

Customer type: Operator

Country/Region: Kenya/Africa

Application: Corporate Office Buildings



The customer

Instaconnect provides businesses and residential with dependable, scalable and reliable broadband internet services in Nairobi. They provide a true broadband service to underserved areas where internet access is only available through dial up, if at all.



The challenge

Instaconnect decided to deploy a broadband wireless infrastructure since laying a wire line infrastructure was prohibitively expensive.

When considering broadband wireless alternatives, the selection of a Wi-Fi network has the advantages of very low initial expenditure on infrastructure and off-the-shelf clients, as well as the availability of many potential customers with a Wi-Fi client built into their laptop.

However, Wi-Fi networks also have certain limitations that need to be addressed. The Wi-Fi spectrum in metropolitan area is characterized by high noise and interference making quality service a real challenge. Furthermore, the typical metropolitan environment makes it difficult to provide high quality service without dead-spots.

Highlights

About Instaconnect

Instaconnect Ltd is a Wireless Internet Service Provider (WISP) based in Nairobi, Kenya. The company provides affordable, high-speed, wireless internet services to communities that are underserved by traditional telecom and cable providers.

The Challenge

The challenge Instaconnect faced was to provide a cost effective wireless service with extended outdoor and indoor coverage, for residential and business customers.

The Solution

The solution Instaconnect chose was a broadband wireless access network based on the Wavion WBS-2400 spatially adaptive Wi-Fi base station. Using its powerful beamforming technology, this base station provides:

- Extended coverage
- Exceptional throughput.
- Uniform coverage throughout the area
- High-grade service with exceptional indoor penetration.
- Seamless integration with the industry-leading access control systems.

The Result

- Instaconnect is the first operator in Kenya to deliver quality high-speed Wi-Fi service to businesses and private customers.
- A cost effective broadband wireless access Wi-Fi network allowing Instaconnect to pursue an aggressive network rollout, taking advantage of existing Wi-Fi clients.

The solution

Instaconnect chose Wavion WBS-2400 Wi-Fi base stations after thorough testing.. In these tests the product demonstrated significantly larger coverage and capacity in comparison to other Wi-Fi solution, as well as much better interference mitigation capabilities.

Based on the WBS-2400 Wi-Fi base stations, Instaconnect created the SUNGURA Broadband network. The WBS-2400 base stations are wirelessly connected to the Instaconnect PoP in Nairobi. The end-to-end wireless infrastructure provides Instaconnect full control over their infrastructure and network performance.

Why Wavion

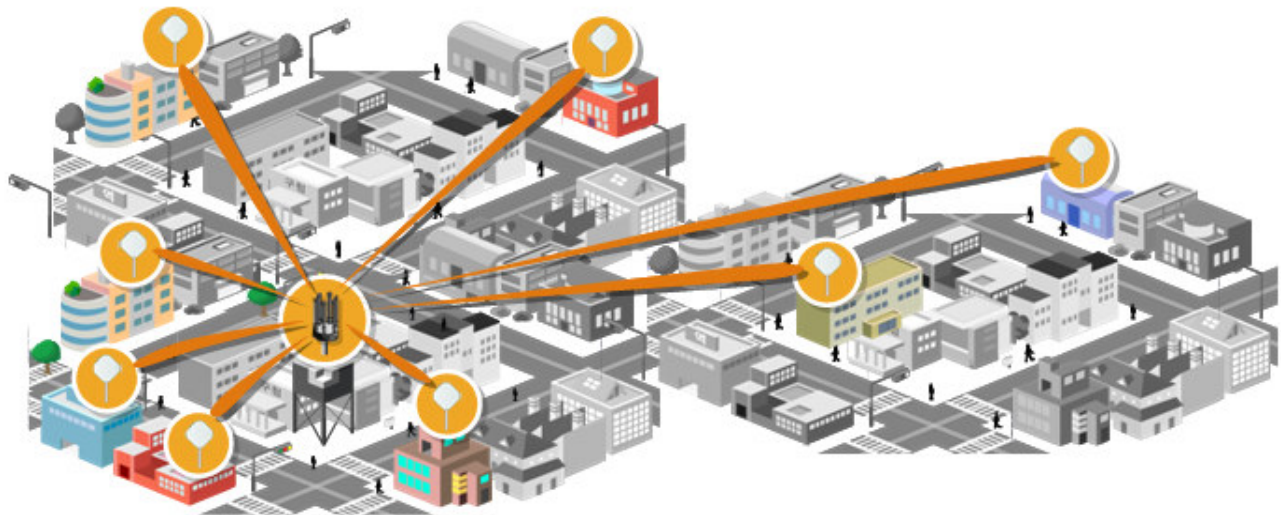
In comprehensive testing, Wavion WBS-2400 base station with the spatially adaptive, beamforming technology proved to be the most cost effective solution for covering hot zones and providing a Wi-Fi broadband internet service. Placed outdoors, the WBS-2400 provided uniform coverage for indoors and outdoor users.

The WBS-2400's unique ability to exploit multipath and to turn an advantage improves the product's performance in metropolitan environment significantly. This allows operators to effectively provide service to customers in non-line-of-sight conditions (from the base station). Furthermore, the WBS-2400 ability to mitigate interferences enables a high grade of service even in areas with high noise levels.

In addition, the WBS-2400 simplicity of installation allows them to expand the network rapidly and cost effectively.

Expanding to the future

Instaconnect business model is based on fast expansion even to area where the initial demand is small. The company published its policy for network expansion in their web site. "If you are not located within the coverage area, we will try and bring it to you provided we get at least 10 users within a radius of 200m" Instaconnect website <http://www.igokenya.com>. The Wi-Fi standard ensures that any client such as laptop or computer can start receiving the service almost immediately.



Metro Business Connectivity Diagram

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