Azure-based IaaS/PaaS provider gains dependable, high-performance and highly flexible virtual load balancing to support a wide range of customers and their requirements.

Background
Headquartered in Portland, Oregon, with customers on five continents, Atmosera is a leading Microsoft Cloud Solutions Provider (CSP) that specializes in solutions using the Microsoft Cloud Platform and Azure. The Atmosera team architects, deploys, and operates highly scalable cloud environments to support their customers’ mission-critical applications. The company was one of the first Microsoft CSPs and is Cloud OS Network (COSN) certified and Azure certified for Hybrid deployments leveraging private and public Azure on a global basis. Customers include mid-market companies and enterprises as well as application developers in the planning and execution of smarter cloud computing investments, in a wide range of industries.

Industry
Infrastructure-as-a-Service/ Platform-as-a-Service, Azure

Challenges
Software upgrade to existing combination firewall/load balancer/UTM product rendered load balancing features inoperable, reduced number of supported applications, and caused a customer outage, resulting in the decision to re-evaluate ADC solutions

Solution
Multiple vAPV virtual application delivery controllers to provide separate load balancing services to customers in dedicated environments

Benefits
Worry-free virtual load balancer performance and flexibility to meet the varying needs and requirements of a wide range of customers
Rapid deployment to improve response times and meet immediate needs
Application performance and throughput improved through application acceleration, caching, compression and TCP connection multiplexing
Added layer of security through WebWall application firewall
Atmosera also helps customers achieve comprehensive Information Security (InfoSec) and compliance including HIPAA/HITECH, HITRUST, PCI-DSS, and IRS-1075. To put it concisely, Atmosera's goal is to solve business problems with modern, open, flexible and secure environments.

Challenges
For a number of years, Atmosera used a firewall product with built-in load balancing, IDS/IPS and unified threat management for smaller customer environments. The team was reasonably happy with this product until a major software update from the manufacturer 'broke' the load balancing capabilities, reduced the number of supported applications, and – worst of all – brought a customer's environment down.

“We decided at that point to look at other options,” said Trey Pautsch, senior enterprise architect for Atmosera. The team developed a list of parameters for the replacement solution, and began the search.

In order to maintain compliance with the various security regulations its customers are subject to, the team posited that virtual application delivery controllers were the only suitable solution. This approach allows each individual service to have its own virtual ADC, in effect walling off each service from all others.

Concerns about overall stability led to the elimination of one solution. The team also required a solution that could run on both Hyper-V and VMware hypervisors. This requirement further reduced the evaluation list to just two vendors.

Solution
Ultimately, the Atmosera team chose Array Networks’ vAPV virtual application delivery controllers as the standard ADC going forward.

The vAPV easily met all the team’s requirements, at a price point that was far more reasonable than the other solution. In addition, one of the team members had used Array products while with a previous employer, which further added to the team’s confidence in their ultimate choice.

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Since the initial deployment, the Atmosera team has purchased multiple vAPV virtual ADCs to support the needs of its growing customer base, and to implement high availability n+1 clustering.

Benefits
Through deployment of the vAPV virtual load balancers, Atmosera has gained the peace of mind afforded by a reliable, high-performance and very flexible application delivery and traffic management solution.

vAPV virtual ADCs support from one to eight virtual CPUs. allowing the IT team to scale resources as needed to meet the needs of customer environments. The high-performance, kernel-level Layer-7 policy engine enables customization of
application traffic management, without impacting performance or scalability.

The vAPV features multi-level security through a hardened OS, reverse-proxy architecture and a kernel-level Web firewall for an added layer of defense for applications. In addition, the vAPV is immune to Heartbleed and other OpenSSL-related vulnerabilities by virtue of its proprietary SSL stack.

“Everyone's happy with the vAPVs, and Array itself has been very responsive to all our needs and requirements,” said Pautsch.