

Allot High Performance Platforms

Service Gateway 9100



Powering the Digital Experience

Allot Service Gateway 9100 provides a powerful service delivery platform in an Intel-based appliance, designed especially for small and medium ISP networks. Its small footprint is equipped with the same advanced features and multiservice functions as the chassis-based Allot

Service Gateway, enabling you to roll out Security as a Service as well as other revenue-generating services rapidly and cost-effectively, while you lower your total cost of ownership and accelerate ROI.



Highlights

- Powerful and cost-efficient multiservice delivery platform
- 50 Gbps per appliance; up to 350 Gbps in a cluster
- Real-time Layer-7 application visibility, policy enforcement, charging
- Real-time visibility of encrypted traffic
- Supporting network-based Security as a Service
- Deployment and management across any access
- Easy installation and pay-as-you-grow scalability

Features

Single Point of Service Integration

Allot Service Gateway 9100 (SG-9100) supports Allot's growing portfolio of pre-integrated value-added services including:

- Allot WebSafe Personal (Security as a Service for consumers)
- Allot WebSafe Business (Security as a Service for businesses)
- Allot ServiceProtector (DDoS protection and bot containment)
- Allot ContentProtector (URL filtering)
- Allot SpamOut Protector (anti-spam service)

The platform also supports real-time traffic steering to third-party applications or virtualized services, and seamless service chaining. As a single point of integration for these services, Allot SG-9100 minimizes interoperability and service integration issues to facilitate fast and efficient service rollout.

Efficient Performance

Allot SG-9100 provides a high performance service delivery platform with rich functionality in an efficient, small-footprint appliance. With high-density 10 Gigabit Ethernet connectivity and 50 Gbps of throughput, the platform allows service provider networks to satisfy the ever-growing demand for Internet bandwidth and network-based services in a cost-efficient manner.

Future-Proof Scalability

Start small and expand seamlessly with pay-as-you-grow deployment that reduces initial capital outlay and allows network operators to respond quickly to market changes.

- **Capacity:** supports up to 1.5 million active subscribers (concurrently attached and active), and 24 million concurrent IP flows
- **Connectivity:** up to 12 x 10 Gigabit Ethernet
- **Throughput:** up to 50 Gbps in a single platform
- **Clustering:** supports up to 8 Allot SG-9100 platforms in a seamless cluster configuration providing aggregate throughput of up to 350 Gbps
- **Central Management** and configuration by Allot NetXplorer Management system, including full integration with Allot Subscriber Management Platform (SMP)

Efficient Clustering

Allot SG-9100 maintains accurate Layer-7 visibility and control of user-application traffic across multiple platforms even when asymmetric upstream and/or downstream IP flows are processed by different appliances. Clustering of up to eight platforms utilizes dedicated interfaces with very low synchronization traffic overhead.

Accurate Traffic Visibility and Policy Control

Allot's Dynamic Actionable Recognition Technology (DART) engine, embedded in the platform, gives you granular visibility of application, user, device, quality-of-experience (QoE) and network topology traffic. Allot's extensive signature library accurately identifies hundreds of Internet applications and protocols, and also supports user-defined signatures. Frequent and automated updates to the signature library keep Allot Service Gateways up to date with the latest applications and Internet developments, ensuring accurate traffic detection and classification.

Moreover, Allot's flexible and powerful Policy Editor makes it easy for you to provision and enforce real-time Quality of Service (QoS), steering, metering and charging policy with equal granularity.

Encrypted Traffic Classification

Allot's superior traffic classification proactively learns and adapts to the changing tactics of traffic encryption that is widely used by Internet services and data privacy applications. From heuristic analysis of IP flow behavior to peer learning and predictive DPI, Allot's synergy of inspection methods provides highly granular and accurate recognition of encrypted traffic even at maximum speeds and peak loads.

Intelligent Policy and Charging Enforcement

Compliance with 3GPP standards and interoperability with most PCRF systems, enables Allot SG-9100 to provide intelligent Traffic Detection Function (TDF) and Policy and Charging Enforcement Function (PCEF) in 3G/4G mobile data networks. This allows operators to leverage superior traffic identification and classification to enrich the policy decisions of PCRF elements, and to enhance the charging capabilities of online and offline charging systems (OCS, OFCS).

Collecting Network Data Records

From its vantage point in the network, Allot SG-9100 collects and exports a rich variety of high-resolution usage data, including real-time transactions per user, per application, per device, per video session, per VoIP and Instant Messaging session, per Web session, and more. Network data records may be exported in standard formats to business intelligence systems, such as Allot ClearSee Network Analytics, and other operator systems for further manipulation and analysis. Frequency and triggers for data record export are configurable parameters, giving operators ready access to usage data that is critical to their business. The data records coming from Allot SG-9100 are configurable and may be customized by Allot Data Science Services for any destination or use case requirements.

Specifications

Allot Service Gateway 9100 Platform

Allot SG-9100	
Capacity	
Throughput per Platform*	Up to 50 Gbps
Throughput per Cluster*	Up to 350 Gbps using 8 devices
Number of Connections/Flows	Up to 12,000,000/24,000,000
Number of Active Subscribers	Up to 1,500,000
Number of Policy Lines / Pipes / Virtual Channels	Up to 512 / 1,000,000 / 2,000,000
Interfaces	
Ethernet Interfaces	Up to 12 x 10 Gigabit Ethernet
Management	2 x 1 Gigabit Ethernet (copper)
Networking Standards	
Tunnel and Encapsulation Support	Including L2TP v1/2, MPLS, PPPoE, GRE, GTP, 6rd, Teredo, SNAP, DS-Lite/MAP-E
IP Version	IPv4, IPv6
Access Technology Support	2G, 3G, 4G/LTE, CDMA, DOCSIS, WiMAX, DSL, FTTx, PON
Product Options	
Network Analytics	Real-time/Long-Term Monitoring and Reporting
High Availability	Active redundancy (1:1, 1+1), Bypass
Asymmetric Traffic Control	Yes
Physical Characteristics	
Form Factor	Standard 1U 19" rack mount
Size	780 mm x 447 mm x 43 mm
Weight	Min: 13.5 kg (29.8 lb) Max: 21.0 kg (46.3 lb)
Power	Dual Hot Plug, Redundant 100/240VAC, 80PLUS, 750W
Operating Temperature	10°C to 35°C (50°F to 95°F), Relative humidity (%RH) 8% to 80% Maximum Altitude 3,048 m
Availability	
System Redundancy	Redundancy for PSUs and fans
Hardware Bypass	Independent, passive bypass unit
Bypass Configuration	Up to two units, 8 fiber-optic ports (4 links) Or HD-16 fiber-optic ports (8 links)
HD-8 Multi-Port Bypass Unit	External 1U 19" rack mount, 2.44kg (5.38lb)
HD-16 Multi-Port Bypass Unit	External 1U 19" rack mount, 2.64kg (5.82lb)
Standards	
Safety	UL 60950-1:2006+A1:2010+A11:2009+A12:2011+A2:2013 EN60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
EMC (Electromagnetic Compliance)	EN 55022:2010+AC:2011(Class A) EN55032:2012/AC:2013 EN 55024:2015 EN 61000-3-2:2014 EN 61000-3-3:2008 FCC CFR 47 Part 15 Sub B Canada ICES-003 Issue 5 VCCI V-3/2013.04 (member ID:1798 [C3775, R-3404, T1630]
Environmental	RoHS/WEEE compliance China ROHS REACH EU 1907:2006

* Actual throughput performance metrics depend on enabled features, policy configuration, traffic mix, and other deployment characteristics.



Contact us: sales@allot.com

Americas: 300 TradeCenter, Suite 4680, Woburn, MA 01801 USA Tel: +1 (781) 939-9300 Fax: +1 (781) 939-9393 Toll free: 877-255-6826 • **Europe:** NCI – Les Centres d’Affaires Village d’Entreprises ‘Green Side’, 400 Avenue Roumanille, BP309, 6906 Sophia Antipolis Cedex, France Tel: +33 (0) 4-93-001160, Fax: +33 (0) 4-93-001165
• **Asia Pacific:** 25 Tai Seng Avenue, #03-03, Scorpio East Building, Singapore 534104 Tel: +65 67490213 Fax: +65 68481015 • **Japan:** 4-2-3-301 Kanda Surugadai, Chiyoda-ku, Tokyo 101-0062 Tel: +81 (3) 5297-7668 Fax: +81(3) 5297-7669 • **Middle East and Africa:** 22 Hanagar St., Industrial Zone B, Hod-Hasharon, 4501317, Israel, Tel: +972 (9) 761-9200, Fax: +972 (9) 744-3626

www.allot.com info@allot.com

© 2017 Allot Communications Ltd. All rights reserved. Allot Communications, Sigma and NetEnforcer and the Allot logo are trademarks of Allot Communications. All other brand or product names are the trademarks of their respective holders. The information in this document is for reference purpose only and constitutes neither an offer, a commitment nor an acceptance. Allot may change the information at any time without notice.

