



IBM Software Partner Academy Program

Telefonkonferenz am 12. Juni 2009

Vorstellung der Tivoli Netcool Suite als wichtiger Bestandteil einer integrierten IBM Service Management Lösung

Alexander Besemer

Channel Brand Sales Tivoli

Agenda:

- Service Management und aktuelle Wirtschaftslage
- Welchen Mehrwert liefert Tivoli Netcool für ein integriertes Service Management?
- Die Tivoli Netcool Suite im Überblick
 - Netcool Omnibus
 - Netcool Impact
 - Tivoli Network Manager IP (ITNM)
 - Tivoli Business Service Manager (TBSM)
- Q & A

Was ist IT- Service- Management?

IT-Service-Management (ITSM) bezeichnet die Gesamtheit von Maßnahmen und Methoden, die nötig sind, um die bestmögliche Unterstützung von [Geschäftsprozessen](#) (GP) durch die IT-Organisation zu erreichen...

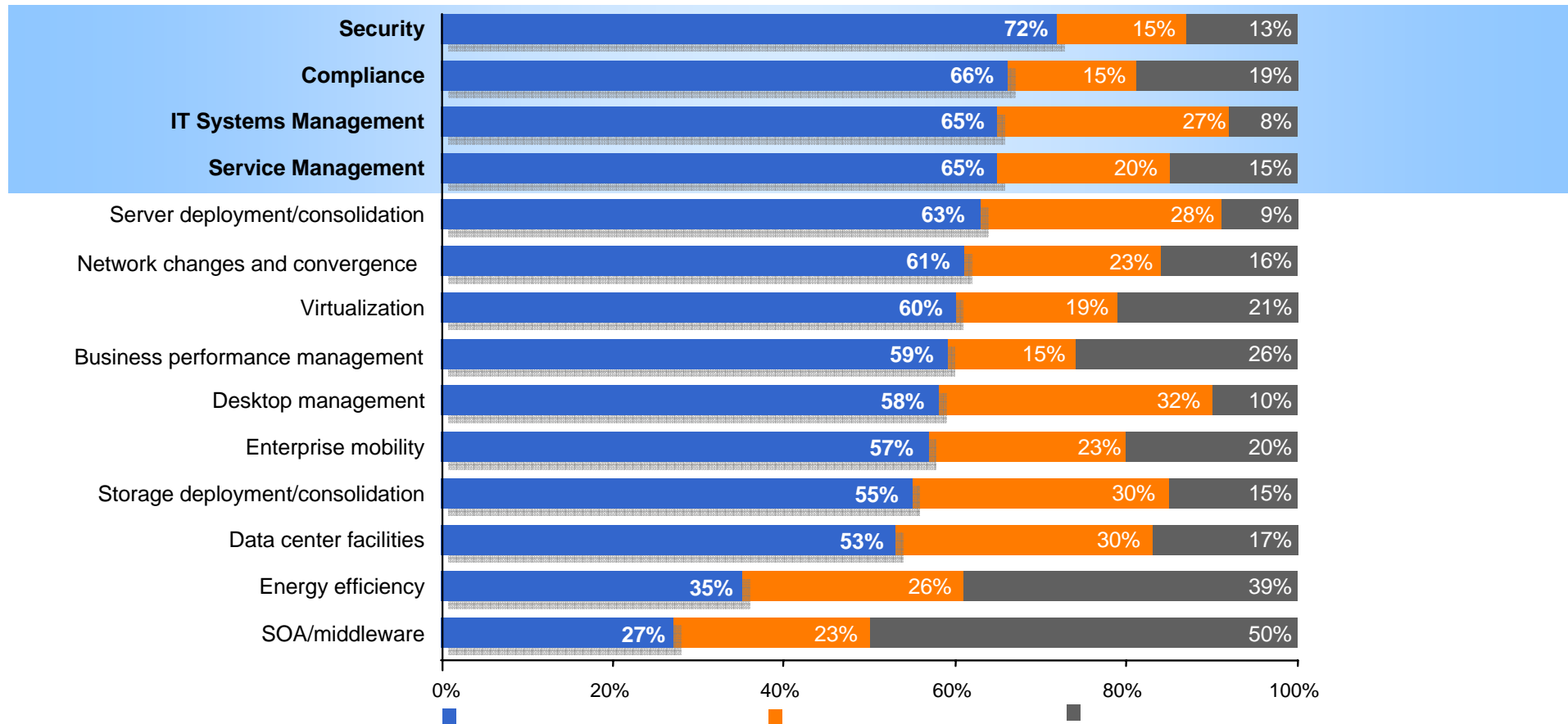
Quelle: Wikipedia

Was ist ITIL?

- Die **IT Infrastructure Library (ITIL)** ist eine Sammlung von *Good Practices* in einer Reihe von Publikationen, die eine mögliche Umsetzung eines [IT-Service-Managements](#) (ITSM) beschreiben und inzwischen international als [De-facto-Standard](#) hierfür gelten. In dem Regel- und Definitionswerk werden die für den Betrieb einer [IT-Infrastruktur](#) notwendigen [Prozesse](#), die [Aufbauorganisation](#) und die Werkzeuge beschrieben.

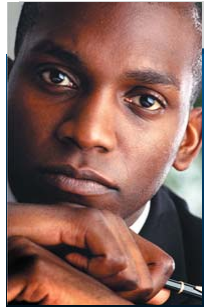
Quelle: Wikipedia

Die Top Prioritäten von IT Projekten



Quelle: IBM Market Intelligence, *Service Management In an Uncertain Economy*, January 2009
 Erste US-Ergebnisse, vorgestellt auf der weltweiten Tivoli Anwenderkonferenz Pulse 2009.

Die Herausforderungen unserer Kunden ?



Wie verbessere ich die Verfügbarkeit in einer komplexer werdenden IT Infrastruktur?

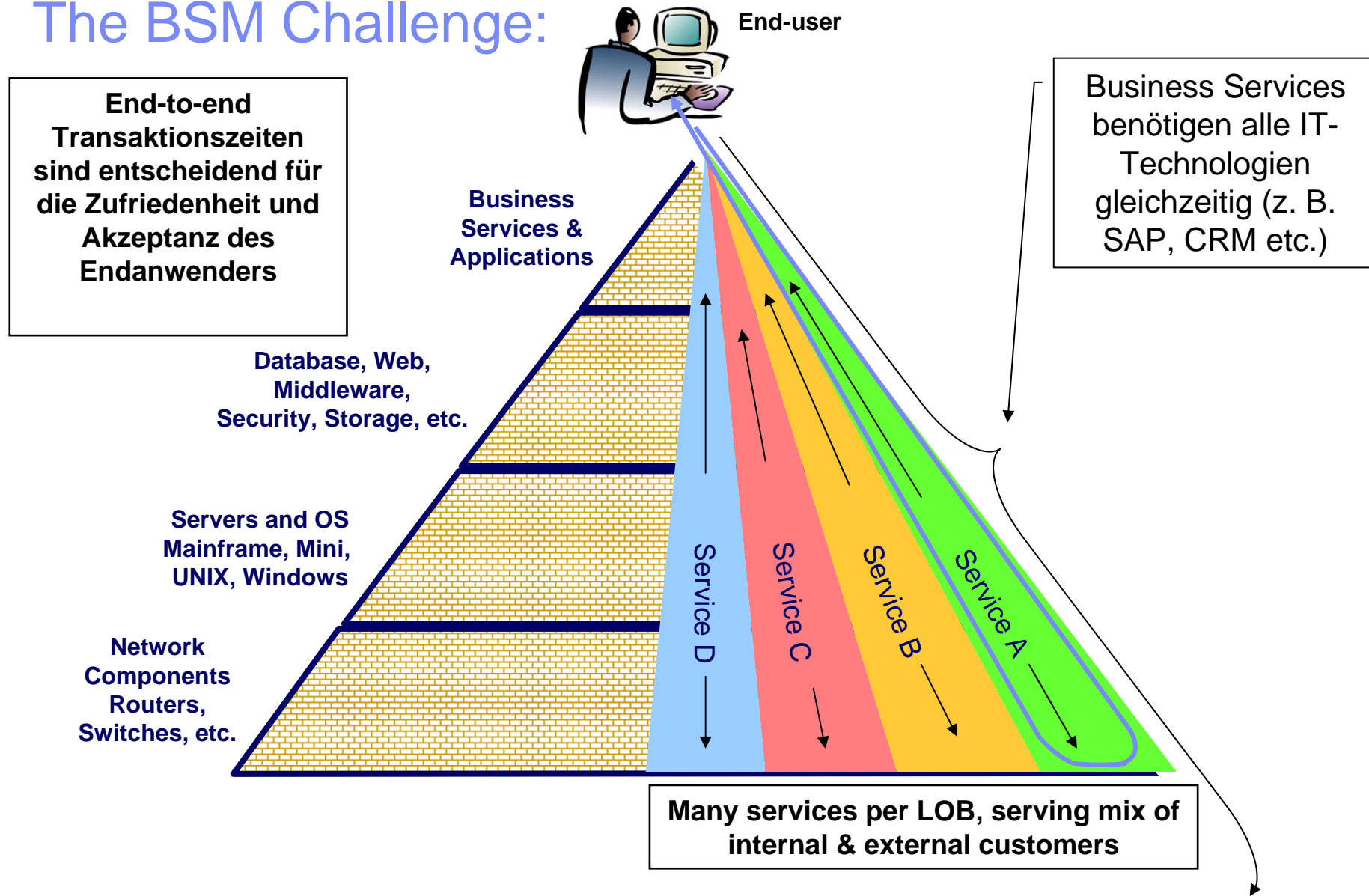


Wie kann ich vorhandene Informationen nutzen um die operative Effizienz und Effektivität zu verbessern?



Wie verstehe ich besser den Zusammenhang zwischen wichtigen Geschäftsprozessen und der IT- Infrastruktur?

The BSM Challenge:



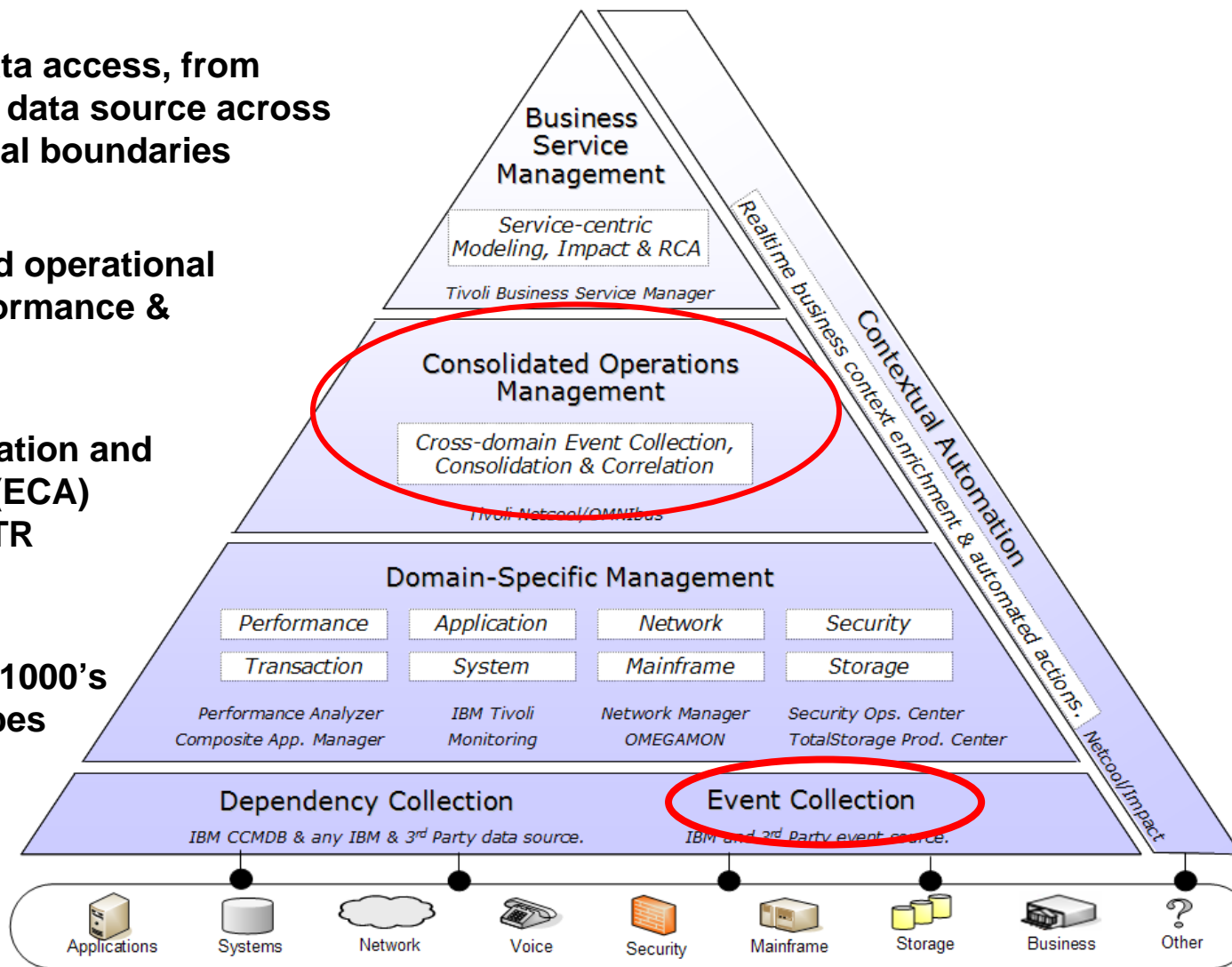
Konsolidiertes Operations Management mit Tivoli Netcool

Real-time data access, from virtually any data source across organizational boundaries

Consolidated operational view of performance & availability

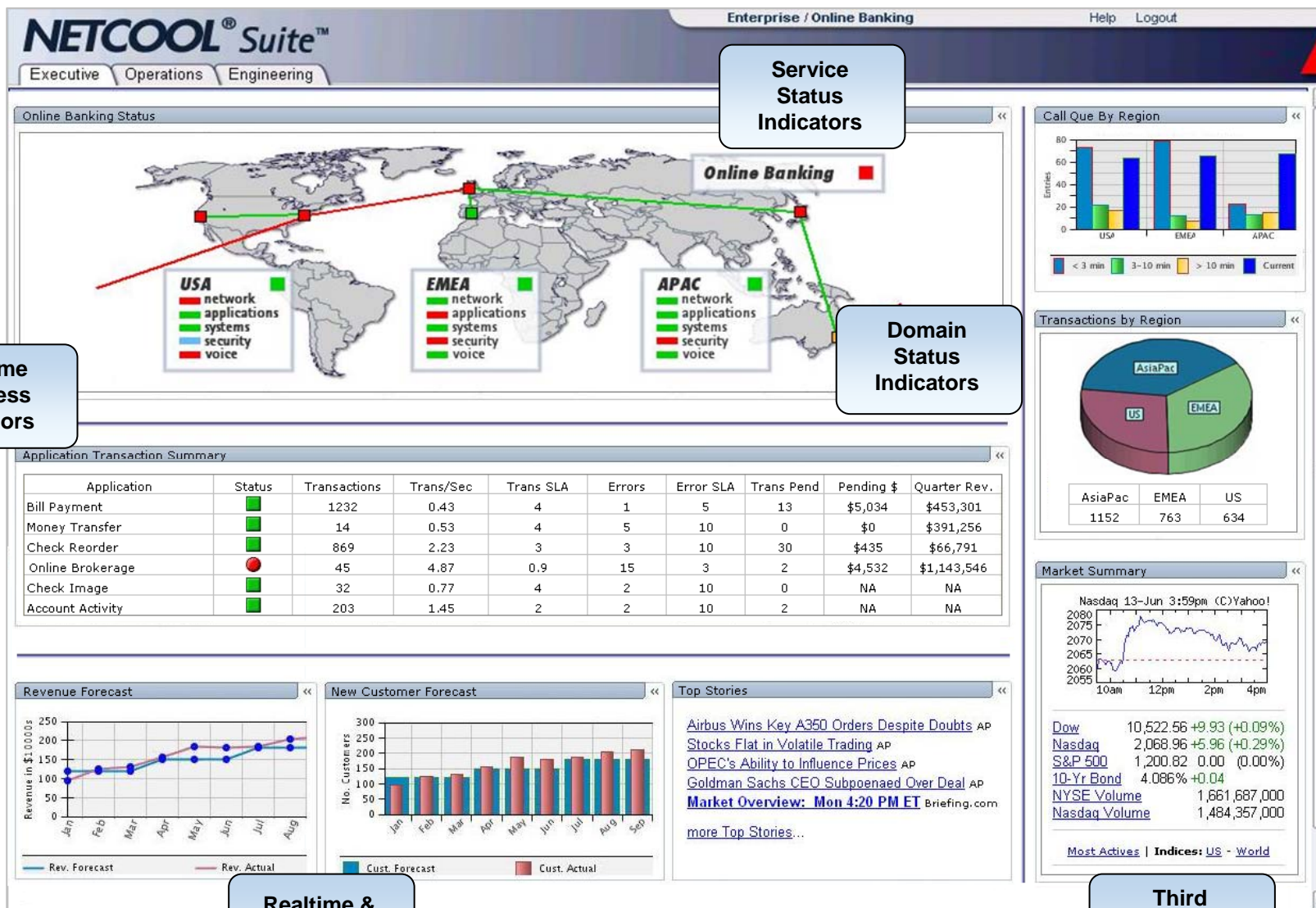
Event correlation and automation (ECA) reduces MTTR

Complete coverage of 1000's of device types



Note: All layers are inclusive of distributed and mainframe.

Service Dashboard



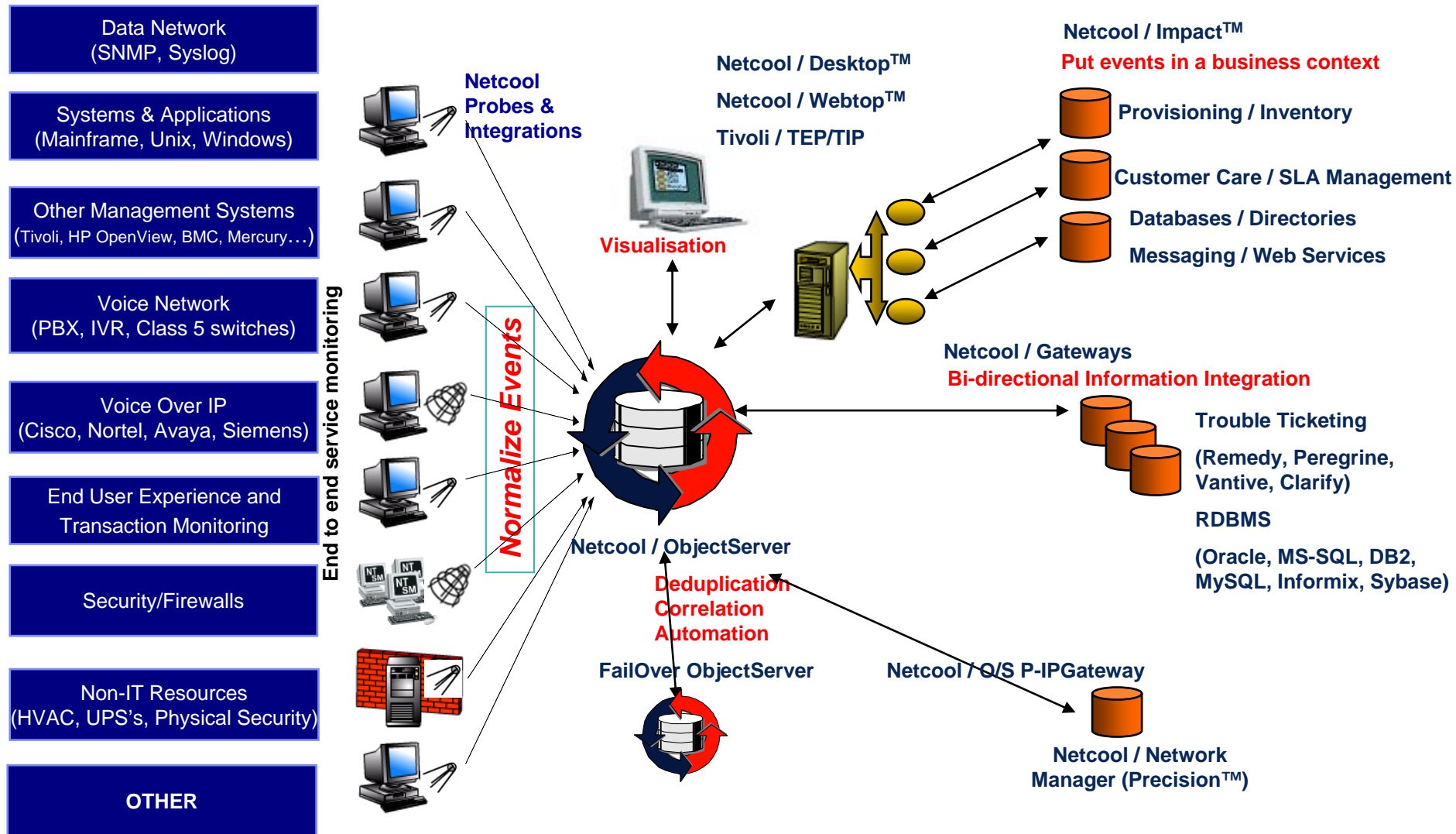
Realtime Business Indicators

Realtime & Historical Reports

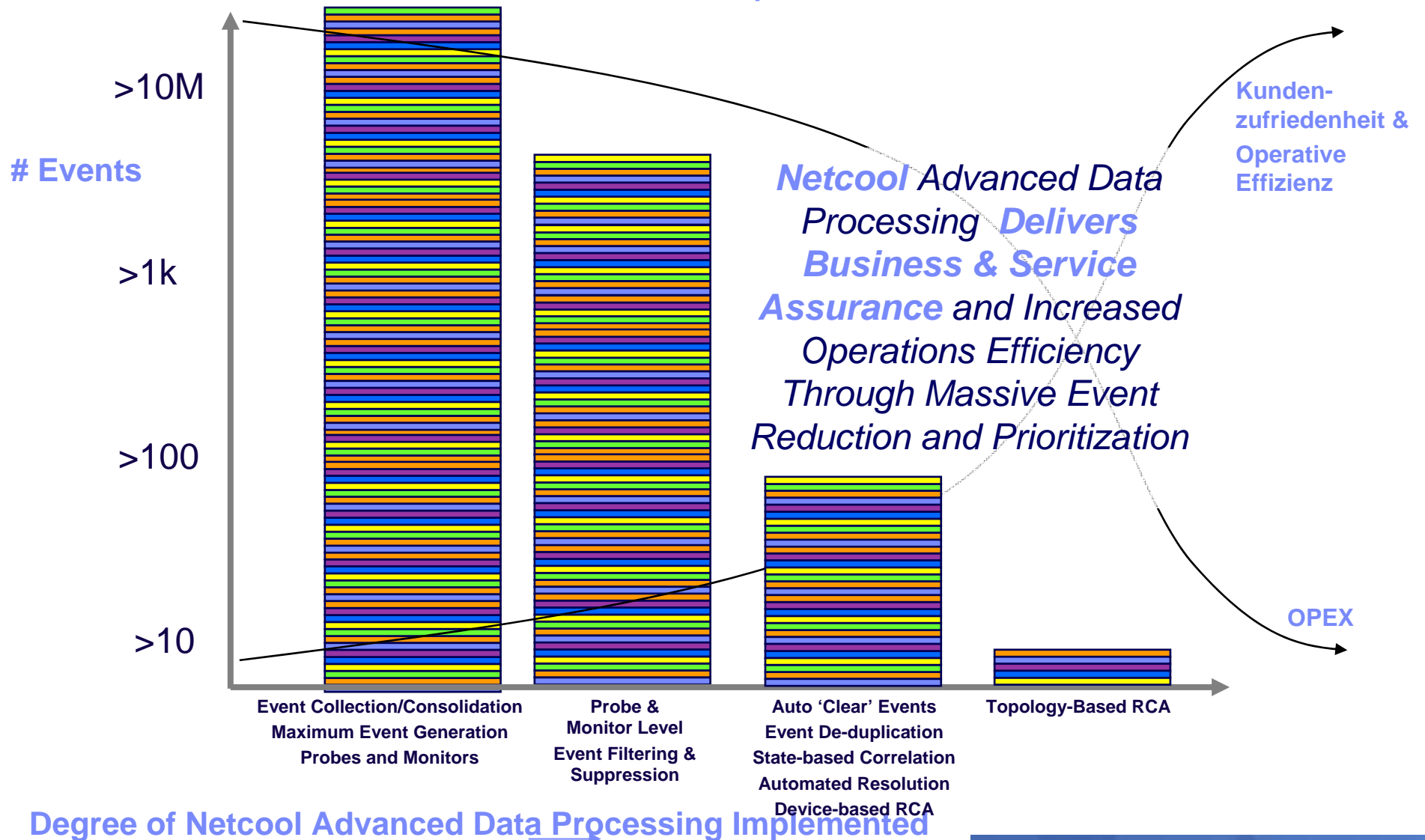
Third Party Data

Netcool/OMNibus Event Management Manager Of Managers

Netcool Event Management Architecture



Netcool Event Management - Summary: Dramatic Business Bottom-Line Impact



OMNibus integrations

Netcool Knowledge Library SNMP support (175 MIBs), including:

Bridge MIB RFC 1493	ATM Forum MIB RFC 1695 for ATM switches	31 different Cisco MIBs (including MPLS VPNs)
MIB-II RFC 1213/2096	ATM Forum PNNI (Single Pier) MIB	21 Nortel MIBs
RMON MIBs	ATM Forum ILMI MIB	6 different Extreme Networks MIBs (inc VLANs)
OSPF MIB	ATM Forum LANE Client MIB	Juniper MPLS VPN support
BGP MIB	Frame Relay MIB RFC 1315	
ifStack MIB	FDDI MIB RFC 1512	
VRRP MIB		

Vendor Alliances (~25):

- Alcatel**
- Motorola**
- Siemens**
- Ericsson**
- Tellabs**
- Marconi**
- Lucent**
- Nokia**
- Huawei**
- Fujitsu**
- Ciena**
- Cisco**
- Juniper**
- Checkpoint**
- Cramer**
- Metasolv**
- SAP**
- Xtera**
- Voyence**

Probes (~ 250):

ADC Metrica NPR	Aprisma Spectrum	Email Probe	Hewlett Packard IT/Operations Center
Airspan Sitespan	Arcom Environmental Monitoring System	Enterprise SNMP EMS Probe	Hewlett Packard OpenView NNM
Alcatel 1000 E10/OCB-283	Ascrom CLOG	Ericsson 3GPP (OSS-RC/RANOS/CNOS)	Hewlett Packard Vantage Point Operations
Alcatel 5620 Logfile	Ascrom PANMAN	Ericsson ACP 1000	Cisco WAN Manager
Alcatel 5620 NM CORBA	Ascrom TimePlex TimeView/2000	Ericsson AXE 10 per Class 5 Voice Switch	CMS400 Probe
Alcatel 5620 SAM	Avaya Definity G3 per switch	Ericsson BNSI	Compaq Tandem
Alcatel AWS	BMC Patrol	Ericsson MD110	Informix
Alcatel DSC Dex per Class 5 Voice Switch	CA Unicenter TNG	Ericsson RANOS (3GPP)	Ion Networks Sentinel 2000
Alcatel MT20	Castlerock SNMPC	Ericsson Xmate	KBU Fivemere
Alcatel NMC 1300	Comverse	Exec Probe	Kodiak EMS
Alcatel OMC-R (3GPP)	Dantel PointMaster	Fibermux LightWatch	Lucent 5ESS - Class 5 Voice Switch
Alcatel OMC-R (Q3 Interface)	DAWCOM	FIFO	Lucent Agile ATM
Alcatel OMC-R (Terminal Server Connection)	DEC VAX Operator Communication Facility	FLEXR Probe	Lucent ECP
Alcatel OMC-S	ECI Lightsoft CORBA	Freshwater Sitescope	Lucent ITM-NM/OMS
Alcatel OS-OS	ECI/eNM	Fujitsu FENS	Lucent ITM-SC
Alcatel S12	ECI/Telematics	Fujitsu ICS Probe	Lucent JMTE (CORBA)
Alcatel SMC 1360		Fujitsu Netsmart	Lucent Naviscore
		Generic Logfile Probe	Lucent NFM
		Generic trapd/syslog capture per device	Lucent OMC (CORBA)
		Glenayre VMS Probe	Lucent OTAF/SDHLR
			Lucent Wavestar SNMS

Gateways (~ 30):

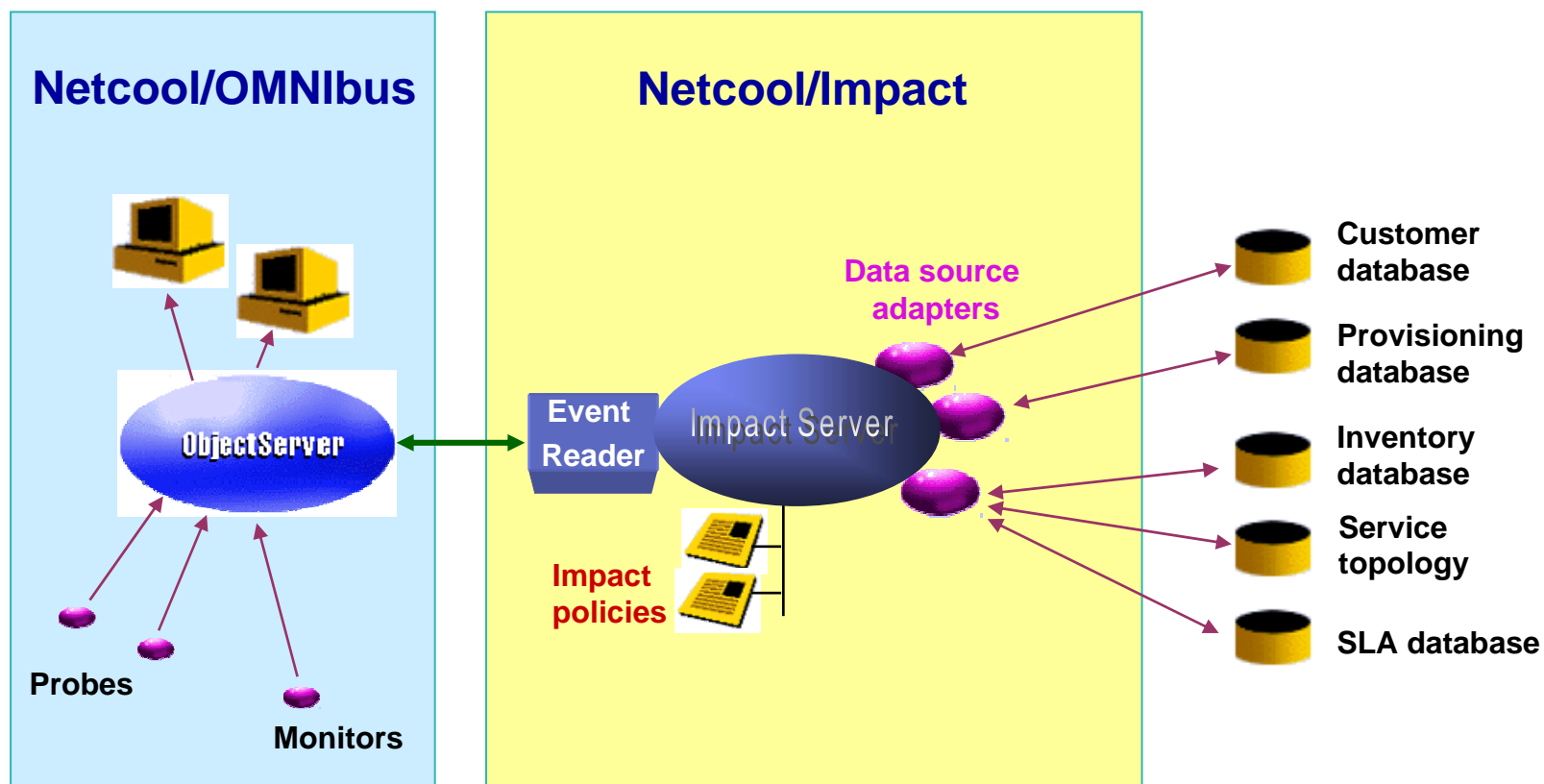
Bi-Directional	IBM DB2 7.1	Remedy 7	ObjectServer v7 Unidirectional
Flat File	IBM Informix 9.20	Siebel	Oracle 10.1.0.2 EE & SE
HP OpenView	MS SQL	SNMP	Peoplesoft Vantive 8
IBM DB2 6.2	ObjectServer 3.5	Socket	

...and if you need to manage something *really unusual*, OMNibus probes can be developed and deployed quickly to enable you to manage virtually anything!

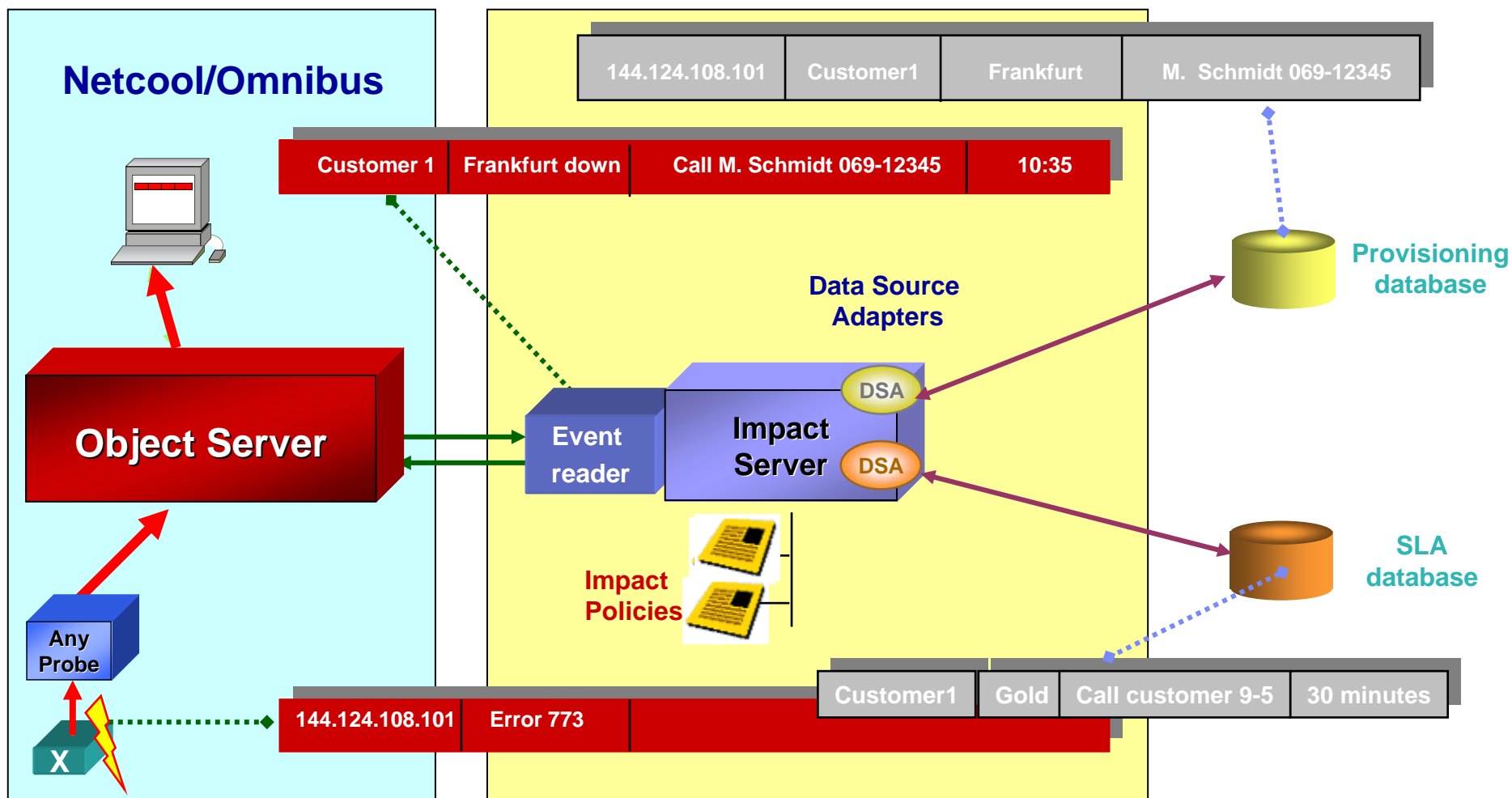
Tivoli Netcool Impact

Netcool/Impact

- High sophisticated and high-performant **Event Manipulation Engine**
- Impact does event Enrichment, Aggregation, Correlation, Suppression etc.



Event Lifecycle - Example



Summary

- **Impact stellt dem “Network Operation Center” eine “Business Sicht” zur Verfügung**
 - “Versteht” den Einfluss von Fehlern auf den Endanwender
 - Reduces noise and highlights the real problems
 - Manages problems according to business effect
 - Allows the NOC to be more responsive
- **Impact managed Ereignisse entsprechend den “business rules”**
 - Ensures that the correct operators see service-affecting events
 - Ensures greater consistency in the management of events
- **Impact liefert flexible Verbindungen zu externen Systemen**
 - Leverages corporate knowledge in inventory, provisioning, and customer relationship management (CRM) systems

Tivoli Network Manager IP Network Management

Tivoli Network Manager IP Edition

- **Network Manager IP Edition ist ein Netzwerkmanagement Produkt:**
 - Automatisierte Netzwerk Erkennung & Modellierung
 - Topologie-basierte Root Cause Analyse Funktionalität
 - Netzwerk-Visualisierung



Network Manager IP Edition

Layer-2/3 Discovery

- **Automatisierte Discovery aller Layer-2/3 Netzwerk-Einheiten, Interfaces & Layer-2/3 Verbindung**
 - Netzwerk Technologien: IP, Ethernet, CDP, ATM (ILMI & PNNI), Cisco Frame Relay, HSRP, VLAN, static NAT, MPLS IP VPNs, ...
 - Unterstützung verschiedenster Netzwerk-Vendors
 - **Unterstützt RFC MIBs**
 - **Spezielle Unterstützung für mehrere Hersteller MIBs; z. B. Cisco, Juniper, Extreme ... etc.**
 - Auto-Discovery konstruiert ein Modell mit Netzwerk-Verbindungen
 - **Durch Re-Discovery ständig aktuell gehalten (inklusive Event-gesteuerter 'partieller Re-Discovery')**
 - Ausgelegt für die Anforderungen eines Next Generation Network Management (MPLS etc.)

IBM Tivoli Network Manager for IP Networks Connectivity Based Root Cause Analysis

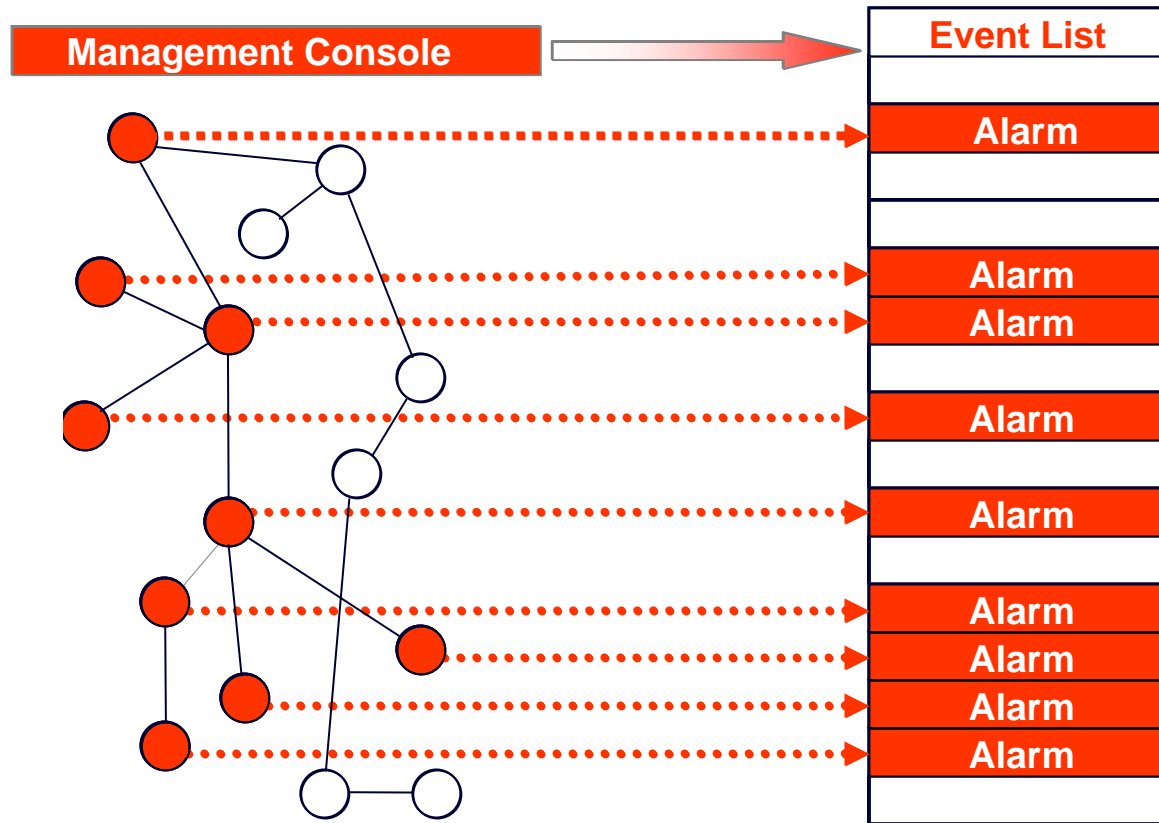
The screenshot shows the IBM Tivoli Network Manager interface. On the left, there are control panels for IP/ID (104), Hops (3), and filters (Router, Switch, Node). The main area displays a network topology diagram with a central node highlighted in red and labeled 'Root Cause Device'. A large purple oval encompasses a significant portion of the network, labeled 'Symptom Devices - Impacted Environment'. At the bottom, a 'Device Info' table shows connectivity details for three source devices.

SOURCEip	SOURCEName	SOURCEInterfaceIP	SOURCEInterface...	SOURCECardPort	DESTip	DESTName	DESTInterfaceIP	DESTInterfaceIdx	DESTCardPort
172.20.1.3	cisco2916.emea.t...	1	1/33	172.20.1.2	172.20.1.2	172.20.1.2	1		
172.20.1.3	cisco2916.emea.t...	21	1/28	172.20.8.10	172.20.8.10	172.20.8.10	1		
172.20.1.3	cisco2916.emea.t...	2	1/34	172.18.1.102	rch-test-05000-0...		157		8/1

IBM Tivoli Network Manager for IP Networks

Connectivity Based Root Cause Analysis

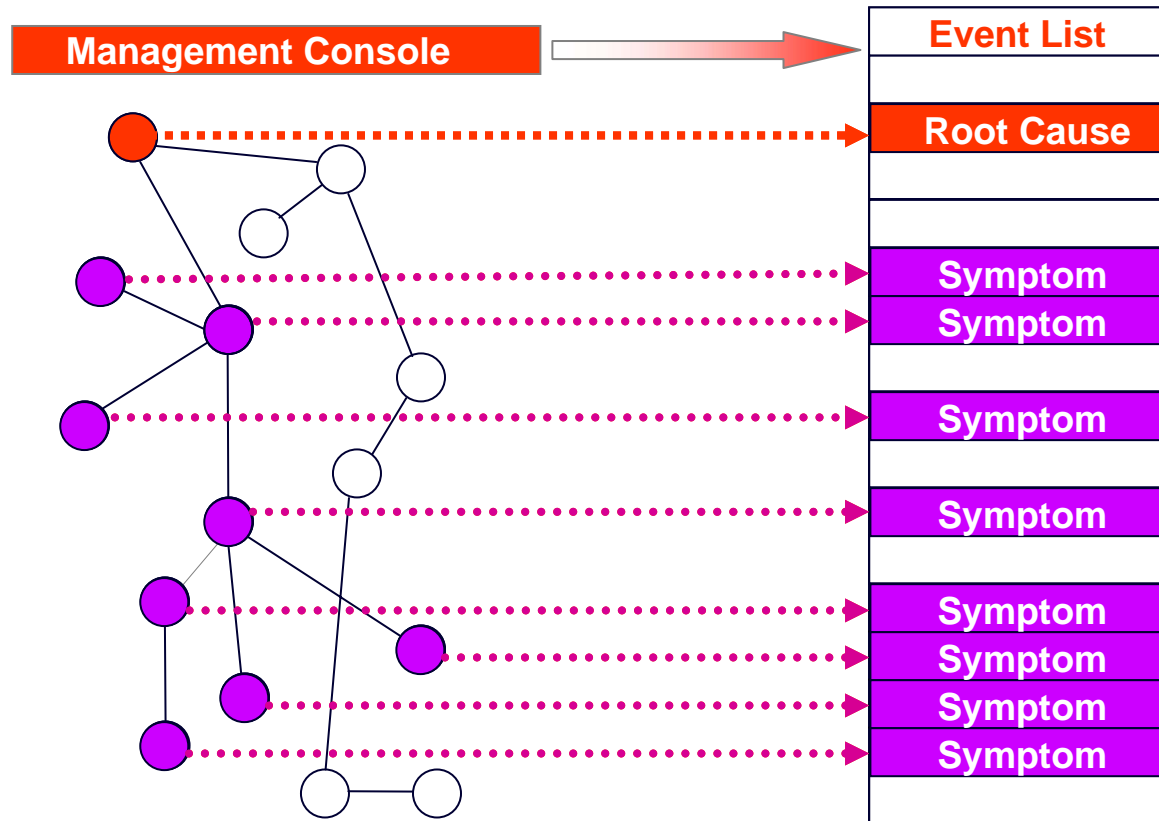
By understanding the relationships between devices it becomes possible to understand the relationships between the events that are originating from those devices



IBM Tivoli Network Manager for IP Networks

Connectivity Based Root Cause Analysis

By understanding the relationships between devices it becomes possible to understand the relationships between the events that are originating from those devices



IBM Tivoli Network Manager for IP Networks Connectivity Based Root Cause Analysis

The screenshot displays the IBM Tivoli Network Manager web interface in Microsoft Internet Explorer. The browser address bar shows the URL: `http://194.203.200.205/interop/index.html`. The page title is "NETCOOL®/Precision™".

On the left side, there is a navigation menu with the following items and counts:

- All Events: 36
- Critical: 34
- Major: 1
- Minor: 0
- Warning: 0
- Last 30min: 36
- Traps: 1
- Syslog: 0
- Security: 0
- Probe Watch: 0

The main content area displays a table of events. The table has the following columns: Node, Summary, CauseType, and Last. The table contains 34 rows, all of which are highlighted in red, indicating a critical status. Each row represents a "DVC Failed - Pings Complete: Timed out" event for a specific node.

Node	Summary	CauseType	Last
172.20.1.191	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:06 PM
172.20.1.174	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:15 PM
172.20.4.12	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:57 PM
172.20.2.12	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:55 PM
172.20.1.20	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:41 PM
172.20.18.41	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:50 PM
172.20.18.13	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:49 PM
172.20.8.4	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:54 PM
172.20.3.12	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:56 PM
172.20.18.11	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:48 PM
172.20.1.176	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:13 PM
172.20.1.180	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:09 PM
172.20.1.196	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:08 PM
172.20.1.2	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:39 PM
172.20.1.179	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:10 PM
172.20.1.221	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:04 PM
172.20.18.10	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:47 PM
172.20.1.247	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:00 PM
172.20.1.219	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:02 PM
172.20.1.177	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:12 PM
172.20.1.168	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:01 PM
172.20.1.189	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:05 PM
172.20.1.242	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:59 PM
172.20.1.220	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:03 PM
172.20.1.192	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:07 PM
172.20.28.13	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:53 PM
172.20.1.175	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:38:14 PM
172.20.1.252	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:58 PM
172.20.1.3	DVC Failed - Pings Complete: Timed out	Unknown	9/10/02 8:37:40 PM

At the bottom of the table, there is a summary bar showing "1" in a yellow box and "34" in a red box. Below this, it states "0 rows inserted, 4 rows updated, and 0 rows deleted." The "CauseType" column is labeled "root" and the "Last" column is labeled "194.203.200.205".

IBM Tivoli Network Manager for IP Networks Connectivity Based Root Cause Analysis

The screenshot displays the IBM Tivoli Network Manager for IP Networks web interface. The browser window title is "http://194.203.200.205/interop/index.html - Microsoft Internet Explorer". The page header includes the "NETCOOL®/Precision™" logo and navigation buttons for "Home", "Help", and "Logout".

On the left side, there is a filter menu with the following items:

- 36 All Events
- 1 Critical
- 0 Major
- 0 Minor
- 0 Warning
- 36 Last 30min
- 1 Traps
- 0 Syslog
- 0 Security
- 0 Probe Watch

The main content area shows a table of events with the following columns: Node, Summary, CauseType, Last, and C. The table contains 34 rows of data, with the first row highlighted in red:

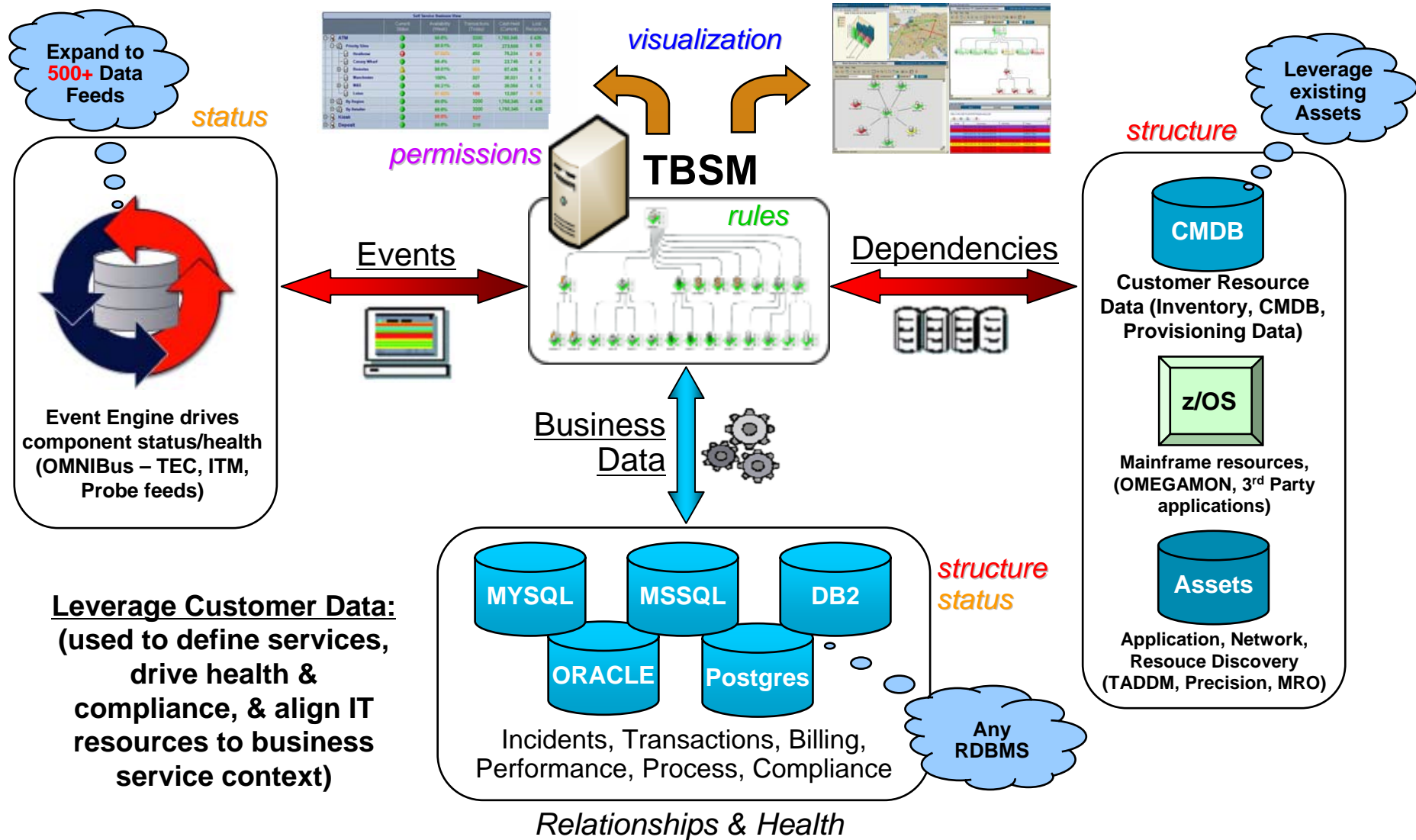
Node	Summary	CauseType	Last	C
172.20.1.3	Link Down, Keepalive failed (FastEthernet1/2)	Root Cause	9/10/02 8:37:34 PM	
172.20.1.174	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:15 PM	
172.20.4.12	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:57 PM	
172.20.2.12	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:55 PM	
172.20.1.20	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:41 PM	
172.20.18.41	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:50 PM	
172.20.18.13	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:49 PM	
172.20.8.4	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:54 PM	
172.20.3.12	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:58 PM	
172.20.18.11	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:48 PM	
172.20.1.176	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:13 PM	
172.20.1.180	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:09 PM	
172.20.1.196	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:08 PM	
172.20.1.2	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:39 PM	
172.20.1.179	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:10 PM	
172.20.1.221	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:04 PM	
172.20.18.10	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:47 PM	
172.20.1.191	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:06 PM	
172.20.1.247	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:00 PM	
172.20.1.177	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:12 PM	
172.20.1.168	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:01 PM	
172.20.1.189	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:05 PM	
172.20.1.242	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:59 PM	
172.20.1.220	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:03 PM	
172.20.1.192	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:07 PM	
172.20.28.13	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:53 PM	
172.20.1.175	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:38:14 PM	
172.20.1.252	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:58 PM	
172.20.1.3	DVC Failed - Pings Complete: Timed out	Symptom	9/10/02 8:37:40 PM	

At the bottom of the table, there is a summary bar showing "34" in a blue box and "1" in a red box, with the text "All Events" to the right. Below this bar, it states "0 rows inserted, 10 rows updated, and 0 rows deleted." and "root" is displayed in a red box.

The browser status bar at the bottom shows the URL "http://194.203.200.205-1/_tb37b/ael/Refresh?entities=AllEvents,57,×tamp=1031690337&frozen=false" and the time "1:39 PM".

Tivoli Business Service Management (TBSM) Business Service Management

TBSM 4.2 – High Level Architecture



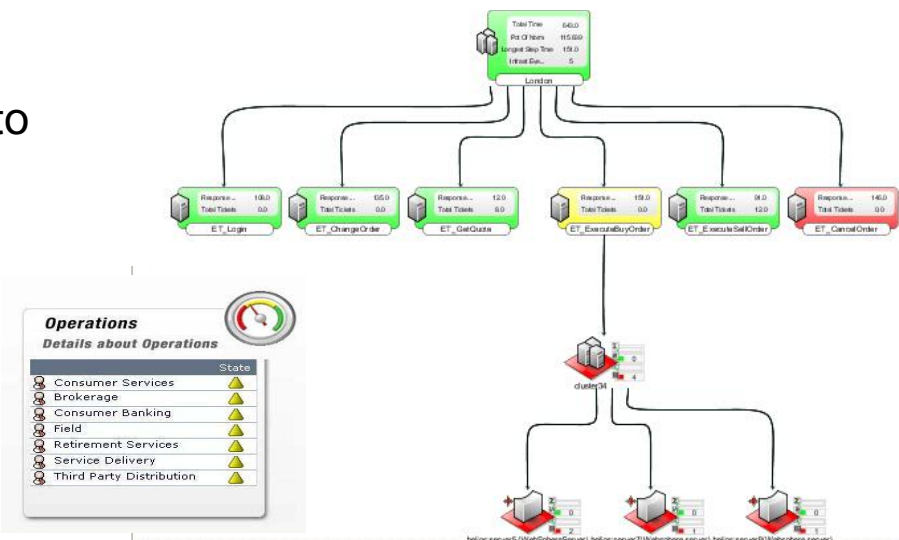
Tivoli Business Service Manager – TBSM 4.2

TBSM is Tivoli's Service Dashboard

- TBSM enables a service-centric approach to management

Capabilities include:

- Model any service
- Track real-time Service Level Agreements
- Custom business views & dashboards
- Service status/health from external sources
- Advanced numeric rules for calculations
- Dynamic key performance indicators (KPIs)
- Service definition from CMDB/inventory
- Tight BSM product integration:
 - ITCAM for ISM & ITM
 - TADDM, TSLA
 - OMNIbus & TEC



Service	State	Infrastructure	% Throughput vs. Baseline	ResponseTime	Historical Baseline	Total Tickets
ExchangeTrading	Green	Green	64%	805	521	71
Chicago	Green	Green	56%	1211	689	71
ET_Convert	Red	Red	60%	306	210	24
ET_Login	Red	Red	47%	747	353	0
ET_Transfer	Green	Green	79%	158	125	47
Hongkong	Green	Green	88%	399	393	0
OnlineBanking	Green	Green	85%	635	540	9
StockTrader	Green	Green	96%	635	612	22
London	Green	Green	104%	643	671	20
ET_CancelOrder	Red	Red	47%	146	69	0
ET_ChangeOrder	Red	Red	238%	135	197	0
ET_ExecuteBuyOrder	Yellow	Yellow	79%	151	120	0
cluster34	Green	Green				
helios.server5 (WebSphere)	Red	Red				
helios.server6 (WebSphere)	Green	Green				
helios.server7 (WebSphere)	Green	Green				
helios.server8 (WebSphere)	Red	Red				
ET_ExecuteSellOrder	Green	Green	247%	91	134	12
ET_GetQuote	Green	Green	250%	12	18	8
ET_Login	Green	Green	731%	108	142	0
New York	Green	Green	96%	555	542	31
Tokyo	Green	Green	89%	698	622	31
ET_CancelOrder	Green	Green	254%	101	196	7
ET_ChangeOrder	Red	Red	66%	218	144	4
ET_ExecuteBuyOrder	Green	Green	225%	112	140	6
ET_ExecuteSellOrder	Red	Red	61%	38	23	0
ET_GetQuote	Green	Green	78%	74	59	14
ET_Login	Red	Red	65%	155	101	0

TBSM 4.2 Web-based Dashboard

Multi-View Navigation

Active Service Navigator

Restricted User Views

The screenshot displays the TBSM 4.2 Web-based Dashboard interface. It features a top navigation bar with tabs for 'Executive Overview', 'Service Manager View', 'Application Infrastructure', and 'Network Infrastructure'. The main content area is divided into several sections:

- Equities Service Navigator:** A table listing various services and their performance metrics. The table includes columns for State, Infrastructure State, % Throughput vs. Baseline, ResponseTime, Historical Baseline, and Total Tickets.
- Service Canvas View:** A hierarchical diagram showing the structure of a service, with nodes representing different components and their relationships.
- Service Details:** A table providing detailed information about a specific service, including SLA, Events, and Rules.

Annotations with arrows point to specific features:

- Active Service Navigator:** Points to the 'Equities Service Navigator' table.
- Multi-View Navigation:** Points to the top navigation tabs.
- Restricted User Views:** Points to the 'Equities View' dropdown menu.
- Key Performance Indicators (KPIs):** Points to the '% Throughput vs. Baseline' column in the service navigator table.
- Dynamic Status Filter:** Points to the 'Levels Down' and 'Levels Up' controls in the Service Canvas View.

Service	State	Infrastructure State	% Throughput vs. Baseline	ResponseTime	Historical Baseline	Total Tickets
OnlineTrader	Green	Green	93%	463	432	125
London	Green	Green	92%	545	505	30
ET_CancelOrder	Red	Red	50%	122	61	0
ET_ChangeOrder	Green	Green	113%	125	141	0
ET_ExecuteBuyOrder	Yellow	Yellow	77%	127	98	0
ET_ExecuteSellOrder	Green	Green	122%	69	84	18
ET_GetQuote	Green	Green	150%	12	18	12
ET_Login	Green	Green	114%	90	102	0
New York	Green	Green	100%	373	374	38
Tokyo	Green	Green	88%	472	418	57
ExchangeTrading	Green	Green	62%	615	381	107
Chicago	Yellow	Yellow	54%	933	510	107
HongKong	Yellow	Yellow	85%	297	252	0
ET_Convert	Red	Red	46%	99	46	0
ET_Login	Green	Green	156%	101	157	0
ET_Transfer	Red	Red	50%	97	49	0
OnlineBanking	Green	Green	82%	424	349	4
Chicago	Green	Green	90%	299	271	0
HongKong	Green	Green	77%	550	428	14
ET_CheckAccountBalance	Green	Green	100%	81	81	0
ET_Deposit	Red	Red	69%	162	112	0
ET_Login	Yellow	Yellow	76%	307	235	0
ET_Transfer	Green	Green	0%	0	0	14

Key Performance Indicators (KPIs)

Dynamic Status Filter

INTEGRATED VISUALIZATION

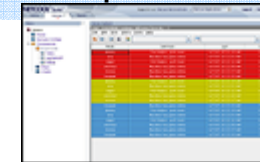
Tivoli Integration Portal (TIP)



Common Application Server

- Webtop
- TBSM
- Network Manager
- Tivoli Common Reorting

Webtop



Web based event views

Tivoli Common Reporting



Historical Reporting

ObjectServer



TDW



Archive DB

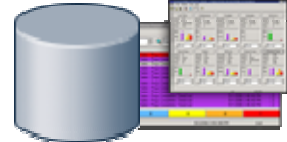


3rd Party Trouble Ticketing

G ateways

OMNibus

Desktop



ObjectServer

TBSM4.x



Business & Service Modeling

Data Fetchers

- Middleware
- Web Services
- Applications
- DBs
- etc...

DSAs

Tivoli Security Operations Manager



Security Management

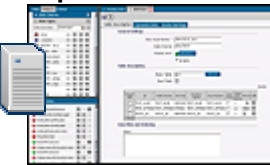
Probes

- SNMP Traps
- Logs
- TCP Socket
- 3rd party APIs
- TEC
- etc...

Monitors

- HTTP
- LDAP
- SAA
- TFTP
- TCP Port
- etc...

Impact



Advanced Correlation & Integration

Proviso



Performance Management

System Agents

- ITCAM (ISM)
- ITM (ASM)

IT Infrastructure

- Devices
- Systems & Applications
- 3rd Party EMSs / Agents
- etc...

Polling

Events

Synthetic Transactions

Discovery & Monitoring

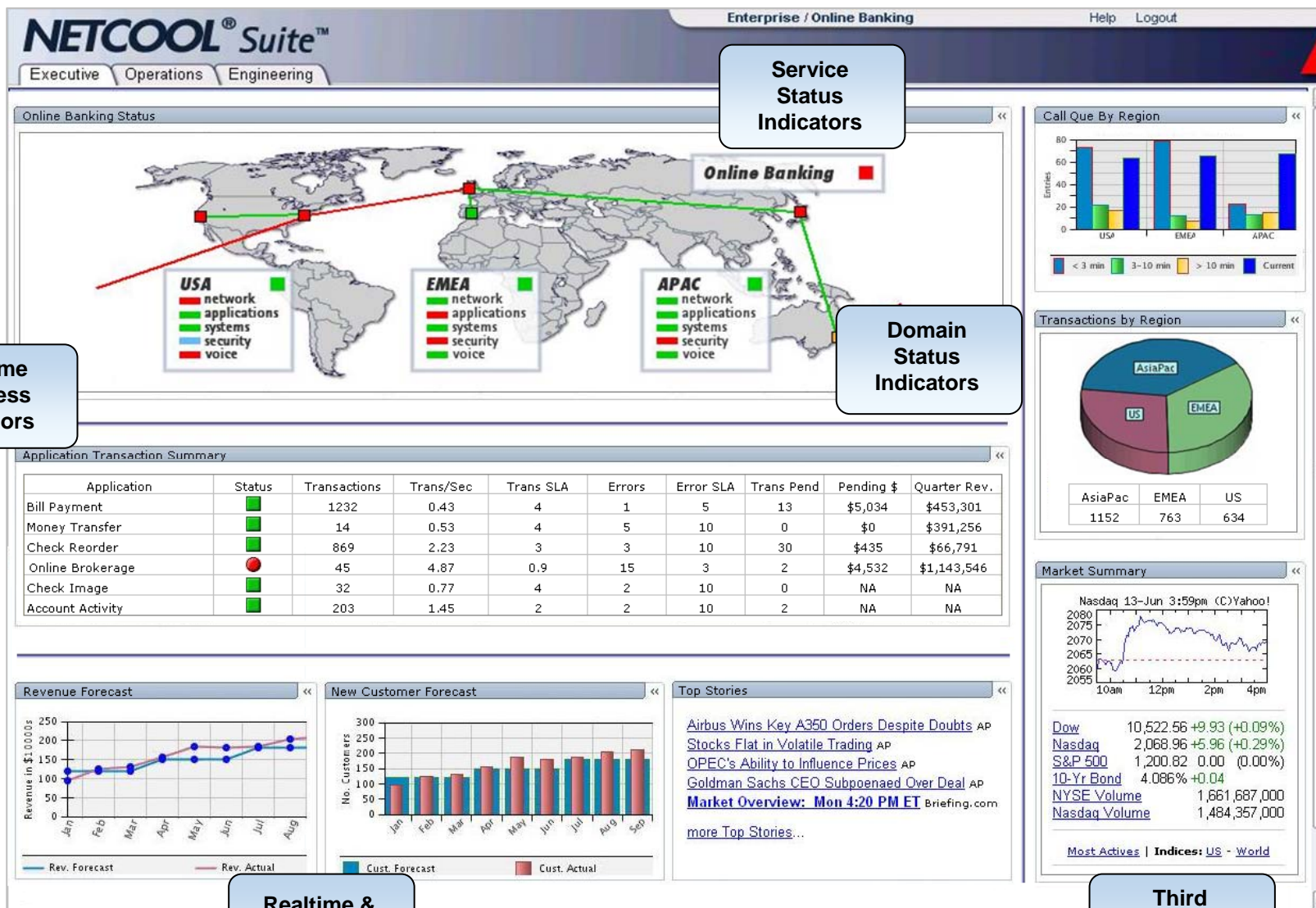
Network Manager



Network Modeling (Layer 1/2/3)
Network Root Cause Analysis

COLLECTION

Service Dashboard





IBM Software Partner Academy Program

Kontakt Daten:

Alexander Besemer

Channel Brand Sales Tivoli

Email: alexander.besemer@de.ibm.com

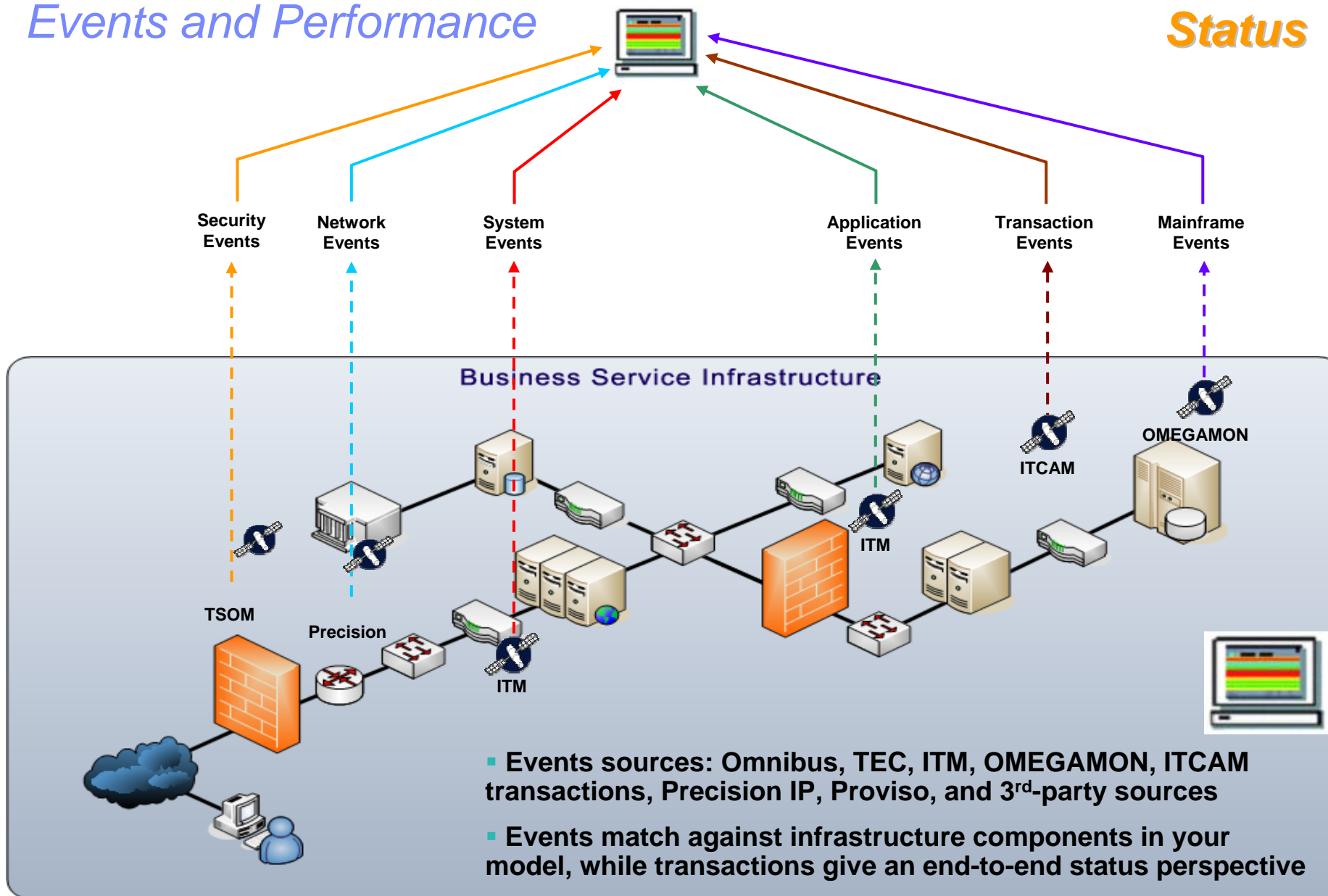
Tel: +49 175 588 2942

Vielen Dank für Ihre Aufmerksamkeit!

Beispiel Szenario

Events and Performance

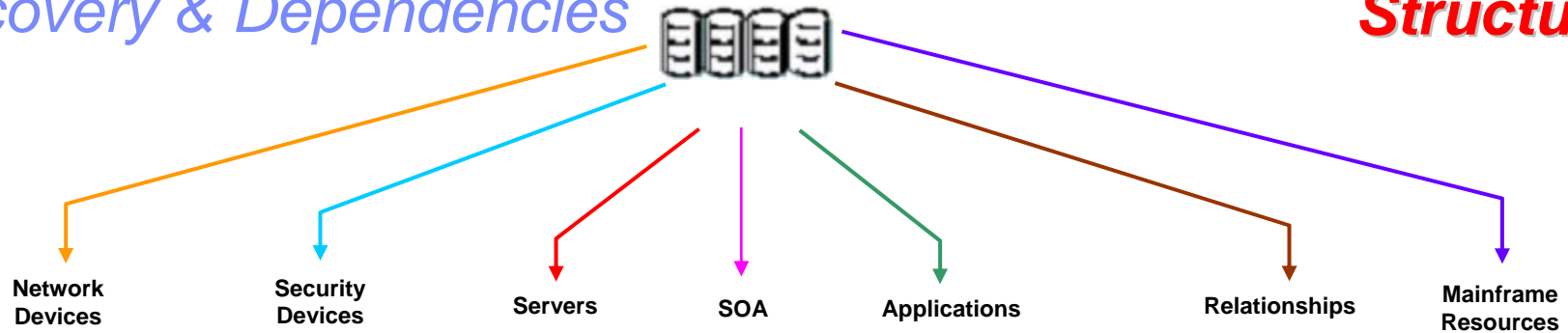
Status



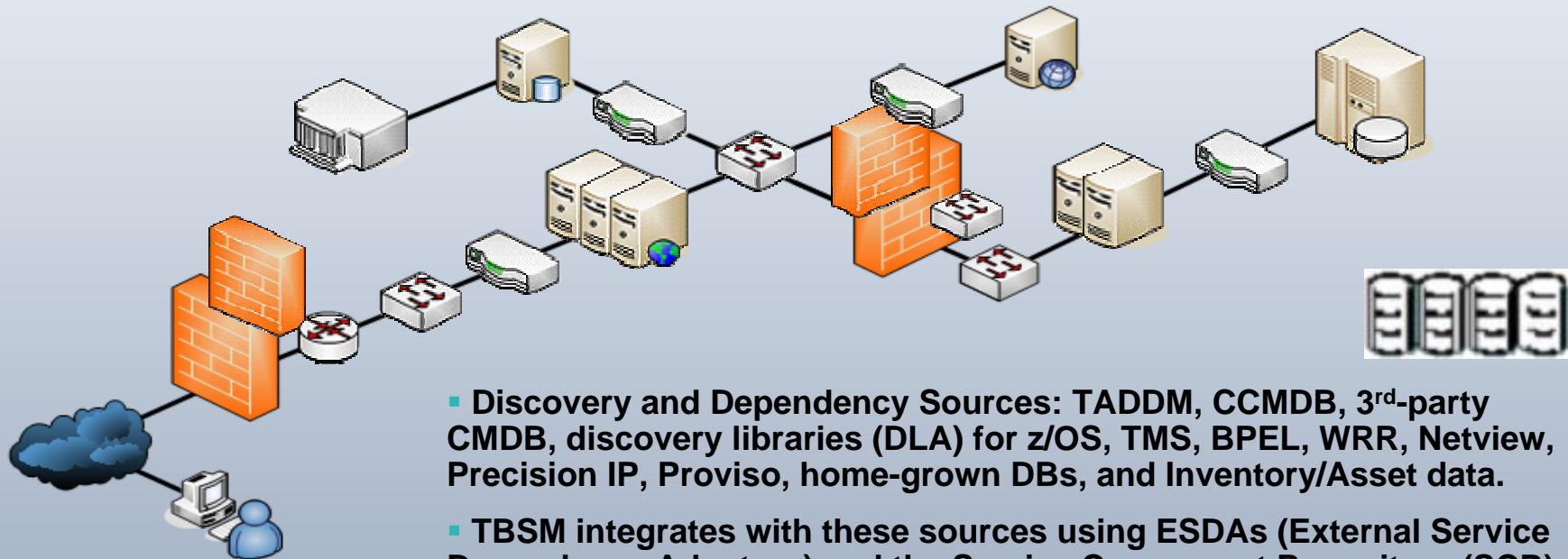
- Events sources: Omnibus, TEC, ITM, OMEGAMON, ITCAM transactions, Precision IP, Proviso, and 3rd-party sources
- Events match against infrastructure components in your model, while transactions give an end-to-end status perspective

Discovery & Dependencies

Structure



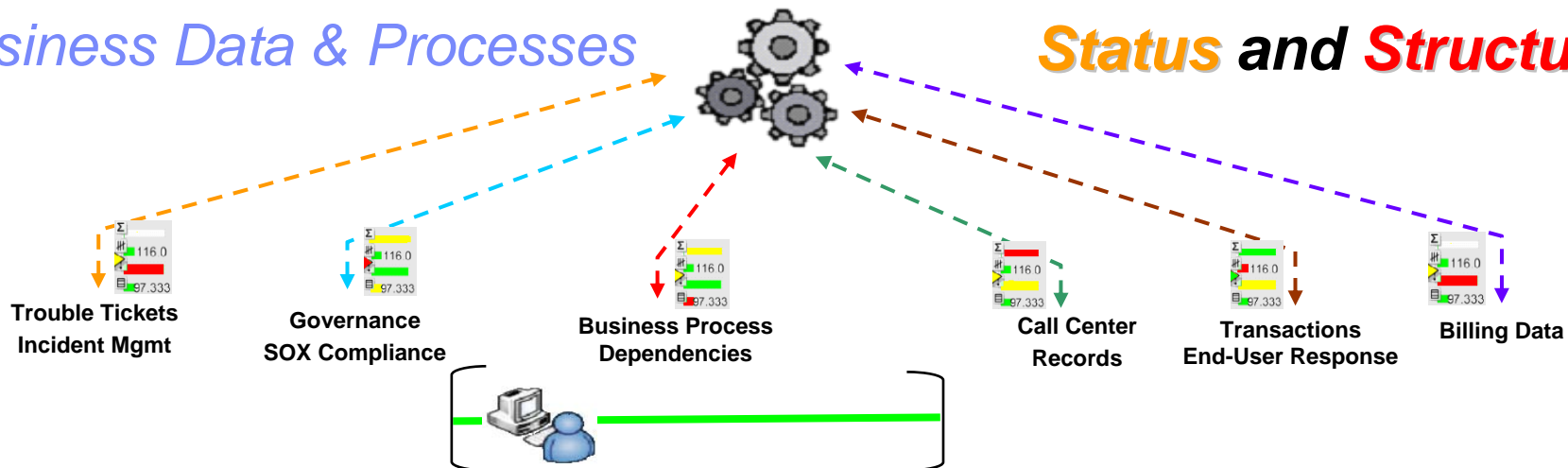
Business Service Infrastructure



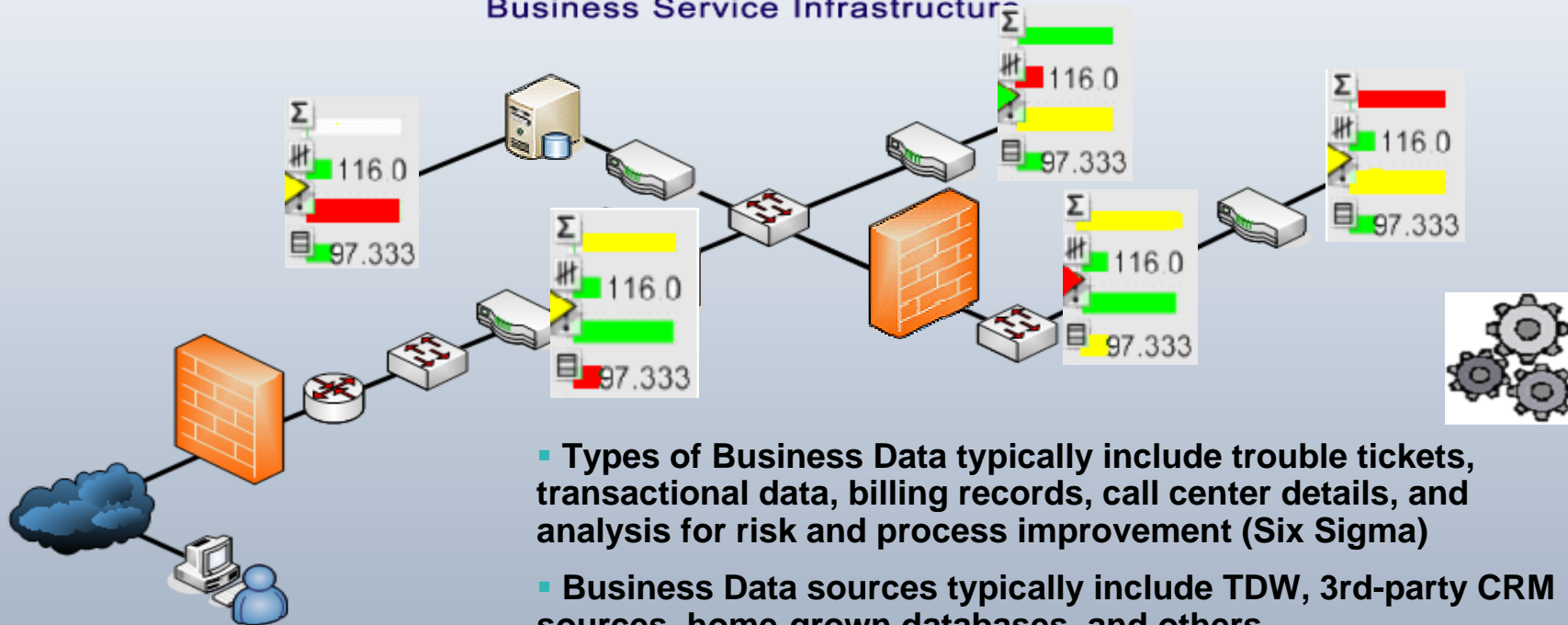
- Discovery and Dependency Sources: TADDM, CCMDB, 3rd-party CMDB, discovery libraries (DLA) for z/OS, TMS, BPEL, WRR, Netview, Precision IP, Proviso, home-grown DBs, and Inventory/Asset data.
- TBSM integrates with these sources using ESDAs (External Service Dependency Adaptors) and the Service Component Repository (SCR)

Business Data & Processes

Status and Structure



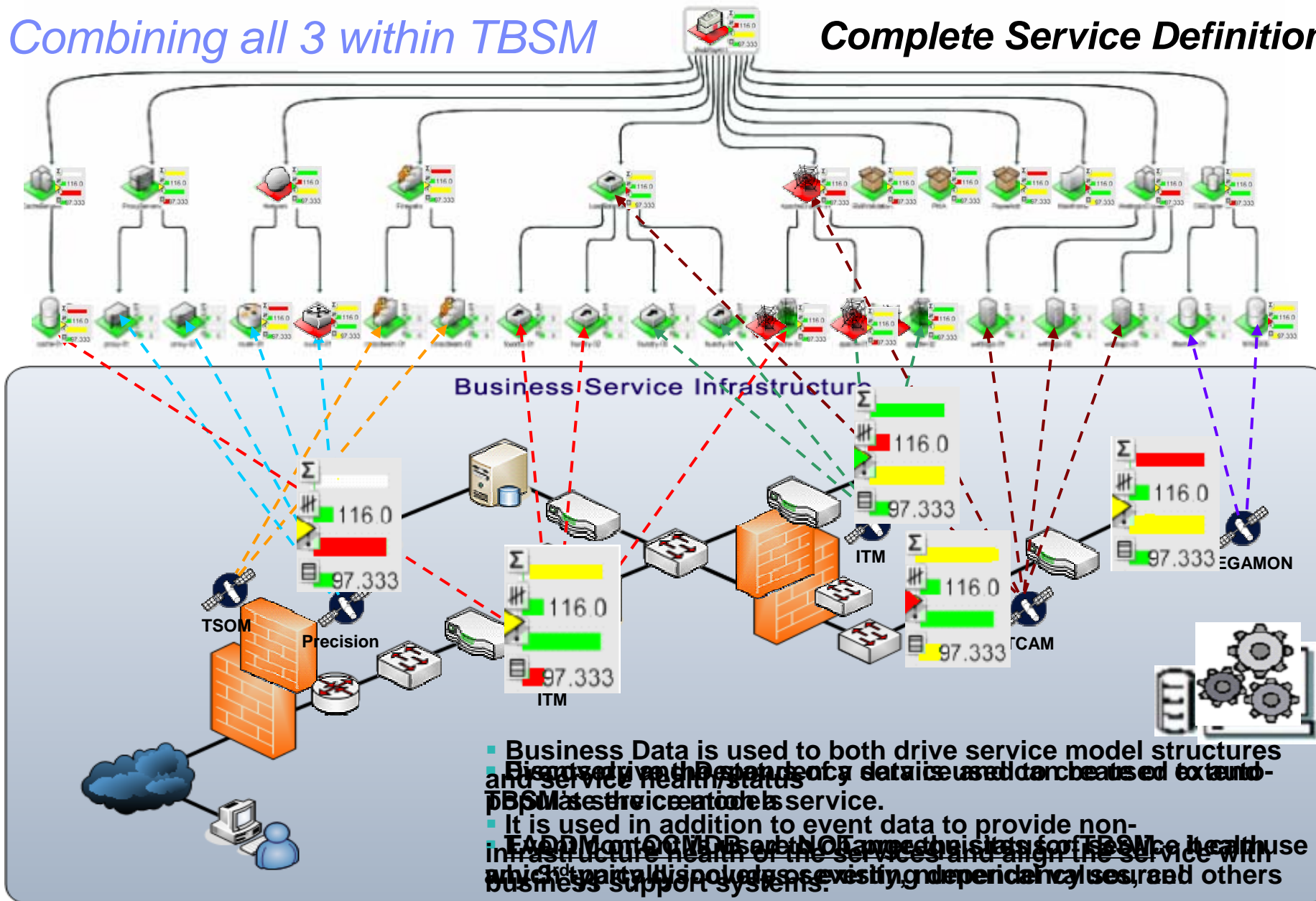
Business Service Infrastructure



- Types of Business Data typically include trouble tickets, transactional data, billing records, call center details, and analysis for risk and process improvement (Six Sigma)
- Business Data sources typically include TDW, 3rd-party CRM sources, home-grown databases, and others

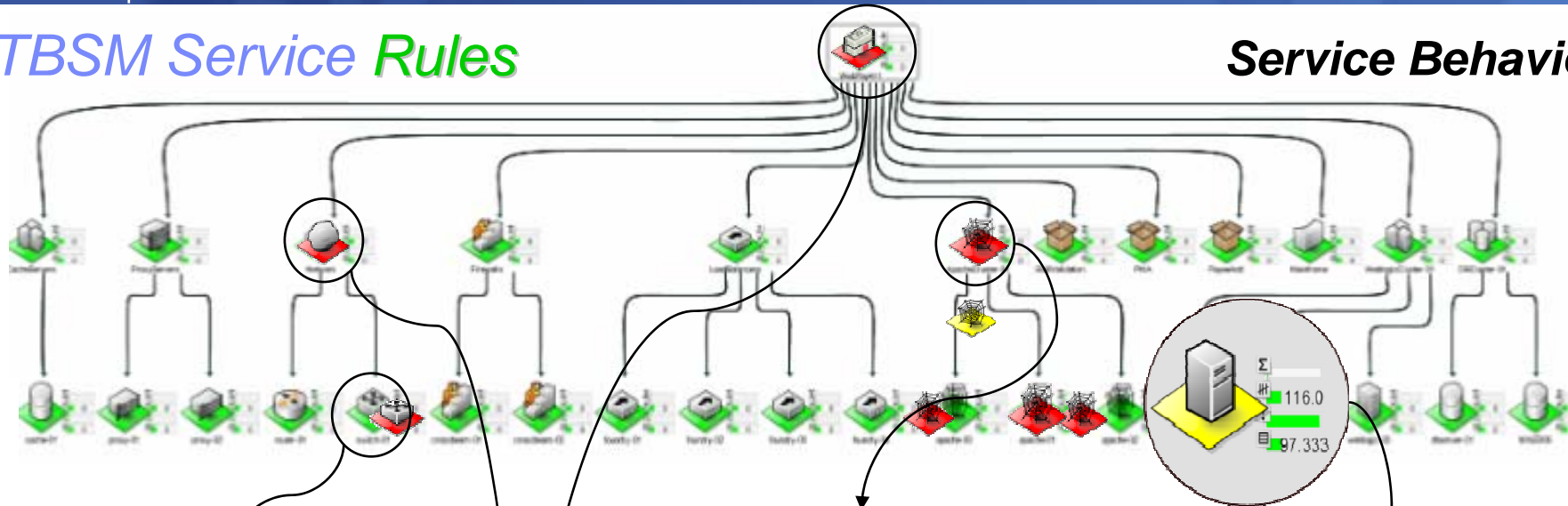
Combining all 3 within TBSM

Complete Service Definition



TBSM Service Rules

Service Behavior



Event Based Status Rule
 Status derived from:

- Incoming Status Events
- External Business Data

Dependency Rule (% of children)

- Status derived from a % of children

Dependency Rule (Any Child):

- Status derived from status of children

Numerical Rules

- Used to obtain a numerical value for output
- Response time, Number of Trouble Tickets

Numerical Aggregation Rules

- Value is calculated using children's numerical values
- Avg, Sum, Min, Max or Weighted Avg

Service Measurement

The screenshot shows the 'Service Viewer' window for 'ET_StockTrader_London'. The hierarchy includes a root service node, several intermediate nodes, and leaf nodes representing different components. A 'Service Details' table at the bottom provides specific SLA metrics for two instances of 'BigBazWebFarm'.

ServiceName	Best Case %	Downtime Time Left	TWin	Penalty
BigBazWebFarm	99.99%	00:03:47s	Apr-2004	5.15
BigBazWebFarm	99.736%	00:03:47s	12-Apr-2004	5.15

SLA Rules

- Can be defined for:
 - Services
 - Applications
 - Devices
- 3 Types of SLAs
 - Instance
 - Cumulative
 - Violation Count

SLA Metrics

- Availability
- Downtime (MTTR)
- Penalties (\$\$\$)

Service Visualization

Visualization of Services:

- Dashboard Creation (Gauges)
- System/Component (Organizational) Visualization
- Service maps & relationships with dependencies status
- Chart and Table Reports business data
- Gauges for service data & business data
- Drill down on sub-services
- Visio-like layouts, with live status feeds
- Use map layers for map control
- User/Role permission control

