

Elevating the Message

with Reliable, Secure Cellular Connectivity



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|-----------|------------|------------|
| Tuesday | 78° 63° | Precip 40% |
| Wednesday | 76° 61° | Precip 81% |
| Thursday | 83° 62° | Precip 84% |
| Friday | 88° 65° | Precip 14% |
| Saturday | 91° 70° | Precip 8% |

iShares
by BlackRock

CHARGING UP YOUR INVESTMENTS IN NEXT-GEN AUTO TECH?

Over 3 million Tesla cars produced
Elon Musk tweeted a congratulatory message to Giga Shanghai for making its one millionth car, and announced that Tesla has now manufactured over 3 million EVs.



MLB NYY: 0 @ BOS: 3 | ATL: 3 @ MIA: 1 | PHI: 0 @ NYM: 6

Background

Goal:

The highest possible uptime for digital displays — through secure, reliable LTE connectivity

Client:

Captivate, LLC

When asked to describe Captivate, project management director Stephanie Slattery replies, “We started out being a silent friend in the elevator — a kind of extension to the front lobby of a building. Every day, Captivate offers a blend of news, traffic, sports, and information to a captive audience in an elevator cab. We have grown to become a top rated amenity by tenants who value our content and love the interactive polls and viewer-generated photo features we publish throughout the year. We take the elevator experience to the next level.”

Founded in 1997, Captivate quickly expanded to become the largest office media network in North America. Growth resulted from organic network expansion and through acquisitions of Elevator News Network in Canada and Wall Street Journal Office Network which broadened the network to include large format office lobby displays. Recently the portfolio has expanded to include multifamily residential properties and student housing. The network currently stands at 23K screens in 8,800+ venues.

But all those elevator displays, large-format displays, and video-first solutions can't broadcast a thing without reliable connectivity. For every digital-out-of-home (DOOH) display Captivate deploys, a secure cellular connection is critical to keeping it up and running.

The Why

Twenty years ago, technologies like POTS and DSL connected digital displays to the internet. If the DSL line went down, signage operators had to call in via the POTS line to reboot the system. Broadband solutions eventually became more sophisticated — and expensive. So, leadership at Captivate began to look for more cost effective options that were still reliable enough for them to run their screens. With its plug-and-play, fully managed cellular solution, OptConnect was the clear favorite from their perspective.

Advertising in Challenging Environments

Figuring out a solution that solved all of the pain points Captivate was experiencing took some time for their team. Getting reliable connectivity into an elevator cab in a tall building is difficult. Elevator shafts are made up of thick concrete walls surrounded by metal, both of which can impede wireless signals. Signal handoff between floors and potential interference from other electronics and building systems can also cause connectivity issues. Adequate bandwidth for high-speed applications like video streaming isn't guaranteed.

Then there's the issue of limited access. Running dedicated fiber, Ethernet, or PoE cables directly into the cab isn't a viable option. Custom solutions for high-rise buildings can also be costly and complex. And because cellular connectivity may be vulnerable to signal interception, security is a critical issue.

Beyond these challenges, Captivate also experienced connectivity issues in multi-family properties with unreliable Wi-Fi and struggled with lag time for international customers. The company also faced prohibitive costs for service calls to its buildings. On top of all of that, finding hardware that was reliable enough for their demanding environments was difficult. Without reliable hardware, when a building with 32 screens had a problem with a single router, all the screens went down simultaneously.

Captivate needed a definitive solution for these challenges. It also needed an embedded firewall, access to an API that would push data to its proprietary software, and real-time updates on the status of its equipment. By partnering with OptConnect, the Captivate team now has the fully managed wireless connectivity it needs to broadcast ads reliably with greater uptime and confidence in the most demanding of environments.



Benefits of Fully Managed Connectivity

For enterprises without a large team of IoT engineers, managing hundreds of cellular devices can be cumbersome and expensive. If a network carrier experiences an outage, mission-critical equipment can be down for hours, if not days. For a digital advertising business like Captivate, this is a disastrous scenario.

Now if there's a potential issue with the primary network, OptConnect immediately pinpoints the problem from its Network Operations Center and shares real-time notifications with the Captivate team via the Summit portal. The Summit API also shares data with Captivate's proprietary software. No second guessing; just real-time information that can be accessed from anywhere. OptConnect's proprietary systems, software, and hardware are all built for mission critical applications where downtime isn't an option. The Critical Response Team at OptConnect also takes immediate action to resolve connectivity issues when they arise.

The fully managed neo2 router used by Captivate offers additional benefits. With its dual-SIM technology, the neo2 ensures a reliable connection no matter what happens to the network. If the primary carrier goes down, the neo2 fails over automatically to a second carrier. The neo2 also uses self-healing technology to eliminate or reduce expensive truck rolls and time spent on the phone with technicians. In the unlikely event that a router needs to be replaced, OptConnect can ship out a free replacement device overnight, as part of an industry-leading lifetime warranty coverage for OpEx customers.

For Captivate, a fully managed solution by OptConnect is money well spent.





"When other companies might say, "you broke it, you figure it out," OptConnect never puts us in that position. We have the neo2 router, which can switch from Verizon to AT&T if needed. That's a game changer, because our viewer experience depends on the reliable network connection that OptConnect provides. While OptConnect can be more expensive than other solutions, we know we will never get the same level of care from another vendor; it's just not going to happen. In the end, OptConnect is the ideal partner because they save us time and money."

Stephanie Slattery Director of Project Management, Captivate

The Face of Security in Digital Advertising

Every connected screen in a building represents a potential entry point to the overall network infrastructure. At any point, digital signs may be vulnerable to cyber attacks, data breaches, denial of service attacks, and content manipulation.

Over the years, Captivate has deployed various third-party devices and software tools to ensure security for its screens and content — but its use of an open source technology was still a concern.

To help bridge the gap and add an extra layer of security, OptConnect created a VPN tunnel and a private network connecting to Verizon and AT&T devices used by Captivate. OptConnect also built firewall capability into each neo2 router. As a result, the Captivate team was able to move away from open source technologies and maintain configuration control of each device.

"With OptConnect, I have a neo2 with its own firewall capability. We can take it anywhere, power it by PoE, and get an instant connection. I've got a protected VPN that communicates with our own entities. Above all, I have a repeatable, secure environment of cyber-hardened devices that keep our screens online and generating ad revenue for our clients."

Del McPhetridge Chief Technology Officer, Captivate



About Captivate

Captivate is the only premium video network that delivers 100% viewable, fraud-free, brand-safe media in impactful locations across North America, reaching high value audiences where they work and live. From the biggest stories to today's weather, traffic updates to building amenity announcements, we're the daily source of information that sparks conversation, piques curiosity and makes an impact. We reach millions through our curated video network in premier office buildings and luxury residential real estate, fostering powerful connections between brands and decision-makers, properties and affluent consumers.

About OptConnect

Since its beginnings in 2009, OptConnect has emerged as a leading provider of cellular connectivity services for security equipment, ATMs, wireless kiosks, micro markets, smart safes, digital signage, parking and mobility, irrigation systems, and many other M2M applications. Many thousands of customers across the globe rely on OptConnect for its 'easy button' approach, plug-and-play hardware, managed services, and world-class customer care.