

IBM Tivoli Monitoring

Highlights

- Help improve uptime and shorten mean time to repair (MTTR) by proactively monitoring, quickly isolating and even preventing problems
- Make new operators highly productive by visualizing real-time and historical metrics and providing them with expert advice and automated actions
- Consolidate monitoring of both distributed and host-based systems to a “single pane of glass”
- Prioritize the services that matter most in your complex IT environment and receive alerts only when a problem occurs
- Help optimize IT service delivery by integrating management products and IT processes to drive performance and meet service level agreements
- Integrate with IBM Tivoli Performance Analyzer to add forward-looking, predictive capabilities that help with performance management and capacity planning
- Realize value faster with streamlined installation and implementation, as well as lightweight agent rule deployment with self-monitoring capabilities

IBM Tivoli® Monitoring solutions are designed to help manage business applications by proactively monitoring essential system resources, detecting bottlenecks and potential problems, and automatically responding to events. By embedding best practices for identifying and resolving infrastructure problems, Tivoli Monitoring solutions can help improve efficiency in your IT department. Proactive system monitoring often identifies problems early, enabling rapid fixes before end users experience significant impact to their performance.

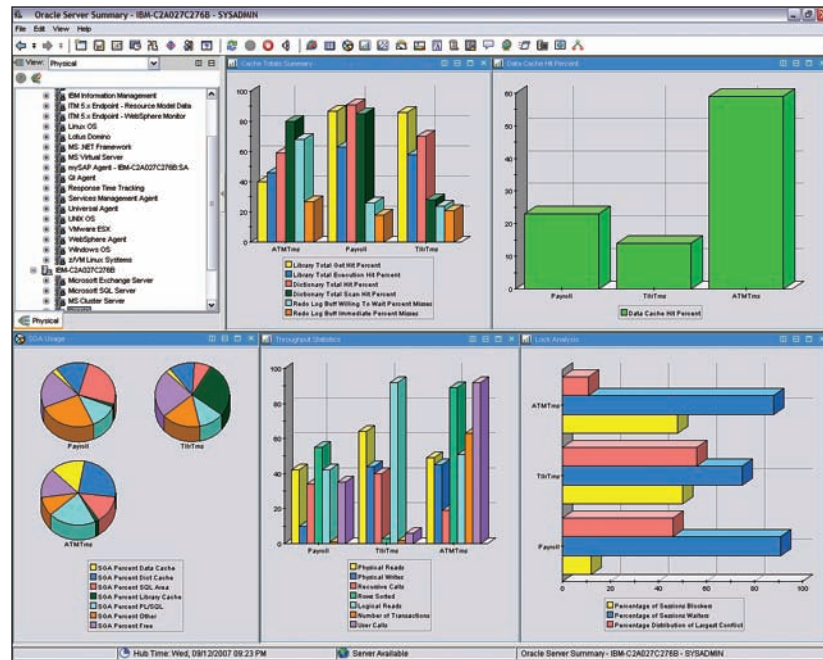
The data you collect with Tivoli Monitoring solutions can also be used to drive timely first-line performance and capacity planning functions with IBM Tivoli Performance Analyzer. This straightforward addition helps you identify trends in server utilization, as well as predict, identify and troubleshoot problems.

Stay on top of key availability and performance problems

In today's IT-driven business environment, it's more important than ever to identify and fix outages and bottlenecks that threaten mission-critical applications — before they impact customer satisfaction and user productivity. But monitoring and managing geographically dispersed systems with disparate operating systems can be labor-intensive and costly. Often there is limited information available to help administrators understand current problems and predict system failures. As a result, they may have difficulty meeting service levels required by the business.

Give your operators powerful, customized monitoring tools

The answer for many businesses — large and small — is Tivoli Monitoring, which provides visibility and automated corrective actions for operating systems. Tivoli Monitoring supports Microsoft® Windows®, Sun Solaris, HP-UX, IBM AIX® and Linux.® The included Universal Agent adds monitoring for agentless resources. In addition, Tivoli



Tivoli Monitoring workspaces provide a concise overview of key health metrics, with expert advice and automation to help maintain availability and performance.

Monitoring can be easily extended with agents to monitor virtual servers, databases, messaging and collaboration, enterprise resource planning (ERP) applications and components throughout a Microsoft environment. As a result, it provides broad and deep visibility in complex heterogeneous environments.

By taking advantage of Tivoli Monitoring solutions, you can stay on top of key performance and resource allocation problems and automate repairs as appropriate. They can also help maximize the efficiency of IT staff and facilitate compliance with service level objectives, which will help minimize the cost of system administration and deployment.

Obtain end-to-end system performance visibility

Front and center in Tivoli Monitoring is IBM Tivoli Enterprise™ Portal, a highly customizable desktop or browser client for viewing and monitoring the end-to-end enterprise. This central point of management allows you to proactively monitor and help optimize the availability and performance of the entire IT infrastructure, across host and distributed environments.

Because information is standardized across all systems, you can monitor all your resources from a single workstation, with the ability to collect and analyze just the specific information you need. You can compile and analyze information from disparate operating systems and other underlying resources on which the applications depend and make management decisions quickly, efficiently and proactively.

The software's portal workspaces also enable you to customize monitoring functions — without writing a single line of code. You can set a simple threshold, or create complex thresholds, situations and alerts. By

graphically combining numerous metrics, you can use Tivoli Monitoring to help minimize false alerts and intelligently manage your distributed environment. Operators can customize their workspaces with dynamic graphical charts and tables that instantly place the situation in perspective.

Tivoli Enterprise Portal can be extended with IBM Tivoli Enterprise Console® and IBM Tivoli Network Manager to add advanced event management capabilities such as filtering and identifying root causes and symptoms. Consequently, your staff can quickly isolate failing components, then diagnose and resolve incidents efficiently and effectively. Tivoli Enterprise Console and Tivoli Network Manager display within Tivoli Enterprise Portal for simple launch in context.

Leverage real-time and historic reports to direct future growth

Behind the scenes, IBM Tivoli Data Warehouse is the embedded common data repository for data analysis and reporting through Tivoli Enterprise Portal. It also eases the management of long-term data by aggregating, summarizing and pruning historical data.

Advanced real-time and historical reporting capabilities can also be customized according to user preferences — so users see only the data that is important to them. The combination of real-time and historical reporting helps you identify trends, predict system behavior and make informed management decisions to guide future growth. And by adding Tivoli Performance Analyzer, you can automate the use of trend data to predict and react to system behavior.

Receive situation-based alerts to facilitate problem resolution

Based on industry best practices, out-of-the-box supplied situations include a combination of metrics and thresholds to trigger, identify, notify and solve problems. You can take advantage of situations in Tivoli Monitoring software to detect and repair incidents as they occur. You can also tailor automated responses to these alerts for your environment to facilitate proactive resolution of recurring problems.

The built-in situation editor allows you to set up your own intelligent alerts and thresholds — based on detailed

logic — that give you the power to create granular notification and eliminate false alarms. The common event viewer in Tivoli Enterprise Portal incorporates events from Tivoli Enterprise Console, IBM Tivoli Netcool®/OMNIBus™ and common base events.

Consistently execute and automate best practices

Automation and advice functions in Tivoli Monitoring software help you resolve problems when they occur, and consistently execute repetitive tasks:

Expert advice — Tivoli Monitoring gives users detailed explanations of incidents and problems, and makes recommendations for resolving them — simply by moving the mouse over an alert. You can use this knowledge out of the box or edit it to preserve solutions specific to your environment.

Take action — You can automatically resolve recurring problems by running scripts created from templates, enabling you to focus on other critical areas. For example, use this to detect runaway processes and view resource

consumption by workload, network and disk information, and system logs — all in real time. Extend the reach of skilled employees by using monitoring automation to capture best practices and “replay” them as problems occur.

Workflow automation — Tivoli Monitoring software includes policies to automate detailed system processes. Using the included workflow editor, you can design policies to perform actions, schedule work to be done by users or automate manual tasks. For example, IBM Tivoli Monitoring for Databases includes best practices for typical situations that database administrators face — determining what to monitor, when to monitor, and how to interpret and act on the monitor results. With the software guiding and automating these tasks, database administrators have more time to focus on complex, less repetitive tasks.

Simplify deployment and help minimize burden on resources

Tivoli Monitoring software is easy to install, thanks to automatic agent and patch deployment throughout your

distributed enterprise, its intuitive interface with point-and-click functions, and simplified monitoring and management capabilities.

Additionally, the lightweight infrastructure and minimized footprint help control the cost of ownership. Efficient data collection results in low memory usage and CPU utilization on managed systems.

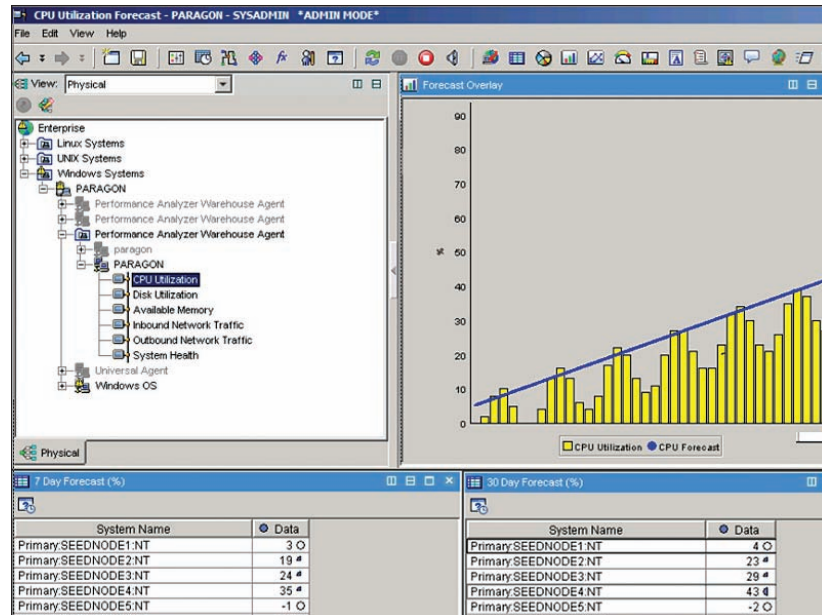
Tivoli Monitoring can be extended with a variety of agents for your environment:

- **Microsoft environments** — including Microsoft Virtual Server, Microsoft SQL Server,™ Microsoft Cluster Server, Microsoft Active Directory® service and applications like Microsoft Exchange.
- **Virtual servers** — including server virtualization and consolidation for Citrix Access Suite and VMware ESX.
- **Databases** — including IBM DB2,® Oracle and Sybase.
- **Messaging and collaboration** — including IBM Lotus® Domino® servers.
- **ERP applications** — including SAP and Siebel.

Adopt a predictive approach to performance management with Tivoli Performance Analyzer

Historically, the work of performance management has been fairly reactive. It takes a great deal of manual effort to thoroughly understand current performance levels, let alone predict future strains and bottlenecks. Tivoli Monitoring software helps make analyzing and troubleshooting current performance easier, by automating and centralizing many repetitive, otherwise time-consuming tasks. And now, you can use Tivoli Performance Analyzer to bring a predictive dimension to your performance management efforts.

By drawing information from multiple sources across the enterprise, Tivoli Performance Analyzer can help you understand resource consumption trends and predict when utilization thresholds will be breached, allowing you to send real-time alerts before performance is impacted. Tivoli Performance Analyzer supports data collected from Tivoli Monitoring and IBM Tivoli Composite Application Manager (ITCAM) software, as well as other data stored in Tivoli Data Warehouse.



Tivoli Performance Analyzer seamlessly integrates with Tivoli Monitoring to automatically predict congestion and help avoid problems.

Because Tivoli Performance Analyzer uses historical information to understand the rate of growth, you can receive alerts at the most appropriate times. You specify the appropriate amount of advance notification for a threshold breach that Tivoli Performance Analyzer forecasts. For example, you could learn when a server's capacity will be exceeded in enough time to order additional hardware or make other configuration

changes to preserve performance. Additionally, you can use the analysis from Tivoli Performance Analyzer to aid in forecasting for — and justification of — server provisioning.

When Tivoli Monitoring software and Tivoli Performance Analyzer are deployed together, IT staff can receive notifications about historical, real-time and forecasted status — and automate tasks to help resolve any issues.

Incorporate dispersed, heterogeneous data into predictive analysis capabilities

Any data in Tivoli Enterprise Portal and Tivoli Data Warehouse can be leveraged by Tivoli Performance Analyzer. It supports the Universal Agent and Agent Builder, which allow you to consolidate and customize monitoring for virtually any device, application or system. You do not need to wait for another vendor to support Tivoli Performance Analyzer to be able to extend the value of your existing investments and apply a predictive perspective to them.

Additionally, Tivoli Performance Analyzer can simultaneously draw on both versions 5.x and 6.x of Tivoli Monitoring software. Consequently, you can begin to take advantage of its capabilities at any point along the upgrade path.

Offer predictive capabilities to people throughout your organization

Normally, doing any kind of capacity management involves the time of highly

trained specialists. This is particularly true when it involves distributed systems. But Tivoli Performance Analyzer, through the Tivoli Enterprise Portal interface, makes essential capacity and trend information available to people in a wide variety of roles:

- **Operations staff** can create more intelligent and earlier alerts of systems performance.
- **Performance specialists**, leveraging out-of-the-box support for distributed systems monitoring, can manage a larger number of systems than would otherwise have been possible.
- **Service level managers** can enhance their insight into impending service issues by adding resource trends and forecasts provided by a tool such as Tivoli Service Level Advisor.
- **IT managers** help get better productivity from their valuable technical resources.
- **Capacity managers** can establish first-line capacity-estimation and triage capabilities.

Using Tivoli Performance Analyzer, people in each of these roles can learn about the “hot spots” in the infrastructure — and take the steps needed to

stay ahead of the performance challenges. They can use some preliminary capacity estimations to perform immediate troubleshooting while specialists with deep capacity management tools develop longer-term prescriptions.

For more information

To learn more about how Tivoli Monitoring software and Tivoli Performance Analyzer can enable you to efficiently monitor and manage your critical resources, contact your IBM representative or IBM Business Partner, or visit ibm.com/tivoli

About Tivoli software from IBM

Tivoli software provides a set of offerings and capabilities in support of IBM Service Management, a scalable, modular approach used to deliver more efficient and effective services to your business. Helping meet the needs of any size business, Tivoli software enables you to deliver service excellence in support of your business objectives through integration and automation of processes,

workflows and tasks. The security-rich, open standards-based Tivoli service management platform is complemented by proactive operational management solutions that provide end-to-end visibility and control. It is also backed by world-class IBM Services, IBM Support and an active ecosystem of IBM Business Partners. Tivoli customers and business partners can also leverage each other's best practices by participating in independently run IBM Tivoli User Groups around the world — visit www.tivoli-ug.org

Tivoli Monitoring family at a glance

Tivoli Monitoring software and Tivoli Performance Analyzer provide support for a wide variety of platforms and databases. Not all platforms and databases are supported on every product. IBM is continually expanding the breadth of coverage of Tivoli Monitoring agents. For the latest, detailed information, visit ibm.com/tivoli/products/monitor

- Supported platforms include AIX; Solaris; Windows; Linux (Red Hat, SUSE) on Intel,[®] IBM System z[™] and IBM System p[™]; HP-UX; and IBM i5/OS[™]
- Supported databases include: DB2, Microsoft SQL Server, Oracle and Sybase
- Tivoli Monitoring agents:
 - IBM Tivoli Monitoring for Active Directory Option
 - IBM Tivoli Monitoring for Applications
 - IBM Tivoli Monitoring for Cluster Managers
 - IBM Tivoli Monitoring for Databases for DB2, Oracle, Microsoft SQL Server and Sybase
 - IBM Tivoli Monitoring for Messaging and Collaboration
 - IBM Tivoli Monitoring for Virtual Servers



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Software Group
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
9-07

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