

# Vedicis Case Study

Wireless Access Gateway (WAG) solution for Tier 1 Mobile operator

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## Overview

Vedicis provides its software Wireless Access Gateway (WAG) to a tier 1 Mobile Network Operator in India. Managing the access to Internet from the Wifi network, the Vedicis solution enables to extend network coverage and to provide new data services to subscribers.

## Situation

Subscribers' need for mobility and bandwidth demanding applications keeps growing. **Operators are therefore facing the requirement for an endless and expensive network expansion, which is no more directly linked to new revenues.**

Either they invest massive capex in mobile (3G/LTE/ and 5G in the future) and fixed (DSL, fiber) networks, or they complement their current network with WIFI networks to rapidly increase their Internet access coverage.

In this respect, **WIFI represents a flexible alternative to standard access with fast deployment and time to service.** Moreover, it allows operators to increase customers' satisfaction with multi-access capabilities, and to generate a new source of revenues with advanced data services.

### Customer and partner profile

#### Partner

- Leader in end-to-end Wifi solutions, integrating Wifi controller, AAA, PCRF and OCS components.
- Provider of India's first Smart City

#### Customer

- Tier 1 operator in India providing Mobile, Fiber and Wifi services
- Around 14 000 wifi hotspots, 90 Millions of mobile subscribers.

## Challenge

Wifi network deployments used to rely on autonomous and costly access points, embedding authentication and routing capabilities. The architecture built by Vedicis partner reduces the complexity and functional scope of Access points, while centralizing key functions in a WAG and Wifi management platform. This is far more cost-efficient and scalable; moreover, it eases service deployment and operation.

This powerful architecture requires a powerful WAG, to be able to efficiently manage the data traffic coming from hundreds of Hotspots, and to integrate with authentication, policy and charging control components. A specific challenge for this project was also to be able to re-use hardware servers already chosen by the operator. Deploying a software and virtualized product was therefore no longer an option.

**How to deploy a cost-efficient Wireless Access Gateway, integrated within the Wifi ecosystem and running on third party hardware?**

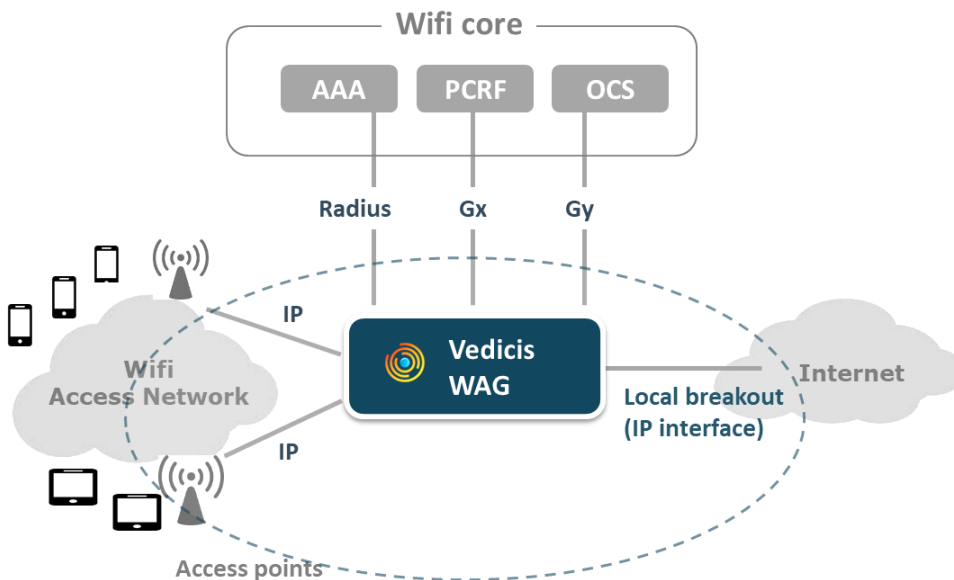


## Vedicis solution and key benefits

### Software TWAG (Trusted Wireless Access Gateway)

Based on the Vedicis Software Service Gateway (SSG) platform, Vedicis Wireless Access Gateway (WAG) allows the MNO to expand network coverage and monetize Wifi traffic, securely routing IP traffic from Wifi access points to local internet peers.

Integrating an advanced Deep Packet Inspection (DPI) engine with policy and charging enforcement function (PCEF), Vedicis WAG is a centralized and cost efficient gateway to enhance customer experience, generate new revenue and optimize IP traffic management.



### Key figures

- 10 points of presence
- 2 months for first deployment
- 200 Gbps of throughput
- +3000 Apps. and protocols

The architecture relies on 3GPP standard interfaces: IPoE for network integration, AAA for subscriber identification, Gx and Gy for policy and charging control.

The Vedicis WAG is deployed in different points of presence, called "circles", distributed all over the country.

### Key features

#### Traffic management

- Data traffic gating, shaping
- Data traffic monetization
- Local breakout to Internet

#### Visibility

- Deep Packet Inspection
- Traffic statistics
- Configurable Data records
- Legal compliancy

Vedicis software is deployed on third party servers with a high level of performance. It does not even require any specific board or resources for the DPI function. This is key for the customer, who has been able to re-use existing hardware.

Using the Vedicis Wireless Access Gateway, the customer has been able to reach the following benefits:

- **Cost saving** with Mobile Data offload
- **New revenue** with Wifi traffic monetization
- **Data traffic visibility** for better knowledge of subscribers' usage.

#### About Vedicis

Vedicis provides network gateways and platforms such as Packet Gateway (PGW), Wireless Access Gateway (WAG), Evolved Packet Data Gateway (ePDG), IP probes and Deep Packet Inspection Policy and Charging Enforcement Function (DPI-PCEF) to Communication Service Providers (MNOs, MVNO/Es, IOT Service Providers, ISPs). Vedicis innovative platform enables to analyze, control and monetize IP broadband usage thanks to new data subscriptions, OTT partnerships and new IOT services. These solutions are delivered with a cloud native platform, Vedicis Software Service Gateway (SSG) and leverage both 3GPP and open standards to accelerate telecom digital transformation, so that Telecom operators can reap the benefits of more flexibility, faster integration and better ROI. Please visit [www.vedicis.com](http://www.vedicis.com) or email to [info@vedicis.com](mailto:info@vedicis.com).