

Allot Digital Lifestyle Services

Subscriber Management Platform



Managing Digital Lifestyle Services: Personalize the Use. Monetize the Experience.

The challenge for fixed, mobile, and converged service providers is to build a profitable broadband service that consistently delivers the Quality of Experience (QoE) that each subscriber expects, while retaining control over network utilization. Allot Subscriber Management Platform (SMP) helps service providers achieve this goal. The flexible service tiering, powerful policy control, and real-time charging provided by Allot SMP is the key to implementing competitive and profitable business models to personalize service offerings and maximize service revenues. Allot SMP also extends per-user management to large enterprises who provide critical connectivity services to employees.

Features

Visibility

Allot SMP maps dynamically allocated IP addresses to assigned subscribers, allowing service providers and large enterprises to accurately monitor, analyze, and meter subscriber data services over multiple concurrent access types. It supports both IPv4, IPv6, and hybrid networks and can correlate multiple IP addresses per subscriber as needed.

Policy Control and Charging

Allot SMP employs standard 3GPP interfaces that empower Allot inline platforms to operate seamlessly in mobile and converged broadband networks as an intelligent Policy Control and Enforcement Function (PCEF) and/or Traffic Detection Function (TDF) nodes with integration to operator Policy and Charging Rule Function (PCRF), and Online and Offline Charging Systems (OCS/OFCS).

Service Tiering and Quota Management

Allot SMP can be configured to provide a standalone Policy Control and Enforcement solution with a rich service creation framework that facilitates the rapid deployment of tiered service plans based on personal Quality of Service (QoS) parameters, usage quotas, and overage policies that enforce how each subscriber's traffic is treated. In this configuration, Allot also supports other interfaces for integrating to existing non-3GPP based OSS/BSS functions.



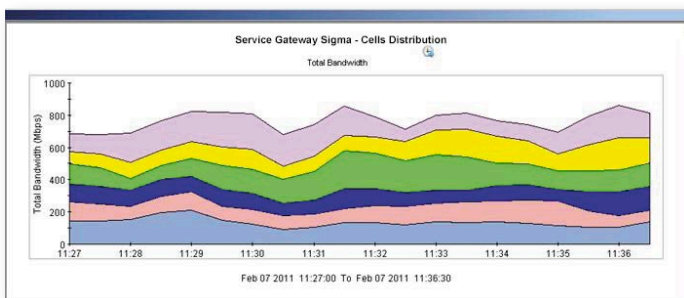
Get a Clear Picture of Subscriber Usage

Understanding subscriber behavior is the first step to identifying ARPU opportunities and creating profitable service plans. Allot SMP provides real-time and long-term analytical reports detailing the usage patterns of individual subscribers, including the applications and devices they use and the volume of traffic they generate. In addition, a full set of Mobile Analytics show mobile operators how often data users access the service, how long they stay connected, their session signaling and average bit rate, the VoIP minutes they consume, and more. These vital statistics can be exported to other systems in the form of subscriber-, application-, and session-based Charging Data Records (CDR), enabling operators to analyze subscriber behavior and to direct broadband resources toward more profitable revenue plans.

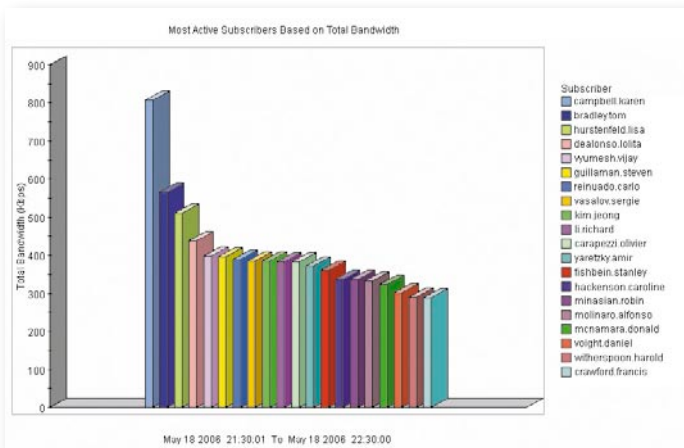
Insightful Reporting

Subscriber monitoring reports are fully integrated in the reporting dashboard of the Allot NetXplorer management system, helping service providers to:

- Identify top applications and top users
- Analyze application usage per subscriber
- Create subscriber profiles based on usage patterns
- Deploy personalized service plans for individuals and groups
- Evaluate the performance of tiered and quota service plans
- Monitor mobile cell utilization and manage subscriber traffic in congested cells
- Troubleshoot customer problems quickly



Top cells in use



Most active Subscribers

Monetize with Value-based Policy Control and Charging

Monetizing the customer experience is the key to broadband service profitability. Allot ChargeSmart (a licensed component of Allot SMP) helps broadband operators implement innovative charging models that reflect the true value of their service to subscribers and content providers.

Allot ChargeSmart

Allot ChargeSmart enables real-time, pay-for-use charging based on the consumption of data and applications per volume and time. It integrates seamlessly in 3G and 4G mobile networks, where it orchestrates the value-based charging process using standard 3GPP interfaces:

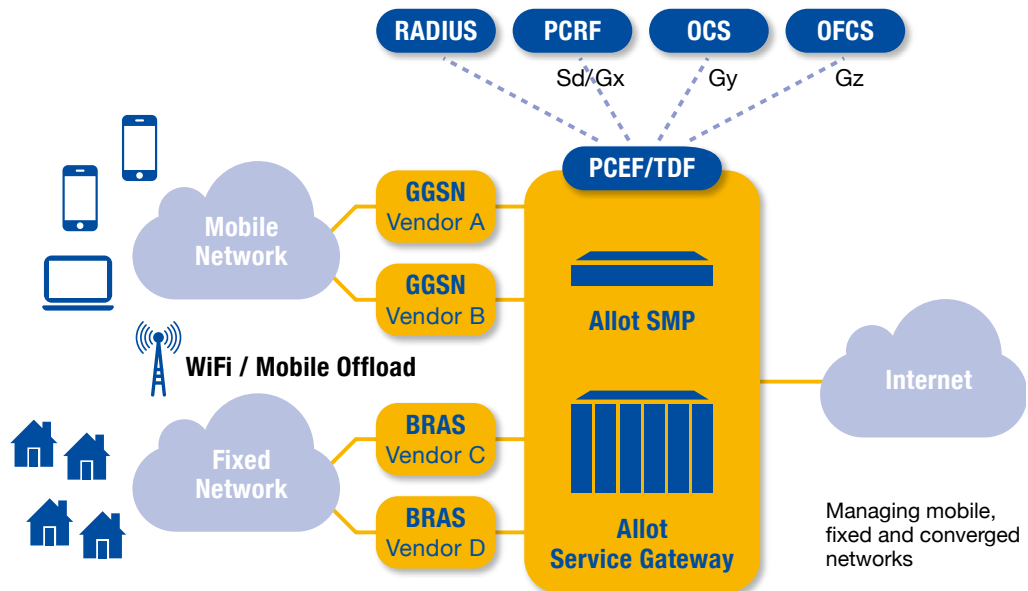
- Via Diameter Gx, Allot ChargeSmart communicates with PCRF systems in real time, managing and enforcing QoS policy and metering usage for mobile sessions and applications based on the subscriber service plan. Granular policies such as online portal redirection, application detection, and cell congestion management can also be managed by this interface.
- Via Diameter Sd, Allot ChargeSmart communicates with PCRF systems in LTE and 3G networks to support advanced service detection and notification capabilities, and performs enforcement with TDF.
- Via Diameter Gy, Allot ChargeSmart meters and conveys real-time usage data to OCS and manages the rating of applications and sessions. The Gy interface supports the most appealing use cases for usage-based charging, including out-of-credit session handling, top-up for prepaid, and dual metering such as metering time and volume for Video Streaming applications.
- Via Gz, Allot ChargeSmart exports summary records to OFCS for data reconciliation and accounting needs. Operators also leverage this interface to support revenue sharing models involving Over-The-Top (OTT) content, and to facilitate efficient session-level monitoring offline.

Allot works actively within the 3GPP forum to introduce and standardize effective methods for dealing with Diameter signaling storms between network elements, which occur frequently and pose a serious challenge when activating complex use cases.

Real-time Metering per Session, per Application

Real-time volume and time metering may be implemented per session with the option to exclude or “zero-rate” individual or groups of applications so they are tracked but not charged.

Operators may also assign specific rates to specific applications and provision one or more of these individually rated applications in a subscriber’s service plan. Individual rates can also be assigned to a category of applications such as P2P or streaming video. Per-application charging provides a wealth of opportunities for operators to create value-based service plans and pricing.



Personalize Services and Manage Quality of Service

Allot TierManager and Allot QuotaManager (licensed components of Allot SMP) provide a complete, standalone service creation and policy management framework for the rapid deployment of tiered and quota services that allow consumers to choose the Internet experience that best suits their life-style and budget, while operators maintain control over network use.

Allot TierManager

Allot TierManager allows providers to define competitive, application-aware service plans with different QoS policies and Service-Level Agreements (SLA), and then assign individual subscribers to the plans. In mobile networks, cell-aware service plans can also be defined, enabling temporary QoS measures to be enforced within a cell when it is congested.

Allot QuotaManager

Allot QuotaManager allows providers to further differentiate their service offering by including usage allowances and overage policies in the service plan. Usage caps based on volume and time may be managed per subscriber and per application. Allot controls the metering and enforcement process for each subscriber and produces standard CDRs for mediation and/or billing systems. A full complement of reports give operators the tools to analyze overall quota usage as well as individual subscriber status and quota consumption.

When quota limits are reached, subscribers may be redirected to the operator service portal where they can

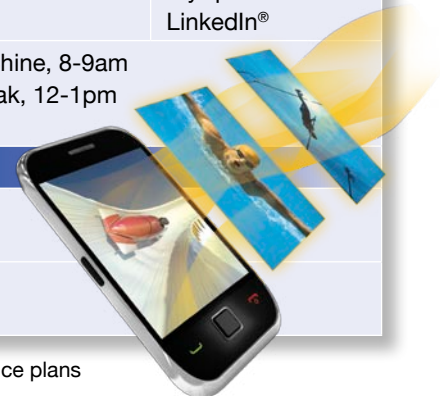
view usage history, extend allowances, or upgrade their service plan. Allot QuotaManager also supports “turbo button” options that allow subscribers to accelerate upload/download speeds and boost an application’s performance for a designated period of time.

Cell-aware and CMTS-aware Congestion Management

Allot SMP provides cell-aware and CMTS-aware visibility and subscriber management, enabling mobile operators to control quality of service for subscriber in a congested cell, and for cable operators to control QoS for subscribers connected to congested channels or bonding groups of CMTS elements. Allot SMP identifies congestion per defined thresholds and automatically enforces QoS policy to relieve congestion and maintain network performance.

Plan Details	Basic	Plus	Premium
Monthly rate	\$25	\$35	\$45
Data volume up to	1.5 GB	2 GB	5 GB
Overage	Throttle	10¢/MB	5¢/MB
Social Networking	----	Unlimited Facebook®	Unlimited Facebook® Twitter® MySpace® LinkedIn®
My Happy Hour	Select one: <input type="checkbox"/> Rise and Shine, 8-9am <input type="checkbox"/> Lunch Break, 12-1pm		
Add more...			
Optimize my Video (\$10/month)	Select one: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Prioritize my VoIP (\$5/month)	Select one: <input type="checkbox"/> Yes <input type="checkbox"/> No		

Allot SMP facilitates the deployment of value-based service plans





Allot SMP operates in conjunction with Allot Service Gateway and Allot NetEnforcer in-line platforms to provide scalable, carrier-class solutions for optimizing and monetizing the user experience in mobile, fixed, converged, and large enterprise networks.

Allot SMP may be purchased in a standard server or a high-availability configuration. The High-Availability Platform (HAP) comprises a cluster of two SMP server appliances running in active/passive redundancy mode together with an external storage unit.

Up to 15 standard SMP appliances or high-availability configurations can be deployed in the network.

Virtualized Subscriber Management

Allot SMP is available as a virtual appliance, running on VMWare in an ESXi environment. Allot virtual appliances are compatible with VMware vCenter 5.5 and higher. For optimal performance, the virtualized environment should be able to provide adequate compute, storage, and network resources according to Allot SMP requirements. Please see Allot Virtual Machine Support Guidelines (Allot Tech Note 1306) for further information.

	Standard SMP Server	High-Availability SMP Server
Capacity* (May vary depending on specific use case and/or network configuration.)		
Max RADIUS messages/second	5000 per SMP node	
Max DHCP messages/second	1000 per SMP node	
Max RADIUS messages/second with Diameter Gx interface with session-based volume reporting to PCRF	5000 per SMP node	
Max active subscribers/SMP node	5 Million	
Health Monitoring		
Provides real-time status on demand for:	Utilization: CPU, memory RADIUS/DHCP message updates per second Number of registered subscribers Number of active IP sessions Subscriber status (service plan, quota balance, active/inactive)	
Interfaces		
3GPP	Diameter Sd, Gx and Gy, and File-based Gz	
AAA	RADIUS, DHCP, Active Directory	
OSS/BSS	CSV	
Management	SNMP, CLI	
Mechanical and Environmental		
Size	Standard 1U in 19" rack	Standard 4U in 19" rack
Power Supply	AC	AC

* Capacity values are based on Allot SMP performance with Allot Service Gateway Sigma/Sigma E/Tera; Allot Operating System (AOS) version 13.3 and above, and on Allot SMP 4th generation hardware

About Allot Communications

Allot Communications Ltd. (NASDAQ, TASE: ALLT) empowers service providers to monetize and optimize their networks, enterprises to enhance productivity and consumers to enjoy an always-on digital lifestyle. Allot's advanced DPI-based broadband solutions identify and leverage network intelligence to analyze, protect, improve and enrich mobile, fixed and cloud service delivery and user experience. Allot's unique blend of innovative technology, proven know-how and collaborative approach to industry standards and partnerships enables network operators worldwide to elevate their role in the digital lifestyle ecosystem and to open the door to a wealth of new business opportunities. For more information, please visit www.allot.com

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