APEX 4

Oracle Application Express 4.0

Dan McGhan

SkillBuilders.com/APEX

ORACLE PARTNER

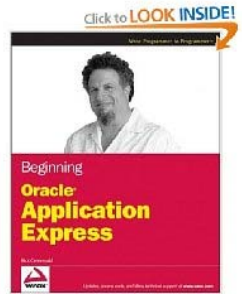
© 2010

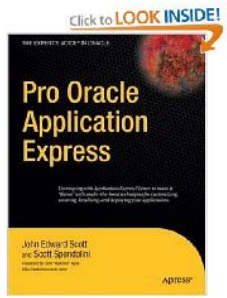
The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions.
The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

© 2010 ORACLE PARTNER

Oracle Application Express Momentum

- Developer community - 100k+ downloads / year
- apex.oracle.com – 4m page views / week
- Active Discussion Forum – 4.6 m views, #3 on OTN
- 100 Consulting companies, 60 BLOGs, 10 Hosting Partners
- User Groups: 30 @OOW-09, 50 @ODTUG, APEXposed
- User interface for Oracle Audit Vault

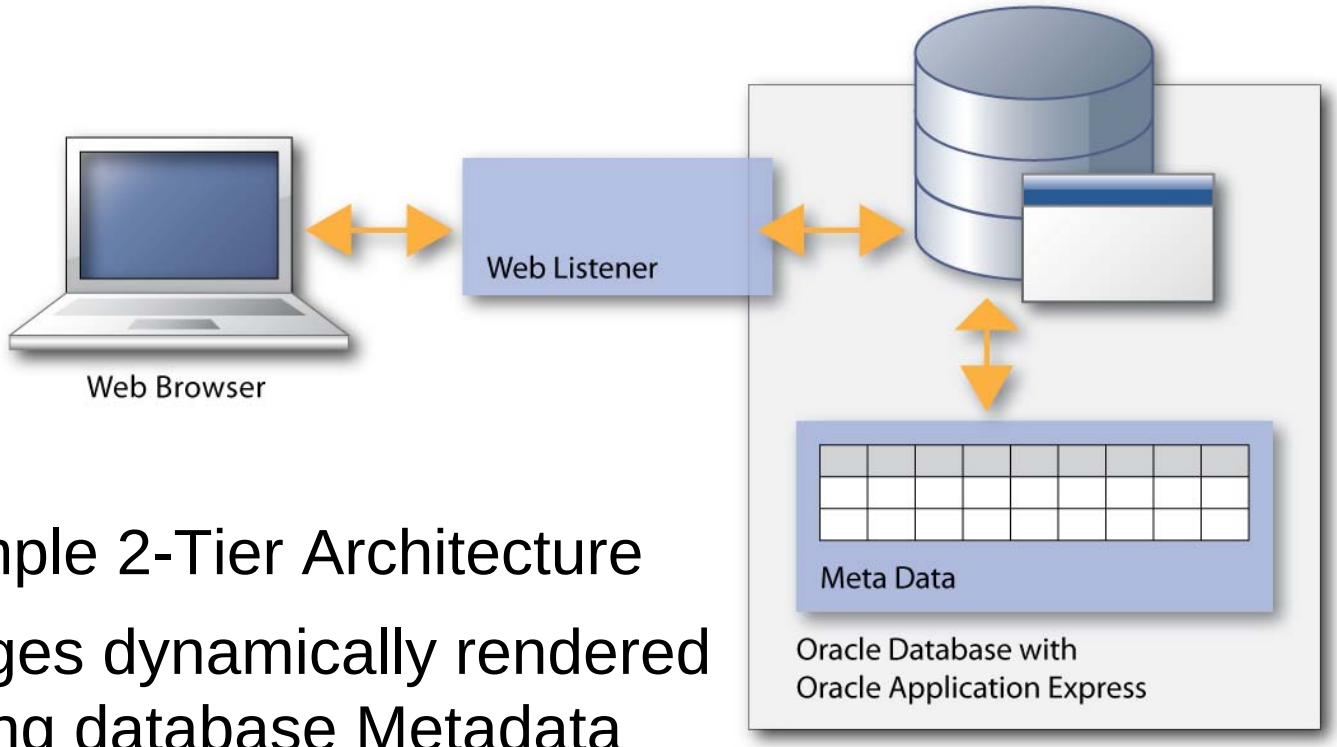




© 2010

ORACLE PARTNER

Architectural Overview



- Simple 2-Tier Architecture
- Pages dynamically rendered using database Metadata
- No code generation or file based compilation
- Runs Everywhere Oracle Database Runs

© 2010 ORACLE PARTNER

Development / Deployment Options

- Locally as a Dedicated Service
- Multi-tenant Enterprise Cloud
- Multi-Tenant Internet Cloud
- Within Amazon cloud

Local Database

Enterprise Cloud

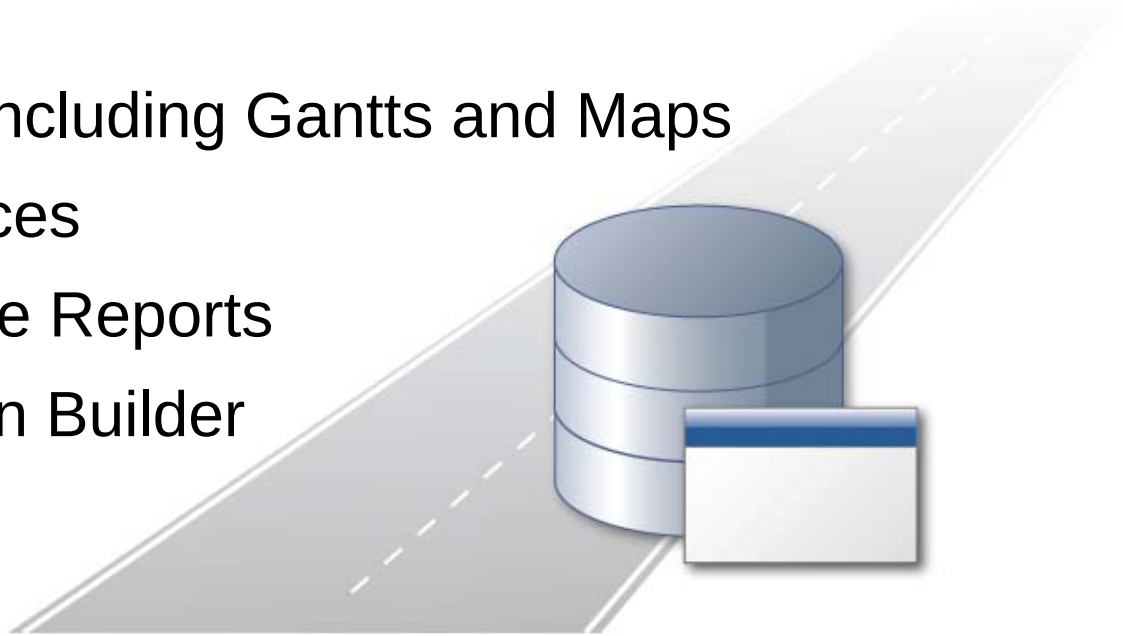
Internet Cloud

Develop & deploy where it is most convenient and cost effective

© 2010 ORACLE PARTNER

APEX 4.0 Marquee Features

- Websheets
- Dynamic Actions
- Plug-Ins
- Team Development
- Improved Charting including Gantts and Maps
- RESTful Web Services
- Enhanced Interactive Reports
- Improved Application Builder
- APEX Listener



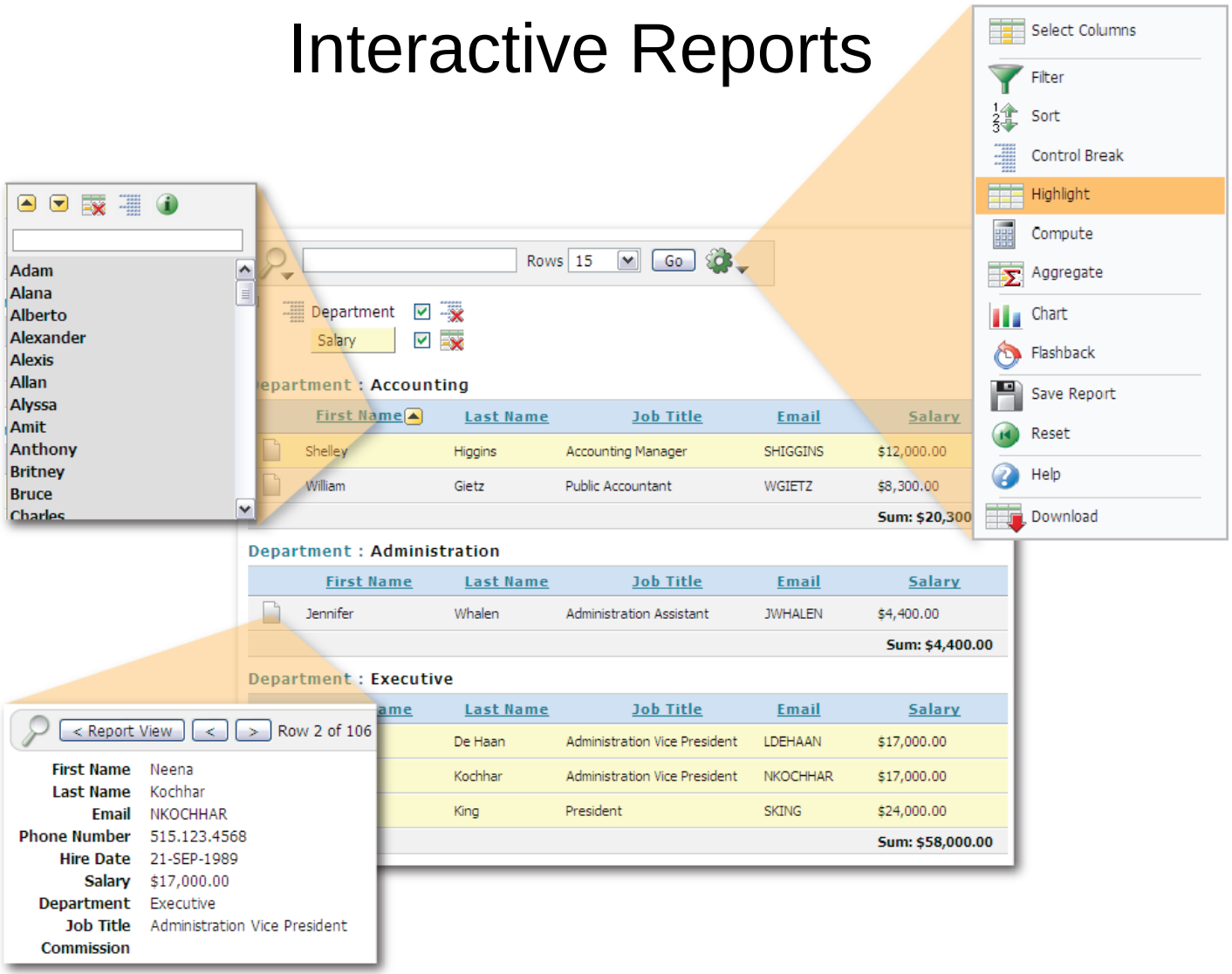
© 2010 ORACLE PARTNER

APEX 4.0 Other Major Features

- Modernized User Interface themes
- Improved Tabular Forms (new item types, declarative validations)
- Sub-regions
- Modernized item types (auto complete, resizable textarea, JavaScript date picker, number field, new rich-text editor)
- Declarative support for cascading LOVs
- Improved UI Defaults with bi-directional synchronization
- Integration of jQuery and jQuery UI
- Declarative accessibility settings
- Instrumentation and Debug framework
- Support for 11gR2 Edition Based Redefinition
- Improved self managing, multi-tenant support
  - Automated workspace purge
  - Improved metering of usage by workspace with archiving

© 2010 ORACLE PARTNER

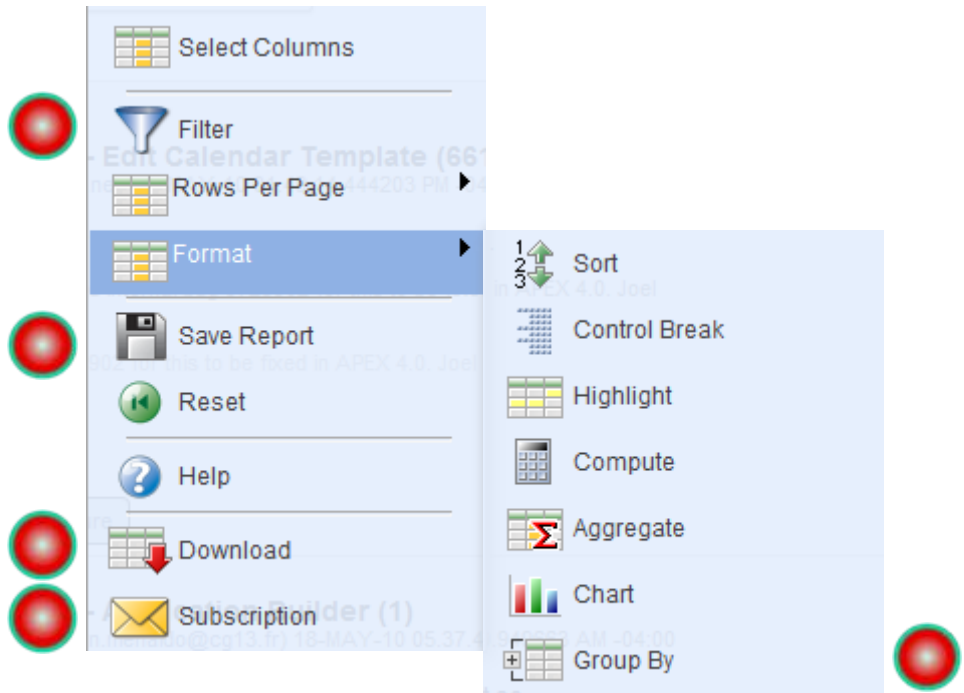
Interactive Reports



© 2010 ORACLE PARTNER

Improved Interactive Reports

- Integrated Report, Icon & Detail Views
- Compound filter expressions
- Group By
- Saved Reports
  - Developer Supplied (Primary / Alternate)
  - Personal {Existing}
  - Shared
- Additional Downloads
  - Searchable HTML
  - Email Report Results
- Email Subscriptions



© 2010 ORACLE PARTNER

Introducing Websheets

- Build basic applications faster and with more functionality
  - Websheet Applications
  - Text Pages
  - Editable data grids
- Interactive Reports
- Designed for Business Users
- Incorporates “sharing” model (ACL)
- “Builder” integrated with “Runtime”
- Integrated annotations - attachments, tags, notes, links

© 2010 ORACLE PARTNER

Websheets vs Database Applications

	Websheet Applications	Database Applications
Database Objects	Automatically managed (APEX$ tables)	Created using SQL Workshop
Primary Key Management	Automatically managed	Triggers and sequences
Validations	Defined using runtime UI	Created using wizards
Report Layout	Defined using runtime UI	Created using SQL
List of Values	Defined using runtime UI	SQL or Static
Page Flow	Limited	Controlled by branches
Form Layout	Column groups	Items and regions
Look and Feel	Basic control	Themes and templates

© 2010 ORACLE PARTNER

Dynamic Actions

- Provides a way to define client-side behavior declaratively within Application Express, without the need to know JavaScript
- Simple Wizard to create
  - Select Page Item
  - Select Condition (e.g. equal to, greater than, is null, in list, JavaScript expression, etc.)
  - Enter value
  - Select Action (Show, Hide, Enable, Show Item Row)
  - Enter list of items
  - Add Condition (Optional)

© 2010 ORACLE PARTNER

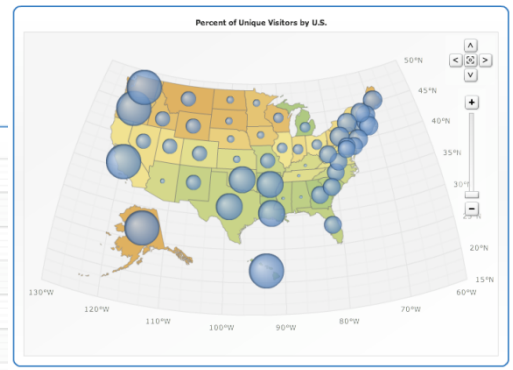
Plug-Ins

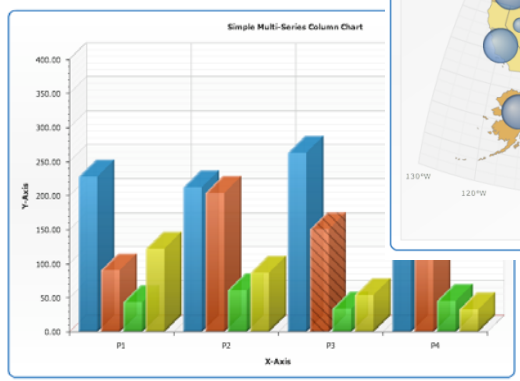
- Easy way to enhance the existing built-in functionality of Oracle APEX with new item types, region types, dynamic actions, etc.
- Developers use in similar fashion to native widgets
- Wizard support and declarative setting of attributes
- Included in APEX application export
- By providing this plug-in system in APEX, we want to engage the APEX community to create a rich ecosystem around Oracle APEX

© 2010 ORACLE PARTNER

Improved Charting

- New charting engine (AnyChart 5.1) = faster, better graphics and decreased rendering time
- Support for Maps & Gantts
- New Features:
  - Scrolling support
  - Interactive labels
  - Markers in legends
  - Multiple data markers
  - Context menu localization



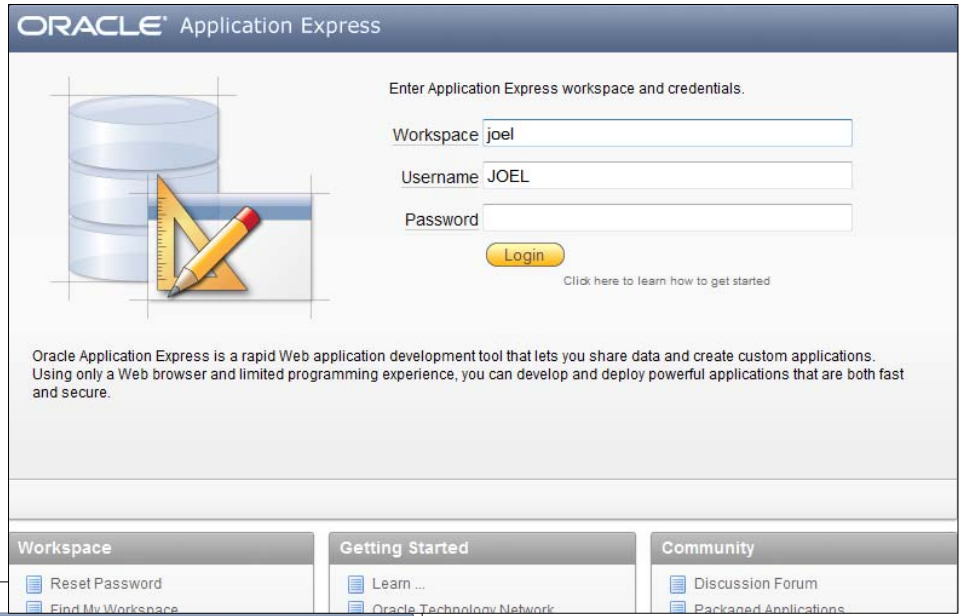


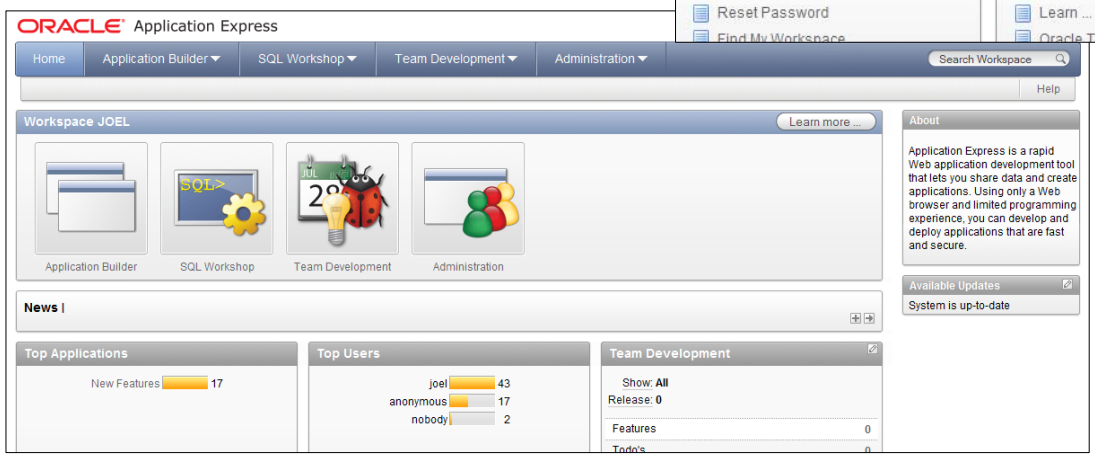
- All chart types can be combined within an interactive dashboard: Charts, gauges, maps, Gantt, etc.

© 2010 ORACLE PARTNER

Improved Application Builder

- New look
- Improved navigation
- Improved Administration screens
- IR's everywhere
- Integrated 'Advisor' and 'Application Search'

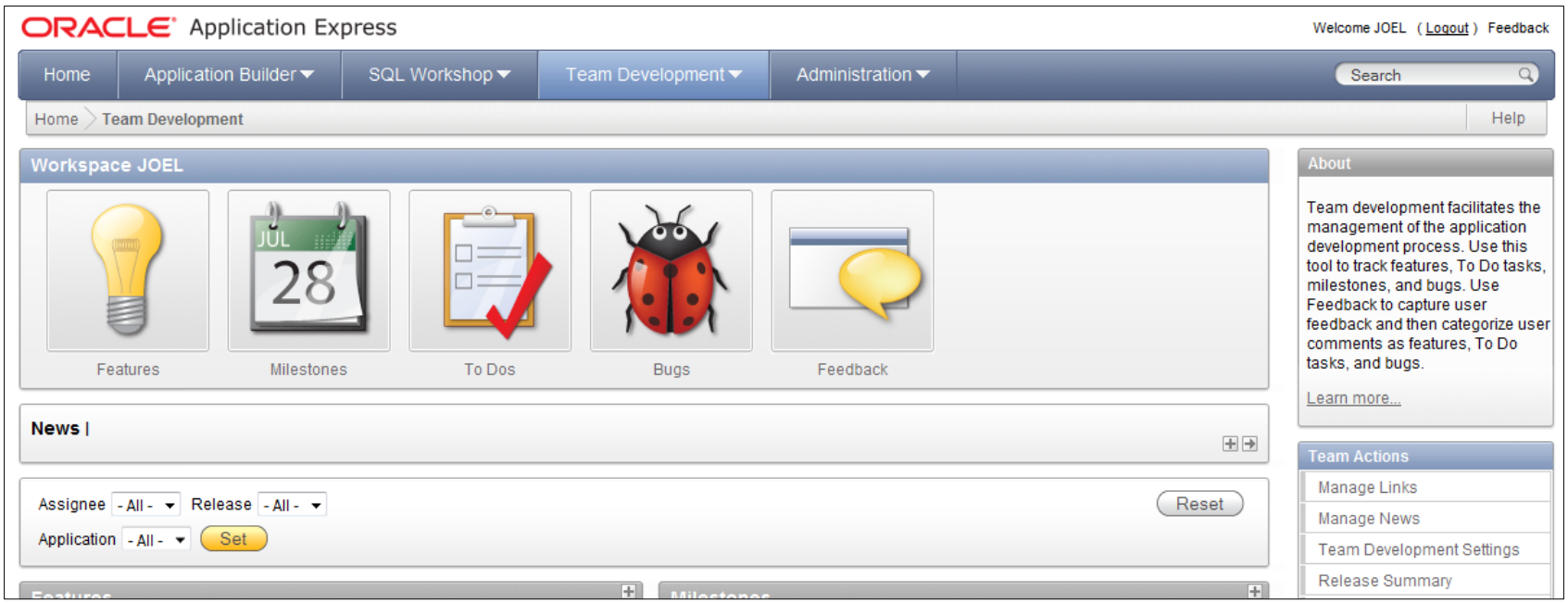




© 2010 ORACLE PARTNER

Team Development

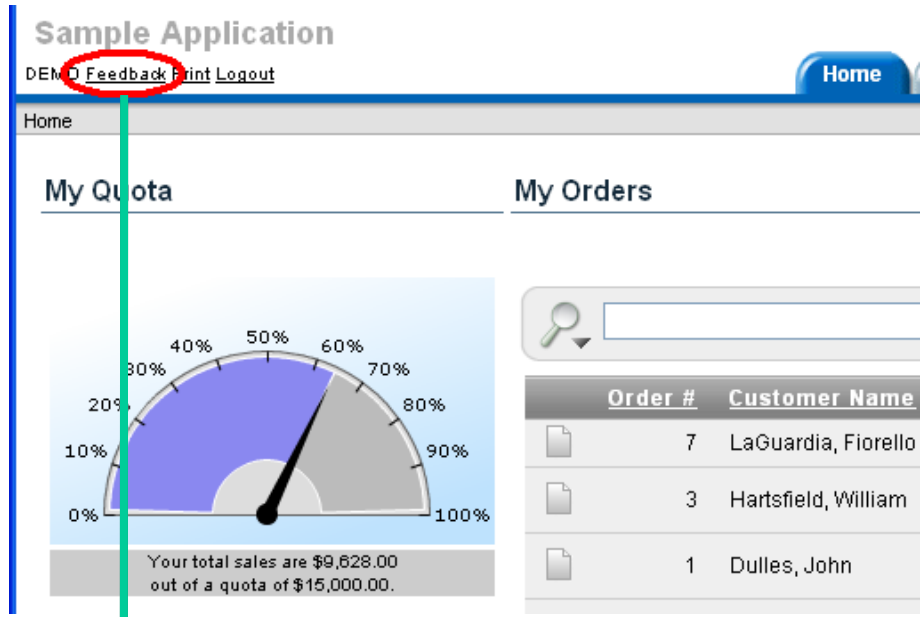
- Facilitates the management of Sotware application development process
- Can link directly to APEX Applications and Pages

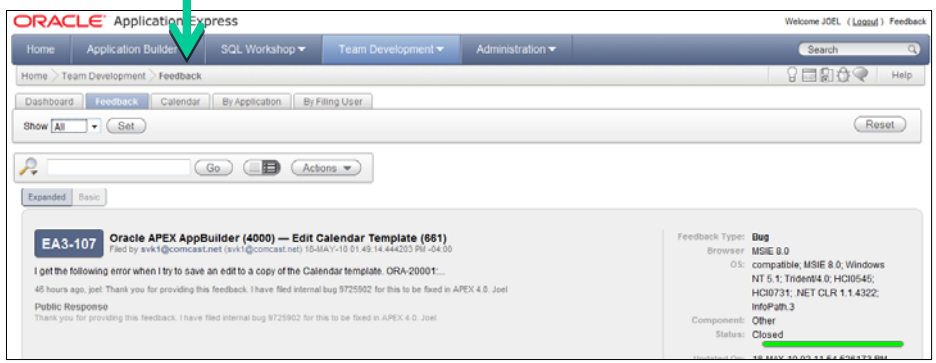


© 2010 ORACLE PARTNER

Team Development - Built-In Feedback

- Integrate into your APEX Applications
- Automatically saves session state
- Feedback managed in Team Development
- Easily transformed into Features, To-Dos or Bugs





© 2010 ORACLE PARTNER

REST Web Services

- Incorporating new declarative APEX component
- Utilizes a simpler architecture than SOAP style Web services
- Typically parameters are passed to a REST Web service as part of the URL and an XML document is returned
- Many popular public Web services provided by Google, Yahoo, Amazon and PayPal use the REST architecture
- Some Web Service providers use the REST architecture exclusively

Yahoo! Flickr

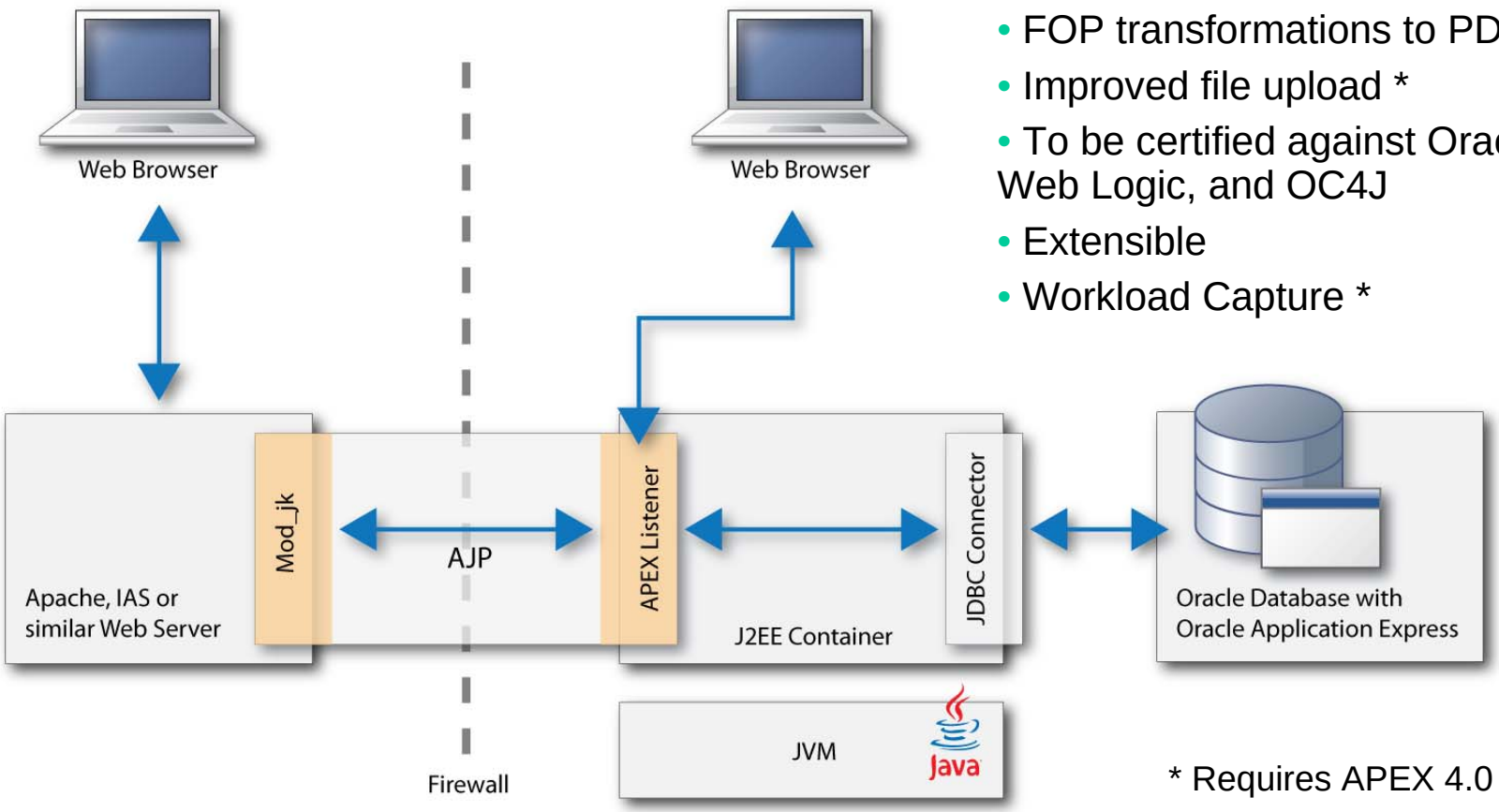
Google Picasa

Amazon Products

© 2010 ORACLE PARTNER

Oracle APEX Listener

- Java based
- mod_plsql replacement
- Support latest APEX releases
- File system caching *
- FOP transformations to PDF *
- Improved file upload *
- To be certified against Oracle Web Logic, and OC4J
- Extensible
- Workload Capture *



* Requires APEX 4.0

© 2010 ORACLE PARTNER

APEX 4.0 Summary

- Continues the APEX Vision
- Express-ier
- Declarative Web 2.0 Magic
- Greater Extensibility

© 2010 ORACLE PARTNER

© 2010 ORACLE PARTNER

Thank You

- Don't miss Kaleidoscope – June 27th – July 1st !
- SkillBuilders Oracle Application Express Training
  - Onsite or Online
  - Mentoring Services
- Oracle Application Express Consulting Services
  - Micro to long-term onsite
  - Full life-cycle application development, training, mentoring
  - Oracle Forms to APEX conversion

Dan McGhan

DanMcghan@SkillBuilders.com

401.783.6172 or 888.803.5607

www.SkillBuilders.com/APEX

© 2010 ORACLE PARTNER

© 2010 ORACLE PARTNER