

BROADBAND COMMAND CENTER

CABLE PROVIDER IMPROVES ACCURACY OF DATA COLLECTION WITH DHCP RADIUS FUNCTIONALITY

The Challenge

The ability to measure bandwidth and maximize resources is essential for today's service providers. Faced with consumers accessing high-bandwidth applications, many providers are turning to various kinds of byte-counting software to learn more about network traffic and create "fair use" policies. Providers must find a method of data collection that is accurate and reliable — or else risk missing out on revenue or facing unhappy customers.

One North American cable provider with more than 600,000 subscribers recently experienced inaccurate measurements as a result of their bandwidth monitoring strategy. The provider used a proprietary solution based on deep packet inspection (DPI) to scan data packets transferred on the network, which counted the bytes used and recorded IP addresses. This tool also listened to DHCP to gather subscriber information and match IP addresses and usage data with individual MAC addresses, allowing the provider to tie usage to the relevant subscriber for billing.

Unfortunately, this solution had some flaws. DPI is not always an accurate method of data collection and can miss packets during high load times. In this case, the DPI-based subscriber management appliance did not

capture all of the relevant DHCP traffic, which meant the provider missed out on subscriber information. As a result, the provider was unable to capture potential revenue.

The Solution

The provider already used Broadband Command Center, a DHCP provisioning solution from Incognito Software, which has a built-in Remote Authentication Dial In User Service (RADIUS) accounting feature. RADIUS accounting is used to record when a device comes online on a network, noting the start, update, and stop of the end user's network access. Broadband Command Center is able to push these RADIUS updates to a third-party RADIUS server to enhance network intelligence.

The provider decided to use the Broadband Command Center RADIUS functionality to improve the accuracy of DHCP data collection. Broadband Command Center was able to actively push relevant subscriber audit details to the third-party DPI application via RADIUS, which meant the provider no longer had to rely on the DPI appliance to listen for information — and risk missing results.

This new method also provides data validation and back-up mechanisms in case the provider's connection to the third-party appliance fails. Any RADIUS transactions that are not sent immediately are added to an internal queue in Broadband Command Center and sent once connection to the third-party appliance returns.

Benefits

1. Push DHCP lease information to a third-party application
2. Validate and queue data for reliable reporting
3. Offer reliable and scalable DHCP provisioning

Looking for Reliable and Efficient DHCP?

Broadband Command Center is a fast, scalable, and accurate device provisioning solution that allows you to streamline your workflows and simplify management. The network-agnostic solution brings multi-standard support and flexible device support to your network. To find out how Broadband Command Center can simplify your DHCP provisioning operations, [download the fact sheet](#).

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.