

# ENABLING COMMUNITY WIFI WITH DHCP

## PROFESSIONAL SERVICES ENABLES SUCCESSFUL WIFI TRIAL FOR EUROPEAN CABLE PROVIDER

### Challenges

A major cable provider and MVNO in Spain wanted to increase customer retention in the competitive European market by offering a community WiFi service. This would enable the company's more than 1 million subscribers to roam between services using public DOCSIS-based cable modems with WiFi capabilities. Subscribers, many of whom lived in densely populated urban areas, could choose whether or not to enable shared WiFi access on their home gateway. However, there was a problem — the provider needed to deliver this project without compromising customer QoE.

Standard DHCP behaviour does not allow subscribers to roam between cable modems without service interruption. This is because a device cannot keep its IP address lease when its unique remote ID changes. In the case of community WiFi, a subscriber roaming from one cable modem to another would cause an IP address change when moving between MAC addresses, resulting in temporary loss of Internet connection. This could frustrate a user who may be using the WiFi service while on the move.

This was a problem for a company committed to delivering consistently high customer experience. The issue was compounded by the fact that some existing cable modems did not use a DOCSIS-compliant remote ID.

### Incognito Solution

To overcome this significant QoE challenge, the provider approached Incognito to develop a custom solution.

The provider asked the Incognito Professional Services team to develop a specific DHCP feature in Broadband

Command Center to solve the issue of dropped service when a subscriber roams from one cable modem to another. Incognito implemented the custom feature to effectively hide changes in the remote ID from the DHCP service, which enabled the subscriber's device to keep its IP address and maintain continuous Internet connection while roaming.

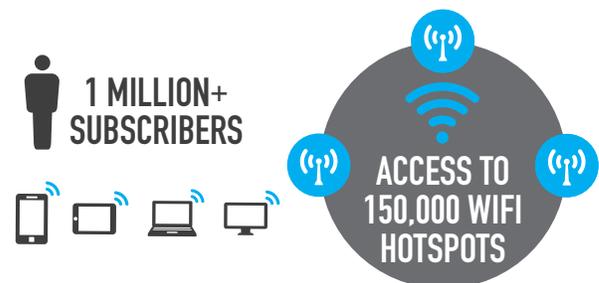
This project was delivered in a matter of weeks to meet the provider's strict project launch date. However, during testing Incognito identified non-compliant behaviour in some of the provider's existing DOCSIS devices, which would affect the project's overall success.

To meet this additional challenge, the provider had to either replace the non-compliant devices at a significant cost or find an alternative solution. Incognito proactively offered a workaround that did not require the costly replacement of the non-compliant devices. This involved adding code to incoming packets to massage the non-compliant remote IDs into a DOCSIS-compliant format.

As a result of Incognito's responsiveness and flexibility, the provider met their project deadline without sacrificing subscriber QoE and launched a successful trial in late 2014.

### Results

After working with the Professional Services team from Incognito, the provider was able to roll out the community WiFi trial on time in late 2014 and successfully launch the project in early 2015. This service offered the provider's more than 1 million subscribers the ability to access to WiFi at 150,000 hotspots — a great benefit in the competitive European market. A pillar in the company's subscriber retention strategy, the WiFi service has resulted in high customer satisfaction ratings in independent user reviews.



The Incognito Professional Services team worked quickly to deliver the DHCP feature in a matter of weeks, providing:

- Identification of issues and potential solutions within the provider's initial community WiFi proposal
- An expedited custom add-on to the provider's existing DHCP solution to enable enhanced subscriber QoE
- Responsiveness and ongoing support to ensure the successful trial and launch of the community WiFi project

Learn more about Incognito Professional Services at [www.incognito.com/services](http://www.incognito.com/services)

# THE INCOGNITO PHILOSOPHY

Broadband service providers worldwide use Incognito products to solve their device provisioning, network intelligence, resource management and service activation challenges. In addition to helping you increase operational efficiency and monetize IP-based services, Incognito also delivers:

## **Flexible Modular Solutions.**

Get software solutions that fit your needs, not the other way around. Our extensive toolkits and experienced integration experts ensure that you can easily integrate any Incognito solution into your existing systems.

## **Customer-Centric Approach.**

Be heard. We listen to and take your suggestions seriously. That's why 80% of new product features are a direct result of customer feedback.

## **Support Services.**

We're committed to your success. Our experienced professional services team can design custom solutions to suit your needs, while our support team is available 24/7 to answer your questions.