Econocom Italia’s Naboo Cloud and Pluribus Networks:
Delivering the Future Today

Naboo Cloud: Delivering the Software-Defined Future

To meet the needs of large and mid-sized enterprise customers, Econocom Italia decided to build a high-performance hybrid cloud platform offering a “gateway of services” that delivered a seamless and accelerated transition to the cloud and containers, even for complex implementations typical of an enterprise customer. Naboo is a software-defined hybrid cloud solution, bringing integration between private data center, private and public cloud for customers.

To support this objective, they built four data centers in Northern Italy. These locations were built using a spine and leaf architecture that was interconnected by low-latency, high-speed fiber optics. This allowed Italian customers to connect to any of the four data centers seamlessly. With future growth on the horizon, the data center infrastructure was designed with expansion in mind, providing connectivity to other locations in Italy, as well as other European Union countries.

The Naboo Cloud service was recently launched with an ecosystem that is entirely software-defined, disaggregating hardware from software, delivering cost benefits associated with open networking while maintaining the flexibility to avoid vendor lock-in. Naboo Cloud is Italy’s first software-defined offering that integrates connectivity and colocation, cloud applications, hosting, managed services, virtual desktop infrastructure, high performance database virtualization, mobile device management, consulting and financing services.

It offers complete integration between public and private cloud environments through a single management platform for monitoring, provisioning and orchestrating the development and distribution of containerized applications in OpenStack environments.

“The programmability, performance and economics of our software-defined infrastructure is critical to our success and the foundation of our customer experience.”

Paolo Bombonati
Econocom Italia’s chief operating officer
Pluribus Networks Solution for Econocom Italia

Econocom Italia works with a variety of vendors and technology and advisory partners to develop and implement each new service. As such, having an open, software-defined solution was a critical starting point for each element of the Naboo hybrid cloud service. To achieve this level of flexibility, Econocom Italia turned to their partner Dell EMC, who provides customers with multiple choices for accelerating adoption of disaggregated open network hardware that supports their next-generation networking requirements.

In order to extract maximum value from the Dell EMC hardware, Econocom next needed to select an open networking software solution. Econocom Italia choose Pluribus Networks because of the flexibility, simplicity and efficiency of the Linux-based Netvisor® ONE operating system (OS) featuring the Adaptive Cloud Fabric™ (ACF) running on the Dell EMC Open Networking switches. Econocom is able to realize immediate cost savings benefits thanks to the white box economics of open networking while at the same time maintaining flexibility to avoid vendor lock-in and reduce operating costs through the ACF.

The ACF, which is a next-generation software-defined networking (SDN) solution, enables Econocom to manage the Naboo Cloud multi-site network as a single fabric – so all the spine and leaf switches appear as one logical switch. This approach dramatically reduces operating costs and the potential for human error. The ACF offers a simple, dynamic and secure approach to building a holistic distributed network architecture that brings the benefits of cloud scale, elasticity and adaptability to the modern data center. The fabric distributes intelligence, integrates a broad range of advanced network services and provides pervasive visibility for all traffic traversing the network. With ACF, Naboo has the ability to enable granular network segmentation, automating high-scale multi-tenant services like Layer 3 VPN, as well as the ability to support 1000+ tenants across the multi-site network fabric.

Unlike competitive offerings, the ACF does not require an external SDN controller. This controllerless next-generation SDN has many advantages, such as fast reconvergence even when there are multiple sites geographically dispersed. It also increases resiliency by ensuring there is no single point of failure. And of course, there is no cost for controller software or hardware.

Econocom Italia also deployed Pluribus UNUM™, which manages the network fabric with a rich graphical user interface along with Pluribus Insight Analytics, providing deep network analysis down to the network flow level.

Through open application programming interfaces and tight integration with VMware, the Pluribus ACF solution enables the provisioning of virtual machines and associated network connections directly from vCenter. It also interfaces with OpenStack, enabling the migration of customers on Naboo Cloud from VMware to OpenStack if they prefer that option.

“Pluribus’ distributed, controllerless Adaptive Cloud Fabric architecture automates plug and play operation with Econocom Italia’s existing network infrastructure. Pluribus is delivering a non-disruptive and transparent solution that makes it easier for Econocom Italia to deliver, manage and secure service delivery,” said Paolo Bombonati, Econocom Italia’s chief operating officer.