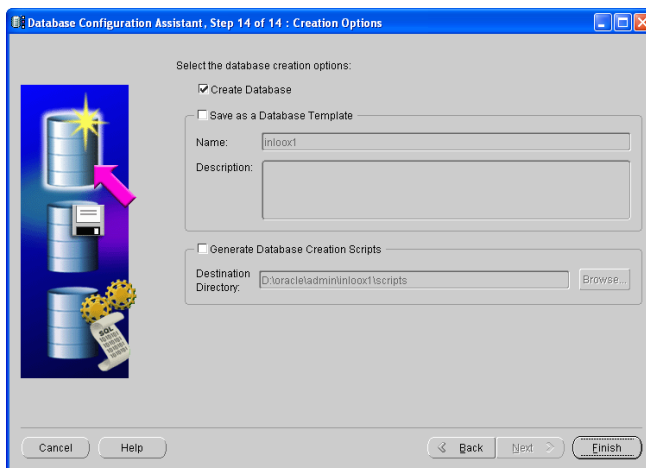
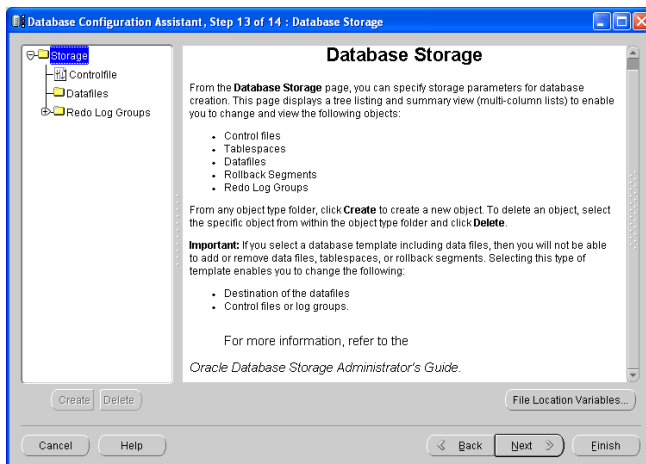
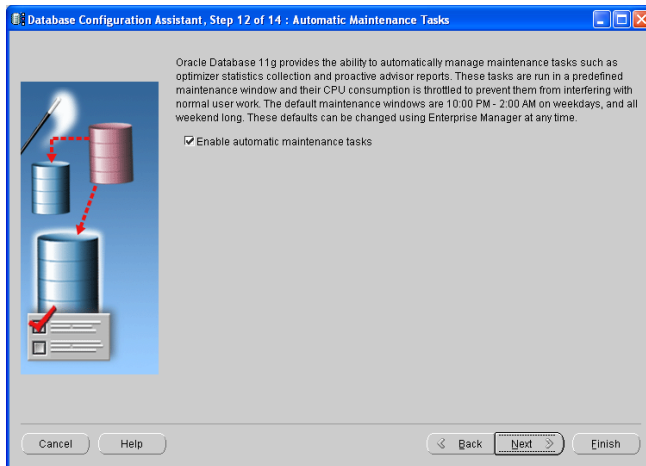


5. At step 10 you have to change the settings for the character set, since InLoox PM uses **Unicode**!



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





## Examine the installation

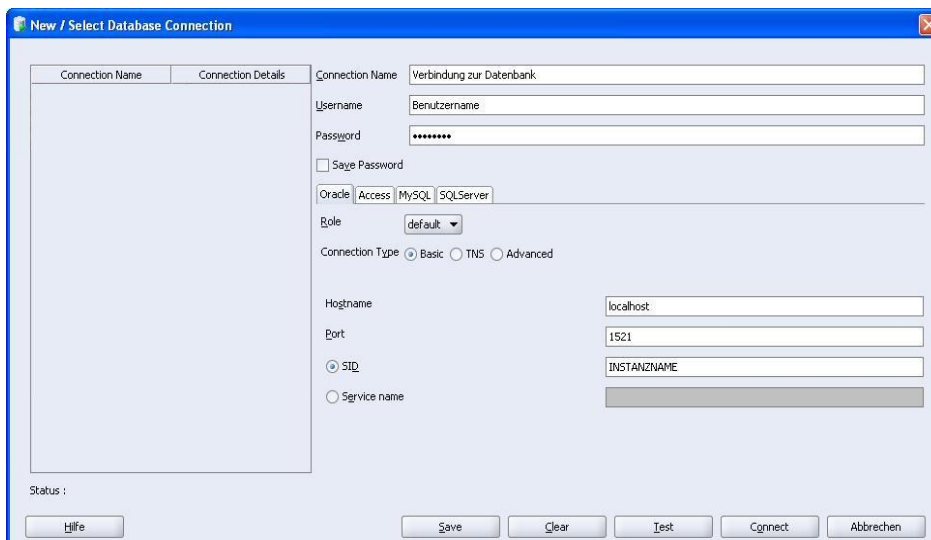
Check if Oracle SQL Server service is running after installation:

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

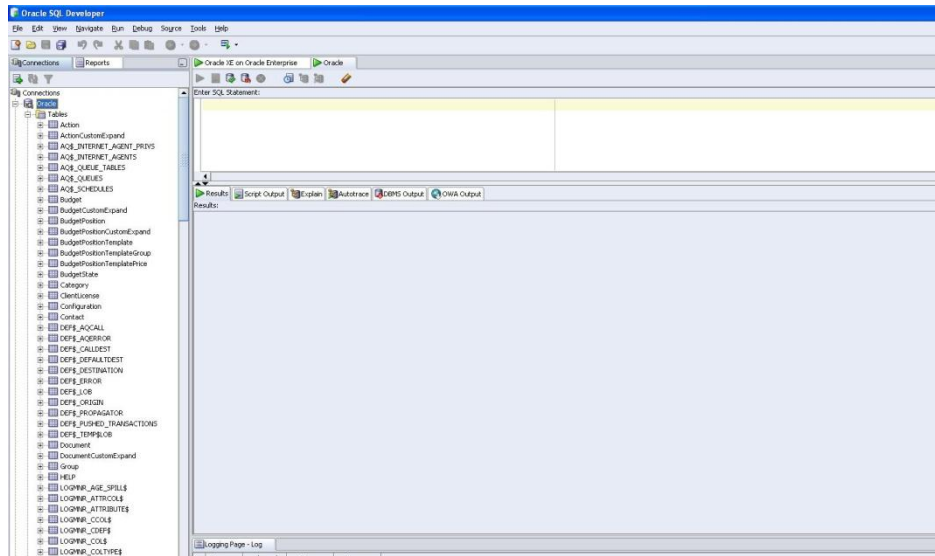


The screenshot shows the 'New / Select Database Connection' dialog box in SQL Developer. The dialog is divided into two tabs: 'Connection Name' and 'Connection Details'. The 'Connection Details' tab is active, showing the following fields and options:

- Connection Name:** Verbindung zur Datenbank
- Username:** Benutzername
- Password:** (masked with asterisks)
- Save Password:** (unchecked)
- Oracle Access:** MySQL, SQLServer
- Role:** default
- Connection Type:** Basic (selected), TNS, Advanced
- Hostname:** localhost
- Port:** 1521
- SID:** INSTANZNAME
- Service name:** (empty)

At the bottom, there is a 'Status:' label and a row of buttons: 'Hilfe', 'Save', 'Clear', 'Test', 'Connect', and 'Abbrechen'. The 'Test' button is highlighted.

## 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 PM client and the database.

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

### Fundamentals

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

Global database name: InLoox.Domain

SID: InLoox

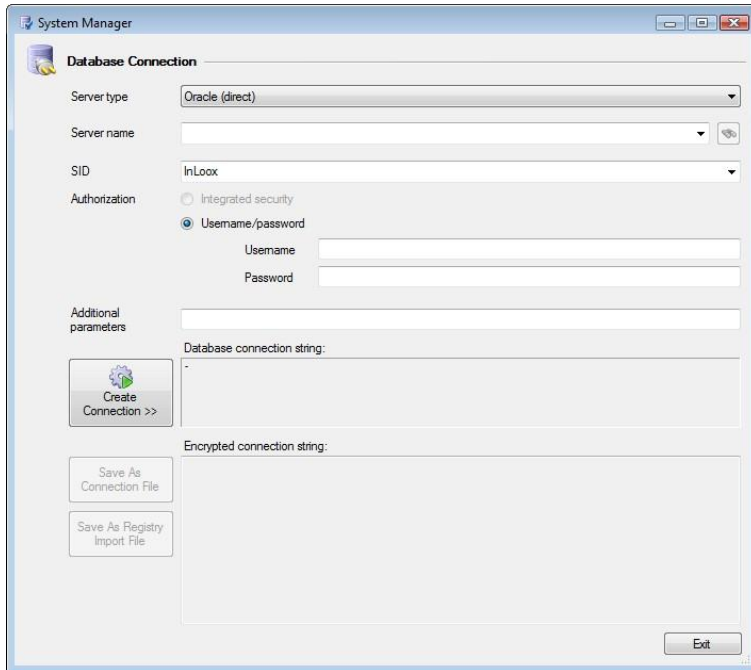
Thus the file „tnsnames.ora“ (to find in the file <ORACLE\_HOME>/network/admin) was created with the following entries:

```
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 PM. All necessary files and settings are installed by InLoox PM. 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 PM 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.

