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15-Minute CIO Report:
Five Critical Elements for Successful Monitoring of IT Performance, Availability, Capacity and Efficiency (PACE)

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Traditionally, IT service components such as hardware, network, databases, applications and business services have been managed independently. These IT silos have inherent limitations for everyone in the business. For example, have your end users ever complained that the website is unavailable, yet the hardware, application and network teams report that the system is working fine? Has a critical server ever gone down, but the business impact is unknown to anyone in your organization except a few experts working on the issue? Has a network issue disabled a business application, but the help desk was unable to correlate the network problem with end users calling for assistance?

While these situations may be commonplace for many organizations, this lack of visibility across the IT environment can really hurt performance, availability, capacity and efficiency—collectively referred to as the PACE of IT. To optimize PACE, organizations need an end-to-end monitoring system that integrates tools, servers, applications, users, locations and environments. With a fully integrated monitoring system, IT administrators gain a valuable business perspective. This end-to-end view also enables resolution of the actual impact of the issue, rather than just a component of it.

Five Critical Elements of an Effective IT Monitoring System

Today's IT organizations use a variety of tools and management service platforms to address issues that affect end users. These tools and platforms are most effective when they can monitor performance, availability, capacity and efficiency from a single pane of glass. Here are five elements to consider for effective, end-to-end monitoring of IT PACE:

1. Configuration management database (CMDB)
As the most critical component of your monitoring system, the CMDB provides a directory of all components in your IT environment. The components are referred to as "configuration items," and their interdependencies are mapped within the CMDB. As a result, the CMDB enriches data by providing additional context to monitoring system events, such as the type of asset, what it does, how it impacts, where it's located and who owns it.

2. Correlation engine
The correlation engine boosts efficiency to ensure IT issues are identified and resolved without delay. The correlation engine accomplishes this by filtering duplicate events, so a new help desk ticket is not issued if there's already a ticket for the same issue. The engine also handles fluctuation data, such as anomalies caused by disturbances in the environment, and verifies the existence of path outages reaching the monitored configuration item before it passes to the workflow engine.

3. Workflow engine
A workflow engine is key to an efficient, end-to-end IT monitoring solution. The workflow engine should be customizable to meet the unique demands of your business environment and should process all alarms received and convert them to tickets. In addition, a workflow engine handles the flood of alarms that impact configuration items; determines if there is scheduled downtime due to a change in the IT environment; and determines if the event impacts business processes due to the time it occurred. The workflow waits until the event is normalized before it creates a ticket. For example, if a CPU threshold increases from 40% to 70% on Saturday evening, the workflow

engine would not create a ticket because it recognizes this as a batch run process that's impacting performance.

4. Snapshots

The ability to capture snapshots of events when they occur provides engineers with the information they need to identify the root cause and resolve the problem. Without the ability to take snapshots, by the time an event converts to a ticket and an engineer acts on it, the cause of the event will have diminished and the engineer may not be able to identify the root cause. If the monitoring system takes a snapshot of processes running at the time of the event, it can help prevent reoccurrences.

5. Auto creation of tickets

The most effective monitoring system should automatically create a ticket in the service management tool based on post-event correlation and processing through the workflow engine. The system should have the built-in intelligence to assign the ticket to the correct group for resolution, such as the Windows or Linux or network administrator, based on the CMDB information.

Driving Business Results with Integrated IT Monitoring

While talking about these elements is important, seeing them in action is more impactful. Here are two examples of global leaders who use integrated, end-to-end monitoring to help drive successful business results:

1) Building and monitoring a cloud-based solution for global hospitality leader

A worldwide hospitality leader with operations in 70 countries wanted to create a differentiated, customer-centric cloud-based offering that meeting planners could use to submit requests to hotel associates. And the hotelier wanted a mobile platform that could scale. Their managed services provider designed a three-tier landscape for development and production, and hosted the application on highly available infrastructure to improve the rollout. The managed services provider also delivered a single point of ownership for the complete business application. As a result, the hospitality giant has increased access to global meeting planners through the mobile web solution while the managed services provider delivers a single dashboard for support and infrastructure hosting, ensuring availability for the application.

2) Build-out, deployment, and monitoring of public cloud for global software giant

A global software giant with a public cloud platform used by Fortune 500 companies and thousands of enterprises struggled with the challenges of out-of-control growth and hardware failures that accounted for 20% of total support calls. The software provider needed an innovation partner to improve the stability of the cloud platform and help them launch the service in China. Its managed services provider developed tools to accelerate deployment, monitor platform health in real time and set up a center of excellence to train the support team. As a result, the cloud platform's stability was significantly improved, support calls were reduced, and the software vendor was able to launch the China service on time.

Summary

IT service components should not be managed in silos. With a fully integrated, end-to-end monitoring system in place, your organization has a powerful mechanism to significantly improve response and resolution times for typical IT challenges. It also improves your overall performance, availability, capacity and efficiency.

At Mindtree, we have extensive experience in delivering IT PACE. We do this through MWatch, our end-to-end visibility intelligence platform that monitors all of your IT components on a common dashboard. We help organizations achieve an integrated view of their IT environments to accelerate business goals and gain a distinctive advantage over competitors.

Contact us

For more information about how Mindtree can help your organization drive business transformation with IT managed services, click here.

About Mindtree

Mindtree [NSE: MINDTREE] delivers technology services and accelerates growth for Global 1000 companies by solving complex business challenges with breakthrough technical innovations. We are among the fastest growing technology firms globally withmore than 200 clients and offices in 14 countries. Mindtree specializes in e-commerce, mobility, digital transformation, business intelligence, data analytics, testing, infrastructure, EAI and ERP solutions.