

### **Oracle Application Express 5.1 New Features**

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## Marc Sewtz

#### Senior Software Development Manager Oracle Application Express / Database Tools

- Joined Oracle Consulting in Hamburg, Germany in 1998
- Moved to Oracle in New York in 1999
- Joined Database Tools group in 2002
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# **APEX 5.1 New Features**



### Oracle Application Express (APEX) Database Centric Application Development



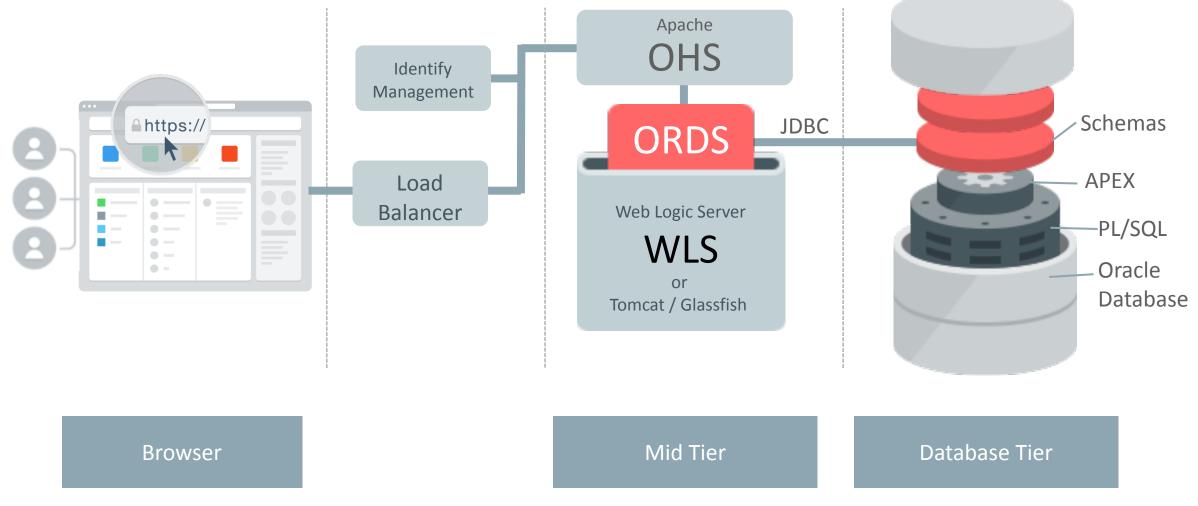




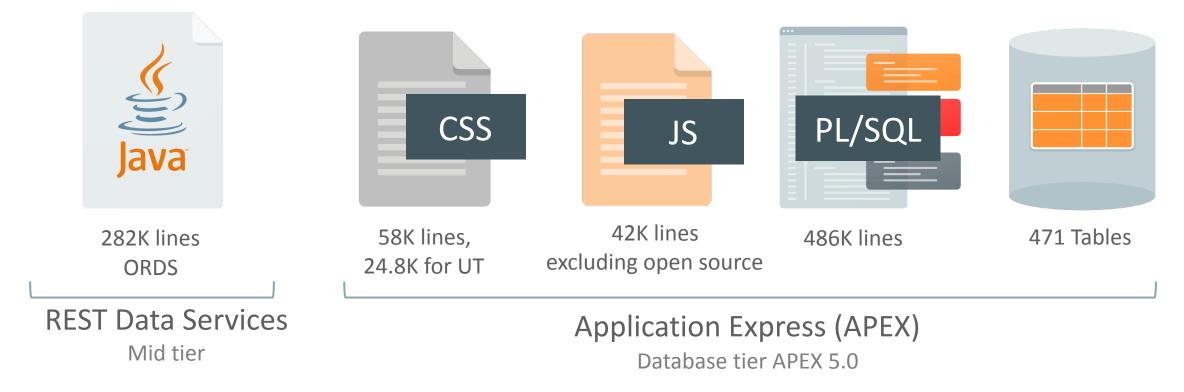
Database centric responsive web-based apps Apps that visualize and or maintain database data

Apps that leverage the power of SQL and PL/SQL

### Oracle Application Express (APEX) Architecture



#### Oracle Application Express (APEX) Declarative Development



- Declarative development provided by significant custom and open source code
- Shields customers from maintaining and modernizing code

Oracle REST Data Services (ORDS), Universal Theme (UT), JavaScript (JS)

#### Oracle Application Express (APEX) Open Source Included

- 960-gs (grid system)
- bgiframe (IE Z-issues)
- ckeditor
- codemirror
- d3
- font-awesome
- hammer
- jquery
- jquery-autocomplete
- jquery-colorpicker
- jquery-flot

- jquery-fullcalendar
- jquery-jstree
- jquery-migrate
- jquery-mobile
- jquery-mobile-nestedlists
- jquery-qtip2
- jquery-quicksand
- jquery-ui
- jquery-validate
- justgage
- less.js
- modernizr

- oraclejet
- raphaeljs
- respond-js
- selectivizr
- twitter-bootstrap

#### Oracle Application Express - 5.1 Page Designer & Component View

• 2-Column Mode

- Integrated 'Component View'
- Create component prompt for key information
- Property Editor multi-tab mode
- Property Editor search capability
- Style and contrast enhancements

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### Oracle Application Express 5.1 Simplified Wizards

- Listened to the community: some wizards way too long!
- Fewer steps, more defaults
- Attributes no longer exposed can be easily edited in Page Designer post-creation
- Consistency across component types

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	INLINE DIALOGS	Override User Interface Level	Yes No
		✓ Navigation	
		Cursor Focus	Do not focus cursor $\sim$
		✓ JavaScript	

#### Oracle Application Express 5.1 Interactive Grid

- Long-standing customer requests to enhance Tabular Forms:
  - Support multiple tabular forms on a single page
  - Cascading LOVs
  - Dynamic Action Support
  - Lift 32k limitation on report rows

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#### Oracle Application Express 5.1 Interactive Grid

- Modern, rich & interactive multi-row editing component
- Master > Detail > Detail and Parent > Child > Grand Child
- Use of existing Item types

- Declarative support for Cascading LOVs and Dynamic Actions
- Upgrade utility for Tabular Forms and Interactive Reports

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#### Oracle Application Express 5.1 Interactive Grid

- Modern design:
  - Fast & Responsive
  - JSON-based, lightweight Ajax communications
  - Widget based (using jQuery UI Widget Factory)
  - Fixed headers and columns
  - Infinite scrolling
  - RTL support
  - Accessible, with outstanding keyboard support

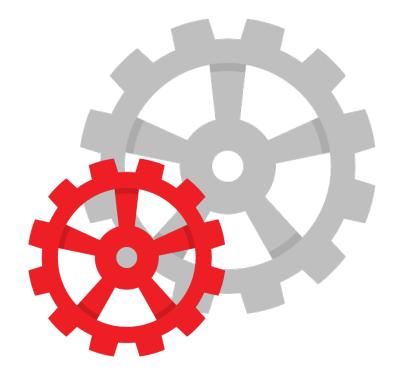
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#### Oracle Application Express 5.1 Interactive Grid - Architecture Changes

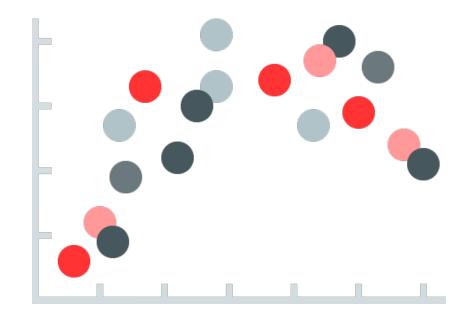
- Removal of limitations like 32k bytes per row
- Form input fields used to be mapped to p\_t001-200 and p\_v001-200
- Now all item values are stored in JSON document
- Allows for > 200 page items
- Multiple file uploads

- Possible future enhancements
  - Dynamic action refresh of regions containing page items (like PL/SQL regions)
  - Removal of 32k limit of page item values



#### Oracle Application Express 5.1 JET Charts

- Based on Oracle JET Data Visualization Components
- Declarative
- Responsive and accessible
- Migration facility for existing charts
- Same chart types as 5.0 + new charts
- Advanced customization available through documented JavaScript APIs
- No 32k limit for the data or configuration



## Oracle Application Express 5.1 JET Charts



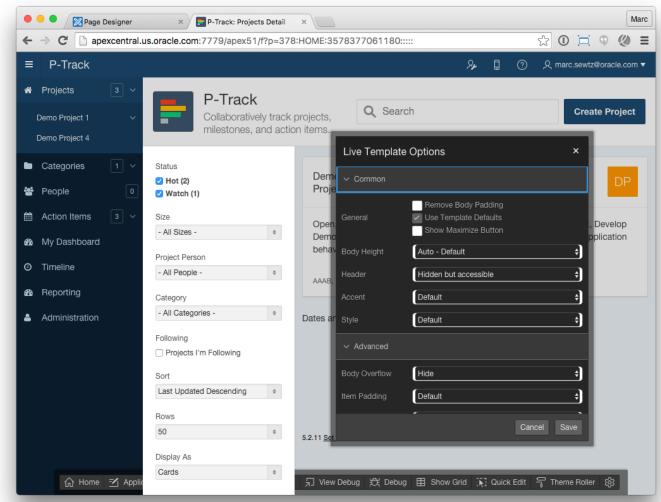
#### Oracle Application Express 5.1 Universal Theme - Right to Left Support

- APEX 5.1 adds support for right-to-left scripts, such as Arabic and Hebrew
- Available with Universal Theme
- Set "Document Direction" in globalization attributes und translation language mapping

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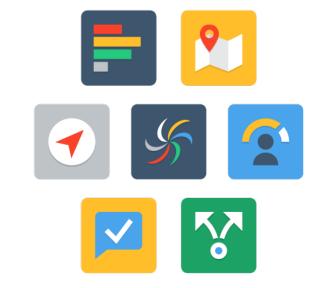
### Oracle Application Express 5.1 Live Template Options

- Apply Template Options at Runtime
- Instantly see impact on selected component
- Enabled via Quick Edit



#### Oracle Application Express 5.1 Packaged Applications

- Pre-Built Business Productivity Applications and Sample Applications
- Installable with only a few clicks using a browser based interface
- Production-ready applications including
   Project Management, Customer Tracker, Data Reporter, various Sample Applications
- Packaged Application Gallery and Administration interface can be configured as Packaged-App-only workspace
- Packaged Apps updated to use new JET charts and Interactive Grids



# **Demo** APEX 5.1 New Features



## Integrated Cloud Applications & Platform Services