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JUMPSTART YOUR SOA WITH JBoss ENTERPRISE DATA SERVICES

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4 May 2011

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Agenda

- Agility – The Core Principle
- We've got SOA, Why Do We Need Data Services?
- Data Integration Use Cases
- How It Works & Demo
- EDS Technical Architecture
- Summary & Q/A

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The Business Inflexibility Trap

Inflexibility: The essential business problem

With agility most (technical) problems are solvable

“With enough eyes, all bugs are shallow”



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Agility is Key

- Because change is the only constant
 - Technologies
 - Requirements
 - Regulations
 - Standards
 - Models
 - Processes
 - ???



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Isn't Agility What SOA Gives Us?

- Increase Reuse
 - Reduce Redundancy
 - Increase Flexibility & Maintainability
 - Reduce/Eliminate Manual Processes
 - Reduce Opportunities for Error
 - Accelerate Business Innovation/Execution
 - Reduce Costs
- ====> Increased Agility

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Quotable Quotes - Forrester

- “SOA by itself does nothing to address the question of how data should be managed within this architecture.”
- “Rationalization of services [...] may not lead to a corresponding rationalization of the underlying data.”
- “Often as not, data remains fragmented despite the best efforts to rationalize it.”



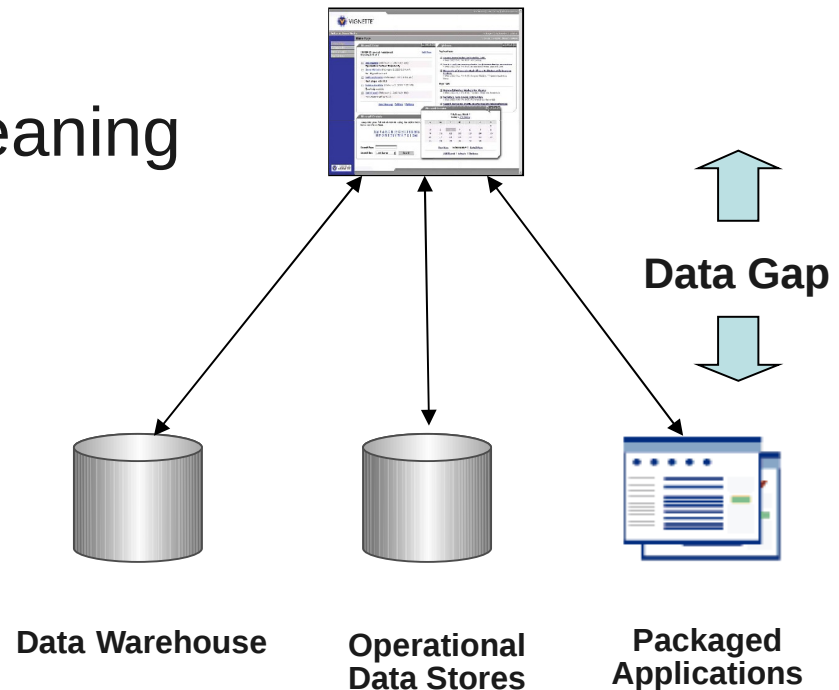
Quotable Quotes - Gartner

- "You won't get the business agility from SOA unless you build an enterprise information management layer first."
- "You will waste your investment in SOA unless you have enterprise information that SOA can exploit."
- *"SOA doesn't solve your data problem, it exposes it."*



Why Is Data So Hard?

- Different physical structure
- Different terminology and meaning
- Different interfaces
- Different owners (policy)
 - Security



- Want to federate/integrate
- Must perform
- Must be secure

Tremendous value in existing assets, but...

Time consuming and costly to access

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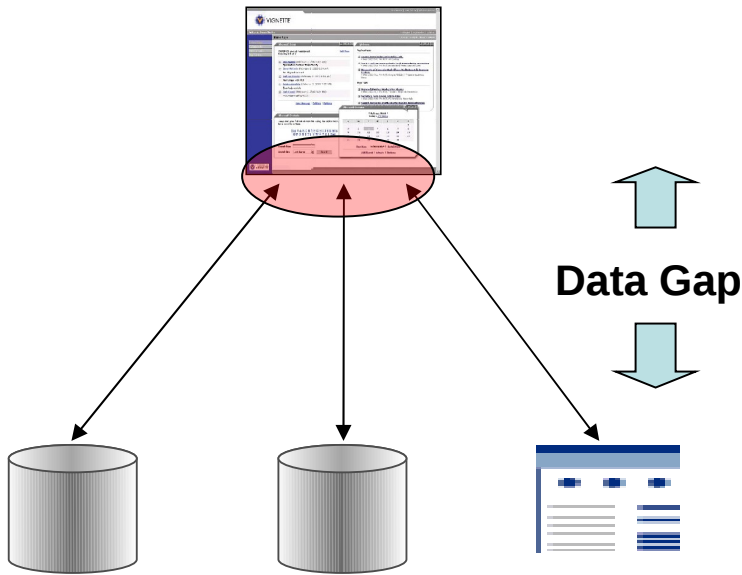
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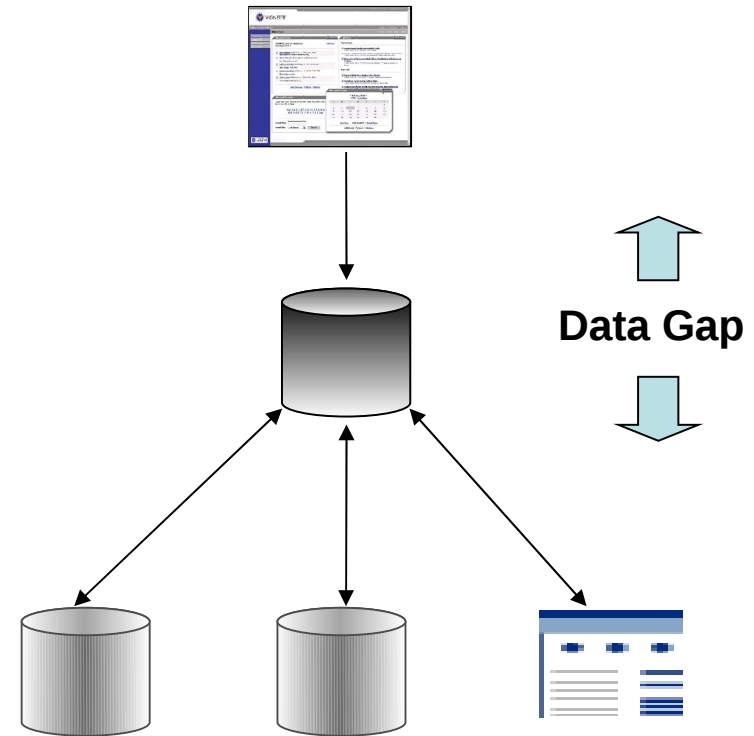
The Usual Approaches

Hard Code



- Time consuming – difficult/costly
- No re-use of data logic
- Any changes break the application

Replicate/Data Mart



- Data not fresh
- Costly – additional licenses
- More copies of data = more silos
- Governance/security

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We Need Another Abstraction

- Abstraction is how to deal with complexity
- Data as an *abstract* service
 - Standard interfaces to disparate sources
 - Integrate both access & semantics
 - Don't move the data, ***virtualize*** it
- Middleware handles integration details

Create agility precisely where it is needed, at the data layer

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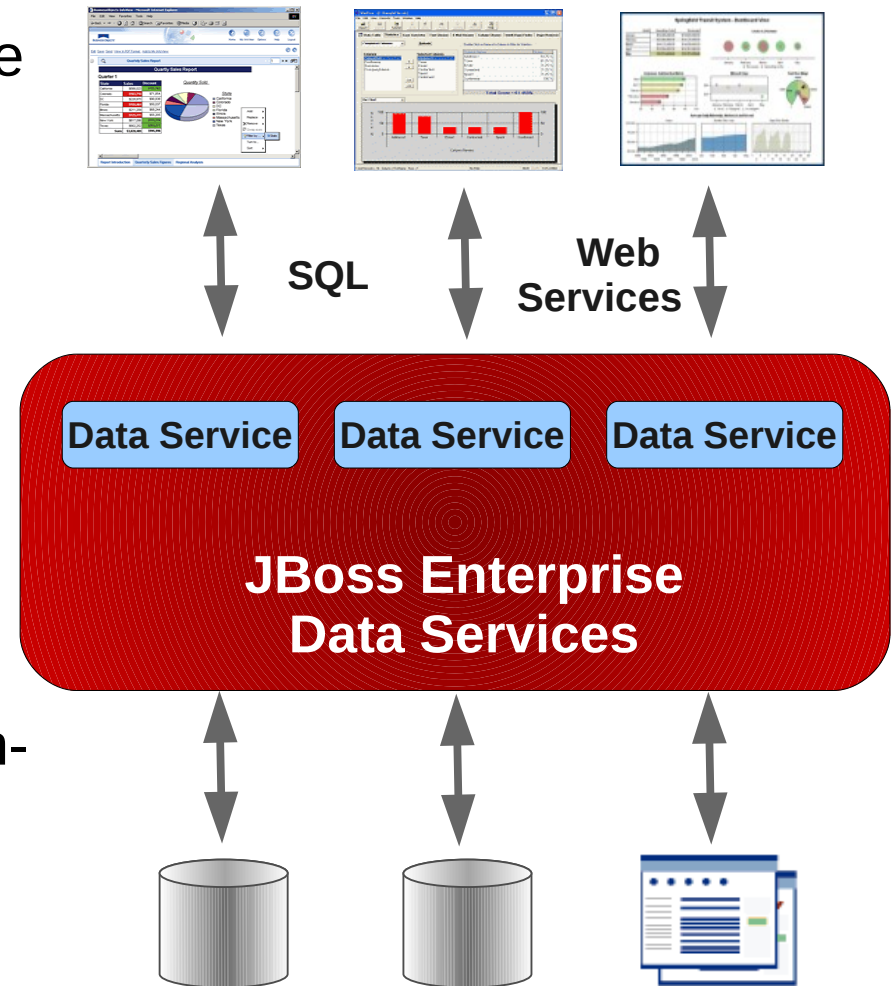


Solution: JBoss Enterprise Data Services Platform

Real Time Data Services to Accelerate Superior Business Execution

- Access to multiple data stores in real time
- Standards-based read/write access
- Speeds application development
- Transform data structure and semantics
- Consolidates data into a “single view”
- Centralized access control

Enterprise-proven – flexible, scalable, high-performance.



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Turns the data you have into the information you need

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Data Integration Use Cases

- Department of Defense
 - Fusion of information, logistics, engineering, planning and transportation technologies to enable military mobility and versatility
- Biotechnology Company
 - Single view of Employee, BI/OI Reporting against Cloud
- Health Claims Processor
 - Consolidated reporting & analysis, event-driven SLA notification
- Intelligence Agency
 - Single (abstract) view of a Person Of Interest across disparate data sources (multiple Federal & State agencies)
 - Provide data services layer of the SOA stack, ESB facilitates sync/async capabilities and provides integrated enterprise data to multiple consumers

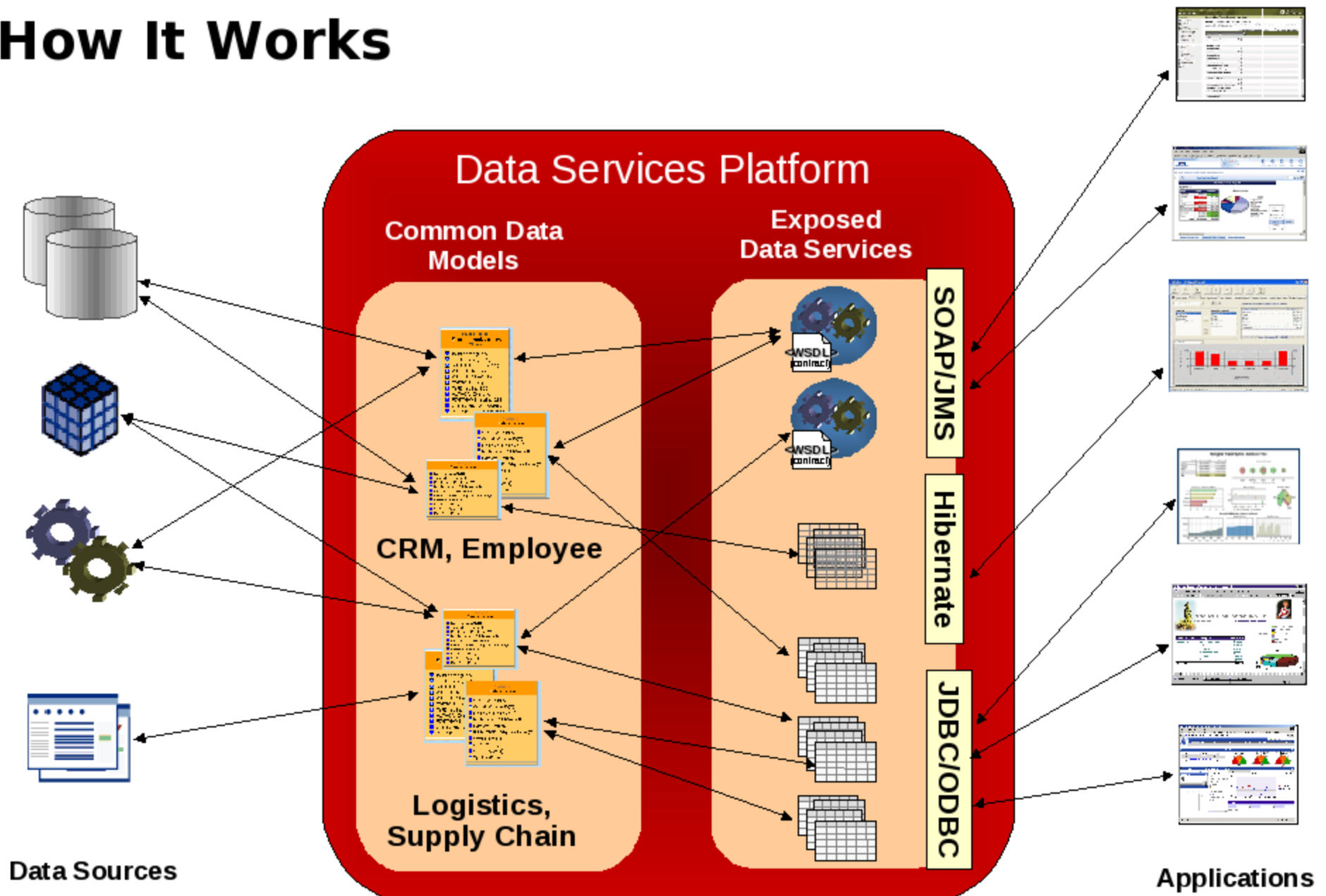
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How It Works



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DEMO

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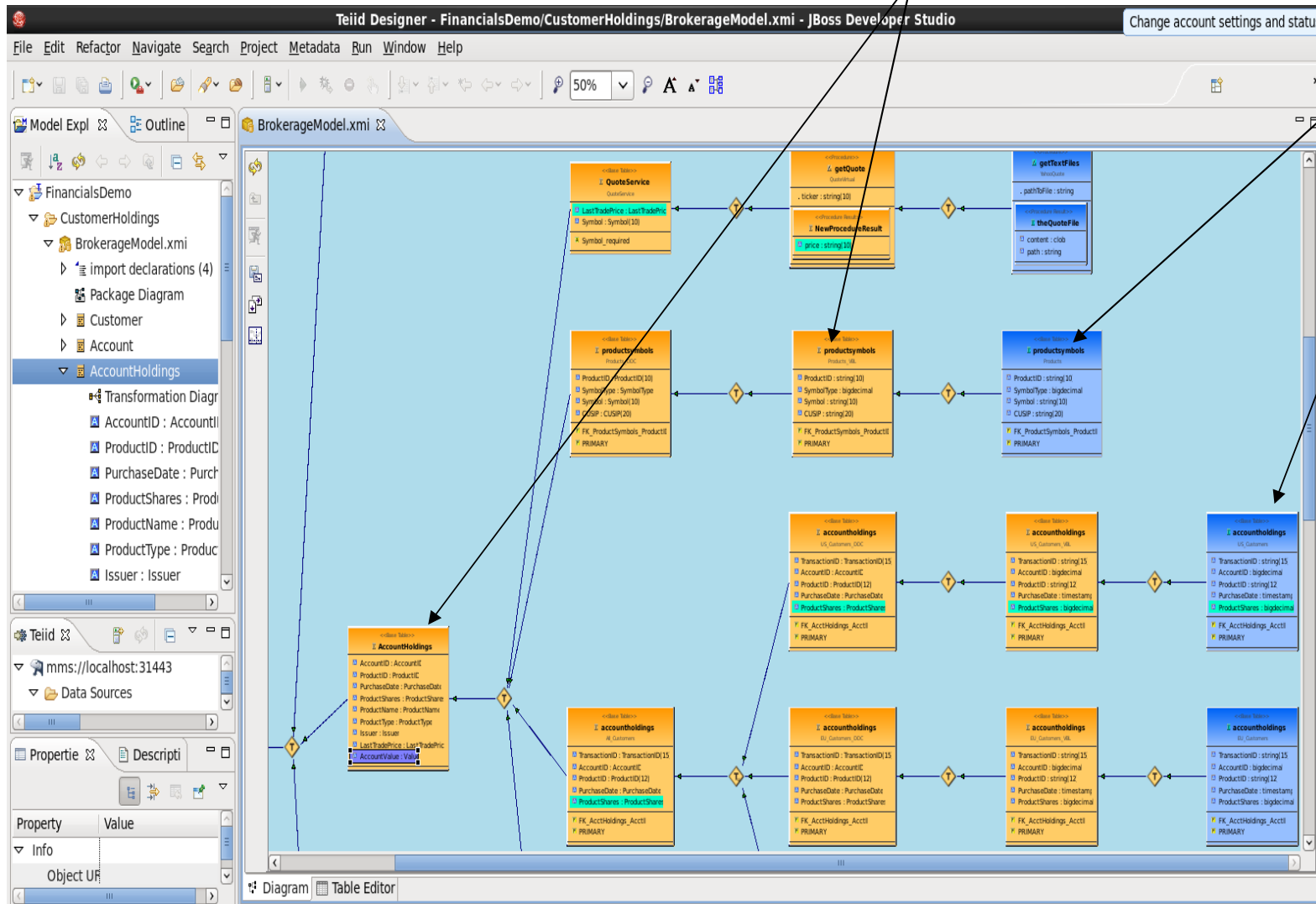
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Designer Tooling

Logical Models

Physical Models representing actual data sources



- Shows structural transformations
- Defines transformations with
 - Selects
 - Joins
 - Criteria
 - Functions
 - Unions
 - User Defined

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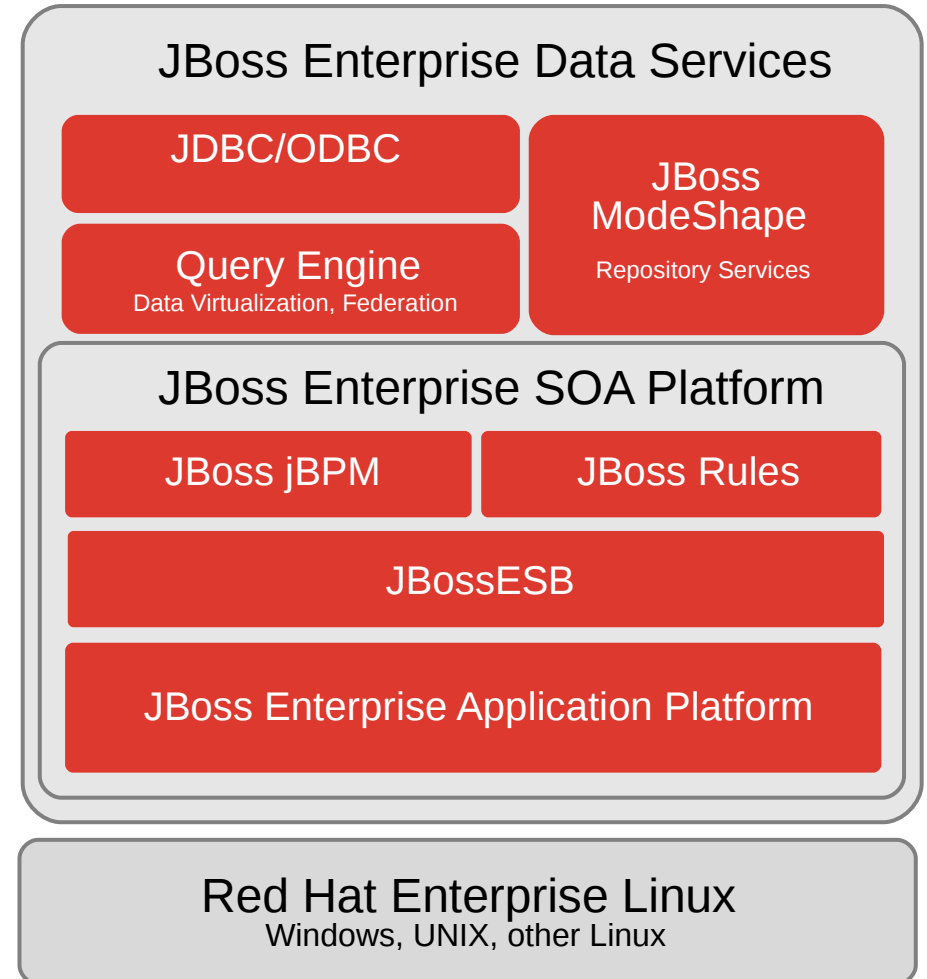


JBoss Enterprise Data Services Platform

Augments and extends SOA Platform to address data access, integration and abstraction.

Subscription to EDS Platform includes full support for SOA-P

Any subscription includes development support for **all** JBoss Enterprise Middleware



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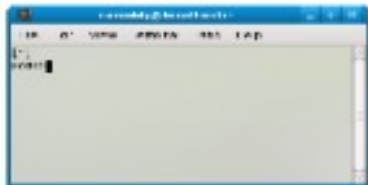


Data Services Platform Architecture

Design Time Tools



JBDS/Designer

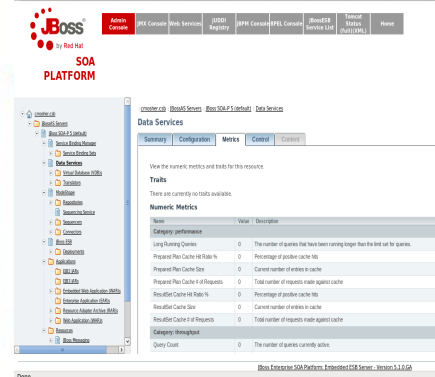


XML/Dynamic VDB

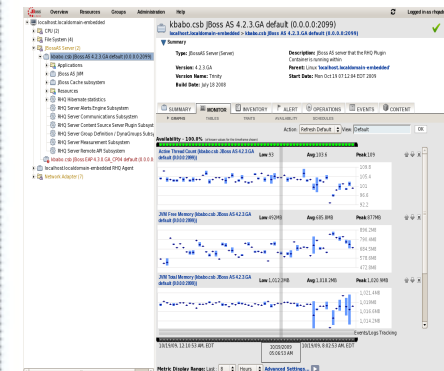


Business Applications

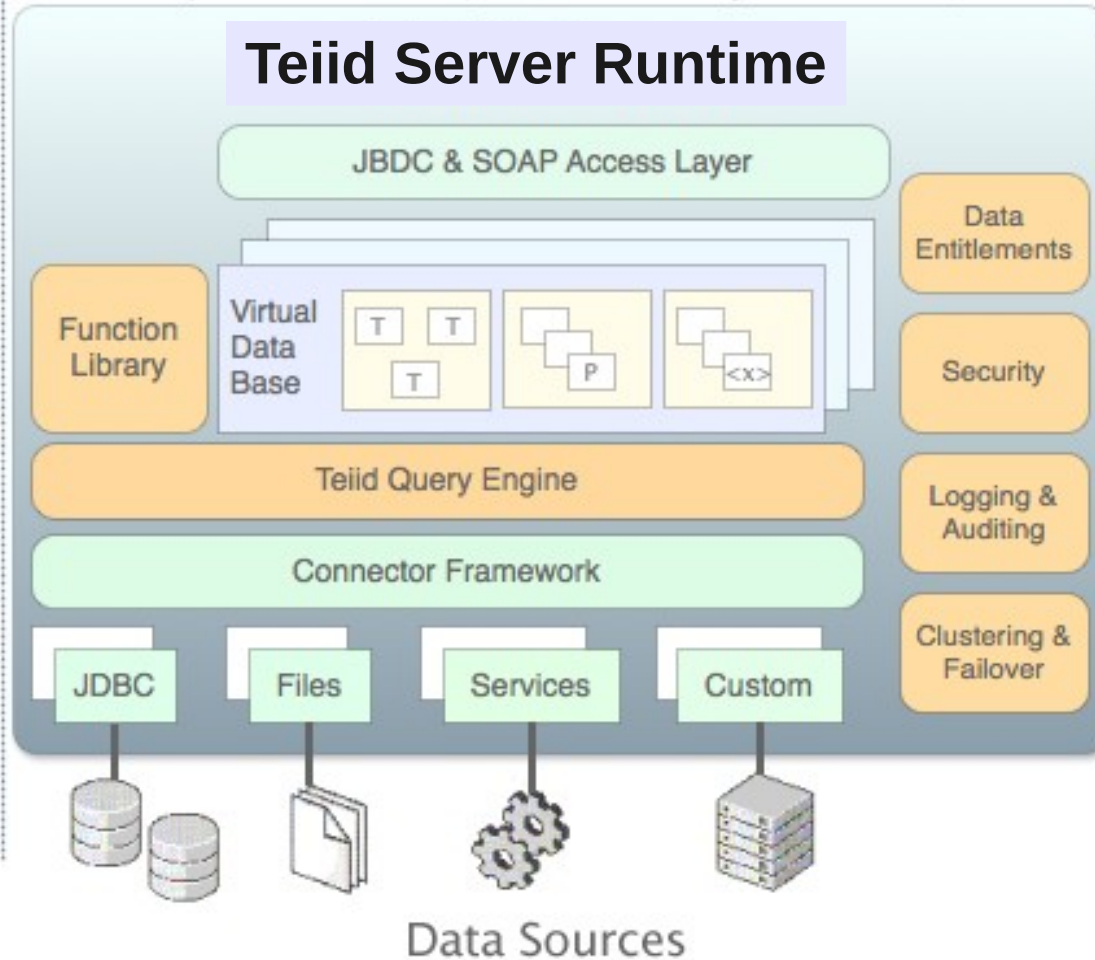
Run Time Tools



Admin Console



JBoss Operations Network (JON)



Data Sources

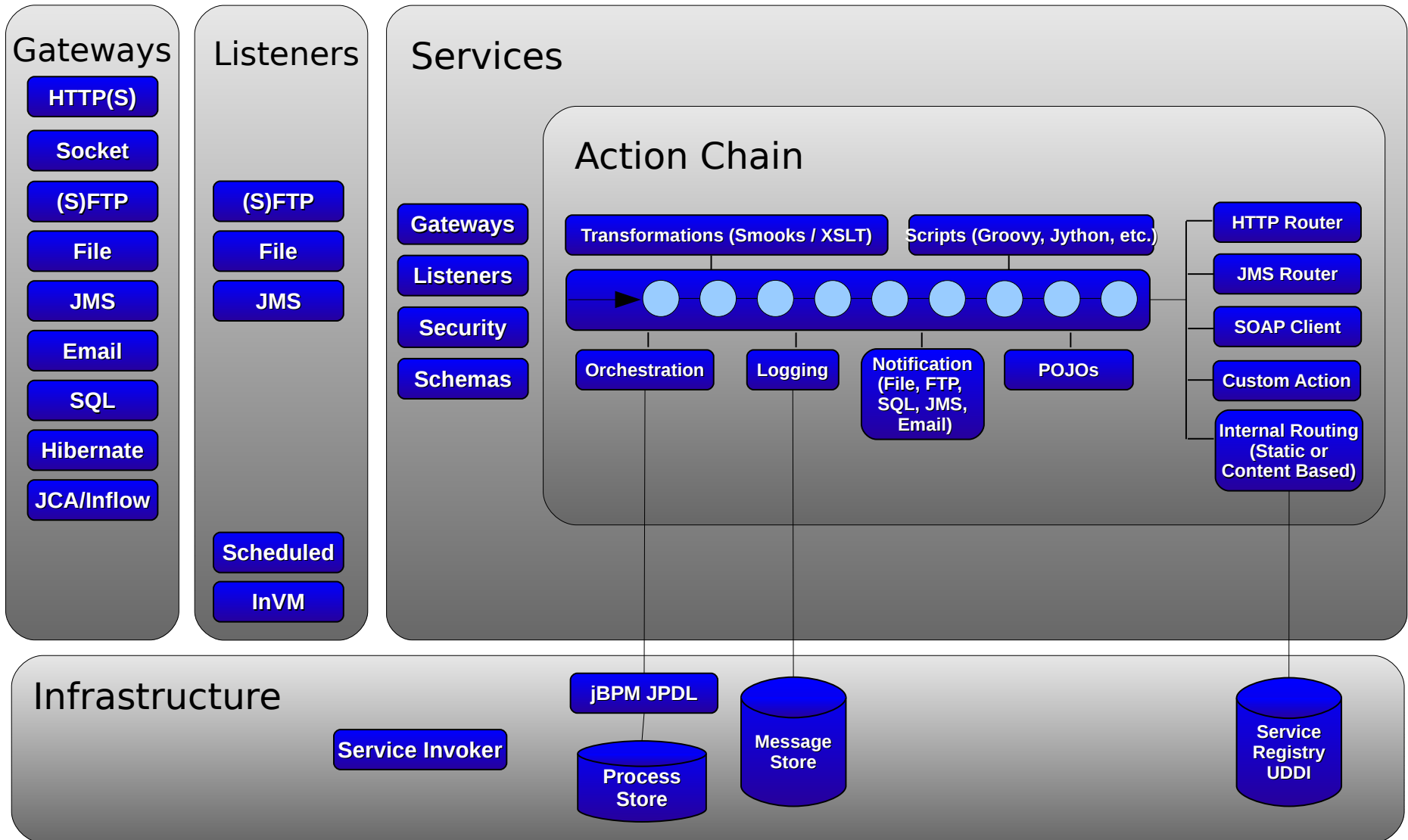
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Integration with the SOA Platform



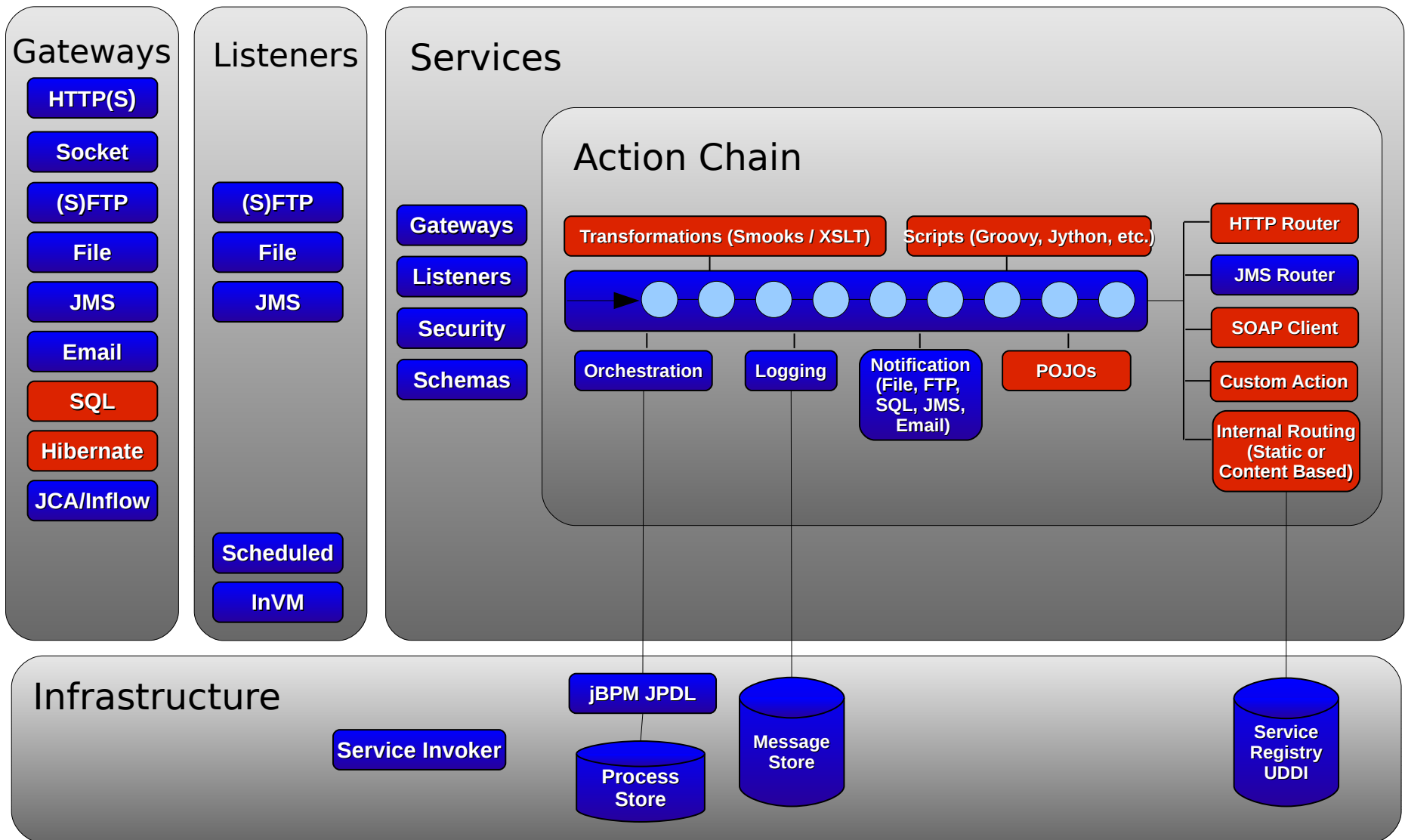
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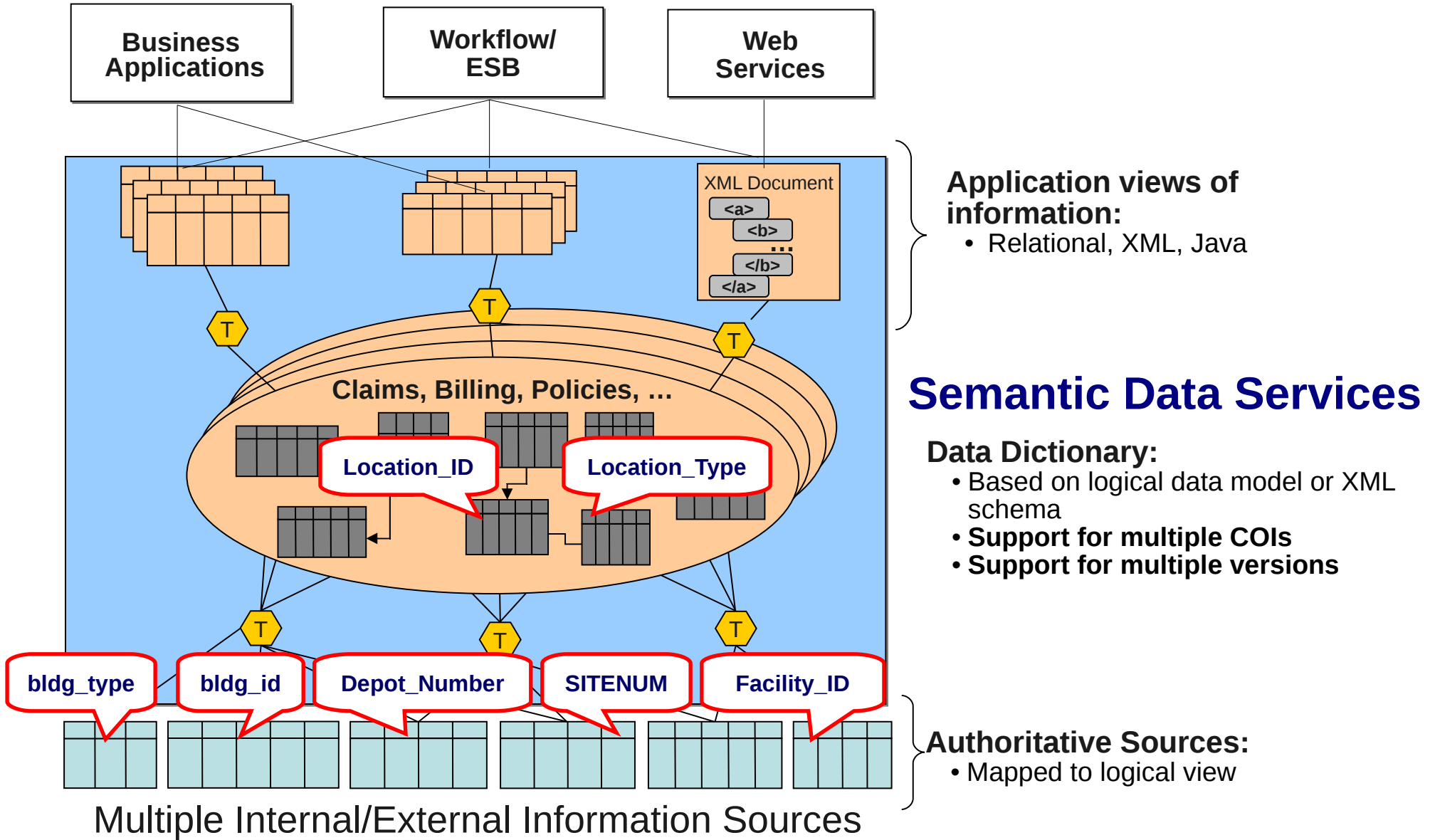
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Semantic Mediation/Integration



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Business Value of Enterprise Data Services

✓ Greater agility, faster time to solution

Jumpstart Your SOA Initiatives!
Better/faster than hand coding
Faster, less costly than data replication
Data virtualization provides loose coupling

✓ Increased ROA

Improved utilization of data assets
Derive more value from existing investments
Complements existing systems

✓ Improved organizational performance

The right data at the right time to the right people
Decision support, BI with a complete view of information across the enterprise

✓ Better control of information

Powerful security, Auditing, Data Firewall
Avoid data silo proliferation
Central data access and policy, Compliance

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Call To Action

- Try It Out at the JBoss *Choose Your Own Adventure* Lab!
 - Thursday 2-4 pm
- Stop by the Booth
 - Anytime, but I'll be there Thursday 5-7pm
- Session at Red Hat Campground 1
 - Friday 9:45-10:45 am
- Visit the Product Page at <http://www.jboss.com/products/platforms/dataservices/>

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