

Nominated Company: Dell

Nomination Title: Dell Active Fabric Manager

As new technologies and architectures are developed to provide the complex, high performance network virtualization needed by businesses to stay competitive, the need for greater and simpler IT management efficiency also grows. For example, Active Fabric, which is Dell's unique approach to providing modern network architecture, works at a top level to take advantage of today's technology to provide an easily-scalable path for businesses. Active Fabric provides a flat, fast any-to-any multipath network architecture that is flexible and better suited for the growing amount of East-West traffic in today's virtualized data centres and private clouds. The adoption of these new, more complex networking architectures often causes a strain on the resources and abilities of IT administrators. This strain has developed a need for a simpler and more efficient way to manage the deployment and tasks of the business' fabric. To deliver an easy way for customers to co-ordinate their fabric, Dell introduced Active Fabric Manager (AFM), a free service which eliminates many manual processes and reduces deployment time by up to 86 percent. AFM is a first-of-its kind software tool that automates the tasks associated with planning, designing, building and monitoring fabrics. With the fabric working at such an advanced performance rate, AFM is a big bonus for businesses looking to handle their networking architecture in a simple and easy way.

AFM achieves results by simplifying and automating the design process for building the fabric, creating a wiring plan that helps in implementing the architecture with exact guidance on how switch ports need to be connected and helping to automate the multi-switch configuration process. The key features of AFM include the following:

Design wizard: AFM greatly simplifies the mapping process as it uses an intuitive graphical interface and performs all the necessary calculations to present the optimal fabric design, eliminating guesswork and errors.

Automated provisioning, validation and configuration: AFM provides a step-by-step approach to translate a fabric design to a completely functional deployment, eliminating numerous command line interface entries, a time-consuming and error-prone process.

Easy integration, role-based access: AFM abstracts the fabric as a single entity, not at the device level, allowing other tools in the data centre to integrate easily. Coupled with this, role-based access allows multiple departments (e.g. server and storage administrators) to monitor different aspects of fabric performance without disrupting the underlying network operations.

The features of AFM partner perfectly with the defining elements of the fabric to bring the complete package to customers. It also makes remote monitoring of the distributed core switches easier and provides a graphical network view. Simply stated, AFM allows the entire fabric to be managed as a single entity and adds the icing to the cake by being completely free.

With the simple administration of AFM, more businesses are able to achieve success with their fabric and fully virtualize their networks. One of the key factors to this success is the fact that Dell has managed to find a way to deliver the right design to suit individual customer needs. With AFM, customers no longer need to rely on expensive consultants to create the fabric design. Consultants

often use an inefficient best guess approach to come up with a design and deliver other aspects by using disparate tools. With AFM, Dell takes a radically different approach in which a wizard walks the user through a set of simple questions while the software generates the design. This bespoke design includes a comprehensive wiring diagram, network topology and a bill of materials. If the user requires any modifications, the design can be easily edited and all the outputs change automatically. A big benefit with this system is that the design phase output forms the input basis for the next phase, simplifying the whole process.

When it comes to the actual deployment of fabric, a lot of time and effort is spent in ensuring that the various switches are cabled appropriately. All the switches need to be provisioned with the correct version of the firmware and the fabric ready configuration must be applied. Invariably, any error detection is extremely problematic. With AFM, the deployment is completely automated, negating the possibility of human error. This automation continues to be a benefit once the fabric is up and running by ensuring the monitoring and management tasks happen automatically and are workflow driven.

Overall, AFM is the only software offering that takes a holistic view of fabric deployment. With AFM, customers can use a single console to design, build and operate multiple fabrics. All other competitive tools concentrate mainly on post-deployment functions, meaning that customers spend an enormous amount of time and effort designing and deploying even small fabrics.

Additionally, another major differentiator is that, compared to traditional chassis-based network designs, Active Fabric solutions on average:

- Provide 59 percent cost savings.
- Consume 77 percent less power.
- Produce 77 percent less heat.
- Require 59 percent less rack space.

Dell's AFM intuitively and rapidly automates and streamlines the steps required to deliver these benefits of Active Fabric in a way that competitors have yet to achieve.

"No other networking vendor offers any capability to design and deploy a fabric like what Dell Fabric Manager does." - Charles Booth, Network Architect, CH2M Hill

"I am extremely impressed with the intuitive workflows for designing, deploying & monitoring in a single management pane and simplifying the sales process." - James Bender, Mike Collins Associates

"I have 3 decades of experience designing and building systems management tools. The way AFM handles the configuration lifecycle is well done!" - John Sweitzer, CTO Office, DSG

Why nominee should win

- Active Fabric Manager (AFM), a free service which eliminates many manual processes and reduces deployment time by up to 86 percent.
- AFM is a first-of-its kind software tool that automates the tasks associated with planning, designing, building and monitoring fabrics.
- AFM achieves results by simplifying and automating the design process for building the fabric, creating a wiring plan that helps in implementing the architecture with exact guidance on how switch ports need to be connected and helping to automate the multi-switch configuration process.
- With AFM, customers no longer need to rely on expensive consultants to create the fabric design. AFM takes complex, time consuming tasks related to protecting massive amounts of critical production VM data and make them simple
- AFM is a fraction of the cost of competitors and offers “guaranteed” recovery and is now shipping a new version of AFM Backup 6.5 available with even more features/benefits