

ITUMA WIFI ORCHESTRATION

Handout



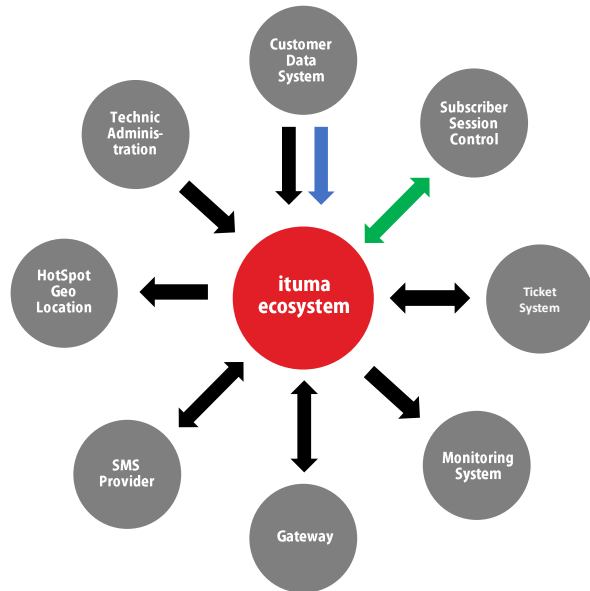
ITUMA WIFI - MDU/TENANTS/CAMPUS/HOSPITALITY

PROVIDE SELFMANAGEMENT MULTI SERVICE WI-FI PLATFORM

HOLISTIC ECOSYSTEM

Central orchestration

Holistic, cross-system Wi-Fi management solution that combines the technical connections, central customer- and access point management as well as operation and monitoring functions.



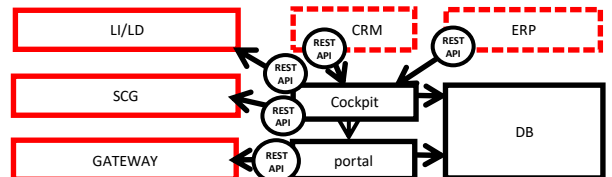
BENEFITS

- » Selfcare portal for renter and tenants
- » cost reduction due to high automation
- » Simplified customer billing through RestAPI interfaces to CRM and ERP systems
- » open system – adoptable to interact with almost any kind of customer infrastructure element

RESOURCE REDUCTION

Customer self-administration based on an automated onboarding process and a self explanatory web-based administration portal minimizes support overhead.

High level of control interfaces to central customer components and sophisticated process flows reduce inter-divisional dependencies and ticket escalation. This improves support processes, lowers resource expenses and promotes customer satisfaction.



LEGAL REQUIREMENTS

Build in wizards examine data validity and check regulatory requirements to provide legal customer location based content.

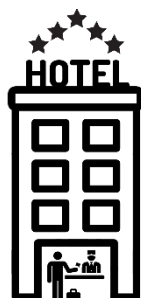


Fully support **lawful interception** and data retention implementations to meet **lawful disclosure** requirements



FLEXIBLE USE CASES

Ability to construct own sales- and price-models for potential b2b customers and to serve requests for a great variety of customer base. This allows offering a wide spectrum of different use cases scenarios out of the box.



COMPONENTS

Hardware:

- » Redundant virtualized servers
- » Multi Vendor WLAN Controller support
- » Carrier Grade Gateway

Administration portal:

- » Customer management
- » Access Point management and assignment
- » Monitoring und Statistics

Customer portal:

- » Content management system
- » Voucher access control
- » User statistics
- » unattended tenant self-administration



Use Cases

MULTI SERVICE PLATFORM



Large realstate:

- Companies asset contains apartment buildings in different cities
- Buildings are equipped with cabling to connect modem/APs in each apartment
- Buildings are managed individually by local groundskeepers with limited IT know how
- Short rental period tenants setup their private WIFI services in their apartments individually
- For IoT devices a second encrypted SSID is required through the buildings

Hospitality:

- A large four star hotel is equipped with full WIFI coverage and dedicated APs in suits
- Guest WIFI is offered on a voucher base
- VIP guests are offered a higher bandwidth exclusive WIFI in their suits
- An office network connects employees handheld devices and printers
- Individual landing pages for the guest wifi and the VIP network is available



The ituma aduno WIFI management platform allows flexible configuration of multiple WIFI services per access point to handle a great variety of use cases. This enables the provider to target customer groups offering new sources of revenue besides plain network connectivity.

1 Guest WIFI

- » An open WIFI network, clients can connect to without knowing initial passphrases or keys.
- » Taken advantage of build in captive portal checks by the client, location based content like individual landing pages, can be provided to the user upon connection.
- » Dedicated access methods can be added, besides simple click and go (T&C), general access codes and vouchers can be setup if needed.
- » Client isolation will ensure, that connected devices cannot interact among each other.
- » Mobility will allow seamless roaming between access points offering the same wifi service.

2 Office Networks

- » Offering encryption and authentication to the network will allow only authorized devices to connect.
- » All devices can seamless move between access points and are able to communicate with other devices connected to the same network like printers, webcams or internal servers.

3 IoT Networks

- » Dedicated network to give IoT devices access to the internet.
- » Protection of the devices is enhanced by minimizing access due to client isolation.
- » Device management can be handled by dedicated access through the cockpit system.

4 Private Networks

- » Individual secured WIFI service bound to dedicated access points
- » Wizard guided tenant self onboarding
- » Visibility beneath connected devices to the same access point allows interaction with consumer goods like smart TVs, printers, alexa etc.
- » Configuration of dedicated AP is ensured by hardware specific authentication codes

Profile control

- » Individual control of bandwidth can be applied to access points, network services or dedicated to clients based on vouchers.