Achieving Service Excellence through IBM Service Management

Agenda

- IBM Service Management Overview
- Service Management Platform Overview
  - Change and Configuration Management Database
  - Configuration Discovery and Tracking
  - Service Desk
- Process Automation
  - Service Support Overview
  - Service Request, Incident, Problem, Change, Release, Configuration
- Business Service Management
  - A Strategic Partnership – Business and IT
- Where to Get Started

Why We're Here Today

The "what"

… "why"

… and "how"

of IBM Service Management

What CEOs Know

Innovation **is the surest path to growth**

80% rated technology and business integration of great importance

There is *a gap* between business and IT innovation

Source: IBM Global CEO Study 2006

A Strategic Partnership – Business and IT

Business innovation:

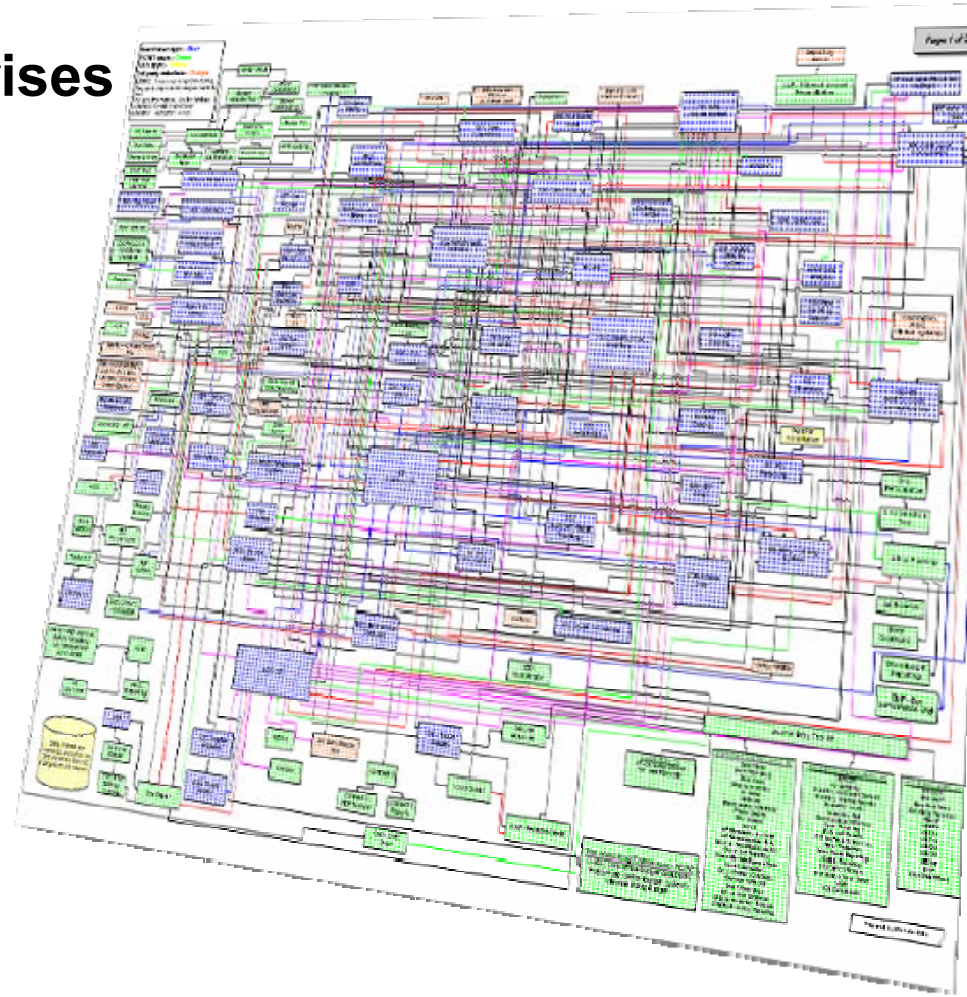
- Gain competitive advantage through service excellence
- Improve operational efficiency and effectiveness
- Drive profitable business growth

IT innovation:

- Align with business objectives
- Improve responsiveness
- Govern effectively and efficiently

The Gap – Delivering High-Quality, Cost-Effective Services to Speed Innovation is Challenging

- Challenge: Complex enterprises and constant change
- IT must balance and shift investments
  - Dependability
  - Innovation
- A service-centric approach ensures success of both



The Business Cost of Poor Service Can be Staggering

FT.com FINANCIAL TIMES

FRONT PAGE - COMPANIES AND MARKETS: Software bug hits electronic trade at LME

By Kevin Morrison, Commodities Correspondent
Financial Times, Nov 07, 2006

Bandwidth squeeze imperils Navy's C4 goals

BY Bob Brewin
Published on Dec. 4, 2006

FCWCOM

Glitch Locks Ameritrade Users Out of Their Trading Accounts

BY GASTON F. CERON JUNE 23, 2006

THE WALL STREET JOURNAL.

denverpost.com

CHAOS: Voting Extension Denied Amid Massive Computer Problems in Colorado

By George Merritt and Jeffrey Leib, Denver Post Staff Writers
November 07, 2006

MSNBC

Air-traffic system outage grounds flights

Planes nearly came too close together; glitch causes Miami delays

AP Associated Press
Updated: 3:30 p.m. ET Dec 5, 2006

Wal-Mart website shuts down on Black Friday morning

By CNN's Katy Byron November 24, 2006

CNNMoney.com

finextra.com

Tokyo Stock Exchange president quits over computer bungles
Finextra.com: December 20, 2005

Bottom Line – Business Depends on Quality Service Delivery

- **Quality service delivery is critical for**
  - **Competitive advantage**
  - **Customer retention and satisfaction**
  - **Meeting regulatory compliance**
  - **Organizational efficiency**
  - **Cost reduction (especially labor)**
  - **Service Level Agreements (SLAs)**

"Two out of every three CEOs expect fundamental changes for their organizations over the next two years."
" … they see opportunity – opportunity to be seized through innovation."

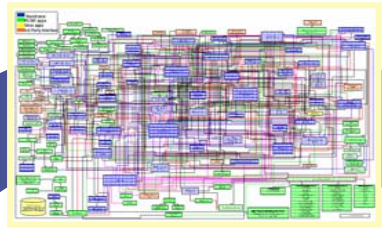
Source: IBM Global CEO Study 2006

"As enterprises become more aware of the increasing interdependence of business and IT issues – they need to adopt a more holistic view of both internal and external service delivery. This is vital for business leaders in targeting and executing business change."

Thomas Mendel
Forrester

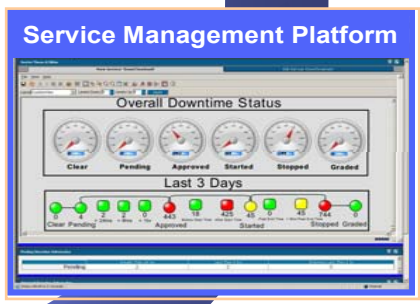
What is IBM Service Management?

IBM Service Management delivers the ability to answer three fundamental questions



What's happening within the infrastructure?

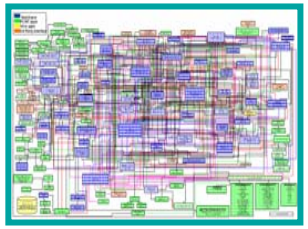
What actions do we take?



How do changes relate to the business service?

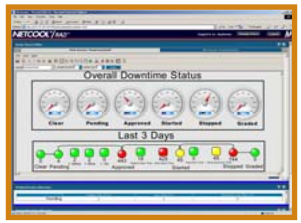
IBM Service Management's Broad Capabilities

What's happening within the infrastructure?



- Server monitoring
- Network monitoring
- Database monitoring
- Application monitoring
- Performance monitoring
- Configuration management

How do changes relate to the business service?



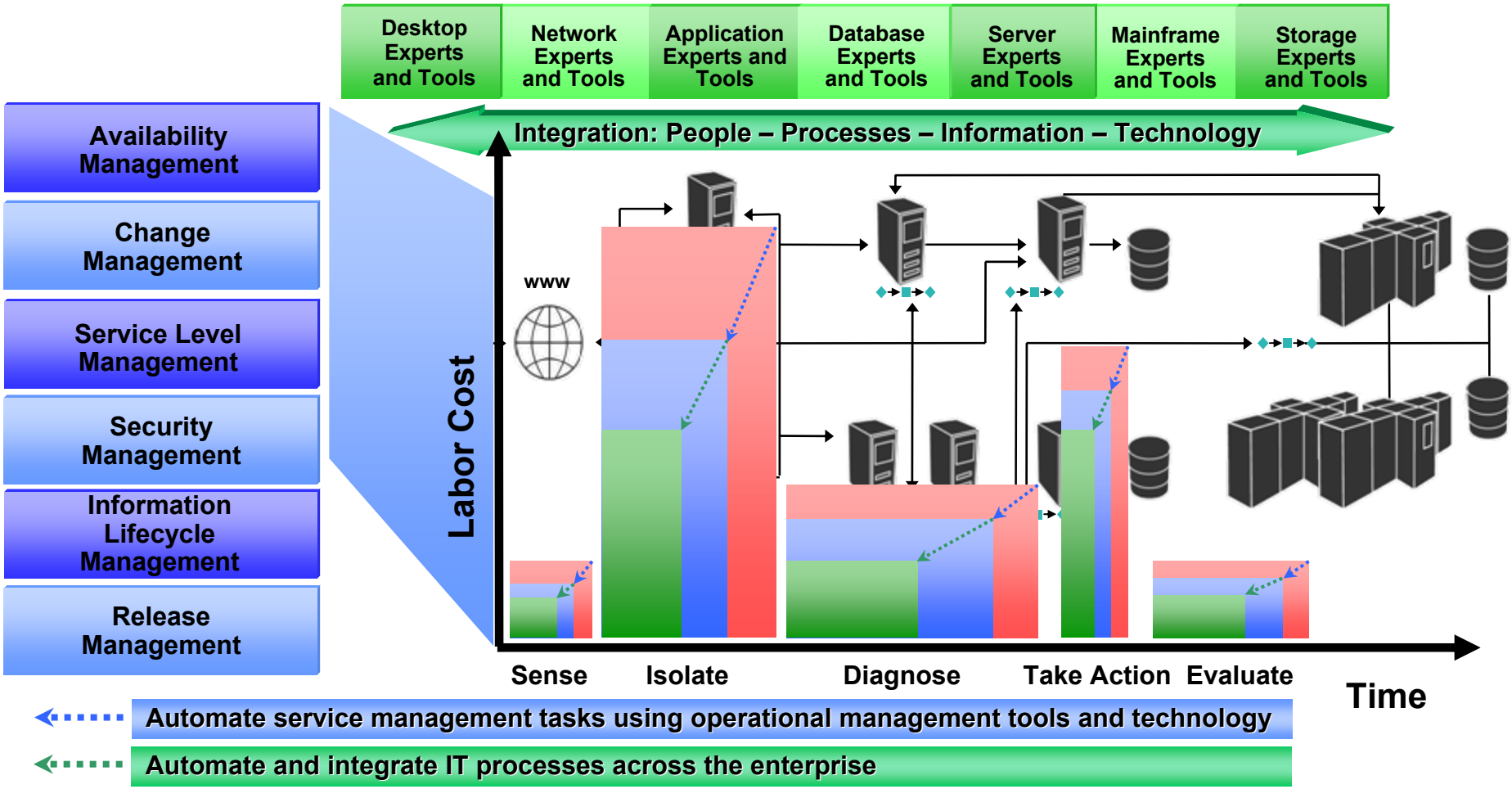
- Dashboard
- Business service management
- Service level management
- Infrastructure and application discovery and mapping

What actions do we take?

- System reconfiguration
- Data restore
- User identity provisioning
- System and application restart
- Infrastructure deployment

Challenge – Manage Cost and Responsiveness Across IT Silos

Many businesses struggle to manage composite applications end-to-end

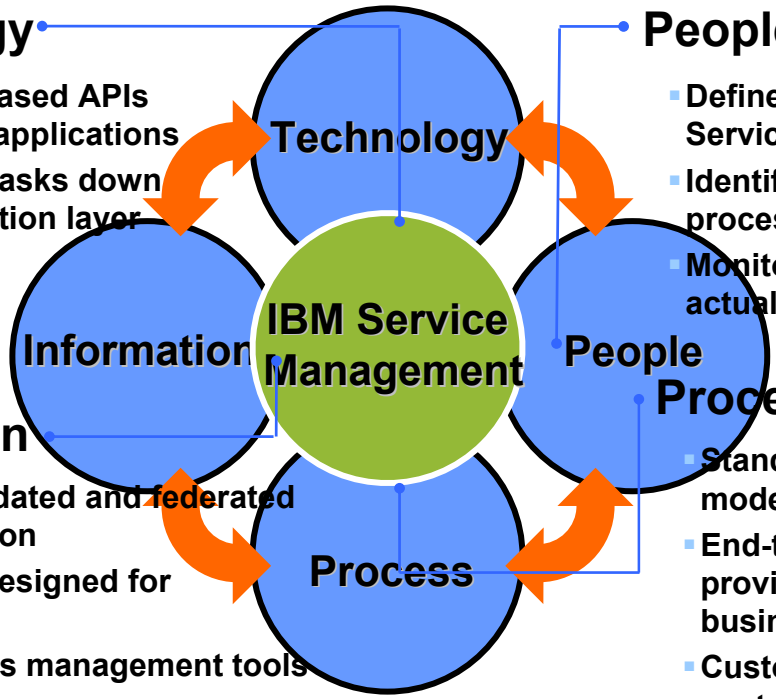


Service Management is the Optimal Intersection of People, Process, Information and Technology

Effective and efficient delivery of IT services in support of business goals.

Desktop Experts and Tools	Network Experts and Tools	Application Experts and Tools	Database Experts and Tools	Server Experts and Tools	Mainframe Experts and Tools	Storage Experts and Tools

- Availability Management
- Change Management
- Service Level Management
- Security Management
- Information Lifecycle Management
- Release Management



Technology

- Standards based APIs interface to applications
- Automated tasks down to the execution layer

People

- Defined roles based on IT Service Management processes
- Identify bottlenecks as processes execute
- Monitor and dynamically adjust actual work

Information

- Both consolidated and federated data integration
- Data model designed for exploitation
- Shared across management tools

Processes

- Standards based process models to protect investment
- End-to-end monitoring provides aggregated view of business services
- Customizable to fit into customer organization

IBM Facilitates Service Excellence, Operational Efficiency & Effectiveness, and Business Growth

- Scalable approach integrating technology, people, information and processes
- Broadest and deepest domain-specific operational management
- Integrated data and contextual visualization
- Automated workflows, processes and repeatable tasks
- Flexible management platform built on SOA
- Based on self-managing autonomic technologies

Best-of-Breed Operational Management

"The biggest reason we selected IBM for this project was because of their operational know-how and broad IT management portfolio. With the implementation of this architecture, NHIC Ilsan Hospital will continue to strive for efficient management of IT infrastructure to support advanced medical digitalization."

– Sung Jik Jung, Medical Information Team Leader for NHIC Ilsan Hospital

Integrated scalable, contextual domain management

Broadest technology support

- Security to storage
- SOA to legacy applications
- Virtualization to composite applications
- Layer 1…7 management support

Deepest management capabilities

- Network and event management
- Availability and performance management
- Storage and security management
- Enterprise and IT asset management

Role-based visualization and control

Open, standards-based products and tools

Integrated Service Management Platform

"With their new Service Management strategy, IBM is now really focused on the big picture – not only delivering tools, but an integrated combination of tools, sharing data through a central database and supporting ITIL processes."

– Alex Nettelenbusch, Release Management Commerzbank AG

Integrated visibility and control across people, process, technology and information domains

Service visualization

- Role-based contextual views
- Customizable Web-based visualization

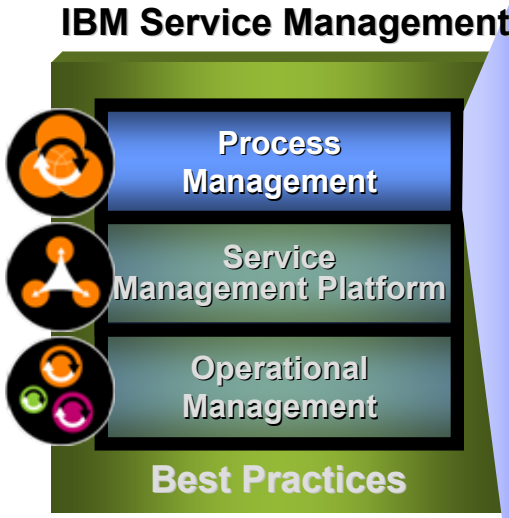
Data integration and federation

- Open and standards based, built on SOA
- Trusted source of information
- Decision making and policy-based

Automation

- Enforce policies for improved compliance
- Automated discovery and impact analysis across all infrastructure layers
- Built-in self-managing autonomic technologies

Integrated Process Management



Enable increased team performance, coordination and collaboration

Automated workflows and process management

- Consistent process execution
- Based on robust process best practices
- Integration of IBM and 3rd party operational management tools into and across IT and business processes
- Enforce and audit change and compliance

"At Belgacom, it is our goal to become the best-in-class next generation service provider through operational efficiency... by ensuring service-level management, helping to optimize resources and streamline our processes for greater end-user satisfaction."

– Yves Vlamijnck, Team Manager, Network and IT Monitoring, Belgacom

An Innovative Approach to Implement Best Practices

"Toshiba Solutions Corporation offers a wide range of services – from consultation, design, and development to implementation, support and maintenance services. By leveraging the IBM Tivoli Unified Process and teaming with IBM on Service Management we are able to offer unparalleled value to our common customers."

– Akira Bannai, Chief Fellow of Toshiba Solutions

Modular approach for incremental execution and value realization

IBM Global Services

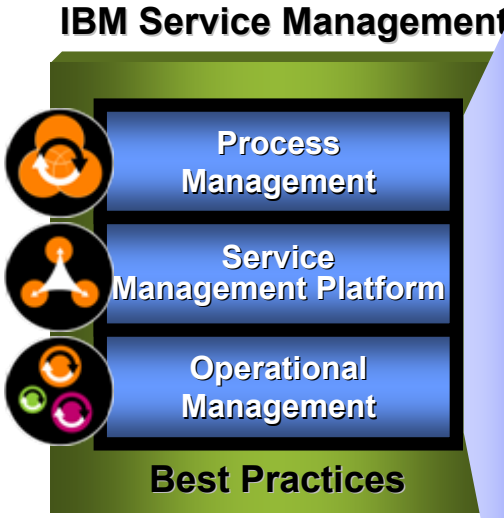
Proven process models, standards and best practices

- Standards-based build to manage toolkits
- Process Model for IT (PRM-IT)
- IBM Tivoli Unified Process
- IBM Service Management Adoption Model
- Support implementation of ITIL, eTOM, CobiT, ISO 20000 and other process models

IBM Service Management Partner Ecosystem

Open Process Automation Library (OPAL)

Key Acquisitions speed Customer Value



Service Management for Converged Networks

- Network Management
- Network Performance and Wireless

Service Deployment

- Automated Provisioning
- Service Delivery and Support
- Change and Configuration Management

Service Asset Management

- Software Asset Management
- IT Asset Management and Enterprise Asset Management

Governance and Security

- Software Usage Metering
- Log Management and Asset Monitoring
- Internet Security

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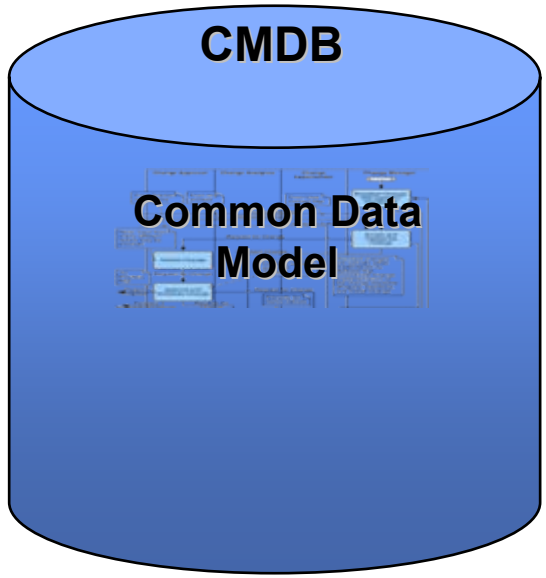
CMDB – Foundation for Service Management

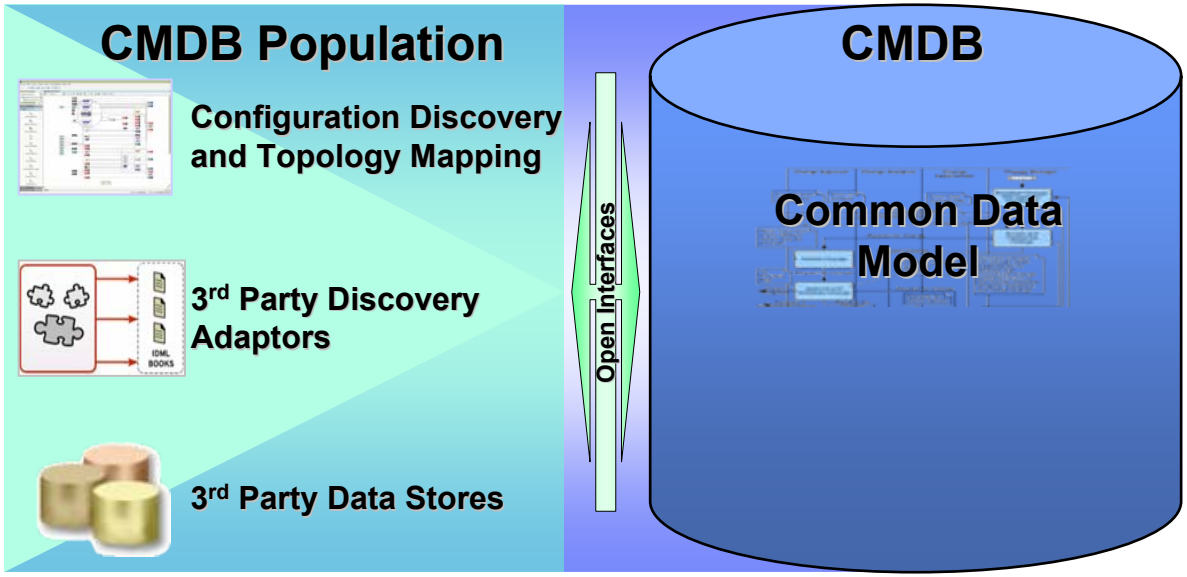
The CMDB provides the source about Configuration Item information and the relationship between them



- **The CMDB provides the trusted source of information**
- **The Common Data Model is built on open standards and best practices (ITIL)**
- **The CMDB is a scalable platform for the implementation of Service Management initiatives**
- **The CMDB is accessible through an application programming interface (API) and GUI reporting**

CMDB – Population through Discovery

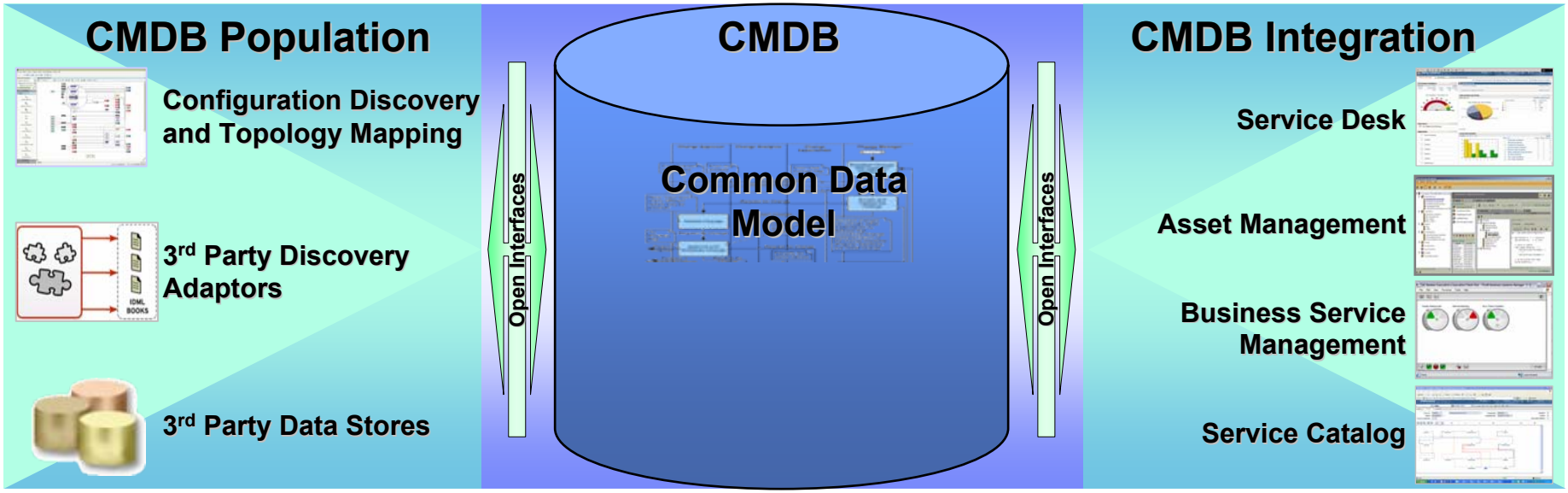
Automated discovery and mapping technology populates attribute information and interrelationships between Configuration Items



- **Methods to identify Configuration Items, their attributes and application dependencies:**
  - **Automated agent-less discovery**
  - **Existing data repositories and tools**
  - **Manual entry**
- **Topology mapping illustrates relationships between Configuration Items and supports the linkage to specific business services**

CMDB – Integration Point to Provide Services

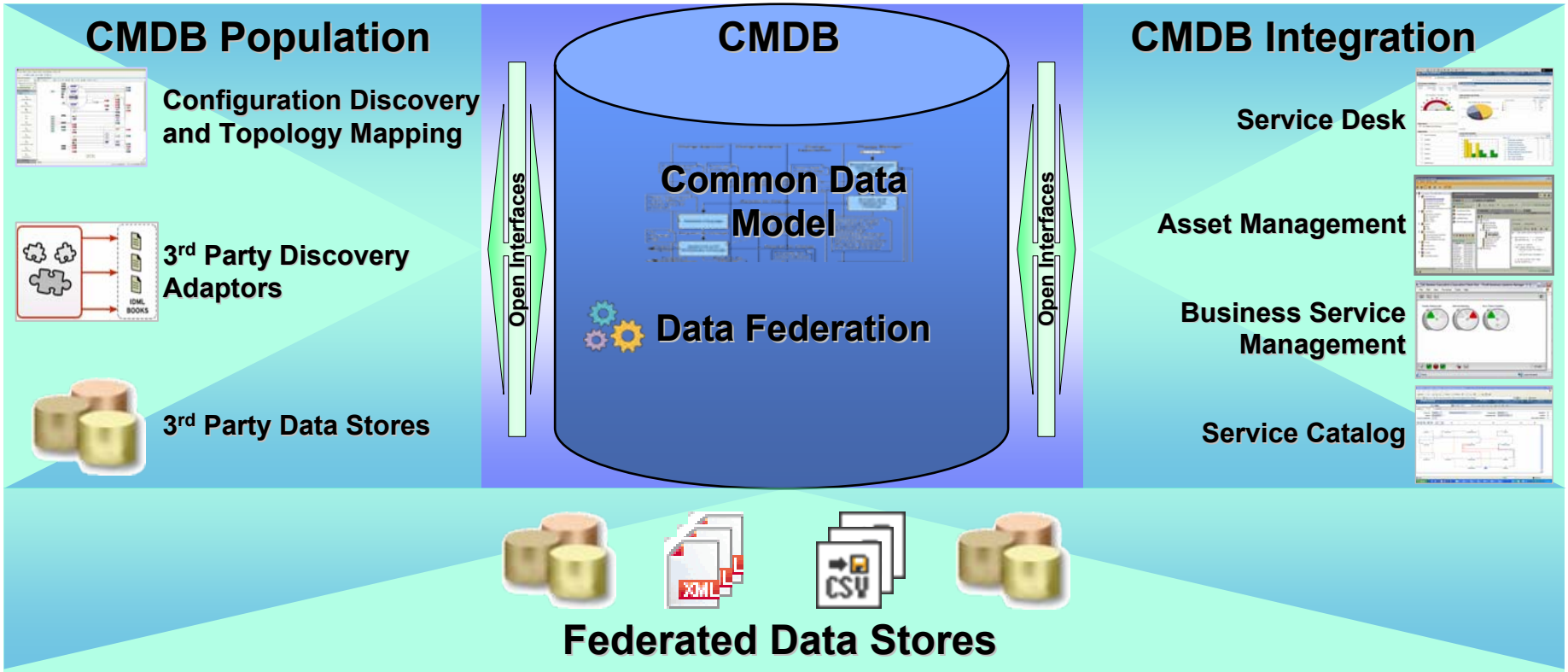
The CMDB is the integration point for the applications which use the information to provide Service Management processes



- The Service Desk delivers critical support by keeping key business systems and services available and reliable
- Asset management includes all the control and automation needed to seamlessly and efficiently track and manage asset configuration information
- Business Service Management provides management of applications as a service
- The Service Catalog is an essential element for defining services and communicating with the business

CMDB – Data Federation

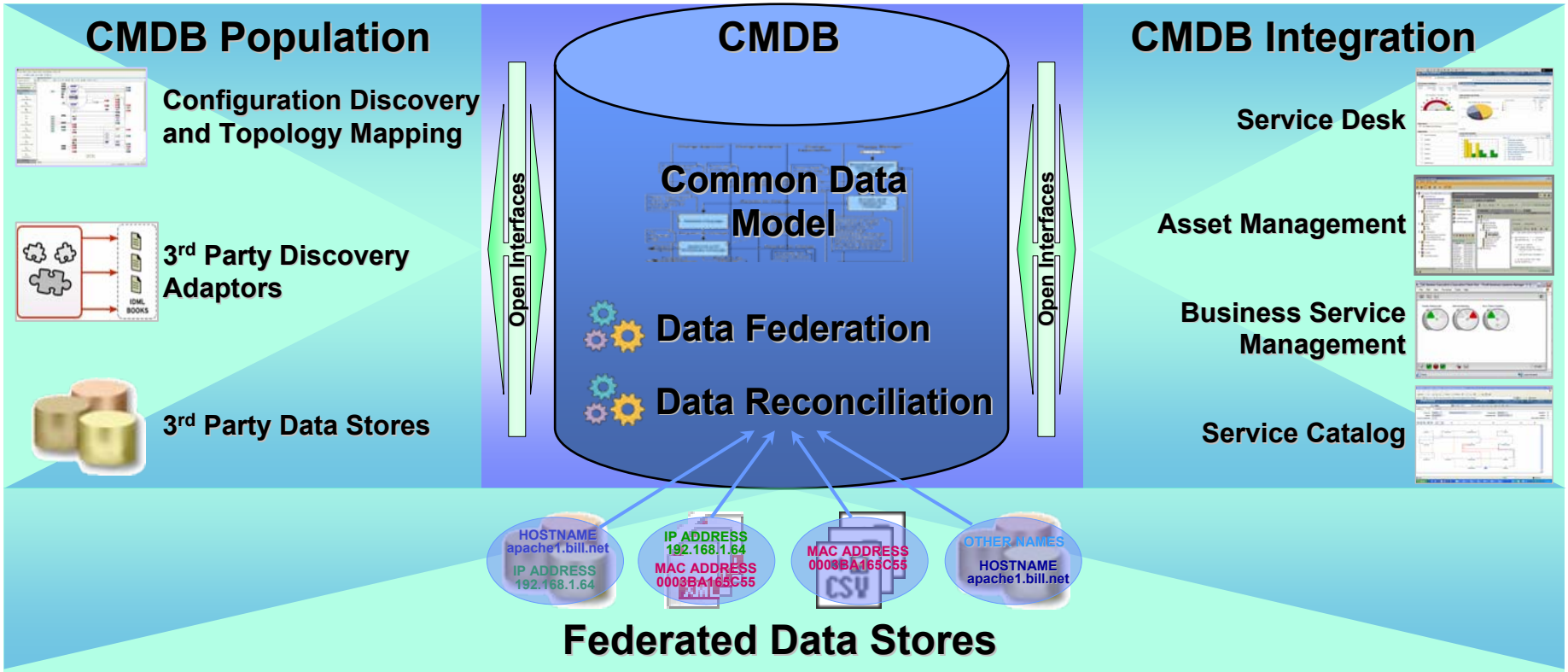
Federated data stores contain information which need to be tracked or referenced but which is not part of the core Configuration Item



- Access source of record for attributes which are not contained in the CMDB
- Federation brings multiple data sources into a coalesced view
- Report generation with information from CMDB and other data sources

CMDB – Data Reconciliation

Data reconciliation is the ability to filter, prioritize and normalize identical Configuration Items from multiple sources



- Automatically ensures single records in the CMDB from duplicates found in multiple sources by comparing matching fields from each data store
- Maintains source integrity of each Configuration Item instance in the CMDB

IBM's CCMDB is More Than a Data Store

Data Integration

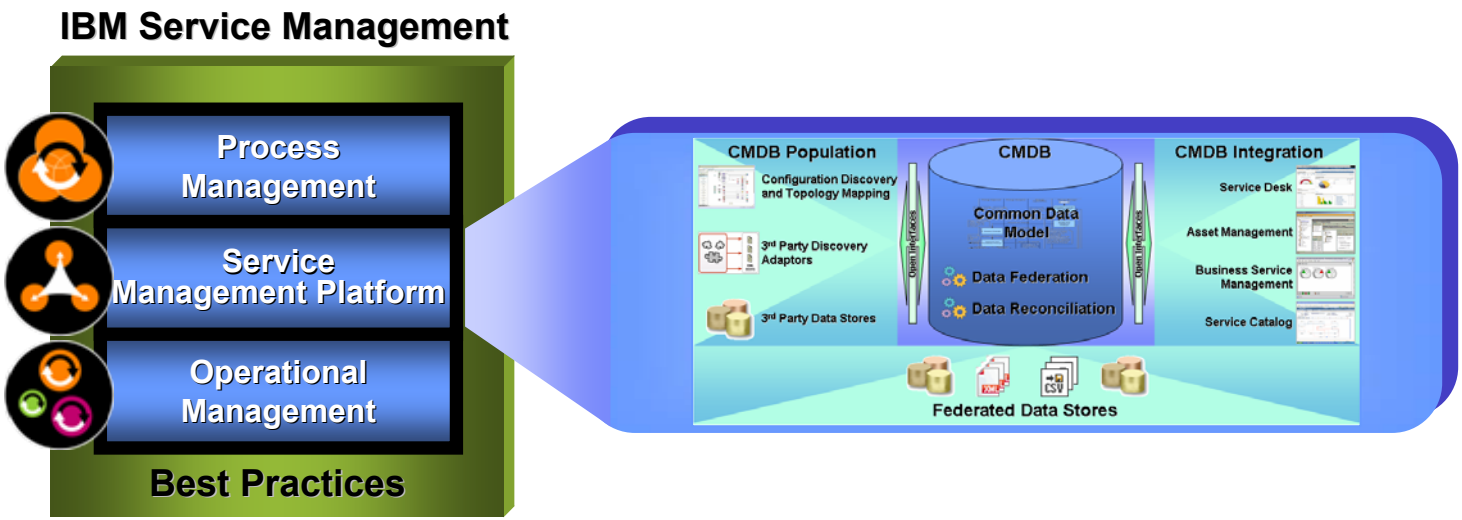
- Integrates and shares data across complex organizational silos
- Proactively manages data currency and accuracy
- The CMDB is the true, authoritative source of record

Workflow Integration

- Is coupled with an automated change management process to ensure integrity and consistency of configuration items
- Increases coordination and data sharing

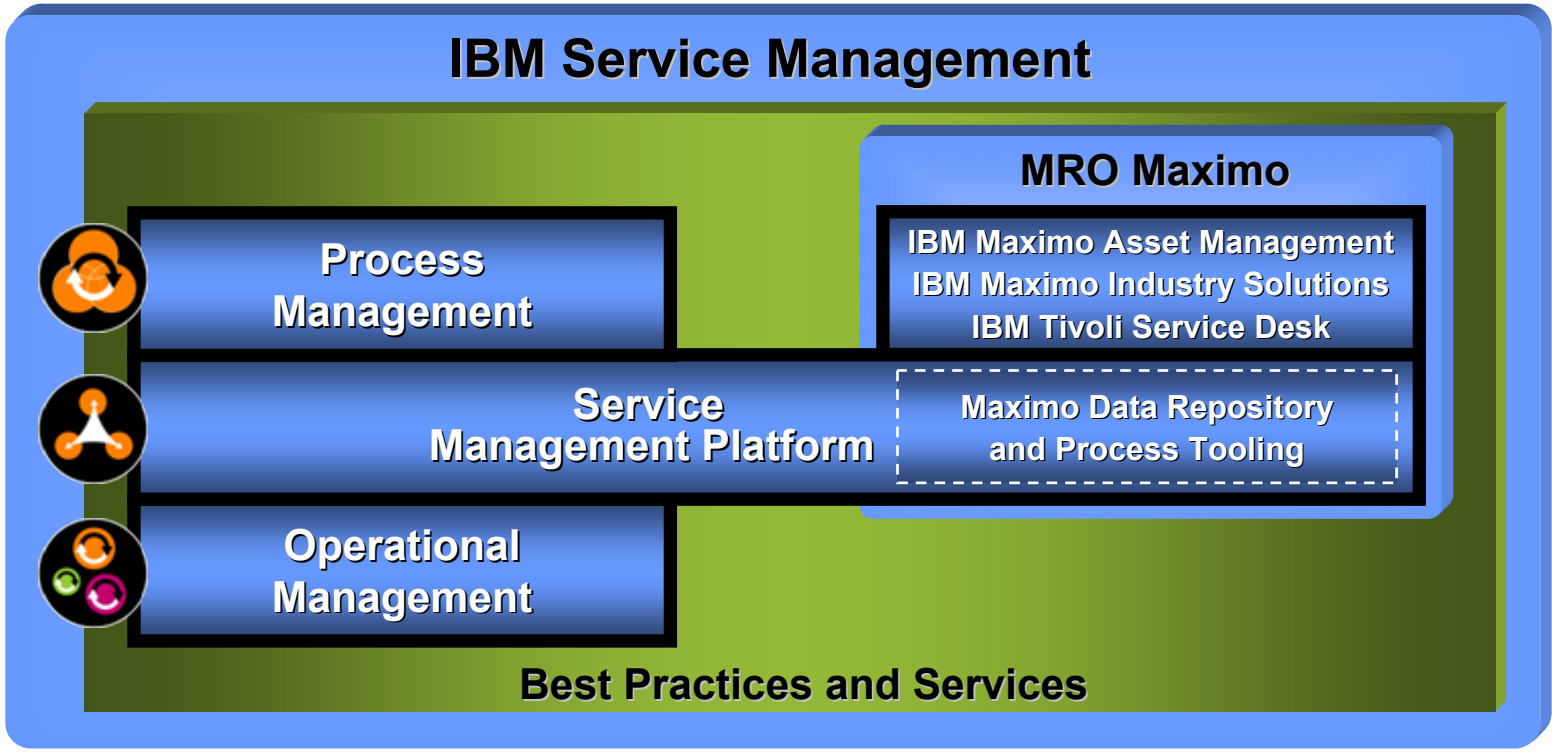
Policy Integration

- Enforces policies to ensure compliance with internal and regulatory requirements



IBM and MRO Maximo – Leveraging Synergies

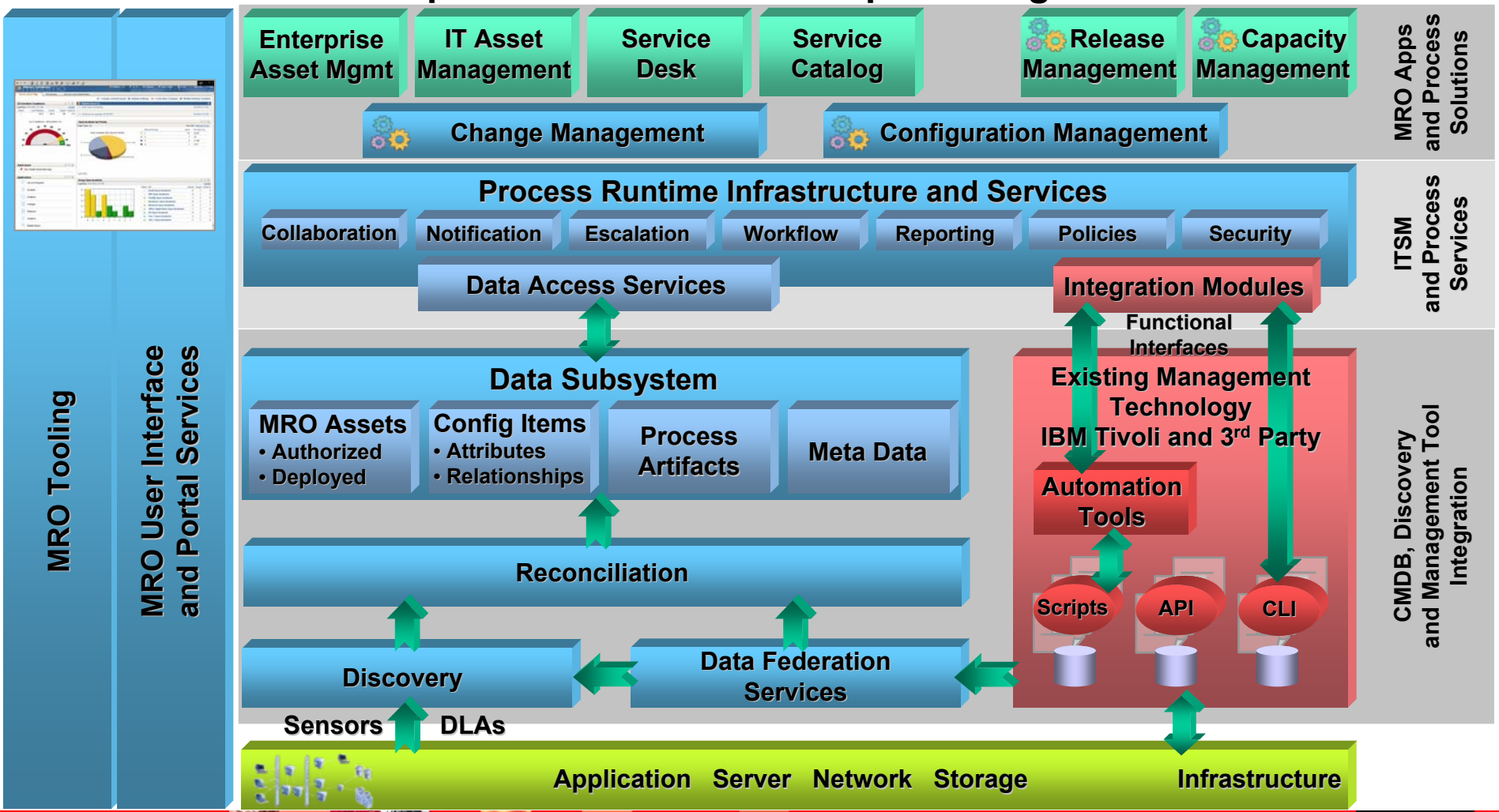
The integration of MRO Maximo with IBM Tivoli provides solutions to solve enterprise-wide Service Management challenges beyond IT



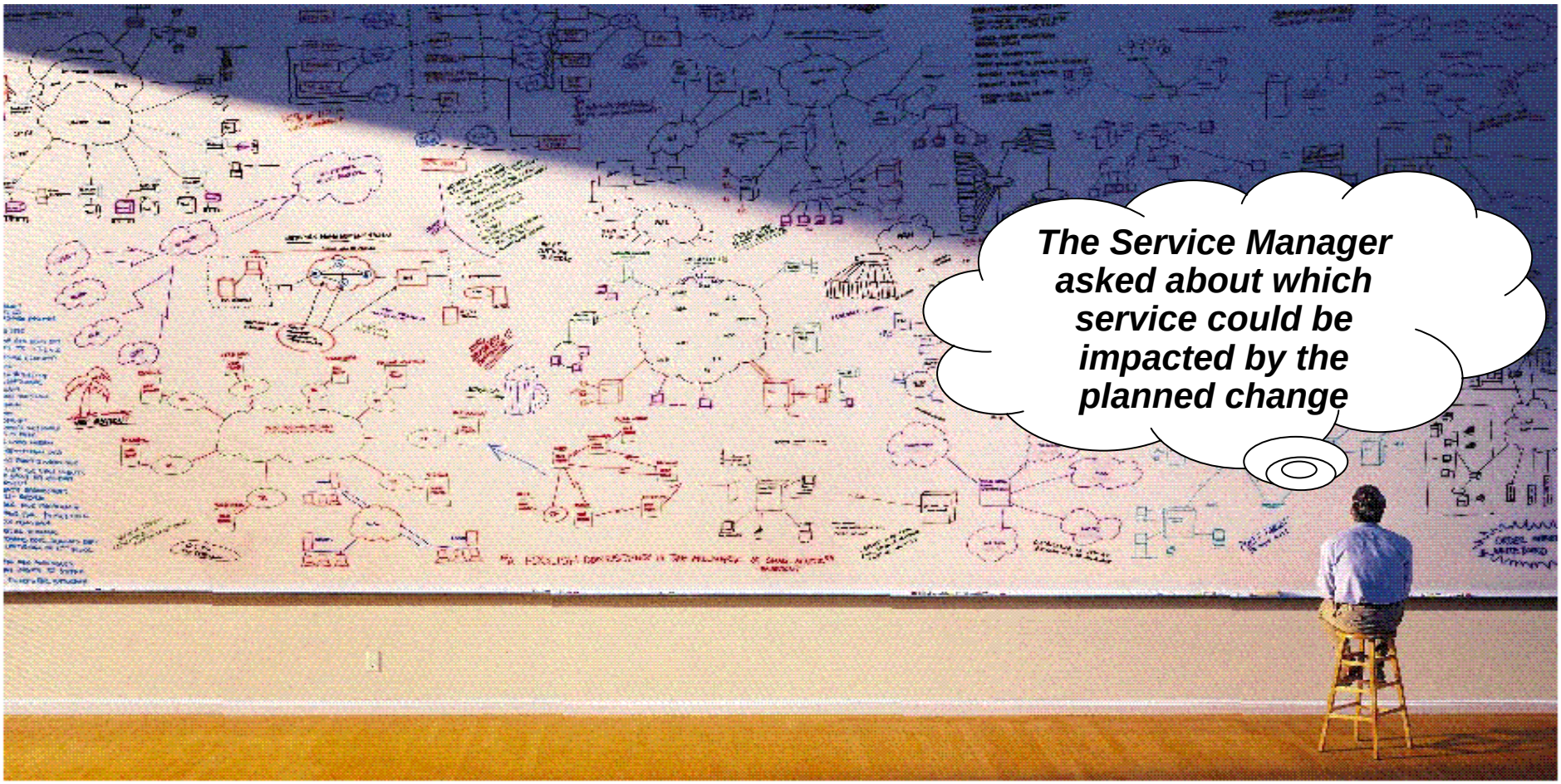
- No impact to existing enterprise asset management applications
- Richer converged data model to include IT assets and relationships
- Integration with other data sources for expanded enterprise and IT consolidation
- Converged process layer providing improved process automation and collaboration

IBM Service Management Architecture

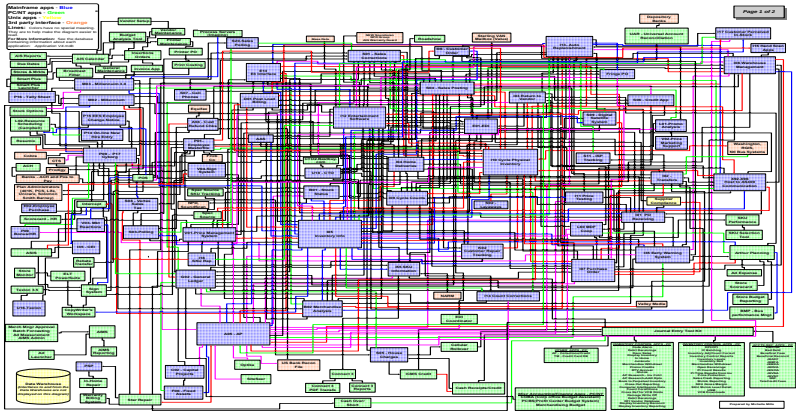
The acquisition of MRO provides a significant opportunity to further accelerate the implementation of the ISM platform guidelines



The Application Dependency Challenge



Visibility through Discovery and Application Mapping

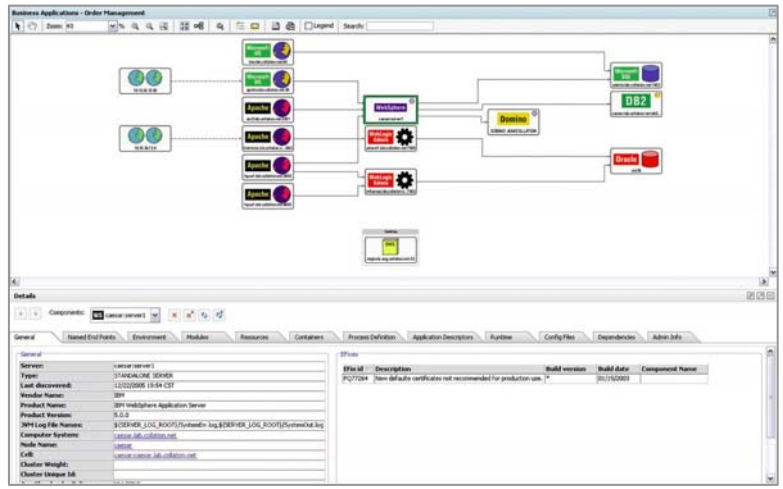


Traditional View of Infrastructure Topology

- What does the service configuration look like – does the topology reflect the current state?
- By changing this server, what other devices are impacted?
- What database might be involved and what other application could be affected?

Automated Discovery & Application Mapping

- Enables organizations to visualize dependencies between applications, and within the IT infrastructure
- Understand how any changes in the IT infrastructure can affect associated business processes
- Achieve regulatory compliance, ability to audit plus improved control of IT infrastructure



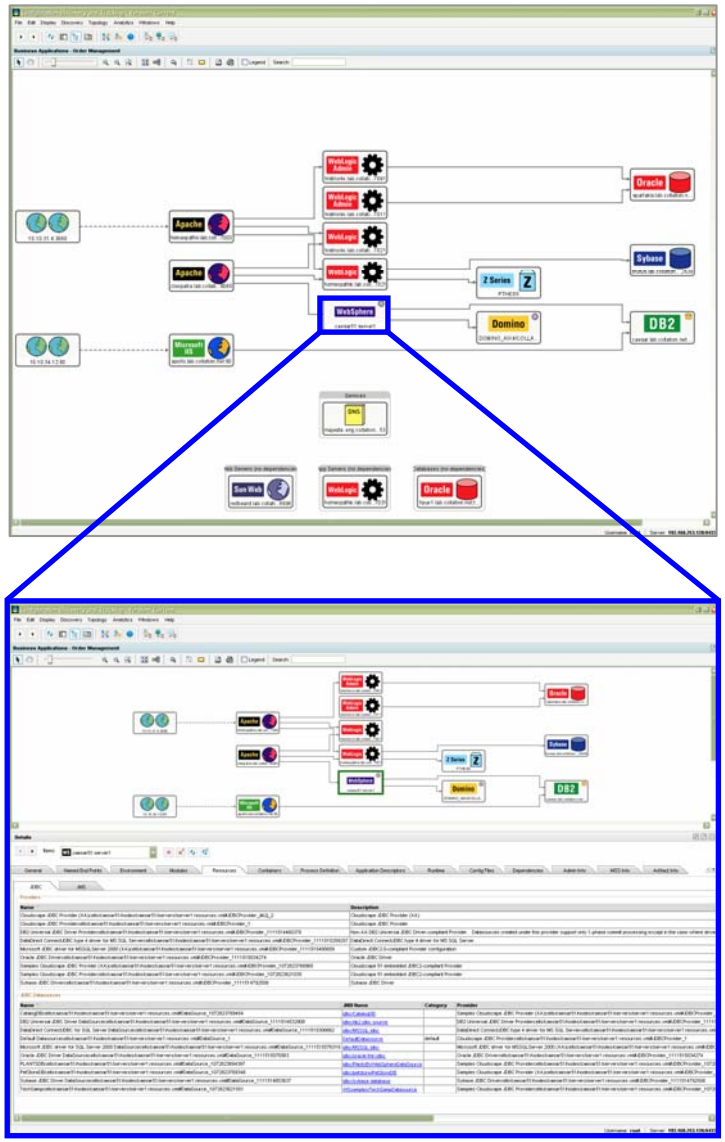
Relationship Mapping and Configuration Information

See the Big Picture

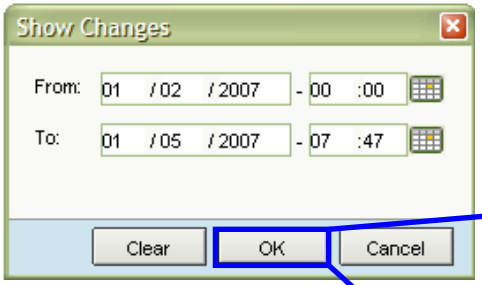
- Broadest and most extensible coverage
- Deepest cross-tier, run-time detail
- Only fully automated application discovery

Rapid Time to Value

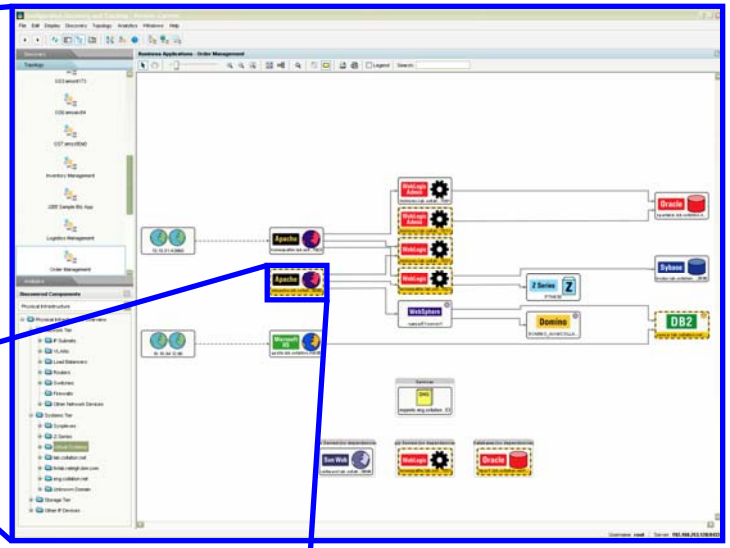
- Fast, low cost implementation
- Agent-free auto-discovery



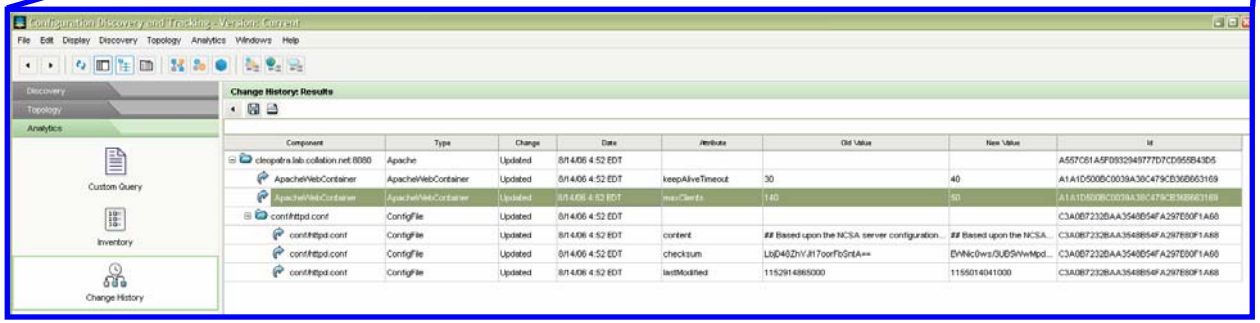
Identify Changes to Assist Problem Resolution



Step 1 – Select change history window to identify changed components

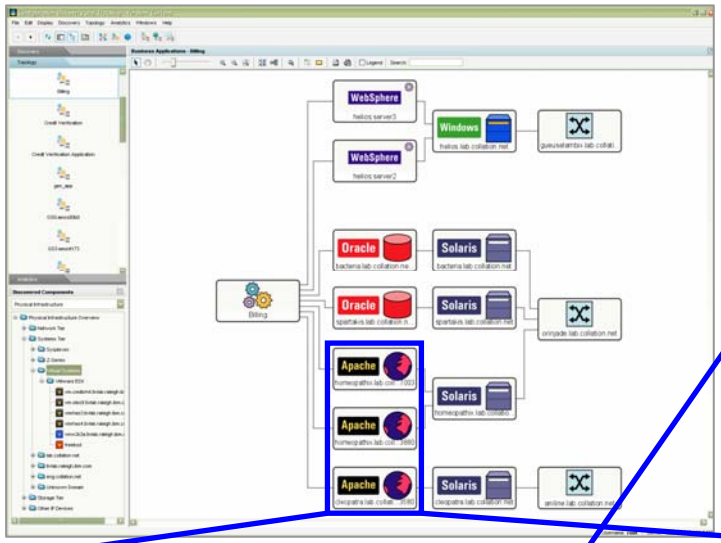


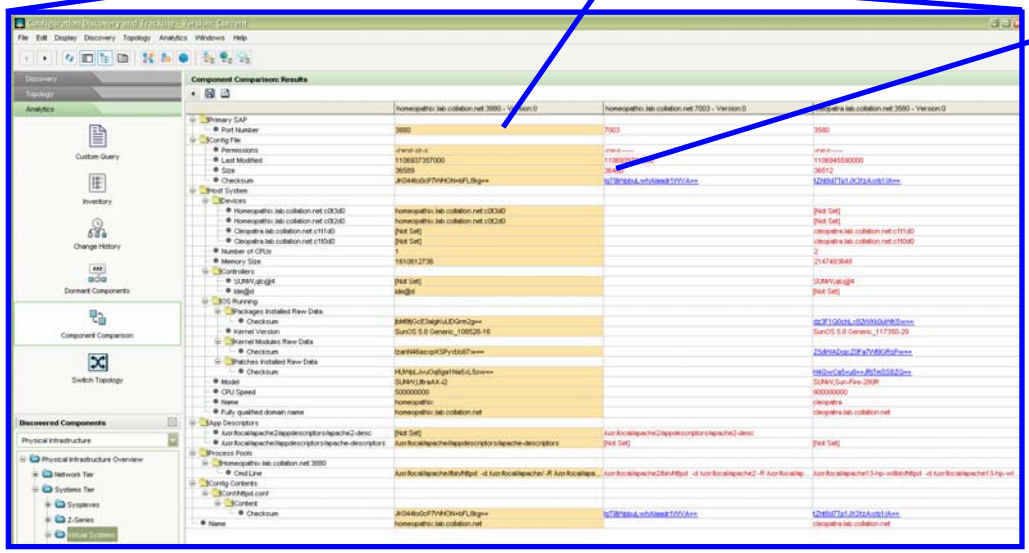
Step 2 – Changed Configuration Items are automatically identified



Step 3 – View detailed history of the changes by attribute

Audit Configuration Items via Comparison





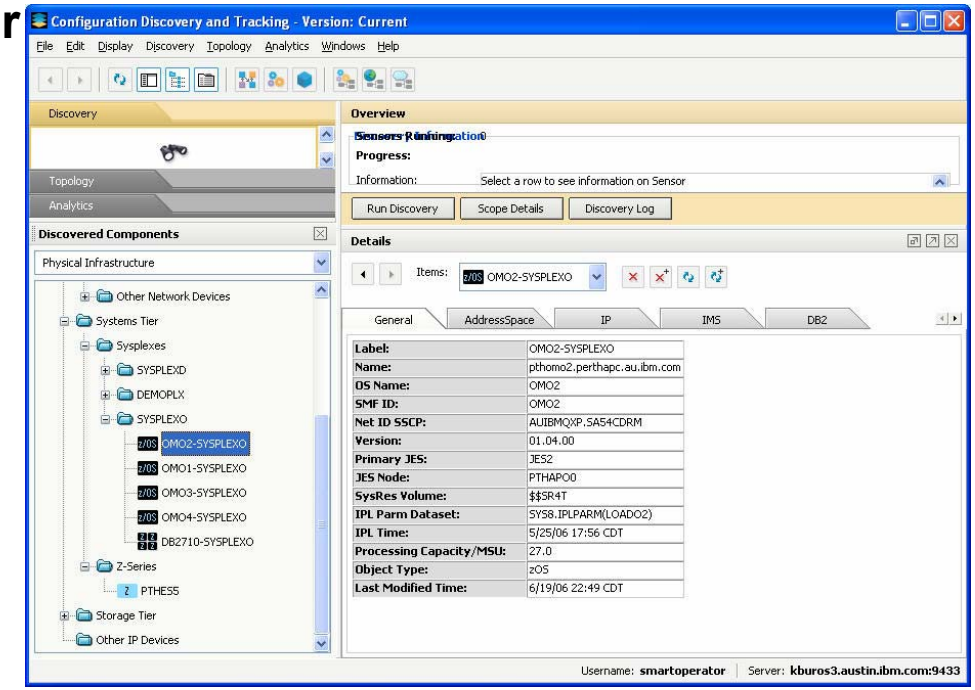
Select identical component types to run a comparison report

Enables easy comparison of like CIs to a 'master' copy

Dissimilar attribute values are highlighted

System z Resources

- **z/OS Discovery Library Adapter includes System z resources**
  - **LPAR**
  - **z/OS**
  - **IMS**
  - **DB2**
  - **CICS**
  - **MQ**
- **WebSphere**
- **Discovery IP networking resources from NetView z/OS**
- **Info/Man incidents affecting computer systems**

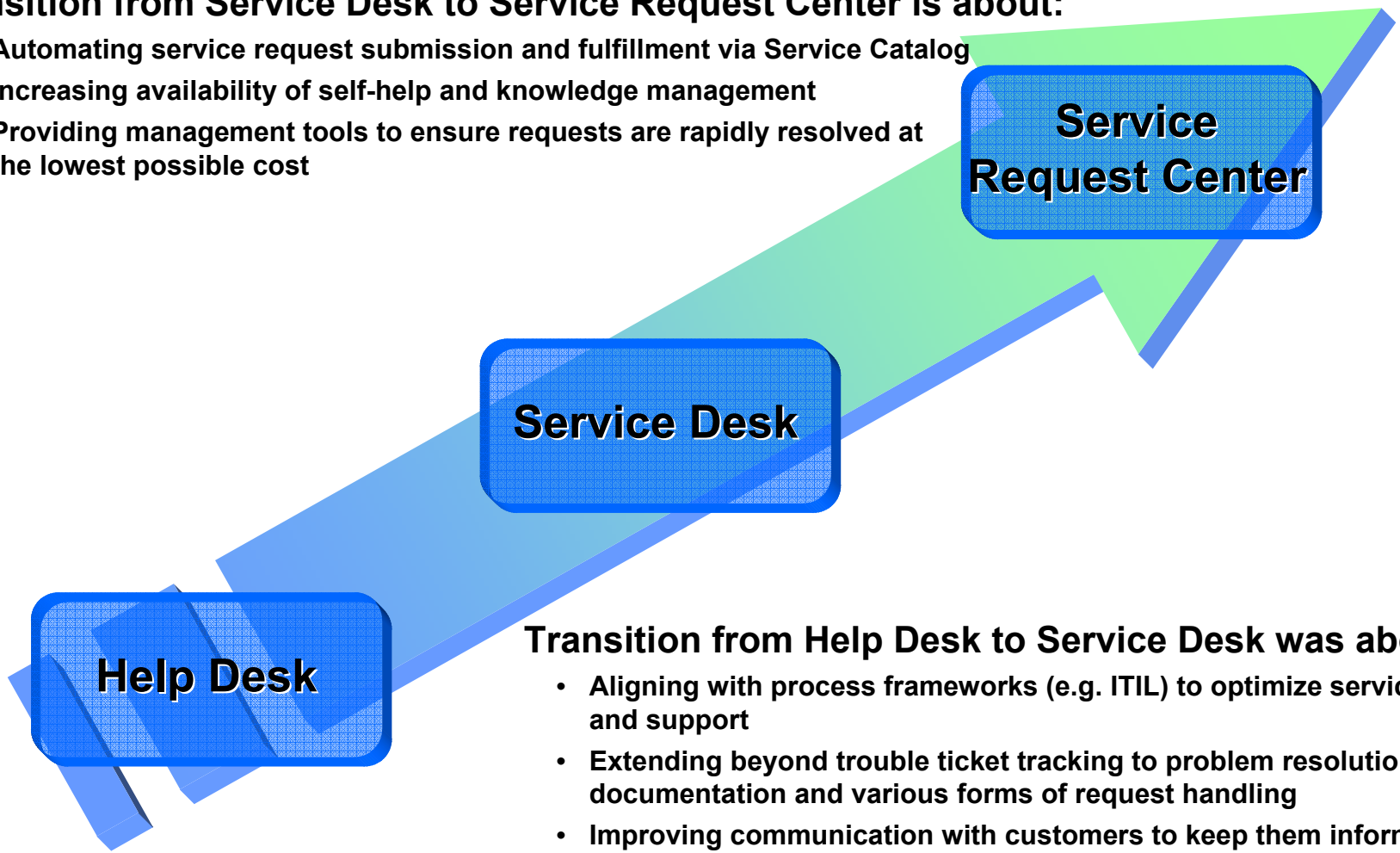


- **Context sensitive launch to OMEGAMON XE**
- **Tivoli Business System Manager integration for Line of Business objects to leverage investment in existing technology**

Evolution of the Service Management Market

Transition from Service Desk to Service Request Center is about:

- Automating service request submission and fulfillment via Service Catalog
- Increasing availability of self-help and knowledge management
- Providing management tools to ensure requests are rapidly resolved at the lowest possible cost

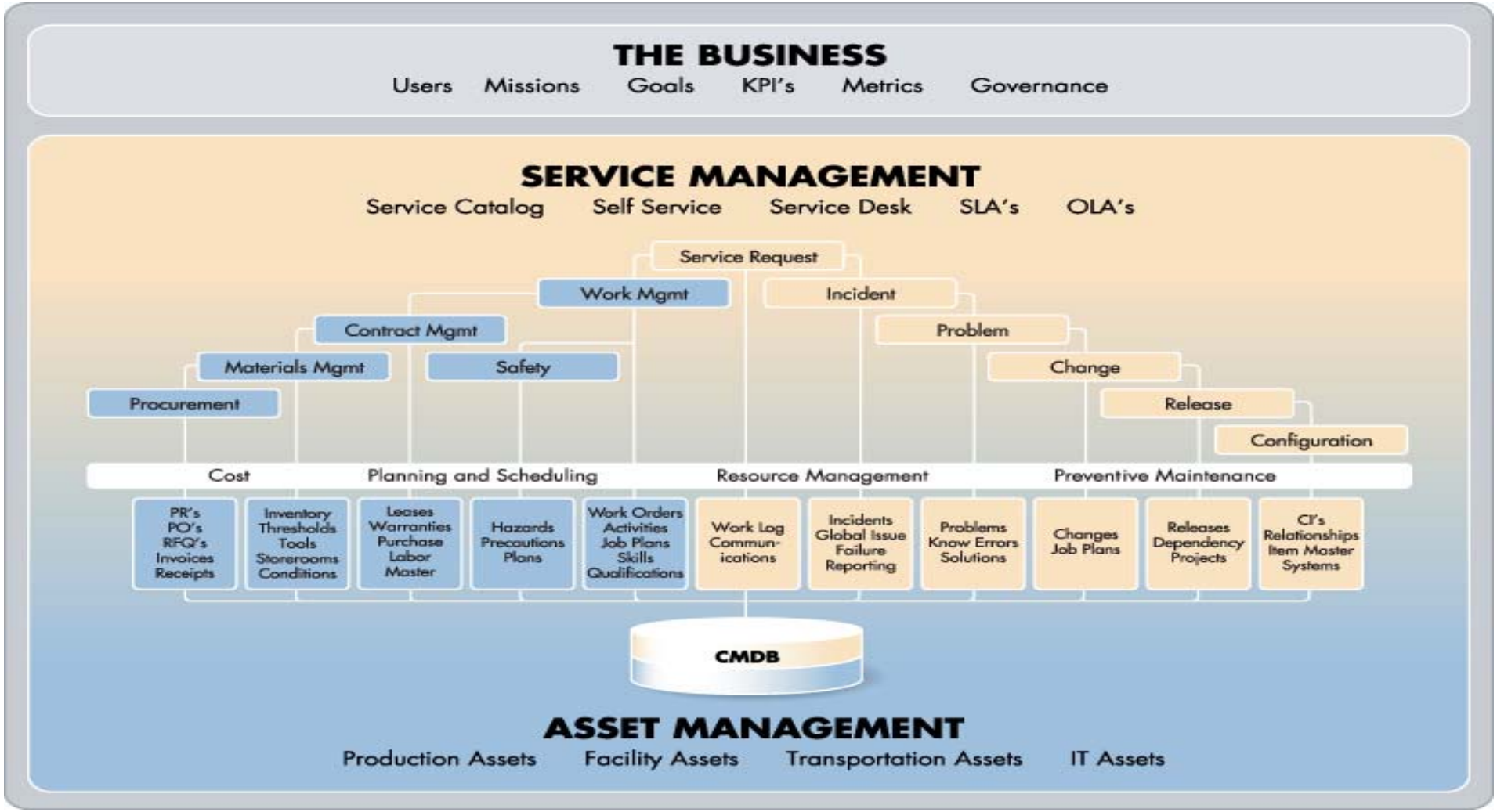


Transition from Help Desk to Service Desk was about:

- Aligning with process frameworks (e.g. ITIL) to optimize service and support
- Extending beyond trouble ticket tracking to problem resolution, documentation and various forms of request handling
- Improving communication with customers to keep them informed about status, confirmation of resolution, etc.

Service Management – Solution Capabilities

Technology components – ITIL and asset management best practices

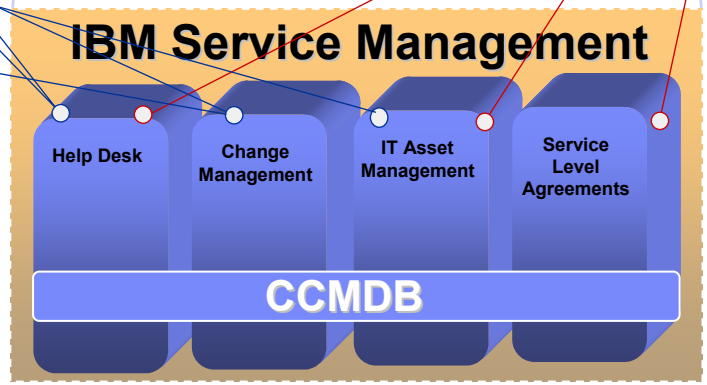


Service Management – Automate ITIL Best Practices

- Service Desk
- Incident Management
- Problem Management
- Change Management
- Configuration Management
- Release Management

SERVICE SUPPORT
PINKVERIFY™
ENHANCED

- Financial Management
- Availability Management
- Service Level Management



IBM Tivoli Service Desk – Key Features and Benefits

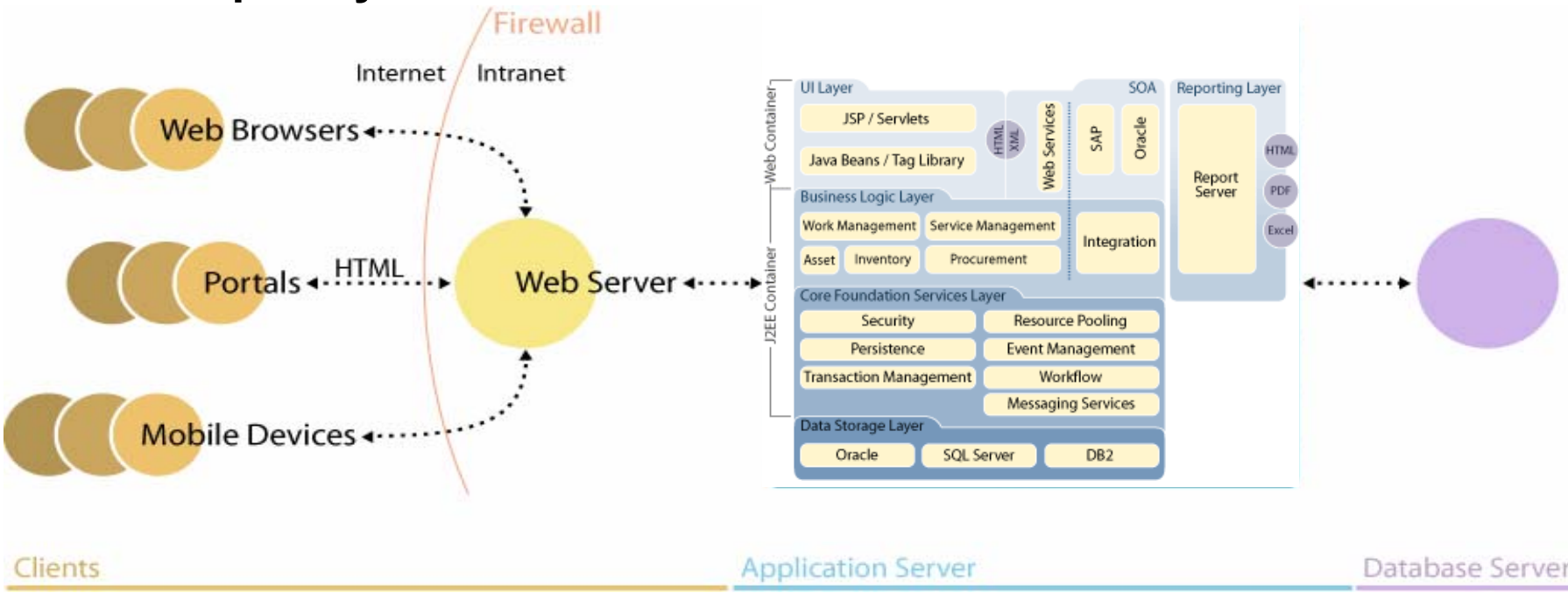
Incident and Problem Management	**Powerful visual workflow and escalation enable quick resolution**
Self Service	**Allows users to proactively address their own issues reducing calls**
Solutions	**Built-in, searchable solutions database enables agents to resolve issues faster, improving first call resolution rates**
Role-based KPIs	**Support staff, managers or executive can monitor role-based KPIs in an easy to configure, intuitive graphical display**
Interactive action-based Workflows	**Guide users through a process or activity based on the context of data entered, reducing training requirements, promoting ease of use and greater accuracy of information**
Escalation Management	**Ensures proper management of resources to achieve service levels – proactively monitor conditions and send notifications from prompt action**
Configuration Tools	**Flexible configuration tools for database configuration and applications design enabling users to easily and quickly configure the UI, dashboards, KPIs, reports and more on the fly**

IBM Tivoli Service Desk – Key Features and Benefits

Work Management	**Work Management to deploy the right personnel with the right skills at the right time**
Dashboards	**Real-time dashboards provide actionable information and identify potential problem areas, enabling support to take appropriate corrective actions before critical services are adversely affected**
E-mail Listener	**Efficiently processes inbound e-mails into service requests streamlining service desk operations and increasing user satisfaction**
Ticket Templates	**Saves time by pre-populating work order fields with information found in the service request**
Bulletin Board	**Provides real-time message display**

Technology Advantage

- Standards-based architecture
- Completely Web-based



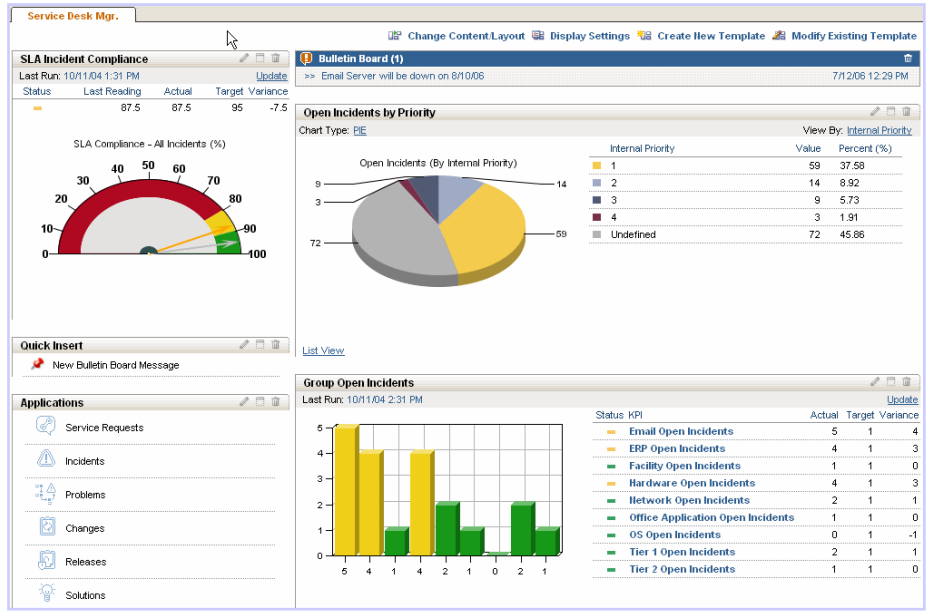
- Built on standards
  - SOA and Web services
  - J2EE
  - HTML
  - XML
- Enterprise level security and authentication
  - Single Sign On and LDAP
  - HTTPS (SSL)
  - DESede
- Zero code (stored permanently) on the client

IBM Tivoli Service Desk – Value Proposition

The IBM Tivoli Service Desk provides critical support to the entire organization by keeping key business systems and services available and reliable

The IBM Tivoli Service Desk enables organizations to:

- Create service efficiencies
- Reduce disruptions
- Streamline service desk operations
- Improve customer satisfaction
- Reduce costs by unifying key service support and asset management processes
- Deliver easily accessible business reporting and real-time Key Performance Indicators (KPIs)



Agenda

- IBM Service Management Overview
- Service Management Platform Overview
  - Change and Configuration Management Database
  - Configuration Discovery and Tracking
  - Service Desk
- **Process Automation**
  - **Service Support Overview**
  - **Service Request, Incident, Problem, Change, Release, Configuration**
- Business Service Management
  - A Strategic Partnership – Business and IT
- Where to Get Started

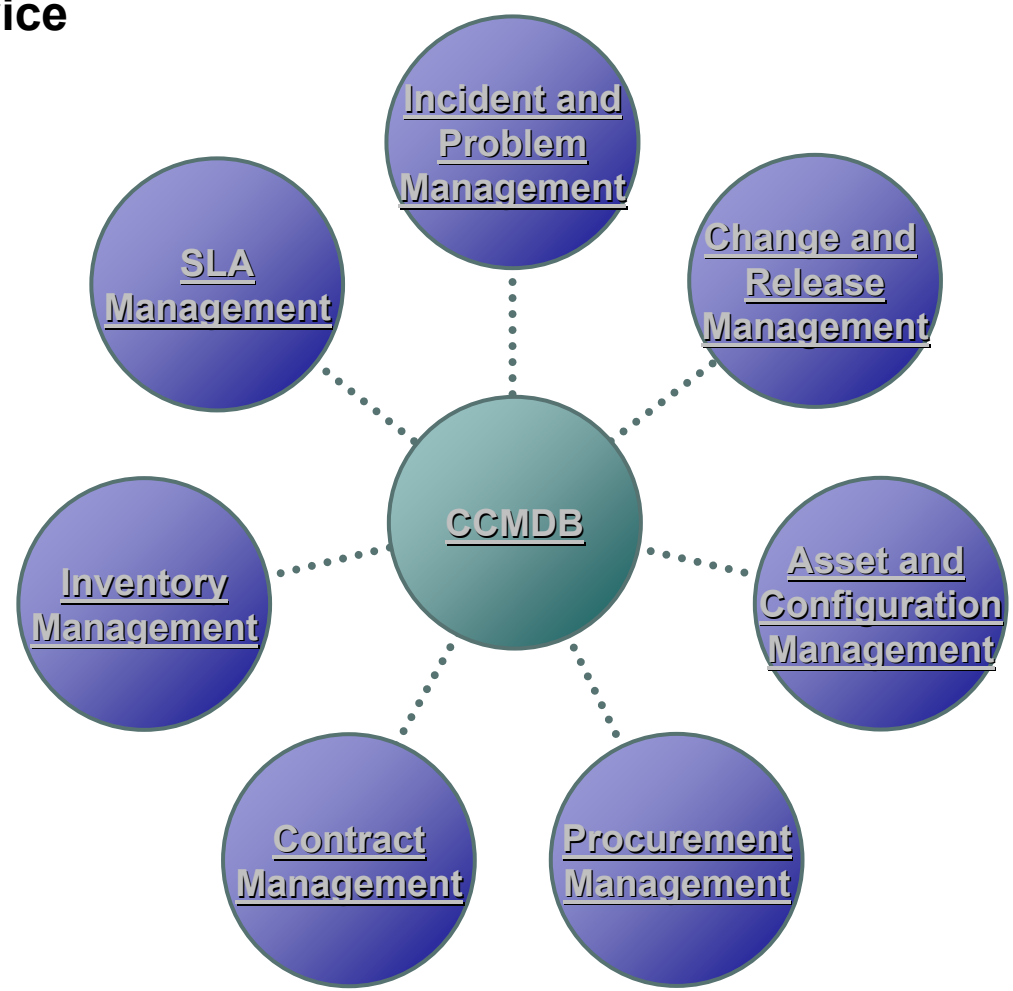
Process Automation

- Automated IT management processes deliver rapid responsiveness and greater flexibility
- Based on experience applying ITIL®, eTOM, CobiT, ISO 20000 and CMMI in customer environments
- Integrated with Tivoli and non-Tivoli management products

- Customization tools allow customers to:
  - Customize the processes
  - Integrate additional products into the processes including in-house and third party applications

Process Automation – Value Proposition

Process automation enables IT organizations to manage, on a single unified platform, the critical IT business processes needed to deliver optimal service

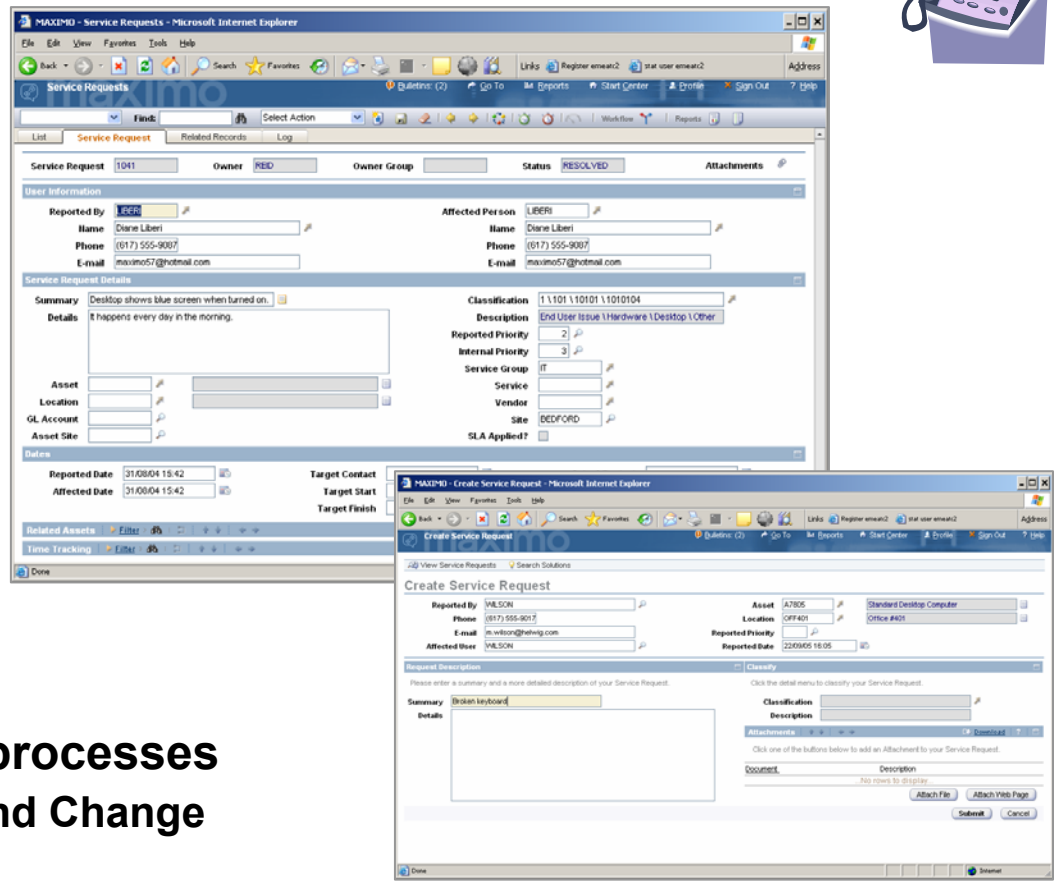


Incident and Problem Management

- Self Service
  - Access to solutions for quick identification of possible resolution
- Service Request
  - Call tracking/customer interface – pre-cursor to work
  - Goal: Capture info and determine if/what next step
- Incident
  - Deviation from expected standard operation of a service
  - Goal: Restore service to customer ASAP
- Problem
  - Unknown underlying cause of one or more incidents
  - Goal: Root-cause analysis to resolve problem and prevent future occurrence of other incidents
- Access to IT asset details/processes (user/location information, IMAC, contracts, procurement), and work order management (skills, labor, tools, materials)

Service Request

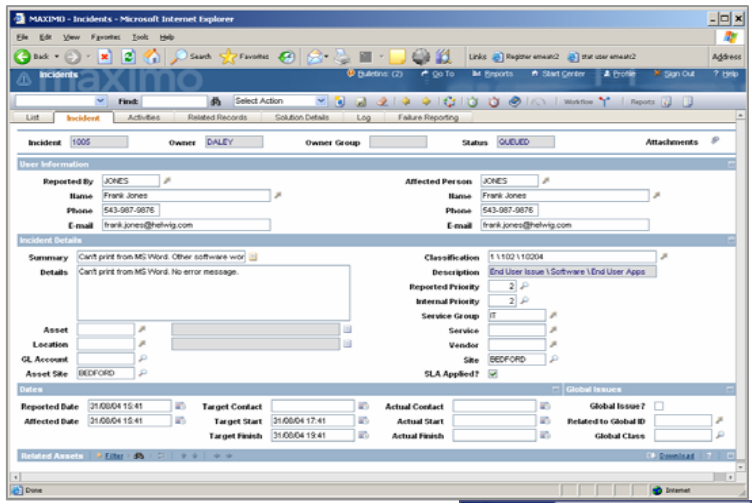
- Request a service
- Self Service capabilities
- Search for knowledge/ solutions/FAQs
- Status updates of request
- E-mail integration



- Interaction with other ITIL processes
  - Interaction with Incident and Change Management
  - SLA interaction

Incident Management

- Incident logging and detection
- Classification and initiating activity
- Investigation and diagnosis
- Business service and criticality identification
- Resolution and logging of work rounds
- Knowledge/solution/FAQ creation and maintenance
- Quick recovery



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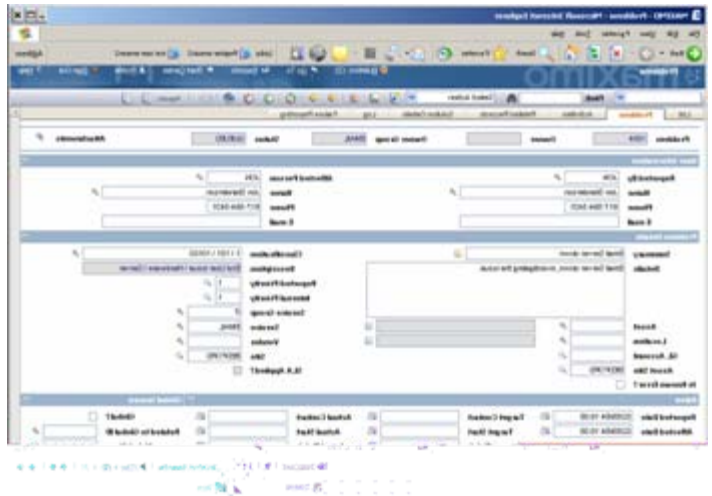
- Interaction with other ITIL processes
  - Interaction with Problem and Change Management
  - SLA interaction
  - Visibility of CI data, including authorized, deployed/discovered and reconciliation results

Problem Management

- Problem and error control
- Root cause analysis
- Work round identification
- Identify transition solution
- Creation and maintenance of a Known Error database
- Implementation of remedial action to prevent issues from reoccurring
- Trend analysis
- Proactive problem management activities



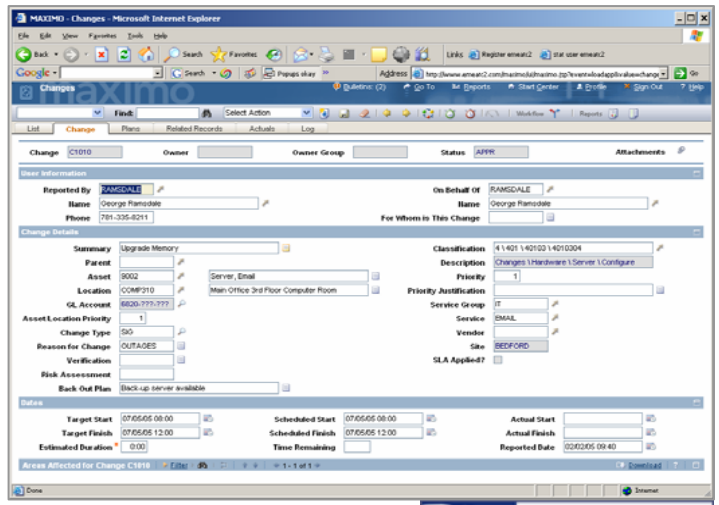
- Interaction with other ITIL processes
  - Interaction with Change and Release Management
  - SLA interaction
  - Visibility of CI data, including authorized, deployed/discovered and reconciliation results

Change and Release Management

- **Change**
  - An action that results in a new status for one or more Configuration Items
  - **Goal:** Standardize change process and minimize change-related incidents
- **Release**
  - A singular or collection of authorized changes
  - **Goal:** Design and implement efficient procedures for the distribution and installation of changes
- **Manages the entire process**
  - Request → Approval → Execution
- **Controls and documents CMDB**
  - Release procedures
  - Release design
  - Build process
- **Access to IT asset details/processes (user/location information, IMAC, contracts, procurement), and work order management (skills, labor, tools, materials)**

Change Management

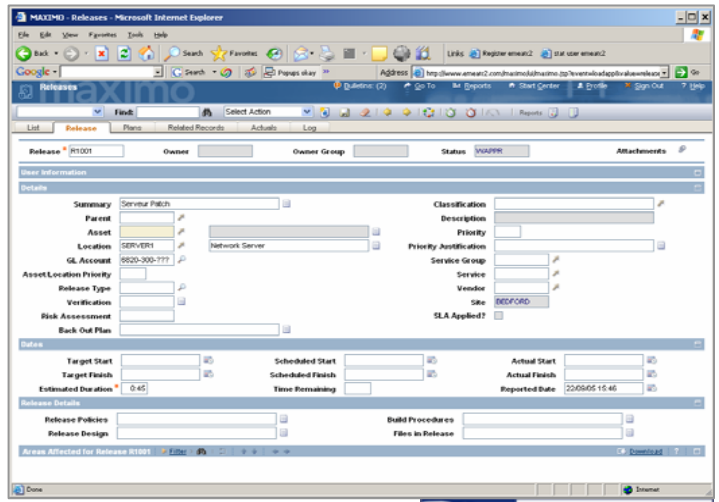
- Identification, assessment and authorization
- Identify and classify RFCs
- Planning and scheduling
- Implementation and review
- Emergency RFC
- Process that includes approval stage(s) to execute planned alterations to the technology infrastructure in line with supporting business goals



- Interaction with other ITIL processes
  - Interaction with Incident Management
  - SLA interaction
  - Visibility of CI data, including authorized, deployed/discovered and reconciliation results

Release Management

- Identify and classify releases
- Planning and scheduling
- Rollout planning
- Distribution interaction
- Manage and control the release cycle through workflow



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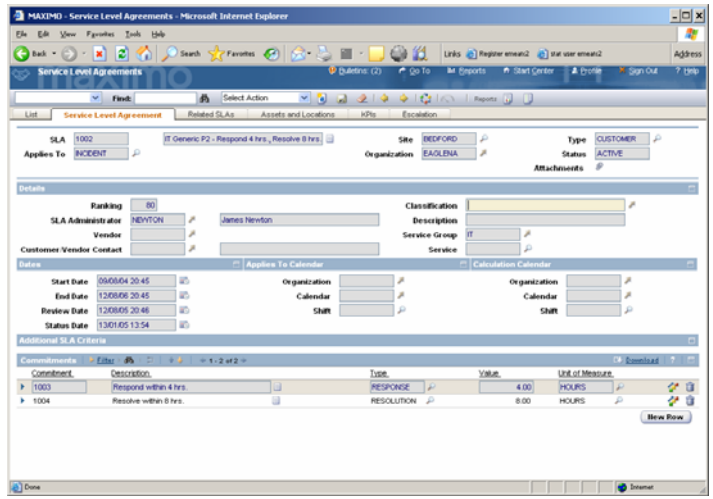
- Interaction with other ITIL processes
  - Hierarchical association between changes and releases
  - Associate Incidents
  - SLA interaction
  - Visibility of CI data, including authorized, deployed/discovered and reconciliation results

Asset and Configuration Management

- Unified with all ITIL processes
- Full life-cycle management support:
  - Moves
  - Reconfigurations
  - Re-assignments
- Unified deployed assets (auto-discovery)
- Reconciliation engine supports software management and hardware standardization compliance

Configuration Management

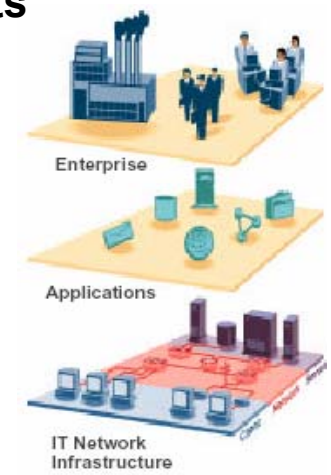
- Control and planning
- Verification and auditing
- Maintenance and status
- Cost control
- License management
- Use and service support



- Interaction with other ITIL processes
  - All processes are tied into Configuration Management

Definition Of Corporate Assets

- **IT asset management is the cohesive merging of the physical, financial and contractual attributes of IT assets to**
  - **Manage assets cost-effectively**
  - **Minimize liability and risk associated with the assets**
  - **Facilitate effective planning and budgeting**

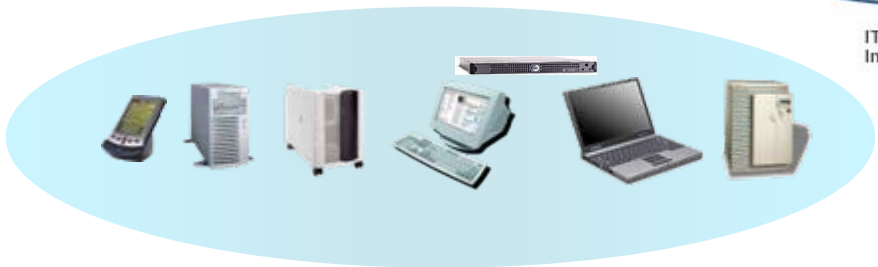


PHYSICAL

Hardware information

Software information

Location, user, cost center



FINANCIAL

Purchase price

Vendor

Depreciation and tax information

CONTRACTUAL

Lease terms

Warranty information

Software license terms

Asset Management

- Discovery
  - Automated collection of hardware and software data
  - Discovery of network devices
  - Tracking physical locations
  - Identify software usage
  - Multi-platform support
- Fusion
  - Mapping IT asset data from auto-discovery solutions to CMDB
- Deployed asset
  - Track assets, locations, cost centers, users
  - Manage IMACD process
  - Reconcile discovered vs. authorized IT asset data

IT Asset Management

Primary ITAM Processes

Asset Management

Contract Management

Procurement/ Financials

Work Management

Service Management

IT Asset Auto-discovery

IT Asset Management

Business vs. technical asset reconciliation

Discovery

Fusion

ITAM Objective

Compliance

Hardware lease management

Software management

Standard procurement

Service support

Procurement Management

- End-user self service applications
- Primary functions include
  - Request for Quotations (RFQ's)
  - Purchase requests
  - Purchase orders
  - Asset receiving and registration
  - Purchase catalogs
  - Invoices
  - Terms and conditions templates
- Supports e-business transactions (with optional e-commerce adaptor)

Contract Management

- Primary functions include
  - Master contracts
  - Purchase agreements
  - Lease and rental agreements
  - Software contracts
  - Warranty contracts
  - Labor contracts
  - Payment schedules
  - Terms and conditions templates
- Unified with IT service management and IT asset management life-cycle functionality

Inventory Management

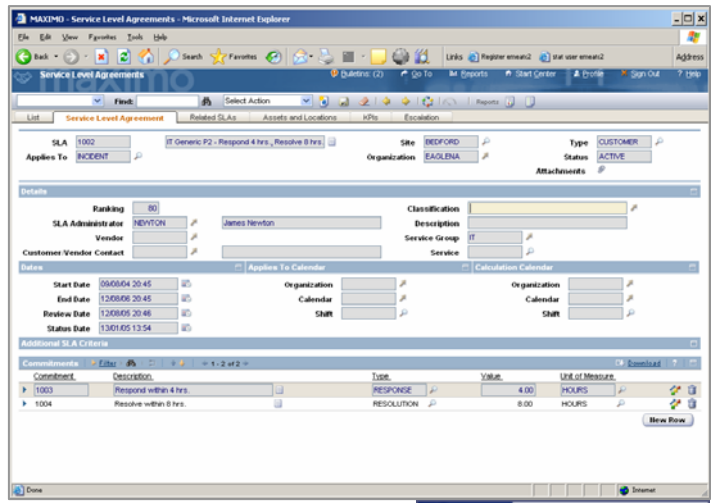
- Primary functions include
  - Item masters
  - Service items
  - Stocked tools
  - Issues and transfers
  - Stockrooms
  - Inventory levels of assets and items
- Support asset receiving (from procurement)
- Support items and assets cost distributions (for financial management)
- Support asset replenish processes

SLA Management

- Support of managed Service Catalogs
  - Provided service
  - Assets targeted and/or impacted by the service
- Service Level Agreements (SLAs)
  - Commitments that are in place with the customer (internal or external)
  - Monitored processes and services
  - Associated preventive countermeasure escalations
  - Performance related to SLA compliance
- SLAs can be applied to any record in IT service management
- Unified with all service processes and IT asset management
- Leverages escalation, notification and workflow engines
- Proactive monitoring of business commitments via KPI's

Service Level Management

SLA application is used to encapsulate the business goals as they apply to the IT infrastructure, to ensure that critical business services are maintained and improved over the duration of these agreements.



- **SLA must be:**
  - **Reasonable**
  - **Appropriate**
  - **Measurable**
  - **Achievable**
  - **Incremental**

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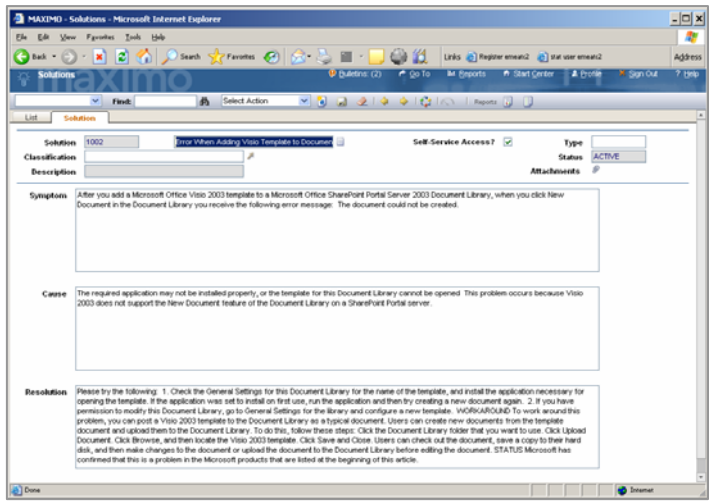
Knowledge Base

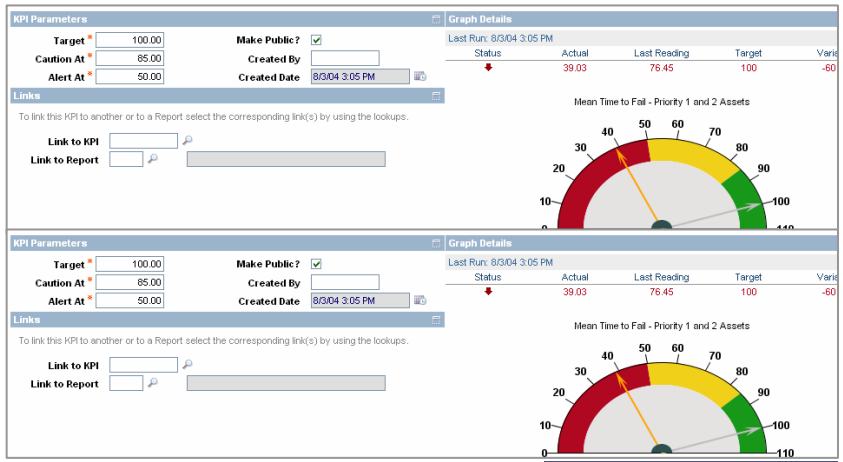
- Identification, assessment and authorization
- Classify solutions
  - FAQ
  - Known error
  - Work round
  - Solution
  - Knowledge
- Maintenance of knowledge through the use of workflows



- Interaction with other ITIL processes
  - All processes are tied into the knowledge base

Availability Management

- No specific availability application (out of the box)
- Meters used to record specific availability measures – such as downtime
- KPIs used to calculate service level availability metrics
- Escalations and workflow used to monitor and proactively notify



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  - **A Strategic Partnership – Business and IT**
- Where to Get Started

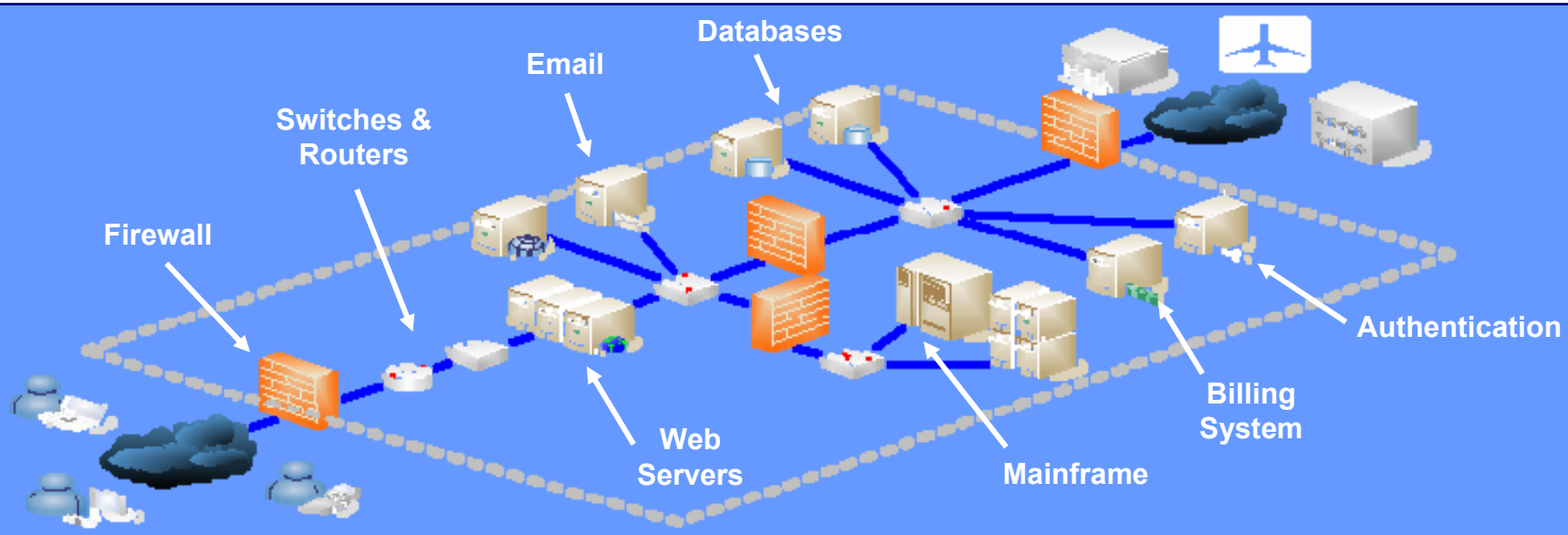
Definition of Business Service

Traditional Understanding

- A customer, partner or user facing any *business application*
  - Examples: SAP, Siebel, Oracle, Microsoft Exchange

Business Service Definition

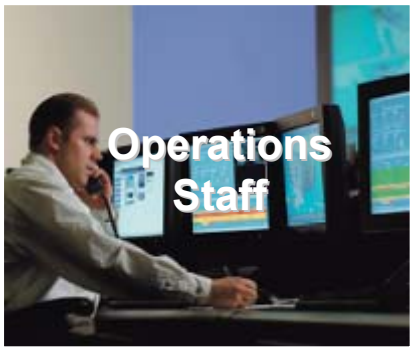
- A business service is any customer, partner or user facing a *group of application, middleware, security, storage, network and other supporting infrastructure* building and enabling a comprehensive, end-to-end business process, transaction or exchange of information
  - Examples: Online banking, e-commerce, credit card processing



Service Visibility – A Must

Business service management is vital to both, business users and IT operations staff

- Manage day-to-day business performance
- Gain insight into the operational health of services
- Track ongoing customer experience
- Make strategic business decisions and investments



- Assure high service availability and performance
- Reduce costs and improve operational efficiency
- Deliver against line of business requirements
- Make long-term IT investment decisions

Business Service Management

Business success is measured against defined quantitative and qualitative metrics

Business performance

- Profit and loss indicators
- Customer growth/churn indicators
- CapEx and OpEx indicators
- Compliance indicators
- Business process indicators

Operational performance

- CapEx and OpEx indicators
- SLA indicators
- Call volume/response indicators
- Cost of downtime indicators
- Mean-time-to-repair indicators

Challenge: Business and Operational audiences lack the integrated service visibility and intelligence needed to align and deliver against defined objectives

Business Service Management

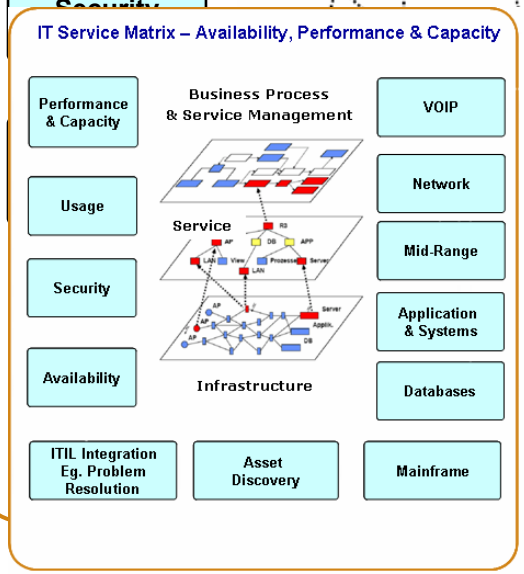
Gartner on BSM:

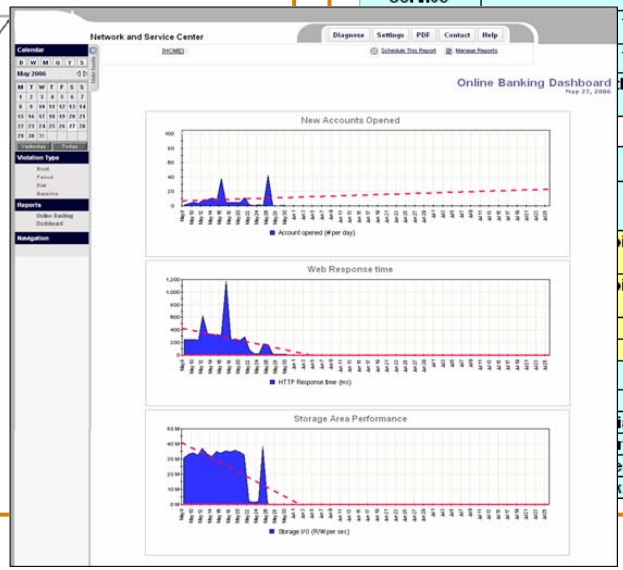
"A category of IT operations software products that link the availability and performance status of the underlying IT infrastructure and application components to business oriented IT services that enable business processes."

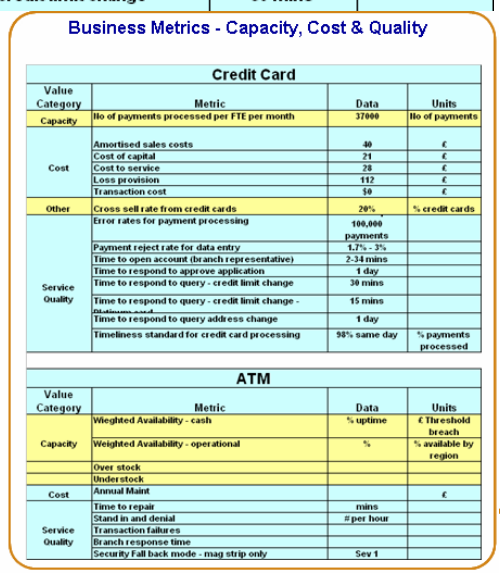
– Debra Curtis, Gartner

Objective: **Improve business aligned service quality, through a constant cycle of agreeing, monitoring, reporting and reviewing IT service achievements and through instigating actions to eradicate unacceptable levels of service.**

Align the Metrics to Manage Business Services

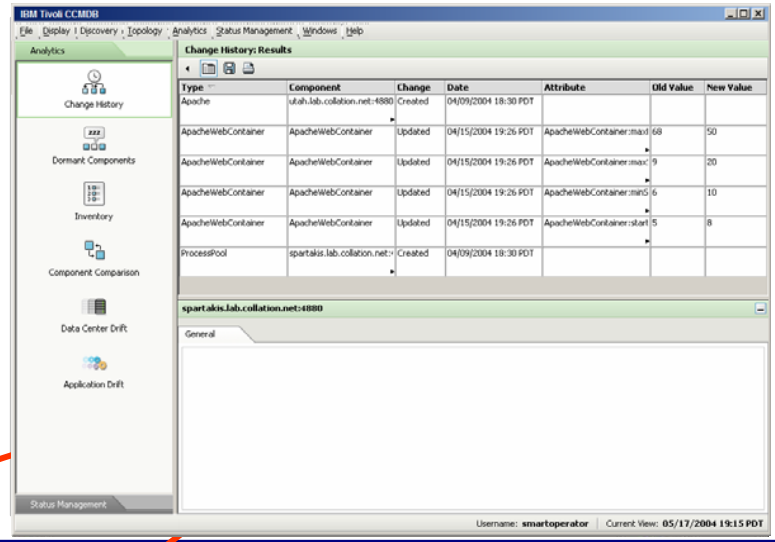


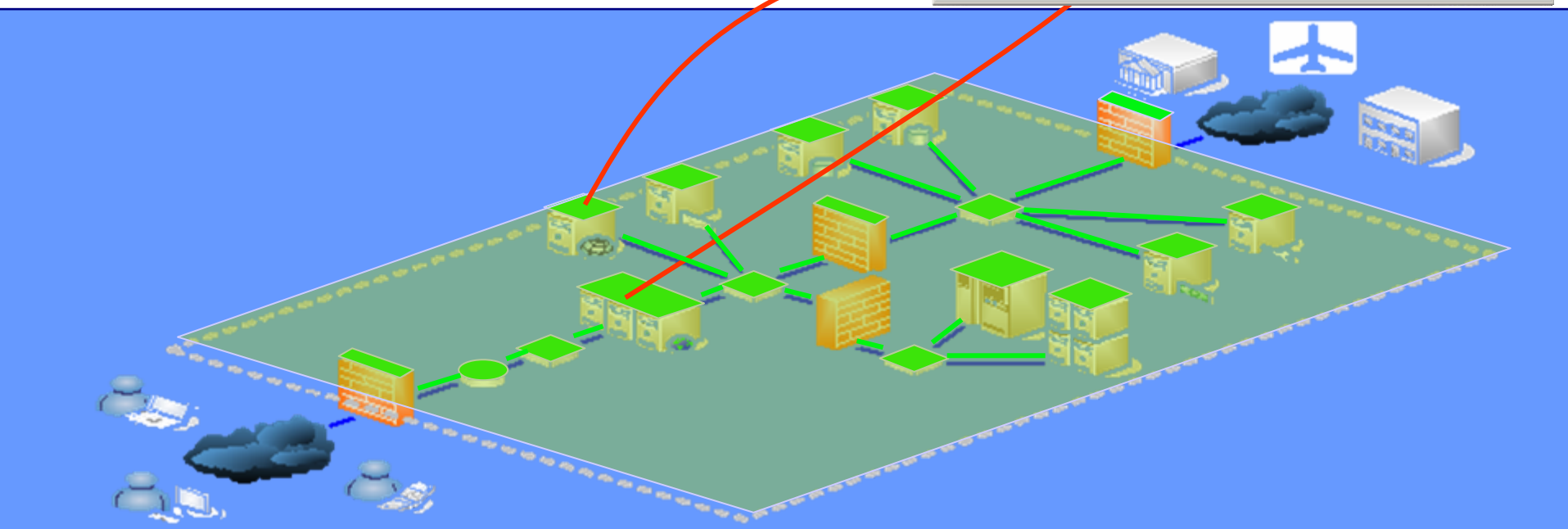




Step 1 – See the Service Dependencies

- Identify Configuration Items (CIs) and Asset Information
- Identify Application and System Dependencies
- Identify Infrastructure Dependencies
- Auto-populate and Maintain Service Models
- Provide Configuration Details and Feed CCMDB
- Provide Change Tracking and Reporting





Step 2 – Understand the End-to-End Customer Experience

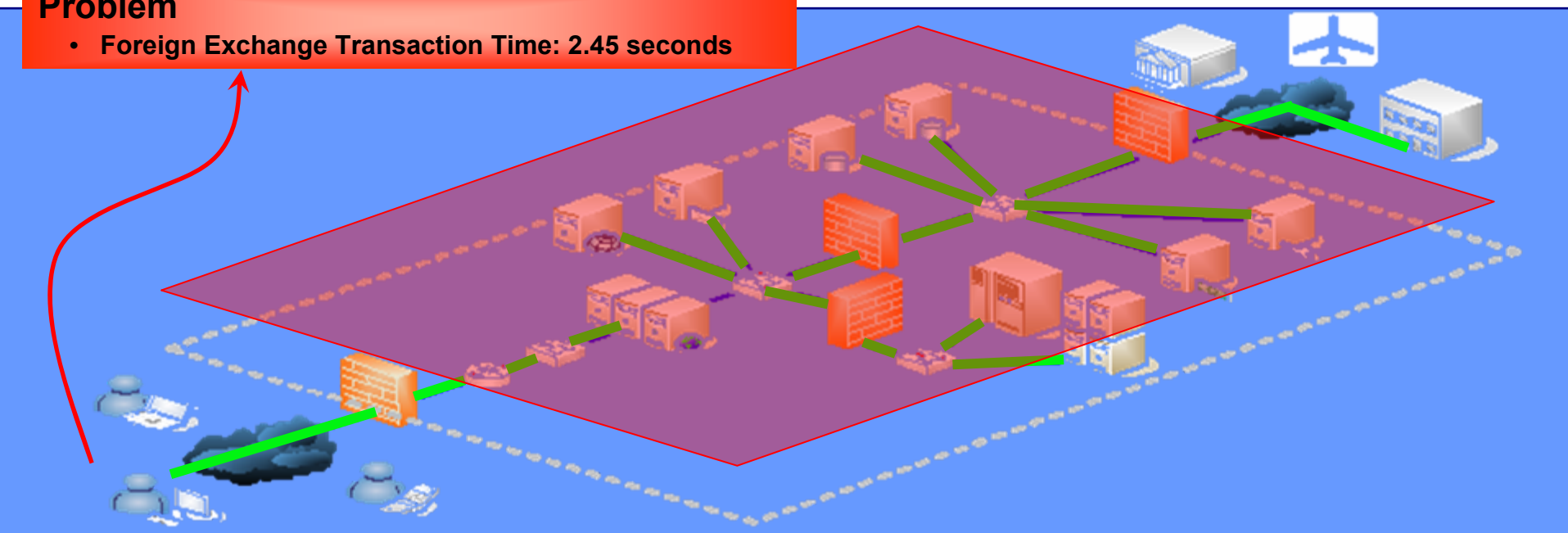
Transaction monitoring provides

- **Real-time transaction performance**
- **Real-time service status**
- **Real-time end-user perspective**
- **Rapid value via improved visibility**

	Trans	Average	Errors	Pending	Revenue
Equity	1232	.43	15	13	453301
Fixed Income	67	0.87	0	4	NA
Commodities	14	0.53	1	0	391256
Foreign Exchange	203	2.45	0	17	212972
Prime Brokerage	32	.77	2	0	973041
Online Trading	869	.41	13	30	66791
Sec.Underwriting	45	NA	1	7	NA

Problem

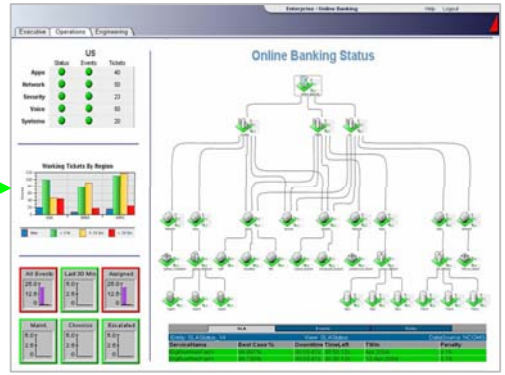
- **Foreign Exchange Transaction Time: 2.45 seconds**



Step 3 – Monitor the Service Infrastructure

Consolidate, integrate and round-out

- Leverage existing IBM and 3rd-party tools
- Consolidate and feed enriched status events
  - Availability, performance, integrity
- Auto-update service model



End-user Events
Security Events
Network Events
Server Events
Web Events
Database Events
Mainframe Events
Application Events
Business Events

Step 4 – Track Key Performance Indicators

Real-time KPI monitoring

- Business activity monitoring
  - ERP – SAP, PeopleSoft…
  - CRM – Siebel, Sales Logix, Remedy etc.
  - Databases – Oracle, Sybase, MS SQL etc.
- Real-time scorecards and dashboards
  - Business transaction/activity KPI/KQIs
- Notification and action automation
- Seek non-traditional sources
  - Operational management products
  - CCMDB
  - Service Desk

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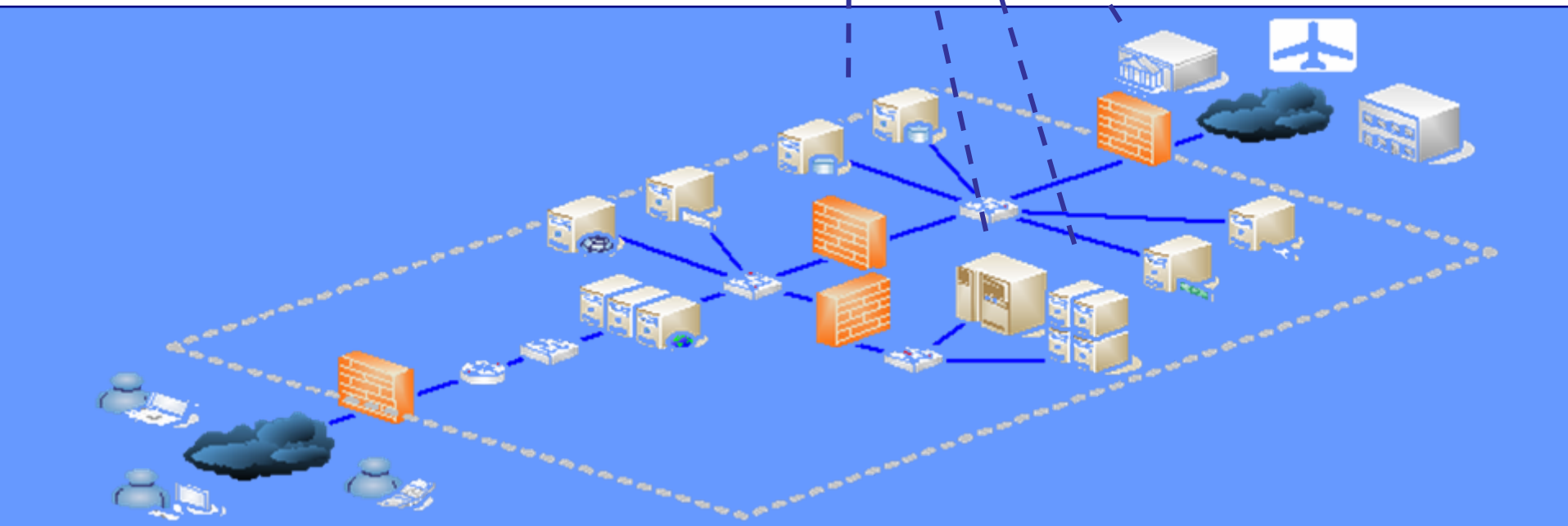


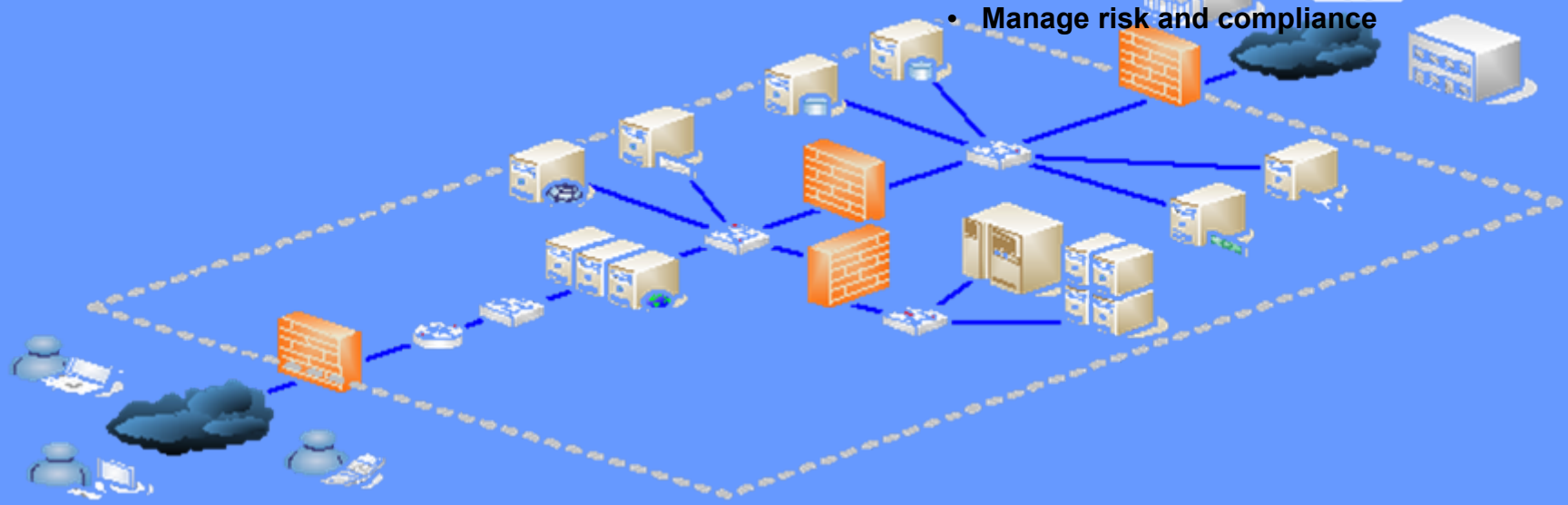
Step 5 – Deliver Targeted Service Intelligence

Targeted Service Views

- Line of Business views
- Revenue, transactions, SLAs
- Customer experience
- Service health and compliance

Operational Views

- Service impact analysis and RCA
- Proactive problem identification
- Troubleshooting and auto-recovery
- Optimize IT and asset performance
- Manage risk and compliance



Customer Example – Trading Floor

- Demanding trading environment
- Enormous scalability and event reduction requirements
- Drastically reduced operating expenses
- Provided smooth upgrade to replace underperforming competitive solution

ROI benefits include

- Zero downtime last 3 years
- Critical alerts happen, but services are not impacted
- Significant improvement in MTTR and accountability
- US$ 750,000 / year ROI for one business unit
- Reduced burden on level 2 and level 3 support

TCO savings include

- Contract reduction
- Cost of man-hours to operate the equipment
- Maintenance hours

Customer Example – Trading Floor

Business Goal: **"99% of all trades within 5 seconds"**

Metrics collected in real-time from any data source (federated data model)

Trading Floor Business and Technology KPIs get

- **Collected**
- **Consolidated**
- **Analyzed**
- **Displayed in real-time**

Proactive correlation of system events with service owners

Aggregated data metrics for each Business Service are displayed in a single Web view

Centralized view of mission-critical applications and infrastructure components across 6 regional data centers – Americas / Europe / Asia

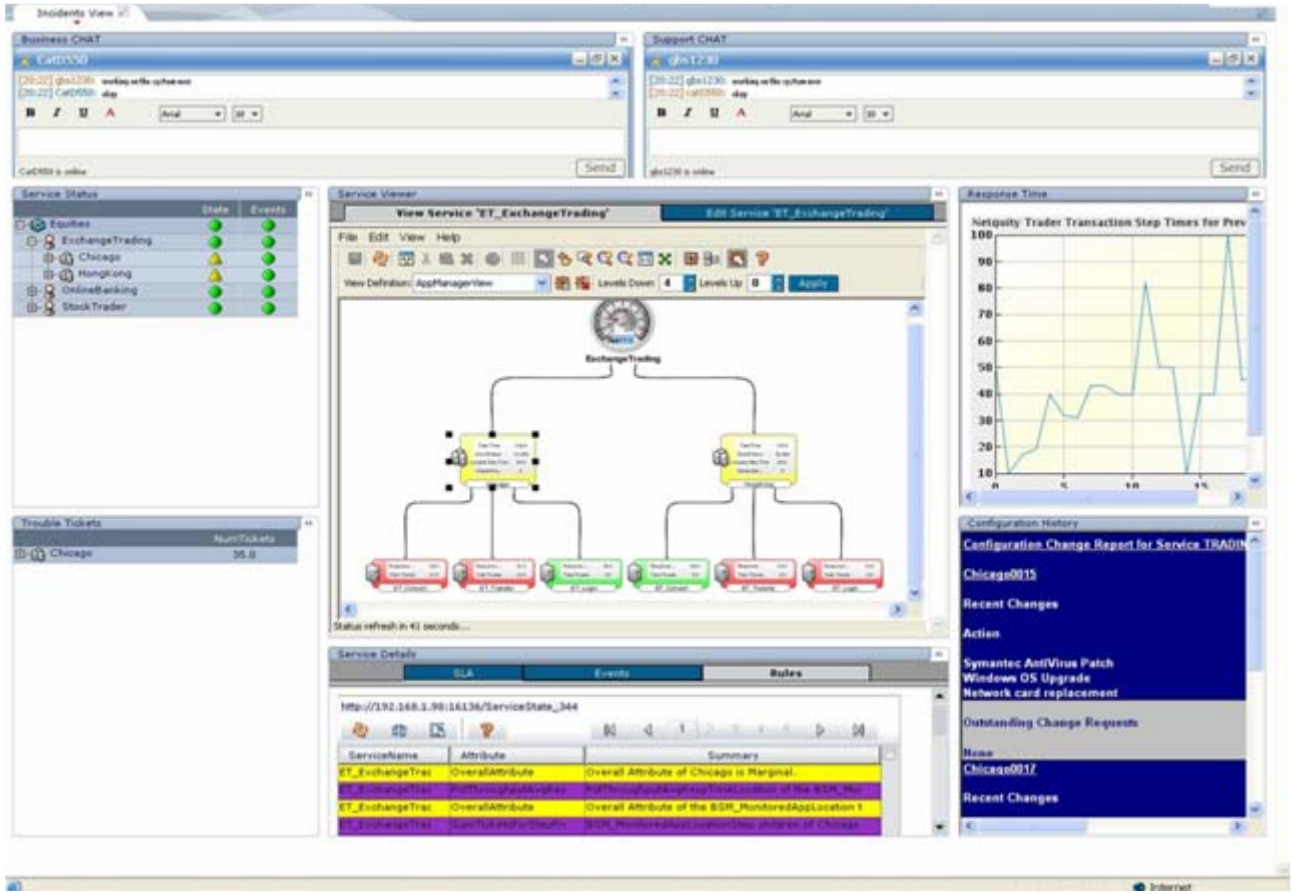
Customer Example – Trading Floor

Single view of all relevant application and service information affecting trade times

Drill down from scorecard to display status of service updated from external data in real-time

Click on a service to populate surrounding windows with data from other business systems as required

Dynamic Service Cockpit
Real-time access to external data



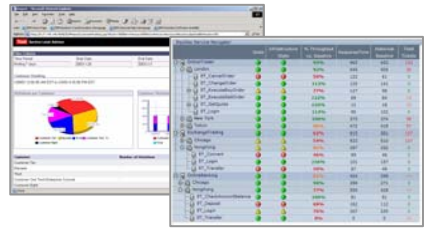
Benefits of Tivoli Business Service Management

Visualize

- *How does the underlying service infrastructure support the provided application or service?*

Prioritize

- *Are problems impacting service availability, performance, integrity and delivery against SLAs?*



Communicate

- *How to deliver contextual service intelligence to the operational staff that must manage service performance?*
- *How to deliver the relevant business metrics to the lines of business that must manage service level agreements?*

"IBM (software) allows us to view our IT infrastructure from a business process perspective in real-time, and respond to problems with the correct priority. This helps to ensure that we maintain the service levels that our customers demand."

– Arndt Kollett , Lead Architect, E.ON IS GmbH, Germany

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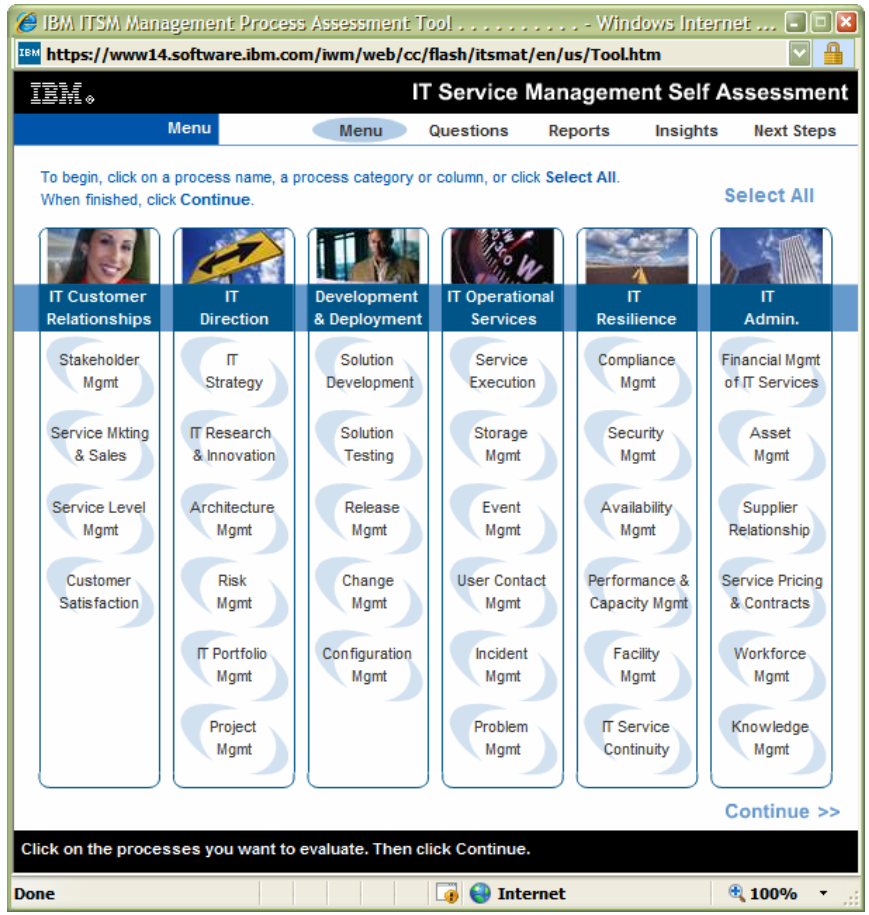
IBM Service Management Self-Assessment

The ISM Self-Assessment Tool guides customers through the process of identifying priority areas for improvement

The assessment can provide insight into each of the following service management process attributes

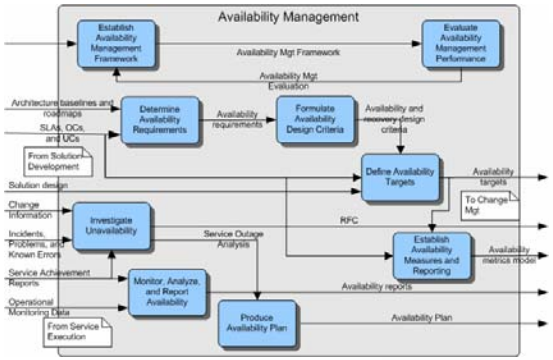
- **Capability**
- **Importance**
- **Automation**
- **Governance**

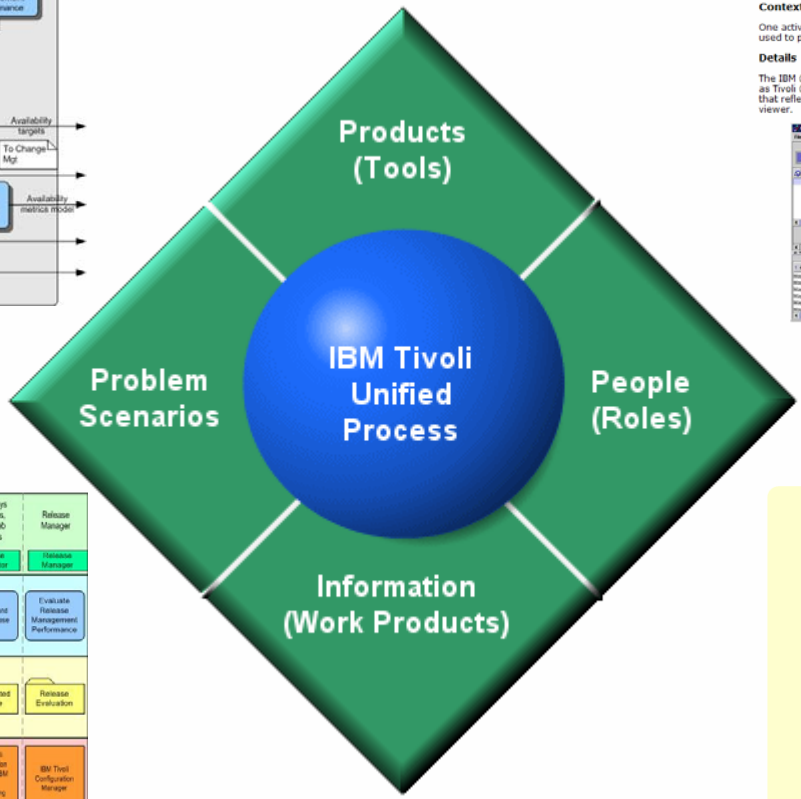


http://www-306.ibm.com/software/tivoli/features/it-serv-mgmt/resources/self-assessment-tool.html

IBM Tivoli Unified Process Tool

The IBM Tivoli Unified Process (ITUP) provides customers a detailed guidance on how to make ITIL actionable





How to Use IBM Tivoli Enterprise Console to Monitor, Analyze, and Report Availability

Context

One activity in Availability Management is to Monitor, Analyze, and Report Availability. This activity is used to provide detailed analysis of service interruptions.

Details

The IBM ® Tivoli Enterprise Console ® product receives enterprise-wide event feeds from sources such as Tivoli ® software or products from other vendors. An operator can readily discern availability events that reflect change in status by viewing the Class or Message field of the Tivoli Enterprise Console event viewer.

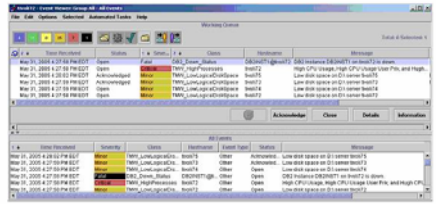
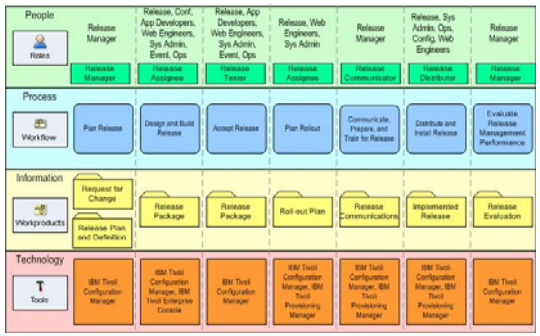
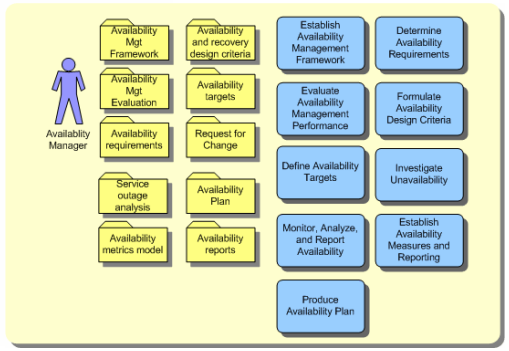


Figure 1: Java Console - TEC event viewer console





http://www-306.ibm.com/software/tivoli/features/it-serv-mgmt/itup/tool.html

The Proof Behind the Story – The Real Value

Finance: 96 of top 100

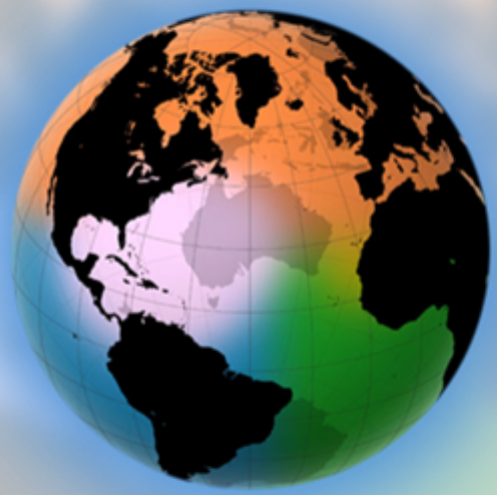
GAD IT für Banken · BARCLAYS · ING

ING anticipates projected savings of €15 million (US$ 20 million) a year

Communications: 20 of 20

TeliaSonera · belgacom · swisscom · BT

Swisscom Mobile tripled business without increasing headcount



Retail: 8 of 10

Ahold USA Best of the Best · ebay · ups · Federated Department Stores, Inc.

Ahold achieved US$ 200,000 savings per week and 99% system availability for 1,400 stores and 2 data centers

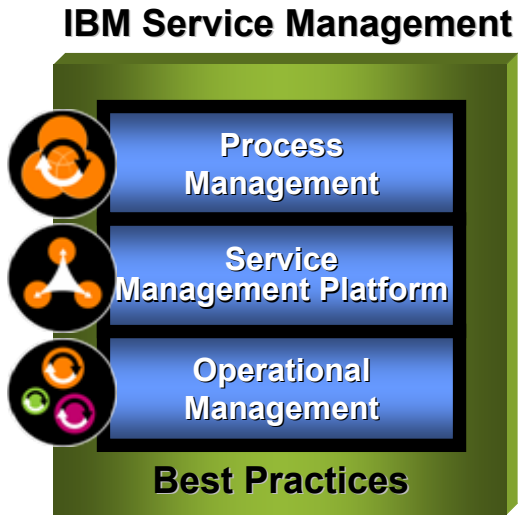
Healthcare: 9 of 10

MayoClinic.com Tools for healthier lives · Trisa of Switzerland · AnMed Health

Anmed saved almost US$ 420,000 annually; strengthened business continuity; reduced time to restore systems by up to 96%

IBM is Uniquely Qualified to Deliver Service Excellence

- **Only IBM delivers**
  - **Service delivery for business purpose**
  - **SOA approach for IT**
  - **Best-in-class architecture and knowledge**
  - **An average of 11% ROI in labor/staff savings and 12% for business impact**
- **Only IBM effectively defines and leverages client and industry best practices**
- **Only IBM leads the industry**
  - **Maintains position as market share leader in worldwide operations five years in a row (Gartner)**
  - **Ranks #1 in multiple IDC and Gartner categories**



The Top Three Things You Need to Remember about IBM Service Management

1. **Service delivery for business purpose**
   by helping to ensure that IT runs as designed and providing the space to innovate and shift investments

2. **Meet service level agreements**
   with business service management and real-time dashboards

3. **Simplify decision making**
   through an integrated and automated approach to quality service delivery and management

Agenda

- IBM Service Management Overview
- Service Management Platform Overview
  - Change and Configuration Management Database
  - Configuration Discovery and Tracking
  - Service Desk
- Process Automation
- Business Service Management
- Where to Get Started
- **Bonus Track – ITIL Version 3**

Facts About ITIL and ITSM

Facts about ITIL

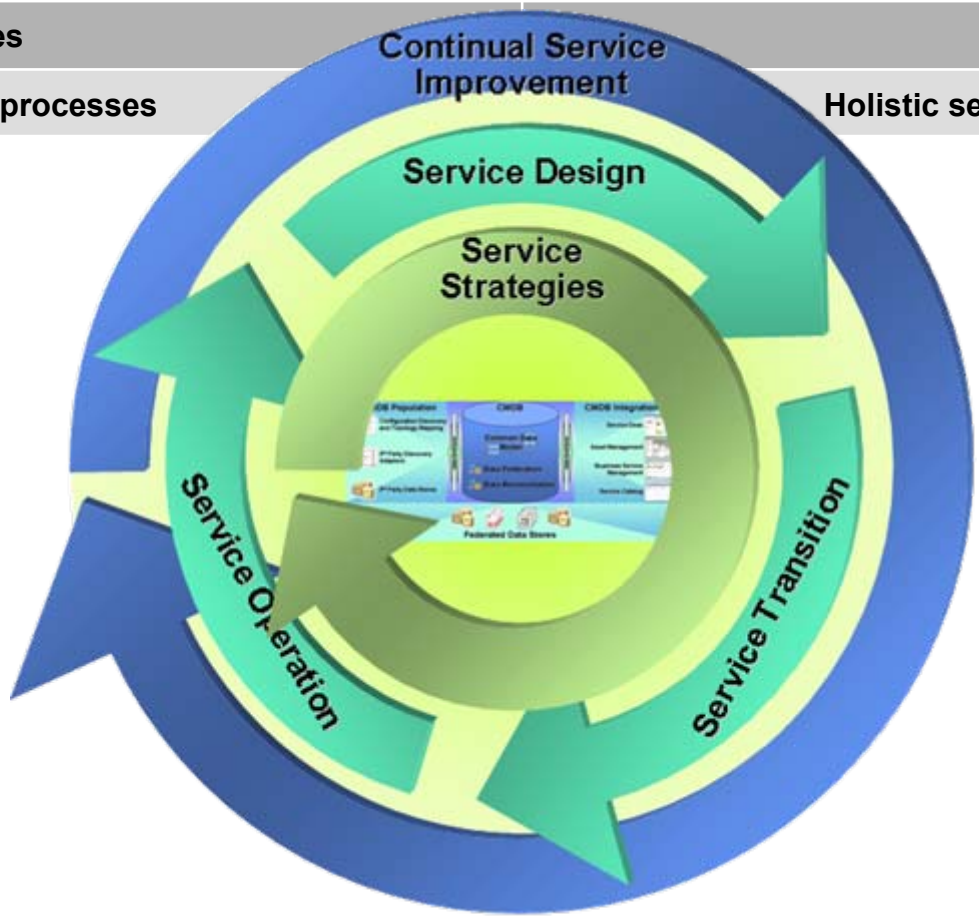
- ITIL is over 20 years old and still the world's most widely adopted practice for IT Service Management (ITSM)
- Practiced in almost every country in the world
- Evolved with the IT industry
- It works!
- Until now, had some grey areas

ITIL is getting into the boardroom

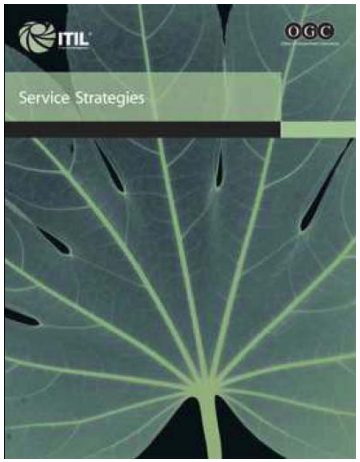
- Aligned to formal standard ISO/IEC20000
- Gained visibility at strategic levels in IT
- Demonstrates tangible ROI
- Aligned to formal IT Governance – CobiT
- Supports legislated requirements – SOX
- Establishes significant business case for investment decisions
- Creates a common vision for business and IT
- New innovations, strategies and possibilities
- Without asking the same questions!

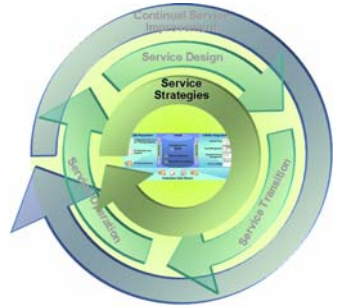
Next Generation of Practice

The past	The present and the future
Business and IT alignment	Business and IT integration
Value change management	Value network innovation
Linear service catalogues	Dynamic service portfolios
Collection of integrated processes	Holistic service management life-cycle



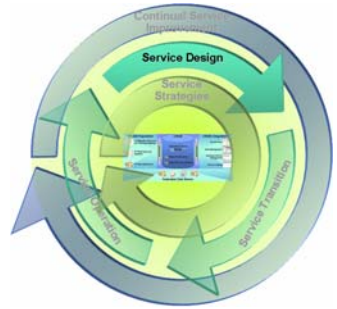
Service Strategies





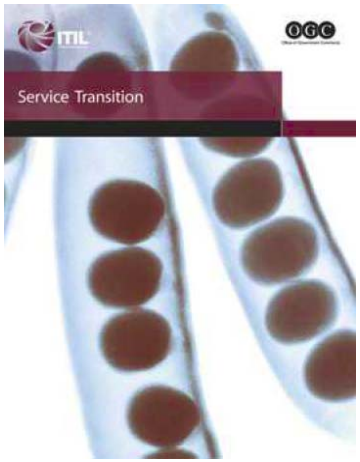
- Business eco-systems
- From value chains to value nets
- Adaptive processes for customers, services and strategies
- Linking to external practices and standards
- Managing uncertainty and complexity
- Increasing the economic life of services
- Selecting, adapting and tuning the best IT service strategies

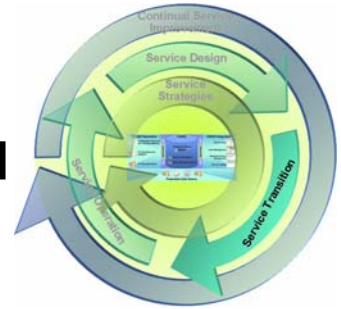
Service Design



- Service Policies, architectures, portfolios and models
- Effective technology, process and measurement design
- Outsource, shared services, co-source models – How to decide and how to do it
- The service package of utility, warranty, capability, metrics tree
- Triggers for re-design

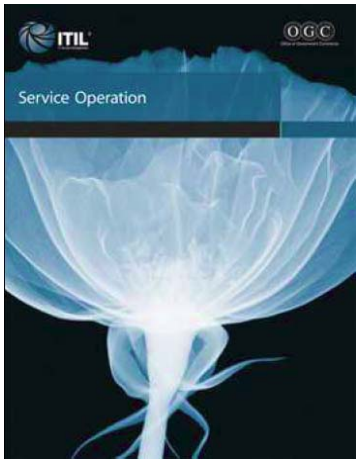
Service Transition

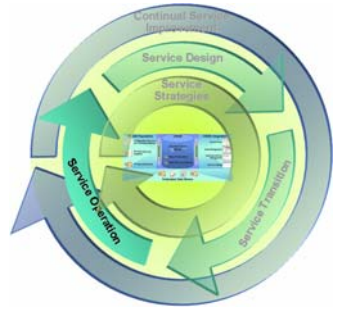




- Newly designed Change, Release and Configuration processes
- Risk and quality assurance of design
- Managing organizational and cultural change during transition
- Service management knowledge system
- Integrating projects into transition
- Creating and selecting transition models

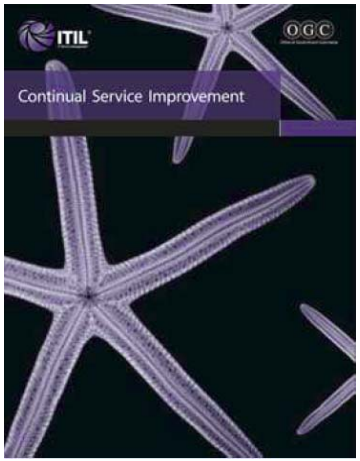
Service Operation

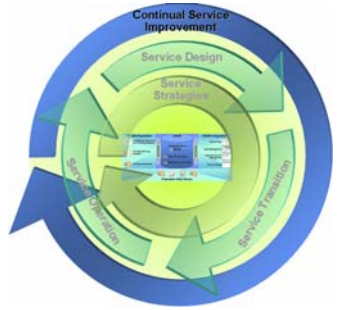




- Robust end to end operations practices
- Redesigned, incident and problem processes
- New functions and processes
- Event, technology and request management
- Influencing strategy, design, transition and improvement
- SOA, virtualization, adaptive, agile service operation models

Continual Service Improvement





- The business case for ROI
- Getting past just talking about it
- Overall health of IT Service Management
- Portfolio alignment in real real-time with business needs
- Growth and maturity of SM practice
- How to measure, interpret and execute results