

# North American Cable Operator Assures Carrier WiFi Services

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## OVERVIEW

### Customer

Major Cable Operator

### Region

North America, United States

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### Business Challenge

Provide a seamless, high-quality user experience over new WiFi infrastructure

Understand the availability, usage and quality of service

Cost effectively deploy WiFi infrastructure with no prior knowledge of demand or usage patterns

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### Business Value

- Provided greater visibility to hotspot demand, performance, and usage
  - Enabled customer to optimize WiFi bandwidth, saving the company millions of dollars within the first six months
  - Allowed the operator to quickly address degradation and downtime to assure a positive user experience
  - Provided a single monitoring platform capable of scaling to a national footprint while supporting voice, data, and video services
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## Introduction

A major cable provider's operations span over half of the United States to serve more than 10 million residential and business customers with video, high-speed data and voice offerings. More than 60% of the company's customers subscribe to two or more of these services, with nearly one-third receiving all three.

## Challenge

With the nationwide rollout of a new WiFi hotspot service, they needed to assure the performance and availability of service as well as provide meaningful data to understand usage patterns across 2000+ hub sites located across multiple strategic locations. Because all existing users would have access to the WiFi infrastructure as part of their service bundle, maintaining satisfaction levels through this additional service was an essential consideration to keeping existing users happy, building brand loyalty, and reducing customer churn.

## Solution

The nGeniusONE® service assurance solution gave the cable operator visibility into the health and performance of their WiFi services, assuring service availability and customer experience. Additionally, the solution provided visibility into subscriber usages patterns of the WiFi service which was critical for capacity planning. They also used the solution to monitor their Video-on-Demand (VoD) service to assure application performance, service levels, and to help with network troubleshooting.

## Benefits

The NETSCOUT® solution gave the cable operator visibility into its aggregation core where WiFi traffic authenticates, providing them with visibility into the health and usage of the service. The solution monitored their Domain Name Services (DNS) servers, HTML, and other service enablers and proactively alerted the IT team when traffic patterns deviate from a baseline norm, providing detailed and meaningful data about imminent issues and where they reside.

## Carrier Grade Platform Allows for Advanced Service Monitoring

The cable operator's IT team started with the internal, corporate WiFi network and organically built alarms and thresholds as needed. As they became acclimated with the solution, they began looking more at how the depth and detail in the solution could be utilized to quantify the customer experience.

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*"It's hard to quantify customer experience," said the Director of Network Operations. "So what we did is look at the interior of the network, where we used NETSCOUT to monitor tunnel protocols."*

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They monitored the payload of each port to gain visibility into response times and enabled the operations team to set alarms when response times deviated from their predetermined thresholds.

## Usage Visibility Reduces CapEx and Improves Capacity Planning

Leveraging the nGenius solution, the cable operator created custom reports to help improve understanding of network health and usage patterns. These reports enabled them to discover that its users were undersubscribing to its WiFi hotspot service. Using key statistical information on the type of the usage its users were engaging in across WiFi hotspots, the reports helped the operator identify and understand that users have different surfing patterns on the road than at home. As it turned out, a majority of the traffic generated from the hotspots was quick and mostly text-based rather than the vast amounts of streaming video and audio found with home users.

This use of capacity planning helped the operator stay on top of service performance levels and enabled the network and operations teams to proactively identify both overprovisioned and under provisioned situations.

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*"We might see an upsurge in streaming video or may see use of a VoIP application that allows customers to make phone calls. We want them to be able to do everything on WiFi that they do at home."*

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## Efficiently Manage Availability, Quality and the User Experience

The cable operator created what the Director of Network Operations referred to as a "sticky service" and as a result, they needed to keep customers happy. This included assuring service performance and availability across its bundled services.

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*"Each bad customer experience leads to potential customer churn. We need to get ahead of service performance issues by being proactive and making sure our customers have a good, consistent experience."*

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With the success of their WiFi project, the cable operator is now leveraging the NETSCOUT solution to provide visibility into their VoD service.

Today, the cable operator leverages the solution to ensure that their VoD offering delivers the consistent performance that their users have come to expect. This includes ensuring that VoD services are available across various screens and platforms; thumbnails are visible, content loads within a predetermined time, and that content plays through without degradation.

## The NETSCOUT Advantage

The nGeniusONE solution unifies multiple analysis views into a single pane of glass providing an integrated analysis architecture that simplifies and streamlines performance management activities. The most demanding cable networks in the world trust NETSCOUT service assurance and analytics solutions to deliver greater insight and assure the performance, availability, and quality of their network and services.

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## LEARN MORE

For more information about NETSCOUT solutions visit:

<https://www.netscout.com>

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