



## Microsoft Windows Server Upgrades on AWS for Mercatus Center at George Mason University

# Mercatus Center at the George Mason University

#### **Founded**

1980

#### Headquarters

Arlington, VA

#### Industry

Education

#### About Mercatus Center at George Mason University

The Mercatus Center at George Mason University (GMU) is the world's premier university source for market-oriented ideas- bridging the gap between academic ideas and real-world problems. A university-based research center, the Mercatus Center advances knowledge about how markets work to improve people's lives by training graduate students, conducting research, and applying economics to offer solutions to society's most pressing problems.

### Challenge

The Mercatus Center at GMU was using Amazon Web Services (AWS) for cloud hosting services. The IT Director at the Mercatus Center was seeking an AWS Consulting Partner to assist them with upgrading their Windows 2012 R2 servers to Windows 2019. The upgrade was a complex one due to the need to upgrade the Active Directory Federation Service (ADFS) while maintaining system operations with zero downtime. In addition to the upgrade, the IT organization wanted to review the overall architecture to improve the security posture of the AWS environment.

#### Solution

stackArmor is an Advanced AWS partner with specific competencies in security & compliance as well as Microsoft systems engineering and management services. stackArmor used its Agile Cloud Transformation<sup>TM</sup> (ACT) to perform rapid iterative discovery, design and deployment sprints executed by an experienced team of AWS certified Solution Architects with specific experience with Windows workloads on AWS. The team conducted a thorough assessment of the environment – including data, services, roles, and applications (including third-party).



Given that the requirement was to keep the environment fully operational as well as for cost reasons, stackArmor performed an "in-place upgrade", that allowed going from the older operating system to a newer one, keeping settings, server roles, and data intact. The upgrade was complex and included upgrading the ADFS proxies to the new versions which had a dependency on the Active Directory version as well. At the end, the stackArmor successfully upgraded the Windows Servers, ADFS proxies and Active Directory in a timely manner. As part of the upgrade, stackArmor was able to analyze the current configuration and provide recommendations for managed services and continuous monitoring.

#### About stackArmor

stackArmor is an Advanced AWS partner specializing in FedRAMP, FISMA, MARS-E 2.0 and DFARS compliance for DOD, Federal Agencies, Government Contractors, ISVs and SaaS providers as well as Educational Institutions. stackArmor provides cloud architecture strategy & assessments, cloud migration, managed services and managed security services for compliance focused customers. stackArmor provides NIST and cybersecurity services using the stackArmor ThreatAlert<sup>TM</sup> security system to accelerate compliance with NIST, FedRAMP, FISMA and DFARS requirements for AWS based applications. Our solutions are delivered by certified and battle tested solution architects and information assurance professionals. Please visit our website and learn more about our education focused cloud security and compliance services https://www.stackArmor.com/Education