

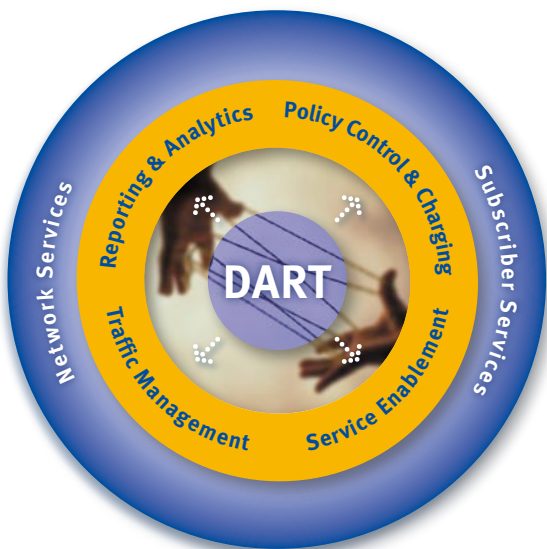
DART

Dynamic Actionable Recognition Technology

What is DART?

Dynamic Actionable Recognition Technology (DART) integrates Allot's vast expertise in IP traffic identification and policy enforcement into a highly effective toolkit for managing bandwidth consumption and service performance in mobile and fixed broadband networks.

DART gives network operators the visibility that enables them to optimize their service by introducing traffic management policies that will assure QoS (Quality of Service), to monetize their network with value-based charging schemes and value added services, and to personalize their offering by enabling subscribers to benefit from enhanced QoE (Quality of Experience).



DART is at the core of every Allot solution

How DART Works

Multiple Analysis Methods

DART employs multiple inspection and analytical methods to identify specific applications and protocols – from simple traffic monitoring to session-level analysis of encrypted protocols. DART utilizes continuously evolving forms of analysis that are able to accurately identify new applications and protocols, including flows that have been deliberately designed in order to evade detection.

This combination of behavioral and statistical techniques greatly improves recognition capabilities and reduces unidentified traffic, even at maximum speeds and peak loads.

Hitless Signature Library Updates

The challenge for operators is to keep pace with the ever growing number of frequently changing applications and protocols. For example, BitTorrent and Skype tend to upgrade their client software on a regular basis and encourage (and in some cases even force) users to move on to the latest release. DART employs hitless signature updates, enabling flows to be continuously and accurately detected and classified while the protocol library is being updated, leaving surrounding systems completely unaffected.

4 Layers of Awareness

Intelligent service optimization, monetization and personalization begin with granular visibility and an understanding of how IP-broadband network resources and services are being consumed. To that end, DART provides **four layers of traffic awareness**: application, device, subscriber, and network topology.



Application Awareness

The phenomenal growth of the smartphone market is reflected in equally strong growth in the number of applications that run on these devices. Users are demanding access to an ever-growing number of services including social networking, VoIP, chat, and video. Allot's DART identifies more over-the-top applications than any other solution on the market and can assign individual policies to each of them. For example, DART is able to identify the voice and chat features of Skype, MSN and Yahoo messengers – enabling operators to gain deeper insights into user behavior.

Through proactive learning, DART is able to adapt to changing tactics as applications attempt to evade detection through a range of measures such as concealment – as in the case of bandwidth-heavy peer2peer applications like BitTorrent. Frequent and ongoing updates to Allot's extensive signature library are designed to keep pace with developments and advances in Internet applications.



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Device Awareness

DART can distinguish between different devices – dongles, smartphones, or tablets; and different handset makers – such as iPhone, Samsung, and Blackberry. End users tend to favor specific devices for certain types of usages. For example, some devices are the choice for bandwidth heavy video applications; others are preferred for latency sensitive applications, such as gaming; while a third type of devices are more user-friendly for emailing. The ability to correlate between the type of device and its most popular usages can be highly instrumental in future capacity planning, in the introduction of personalized service plans, as well as in strategic decision making.

Allot's device awareness functionality enables operators to monitor tethering – using a mobile device as a modem for another device such as a laptop. The ability to identify tethering is important in service plan level enforcement, quota reporting, and charging.



Subscriber Awareness

DART can also identify the user who is generating the traffic. For example, the service provider may see that one subscriber is streaming YouTube videos to his laptop, while another is “skyping” from her iPhone. DART employs real-time mapping of static or dynamically allocated IP addresses to subscribers and their service plans in order to monitor subscriber-application usage and to track consumption patterns and trends in order to personalize the Internet experience.



Network Topology Awareness

Network topology is the fourth layer of awareness that DART brings to Allot solutions, providing valuable intelligence on specific

areas within the mobile or fixed network. As a result, operators can monitor and manage with pinpoint accuracy the utilization of areas such as cell backhaul and peering links, and can modify policies in real time in response to changing network conditions.

Ability to Act

DART gives network providers the ability to act upon the application, device, subscriber and topology intelligence they've gathered by mapping these elements directly into policy enforcement rules. As a result, operators can regulate bandwidth consumption, introduce tiered and application-based service plans, and steer traffic to value added services. Altogether, these separate actions result in a coherent enforcement policy that protects network integrity, reduces network costs, generates new revenue streams, and enhances the end-user's experience.

Ability to Scale

DART is an integral part of Allot Service Gateway and NetEnforcer inline platforms, which scale from 10 Mbps to 160 Gbps of throughput.

DART Benefits

- Comprehensive visibility of all network traffic
- Regular protocol pack updates for up-to-the-minute recognition capabilities
- Uninterrupted traffic detection and enforcement through hitless signature updates
- Enhanced QoS policy enforcement and network management
- Ability to monetize specific applications and deliver better QoE

About Allot Communications

Allot Communications Ltd. (NASDAQ: ALLT) is a leading provider of intelligent IP service optimization solutions for fixed and mobile broadband operators and large enterprises. Allot's rich portfolio of solutions leverages dynamic actionable recognition technology (DART) to transform broadband pipes into smart networks that can rapidly and efficiently deploy value added Internet services. Allot's scalable, carrier-grade solutions provide the visibility, topology awareness, security, application control and subscriber management that are vital to managing Internet service delivery, enhancing user experience, containing operating costs, and maximizing revenue in broadband networks.

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