COPPER MOUNTAIN
Fast and Reliable Wi-Fi Creates a Better Overall Visitor Experience

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OVERVIEW

Copper Mountain Resort is one of Colorado's premier ski resorts located about 75 miles west of Denver and hosts close to one million skier visits per year. Copper Mountain has over 2,500 skiable acres and 38 individual condo buildings for a comfortable vacation at any time of the year.

REQUIREMENTS

- Easy to use, quality user experience
- Comprehensive in-door and out-door public internet access
- Support for high device density
- Support high bandwidth capacity
- Managed Service

SOLUTION

- Indoor: five hundred ZoneFlex R300 and R500 802.11ac APs
- Outdoor: twenty one Ruckus T300 802.11ac Aps
- Hosted Virtual SmartZone controller

MULTIPLE DWELLING UNITS AMONG SKI RESORT INSTALLS RELIABLE WI-FI

Hosting nearly one million skiers per year, Copper Mountain is one of Colorado's premier ski resort destinations. It is home to the US downhill ski team as their training venue. The beautiful landscape, world-class facilities, events for all ages, and the focus on providing an exceptional guest experience is what has skiers returning year after year. Copper Mountain Resort has truly placed guest experience at the top of their list. Guest Wi-Fi access is no exception

CHALLENGE

With 38 individual condo buildings, many have been renovated by adding staircases, merging units, and giant slate fireplaces built in. This creates an unpredictable and challenging environment to deploy Wi-Fi.

"Our biggest requirements for a guest access Wi-Fi solution are stability and user experience," said Michael Hurwitch, Director of IT for Copper Resorts. Free Wi-Fi is a common and very popular amenity in many establishments today, but often times the networks just don't perform to the end users expectations.

"The end user experience needs to be positive, we cannot have a solution that causes end users more frustration than it's worth," adds Hurwitch.

Deploying and managing public Wi-Fi access networks can be a resource intensive operation that often cannot be absorbed by the IT department. "Given our need to support public Wi-Fi access for multiple Home Owners Associations, retail locations, public areas, and resort owned lodging facilities, a managed services solution was the only way to go," said Hurwitch.

Originally, Copper Mountain did not have a solution in place to cover common areas and outdoor arenas to offer their guests. The only Wi-Fi offered was in the lodging facilities which was not providing enough bandwidth and had poor coverage.

So Hurwitch along with his team turned to the folks at ResortInternet and Ruckus Wireless for help. Like many other businesses, Copper Mountain wanted to provide their guests with superior connectivity and coverage while also allowing for an increase in the number of concurrent clients.

SOLUTION

For the previous five seasons, ResortInternet has been providing managed wireless services to the homeowners associations of the independently owned condos throughout the resort. A Ubiquity Wi-Fi network that

ResortInternet had installed with independent ISP connections into each building supported wireless access for the fifteen hundred units.

As ResortInternet evaluated the needs to support a Wi-Fi expansion into outdoor public areas, retail, and restaurant locations they quickly realized they needed to upgrade backhaul and Wi-Fi capacity. ResortInternet worked with the Copper Mountain Consolidated Metro District to deploy a robust fiber network interconnecting all of the buildings located at the resort, providing a more scalable Internet access solution. "We have been talking about expanding the Wi-Fi access network to support outdoor common areas and the growing user demands for years," said Mark Wentzlaff, President of ResortInternet, "The fiber network made those conversations a real possibility."

With the wired infrastructure limitations resolved, Mark and his team needed an upgraded solution for the Wi-Fi network. "We noticed that the legacy Ubiquity solution was no longer capable of supporting the number of devices guest were bringing to the resort. "As end users changed the way they used the Wi-Fi solution over the years, the Ubiquity solution just could not provide the capacity and RF coverage that was needed," added Wentzlaff.

> "We chose Ruckus because their antenna technology thrives in these high density, high capacity types of deployments."

MARK WENTZLAFF
President, ResortInternet

Having previously deployed Ruckus Wireless solutions in several similar resort style deployments, ResortInternet felt a Ruckus solution was the right fit for Copper Mountain. Supporting the indoor areas of the property, ResortInternet has deployed over five hundred Ruckus 802.11ac access points. They have selected a mix of ZoneFlex R300 and R500 access points and mounted them in the hallways or strategic locations within each property. With the challenging environment, Ruckus' patented adaptive antenna technology known as BeamFlex+ provides thousands of antenna patterns and supports horizontal and vertical polarization allowing for up to a three times performance increase. BeamFlex+ enhances the user experience by ensuring consistent wireless signals especially for mobile devices. The solution has allowed for up to four devices per bed within all of the condo units.

"Utilizing Ruckus' Beamflex technology for our Wi-Fi deployments has proven to be a success for the growth of ResortInternet," says Wentzlaff.

The outdoor areas were treated with twenty one ZoneFlex T300s deployed under the roof tops among the deck areas. As the resort often experiences severe weather, the T300 has a hardened exterior with an IP-76 water and dustproof plastic enclosure providing reliability and superior performance.

As a managed services provider, ResortInternet is able to take advantage of the Ruckus NFV (Network Function Virtualization) controller solution. The virtual SmartZone controller allows ResortInternet to reduce costs and centralize management and monitoring of their Wi-Fi deployments.

"Having a virtual controller option to help us oversee, manage, and troubleshoot was important to our decision," states Wentzlaff.

Combined with marketing information gathered during the user authentication process, ResortInternet can leverage network and usage data from the Virtual SmartZone to provide robust reporting to Copper Mountain Resorts.

"Since the install in-November, even though ski season is just gearing up, over 7,500 individual devices have already connected to the public Wi-Fi network in Copper Mountain," says Hurwitch.

"We chose Ruckus because their antenna technology thrives in these high density, high capacity types of deployments. Installing a high density, high speed Wi-Fi network in Copper Mountain is an amenity that visitors to Copper will be able to enjoy for decades to come," concludes Hurwitch.

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