Top-level performance and flexibility for Aruba Enterprise

■ NetApp



Aruba Enterprise can now provide an optimal response in terms of reliability and flexibility to new challenges. Aruba Enterprise is the division of Aruba dedicated to complex projects for companies and PAs. It has been developing IT projects in the Data Centre, Cloud and Trust Services areas since 1996, managing online services under the Aruba.it trademark for 2.7 million domains, 8.6 million email accounts, 6.7 million certified email accounts, 130 thousand physical and virtual servers and a total of about 5.4 million customers. It operates on the main European markets with a network capable of hosting over 130,000 servers across the continent.

Aruba Enterprise is the result of the natural evolution over ten years of exchanges, understanding and focus on the specific needs of all customers seeking innovative and customised IT solutions.



Increased provisioning (hosting) speed +200%

"Our goals were focused on email, certified email and dedicated private clouds. NetApp's solutions have given us the scalability and flexibility we need to tackle the growing number of services and guarantee customer satisfaction."

Lorenzo Giuntini CTO, Aruba

Three project areas

The needs of Aruba Enterprise mainly addressed three areas. The first concerned the management of traditional and certified email. "We were dealing with an existing portfolio of over 8 million mailboxes and some 7 million certified email accounts, with a 30% average growth in data volume and a 15% increase in customers", says Lorenzo Giuntini, CTO of Aruba. "Therefore, we needed to keep the service fast, secure and competitive with just-in-time sourcing and by increasing planning efficiency of environment set-ups."

The other two areas were dedicated private cloud and hosting. "In the first case, the key element was flexibility, obviously with further improvements in the cost-effectiveness and security of the service, besides making the infrastructure layer simple, secure and replicable", the manager explained.

With regards to web hosting, Aruba is the major player in Italy and it was essential for them to be able to scale the infrastructure quickly, improving monitoring and management, and grow by implementing new technologies, like that based on containers.

In response to these requirements, Aruba Enterprise set up a laboratory to test the best available technologies, identify new methods and introduce new functional services at competitive costs. Once the methods were selected, the infrastructures were implemented in each area in parallel based on a project carried out with the collaboration and support of NetApp.

Tailor-made solutions

For data management, Aruba Enterprise adopted the All Flash NetApp AFF A700 array in MetroCluster configuration or with asynchronous replication, according to the service. "These systems ensured us the highest level of information availability, in addition to high performance, extremely low latencies, minimal power consumption and a small footprint", explained Lorenzo Giuntini.

NetApp's software-defined hyperconverged infrastructure with ONTAP Select was chosen for mail storage service, exploiting S3 object storage resources with NetApp's StorageGRID Webscale.

"This solution guarantees a high level of reliability, as well as the remarkable flexibility and typical simplicity of these systems", the manager commented. In this way, Aruba Enterprise can guarantee services based on top-level technology from their own data centre network. Being kept within Italy, the data are protected by the ANSI/TIA 942 Rating 4 certified infrastructure.

"A similar architecture has also been implemented for dedicated private cloud services, with the use of Hybrid FAS and All Flash FAS hardware solutions and virtual storage solutions based on ONTAP Select, offering the possibility of creating bonafide Software-Defined hyperconverged systems using standard X86 servers", the manager continued. "Data management technology based on a NetApp AFF A300 infrastructure was chosen for the web hosting service."

The benefits

Aruba obtained many various advantages. These range from a 182% increase in IOPS (Input Output Per Second) to a 50% increase in the new service delivery speed, a 200% increase in the hosting infrastructure provisioning speed and a reduction in the cost per Terabyte.

"On top of this is a significant drop in consumption (10:1) and footprint (7:1), a decrease in TCO compared to previous infrastructure islands and more simplification, resulting in a reduction in configurations", Lorenzo Giuntini said. "The customers benefit from all these improvements as well experiencing a 60% increase in inbox access speed, while in terms of data accessibility, latency has been reduced by 10 times."

For the web hosting area, the ONTAP operating system is perfectly integrated with container-based technology, guaranteeing the persistence of storage resources. Using NetApp Storage Efficiency, data are compressed, deduplicated, and compacted without impacting performance, reducing the cost per Terabyte as a consequence.

In all three project areas, the Active IQ technology exploits Artificial Intelligence algorithms to maintain the quality and efficiency of services at the highest levels, from the millions of managed domains to hosting.

The benefits

- 10X latency reduction
- Maximum data security
- Increased provisioning speed (hosting) +200%
- Increased QoS control
- Reduced TCO and cost per Terabyte
- Infrastructure island modularity and scalability
- Footprint reduction 7:1

NetApp's products

Email and certified email:

 All Flash AFF A700 array in MetroCluster configuration (2 HA nodes in cluster at each site for high local availability and remote DR)

Dedicated private cloud and hosting:

 AFF A300 (2 HA nodes in cluster at each site for high local availability)





NetApp is a global cloud-led, data-centric software company that empowers organizations to lead with data in the age of accelerated digital transformation. The company provides systems, software and cloud services that enable them to run their applications optimally from data center to cloud, whether they are developing in the cloud, moving to the cloud, or creating their own cloudlike experiences on premises. With solutions that perform across diverse environments, NetApp helps organizations build their own data fabric and securely deliver the right data, services and applications to the right people—anytime, anywhere. Learn more at www.netapp.com or follow us on Twitter, LinkedIn, Facebook, and Instagram.

