

Carrier High-Availability AAA Suite

AAA SERVICE CHALLENGES

OSS/BSS Authentication, Authorization and Accounting (AAA) services form a critical component of carrier broadband access:

- Front-end AAA support for broadband/ mobility services
- Back-end subscriber data management
- HLR /HSS migration to support 'on-demand' service models, WAS and 'on-line' charging

The need to address AAA service requirements to meet fixed-mobile infrastructure convergence, service convergence (driven by IMS) and IT convergence is driving OSS/BSS consolidation.

However, Converged AAA/SDM environments introduce multiple IP service challenges including multi-protocol support, service availability, scalability, security and virtualization, along with subscriber and service awareness need to enable new 'on-demand' business models.

Radware transforms carrier networks into service aware networks, enabling the optimization of all mission critical, 'high-touch', authentication, authorization and accounting (AAA/SDM) services across the carrier OSS/BSS including DHCP, DNS, RADIUS, LDAP as well as next generation IMS-HSS DIAMETER and HLR migration service architectures.

Radware provides a unified IP traffic management framework to control broadband AAA service reliability and performance while enabling the consolidation of common OSS/BSS IP services for operational efficiency, cost savings and full support of fixed-mobile network convergence.



User Awareness



Service Awareness



Content Awareness

Radware intelligent IP service overlay affords user, service and content-awareness, optimizing AAA service operations across the OSS-BSS:

- Full support of next generation front-end AAA (HSS-DIAMETER, RADIUS and HLR successors) for broadband mobility services, mobile migration and back-end subscriber data management (SDM) enabling HLR /HSS migration, 'on-demand' service models, WAS and 'on-line' charging.
- Wire-speed, deep packet and deep flow inspection (DPI/DFI) for OSS/BSS application and transaction visibility and comprehensive layer 2-7 services including: high availability, global AAA load distribution, network-based, 'zero-minute, zero-touch, zero false positives' DoS/DDoS flood mitigation and Intrusion Prevention, AAA transaction persistency, AAA acceleration, high scalability and disaster recovery.
- OSS/BSS virtualization for infrastructure flexibility, consolidation and simplification, delivering immediate OpEx/CapEx savings.

Feature	Carrier Benefit	APSOlute Advantage
Multi-Protocol/Multi-Service Support	Single AAA service control overlay to optimize DHCP, DNS, RADIUS, LDAP and HSS-DIAMETER	Flexible approach that supports convergence and migration strategies to NG networks and IMS frameworks.
High Availability	Fault tolerant and continuous broadband user access, failure bypassing, reduced customer churn	Server/application availability based on physical/logical criteria, full application/transaction path.
Intelligent Load Distribution	Service burst management, eliminated latencies and heightened responsiveness for end-users.	Transaction persistency, unique TCP and Diameter splitting mechanism and optimized layer 2-7 load balancing and traffic redirection
Virtualized AAA Architecture Global Disaster Recovery	Global service redundancy, immediate disaster recovery and complete AAA infrastructure and service flexibility for OpEx/Capex savings.	Global, optimized messaging-level traffic management to support fixed/mobile/IMS network consolidation.
AAA Service Scalability	Serve millions of users, economically scale AAA to meet broadband service growth.	AAA front-end optimizes aggregated global resource pools maximizing utilization, eliminating the need for server 'over-building' and affording full flexibility in use of small scaled servers for immediate ROI.
Real-Time Network-based IPS/DoS Security	Built in Intrusion Prevention to block known attacks and OS exploits and Denial of Service Protection to safeguard against service floods.	1,500+ attack signature database, advanced behavioral DoS/DDoS for 'zero-touch, zero-minute' mitigation and 24/7/365 Security Update Service.
User, Application, Subscriber Awareness	Complete visibility and classification of traffic for 'on-demand' broadband service enablement and usage-based billing.	Granular, policy-based traffic management based on any Layer 2-7 criteria, SLA management and service metering



Carrier-Grade Visibility, Control & Performance

Radware enhances the network's ability to identify, classify and manage AAA service operations, guaranteeing service reliability while providing tools to enable 'on-demand' broadband service delivery and granular billing to help carriers drive IP service profitability.

Radware OSS/BSS Solutions are built on-top of multi-Gigabit, carrier-grade AppDirector and AppXcel APSolute Application Switches to meet even the most demanding carrier networking environments. The system is designed for 99.999% uptime and supports fully redundant configurations for AAA service control fault tolerance and immediate disaster recovery.

Learn More

To learn more about how Radware carrier solutions can help optimize, control and drive the profitability of your IP services eMail us at carrierinfo@radware.com or visit us at www.radware.com.