

# Pulse2011



## Integrated Service Management Strategy

*Jamie Thomas, VP Tivoli Strategy and Development*

## *What's Keeping You "Awake at Night"?*

- What are my top business services, processes & transactions?
- What are the expectations for service innovation, speed and quality?
- What does it cost to deliver them?
- Are there any regulatory or compliance mandates?



# ***Integrated Service Management provides a holistic approach to designing, delivery & managing innovative services...***

## **VISIBILITY**



*See the service & infrastructure*

## **CONTROL**



*Manage risk & compliance*

## **AUTOMATION**

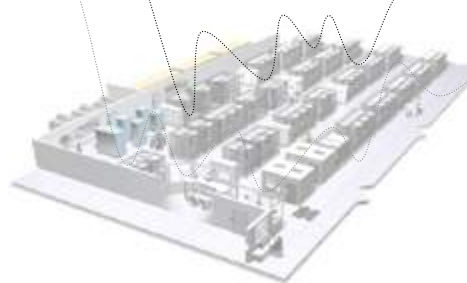


*Optimize service delivery*

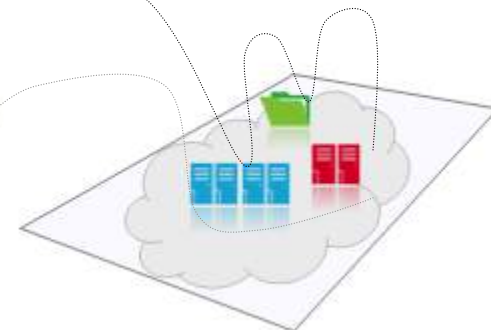
*Across the interconnected business infrastructure and service chain...*



Interconnected users and smart devices



Highly virtualized, service-oriented architectures



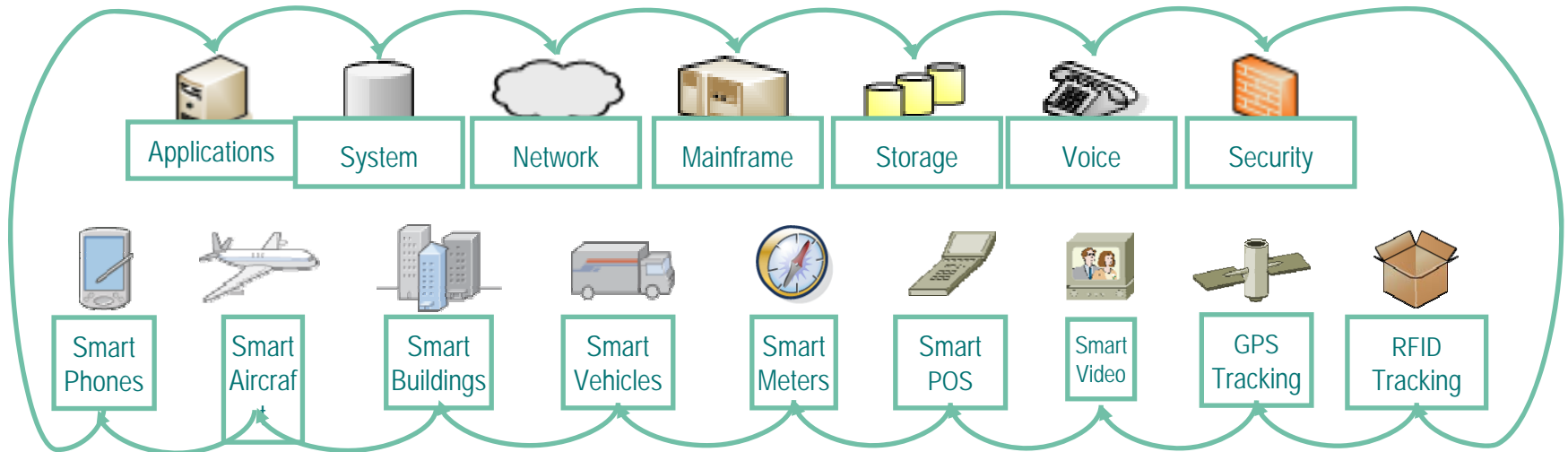
Private & public delivery options, like Cloud & SaaS

# To Be Successful We Must Challenge IT To Think Differently

- From ***silos and point solutions:***



- To ***service chain:***



# Tivoli Integrated Service Management

## Service Availability & Assurance



Business Service Management

Event Management

Monitoring

High Availability

Backup & Recovery

## Service Planning, Support & Maintenance

Incident Management

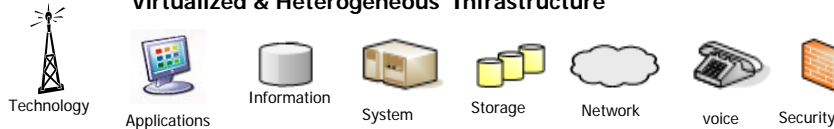
Change & Configuration Management

Asset Management

Licensing

Metering

### Virtualized & Heterogeneous Infrastructure



### Diverse Assets



## Service Deployment & Optimization

Automation

Provisioning

Configuration

Workload Optimization

## Service Security

Identity and Access Management

Server and Endpoint Security

Network Security

Security GRC

Security Intelligence

Resource Reconciliation & Naming

Security

Service Registration

Central Administration

Audit and Logging

Analytics Hub Reporting



**Open Services for Lifecycle Collaboration**

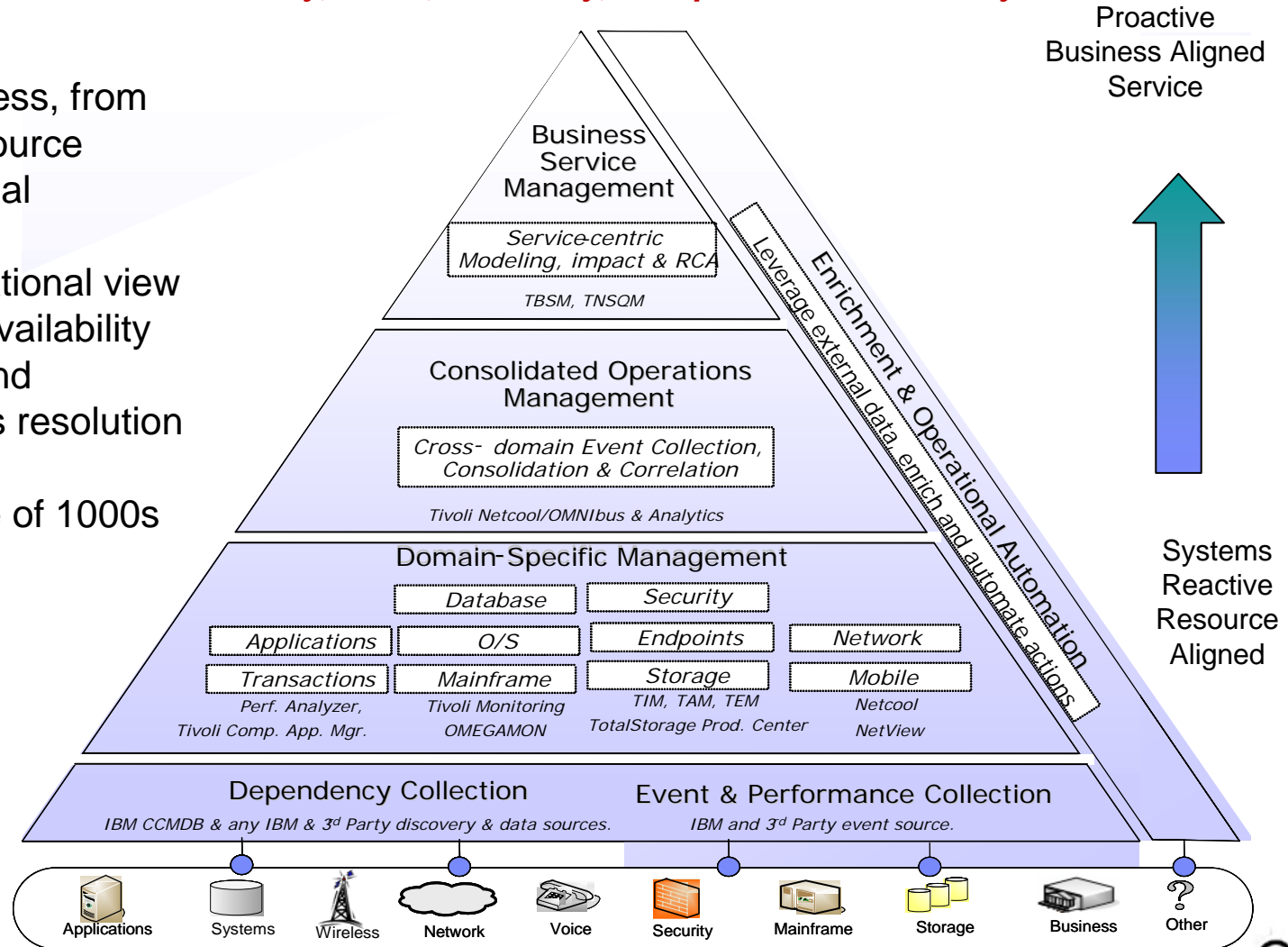
Open interfaces. Open possibilities.

- ✓ Open infrastructure
- ✓ Federated Data
- ✓ Dynamic interaction
- ✓ Common Services

# Service Availability & Assurance

**Enable Service Management through Consolidation and Integration**  
**Meet the needs of the business with Quality, Scale, Flexibility, Compliance & Resiliency**

- Real-time data access, from virtually any data source across organizational boundaries
- Consolidated operational view of performance & availability
- Event correlation and automation reduces resolution time
- Complete coverage of 1000s of device types



# Tivoli Provides Comprehensive Domain Coverage

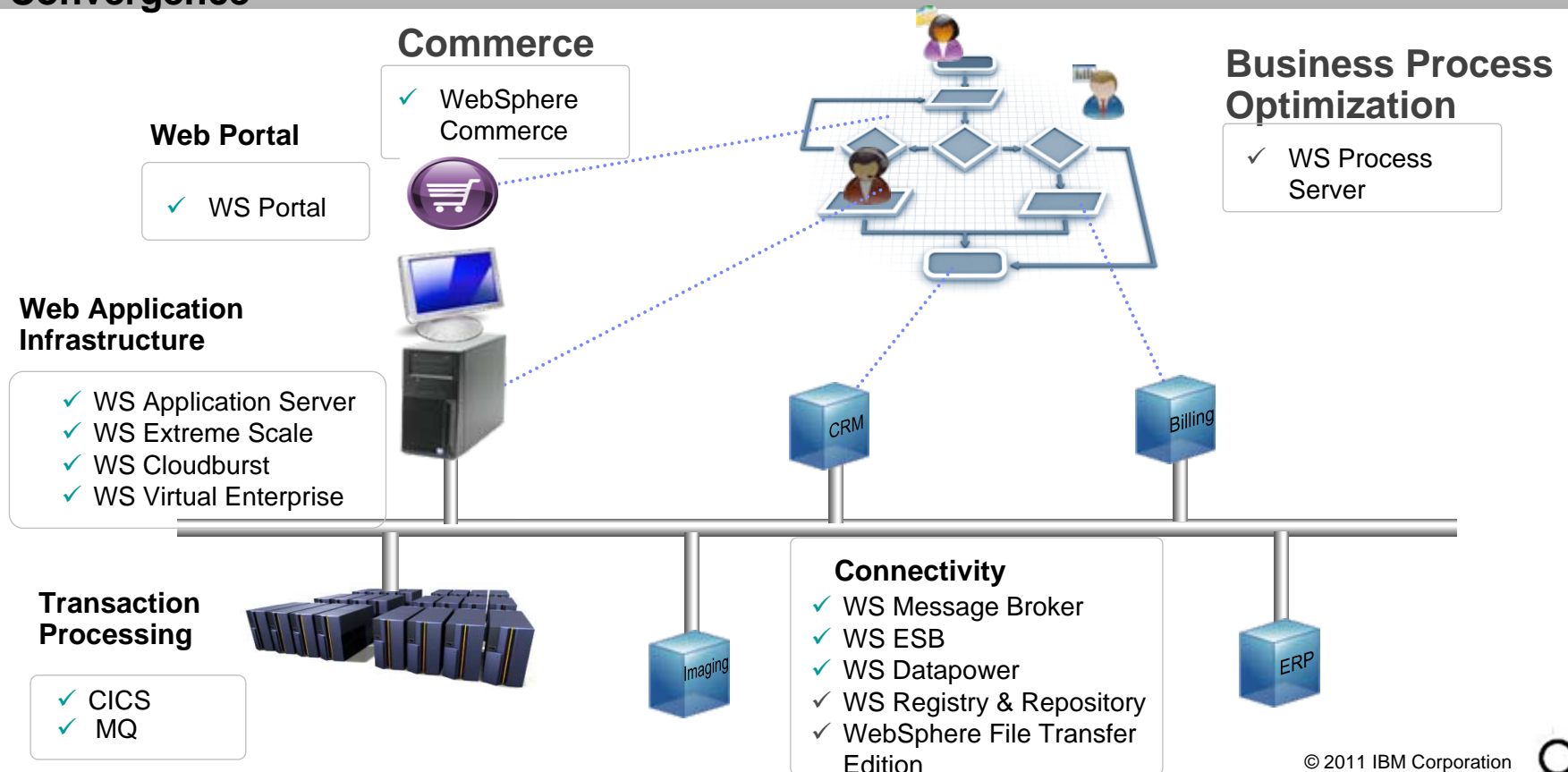
**Digital-Physical Convergence**

**Virtualization and cloud**

**Mobile Everything**

**Predictive Intelligence**

**Optimization**





## ***Application Performance Management Improved integration and upgrade***

### WebSphere Appliance Management Center

- Multi-box DataPower appliance management
- Enhanced monitoring with more KPIs
- Seamless integration into the Tivoli Monitoring infrastructure

### ITCAM for WebSphere Application Server

- Data Collector available in WebSphere Application Server
- More robust deep dive capabilities available in ITCAM for Application Diagnostics

### MQ Performance Monitor

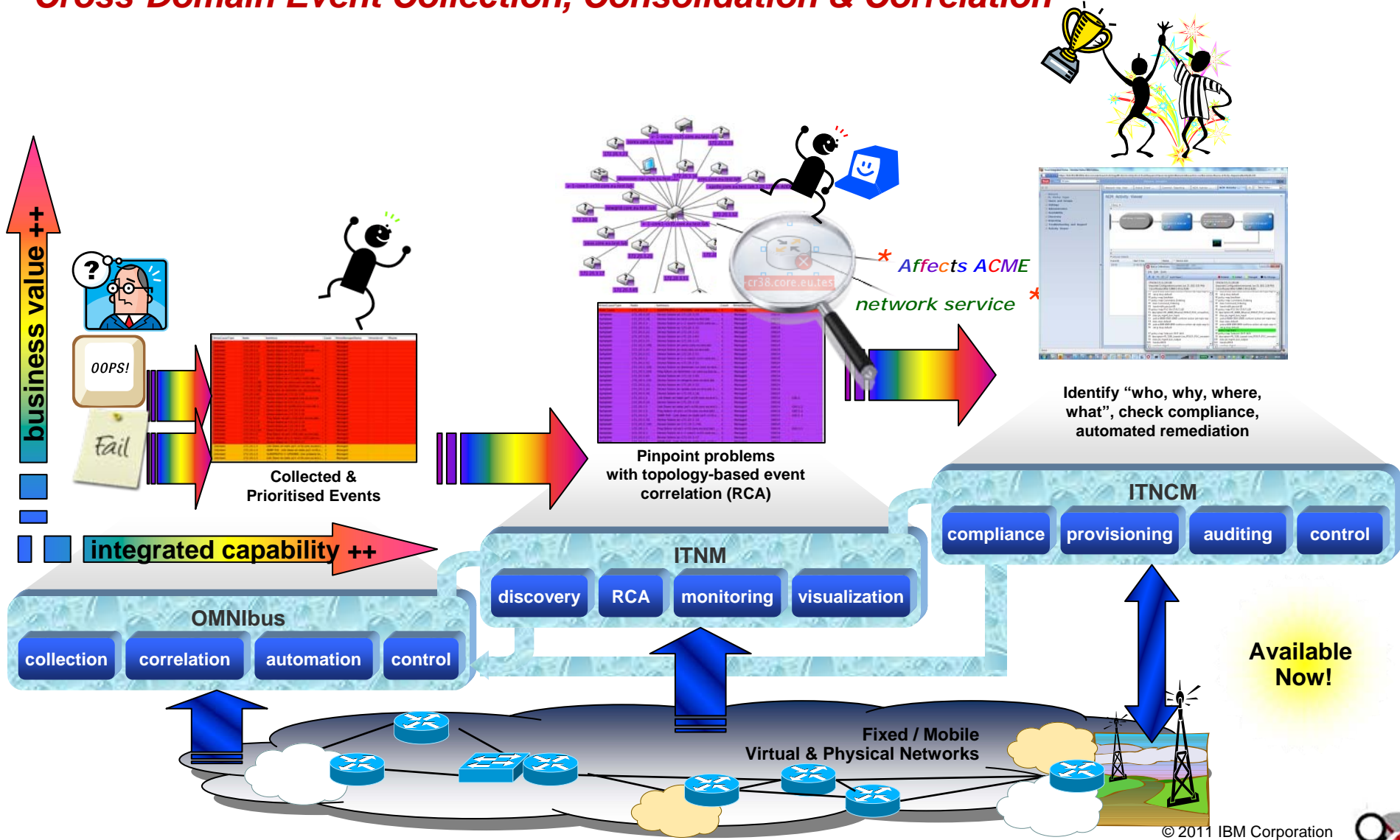
- Available as a downloadable support pack
- Decrease WebSphere MQ downtime & Proactively prevent problems
- Upgrade is simple to ITCAM for Applications

**Available  
Now!**





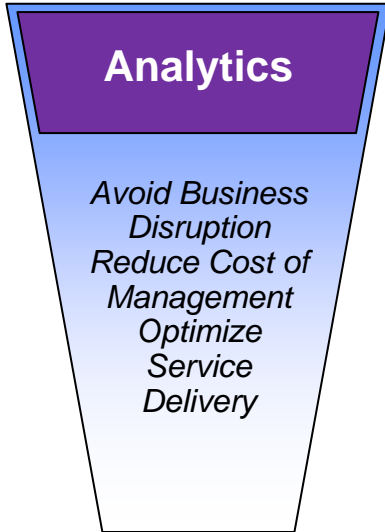
# Consolidated Operations Management Cross-Domain Event Collection, Consolidation & Correlation



# Analytics to Radically Change Management

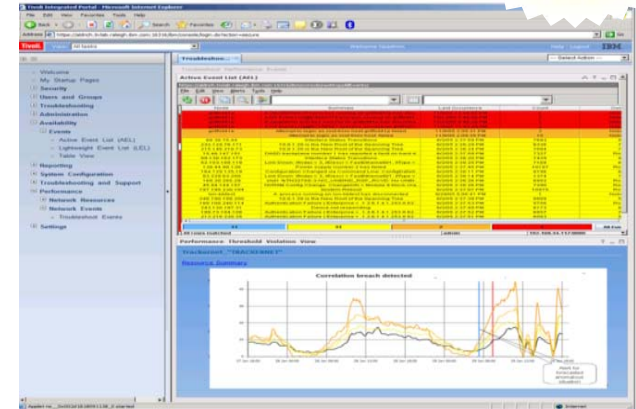
*Improved visibility keeps inbound shipments on their intended paths*

Available  
in Beta



## Avoid Service Disruption

- Identify emerging problems in application and infrastructure using streaming analysis and innovative learning technologies for maximum lead time.
- Provides alert on problems the **first time** they occur, not the second.



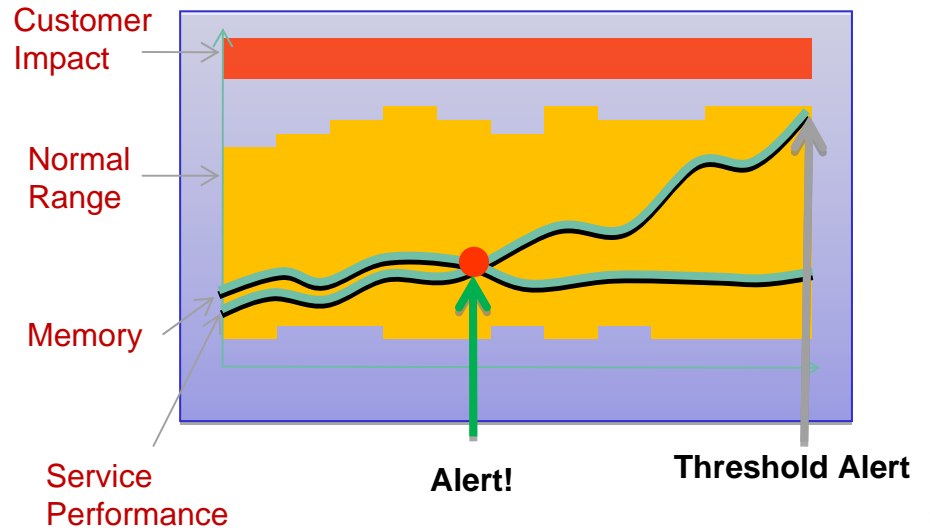
Detect Problem before  
Thresholds are Breached

## Reduce Total Cost of Ownership

Provides trending and dynamic threshold management for all resources

## Optimize Service Delivery

Mine real time and historical performance information for insights improving efficiency without sacrificing customer responsiveness



# Business Service Dashboard: Integrated Visibility & Context

## Role-based dashboards:

- LoB, Operations Mgmt, Operators.
- Customizable/sharing common context
- Launch in context views & automations.
- Realtime & Historical reporting across KPIs, event & performance.
- Web & Mobile Support

## Visibility across:

- Services, Processes, Transactions
- Distributed & Mainframe
- Traditional and virtualized environments

The screenshot shows the Tivoli Business Service Dashboard interface. It features several key components:

- Service Tree:** A hierarchical tree view on the left showing service components like Customer Service, Mobile Integration, and Online Ordering, with status indicators (green, yellow, red).
- Service Maps:** A map of the United States showing service locations and connections.
- Urgent Services:** A table listing services with critical status (red exclamation mark) and their last change times.
- Service Model:** A diagram at the bottom showing the relationships between various services and components.
- Event Summary:** A summary of event counts and trends, including All Events (1084), Assigned (1), Escalated (2), Unack'd (1), Maintenance (0), and Ticketed (0).
- Mobile Access:** A mobile phone icon indicating the dashboard is accessible via mobile devices.

# Depository Trust & Clearing Corporation

## *Keeps up with growth and keeps the markets on firm ground*

***Improved visibility keeps inbound shipments on their intended paths***

### Business Challenges

- Dominant provider of investment processing services in U.S. Sought to parlay its record of service innovation and cost leadership by expanding globally.
- Needed scalability, reliability and flexibility in its processing platform to meet the additional processing demands and new service development requirements for these new markets

### Solution

- Teamed with IBM to re-architect its core processing infrastructure to
- Leverage a service-oriented architecture.
- Enable it's world-leading transaction capabilities to accommodate global growth vision.
- Provide monitoring solution to increase the performance and availability.

### Benefits

- 77% increase in overall transaction processing capacity; handling 3 times the highest volume ever recorded
- 100% rate of reliability, with US\$1.5 quadrillion in trades settled annually
- 25% reduction in cost per transaction to the lowest cost per transaction in the world.

*Our ability to expand capacity demonstrates our commitment to prepare for unprecedented growth and other risk factors affecting the global marketplace. IBM's technology and vision have been essential to our success in doing this.*

**William B. Aimetti, President  
and COO, DTCC**

#### Solution components:

- IBM WebSphere Application Server
- IBM WebSphere MQ
- IBM Tivoli Composite Application Manager
- IBM DB2



*The Depository Trust &  
Clearing Corporation*



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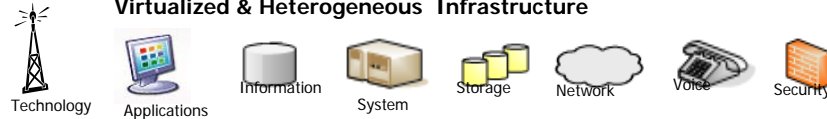
Change & Configuration Management

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### Virtualized & Heterogeneous Infrastructure



### Diverse Assets



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Open Services for Lifecycle Collaboration

Open interfaces. Open possibilities.

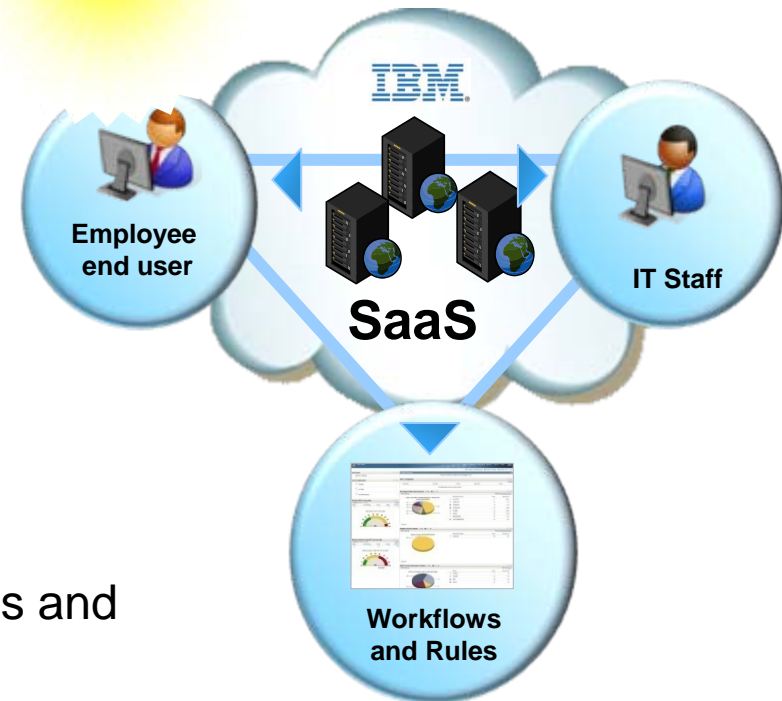
- ✓ Open infrastructure
- ✓ Federated Data
- ✓ Dynamic interaction
- ✓ Common Services

# Flexible and Affordable Service Management Software as a Service

## *Tivoli Live – Service Manager*

- Integrated Service Management capabilities
  - Problem and incident Management
  - Change and Release Management
  - Configuration Management
  - IT Asset Management
  - Service Catalog
- Radically improves Time to Value
  - Get started in hours and days instead of weeks
- Simplifies support and provides flexibility
- Reduces complexity
- Self service, standardization and simplified roles and workflows
- Leverages existing software
- Based on enterprise-class software

**Available  
Now!**



- 80% reduction in help desk calls and a 22% reduction in service tickets for a leading IT Service Provider

# IBM Global Technical Services Helpdesk Overview

- Software-as-a-Service offering available on-demand, over the Internet
- Hosted by IBM, administered by client
- Web-enabled service request, release manager, service catalog, and asset management capabilities
- Innovative, role-based pricing allows clients to pay only for what they need



- Supports 400,000 IBM Employees
- 24/7 Support Worldwide
- 14 million service tickets processed
- 24 million projected in 2011
- 900 IBM GTS clients worldwide



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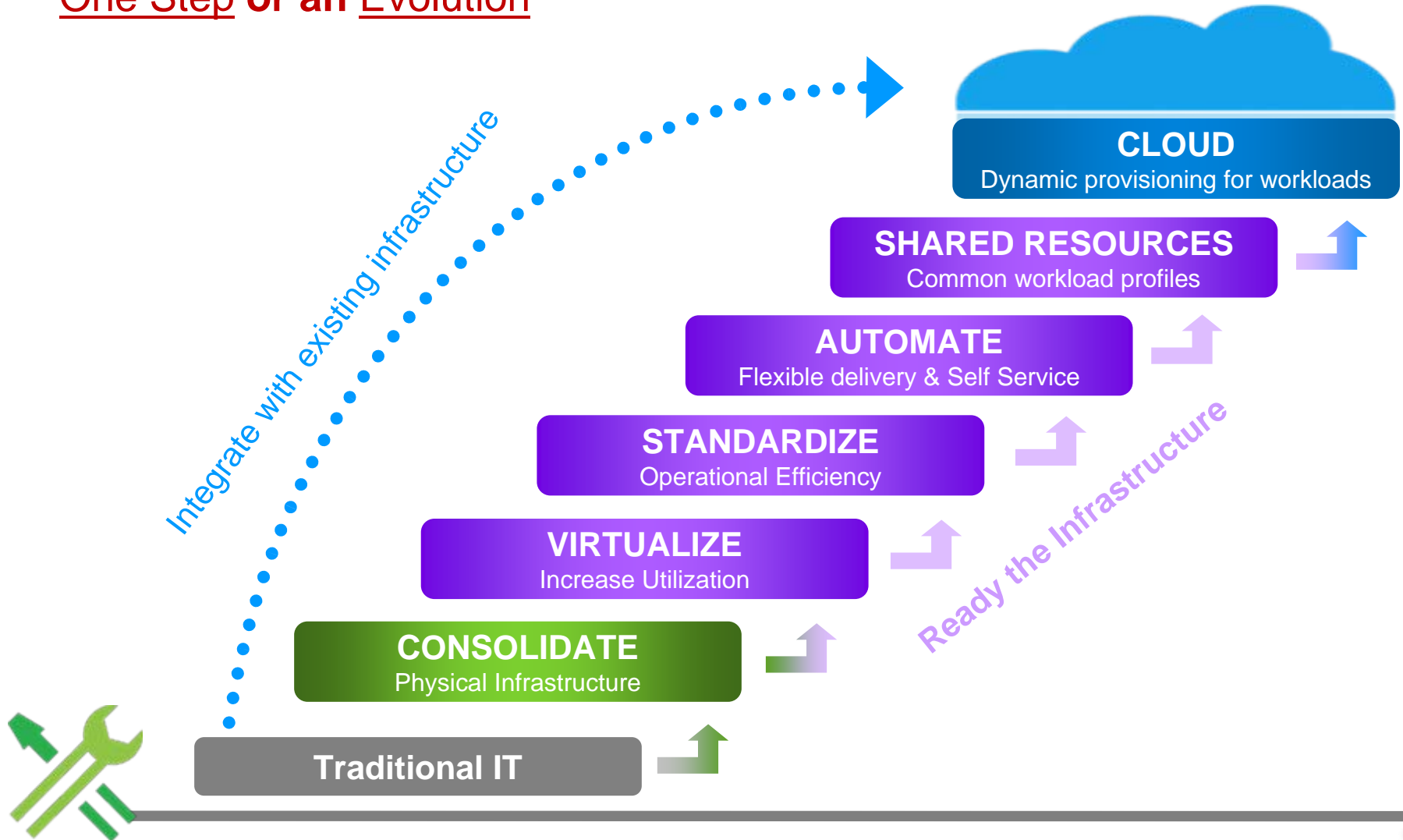
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# Movement from traditional environments to Cloud

## One Step or an Evolution



# Cloud Capabilities



## Virtualize

Server, storage & Network devices to increase utilization



## Provision & Secure

Automate provisioning of resources



## Monitor & Manage

Provide visibility of Performance of virtual machines



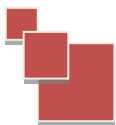
## Orchestrate Workflow

Manage multi-step service tasks



## Meter & Rate

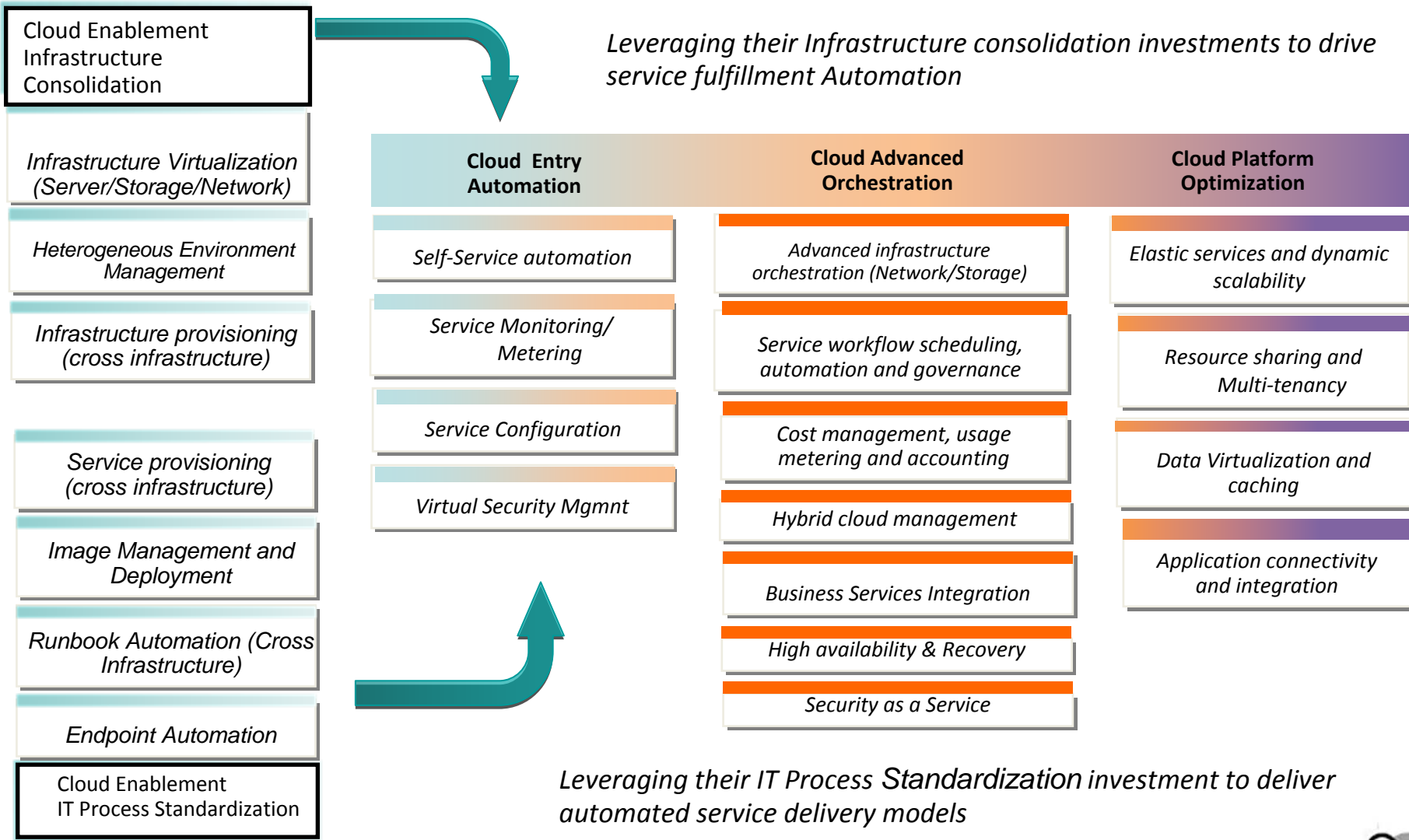
Track usage of resources



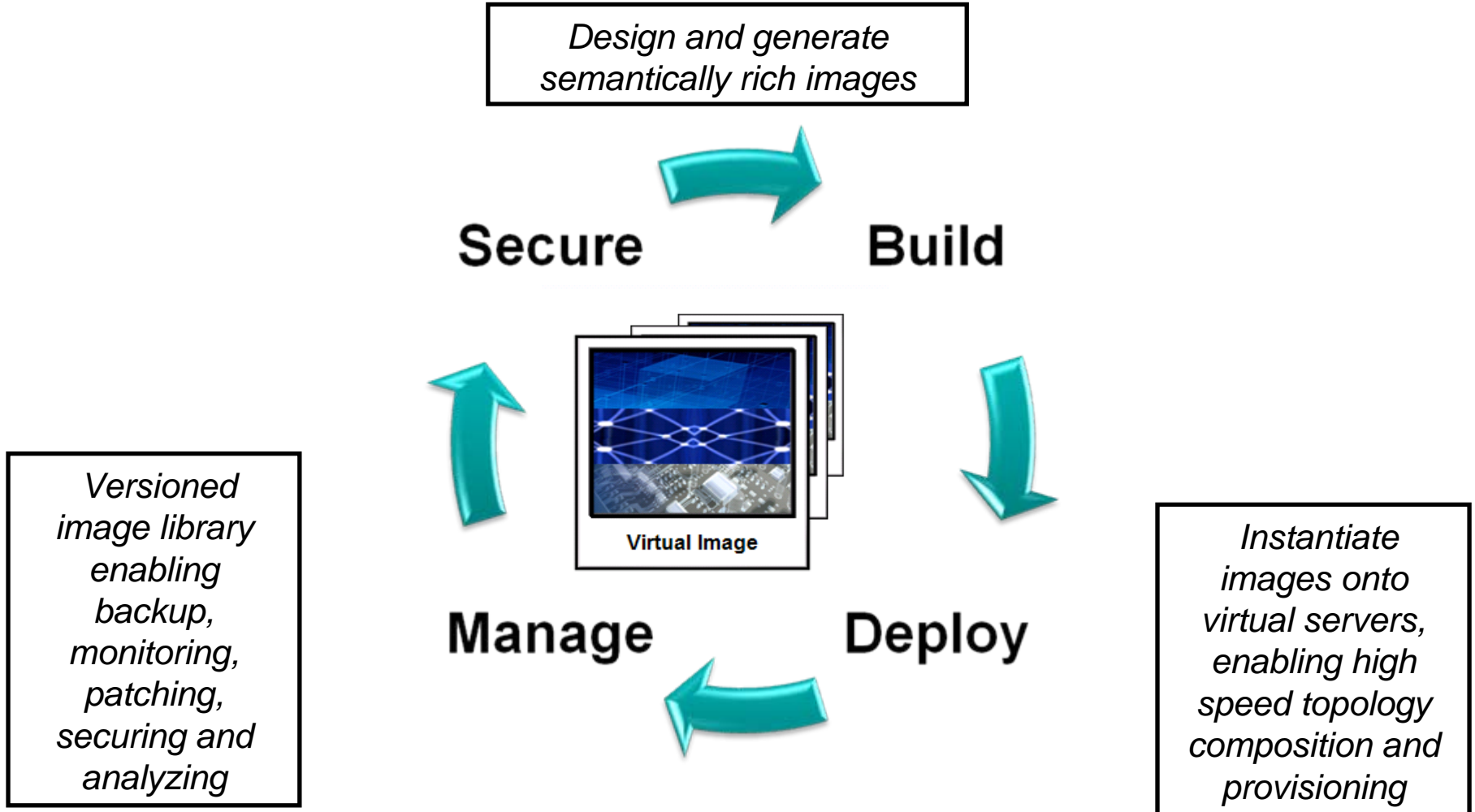
## Integrate and Connect

Integrate and connect across cloud environments

# Clients are approaching cloud from two key entry points



# Provision, Manage and Secure Image lifecycle

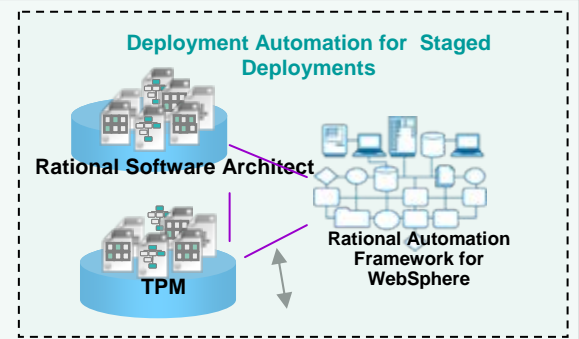


# Provision, secure and manage Image lifecycle automation



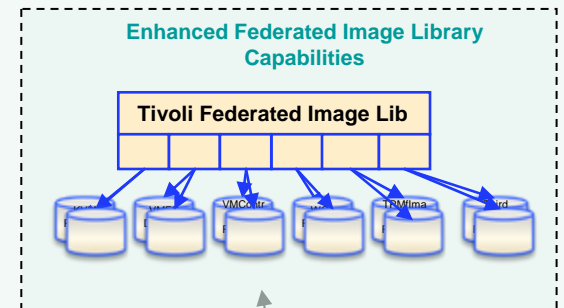
How can I automate and expedite deployment of my dev/test topology?

- Plan, automate, and govern deployment of composite applications as part of the application life cycle.
- Capture running composite services and build golden images



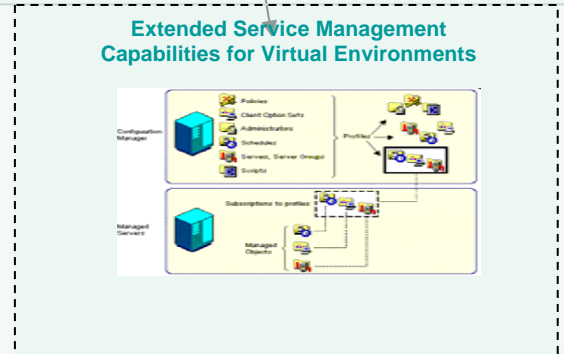
How to govern proliferation and deployment of images?

- Catalog & Index images with content across many repositories.
- Versioning, change management, provenance of images.
- Update and Patch images



How do I monitor, backup and secure my Virtual Environment? and link it to my mgmnt system

- High availability of applications through proactive monitoring, reduced labor cost for problem isolation
- Flexible, faster and frequent backups - granular, near-instant restore
- Multilayered intrusion prevention and firewall

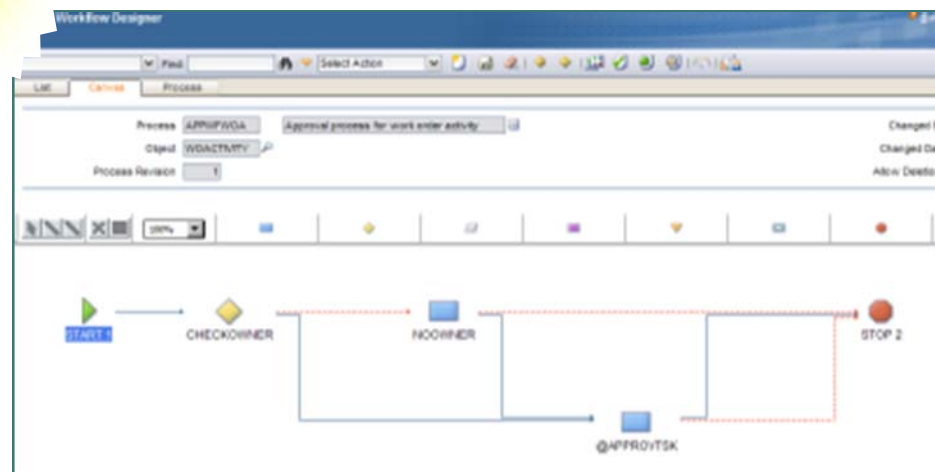


# Orchestrate Workflow Runbooks Automation

**Available  
Now!**

**Integrate task automation!**

- Unified Graphical Orchestration Tool
- Over 1,100 out-of-the-box automation tasks
  - Virtualization automation libraries
  - Software deployment and management
  - Network management
  - Storage management
- Re-useable automation between data center and cloud
- One-click task automation
- Essential sample process flows out of the box
- Performance and scalability improvements
- Platform and Hypervisor currency





# Standing up a cloud rapidly

## Tivoli Virtual Deployment Engine

Available  
in Beta

- Hours/days to install instead of weeks/months
- Deploy a running VM in less than 30 seconds
- Handle high volumes of VM requests -- over 4,000 per hour
- Update/Upgrades with zero downtime



**NC STATE UNIVERSITY**

### Virtual Computing Lab (VCL)

- Currently over 1000 images
- Supports approximately 250,000 students and faculty
- System availability: exceeds 99.9%
- Image reservation reliability > 99%
- Provides up to 120k image reservations per semester
- Reservation times range from 30 min to open-ended
- Extremely fast load times

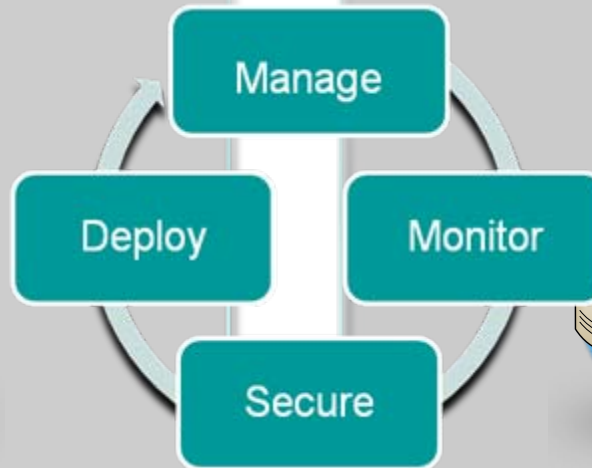
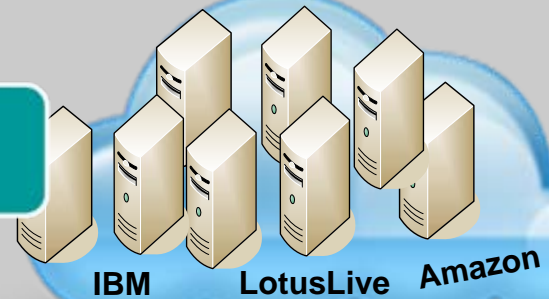
Available  
in Beta

# Integrate and Connect -- Hybrid Cloud Integration

## Enterprise Infrastructure & Private Cloud



## Public Cloud



### Secure

Protect your virtual environment



### Provisioning

Automate provisioning of resources



### Monitoring

Provide visibility performance of virtual machines

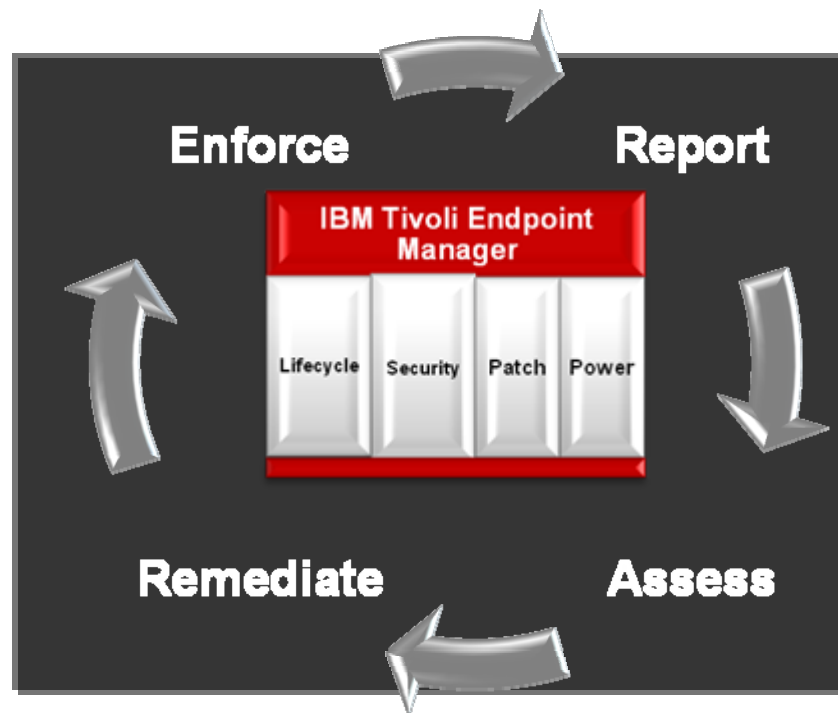
# Tivoli Endpoint Manager

## Built on BigFix Technology

Discover 10% - 30% more assets than previously reported

Library of 5,000+ compliance settings

- Patch Management
- Security Configuration Management
- Vulnerability Management
- Asset Management
- Network Self Quarantine
- Multi-Vendor Endpoint Protection Management
- Anti-Malware & Web Reputation
- Service



Automatically and continuously enforce endpoint policy

Achieve 95%+ first-pass success rates within hours of policy or patch deployment

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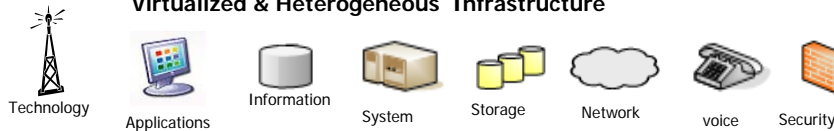
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## Secure and protect your network

### *Security Network Intrusion Prevention System GX7800*

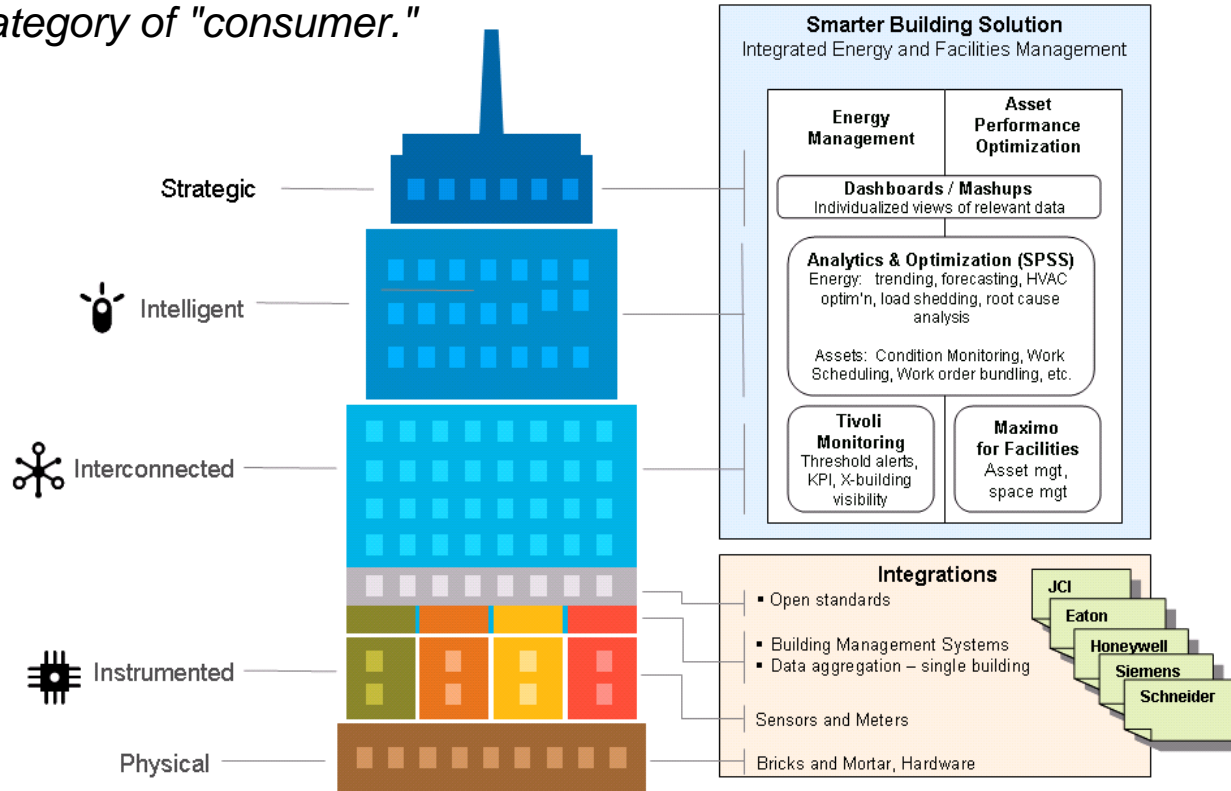
- Block threats before they impact your network
- Reclaim network capacity lost to threats or noise
- Broader security coverage over 10GbE networks
- Fast security inspection
- Integrated Data Loss Prevention (DLP) capabilities
- Web application protection (utilizing the IBM Injection Logic Engine)
- Eliminate the need for a stand-alone web application firewall
- Plug-and-protect easy deployments



Secure appliance for ultra fast  
inspection for today's 10GbE  
networks

# IBM Smarter Building Solution

....by 2025, buildings will use more energy than any other category of "consumer."



- Aggregate, normalize, optimize across portfolio of buildings, across BMS brands
- Industry-leading analytics, proven 8% savings at mature IBM facility
- The only integrated energy mgt and facilities mgt solution



## IBM acquires TRIRIGA

*Providing unique capabilities that are essential to Tivoli's strategy*

- Dashboards for Key Stakeholders
- Real-time visibility to events: weather, utility pricing, consumption
- Converge Energy and Business Data
- Energy data, space utilization, occupancy, financial (leases, bills), building ops
- Industry-specific Analytics
- Predict and correct equipment performance along with root cause analysis
- Control Mechanisms
- Automate building controls
- Optimal equipment scheduling

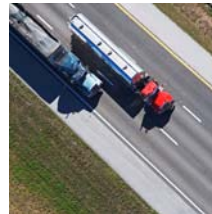
Production  
Infrastructure



Facilities  
Infrastructure



Transportation  
Infrastructure



Technology  
Infrastructure

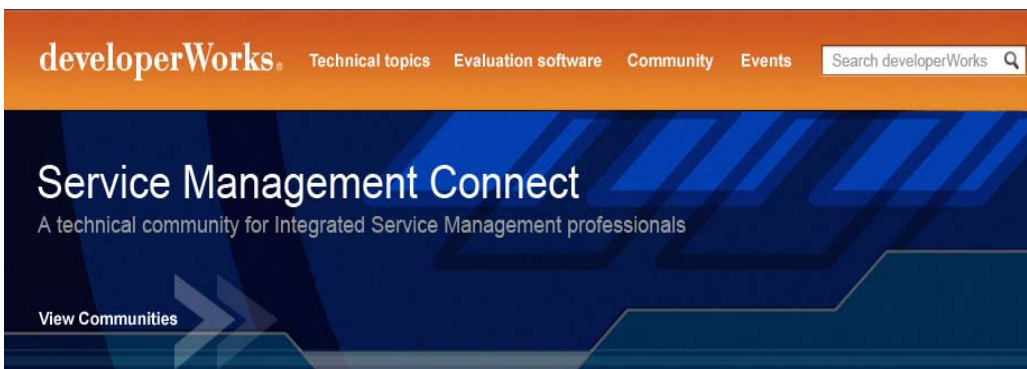


Communications  
Infrastructure





# New Communities!



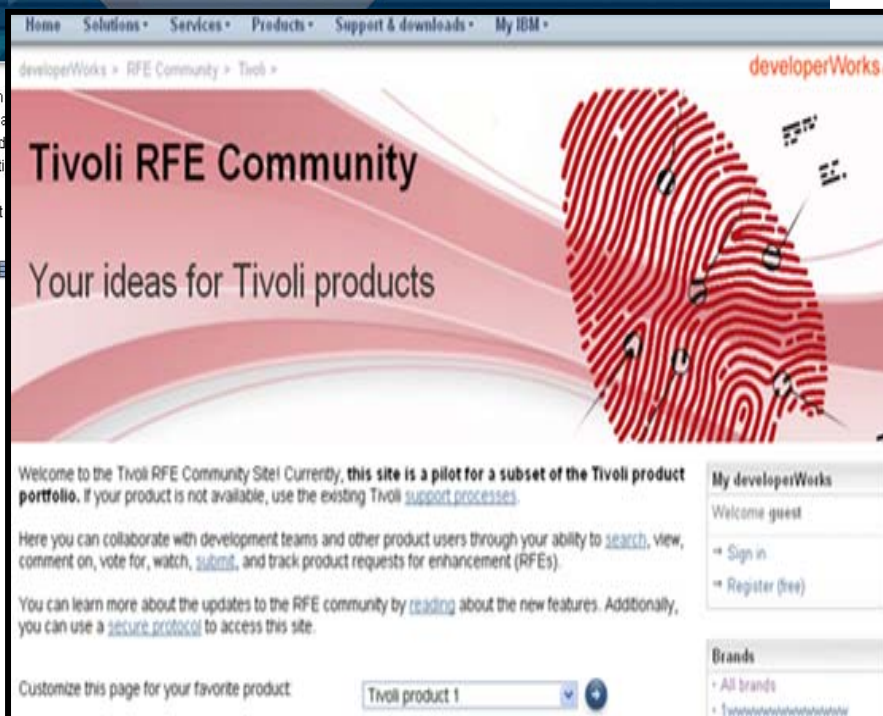
## Service Management Connect

- New community for Integrated Service management practitioners
- Connects you with the technical experts
- Provides best practices for using service management products
- Now supporting 1,500+ members
- Over 200,000 active pages views

Description text here... Lorem Aliquam vel lectus eget quam a dolor sit amet, consectetur ad mod. Sed ullamcor Fusce preti

Nunc lobortis convallis erat. Ut pretium nunc.

Meet the Expert



## RFE Community

- New tool for requesting product enhancements
- Interact directly with product management
- Improved ability to manage and monitor requirements
- View and vote on other enhancement submissions

# Questions

# Thank You

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