Nutanix was trying to improve their ability to ensure application performance by getting service-centric visibility. They needed to unify monitoring across infrastructure, applications, databases, directory services and more. Nutanix began to evaluate a number of monitoring solutions and found many of the options to be complicated, which was a “showstopper” for Nutanix. It was critically important that the monitoring platform they chose provide total visibility with low overhead, enhancing their team’s agility as new services get deployed.

Here are the monitoring requirements identified by Nutanix:

- Incorporate performance metrics and fault events for F5 load balancers
- Check web portal function with synthetic web transactions
- Notify in advance of SSL certificate expirations
- Dig deep into Tomcat Java JMX applications by gathering thread counts, heap memory and open file descriptors
- Track MySQL database essentials like data and index sizes, open connections and tables, and join statistics
- Support core Active Directory infrastructure by collecting number of connections and sessions, read/write activity, bind times, and cache hit rates

**What Was Keeping Nutanix IT Leaders Awake at Night?**

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**Why Nutanix Chose Zenoss (and Nutanix)**

The key benefit Zenoss provides is clear visibility of IT status through deep infrastructure metrics collection coupled with a broad understanding of how different technology components work together to deliver a business service. Zenoss extends the capabilities of the Nutanix Prism interface by collecting detailed data points on Nutanix clusters, hosts, CVMs, storage pools and so on. When coupled with service impact analysis, the Nutanix ZenPack maps out not services they enable. This gives users the ability to see when and where issues are occurring, identify affected services that rely on Nutanix infrastructure, and quickly pinpoint and resolve issues hindering service delivery. Zenoss also maintains a rich history of these data points over time so system performance can be explored retrospectively. Its machine learning algorithm utilizes this historical data to identify anomalous behavior and help you head off future issues before they occur.

Wendy M. Pfeiffer, CIO, Nutanix
These capabilities enable the Nutanix team to maintain visibility and control across their IT infrastructure landscape, meeting their team’s needs for connected, full-stack service awareness. Here’s how:

- They had a business-critical need for insight into application stacks and internals. Zenoss delivers a complete monitoring solution.

- The Nutanix ZenPack extension brings in all the information from Prism, so a team member can rely on one user interface to look at F5 performance, Tomcat application metrics or Prism alerts.

- The Google Cloud Platform (GCP) ZenPack that integrates Zenoss and GCP enables unique monitoring capabilities and visibility, ensuring optimal performance of workloads for GCP instances.

- Zenoss fills all the monitoring, service and integration needs of the Nutanix team. Standard extensions provide the base services, and a Python-friendly SDK ensures that Nutanix can handle special cases.

“"If there’s a problem, we can see exactly where our environment will have issues — and that’s been really nice.""
- David Ta, Director Systems Engineering, Nutanix

**Why Nutanix Chose Zenoss (and Nutanix)**

By using Zenoss to deliver service context into the monitoring stack, Nutanix is able to successfully resolve IT issues as quickly as possible to maintain ongoing operations and maximize uptime. Nutanix also leverages the Zenoss and Nutanix integration by using Zenoss event triggers to tap Nutanix’s API and perform autoscaling functions whenever virtual resources need to be resized in response to demand.

Zenoss fills in the holes of Nutanix Prism by providing insight into all the different application stacks, internals of environment and so on.

“"One of the benefits [of using Zenoss] is our ability to classify services using service dynamics. Now we have the ability to group together different tiers of web applications and tie them together. And we can see when services are in a degraded state versus completely down. [Zenoss] helps us know when to pull the right people in and when to sound off the fire alarms.""
- David Ta, Director Systems Engineering, Nutanix

Zenoss provides Nutanix with unprecedented capabilities to visualize incidents, forecast trends and detect issues before the business is impacted. Model-informed algorithms overcome the primary obstacle with making machine learning productive for IT Ops teams by enabling insights based on certainties instead of limited probabilities.

“"For some time, Zenoss has been the gold standard in web services monitoring. The Nutanix ZenPack takes this monitoring to the next level by seamlessly integrating with Nutanix Prism. It’s a match made in heaven — a truly integrated monitoring environment for all of our services.""
- Wendy M. Pfeiffer, CIO, Nutanix