

SageNet Reduces PCI Scope and Effort with AppGate

Improved access controls for secure, multi-tenant managed PCI network



ABOUT SAGENET

SageNet manages secure communications for over 300 enterprises operating more than 160,000 locations for leading retail, healthcare, financial and energy companies, as well as public utilities, state lotteries and government agencies. SageNet hosts and supports credit card processing equipment for these retail customers, backed by a proven track record of deploying customer-focused, secure technology solutions.

SOLUTION

AppGate®

CHALLENGES

SageNet secures, manages, and audits both customer and system admin access to customer systems in a multi-tenant, colocation data center, subject to rigorous PCI compliance. Through their partnership with Cryptzone, they exceed customer requirements by:

- Supporting end-to-end encryption between users and managed devices
- Broadly deploying multi-factor authentication and eliminating shared credentials
- Enabling detailed logging of user access and activities
- Leveraging role and attribute-based context to determine access to network services
- Using network segmentation to reduce the scope of PCI audits

Industry

- Managed PCI Network Solutions Partner

Background

SageNet manages a multi-tenant PCI data network for over 300 enterprises operating across 160,000 US convenience store, retail, healthcare, financial and energy companies, as well as public utilities, state lotteries and government agencies. As a leading managed network solutions partner backed by more than three decades of hands-on experience in the world's most sophisticated networks, SageNet has the assets and infrastructure to support networks of all sizes. SageNet has an integrated private network, three US-based state-of-the-art 24/7 Network Management and Operations Centers, and a nationwide field service and support organization.

Requirements

Hosting and supporting credit card processing equipment in a multi-tenant, colocation data center requires securing, managing, and auditing both customer and system admin access to customer systems. SageNet sought to differentiate themselves from other managed PCI network solutions partners through reducing the scope of PCI and streamlining the audit processes. In short, they wanted to balance the often conflicting security, compliance and user access requirements. They challenged Cryptzone to work with them to enable their customers to:

- Support end-to-end encryption between users and managed devices
- Broadly deploy multi-factor authentication and eliminate shared credentials
- Enable detailed logging of user access and activities
- Leverage role and attribute-based access control to network services
- Create fine-grained network segmentation and reduce the scope of PCI audits
- Eliminate security issues including jump host, shared accounts, and weak authentication

The Solution

SageNet leverages Cryptzone's AppGate, enabling them to adopt a software-define perimeter (SDP) approach that delivers highly granular access control and detailed logging of user access and activities to efficiently feed audit request data needs. AppGate provides dynamic, user-centric access control, creating an individualized network *segment of one*, based on simple policies.

AppGate's context-aware security platform ensures that users can only access those network services and applications to which they're specifically entitled - via a secure, encrypted tunnel between users and authorized network resources. Everything else on the network is invisible and unreachable. SageNet, leveraging AppGate, offers clients reduction in PCI scope, overall effort and cost of their PCI audits.

BENEFITS

- SageNet, with Cryptzone's AppGate, reduced PCI Scope, resulting in more than 50% reduction in time and effort required to collect infrastructure and system information
- Onboarding new customer cardholder data environments has been reduced from three weeks to two days
- Streamlined audit process
- Improved security with robust *segment of one* software-defined perimeter solution
- Turned new security approach into a service offering that generates new revenue for the business

Without AppGate

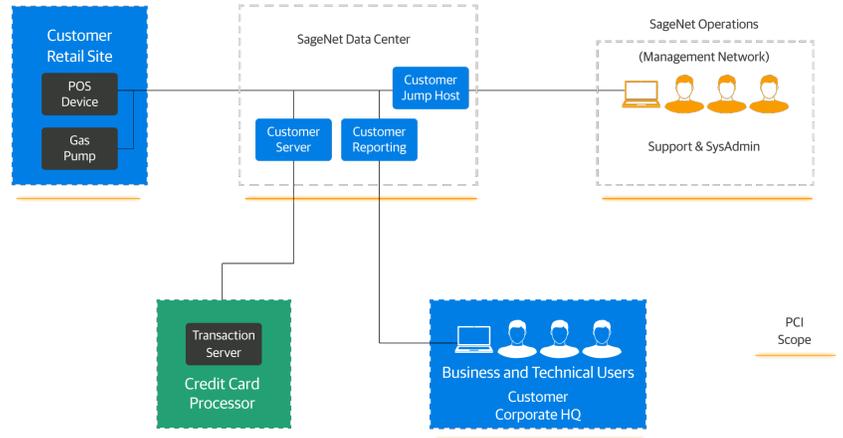


Figure 1: Shows what the SageNet environment would look like if AppGate were not deployed. This theoretical client utilizes a shared account on a jump host, with single-factor authentication, in order to access their servers and retail devices. The client's business and technical users directly access the reporting system hosted in the SageNet data center. As a result, a very broad part of the infrastructure, highlighted by the orange lines, is in scope for a PCI audit.

With AppGate

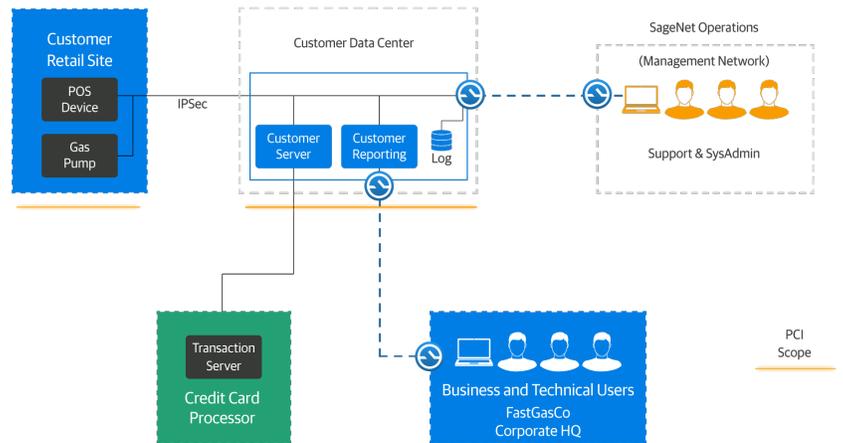


Figure 2: Shows the environment if the same client utilizes the SageNet environment with AppGate deployed. It provides secure access for both SageNet and the client's employees. The overall security of the network is significantly improved - strong authentication per-user access - and simplified with the elimination of the jump host. Deploying AppGate also provides operational savings, by reducing the scope of the PCI audit. Because AppGate controls network access, both the SageNet operations and the client's corporate systems are removed from the PCI audit scope.

About Cryptzone

Cryptzone reduces the enterprise attack surface by 99% with its secure network access solutions. Using a distributed, scalable and highly available Software-Defined Perimeter model, Cryptzone protects applications and content from internal and external threats while significantly lowering costs. In cloud environments including AWS and Azure, Cryptzone provides user access control, increases operational agility and improves the ability to meet regulatory and compliance standards. More than 450 companies rely on Cryptzone to secure their network and data. For more information visit www.cryptzone.com.

Conclusion

SageNet solves their and their customers' PCI DSS problems with use of an innovative network security product, AppGate, which provides a software-defined perimeter solution. With this new security platform, SageNet improves security, saves time and money. Because this platform provides per-user network segmentation, PCI audits are reduced in scope; reducing the time and effort required to collect infrastructure and system information by more than 50%. In addition, onboarding customer cardholder data environments can be reduced from three weeks to two days.

Finally, this secure network access solution has been packaged into a value-add service that SageNet's customers can purchase. This has created a new and growing revenue source for the business, initiated and enabled by the security team.