

## Nominee: Dell

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### Nomination title: Dell - Active Fabric Controller

What are your product's/solution's key distinguishing features and/or USP?

Building on the success of Dell's Active Fabric Manager, Dell's Active Fabric Controller is a purpose-built SDN platform designed to simply and securely configure and deploy networking functionality in Cloud and Anything as a Service (XaaS) environments. While traditional networking solutions cannot deliver critical capabilities needed for modern applications and private cloud deployments, software-defined networking (SDN) has emerged as a potentially transformative new technology. However, many SDN solutions are complex, cumbersome and confusing, and organisations are demanding a solution which dynamically adapts to their networking requirements.

The AFC takes advantage of both OpenFlow and advanced SDN features to deliver zero-touch deployment for the fabric, meaning that no operator intervention is required. It is activated by simply setting up, plugging in and switching on. The fabric can detect which virtual machines are operational and moves the network connection along with the application, ensuring that workloads are optimised without the need for a human supervisor.

The controller offers a single, integrated solution to provide on-demand virtualized network services to OpenStack with fully automated, unified lifecycle management of the physical infrastructure. AFC also offers network, endpoint, and policy abstractions, together with a simple GUI & comprehensive API. This enables OpenStack applications to programme the network to meet workload needs, and developers and private-cloud administrators have simplified visibility and comprehensive programmatic control of the access fabric.

The key features of the controller include:

- Simple operation and intelligent approach, allowing for services and applications to be deployed painlessly;

- On-demand customised virtual fabrics that adapt to the workloads on the network, enhancing the security, performance and efficiency for each application;
- Elastic, auto-adapting fabric services that offer the ultimate efficiency in design, operations and application provisioning;
- Easy insertion of service appliances, including firewall, load balancing and wide area network optimisation, which are commonly virtualized services in Network Functions Virtualization (NFV) implementations.

What tangible impact has your product/solution had on the market and your customers?

The Active Fabric Controller has caused a stir, allowing customers to transition easily to XaaS operations and manage workloads effectively throughout their IT infrastructure. The advanced features are configured through a single, simple graphical interface to give cloud administrators greater visibility and control over application behaviour and performance. By design, this removes the need for operators to perform extensive configuration and reconfiguration of all switches. It also removes any of the usual complexity associated with error detection in chassis-based architectures; thus eliminating the possibility of any human error.

The AFC is designed to be case and need-tailored, enabling powerful customisable policies, new enforcement methods and deep programmability in customers' IT infrastructures. In addition, the controller provides centralised logic for all fabric switches for monitoring and troubleshooting purposes, providing a real-time fabric-wide overview of the network for network administrators and delivers advanced, programmable fabric services to applications.

A few of the benefits are highlighted below:

- Cost effective solution for SMEs, who must consider their budgets when finding a new IT solution;
- Greater efficiency within the network as the fabric constantly optimises each thread of the network to minimise latency;

- Fully supports mobile working on-demand, offering employees the opportunity to work remotely without losing the performance of their corporate network;
- Simple diagnosis of issues, with a real-time fabric-wide view of the network to administrators.

What are the major differentiators between your product/solution and those of your primary competitors?

When considering what competing products have to offer, these solutions often demand compatible legacy infrastructure for implementation, restricting the products' open capacity and the extent to which customers can invest. This dependence also locks the customer down to a specific vendor, meaning that they are often unable to upgrade their solutions without negotiating with a vendor to unlock their infrastructure. These solutions are also distributed on a per-device basis, forcing IT managers to factor in costs for expansion without knowing how their infrastructure will change over the coming years.

The Active Fabric Controller stands out as a fully open SDN platform, delivering architectures that help advance legacy systems, prevent propriety vendor lock-in penalties, and future proof infrastructure to meet the growing demand for SDN, cloud-based services and NFV. This openness means that the AFC can be integrated into any environment, ensuring that enterprises are not tied into an ongoing deployment cycle. In addition, the AFC can be deployed across a network rather than being tied to a single device, which allows for simple configuration and upgrading, particularly when expanding to meet future demands.

### **Why nominee should win**

- Simple operation and intelligent approach, allowing for services and applications to be deployed painlessly;
- On-demand customised virtual fabrics that adapt to the workloads on the network, enhancing the security, performance and efficiency for each application;
- Elastic, auto-adapting fabric services that offer the ultimate efficiency in design, operations and application provisioning;

- Greater efficiency within the network as the fabric constantly optimises each thread of the network to minimise latency;
- Cost-effective solution based on fully open SDN platform, allowing easy integration into any environment and expansion to meet future demands.