

CA Unified Infrastructure Management for IBM PowerVM



At a Glance

CA Unified Infrastructure Management (CA UIM, formerly CA Nimsoft Monitor) uses agentless data collection and core platform features to monitor and optimize the performance of IBM PowerVM host and virtual machines. It is equipped with a full suite of IBM PowerVM® virtualization managing and monitoring capabilities and delivers insights into opportunities to help resource optimization and better problem solving. The solution automatically creates and displays monitoring data using CA UIM templates and list views, and correlates and displays container monitoring with data from the IBM PowerVM-based host.

Key Benefits/Results

- **Improved performance and uptime** – Proactive monitoring and alerting accelerate identification of performance issues—enabling response before end-user productivity is affected.
- **Enhanced resource optimization** – Centralized, cohesive view of performance delivers insights into opportunities for resource optimization and “right sizing” of hardware investments.
- **SLA compliance** – Instant alerts and real-time dashboards notify service managers in advance of SLA compliance breaches.

Key Features

- **Highly scalable** – Can go from 100 to more than 100,000 devices that eliminates the worry of outgrowing your monitoring solution.
- **Customizable dashboards** – Configure service delivery information based on roles within the organization.
- **Business metric monitoring** – Enables aggregation of monitoring data from disparate sources to provide current views of critical business services that impact customer experience.
- **Unified trending and root-cause analysis** – Quickly identifies and corrects problems across your entire IT infrastructure before they become performance issues.
- **Multi-tenant** – Multi-tenant architecture allows you to efficiently scale and personalize service offerings for one or many clients.

Business Challenges

While virtualization technologies have ushered in a world of potential benefits, they also brought an entirely new world of challenges from a monitoring perspective.

IBM PowerVM is a virtualization platform for UNIX, Linux and IBM I Client. PowerVM is designed to run on IBM Power processor-based systems. When IBM PowerVM gets implemented, an entirely new layer of “moving parts” gets added to the mix and dramatically increases the complexity of monitoring business applications and the infrastructure upon which they rely. How can organizations efficiently monitor this virtualized infrastructure? How can they ensure that the virtualized infrastructure and all the applications that run in this virtual environment are optimized?

Solution Overview

With CA UIM for IBM PowerVM, organizations gain a complete solution for monitoring IBM PowerVM host and virtual machines. CA UIM enables organizations to monitor and fully optimize their IBM PowerVM implementations. Plus, with CA UIM, organizations can monitor and manage all the operating systems and business applications that run in this virtualized environment—and get insights into the performance end user’s experience from these business applications. By offering this comprehensive monitoring picture through a centralized solution, organizations can take a more holistic and service-led view of the virtualized environment—and much more effectively optimize the performance, utilization and reliability of the entire infrastructure.

Monitoring OS and apps running on virtual machines

CA UIM offers capabilities for monitoring the following:

- All major UNIX- and Linux-based operating systems.
- A host of common business applications, including Microsoft Exchange, Microsoft Active Directory, Microsoft IIS, Lotus Notes, SAP, WebSphere, e-commerce applications and custom-built applications.
- All prevalent databases, such as Oracle, Microsoft SQL Server and Sybase.

Critical Differentiators

CA UIM uses a Message Bus Architecture as a core element that is streamlined, comprehensive and efficient. It enables all monitoring components to communicate with each other, without direct program-to-program connections and acts as an abstraction layer between the core system and the monitoring probes. This leads to significant improvements in reliability, scalability and development agility.

Monitoring response times of end-user applications. Through its extensive support for response time solutions across a range of applications, CA UIM provides vital insights into what is really happening from an end-user perspective.

CA UIM offers a range of capabilities for simulating transactions that end users conduct with business applications. With CA UIM, these simulations are easy to implement and automate, and they yield a wealth of practical insights and alerts if end-user processing is degraded or down.

Critical performance data. When and how it's needed: CA UIM compiles, analyzes and monitors performance data to provide real-time tracking of Microsoft virtualized infrastructures. CA UIM delivers this vital information via alarms, operator consoles, business dashboards, long-term trend reports and SLA compliance reports.

Supported Environments

- IBM PowerVM Standard
- IBM PowerVM Express
- IBM PowerVM Enterprise

Comprehensive coverage. With CA UIM, administrators can monitor the following metrics:

	Managed System	VIO Server	LPAR		Managed System	VIO Server	LPAR
CPU				SYSTEM			
Available processing units	x			Execution state	x	x	x
Configurable processing units	x			Maximum LPARs supported	x		
Deconfigured processing units	x			Average CPU utilization		x	
Installed processing units	x			Disk paging		x	
Active processors		x	x				
Assigned processors		x	x	DISK			
Current processing units		x	x	Disk size (per disk)	x	x	x
Maximum processors		x	x	Disk bandwidth used (%) (per disk)	x		
Minimum processors		x	x	Disk data transfer rate (per disk)	x		
Physical processors consumed		x	x	System data transfer rate	x		
Processing mode		x	x				
Processor entitlement consumed		x	x	NETWORK			
Runtime processing units		x	x	Kilobytes received (per device)	x	x	x
Sharing mode		x	x	Kilobytes sent (per device)	x	x	x
				Last Reset time (per device)	x		
MEMORY				Packets received (per device)	x	x	x
Assigned memory	x	x	x	Packets sent (per device)	x	x	x
Configurable memory	x						
Deconfigured memory	x			STORAGE POOL			
Installed memory	x			Storage pool free (per pool)	x		
Percent memory assigned	x			Storage pool size (per pool)	x		
Unassigned memory	x			Storage pool used (per pool)	x		
Maximum memory		x	x	Storage pool utilization (per pool)	x		
Minimum memory		x	x				
Used memory		x	x	CPU POOL			
				Global shared processor pool size	x		
				Global shared processor pool utilization	x		

For more information, please visit ca.com/uim

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