

ADVANCED ANALYTICS FOR BUSINESS VPN APPLICATION ASSURANCE

LEVERAGE ENTERPRISE APPLICATION USAGE AND PERFORMANCE INTELLIGENCE WITH THE ALCATEL-LUCENT 5670 RAM

- **Enables new business VPN services with application-level visibility for enterprise customers**
- **Intelligence allows support teams to resolve problems faster, resulting in a better user experience and lower support costs**
- **More scalable and cost-efficient than traditional solutions**

An Alcatel-Lucent Application Assured VPN (AA-VPN) offers service providers the capability to develop differentiated, revenue-generating business VPN services while solving critical challenges for enterprise customers as they centralize application delivery and ultimately adopt cloud services. As an integral part of the Alcatel-Lucent AA-VPN solution that enables application-aware VPN and dynamic cloud VPN services, the Alcatel-Lucent 5670 Reporting and Analysis Manager (RAM) provides analytics that enable service providers and their customers to explore the usage trends and performance of enterprise applications. It extends a service-aware L2/L3 VPN to include per-application volume, performance and quality of experience (QoE) analysis. This analysis enables application-aware fault isolation, diagnostics/forensics and capacity planning.

SOLUTION OVERVIEW

With demand for bandwidth-intensive and time-sensitive applications on the rise, it is crucial for service providers to understand exactly how enterprise customers are using applications over their VPN service. Faced with increased competitive pressure, there is even more of a need to offer innovative services and ensure a positive user experience plus full compliance with Service Level Agreements (SLAs). At the same time, to be profitable, delivery of services must make efficient use of existing network and operations resources.

Enterprise customers also often lack a good understanding of how corporate networks are being used by their employees, and lack the intelligence to distinguish mission-critical traffic from best-effort traffic. This makes planning and budgeting a daunting experience, and impacts their ability to respond adequately to enterprise network issues.

A new generation of application-aware intelligence is required to address these issues – and the Alcatel-Lucent AA-VPN solution with the 5670 RAM provides the advanced analytics needed to deliver this intelligence.

The 5670 RAM identifies, classifies and analyzes enterprise applications to enable service providers and their customers to explore usage trends and performance. It extends a service-aware L2/L3 VPN to include per-application volume, performance and quality of experience (QoE) analysis. This analysis also enables application-aware fault isolation, diagnostics/forensics and capacity planning.

Out-of-the-box reporting delivers immediate value through a wide range of predefined reports. Versatile reporting options also provide flexible report authoring capabilities that ensure relevance of information for specific audiences. For example, executives benefit from succinct Application Performance Index (APDEX) dashboards and reports that provide summaries of overall user satisfaction and application health.

With a highly flexible and scalable architecture, the 5670 RAM provides an intelligent aggregation engine that enables collection and warehousing of massive amounts of data. Access to data from open, northbound interfaces saves the time and money normally required for integration with portals and operations support systems/business support systems (OSSs/BSSs).

Tight integration with the Alcatel-Lucent 5620 Service Aware Manager (SAM) enables dynamic inventory tracking for uninterrupted reporting without manual intervention. Traditional reporting suites do not have this capability.

ENABLE A NEW BREED OF BUSINESS VPN SERVICES

Leveraging intelligence on enterprise application usage and network performance, service providers can now evolve their enterprise services into application-aware VPNs and dynamic cloud VPNs.

Product managers can use the intelligence provided by the 5670 RAM to define these new application-aware services and introduce service plans with different QoS levels to meet enterprise-specific requirements. Up-sell opportunities, including service upgrades, professional services and hosted applications, can now be justified with a business case based on customer reporting data.

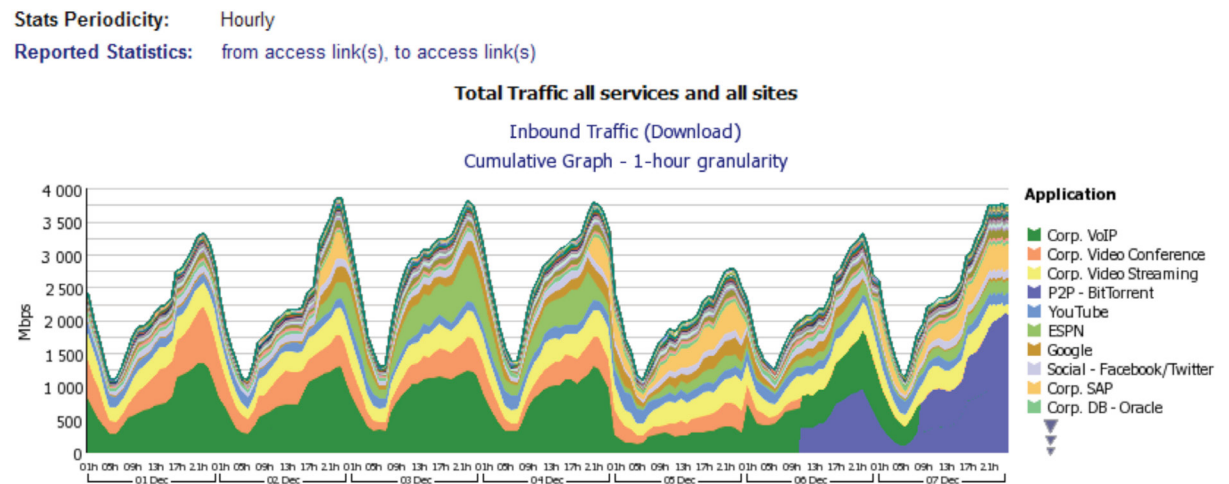
Self-care web portals can be offered to customers to provide insight into their specific application usage and network performance analysis

information. This intelligence allows enterprise IT managers to better customize and control their services to meet their needs, such as through capacity right-sizing or application-level policing. Intelligence can also be used to help enterprises justify their spending, simplify their planning and support enterprise IT network diagnostic activities.

ENSURE A POSITIVE USER EXPERIENCE

With the 5670 RAM, enterprise IT managers will now have a clear understanding of how QoE of mission-critical applications such as VoIP or video conferencing are impacted by use of non-critical applications such as Peer-to-Peer (P2P), YouTube and Facebook (see Figure 1).

Figure 1. Visibility into rogue traffic impacting mission-critical applications



“WITH THE ALCATEL-LUCENT APPLICATION ASSURANCE SOLUTION, OUR ENTERPRISE CUSTOMERS WILL HAVE CLEAR INSIGHT INTO HOW MUCH BANDWIDTH VARIOUS APPLICATIONS ARE USING.”

– TOM WUYTS, DIRECTOR WAN, INTERNET & SECURITY (ENTERPRISE BUSINESS UNIT), BELGACOM

For service providers, the 5670 RAM enables superior SLA assurance by enabling operators to monitor, analyze and document application performance, usage trends and traffic flows. This also allows network operations teams to detect potential issues before they become service affecting and to better document and conduct forensic analysis to report on the causes of SLA-affecting issues.

However, user experience may suffer even in cases where all SLA parameters are met. The detailed analysis of application-level performance and the volume of application traffic flows provided by the 5670 RAM help to guarantee QoE for business-critical applications and remove the need for customers to invest in costly WAN optimization products.

FLEXIBILITY AND EFFICIENCY TO SCALE OPERATIONS

Most solutions that provide application-level information rely on a highly distributed overlay network of WAN optimization and control

appliances that are deployed within the customer premises. These devices are typically configured and managed independently from the rest of the network, requiring the service provider to incorporate on-site services as well as adapt processes and workflows. The network-centric Alcatel-Lucent approach to application assurance helps service providers minimize investments in new hardware and software, giving them the flexibility and efficiency needed to better scale operations.

The 5670 RAM provides a versatile reporting and analysis engine that produces immediate benefit through a wide range of predefined reports. It also offers flexible custom report authoring capabilities to create reports for different audiences. This enables efficient analysis and visualization of current patterns and historical trends.

For network operators, the 5670 RAM extends service-aware management information from the 5620 SAM on Ethernet- and IP/MPLS-based enterprise VPNs to include per-application volume, performance and QoE analysis. With the 5670 RAM, traffic flows can be examined across various service segments and through specific points in the network. This increases operational efficiency in support of fault isolation, troubleshooting, diagnostics/forensics and capacity planning.

The 5670 RAM scales to securely collect and warehouse massive volumes of fine-grain data that is intelligently aggregated as required. Northbound interfaces simplify integration with existing workflows, processes and OSSs/BSSs.

THE ALCATEL-LUCENT ADVANTAGE

Alcatel-Lucent's comprehensive portfolio of service-aware management applications enables service providers to implement the lean and scalable operations processes required to deliver a positive user experience and meet strict SLAs.

The 5670 RAM delivers accurate, timely application-level intelligence for service providers and enterprise customers as well as provides insight into improving application performance and optimizing QoS.

By using the 5670 RAM to collect, warehouse, aggregate and analyze application performance and traffic flows, service providers are able to better understand network usage and make informed decisions. Telstra, Belgacom and many other service providers worldwide have already deployed the Alcatel-Lucent AA-VPN solution with the 5670 RAM to ensure a positive user experience, sustained revenue growth and operational flexibility while increasing profits.

LEARN MORE

Visit the Alcatel-Lucent website for more information on the 5670 RAM:

www.alcatel-lucent.com/5670ram

www.alcatel-lucent.com Alcatel, Lucent, Alcatel-Lucent and the Alcatel-Lucent logo are trademarks of Alcatel-Lucent. All other trademarks are the property of their respective owners. The information presented is subject to change without notice. Alcatel-Lucent assumes no responsibility for inaccuracies contained herein. Copyright © 2012 Alcatel-Lucent. All rights reserved. M20120104633 (October)