JBoss World 2006 LAS VEGAS

Provisioning Services in the "Must Have Now" World

Guaranteed, Self-Managed Execution through Virtual Application Infrastructure

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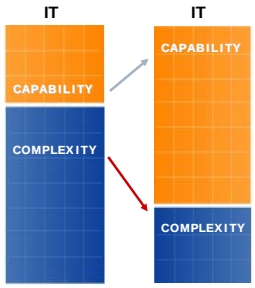
Why Pursue SOA? Increase Capability, Reduce Complexity

Increase Capability

- ✓ Leverage SOA and Web Services
- ✓ Use best-of-breed, standards-based technologies
- ✓ Leverage open source initiatives where appropriate

Reduce Complexity

- ✓ Re-use standard architectures
- ✓ Use common distributed deployment and runtime models
- ✓ Commoditize and share infrastructure - automate operations

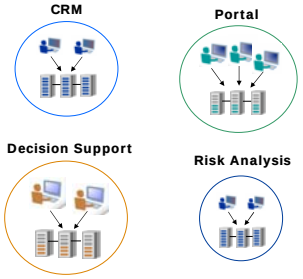


Web Services Enable SOA...

- Heterogeneous Clients and Services
- Platform Neutral
- Interoperability Improving
- Specifications are Maturing

...but Availability is Up To You!

Current State: Siloed Web Applications

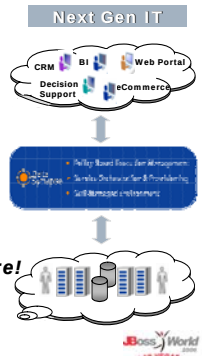


- Static deployment: install, configure, deploy, upgrade
- Provision for peak demand and resilience
- Inability to scale/change in a timely manner

Tearing Down the Silos

- Logical Pool of Compute Resources
- Service-Oriented Management
- Centralized Configuration
  - ✓ Deployment
  - ✓ Versioning
  - ✓ Upgrades
- Unconstrained Scalability
- Resiliency

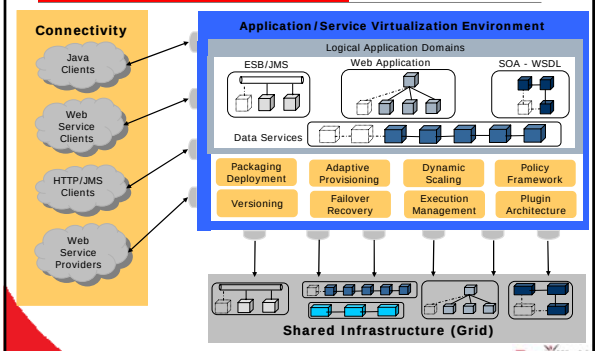
Virtual Application Infrastructure!



Virtual Application Infrastructure

- Decouples Service/Application Execution from Physical Compute Resource
- Provides
  - ✓ Service/Application Ubiquity
  - ✓ Policy-Based Execution
  - ✓ Guaranteed Service/Application Execution
  - ✓ Service Heterogeneity

SOA and Virtualization – Multiple Architectures



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Service/Application Ubiquity

- Services/Applications Deployed to All Appropriate Compute Nodes
- Multiple Service/Application Instances Executing Simultaneously on Each Node
- Availability Limited Only by the Number of Instances
- Model Ensures Scalability and Resilience

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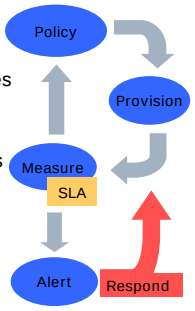
Policy-Based Execution

- Alignment of Service/Application Execution with Business Requirements (SLAs)
- Centralized Management of Policies Enables Business Agility
- Ensures Resource Availability is Based upon Current Requirements
- Decouples Business Requirements from Service/Application Implementation



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Guaranteed Execution

- Service/Application Ubiquity Ensures Readiness to Execute
- Policy Ensures Resources Always Available for Execution
- Adaptive/Intelligent Scheduling Ensures Fastest Response
- Hardware Failure (or Gain) Has Little or No Impact on Service Execution

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Heterogeneity

- Support for Any Service Type
  - ✓ Java, C++, .NET, .dll, .so, .exe, shell
- Client Service Invocations Become Abstract
- Client Support for Direct API Access or WSDL/SOAP
- WS-I Basic Profile Ensures Interoperability

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Side Effects

- Resource Utilization Maximized
- Periodic Maintenance Has No Impact on Production Environment
- Ability to Overflow onto Non-Production Systems
- Production Deployments Happen Once, Occur Everywhere
- Virtual Application Infrastructure Enables “Have Your Cake, and Eat it Too” Deployments

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Summary

- Service/Application Availability is Up to You
- Grid is the Basis for Virtual Application Infrastructure
- Policy Ensures Alignment of Business Requirements (SLAs) with Service/Application Execution
- IT Resources Maximized, Management and Spending Minimized

Questions?

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Thank You!