Session 1 : Tivoli

Laurent Michel – IBM Tivoli Sales
Pierantonio Marchesini – IBM Tivoli TechSales
Marcel Prisi – Directeur Virtua SA

Smart Decisions for a Smarter Planet

LEARN NEW IDEAS TO STAY AHEAD OF THE MARKET!

Superviser efficacement son IT avec Tivoli Monitoring

Mission Statement

Monitor systems' OS and applications,

with reporting and capacity planning features

using pre-defined best practices

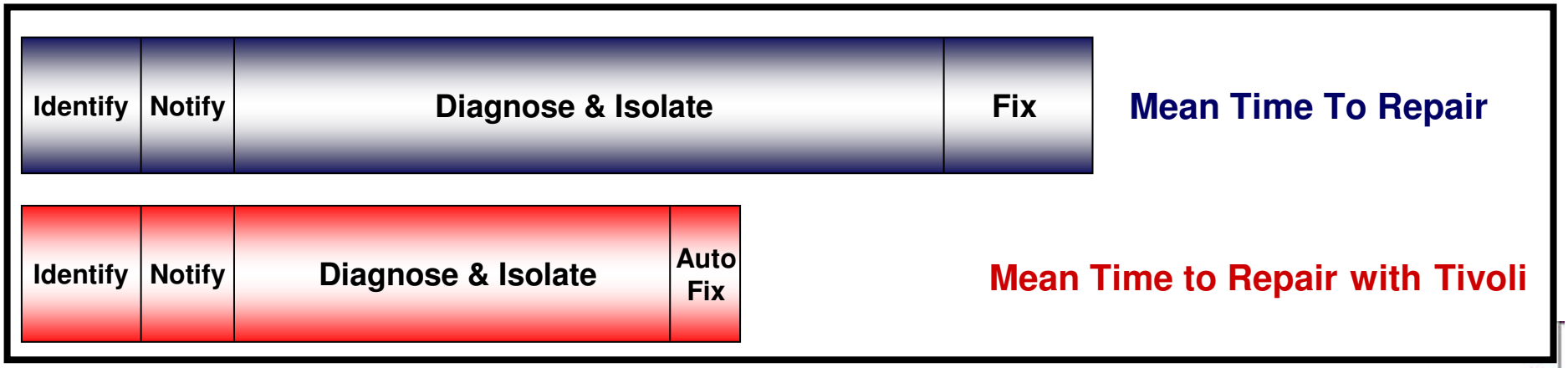
and centralised role-based console

Wikipedia

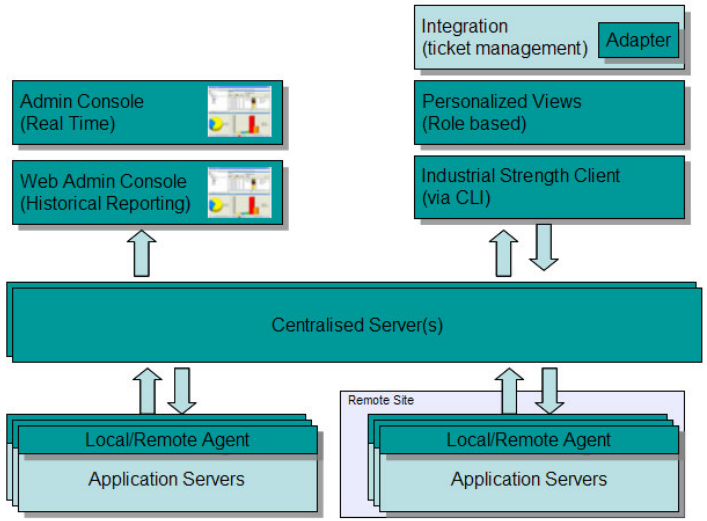
- *ITM is the monitoring middleware solution from IBM. It is the result of the Candle acquisition in 2004, and replaces the IBM FW based solution.*
- *ITM current version is 6.2.1. ITM 6.x does NOT require a framework.*
- *ITM allows centralised/decentralised automation, performance monitoring of the Data Center full stack (OS and applications)*

Goal: Reduce the Mean Time To Repair

- **By Some Estimates**
  - 10% of users report a problem they have
  - 90% “try again later” (or not) or move on to something else.
- **Tivoli’s ability, in application and OS environments, to quickly correlate, isolate and diagnose the root cause of problems can dramatically reduce MTTR**
- **What is your cost of downtime per application?**

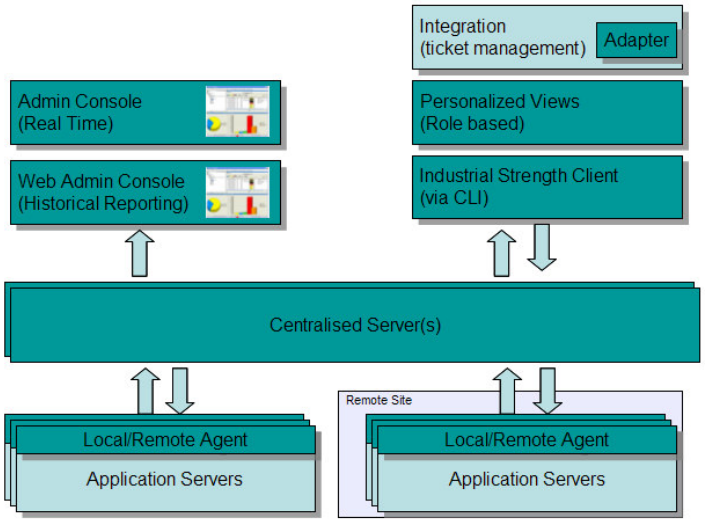


Features



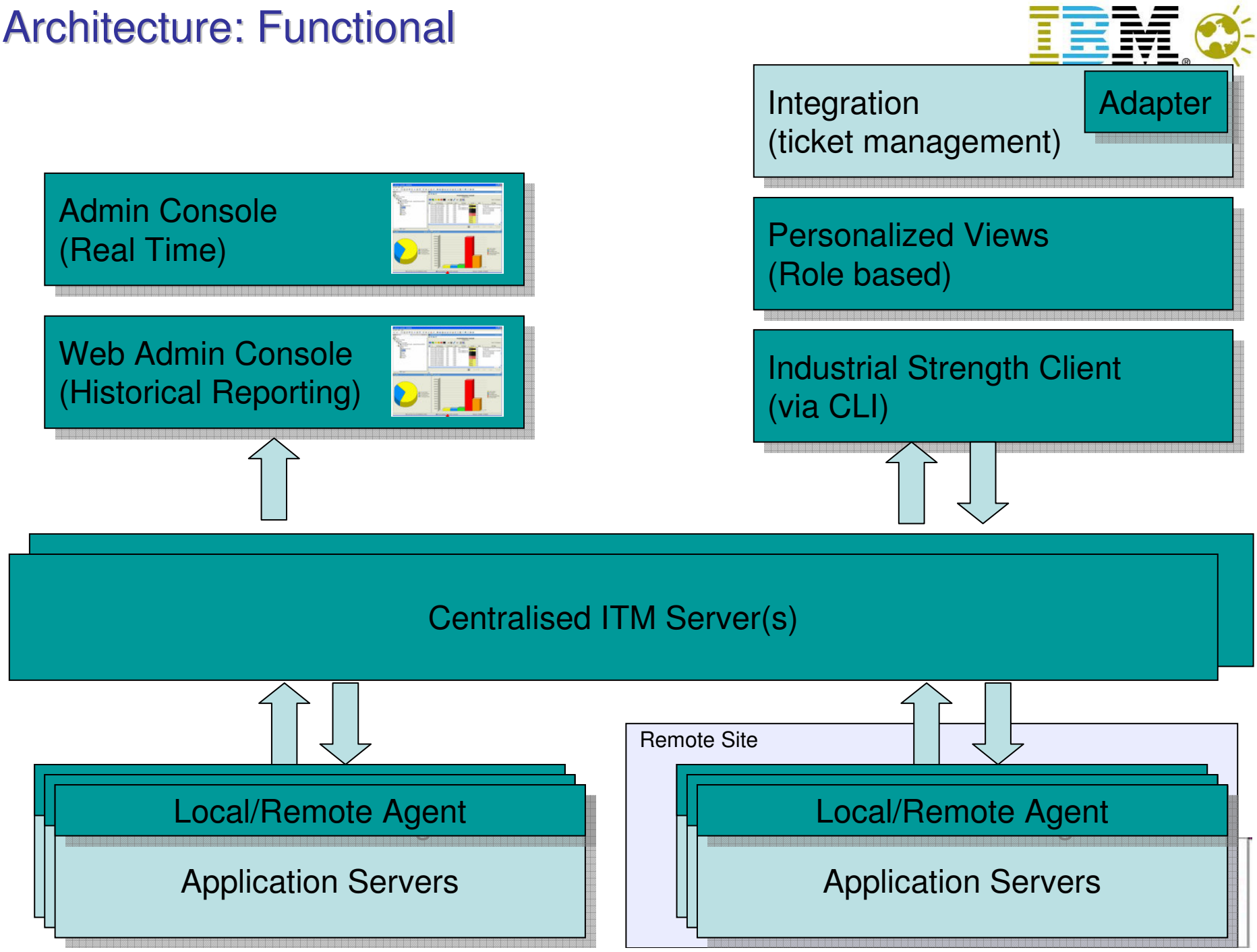
- **Centralised Console** for all the IT Resources (HW & Software)
- **Scalable Architecture** with remote sites support (Firewall support)
- **Customisable views** for different users (DB, SYS Admins, etc.)
- **CLI and WEB-light client based GUI**
- Out-of-the-box **metrics and best practices (**with knowledge base**)**
- **Historical data reporting**, trend analysis as a plus

Features II

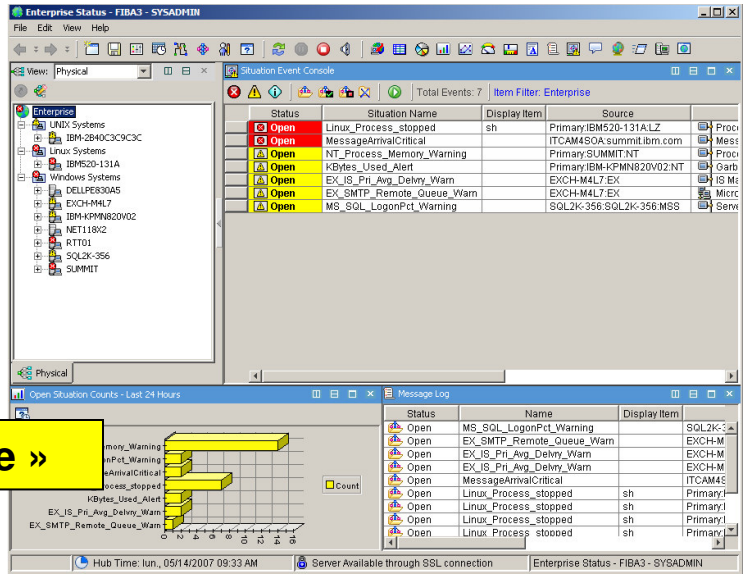


- **Correlation and policy based management**
- **Automatic actions upon problems**
- Covers and runs on **etherogeneous environments** (from AIX to z/OS)
- Centralised **Management** of resources
- Agents can **gather "special" metrics** (not just via SNMP)
- **Easy Deployment**
- **Helpdesk integration for tickets**
- "easy" **SLA support** for availability
- Capacity planning

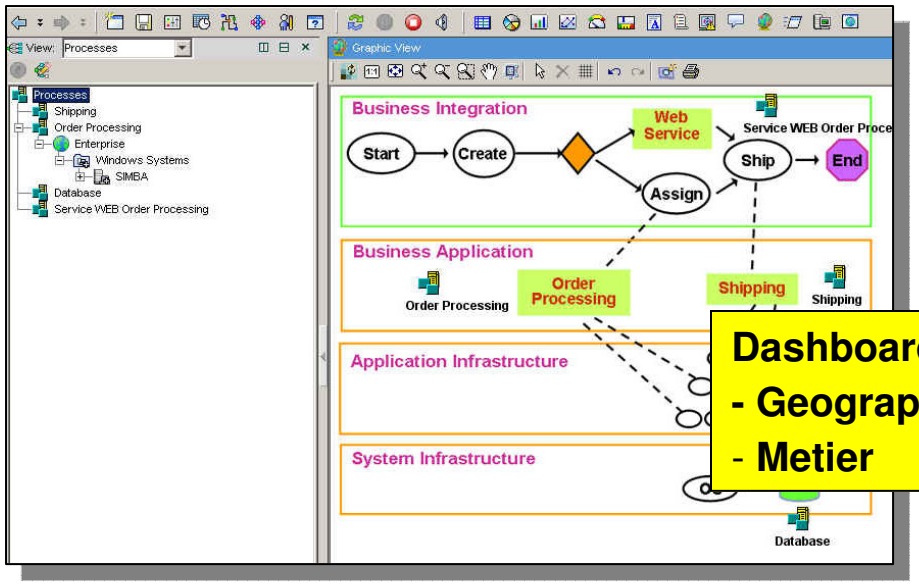
Architecture: Functional

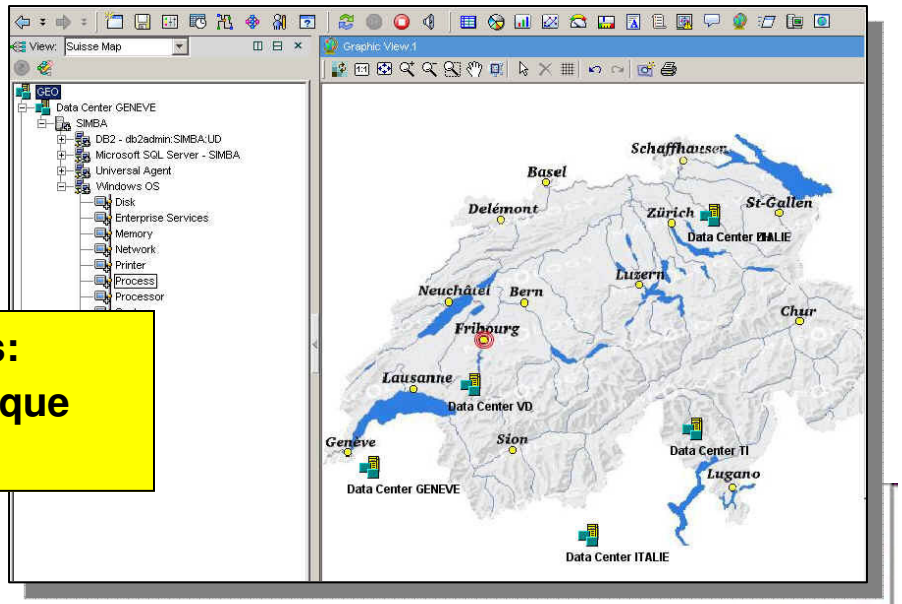


Concepts: Physical and Logical Views



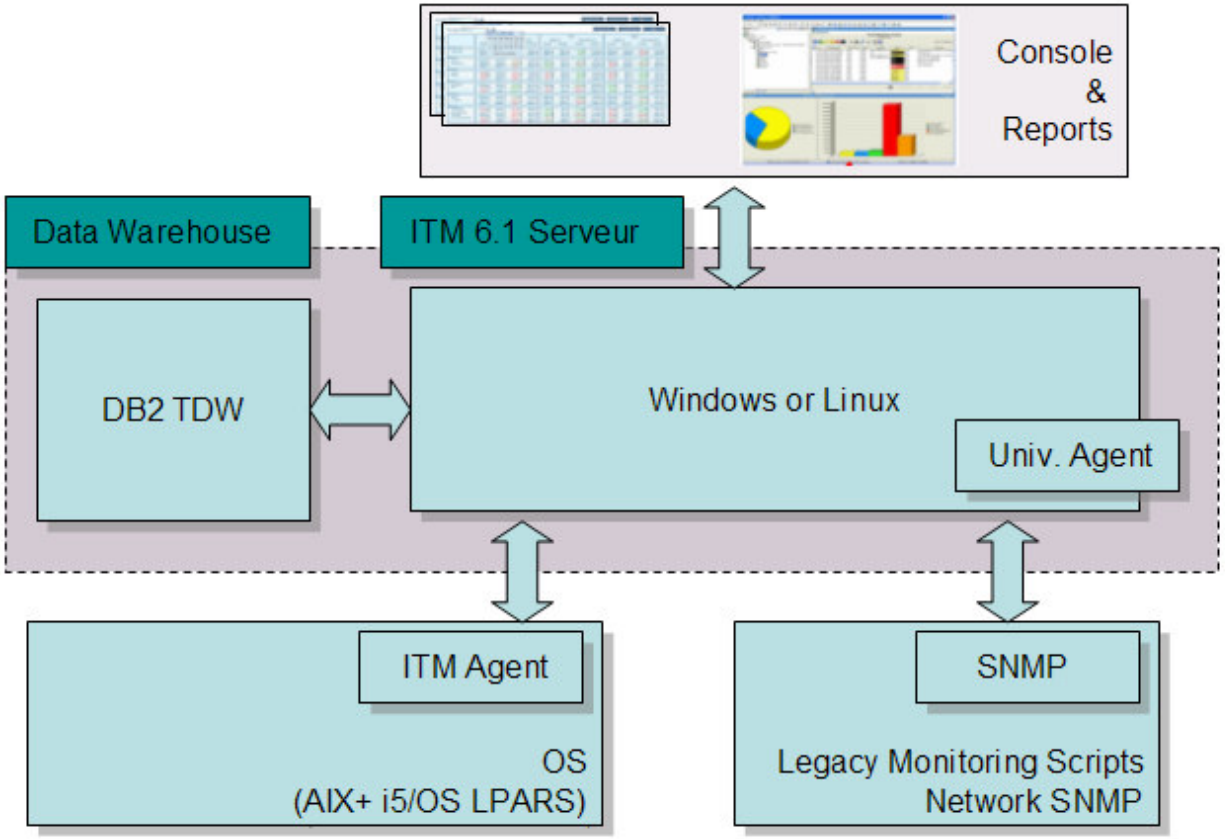
Vue « physique »





Dashboards:
- Geographique
- Metier

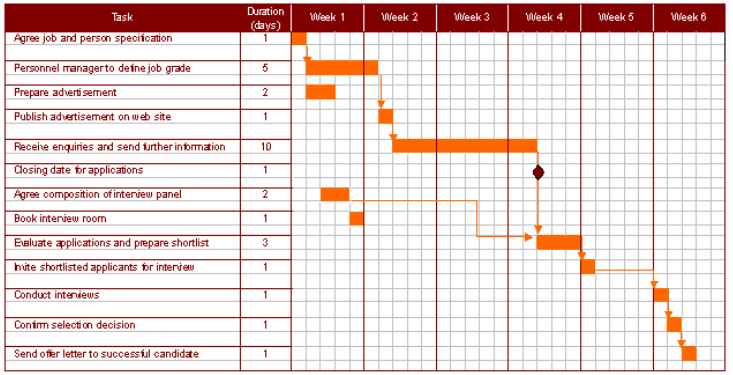
Infrastructure HW requirements



Item	Procs	Proc	Memoire	Disque	Remarques
ITM 6.1 Serveur	1	2GHz	2GB	80GB	(1)
Data Warehouse	1	2GHz	2GB	200GB	(1,2)

(1) proc dediee
(2) historique 1 aneee

Déploiement

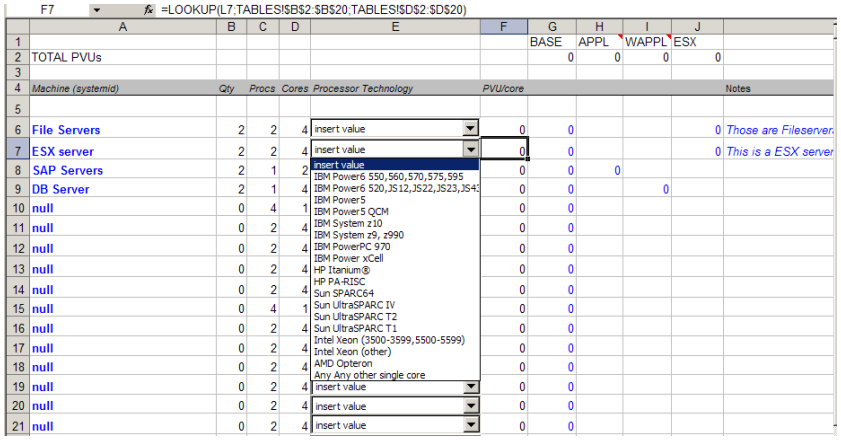


Quick Start

Effort, 8 à 10 jours avec les activités suivantes:

- Installation et tuning du serveur ITM (TEPS + TEMS + DB2 + data warehouse + Warehouse Proxy)
- Installation d'un agent OS, AIX Premium, Unix Log, Agent i5, VIOS (si VIOS v2.1 en place chez le client)
- Configuration du monitoring de base (CPU, mem, disque, errpt, qsysopr ...)
- Historisation des données (data warehouse)
- Création de quelques rapports historiques pour exemple.
- Transfert de connaissance sur l'environnement mis en place (cela ne remplace pas le training ITM)
- Documentation d'installation.

Licenses



F7 =LOOKUP(L7;TABLES!$B$2:$B$20;TABLES!$D$2:$D$20)

	A	B	C	D	E	F	G	H	I	J
1							BASE	APPL	WAPPL	ESX
2	TOTAL PVUs						0	0	0	0
3										
4	*Machine (systemid)*	*Qty*	*Procs*	*Cores*	*Processor Technology*	*PVU/core*				Notes
5										
6	File Servers	2	2	4	insert value	0	0			0 *Those are Fileserver*
7	ESX server	2	2	4	insert value	0	0			0 *This is a ESX server*
8	SAP Servers	2	1	2	insert value	0	0	0		
9	DB Server	2	1	4	IBM Power6 550,560,570,575,595	0	0		0	
10	null	0	4	1	IBM Power6 520,JS12,JS22,JS23,JS4	0	0			
11	null	0	2	4	IBM Power5	0	0			
12	null	0	2	4	IBM Power5 QCM	0	0			
13	null	0	2	4	IBM System z10	0	0			
14	null	0	2	4	IBM System z9, z990	0	0			
15	null	0	4	1	IBM PowerPC 970	0	0			
16	null	0	2	4	IBM Power xCell	0	0			
17	null	0	2	4	HP Itanium®	0	0			
18	null	0	2	4	HP PA-RISC	0	0			
19	null	0	2	4	Sun SPARC64	0	0			
20	null	0	2	4	Sun UltraSPARC IV	0	0			
21	null	0	2	4	Sun UltraSPARC T2	0	0			
					Sun UltraSPARC T1					
					Intel Xeon (3500-3599,5500-5599)					
					Intel Xeon (other)					
					AMD Opteron					
					Any Any other single core					

Processor Technologies									
Vendor	Brand	Processor Type							PVU per Core
		One-Core (1)	Dual-Core (2)	Quad-Core (4)	Hex-Core (6)	Oct-Core (8)	IFL Engine		
IBM	POWER6 550, 560, 570, 575, 596 [2]		■					All Existing	120
	POWER6 520, JS12, JS22 [2]		■					" "	80
	POWER5		■					" "	100
	POWER5 QCM			■				" "	50
	System z10 [3]						■	" "	120
	System z9, z990, S/390 [3,4]						■	" "	100
	PowerPC 970		■					" "	50
	PowerXCell™, Cell/B.E.™ 8i [5]	■						" "	30
HP (Intel ®)	Itanium ®		■					All Existing	100
	PA-RISC		■					" "	100
Sun / Fujitsu	SPARC64 VI, VII		■					All Existing	100
	UltraSPARC IV		■					" "	100
	UltraSPARC T2		■					" "	50
	UltraSPARC T1		■					" "	30
Intel R	Xeon ®		■	■				3500 to 3599, [6] 5500 to 5599 [6]	70
			■	■	■			3000 to 3499, 5000 to 5499, 7000 to 7499	50
AMD	Opteron		■	■				All Existing	50
Any	Any other single core	■						All Existing	100

The ITM price model is based on the Physical CORES. You need to compute the PVUs of your environment (depending on the processor technology)

Additional agents are bundled for Windows platforms (MSSQL, Exchange, IIS) and non-Windows applications (SAP, Lotus, etc.)

A tool is available for configuration

Exemple d'installation

- Scenario
  - 50 serveurs Windows/Linux
  - Dont 10 serveurs VMware
- Licences
  - 38'000 CHF inclus 12 mois de maintenance et support
  - 10'000 CHF /an maintenance et support
- Services – 10 jours
  - 12'000 CHF d'installation et configuration

» TOTAL – 50'000 CHF

» (- 500 CHF par serveur physique sur 3 ans)

Références

Estimated 3000 IBM ITM customers worldwide*

- **1** customer with 20,000 servers with plans to grow to 50,000
- **17** customers with greater than 7,000 servers
- **44** customers with greater than 4,000 servers
- **87** customers with greater than 2,000 servers
- **346** customers with greater than 500 licenses
- **1235** customers with greater than 50 licenses

Quelques Références en Suisse et mondiales

- SBB/CFF
- IBM Banking Competence Centre
- Loyds TSB
- UNEDIC
- ATOS Origin
- Barclays Capital
- Merrill Lynch
- Harley Davidson
- Airbus
- Deutsche Bank
- JPMorgan Chase Bank
- Swiss Re
- Bank of America

Summary

The IBM Tivoli Monitoring V6.2 solutions provide rapid time to value and reduced total cost of ownership through:

- a simplified install,
- new GUI, and
- framework-less lightweight infrastructure for the next generation of IBM monitoring products.

The new look of IBM Tivoli Monitoring V6.2, is based on the **Tivoli Enterprise Portal (TEP)**, a flexible and easy-to-use browser interface that allows users to quickly isolate and resolve potential performance problems through consolidated resource monitoring and management for both distributed and mainframe environments.


Questions ?!?