

Fully Virtualized Bandwidth Management and DDoS Mitigation Provide Service Assurance and QoE

About Bristol Virginia Utilities

Bristol Virginia Utilities (BVU) is a utilities and internet service provider. Its service provider business offers telephone, cable TV, and advanced fiber-optic broadband services to over 13,000 subscribers in a 125 square-mile area located in Bristol, Virginia and south-west Virginia. BVU is recognized as the first municipal utility in the USA to deploy an all-fiber network offering the triple play of video, voice and data services.

Challenge

BVU experienced an increase in the frequency and volume of DDoS attacks and it had reached a level where many attacks were impacting the customer experience. BVU needed to eliminate the negative effect of DDoS attacks to maintain its subscriber satisfaction. Using the network intelligence generated by the existing Allot Service Gateways on its network, BVU also identified multiple occasions when gamers launched attacks against other gamers. This discovery created an additional need to minimize the damage that these targeted DDoS attacks caused to unsuspecting subscribers.

The challenge was to offer BVU value-added security features that would protect its network from DDoS attacks without impacting network services and application performance. BVU needed a security solution that quickly identified inbound attacks, automatically mitigated those attacks, and provided protection with precision so that customers QoE remained unaffected. The solution also needed to be easy to integrate with their existing offering.



Vertical | Service Provider
Industry | Fixed
Region | North America
Solution | DDoS Protection

Challenge

- Increased number of DDoS attacks
- Negative impact on user QoE
- Drop in subscriber satisfaction

Solution

Allot understood the importance of maintaining high QoE for an internet service provider to succeed. By providing BVU with DDoS Secure, as part of the Allot Service Gateway, we were able to deliver the rapid rollout, scalable solution they needed. Additionally, the deployment enabled them to generate higher ARPU by offering security services for an extra cost.

Benefits

- Gain full visibility of DDoS attacks and valuable threat intelligence
- Assure service availability and maintain high QoE
- Seamless scalability to address future need and delay infrastructure investment
- New revenue from Allot-powered security-as-a-service

Success Story

Solution

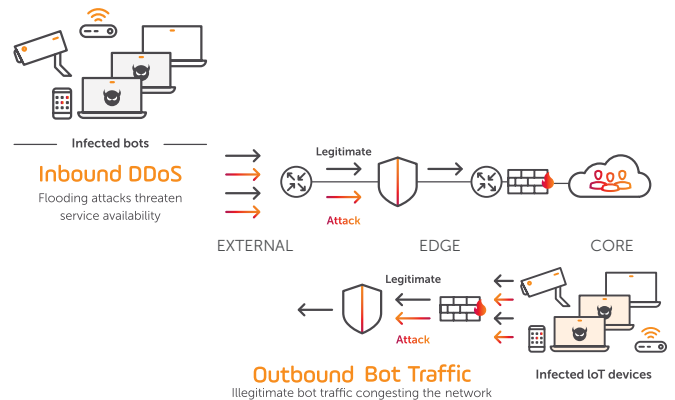
Allot DDoS Secure was activated on BVU's network to provide DDoS detection and mitigation. DDoS Secure is a self-learning system that builds dynamic signatures in real-time. This approach protects against zero-day attacks and eliminates the need to manage an external database. The following key features for DDoS Protection are provided in this solution:

- High Performance
- 100% inline packet and flow inspection
- Real-time detection and mitigation in under 2 minutes
- No performance degradation during attacks
- Real-time Detection
- Dynamic attack signatures
- Detect zero-day attacks
- No need to maintain a signature database
- Precise Mitigation
- Targets attack flows
- Mitigation performed In-band, without scrubbing center
- Application and session awareness limits collateral damage
- Operational Efficiencies
- Centralized GUI for real-time and historic attack reporting/threat analysis
- Real-time email alerts
- SIEM integration and Syslog support

“DDoS Secure has blocked many attacks for us. It is one of the best products we have ever bought.”

Stacy Evans,
Manager of Network Engineering,
BVU

BVU implemented Allot DDoS Secure for DDoS protection, running on Allot's AC-6000 NetEnforcer to monitor and manage its data traffic and maximize subscribers' QoE. The solution protects against DoS and DDoS floods using SYN, RST, ACK, unusual flag combinations, UDP floods, DNS floods, ICMP floods, fragmented packets, very large packets, runs, and unusual protocols.



Benefits

Real-time protection and mitigation

- 24/7 defense against the largest volumetric attacks, with mitigation bandwidth of Terabits per second
- Stop DDoS attacks at carrier backbone or network edge, far from users
- Mitigate inline without diverting massive data volumes to cloud scrubbing centers

Visibility and root cause intelligence

- Real-time visibility into attackers and their targets on the network
- Detailed reporting and threat analytics
- Treats root cause of infected endpoints so they can be stopped without affecting others
- Eliminates spammer abuse complaints and appearance on blacklists

Flexibility and cost savings

- Drives efficiencies with on-premise, cloud and/or hybrid deployment
- Lowers operational overhead through automated mitigation of internal spammers
- Accelerates ROI through full integration in Allot Service Gateway

Resources

[About DDoS Secure](#)

[About Service Aware DDoS Mitigation](#)

[Frost & Sullivan DDoS Mitigation Whitepaper](#)

Learn more about
Allot's Solutions »