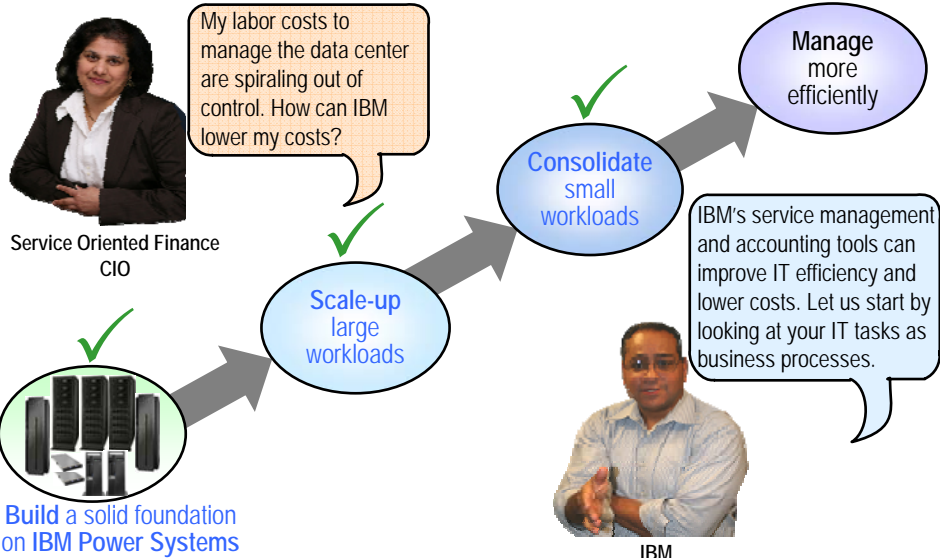


Building a Better Infrastructure With IBM Middleware on IBM Power Systems

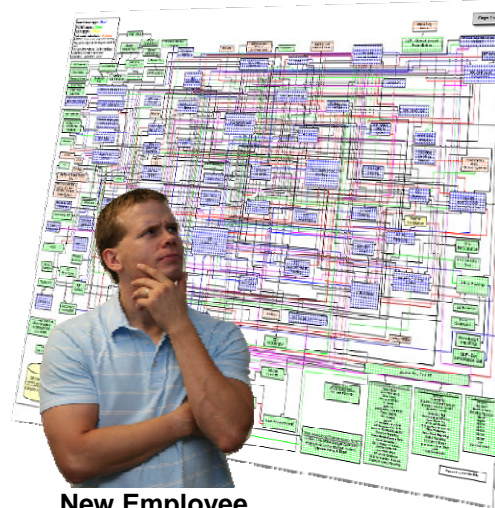
Manage Datacenter Services
With Best Practices

Steps to Optimizing IT with IBM Middleware on Power Systems



Achieving IT Efficiency is Difficult

- **It's a people process!**
- **Challenges**
 - ▶ **Lack of skills:** Staff turnover, knowledge scope, experience level
 - ▶ **Growing complexity:** Disparate technologies infrastructures
 - ▶ **Lack of visibility and manual processes:** Silos of people, process, information, technology
 - ▶ **Rapid, constant change:** Industry consolidation, technology convergence
- **Consequences**
 - ▶ Delays, rework, dropped problems



New Employee

Managing Service Requests in the Data Center

We get hundreds of service requests each day.
My new employees don't have the experience to handle them.

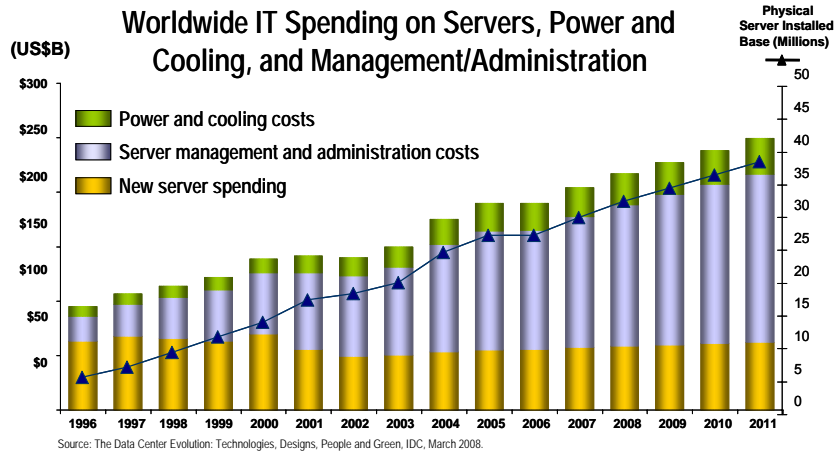


**Service Oriented Finance
Data Center Manager**



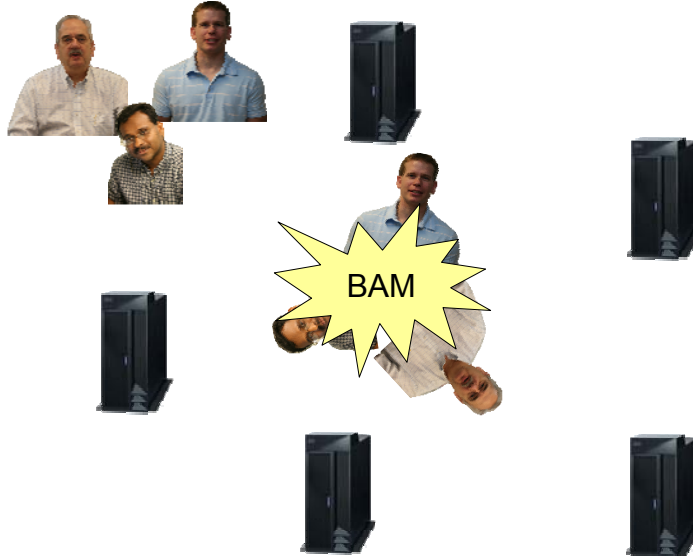
New Employee

Rising Server Management Costs

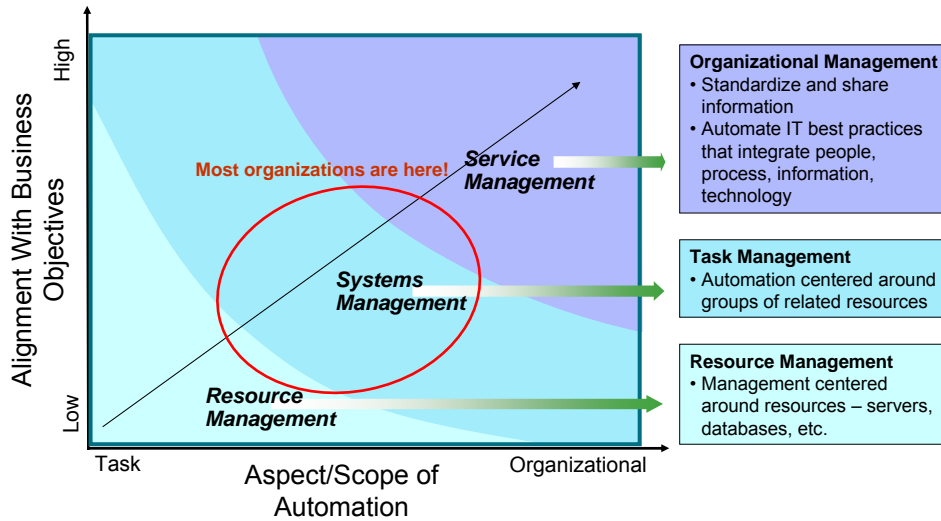


Total cost of ownership (TCO) for servers continues to rise significantly, even as total server spending remains nearly flat - Management costs are the reason, driven by the increasing number of systems

Ad Hoc Response to Service Requests are Inefficient



Achieve Higher Efficiency With Service Management



IBM Prescriptive Approach to IT Service Management

Automation

Automate core IT management processes to efficiently resolve issues and increase employee productivity

Control

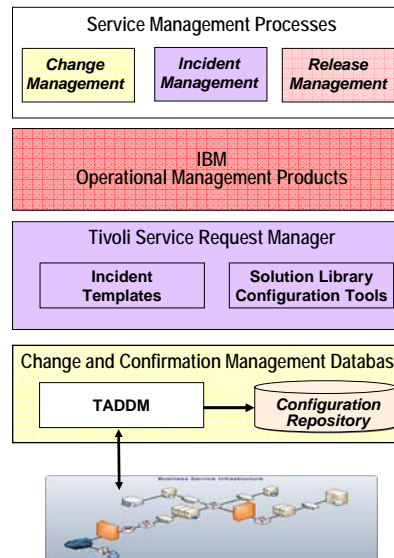
Establish a process to manage customer requests for service issues

Visibility

Know what you have to efficiently manage changes

**IBM rated #1
IT Service Management Vendor!***

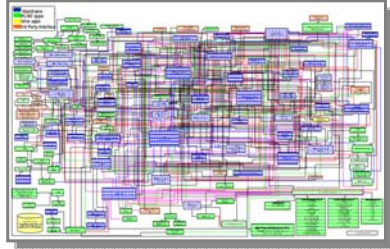
*Ovum Summit Report: http://ftp.software.ibm.com/software/tivoli/whitepapers/ITSM_Vendor_Report_Card_-_Turner_12-06.pdf



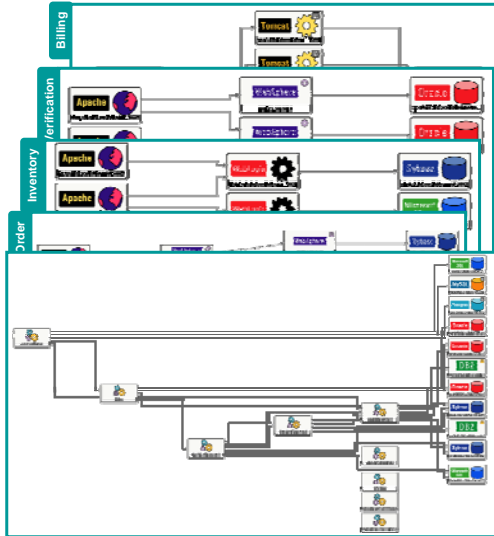
Visibility Lets You See System Relationships in Context

Discover and Visualize Cross-tier Transactional Dependencies and Applications

Turn this...

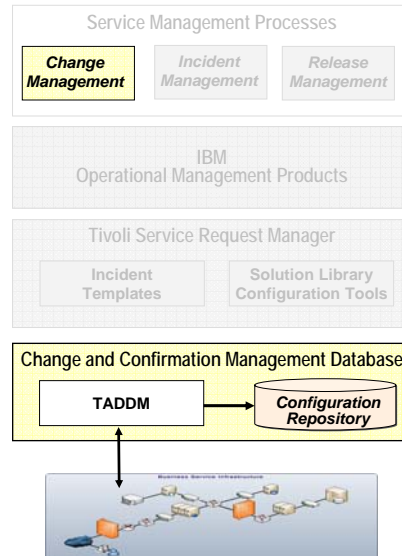


... into clearly understood dependencies



Gain Visibility Using IBM Tivoli Change and Configuration Management Database

- Change and Configuration Management Database (CCMDB)
 - ▶ Discover assets in environment
 - 200 out-of-the-box sensors discover distributed data center components
 - Discovery adapters for various other data sources, including mainframe
 - ▶ Gives single master view from disparate configuration data sources
 - ▶ Automated dependency mapping
 - ▶ No programming required!
- Integrated change management process
 - ▶ Schedule, assess impacts and verify changes to I/T assets



IBM Tivoli CCMDB -- Discovery Sensors

- Web Servers
 - ▶ Apache
 - ▶ iPlanet/SunOne
 - ▶ IIS
 - ▶ IBM HTTP Server
- Application Servers
 - ▶ WebSphere
 - ▶ WebLogic
 - ▶ JBoss
 - ▶ Apache Tomcat
 - ▶ Lotus Domino
 - ▶ Oracle Application Server
 - ▶ CICS
- Databases
 - ▶ Oracle
 - ▶ Sybase
 - ▶ DB2
 - ▶ MS SQL
 - ▶ PostGres SQL
 - ▶ MySQL
 - ▶ IMS
- Applications
 - ▶ VMWare ESX Server
 - ▶ PeopleSoft (via custom server templates)
 - ▶ SAP
 - ▶ Seibel (via custom server templates)
 - ▶ Netegrity (via custom server templates)
 - ▶ MQ Series
- Universal Data Sensor for 3rd Party Applications
 - ▶ CiscoWorks
- Services
 - ▶ MS Active Directory
 - ▶ SunOne Directory Server
 - ▶ WFS (Samba)
- Supported Hosts/OS
 - ▶ Red Hat Linux, Suse Linux
 - ▶ AIX, HP-UX, Solaris
 - ▶ Windows
 - ▶ OpenVMS
 - ▶ z/OS
- Routers and Switches
 - ▶ Cisco Routers and Switches
 - ▶ Extreme Switches Summit
 - ▶ HP Procurve Switches (SNMP supported)
- Firewalls
 - ▶ Cisco PIX
 - ▶ Netscreen Firewall
 - ▶ Checkpoint Firewall (Nokia and Solaris installs)
- Load Balancers
 - ▶ Alteon Load Balancer
 - ▶ F5 Big IP Load Balancer
 - ▶ F5 DNS Server
- Storage Devices
 - ▶ Emulex HBAs
 - ▶ Brocade Switches (SNMP supported)
 - ▶ Disk Arrays, SAN switches (via TPC)

IBM Tivoli CCMDB – Changes Automatically Tracked and Recorded

1) Select change history window to identify changed components in any application

2) Changed configuration items are easily identified

3) View detailed history of the changes by attribute

Type	Component	Change	Date	Attribute	Old Value	New Value	Id
Apache	homepath01.lab.colliag	Updated	12/24/2004 15:01 PST	appProcessors	Jun.Bocall/apache/colliag	Jun.Bocall/apache/colliag	13342
Apache	homepath01.lab.colliag	Updated	12/24/2004 15:01 PST	appProcessors	Jun.Bocall/apache/colliag	Jun.Bocall/apache/colliag	13342
ApacheWebContainer	homepath01.lab.colliag	Updated	12/24/2004 15:01 PST	ApacheWebContainer.w	Jun.Bocall/apache	Jun.Bocall/apache	13342
ApacheWebContainer	homepath01.lab.colliag	Updated	12/24/2004 15:01 PST	ApacheWebContainer.g	15	20	13342
ApacheWebContainer	homepath01.lab.colliag	Updated	12/24/2004 15:01 PST	ApacheWebContainer.s	1000	1000	13342
ProcessPool	homepath01.lab.colliag	Updated	12/24/2004 15:01 PST	homepath01.lab.colliag	Jun.Bocall/apache/colliag	Jun.Bocall/apache/colliag	13420

Process Management with IBM Tivoli

How do we keep track of all the service requests to make sure that they are handled properly?



**Service Oriented Finance
Data Center Manager**

IBM Tivoli Service Request Manager provides a service desk to help you centrally manage your service issues.

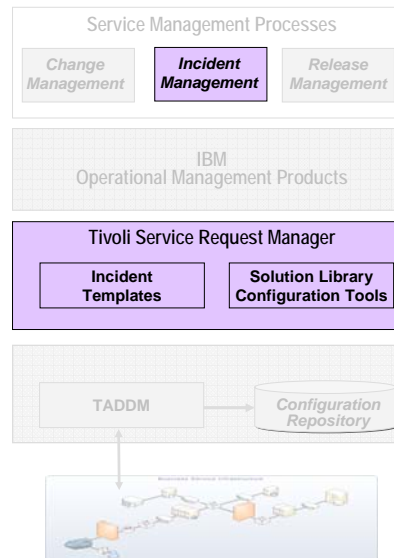
Let me show you!



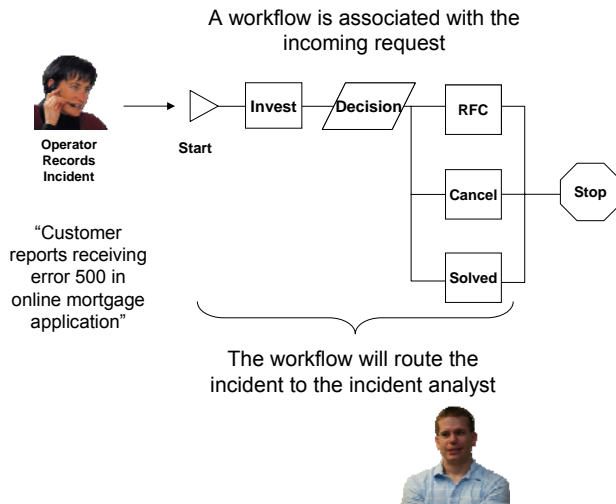
IBM

Exercise **Control** Over Problems Using IBM Tivoli Service Request Manager

- Central point to **manage responses** to user requests for help, information and service
- Create **incident templates** for common service desk calls and library of reusable solutions
 - ▶ Use templates to quickly create tickets for incidents, problems, changes
 - ▶ View updates and search library for solutions to solve problems quickly
- Automates **incident management process**
 - ▶ Out-of-the-box **integration** with CCMDB to accurately assess IT infrastructure
 - ▶ Out-of-the-box **integration** with Operational Management products to automate tasks (for example: Tivoli Provisioning Manager)



DEMO: Incident Analyst



Investigate

- Incident analyst will select an incident template
- Incident template recommends activities:
 1. Investigate by using Tivoli Business Services Manager
 2. Verify diagnosis
 3. Search for recommended solution in knowledge base

Decision

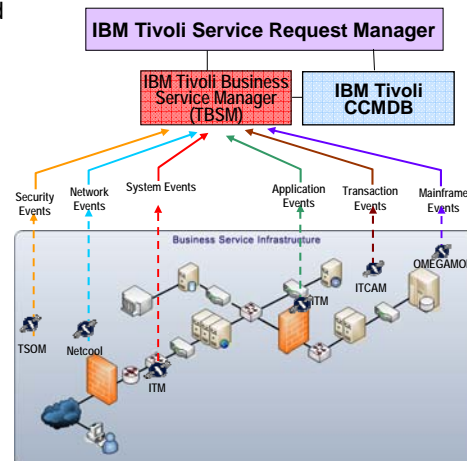
- Decide on the next step

Create Request for Change

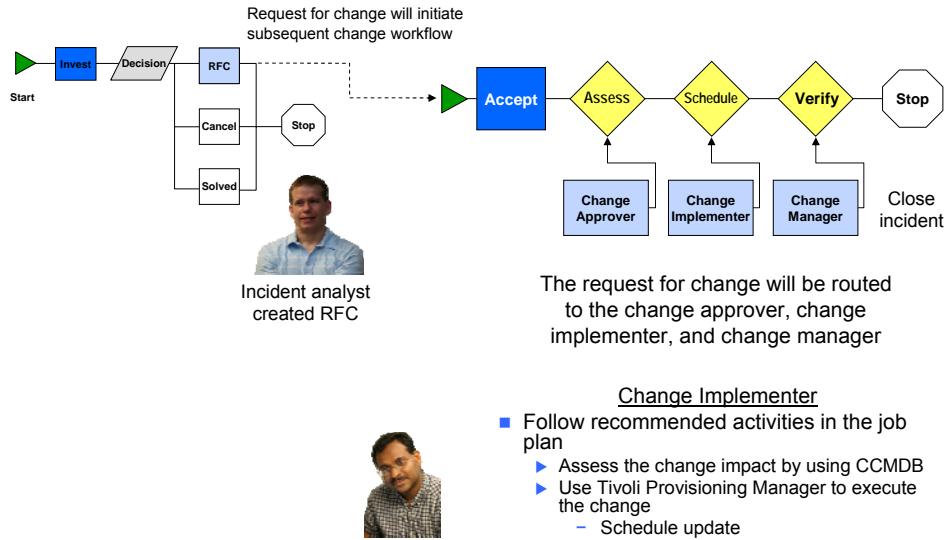
- Assign recommended job plan

IBM Tivoli Business Service Manager (TBSM)

- Display health of business services and service level agreements
- Service definition from IBM Tivoli CCMDB
- Service status/health from various event sources, including:
 - ▶ Transaction events from IBM Tivoli Composite Application Manager (ITCAM)
 - ▶ System and application events from IBM Tivoli Monitoring (ITM)
 - ▶ Mainframe events from IBM Tivoli OMEGAMON
 - ▶ Network events from IBM Tivoli Netcool/Precision
 - ▶ Security events from IBM Tivoli Security Operations Manager (TSOM)
 - ▶ Events from 3rd party monitors

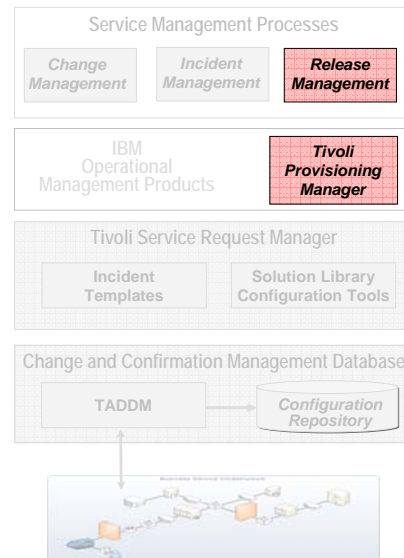


DEMO: Change Implementer



Automate Core IT Processes With Tivoli Release Process Manager and Provisioning Manager

- Tivoli Release Process Manager
 - Plan, schedule, and control application releases
 - Out-of-the-box integration with Tivoli Provisioning Manager to automate tasks within the release process
- IBM Tivoli Provisioning Manager (TPM)
 - Automates manual tasks of provisioning and configuring servers, storage, middleware, application
 - Best practice automation workflows included in package
 - Automatic workflow execution with verification at each step
 - Tools to customize provisioning workflows for best practices



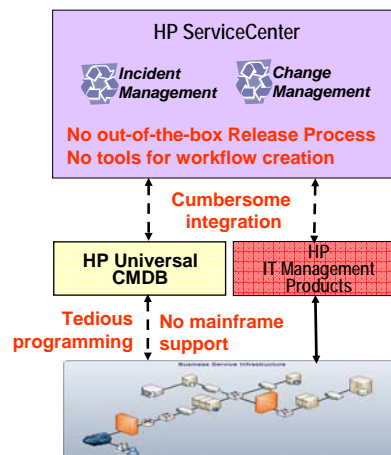
IBM Service Management Portfolio

- Service management platform to gain visibility
 - ▶ IBM Tivoli Change and Configuration Management Database (CCMDB) discovers and federates IT information spread across the enterprise
- Process management products to automate IT processes
 - ▶ Tivoli Service Request Manager
 - ▶ Tivoli Release Process Manager
 - ▶ Tivoli Availability Process Manager
 - ▶ Tivoli Storage Process Manager
 - ▶ Tivoli Capacity Process Manager
- Operational management products to automate tasks
 - ▶ Business application management products
 - Tivoli Business Service Manager
 - ▶ Server, network and device management products
 - Tivoli Provisioning Manager
 - ▶ Security management products
 - ▶ Storage management products

Products discussed in this presentation

HP Service Management – Lacks Integration, Tedious Programming Required

- HP ServiceCenter
 - ▶ Limited to incident and change process
 - ▶ No tooling for workflow creation and modification
 - ▶ Lacks out-of-the-box integration with HP Universal CMDB and HP IT management products for automating tasks within processes
- HP Universal CMDB
 - ▶ HP Universal Configuration Management Database (CMDB) requires tedious programming to create maps and complex discovery patterns
 - ▶ No specific support for mainframes
- Result: Costly service engagements



Tivoli Service Request Manager Reference



- “We were able to integrate our entire ITIL framework and automate our service and support delivery capabilities through the IBM asset and service management solutions.” - **Sharad Joshi, Assistant Vice President, Enterprise Services Group, Birlasoft.**

- Benefits
 - ▶ Nearly 80 percent decrease in the number of help desk calls each day
 - ▶ 22 percent reduction in the number of service tickets
 - ▶ 10 percent decrease in incident resolution times
 - ▶ 6 month return on investment

Summary

Gain visibility and automate your IT management processes to cut costs with IBM Service Management!



Successful Employee



IBM

