ACTI (Allot Cloud Traffic Intelligence) - Virtual Edition

Flexible and Scalable Delivery for Cloud Environments

Virtualized Service Gateway for Cloud Environments

The Allot Service Gateway (SG) is a robust and field-proven platform, spanning over 20 years of service to thousands of Enterprise customers, the SG provides actionable Traffic Intelligence and Application Performance assurance, to deliver optimized Quality of Experience, business continuity, and productivity.

The Allot Service Gateway Virtual Edition (SG-VE) is the Virtualized Edition of the Allot Service Gateway. It fulfills the same role and can be deployed in virtualized and cloud environments. The SG-VE is a high-performance element that powers Allot Traffic Intelligence solutions. It operates seamlessly and consistently across various Enterprise architectures – the SG-VE can be deployed over various Private Clouds environments, such as Enterprise HQ, Branches, Data Centers, as well as MSP collocation spaces, or over Public and Hybrid Cloud environments. The Allot SG offers the entire range of Software Packaging: from Physical (Bare-Metal), through Virtualized / VMs, all the way to fully containerized Cloud-native.

Benefits

- **Increased Network Observability and Agility**

  Deploy Allot's Layer-2 to Layer-7 Application Traffic observability, network policy enforcement, and network security services wherever these are the most needed - at customer premises or, on the cloud environment – either private or public.

- **Optimizing cloud-assets-related costs**

  Whether deployed on a private or public cloud, the SG-VE's granular visibility capabilities enable you to assess and troubleshoot your private cloud networking resources utilization, or the "public cloud network pipes" traffic - to ensure optimized utilization.

- **Safeguard business continuity and Enforce App SLA**

  In the public cloud, the SG-VE enables you to ensure that your mission-critical applications and services Quality of Experience (QoE) is delivered by managing the cloud traffic while, on private cloud environments, it enables you to enforce the required traffic priorities, in order to meet corporate SLA and assure business continuity.

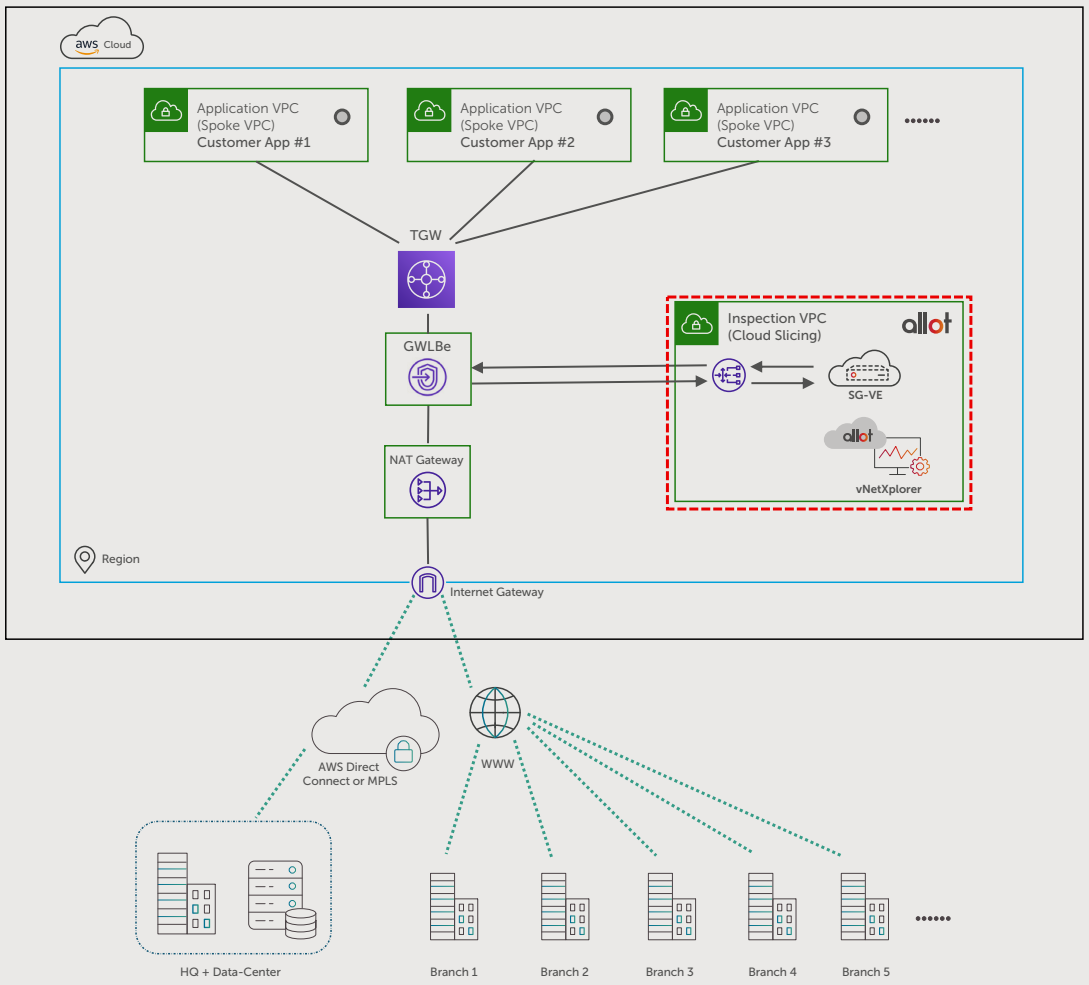
Single Point of Service(s) Delivery

When deploying the SG-VE, Allot implements a zero-touch automated deployment of its software components: in Public Clouds ACTI is deployed as a dedicated Inspection Hub construct. In Private Clouds ACTI can also be deployed as a single, or multi, standalone instances.

- Policy Definition & NaaS: using the Allot NetXplorer (NX / NPP) element to visualize and create the Network and Applications policy as well as support Network as a Service (NaaS) multi-hierarchy network controls
- Users awareness – using the Allot Subscriber Mgt Platform (SMP) to deliver user-granular traffic visibility & control
- Public Cloud Life Cycle Management (LCM) with Cloud Formation and Terraform Infrastructure as Code (IaC) instructions to IaaS orchestration layer
- Continuous Integration / Continuous Delivery (CI/CD) - to streamline and accelerate the software development and software delivery processes

Deployment Flexibility

Allot's Service Gateway Virtual Edition enables enterprises to enjoy the same granular visibility and control of network, service, user, and device traffic, ensuring optimal QoE regardless of deployment mode. The below diagram provides an example of ACTI deployment architecture over AWS Public Cloud.



Specifications

Centralized Management

Allot NetXplorer component works harmoniously to provide a central vantage point for network-wide configuration and management of all Allot platforms and services, including Allot SG-VE (Service Gateway Virtual Edition). Allot VMs make it easy to spin up and provision Virtual Editions on demand (aka VNF scale-out), and scale-in the Virtual Edition and return the unused capacity to the license pool for future use. Virtual Edition license pools (based on number of CPU/core processors required) are available in various increments.

Environment & Deployment

Allot Service Gateway Virtual Edition supports popular virtualization platforms, enabling easy public or private cloud deployment. Performance specifications are calculated based on virtual cores, assuming an Intel® Xeon® processor with DPDK/SR-IOV available. Actual throughput performance will be affected by underlying hardware (included SGVE NICs spec and line-rate capacity), hypervisor configurations, software licenses, and enabled policies.

	Allot Service Gateway Virtual Edition				
Product Name	**SG-VE-04**	**SG-VE-08**	**SG-VE-16**	**SG-VE-32**	**SG-VE-48**
Virtual CPUs (threads)	4	8	16	32	48
Virtual RAM	10 GB	20 GB	40 GB	80 GB	135 GB
Virtual Storage	100 GB	100 GB	100 GB	100 GB	100 GB
Deployment mode	BITW*** / NHR**	BITW/NHR	BITW/NHR	BITW/NHR	BITW/NHR
Hypervisor					
VMware ESXi / vSphere	VMware ESXi / vSphere 6.7				
Linux KVM	Red Hat RHEL 7.9 (9.2 on roadmap)				
Private Cloud OS and Public Cloud IaaS					
OpenStack	RHOS 16 (based on OpenStack Train)				
VMware	VMware vCloud 8				
AWS	AWS IaaS				
Azure	Azure IaaS				
Guest Operating System					
CentOS	Linux CentOS 7.9, 64-bit x86 (Oracle Linux 9.2 roadmap)				
VM Image types					
Format	QCOW2, AWS AMI, Azure VM image				

Note:
vCPU specs assume Hyper-Threading Enabled.
** - NHR = Next Hop Route deployment
*** - BITW = Bump In The Wire deployment

Product Specifications:

Parameter	SG-VE-04	SG-VE-08	SG-VE-16	SG-VE-32	SG-VE-48
Real traffic BW (Gbps) *	4	12	24	48	72
CER (Connections Establishment Rate)	12k	36k	72k	144k	216k
NOC (Number of Connections)	2M	8M	16M	32M	48M
Registered subscribers	20k	480k	960k	1.9M	2.88M
Max total records (VC + conv) per 30s	160k	1.3M	2.6M	5.2M	7.8M
Max total records (VC + conv) per 300s	320k	2.6M	5.2M	10.4M	15.6M
Http wildcard URLS (Websafe)	14k	14k	14k	160M	160M
Https wildcard URLS (Websafe)	7k	7k	7k	15M	15M

* achieved while Allot's DPI Engine is active

Note: Actual performance may vary depending upon network conditions (such as packet size, DL/UL ratio, session establishment rate, etc.), the actual configuration of the Service Gateway, and enabled features (QoS, Steering, DDoS, etc.).

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