



TIM Brasil, Aptilo Bring Wi-Fi to Brazil's Poorest Neighborhoods

TIM Brasil, the second largest mobile operator in Brazil, and Aptilo Networks have deployed low-cost wireless broadband to Brazil's favelas, or shantytowns, including Rocinha, Rio's largest favela with ([according to unofficial estimates](#)) 180,000 people living in two square miles. Today, Wi-Fi is available at favelas throughout the country, providing internet access to orphanages, schools and other community organizations that otherwise would not have connectivity.

Bringing Wi-Fi to the favelas was part of TIM Brasil's larger initiative to enable Wi-Fi countrywide, to offload mobile data traffic from a congested internet pipeline. Through systems integrator Retis, Aptilo is providing TIM Brasil with a complete Wi-Fi and mobile data offloading solution that allows for a cost-effective, fast rollout; decreases 3G network congestion; and improves user experience.

The Wi-Fi network offloads mobile data traffic over 10,000+ hotspots located at 15 airports including Sao Paulo, Rio, Recife and Brasilia, and 12 soccer stadiums. TIM Brasil's Wi-Fi is also designed to support large-scale events. Six stadiums were "hot" with Wi-Fi during the 2014 FIFA World Cup, allowing users to share photos, send emails, text and surf the internet right from their seats.

TIM Brasil is using the [Aptilo Service Management Platform](#)TM (SMP), a state-of the-art system to enable carrier-class mobile data services for Wi-Fi networks. Aptilo SMP is a purpose-built carrier-grade system for control of billing, user services and access in wireless networks. Aptilo SMP offloads mobile data from TIM Brasil's HSPA and HSPA+ networks. It utilizes the fiber network of TIM Intelig and TIM Fiber as a backbone.

A true innovator, TIM Brasil was the first private company to deploy low-cost wireless broadband in Rocinha. They are also the first operator in South America to utilize EAP-SIM Authentication. Aptilo SMP's SIM Authentication Server is highly scalable and optimized to deliver an automatic, secure and seamless mobile data offload experience. It authenticates users via the SIM card (via EAP-SIM/AKA) in their mobile device as they move from TIM Brasil's 3G network to Wi-Fi, ensuring an "invisible" handoff as users move from 3G to the Wi-Fi network.

The SIM Authentication Server also helps TIM Brasil monetize the network. When customers are authenticated as they move from the 3G to the Wi-Fi network, they are brought to a portal page to approve the minimal daily charge for Wi-Fi access.

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