



IBM Systems Director Enterprise Edition: High-Level Overview

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IBM Advanced Technical Skills



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Agenda

- Systems Director Enterprise Edition High-Level Overview
 - Systems Director Edition Overview
 - Systems Director Enterprise Edition Components
 - Systems Director Base Overview

- IBM Tivoli Monitoring High-Level Overview
 - ITM Component Overview
 - Tivoli Data Warehouse
 - IBM Tivoli Performance Analyzer Agent
 - IBM Tivoli Monitoring for Energy
 - ITM Samples

- Tivoli Common Reporting for Asset and Performance Management
 - TCR Overview
 - TCR Samples

- Tivoli Application Discovery and Dependency Manager Overview
 - Feature Overview
 - TADDM Samples

Agenda Cont.

- IBM DB2 High-Level Overview
- Systems Director & ITM Integration
 - Integration Overview
- System Director Enterprise Edition Requirements
- ATS Systems Director Enterprise Edition Lab
- Links to More Information

IBM Systems Director Editions

- **IBM® Systems Director Express Edition**
 - Remotely monitor, configure and update servers and OS's
 - Troubleshoot problems faster for higher system availability
 - Reduce time to execute administrator tasks
- **IBM Systems Director Standard Edition**
 - Use Systems Director Express Edition features
 - Monitor and manage energy use and thermal output
 - Get a single view and status of networking systems
 - Reduce time to configure and deploy virtual images (AIX/Linux only)
- **IBM Systems Director Enterprise Edition**
 - Use Systems Director Standard Edition features
 - Deploy workloads faster with improved reliability in system pools
 - Increase operator productivity with prioritized information and context, real-time and historical health status
 - Use predictive capabilities to help with capacity estimation
- **AIX Enterprise Edition**
 - Includes AIX and Systems Director Enterprise Edition
 - Increase deployment flexibility with Workload Partitions



IBM Systems Director Enterprise Edition Overview

Tivoli. software



- The Systems Director Enterprise Edition provides:
 - All features of the Systems Director Express and Standard Editions
 - Creation/removal of system pools and resource management in AIX and Linux system pools as if they were a single system
 - Addition/removal of physical servers within system pools
 - Visualization of the relationships of LPARs to servers to applications
 - **Proactive real-time and predictive monitoring of the virtualized environment**
 - **Predictive performance management and capacity estimation**
 - **Application & Dependency Discovery**
 - **Enhanced Reporting Capabilities**

IBM Systems Director Enterprise Edition for Power V6.2

5765-EEP

Pieces and Parts:

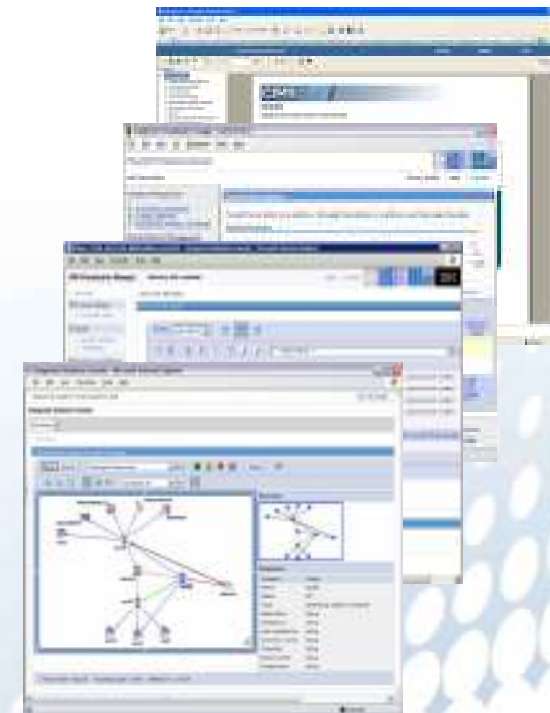
- IBM Systems Director products
 - IBM Systems Director (ISD) 6.2
 - ➔ ISD VMControl [Enterprise](#) Edition for Power, V2.3
 - ➔ ISD Service & Support Manager V6.2
 - ➔ ISD Transition Manager for HP SIM V6.2
 - ➔ ISD Active Energy Manager V4.3
 - ➔ ISD Network Control V1.2

- Tivoli products (plus DB2 & Launchpad):
 - [IBM Tivoli Monitoring \(ITM\) V6.2.2 FP2 plus OS,CEC,HMC and System p Agents](#)
 - [IBM Tivoli Monitoring for Energy Management V6.2.1](#)
 - [IBM Tivoli Application Discovery and Dependency Manager \(TADDM\) V7.2](#)
 - [IBM Tivoli Performance Analyzer V6.2.2](#)
 - [IBM Tivoli Common Reporting for Asset and Performance Management V1.2](#)
 - [DB2 Enterprise Server Edition V9.7 FP1](#)
 - [ISD Enterprise Edition Installation Launchpad V6.2](#)

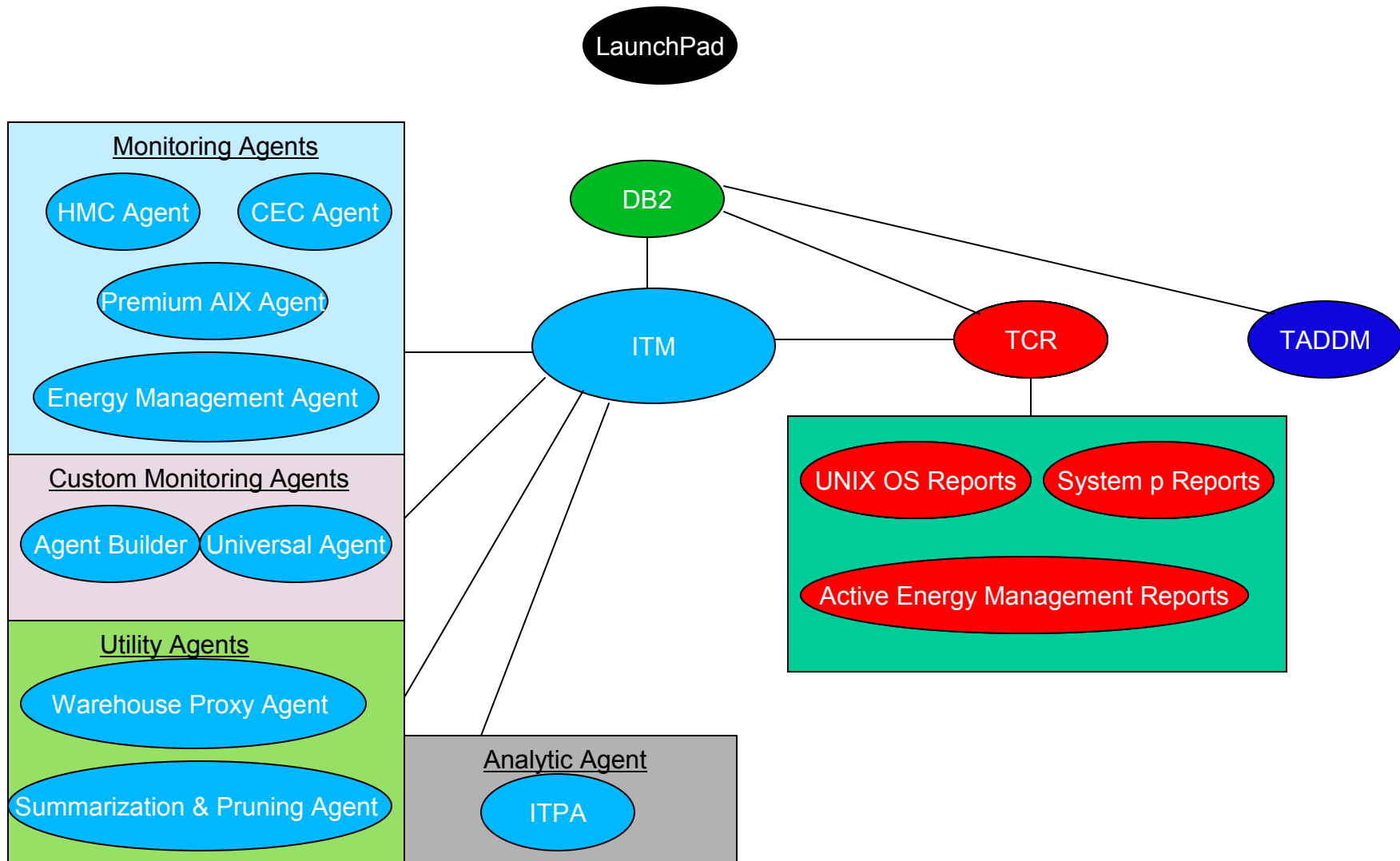


IBM Systems Director Base

- Consolidation of Platform Management Tools
 - Single consistent cross-platform management tool
 - Simplified tasks via Web based interface
 - Manage many systems from one console
- Integrated Physical and Virtual Management
 - Discovery and inventory of physical and virtual resources
 - Configuration and provisioning of platform resources
 - Status, health and monitoring of platform resources
 - Visualization of server resource topologies
 - Move virtual servers between systems without disruption to running workloads
- Platform Update Management
 - Simplified consistent cross-platform tools to acquire, distribute and install firmware and OS updates



IBM Systems Director Enterprise Edition Middleware Components



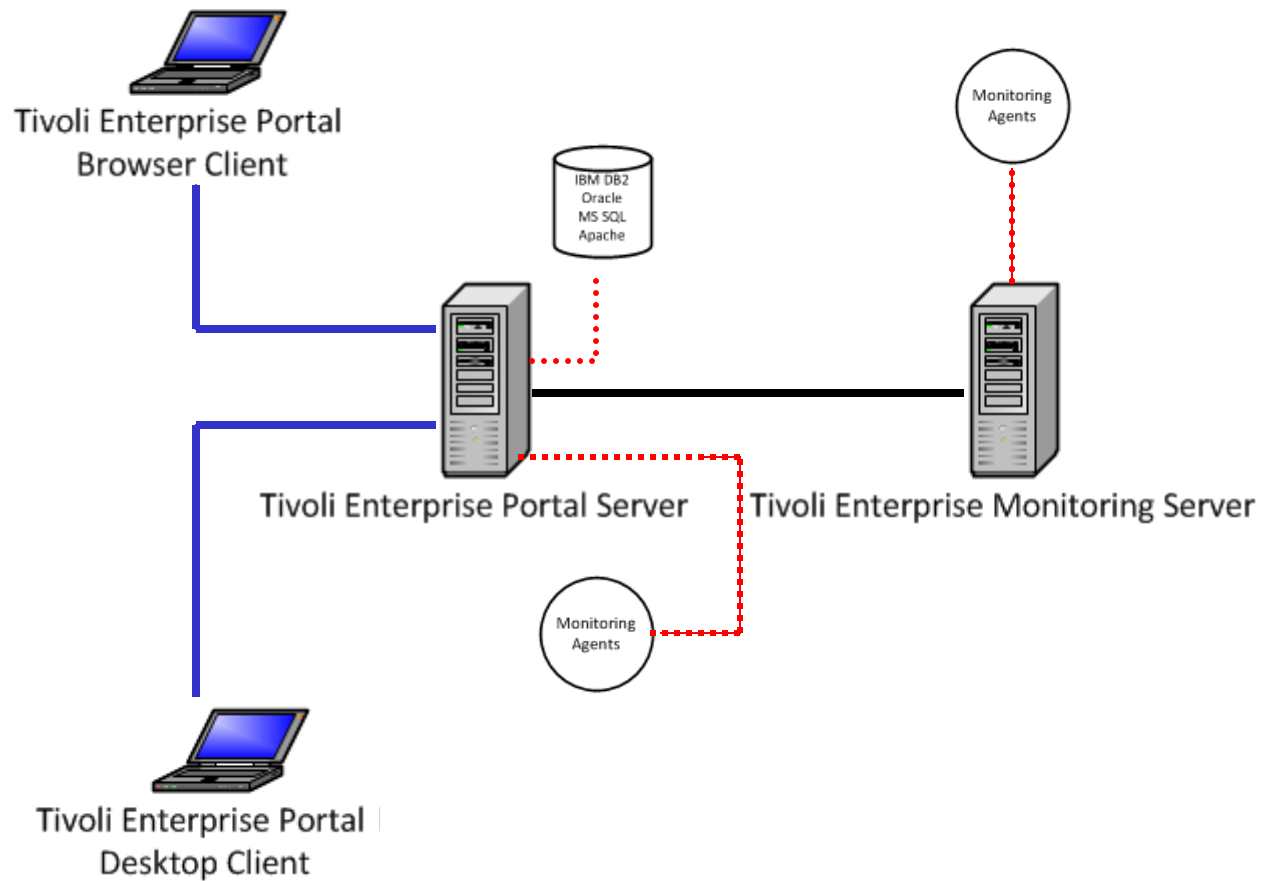
IBM Tivoli Monitoring

Tivoli. software

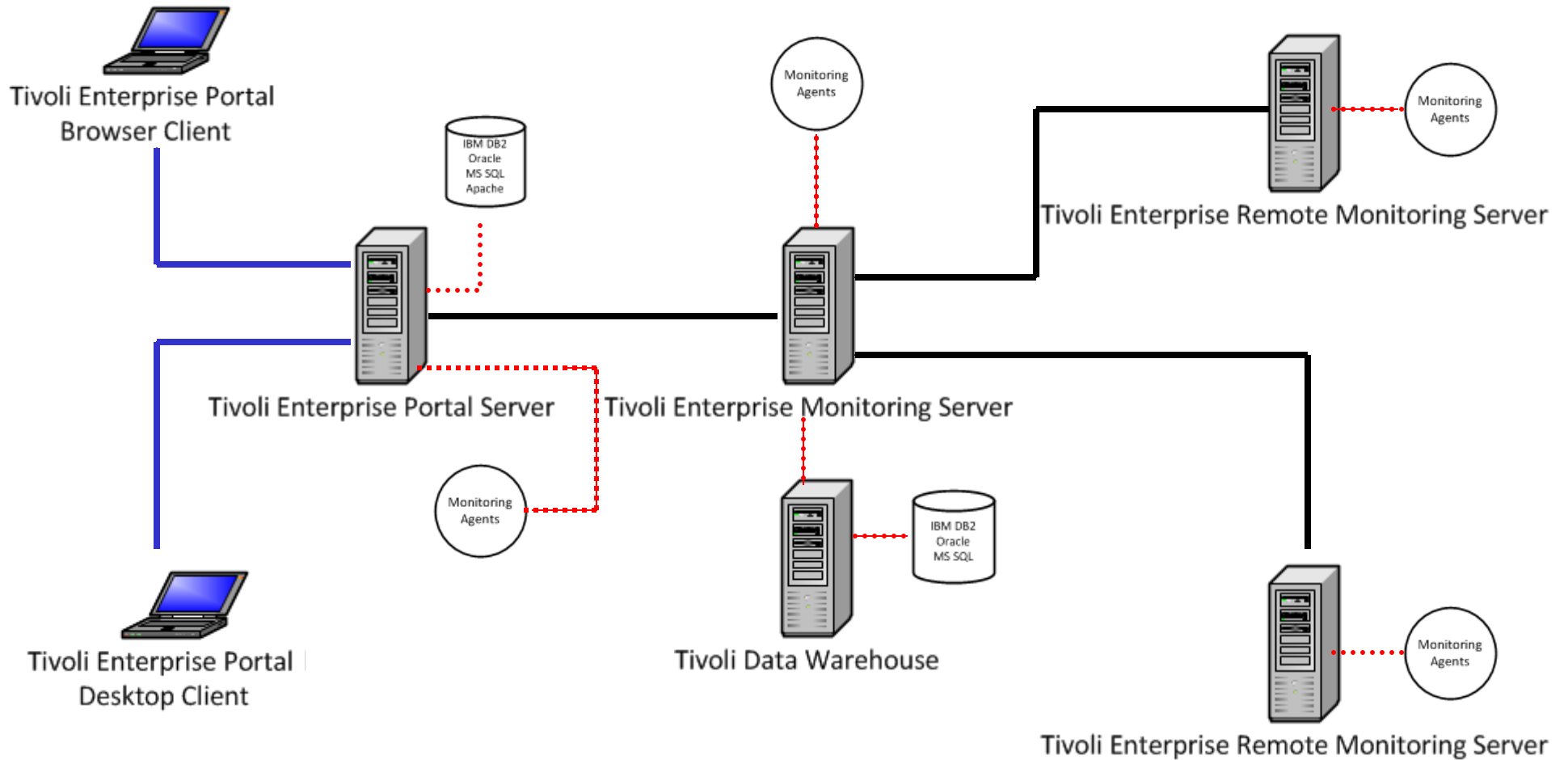
- Monitoring Software to Help Improve IT Department Effectiveness & Efficiency
 - Optimize IT infrastructure performance and availability
 - Simplified tasks via Web based or Java Webstart interface
 - Monitor many systems from one console
 - Includes, as part of the system monitoring software package, easy-to-use warehouse and advanced reporting capability
 - Open Systems Support
 - Oracle & DB2 Monitoring Support
 - Virtualization Aware: PowerVM, VIOS, WPAR, AMS, AME



Tivoli Monitoring Topology: Basic



Tivoli Monitoring Topology: Advanced



Tivoli Monitoring Components Details

Every installation requires the following components:

- Tivoli Enterprise Monitoring Server(s)
 - Act as a collection and control point for alerts received from the agents, and collect their performance and availability data.
 - The monitoring server also manages the connection status of the agents.
 - One server in each environment must be designated as the *hub*.

- A Tivoli Enterprise Portal Server
 - Provides the core presentation layer for retrieval, manipulation, analysis, and pre-formatting of data.
 - The portal server retrieves data from the hub monitoring server in response to user actions at the portal client, and sends the data back to the portal client for presentation.
 - The portal server also provides presentation information to the portal client so that it can render the user interface views suitably.

- Tivoli Enterprise Portal Clients
 - Java-based user interface for viewing and monitoring your enterprise
 - Tivoli Enterprise Portal offers two modes of operation: desktop and browser.

Tivoli Monitoring Components Details

- Tivoli Enterprise Monitoring Agents
 - Installed on the systems or subsystems you want to monitor.
 - Collect data from monitored, or managed, systems and distribute this information to a monitoring server.
- IBM Eclipse Help Server
 - for presenting help for the portal and all monitoring agents for which support has been installed.

An installation optionally includes the following components:

- Tivoli Data Warehouse
 - Repository for historical data collected from agents in your environment.
 - The data warehouse is located on a DB2 on the workstation, DB2 on z/OS, Oracle, or Microsoft® SQL database.
 - To store data in this database, you must install the Warehouse Proxy agent.
 - To perform aggregation and pruning functions on the data, you must also install the Summarization and Pruning agent.

ITM Samples

Performance Summary of all UNIX Systems

UNIX Systems Root Workspace

Memory Usage Summary

Load Average Summary

CPU % Summary

The screenshot displays the Enterprise UNIX Systems Summary application interface. At the top, a window titled 'UNIX Systems Summary' contains a table with the following data:

System Name	Type	Version	Total Real Memory (K-Bytes)	Free Virtual Memory (K-Bytes)	Total Virtual Memory (K-Bytes)	Number of User Sessions	Number of System Procs	Net Address	Timestamp	Idle CPU (Percent)	Load Average (1)
faisds:KUX	AIX	7.1	2,392,064	2,847,860	6,586,368	2	119	9.19.51.217	03/21/11 17:24:27	80	1.52
fativ1:KUX	AIX	6.1	1,048,576	433,256	6,291,456	1	143	9.19.51.215	03/21/11 17:31:22	0	23.66
fativ2:KUX	AIX	7.1	2,883,584	2,317,580	8,126,464	2	184	9.19.51.216	03/21/11 17:31:10	72	3.06

Below the table, there are two smaller tables: 'UNIX Systems Online' and 'UNIX Systems Offline'.

Status	Name	Version
*ONLINE	fativ2:KUX	06.22.02
*ONLINE	faisds:KUX	06.22.02
*ONLINE	fativ1:KUX	06.22.02

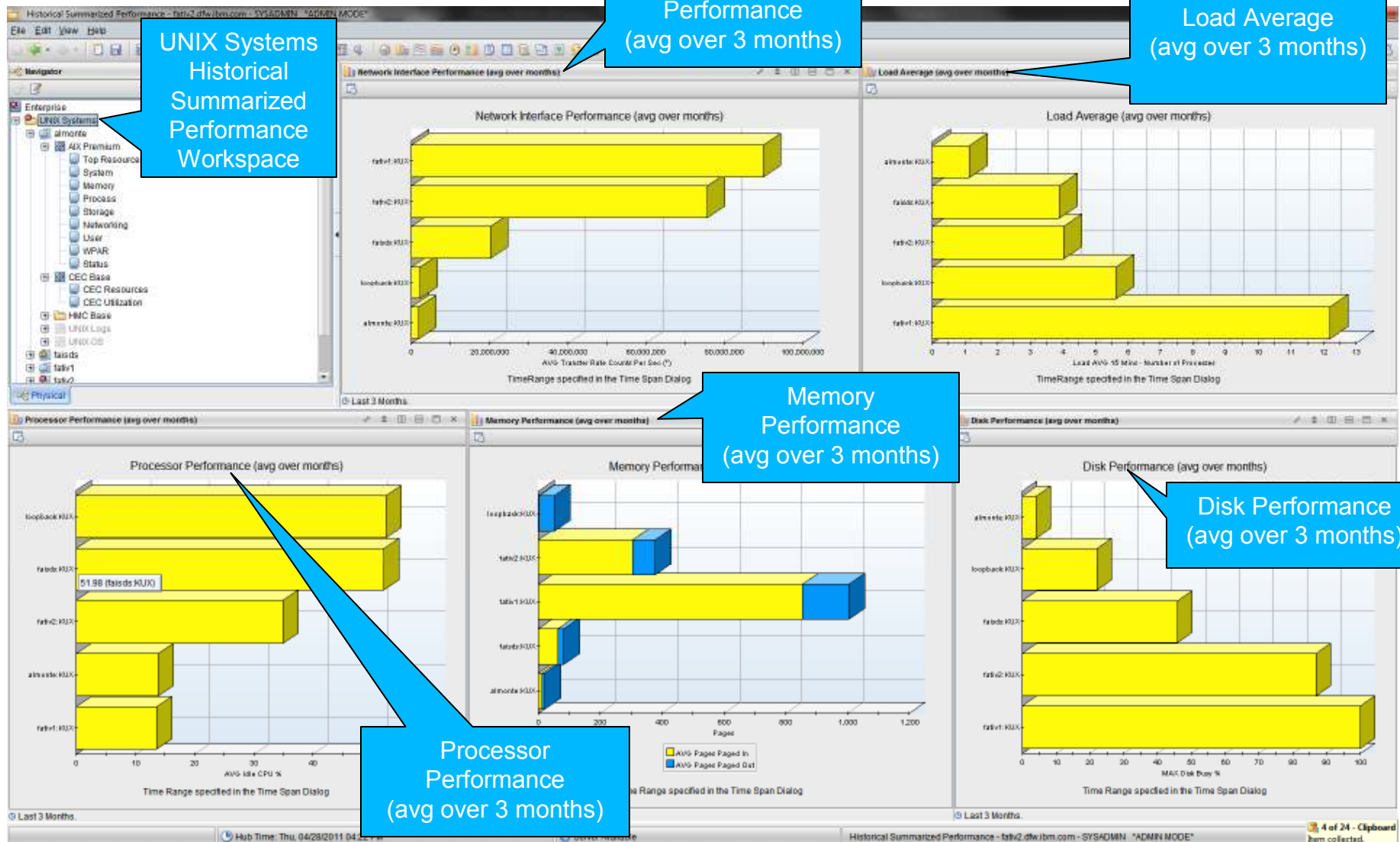
Status	Name	Version
*OFFLINE	almontr:KUX	06.22.02

The bottom section of the screenshot features three charts:

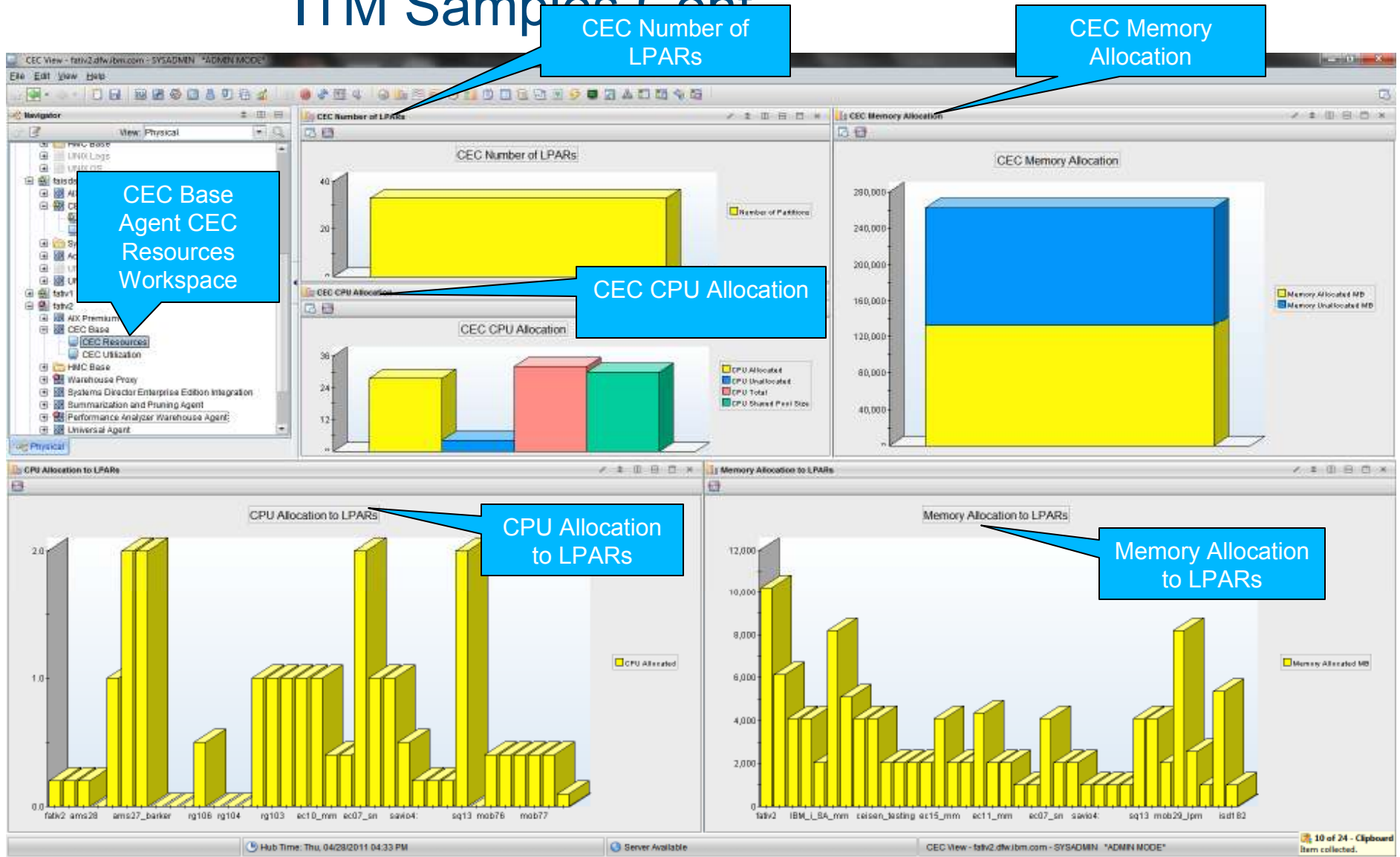
- Memory Usage Summary:** A 3D bar chart showing Total Virtual Memory (K-Bytes), Free Memory (K-Bytes), and Active Virtual Memory (K-Bytes) for fativ2:KUX, fativ1:KUX, and faisds:KUX.
- Load Average Summary:** A 3D bar chart showing Load Average (1 Min.) and Load Average (5 Min.) for fativ2:KUX, fativ1:KUX, and faisds:KUX.
- CPU % Summary:** A horizontal stacked bar chart showing User CPU (Percent), System CPU (Percent), Idle CPU (Percent), and CPU ID for each system.

The application footer shows: Hub Time: Mon, 03/21/2011 05:41 PM; Server Available; Enterprise UNIX Systems Summary - fativ2.dfw.ibm.com - SYSADMIN *ADMIN MODE*

ITM Sample



ITM Samples Cont



ITM Samples Cont

The screenshot displays the IBM Tivoli Monitoring (ITM) interface with several key components:

- CEC Resource Inventory:** A table showing aggregate frame usage for the Zeus system.

Name	Number of Partitions	CPU Total	CPU Allocated	CPU Unallocated	CPU Allocated Pct	CPU Unallocated Pct	CPU Shared Pool Size	Num Dedicated Mem LPARs	Num Shared Mem LPARs	Num AMS Pools	Memory Total MB	Memory Allocated MB	Memory Unallocated MB	Memory Allocated Pct	Memory Unallocated Pct	Machine ID	CPU Units Allocated	CPU Units Unallocated	CPU Shared Pool Size Units	Shared Processor Pools	Sho Prc
Zeus	32	32.0	26.5	5.5	83	17	30.0	23	0	0	262144	131584	130560	50	50	8000020	26.50	5.50	30.00	1	179
- CPU Shared Pools:** A table showing available pools and utilization.

CPU Pool ID	CPU Units Consumed	Available CPU Units in Pool	Avail Shared Pool Pct	Pool Entitlement	Maximum Pool Capacity	LPARs Using Pool
0	3.64	26.37	87.90	Undefined	30.00	53
- Active Memory Sharing (AMS) Pools:** A table showing available pools and utilization.

AMS Pool ID	Available Memory Pool Pct	AMS Mempool Size	AMS Total Mem In Use	LPARs Using Pool
0	Not Collected	6.00	79.00	0
- CEC LPAR Metrics:** A table providing detailed metrics for various LPARs.

Name	ID	State	Monitoring Status	Environment	PoolID	Entitlement	CPU Allocated Pct	Memory Allocated MB	Memory Allocated Pct	Capped Mode	Shared Mode	Machine ID	OS Version	Hostname	CPU Capacity Weight
mob77	33	Not Activated	unmonitored	ablnux	0	0.00	0	1024	0	uncapped	shared			mob77.dfw.ibm.com	Not Collected
sq13	27	Running	monitored	Wosexer	0	2.00	6	4096	2	uncapped	shared	8000020	AX06.1	sq13.dfw.ibm.com	128
IBM_I_SA	8	Running	unmonitored	ablnux	0	0.40	1	1024	0	uncapped	shared		AX06.1		Not Collected
mob76	23	Running	monitored	ablnux	0	0.20	1	2048	1	uncapped	shared	8000020	AX07.1	mob76.dfw.ibm.com	128
sq14	22	Running	monitored	ablnux	0	0.40	1	2048	1	uncapped	shared	8000020	AX07.1	sq14.dfw.ibm.com	128
IBM71_mm	21	Not Activated	unmonitored	os400	0	0.00	0	4096	2	capped	shared		AX07.1		Not Collected
IBM611_mm	20	Not Activated	unmonitored	os400	0	0.00	0	4096	2	uncapped	shared		AX07.1		Not Collected
celen_test	19	Running	monitored	ablnux	0	1.00	3	4096	2	capped	dedicated	8000020	AX06.1	demo3.dfw.ibm.com	0
rg106	18	Running	unmonitored	ablnux	0	0.50	2	2048	1	uncapped	shared		AX06.1		Not Collected
rg105	17	Not Activated	unmonitored	ablnux	0	0.00	0	2048	1	uncapped	shared		AX06.1		Not Collected
rg104	16	Running	unmonitored	ablnux	0	0.50	2	2048	1	uncapped	shared		AX06.1		Not Collected
ec16_mm	15	Running	unmonitored	ablnux	0	1.00	3	4096	2	uncapped	shared		AX07.1		Not Collected
ec14_mm	14	Running	monitored	ablnux	0	1.00	3	4096	2	uncapped	shared	8000020	AX07.1	ec14.dfw.ibm.com	128
rg103	13	Running	unmonitored	ablnux	0	1.00	3	2048	1	uncapped	dedicated		AX07.1		Not Collected

CEC Base Agent
CEC Resource
Inventory
Workspace

CEC Resource Inventory: Total
Aggregate Frame Usage

CPU Shared Pools: Available
Pools & Utilization

AMS Pools: Available
Pools & Utilization

CEC LPAR Metrics:
State, OS, Hostname,
Memory/CPU
Allocations, Etc.

ITM Samples Cont

Physical Memory Consumed by Partitions

Physical CPU Busy Time for Partitions

CEC Base Agent CEC Utilization Workspace

Physical CPU Busy Time for Partitions

Average CPU & Memory Utilization Among Monitored Partitions

Total Monitored CPU Used Pct	Total Monitored Memory Used Pct	Monitored Shared LPARs	Monitored Dedicated LPARs	UnMonitored Active LPARs	Total Monitored CPU	Total Unmonitored CPU	Total Monitored CPU Used Units	Inactive LPARs	Total Monitored Memory MB	Total UnMonitored Memory MB
12	25	21	2	6	27.6	4.4	3.71	5	94464	37120

ITM Sample

File System Sizes & Utilization 3D Pie Charts

AIX Premium Agent Top Resources Workspace

File System Metrics

The screenshot displays the IBM ITM (IBM Tivoli Monitoring) interface for AIX Premium Agent. The interface is divided into several sections:

- File System Sizes:** A 3D pie chart visualization showing disk usage for various file systems. The legend indicates 'Used Pot' (yellow) and 'Free Pot' (blue).
- File System Metrics:** A table providing detailed metrics for each file system.
- Top CPU Processes:** A table listing the processes with the highest CPU usage.
- Top Memory Processes:** A table listing the processes with the highest memory usage.

Mount Point	Volume Group Name	Size MB	Free MB	Used MB
/var/adm/ras/livedump	rootvg	256	256	0
/home	rootvg	16	16	0
/updates	rootvg	8976	1540	7428
/opt	rootvg	9328	460	8868
/usr	rootvg	2272	78	2194
/	rootvg	512	195	317
/var	rootvg	448	79	369
/tmp	rootvg	1536	55	1481
/admin	rootvg	128	128	0

Name	ID	CPU Pct	Owner
slp_snreg	7405588	43.5	root
kcawd	9306252	37.2	root
java	8388626	15.3	root
firefox-bin	14221432	1.2	root
lnud	262152	0.6	root
java	7274508	0.4	cmdbuser
java	3997882	0.3	cmdbuser
java	8585300	0.3	cmdbuser
java	10420294	0.2	cmdbuser
java	6881314	0.2	cmdbuser
java	5701800	0.1	cmdbuser
kdsmain	16646180	0.1	root
java	5570792	0.1	cmdbuser
dtfile	18546764	0.1	root
kuxagent	11796622	0.0	root
kuxagent	16252998	0.0	root
kcawd	12583152	0.0	root
glt	1441836	0.0	root
random	3539104	0.0	root
ainDataProvider-61	6291510	0.0	root
java	3801248	0.0	pconsole
kpxagent	7602396	0.0	root
nfsd	3866788	0.0	root
Xvnc	14024844	0.0	root
getty	5829332	0.0	root
syncd	2162840	0.0	root
topasrec	4718782	0.0	root
cimsrver	7209182	0.0	root
ctd_daemon	10044500	0.0	root

Name	ID	Memory KB	Owner
firefox-bin	14221432	139203	root
java	3997882	93900	cmdbuser
java	8388626	80762	root
java	5570792	59091	cmdbuser
kdsmain	16646180	50322	root
java	7274508	47770	cmdbuser
java	8585300	40153	cmdbuser
java	10420294	35679	cmdbuser
java	5701800	33290	cmdbuser
slp_snreg	7405588	26228	root
java	6881314	18964	cmdbuser
kpxagent	7602396	12720	root
java	3801248	10478	pconsole
cimsrver	7209182	6135	root
kuxagent	16252998	5273	root
kuxagent	11796622	5253	root
kcawd	12583152	2639	root
ainDataProvider-61	6291510	2556	root
cimlistener	9371694	1776	root
kpxagent	8519770	1765	root
dirsnmpd	5439664	1744	root
rmcd	8650782	1690	root
kcawd	9306252	1502	root
kphagent	8323156	1353	root
kphagent	6619366	1320	root
tier1slp	3276924	1297	root
j2pg	2228292	928	root
Xvnc	14024844	898	root
IBM_CSMAppDM	7664326	840	root

Top CPU Processes

Top Memory Processes

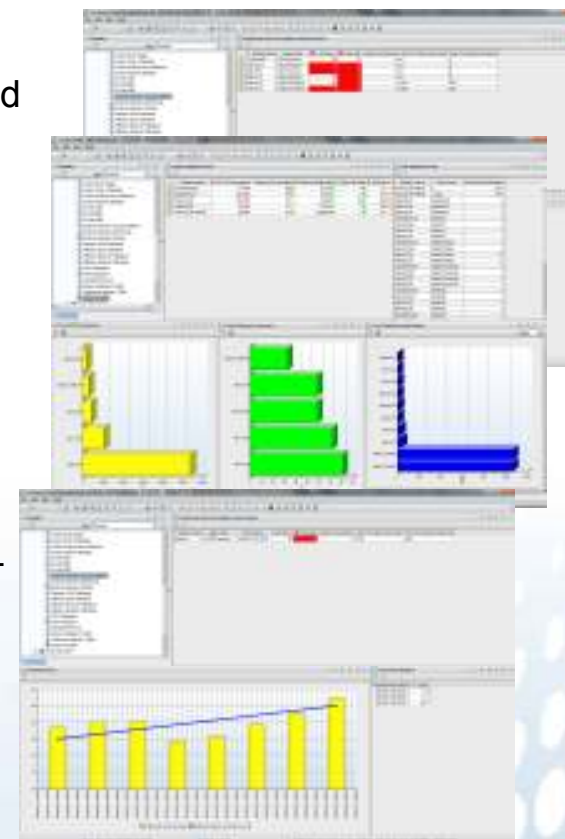
Tivoli Data Warehouse

- Optional database that allows ITM components to interact to collect and manage historical data.
- The components that make up the Tivoli Data Warehouse solution are:
 - Tivoli Enterprise Monitoring Server
 - Tivoli Enterprise Portal Server
 - Warehouse Proxy Agent
 - Summarization and Pruning Agent
- TWD requires ITM Base environment to be properly installed and properly configured.

IBM Tivoli Performance Analyzer Agent

- Tivoli Performance Analyzer extends the capability of Tivoli Monitoring by analyzing and enriching the data that is collected by its monitoring agents and by providing reports about the performance and capacity of your systems.
- Tivoli Performance Analyzer enhances ITM with Predictive Capabilities
 - Monitor resource consumption trends
 - Anticipate future performance issues
 - Predict application bottlenecks and create alerts for potential service threats
- Tivoli Performance Analyzer performs the following functions for individual IT components:
 - Gathers and stores IT components such as CPU, disk, and memory utilization in a central data repository
 - Provides a predictive analysis component that indicates trends in IT component utilization
 - Retains the analyzed data in a central repository for reporting purposes

Tivoli. software



ITPA San System Health Overview

The screenshot displays the IBM System Health console interface. It features a central 'System Health Overview' table, a 'Disk Health Overview' table, and three bar charts: 'Top 10 CPU Consumers', 'Top 10 Memory Consumers', and 'Top 10 Daily Disk Space Deltas'. A 'Navigator' pane on the left shows the 'System Health Workspace' tree. Callout boxes highlight these key components.

System Name	CPU Consumption	Memory Consumption	Memory Differential	Page Hit Ratio	Workload
almonte:KUX	177	59	9736	0	75
fabdc:KUX	5403	59	3936	3	81
fabv1:KUX	1042	72	3928	18	84
fabv2:KUX	405	81	11026	7	89
Primary:TITAN.MT	284	33		1	64

System Name	Disk Name	Disk Space Differential
Primary:TITAN.MT	C:	1071
Primary:TITAN.MT	Total	1071
fabv2:KUX	Iddevfsh00	0
fabv1:KUX	Iddevfsh01	0
fabv2:KUX	Iddevfsh01	0
almonte:KUX	Iddevhd1	0
fabdc:KUX	Iddevhd1	0
fabv1:KUX	Iddevhd1	0
fabv2:KUX	Iddevhd1	1
almonte:KUX	Iddevhd10opt	6
fabdc:KUX	Iddevhd10opt	6
fabv1:KUX	Iddevhd10opt	35
fabv2:KUX	Iddevhd10opt	21
almonte:KUX	Iddevhd11admin	0
fabdc:KUX	Iddevhd11admin	0
fabv1:KUX	Iddevhd11admin	0
fabv2:KUX	Iddevhd11admin	0
almonte:KUX	Iddevhd2	0
fabdc:KUX	Iddevhd2	0
fabv1:KUX	Iddevhd2	0
fabv2:KUX	Iddevhd2	0
almonte:KUX	Iddevhd3	0

System Name	CPU Consumption (%)
fabv2:KUX	~5403
Primary:TITAN.MT	~284
fabv1:KUX	~1042
almonte:KUX	~177
fabv2:KUX	~405

System Name	Memory Consumption
fabv2:KUX	~59
fabv1:KUX	~72
almonte:KUX	~59
Primary:TITAN.MT	~33
fabv2:KUX	~81

System Name	Disk Space Delta (MB)
Primary:TITAN.MT	~1071
fabv2:KUX	~0
fabv1:KUX	~0
almonte:KUX	~0
fabdc:KUX	~0
fabv2:KUX	~1
fabv1:KUX	~0
Primary:TITAN.MT	~1071

ITPA Samples Cont.

The screenshot displays the IBM Tivoli Monitoring interface. The top window, titled "Physical Busy Percentage Forecast Details", shows a table with the following data:

#	System Name	Agent Type	Timestamp	Confidence	Strength	Number Of Samples	Time To Critical Threshold	Time To Warning Threshold
1	almonte PX	AX Premium	08/03/11 09:00:00	6	1	116	3070	2685

Below the table, a context menu is open, highlighting "Physical Busy Percentage Forecast Details". A blue callout box points to this menu item with the text "Physical Busy % Forecast Details Workspace".

The bottom window, titled "Forecast Overlay", shows a bar chart of "Physical Busy Percentage" (yellow bars) and a blue line representing the "Physical Busy Percentage Forecast". The y-axis ranges from 0 to 16. A blue callout box points to the chart with the text "Forecast Overlay".

To the right of the chart, a "Forecast Predictions" window shows a table:

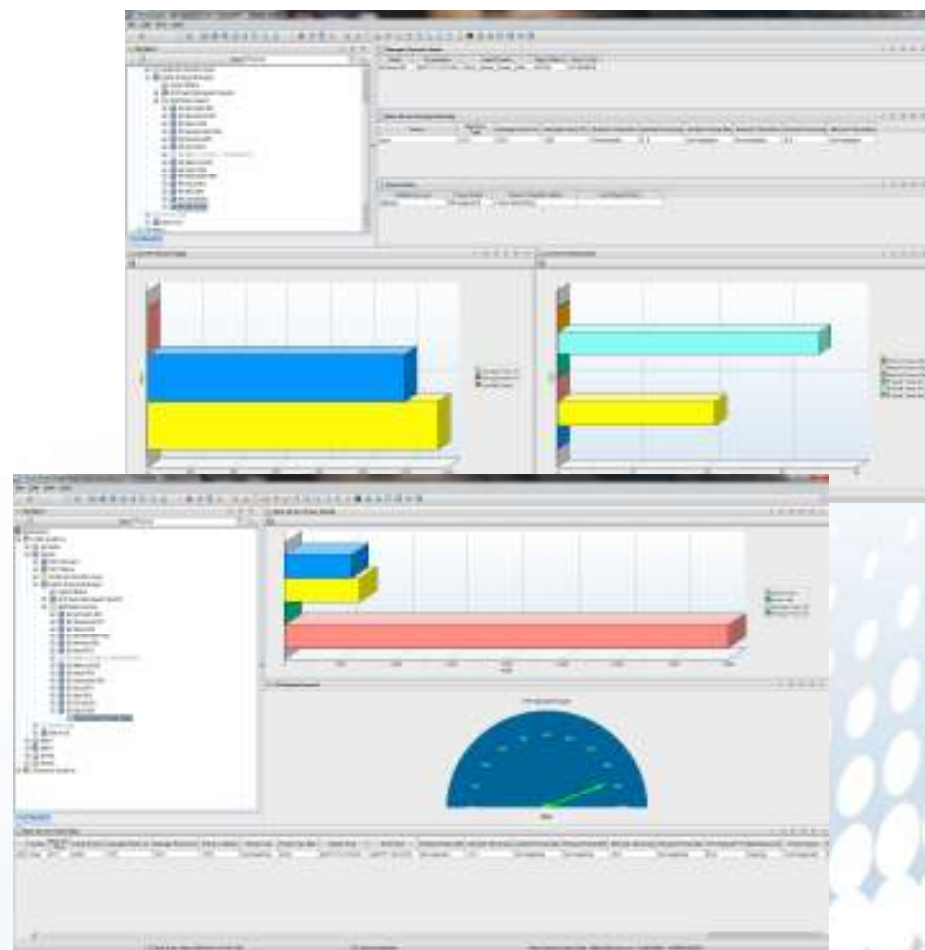
Forecast Timestamp	Data
08/10/11 00:00:00	12
09/02/11 00:00:00	13
11/01/11 00:00:00	15

A blue callout box points to this table with the text "Forecast Predictions".

IBM ITM Monitoring for Energy

Tivoli. software

- ITM Systems Director Application Agent leverages Systems Director Active Energy Manager to report and alert on energy related events from within ITM
- Allows for the following active management tasks:
 - Changing the Power Mode
 - Changing the Power Cap for Rack Servers
 - Changing the Power Saver Mode
 - Anticipate future performance issues
- Predefined Reports available for import into Tivoli Common Reporting



IBM ITM Monitoring for Energy Samples



The screenshot displays the IBM ITM monitoring interface for a rack server. On the left is a tree view of the system hierarchy. The main area contains two charts: a 3D bar chart for power details and a gauge for CPU speed percentage. A table at the bottom provides detailed metrics for the server 'Zeus'.

Rack Server Power Details

CPU Speed Percentage

Rack Server Power Data

Name	Machine Type	Label Power	Average Power AC	Average Power DC	Power Cap Min	Power Cap	Power Cap Max	Begin Time	End Time	Ambient Temp Min	Ambient Temp Avg	Ambient Temp Max	Exhaust Temp Min	Exhaust Temp Avg	Exhaust Temp Max	CPU Speed Pct	Metering Level	Power Saver
Zeus	9117	8000	1357	1201	3779	Not Available	4094	04/27/11 01:58:03	04/27/11 02:03:29	Not Available	21.0	Not Available	Not Available	35.0	Not Available	86.8	Capping	Not Supported

IBM ITM Monitoring for Energy Samples



The screenshot displays the IBM ITM monitoring interface for a rack server. It includes several panels and callouts:

- Managed System Status:** A table showing system details for 'E9 Zeus RS'.
- Rack Server Energy Summary:** A table providing energy metrics for the 'Zeus' server.
- Power Policy:** A table showing the current power policy settings.
- Current Power Usage:** A 3D bar chart showing Average Power AC, Average Power DC, and Auxiliary Power.
- Current Temperature:** A 3D bar chart showing various ambient and exhaust temperature metrics.

Node	Timestamp	Object Name	Object Status	Error Code
E9 Zeus RS	04/27/11 10:19:38	Rack_Server_Power_Data	ACTIVE	NO ERROR

Name	Machine Type	Average Power AC	Average Power DC	Ambient Temp Min	Ambient Temp Avg	Ambient Temp Max	Exhaust Temp Min	Exhaust Temp Avg	Exhaust Temp Max
Zeus	9117	1357	1201	Not Available	21.0	Not Available	Not Available	35.0	Not Available

Metering Level	Power Saver	Power Collection Mode	Last Power Policy
Capping	Not Supported	Power Monitoring	

Category	Value (Watt)
Average Power AC	~1357
Average Power DC	~1201
Auxiliary Power	~100

Metric	Value (Degree Celsius)
Average Power AC	~1357
Average Power DC	~1201
Auxiliary Power	~100

IBM Tivoli Common Reporting

Tivoli. software

- Robust reporting tool which is available to users of Tivoli Products
 - Consistent approach to viewing and administrating reports
 - Simplified reporting via intuitive Web based interface
 - Tivoli products can provide report packages designed for use with TCR
 - Reports have consistent look and feel
 - Ability to schedule reports
 - Reports available in different formats
 - Ability to email reports



TCR Sam

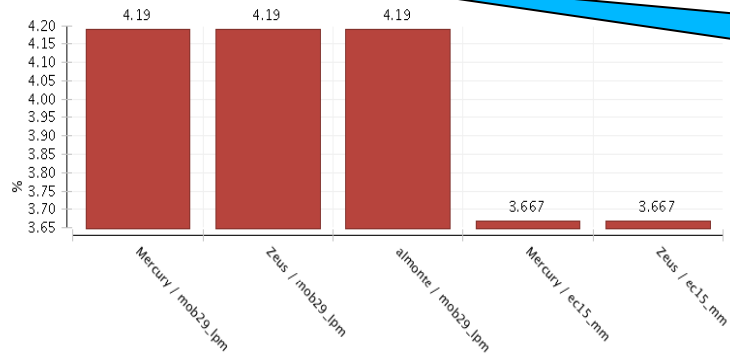
System P:
Top/Bottom
LPARs by
Physical CPU
Utilization

Tivoli

System P: Top/Bottom LPARs by Physical CPU Utilization

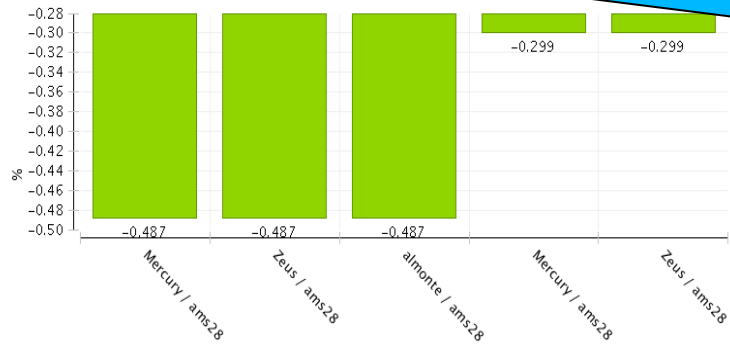
Start Date	Mar 28, 2011 12:00 AM	End Date	Apr 27, 2011 11:59 PM
Report Period	Last 30 days	Top LPARs	5
CEC	%	Bottom LPARs	5

Top LPARs by Average CPU Utilization



Top LPARs by
Average CPU
Utilization

Bottom LPARs by Average CPU Utilization



Bottom LPARs
by Average
CPU Utilization

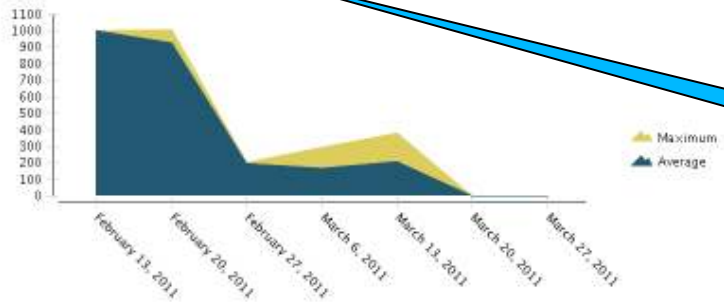
TCR Samples Cont.

System P: Server Resource Utilization

Start Date	Jan 1, 2011 12:00 AM	End Date	Apr 27, 2011 11:59 PM
Report Period	Year-to-date	Selected Summarization Type	Default (Weekly)
CEC	Mercury	LPAR	TIV1

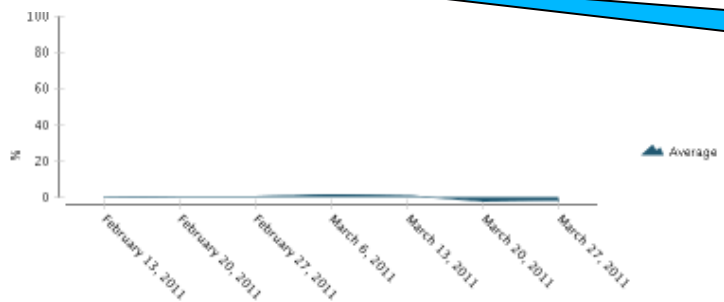
Server Resource Utilization for Single LPAR

CPU Entitlement Percent Used



CPU Entitlement Percentage Used

Physical CPU Utilization



Physical CPU Utilization

Physical Memory Utilization



Physical Memory Utilization

TCR Samples Cont.

Tivoli Performance Analyzer **IBM**

Disk Utilization Detailed Forecast

System name: fb0v2r00X Disk name: /dev/hd1
 Operating system: UNIX

Trend Chart

ITPA Report: Disk Utilization Detailed Forecast Report

Forecast Overview

System name	Disk name	Timestamp	Confidence	Strength	Number of samples	Time to critical threshold (days)	Time to warning threshold (days)
fb0v2r00X	/dev/hd1	Apr 26, 2011 10:29 AM	97	3	27	0	0

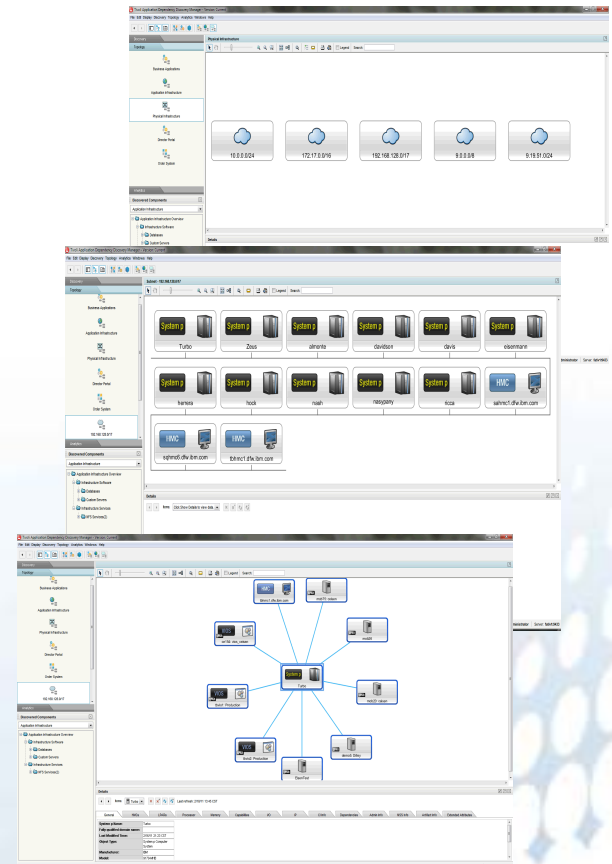
Forecast Details

Forecast timestamp	Used disk space (%)
May 3, 2011 12:00 AM	167
May 26, 2011 12:00 AM	222
Jul 25, 2011 12:00 AM	366

This report presents the forecast details of used disk space (in %) for the monitored item outlined at the top of this report. The chart depicts the current trend inclination (blue line), and historical data (green line). The first table (Forecast Overview) displays the general trend information, for example 'Number of samples' on which the trend is calculated, 'Confidence' showing how certain the outcome is, or 'Time to critical/warning threshold' that indicates when a particular limit will be exceeded. Forecast Details table presents the values for 7, 30 and 90 day forecast.

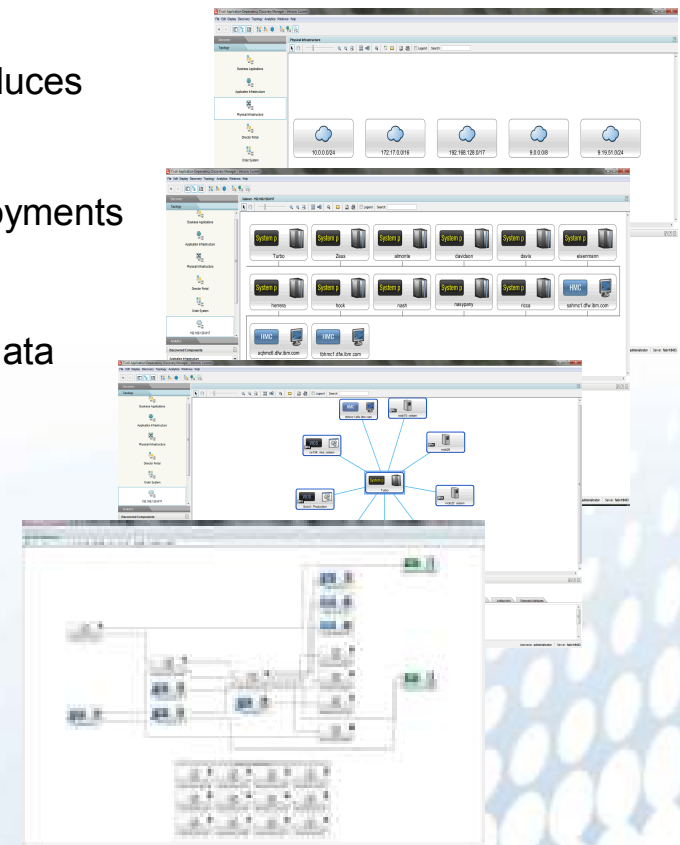
Tivoli Application Discovery Dependency Manager

- Visualize interdependencies and relationships between applications, computer systems and network devices through application mapping and agentless, credential-free discovery capabilities
- Configuration items are configured and changing over time by capturing the configuration of each CI, tracking changes to it and providing analytics to report on the history of configuration changes
- Determine if configurations comply with your policies by comparing discovered configurations to a “reference master” to reveal policy compliance violations

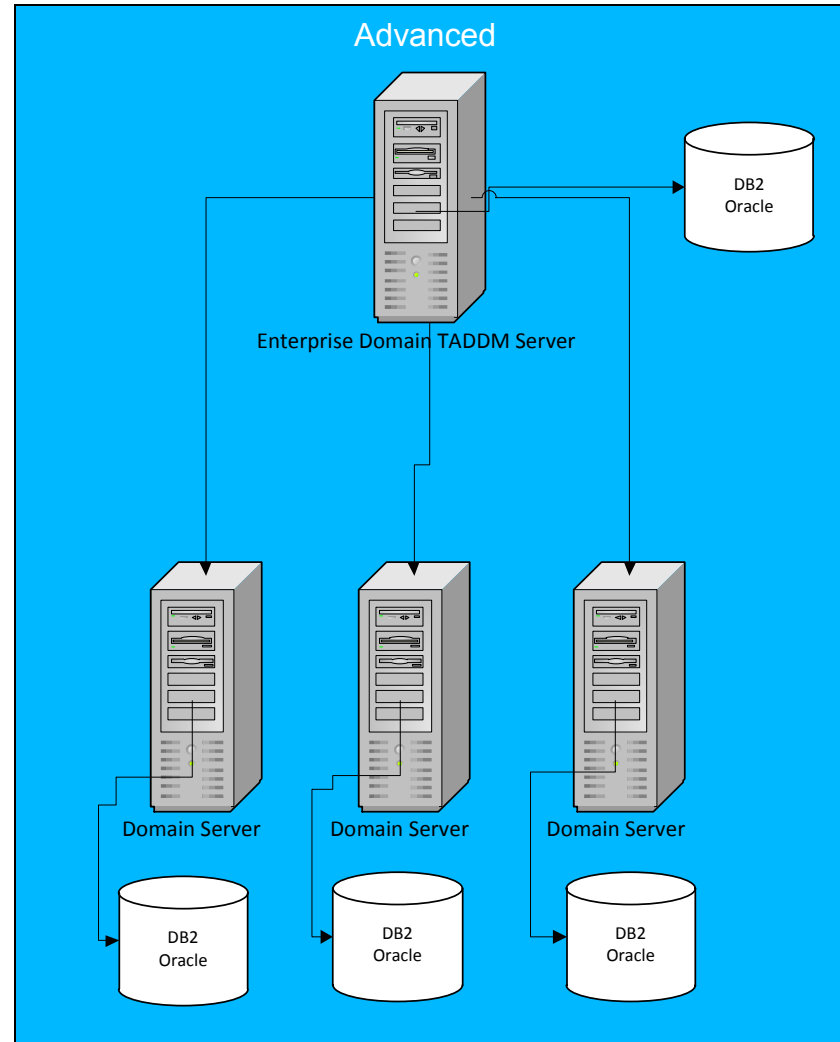
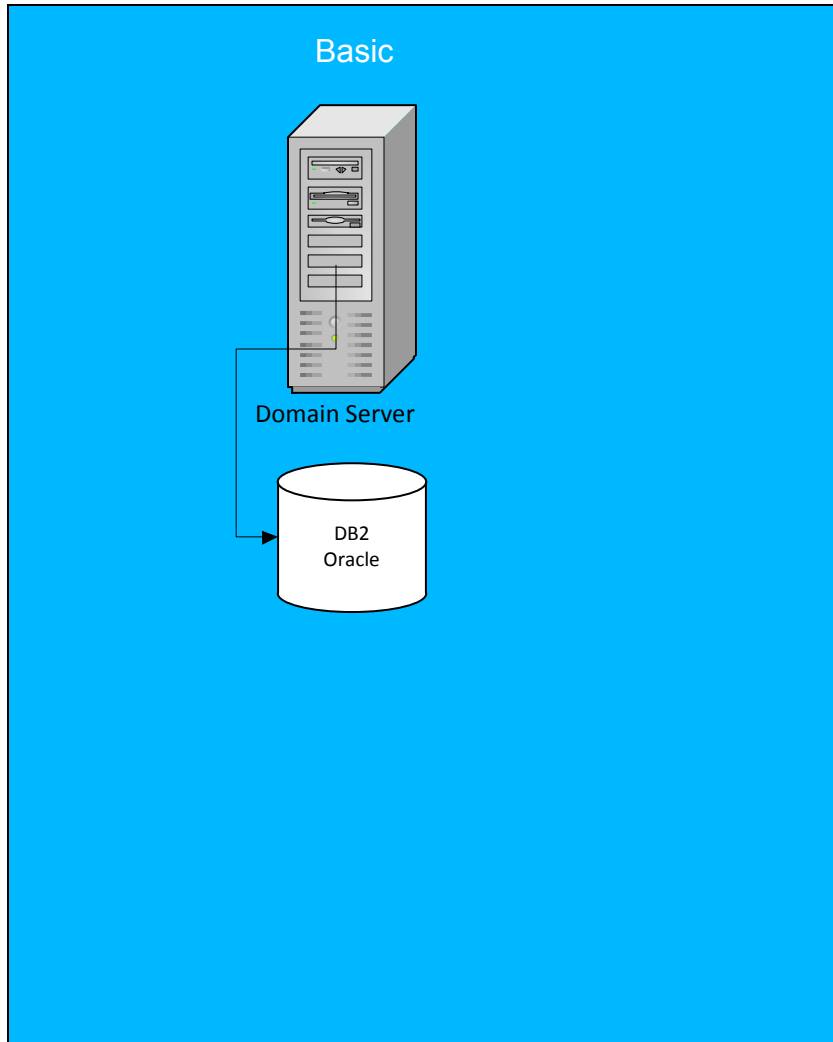


Tivoli Application Discovery Dependency Manager

- Understand the structure of interdependent and complex applications
- Rapidly isolate configuration-related application problems, which reduces troubleshooting time from hours and days to minutes
- More effectively plan change so that application upgrades and deployments can occur without disruptions
- In summary, you can use TADDM to accomplish four tasks in your data center environment:
 1. Discover components
 2. Discover the configuration of components
 3. Discover the relationship of components
 4. Discover and track the changes



TADDM Topology: Basic & Advanced



TADDM Discovery Process

TADDM provides you with three levels of discovery:

Level 1 Discovery

A Level 1 discovery does not require credentials and scans the TCP stack, discovers computer systems and network devices. It is a very shallow discovery that captures the host name, OS, Internet Protocol (IP) interface, and fully qualified domain name (FQDN). This discovery discovers the Media Access Control (MAC) address on Windows® and zLinux computers.

Level 2 Discovery

A Level 2 discovery requires computer system credentials and captures deep host configurations. It is a shallow application discovery that does not require additional application credentials. This discovery captures application names, ports, and computer systems on which it is running. If the application has an established TCP session with another application, it is discovered as a dependency.

Level 3 Discovery

A Level 3 discovery does not require application credentials and is the TADDM standard deep-dive discovery. It captures network devices, host configurations, application configurations and web services.

TADDM Samples

Topology Physical Infrastructure View

System p Turbo
System p Zeus
System p almonte
System p davidson
System p davis
System p eisenmann

System p herrera
System p hock
System p nash
System p nasypany
System p ricca
HMC sahmc1.dfw.ibm.com

HMC sqhmc6.dfw.ibm.com
HMC tbhmc1.dfw.ibm.com

Discovered Components
Application Infrastructure
Application Infrastructure Overview
Infrastructure Software
Databases
Custom Servers
Infrastructure Services
NFS Services(2)

Details
Items: Click Show Details to view data.

Username: administrator Server: fativ1:9433

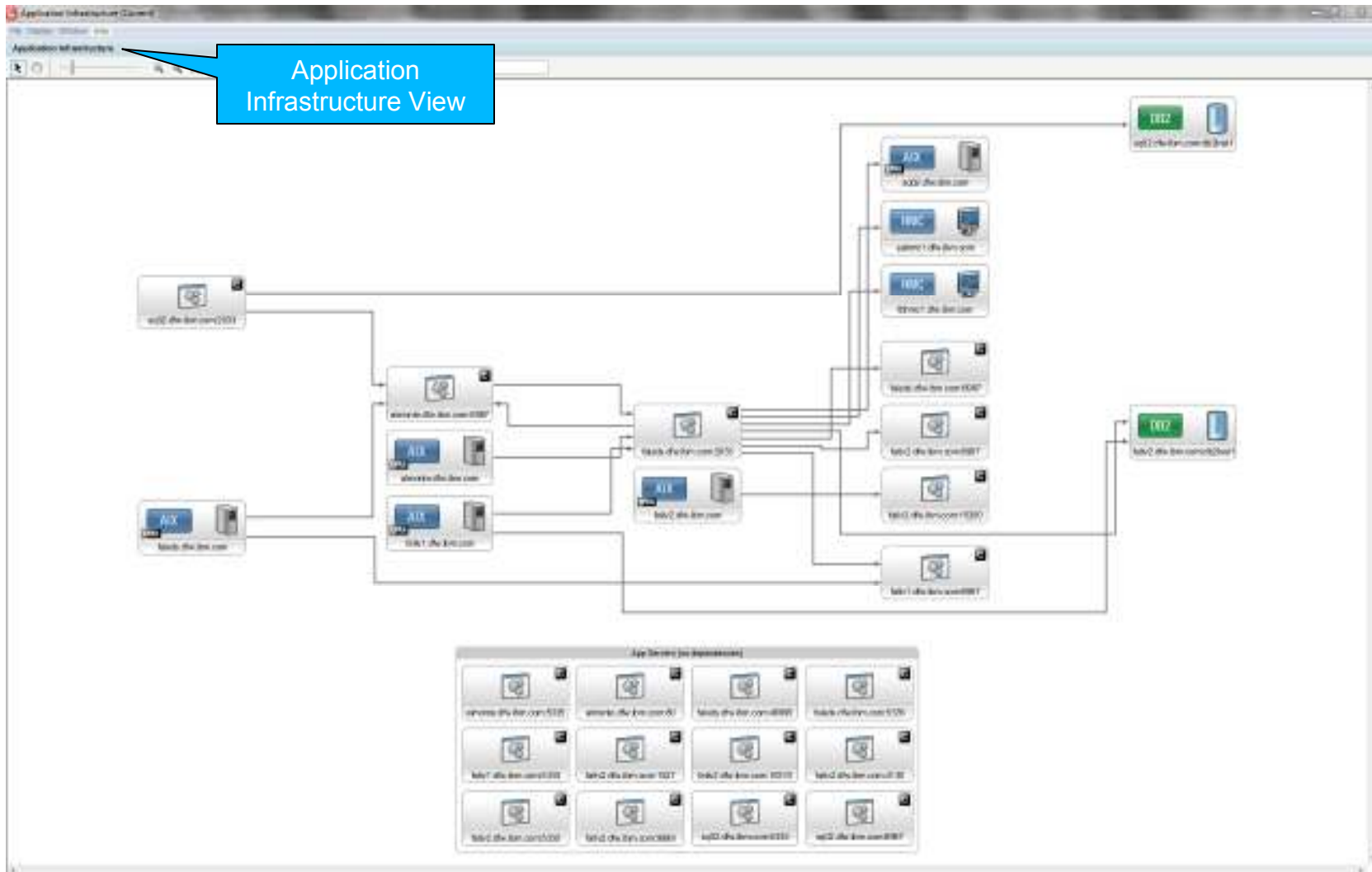
TADDM Samples Cont.

The screenshot displays the TADDM interface with a central topology diagram. A central node labeled 'System p Turbo' is connected to several peripheral nodes: 'HMC' (tbhmc1.dfw.ibm.com), 'VIOS' (ce154: vios_celsen), 'VIOS' (tbvio1: Production), 'VIOS' (tbvio2: Production), 'EisenTest', 'demo5: Dilley', 'LPAR' (mob20: celsen), 'LPAR' (demo5: Dilley), 'LPAR' (mob26), and 'LPAR' (mob75: celsen). A blue callout box labeled 'Managed System Drill-Down' points to the central 'System p Turbo' node. Another blue callout box labeled 'Managed System Details' points to the 'Details' pane at the bottom of the interface.

Managed System Details

Property	Value
System p Name:	Turbo
Fully qualified domain name:	
Last Modified Time:	2/18/11 21:23 CST
Object Type:	System p Computer System
Manufacturer:	IBM
Model:	9179-MHB

TADDM Samples Cont.



TADDM Samples Cont.

The screenshot displays the TADDM web interface. On the left, a navigation pane shows 'Change History' selected under the 'Analytics' section. The main area is titled 'Change History' and features a 'Date Range' filter set to 'Relative Timeframe' with a 'From' field set to '1 Week' ago. Below this is a 'Component Type' dropdown menu. The main content area shows a tree view of discovered components, including 'Infrastructure Software' (with sub-items like Databases, Custom Servers, JavaServer, and KlvServices), 'Infrastructure Services' (with NFS Services), 'Network Tier' (with IP Subnets), and 'Systems Tier' (with Virtual Systems, LPAR, System p, Other Computer Systems, VirtualIO Server, AIX, and Hardware Management Console). A 'Run Report' button is visible at the bottom of the main area. The bottom right corner of the interface shows 'Username: administrator | Server: fativ19433'.

TADDM Samples Cont.: System Change History

The screenshot displays the Tivoli Application Dependency Discovery Manager interface. The main window shows a 'Change History' table with the following columns: Component, Type, Change, Date, Attribute, Old Value, and New Value. A 'Date' callout points to the Date column. Other callouts point to the Component, Type, Change, Attribute, Old Value, and New Value columns. The table contains multiple rows of system change records, including updates to computer systems, configuration files, and data files, as well as additions and deletions of software components.

Component	Type	Change	Date	Attribute	Old Value	New Value
sq02.dfw.ibm.com	AIX Computer System	Updated	3/28/11 17:35 CDT			
telnetresman	ConfigFile	Updated	3/28/11 17:35 CDT	lastModified	1/28/11 17:35 CDT	3/28/11 15:19 CDT
telnettab	ConfigFile	Updated	3/28/11 17:35 CDT	lastModified	2/18/11 16:11 CDT	3/28/11 14:41 CDT
rmi	NFSFileSystem	Updated	3/28/11 17:35 CDT	exportName	/export/riac	/export/ldr
AixComputerSystemTemplateUsers	DataFile	Updated	3/28/11 17:35 CDT	lastModified	3/8/11 14:41 CDT	3/28/11 17:35 CDT
AixComputerSystemTemplateUsers	DataFile	Updated	3/28/11 17:35 CDT	content	root id=0 pgrp=system root id=0 pgrp=system	root id=0 pgrp=system
AixComputerSystemTemplateUsers	DataFile	Updated	3/28/11 17:35 CDT	checksum	REH0V6VTVvgeSRic...	8hg4UC2MvnmJdlHtubX1w...
AixComputerSystemTemplateUsers	DataFile	Updated	3/28/11 17:35 CDT	lastModified	3/8/11 14:41 CDT	3/28/11 17:35 CDT
sq02.dfw.ibm.com	Aix	Member added	3/28/11 17:35 CDT	softwareComponents	X11.appa.xterm.7.1.0.0	X11.appa.xterm.7...
sq02.dfw.ibm.com	Aix	Member deleted	3/28/11 17:35 CDT	softwareComponents	rtas.bases.agent.7.1.0.0	
sq02.dfw.ibm.com	Aix	Member deleted	3/28/11 17:35 CDT	softwareComponents	DirectorCommonAgent...	
sq02.dfw.ibm.com	Aix	Member deleted	3/28/11 17:35 CDT	softwareComponents	cas.agent.1.4.2.30	
sq02.dfw.ibm.com	Aix	Member added	3/28/11 17:35 CDT	softwareComponents	DirectorCommonAgent.6.2.0.0	DirectorCommonA...
sq02.dfw.ibm.com	Aix	Member added	3/28/11 17:35 CDT	softwareComponents	X11.ftl.xorg-bt-H17.1.0.0	X11.ftl.xorg-bt-8f...
sq02.dfw.ibm.com	Aix	Member added	3/28/11 17:35 CDT	softwareComponents	X11.ftl.xorg-nlsc-7.1.0.0	X11.ftl.xorg-nlsc...
sq02.dfw.ibm.com	Aix	Member added	3/28/11 17:35 CDT	softwareComponents	cas.agent.1.4.2.2	cas.agent.1.4.2.2
sq02.dfw.ibm.com	Aix	Member added	3/28/11 17:35 CDT	softwareComponents	vnc-3.3.3c2-6.3.3c2-6	vnc-3.3.3c2-6.3.3...
sq02.dfw.ibm.com	Aix	Member added	3/28/11 17:35 CDT	softwareComponents	X11.appa.clients.7.1.0.0	X11.appa.clients.7...
sq02.dfw.ibm.com	AIX Computer System	Updated	3/28/11 17:35 CDT	name	sq02.dfw.ibm.com	tel
sq02.dfw.ibm.com	AIX Computer System	Updated	3/28/11 17:35 CDT	name	tel	sq02
sq02.dfw.ibm.com	AIX Computer System	Updated	3/28/11 17:35 CDT	name	tel	sq02

TADDM Samples Cont.: DB2 Change

The screenshot shows the 'Change Results' window in TADDM. The table below represents the data shown in the window:

Component	Type	Change	Date	Attribute	Old Value	New Value	ID
sq02.dfw.ibm.com.db2inst1	Db2Instance	Created	3/9/11 14:42 CST				
sq02.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/28/11 17:38 CDT				
TPCDB	Db2Database	Updated	3/28/11 17:38 CDT				
FKCACHESZ	Db2DatabaseConfigValue	Updated	3/28/11 17:38 CDT	value	AUTOMATIC(1204)	AUTOMATIC(1215)	AUTOMATIC
All committed transactions have been writ	Db2DatabaseConfigValue	Updated	3/28/11 17:38 CDT	value	NO	YES	YES
DATABASE_HISTORY	Db2DatabaseConfigValue	Updated	3/28/11 17:38 CDT	value	AUTOMATIC(190200)	AUTOMATIC(95904)	AUTOMATIC
BMOR	Db2Database	Updated	3/28/11 17:38 CDT				
sq02.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/30/11 12:13 CDT				
sq02.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/31/11 15:01 CDT				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Created	2/11/11 16:53 CST				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	2/11/11 20:39 CST				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Member add	2/17/11 10:55 CST				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/3/11 20:47 CST				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/9/11 14:43 CST				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/9/11 17:59 CST				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/9/11 17:21 CST				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/28/11 17:38 CDT				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/30/11 12:12 CDT				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	3/31/11 15:01 CDT				
fwv2.dfw.ibm.com.db2inst1	Db2Instance	Updated	4/28/11 11:54 CDT				

TADDM Samples Cont.: Managed System

The screenshot shows the TADM Application Dependency Discovery Manager interface. The main window is titled "TADM Application Dependency Discovery Manager - Version: Current". The interface includes a menu bar (File, Edit, Display, Discovery, Topology, Analytics, Windows, Help), a toolbar, and a left-hand navigation pane with options like Change History, Deinstall Components, Component Comparison, Switch Topology, and Uninstall Processes. The main area is divided into several sections:

- Component Comparison:** A section with a "Components" dropdown set to "Current", a "Component Type" dropdown set to "System & Computer System", and a "Component Comparison" callout.
- Available Components:** A table listing components like Mercury, math, newapp, rical, and Styx. A callout "Available Components" points to this table.
- Included Components:** A table with columns "Name" and "Version", containing rows for "akroite" (Current) and "Zeus" (Current). A callout "Selected Components" points to this table.
- Options:** A section with radio buttons for "Level" (Basic, Deep), checkboxes for "Include Infrastructure Services" (Yes, No), and "Include System" (Yes, No). A callout "Options" points to this section.

At the bottom, there is a "Run Report" button and a "Details" section with a "Click Show Details to view data" button.

TADDM Samples Cont.: Managed System

The screenshot displays the Tivoli Application Dependency Discovery Manager (TADDM) interface. The main window shows a 'Component Comparison Results' table. The table has three columns: 'Component', 'almora - Version: Current', and 'Zeas - Version: Current'. The 'Component' column lists various system components and hardware specifications. The 'almora - Version: Current' column shows the status of these components in the current system, with many entries marked as '[Not Set]'. The 'Zeas - Version: Current' column shows the status in a second system, with some entries marked as '[Not Set]' and others as 'true' or specific values. A yellow highlight covers the main data area of the table. Three callout boxes are present: one pointing to the 'Component' column header, one pointing to the 'almora - Version: Current' column header, and one pointing to the 'Zeas - Version: Current' column header. The left sidebar contains navigation options like 'Inventory', 'Change History', 'Component Comparison', and 'Switch Topology'. The bottom left shows 'Discovered Components' and 'Application Infrastructure Overview'.

Component	almora - Version: Current	Zeas - Version: Current
ec09_nnn	[Not Set]	ec09_nnn
nlrnode1_herra	[Not Set]	nlrnode1_herra
sq13	[Not Set]	sq13
sq14	[Not Set]	sq14
WCO	WCO	[Not Set]
savio4_Webboob	[Not Set]	savio4_Webboob
WCOa	WCOa	[Not Set]
ry103	[Not Set]	ry103
osgen_testing	[Not Set]	osgen_testing
ams27_banker	[Not Set]	ams27_banker
ms077	[Not Set]	ms077
ec07_nnn	[Not Set]	ec07_nnn
pmo_demo_osgen	[Not Set]	pmo_demo_osgen
nlrnode2_herra	[Not Set]	nlrnode2_herra
IBM71_nnn	[Not Set]	IBM71_nnn
lms2.dfw.ibm.com	lms2.dfw.ibm.com	[Not Set]
lmsds.dfw.ibm.com	lmsds.dfw.ibm.com	[Not Set]
nlrnode3_herra	[Not Set]	nlrnode3_herra
ec11_nnn	[Not Set]	ec11_nnn
IBM_LSA_nnn	[Not Set]	IBM_LSA_nnn
CoD Memory Capable	false	true
None	almora	Zeas
CPU Cores Installed	4	32
LHEA Capable	false	true
Available System Processing Units	0.5	4.3
Maximum Number of Processors per LPAR	4	256
Maximum Number of Shared Processor Pools	1	64
CPU Cores Enabled	4	32
Number of CPUs	4	32
SIOS Capable	false	true
Memory Available For Partitions	0	19009776192
Memory Size	8.88 GB	256.88 GB
Model	9131-S24	9117-M8B

TADDM Samples Cont.: DB2 Comparison

The screenshot shows the TADDM interface with the 'Component Comparison Results' window open. The window displays a tree view of components on the left and a table of values for two different DB2 instances on the right. The table is highlighted in yellow. Three blue callout boxes point to the columns: 'DB2 Component', 'DB2 System #1', and 'DB2 System #2'.

DB2 Component	DB2 System #1	DB2 System #2
Product ID	SQL00071	SQL00071
Product Version	DB2 v9.7.0.1	DB2 v9.7.0.0
Build Level	w091114	w090521
DBM Config Values		
OPT_MON_TIMESTAMP	ON	OFF
SPM_NAME	tdw2_6	
DWAGSIZE	0	64
CPUSPEED	5.117863e-07	2.678817e-07
SVCPNAME	50000	db2c_db2net1
Databases		
BMDR	[Not Set]	BMDR
TEPS	[Not Set]	[Not Set]
CMDB	[Not Set]	[Not Set]
WAREHOU	WAREHOU	[Not Set]
SAMPLE		
Buffer Pools		
BMDFAULTP	BMDFAULTP	[Not Set]
Config Values		
NON_PQLIST_SZ	NON_PQLIST_SZ	[Not Set]
SQL_CCLFLAGS	SQL_CCLFLAGS	[Not Set]
Path to log file		
Value	/home/db2net1/db2net1/NODE0000/SQL00001/SQLLOGDRV	/home/db2net1/db2net1/NODE0000/SQL00002/SQLLOGDRV
SECTION_ACTUALS	SECTION_ACTUALS	[Not Set]
DATABASE_MEMORY		
Value	AUTOMATIC(36160)	AUTOMATIC(36000)
NON_LOCK_MSG_LVL	NON_LOCK_MSG_LVL	[Not Set]
Schemas		
SQLJ	SQLJ	[Not Set]
SYSCAT	SYSCAT	[Not Set]
SYSIBMADM	SYSIBMADM	[Not Set]
SYSIBMTS	SYSIBMTS	[Not Set]

IBM DB2 9.7



- A DB2 database system consists of a DB2 server and IBM® data server clients.
- A DB2 server is a relational database management system (RDBMS) that delivers data to its IBM data server clients.
- An IBM data server client is an application that allows you to run commands and SQL statements against a DB2 server, connect to a remote DB2 server, and access its databases.
- IBM DB2 is the backbone of the IBM Systems Director Enterprise Edition solution and used with the following components:
 - IBM Systems Director
 - IBM Tivoli Monitoring
 - Tivoli Data Warehouse
 - IBM Tivoli Performance Analyzer Agent
 - Tivoli Common Reporting

Systems Director Integration



- ITM for Systems Director Base V6.2.2 FixPack 2
 - Monitoring and management for Systems Director V6.1.2.2 and above
 - Core Director functionality: Hardware Inventory, real-time Events and Jobs
 - Inventory covers approximately 60 device, physical, network and system types
 - 3 Tier Reporting structure
 - All Systems currently managed by Systems Director
 - System Groups, as defined by Systems Director
 - Individual Systems
 - Core Director tasks are available as TEP Take Actions such as:
 - System Discovery
 - Inventory collection
 - System, event, job and discovery job removal
 - 90+ workspaces and 140 workspace views



Systems Director Integration Samples

The screenshot displays the Systems Director interface with a table of managed endpoints. A callout box labeled "All Managed Endpoints" points to the table header. Another callout box labeled "Systems Director Base Workspace" points to the left-hand navigation tree.

Name	System Type	Access State	Health State	Operating State	Communication State	Changed Date	Last Boot Up Time	OS Type	OS Version	Architecture	Machine Typ
AX53-ML4	Virtual Server	OK	Unknown	Started	Communication OK	05/18/11 10:29:55				ppc64	0131
AX53-ML4	Virtual Server	OK	Unknown	Started	Communication OK	05/21/11 09:24:00				ppc64	0131
AX53-ML4	Virtual Server	OK	Unknown	Started	Communication OK	05/20/11 20:46:18				ppc64	0131
AX53ML5	Virtual Server	OK	Unknown	Started	Communication OK	05/17/11 04:33:26				ppc64	0131
ais61	Virtual Server	OK	Unknown	Started	Communication OK	05/02/11 18:11:11				ppc64	0131
almona	Server	OK	Unknown	Started	Communication OK	04/17/11 23:55:50				ppc64	0131
almona.dfw.ibm.com	Operating System	OK	OK	Unknown	Communication OK	05/16/11 20:42:42		ADC	7.1	ppc64	0131
ama28	Virtual Server	OK	Unknown	Started	Communication OK	05/22/11 06:08:57				ppc64	0179
ama28	Virtual Server	OK	Unknown	Started	Communication OK	08/03/11 11:09:58				ppc64	0117
ama30_71ga	Virtual Server	OK	Unknown	Started	Communication OK	05/24/11 15:56:02				ppc64	0177
ca154_vios_celien	Virtual Server	OK	Unknown	Started	Communication OK	05/17/11 00:18:33				ppc64	0179
celien_testing	Virtual Server	OK	Unknown	Started	Communication OK	08/03/11 11:09:57				ppc64	0117
client1	Virtual Server	OK	Unknown	Stopped	Communication OK	05/04/11 12:54:16				ppc64	0131
client1-53ML5	Virtual Server	OK	Unknown	Started	Communication OK	08/19/11 15:16:40				ppc64	0131
client2	Virtual Server	OK	Unknown	Stopped	Communication OK	04/17/11 23:55:01				ppc64	0131
client2-53FL7	Virtual Server	OK	Unknown	Started	Communication OK	05/05/11 15:14:01				ppc64	0131
client3	Virtual Server	OK	Unknown	Stopped	Communication OK	04/17/11 23:55:05				ppc64	0131
connor	Virtual Server	OK	Unknown	Started	Communication OK	08/03/11 11:06:14				ppc64	0131
davidson	Server	OK	Unknown	Started	Communication OK	04/17/11 23:55:52				ppc64	0131
davis	Server	OK	Unknown	Started	Communication OK	04/17/11 23:55:04				ppc64	0131
demo5_Dilley	Virtual Server	OK	Unknown	Started	Communication OK	05/21/11 03:21:06				ppc64	0179
ec01.dfw.ibm.com	Operating System	No access	OK	Unknown	Communication OK	05/15/11 19:55:59	03/24/11 13:24:33	IBM VIOS	2.2.0.10		
ec02.dfw.ibm.com	Operating System	No access	Unknown	Unknown	Unknown	05/15/11 19:55:56			2.2.0.10-PP-24		
ec07_sn	Virtual Server	OK	Unknown	Started	Communication OK	05/28/11 13:00:58				ppc64	0117
ec09_mm	Virtual Server	OK	Unknown	Started	Communication OK	05/24/11 06:53:22				ppc64	0117
ec10_mm	Virtual Server	OK	Unknown	Started	Communication OK	05/22/11 22:44:55				ppc64	0117
ec11_mm	Virtual Server	OK	Unknown	Started	Communication OK	05/22/11 22:44:55				ppc64	0117
ec12_mm	Virtual Server	OK	Unknown	Started	Communication OK	05/22/11 22:44:55				ppc64	0117
ec14_mm	Virtual Server	OK	Unknown	Started	Communication OK	05/03/11 11:09:57				ppc64	0117
ec15_mm	Virtual Server	OK	Unknown	Started	Communication OK	05/28/11 13:00:58				ppc64	0117
echm1.dfw.ibm.com	Operating System	No access	OK	Unknown	Communication OK	05/21/11 10:52:33		IBM HMC	7.7.2.0.1		
eisenmann	Server	OK	Unknown	Started	Communication OK	04/14/11 13:59:11				ppc64	0131
EisenTest	Virtual Server	OK	Unknown	Started	Communication OK	05/22/11 06:08:56				ppc64	0179
Eth_sx_11-Mercury	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/17/11 07:18:10					0117
Eth_sx_12-Mercury	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/17/11 12:16:57					0117
ETHERNET0-Mercury	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/17/11 10:28:57					0117
ETHERNET0-Stx	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/17/11 18:59:40					8203
ETHERNET0-Turbo	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/17/11 04:38:20					0179
ETHERNET0-Zeus	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/17/11 15:44:40					0117
ETHERNET1-Mercury	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/17/11 10:28:59					0117
Ethnet1-Zeus	VirtualSwitch	OK	Unknown	Unknown	Unknown	05/18/11 01:00:00					0117
fw5ds.dfw.ibm.com	Operating System	OK	OK	Unknown	Communication OK	05/08/11 02:53:47		ADC	7.1	ppc64	0131
fabv1	Virtual Server	OK	Unknown	Started	Communication OK	05/18/11 01:07:08				ppc64	0117
fabv1.dfw.ibm.com	Operating System	OK	OK	Unknown	Communication OK	05/16/11 09:21:43		IBM AIX	6.1.0.0		
fabv2	Virtual Server	OK	Unknown	Started	Communication OK	05/18/11 01:07:08				ppc64	0117
fabv2.dfw.ibm.com	Operating System	OK	OK	Unknown	Communication OK	05/16/11 21:20:22		ADC	7.1		
fabv3.dfw.ibm.com	Operating System	OK	OK	Unknown	Communication OK	05/23/11 13:11:35	01/22/11 10:01:01	IBM VIOS	2.2.0.10	ppc64	0131
fabv3.dfw.ibm.com	Operating System	OK	OK	Unknown	Lost Communication	05/28/11 14:52:04		IBM VIOS	2.2.0.10	ppc64	0131
full-system	Virtual Server	OK	Unknown	Started	Communication OK	04/17/11 23:55:59				ppc64	0131
full-system-test	Virtual Server	OK	Unknown	Stopped	Communication OK	04/17/11 23:55:52				ppc64	0131
hemara	Server	OK	Unknown	Started	Communication OK	04/17/11 23:56:07				ppc64	0131
hock	Server	OK	Unknown	Started	Communication OK	04/17/11 23:56:04				ppc64	0131
IBM 0111520 10C11C1 5	Virtual Server	No access	OK	Unknown	Communication OK	08/05/11 11:48:10				ppc64	0111



Systems Director Integration Samples

Systems Discovery Workspace

Most Recent Systems without Access

Name	System Type	Access State	Communication State	Changed Date	IPv4 Address	IPv6 Address	Host Name	Description
IBM 0111520 10C1C1C 5	Virtual Server	No access	Communication OK	08/05/11 11:48:10	0.19.51.87		sq05.dfw.ibm.com	Represents the single node container of an Operat
VIO0	Virtual Server	No access	Communication OK	08/08/11 14:52:04	0.19.51.214		taio0.dfw.ibm.com	
IBDS82	Virtual Server	No access	Communication OK	08/08/11 14:32:25	0.19.51.217		taio0.dfw.ibm.com	
tbw02_Production	Virtual Server	No access	Communication OK	08/08/11 14:00:39	0.19.51.108		tbw02.dfw.ibm.com	
saw02_Production	Virtual Server	No access	Communication OK	08/08/11 10:45:32	0.19.51.145		saw02.dfw.ibm.com	Represents the single node container of an Operat
tbw01_Production	Virtual Server	No access	Communication OK	08/08/11 09:19:43	0.19.51.107		tbw01.dfw.ibm.com	
schmct.dfw.ibm.com	Operating System	No access	Communication OK	08/21/11 10:52:33	0.19.51.40		schmct.dfw.ibm.com	
Stx	Server	No access	Communication OK	08/17/11 18:40:04				
Zeus	Server	No access	Communication OK	08/17/11 18:40:03				
mo026.dfw.ibm.com	Operating System	No access	Unknown	08/17/11 00:12:51	0.19.51.226		mo026.dfw.ibm.com	Represents the running OperatingSystem.
ec01.dfw.ibm.com	Operating System	No access	Communication OK	08/15/11 19:55:59	0.19.51.41		ec01.dfw.ibm.com	
sq01.dfw.ibm.com	Operating System	No access	Unknown	08/15/11 10:55:58	0.19.51.27		sq01.dfw.ibm.com	Represents the running OperatingSystem.
is0190.dfw.ibm.com	Operating System	No access	Unknown	08/15/11 10:55:57	0.19.51.190		is0190.dfw.ibm.com	
sq02.dfw.ibm.com	Operating System	No access	Unknown	08/15/11 10:55:57	0.19.51.84		sq02.dfw.ibm.com	
ec02.dfw.ibm.com	Operating System	No access	Unknown	08/15/11 19:55:56	0.19.51.42		ec02.dfw.ibm.com	

Current Discovery Jobs

Latest Update	Percentage Complete	Status	Systems	Resource Types
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Take Action

Take Action

Action Name: <Select Action>

Command: <Select Action>

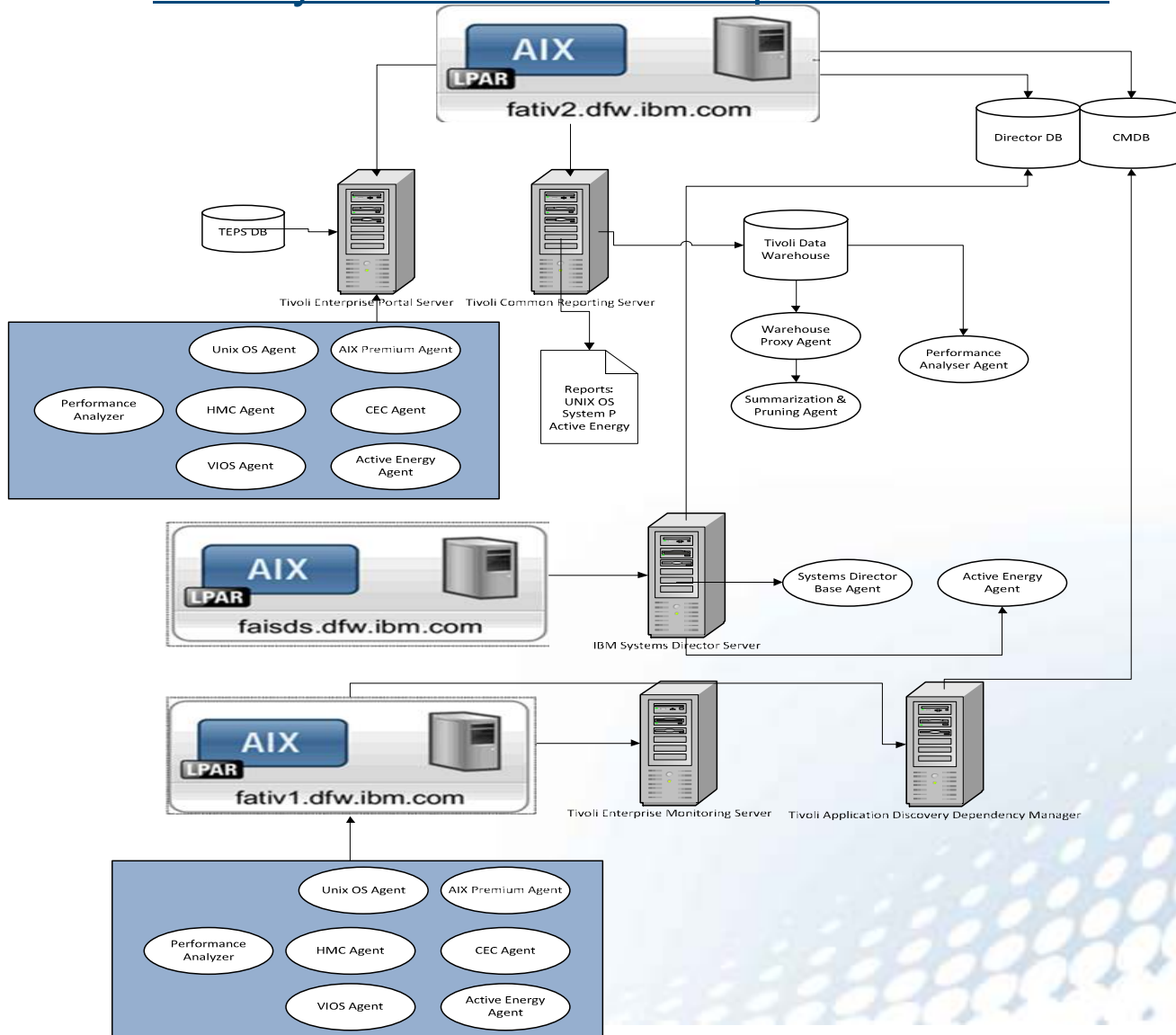
- CollectSystemInventory
- DiscoverSystems
- RemoveDiscoveryJob
- RemoveEvent
- RemoveJob
- RemoveSystem

Destination Systems:

Systems Director Enterprise Edition Requirements

Product/component	Memory	Disk
Launchpad GUI	10 MB	10 MB
DB2	1 GB	Review InfoCenter for guidance
Tivoli Application Dependency Discovery Manager	4-8 GB	100 GB
Tivoli Enterprise Monitoring Server	400 MB	1.3 GB
Tivoli Enterprise Portal Server	650 MB	1.2 GB
UNIX OS Agent	55 MB	380 MB
Tivoli Data Warehouse database	8 GB	Review InfoCenter for guidance
Warehouse Proxy Agent	200 MB	150 MB
Summarization and Pruning Agent	200 MB	150 MB
IBM Tivoli Performance Analyzer agent	Review InfoCenter for guidance	Review InfoCenter for guidance
Tivoli Common Reporting	2 GB	662 MB
Monitoring Agent for IBM Systems Director Enterprise Edition Integration	5 MB	5 MB
Eaton Power Xpert Agent	3 MB	20 MB
Active Energy Manager Agent	3 MB	55 MB

ATS Systems Director Enterprise Edition Lab



Links to More Information

- Systems Director Enterprise Edition Links
 - ISDEE Planning and Implementation Guide
 - http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.editions.doc/sdee_install_guide.pdf
 - ISDEE Users' Guide
 - http://publib.boulder.ibm.com/infocenter/director/v6r2x/topic/com.ibm.director.editions.doc/sdee_users_guide.pdf
- Information on how to use ITM
 - http://publib.boulder.ibm.com/infocenter/tivihelp/v15r1/topic/com.ibm.itm.doc_6.2.2fp2/welcome.htm
- Information on how to use ITM Energy Management Reporting & Optimization
 - <http://publib.boulder.ibm.com/infocenter/tivihelp/v15r1/topic/com.ibm.itmem.doc/welcome.htm>
- Information on how to use TADDM
 - http://publib.boulder.ibm.com/infocenter/tivihelp/v10r1/topic/com.ibm.taddm.doc_7.2/welcome_page/welcome.html

Links to More Information Cont.

- Information on how to use Tivoli Common Reporting
 - http://publib.boulder.ibm.com/infocenter/tivihelp/v3r1/topic/com.ibm.tivoli.tcr_cog.doc/tcr_welcome.html
- Information on how to use ITPA
 - http://publib.boulder.ibm.com/infocenter/tivihelp/v15r1/topic/com.ibm.kpa.doc/itpa_welcome.html