

Open For Business in a Nutshell

Open Source Foundations for Enterprise Applications

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What is OFBiz?

- Open Source Project for Enterprise Applications (ERP/CRM/MRP)
 - Applications Development Framework
 - Data Model
 - Applications

More about OFBiz

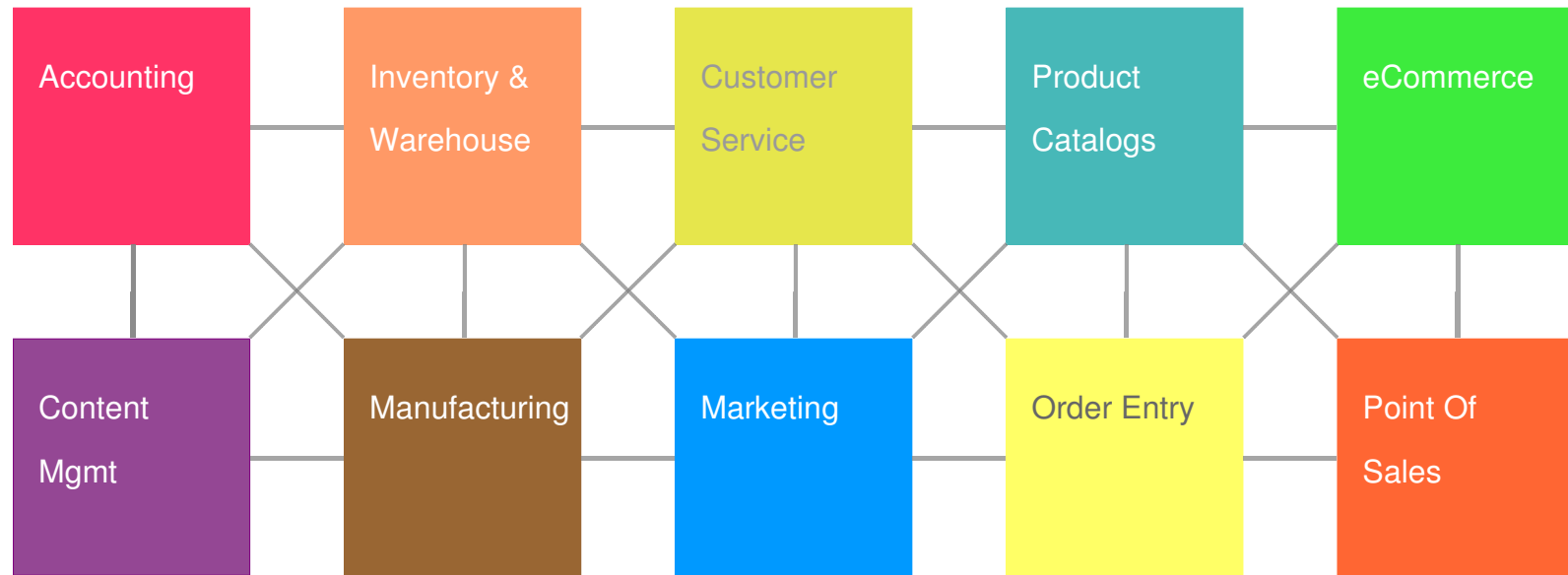
- www.ofbiz.org
- Began in 2001
- International Developer Community
- Enterprise-Class Features

Presentation Outline

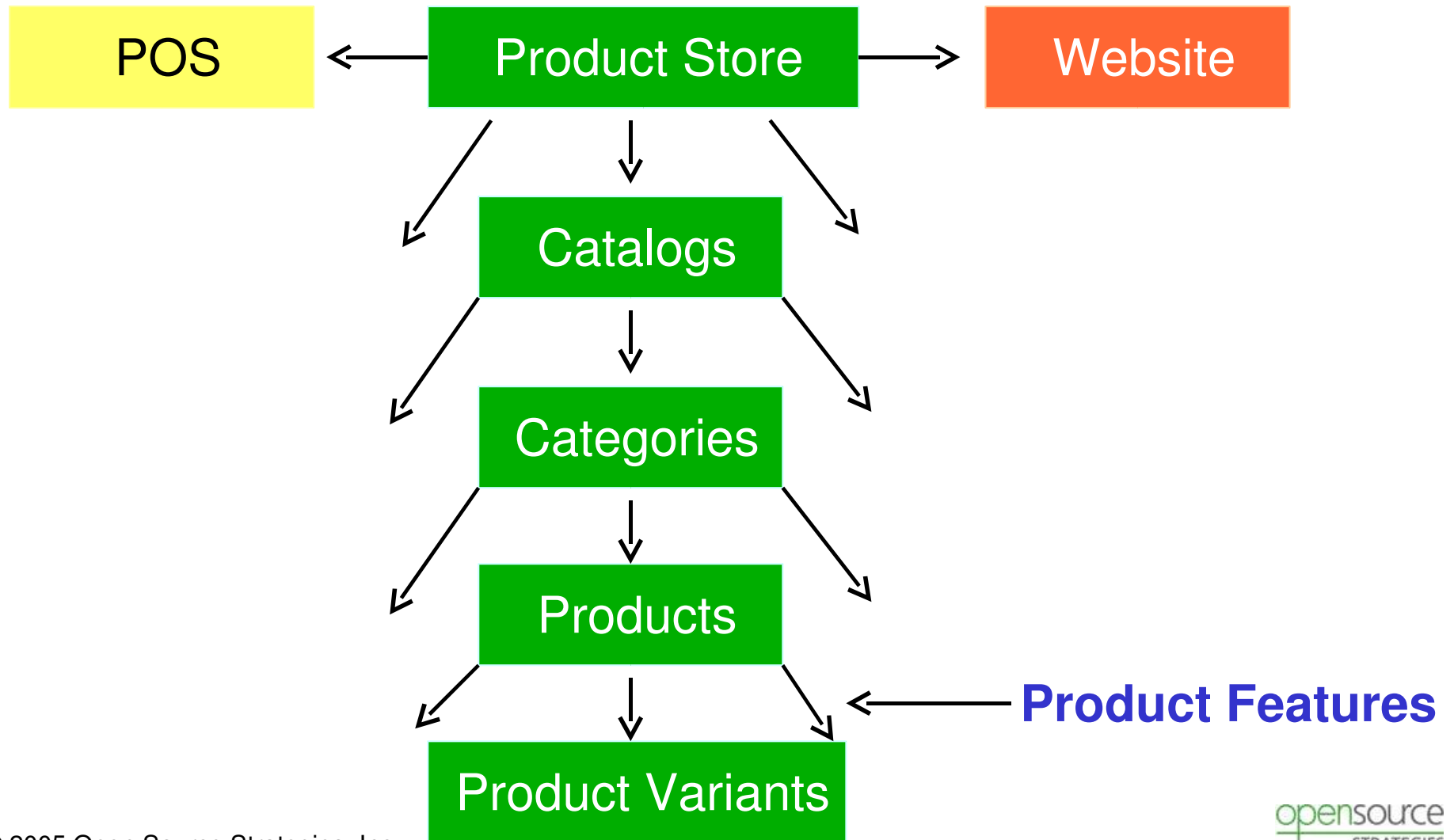
Is OFBiz for me?

- Applications & Capabilities
- Underlying Technologies
- Developing and Deploying OFBiz

OFBiz Applications



Products and Stores



eCommerce Highlights

- Multiple stores
- Custom catalogs and pricing
- Price and Promotion Rules
- Associations: upsell/cross-sell/substitution
- Site search and product reviews

Order Manager

- Create and manage orders
- Quotes: create quotes, get bids, convert to orders
- Returns: create, approve, receive returns
- Purchasing: multi-vendor, multi-currency

Inventory and Warehouse

- Multiple facilities
 - Receive inventory
 - Track locations
 - Serialized vs. non-serialized inventory
- Shipments
 - Create shipments
 - Pick & Pack
 - Carrier Integration

Point Of Sales (POS)

- Based on JavaPOS
- Independent POS station
- Web-enabled synchronization with store and corporate servers

Other Applications

- Blogs, wikis, surveys in Content
- Billing accounts, payment gateways in Accounting
- Material resource planning in Manufacturing
- Affiliate, PPC campaigns in Marketing
- People and Security in Party Manager

The OFBiz Framework

Presentation

Model-View-Controller
Decorator pattern
Templates vs actions
Meta-programming

Tomcat, Jetty
Freemarker, FOP
JasperReports
JavaPOS, XUI
beanshell

Business Logic

Service Oriented Architecture
Web Services (SOAP/XML)
Scripting languages
Meta-programming

Axis
BSF
beanshell

Data

XML Data Modeling
Persistence
Database Independence
Meta-programming

JOTM
XAPool
Minerva
Derby
JDBC

Framework

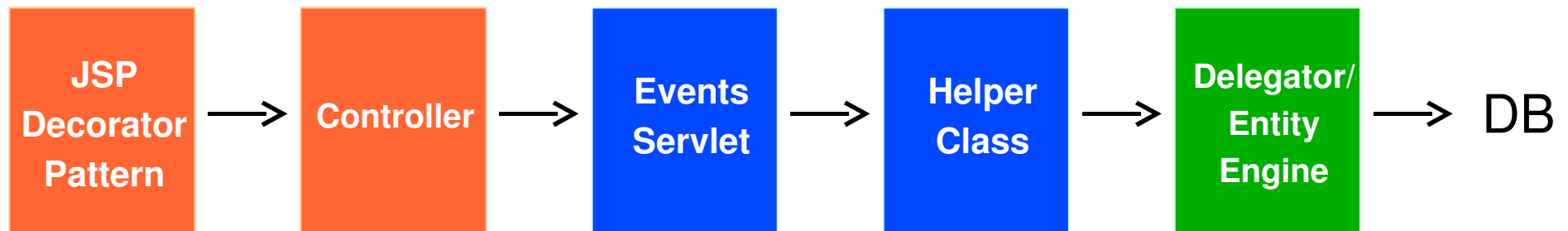
Xerces	Jakarta Commons	Javolution
Lucene	Xalan	POI
Log4j	ORO	

Framework Highlights

- Platform and DB Independent
- Highly Versatile Development Style
- Plug-In Architecture: add new apps easily
- Mutually Aware Tiers

In the Beginning...

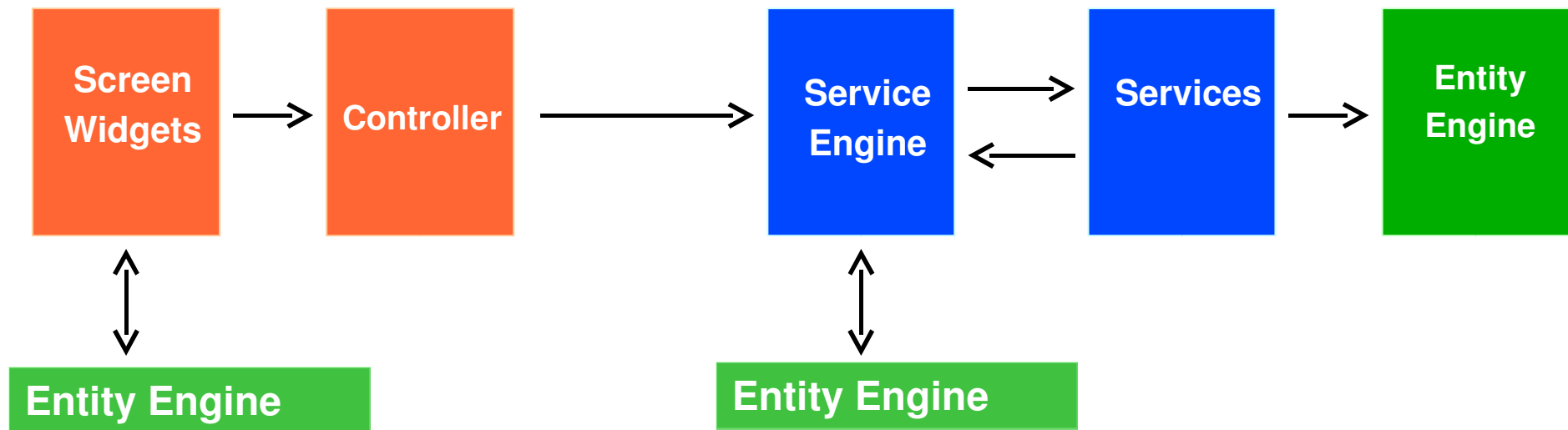
OFBiz (~ 2002)



- Followed *Core J2EE Patterns* book
- Lots of repetitive code in Events and Helpers

OFBiz Architecture Today

OFBiz Today (2005)

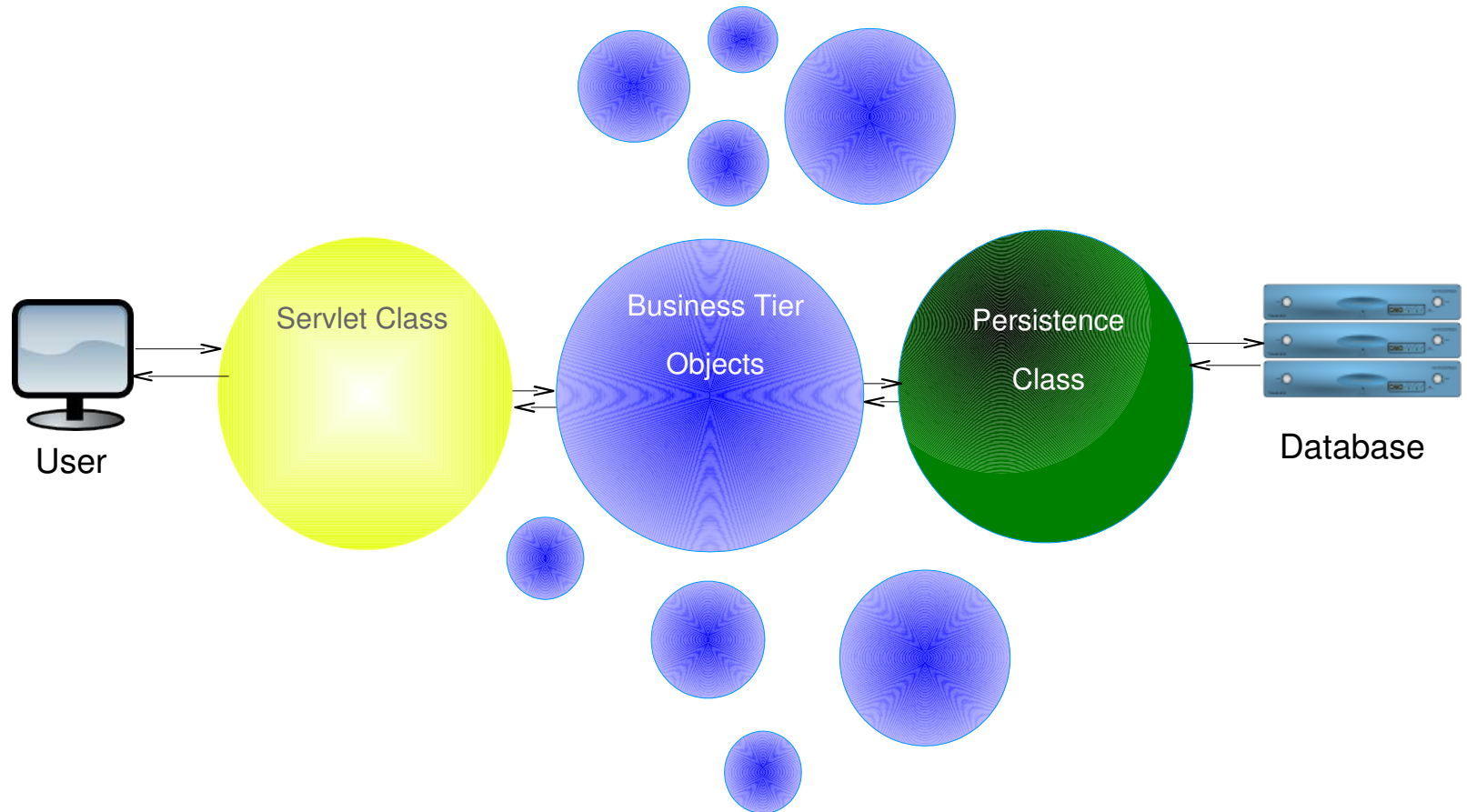


- Much better code re-use with Service Oriented Architecture

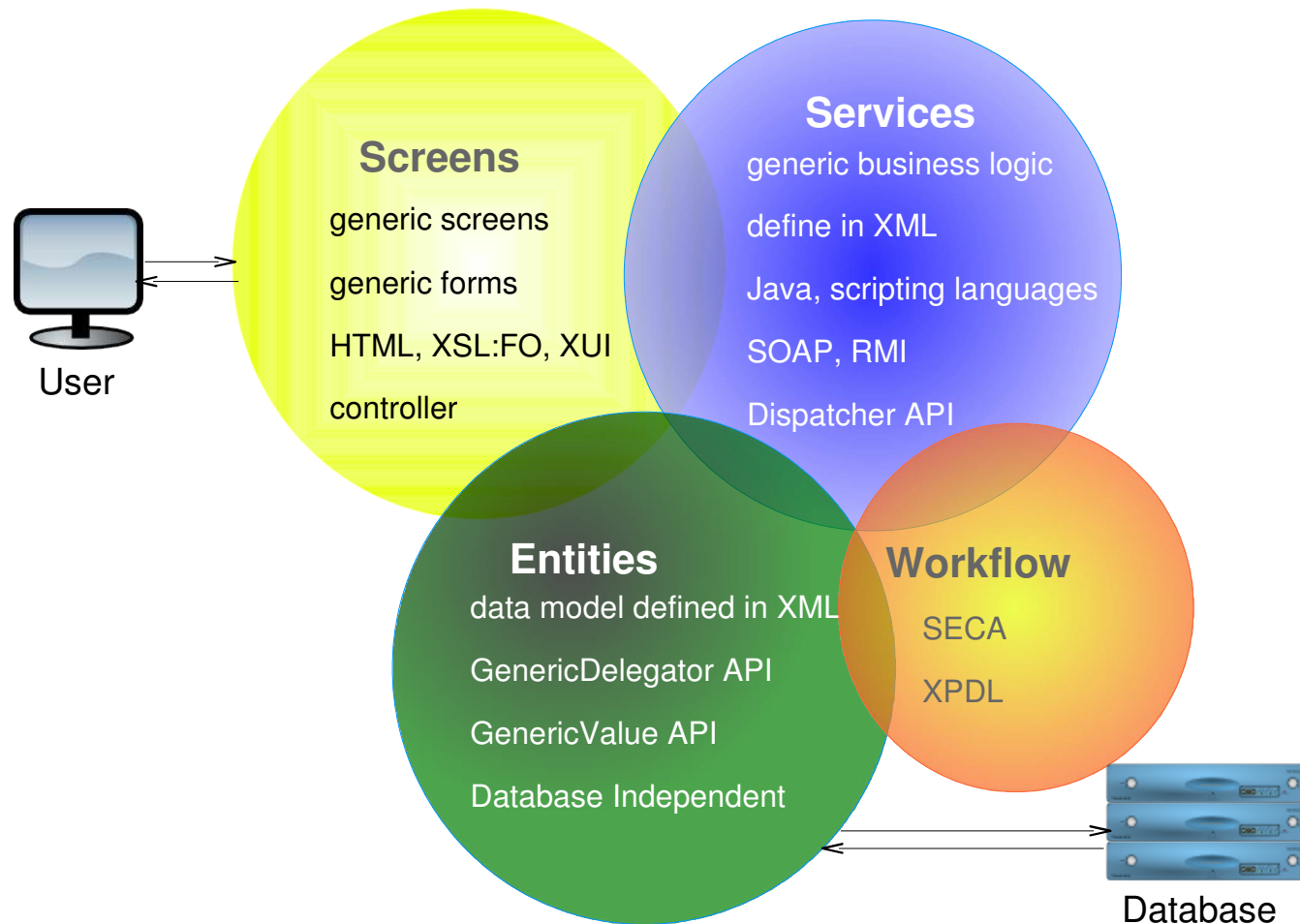
Architectural Comparison: PHP/Perl



Architectural Comparison: Java



Architectural Comparison: OFBiz



Java Persistence Frameworks

- Model data as classes with fields and accessors
- Map fields from Java to SQL
- Auto-generate Java and SQL code

OFBiz Persistence Framework

Entity: small unit of data model

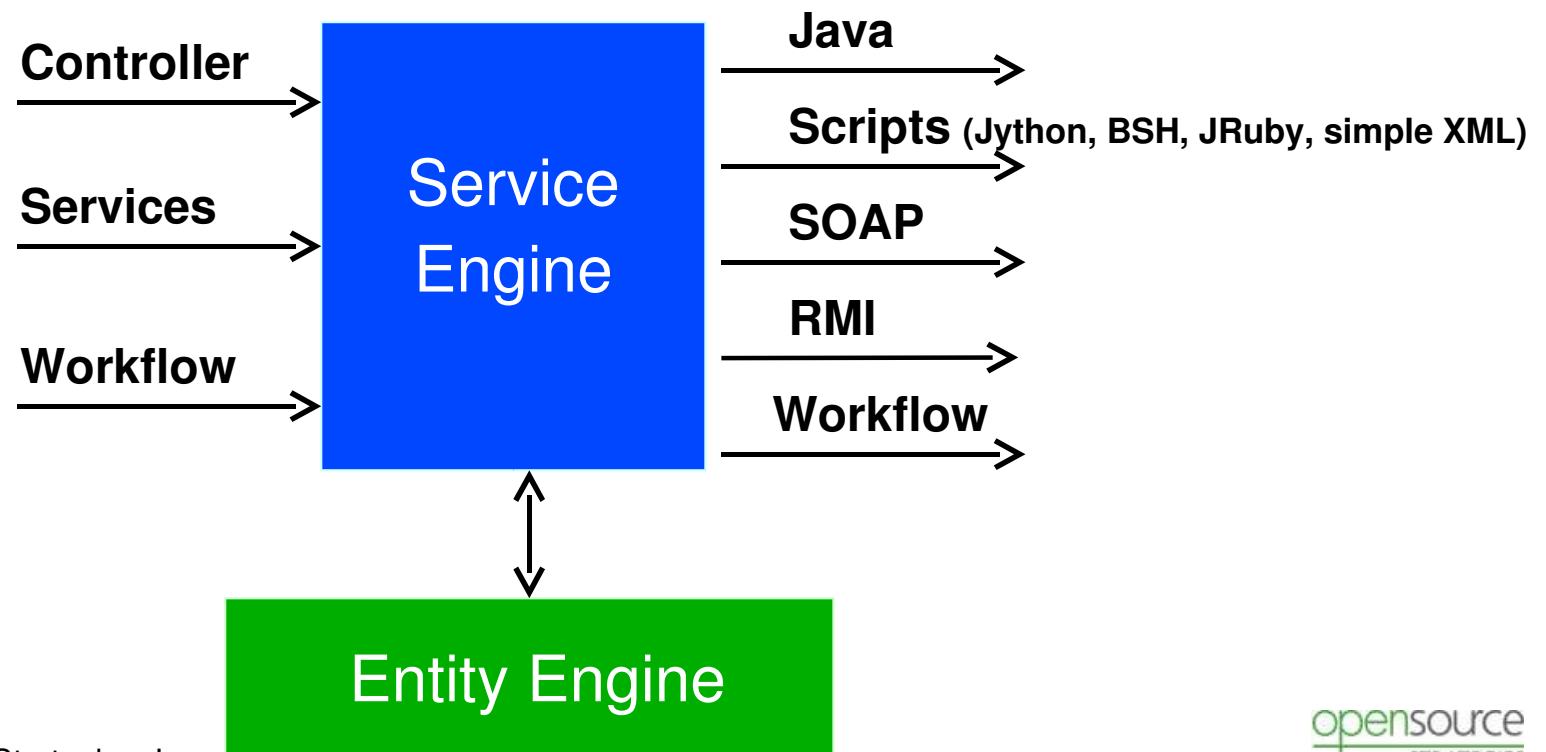
- Key/value pairs
- Related to other entities
- Declared in XML file
- Found by delegator
- Generic class with get, set, store methods

Using the Entity Engine

- Modeling the Data:
 - Entitymodel.xml, entitygroup.xml
- Interfacing the Database:
 - Entityengine.xml, fieldtype.xml, cache properties
- Accessing the Data:
 - Generic Delegator
 - Generic Entity / Generic Value

Business Logic: The Service Engine

- **Service: small unit of business logic**
- Central clearinghouse of business logic. “API layer”



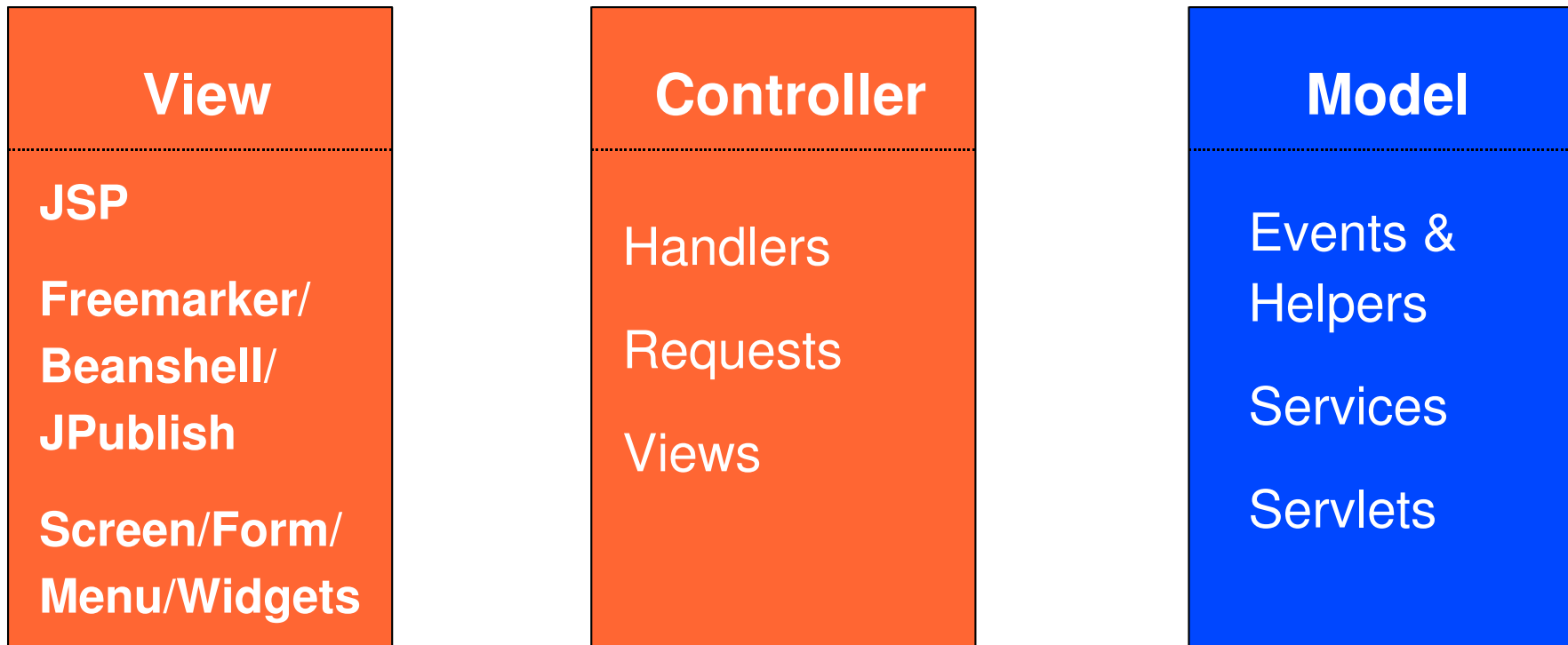
Service Engine Highlights

- Defined in services.xml
- Accessed via Generic Dispatcher
- Map in, Map out
- Built-in transactions
- Exception handling using Map fields

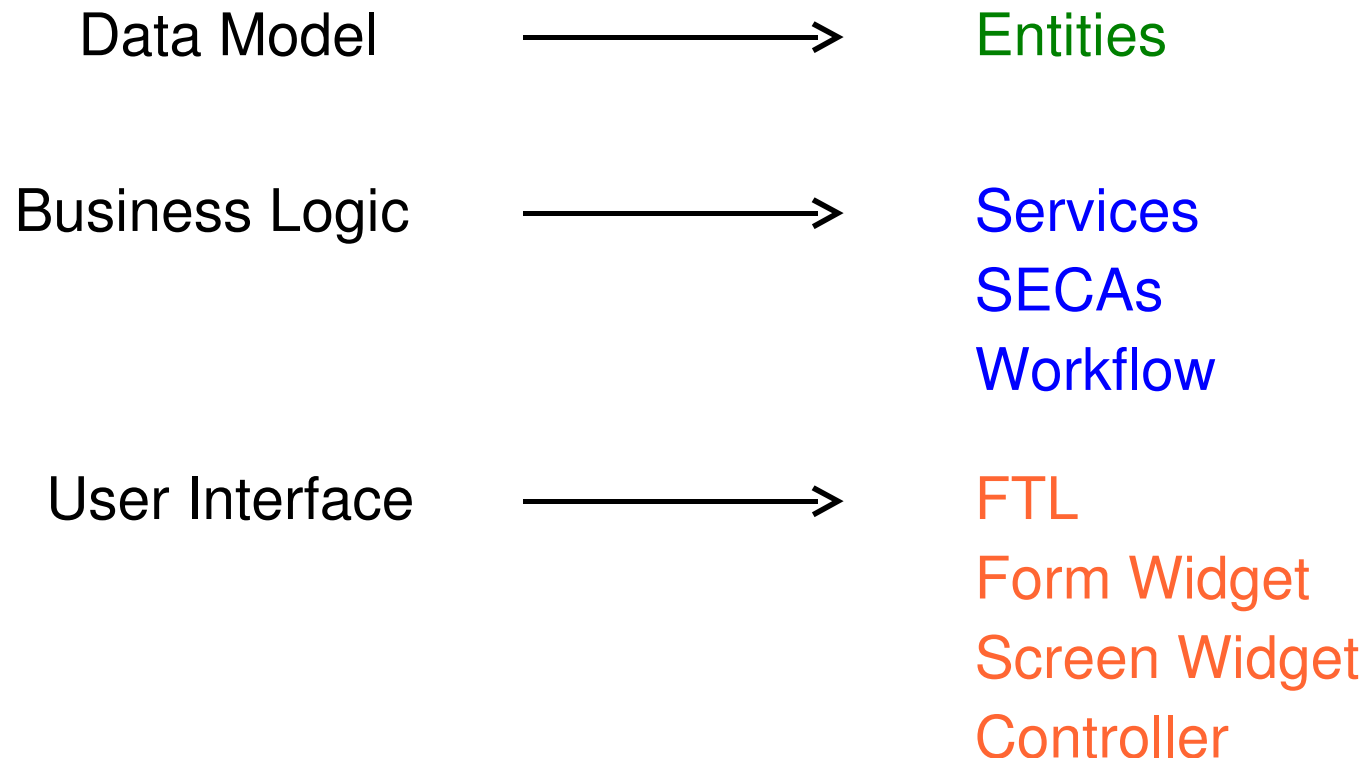
Services Maximize Code Reuse

- Linked together in SECA or XPDL workflow
- Directly plugs into controller: no parsing needed
- Automated form generation

Presentation Layer



Developing with OFBiz

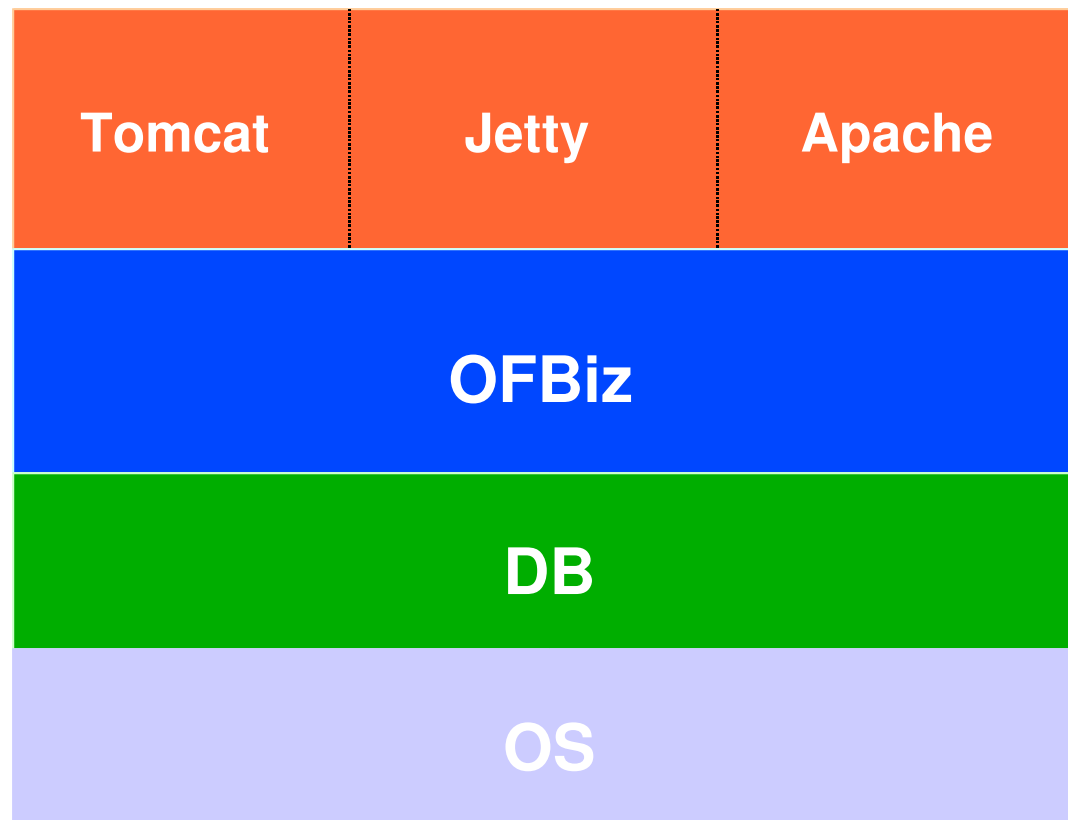


Developing *Efficiently* with OFBiz

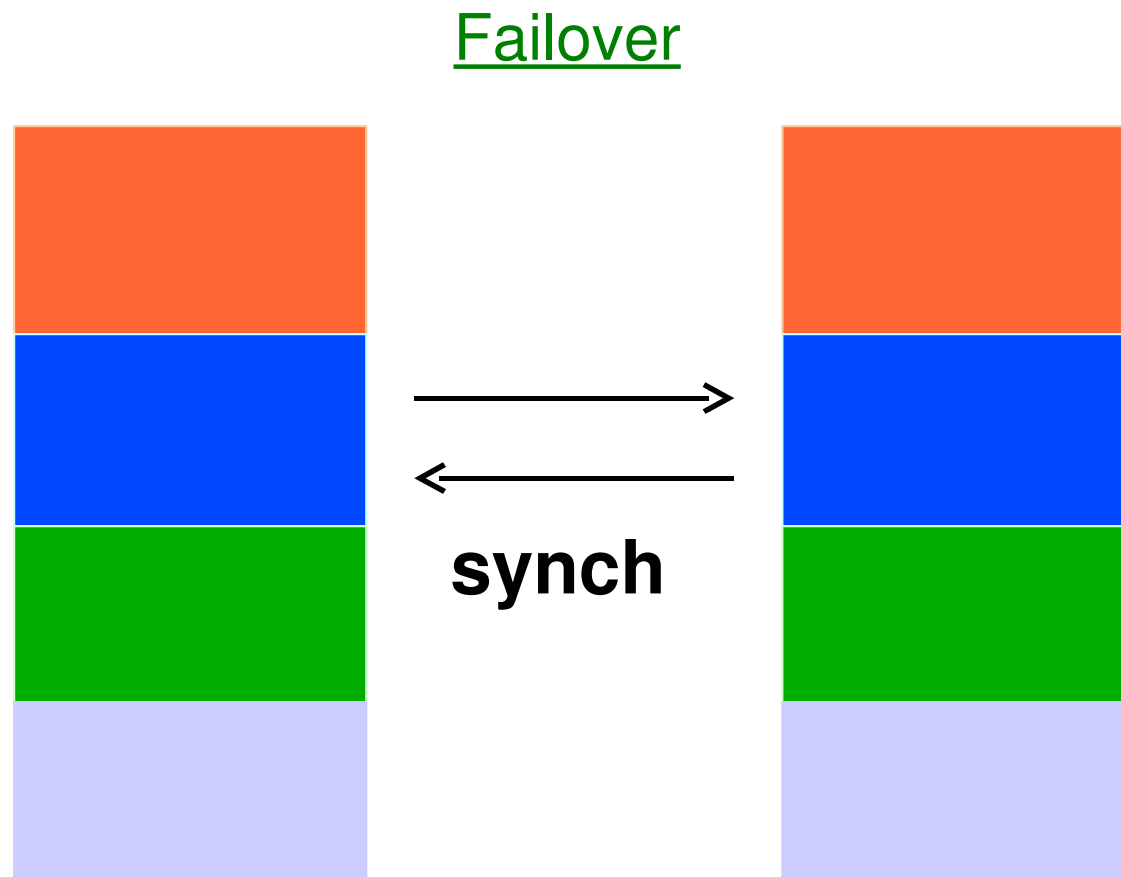
- Use existing data model, business logic
- Use services
- Prototype with beanshell

Deployment Possibilities

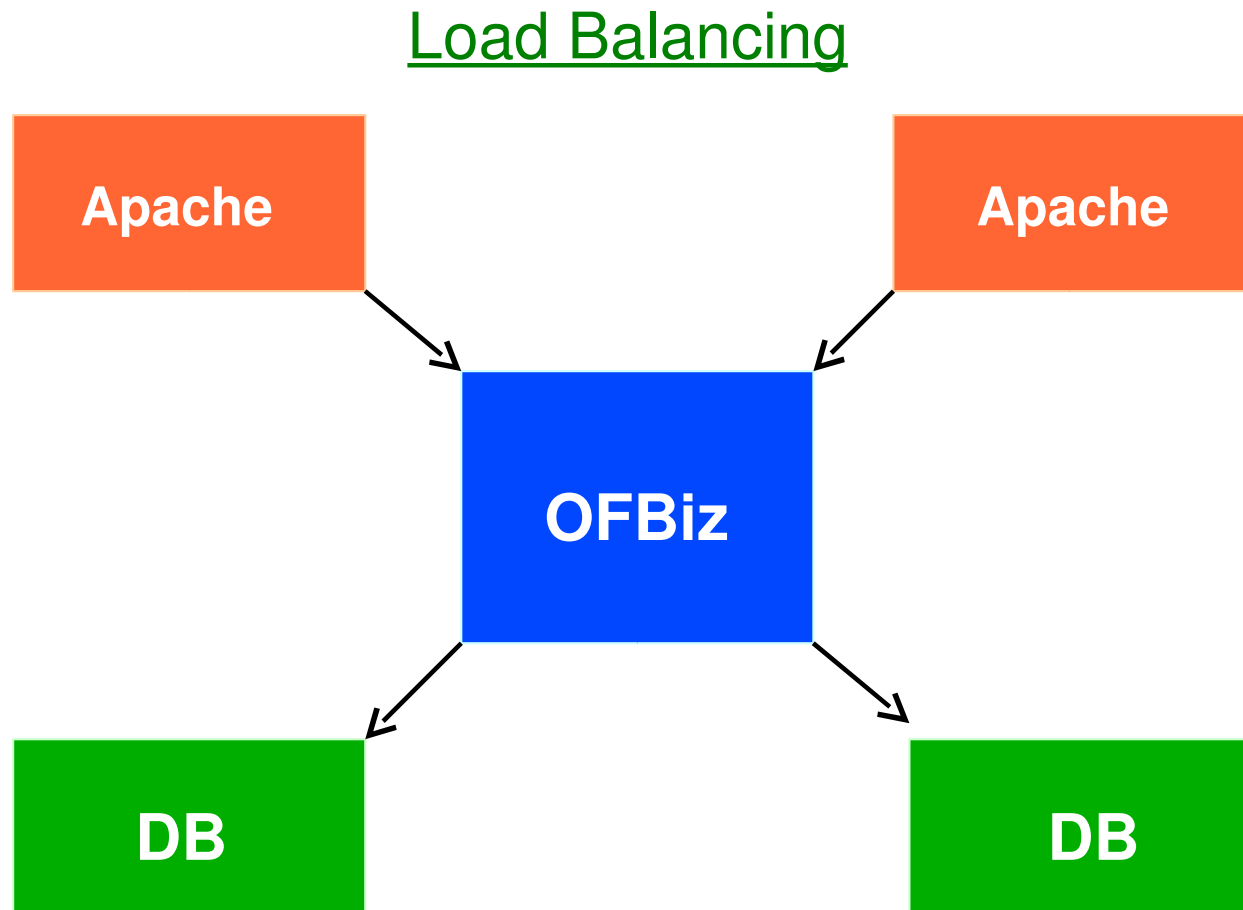
Single Instance



Deployment Possibilities

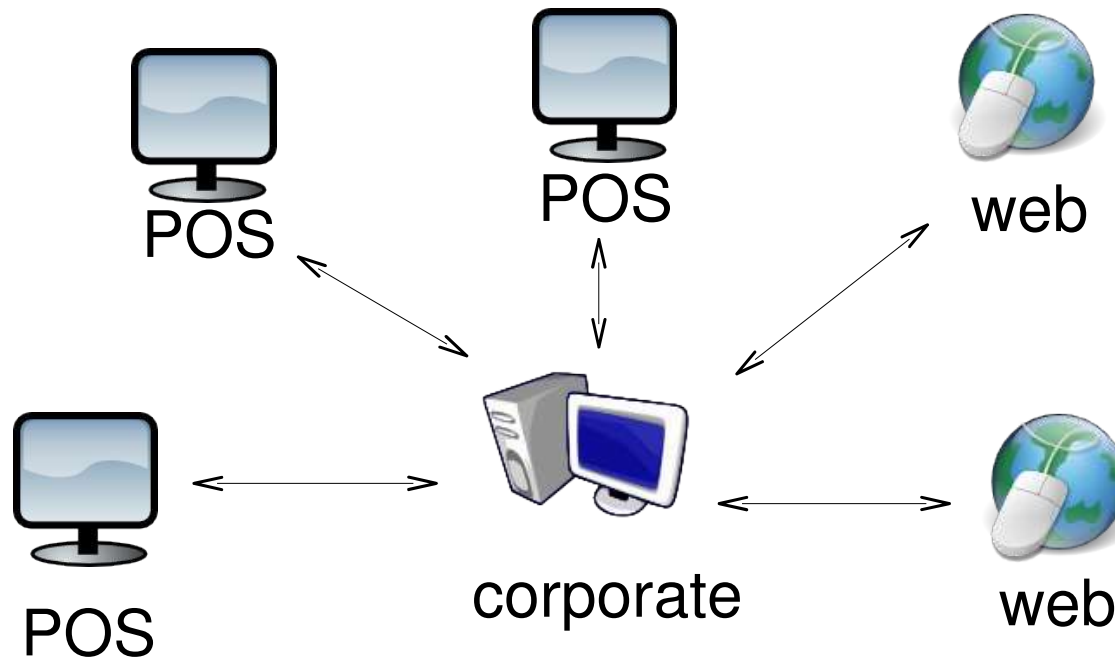


Deployment Possibilities



Deployment Possibilities

Multi-Store



- Built-in synch allows scaling out or up

Why We Chose OFBiz

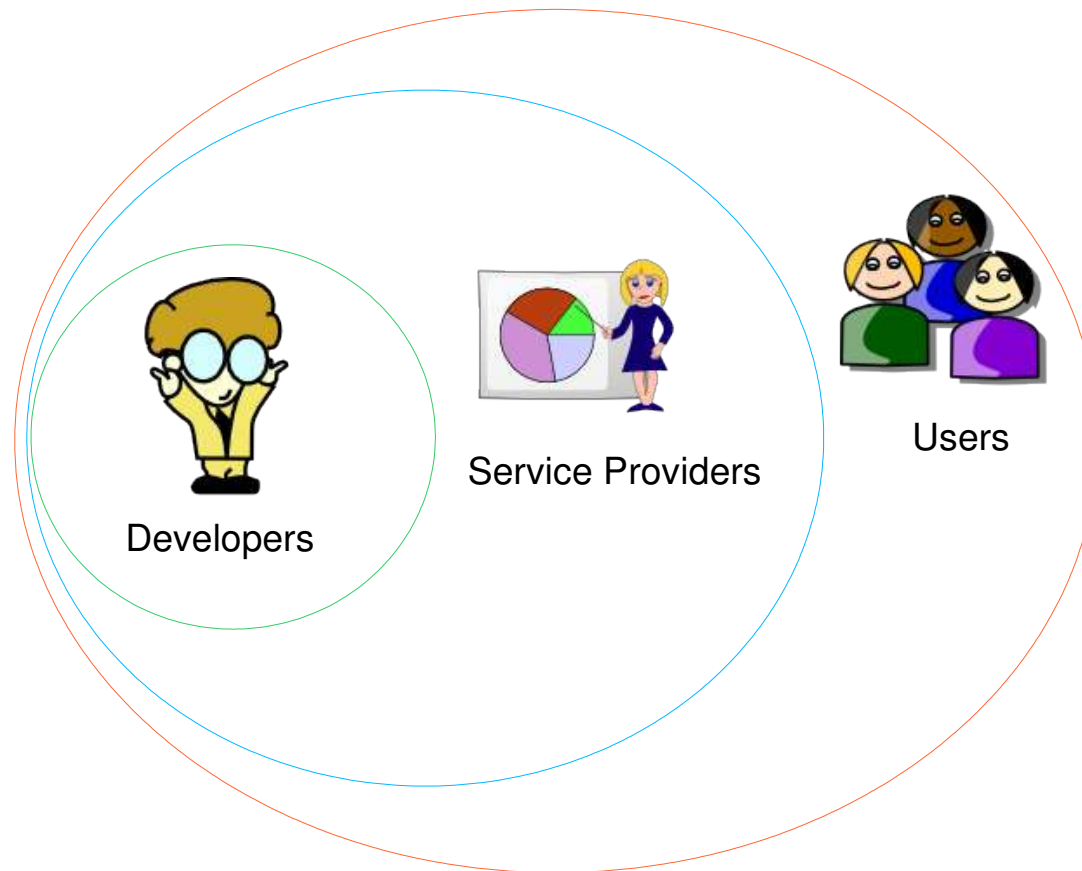
- Flexible
- Scalable
- Strong development model
- Growing community

Next Step

- Try it out
- Developers' InstallFests
- Read the tutorials

www.opensourcestrategies.com/ofbiz

OFBiz SoCal



Bringing Open Source to the Enterprise



Logos properties of their respective owners



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