

Overview of Web Services Management

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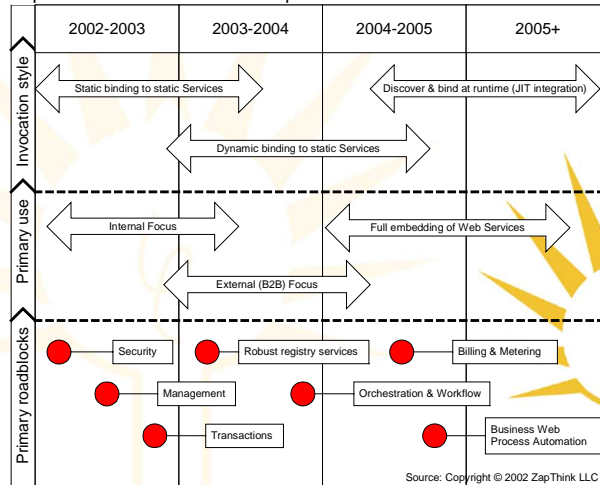
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Management – The 2nd Roadblock

- After security comes management
- Critical issue for 2002-2003 timeframe

ZapThink Web Services Roadmap



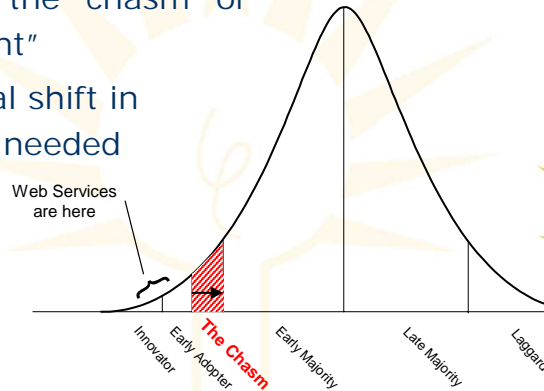
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The Web Services Adoption Curve

- Now in the Early Adopter/Innovator Stages
- Yet to cross the “chasm” or “tipping point”
- Fundamental shift in perspective needed



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The shift in perspective...

**Point-to-point
integration
to
Service-Oriented
Architecture (SOA)**

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Point-to-point integration...

- SOAP wrappers / Web Services adapters
- Replace proprietary APIs with standards-based APIs
- Still fine grained, may still be tightly coupled
- n-Tier architecture with addition of Web Services interface
- Less secure and more verbose



Same cake with new frosting

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Service-Oriented Architecture...

- Coarse-grained business Services
- Location independence
- Underlying systems loosely coupled from Service consumers
- Security functionality available as a Service
- Dynamic discovery and invocation



Sounds good, but how does it work?

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Why "Service-Oriented Management"?

- Business agility is fundamental business driver.
- Business agility requires efficient, Service-oriented integration.
- Service-oriented integration requires Service-oriented architectures.
- Service-oriented architectures require encapsulation and composition.
- Service-oriented management applications provide encapsulation and composition.

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Service-Oriented Management offers...

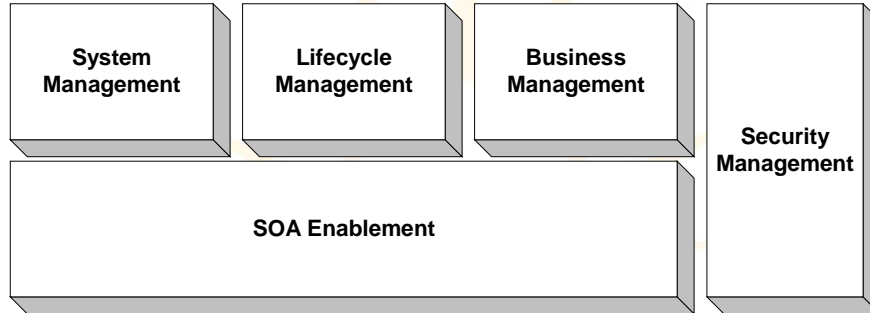
- Combine fine-grained APIs into coarse-grained business Services
- Handle quality of service, scalability, etc. "behind the scenes"
- Allow for new and updated Web Services
- Provide business visibility and control for the IT environment

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The Five Categories of WS Management Functionality



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System Management

- Monitoring
- Alerts
- Billing & metering
- Auditing & reporting
- SLA/QoS management
- Exception management & problem resolution
- Root cause analysis



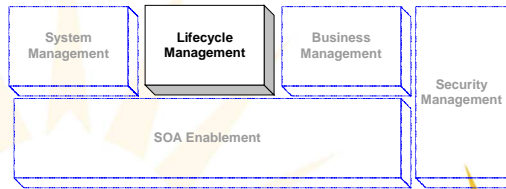
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Lifecycle Management

- Versioning
- Deprecation
- Dependencies
- Configuration management
- Provisioning
- Web Service emulation

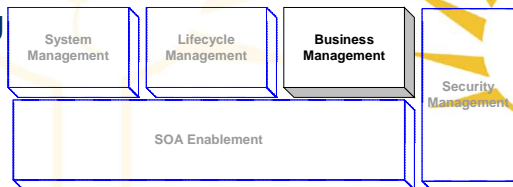


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Business Management

- Business process management
- Transaction management
- Message prioritization/differential QoS
- Business activity monitoring & decision support
- Billing & metering

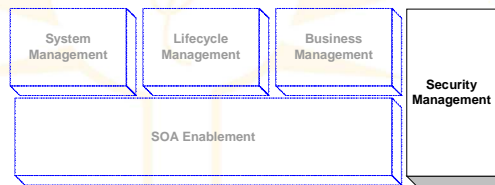


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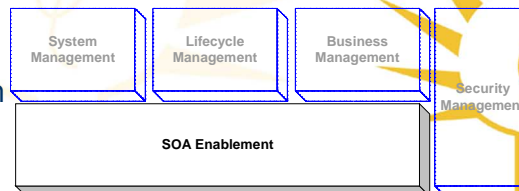
Security Management

- Authentication & access control
- Encryption/decryption
- Malicious attack prevention
- Non-repudiation



SOA Enablement

- Caching/virtual Web Service
- Synchronous/asynchronous conversion
- Coarse graining/Web Services networking
- Web Service instance management/resource mobility
- Dynamic routing
- Protocol translation





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Architectural Approaches to Web Services Management

- Proxy mode
- Invasive vs. non-invasive approaches
- In-server vs. standalone
- Centralized vs. distributed
- Enterprise vs. B2B

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Architectural elements of a Web Services Management app

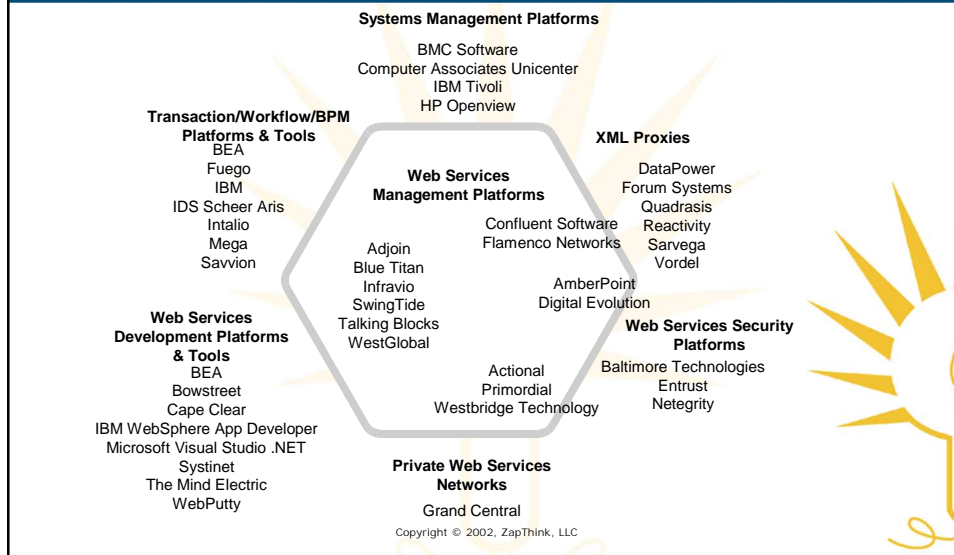
- Management dashboards
- Service grid
- Adaptation layer
- XML pipeline
- UDDI-compliant registry

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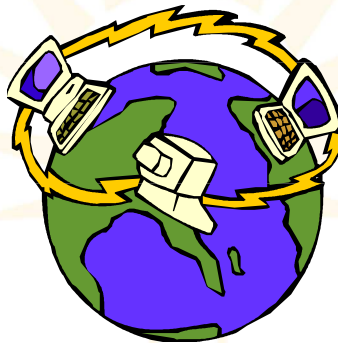
WS Management Market Map



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Let's take a closer look...

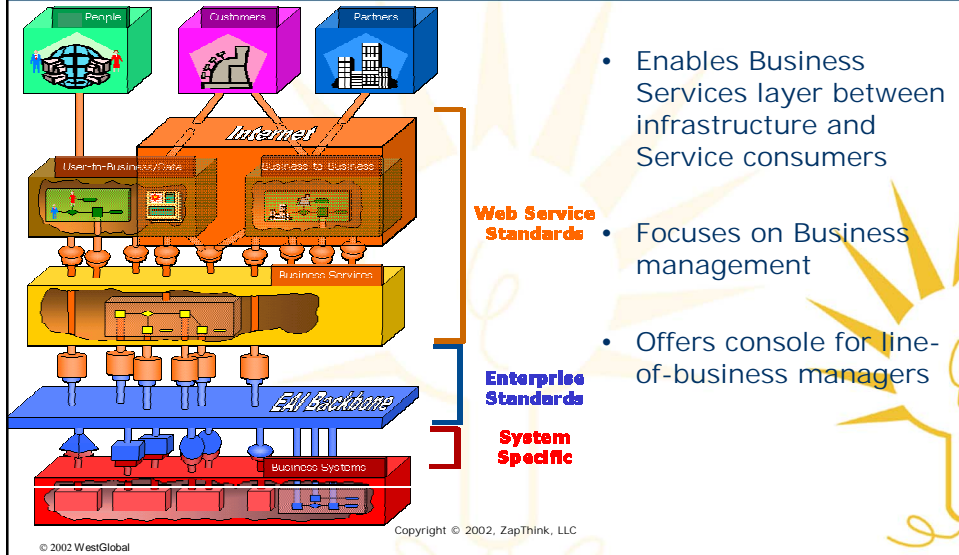
What are Web Services Management platform vendors offering?



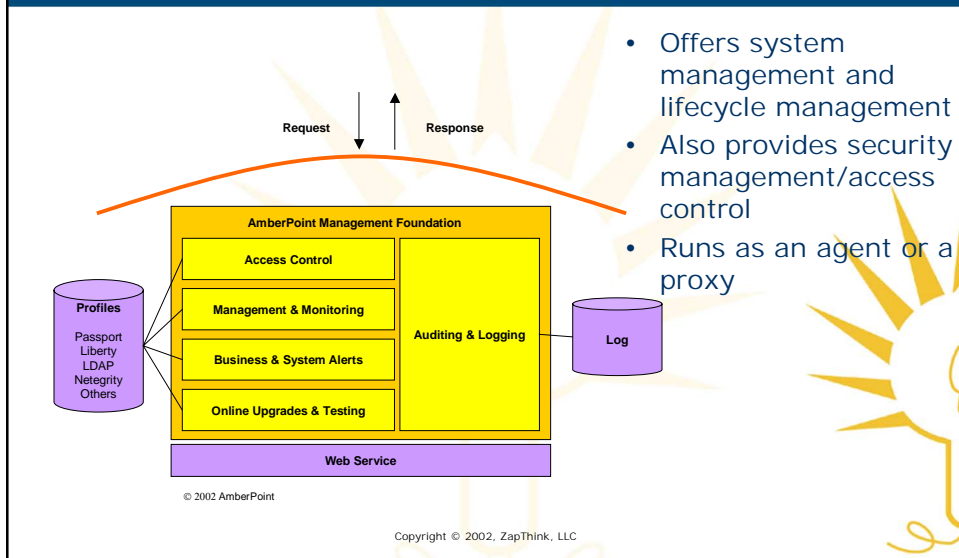
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WestGlobal



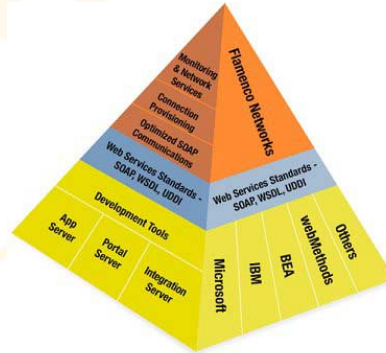
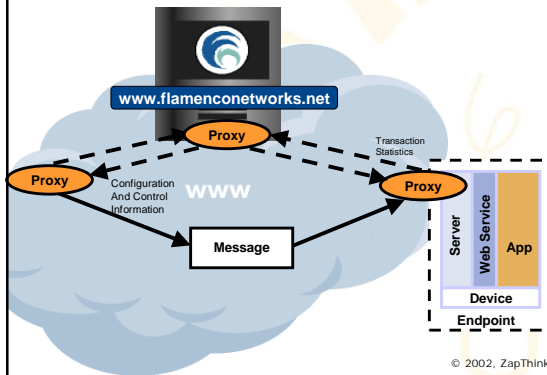
AmberPoint





Flamenco Networks

- Can be run in-house or as hosted solution (Web Services network)
- Focuses on provisioning and system management
- Proxy approach



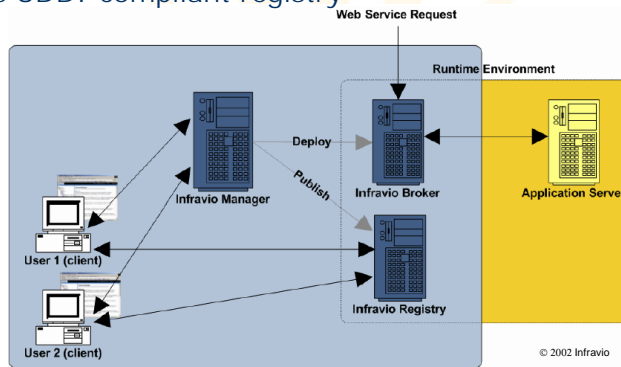
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Infravio

- Focuses on lifecycle management and SOA enablement
- Uses UDDI-compliant registry



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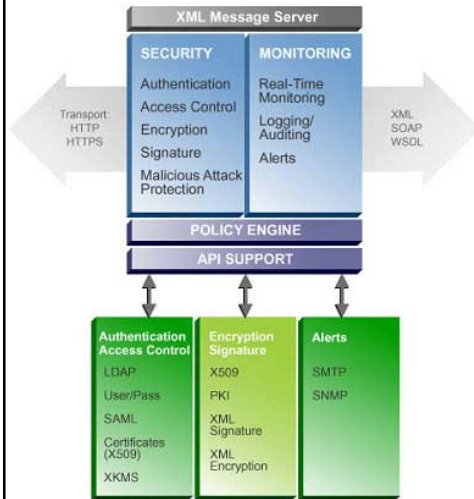
Infravio Web Services Management System

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Westbridge Technology



- XML "application level" firewall on top of policy engine
- Focuses on security management and system management

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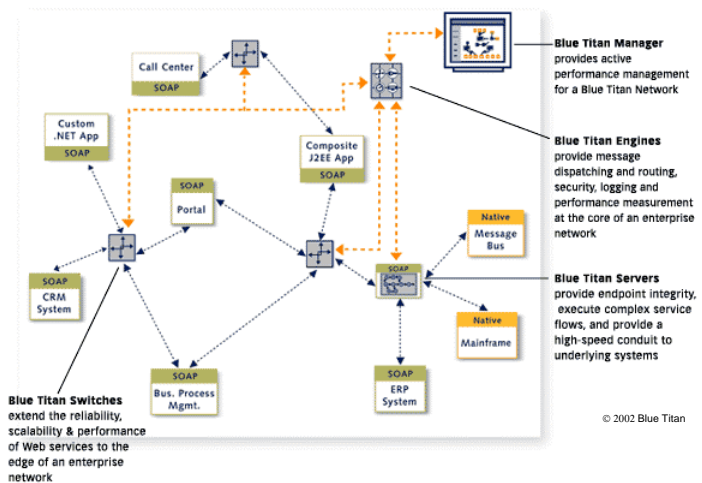
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Blue Titan

- Fully distributed, non-centralized approach: "fabric Services"
- Proxy approach to SOA enablement
- Also focuses on system management

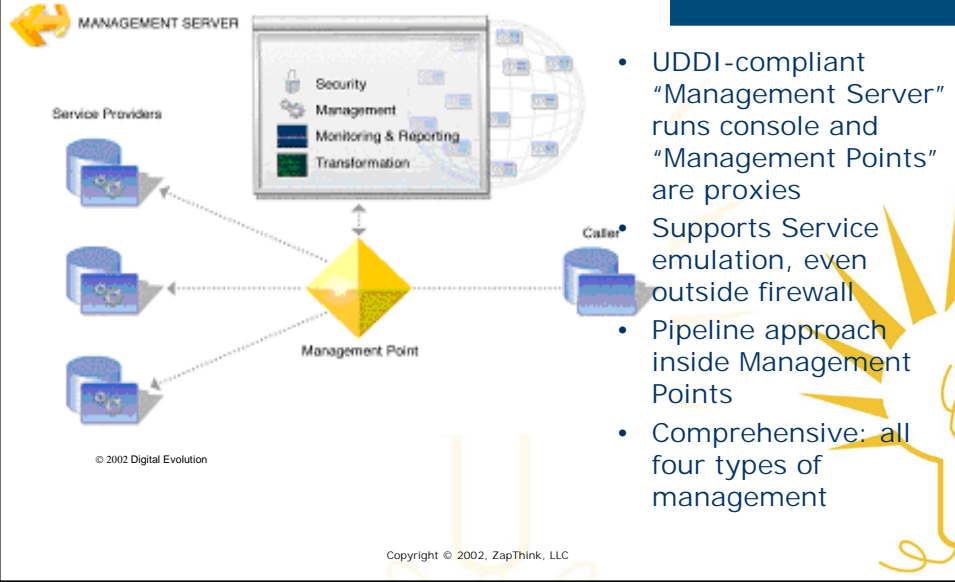


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Digital Evolution

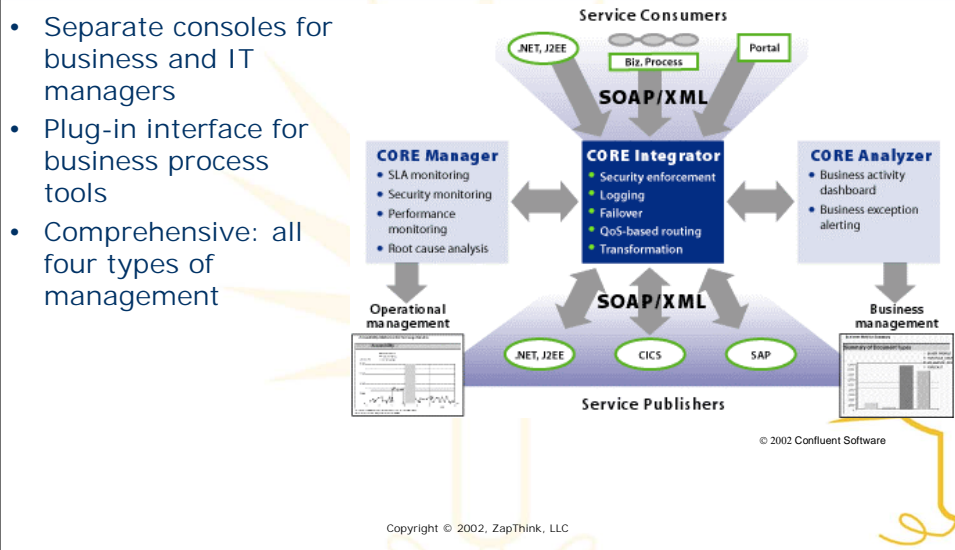


- UDDI-compliant "Management Server" runs console and "Management Points" are proxies
- Supports Service emulation, even outside firewall
- Pipeline approach inside Management Points
- Comprehensive: all four types of management

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Confluent Software



- Separate consoles for business and IT managers
- Plug-in interface for business process tools
- Comprehensive: all four types of management

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Important Points

- Management is critical for building and running enterprise-class SOAs
- The Service-Oriented management space is still in flux, with too many vendors and shifting feature sets
- Large vendors do not have practical solutions in this space – yet

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Questions & Discussion

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Wrap-Up

Homework for tonight:

- Article: The Practice of SOA
- Report Excerpt: SOA-Tools-ZTR-WS107
Excerpt for Samsung

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