



Achieving Service Excellence through IBM Service Management

Félix Merchán Arellano
Director IBM Tivoli Software
Spain, Portugal, Grecia, Israel y Turquía

IBM Service Management
A Better Way to Manage



Businesses are Under Pressure to Innovate and Grow



Competitive Advantage through Service Excellence

- Need to retain and add new customers through quality and value add services

Operational Efficiency and Effectiveness

- Cost Containment
- Reduce the risk of security exposure
- Greater regulatory and audit requirements

Business Growth

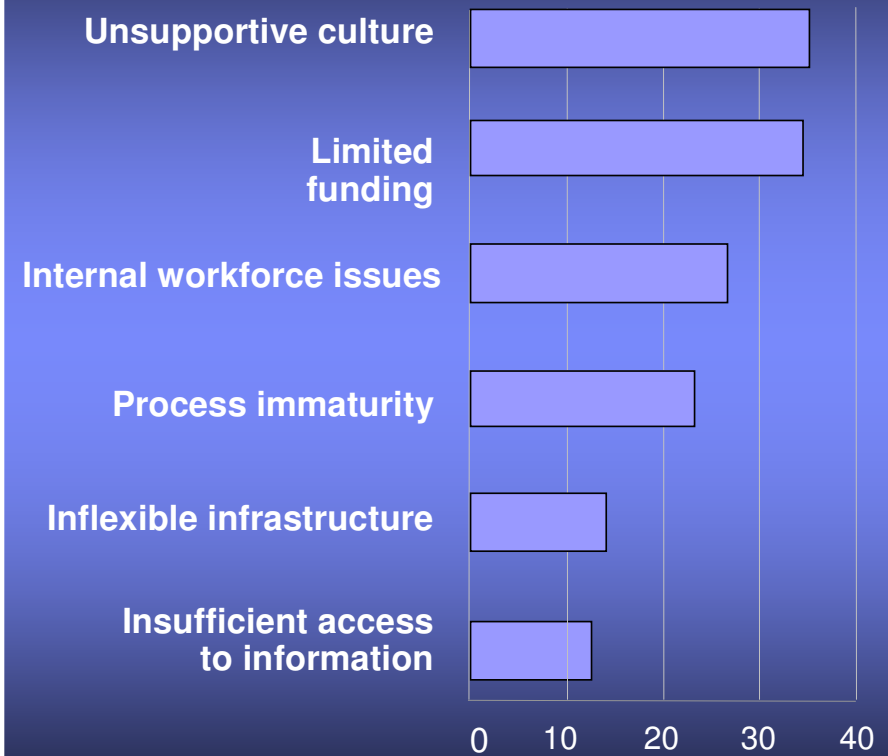
- Financial performance & market share growth expectations from investors

Business Depends on Quality Service Delivery

Delivering High-Quality, Cost-Effective Services is Challenging

- **Growing Complexity:** Disparate technologies and service infrastructures
- **Rapid, Constant Change:** Industry consolidation, technology convergence
- **Rising Costs:** Process inefficiencies, administration, maintenance
- **Tougher Compliance:** Added security, audit and governance requirements
- **Lack of Service Context:** Silos of people, process, technology, information

Obstacles to Innovation



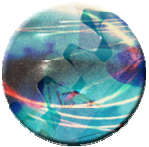
Source: IBM Global CEO Survey, Jan. 2006

Business and Infrastructure Silos Must be Bridged

Business Objectives



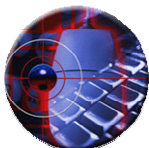
People



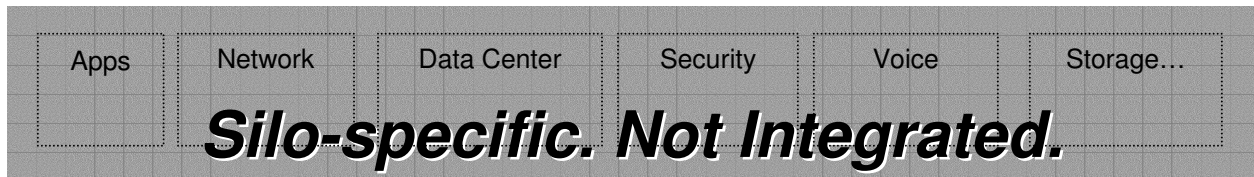
Processes



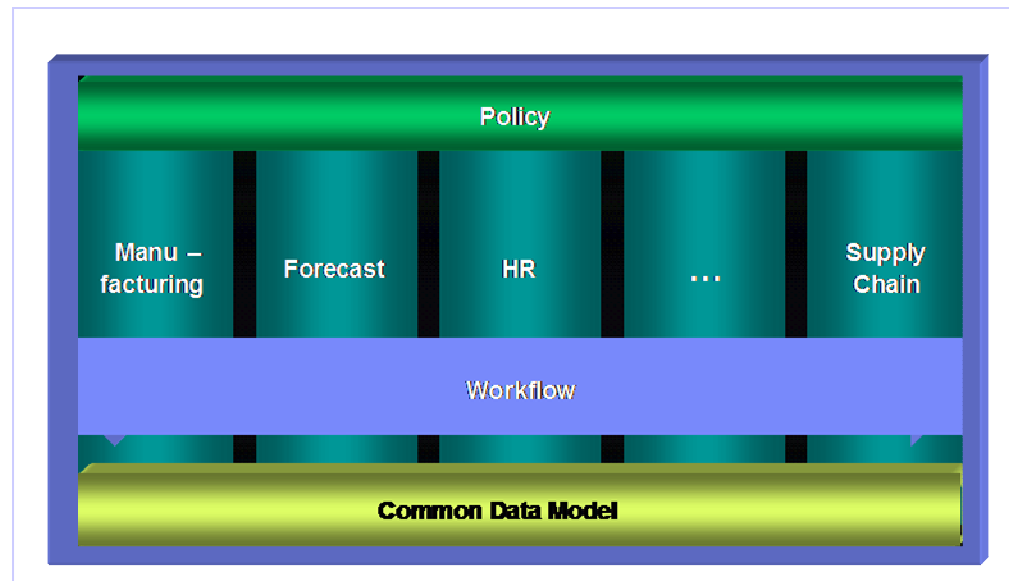
Information



Technology



Integrating People, Process, Information & Technology: Learning from the Benefits and Challenges of ERP



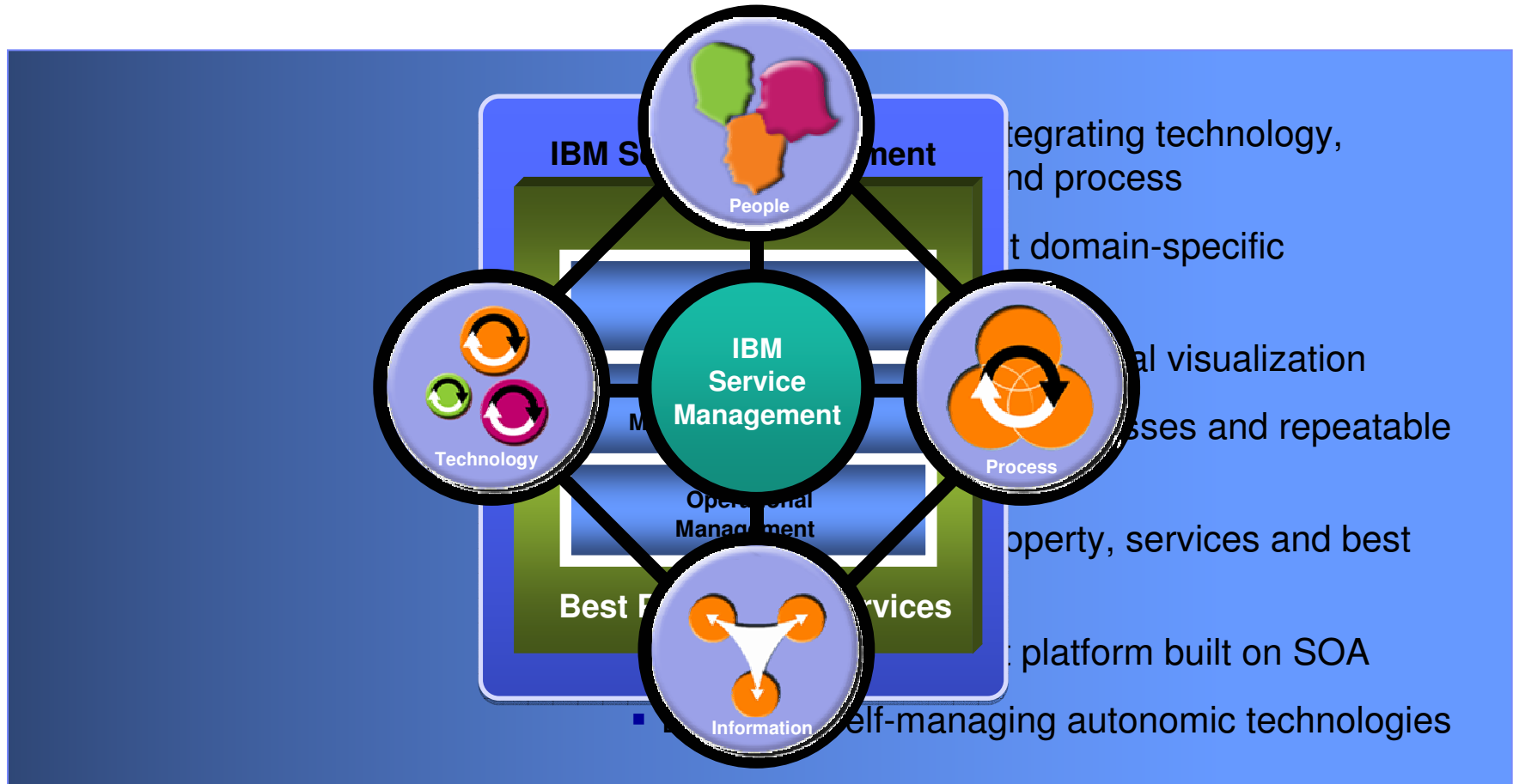
ERP Benefits:

- Creates efficient organization by integrating individual teams and their work
- Automates process to enforce consistent execution

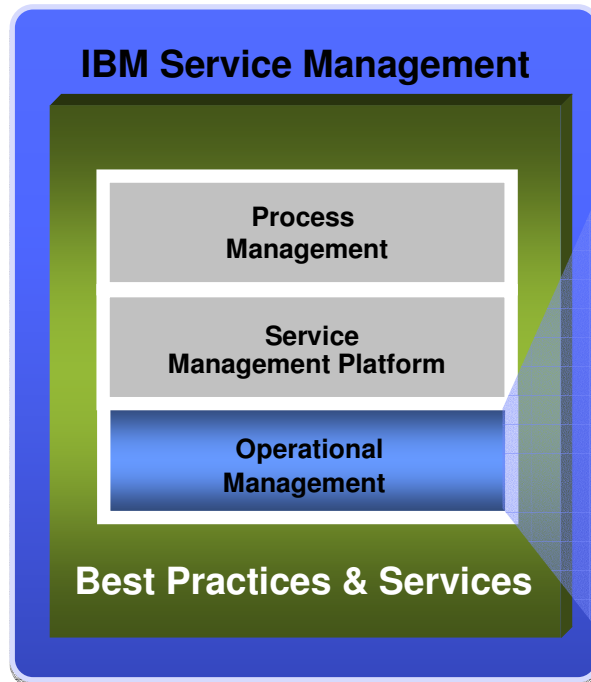
ERP Challenges:

- Costly and time intensive to customize rigid, inflexible processes
- Costly to integrate existing applications into proprietary ERP data and process model

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



Best-of-Breed Operational Management



Broadest technology support spanning:

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

Deepest management capabilities, including:

- Network and event management
- Availability and performance management
- Storage and security management
- Extensive support for 3rd party products

Role-based visualization and control

Automation of tasks, workflows and processes

Open, standards-based products and tools

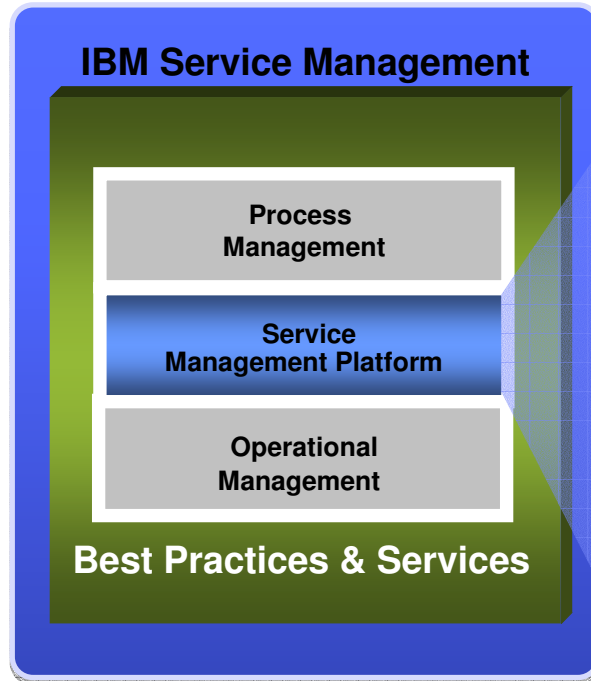
- Built-in self-managing autonomic capabilities

“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.”

--- *SungJik Jung, medical information team leader for NHIC Ilsan Hospital*

Integrated Service Management Platform

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



IBM Service Management Platform Delivers:

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
- Highly scalable

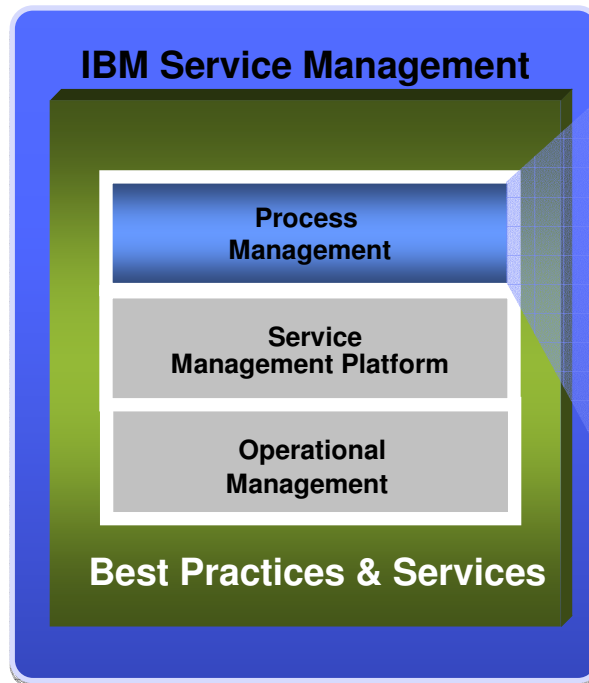
Automation

- Enforce policies to better address compliance with internal and regulatory requirements
- Automated discovery and impact analysis spanning Layers 1-7
- Built-in self-managing autonomic technologies

“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 Process Management

Enables increased team performance, coordination and collaboration



Automated workflows and process management:

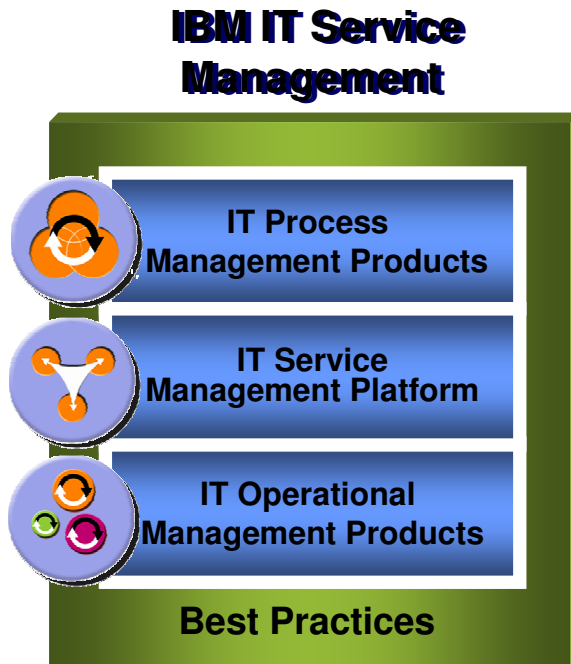
- Consistent process execution
- Based on robust process best practices
- Role-based visualization and control
- Integration of IBM and third-party operational management tools into and across IT and business processes
- Enforce and audit change and compliance

"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 Mgr, Network and IT Monitoring, Belgacom



IT Process Managers Bridge Organizational Silos



IT CRM & Business Management	Service Delivery & Support	Service Deployment	Information Management	Business Resilience
Financial Assessment Process Manager	Availability Process Manager	Release Process Manager	Storage Process Manager	Service Continuity Management Process Manager
Service Level Management Process Manager	Change and Configuration Management*			Security Management Process Manager
Asset Management Process Manager	Capacity Management Process Manager			Compliance Management Process Manager

Change and Configuration Management Database

*Change and Configuration Management is included in the Change and Configuration Management Database product

Available in June 2006!

Available in 2H 2006!

Future Directions

Acquisitions Fill Strategic Gaps and Contribute to Growth



Change and Configuration Management



Network Management



Performance Monitoring



Automated Provisioning



Management Composite Application



Software Asset Mgmt



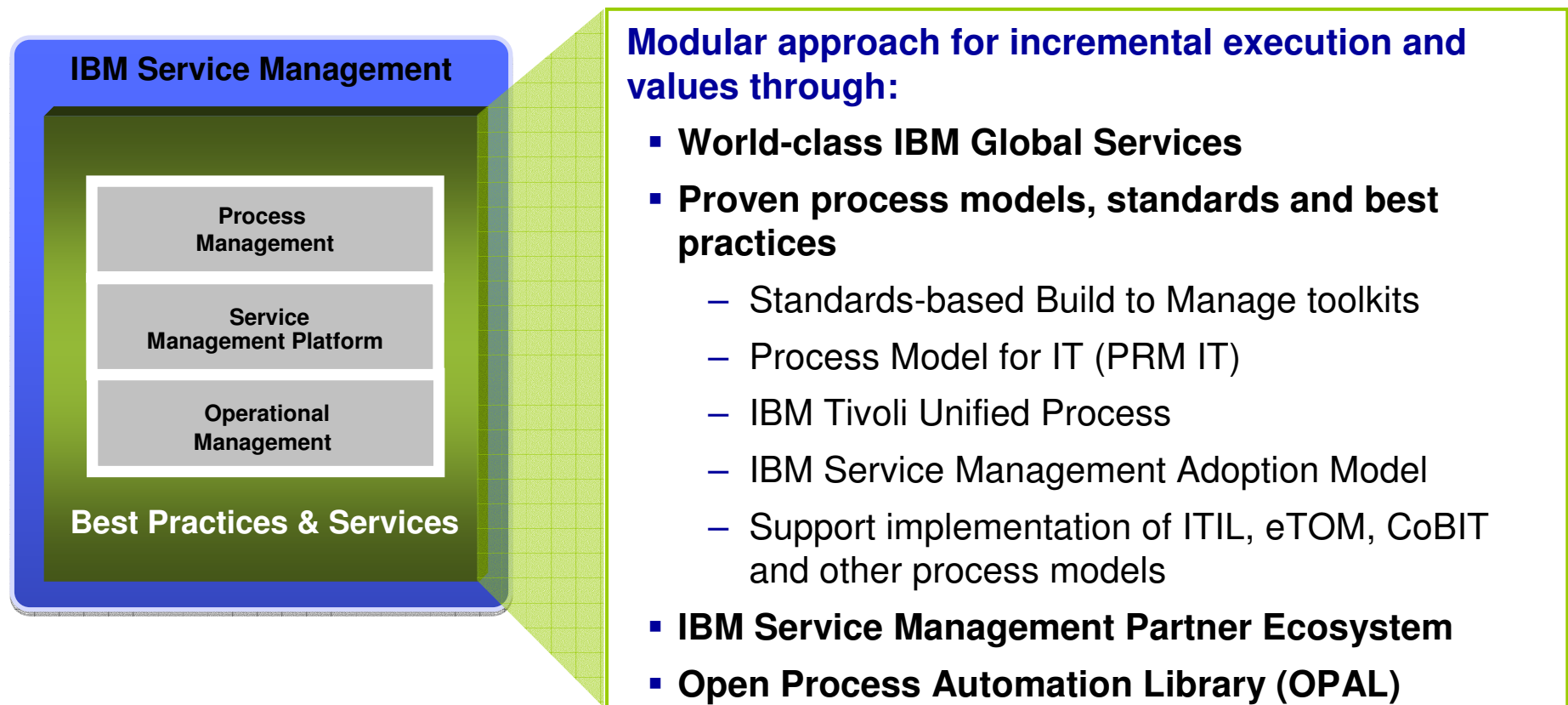
Software Usage Metering



IT Asset Management

An Innovative Approach to Implementing Best Practices

Proven methods tested in real-world environments



"Toshiba Solutions Corporation, the IT solutions company in Toshiba Group, 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

Innovative Process Model - IBM Tivoli Unified Process

Thousands of Downloads!

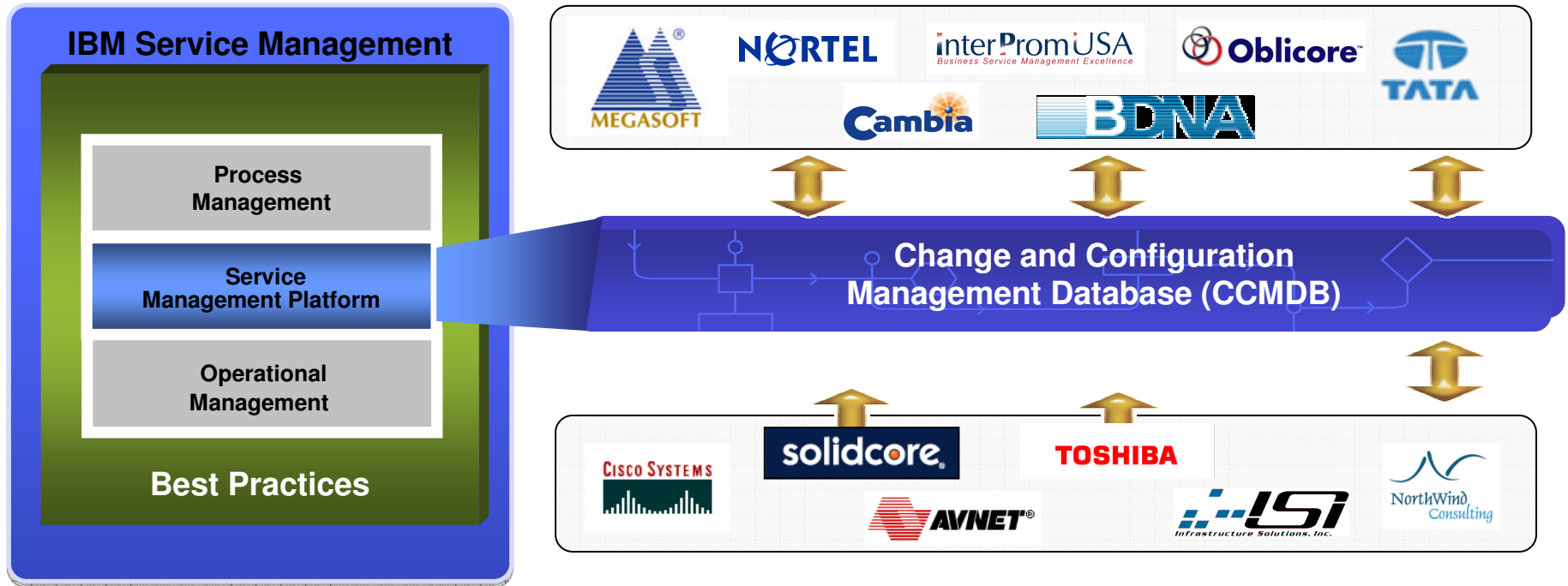
The image is a composite of three parts. On the left, a blue-bordered box titled 'IBM Service Management' contains three stacked grey boxes: 'Process Management', 'Service Management Platform', and 'Operational Management'. Below these is the text 'Best Practices & Services'. In the center, a screenshot of the 'IBM Tivoli Unified Process' software interface shows a navigation tree with items like 'Getting Started', 'ITUP Method Content', 'Process Mappings', 'Organization', 'ITUP Method Content Intro', 'IT Processes', 'Roles', 'Work Products', 'Tools', and 'Scenarios'. A red starburst with the word 'New' is placed over the 'Organization' item. On the right, a green diamond-shaped diagram has 'IBM Tivoli Unified Process' in a central blue circle. The four points of the diamond are labeled: 'Products (Tools)' at the top, 'People (Roles)' on the right, 'Information (Work Products)' at the bottom, and 'Problem Scenarios' on the left.

- **IBM Tivoli Unified Process (ITUP)** is a free, read only knowledgebase that describes IT Service Management processes and offers guidance on industry best practices and tools that help automate processes and tasks.
- **ITUP Composer** is the product version of ITUP which contains a content library that can be customized, extended, and then published with the tools included in the product.

IBM Service Management Partner Ecosystem



- Based on **open standards**, extending the **value of IBM Service Management** and translating into a high level of confidence for our customers in their ISM investment
- A true partnership involving close cooperation, and responsibilities that demonstrate a deep and long-term commitment toward **delivering customer value**



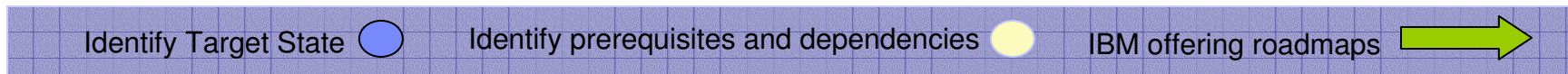
“The joint IBM Service Management and BDNA solution addresses a critical need of IT organizations striving to optimize their infrastructure and improving the quality of service by creating and maintaining an immediately accessible deep inventory of all IP-based IT and healthcare assets in a single CMDB.”
 --- David Watson, Senior VP and CTO, Kaiser Permanente

IBM Service Management Adoption Model



- An innovative step-by-step roadmap to improved service management
- Current state and desired future state mapping
- Provides a consistent IBM approach for recommending products and services that actually best address clients needs

	Discrete IT Silos	Partially Integrated IT	Integrated IT	Integrated IT & Business	Dynamic Collaboration
IT Business Management					
IT Governance					
IT Development					
IT Operations					

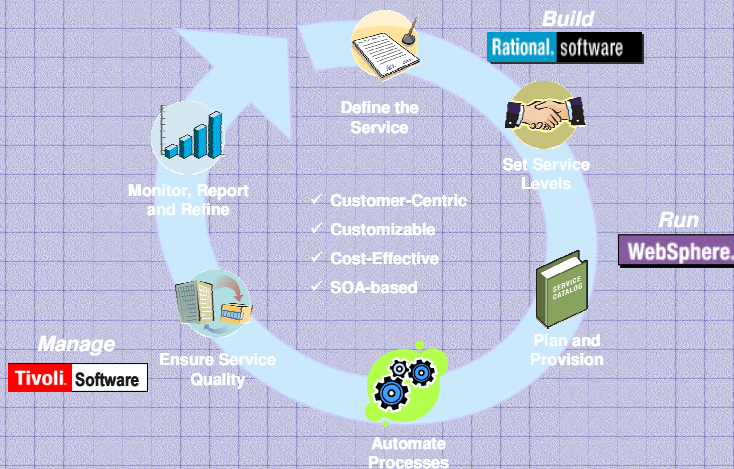


“The magic happens when technology and process combine through integrated planning, dialog and implementation. The IBM adoption model methodology provides a practical approach for bridging technology adoption with processes requirements in real world organizational environments.” --- *Dennis Drogseth, Vice President, Enterprise Management Associates*

IBM Service Management Provides On-Ramps for Life-Cycle Management and Business Process Management

Lifecycle Management

- Integrate across build, run, and manage phases
- Improve service performance and customer satisfaction
- Reduce maintenance costs and problem resolution time



Business Process Management

- Gain a holistic view of business performance
- Integrated business key process indicators with related key process indicators
- Create role-based dashboards for business, operations and IT users



Take the Next Steps Now!

For more information:



- Visit www.ibm.com/itsm for more information
- Register and use the IBM Tivoli Unified Process Tool
- Contact your IBM Representative







Casos de Estudio

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Director IBM Tivoli Software
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IBM Service Management
A Better Way to Manage





***PREMIER BUSINESS ASSURANCE
MONITORING WITH NETCOOL®***



CETELEM Business Case

MICROMUSE™
NETCOOL® SOLUTIONS

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Agenda

- I - Introduction to Cetelem**
- II - Business Objectives**
- III - Netcool Solution Selected**
- IV - Business Benefits Experienced**



Cetelem's mission

- > **Cetelem: The group**
 - > Number One for consumer credit in Euro Zone
 - > A subsidiary of the BNP Paribas
 - > Already established in 20 countries and with nearly 60% of its associates outside France
 - > The European specialist of credit cards proposing standard loan, affinity, or co-branded cards
- > **Cetelem's mission**
 - > To offer consumer credit and associated financial services to consumers
 - > To make credit into a modern tool that can be used sensibly to manage household consumption and budgets
- > **Cetelem's specialities**
 - > In-store credit: products adjusted to retailer requirements
 - > multi-brand (Aurore) and pure brand cards (Carrefour, Ikea)
 - > dedicated credit suited to specialist market (furniture or home improvement)
 - > financing private vehicles to customers at concessions
 - > Instant credit:
 - > range of products to private individuals through its network of branches, phone and the Internet
 - > Partnership:
 - > close links with major traditional retailers and with Internet commerce
 - > Expertise:
 - > ability to run a network for issuing and receiving cards and managing partnership



Context

- > **IT management context**
 - > Supervision segmented by technology
 - > The applications are increasingly transversal
 - > Trouble shooting time are mostly due to problem RCA
- > **Need for an End-to-End supervision of applications' performance and availability with technical overview in a single point for Business Service Monitoring**
 - > To increase the reaction time by shunting the incidents
 - > To Prevent and to anticipate the customers calls
- > **Need to implement a « hypervision » platform**
 - > Handled by the IT exploitation team
 - > Intended to improve the process of management of the incidents
 - > Intended to increase the quality of the service rendered to customers and partners
 - > Project included in a global ITIL process
 - > The solution should allow problem detection, centralisation, consolidation and prioritise events in order to initiate escalation on 3 support levels:
 - > **Lev 1: operational supervision team**
 - > **Lev 2: internal experts**
 - > **Lev 3: external experts**



Cetelem's Project - Step #1

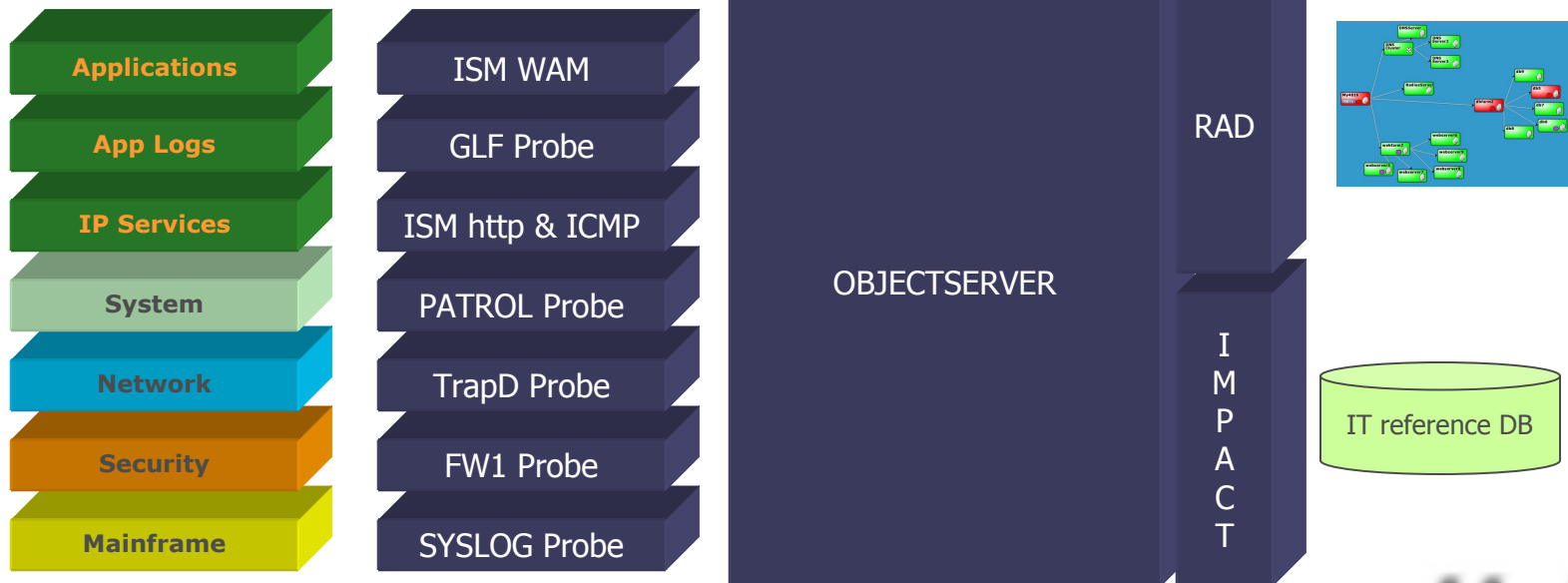
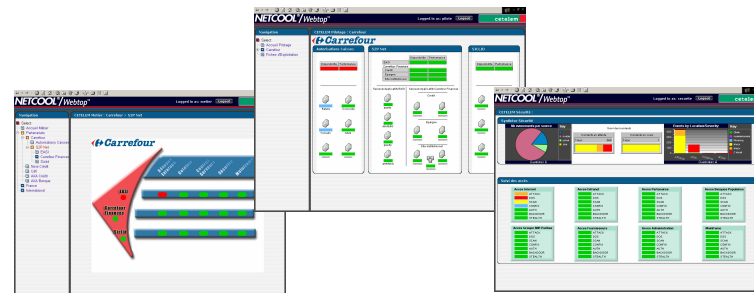
- > **Step#1 – Proof of Concept to select the right solution**
 - > Focused on a strategic application in a production context
 - > 1st retailer in Europe, re-branded web based consumer credit application
 - > Selected 2 competitors who had to take into account the whole IT infrastructure and application
 - > POC implemented on 3 weeks by a 3 engineer team

- > **Netcool/Solution outstanding points**
 - > **Speed** of implementation and **ease** of use
 - > Ability to manage the entire **technical infrastructure**
 - > Provide **Business KPIs** (app logs parsing and simulation robots)
 - > Modeling of **application processes**
 - > Provide **dedicated interfaces** for each Cetelem population
 - > Provide associated **reporting**
 - > Integrate **existing solutions**
 - > **Interact with IT reference frames**



Netcool selected modules

- > Netcool/OMNibus
- > Netcool/Impact
- > Netcool/Webtop
- > Netcool/RAD
- > Netcool/ISM (WAM/HTTP/ICMP)
- > Netcool for Security Management (FW and IDS)



Cetelem's Project - Step #2

- > **Step#2 – Implementation of the production platform**
 - > Re-use of the POC components
 - > Fully implemented in 3 months by a 2-engineer team
- > **Implementation of a realtime solution capable of:**
 - > Handling and providing technical indicators on **availability** and **performance** weakness of infrastructure components
 - > Providing aggregated events on **security threats**
 - > Providing **functional** and **business indicators** on critical applications
 - > Being technically **integrated** with **existing managers** and tools already used by operations
 - > Using **generic** event management and categorisation rules by interacting with **reference frames**
 - > Providing several types of **statistical reports** on application availability and response time for different populations (Business Intelligence)
 - > Management committee
 - > IT coordination
 - > **Customer relationship direction**



The Netcool Solution

Security, Network, UNIX/NT systems, Mainframe, Critical Applications

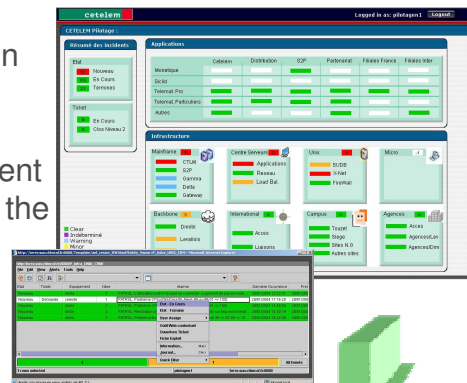
Technical View



Executive View

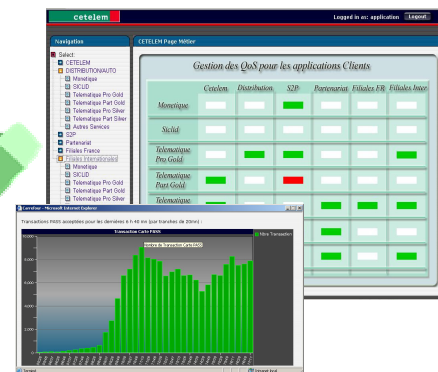
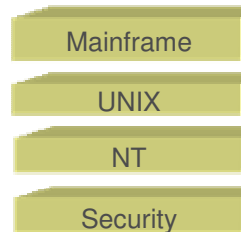
Level 1

- Technical supervision
 - Problem detection
 - Impact evaluation
- Problem Management
 - Escalation towards the experts



Level 2

- Experts
 - Help with the diagnosis
 - Detailed technical events
 - Impact validation
 - Escalation toward lev.3 and problem resolution



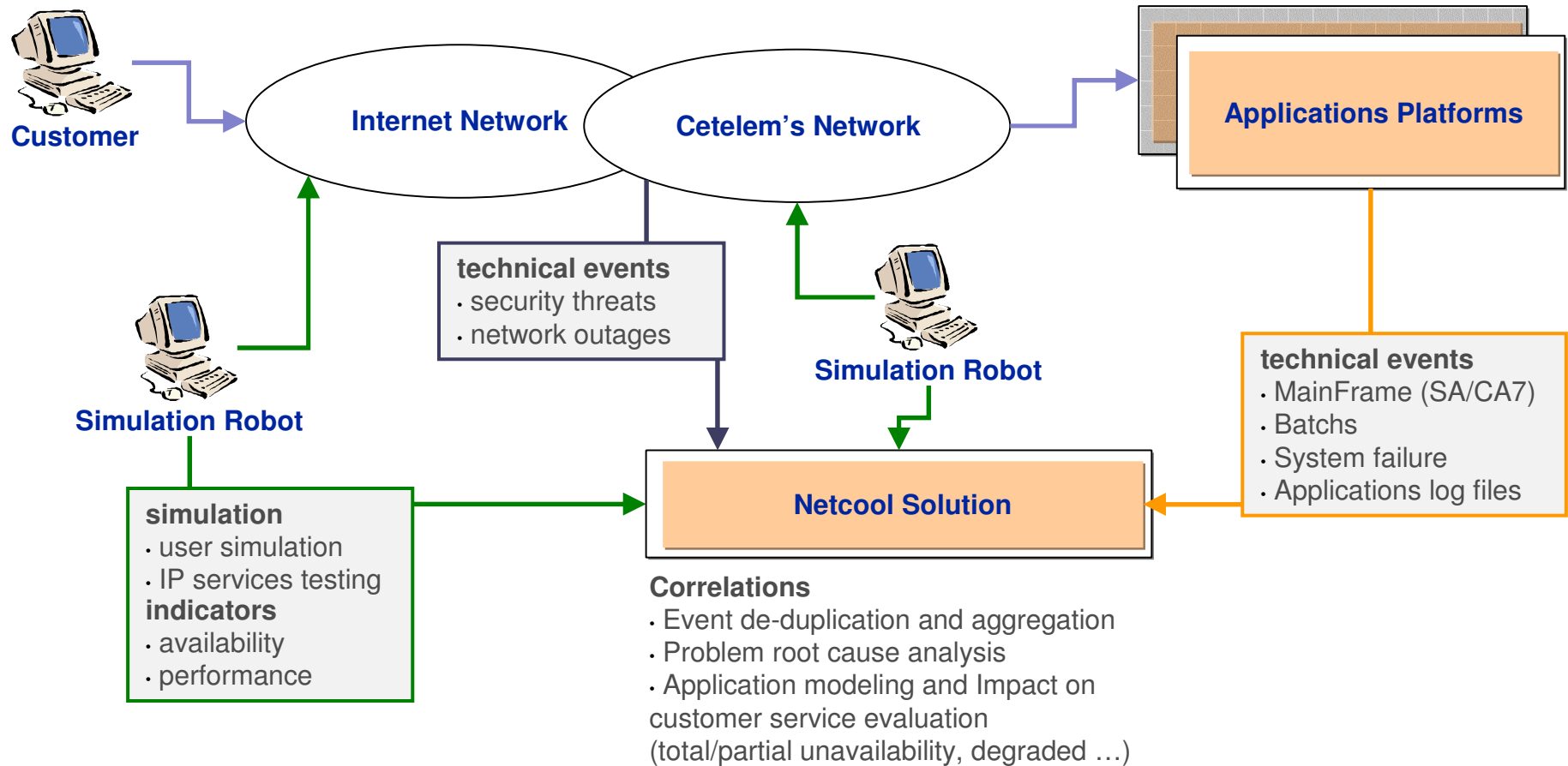
Coordination of IT teams
Data-processing direction

What is the quality of the service provided to the customer?



Example of Internet Application Supervision

Internet Public application / e-Commerce



Some Interface Examples

Level #1 – Operational Supervision Center

The screenshot displays a complex web-based interface for operational supervision. It includes several key components:

- Service Level Agreement (SLA) Statistics:** A section titled "Service : secure.cetelem.com:443/hxctlm/b2b/apply" showing a pie chart for "Service Level Agreement" (Good: 84.21%, Marginal: 0.00%, Failed: 15.79%) and a "Measurements Breakdown" table.

Measurements Breakdown	Number
First	00:08:56
Last	15:40:44
Avg Poll(s)	593
- Ticket Management Table:** A table listing tickets with columns for Ticket, Equipement, Nbre, Alarme, and Demier.

Ticket	Equipement	Nbre	Alarme	Demier
au	secure.cetelem.c.	30	HTTPS - CLIENTS - Extranet UK Orca Apply (page d'accueil via la DMZ Internet.	30/01/2004
au	secure.cetelem.c.	2	HTTPS - CLIENTS - Extranet UK Orca Apply (page d'accueil via la DMZ Internet.	28/01/2004
au	secure.cetelem.c.	90	HTTPS - CLIENTS - Extranet UK Orca Apply (page d'accueil via la DMZ Internet.	28/01/2004
au	secure.cetelem.c.	16	HTTPS - CLIENTS - Extranet UK Orca Apply (page d'accueil via la DMZ Internet.	28/01/2004
- System Status Indicators:** A dashboard showing various system components with status bars and counts:
 - Unix: 4 (with sub-indicators for SUDB, X-Net, FireWall)
 - Micro: -1
 - Agences: 0
 - Acces: 3270
 - Agences/Lev
 - Agences/Dim
- Alerts and Logins:** A "Logged in as: pilotagen1" indicator and a legend for alert levels: Warning (blue), Minor (yellow), Major (orange), Critical (red).



Some Interface Examples

Level #1 – Operational Supervision Centre

The screenshot displays a complex dashboard with several key components:

- Top Panel:** Shows the user is logged in as 'pilotagen1' with a 'Logout' button.
- Table 1 (Distribution - Professionnels):**

	Disponibilité	Performance	Technique
Gold Extranet Conforama	[Green Bar]	[Green Bar]	[White Bar]
Gold Extranet IKEA	[Green Bar]	[Green Bar]	[White Bar]
Gold Internet Commerce	[Green Bar]	[Green Bar]	[White Bar]
Gold Extranet Cofica DUO	[Green Bar]	[Green Bar]	[White Bar]
Gold Duocontact Internet	[Green Bar]	[Green Bar]	[White Bar]
Gold Logicontact	[Green Bar]	[Green Bar]	[White Bar]
- Table 2 (Distribution Summary):**

Distribution	S2P	Partenariat	Filiales France	Filiales Inter
[Green Bar]	[Green Bar]	[White Bar]	[White Bar]	[White Bar]
[Green Bar]	[Green Bar]	[Green Bar]	[Green Bar]	[Green Bar]
[Green Bar]	[Green Bar]	[Green Bar]	[White Bar]	[White Bar]
[Green Bar]	[Green Bar]	[Green Bar]	[White Bar]	[Green Bar]
- Bar Chart (Transaction Carte PASS):**

Transactions PASS acceptées pour les dernières 6 h 40 mn (par tranches de 20mn) :

Y-axis: Nbre Transaction (0 to 10,000). X-axis: Time (06:26 to 17:11).

The chart shows a significant increase in transactions starting around 09:00, peaking at approximately 9,000 transactions around 11:10, and then gradually declining.
- System Status Indicators:**
 - Unix:** 4 (SUDB, X-Net, FireWall)
 - Micro:** -1
 - Campus:** 0 (Touzet, Siege, Sites N.G, Autres sites)
 - Agences:** 0 (Acces, Agences/Lev, Agences/Dim)



Some Interface Examples

Level #2 – Security Expert view

NETCOOL®/Webtop™

CETELEM Sécurité :

Pilotage securite

Non traites

79 258 9

ATTACK
VIRUS
AUTH
DOS
SCAN
INCIDENT
CONFIG

Equipment	Count	Message
Idler	781	IDS-DRAGON: Alerte probe de 194.250.170.150 vers 0.0.0.0 (UDP-S
Idler	378	IDS-DRAGON: Alerte probe de 194.250.170.150 vers 172.20.4.12 (S
Idler	2	IDS-DRAGON: Alerte probe de 194.250.170.150 vers 172.20.4.12 (S
Idler	9	IDS-DRAGON: Alerte probe de 213.1.1.1 vers 194.250.170.150 (S
Idler	8	IDS-DRAGON: Alerte probe de 194.250.170.150 vers 194.250.170.150 (S
Idler	9	IDS-DRAGON: Alerte probe de 213.1.1.1 vers 194.250.170.150 (S
Idler	37	IDS-DRAGON: Alerte probe de 194.3.3.3 vers 194.250.170.150 (S
Idler	2	IDS-DRAGON: Alerte probe de 194.3.3.3 vers 194.250.170.150 (S
Idler	2	IDS-DRAGON: Alerte probe de 194.250.170.150 vers 194.250.170.150 (S
Idler	3	IDS-DRAGON: Alerte probe de 194.250.170.150 vers 194.250.170.150 (S
Idler	3	IDS-DRAGON: Alerte probe de 194.250.170.150 vers 194.250.170.150 (S
Idler	4	IDS-DRAGON: Alerte probe de 193.1.1.1 vers 194.250.170.150 (S
Idler	4	IDS-DRAGON: Alerte probe de 193.1.1.1 vers 194.250.170.150 (S
Idler	4	IDS-DRAGON: Alerte probe de 193.1.1.1 vers 194.250.170.150 (S

338 103

1 rows selected

securete net-cet

Applet.com.micromuse.wave.applets.ael.AEL [1]

Clear Undeterminate Warning Minor Major Critical

CVE-1999-0145 - Microsoft Internet Explorer

Address: <http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-1999-0145>

CVE Common Vulnerabilities and Exposures
The Key to Information Sharing

Home Get CVE About CVE News and Events Editorial Board Advisory Council Compatible Products

CVE-1999-0145

CVE Version: 20030402

This is an entry on the [CVE list](#), which standardizes names for security problems. It was reviewed and accepted by the [CVE Editorial Board](#) before it was added to CVE.

Name: CVE-1999-0145
Description: Sendmail WIZ command enabled, allowing root access.

References

- CERT:CA-1990-11
- CERT:CA-1993-14

Forensics: Signature List - Microsoft Internet Explorer

Address: <https://172.18.247.147/cgi-bin/dfire/sigdes>

Detail of SMTP: WIZ

Port: 25
Protocol: TCP
Direction: Destination Port
Protected: Any Traffic
Log: 5 Packets
Search: 5 Bytes into Session
String Type: String Search
String: wiz/0d

Description of SMTP: WIZ

Very old versions of Sendmail had the WIZ command enabled, allowing root access.

CVE References

[CVE-1999-0145](#)

BugTraq References

[2897](#)

Address: <http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE>

Some Interface Examples

Level #3 – Executive Functional view

cetelem Logged in as: application [Logout](#)

S2P / Telematique Pro Gold - Microsoft Internet Explorer

S2P / Telematique Pro Gold

Etat global

Disponibilité

EASI

Etat par domaine technique

Réseaux Externes	Réseaux Cetelem	Centres Serveurs	Sécurité	Mainframe
				


Applications Clients

Partenariat	Filiales FR	Filiales Inter
		
		
		
		
		
		
		
		
		
		
		
		
		
		

http://terre.sun.ctlmcof.fr:8080/Template/CTLM_Metier_ISM.html?DatalogDirectory=WSH_EASI_wsh_&M - Microso...


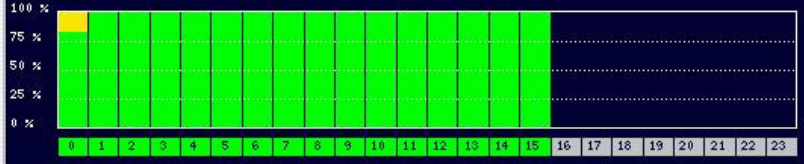
Outils

[Acces Serveur ISM](#)



WSH service at 194.250.170.107:9099 measured from location ophelia
Service Level Statistics

Service Level Agreement		Measurements Breakdown	
Good	98,96%	Number	96
Marginal	1,04%	First	00:00:39
Failed	0,00%	Last	15:50:30
		Avg Poll(s)	593

Statistiques Netcool service level reporting

Terminé Intranet local

Business Benefits

- > **Global overview of the IT infrastructure & Business Service monitoring**
 - > **Critical applications' availability & performance**
 - > **System performance**
 - > **Mainframe and Security alerts**
 - > **Network outages**
 - > **IP services KPI's**
- > **Integrate with existing solutions for TCO reduction**
 - > **BMC PATROL**
 - > **NetView OS390 / Netview 6000**
 - > **Cisco Works**
 - > **FW1 NG manager**
 - > **System Automation**
 - > **Open Source and dedicated applications**



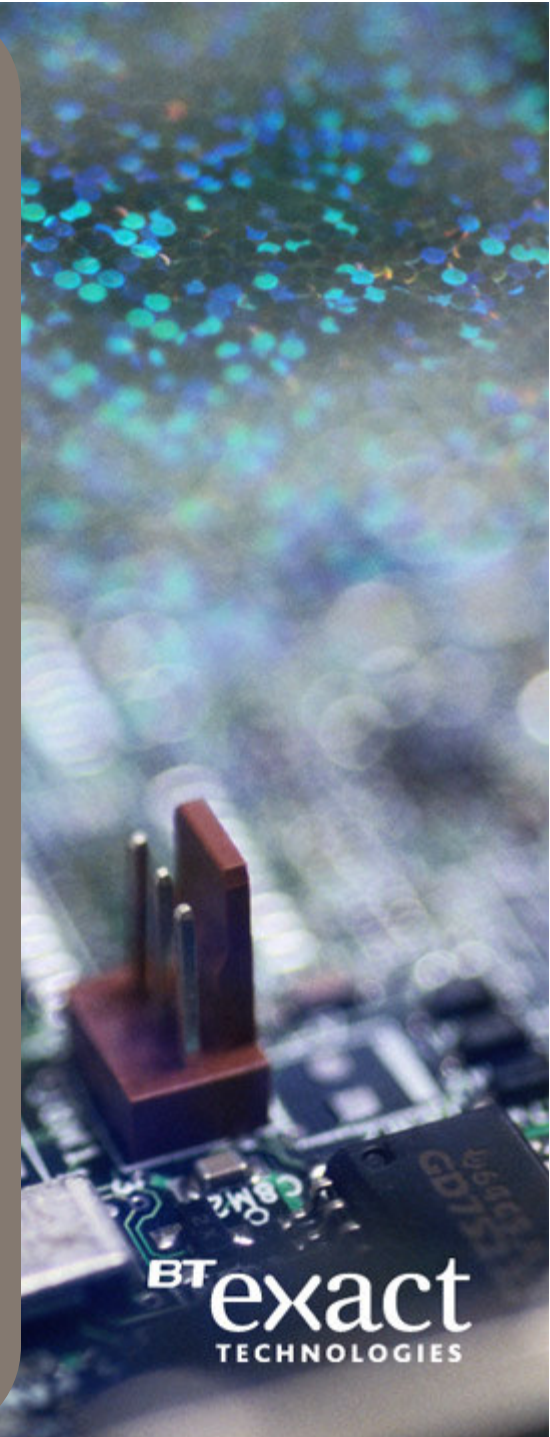
Business Benefits

- > **A new solution for a new organisation**
 - > **Mainframe operators became level#1 operational supervision center for the global IT structure (network, system & mainframe)**
 - > **Both Level#1 and Level#2 use the same solution to reduce training and support costs**
 - > **Mean-time-to-repair reduction on critical applications**
 - > **Enable effective business and operational decisions**

- > **Future proof solution in ITIL process**
 - > **the current platform could be supplemented for :**
 - > **Advanced monitoring of VoIP services (NfVoIP)**
 - > **Advanced Risk management (NfSM)**
 - > **Asset management (NfAM)**
 - > **Trouble Ticketing and CRM System interaction (Gateways)**
 - > **Datawarehouse and Reporting (RDBMS Gateways)**



Moving service monitoring up the value chain



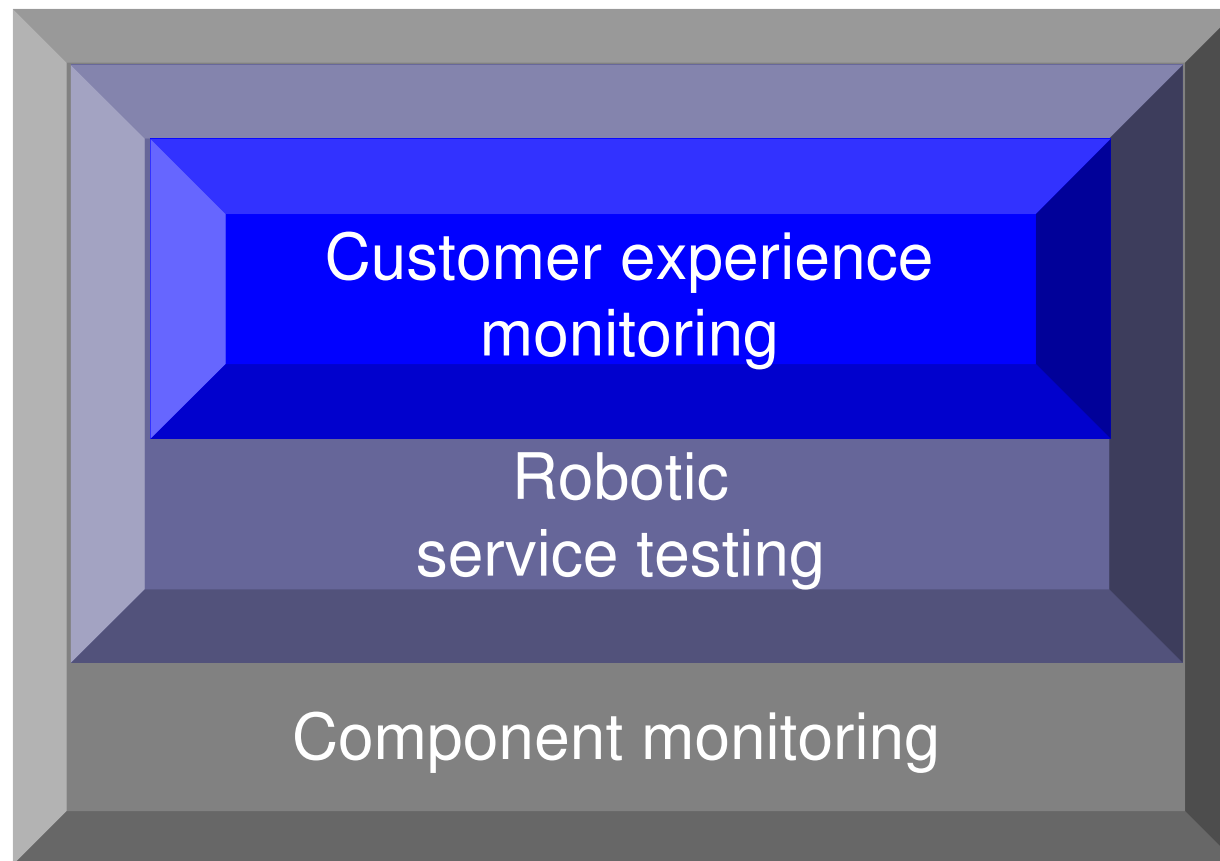
BT exact
TECHNOLOGIES

Our scale and technical excellence

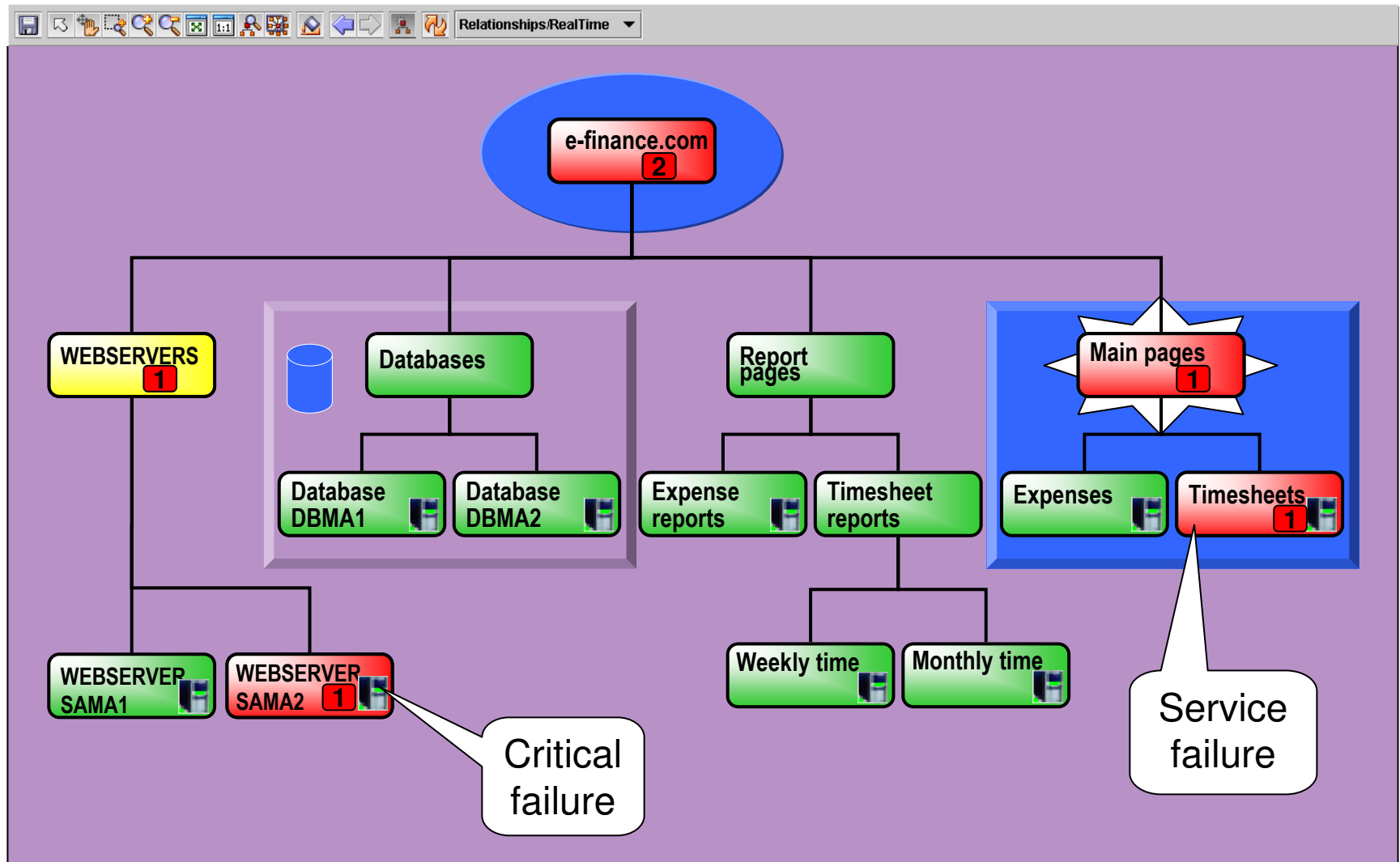
- Operating one of the largest intranets in Europe with over 100,000 users
- Managing one of the largest single implementations of Microsoft Outlook handling 35 million e-mails a month
- 6750 Unix and NT servers utilising 630 terabytes of live data.
- Supporting the 200+ external hosting customers



Moving service monitoring up the value chain



Service monitoring

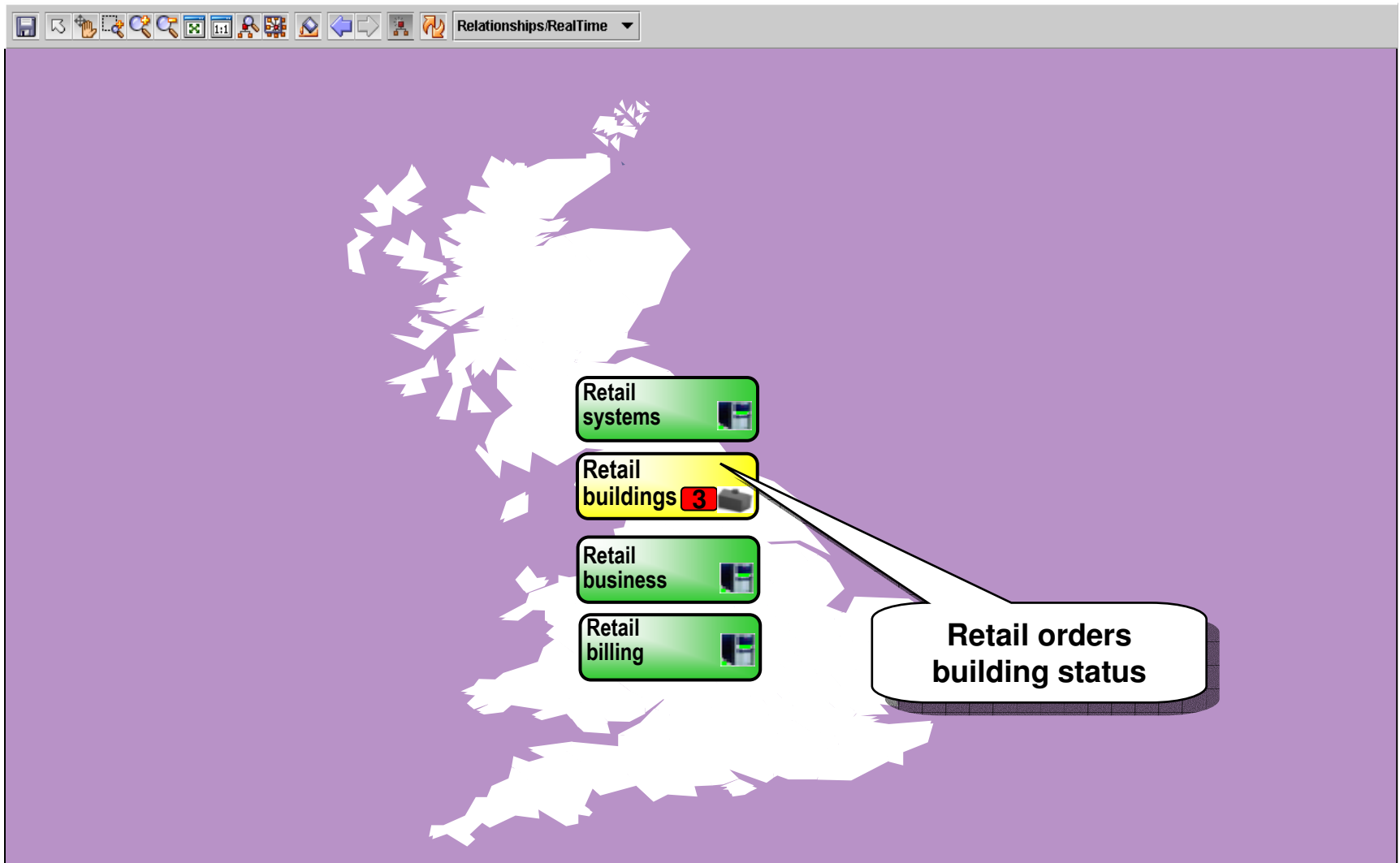




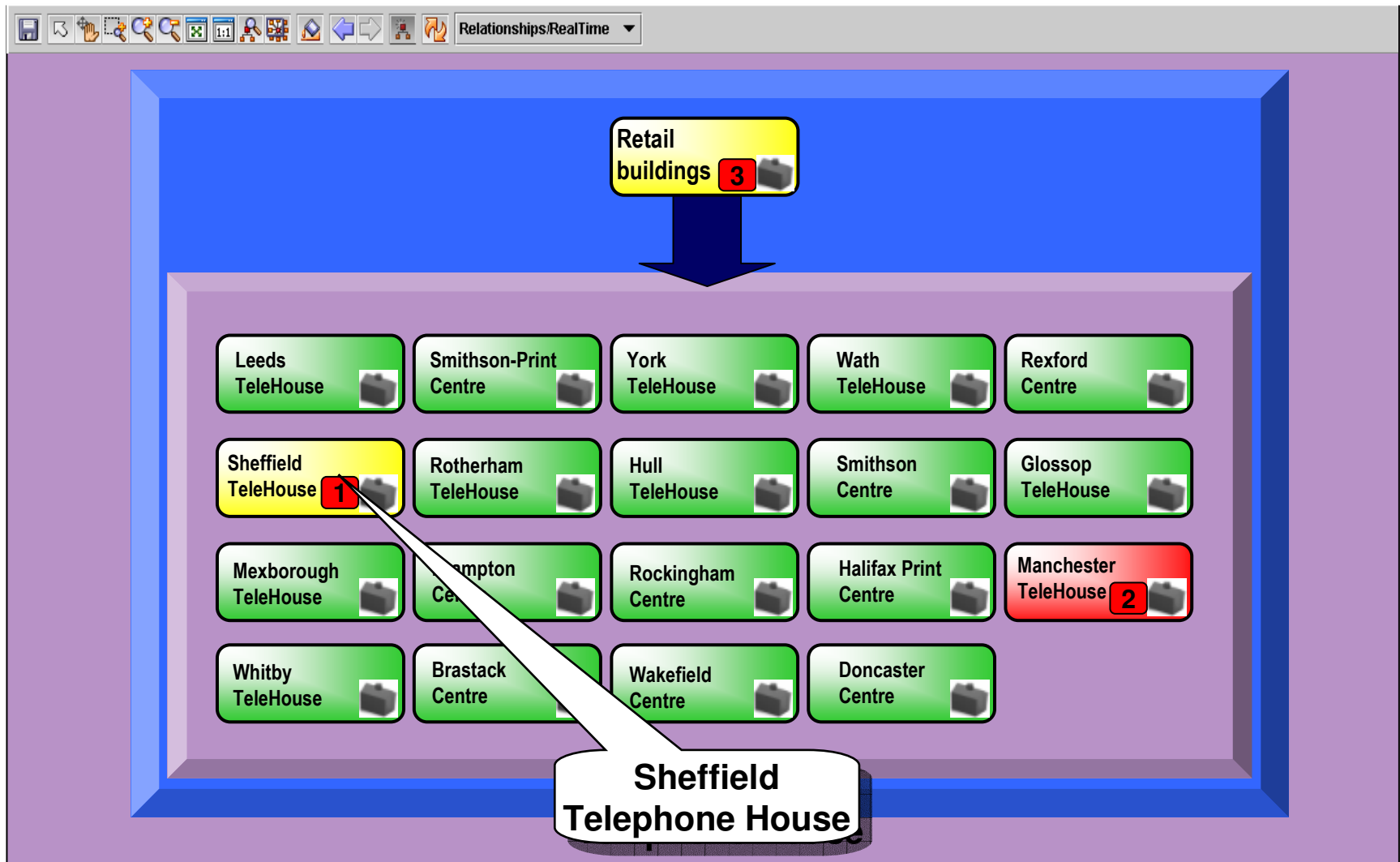
Building service view

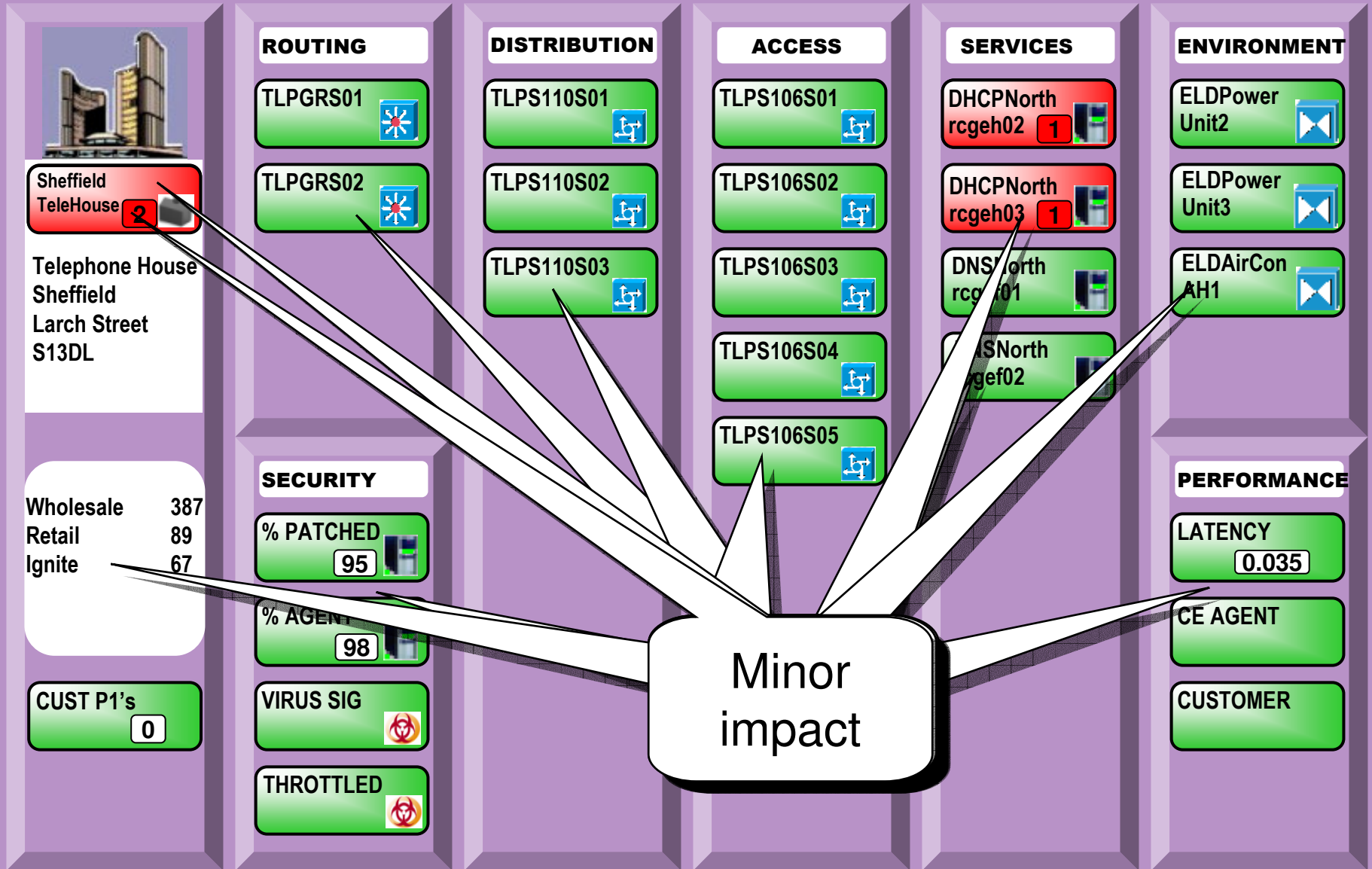
- Service source data
 - ISM's and components via probes
 - Network
 - Systems
 - Performance
 - Environmental
 - Security
- Service visualisation
 - SLAM

Service monitoring



Building service monitoring

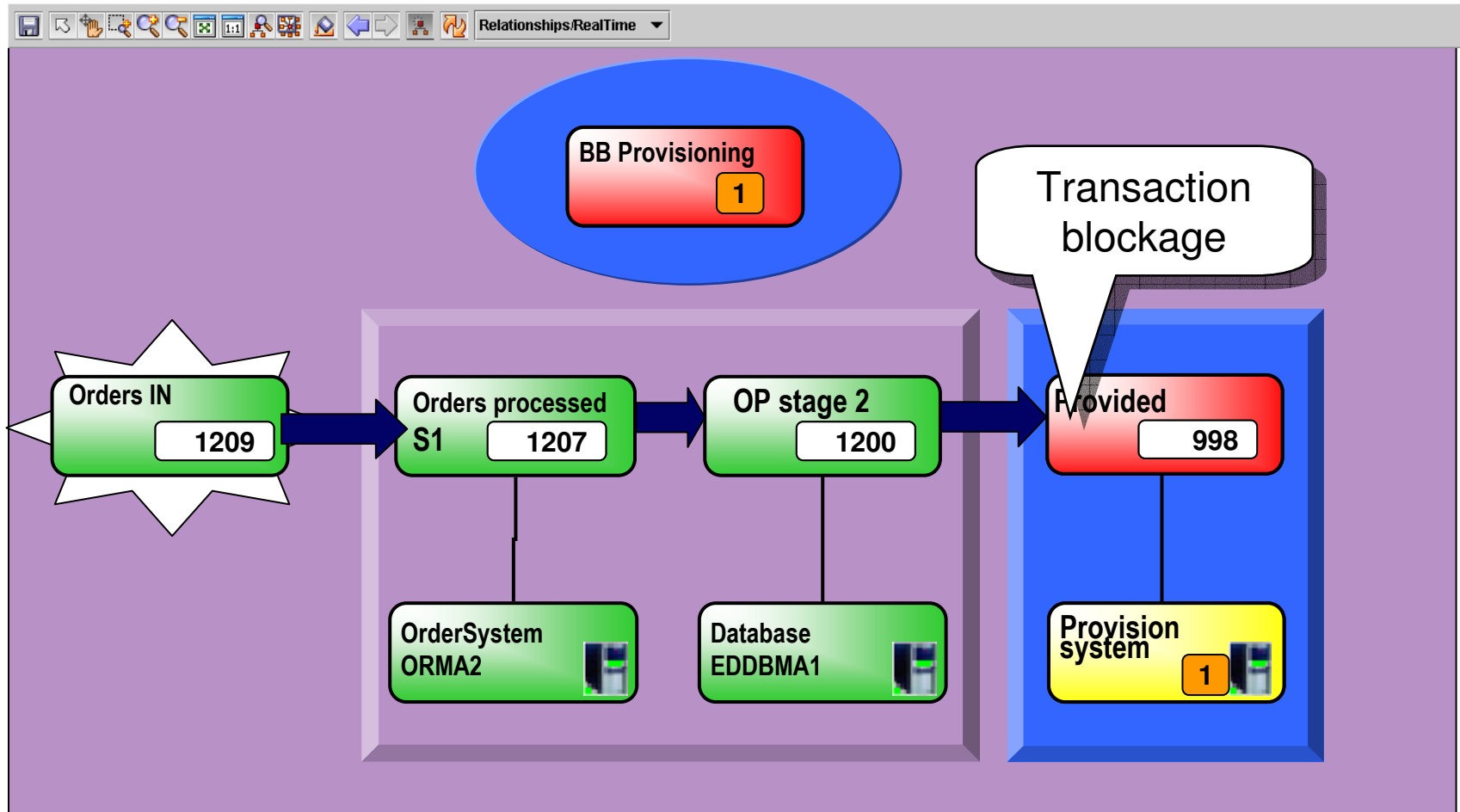




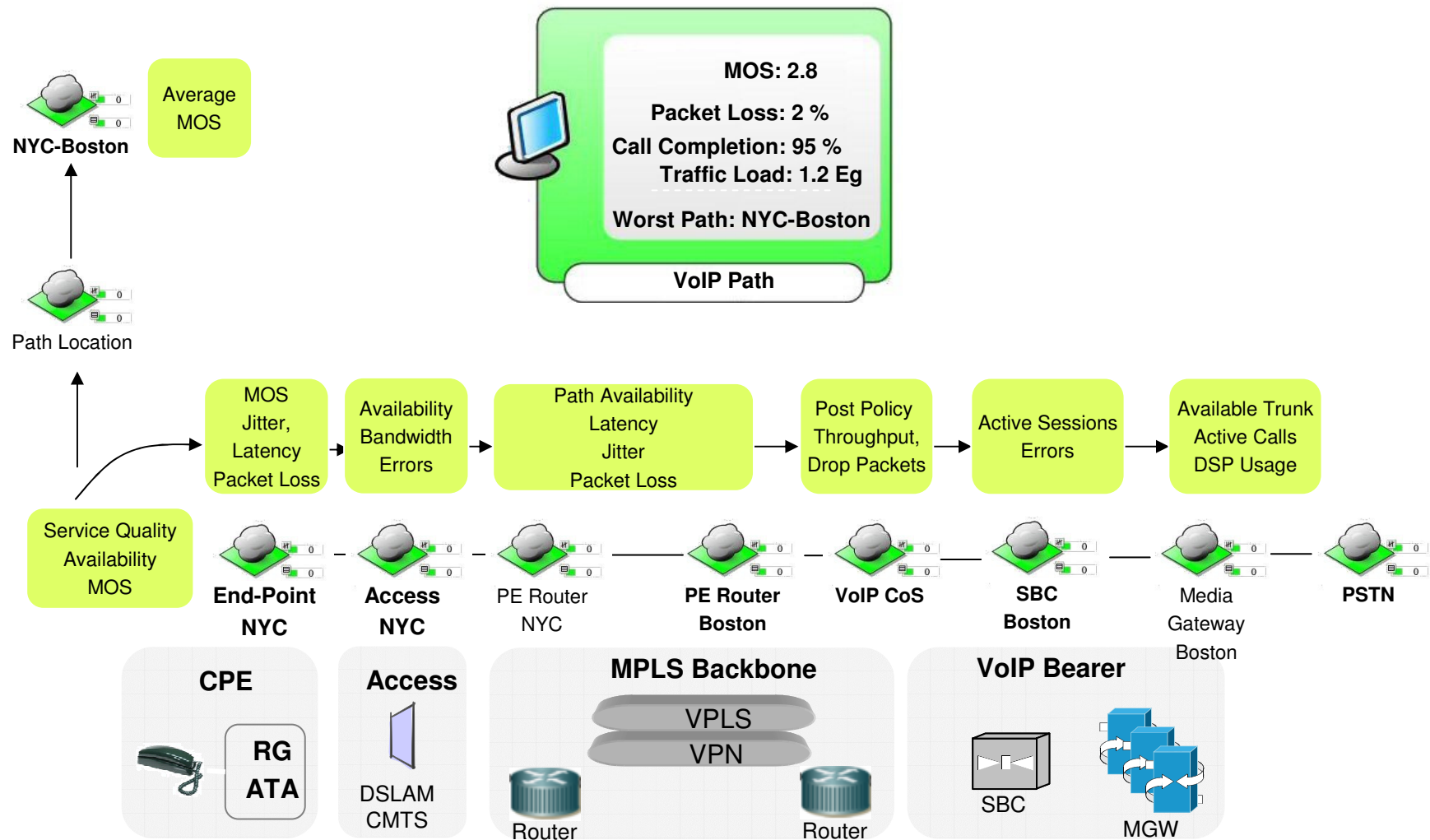
Business process monitoring

- Monitoring business transactions
 - Source data
 - Databases (via Impact) & log files (via probes)
 - Visualisation
 - SLAM

Business process monitoring



Example of Service Assurance for Telco End-to-end VoIP Path View



BT Global Services: Incident Management for IPT services

NETCOOL/Webtop - Mozilla Firefox
 http://195.182.114.199:8080/voip/index.html
 BT IPT Showcase
 BT Global Services
 Logged in as: ginadm Logout

Navigation

- Select:
- Home
- Edit Profile
- Network View
- All Messages
- Service Monitoring
- Reachability
- Availability
- Status
- Quality
- Call Usage
- Core Services
- Service Reporting
- Reports
- ISM Server
- Internet
- BT
- Micromuse
- Qualify
- Support
- Java Plugin
- Tech Support

IPT Showcase Network Layout

IPT DemoCentre
 NetworkDesign v.1.4
 Author: adri.sutere@bt.com

FRANKFURT
 IPT-Management-VLAN
 QUALLABY

Dortmund
 Europaplatz

Bartstrasse 22
 SERVER-ROOM
 Rack M5

Bartstrasse 22
 4th. Floor WirelessLAN

Bartstrasse 22
 Basement (Munich1&2 + HOT-SPOT-Areas)

VLAN NUMBER	VLAN NAME	SUBPOD
10	LAN-DATA	Date-Clients (Date-Accesst-Only, without SoftClients)
30	LAN-VOICE	VoIP-Phone-Clients (7902, 7900, SoftClients)
100	LAN-MNGMT	Management LAN (Access-Points, Switches, Router)
120	LAN-CCM	CallManager LAN (Publisher & Subscriber Server)
200	LAN-TXOFFIC	Traffic-Generators (Multicast Server, VLS)
	LAN-ACS	Security LAN (Access Control Server, TAGACS, WLSE)

last modified: 24.11.2004

Done

Return on Investment Case Study

T-Mobile: Pan-EMEA Master Service Management Centre

Business Goal

- Provide a standardised service management approach for the operations in 5 countries (Service Management Centres)
- Correlate data from each SMC to focus on critical customers SLAs
 - Improve customer satisfaction
 - Improve service uptime
 - Reduce customer churn
- Increase competitive edge by being able to support delivery of new services quickly

Netcool™ Solution

- Netcool implemented in 5 countries (SMC), and consolidated at MSMC as Manager-of-Manager
 - Service view & Performance Measurements
 - Planned work schedules
 - Critical real-time service escalations
 - Knowledge repository
 - Global Trouble Ticketing
 - Centralised reporting
 - Built-in High Availability
- Supports equipments from Nortel, Ericsson, Nokia, Siemens, Cisco, Comverse, ..., etc
 - GSM RAN & Backbone
 - UMTS RAN & Backbone
 - IP & ATM
 - ...

Return on Investment

- > MSMC & 5 SMCs were deployed in less than 6 months
- > Single view of the entire operations, enabling
 - Fast detection, isolation & resolution of national & international service problems
 - Measure & monitor KPIs
 - Centralised reporting
- > Information available to users anytime, anywhere
 - Ability to support major events such as Tradeshow or Sports (E.g. Euro 2004)
- > Increase investors' & analysts' confidence
 - A Centre of Excellence showcase to demonstrate the company's ability to achieve its growth targets.



Maintaining high availability and performance of the trading applications is extremely critical. A minute of application downtime would cause the company a loss of \$300K.

The support staff need to be notified and resolve the problem rapidly – before it affects the trader.



Business Goals: Front-to-back view of critical business functions

- Global event management
- Increase the ability to report on key infrastructure metrics
- Total cost, overall health (up/down), capacity, performance
- Decrease Mean-Time-To-Discover (MTTD) & Mean-Time-To-Repair (MTTR)
- Leverage functionality of installed tools and management systems
- Faster notification of business stream owners when a status-affecting event occurs

Netcool Solutions : Centralised view of mission-critical apps

- Centralized view of mission-critical apps and infrastructure of 6 regional centers Americas / Europe / Asia. Network Servers, Database, Applications & Messaging
- Solves scale problem: +600 Applications, 8000 servers, 8500 Databases, +2000 Layer 2/3 routers and switches, 1000's of users served
- 24 x 7 availability, Fully fault tolerant
- Reduced 500 million raw alarms to 12,000 a day



Micromuse usage on Trading floor

Either Graphical or direct to Alerts

Launch screens decoupled from controller

Enables multiple views open on support screen

'floating' controller
Minimal usage of valuable screen space

Immediate split between App. & Infra. alerts



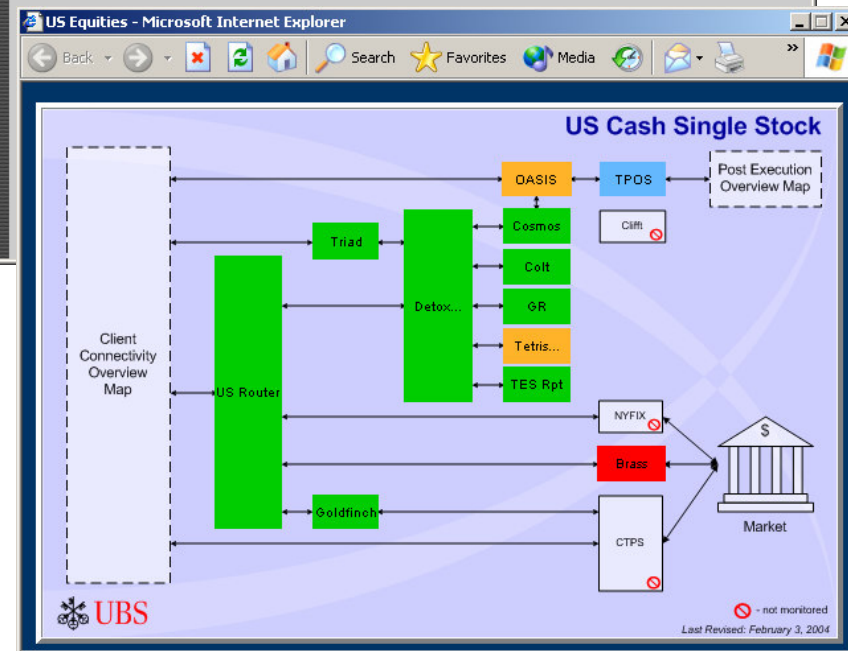
USEQ - Microsoft ...

	App	Infra
Program Trading	45	1
Lego	0	0
Opera	43	1
Protocx	0	0
Tetris	2	0
Client Connectivity	75	129
A4	0	8
BOM	0	2
DMA FIX	0	0
Equity Trader	2	106
FIXWeb	0	106
FRA/FDA	22	2
LDN FIX	51	10
Sweep	0	1
Triad	0	0
Single Stock	5	6
Brass	4	0
Oasis	1	2
Detox	0	0
US Router	0	4
Post Execution	24	

LEL 0.1 - entity: USEQSS_I_All view: basic - Microsoft Internet Explorer

http://ncdevwebtop:8080/USEQSS_I_All@

NodeAlias	AlertGroup	Count	Last Occurrence	Summary
sm0p7254cm	UNIX	1	3/3/04 10:26:18 AM	[ID 969705 kern.info] [AFT0] errID 0x0000e
sm0p7254cm	UNIX	1	3/3/04 10:26:17 AM	[ID 596940 kern.warning] WARNING [AFT0]
sm0p7254cm	UNIX	1	3/3/04 10:26:18 AM	[ID 233852 kern.info] [AFT0] errID 0x0000e
sm0p7254cm	UNIX	1	3/3/04 10:26:16 AM	[ID 542283 kern.info] [AFT0] Corrected Men
sm0p8071cm	UNIX	6802	3/3/04 11:04:54 AM	ALARM #1 OF GLOBAL PARAMETER 'ERRORC
sm0p8071cm	UNIX	9	3/3/04 11:05:54 AM	ALERT ON 'ENSIGN_MODULES.STD_SOLARI



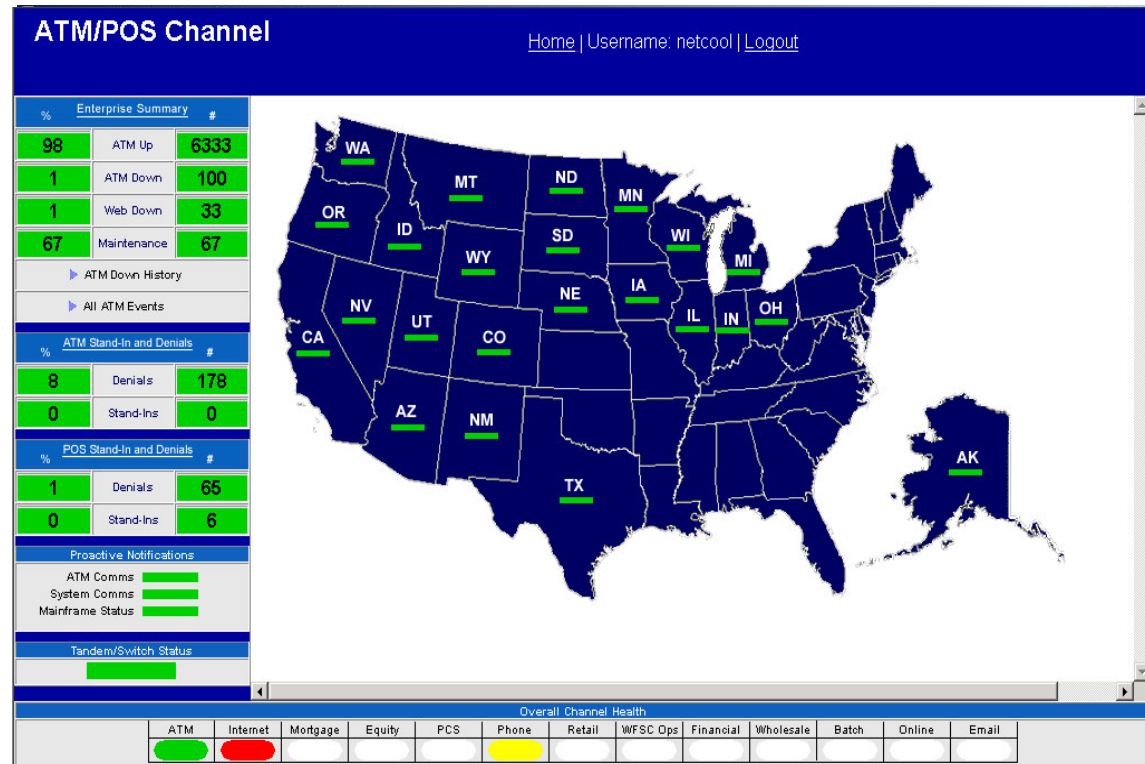
Business Goal:

Deliver & measure customers access “anytime, anywhere” to 11 service “channels

- 4M transactions / day
- 60+ banking systems
- 15 EMS1250+ servers
- 5 Tandems
- 5 Mainframes
- 50,000+ network nodes
- 3200+ retail stores
- 6000+ ATMs

•Net Minus 30

Bank delivered a business and IT solution for their ATM infrastructure within 6 weeks. At the end of this they were able to predict a mainframe outage 30 minutes before it impacted their first customer





IBM Software Group

IBM Software Expo

AGENCIA TRIBUTARIA

Natalia Escobedo López



@business on demand software



Sistema de Gestión de Servicios





Descripción de la Solución

- El objetivo fue hacer posible la transformación de la actual *visión de comportamiento de componentes* en *visión de comportamiento de servicios*, instalarlas conforme a los procedimientos de instalación establecidos en el DIT, adaptarlas al entorno tecnológico existente y realizar su completa puesta en producción.





Sistema de Gestión de Servicios

- Pasado
- Presente



Gestión Servicios (Operación) ← pasado

Misión:

- “Primer nivel de control de los RECURSOS de la infraestructura informática del DIT”

Funciones (desde el punto de vista de los recursos):

- monitorización de disponibilidad y rendimiento
- registro y control de incidencias y cambios
- atención de problemas de primer nivel



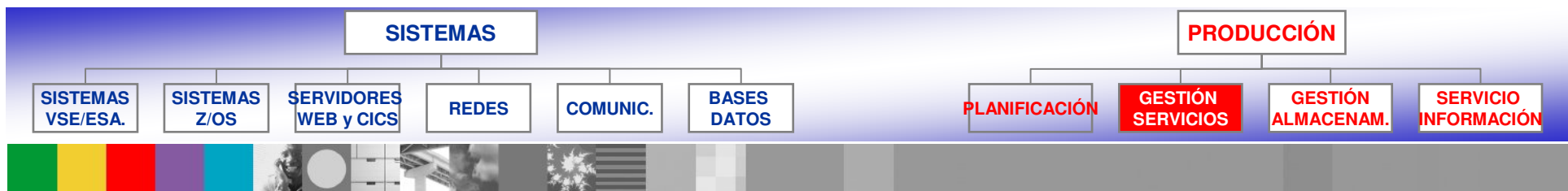


Gestión Servicios → presente

La complejidad de la infraestructura en cuanto al nº de componentes y dependencias y el volumen de actividad → control integrado y automatizado

Monitorización de servicios → controlar el comportamiento de los sistemas de información del DIT desde el punto de vista de los SERVICIOS informáticos que se prestan proporcionando:

- punto focal de monitorización
- representación gráfica de servicios (no sólo de recursos)
- análisis de impacto ante paradas planificadas y no planificadas





Presente: cambios realizados

- Sala de Control
 - Antes de TBSM:
 - Areas temáticas
 - Sin vista resumen
 - Después:
 - Videowall
- Herramientas de Monitorización





Sala de Operación - Antes

Departamento Informática Tributaria





Después - Sala Operación

Departamento Informática Tributaria





Videowall





Herramientas de monitorización

- Orientadas al recurso (heredadas)
 - sistemas
 - comunicaciones
 - Internet
- Orientadas al servicio (nueva)
 - TBSM



Monitorización **recursos** vs Monitorización **servicios** (I)

– **Visión de recursos**

- Base de datos, transacción, línea comunicaciones...

– **Punto de vista técnico**

- “no funciona el recurso CICS05P”

– **Visión de servicios**

- Borrador, Aduanas, Panel ...

– **Punto de vista de usuario**

- “problemas con el servicio Subastas...”





Monitorización recursos vs Monitorización servicios (II)

– Métricas técnicas

(distintas a las del usuario)

- consumo de procesador
- % ocupación de las líneas

– Métricas de usuario

(mismas métricas para técnicos y usuarios)

- % disponibilidad del servicio
- tiempo de respuesta

– Análisis de impacto a posteriori

- análisis *reactivo* de impacto de cambios
- evaluación *diferida* ante indisponibilidad de recursos

– Análisis de impacto a priori

- análisis *predictivo* de impacto de cambios
- evaluación *inmediata* ante indisponibilidad de recursos



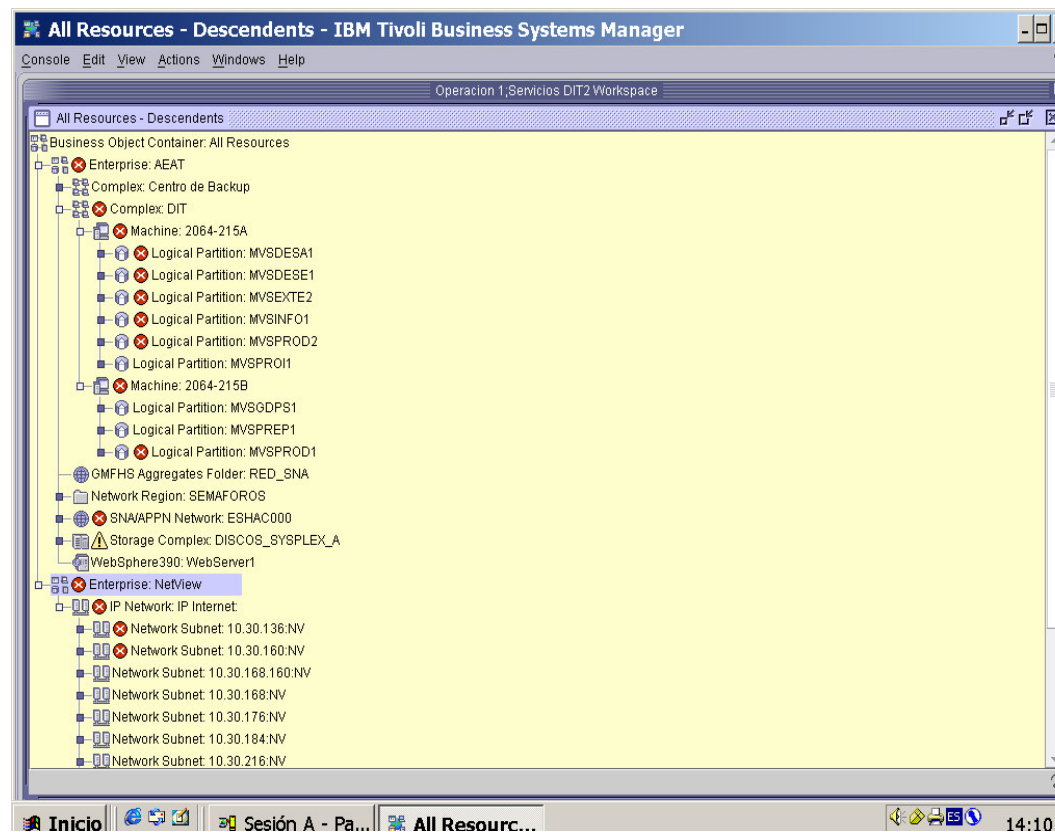


Estado actual (TBSM)

- Visión de recursos y servicios
- Control de disponibilidad de servicios (suma de componentes):
 - Mejora en Disponibilidad y Rendimiento
 - Menores tiempos de indisponibilidad y más rápida identificación de la fuente de los problemas
 - Mejora del conocimiento sobre la disponibilidad de los Sistemas y de la productividad del personal
- Gestión de alertas de recursos
- Análisis de impacto en los servicios
 - Focalización en el análisis de los problemas críticos



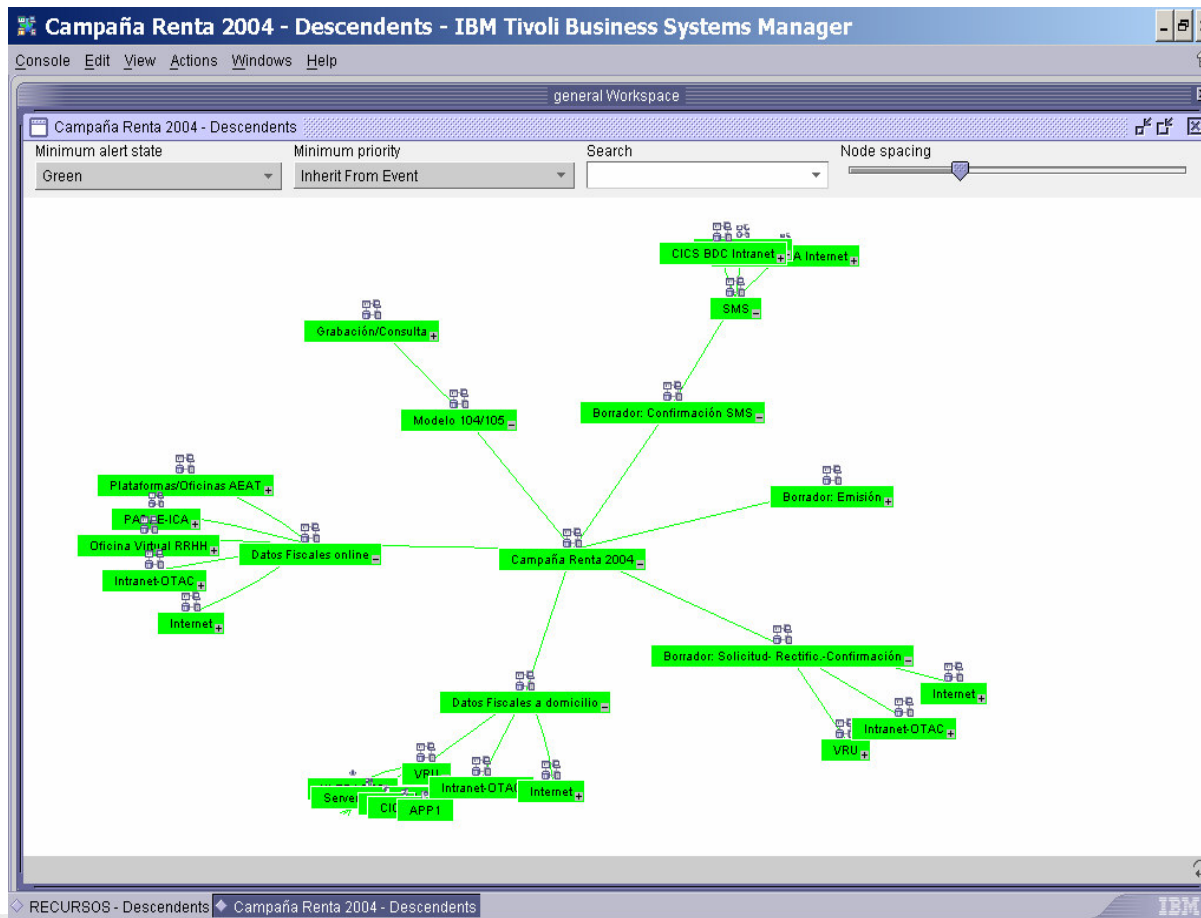
Descripción de la Solución-TBSM Vista Jerárquica





Descripción de la Solución – TBSM

Vista Hiperview



Servicios Críticos

SERVICIOS - Descendents - IBM Tivoli Business Systems Manager

Console Edit View Actions Windows Help

general Workspace

SERVICIOS - Descendents

Minimum alert state: Green | Minimum priority: Inherit From Event | Search: | Node spacing: [slider]

Campaña Renta 2004 - Descendents

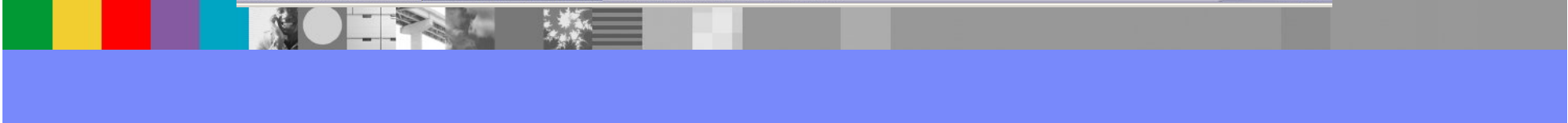
Minimum alert state: Green | Minimum priority: Inherit From Event | Search: | Node spacing: [slider]

RECURSOS - Descendents

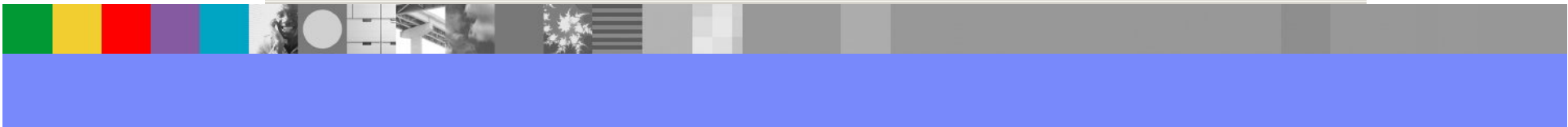
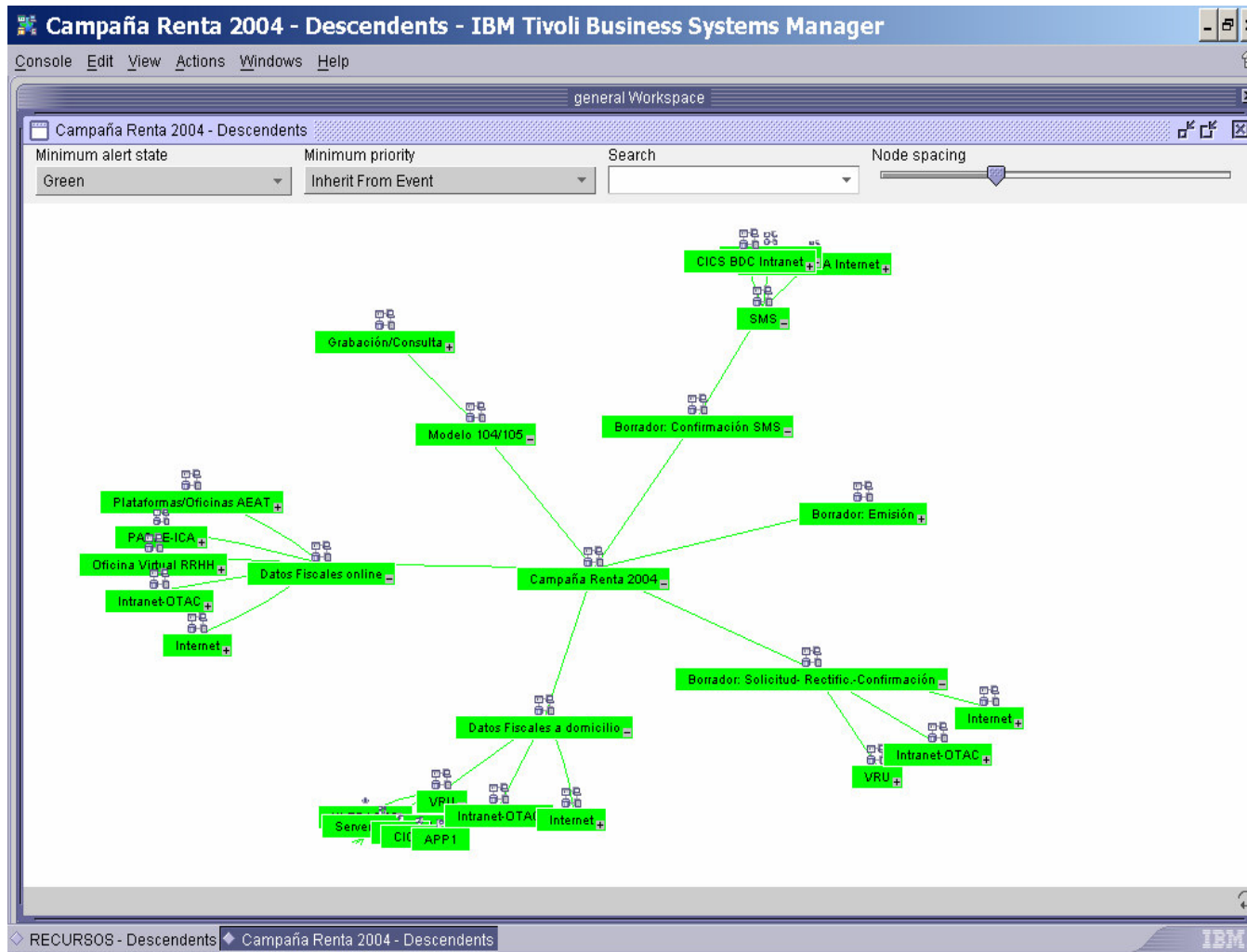
Minimum alert state: Green | Minimum priority: Inherit From Event | Search: | Node spacing: [slider]

◊ RECURSOS - Descendents ◊ **SERVICIOS - Descendents** ◊ Campaña Renta 2004 - Descendents

IBM.



Campaña Renta



Take the Next Steps Now!

For more information:



- Visit www.ibm.com/itsm for more information
- Register and use the IBM Tivoli Unified Process Tool
- Contact your IBM Representative





GRACIAS

