

# AcroWiFi. Professional WiFi Connectivity Service. Detailed Service Catalog

#### Service Overview

We live in an era of technology and connectivity. With the explosion of mobile devices such as laptops, smart phones and tablets, people are more connected than ever. It is, without a doubt, a fact that people expect to be able to connect from everywhere, either to work, or to entertain.

Businesses around the world have started offering WiFi connectivity as value-add or per-cost services, in a way to attract and retain customers. This is particularly more important to business verticals where customers are physically present for extended periods of time (e.g. HoReCa, Healthcare, Education, and Retail). In Corporate world, WiFi connectivity has started replacing the wired alternatives as a way to boost productivity by stimulating flexibility and mobility at the work-place.

There are many WiFi solutions that can provide connectivity for mobile users, most of which are consumer grade meant for home use. There are few solutions, however, that are enterprise-grade from the perspective of performance, capacity and security, and able to provide coverage for large applications, such as a university campus. Acrom is providing a WiFi solution as a fully managed service, and has adopted one of the most secure and modern WiFi technologies to date.

The applications of AcroWiFi are multiple, but are targeted towards larger deployments (buildings, campuses or companies with distributed branch offices). The main industry verticals:

- Enterprise/Corporate (with distributed/branch offices)
- Healthcare (Clinics, Hospitals and Campuses)
- Education (Schools & University Campuses)
- Retail (Stores, Restaurants and Hotels chains)

The key differentiators of the AcroWiFi solution are as follows:

- Enterprise grade security; the AcroWiFi underlying technology is both PCI (for banking security) & HIPAA compliant (for medical records security and privacy)
- Centrally managed; AcroWiFi solution does not use complex management equipment; the entire management of the infrastructure is off-site, combining cloud-technologies and Acrom's technical team from the head-office in Bucharest, Romania. This will translate into lower operational costs and better reliability with faster issue resolution timings.
- High performance, high capacity. In high density mobile population settings, typical WiFi solutions exhibit performance degradation, connectivity loss and even denial of service.
   AcroWiFi solution is different, as it is primarily designed for mediums with high density of mobile population, which can be found in large offices, medical buildings, schools, hotels, etc.
- Add-on value add features. Features like BYOD (Bring Your Own Device), Presence Analytics,
  Marketing Channel, Paid access, Facebook Login, etc, typically require additional
  infrastructure for significant costs. AcroWiFi solution includes all these features.
- Fully Managed Service. AcroWiFi can provide full lifecycle service, starting with site survey, deployment, implementation, configuration, and ongoing administration, security audit and configurations, support, reporting, etc. No technical skills required on client side.







## Key Functions & Benefits

AcroWiFi service features are packed into tiers that fit within the interests of the typical verticals.

Technical Features	AcroWiFi Packages			Business Benefits		
	Enterprise	Healthcare	Education	Retail	belletits	
High Capacity	✓	✓	<b>√</b>	<b>√</b>	Performs even in very crowded environments	
High Performance	✓	✓	<b>√</b>	<b>√</b>	Highest speeds in industry	
Cloud/Central Management	<b>√</b>	✓	<b>✓</b>	✓	Lower support costs Efficient management	
Mesh Routing	✓	<b>√</b>	✓	<b>√</b>	Lower installation cost reduced wiring	
Enterprise Security	<b>√</b>	<b>√</b>	✓	<b>√</b>	Data Security Assurance (Banking &	
PCI Compliance	<b>√</b>	✓	-	<b>√</b>	Medical field grade)	
HIPAA Compliance	-	<b>√</b>	-	-		
Users Control	✓	✓	<b>√</b>	✓	Control which users can access the network	
Application Control	✓	✓	✓	<b>√</b>	Set access and bandwidth limits for specific apps.	
Content Filtering	✓	<b>~</b>	✓	✓	Prevent access to inappropriate web sites	
Guest WiFi	<b>~</b>	<b>~</b>	<b>√</b>	<b>√</b>	Allow guests to have restricted access to WiFi	
Guest Facebook Login	-	<b>√</b>	<b>√</b>	<b>√</b>	Improve brand awareness via social networks	
Splash Screen	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>√</b>	Additional revenue when used as marketing channel	
Bring Your Own Device (BYOD)	<b>√</b>	<b>√</b>	<b>\</b>	-	Improve staff satisfaction levels by allowing them to use their own mobile devices for work purposes	
Presence Analytics	-	-	-	<b>√</b>	Understand customers behavior and extract relevant business analytics insight to optimize business	







## Service Model

AcroWiFi service is flexible with respect to the specific needs of the client.

## **Support Availability Options**

TIERS:	Silver	Gold	Platinum	Custom
Support & Administration Timeframes	8x5	24x5	24x7	Cf. Client
				Requirements

## Service Levels

The following are the default, typical service levels. Custom levels can be discussed as well.

Service Level Timings are relative to Romanian Time Zone

Administration & Support	Standard		Custom
	Acknowledgment	Resolution	
Issue resolution (Remote)	2 b.hours	4 b.hours	Cf. Client
Issue resolution (On-Site)	2 b.hours	1 b.day	Requirements
User/App/Device Group Policy Change	2 b.hours	2 b.days	
User Provisioning	2 b.hours	1 b.day	
Other Configuration Changes	2 b.hours	2 b.days	

Add-On Services	Standard		Custom
	Acknowledgment	Resolution	
Splash Screen Content Change	2 b.hours	1 b.day	Cf. Client
Presence Analytics Reports	Weekly, Monthly or Quarterly		Requirements
Security Audit & Revision	Monthly, Quarterly or Yearly		
Summary Usage Report	Monthly, Quarterly or Yearly		

## Cost Model

	Cost Model	Conditions
Fully Managed Service	No One Time Cost	Long Term Contract (2 years +)
Model (IT-as-a-Service)	Monthly Service Charge	
Professional Service Model	One Time Installation Cost	
	Equipment Purchase	
	Software Licenses Purchase	
	Monthly Support Costs	
	Monthly Administrative Costs	

## **Custom Services**

Acrom values providing flexible options to clients.

This document outlines the default, typical offerings. However, Acrom team will be glad to meet client's specific needs and provide a customized service.







## APPENDIX. Detailed Functions & Benefits

## High Capacity WiFi Connectivity

AcroWiFi solution is based on latest 802.11ac and 802.11n industry standards, and is customized to operate in very dense environments, with many mobile devices connected concomitantly, which is a typical setting for corporate offices, hospitals, schools/universities, hotels and restaurants, where traditional WiFi solutions slow down to a crawl.

#### **Business Benefits:**

• Ensure optimal performance of the network even in very dense conditions without experiencing significant performance degradation.

## High Performance WiFi Connectivity

AcroWiFi solution can support radio rates of up to 1.75Gbps, and leverages real-time radioanalysis to maintain high radio rates in very difficult environments.

#### **Business Benefits:**

 Ensure high satisfaction levels of both employees and guests with respect to leveraging the WiFi connectivity. No more frustration episodes. AcroWiFi ensures fastest possible speeds by industry standards for WiFi connectivity at all times.

## Cloud/Central Management

The entire WiFi infrastructure can be configured and managed from a central, remote location, without the need of traditionally complex on-site wireless controllers.

#### **Business Benefits:**

- Lower operational costs due to simplified management
- Shorter issue resolution times
- Faster configuration changes

## Mesh Routing

Traditionally, WiFi access points require wired connectivity to the local area network. This can be a very expensive proposition for large campuses or areas where long cables must be structured. AcroWiFi solution can leverage a cutting edge technology known as "mesh routing", by which, in the absence of a direct access point wired link to local area network, the access point can leverage the nearest access point instead to exchange data. This also enables better robustness of the network, as mesh routing mechanism can be automatically leveraged even in the case of a wired network failure

#### **Business Benefits:**

- Lower installation costs
- Higher WiFi network reliability

#### **Enterprise Security**

AcroWiFi uses probably the most secure WiFi infrastructure in industry that will comply with most stringent needs of the enterprise/corporate environments. First, it can allow segmentation of users, applications and devices, and enforce various policies on







them. In this way, WiFi guests can safely leverage the network without accessing sensitive business information.

The built-in stateful policy firewall 802.1X/RADIUS together with the group policies configurations can adequately secure the network from attacks. On top, being offered as a service, we'll apply our security expertise to the deployed environment to ensure that clients gain the security they expect without having the technical knowledge to do it.

For large enterprise, the infrastructure also supports Active Directory integration.

Lastly, AcroWiFi underlying technology has a built-in real-time scanning intrusion prevention system (IPS), which will trigger alerts in case of any suspicious behavior encountered.

#### **Business Benefits:**

- Security meets highest industry standards
- Rest assured on a secured environment without having the technical skills or hire specialized personnel.

## Security. PCI Compliance

The Payment Card Industry Data Security Standard (PCI DSS) is a set of requirements designed to ensure that ALL companies that process, store or transmit credit card information maintain a secure environment.

AcroWiFi underlying technology is PCI compliant.

#### **Business Benefits:**

 You can leverage the AcroWiFi infrastructure to connect POS/PinPad terminals for electronic payments.

## Security. HIPAA Compliance

HIPAA, the Health Insurance Portability and Accountability Act, sets the standard for protecting sensitive patient data. Any company that deals with protected health information (PHI) must ensure that all the required physical, network, and process security measures are in place and followed.

AcroWiFi underlying technology is HIPAA compliant

#### **Business Benefits:**

In healthcare industry, you can rest assured that the sensitive patient data is well
protected while transiting the wireless medium from mobile devices to the local
wired network.

#### **Users Control**

Different users may need different restrictions applied. For example guest users may not be allowed to access business information, and have the amount of bandwidth limited to prevent waste. With AcroWiFi infrastructure, you can create different user groups, and apply various group policies to control the restrictions, bandwidth allocation, performance priority/QoS, and the resources that can be accessed.

**Business Benefits:** 







Provide maximum flexibility and control while maintaining security

### **Applications Control**

Not only users access the internet via WiFi connectivity, but also applications on behalf of the users (e.g. torrent-clients, email clients, etc). With AcroWiFi, strict usage policies can be applied by type of application as well. For example, bandwidth hungry application (such as YouTube, Torrent clients, etc) may be limited or declined access individually. The technology is capable of identifying hundreds of popular applications by using a unique Layer 7 fingerprinting and apply QoS restrictions individually.

Same policies can be applied to types of devices as well (e.g. phones can have better service priority than tablets).

#### **Business Benefits:**

 Reduced internet costs: you can share the same bandwidth you have contracted with many more users, without having to invest in larger internet bandwidth, by minimizing wasteful practices.

#### Guest WiFi

There is no need for additional hardware, complex configurations and extra licenses to grant access to guests. The built in firewall and DHCP server can enable a secure, internet-only access to external users, while protecting the internal LAN.

The guest experience is fully customizable: free or login-based access, custom splash screens, bandwidth and application restrictions and content filtering.

#### **Business Benefits:**

- Improve customer satisfaction by providing guest WiFi access, without the hassle, security risks or setup complexity of traditional solutions.
- Have precise control over how guest can access the network (e.g. free vs. paid) and what they can access.

#### Guest Facebook WiFi Login Alternative

There is a built-in option to offer advantages to guests (e.g. more bandwidth) by connecting to the WiFi network using Facebook Check-In option. In turn, the company brand will get increased awareness/advertisement through social media.

#### **Business Benefits:**

Increased brand awareness on popular social networks

## Splash Screen

Each attempt to connect to WiFi will trigger a welcome-page where additional user action is requested. Be it login request, payment request or simply an informative page, the splash screen can also be used to place advertisements. These advertisements can be used to promote other internal services, or as a revenue channel, by allowing partners products to be advertised for a specific fee. All this is configured and updated by AcroWiFi team, as a service, upon request – no technical skills required.

#### **Business Benefits:**







- Increase business by promoting additional internal services
- Increase cash revenue by "selling" the splash screen to partners to be used as an advertisement channel. It is a very good form of targeted marketing, since the customers may already be closely interested in your products and services.

## BYOD (Bring Your Own Device)

BYOD is an industry now-classic term to designate the capability of a company to enable its staff to bring and use their own mobile devices (phones, tablets, etc) for work purposes, without sacrificing security. Typically, it would be required to invest in a separate technology and infrastructure to support this capability. AcroWiFi uses a unique technology that is built in the WiFi access points directly, for a much more efficient way to administering BYOD policies. With BYOD, you will be able to set policies for (groups of) devices according to the company security rules.

#### **Business Benefits:**

- Improve staff satisfaction by allowing them to use the mobile devices of their choice
- Reduce costs on company mobile devices
- Gain BYOD capabilities at virtually no additional infrastructure cost
- Secure, reliable, hassle free, 100% integrated.

## Presence Analytics

Presence Analytics is a revolutionary technology that allows understanding your customer behavior, anonymously. Nearly every person now has at least one WiFi enabled device (typically, a mobile phone). The WiFi access point can track these mobile devices even when not connected to the network, and compute statistics regarding customer dwell time, repeat visits and capture rate. This information provides a certain level of Business Intelligence, and can be used to optimize opening hours, assert the impact of a recent marketing campaign, or improve staffing policies.

#### **Business Benefits:**

- Additional business analytics data, at virtually no additional infrastructure cost
- Understand customer behavior to improve business
- Hassle free; AcroWiFi service will provide periodic analytic reports



