



# GRIDLOC

MAXIMIZED CONNECTIVITY, BOUNDLESS POSSIBILITIES

Manage, Maximize, and Monetize your network and reap from the multitude of benefits. Gridloc is composed of AAA, Policy Control, Captive Portal, Voucher Management and Billing modules. It can support telco service providers and enterprises to promote products and services via the customizable portal as well as control the usage of customers.



## MANAGE

### Take control of your network.

Gridloc provides a centralized profile and policy management. A feature-rich dashboard showcases pertinent information about your network. Customize the login type by using pre-defined templates.



## MAXIMIZE

### Get the most out of your network.

Gridloc implements a rigid session management which supports a wide-range of servers. Allot either time-based or volume-based packages to the users. Configure and customize the authentication methods and policies.



## MONETIZE

### Capitalize on your network.

Gridloc can help network providers build and implement billing and marketing strategies. Voucher-based user login can be implemented to directly generate revenue. Survey and analytics can serve as valuable marketing information sources.



Gridloc is a complete solution that allows network providers to provide a customized user experience by managing the portal, user authentication and policy control of the network. Gridloc can make network management easier for providers by enabling them to maximize and monetize opportunities from it.

## Product Features

### Template Based Portal Types

- Click through
  - Accept Terms and Conditions
  - Form Type
- Survey Questionnaire
- Username and Password
- Voucher Login
- Social Media Login
- Video Playback
- Custom HTML\*

### Dashboard and Reports

- System Overview
- Cluster Health
- Subscriber Hits and Logins
- Unique users
- New vs. Returning users
- Survey Results
- Access Duration
- Access Point Heatmap
- Top User Uploads
- Top User Downloads
- Device Type and Device Vendor
- Device Operating System
- User Demographics
- Passerby and Visitor Count

### Usage Type

- Time-based Package
  - Running Time
  - Consumable Time
- Volume-based Package
- Voucher/PIN Based

### Authentication Protocols

- PAP, CHAP, EAP TLS, EAP-SIM/AKA\*\*
- MAC based authentication
- Voucher authentication
- RadSec – secure, reliable RADIUS Proxy

### Implementation Type

- Cloud-based
- Server-based
- Software as a Service

### Related Systems

- Lighthouse Mobile Application
- Gridloc Billing
- Gridloc Mobile Application
- EAP-SIM/AKA Adapter\*\*
- CDR Adapter\*

## Standards Support

### **Authentication, Authorization and Accounting**

RFC 2865 Remote Authentication Dial In User Service (RADIUS)  
RFC 2866 RADIUS Accounting  
RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support  
RFC 2868 RADIUS Attributes for Tunnel Protocol Support  
RFC 2869 RADIUS Extensions  
RFC 2618 RADIUS Authentication Client MIB  
RFC 3576 Dynamic Authorization Extensions to RADIUS

### **Diameter**

RFC 3588 Diameter Base Protocol\*\*\*  
RFC 4006 Diameter Credit Control Application

### **SNMP**

RADIUS Authentication Client MIB  
RADIUS Authentication Server MIB  
RADIUS Accounting Client MIB  
RADIUS Accounting Server MIB

### **EAP**

RFC 3748 Simple CHAP  
RFC 2716 Transport Layer Security  
RFC 4186 EAP Method for GSM for Mobile Communication Subscriber Identity Module (EAP-SIM)\*\*  
RFC 4187 Authentication and Key Agreement (EAP-AKA)\*\*

### **Administration**

Web-based Administration  
Command line interface  
API for OSS/BSS Integration

## Software Components and Benefits

### **GridLogic™**

Create custom rules and policies for pre and post authentication of subscribers. This enables network providers to provide flexible networks and service policies.

### **Integrated Portal, AAA and Policy Control**

The integrated software lets the network providers to easily manage and monitor their network as well as define new services for faster time-to-market deployment.

### **Access Agnostic**

Designed to work across all devices and interoperates with a range of access points and gateways

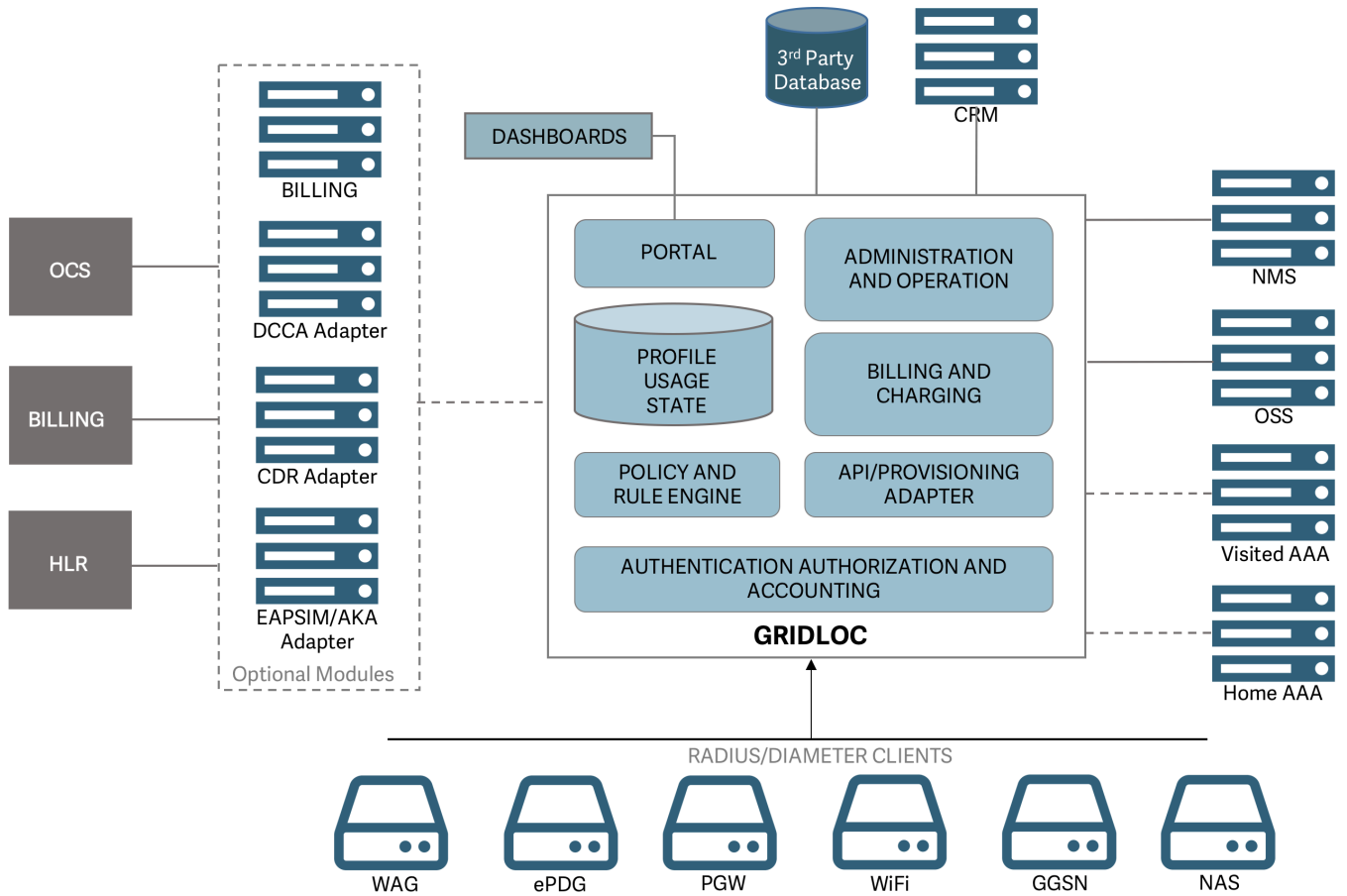
### **Subscriber and Session Management**

Control and manage subscriber status, session, profile packages and credits

### **Deployment Options**

Implement software high-availability, database replication and software redundancy

# Architecture



# System Requirements

Requirement	Minimum Configuration	Recommended Configuration
CPU	3.4 GHz, Dual-Core	2 x 2.6 GHz, Quad-Core
Memory	16GB RAM	64GB RAM
Internal Storage	250GB	1TB 10K SAS HDD
System Type	Intel® NUC Kit	PowerEdge R430 Server or equivalent
Operating System	Debian Linux, CENTOS 7	Red Hat Enterprise Linux 7
Network	1 x 10 MBPS Ethernet	4 x 10/100/1000 Mbps Ethernet

## Access Points

The following WiFi access point brands are tested and compatible with Gridloc:

- Altai
- Aruba
- Antlabs
- Cisco Aeronet
- Cisco Meraki
- Cisco WLC
- D-Link
- Edge Core
- Extreme Networks
- Fortinet
- HP
- Huawei
- IgniteNet
- LigoWave
- Linksys
- Mikrotik
- Motorola
- Open Mesh
- Ruckus
- Ruijie
- TP-Link
- Ubiquiti
- Xirrus
- Zebra Networks
- Zyxel
- ZTE