



ORACLE®
DATABASE

Agenda

1. Was ist dbca?
2. Erstellen der DB
3. Nacharbeiten

Agenda

1. Was ist dbca?
2. Erstellen der DB
3. Nacharbeiten

Was ist dbca

- dbca (DataBase Creation Assistant) ist ein grafisches Tool von ORACLE, welches zum Erstellen von Datenbanken verwendet werden kann
- Es können Templates erstellt werden, damit dbca im Silent mode verwendet werden kann um DB's zu erstellen
- dbca ist ein Script Generator
- Er liegt im `${ORACLE_HOME}/bin`

```
$ ${ORACLE_HOME}/bin/dbca
```

Agenda

1. Was ist dbca?
2. Erstellen der DB
3. Nacharbeiten

Erstellen der DB 1/16

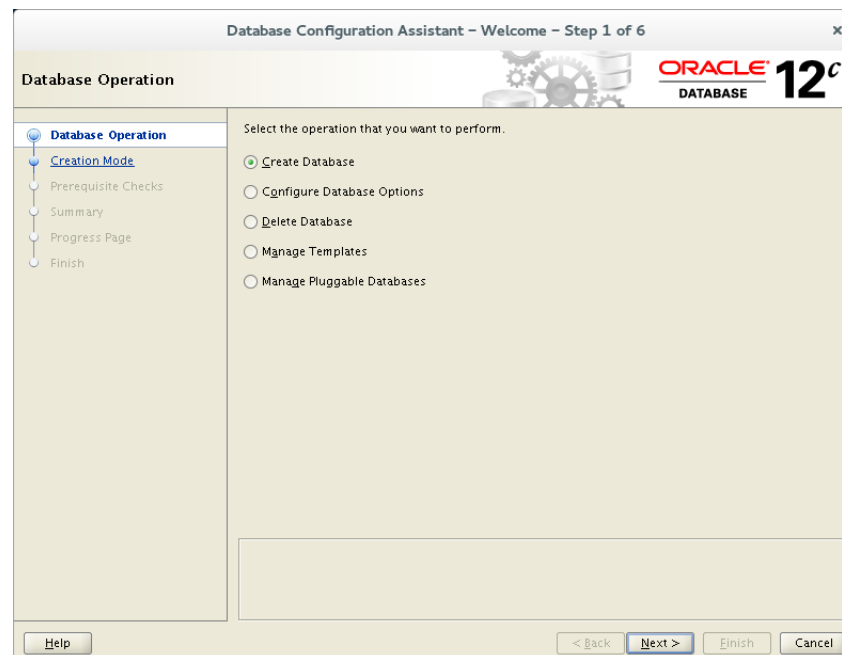
- Umgebung auf das entsprechende ORACLE_HOME setzen

```
$ rdbms_12102_ee
```

- dbca starten

```
$ ${ORACLE_HOME}/bin/dbca
```

- Create Database auswählen



Erstellen der DB 2/16

- Advanced Mode

Database Configuration Assistant – Create Database – Step 2 of 14

Creation Mode

Database Operation

Creation Mode

Database Template

Database Identification

Management Options

Database Credentials

Storage Locations

Database Options

Initialization Parameters

Creation Options

Prerequisite Checks

Summary

Progress Page

Finish

☐ Create a database with default configuration

Global Database Name:

Storage Type:

Database Files Location:

Fast Recovery Area:

Database Character Set:

Administrative Password:

Confirm Password:

☒ Create As Container Database

Pluggable Database Name:

☒ Advanced Mode

Help

< Back

Next >

Finish

Cancel

Erstellen der DB 3/16

- Custom Database

Database Configuration Assistant – Create Database – Step 3 of 14

Database Template

Templates that include datafiles contain pre-created databases. They allow you to create a new database in minutes, as opposed to an hour or more. Use templates without datafiles only when necessary, such as when you need to change attributes like block size, which cannot be altered after database creation.

Select a template for your database.

Select	Template	Includes Datafiles
<input type="radio"/>	General Purpose or Transaction Processing	Yes
<input checked="" type="radio"/>	Custom Database	No
<input type="radio"/>	Data Warehouse	Yes

Show Details...

Help < Back Next > Finish Cancel

Erstellen der DB 4/16

- Beliebigen Namen eingeben (max. 8 Stellen)

The screenshot shows the 'Database Configuration Assistant - Create Database - Step 4 of 15' window. The 'Database Identification' step is selected in the left-hand navigation pane. The main area contains instructions and input fields for the database name and SID. The 'Global Database Name' and 'SID' fields both contain 'EE12DBCA'. The 'Create As Container Database' section has three options: 'Create As Container Database' (unchecked), 'Create an Empty Container Database' (unselected), and 'Create a Container Database with one or more PDBs' (selected). The 'Number of PDBs' is set to 1, and the 'PDB Name' field is empty. The bottom of the window features a 'Help' button and navigation buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

Database Configuration Assistant - Create Database - Step 4 of 15

Database Identification

Provide the identifier information required to access the database uniquely. An Oracle database is uniquely identified by a Global database name, typically of the form "name.domain". Additionally, a database is referenced by at least one Oracle instance which is uniquely identified from any other instance on this system by an Oracle system identifier (SID).

Global Database Name: EE12DBCA

SID: EE12DBCA

☐ Create As Container Database

Creates a database container for consolidating multiple databases into a single database and enables database virtualization. A container database (CDB) can have zero or more pluggable databases (PDB).

☐ Create an Empty Container Database

☒ Create a Container Database with one or more PDBs

Number of PDBs: 1

PDB Name:

Help < Back Next > Finish Cancel

Erstellen der DB 5/16

- Default lassen

Database Configuration Assistant – Create Database – Step 5 of 14

Management Options

Specify the management options for the database.

☒ **Configure Enterprise Manager (EM) Database Express**

EM Database Express Port: 5500

☐ Register with Enterprise Manager (EM) Cloud Control

QMS Host:

QMS Port:

EM Admin Username:

EM Admin Password:

Help < Back Next > Finish Cancel

Erstellen der DB 6/16

- Passwort für sys und system setzen

Database Configuration Assistant – Create Database – Step 6 of 14

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		

☒ Use the Same Administrative Password for All Accounts

Password:

Confirm Password:

Messages:

Password: The password entered does not conform to the Oracle recommended standards. A password should have minimum of 8 characters in length. In addition, the password must contain at least one upper case character, one lower case character and one digit.

Help < Back Next > Finish Cancel

Erstellen der DB 7/16

- Bestehenden Listener auswählen

Database Configuration Assistant – Create Database – Step 7 of 15

Network Configuration

Database Operation
Creation Mode
Database Template
Database Identification
Management Options
Database Credentials
Network Configuration
Storage Locations
Database Options
Initialization Parameters
Creation Options
Prerequisite Checks
Summary
Progress Page
Finish

Listener Selection

Listeners from current Oracle home are listed below. To create a new listener in current Oracle home, specify the listener name and port.

Select Listeners.

Select	Name	Port	Oracle Home	Status
<input checked="" type="checkbox"/>	LISTENER	1521	/u01/app/oracle/product/11.2.0/xe	Up

☐ Create a New Listener

Listener Name:

Listener Port:

Target Oracle Home: /u01/app/oracle/product/12.1.0.2

Help < Back Next > Finish Cancel

Erstellen der DB 8/16

- Wichtig

Database Configuration Assistant – Create Database – Step 8 of 15

Storage Locations

Database files Storage Type: File System

☐ Use Database File Locations from Template

☒ Use Common Location for All Database Files

File Location: /u02/oradata [Browse...](#)

☒ Use Oracle-Managed Files [Multiplex Redo Logs and Control Files...](#)

Choose the recovery options for the database.

Recovery files Storage Type: File System

☒ Specify Fast Recovery Area

Fast Recovery Area: /u04/fra [Browse...](#)

Fast Recovery Area Size: 4815 MB

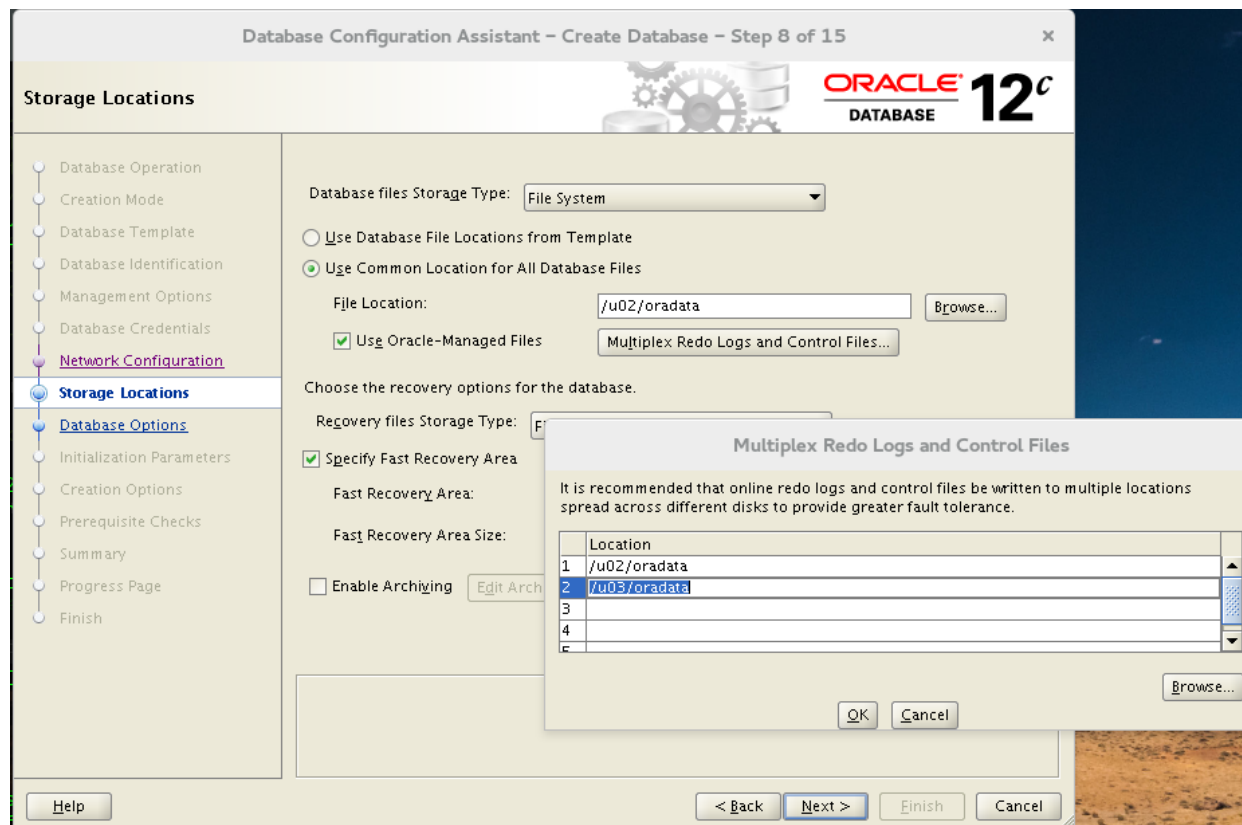
☐ Enable Archiving [Edit Archive Mode Parameters](#)

[File Location Variables...](#)

[Help](#) [< Back](#) [Next >](#) [Finish](#) [Cancel](#)

Erstellen der DB 9/16

- Klick auf “Multiplex redo Logs and Control Files”
- Per Default würde dbca diese Files nicht duplizieren!



Erstellen der DB 10/16

- Nur JVM auswählen

Database Configuration Assistant – Create Database – Step 9 of 15

Database Options

Database Components | Sample Schemas

Select the standard database components you want to configure for use in your database. Oracle recommends that you always install these components in your database. Deselecting these components may cause you to no longer be able to choose some components on the previous page.

<input checked="" type="checkbox"/> Oracle JVM	SYSTEM
<input type="checkbox"/> Oracle Text	SYSAUX
<input type="checkbox"/> Oracle Multimedia	SYSAUX
<input type="checkbox"/> Oracle OLAP	SYSAUX
<input type="checkbox"/> Oracle Spatial	SYSAUX
<input type="checkbox"/> Oracle Label Security	SYSTEM
<input type="checkbox"/> Oracle Application Express	SYSAUX
<input type="checkbox"/> Oracle Database Vault	SYSAUX

< Back Next > Finish Cancel

Erstellen der DB 11/16

- Parameter Teil 1

Database Configuration Assistant – Create Database – Step 10 of 15

Initialization Parameters

Database Operation
Creation Mode
Database Template
Database Identification
Management Options
Database Credentials
Network Configuration
Storage Locations
Database Options
Initialization Parameters
Creation Options
Prerequisite Checks
Summary
Progress Page
Finish

Memory Sizing Character Sets Connection Mode

☒ Typical Settings

Memory Size (SGA and PGA): 1024 MB
Percentage: 27 %
390 MB 3776 MB

☒ Use Automatic Memory Management [Show Memory Distribution...](#)

☐ Custom Settings

Memory Management: Automatic Shared Memory Management

SGA Size: -1 M Bytes

PGA Size: -1 M Bytes

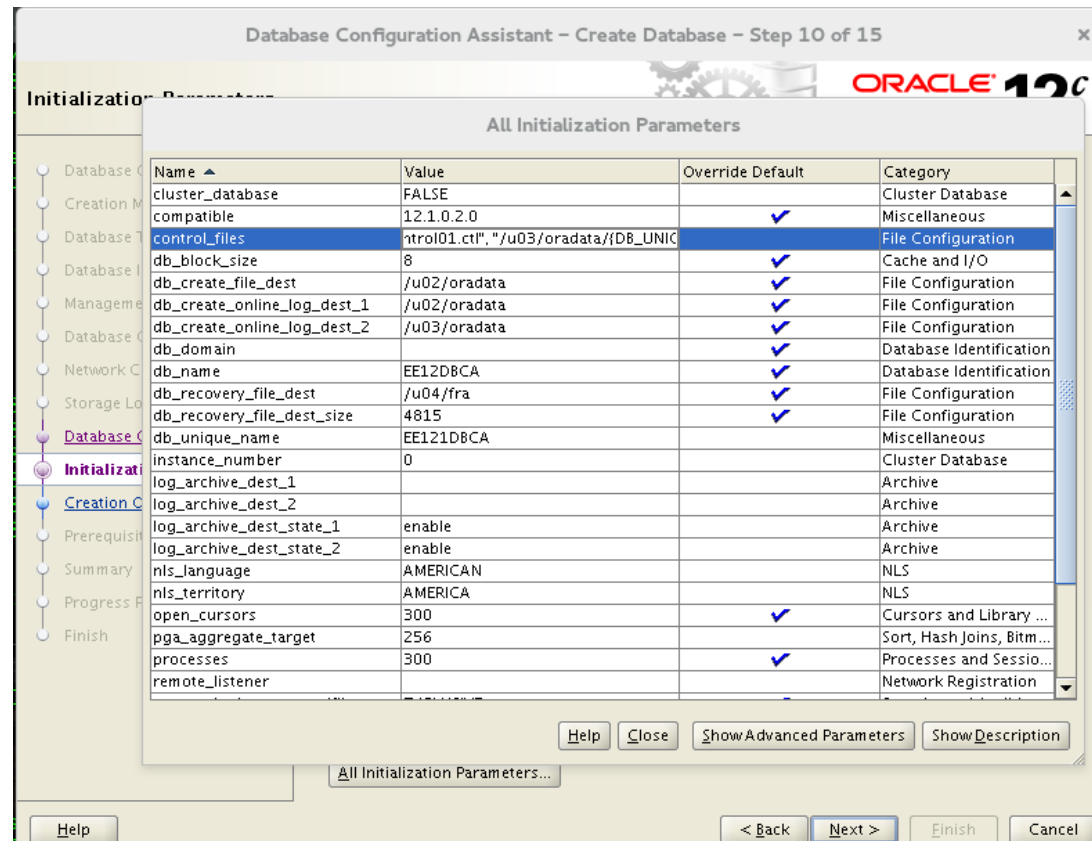
Total Memory for Oracle: 1480 MB

[All Initialization Parameters...](#)

Help < Back Next > Finish Cancel

Erstellen der DB 12/16

- Parameter Teil 2
- Klick auf All initialization Parameters
 - Wert von control_file 2 anpassen nach /u03/oradata/...



Erstellen der DB 13/16

- “Generate Scripts” auswählen
 - Damit kann z.B. ein eigenes Scriptset generiert werden oder es ist interessant zu schauen was gemacht wird

Database Configuration Assistant – Create Database – Step 11 of 15

Creation Options

Select the database creation options.

☒ Create Database

☐ Save as a Database Template

Name: EE12DBCA

Description: This is a template created from an existing template - New Database.

☒ Generate Database Creation Scripts

Destination Directory: /u01/app/oracle/admin/EE12DBCA/scripts [Browse...](#)

[Customize Storage Locations...](#)

[Help](#) [< Back](#) [Next >](#) [Finish](#) [Cancel](#)

Erstellen der DB 14/16

- Summary kontrollieren

Database Configuration Assistant – Create Database – Step 13 of 15

Summary

Database Configuration Assistant: Summary

Create Database – Summary

Database Configuration Summary

Global Database Name: EE12DBCA
Database Configuration Type: Single Instance
SID: EE12DBCA
Create As Container Database: No
Storage Type: File System
Memory Configuration Type: Automatic Memory Management
Template Name: Custom Database

Database Configuration Details

Database Components

Component	Selected
Oracle JVM	true
Oracle Text	false
Oracle Multimedia	false
Oracle OLAP	false
Oracle Spatial	false

Help < Back Next > Finish Cancel

Erstellen der DB 15/16

- Kaffee trinken gehen ☺

Database Configuration Assistant – Create Database – Step 14 of 15

Progress Page

Progress
Database "EE1ZDBCA" creation in progress...

3%

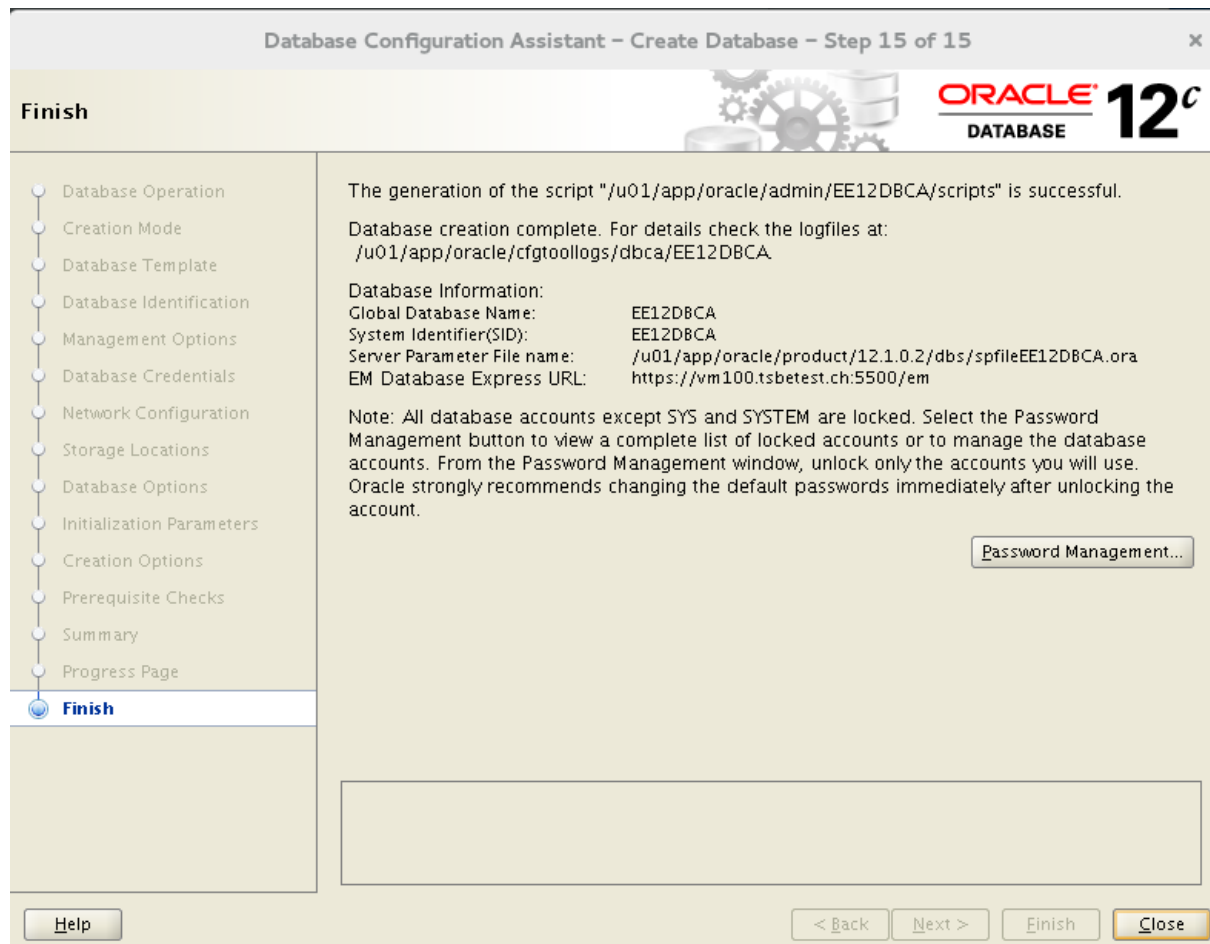
Steps	Status
Creating and starting Oracle instance	In Progress
Creating database files	
Creating data dictionary views	
Adding Oracle JVM	
Completing Database Creation	

Activity Log Alert Log

Help < Back Next > Finish Cancel

Erstellen der DB 16/16

- Und die Zusammenfassung...



Agenda

1. Was ist dbca?
2. Erstellen der DB
3. Nacharbeiten

Nacharbeiten 1/2

- In diesem Beispiel ist der DB Name EE12DBCA
- Eintrag in oratab auf automatisches Starten einstellen

```
EE12DBCA:/u01/app/oracle/product/12.1.0.2:Y
```

- Basenv neu sourcen

```
$ basenv  
oder  
$ . basenv.bash  
oder ausloggen und neu einloggen
```

- Umgebung auf die neue ORACLE_SID umstellen

```
$ ee12dbca
```

- Verschieben des erstellten Passwort Files und des spfiles ins Admin/pfile Directory und Verlinken der Files

```
$ mv ${ORACLE_HOME}/dbs/orapwEE12DBCA $cda/pfile  
$ mv ${ORACLE_HOME}/dbs/spfileEE12DBCA.ora $cda/pfile  
$ ln -s $cda/pfile/orapwEE12DBCA ${cdh}/dbs  
$ ln -s $cda/pfile/spfileEE12DBCA.ora ${cdh}/dbs
```


Fragen?

