Worldwide Trends

Advanced Technology providers and cloud service providers are becoming ‘must have’ vendors for enterprises. By shifting on-premise deployment of IT infrastructure, business-critical applications, and information hosting to providers offering edge and cloud-based IT infrastructure and services, enterprises can better focus on their core business activities. International efforts to cope with the global pandemic shed light on the importance of these technology providers. The best among them aligned their service offerings with values such as resilience, agility, and continuity, all of which have been embraced by leading enterprises across all industry sectors.

By the end of 2021, based on lessons learned in the pandemic, most enterprises will put a mechanism in place to accelerate their shift to cloud-centric digital infrastructure and application services twice as fast as before the pandemic. 

Richard L. Villars, group vice president, worldwide research at IDC.

Top reasons enterprises are shifting on-prem IT to Advanced Technology providers:

a. Costs Savings: Maintaining IT and an internal data center is uneconomical for many enterprises. It involves costs related to building permits and construction, equipment, power, physical security, technology, and staffing. Moving to a 3rd party provider to host IT infrastructure, mission-critical applications, and information reduces these costs significantly and simplifies future challenges, such as expansions, security, and IT domain expertise.

b. Business Agility: New business initiatives usually require intense collaboration and cooperation from all an organization’s parts and departments. These processes are typically becoming heavy, take longer than expected, and involve internal politics. A 3rd party technology provider can enable organizations to accelerate these processes while alleviating internal processes and politics.

c. IT domain expertise: Maintaining an on-prem data center requires strong IT domain expertise, which is usually not the focus of the business. Shifting IT from on-prem to a 3rd party provider enables the company to focus on its core business and enjoy top-level IT services from dedicated vendors with the required domain expertise.

While increased demand allows technology providers to maximize network monetization, it also emphasizes the IT challenges they face.

Ensuring customer SLA is critical to the continuity and reputation of any Technology provider. The technology provider know everything that is happening in its network, in real-time, and maintain network hygiene from DDoS attacks and other vulnerabilities. It must gain smart visibility and control, protect the network from malicious and abnormal activity, and enforce required policies.

Like any other business, a positive bottom line and YoY revenue increases are the main goals of most technology providers. As such, it’s important to improve the monetization of network resources and the offering of network and security value-added services on an ongoing basis. Multitenancy that scales and efficient utilization of shared resources are vital capabilities for enhanced monetization.

The network is the main resource of advanced technology providers and it must be used intelligently. These technology providers must ensure high levels of network utilization, resolve faults quickly, and plan expansions wisely.

The Allot Traffic Intelligence Platform empowers advanced technology providers with a greater ability to maximize network monetization and assure SLAs.
Benefits

New revenue streams
- Ability to offer multi-tier levels of service for differential pricing models, which can include: reporting and analytics, management and control, DDoS protection, and more.

Adds insight to decision-making processes
- Clear, customizable data that can be digested and acted upon in real-time.

Increases network utilization
- Virtualize network resources
- Minimize network downtime by mitigating DDoS attacks.

Assures customer SLAs
- Ensure QoS of customers’ mission-critical applications
- Ensure a high-level digital experience for customers and their end-users, even during attacks.

Protects network hygiene
- Protect customers and data by blocking anonymizers
- Identify vulnerabilities and DDoS attacks
- Mitigate volumetric attacks within seconds.

Use Cases

- **Network visibility and analytics-as-a-service**
  Utilizing multitenancy capabilities to provide each customer (tenant) data about network utilization, as well as application and user behavior.

- **DDoS protection-as-a-service**
  Protect customers and data by identifying DDoS attacks and blocking anonymizers.

- **Network control-as-a-service**
  Utilizing multitenancy capabilities to implement policies and align applications performance with each customer’s business priorities.
Features

Key capabilities to help maximize network monetization

Optimized network resource utilization

By virtue of being deployed in-line in the network itself, the Allot Traffic Intelligence Platform can aggregate all network resources, coming from multiple access providers, into a shared pool of bandwidth resources. It virtualizes the resources and enables the advanced technology provider to define different tenants for its business customers with tiered services per tenant and unique SLA enforcement and management to maximize revenues.

Insightful decision making tool

With advanced network visibility and analytics capabilities, the Allot platform is an insightful decision-making tool when advanced technology providers need to plan network expansions wisely.

Application performance SLA, recreational traffic use and Inbound and Outbound traffic trends
Multitenancy for offering new revenue streams to customers

Advanced technology provider can offer unique revenue streams and services to each business customer thanks to multi-tenancy capabilities. These include:

- Traffic intelligence and advanced analytics-as-a-service: Customers can view their application performance, recreational traffic, and end users’ digital experience.
- Network management and control-as-a-service: The technology provider can define unique traffic management and policy enforcement rules per tenant (business customer) to ensure customer priorities are met.
- DDoS protection-as-a-service: Platform’s DDoS attack protection and mitigation mitigate attacks at network and per-tenant levels.

With the Allot Service Gateway, we will improve overall customer QoE by more easily troubleshooting network and application performance in real-time, as well as enforcing SLAs while improving capacity planning.”

Gert Heyblom, Technical Product Manager at KPN

Key capabilities for customer SLA assurance

Advanced analytics for SLA verification: A set of graphical dashboards provides a 360° overview of customer Quality of Service (QoS) and Quality of Experience (QoE), which are the key indicators to assure SLA.

Many parameters are displayed in the graphical dashboards.

- Network SLA metrics overview: Round Trip Time (RTT), dropped packets, utilization and more
- User-centric or QoE metrics overview: Response time and page load
- Activity overview: Server and application usage metrics

All these dashboards are presented at a tenant level and in real-time (RT), thus providing RT SLA monitoring. In addition, in the case of QoS or QoE degradation, the system sends alerts to data center IT managers so they can take prompt action before any SLA violations occur.

Network hygiene protection

Network hygiene is vital to assure continuous network availability, accessibility, and performance. The Allot Traffic Intelligence platform provides powerful DDoS protection and mitigation that guarantees technology provider’s network availability, even under attack. It protects against fast-moving, high-volume, DDoS attacks as well as short duration threats. In addition, it provides the first line of defense against both inbound and outbound attacks. Inbound DDoS attacks are automatically mitigated by discarding the DDoS traffic, which is targeting the network and the devices and allowing legitimate traffic to pass through. Allot DDoS protection also identifies and then isolates possible threats originating from individual hosts on the network, preventing outbound attacks that can disrupt the performance and integrity of network infrastructure and services and damage reputation.