



Key Benefits

- Carrier Grade & Scalable
- WiMAX Forum NWG 1.5 Compliant
- Multi-Vendor Support
- Multiple Services on single Platform
- Compliant to latest Standards & RFCs
- Support for On Demand & Prepaid services
- Open API for Integration with existing infrastructure
- Supports WiMAX 16e & 16d deployment

EliteAAA Overview

A robust AAA server is a preliminary requirement to propel the growth that comes with the launch of new services and an increasing subscriber base. EliteAAA is the answer to the aggressive and ever-growing access control, service delivery, and accounting requirements of carriers, service providers, and wireless operators. Be it wireless or Wireline Internet access, outsourced remote access, managed VPNs, broadband, VoIP or any combination of services, EliteAAA centrally manages the authentication of the subscribers, authorizes them for appropriate level of service, and ensures reliable accounting of their usage.

Industry Overview

WiMAX has been designed as a true next-generation access technology. WiMAX provides fixed, nomadic, portable, mobile wireless broadband connectivity without the need for direct line-of-sight with a base station and is expected to replace the GSM Technology in the long term. In the WiMAX forum's NWG release specification AAA is specified as the basic building block to effectively capitalize on the opportunities presented by WiMAX. The reference architecture, service flexibility and mobility supported by WiMAX demands a robust AAA server. The role of the AAA system in WiMAX networks extends well beyond access security and accounting. Service providers will need to closely examine the capabilities of the AAA system for successful WiMAX roll out.

Elite AAA for WiMAX

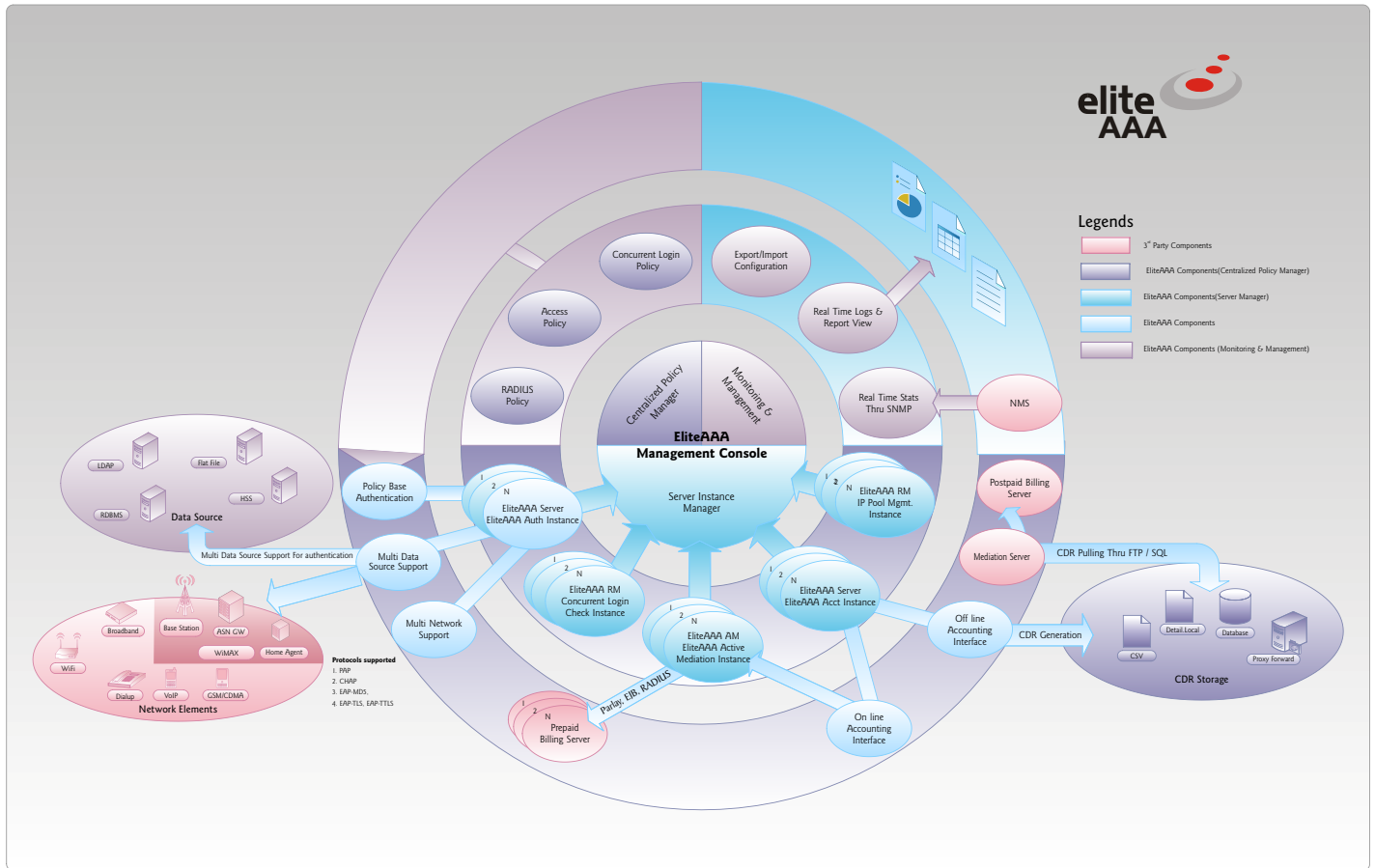
EliteAAA centrally manages the authentication of WiMAX subscribers, authorizes them for appropriate level of service, and ensures reliable accounting of the usage. EliteAAA for WiMAX includes an integrated RDBMS database which can further be extended, Web self care, Service Selection portal, Captive Portal, Hotlining & Policy Manager.

EliteAAA is dual stack AAA supporting Radius & Diameter protocols. It also provides Advanced EAP based Authentication EAP-TLS and EAP-TTLS for Device Authentication and User Authentication. EliteAAA supports the intelligence and performance to manage mobility and roaming in WiMAX networks. EliteAAA empowers service provider's competitive strength; It includes state-of-the-art reliability features, including load balancing and redundancy across your authentication and accounting systems.

Key Capabilities

Multi Protocol & Multiple Authentication Method Support

EliteAAA's Dual-stack AAA with RADIUS and Diameter, enables migration to IMS. EliteAAA communicates to ASN gateways via NWG R3 Interface & CSN Layers thru RADIUS / Diameter / SOAP/HTTP interfaces. It supports multiple EAP methods (EAP-MD5, EAP-TLS, EAP-TTLS, etc.) simultaneously, ensures a seamless subscriber experience while roaming. It supports Device and User Authentication via X.509 Certificates or Pre Shared Key and Intelligent Proxy based Authentication while also enables full support for Mobile IP key derivation. EliteAAA also supports username/ password based authentication or CUI base authentication for casual users.



Real time Session Management and Subscriber Management

EliteAAA enables real-time session management to enable mobility, roaming, security, and usage tracking. It aggregates, correlates, formats, and automatically streams records to appropriate billing and settlement systems with no human intervention. EliteAAA Supports Change of Authorization (CoA) for dynamic profile change for bandwidth upgrades etc during a live session.

Session & Flow Based Accounting

EliteAAA supports both Flow based & Session based accounting needed for WiMAX. In WiMAX, many accounting records can be generated because of mobility. EliteAAA receives and organizes large volume of accounting records. It also support a complex accounting strategy to identify usable records from the raw accounting message, it synthesizes those records into formats that can be used by a billing system. An additional benefit is EliteAAA simultaneously supports Session based & Flow based accounting enabling service providers to deploy innovative flow based pricing schemes.

Flexible and versatile policy management

Single-platform solution with common policy and profile repository to control access to advanced services across multiple networks. It's Integrated Policy Engine and database helps create different types of Policy for different services for single customer profile. Allows for sharing of common centralized address pools for more than one NAS.

MIP for Roaming: EliteAAA offers support for wireless Mobile-IP (MIP) standards that is very essential for data roaming facility which would allow subscribers from one network to use their devices to access their "home" data services easily on another network.

Seamless Integration with Prepaid Servers

EliteAAA seamlessly integrates with prepaid servers, allocates quota to multiple concurrent services. It supports Complex Rating & One time charging, also supports Prepaid Services in Roaming Network & Tariff Switching based on duration and Volume. Reduces revenue leakage and create new revenues from top-up services through Hotlining or Subscriber Redirection.

Pre-provisioned QoS Support

It can communicate pre-provisioned QoS parameters such as upload or download bandwidth related parameters, where the metering could be time-based or volume-based, to the network elements. It supports Multiple Traffic Flows with Specific QoS and QoS Support for every subscriber session or application

Support for ASN gateways with different QoS Parameters:

The infrastructure and access networks for realizing services over WiMAX are varied. Each ASN gateways have different QoS parameters. EliteAAA policy manager supports ease in configuration for different ASN gateway QoS Parameters. Supporting a truly open WiMAX ecosystem.

Hotlining Module

EliteAAA Hotlining module supports redirection of subscribers that have exceeded usage or credit limit and need to pay before continuing usage. It helps prevent excessive & fraudulent service usage.

Security

Security is a primary requirement from AAA in WiMAX. EliteAAA support MSK and EMSK for Mobile IP that enables secure connection and exchange of information. Elitecore also has a Legal Intercept module to meet the regulatory compliances. It uses https for all-Hotlining, Captive Portal, Webself Care, Service Selection portal, assigning each session a unique ID.

Multi Service, Multi business Support

EliteAAA supports multiple business model Wholesale, Retail, MVNO as well as prepaid & postpaid service roll out. EliteAAA also supports multi services on a single platform with requirements of different bandwidth across different services, differing QoS for different services, IP, concurrent session and so on. Thus allowing Service Providers to define and manage subscriber policies and profiles centrally while extending local control to offer services based on the requirement.

Broad Multi Vendor Support

The system fits into any network environment such as WiMAX, Broadband, VoIP, GSM/CDMA, Dialup and Wi-fi and works with the widest variety of network access equipment. This broad multi-vendor support leads to easy integration of legacy systems with new systems. It supports multiple data source such as LDAP, RDBMS, HSS and Flat file, and is compatible with the latest authentication, provisioning, and billing systems.

Seamless Integration with Elitecore CRESTEL CSN Component

- CRESTEL Convergent Rating & Charging (OCS)
- CRESTEL Prepaid Billing CRESTEL Convergent Billing
- CRESTEL Provisioning
- CRESTEL Customer Care

About Elitecore Technologies Ltd.

Elitecore Technologies is the provider of CRESTEL - Billing Revenue Management & EliteAAA - Core Network Session Control Software to enable Next Generation Voice, Video & Data Services offered by Tier-1 to Tier 3 Telecom operators / service providers over Wireline or Wireless Networks offered directly and through distribution channels. Elitecore serves customers across the globe with presence in more than 75 countries and is a Carlyle invested company-The Carlyle Group is a global private equity firm with USD 84.5 billion under its management. For more information, visit Elitecore Technologies Ltd. at www.elitecore.com



Corporate Office

Elitecore Technologies Ltd.
904, Silicon Tower, Off. C.G.
Road, Ahmedabad - 380 006.
INDIA.
Tel: +91-79-66065606,
Fax: +91-79-26407640

Sales & Marketing

Mumbai Tel: +91-22-66951280 / 1380 Fax: +91-22-66923363
Delhi Tel: +91-11-41589761/62 Fax: +91-11-41589760
Bangalore Tel: +91-80-41517880 / 81 Fax: +91-80-41517883
USA New Jersey Tel: 201-422-9200 Fax: 201-735-5888
Bahrain Tel: +97316199249 Fax: +973-16-500-501
Toll Free: 1-800-301-00013

