Open Nebula

Empowering Millions with Financial Aptitude and Might

LOCATION
USA

SECTOR
Technology (FinTech)

MX is a global technology leader with a mission to empower financial strength and productivity by developing cutting-edge software and building solutions for banks, credit unions, and other financial institutions. With products addressing a range of use cases including Digital Banking, Financial Wellness, Lending and Payment Processing, MX provides direct value to their millions of end users by focusing on delivering seamless and insightful solutions that protect from security risks and allow their users to understand and manage their finances more easily.

MX was founded in 2010, and is based in Lehi, Utah, USA.

As a Software as a Service company that develops and produces solutions for financial customers around the world, MX runs their own private data centers to meet the demands of their business. Prior to running OpenNebula, they had built their virtualization infrastructure using XEN hypervisors, but soon realized that the XEN licensing model was not compatible with the MX business model. And at the point of exploring new virtualization and cloud solutions, finding an open source technology to meet their enterprise needs and suitable for their long-term strategy became a key factor in their evaluation effort.

THE BENEFITS OF OPEN SOURCE FOR THE ENTERPRISE

MX took the typical route of companies testing the Community Edition of the OpenNebula software, putting it to work through a thorough evaluation, and eventually determining that OpenNebula would fit well into their long-term strategy and they became an Enterprise Customer.

> *"We have used the customer support portal many times, the professional services once thus far, and the tools provided by the enterprise license (for upgrades, etc). We anticipate running VMs for a long time, and we've been able to scale to tens of millions of end users on top of our OpenNebula platform."*
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> *Thomas Bennett, Site Reliability Engineer*

With an environment where they are leveraging the SDK and the OpenNebula API, and running close to 500 KVM hypervisors, having an Enterprise Subscription has provided security and stability in their efforts to build an enterprise-wide system around OpenNebula.

OPEN SOURCE PROVIDING THE KEYS TO THE CASTLE

Not everyone needs a solution that encompasses all if its enterprise needs. Oftentimes, companies that look to open source solutions find value in the ability to utilize a software solution that provides a springboard for building features and extending its capabilities. One of the key attractions of OpenNebula to MX has been the flexibility gained by integrating with the SDK, utilizing the API, and building a complete, automated enterprise solution from the ground up.

> *"We heavily leverage the SDK provided and the API in our environment of about 500 KVM hosts. We have been able to fit OpenNebula into our current technology stack without re-architecting anything major on our end."*
>
> *Thomas Bennett, Site Reliability Engineer*

With relative ease, the MX team has been able to leverage the OpenNebula SDK, gain helpful insights about the underlying code, and ultimately put it to use in building out additional features and extending its reach within their system. For example, through scripting with Ruby and Ansible integration, they've built out a simple VM instantiation procedure based on specific requirements and templates within their configuration management system. Similarly, through other custom modules using Puppet, Python, and Bash scripts, they have been able to build capabilities around OpenNebula, amplifying the reach it has within the broader MX systems. They have developed scripts to enhance their process automation and pinpoint scalability, as well as to gather valuable metrics and create reporting features to provide insights for future improvements.

One particular use case where OpenNebula has proven helpful is in their virtual machine live migrations. They have been able to add additional hardware into their OpenNebula clusters, provisioning using their Puppet modules, allowing them use the Live Migration feature to then migrate their VMs off of their old hardware onto the new hardware, and ultimately retiring the old hardware - all without any impact at all to the workloads and the running applications and end-users.