

ORACLE®

# Application Express 5

## New Features Überblick

Jürgen Vester  
DOAG Regio, 15. Mai 2014

ORACLE®  
DATABASE 12<sup>c</sup>

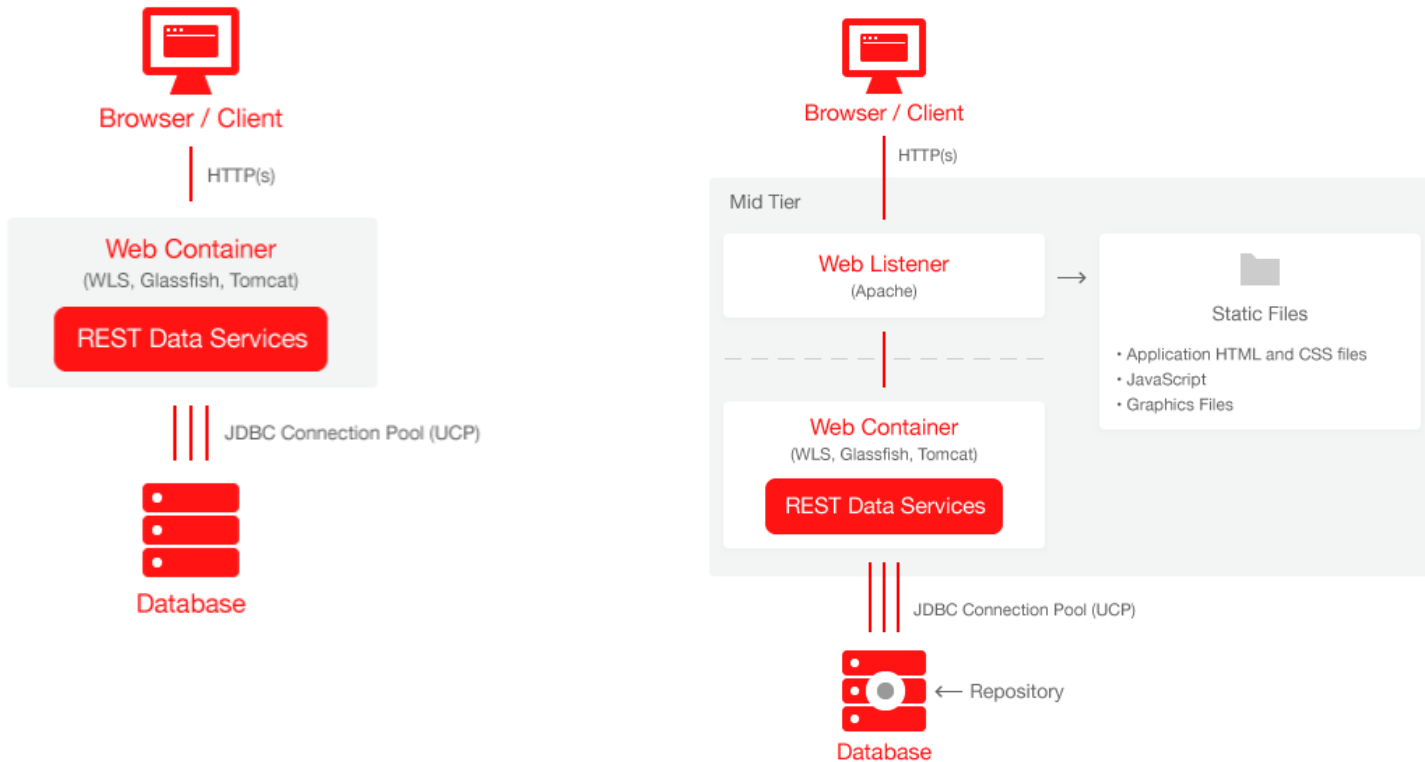


Plug into the **Cloud.**

# Agenda

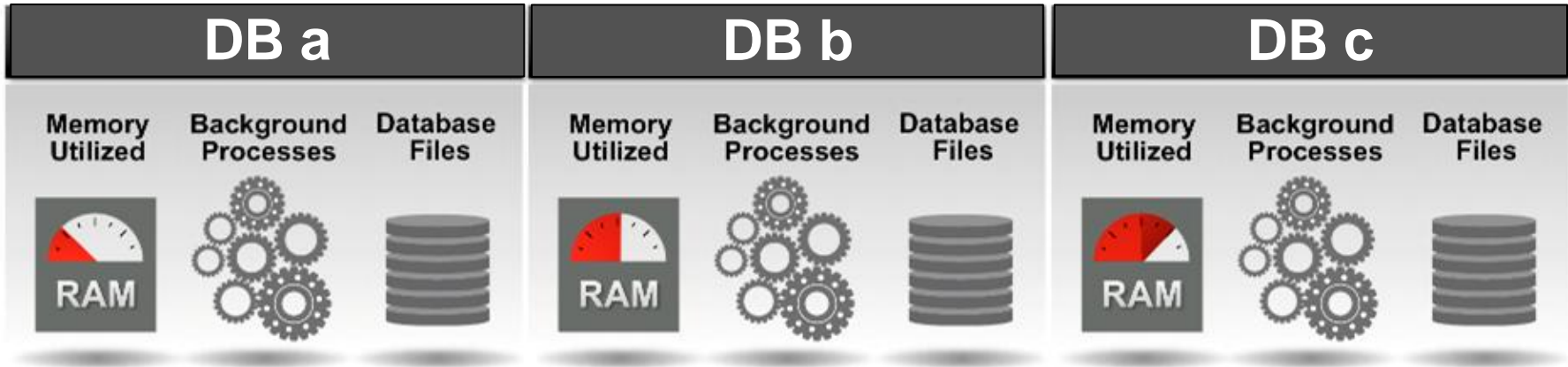
- Oracle REST Data Services 1'
- [Apex Multitenant Environment](#) 5'
- Apex 5.0 New Features 5'
- Demo 10'
- Sonstiges 10'
- Zusammenfassung 1'

# Oracle REST Data Services (APEX\_Listener)



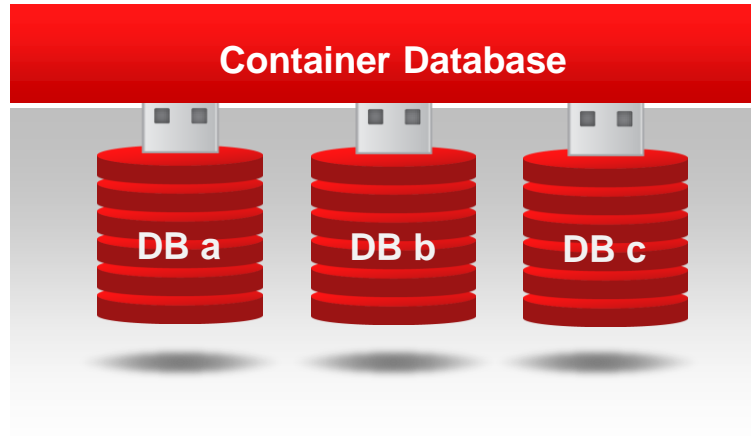
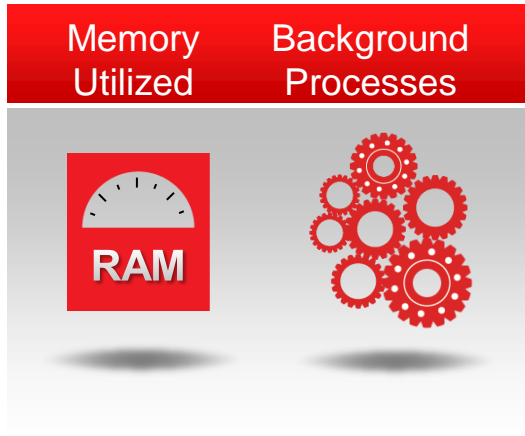
# Klassische Datenbank Architektur

Memory und Prozesse auf Instanz-Level



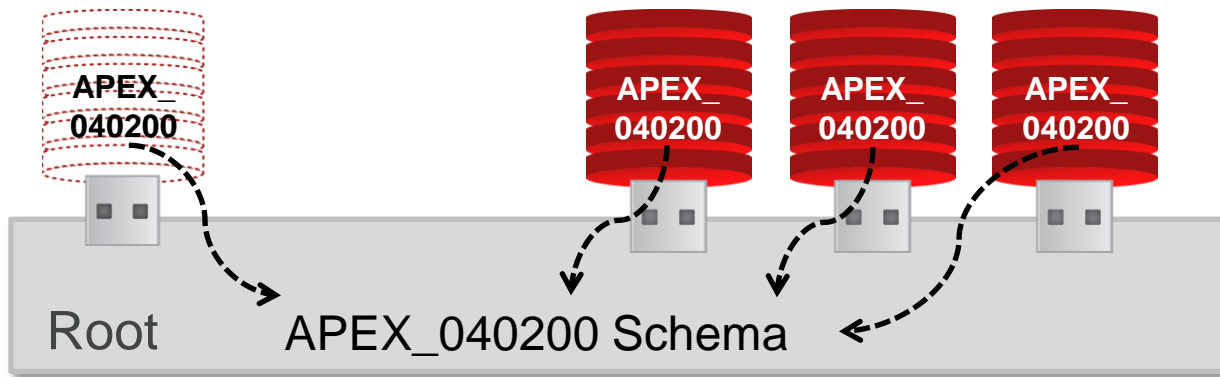
# 12c Multitenant Datenbank Architektur

Memory und Prozesse werden nur auf Container-Level



# Standard “Default” 12c Installation

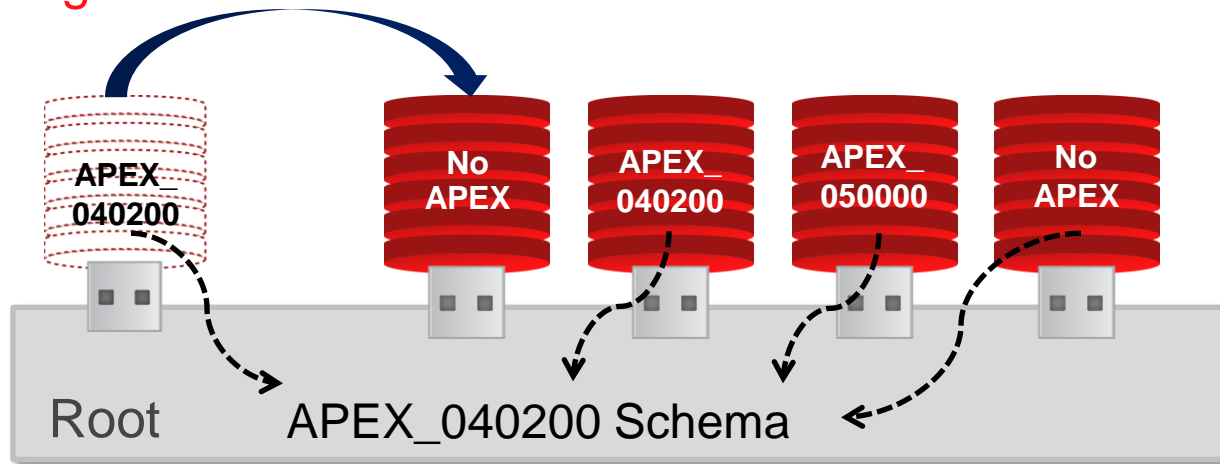
Application Express 4.2 installed in CDB (Container DB)



- APEX 4.2 is installed into CDB\$Root and PDB\$Seed
- Each PDB contains meta-data linked objects to APEX Schema in Root
- Each PDB also has an APEX Schema which holds local tables

# Non-Standard Configuration

## Installing Different Versions into PDBs



- Uninstall Application Express from the CDB
- Log into PDB, run *apexins.sql* or *apxrtins.sql*

# APEX 5.0 New Features

- **Page Designer**

New Page definition **IDE** which incorporates tree controls, drag and drop layout editor, and a property editor.

- **Multiple Interactive Reports**

Allow any number of Interactive Reports to be defined on a single page.

- **Modal Dialog**

Enhance the ability to declaratively define modal dialogs.

- **Navigation Lists**

Ability to define hierarchical lists for navigation, with pull-down menus and sub-menus.

- **Mobile**

Enhanced responsive tables, including reflow tables and column toggles, and the introduction of panels.

- **Calendar**

New calendar region which allows duration based events, improved functionality, and better control over drag and drop operations.

- **Universal Theme**

A new central theme which readily allows developers to customize simply using CSS files.

- **HTML5**

Improve native capabilities for handling HTML5 constructs.

- **Application Builder Security**

Allow different authentication schemes to be used to control developer access to the Application Builder.

- **Numerous functional improvements**



# Page Designer

The screenshot displays the Oracle Page Designer interface for editing a page titled "Emp". The top navigation bar shows "Application 13226" and "Page Designer". A toolbar contains icons for undo, redo, zoom, and other editing functions.

The main workspace is divided into two tabs: "Grid Layout" and "Text Editor". The "Grid Layout" tab is active, showing a visual representation of the page structure. The page is organized into regions:

- Region Position 01:** Contains a "Header [Global Page]" with "Previous" (MENU [Global Page]) and "Next" (LOGOUT [Global Page]) buttons. Below the header are sections for "Items", "Region Content" (Right of Interactive Report Search Bar), and "Sub Regions".
- Region Position 08:** Contains a "Body" with an "EMP" component, "Type: List View", "Start New Row: Yes", and "Right of Interactive Report Search Bar".

The left sidebar shows a tree view of the page structure, including "Emp", "Before Header", "After Header", "Before Regions", "Regions", "Region Position 01", "Header [Global Page]", "Region Buttons", "MENU [Global Page]", "LOGOUT [Global Page]", "Body", "EMP", "Region Position 08", and "Footer [Global Page]".

The right sidebar is the "Property Editor - Region" for the selected "EMP" component. It includes:

- Identification:** Title: EMP, Type: List View.
- Source:** SQL Statement: 

```
select empno, ename, hiredate, job, sal, dname, loc from emp e join dept d on (e.deptno = d.deptno)
```
- Settings:** Features:  Advanced Formatting,  Show Image,  Show List Divider.

At the bottom left, there are sections for "Dynamic Actions" (with a mouse cursor), "Processing", and "Utilized Shared Components".

# Modal Dialog

The screenshot displays a web application titled "Sample Database Application" with a navigation menu including Home, Customers, Products, Orders, and Reports. The current page is "Product Order Tree" under the Reports section. A modal dialog titled "Sample Database Application - Order Details" is open, showing information for "Order #2".

**Order #2** (Buttons: Cancel, Delete, Apply Changes, <, >)

Customer Info: John Dulles, 45020 Aviation Drive, Sterling, VA 20166

Order Date: 17-DEC-2013 07:21AM


Order Total: \$2,380.00

Sales Rep: DEMO (dropdown menu)

Tags: LARGE ORDER

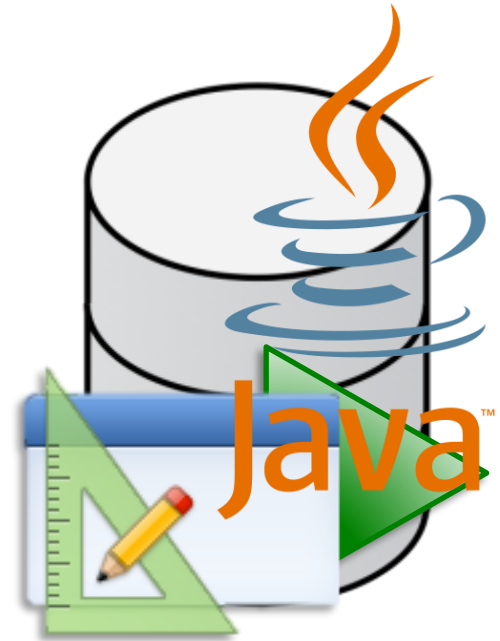
2 of 10

**Items for Order #2** (Buttons: Delete Checked Items, Add Item to Order)

<input type="checkbox"/>	Product Name ▲	Quantity	Unit Price	Subtotal
<input type="checkbox"/>	 Bag	4	\$125.00	\$500.00

# Oracle12c für Entwickler

- SQL LIMIT und OFFSET Clauses
- Identity Columns und Sequences as Default
- PL/SQL in WITH-Klausel
- 32k VARCHAR
- Valid Time Temporal
- SQL Pattern Matching
- Oracle Text
- Und vieles mehr ...



# SQL "Row Limit" Klausel

## Zwei Beispiele ...

- Sortiere nach "SAL" aufsteigend und gib die ersten 5 Zeilen zurück

```
SELECT empno, ename, sal FROM emp
ORDER BY sal ASC
FETCH FIRST 5 ROWS ONLY;
```

- Sortiere nach "SAL" absteigend, überspringe 3 Zeilen und gib dann die nächsten drei Zeilen zurück

```
SELECT empno, ename, sal FROM emp
ORDER BY sal DESC
OFFSET 3 ROWS FETCH FIRST 3 ROWS ONLY;
```

# APEX 5.0 testen

## Oracle Application Express 5.0 Early Adopter 1

- Request Workspace: <http://apexea.oracle.com>
- Aktuelle Informationen nach Anmeldung am Workspace
  - Feature Descriptions:  
<http://apex.oracle.com/pls/apex/f?p=65339>
  - Early Adopter Public Feedback  
<https://apexea.oracle.com/pls/apex/f?p=4840>
- Statement of Directions  
<http://www.oracle.com/technetwork/developer-tools/apex/application-express/apex-sod-087560.html>

Plug into the **Cloud.**

# Oracle Database In-Memory Option Launch

Wir laden Sie herzlich ein, am **17. Juni** mit dabei zu sein, wenn **Andy Mendelsohn**, Head of Database Development, die neue, bahnbrechende Oracle Database In-Memory Option und weitere innovative Oracle Datenbank 12c Funktionen vorstellt.



**Registrieren Sie sich jetzt.**

**17. Juni 2014, 10-15 Uhr**

Radisson Blu Hotel

60486 Frankfurt am Main

**[www.oracle.com/goto/de/dbim](http://www.oracle.com/goto/de/dbim)**

**Hardware and Software**

**ORACLE**

**Engineered to Work Together**