Tivoli software

IBM

IBM Corporation / SWG / Tivoli

Le Mainframe System z au coeur des exploitations

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Jg_weyer@fr.ibm.com – Team zSeries

ON DEMAND BUSINESS™

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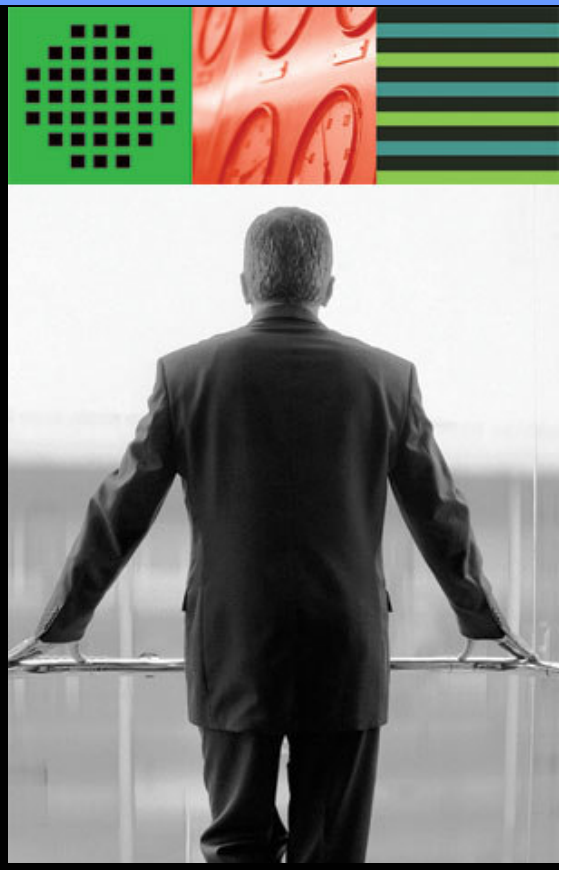
AGENDA

- Vision IBM « IT Service Management »
- Virtualisation: accounting & reporting (TUAM)
- Nouveautés Supervision et Automatisation zOS
- Virtualisation: compliance SW (TLCM)
- Questions / Réponses



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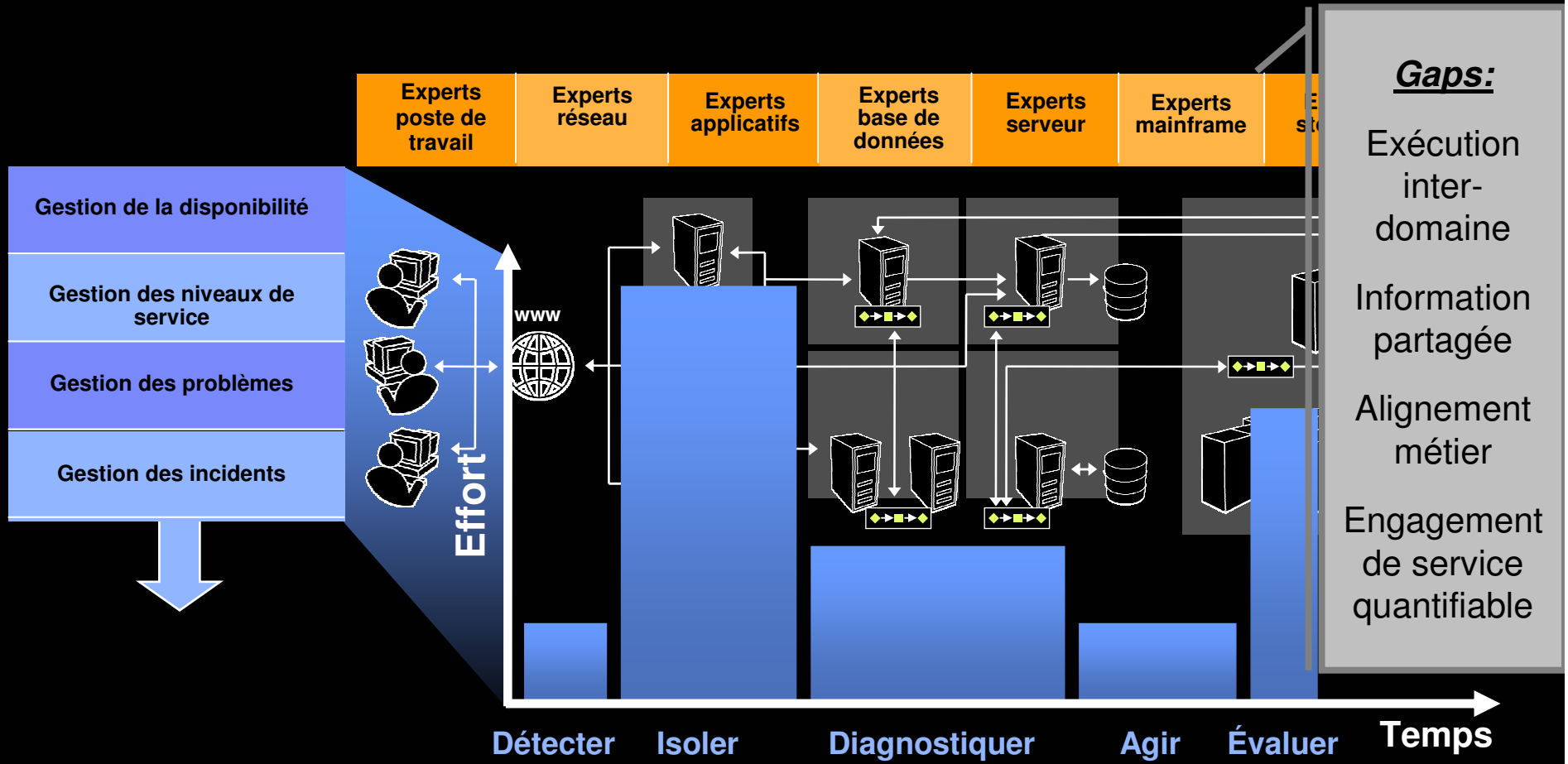
Concilier coûts et réactivité à travers les domaines

« Les solutions traditionnelles atteignent leurs limites, elles renforcent trop souvent le principe des silos et limitent l'efficacité des processus IT»



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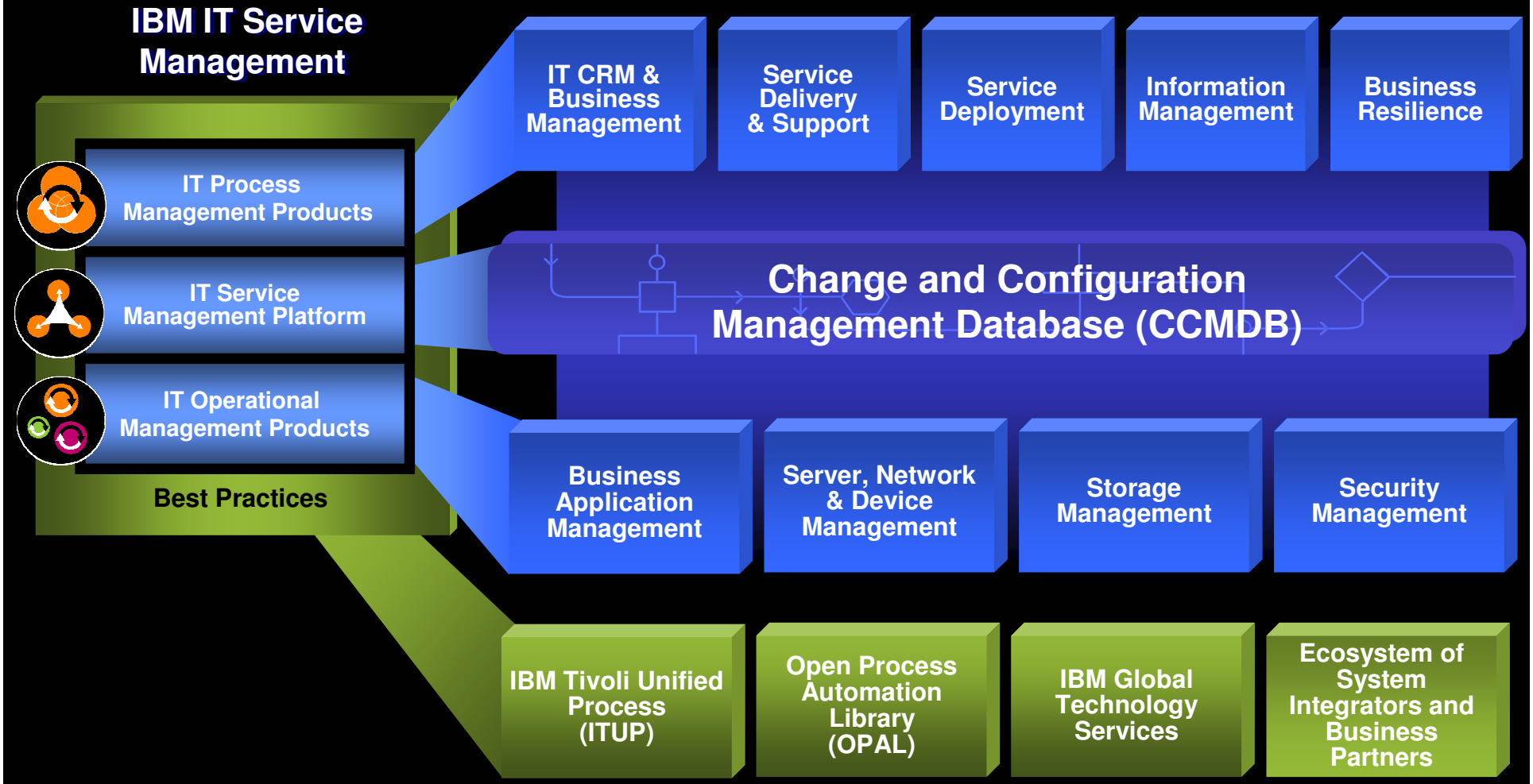
Une approche globale : IT Service Management



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IT Service Management

Tivoli System Automation
NetView for z/OS, TWS

IT CAM family

OMEGAMON XE family

High Availability Management

Composite Application Management

Performance Management

Tivoli Enterprise Portal

End-to-End Systems Management

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Le management de “bout en bout” de l’ infrastructure

Portfolio Tivoli

IBM Tivoli Monitoring v6.1

OMEGAMON XE on z/OS v4.1.0

OMEGAMON XE on IMS v4.1.0

OMEGAMON XE for DB2 PE/PM v4.1.0

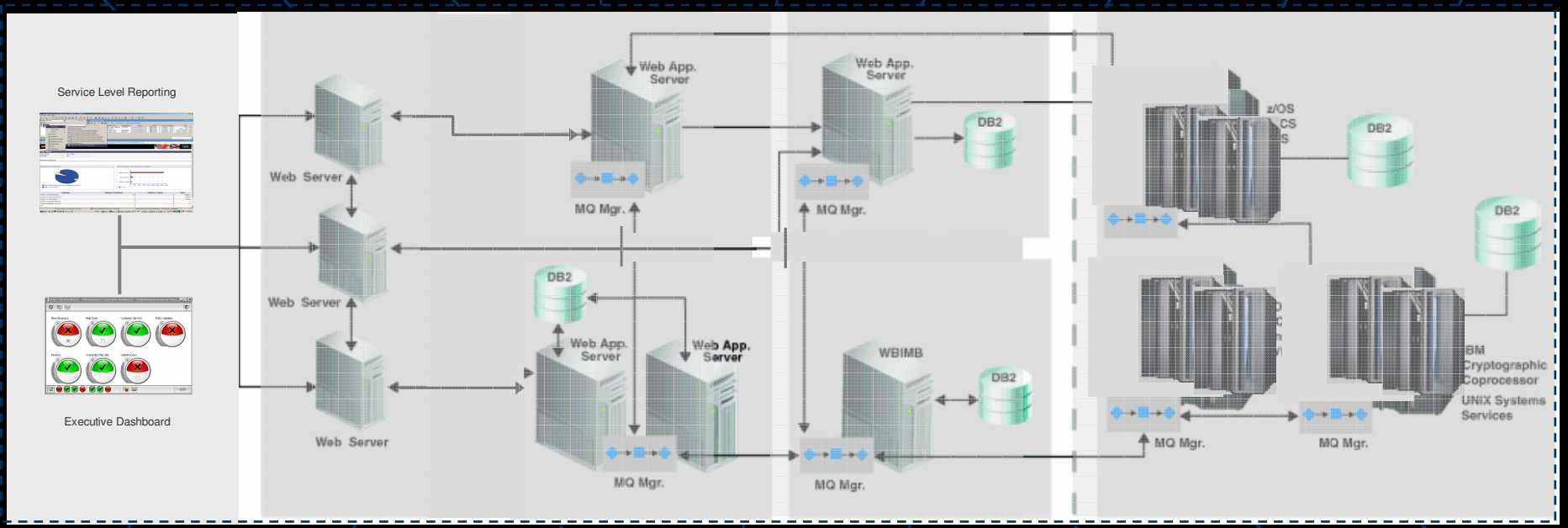
OMEGAMON XE for CICS & IMS v4.1.0

OMEGAMON XE for MF Networks v4.1.0

OMEGAMON XE for Storage v4.1.0

License Compliance Manager for z/OS v4.1

Contract Compliance Manager v3.7



OMEGAMON XE for Messaging v6.0.0

Composite Application Manager for WebSphere V6.1

Composite Application Manager for R.T. Tracking V6.1

Composite Application Manager for SOA V6.1

NetView on z/OS v5.2

System Automation for z/OS 3.1

Workload Scheduler for z/OS 8.3

Usage and Accounting Manager v6.1

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IBM Corporation / SWG / Tivoli

Virtualisation: accounting & reporting: Tivoli Usage & Accounting Manager (ex-CIMS)

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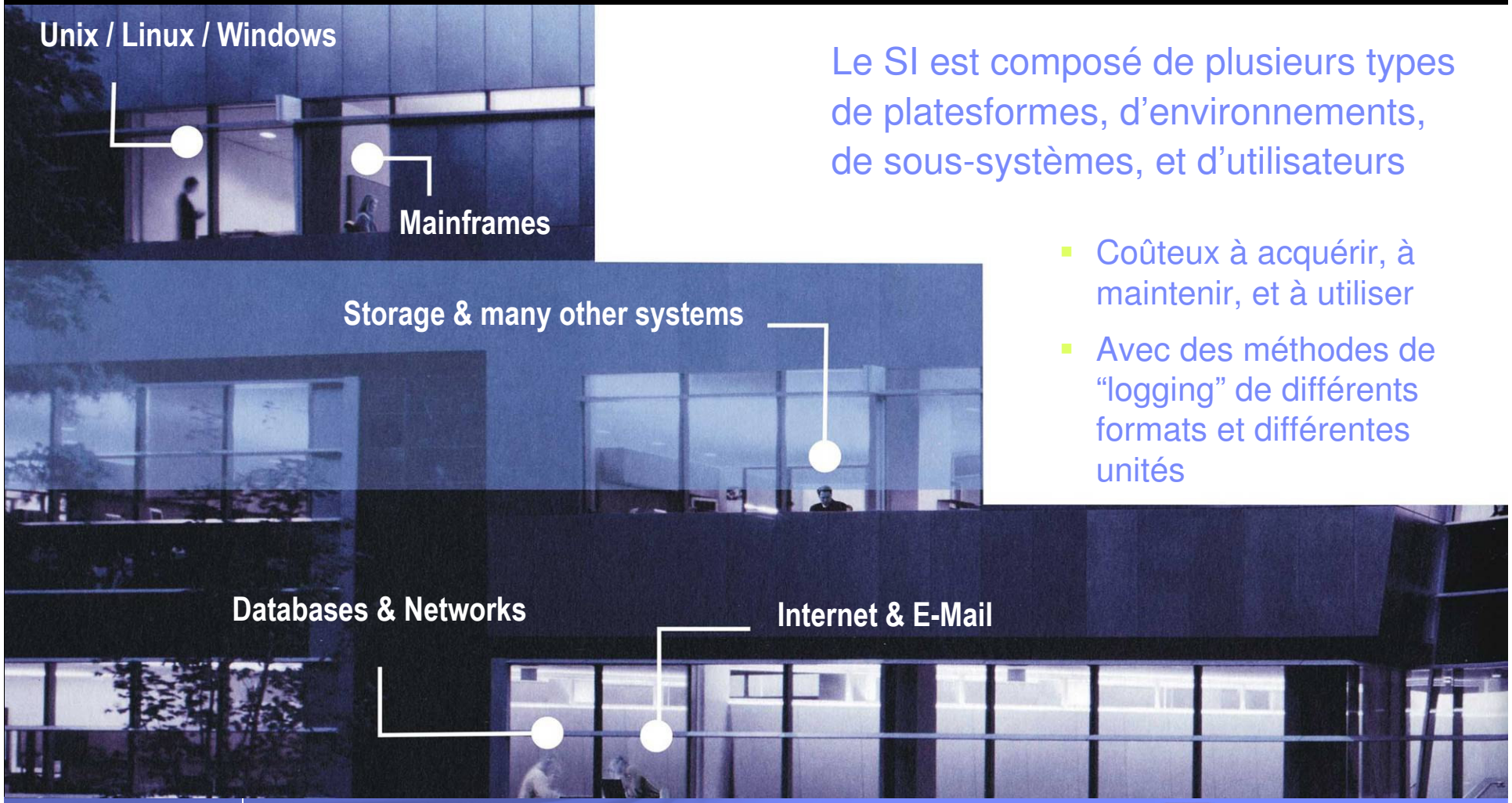
Quel est le problème ?

Difficulté pour affecter le coût, l'utilisation, le prix



Le SI est composé de plusieurs types de platesformes, d'environnements, de sous-systèmes, et d'utilisateurs

- Coûteux à acquérir, à maintenir, et à utiliser
- Avec des méthodes de "logging" de différents formats et différentes unités

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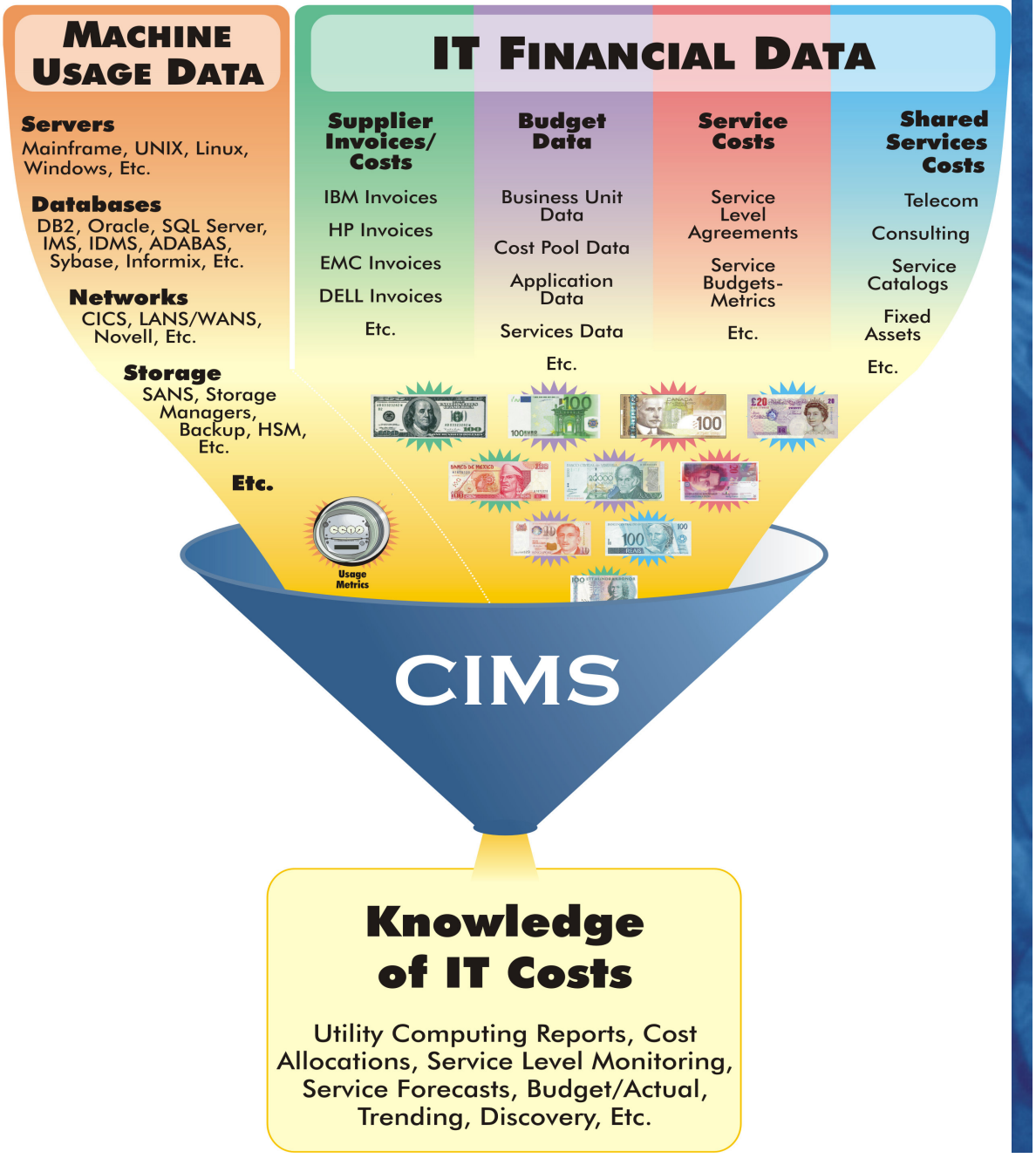
TUAM est
un entonnoir

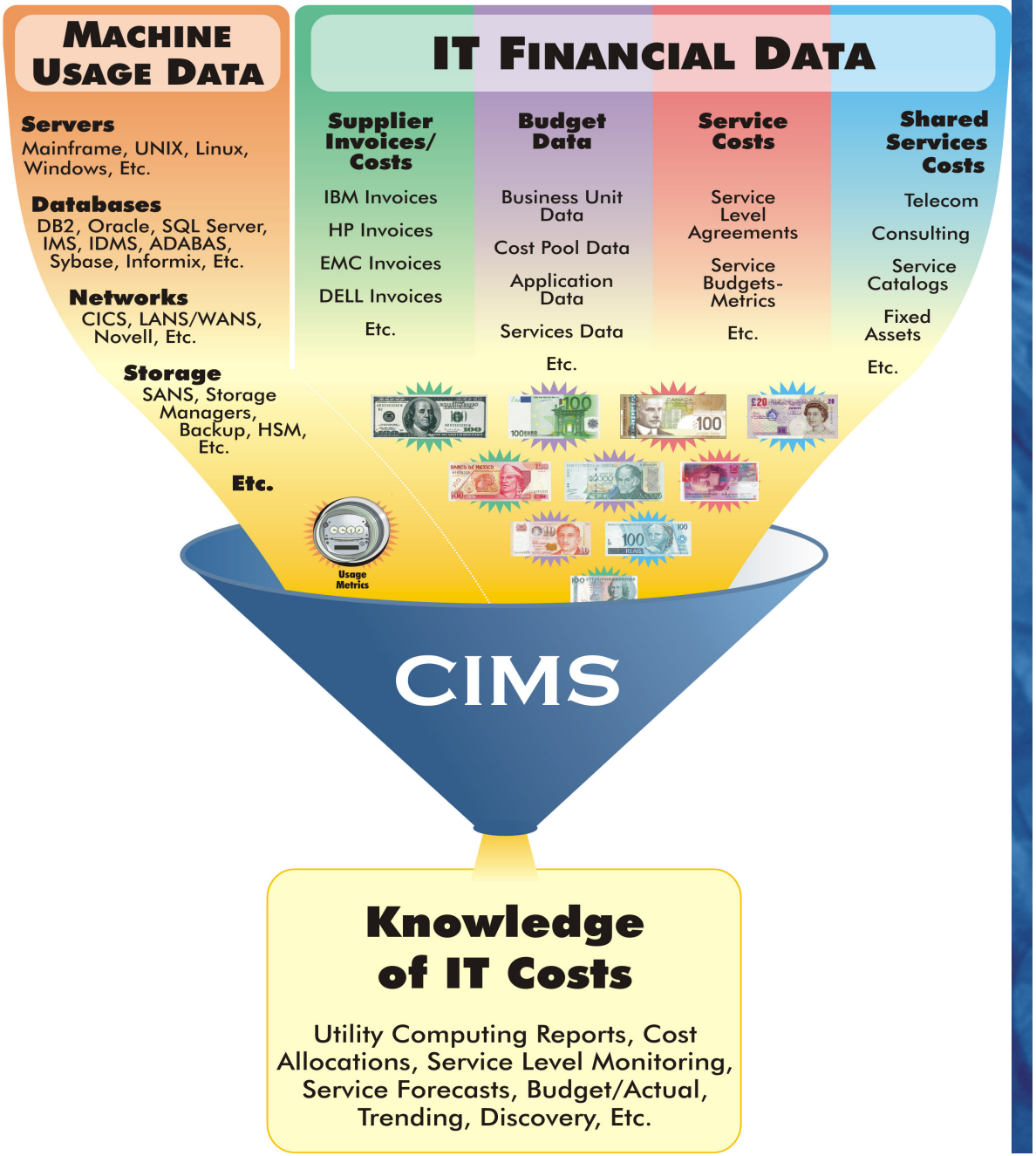
CIMS – Know What IT Costs



TUAM est
un entonnoir…

… qui reçoit les
données
« brutes » en
provenance
des différents
environnements

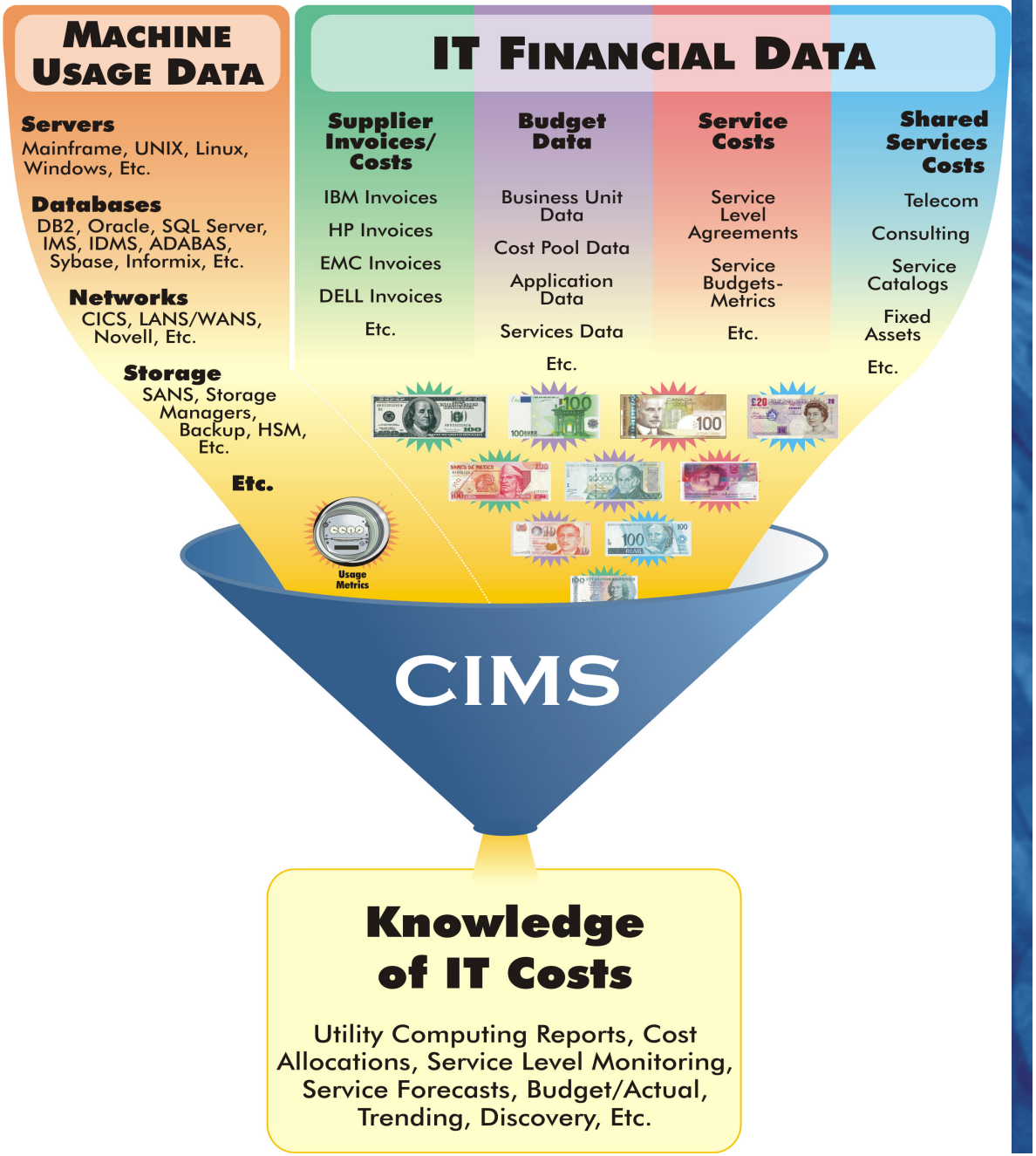
CIMS – Know What IT Costs



TUAM est
un entonnoir

Pendant le
traitement des
données,
les informations
permettant
d'identifier
l'utilisateur,
sont analysées

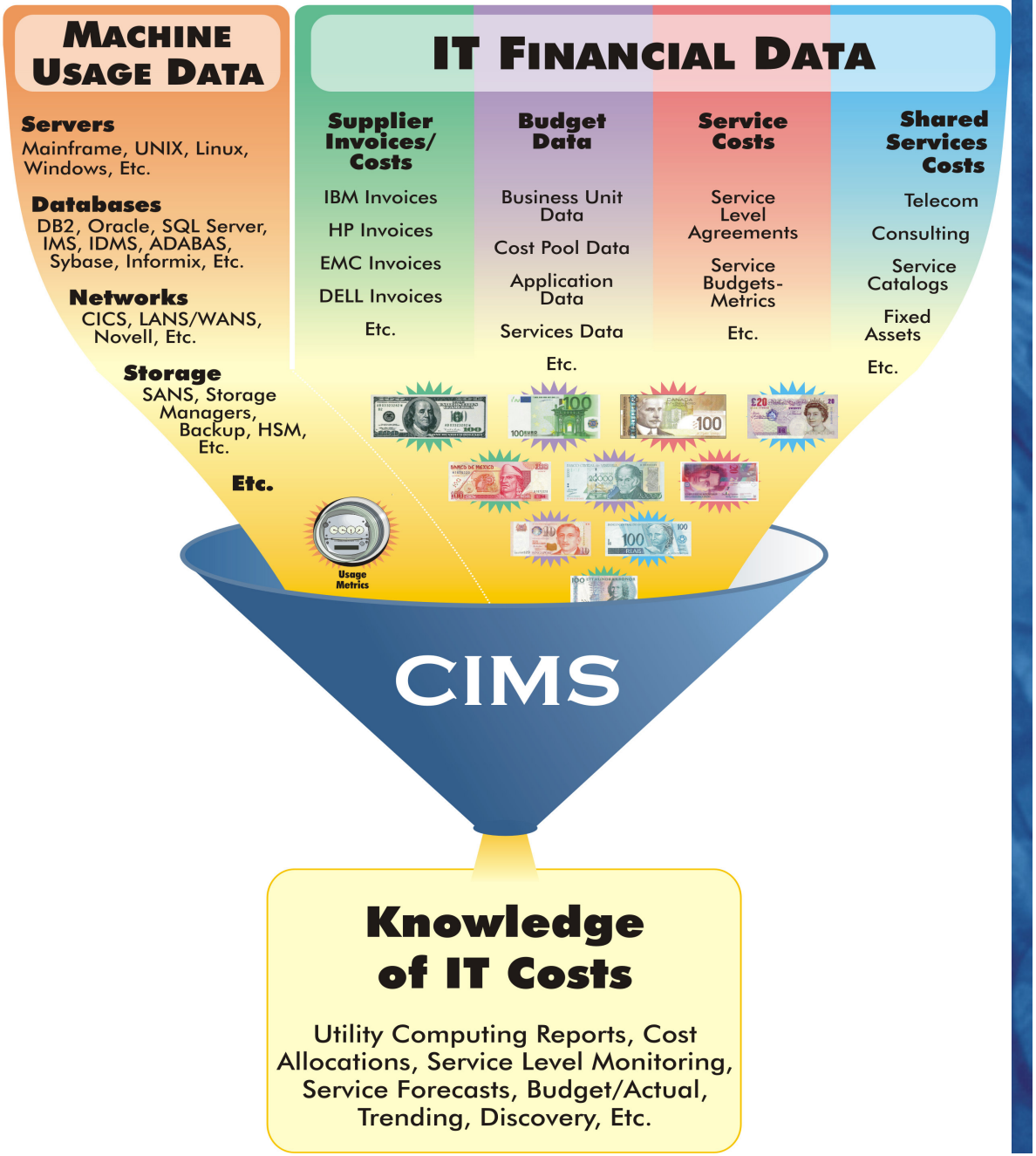
CIMS – Know What IT Costs

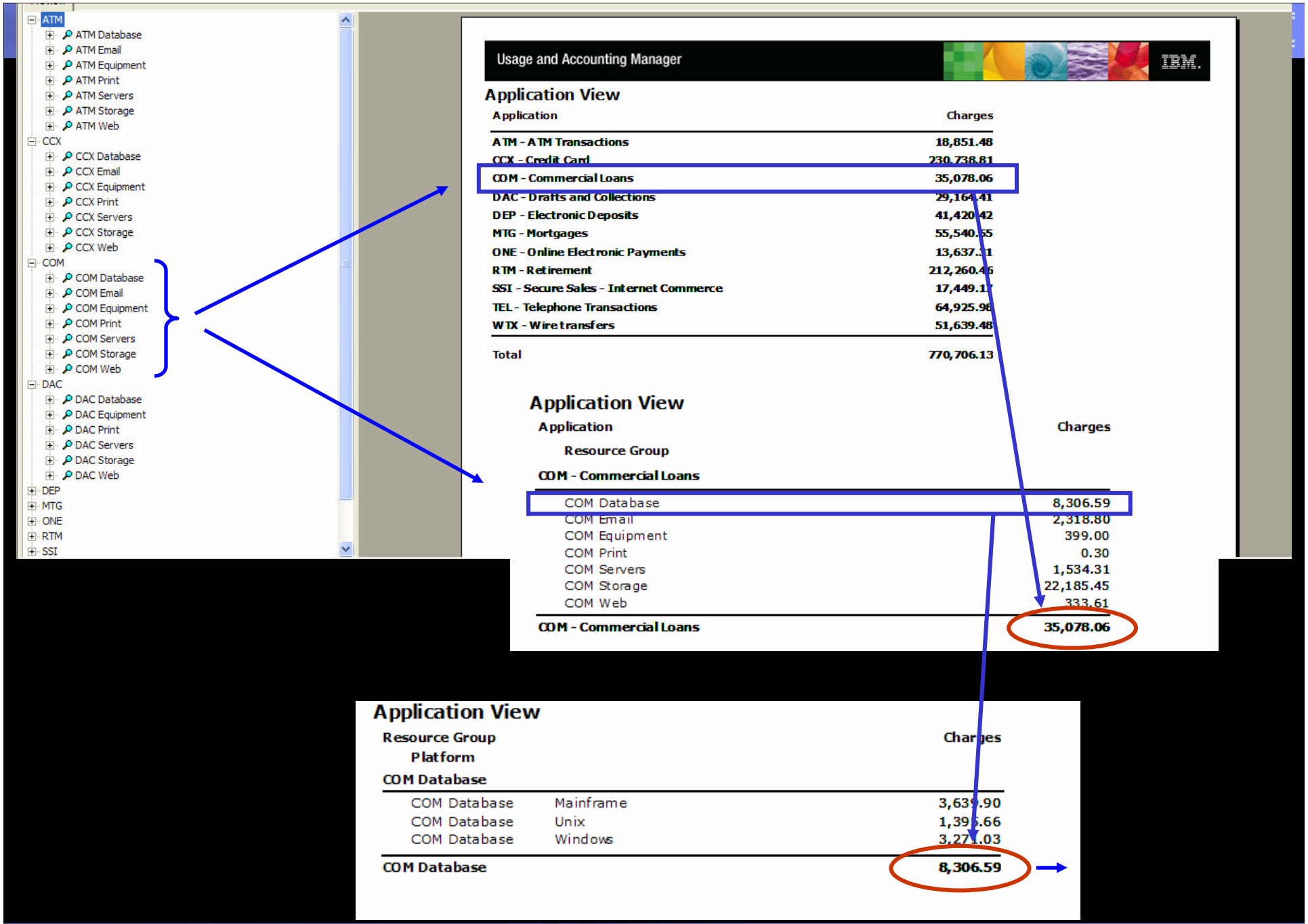


TUAM est
un entonnoir

Quand
les données
ressortent de
l'entonnoir,
elles sont
prêtes à être
utilisées pour
la comptabilisation
et la facturation
des ressources

CIMS – Know What IT Costs





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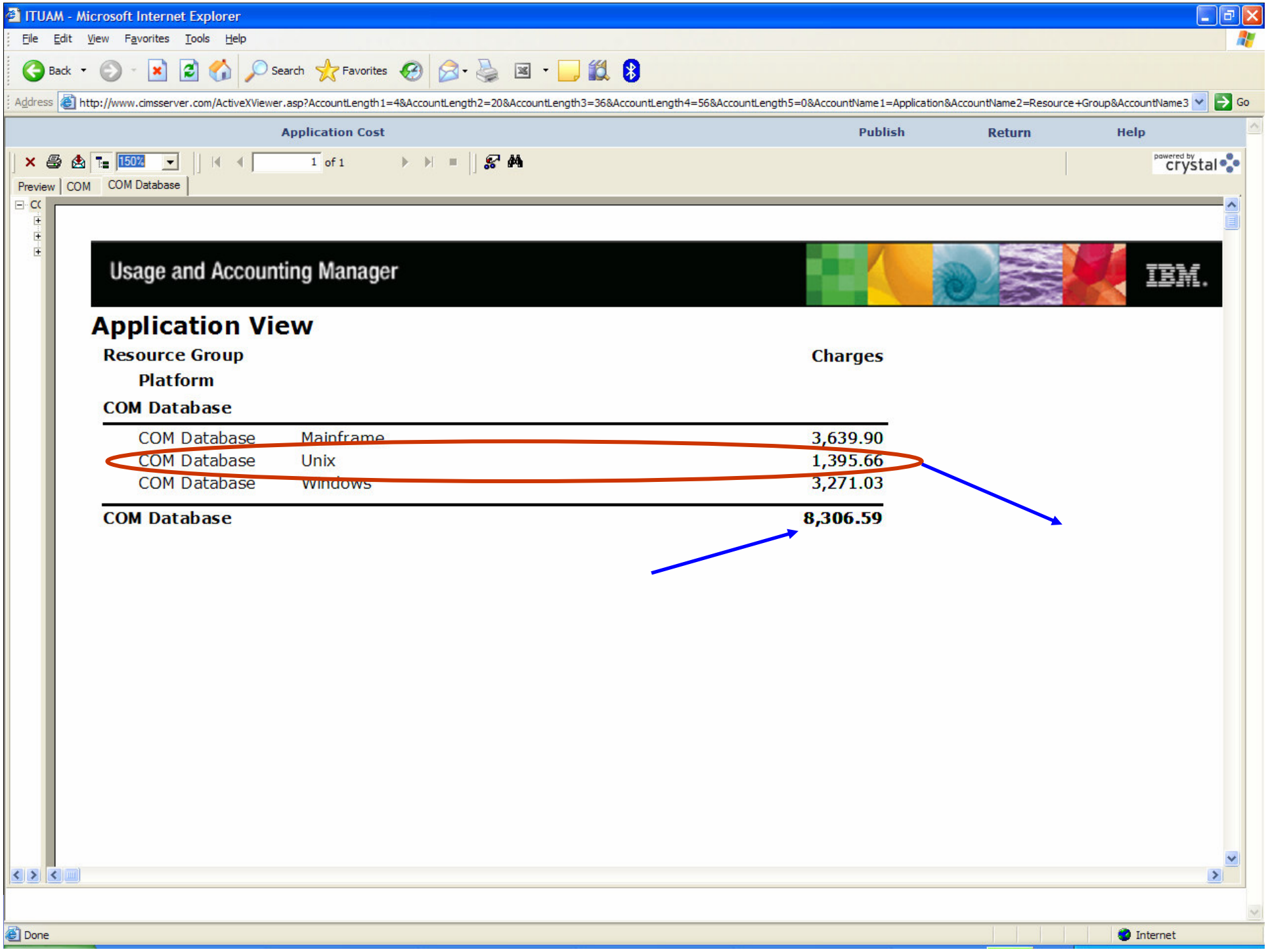
ITUAM - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
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Go
Application Cost
Publish
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Help
150%
1 of 1
powered by crystal
Preview
COM
COM Database
Usage and Accounting Manager
IBM.
Application View
Resource Group
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Platform
COM Database
COM Database Mainframe 3,639.90
COM Database Unix 1,395.66
COM Database Windows 3,271.03
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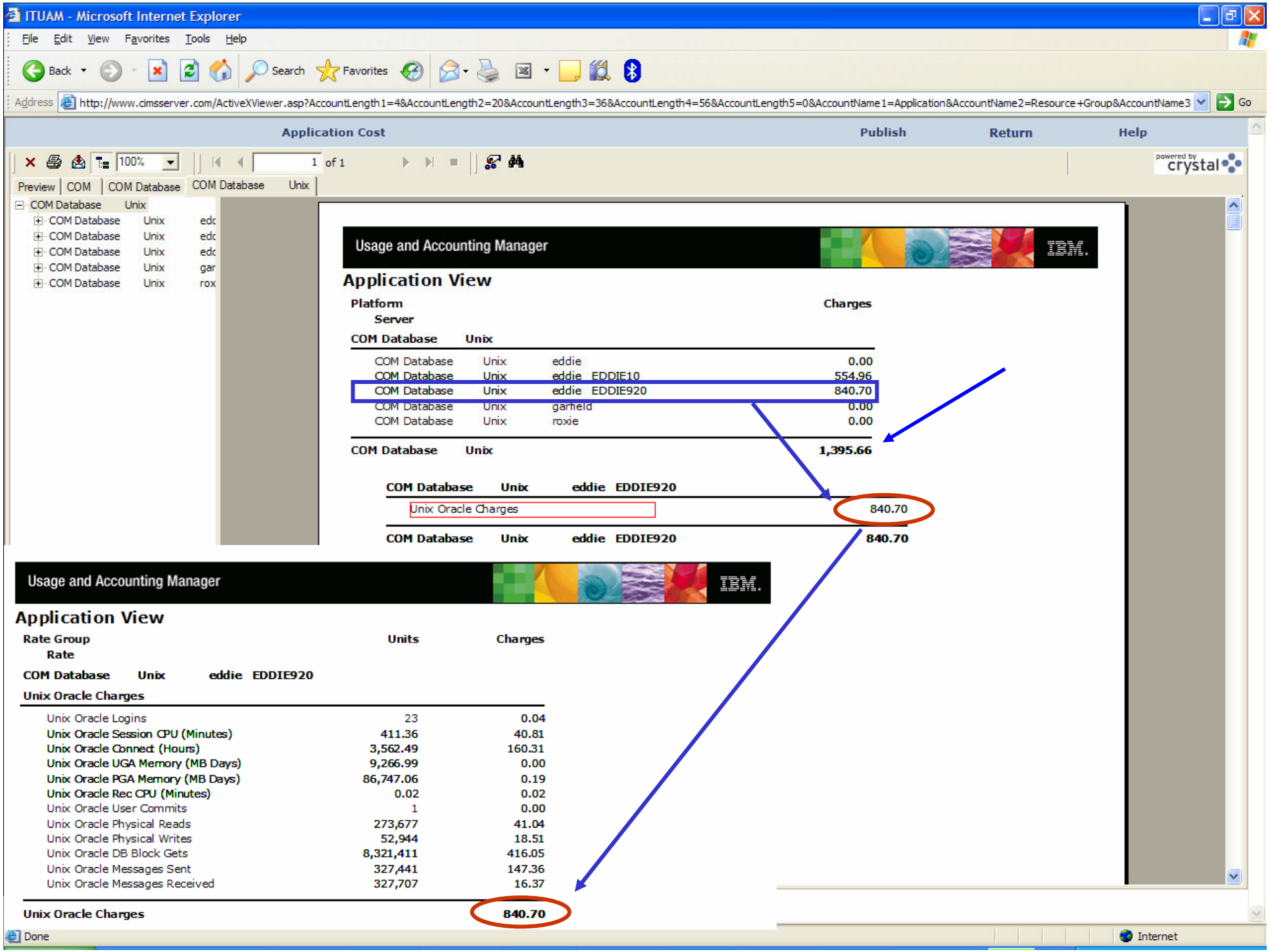
ITUAM - Microsoft Internet Explorer
File Edit View Favorites Tools Help
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COM Database Unix eddie EDDIE920
Unix Oracle Charges 840.70
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Usage and Accounting Manager
IBM.
Application View
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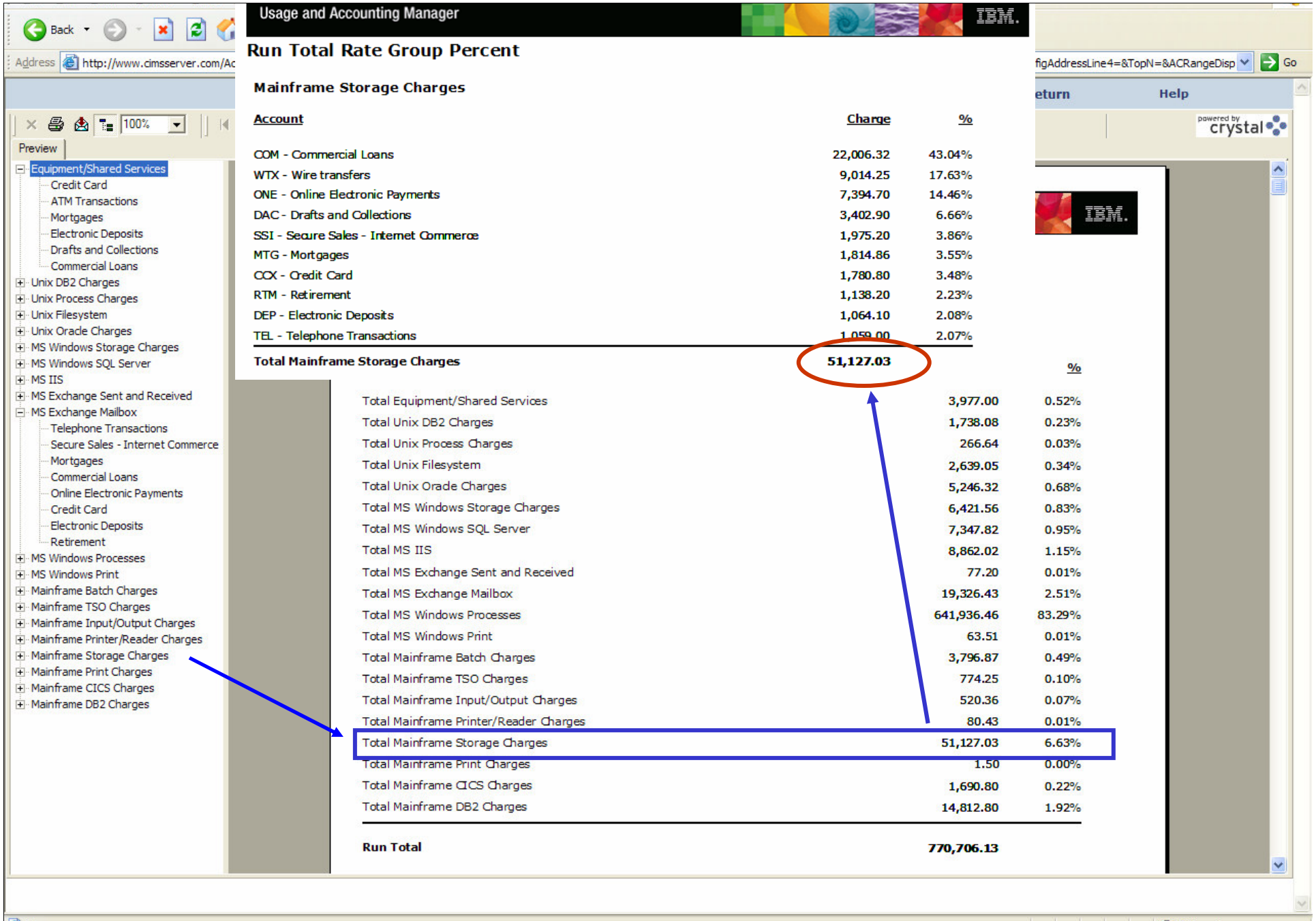
Charges
COM Database Unix eddie EDDIE920
Unix Oracle Charges
Unix Oracle Logins 23 0.04
Unix Oracle Session CPU (Minutes) 411.36 40.81
Unix Oracle Connect (Hours) 3,562.49 160.31
Unix Oracle UGA Memory (MB Days) 9,266.99 0.00
Unix Oracle PGA Memory (MB Days) 86,747.06 0.19
Unix Oracle Rec CPU (Minutes) 0.02 0.02
Unix Oracle User Commits 1 0.00
Unix Oracle Physical Reads 273,677 41.04
Unix Oracle Physical Writes 52,944 18.51
Unix Oracle DB Block Gets 8,321,411 416.05
Unix Oracle Messages Sent 327,441 147.36
Unix Oracle Messages Received 327,707 16.37
Unix Oracle Charges 840.70
Done
Internet



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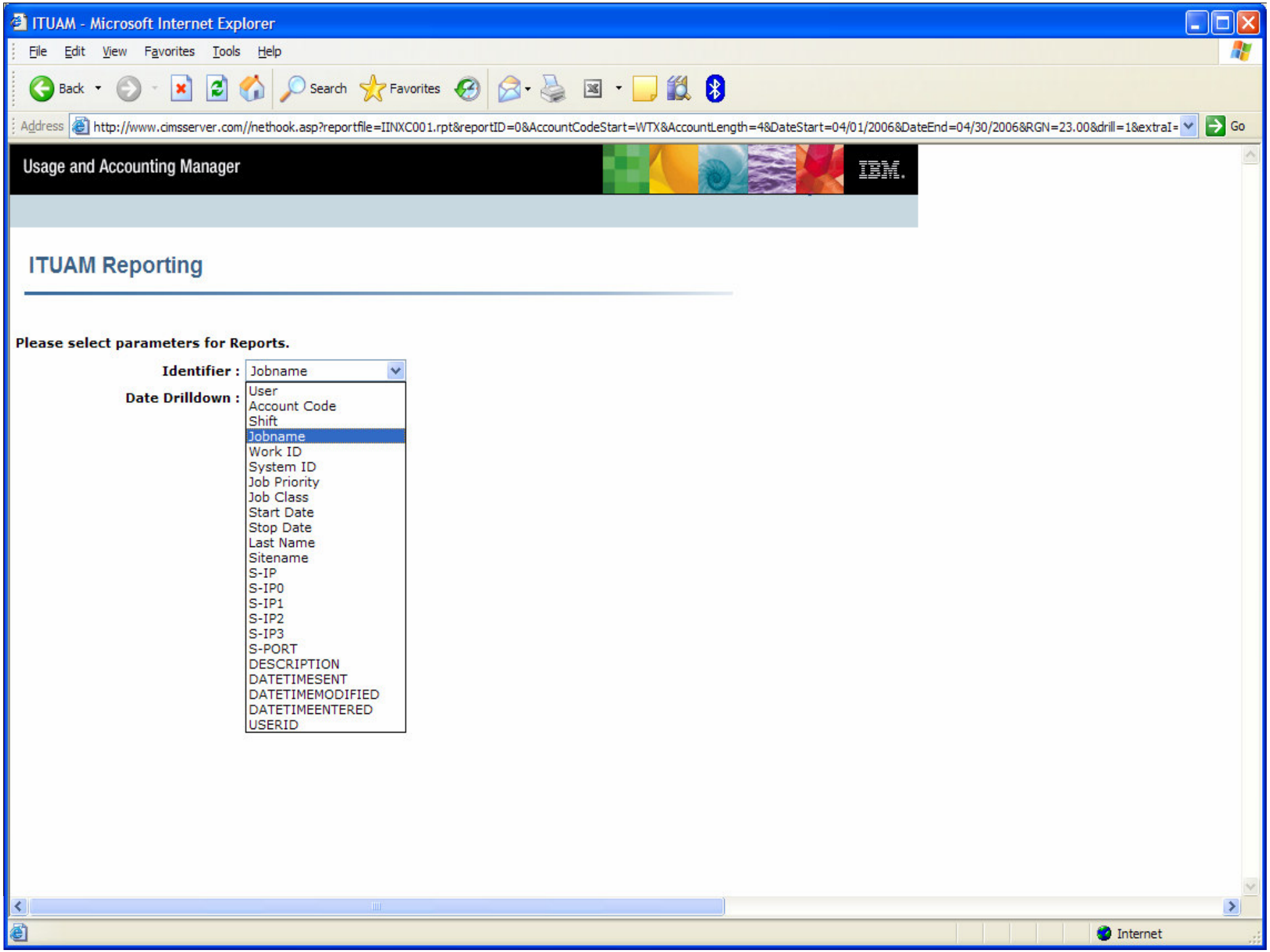
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Back Search Favorites
Address http://www.cimsserver.com//nethook.asp?reportfile=IINXC001.rpt&reportID=0&AccountCodeStart=WTX&AccountLength=4&DateStart=04/01/2006&DateEnd=04/30/2006&RGN=23.00&drill=1&extraI=
Go
Usage and Accounting Manager
IBM.
ITUAM Reporting
Please select parameters for Reports.
Identifier :
Jobname
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User
Account Code
Shift
Jobname
Work ID
System ID
Job Priority
Job Class
Start Date
Stop Date
Last Name
Sitename
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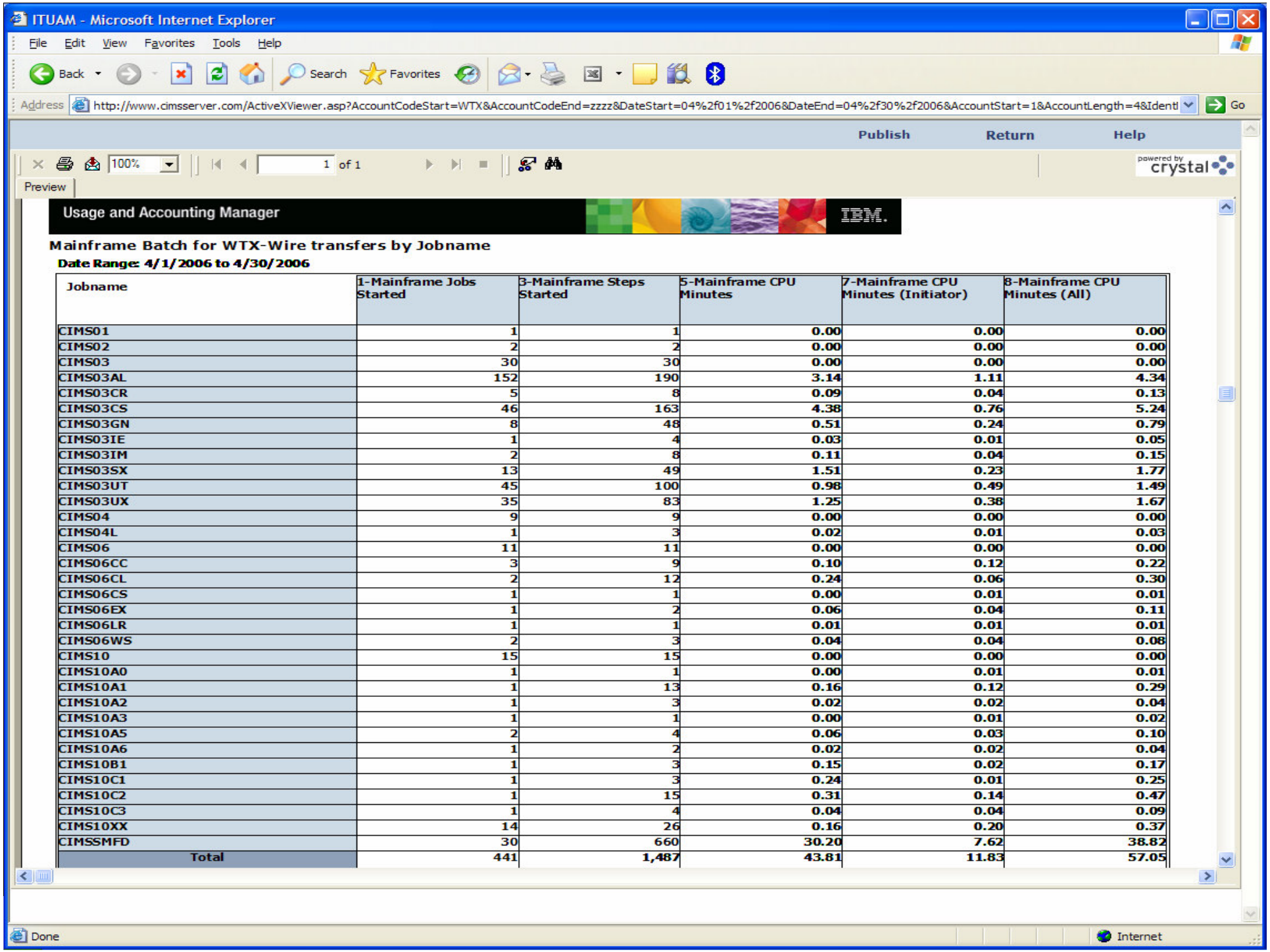


Mainframe Batch for WTX-Wire transfers by Jobname

Date Range: 4/1/2006 to 4/30/2006

Jobname	1-Mainframe Jobs Started	3-Mainframe Steps Started	5-Mainframe CPU Minutes	7-Mainframe CPU Minutes (Initiator)	8-Mainframe CPU Minutes (All)
CIMS01	1	1	0.00	0.00	0.00
CIMS02	2	2	0.00	0.00	0.00
CIMS03	30	30	0.00	0.00	0.00
CIMS03AL	152	190	3.14	1.11	4.34
CIMS03CR	5	8	0.09	0.04	0.13
CIMS03CS	46	163	4.38	0.76	5.24
CIMS03GN	8	48	0.51	0.24	0.79
CIMS03IE	1	4	0.03	0.01	0.05
CIMS03IM	2	8	0.11	0.04	0.15
CIMS03SX	13	49	1.51	0.23	1.77
CIMS03UT	45	100	0.98	0.49	1.49
CIMS03UX	35	83	1.25	0.38	1.67
CIMS04	9	9	0.00	0.00	0.00
CIMS04L	1	3	0.02	0.01	0.03
CIMS06	11	11	0.00	0.00	0.00
CIMS06CC	3	9	0.10	0.12	0.22
CIMS06CL	2	12	0.24	0.06	0.30
CIMS06CS	1	1	0.00	0.01	0.01
CIMS06EX	1	2	0.06	0.04	0.11
CIMS06LR	1	1	0.01	0.01	0.01
CIMS06WS	2	3	0.04	0.04	0.08
CIMS10	15	15	0.00	0.00	0.00
CIMS10A0	1	1	0.00	0.01	0.01
CIMS10A1	1	13	0.16	0.12	0.29
CIMS10A2	1	3	0.02	0.02	0.04
CIMS10A3	1	1	0.00	0.01	0.02
CIMS10A5	2	4	0.06	0.03	0.10
CIMS10A6	1	2	0.02	0.02	0.04
CIMS10B1	1	3	0.15	0.02	0.17
CIMS10C1	1	3	0.24	0.01	0.25
CIMS10C2	1	15	0.31	0.14	0.47
CIMS10C3	1	4	0.04	0.04	0.09
CIMS10XX	14	26	0.16	0.20	0.37
CIMSSMFD	30	660	30.20	7.62	38.82
Total	441	1,487	43.81	11.83	57.05

ITUAM - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://www.cimsserver.com/ActiveXViewer.asp?InvoiceLevel=1&ConfigOrgName=Big+Time+Bank&ConfigAddressLine1=Any+Town%2c+USA&ConfigAddressLine2=&ConfigAddressLine3=&ConfigAddressLine4=&InvoiceNumber=1&Se Go

Invoice by Account Level Publish Return Help

100% 1 of 41 powered by crystal

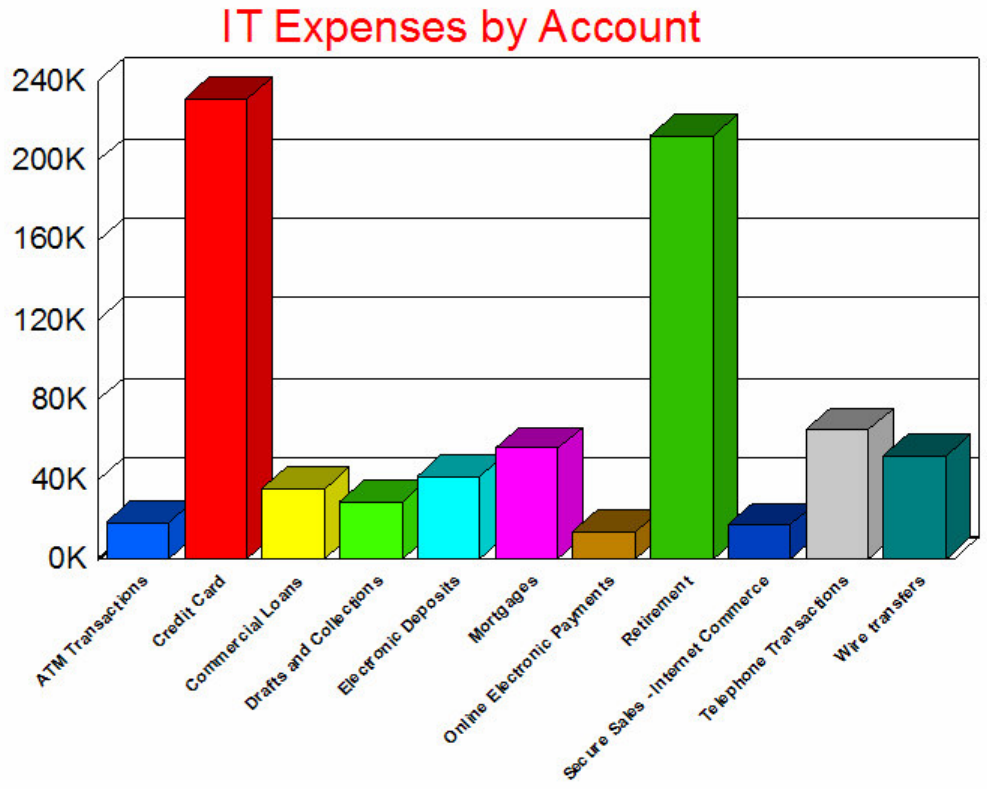
Preview

- ATM Transactions
  - Equipment/Shared Services
  - Unix Process Charges
  - Unix Filesystem
  - Unix Oracle Charges
  - MS Windows Storage Charges
  - MS Windows SQL Server
  - MS IIS
  - MS Exchange Sent and Receive
  - MS Windows Processes
  - MS Windows Print
  - Mainframe Printer/Reader Char
  - Mainframe Storage Charges
  - Mainframe Print Charges
  - Mainframe CICS Charges
  - Mainframe DB2 Charges
- Credit Card
  - Equipment/Shared Services
  - Unix DB2 Charges
  - Unix Process Charges
  - Unix Filesystem
  - Unix Oracle Charges
  - MS Windows Storage Charges
  - MS Windows SQL Server
  - MS IIS
  - MS Exchange Mailbox
  - MS Windows Processes
  - Mainframe Batch Charges
  - Mainframe TSO Charges
  - Mainframe Input/Output Charge
  - Mainframe Printer/Reader Char
  - Mainframe Storage Charges
  - Mainframe Print Charges
  - Mainframe CICS Charges
  - Mainframe DB2 Charges
- Commercial Loans
- Drafts and Collections
- Electronic Deposits
- Mortgages
- Online Electronic Payments
- Retirement
- Secure Sales - Internet Commerce
- Telephone Transactions

Usage and Accounting Manager IBM.

Invoice

Billing Period: 04/01/2006 to 04/30/2006



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ITUAM - Microsoft Internet Explorer

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Back Search Favorites

Address http://www.cimsserver.com/ActiveXViewer.asp?ServerNode=www.cimsserver.com&VirtualDir=&InvoiceLevel=1&PortNumber=&ACRangeDisplay=Account+Range%3a+All+Accounts&NoGroupTree=Y&AccountCodeStart=&AccountCoc Go

Top 10 Pie Chart Publish Return Help

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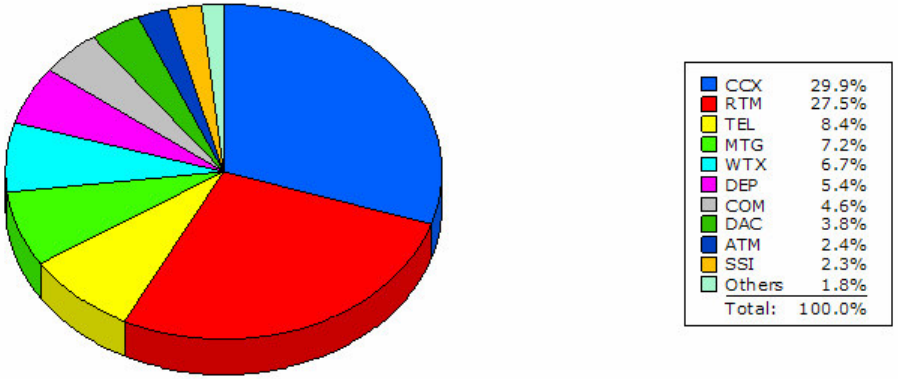
Preview

Usage and Accounting Manager IBM.

Top 10 Cost Report - Pie Chart

Account Range: All Accounts
Date Range: 4/1/2006 to 4/30/2006

Account Charges



Account	%	Charges	
CCX-Credit Card	29.94%	230,738.81	Invoice
RTM-Retirement	27.54%	212,260.46	Invoice
TEL-Telephone Transactions	8.42%	64,925.98	Invoice
MTG-Mortgages	7.21%	55,540.55	Invoice
WTX-Wire transfers	6.70%	51,639.48	Invoice
DEP-Electronic Deposits	5.37%	41,420.42	Invoice
COM-Commercial Loans	4.55%	35,078.06	Invoice
DAC-Drafts and Collections	3.78%	29,164.41	Invoice

Done Internet

ITUAM - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://www.cimsserver.com/ActiveXViewer.asp?Year=2006&ACRangeDisplay=Account+Range%3a+All+Accounts&InvoiceLevel=1&AccountCodeStart=&AccountCodeEnd=zzzz&AccountStart=1&AccountLength=4&UserID=mark&Yea Go

Usage Trend Graph Publish Return Help

100% 57 of 135 powered by crystal

Preview

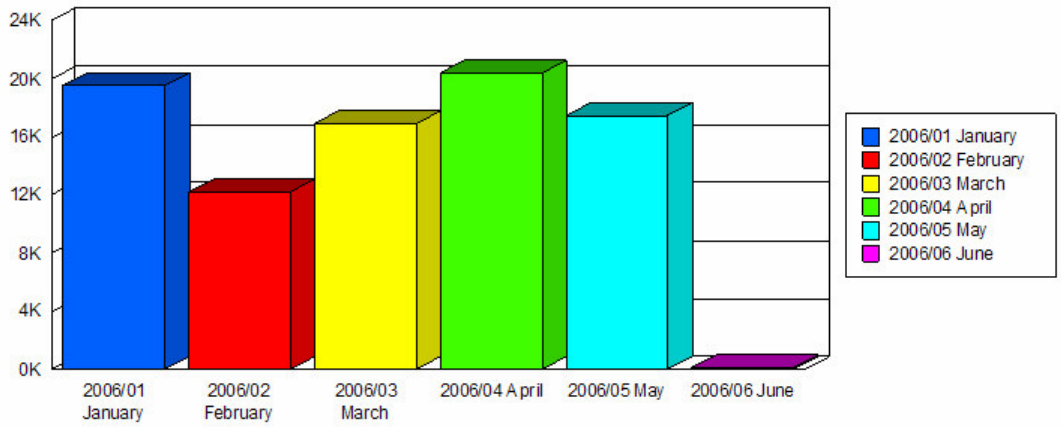
- PSF Number of Feet of Paper
- Tape Mounts
- Disk Data Sets
- Disk Space Allocated (MB Days)
- Disk Space Used (Non VSAM) (MB D
- Secondary Space Allocated (Non VS
- Disk Space Wasted (Non VSAM) (ME
- One Part Forms
- Standard Forms
- Standard Forms Remote
- CICS Transaction Minutes
- CICS CPU Minutes
- CICS Transactions
- CICS Input Messages
- CICS Output Messages
- CICS Messages
- CICS File Access Count
- VMware CPU Usage
- VMware CPU Usage Guaranteed
- VMware Disk Kilobytes Read
- VMware Disk Kilobytes Written
- VMware Memory Kilobytes Active
- VMware Memory Kilobytes Granted
- VMware Network Kilobytes Read
- VMware Network Kilobytes Transfer
- DB2 Transactions (Records)
- DB2 Transaction CPU Minutes
- DB2 Accumulated CPU Minutes
- DB2 Transaction Elapsed Minutes
- DB2 Accumulated Elapsed Minutes
- DB2 Entry/Exit Events
- DB2 I/O Activity (Get Pages)
- MS Windows SQL Server Records
- MS Windows SQL Server Duration (S
- MS Windows SQL Server CPU (Seco
- MS Windows SQL Server Reads
- MS Windows SQL Server Writes
- MS Windows SQL Server Used (MB I
- IIS FTP Bytes Received
- IIS FTP Bytes Sent
- IIS FTP Successful Protocol Status 2
- IIS FTP Redirection Protocol Status
- IIS FTP Client Error Protocol Status

Usage and Accounting Manager IBM.

Resource Usage Trend

Account Range: All Accounts
Year: 2006
MS Windows SQL Server CPU (Seconds)

Resource Usage per Month

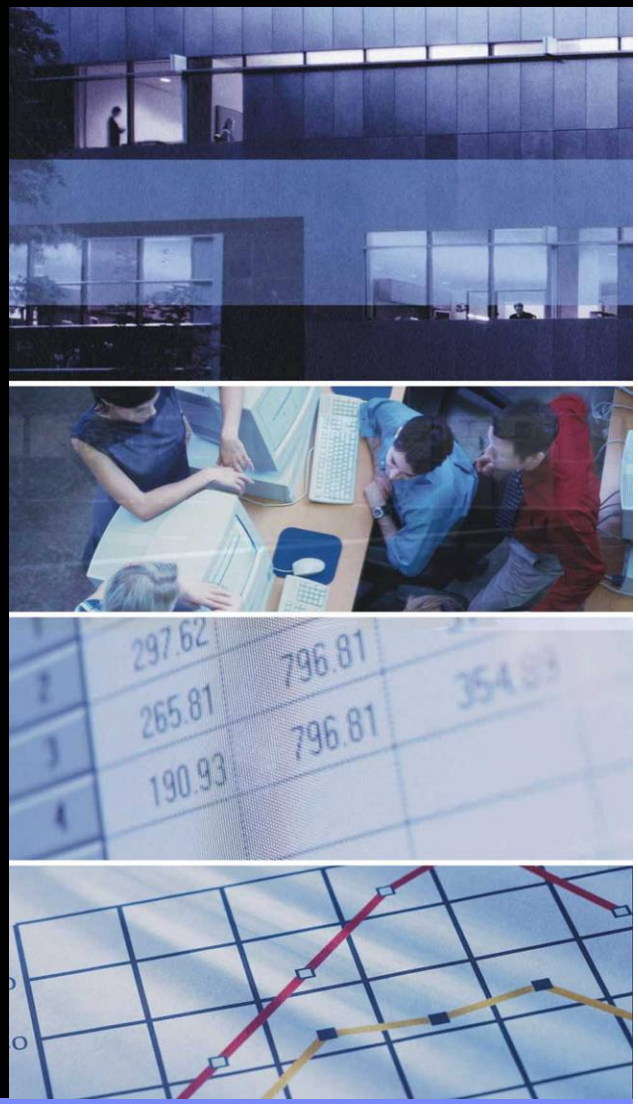


Month	Resource Usage
2006/01 January	19,545.66
2006/02 February	12,306.85
2006/03 March	16,959.50
2006/04 April	20,485.42
2006/05 May	17,487.22
2006/06 June	105.98
Total	**86,890.62**

Done Internet

Tivoli Usage and Accounting Manager est…

- Un composant essentiel du système de reporting financier
  (Services partagés, facturation, Profitabilité par domaines, intégration aux ERP, Affectation de coûts, facturation à l'utilisation, analyse de tendance pour les ressources et les coûts, etc.)
- Support Multi-Platesformes
  (Mainframe, Unix, Linux, Windows, etc.)
- Support de multiples sous-systèmes
  (DB2, Oracle, SQL Server, CICS, Virtualization, Web, E-Mail, Networks, Storage, Print Servers, etc.)
- Accès web
  (Web-Based Reporting & Drill-Down and multiple outputs)



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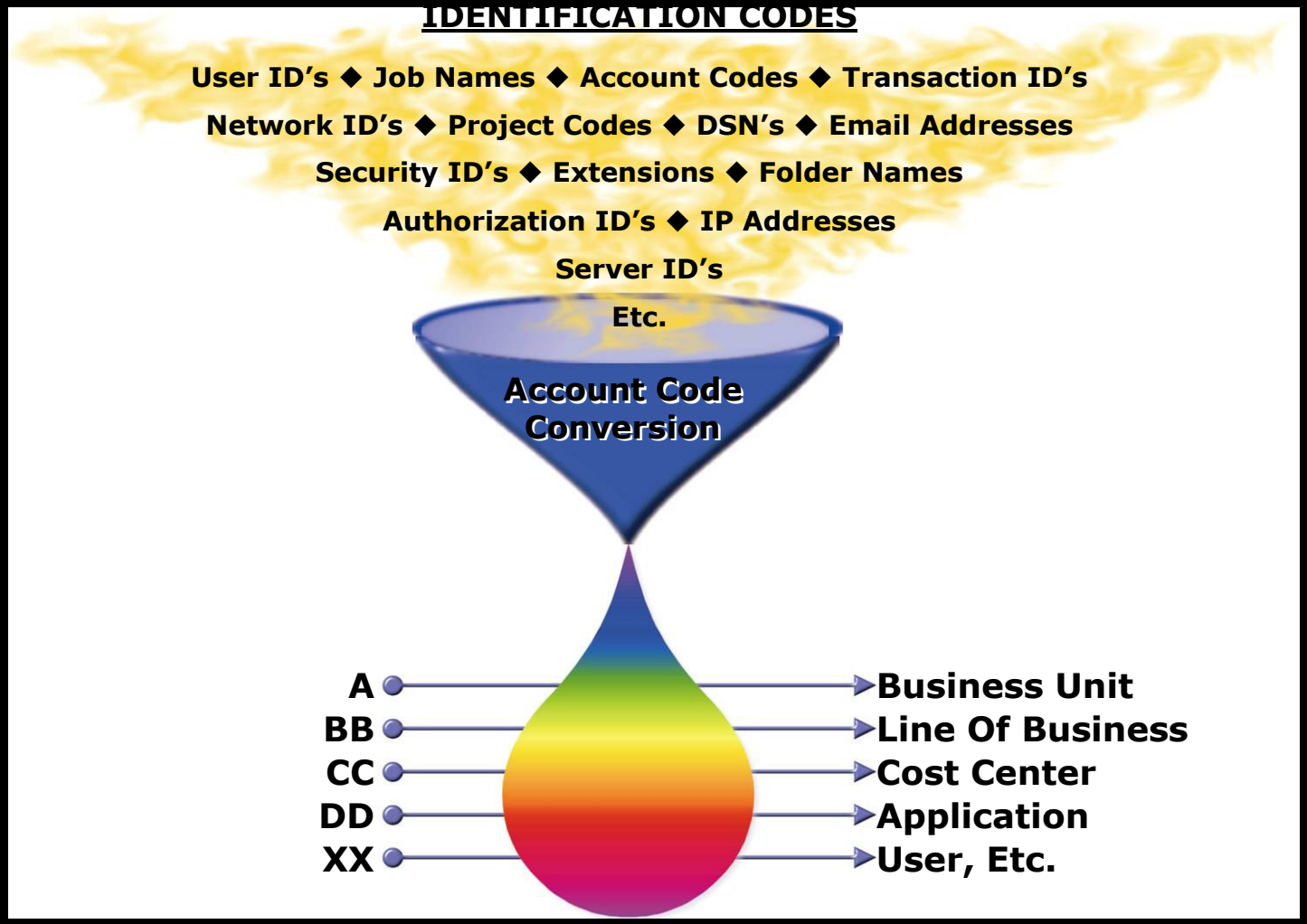
Application de régles “business”



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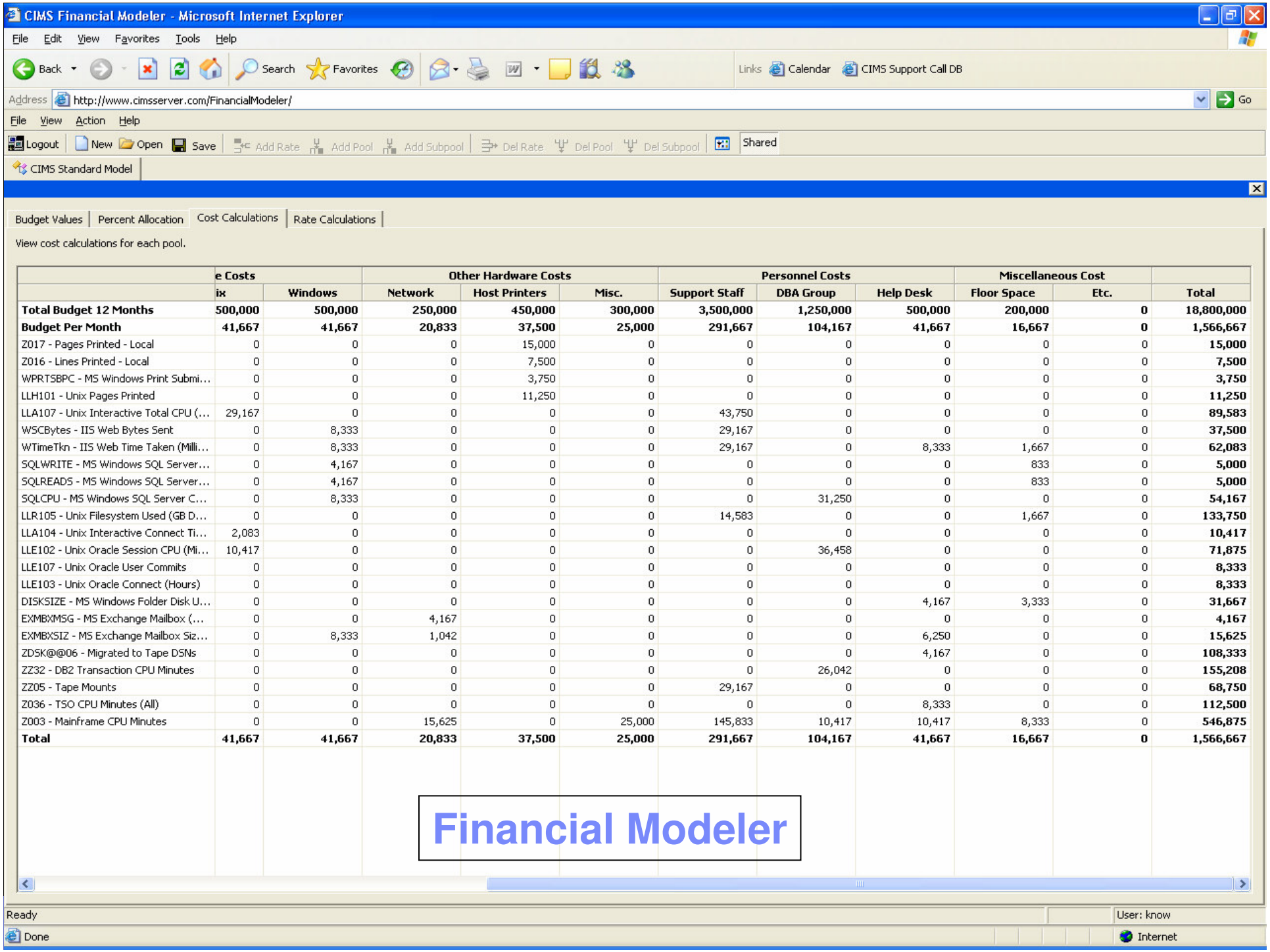
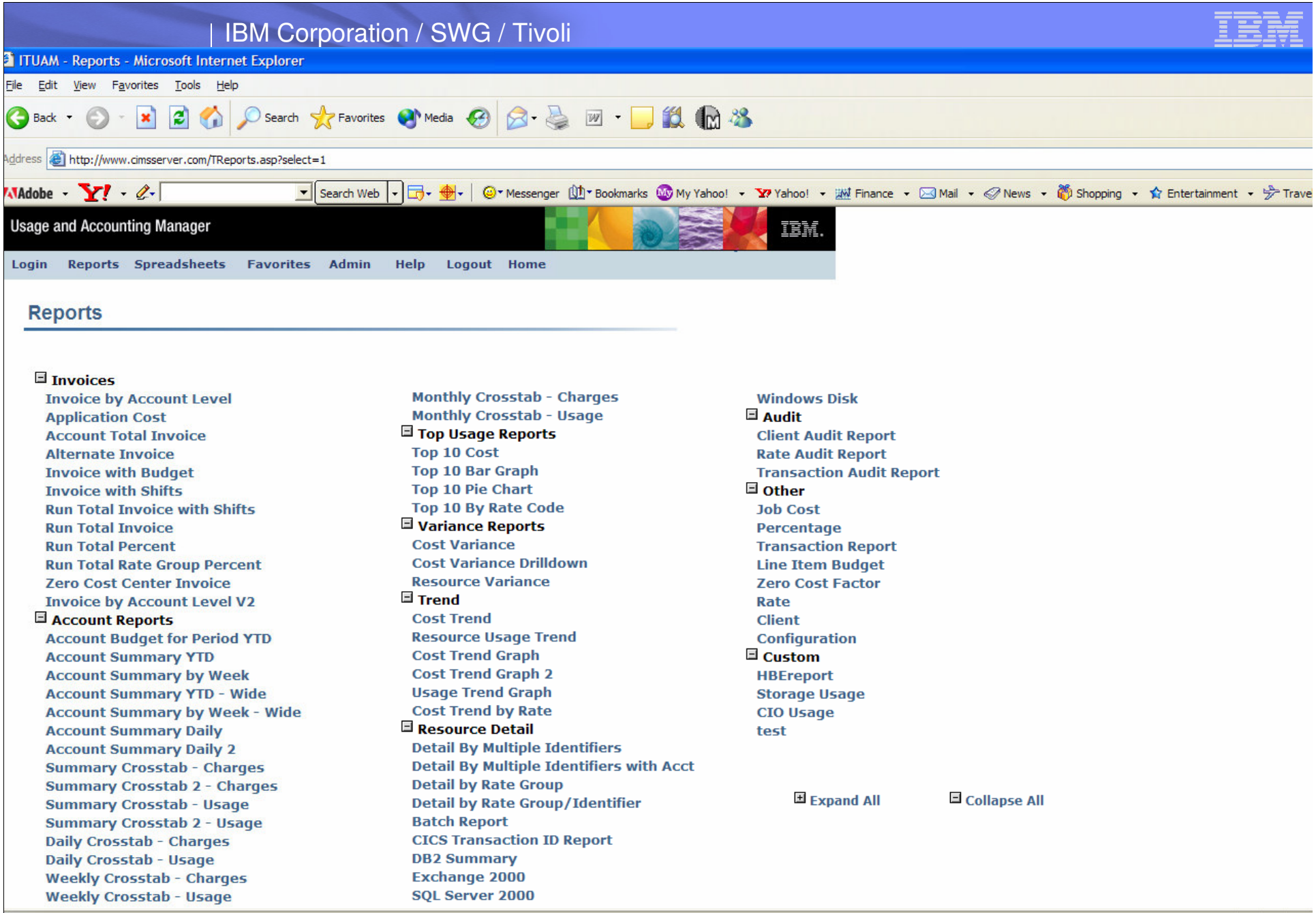


	e Costs		Other Hardware Costs			Personnel Costs			Miscellaneous Cost		
	ix	Windows	Network	Host Printers	Misc.	Support Staff	DBA Group	Help Desk	Floor Space	Etc.	Total
Total Budget 12 Months	**500,000**	**500,000**	**250,000**	**450,000**	**300,000**	**3,500,000**	**1,250,000**	**500,000**	**200,000**	**0**	**18,800,000**
Budget Per Month	**41,667**	**41,667**	**20,833**	**37,500**	**25,000**	**291,667**	**104,167**	**41,667**	**16,667**	**0**	**1,566,667**
Z017 - Pages Printed - Local	0	0	0	15,000	0	0	0	0	0	0	**15,000**
Z016 - Lines Printed - Local	0	0	0	7,500	0	0	0	0	0	0	**7,500**
WPRTSBPC - MS Windows Print Submi...	0	0	0	3,750	0	0	0	0	0	0	**3,750**
LLH101 - Unix Pages Printed	0	0	0	11,250	0	0	0	0	0	0	**11,250**
LLA107 - Unix Interactive Total CPU (...	29,167	0	0	0	0	43,750	0	0	0	0	**89,583**
WSCBytes - IIS Web Bytes Sent	0	8,333	0	0	0	29,167	0	0	0	0	**37,500**
WTimeTkn - IIS Web Time Taken (Milli...	0	8,333	0	0	0	29,167	0	8,333	1,667	0	**62,083**
SQLWRITE - MS Windows SQL Server...	0	4,167	0	0	0	0	0	0	833	0	**5,000**
SQLREADS - MS Windows SQL Server...	0	4,167	0	0	0	0	0	0	833	0	**5,000**
SQLCPU - MS Windows SQL Server C...	0	8,333	0	0	0	0	31,250	0	0	0	**54,167**
LLR105 - Unix Filesystem Used (GB D...	0	0	0	0	0	14,583	0	0	1,667	0	**133,750**
LLA104 - Unix Interactive Connect Ti...	2,083	0	0	0	0	0	0	0	0	0	**10,417**
LLE102 - Unix Oracle Session CPU (Mi...	10,417	0	0	0	0	0	36,458	0	0	0	**71,875**
LLE107 - Unix Oracle User Commits	0	0	0	0	0	0	0	0	0	0	**8,333**
LLE103 - Unix Oracle Connect (Hours)	0	0	0	0	0	0	0	0	0	0	**8,333**
DISKSIZE - MS Windows Folder Disk U...	0	0	0	0	0	0	0	4,167	3,333	0	**31,667**
EXMBXMSG - MS Exchange Mailbox (...	0	0	4,167	0	0	0	0	0	0	0	**4,167**
EXMBXSIZ - MS Exchange Mailbox Siz...	0	8,333	1,042	0	0	0	0	6,250	0	0	**15,625**
ZDSK@@06 - Migrated to Tape DSNs	0	0	0	0	0	0	0	4,167	0	0	**108,333**
ZZ32 - DB2 Transaction CPU Minutes	0	0	0	0	0	0	26,042	0	0	0	**155,208**
ZZ05 - Tape Mounts	0	0	0	0	0	29,167	0	0	0	0	**68,750**
Z036 - TSO CPU Minutes (All)	0	0	0	0	0	0	0	8,333	0	0	**112,500**
Z003 - Mainframe CPU Minutes	0	0	15,625	0	25,000	145,833	10,417	10,417	8,333	0	**546,875**
Total	**41,667**	**41,667**	**20,833**	**37,500**	**25,000**	**291,667**	**104,167**	**41,667**	**16,667**	**0**	**1,566,667**



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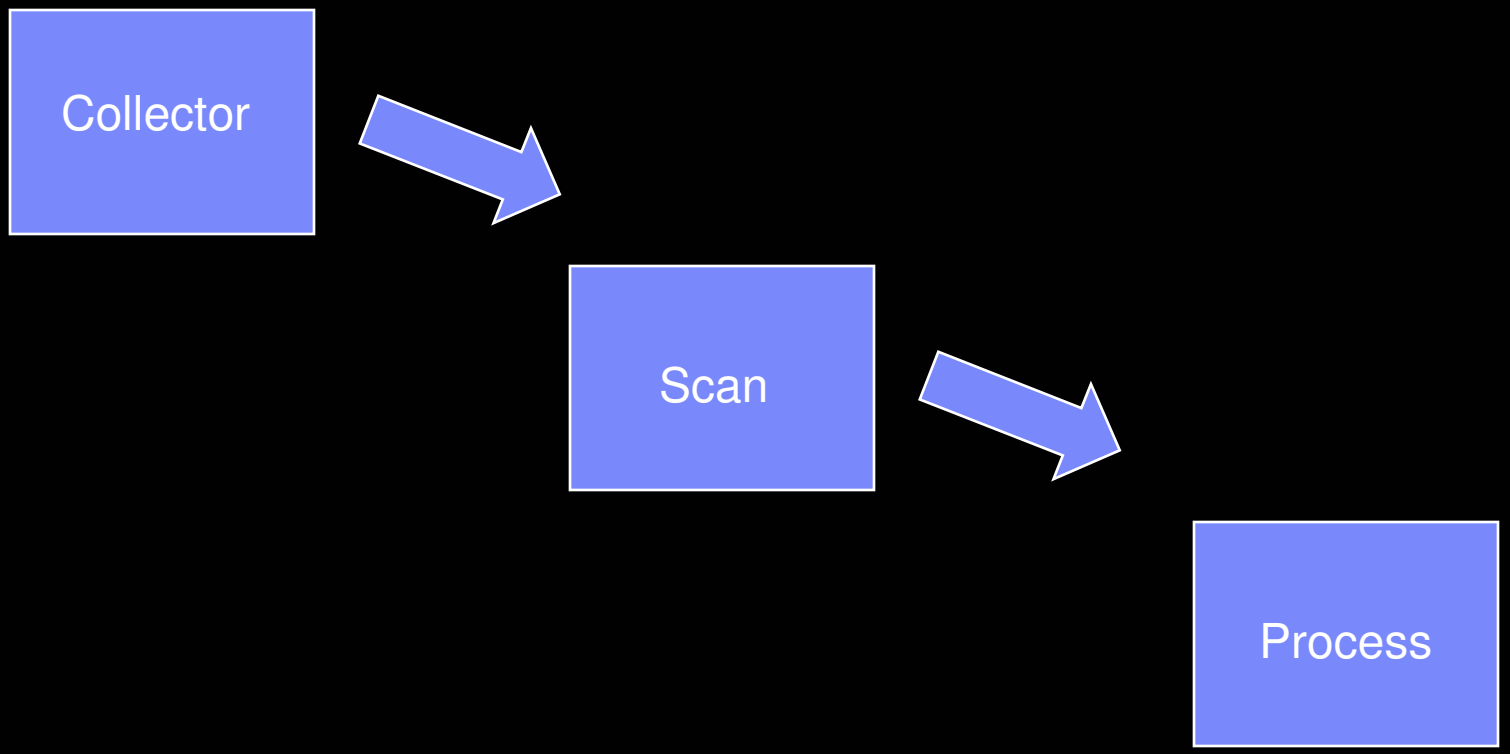
ITUAM automated processing



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Apports de Tivoli Usage & Accounting Manager

- Affectation des coùts IT aux utilisateurs, à des centres de coûts, des applications, des départements… qui consomment ces ressources .
  - de façon équitable
  - compréhensible
  - auditable,
  - et facile à gérer
- Optimisation des coûts IT par:
  - Identification des tendances
  - Analyse en temps réel

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IBM Corporation / SWG / Tivoli

Nouveautés Supervision et Automatisation zOS

ON DEMAND BUSINESS™

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La Supervision de “Bout en bout” de l’infrastructure

Avec OMEGAMON XE 4.1.0, ITM 6.1, & IT CAM suite

End-to-End Management

Platforms	Databases	Applications	Business Integration	Web Infrastructure	Messaging & Collaboration	Networks
Unix	DB2 (Z & Distributed)	SAP	Web Services	WebSphere (Z & Distributed)	Lotus Domino	TCP/IP & SNA
Windows			CICS			
Cluster(s)	Oracle	.NET (full suite of MS apps)	SOA	IIS		
Linux						
z/VM	SQL	Citrix	IMS	iPlanet		
z/OS	Sybase	Siebel	WebSphere MQ	Apache	Exchange	Devices
VMWare						
OS/400	Informix	Tuxedo	WebSphere MQ Integrator	WebLogic		

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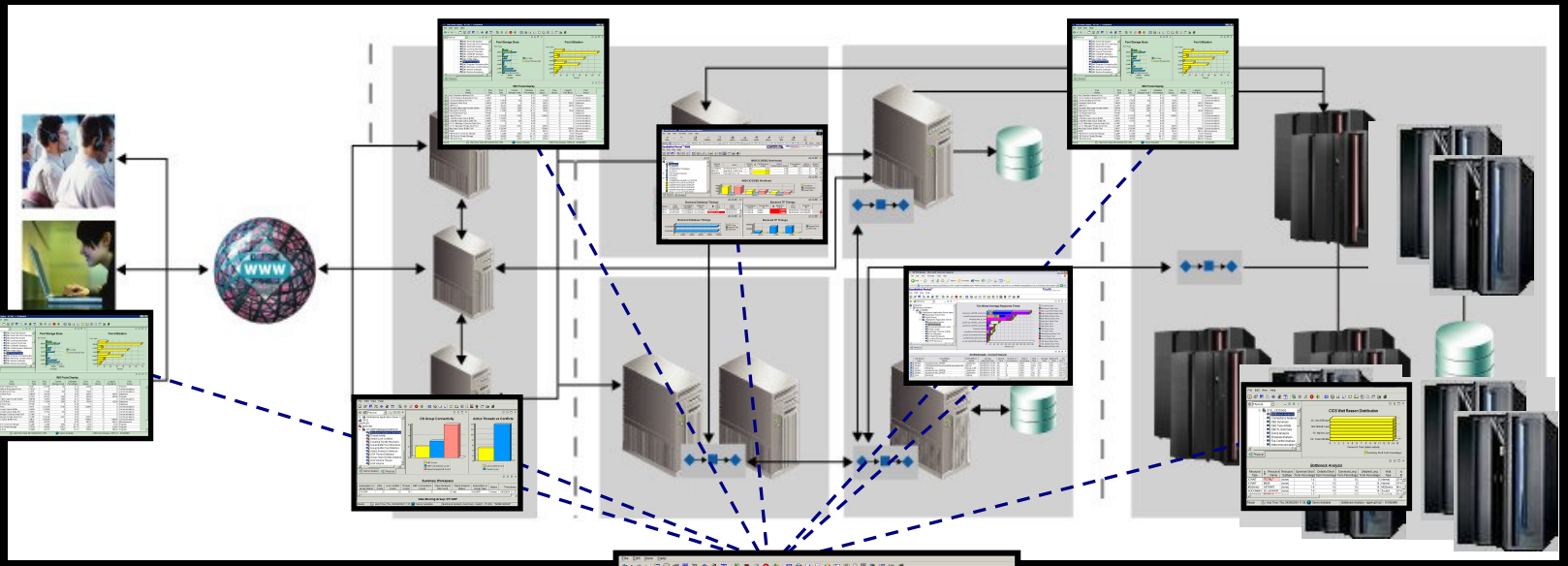
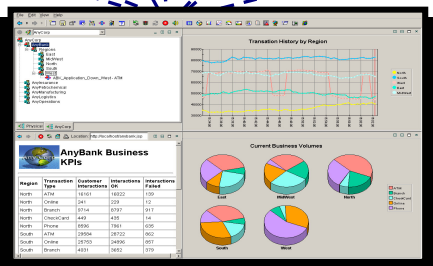
La vue de “bout en bout” de l’infrastructure

Tivoli Enterprise Portal (TEP)





Tivoli Enterprise Portal (TEP)

Integrating Products

- Tivoli Enterprise Console
- NetView for z/OS
- System Automation
- Tivoli Workload Scheduler
- Tivoli Monitoring Version 5
- Tivoli Service Level Advisor
- Tivoli Business Systems Manager
- RAD (Micomuse)

Embedded Portal for

- Tivoli OMEGAMON for System z
- Tivoli Monitoring Version 6
- IBM OMEGAMON z/OS Management Console
- Tivoli Composite Application Manager Family

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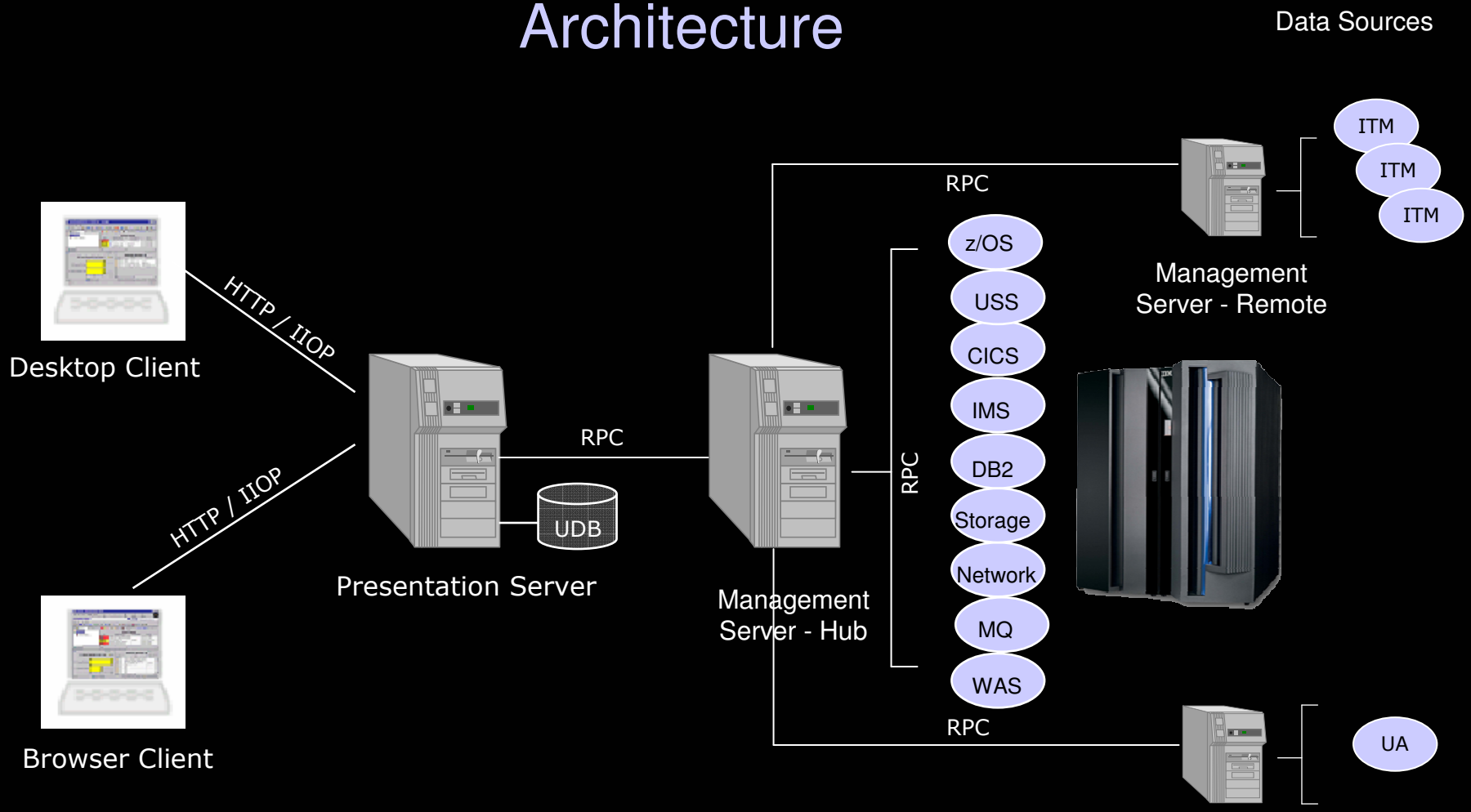
Supervision de “bout en bout” Architecture



INTEGRATION

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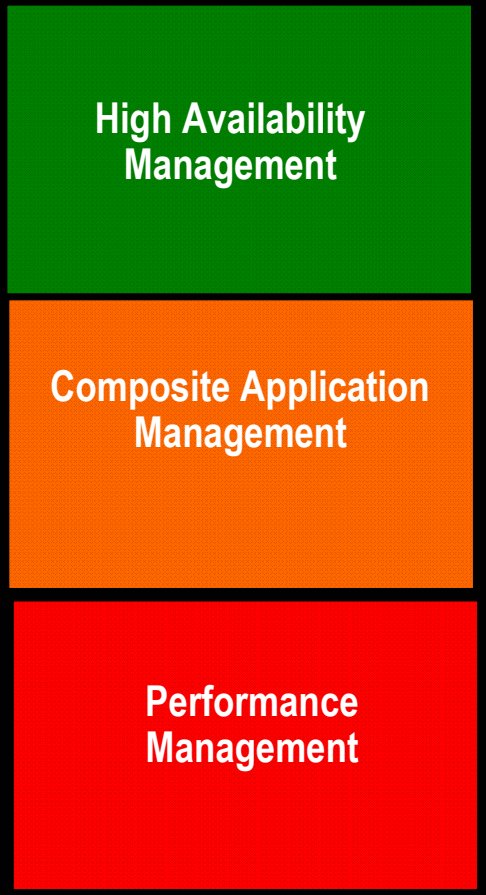
Versions 2006/2007

- IBM Tivoli for NetView on z/OS 5.2
- IBM Tivoli System Automation V3.1.0
- IBM Tivoli Workload Scheduler 8.3
- IBM Tivoli OMEGAMON XE for Messaging V 6.0
- IBM Tivoli CAM for WebSphere 6.1
- IBM Tivoli CAM for SOA 6.1
- IBM Tivoli CAM for RTT 6.0
- IBM Tivoli OMEGAMON XE for z/OS 4.1.0 (*)
- IBM Tivoli OMEGAMON XE for CICS on z/OS 4.1.0
- IBM Tivoli OMEGAMON XE for IMS on z/OS 4.1.0
- IBM Tivoli OMEGAMON XE for DB2 PE on z/OS 4.1.0
- IBM Tivoli OMEGAMON XE for DB2 PM on z/OS 4.1.0
- IBM Tivoli OMEGAMON XE for Mainframe Networks 4.1.0
- IBM Tivoli OMEGAMON XE for Storage on z/OS 4.1.0
- IBM Tivoli OMEGAMON XE for zVM & Linux 4.1.0
- IBM Tivoli OMEGAMON DE on z/OS 3.1.0
- **IBM Tivoli OMEGAMON z/OS Management Console 4.1.0 (*)**

(*) Disponible 1Q2007



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Nouveautés OMEGAMON

- **Added Globalization to Group 1 languages**

  French, German, Italian, Spanish, Portuguese, Chinese (simple & traditional), Japanese, Korean
- **Extended Interoperability via Dynamic Workspace Linking**

  intelligently link to other workspaces using the context available at the time of link execution to reduce problem resolution time
- **Added z9 Integrated Information Processor (zIIP) monitoring in OMEGAMON XE on z/OS & XE on DB2 PE/PM on z/OS**

  zIIP address spaces, service classes, LPAR data, DDF server thread data, workloads eligible for zIIP that are running on standard CPUs
- **Extended Tivoli Data Warehouse (TDW) with support for Pruning and Aggregation**

  Automatic deletion of data and consolidated reporting by groups, dates, etc.
- **Added IBM Support Assistant**

  Plug-ins to improve product support
- **IBM Customization Assist Tool (ICAT) enhanced to simplify SMP/E and Run Time Environment (RTE) installation and deployment**

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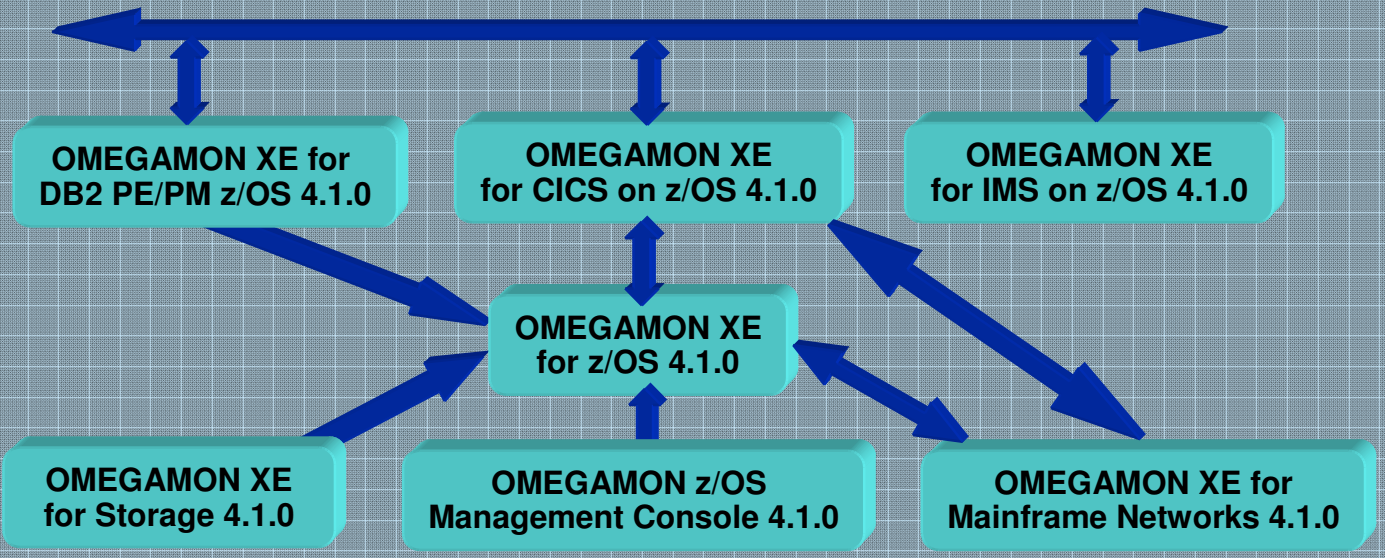
Dynamic Workspace Linking Functionality

Problem: **How do I quickly find a potential problem that requires multiple monitoring products?**

Scenario: **Dynamically link in context from CICS transaction to the associated DB2 thread**

Solution: **Dynamic Workspace Linking**
Product provided links & user customized



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OMEGAMON XE on z/OS v4.1.0 *Highlights*

Availability 1Q2007

- **DWL**

  Linking from OM XE DB2 PE/PM to OM XE on z/OS (enclave), DWL to OMEGAMON XEs, and z/OS Management Console (zMC)
- **Added to XE interface from CUA**
  - I/O rate by address space
  - Real Storage information
- **Tape drive situation support**
- **z/OS Exploitation**
  - Coupling Facility structure duplexing reporting
  - Plex wide zAAP support
- **zIIP processor usage and reporting**
- **Converged OM XE for USS into OM XE on z/OS**

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OMEGAMON XE for CICS on z/OS v4.1.0 *Highlights*

- **Enhanced CICS TS 3.1**
  - URIMAP summary, global counts and details for CICS web clients
  - Web Service analysis reports for Web Service Details, Virtual Host Detail, Pipeline Detail, Document Template Detail
  - Business Transaction Services (BTS) support for long running processes
  - Recovery Manager reporting for application performance tuning
  - Enqueue pool details for recovery
  - Enterprise Java analysis reporting
- **DWL**

  CICS Transaction -> DB2 Thread, CICS Transaction Analysis data,

  DB2 Thread Exception Detail reports
- **CUA Migration to XE – Service Level Analysis (SLA) and Application Trace Facility (ATF)**
- **Integration with CICS PA**

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OMEGAMON XE for IMS on z/OS v4.10 *Highlights*

- **TRF reporting improvements**
  Increased precision expanding transactions to the millisecond
- **DL/I call reporting for full function and Fast Path WFI regions**
  Accumulation of all call types issued by an application during transaction processing
- **HALDB support**
  DB summaries, partition details, VSAM / OSAM statistics
- **DBCTL detailed thread reporting for monitoring activity**
  Allows detection and prevention of application bottlenecks and response time problems.
- **Enhanced IMS Connect reporting**
  Provides summary of transaction performance, details about every transaction processed and auto-discovery of IMS Connect tasks
- **Product provided Dynamic Workspace Links (DWL) to OMEGAMON DB2 and CICS**

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OMEGAMON XE for DB2 PM/PE on z/OS v4.1.0 *Highlights*

- **Support for zIIP processor usage**
- **New DB2 Top Ten Volume reports for the System z9 platform**
- **DB2 version 9 day one support**
- **Enhanced Thread Overview**
  - Show additional LOCK information and Changed Pages in all Group Buffer Pools
- **DWL for enclave to OMEGAMON XE on z/OS, OMEGAMON XE for CICS on z/OS and OMEGAMON XE for IMS on z/OS.**

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OMEGAMON XE for Storage on z/OS v4.10 *Highlights*

- **New storage toolkit for DFHSM and DFDSS functions**
  - Database administrators can quickly and easily create commands or schedule actions to maintain and administer DASD storage via the TEP
- **Top ten volume reports**
- **New dataset attribute database**
  - Granular and versatile reporting capabilities at the dataset level that can be administered via the new storage toolkit function
- **New problem solving workspaces adding to your problem determination capabilities**
  - Intelligent situation analysis
- **Integration:**
  - DWL to other OMEGAMON XE on z/OS
  - Launch of Total Productivity Center (TPC)

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OMEGAMON XE for Mainframe Networks on z/OS v4.1.0 *Highlights*

- **New performance reports**

  VTAM buffer pool and address space workspaces
- **Enhanced FTP records**

  Provided by the z/OS Communications Server Network Management Interface resulting in performance improvement
- **TN3270 server session workspaces provide performance and availability metrics for systems running z/OS version 1.8**
- **Advanced historical reporting**

  Available using both new Tivoli Enterprise Portal workspaces and SQL queries against the Tivoli Data Warehouse database

  DBCTL detailed thread reporting for monitoring activity allowing the detection and prevention o application bottlenecks and response time problems
- **Enhancements to Enterprise Extender (EE) reporting and High Performance Router (HPR) connections**
- **DWL to OMEGAMON XE on z/OS and NetView on z/OS for extended integration**

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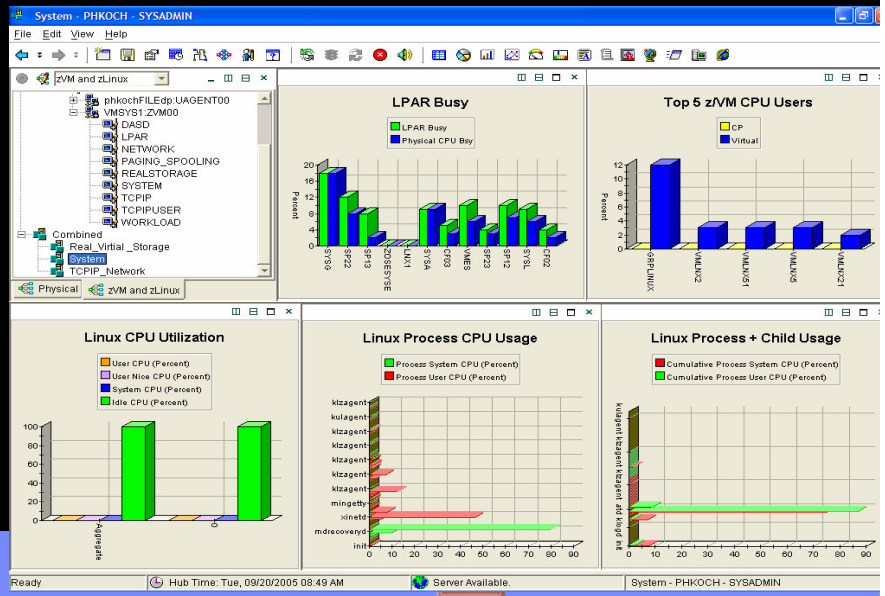
OMEGAMON XE for z/VM and Linux v4.1.0

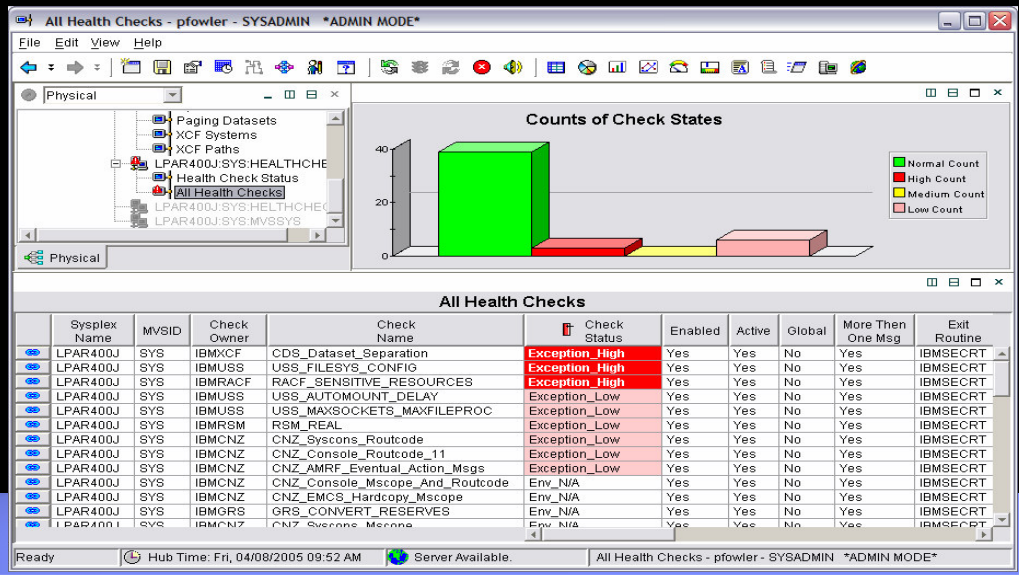
- **Combined offering to monitors z/VM and Linux on System z**
- **Provides workspaces that display**
  - Overall System Health
  - Workload metrics for logged-in users
  - Individual device metrics
  - LPAR Data
- **Composite views of Linux on z running on VM**
- **Integrated with the VM Performance Toolkit**



IBM OMEGAMON z/OS Management Console v4.10 *Highlights*

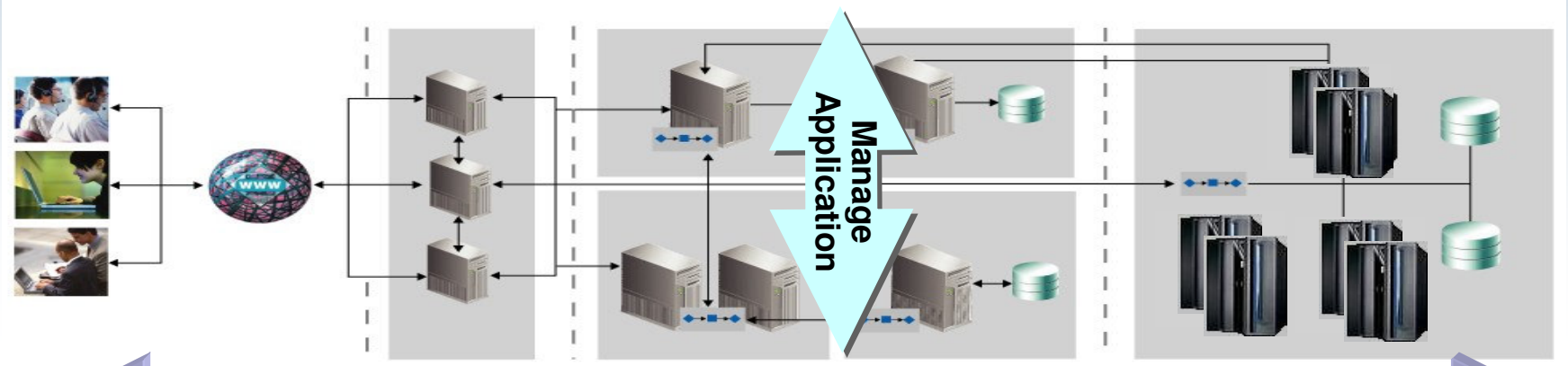
Availability 1Q2007

- **Coupling Facility status details**
- **Coupling Facility Resource Manager (CFRM) status for contention issues**
- **LPAR Cluster status details**
- **Unix System Services data and processes reports**
- **DWL to OMEGAMON XE on z/OS for better integration and problem determination**



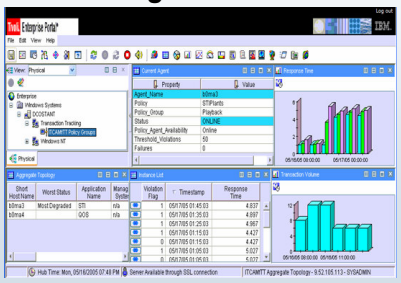
Tivoli Composite Application Management Portfolio

Analyze and Measure Transactions & Services

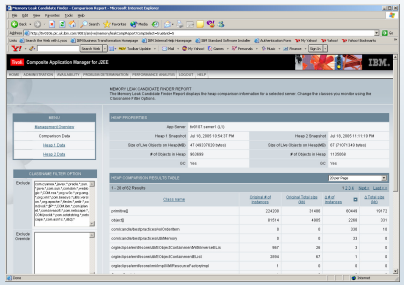


Monitor Infrastructure

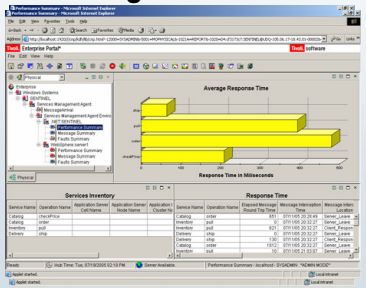
Composite Application Manager for for RTT



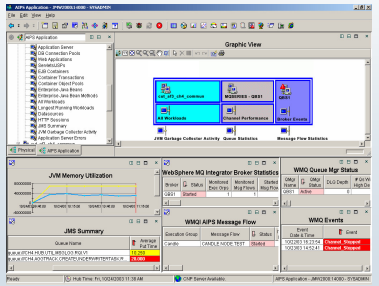
Composite Application Mgr for WebSphere & J2EE



Composite Application Manager for SOA



OMEGAMON XE for Messaging



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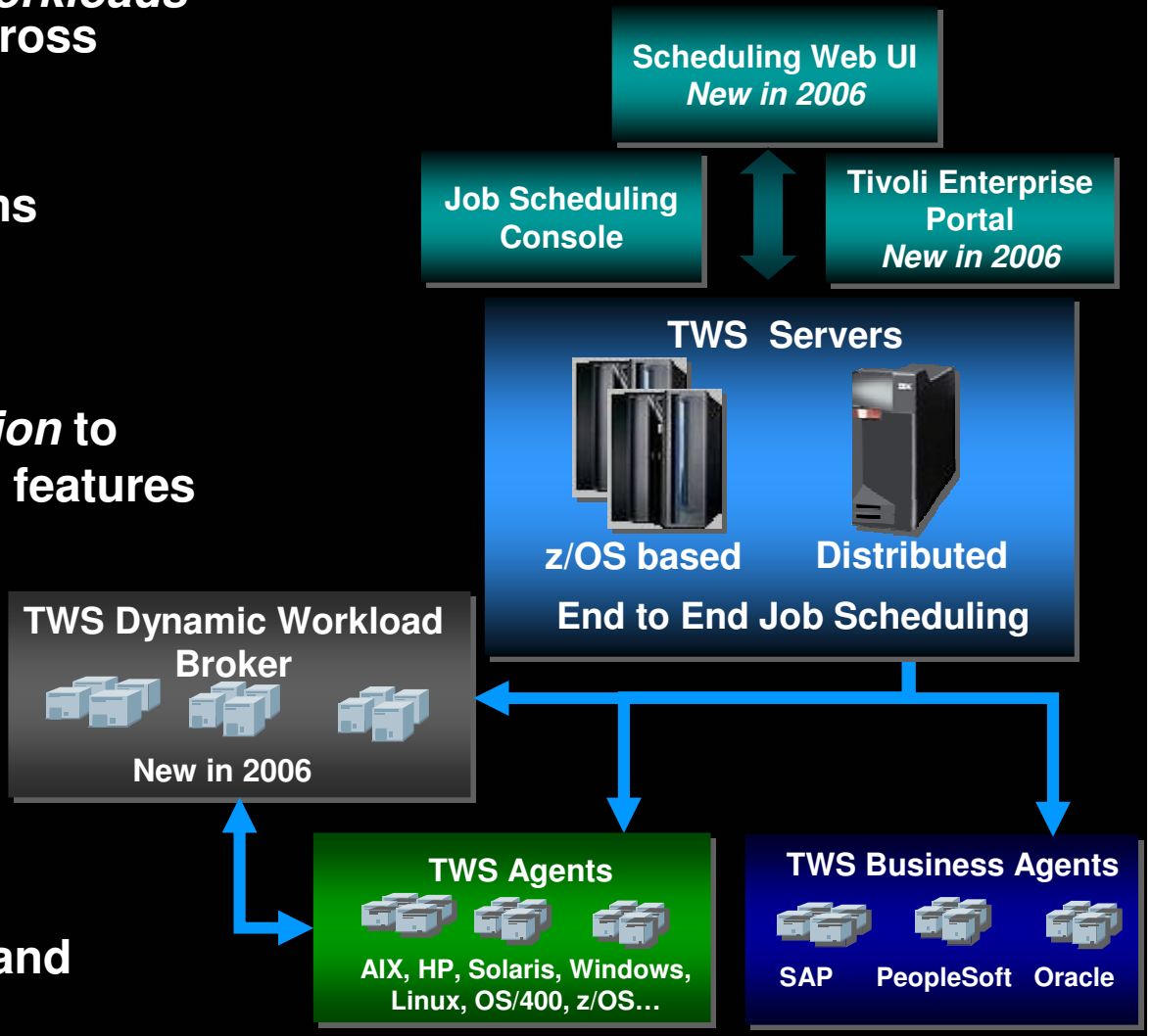
IBM Tivoli Workload Scheduler

- ***Single solution to integrate workloads*** **from multiple applications, across multiple platforms.**
- ***Improves availability and integrity*** **of production systems**
- ***High Availability and Fault Tolerant*** **architecture.**
- ***Enhanced TWS-WLM integration*** **to support new WLM scheduling features**
- ***New TEP integration*** **to monitor the status of TWS critical jobs**
- ***Dynamic real-time workload automation*** **in addition to traditional calendar and event-based scheduling**
- **New *Critical Path Monitoring* and management feature for TWS**



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System Automation & NetView for z/OS

- Enhanced **Tivoli System Automation on z/OS** (TSA) integration
  with Tivoli Workload Scheduler (TWS)
  - Issue TSA commands from within the TWS console
  - TEP launch in context to TSA
- **TSA Multiplatform** provides integration with IBM High Availability Cluster Multiprocessing (HACMP) and Microsoft Server Cluster Service (MSCS)
  - Centrally manage high availability for composite applications running in heterogeneous environments
- **Tivoli NetView on z/OS** enhanced TEP integration
  - With OMEGAMON XE for Mainframe Networks and new interoperability with OMEGAMON XE for z/OS, DB2 PE/PM, and CICS

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Résumé

- Un interface unique de pilotage
- Analyse approfondie des systèmes et sous-systèmes
- Maîtrise des niveaux de service requis à travers des alertes et des Workflows
- Vision de bout en bout de la performance et de la disponibilité des services et de l'infrastructure sous-jacente
- Des agents qui couvrent l'ensemble des composants systèmes et sous systèmes zSeries en architecture SYSPlex
- Architecture qui permet d'intégrer le monitoring des nouveaux composants de l'infrastructure
- Architecture qui permet d'intégrer des composants existants

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Virtualisation: « compliance » SoftWare Tivoli Licence & Compliance Manager (ex ISOGON)

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Le coût de la gestion des logiciels

- GARTNER : *« Les entreprises peuvent espérer 30 % d'économies la première année (et entre 5 et 10 % ensuite) après déploiement d'un programme de gestion du parc logiciels (Software Asset Management) »*
- GIGA : *"Les dépenses logicielles sont 7 fois supérieures au dépenses matérielles"*
- IDC : *"Les budgets logiciels augmentent de 13 % plus vite que n'importe quel autre budget"*

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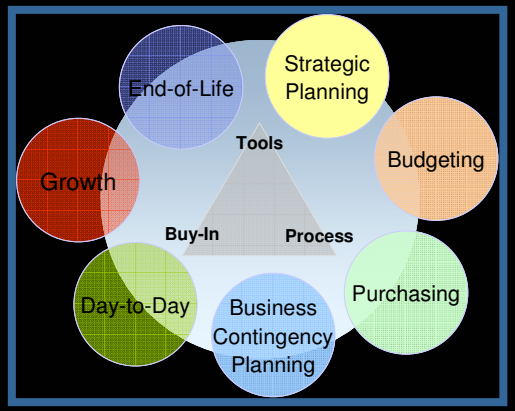
La mise en place d'un contrôle des logiciels permet :

Le contrôle des coûts logiciels

- Identification et réduction de la non ou sous utilisation de certains logiciels
- L'efficacité des consolidations de serveurs
- Des mises à jour de SW et HW efficaces
- Une force de négociation avec les éditeurs de SW
- Évite les pénalités
- Réduction des coûts de SW lors de remplacement de logiciels
- Amélioration des performances opérationnelles et réduction des coûts de maintenance
- Validation des factures
- Continuité du business

Réduction des risques de conformité

- Audits de conformité des licences par les éditeurs
- Loi de conformité financière



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Edictée en 2002 suite à l'affaire de Enron puis au scandale de Worldcom, la **loi Sarbanes-Oxley** (appelée aussi SARBOX ou SOX ou LSO pour les français) vise à améliorer la précision et la fiabilité des publications financières des entreprises cotées en Bourse aux Etats-Unis. L'objectif est de mieux protéger les investisseurs pour rétablir leur confiance dans le marché.

Cette loi est guidée par trois grands principes : l'exactitude et l'accessibilité de l'information, la responsabilité des gestionnaires (CEO et CFO) et l'indépendance des auditeurs externes. Elle implique notamment l'**utilisation de l'informatique comme outil de gestion et de contrôle financier**, avec l'obligation d'assurer la sécurité de ce même système informatique.

La loi Sarbanes-Oxley est entrée en vigueur en 2005 pour tous les grands groupes aux Etats-Unis, et concerne dès cette année l'ensemble de leurs filiales à l'étranger.

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Les priorités de la gestion des logiciels

De quels logiciels je dispose?

Découverte automatique des logiciels installés

Quels logiciels sont utilisés? Pourquoi est-ce différent de ce qui est dans les contrats?

Utilisation de la surveillance: mesure de l'utilisation effective

Combien coûte chaque logiciel maintenant et dans un futur proche?

Gestion des contrats: comparer l'utilisation réelle avec le contrat en cours

Une réponse à ces trois questions est nécessaire pour l'alignement des coûts informatique avec les enjeux de l'entreprise.

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La gestion logicielle : une vision de bout en bout

Inventaire & Utilisation ⟷ **Contrats & Finances**

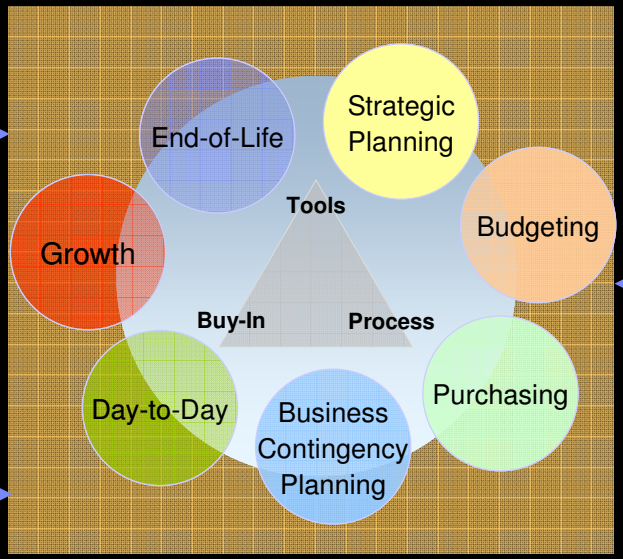
Activités Gestion des logiciels (SAM)

License Compliance for z/OS

UNIX, Intel & Other Distributed Servers

License Compliance For distributed

PCs



Contract Compliance

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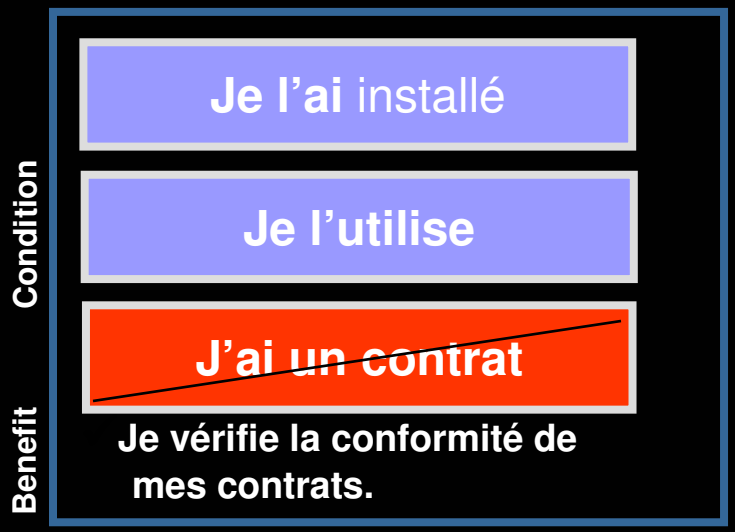
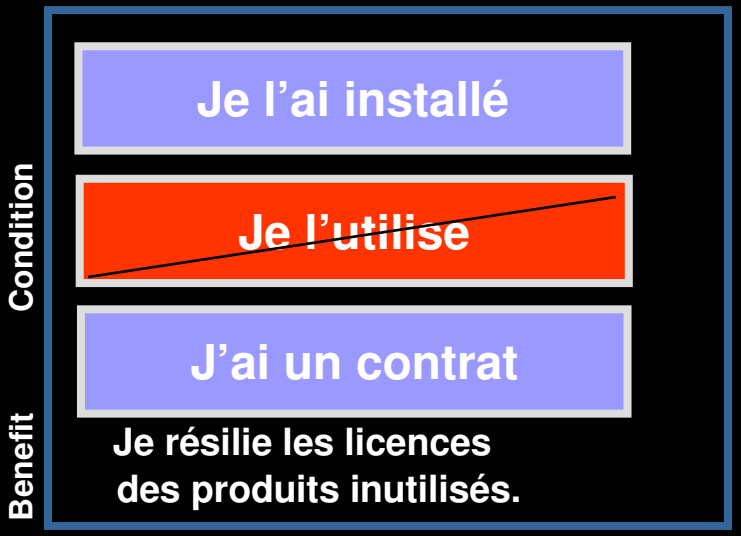
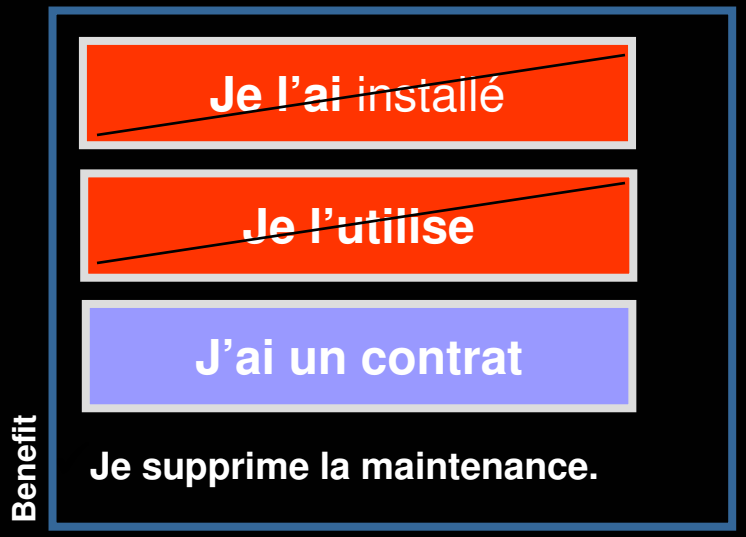
Les différentes situations







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Tivoli End-to-End IT Asset Management Solution

"Enterprises that begin an asset management program experience up to a 30% reduction in costs the first year.. and continue savings of 5-10% for the next 5 years" – Gartner

Problèmes "Business"

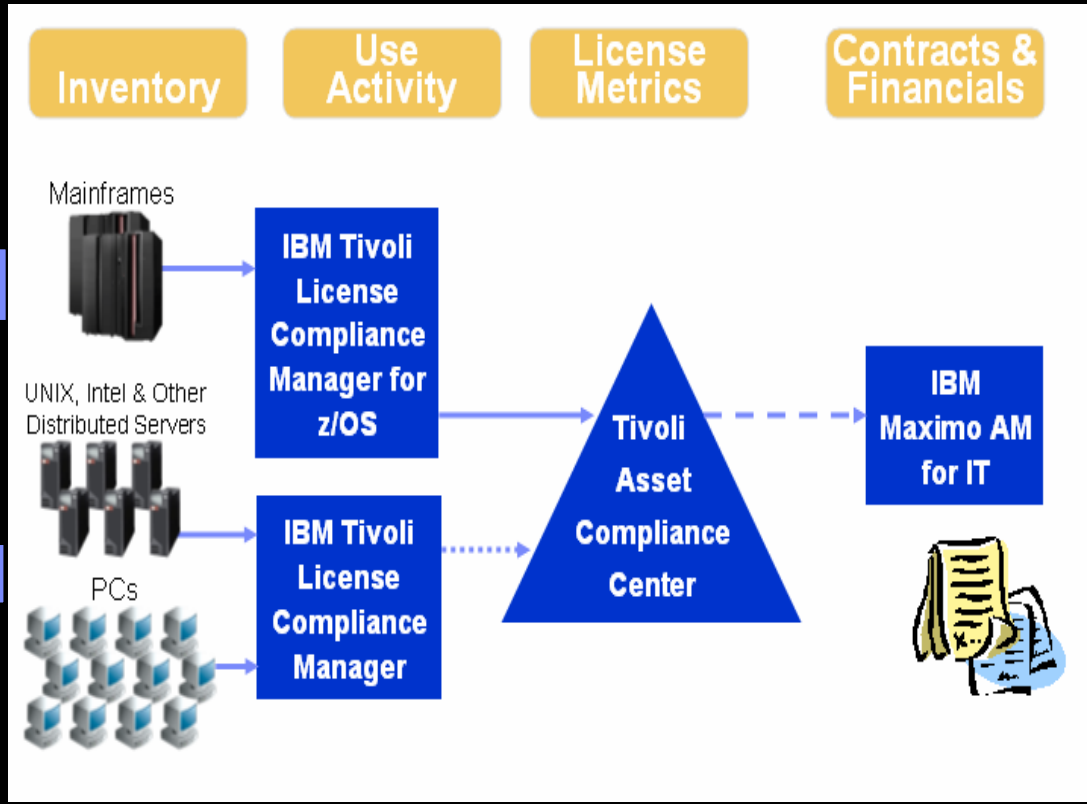
- Les coûts SW sont difficiles à maitriser
- Risques de coûts inattendus provoqués par des réajustements non prévus, voire des pénalités de non conformité
- Difficulté de savoir "qui utilise quel SW" de façon à gérer la dépense de manière efficace
- Difficulté d'ajuster la dépense SW avec les besoins "business"

Valeur ajoutée

- TLCM permet de contrôler les coûts software et les risques de non conformité au niveau des licences, ce qui libère du budget pour les projets prioritaires
- Aide les entreprises à respecter les standards comptables les plus stricts (ex: Sarbanes-Oxley, Basel II)

Synthèse: Où sont les gains potentiels ?

- Réduction budgétaires
- Accroissement des coûts
- Négociations "tendues"
- Intégration des informations contractuelles avec l'inventaire SW
- Optimisation du "Capacity Planning"
- Réduction des coûts de maintenance
- Consolidations HW & SW plus efficaces



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Tivoli License Compliance Manager for z/OS

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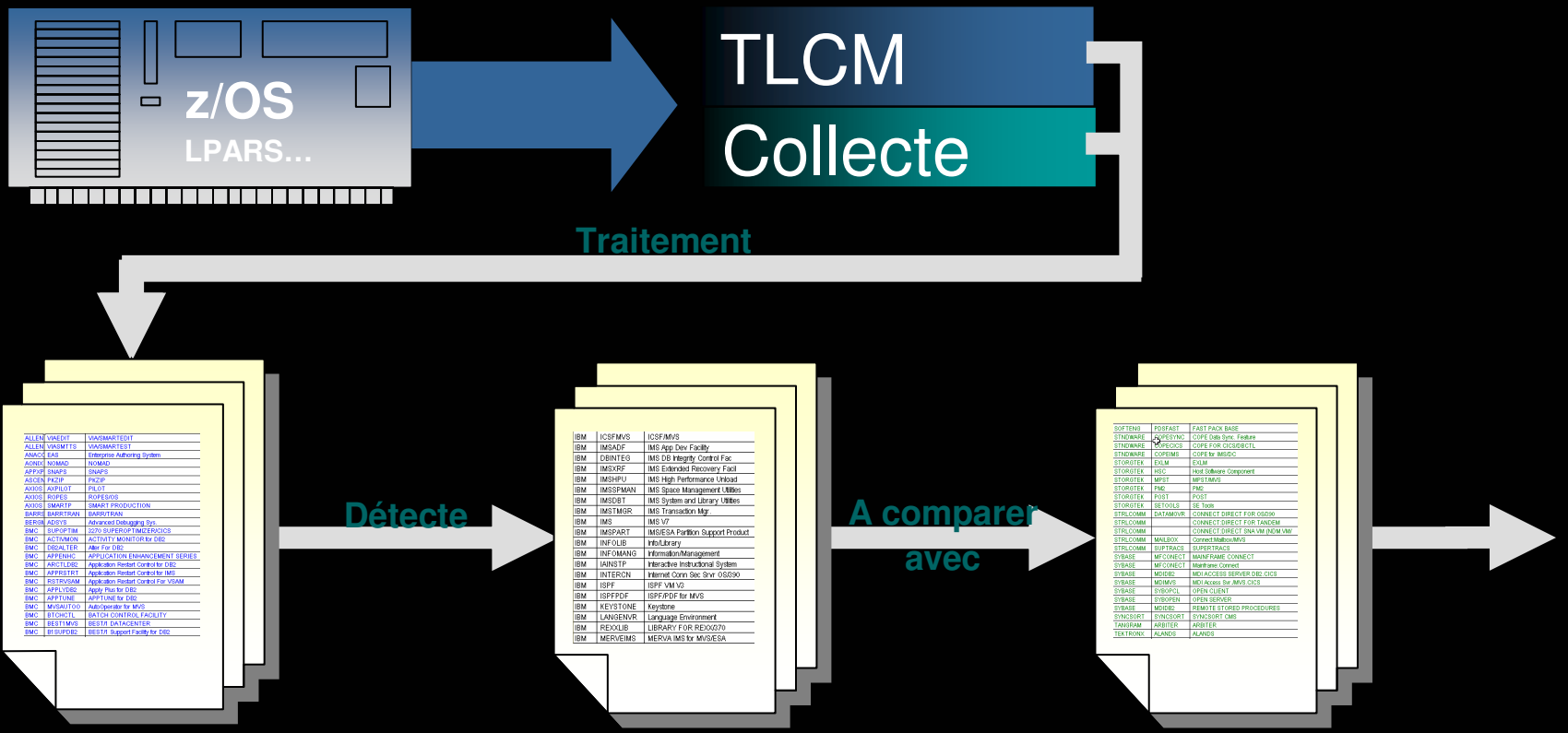
L'offre de bout en bout : de l'inventaire au contrat



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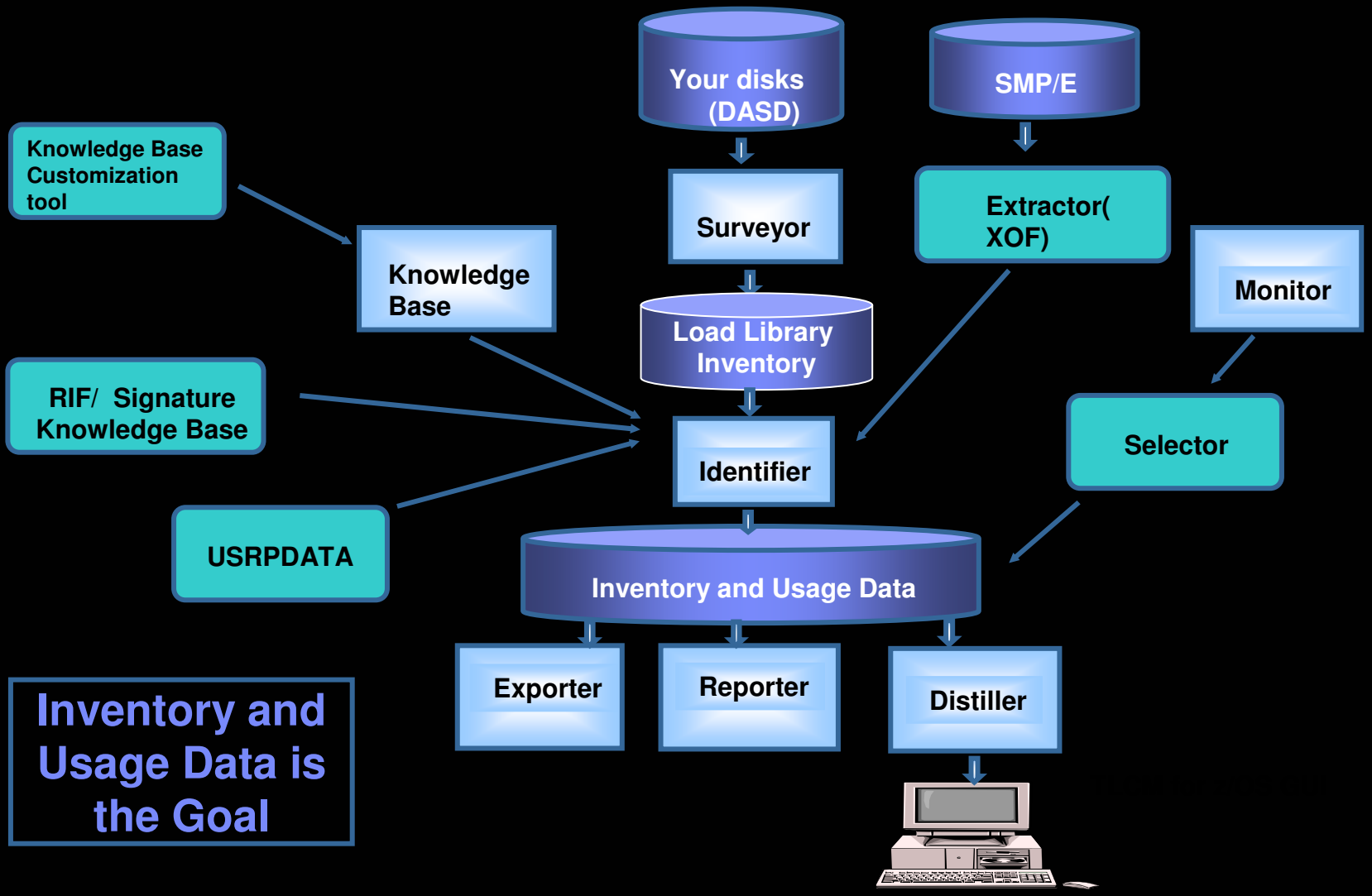
TLCM for z/OS Components overview



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Tivoli License Compliance Manager

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IBM Tivoli License Compliance Manager

- Gestion des droits d'usage
- Inventaire des logiciels
- Suivi de l'utilisation des logiciels (Technologie brevetée)
- Respect des règles d'utilisation (Technologie brevetée)
- Administration par interface Web
- Intégration avec les applications tierces par XML
- Gestion des contrats
- Compte-rendus et rapports

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Valeur de « Licence Compliance Manager » pour l'entreprise

- Permet de maintenir la conformité avec les termes et conditions des contrats de licence
  - En automatisant le suivi de l'usage (sans nécessiter que les applications soient instrumentées)
  - En gérant les clauses contractuelles d'expiration et de renouvellement
- Réduit les coûts d'utilisation des logiciels
  - R/I par économie sur les licences logiciels
    - Eviter les pénalités pour couverture insuffisante en licences ou en maintenance
    - Eviter le sur-équipement en licences ou en maintenance

"License management is becoming a priority because IT budgets are scaling back and that's a potential savings area."
Audrey Rasmussen, VP, Enterprise Management Associates

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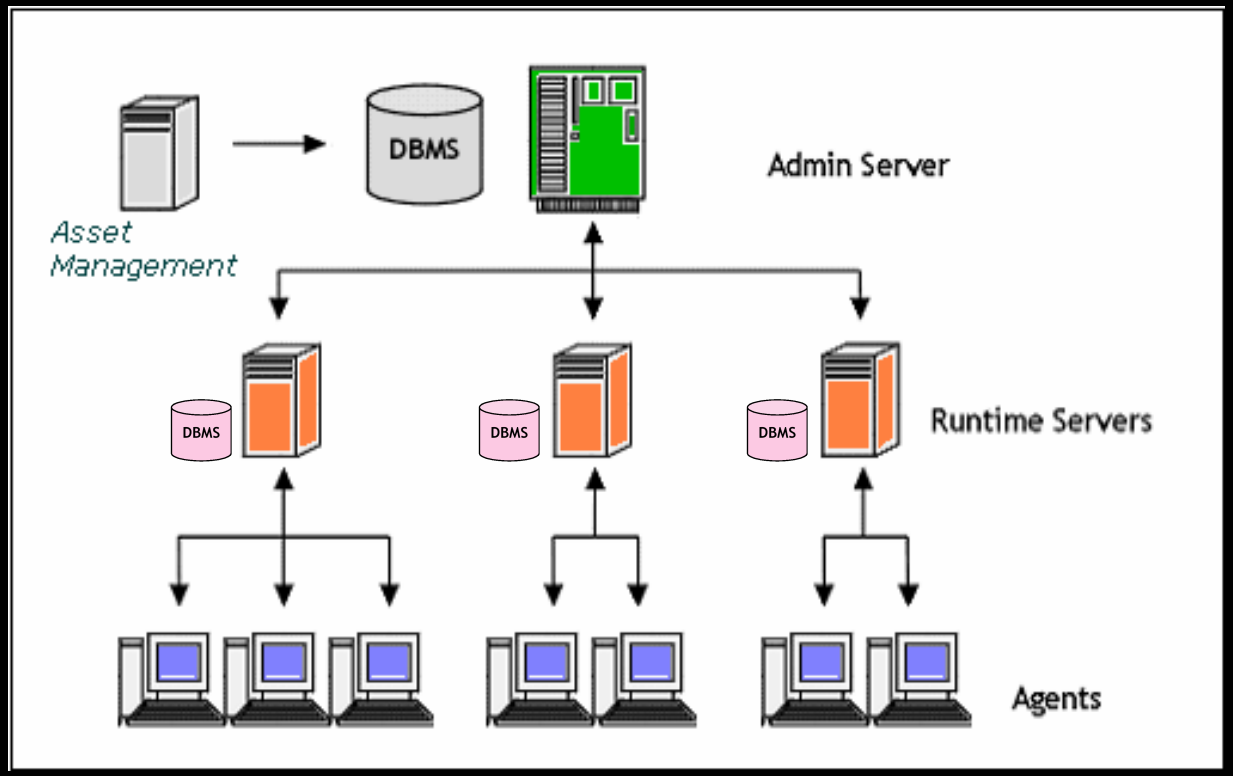
Architecture

- **Admin Server**
  - Dépôt de l'historique
  - Administration
  - Rapports
- **Runtime Server**
  - Dépôt du temps réel
  - Mesure de l'usage et respect des règles
  - Rapports
- **Agents TLM**
  - Collecte des informations
  - Respect des règles



- **WebSphere Application Server**
- **DB2 Universal Database**

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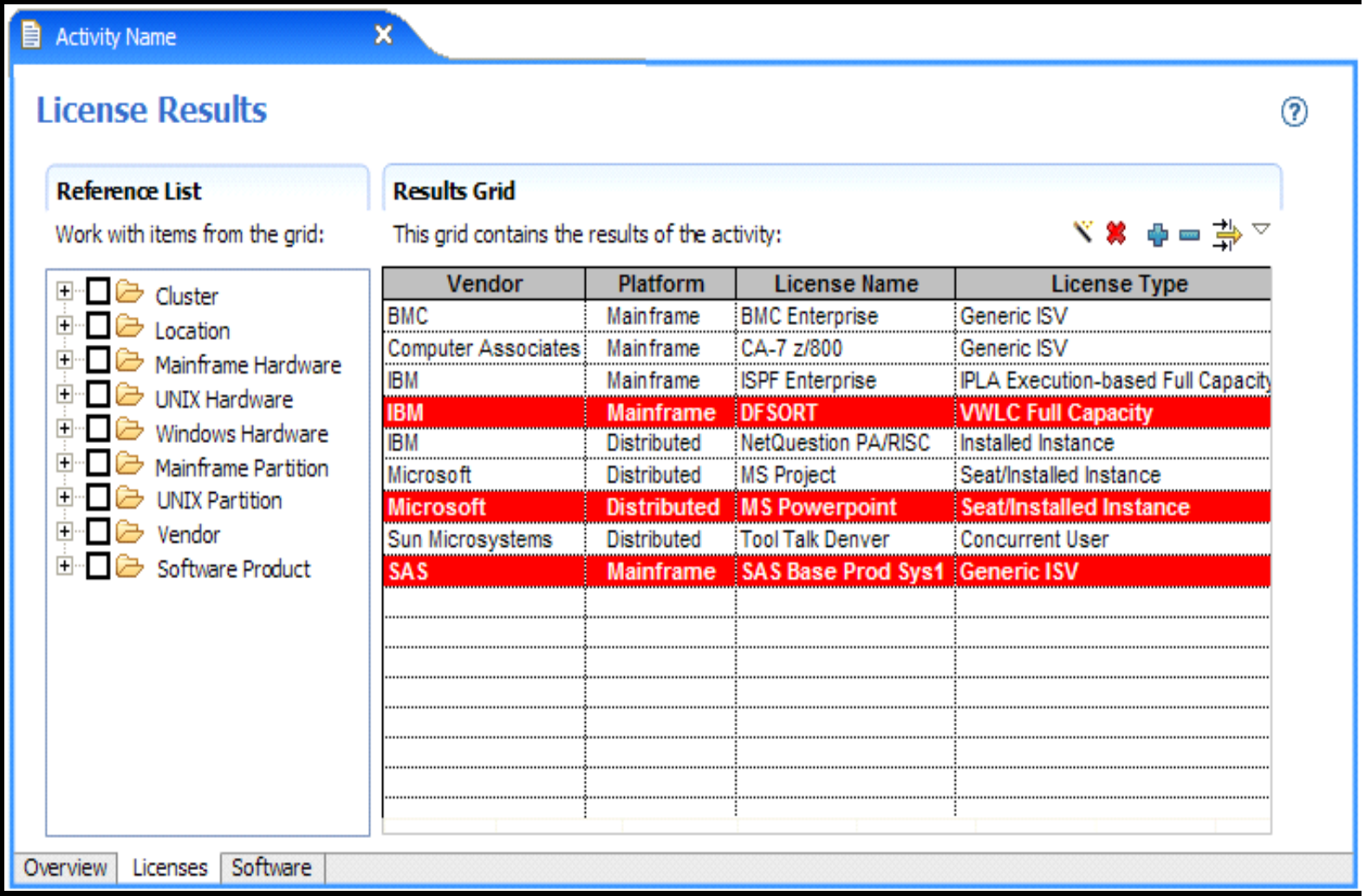
Manage Compliance

Gestion de la conformité des Licences

Cet exemple montre comment la non-conformité des licences mainframe et “distribué“ est clairement mise en évidence.

- Un “click” sur l’information “Licences” permet de retrouver les données et de travailler sur le contenu du tableau de résultats.
- Les lignes en rouge indiquent les produits non conformes en terme de licences.



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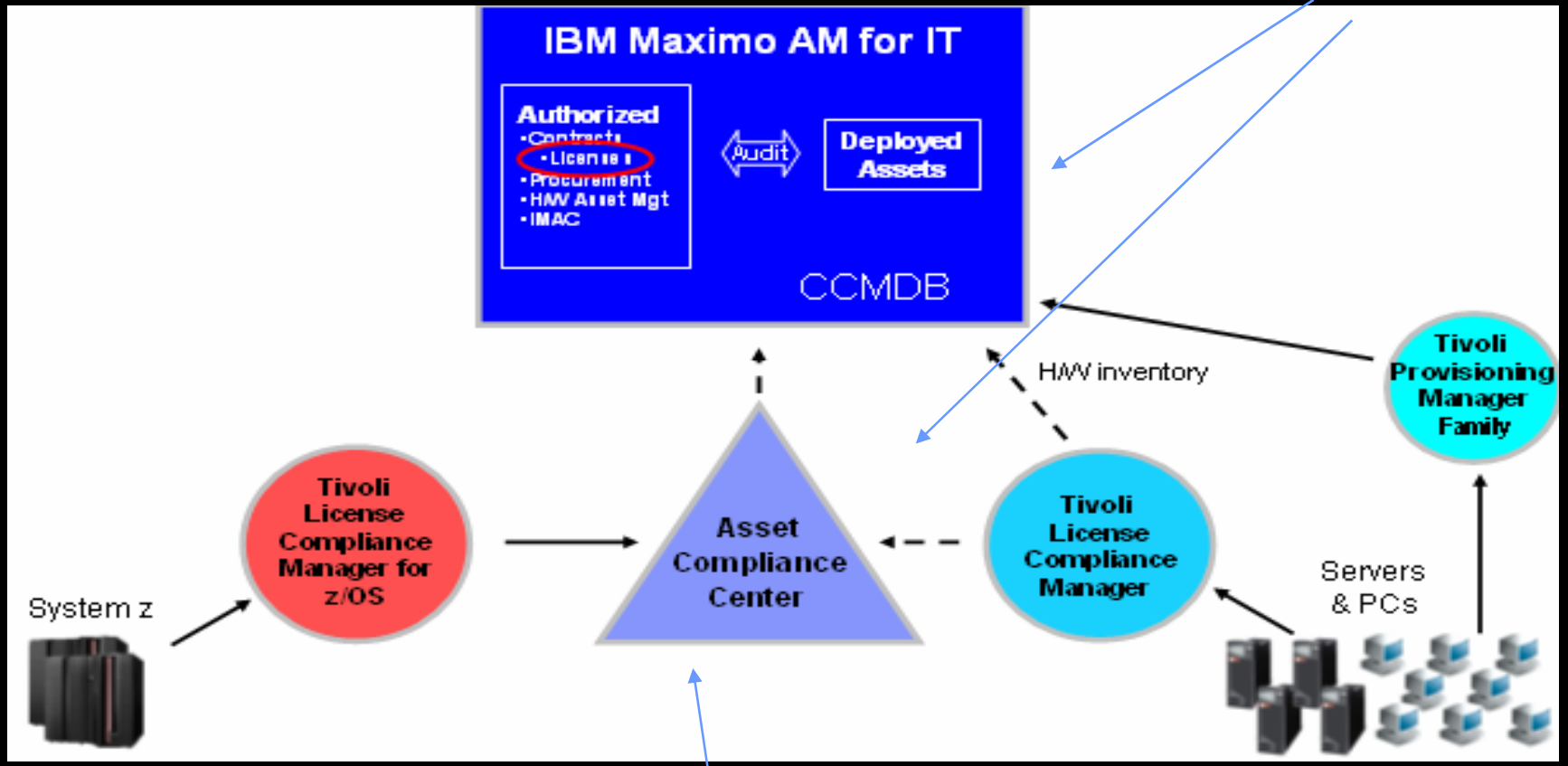
IBM Maximo AM for IT Roadmap

Q2 2007

Software Contracts vers license view



Q4 2006

TLCMz 4.2 and TACC

Q1 2007

TLCM 2.3 and TLCMz 4.2 Fix Pack

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SAM en résumé – D'où viennent les gains?

Réduction des budgets logiciels

- Coûts réels des mises à jour
- Levier puissant pour la négociation de contrats

Intégration des données liées aux contrats et aux licences

- Optimisation du « CPU Capacity Planning »
- Réduction des coûts de support SW
- Plus d'efficacité dans les consolidations HW/SW

"Les Entreprises qui démarrent une gestion des actifs font l'expérience de gains importants allant de 30% de réduction des coûts la première année et de 5-10% les 5 années suivantes – Gartner

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Conclusion

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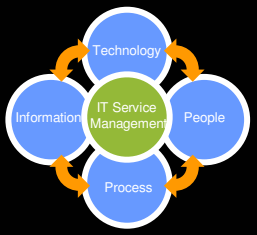
Les bénéfices de la démarche IBM IT Service Management



Une meilleure manière de gérer l'informatique

- Délivrer des services de qualité – Alignés avec les priorités métier.
- Des processus mesurables – De bout en bout.
- Valoriser les investissements existants – Meilleure collaboration et intégration entre technologie, information et personnes.
- Accroître la productivité de l'organisation en intégrant les domaines par des processus communs.

"Service Management is about transforming IT to operate like a business…".

—Pentagon IT Agency, John Hanson

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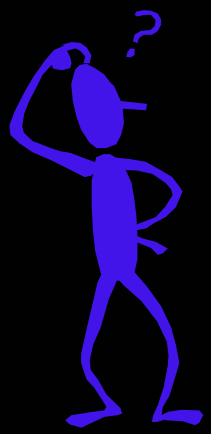

Questions ?

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