STEMCELL Remote Workers Deliver Results with Cisco Security on AWS Cloud

STEMCELL provides hundreds of remote workers with secure access to applications and data with Cisco virtual firewalls on Amazon Web Services (AWS) public cloud.

Canada’s largest biotechnology company

STEMCELL Technologies is Canada’s largest biotechnology company. Founded in 1993 and privately owned, STEMCELL provides specialized cell culture media, cell separation technologies, instruments, accessory products, and scientific services to scientists around the world working in stem cell, immunology, cancer, regenerative medicine, and cellular therapy research.

Today STEMCELL has approximately 1,500 employees worldwide that serve over 80 countries. The company has seen steady average annual growth of 20% since inception and currently offers a catalogue of more than 2,500 cell biology research tools. By 2029, STEMCELL plans to attain sales of $1 billion with over 5,000 employees globally, fueled by strong intellectual capital, expanding product portfolio, and collaboration with partners.

“STEMCELL is driven by science and a passion for quality, supporting the advancement of scientific research around the world.”

Dr. Allen Eaves
STEMCELL Technologies Founder, President, CEO
Challenges

• Hundreds of employees worldwide suddenly required to work remotely
• Rapidly expand secure remote access to corporate data and applications across multiple device types
• Need a proven network security solution that can be quickly scaled-out, and with limited re-tooling and training
• Maintain security for company data sent across remote networks

Solutions

• Cisco Secure Firewall ASA Virtual (ASAv) on Amazon Web Services (AWS) public cloud
• Cisco AnyConnect Secure Mobility Client
• AWS Marketplace subscription
• AWS Global Accelerator
• Amazon Elastic Compute Cloud (Amazon EC2)

Results

• In just hours, STEMCELL scaled-out secure access for hundreds of remote workers using Cisco ASAv virtual firewalls on AWS
• Delivered secure VPN connectivity for remote workers to access corporate data and applications
• Transition from Cisco ASA firewalls to Cisco ASAv virtual firewalls on AWS was a smooth process
• Deploying Cisco ASAv on AWS reduced IT management activities by over 75%, freeing staff to work on other projects

Embracing public cloud

For almost a decade STEMCELL has utilized the Amazon Web Services (AWS) public cloud environment and most of their applications are currently deployed on AWS. This approach has allowed the organization to remain focused on their core Life Sciences business objectives, while leveraging the robust AWS infrastructure. “We are in the science business, not the datacenter business and AWS enables us to optimize our IT resources, while providing great flexibility and scalability when we need it”, said Adam Leggett, STEMCELL’s manager of global IT infrastructure and operations.

STEMCELL had utilized Cisco ASA firewall solutions on-premise for many years as VPN concentrators and given their focus on the cloud, decided to explore available Cisco solutions. The team decided to deploy Cisco Secure Firewall ASA virtual (ASAv) appliances, which are virtualized versions of Cisco ASA on-premise firewalls and it was an easy decision. “We had successfully deployed Cisco ASA firewalls for many years, so when we moved to Cisco ASAv on AWS a few years ago, it was fast and easy. It has the same management interface, so we had consistent security policies and the transition was very smooth”, said Adam.

Scalable, secure access for remote workers

When STEMCELL deployed Cisco ASAv on AWS, the organization updated their architecture to take advantage of the AWS environment. By creating a standard image for Cisco ASAv that can be utilized globally, the organization benefitted by having a solution that can be deployed in a consistent and repeatable manner, while reducing the risk of human error.

In addition, STEMCELL has leveraged AWS Global Accelerator to improve the availability and performance of their applications for globally-based staff, along with Amazon Elastic Compute Cloud (Amazon EC2) launch templates to quickly deploy on AWS. Cisco ASAv also provides the ability to quickly scale up or down on AWS to meet the needs of dynamic environments.
When global events caused organizations worldwide to unexpectedly close their local offices, some firms struggled to support employees that were suddenly working from home. However, STEMCELL had been successfully supporting remote workers with Cisco ASAv on AWS for several years, so when they needed to expand VPN capacity it took just a matter of minutes to expand on the cloud. Today many of STEMCELL’s remote workers securely access corporate applications via Cisco ASAv firewalls and Cisco AnyConnect Secure Mobility clients, with the company supporting about 600 concurrent users during peak times. Remote employees worldwide enjoy secure, reliable access to corporate applications and data, enabling them to remain productive and connected.

**Winning with Cisco Security**

STEMCELL has benefitted from a strong relationship with Cisco and AWS, viewing both as strategic partners that have the technology, infrastructure, and resources to help the company reach its long-term goals. Deploying Cisco ASAv on AWS provides STEMCELL with almost unlimited flexibility and scalability to meet their employee and customer needs worldwide. In addition, by deploying on the cloud STEMCELL has realized significant savings in terms of IT management time and costs. Having deployed Cisco solutions for over a decade while embracing the AWS cloud, STEMCELL has significantly reduced their on-premise hardware, software, and infrastructure costs. At the same time, Cisco’s global presence and portfolio of industry leading, integrated security solutions enables STEMCELL to achieve their existing and planned business objectives.

“Moving to Cisco ASAv on AWS reduced our IT management activities by about 75%, freeing the team to work on other projects.”

Adam Leggett
Manager of global IT infrastructure and operations, STEMCELL

To learn more about solutions from Cisco and STEMCELL, please visit:

- [Cisco Secure Firewall solutions](#)
- [Cisco Secure virtual firewalls for public cloud](#)
- [Cisco AnyConnect Secure Mobility Client](#)
- [STEMCELL Technologies](#)
- [STEMCELL Technologies on YouTube](#)