zenoss

Success Story:

UMUC

University of Maryland University College (UMUC)

Education

Maryland, USA

Highlights

> Premier distance learning institution servicing 95,000 students worldwide

> Had 5 data centers across 3 continents

> Zenoss helped UMUC transition 97% of physical infrastructure to Amazon Web Services (AWS)

> UMUC uses Zenoss as a Service (ZaaS) to monitor AWS, Linux and Windows servers, Cisco UCS, Cisco networking, and virtualized storage devices

> Reasons UMUC chose ZaaS:
  • Easy to use, turnkey-like solution
  • Speed of implementation
  • Unified view of events
  • Correlation of devices and services

> Benefits to UMUC:
  • Only 1 engineer needed to implement solution
  • Consolidated 5 tools
  • Service-level insight
  • Improved staff efficiency

WHAT WAS KEEPING UMUC IT LEADERS AWAKE AT NIGHT?

As online distance learning proliferates, the burden on university IT systems is accelerated. IT networks can slow to a crawl, making an online university's distance learning, mobile interactions and telepresence virtually unusable. This can diminish learning productivity and typically has a tangible negative impact on the educational institution's business.

UMUC BEFORE ZENOSS

UMUC traditionally hosted all distance learning IT infrastructure in on-premises data centers. They had five data centers on three continents with approximately 1,500 hardware systems in operation. Because students tended to use the systems in massive, regular surges — such as Sunday nights just before weekly homework or testing deadlines, or at the end of grading periods — there were capacity issues with UMUC's legacy learning management system (LMS) and an array of third-party applications. With additional internal systems supporting everything from document management to human capital management, UMUC had a clear need for a unified monitoring platform.

> **Organizationally, the teams were siloed by technology. We had no clear, centralized view of what application we had nor what infrastructure they depended on.**
>
> *Scott Reece, Director of Operations, UMUC*

UMUC lacked visibility into issues that were affecting end users, so the UMUC IT staff was completely unaware of service interruptions in many cases. Once aware, they still had difficulty identifying the exact points in the infrastructure where the issues were occurring.

> **When I started at UMUC, we had five different monitoring systems that were in various states of disarray. None of them gave a full view of the infrastructure health.**
>
> *Greg M. Smith, Associate VP of Enterprise Operations, UMUC*

In 2012, UMUC adopted a new cloud-first IT strategy, which included first adopting SaaS technologies from vendors and then transitioning infrastructure in their own global data centers to AWS, leaving only essential infrastructure components on premises. To scale IT operations, unify monitoring, and achieve a smoother cloud transition, and user experience, UMUC decided to adopt Zenoss-as-a-Service (ZaaS), the cloud-hosted version of Zenoss Service Dynamics..

> **We had around 1,500 pieces of physical gear in five data centers, and now we're down to fewer than 100 worldwide — a 97 percent reduction. Working with Zenoss gave us visibility into both our virtual and physical resources, which greatly facilitated our move into the cloud.**

Greg M. Smith, Associate VP of Enterprise Operations, UMUC

HOW ZENOSS SOLVED UMUC'S PROBLEM

Managing a consolidated hybrid cloud infrastructure brings its own challenges. UMUC needed to be able to monitor server, network, storage, virtualization and cloud components from a centralized platform because multiple disparate tools had resulted in slow issue identification and response times. ZaaS provided unified performance and availability monitoring and event management for UMUC's entire IT infrastructure.

> **If you're thinking about unified monitoring, consider implementing it as software-as-a-service rather than running it internally because it's easier to start working with it that way. ZaaS was a very quick turn-up for us.**

Greg M. Smith, Associate VP of Enterprise Operations, UMUC

Successful Transition to Cloud

UMUC has been able to migrate 97 percent of their physical infrastructure to AWS. Their use of ZaaS helped ensure seamless operations before, during and after the transition to the cloud. ZaaS allowed UMUC to continually monitor the health of their hybrid infrastructure and move data collectors around as needed throughout the process. ZaaS also allowed the IT staff to better understand system interdependencies, which helped eliminate redundant equipment and significantly reducing unnecessary labor and repair costs.

Service Insight and Correlation

UMUC has leveraged Zenoss' Service Impact features to build out models of their cloud-hosted sales and marketing, administrative, and academic applications, such as their student-facing portal. These service impact views are in the main ZaaS dashboard that UMUC uses on a daily basis to track up-to-date application health and to understand what infrastructure events truly pose service risks. By identifying which infrastructure issues are already mitigated via redundancy, they are even able to reduce event storms, thus avoiding waking system administrators in the middle of the night.

Improved Performance & Visibility

UMUC believes that the emphasis on performance has shifted from analyzing individual pieces of hardware to understanding how those hybrid IT technologies are interconnected to enable services for facult, staff and students. The ZaaS unified monitoring platform allows UMUC to do both simultaneously. To supplement the monitoring done natively within ZaaS, UMUC is also feeding log data from Splunk into their solution to achieve greater quality insights.

> **Zenoss gives us the control and visibility we need — from early detection and rapid root-cause isolation through diagnosis and on to resolution. This helps us ensure service quality for each of our users, regardless of location.**

Greg M. Smith, Associate VP of Enterprise Operations, UMUC