

Oracle Web Services GGF12 DAIS WG Session 3

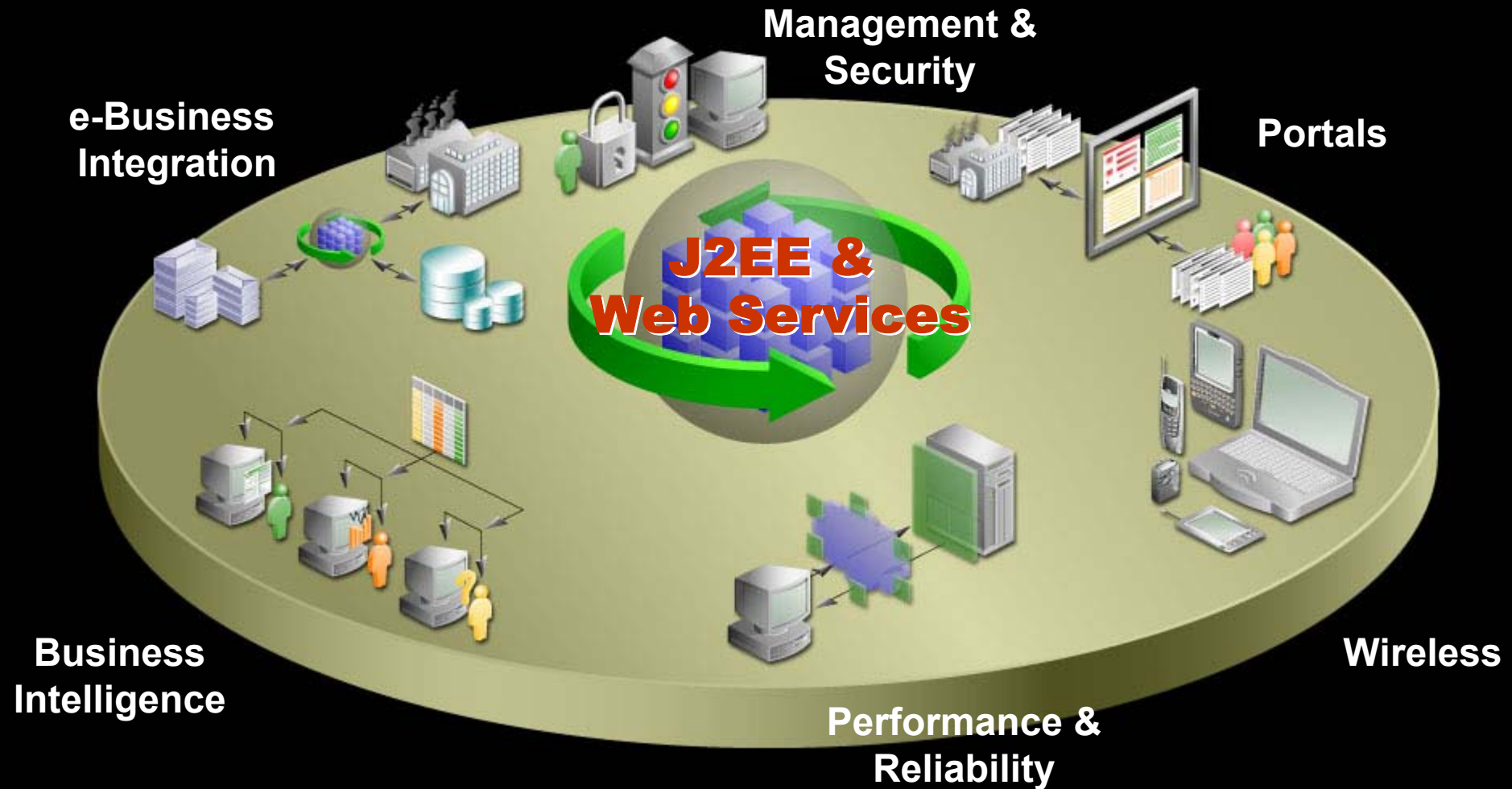
Dave Pearson

Oracle

Oracle Web Services Features

- Utilises Oracle Application Server Capabilities
- Unified J2EE and Web Services
- Facilities to Support 'Complex' Web Services
- Open Standards Support

Oracle Application Server



Web Services Build on J2EE Infrastructure

- J2EE for Web services infrastructure
 - Transactions, security, lifecycle
- J2EE is proven
 - Mature, scalable, portable, widely adopted
- J2EE has standards for Web services
 - Java XML Pack: SOAP, WSDL, UDDI



Oracle Web Services Capabilities

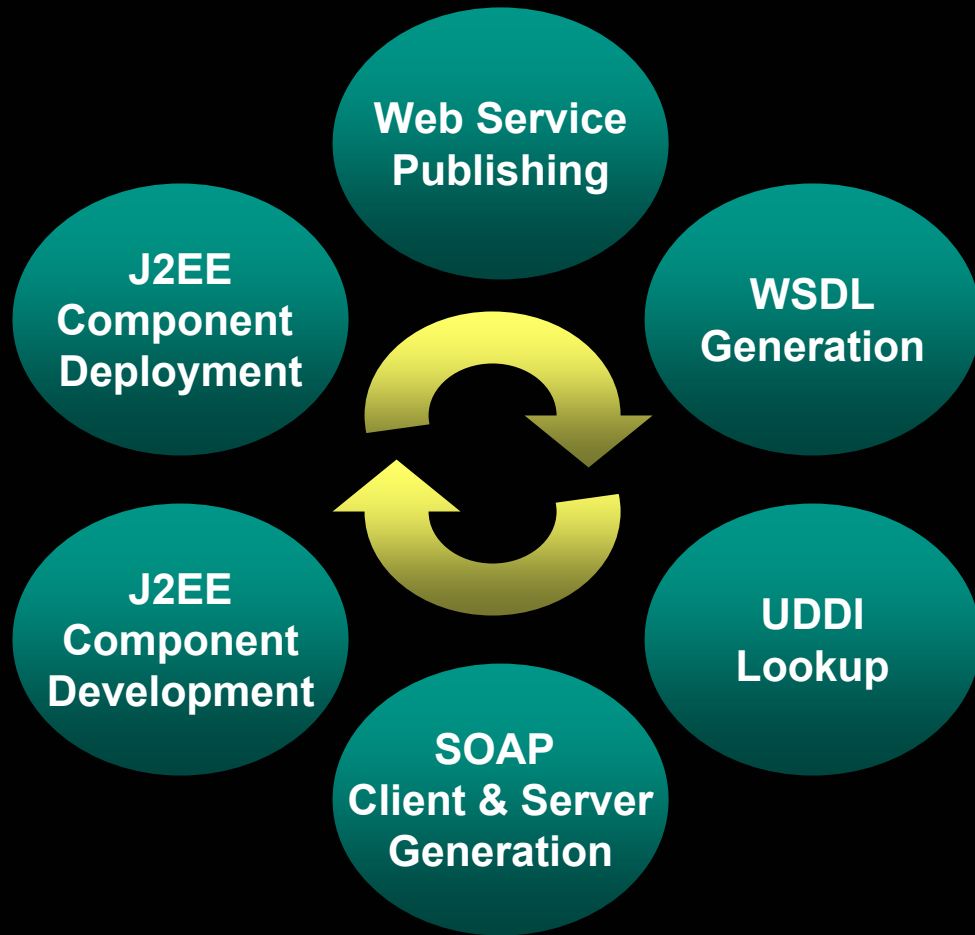
- Leverage existing & future PL/SQL stored procedures & Java classes running in DB
- SQL/XML based XML document storage & retrieval
- Expose Relational, Object, Text, Spatial & multi-media storage & retrieval through pre-defined SQL & DML
- Expose DB queuing and messaging operations as Web services endpoints

Simple & Complex Web Services

- Simple Web Services
 - Based on WSDL, UDDI, and SOAP
 - Point-to-point, synchronous, request/response
 - Primarily for data exchange, not transactional
- Complex Web Services
 - Based on ebXML and RosettaNet standards
 - Multi-party, asynchronous, conversations
 - Require security, business process management
 - Facilitate trading partner collaboration

Oracle JDeveloper: J2EE and Web Services Development

- Built on standards
 - SOAP, WSDL, UDDI
 - Java XML Pack
 - Apache SOAP
- Complete lifecycle
 - Model, build, deploy, debug, profile
- Integrated
 - Publish J2EE components
 - Publish stored procedures
 - Consume external services
- UDDI lookup and discovery

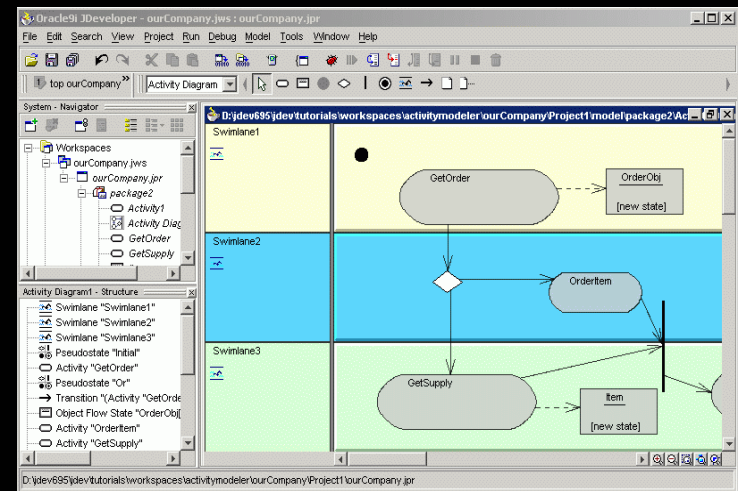
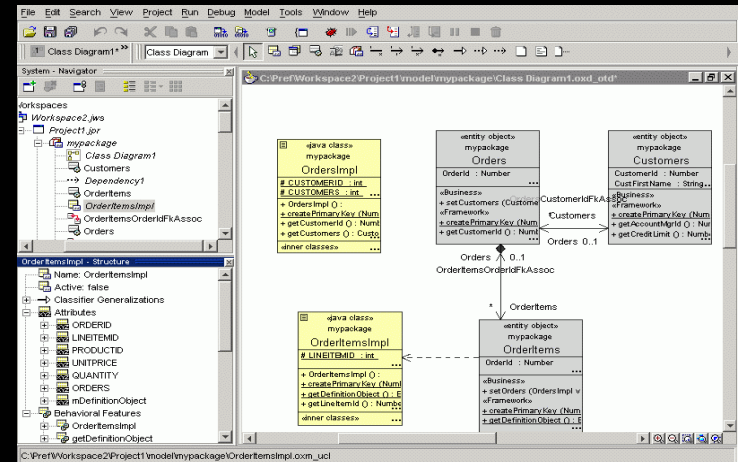


Productive Development

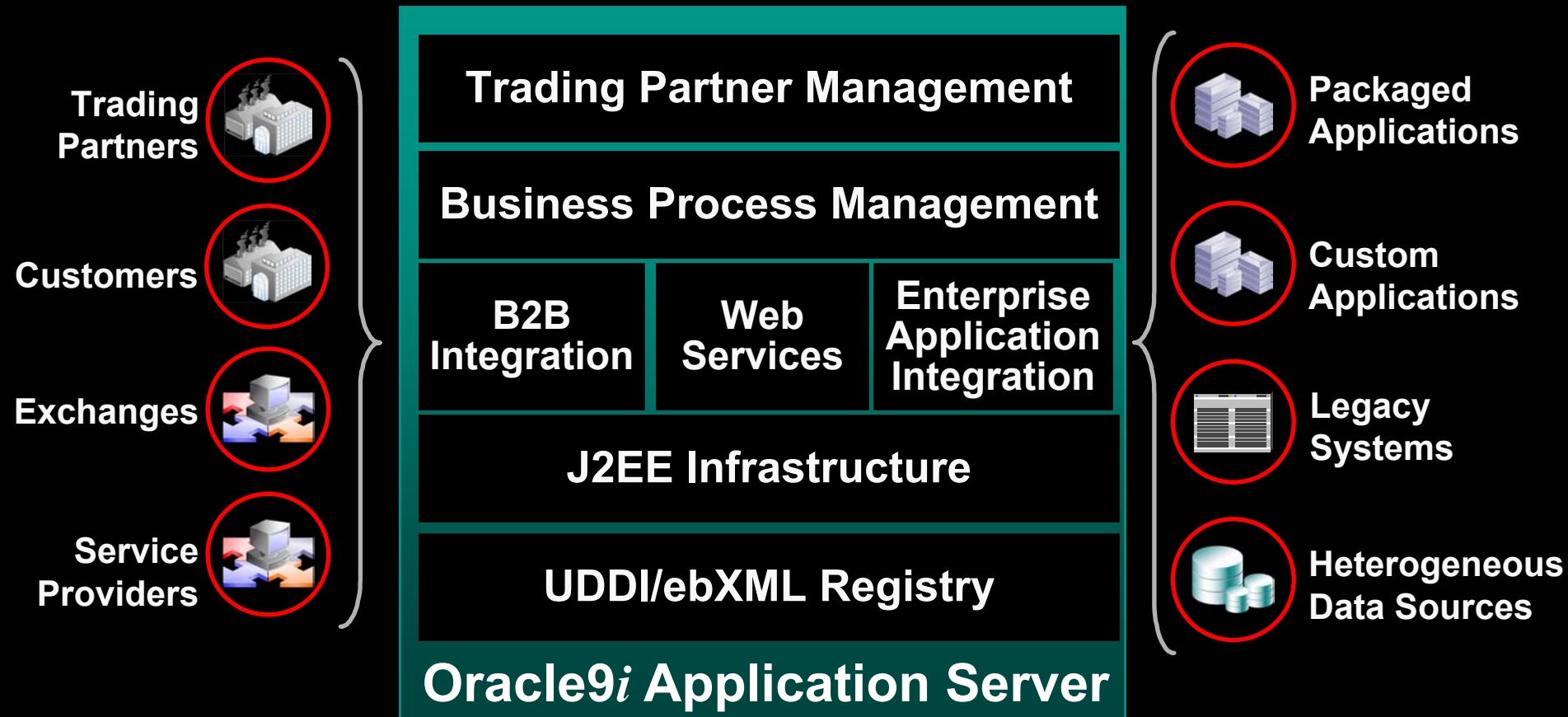
- Developer Simplicity
 - Use existing Java programming concepts, tools
- Business Logic Reuse
 - Publish existing EJBs, BC4J, Java classes, PL/SQL as Web services
 - Auto-generate WSDL, SOAP proxies & wrappers
- Common Runtime Services
 - Transactions, messaging, logging, security

Web Services and UML Modeling

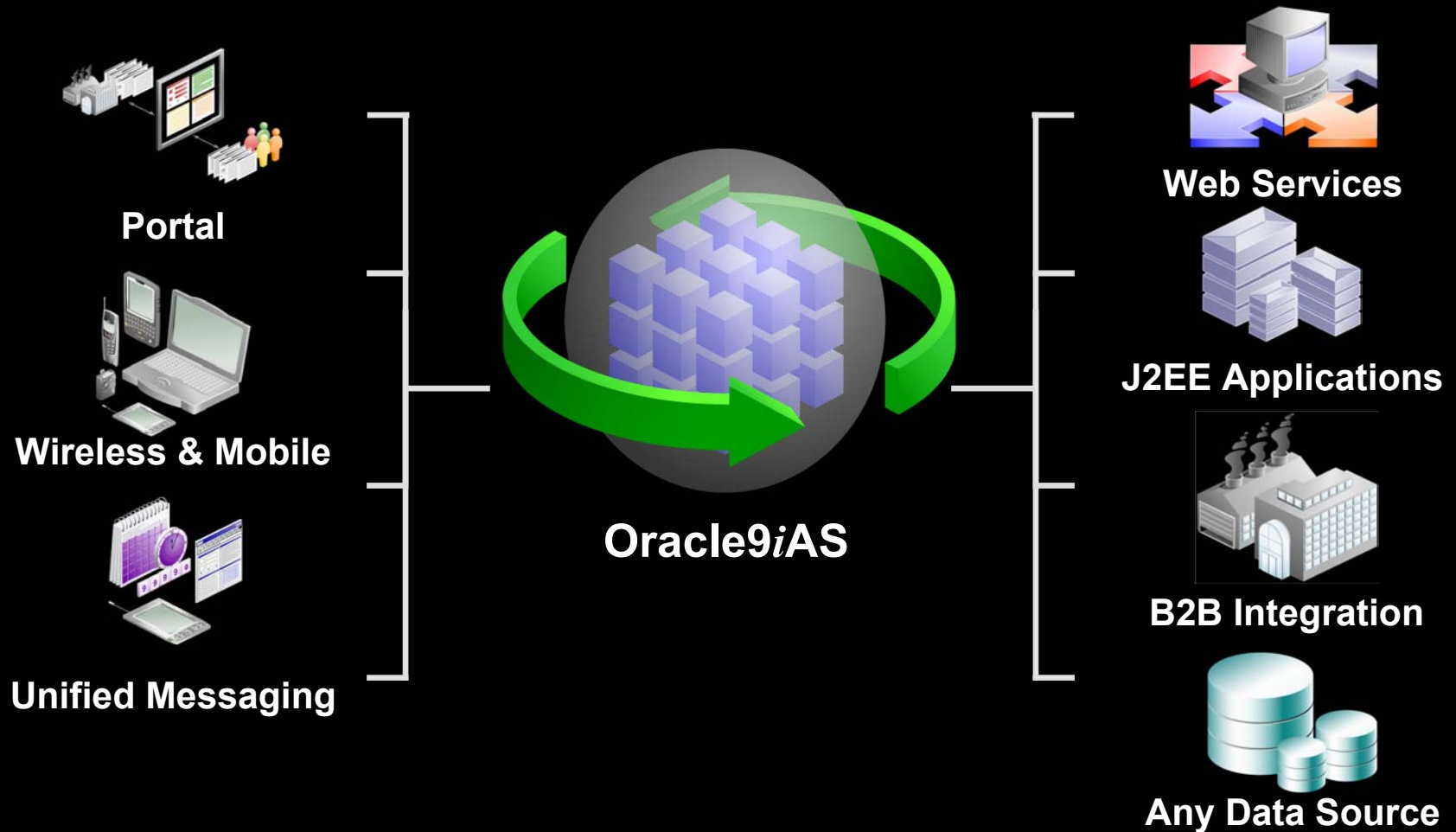
- UML Class Modeler
 - Model classes, EJBs and Web services
 - Synchronization of code, model, editors
- UML Activity Modeler
 - Web services orchestration
 - Application integration
 - Model business processes
 - Model object states



J2EE Web Services for the Enterprise



Deliver Web Services via Oracle9iAS Portal, Wireless, or e-Mail



Oracle Web Services v DAIS

Oracle Features

- Fully integrated with Oracle Application server
- Expose DB queuing and messaging operations as Web services endpoints
- Optional result sets
- Query virtual tables
- Facilities to Support 'Complex' Web Services
- BPEL for orchestration

DAIS Differences

- Mandatory SQL expressions
- Depends on Resource properties & Metadata
- Factory pattern – asynchronous interactions
- Separate realisations