

Überblick über APEX

Carolin Hagemann



BASEL ■ BERN ■ BRUGG ■ DÜSSELDORF ■ FRANKFURT A.M. ■ FREIBURG I.BR. ■ GENÈVE
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trivadis
makes IT easier. ■ ■ ■

■ Vorstellung



- Carolin Hagemann
- Consultant
(Application Development)
- Trivadis GmbH

- Oracle APEX
- PL/SQL-Entwicklung
- Applikationsmodernisierung

Wer verwendet APEX bereits?

■ AGENDA

Was ist APEX?

Welche Arten von Applikationen kann ich erstellen?

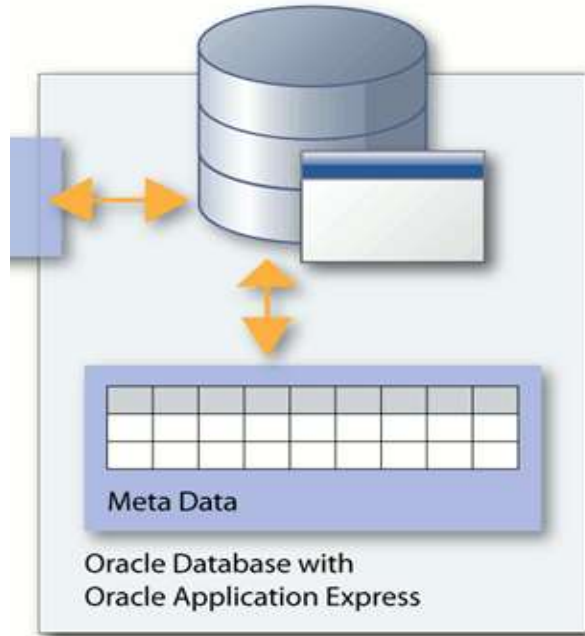
Wie baue ich eine Applikation auf?

Wie funktioniert das Deployment?

Zusammenfassung

Was ist APEX?

■ Die Architektur



Meta-Tabellen

Datenbankoptionen

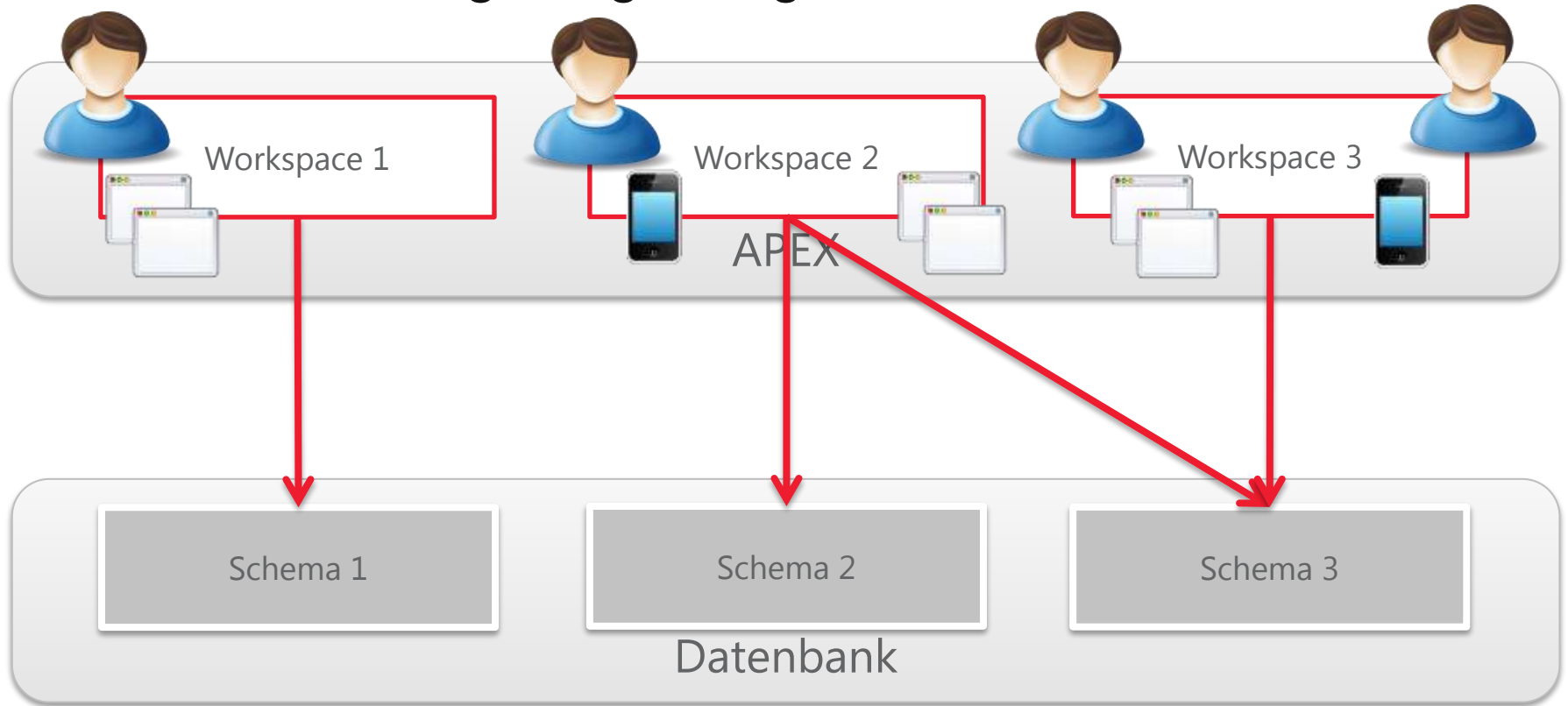
Browserbasiert

„Stateless“

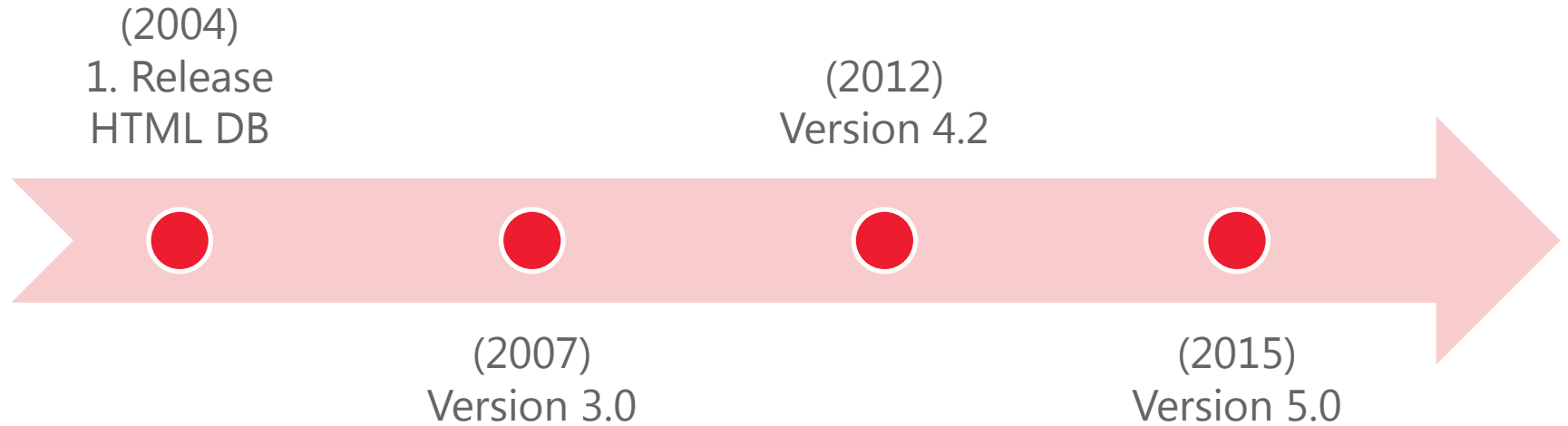
Webtechnologien

Assistentengestützte
Entwicklung

Die Entwicklungsumgebung



■ Zeitachse



■ Empfehlungen für APEX 5.0



Oracle DB 12c



Mozilla Firefox 35



Google Chrome 40



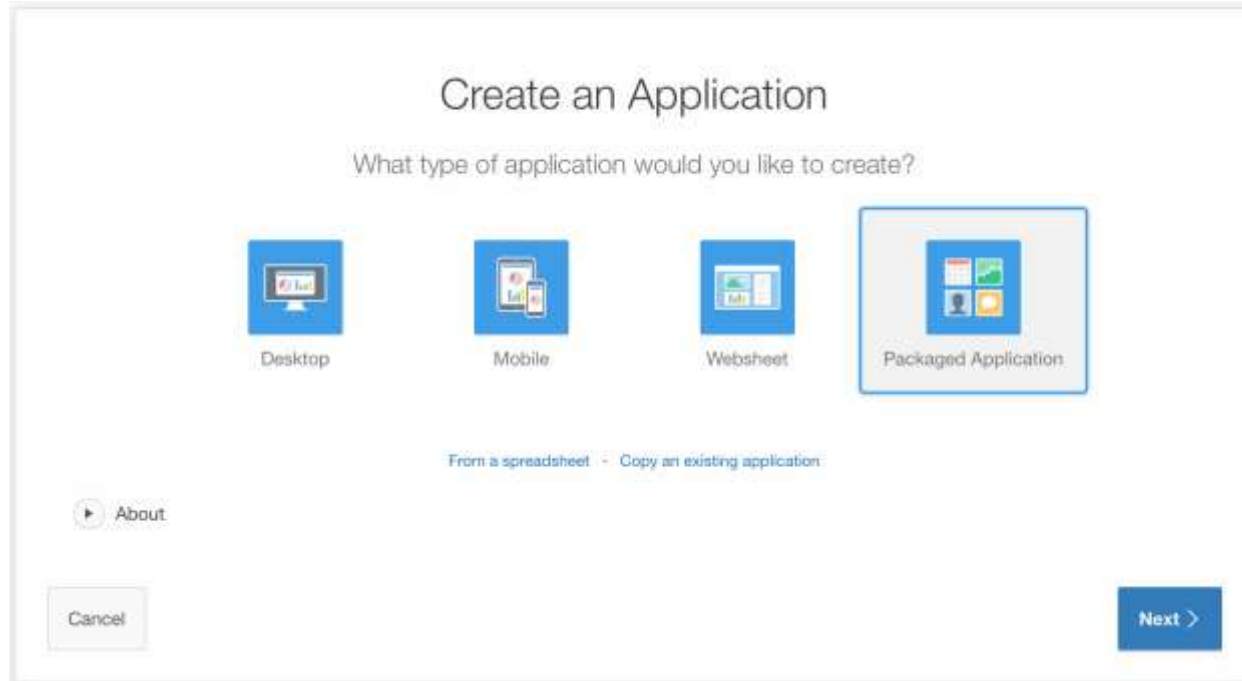
Safari 7



Microsoft Internet Explorer 9

Welche Arten von Applikationen kann ich erstellen?

■ Applikationsarten



■ Database Application (Desktop + Mobile)

Desktop

PC / Notebook / usw.

Universal Theme

Datenbankstruktur

Mobile

Mobile Endgeräte

jQuery Mobile

Datenbankstruktur

■ Websheet Application (1)

The screenshot displays the Websheet-Application interface. At the top, there is a blue header bar with the title "Websheet-Application" and navigation links for "Language", "Help", "admin", and "Sign out". Below the header, there are several tabs: "View", "Create", "Edit", "Data Grid", and "Administration". A search bar labeled "Search Websheet" is located on the right side of the header. The main content area features a "Welcome to Websheets" message with an "Edit" button. Below the message, a paragraph explains that users can manage structured and unstructured data without a developer. A bulleted list follows, detailing various capabilities such as creating content, organizing pages, using data grids, and managing users. On the right side, there is a "Control Panel" sidebar with options like "New Section", "Edit Sections", "New Page", "New Page as a Copy", "Edit Page", "Page Directory", and "New Data Grid". Below the control panel, there are sections for "Files" and "Tags", both showing "No Files" and "No Tags" respectively.

Websheet-Application Language Help admin Sign out

View Create Edit Data Grid Administration Search Websheet

Home

Welcome to Websheets Edit

Using Websheet applications, end users can manage structured and unstructured data without the need for a developer. Websheet enable users to:

- Create and share content over the Web using just a Web browser.
- Organize pages in a hierarchy and cross-link pages.
- Create and manage tabular data using an embedded feature called data grids.
- Create interactive reports using SQL on existing data structures within the database.
- Expose data grid and report data within pages as charts or reports.
- Annotate pages with files, tags and notes. Associated images can be shown inline within page content.
- Search page content (using built-in search capability).
- Manage who can log in. Once logged in, manage who can read, write, or administer the application (authentication and authorization).

Please click Help for more information.

Control Panel

- New Section
- Edit Sections
- New Page
- New Page as a Copy
- Edit Page
- Page Directory
- New Data Grid

Files + >

No Files

Tags + >

■ Websheet Application (2)

Pflege durch
Endanwender

Integration
von Excel-
Dateien

Einfache Logik

„Starter-
Guide“

Sammlung
von
Informationen

■ Packaged Applications (1)



Software Development



Bug Tracking

Software Development, Tracking



Customer Tracker

Tracking, Marketing



Expertise Tracker

Tracking, Knowledge Management



Group Calendar

Team Productivity



Meeting Minutes

Tracking, Team Productivity



Tracking, Knowledge Management



Checklist Manager

Tracking, Team Productivity



Data Reporter

Knowledge Management, Tracking, Project Management



Feedback

Software Development



Incident Tracking

Software Development, IT Management



Opportunity Tracker

Tracking, Team Productivity



Sample Application



Community Requests

Software Development, Community



Decision Manager

Team Productivity, Tracking



Go Live Checklist

Project Management



Live Poll

Marketing, Tracking



P-Track

Project Management, Team Productivity, Tracking



■ Packaged Applications (2)

Beispielapplikationen

Chart

Universal Theme

Spatial

Nützliches

P-Track

Umfragen

Incident-Tracking

Wie baue ich eine Applikation auf?

■ Die Applikation

Database Application

Themes

Assistenten / Wizards

Page Designer

Shared Components

■ Themes / Designs (1)

Select Theme ✕		
14	Simple Green	Tabs
15	Light Blue	Tabs
16	Dark Blue	Tabs
17	Sapphire	Tabs
18	Simplified Gray	Tabs
19	Red Gray	Tabs
20	Traditional Blue	Tabs
21	Scarlet	Tabs
22	Bluejay	Tabs
23	Uniframe	Tabs
24	Cloudy	Tabs
25	Blue Responsive	Tabs
26	Productivity Applications	Tabs

■ Themes / Designs (2)

Gängige Themes

Responsive

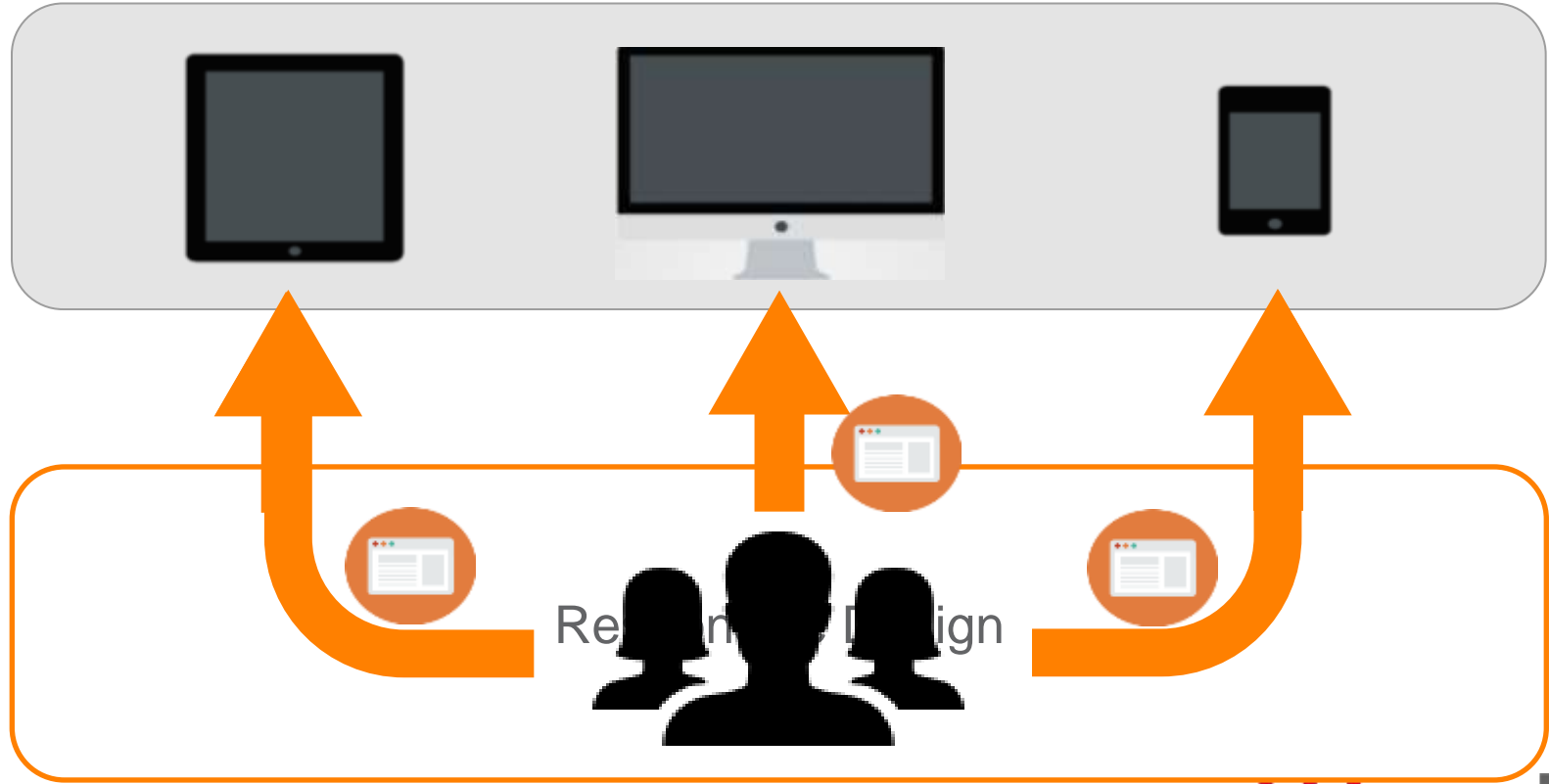
–

25: Blue Responsive

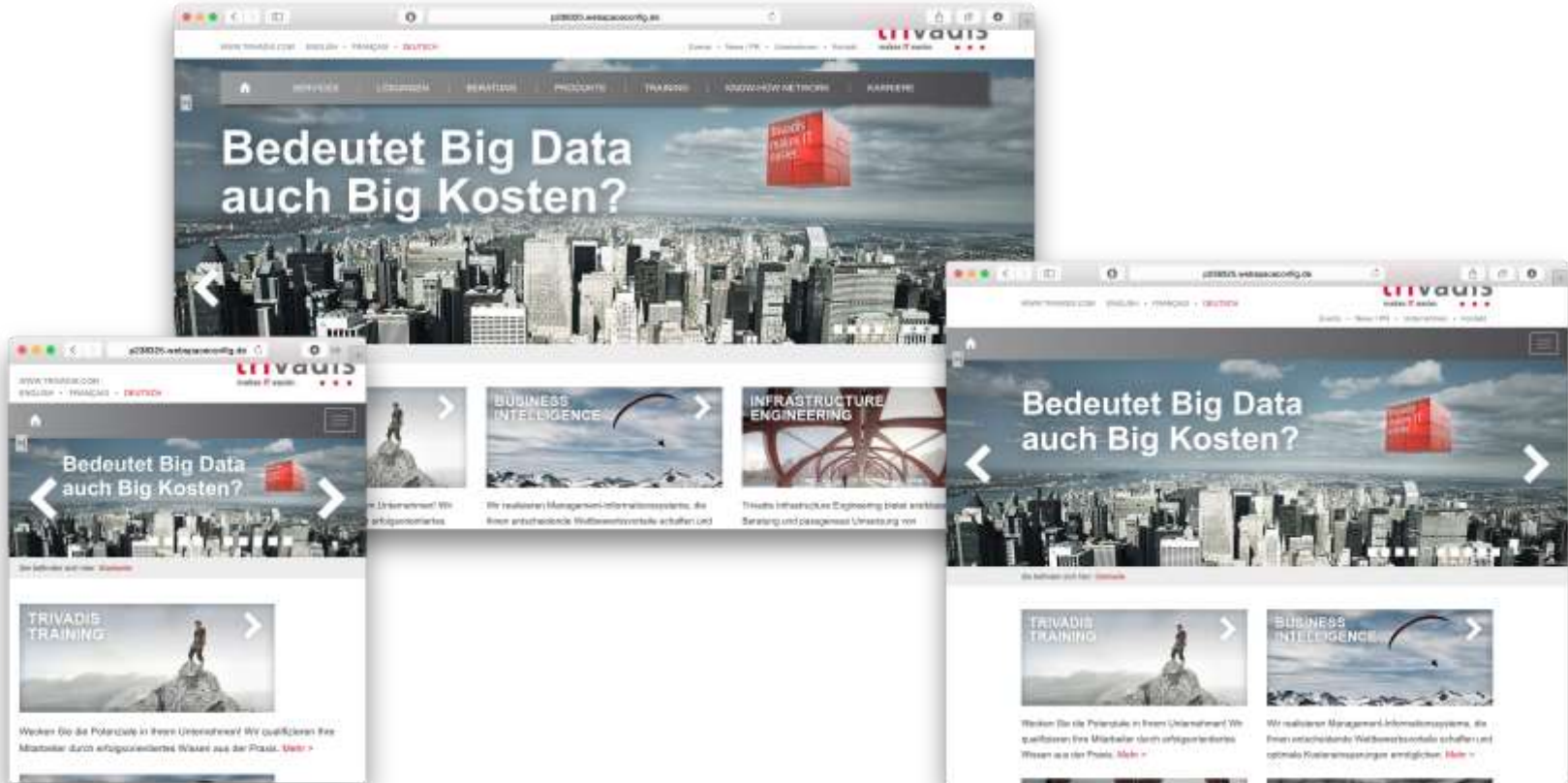
42: Universal Theme

26: Productivity
Applications

■ Was bedeutet „Responsive“?



■ Beispiel





Oracle Application Express 5

Universal Theme

Better UI for your apps

Universal Theme is an all-new user interface for your Application Express apps. This app introduces you to Universal Theme by providing an easy way to browse through the various templates, template options, and theme styles.



Search customers, orders and product data

Sales for this Month

No sales found for current month.



The gauge is a semi-circular instrument with a needle pointing to the zero mark on the left side of the scale. The needle is red and the scale is blue.

Top Customers

Bradley, Eugene - 2 Order(s)	\$2,760.00
Logan, Edward - 2 Order(s)	\$2,420.00
Dulles, John - 1 Order(s)	\$2,380.00
Hartsfield, William - 2 Order(s)	\$2,370.00
LaGuardia, Fiorello - 1 Order(s)	\$1,090.00

Top Products

Jacket - 18 x \$1.50	\$2,700.00
Bag - 16 x \$1.25	\$2,000.00
Trousers - 21 x \$80	\$1,680.00

Top Orders by Date

October 19, 2013	2,380
October 05, 2013	1,890
October 30, 2013	1,640

- Home
- Customers 7
- Products 10
- Orders 10
- Reports
- Administration

Sample Database Application

Track and Manage Customers, Orders and Products

Search customers, orders & products

Dashboard



Top Customers

Bradley, Eugene	\$2,760.00
Logan, Edward	\$2,420.00

Top Products

Jacket - 18 x \$1,50	\$2,700.00
Bag - 16 x \$1,25	\$2,000.00



■ Universal Theme (Theme Roller)



- Live-Vorschau
- Speicherung der Einstellungen
- Definition als Standard-Style
- Benutzerdefiniertes CSS

■ Universal Theme (Eigenschaften)

Responsive

„Flat“ Style

Theme
Roller

Font
Awesome

Template-
Optionen

■ Assistenten / Wizards

The wizard consists of five steps:

- Select a page type:** Options include Blank Page, Map Chart, and Feedback Page.
- Form on a Table with Report:** Selected option, showing a table icon and a report icon.
- Form on a SQL Query:** Option showing an SQL icon and a report icon.
- Report Page:** Step where the user specifies the row to be displayed and the schema owner.
- Create Form and Report:** Confirmation screen showing the following attributes:

Application	102
Report Page	32
Report Page Name	Report 1
Report Implementation	Interactive
Form Page	34
Form Page Name	Form on DEMO_STATES
Table / View Owner	DOAG
Table / View Name	DEMO_STATES
Primary Key Column 1	ROWID

Page Designer (1)

The screenshot displays the Oracle APEX Page Designer interface. At the top, the navigation bar includes 'ORACLE Application Express', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Packaged Apps'. Below this, the breadcrumb shows 'Application 102 > Page Designer'. The main workspace is divided into several sections:

- Left Panel (Rendering):** Shows a tree view of the page structure. The 'Products' page is selected. The tree includes 'Pre-Rendering', 'Regions' (with sub-items like 'Page Navigation', 'Breadcrumb Bar', and 'Content Body'), and 'Items'.
- Center Panel (Grid Layout):** Displays the visual layout of the page. It is organized into regions: 'PAGE HEADER', 'PAGE NAVIGATION', 'BREADCRUMB BAR', and 'CONTENT BODY'. The 'Products' item is visible within the 'CONTENT BODY' region.
- Right Panel (Page Properties):** Shows configuration options for the selected page.
 - Identification:** Name: Products; Page Alias: ; Title: &APP_NAME. - Products; Page Group: Desktop.
 - Appearance:** User Interface: Desktop; Page Mode: Normal; Page Template: Standard.

At the bottom of the center panel, there are tabs for 'Regions', 'Items', and 'Buttons', along with a toolbar containing various design tools like a hand, a link, a table, and a grid.

■ Page Designer (2)

Gleichzeitige
Bearbeitung
mehrerer Objekte







Shortcuts

Live-Validierung

Drag & Drop

Modaler Dialog

Shared Components (1)

 <ul style="list-style-type: none">Application Definition AttributesApplication ItemsApplication ProcessesApplication Computations	 <ul style="list-style-type: none">Security AttributesAuthentication SchemesAuthorization SchemesSession State ProtectionBuild Options	 <ul style="list-style-type: none">List of ValuesPlug-insComponent SettingsShortcuts	<ul style="list-style-type: none">Export Application Components >Manage Supporting Objects >Edit Application Comment >Developer Comments >
Navigation	User Interface	Files	
 <ul style="list-style-type: none">ListsNavigation MenuBreadcrumbsClassic Navigation Bar EntriesNavigation Bar List	 <ul style="list-style-type: none">User Interface AttributesThemesTemplates	 <ul style="list-style-type: none">Static Application FilesStatic Workspace Files	

■ Shared Components (2)

Authentifizierung
(z.B. LDAP)

Autorisierungen

Designanpassungen

Sicherheitseinstellungen

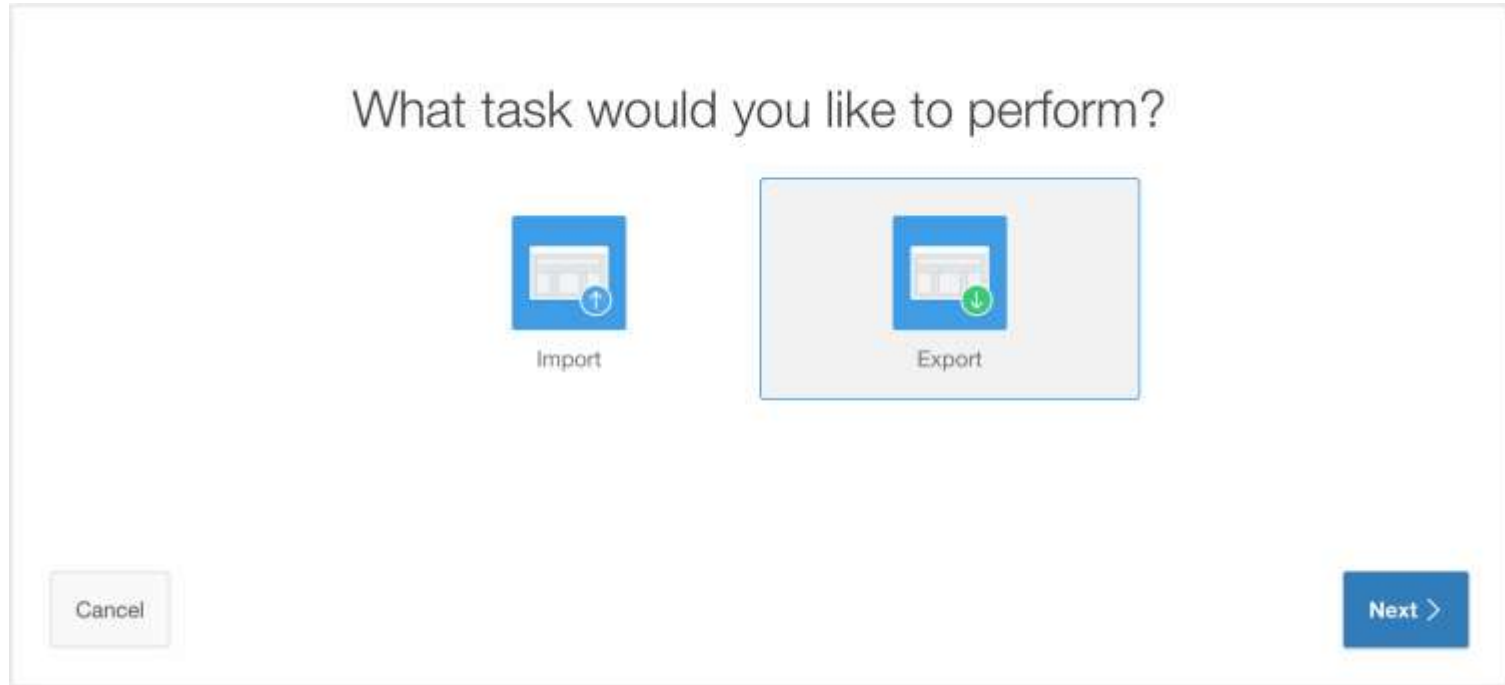
List of Values

Listen

Dokumente

Wie funktioniert das Deployment?

■ APEX (1)



■ APEX (2)

Direkten Zugriff auf
Workspaces

Manuelles
Exportieren

Manuelles
Importieren

Zeichensatz

Assistentengesteuert

■ SQL-Developer

Export über SQL-
Developer

Import per SQL-
Script

Zielschema oder
APEX_50000

Einheitliche
Workspace-ID

■ Tipps

Produktivumgebung
als solche
installieren

Run and Build / Run
Only

Debugging-Modus

Application-Alias

Zusammenfassung

- Probieren geht über studieren

<http://apex.oracle.com>

Vielen Dank für Ihre Aufmerksamkeit!

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Quellen und Links



- <http://dgielis.blogspot.de/2015/03/apex-50-pimping-login-page.html>
- <http://www.oracle.com/technetwork/developer-tools/apex/application-express/oracle-application-express-sod-1596338.pdf>
- <http://fortawesome.github.io/Font-Awesome/>
- <http://hardlikesoftware.com/weblog/2015/04/19/apex-5-0-and-keyboard-shortcuts/>