KEEPING THE LIGHTS ON

IT MANAGEMENT SOLUTIONS ARE NO LONGER SIMPLY ABOUT FINDING NETWORK BOTTLENECKS. INDEED, THEY'RE NOW ABOUT PROVIDING A HOLISTIC VIEW OF THE IT INFRASTRUCTURE AND APPLICATIONS

BY TOM PAYE

For all the talk about IT teams no longer being about 'just keeping the lights on', ensuring the proper performance of a modern IT infrastructure is still one of the biggest challenges facing CIOs. Happily, various solutions now exist to help manage disparate IT systems, from the software to the network. These monitor network flow, congestion, bandwidth management and faults, as well as provide a holistic view of everything on the infrastructure. But how can a CIO ensure that he or she is getting the most from these solutions to get the best performance from their infrastructure and resources?

Systems management is about tying together the different systems — such as routers, firewalls, servers, applications, racks and workstations — in the environ-

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> AYMAN EL SHEIKH, SOLUTIONS ARCHITECT MANAGER AT RED HAT

ment. And one of the biggest challenges faced by organisations today is the fact that each of these systems or functions is handled by different teams, creating silos. A solid IT systems management solution, however, will streamline and tie together each of these systems seamlessly.

"The biggest challenge organisations face today is that different functions of their business work in silos. This applies to the IT management of an organsation as well. An efficient IT management system will connect all the information in these silos, or departments, readily available. The advantage of such an IT management system is the information, which is made available, through which business intelligence can be gathered," explains Sridhar Iyengar, vice president at ManageEngine.

According to Gartner, IT management services are divided into three key sub segments - operations services (for IT infrastruc-

THE BENEFITS OF OUTSOURCING

According to Yasser Zeineldin, CEO of eHosting DataFort, many organisations in the region could do away with the headaches surrounding IT systems management by outsourcing parts of their infrastructure.

"The idea of IT infrastructure management outsourcing is simple: Offload the mundane IT operational and maintenance tasks to a service provider and free up time for the organisation's IT team to work on delivering more value and innovation to the business. There is also the added benefit of saving money by converting capital expenses to a monthly operating cost model. Middle Eastern enterprises are slowly beginning to see the value of outsourcing the management of their IT infrastructure to specialised service providers," he explains.

"As IT infrastructure continues to be an integral component of an organization's overall assets, partnering with an IT services provider for hosting and management of IT systems will be the key to cost-effective and fully supported, highly available IT infrastructure. We are seeing a high uptake for all models of IT services including managed hosting, cloud infrastructure services, disaster recovery as well as remote monitoring and management services."

ture), application management services and help desk management services. The main benefits to adopting these systems and services, according to Biswajeet Mahapatra, research director at Gartner, are better service quality, higher customer satisfaction, keeping the lights on, improved service delivery, and less down time.

"Prehistorically, it was all about network monitoring, then application monitoring, hardware monitoring, power and cooling monitoring, and facilities monitoring. [Vendors] kept on adding and now it is not just about monitoring but more about proactively detecting any issues in the entire system and automatically taking remedial actions even before any major incident happens," he explains.

"That leads to maximum uptime and higher customer satisfaction. This can only happen with single topological view of all the aspects, having integrated and standard processes and adopting

newer technologies like analytics in I&O, cloud, big data and social. So it has moved much beyond just a holistic view — it is more about what do you do with the information and how do you improve the services."

Indeed, according to Ayman El Sheikh, solutions architect manager for the Middle East, Turkey and Africa at Red Hat, IT management systems now need to encompass a variety of processes, within IT and outside it.

"IT management systems (ITMS) — or, to be more precise, new cloud management solutions — are critical for system monitoring, capacity planning, and managing governance, security and compliance. Having an IT management system also enables the business to respond quicker to customer requirements and reduces time to market," he says.

"A solid ITMS should be modular so as to be able to manage different resources across the IT landscape. Ease of customisation and interoperability is key to ensuring that the solution can be easily extended to fit various customer requirements."

Iyengar adds that most CIOs already have a dashboard in place tracking the performance of the different network and application

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components in their environment. However, without a proper IT management system, he says that statistics and metrics from are often overlooked.

There are a plethora of solutions available on the market, and they all deal with various areas associated with IT systems management. According to Mahapatra, Gartner tracks the solutions that have matured, as well as the ones which are up-and-coming.

"To name a few which have already matured, [there is] job scheduling, IT asset management, infrastructure monitoring, network fault management tools, IT event correlation and analysis tools, service provisioning and configuration management tools, and many more," he says.

"Upcoming technologies include ValueOps, service billing, DevOps, IT operations analytics, and social IT management."

So which ones are the most essential? Naturally the answer to that question depends on the type of organisation that you're running. However, according to Red Hat's El Sheikh, it would be prudent for IT leaders to evaluate IT management systems that help to manage cloud-based deployments and workloads. He says that these should be used so that companies can get the best out of their cloud infrastructures, rather than having to worry about how all the different pieces fit together.

"The new trends in ITMS are all around managing private and hybrid clouds, which in essence requires new management capa-

bilities that need to be tightly integrated to ensure operational efficiency, resource optimisation, and high availability. The underlying complexity and highly dynamic nature of cloud environments require solutions that simplify operations and administration so that the focus can be on service delivery rather than on building, integrating, and maintaining a portfolio of disparate management tools," he explains.

"Enterprises should avoid cloud 'tool sprawl', which requires separate tools for each different environment, platform, and service delivery model. Cloud workload interoperability is key to moving workloads and applications between different cloud providers."

El Sheikh adds that another trend is the changing nature of the applications and workloads. He says that the days of monolithic applications and workloads, which were designed for statefull communication with a scale-up model, are now gone

"Today, we are seeing the move to cloud workloads — stateless, web-scale applications which can be easily scaled on demand without any service disruptions. This creates a new demand for next-generation management software — what we now refer to as cloud management systems. These systems have the capabilities to manage both workloads and the new infrastructure based on OpenStack, which is becoming a new standard," he says.

Mahapatra, meanwhile, makes his own suggestions for emerg-

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Mahapatra: Vendors have continued adding features to their IT management solutions.

TOP TIPS FOR CIOS STRUGGLING WITH IT SYSTEMS MANAGEMENT

1. Do not have a piecemeal approach for managing your IT systems — such as using application-provided tools to just manage that specific application. You need an integrated approach.
2. Managing IT systems is no longer a by-product. Infrastructure operations management is the backbone of any IT system for any company, so monitoring, managing and maintaining it should be the first priority.
3. Adopt well-established best practices in infrastructure and operations such as ITIL standards and ISO certification, or CoBit. This helps to improve the quality of services.
4. Have a services view of all the services that the IT department provides. This will help you provide better services at a reasonable cost.

Biswasjeet Mahapatra, research director at Gartner

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ing technologies in the realm of IT management systems. He explains that cloud-based IT service tools help enterprises monitor, manage and run their IT systems in a cost-effective manner. And he advises that using analytics tools on IT systems helps increase predictability and reduce downtime.

"Using social media helps in faster decision making and propagating messages in a faster and more effective way, and mobile-based tools help in remotely managing, monitoring and running day-to-day operations," he adds.

"All this is helping increase agility of systems, monitor the entire network, facilities, applications, and hardware 24-7, and increase customer satisfaction. Even during downtime using social media to keep stakeholders updated also helps in managing risks."

The important takeaway here, however, is that IT management solutions are no longer simply about finding network bottlenecks. Indeed, they're now about providing a holistic view of the IT infrastructure and applications, allowing IT managers to see where there might be possible pain points, as well as predict faults ahead of time.

"Historically we used to have separate systems to manage and monitor particular points of the infrastructure network, servers and storage. This is now changing and the focus is on taking a holistic view of the total infrastructure and applications through a single pane of glass," explains El Sheikh. ■