

# Delivering Digital Workstyle Services

Enterprise Use Cases



# The Vision

Control bandwidth usage per application

Match user experience with business needs

Prioritize business critical applications and users

Manage and save on bandwidth upgrades



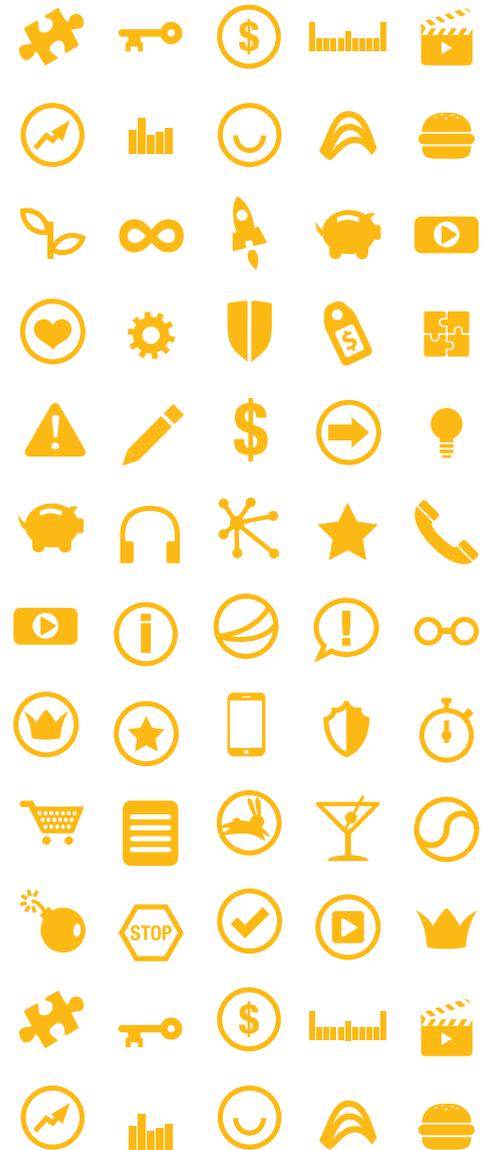
**Enterprise Networks at the Center  
of the Digital Workstyle**

# Introduction

Allot Communications is a leading provider of intelligent IP service optimization solutions that help enterprises and data centers run more efficient networks that better satisfy users. Allot leverages superior DPI technology to provide a clear and accurate view of network usage. Armed with this valuable insight, IT managers are able to dynamically control the delivery of critical applications; to assure SLAs; to protect network assets against attack; and to accelerate ROI on their IT infrastructure. Allot solutions are deployed worldwide in data centers and enterprise networks from all sectors, including education, finance, healthcare, hospitality, manufacturing, retail, transportation, and government.

The use cases in this booklet are based on Allot's core capabilities that can be deployed at enterprise premises or through managed services providers:

- **Real-time Usage Reporting:** understand how bandwidth resources are being consumed by applications, websites, users, and devices on LAN/WAN/WiFi/Data Center networks.
- **Real-time Multi-tenant Reporting:** view the network traffic of hundreds of branch offices and remote network locations from a central vantage point.
- **Dynamic Application Control:** define real-time traffic management policy that controls how each application is classified, prioritized, delivered and metered.
- **Dynamic Congestion Control:** define real-time traffic management policy that adjusts IP traffic flows when links are congested.
- **Dynamic SLA Enforcement:** define tiered traffic management policy based on different levels of service for management, employees, and customers.
- **Real-time DDoS and Bot Protection:** detect and neutralize external attacks on the network and malware-infected hosts within the network.



# Enterprise Use Cases

## Enterprise Network Optimization

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# Use Cases

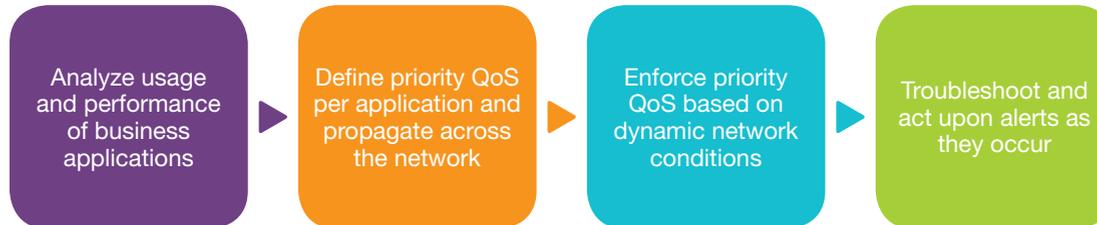
# Business Application Prioritization

## Enterprise Network Optimization

### Key Benefits

- Ensure availability and response-time of critical applications
- Enhance user productivity and satisfaction
- Reduce help desk calls

### Business Application Prioritization in Action



Every enterprise relies on networked applications to conduct business successfully. Corporate networks must ensure application availability and response-time to all users and all access modes. Application control begins with understanding how critical applications are used, how they perform under different network conditions, and what are the factors IT can control to ensure their delivery. Based on this analysis, each application gets a tailored QoS policy which may define utilization thresholds along with some form of expedited forwarding (depending on delay sensitivity). It may also define guaranteed minimum bandwidth, or different data rates for inbound and outbound traffic. Altogether, these QoS parameters ensure that users of CRM, ERP, VoIP, video conferencing, and other business applications are able to work more productively and with greater satisfaction.



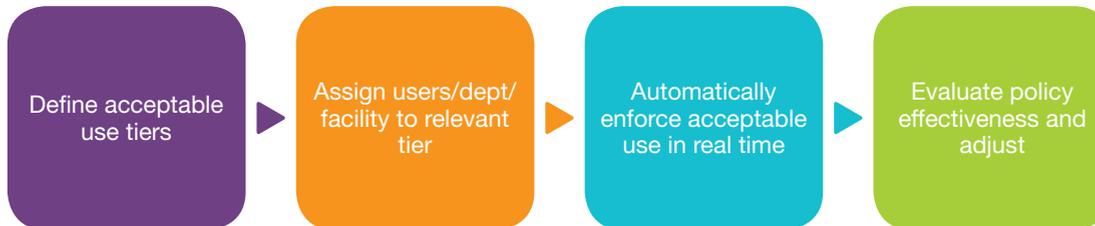
# Acceptable Use Management

## Enterprise Network Optimization

### Key Benefits

- Prevent excessive non-business use of the network
- Improve user productivity and satisfaction
- Optimize Internet link performance

### Acceptable Use Management in Action



Internet connectivity is essential to the success of most businesses. Enterprises are managing this valuable resource by establishing acceptable use policy that manages how it is utilized by different facilities, departments, users, and applications. For example, management may decide to block P2P downloads of recreational applications like BitTorrent because they eat up bandwidth and invite malware into the network. Or the enterprise may limit access to social networks during business hours and prioritize business applications over other Internet traffic. Through acceptable use rules, enterprises can prevent individuals and applications from monopolizing Internet bandwidth, ensure quality of service for all users, and minimize non-business Internet activity to improve productivity.



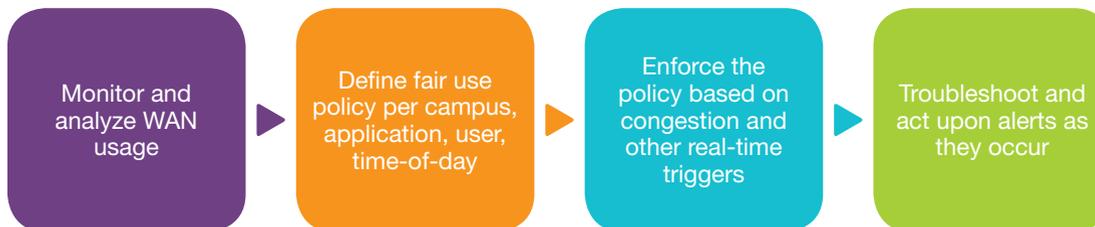
# Campus Congestion Control

## Enterprise Network Optimization

### Key Benefits

- Guarantee the performance of education-critical applications
- Reduce time and costs involved in troubleshooting the campus WAN
- Avoid costly WAN upgrades

### Campus Congestion Control in Action



Education enterprises increasingly find themselves in the role of ISP, delivering network and Internet services to students, faculty, administrators and guests located on multiple campuses that are tied together in a WAN topology to a main campus hub. The ostensibly “free” and ubiquitous Internet connectivity can easily overload the campus WAN with recreational video/audio streaming, P2P downloads, social networking, and VoIP calling, in addition to the demanding education applications it has to support. DPI-based solutions successfully control WAN congestion by enforcing fair use policy, which may include usage caps, limited data rates for recreational applications, assured forwarding for video lectures and remote learning, busy-hour blocking of P2P, and many other methods for controlling WAN utilization and budgets.



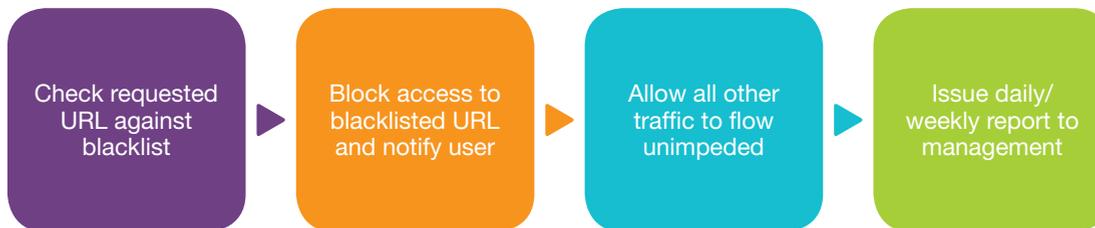
# Workstyle Browsing

## Enterprise Network Optimization

### Key Benefits

- Comply with legal and regulatory requirements
- Promote work-focused Internet use
- Reduce the load on the network

### Workstyle Browsing in Action



Through real-time URL filtering, enterprises can comply with emerging and existing legislation against copyright infringement and distribution of illegal content via the Internet. Enterprises can also nurture a professional and productive work environment by blocking access to specific categories of web content (social networks, adult, violence, drugs, etc.) based on department and time-of-day restrictions. For example, Marketing personnel may be allowed to access and update social media sites at all times as part of their job, while other departments would have restricted access as a way to control recreational Internet use during work hours.



**Allot WebSafe**  
**Allot WebSafe Personal**

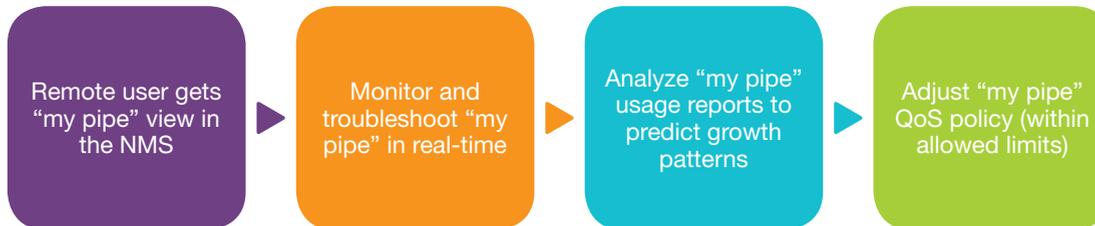
# Remote Workstyle Control

## Enterprise Network Optimization

### Key Benefits

- Improve user satisfaction with IT services
- Make traffic management more efficient and effective
- Empower users and reduce Help Desk calls

### Remote Workstyle Control in Action



High-quality self-monitoring and self-provisioning services gives branch offices and other remote users a customized view of the traffic they are generating on their own bandwidth pipe/s. Via secure access to a pre-defined set of reporting and provisioning functions, remote offices can track their own usage and adjust QoS policy to better regulate bandwidth utilization and application performance.



Allot NetPolicy Provisioner

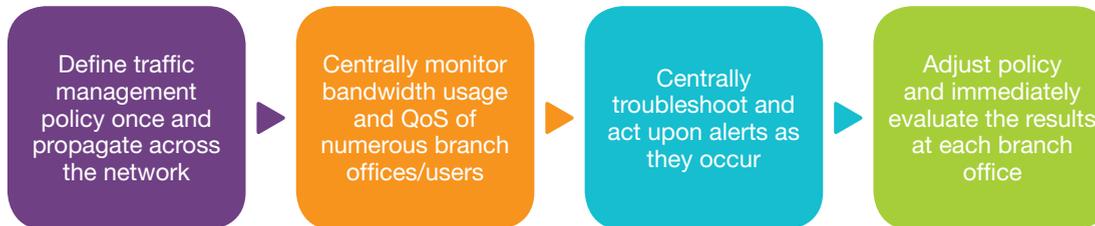
# Multi-Tenant Service

## Enterprise Network Optimization

### Key Benefits

- Support numerous branch offices from a central location and common platform
- Reduce service delivery costs
- Improve quality and efficiency of IT services

### Multi-tenant Service in Action



Branch office transactions and communications rely on fast response time from computerized systems and applications. Hundreds of branch offices and the thousands of employees who work in them must be able to connect to data centers and enjoy consistently good response time from the applications and services they use. For example, branches may connect to a central office via Metro Ethernet and SHDSL lines in redundant configurations. Branches may have 3G connectivity as well. DPI-based solutions provide a unified way to monitor and manage network utilization in real time, and ensure quality of service for each branch office across diverse and numerous access points.



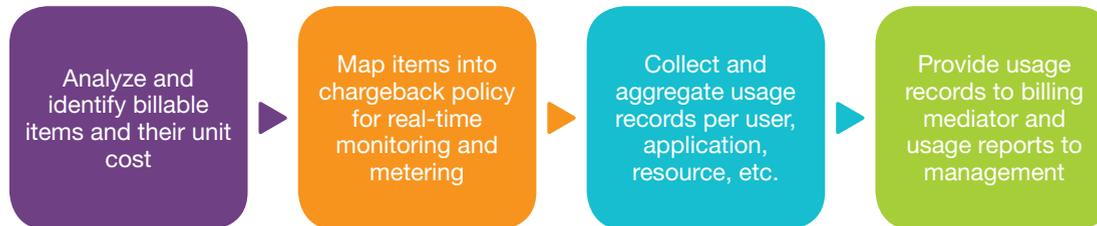
# Department SLA Chargeback

## Enterprise Network Optimization

### Key Benefits

- Provide visibility into resource utilization
- Justify and distribute the cost of IT services to corporate users/departments
- Improve capacity planning and budgeting

### Department SLA Chargeback in Action



Enterprises are distributing network and IT costs through chargeback models that effectively require different departments to pay for their usage and Service Level Agreement. Accurate and auditable chargeback models can be implemented using DPI-based solutions integrated with Active Directory to monitor and meter actual usage per user, per application or per resource (such as WAN or VPN link); to mediate those usage records into aggregate records for billing purposes; and to provide detailed reports to both department personnel and management. Likewise, IT managers can monitor and measure SLA deviations that would warrant a credit back to the department that was affected.



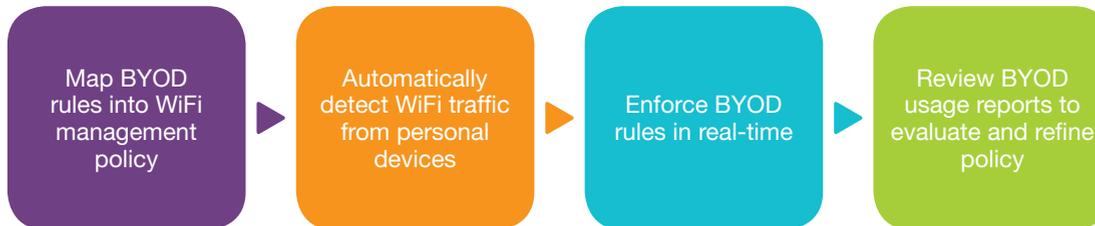
# WiFi BYOD Control

## Enterprise Network Optimization

### Key Benefits

- Allow personal devices to enhance employee productivity
- Ensure personal devices do not compromise the network
- Strengthen network security measures

### WiFi BYOD Control in Action



While many IT managers see Bring-Your-Own-Device (BYOD) as an inevitable disruption that opens the network to security risks, users see it as a great enabler of personal productivity and efficiency. Enterprises need the ability to enforce usage rules for personal devices once they are on the network. BYOD rules may include throttling heavy usage, blocking downloads of exe/zip files, allotting more bandwidth to employee devices over guest devices, and giving priority to business applications. Allot's superior DPI technology provides device signatures in the same way that it provides application signatures, and it updates them regularly. This ensures timely and accurate identification of non-corporate devices and their traffic on the network.



Allot SMP

Allot ClearSee Analytics

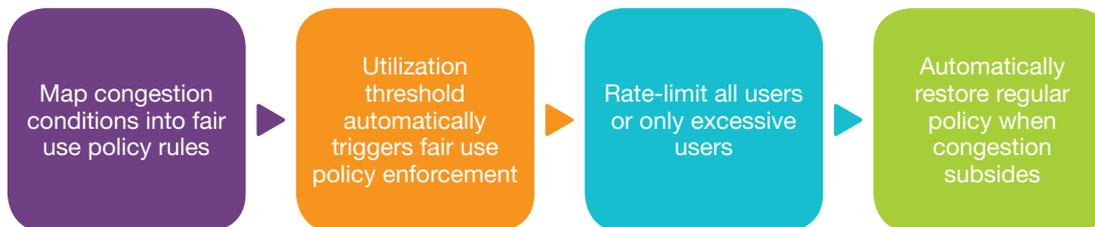
# WiFi Fair Use

## Enterprise Network Optimization

### Key Benefits

- Prevent WiFi network congestion
- Ensure WiFi service availability to all users
- Enhance customer satisfaction

### WiFi Fair Use in Action



A growing number of WiFi providers are the national retail chains, banks and restaurateurs who offer in-store/in-branch WiFi service to attract customers and enhance their shopping/banking/leisure experience. This service can be easily monopolized by one or two heavy users, and therefore requires fair use management. For example, a bank branch cannot afford to allow the child of a customer to consume all of the branch bandwidth watching HD videos while he waits for his parents to negotiate a home loan. DPI-based solutions allow these enterprises to monitor WiFi utilization in real time and enforce QoS based on dynamic network conditions.

  
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**Allot NetXplorer**  
**Allot SMP**

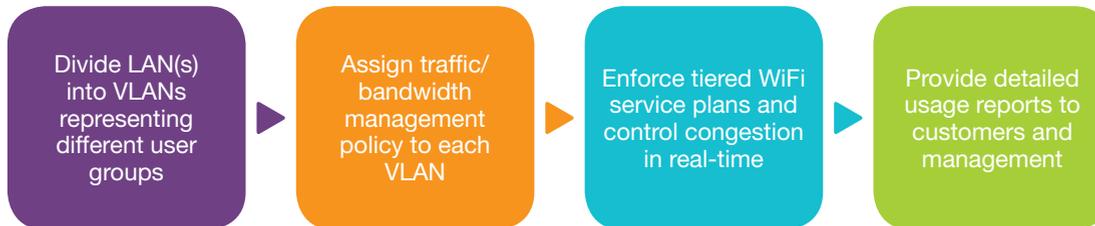
# WiFi Service Tiers

## Enterprise Network Optimization

### Key Benefits

- Match WiFi service to diverse groups of customers and employees
- Increase revenue through tiered WiFi packages as well as real-time and post-event upsell
- Improve resource utilization and planning through full visibility and tracking

### WiFi Service Tiers in Action



Hospitality enterprises often have multiple LANs - one for hotel guests, one for a convention center, and another for administration staff. The WiFi connectivity requirements for these user groups are typically quite different and require multiple bandwidth management policies. For example, guest rooms may receive a fixed amount of WiFi bandwidth with an option to pay-for-more, while convention and showfloor areas allocate bandwidth according to a tiered pricing structure per event. Numerous showfloor policies may be in use at an event, offering a range of WiFi access speeds, with real-time upsells enabled by a central command and control office. At the same time, congestion thresholds are monitored, triggering peak usage policies that may limit P2P traffic or individual connection establishment rates, ensuring sufficient bandwidth to meet SLAs.



# Real-time SLA Enforcement

Cloud / Data Center  
Optimization

## Key Benefits

- Accommodate a wide range of customer workloads
- Prevent customers from experiencing “bad” performance
- Reduce SLA deviations and associated penalties

## Real-time SLA Enforcement in Action



Many data centers are being deployed to house public and private cloud capabilities on behalf of enterprise customers who vary from individuals seeking online storage and backup of personal data, to small businesses who want much broader hosting services. Behind the scenes, DPI-based traffic management and policy control solutions enable cloud service providers to monitor usage volumes and average/peak bitrates in real-time for thousands of customers, and to enforce committed data rates (Internet bandwidth) for upload/download of customer content. DPI-based policy also balances the traffic load to/from/within the data center based on dynamic utilization conditions. Likewise, SLA reports detailing the inbound/outbound and overall bandwidth consumption and other bandwidth-related statistics are generated automatically and emailed to cloud service customers at whatever frequency the customer determines.

  
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Allot NetXplorer  
Allot SMP

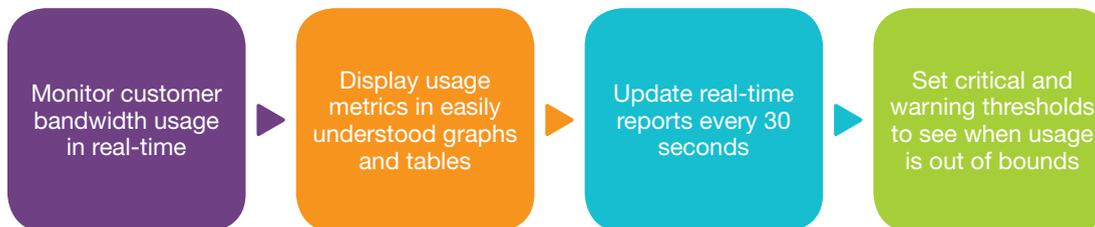
# Real-time SLA Report

Cloud / Data Center  
Optimization

## Key Benefits

- Communicate more effectively with users when SLAs are impacted
- Isolate and fix service-impacting problems faster
- Ensure SLAs match actual usage requirements

## Real-time SLA Report in Action



Cloud and data center service providers are often required to supply periodic SLA reports showing performance targets and the degree to which they were achieved. However, it is of limited value for IT managers to discover after-the-fact that certain SLA deviations occurred during the month and they may be due financial rewards. DPI-based solutions provide real-time performance metrics to help IT managers identify SLA violations as they occur and where they occur. As a result, they can correlate and assess the specific applications and end users who are affected. Also, as managers track actual bandwidth utilization against committed and peak bandwidth SLAs, they are better able to forecast when additional bandwidth will be required and may be able to prevent service-impacting conditions from occurring. SLA reports are generated automatically and emailed to cloud service customers at whatever frequency the customer determines.



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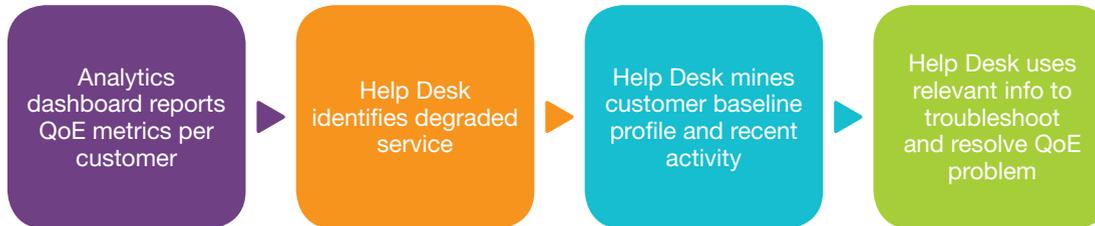
# Proactive Customer Care

Cloud / Data Center  
Optimization

## Key Benefits

- Identify and address degradations in user experience
- Reduce trial-and-error in resolving customer complaints
- Improve your Help Desk service and brand image

## Proactive Customer Care in Action



Proactive customer care requires the ability to understand the patterns and trends of data center usage. Providers need to analyze bandwidth utilization per customer and then drill down to see the applications and devices in use; the source and destination of the traffic; and the Quality of Experience customers are getting. Tools that offer **specialized dashboards** and preconfigured reports allow customer care personnel to monitor usage in real-time and over time, and to identify problems and to address them rapidly. Tools that offer **Self-service analytics** enable providers to look further and deeper into data center utilization and customer QoE by making it easy to build ad hoc reports to incorporate new data and to answer questions as they arise.



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Allot Service Gateway

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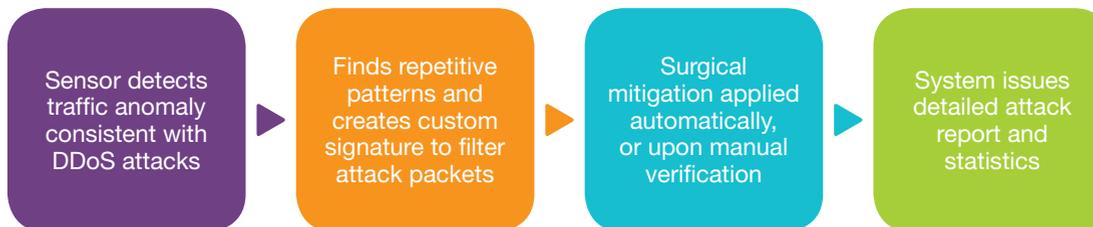
# Real-time DDoS Attack Mitigation

Cloud / Data Center  
Optimization

## Key Benefits

- Protect data center availability and efficiency
- Ensure data center SLAs and minimize the risk of outages
- Gain visibility into attackers and their targets in your cloud

## Real-time DDoS Attack Mitigation in Action



Cloud data centers are designed to help businesses cut costs and maximize IT efficiency, This is done by creating interconnected pools of virtualized resources that are shared between multiple data center locations. While the agility and cost benefits are many, cloud deployment makes the data center more vulnerable to threats from Denial of Service attacks and other malicious traffic that is designed to flood and exhaust computation and server processing resources. Surgical DoS/DDoS protection neutralizes flooding attacks within seconds of emergence by rapidly detecting, identifying, and filtering DDoS packets, while allowing legitimate traffic to flow unimpeded.

  
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**Allot ServiceProtector**

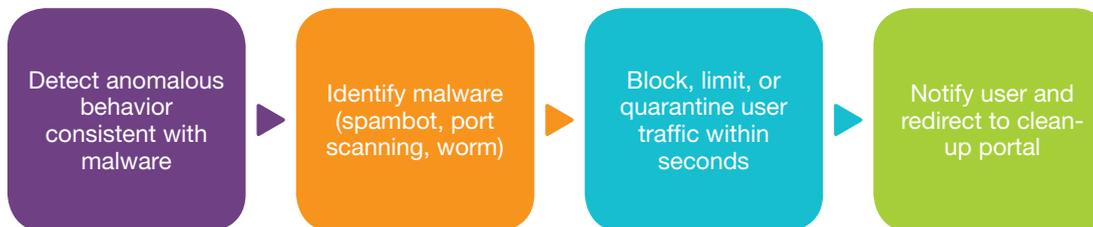
# Real-time Bot Containment

Cloud / Data Center  
Optimization

## Key Benefits

- Protect network integrity through fast treatment of spambot infections
- Ensure business productivity by blocking only anomalous traffic
- Reduce helpdesk time spent on problems resulting from malware

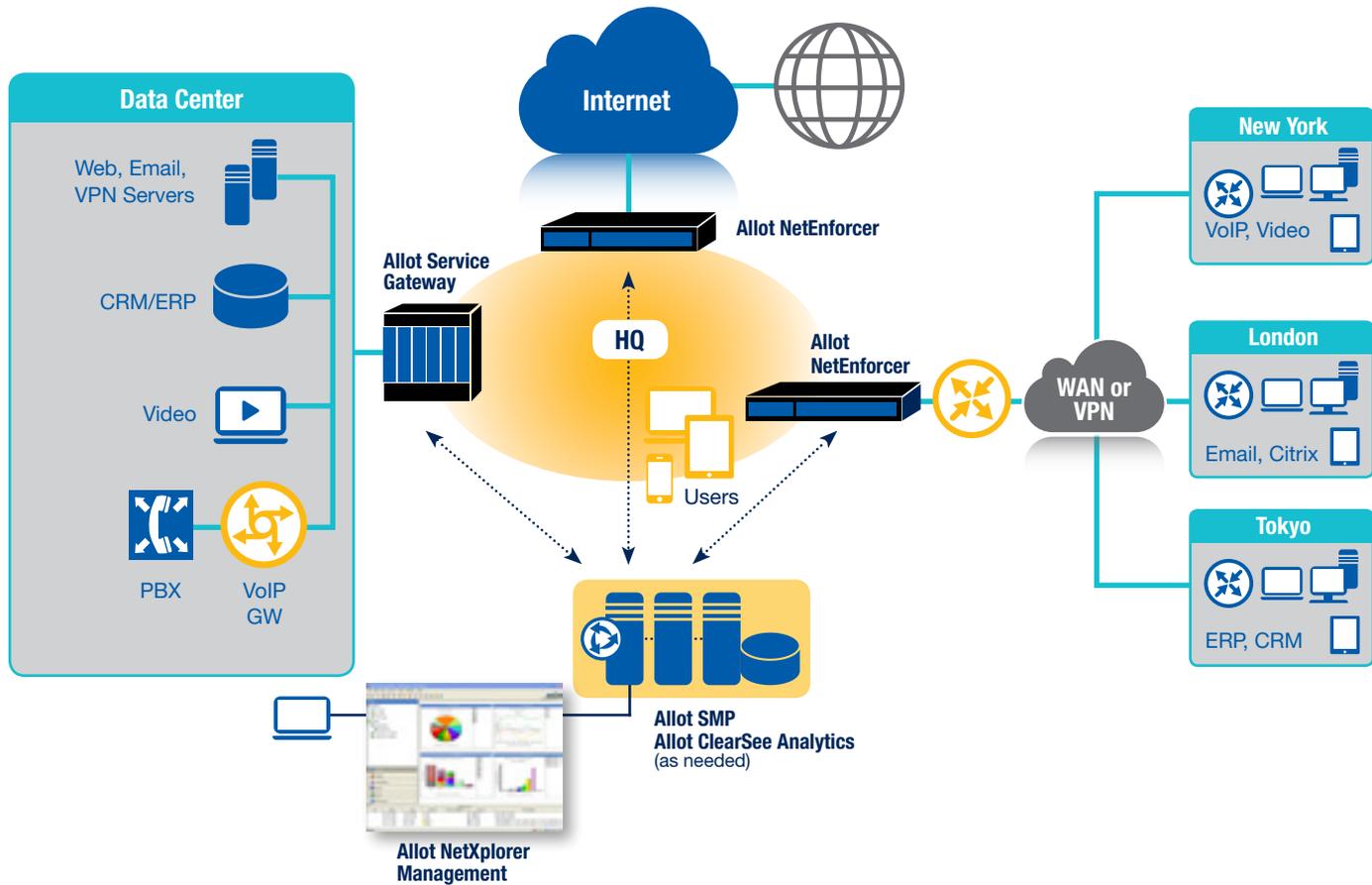
## Real-time Bot Containment Action



Defend your network against malicious bots by neutralizing malware-infected hosts and spam activity before it adversely affects network performance and integrity. Prevent unintended spam and IP scanning traffic from eating up valuable bandwidth and quickly identify infected hosts that require cleanup. Allot security solutions monitor connection establishment rates and other symptoms of anomalous user behavior, allowing enterprises to surgically treat the root cause (i.e., the malware-infected host) without having to resort to broader measures such as blocking entire subnets, links or ports. Behavior-based anomaly detection enhances existing security layers with frontline mitigation of spambots and other malware.



# Enterprise Network Deployment





## About Allot Communications

Allot Communications Ltd. (NASDAQ, TASE: ALLT) is a leading global provider of intelligent broadband solutions that put mobile, fixed and enterprise networks at the center of the digital lifestyle and workstyle. Allot's DPI-based solutions identify and leverage the business intelligence in data networks, empowering operators to analyze, protect, improve and enrich the digital lifestyle services they deliver. 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](http://www.allot.com)

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