

# NetXplorer

## Advanced Visibility and Centralized Management of All Network Traffic

As a network operator you need to understand how your bandwidth resources are being consumed by applications and users. This will help you define traffic management policies that control application performance according to your business priorities, and make sure your network services are meeting user expectations.

Allot NetXplorer, the scalable management system for Allot multiservice platforms and value-added services, provides a centralized interface for network-wide configuration, monitoring, and reporting. NetXplorer's intuitive Graphical User Interface (GUI) enables easy configuration of network elements, displays a consolidated picture of application, user, device, and network topology traffic, and enables easy drill-down to the most granular view of traffic data. With a full complement of real-time and long-term reporting capabilities, Allot NetXplorer provides unsurpassed visibility for proactive troubleshooting and traffic trend analysis to assist you with capacity and service planning.

NetXplorer is a client-server application that is designed to work simultaneously in parallel with JAVA-based clients and web clients.

### Benefits

- Superior traffic visibility
- Centralized NMS with powerful tools for policy creation, traffic management, and platform and software configuration and maintenance.
- Single policy front-end for managing Allot's distributed, scalable solution
- Real-time and long-term analytical capabilities with customizable data views

The web-based clients, introduced after the JAVA-based clients, are still undergoing enrichment to cover the full set of functions available on the JAVA-based clients, as well as new enhanced features.



The ongoing advances to the underlying NetXplorer server technology support the new web client and future proof new and existing functions via containerized support for fully cloud native deployments.

## Enhanced Broadband Traffic Visibility

Allot NetXplorer's reporting and analytics capabilities span a broad range of dimensions:

**Application-based reports** provide granular statistics and analysis of Internet applications such as BitTorrent, Skype, WhatsApp, and Netflix.

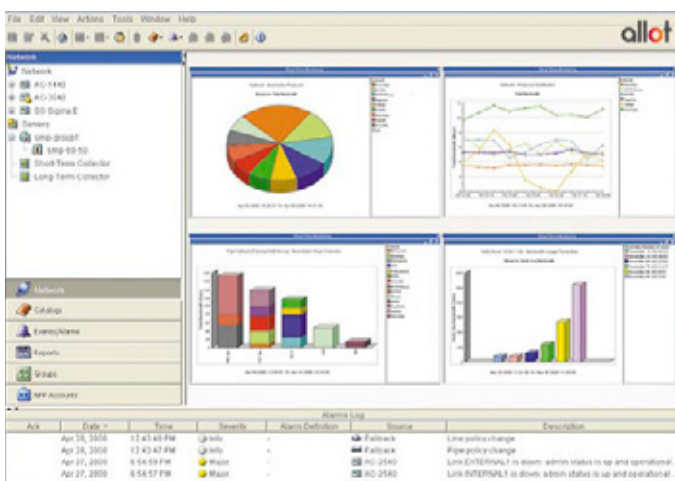
**HTTP reports** analyze Internet usage and Over-The-Top (OTT) applications such as browsing, HTTP streaming, and downloads – showing which websites are generating the most traffic.

**Subscriber reports** provide individual and aggregate subscriber behavior data. Reports showing subscriber usage of popular content such as Netflix and Facebook enable operators to personalize their service plans, while service plan utilization and popularity reports help operators to fine-tune service plan quotas and percentile reports show the average usage for the top X% of users.

**VoIP Minutes of Use report** tracks usage volume and identifies usage trends of OTT VoIP applications.

## Rich Set of Reporting Functions

- Real-time reports provide precise traffic statistics for quick diagnosis of network problems
- Historical traffic statistics facilitate network capacity planning and trend analysis
- Easy navigation (including zoom or scroll) to view all report data in graph or tabular format, desired time-frame, and drill-down to view more granular data
- Dashboard arranges up to 10 frequently used reports on a single screen for efficient viewing
- Variety of report export formats, including textual file, JPEG, PNG, HTML, XML, and CSV
- Scheduled reports for automatic generation and email distribution
- Multiple chart styles including color-coded, pie, line, and stack-area charts



Configurable display

## One Network – One Management Front End

Allot NetXplorer provides centralized visibility that is accessible to multiple clients and designed to manage a globally dispersed network infrastructure.

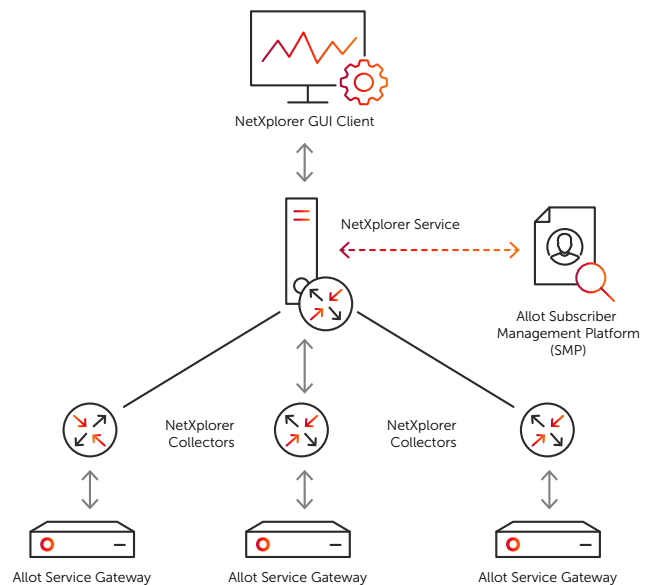
- One GUI provides centralized control of key Allot solution elements, including in-line platforms, Subscriber Management Platform (SMP), and collection and export servers
- Scales up and out to manage a multi-site, distributed deployment, and to handle Terabytes (TB) of network data generated by the Allot solution elements
- Policies, alarms, and subscriber updates are automatically propagated to the relevant solution elements (user audit log provided on demand)
- Allot NetXplorer server is accessible from multiple clients concurrently – facilitating user identity management and authentication
- User authorization provided via standard RADIUS element for smoother and tighter integration in operator networks



The graphical Device View simplifies maintenance and operation

## Scalable System Architecture

The fully distributed design of Allot NetXplorer allows the system to scale upward by adding functional elements at the appropriate architectural layers, while



maintaining overall management from a central server.

**Interface Layer:** Provides multiple levels of access/operation, and open interfaces for integration with external systems.

**Application Layer:** Centralizes reporting, policy provisioning, and management of network traffic, configuration of all managed devices/platforms, and notification/ mitigation of network attacks.

**Collection Layer (optional):** Supports growing and large-scale deployments through distributed data collection.

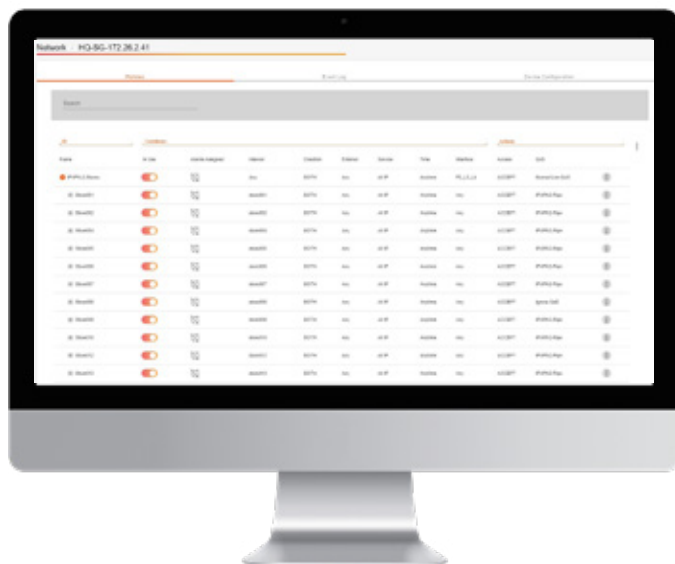
**Real-time Service Layer:** In-line platforms monitor network traffic in real time and dynamically enforce policy control per application and per user.

## Powerful Policy Control

Allot NetXplorer's full set of reusable service catalogs and provisioning tools make it easy to build dynamic Quality of Service (QoS) enforcement and charging policies.

### Enforcement Policy

Allot's Enforcement Policy Editor provides a powerful framework for defining specific traffic conditions and QoS enforcement actions according to high-level, easy-to-understand concepts. Enforcement policies may include any combination of access, priority, bandwidth allocation, traffic shaping, traffic steering, and quota actions to be taken on application and subscriber traffic. Additionally, rich Command Line Interface (CLI) and Simple Object Access Protocol (SOAP) interfaces allow external systems to provision policies and distribute them to all managed elements.



Enforcement Policy Editor

### Charging Policy

Allot NetXplorer provides flexible charging policy editors that make it easy to define online and offline charging rules for both pre-paid and post-paid subscribers. The Online Charging Policy Editor defines real-time metering and rating rules for subscriber sessions and applications, while the Offline Charging Policy Editor defines the Charging Data Records (CDR) for data reconciliation and accounting systems. (See Allot SMP datasheet for further information on 3GPP-based policy control and charging capabilities.)

### Intuitive Assistance with Service Plan Creation

Also in conjunction with Allot SMP, Allot NetXplorer provides the GUI for the creation of tiered service plans, including the introduction of various quota allowances to prevent network overloading, and time-based policies to address peak hour usage.

## NetPolicy Provisioner

### NetPolicy Provisioner - Value added self-management

Allot NetPolicy Provisioner (NPP) adds distinctive value to provider-carrier service offerings by allowing them to offer self-monitoring and self-provisioning capabilities to their VPN, ISP, and managed services customers. The NPP web-based GUI is accessible from any browser window and provides direct access to a predefined set of NetXplorer real-time monitoring reports with full display options and drill-down capabilities. If desired, the provider may also permit customers to provision and adjust QoS policies within predefined limits (See the Allot NetPolicy Provisioner datasheet for details).

## NetXplorer Hardware Platforms

Allot NetXplorer software and hardware servers may be purchased in Standalone (non-redundant) and high-availability configurations:

- Standalone configuration  
Single server to host both the device and the storage.
- High availability configuration  
3 servers – 2 for the redundant device and an additional server for the shared storage

### Specifications for high availability NetXplorer

Platform	2x Lenovo SR630 1U server + 1x IBM Flash System 2U server (for Storage)
CPU	2x Intel Xeon with 12 cores
RAM	4x 16 GB
Storage	2x 480 GB SSD OS and 5x1.2TB HDD disks database storage
Power Supply	Dual AC/DC
Connectivity	8x 1Gb

### Specifications for standalone NetXplorer

Platform	Lenovo SR630 1U server
CPU	2x Intel Xeon with 12 cores
RAM	2x 16 GB
Storage	4x 480 GB SSD OS
Power Supply	Dual AC/DC
Connectivity	4x 1Gb

### Hardware Specifications

When using non-redundant management platforms, Allot NetXplorer software may be purchased and installed on operator equipment that meets Allot’s minimum capacity and configuration requirements. The minimum configuration supports a limited number of Allot Service Gateway, Allot NetEnforcer and Allot Data Collector platforms. Individual sizing requirements should be obtained from your Allot representative.

### Virtualized NetXplorer Management

Allot NetXplorer 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 NetXplorer requirements. Please see Allot Virtual Machine Support Guidelines (Allot Tech Note 1306) for further information.

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