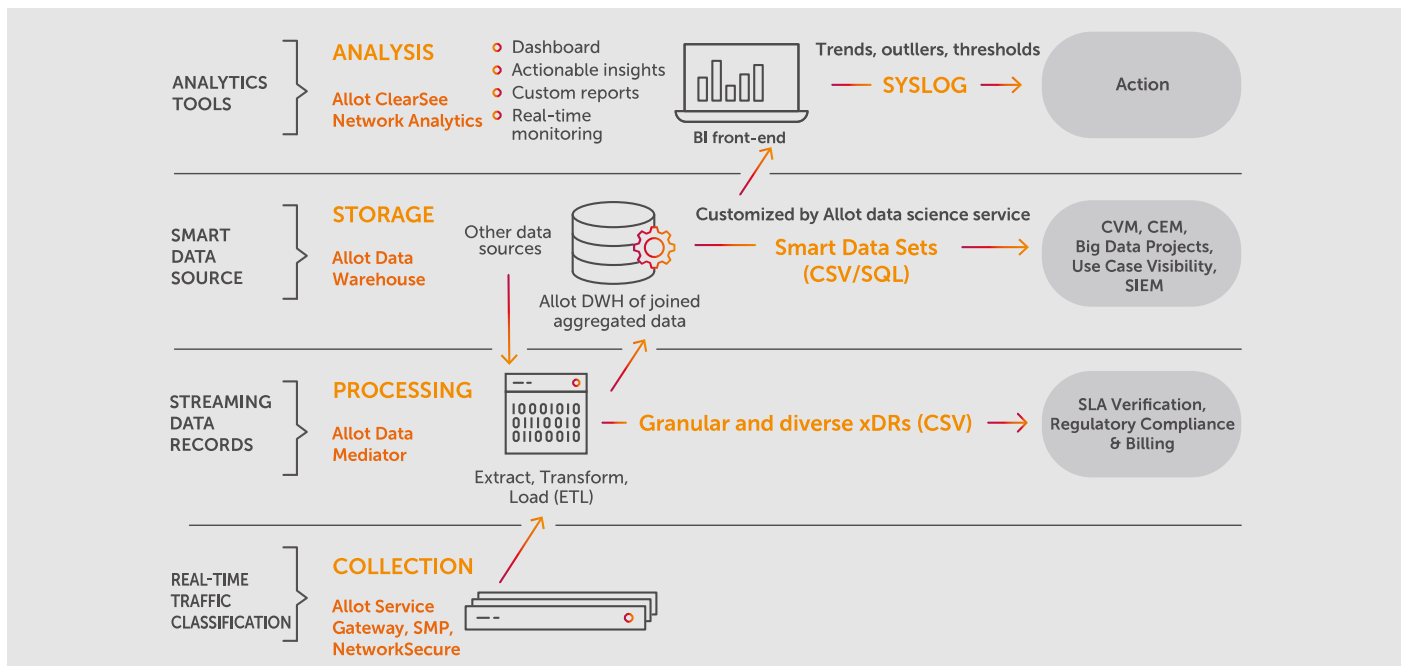Allot Smart

ClearSee Network Analytics

Accurate Network Intelligence
to Make Informed Business Decisions

Allot ClearSee Network Analytics software is well-suited to a wide variety of project sizes and are matched to a range of hardware platforms with different levels of CPU strength, storage capacity, and memory resources. These hardware offerings include platforms designed for small projects with less than 100K data subscribers, platforms designed for projects with up to 1 million data subscribers, and platforms for over 1 million subscribers.

In addition to the standalone set of platforms available from Allot, highly-resilient set of scalable "pay-as-you-grow" platforms is available. In this cluster platform, the business intelligence (BI) and data warehousing (DW) are installed on separate hardware platforms. The BI is installed on two nodes, which provide high resiliency. The DW, with a highly-resilient "pay-as-you-grow" scalable design, can start from a minimum of three nodes to an unlimited number of nodes.

Allot ClearSee software can be installed on bare metal platforms provided by Allot, or on equivalent operator equipment that meets the same requirements. Additionally, ClearSee software may be installed on virtual machines. For more details about the Virtual Edition, consult an Allot representative. Individual sizing and installation requirements should be verified with an Allot representative.

Allot ClearSee Network Analytics provides a breakthrough solution for network business intelligence

ClearSee Network Analytics

Deeper Understanding. Better Business Insight.

Whether you operate a network business or a business network, Allot's actionable analytics will give you deeper understanding of your network and its users.

Network & Operations experts gain insight from visual reports and analysis of network traffic, online activity, and unusual traffic volumes, along with information regarding the causes. For example, real-time reports can show which applications and devices are consuming the bandwidth in a chronically congested cell, while historical analysis can be used to identify traffic trends and the effects they will have on network performance over time. Daily or weekly reports showing bandwidth consumption, usage volumes, video and HTTP QoE, signaling traffic, average bitrates, sessions opened, and other vital statistics enable operators to identify problematic areas and better plan around them.

Marketing professionals gain the ability to quantify and characterize subscriber activity to assist with customer segmentation and service planning. For example, analysis of subscriber-application-device usage can be used to target customers most likely to respond to a service plan upgrade, thereby improving response rates and increasing customer lifetime value. Using the system's flexible self-service approach, marketeers can build their own reports to explore usage trends and outliers on the fly.

Executive Management gain from a consolidated view of their network business provided by report dashboards that summarize the key performance indicators they want to track - for example – monitoring the adoption and performance of newly launched services per demographic or per location. Web-based dashboards may be viewed on multiple devices from any location.

A Powerful Self-Service Approach to Analytics

Allot ClearSee provides a complete toolkit for analyzing network usage data with extreme ease and efficiency. And we've put all the tools behind a single pane of glass:

o   Real-Time Network Monitor

o   Network Metrics

o   Self-Service Reports

Real-Time Monitor

Allot's real-time monitoring dashboard lets you visualize network and subscriber usage as it happens. Live, self-refreshing performance metrics report network activity in a granularity of seconds. One-click drill down helps you zero in on problems and troubleshoot faster. All Allot ClearSee dashboards are under the same pane of glass, so you can easily switch back and forth between real-time views and longer-term metrics.

Allot Real-Time Monitor Dashboard

Real-time views also include traffic per the policy-enforcement elements you've defined per application, per subscriber, per location, per link, etc. With this level of granularity, it's easy to track the real-time activity of individual users, remote locations, WAN links, or any other element that has been associated with an enforcement policy. Moreover, live dashboard views may be customized to address your precise requirements and business priorities.
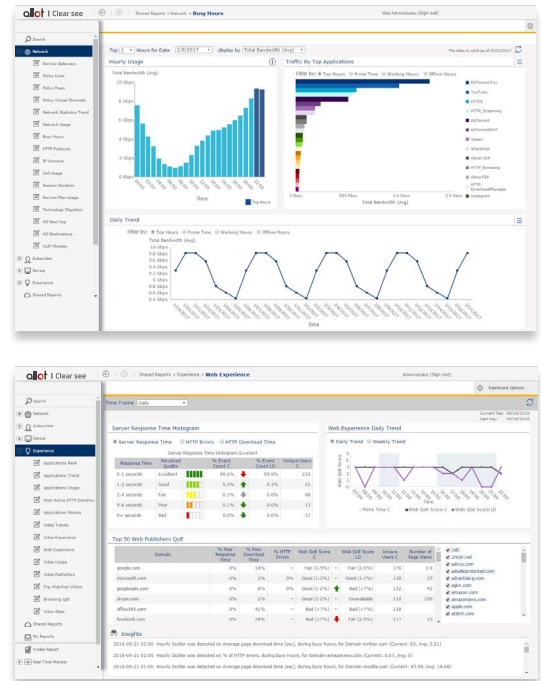
Insightful Network Metrics

Allot ClearSee reporting dashboards make easy for your stakeholders to measure and visualize the network and user activity that matters most. Dashboard reports are interrelated and interactive. Drilling down or changing the data fields of one report, instantly updates and refreshes the display of the other reports in the dashboard. In addition, individual reports and dashboards are easily customized. Reporting dashboards are organized per domains that are of interest to every network operator – Network, Subscriber, Device, Experience and Security.

Network Metrics Dashboards

Analytics Domains	Reporting Dashboards
Network	Real-time health, Congestion analysis, Busy Hour, Peak Period, Application usage/popularity, Signaling analysis, and more
Subscriber	App usage, Device usage, Content consumed, Video and VoIP usage, QoE metrics, and more
Device	Data volume, App usage per model, 3G vs 4G, and more
Experience	Top content, Top consumers, Top publishers, Video and HTTP QoE per app/sub/device, and more
Security	Security dashboards display monitoring data on the network requests that WebSafe handles

Self-Service Data Mining

With Allot ClearSee Network Analytics, which is designed for flexibility and ease of use, you aren't limited to a predefined set of reports or a specific way to analyze data. As new requirements arise, or new data presents itself, our self-service analytics module helps you model your questions and find answers to complex business problems such as discovering new market and service opportunities before the competition, or gaining insight on how to dramatically improve customer satisfaction and retention rates.

While the Self-Service module is easy enough for anyone to use, it provides an excellent tool for experienced analysts who for the first time have access to source data that is more varied, detailed and accurate than ever before. Custom, ad hoc analyses and reports can be built without the need for software development or upgrade. Changes and what-if scenarios can be tested on the fly. With Self-Service, you can find answers to specific questions, explore possible courses of action, and often discover problems and opportunities that were not anticipated.

Open Solution

Allot's ClearSee Network Analytics is an open solution that's based on industry standard APIs. It offers full flexibility for orchestration and easy integration with customer's existing data lake, data pond, and OSS/BSS. ClearSee also supports a variety of machine-to-machine APIs, REST API for request & respond, ODBC/JDBC to pull data from the database, and Smart Data Export files that support flexible, customizable formats via push and pull mechanisms.

Tight Security

Data privacy and integrity is a top concern for network operators. Allot provides robust security settings that allow administrators to control access to the applications as well as use/view privileges to the data and to the different analytics tools. The system administrator controls the following security settings:

○ Access Authentication controls login permissions

○ Functional Privileges control the functions that each user/group may use

○ Object Permissions control the business objects that each user/group may use

○ Data Security filters control which data each user/group may access or view

○ Database Security controls direct access to the Allot data warehouse

Data Science Services

Allot Data Science Service experts can help you identify and obtain the right data sets and build customized reports for the specific use cases that you want to analyze. Our expertise and experience can save you time and money as we help to aggregate the right data sets, generate custom reports and build custom dashboards that put you on the fast track to valuable insights.

Allot ClearSee Network Analytics

Allot ClearSee Network Analytics soft ware is well-suited toa wide variety of project sizes and are matched toa range of hardware platforms with different levels of CPU strength, storage capacity ,and memory resources. These hardware offerings include platforms designed for small projects with less than 100K data subscribers, platforms designed for projects with upto 1 million data subscribers, and platforms for over 1 million subscribers.

In addition to the standalone set of platforms available from Allot, highly-resilient set of scalable "pay-as-you-grow" platforms is available. In this cluster platform, the business intelligence (BI) and data warehousing (DW) are installed on separate hardware platforms. The BI is installed on two nodes, which provide high resiliency. The DW, with a highly-resilient "pay-as-you-grow" scalable design, can start from a minimum of three nodes to an unlimited number of nodes.

Allot ClearSee software can be installed on bare metal platforms provided by Allot, or on equivalent operator equipment that meets the same requirements. Additionally, ClearSee software may be installed on virtual machines. For more details about the Virtual Edition, consult an Allot representative. Individual sizing and installation requirements should be verified with an Allot representative.

Standalone Specifications

The Standalone deployment provides a single server to host both the DW and the BI and is available in the following 3 configurations targeting a variety of project sizes.

Specifications for Standard ClearSee Standalone (SR630)– for up to 100,000 data subscribers	
Platform	Lenovo SR630 1U server
CPU	2x Intel Xeon with 12 cores
RAM	64 GB
Storage	2x 480 GB OS and 4X480GB disks database storage
Power Supply	Dual AC/DC
Connectivity	4x 1Gb

Specifications for Enhanced ClearSee Standalone (SR650)– for up to 1 million subscribers	
Platform	Lenovo SR650 2U server
CPU	2x Intel Xeon with 16 cores
RAM	128 GB
Storage	2x 480GB OS and 12x600GB disks database storage
Power Supply	Dual AC/DC
Connectivity	4x 1Gb, 2x 10Gb

Specifications for Extended ClearSee Standalone (SR650)– for over 1 million Subscribers	
Platform	Lenovo SR650 2U server
CPU	2x Intel Xeon with 18 cores
RAM	256 GB
Storage	2x 480 GB OS and 24x1.2 TB disks database storage
Power Supply	Dual AC/DC
Connectivity	4x 1Gb, 2x 10Gb

Cluster Specifications

The Cluster deployment is a scalable solution that provides separate, expandable nodes hosting the DWs and the BIs. Cluster nodes support many millions of subscribers with effectively unlimited scalability.

A Cluster deployment consists of a primary BI server and a secondary BI server, and at least three DWs that can scale to tens of DWs.

Specifications for ClearSee BI (SR630)	
Platform	Lenovo SR630 1U server
CPU	2x Intel Xeon with 12 cores
RAM	64 GB
Storage	2x 480 GB OS and 2X480GB disks database storage
Power Supply	Dual AC/DC
Connectivity	8x 1Gb

Specifications for Standard ClearSee DW (SR650) – The small DW node	
Platform	Lenovo SR650 2U server
CPU	2x Intel Xeon with 16 cores
RAM	128 GB
Storage	2x 480GB OS and 12x600GB disks database storage
Power Supply	Dual AC/DC
Connectivity	4x 1Gb, 2x 10Gb

Specifications for Enhanced ClearSee DW (SR650) – The medium DW node	
Platform	Lenovo SR650 2U server
CPU	2x Intel Xeon Processor Gold 6240 18 cores
RAM	256 GB
Storage	2x 480 GB OS and 24x1.2 TB disks database storage
Power Supply	Dual AC/DC
Connectivity	4x 1Gb, 2x 10Gb

Specifications for Extended ClearSee DW (SR650) – The large DW node	
Platform	Lenovo SR650 2U server
CPU	2x Intel Xeon Processor Gold 6240 18 cores
RAM	256 GB
Storage	2x 480 GB OS and 24x2.4 TB disks database storage
Power Supply	Dual AC/DC
Connectivity	4x 1Gb, 2x 10Gb

Apr 2023

www.allot.com