

EPM guarantees reliability and quality for their customers with Nutanix

Colombia's largest multi-utility company improves efficiency, enables faster scaling, and reduces costs with their Nutanix cloud platform

BUSINESS BENEFITS

EPM can lead the way in reliability and quality for their residential public utility customers, powered by a hyperconvergence-based solution from Nutanix. Cohesive, simplified system management allows them to enjoy a reduced risk of failure, faster scalability, and significant cost savings.

CHALLENGE

Empresas Públicas de Medellín (EPM) is a residential public utilities company serving several cities across Colombia, providing almost 25% of public utility service in the market.

EPM also owns several electricity distribution companies in Colombia's as well as water companies in various municipalities of the country. Across Central America, EPM owns four important companies in the field of home utility public services.

EPM has a long-standing reputation for quality. Their aqueduct systems produce water that is outstanding in international quality standards. In the energy area, EPM is proud to offer a service with very high availability and very good quality standards.

As a public company with private management, EPM employs directly and indirectly approximately 50,000 people across Colombia. What makes them different is that they provide all public utility services simultaneously: water, electricity distribution and production, natural gas, and water treatment. They also have a company that provides solid waste disposal services.

INDUSTRY

Energy & Utilities

BENEFITS

- Guaranteed reliability and quality for customers with highest ever levels of continuous availability (>99.6%)
- Reduced risk of failure of over 30 critical applications prevents downtime costs of \$15,000 per hour per application
- Significant cost savings in infrastructure and personnel time
- Increased speed of server provisioning means faster scalability and quicker response to the needs of teams and customers
- Simplified system management requires only a single console
- Ongoing systems support from Nutanix helps EPM continue to improve their service to customers.

SOLUTIONS

- AOS Ultimate
- Nutanix Files

Applications and Use Cases:

- Server Virtualization
- Microsoft SQL Server
- Oracle Databases
- Data Lake
- SAP HANA

For EPM, IT infrastructure and computer systems play a critical role in serving the needs of their customers.

“Before Nutanix, we had several significant technical challenges,” explained Antonio Pérez, Director of IT Infrastructure Services. “We had a traditional configuration with separate silos for storage, processing, and network. We were having a lot of difficulties with disk disconnections and problems with integration between the processing and storage silos. We also had significant challenges in maintaining an availability of 99.6% for critical systems, which was our main goal.”

SOLUTION

The EPM team realized they needed to find a better way to guarantee reliability for their customers.

“When we identified the cause of the disconnections and data losses, we realized it was the segregation of our systems that was to blame,” said Jhon Fredy Rendón, IT Professional at EPM. “That was when we looked to a Nutanix hyperconvergence-based solution to mitigate these points of failure.”

“When we analyzed different hyperconverged solutions on the market, Nutanix met a condition that the others did not: not being tied to specific hardware,” explained Rendón. “The other selling point was that it was exceptionally well ranked by Gartner. These were the key reasons we chose Nutanix’s cloud platform for our company.”

EPM now uses Nutanix for virtualizing a wide array of applications and databases, including Microsoft SQL Server, Oracle, administration and management systems, and an active directory. They also have another cluster with 3 nodes, which is for a data lake, and another cluster for a SAP HANA treasury execution, where the productive database is about 80 gigabytes in size. EPM will also be using Nutanix Files in an upcoming SAP deployment.

CUSTOMER OUTCOME

Superior reliability

For EPM, Nutanix has proved to be a big improvement in terms of reliability and availability—something that’s critically important to the business.

“If a critical application fails, it can cost us around \$15,000 per hour of downtime. In our system, we have around 30 critical applications and 120 non-critical applications, so the repercussions of having a critical system fail are significant,” explained Pérez.

“When we had the traditional infrastructure, there were multiple points of failure: a disk got disconnected, an optical fiber shifted, and so on,” said Rendón. “Now with Nutanix, the availability really stabilized the service. Up to now, there has not been any unavailability associated with the solution.”

Pérez furthered: “I think the change has been very positive. The failures we once had are now a thing of the past. By decreasing our reliance on traditional technology, it’s helped us a lot to reduce failures and improve availability.”

Ease of scalability

EPM’s first deployment with Nutanix used 5 nodes. Seeing the successful performance of their new system quickly gave them the confidence to begin implementing more. Now, EPM uses 29 nodes across their three solutions.

“Server provisioning times have been reduced, and having the entire solution integrated means that growth is very straightforward by adding nodes,” said Rendón.

Improved customer experience

With Nutanix, EPM can serve their customers better. “Because it takes less time to implement or add a new server, we can respond much more quickly to the needs of our teams and customers,” said Pérez.

Cost savings

The EPM IT team has also found that Nutanix is a cost-effective solution. “The virtual machines that are running Nutanix solutions are much cheaper by having everything integrated. A virtual machine on the Nutanix platform can cost us a tenth of what it would cost in the cloud,” explained Rendón.

EPM has been able to grow their platform and improve performance without the need for additional personnel. “We are doing more with the same people,” said Pérez.

Rendón explained further: “Because we don’t need additional personnel to attend to the additional loads, Nutanix has helped us make savings by not having to increase our staff. Now, we can continue with the same tasks and also tackle new challenges for the organization.”

Originally, the IT team at EPM intended to have a community cloud that would serve all of the companies in the group. What they saw with Nutanix was not only improved access to information, but also the opportunity to reduce costs.

“We saw that Nutanix could help us make that decision very cost-efficient, compared to cloud servers. From there, we grew a lot,” explained Rendón.

Simplified management

For Rendón and the rest of the IT team, Nutanix removes the need to perform many storage activities manually.

“Our hyperconverged system has significantly reduced our need to manage storage, fiber optics, server cards, disks, and so on. With Nutanix, we only need a single console to verify the status of the entire platform,” he explained.

Improved efficiency

With Nutanix, the IT team has experienced far less technical problems—meaning improved satisfaction for EPM’s employees across Central America who use the system.

“We are no longer constantly putting out fires as we were before: almost every week we had a problem with some of the machines because they lost the disks,” explained Rendón.

“Now, the Nutanix solution has helped us create stable environments, something that helps the entire EPM team. The fulfillment that our internal users have—and the perception that they have of us—has improved a lot.”

Faster time to delivery

The team at EPM has also enjoyed improvements in development speed without having to make additional changes to their infrastructure.

“Because we have an infrastructure with provisioning and cloning capabilities, we can provision more machines with the same infrastructure as we would have if it were traditional,” said Rendón. “Unlike before, Nutanix allows us to quickly meet new development demands without having to buy additional infrastructure.”

Systems support

The EPM IT team found that Nutanix was there to support them during the initial implementation, even though the process was managed by a third-party contractor.

“Nutanix, as the representative of the product we were implementing, became actively involved in being part of the solution to find out how we could solve this challenging project,” explained Rendón. “They supported us, they fulfilled their responsibility and gave us the resources to carry out the project successfully.”

Pérez furthered this positive opinion of Nutanix, saying: “They have shown great responsibility and commitment with the solution.”

NEXT STEPS

As digital transformation poses new challenges for the public services sector in Colombia, EPM are ready to tackle them with Nutanix at their side.

“One of our significant challenges is smart metering, and being able to implement many smart meters in a short period of time,” explained Pérez. “Another challenge we have is being able to implement IoT projects with challenges such as monitor the entire aqueduct network, measure pressures, and make decisions in real-time.”

The EPM team are looking forward to specific training sessions to learn how Nutanix can help them continue to improve their applications, infrastructure, and service to customers.

Pérez concluded: “We invest in what works well for us, and so far, the solution we have from Nutanix has worked very well for us.”



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