Zinwave Delivers In-Building Wireless for Imperial Pacific Resort Hotel

SEARCHING FOR A SOLUTION

The resort hotel's project manager wanted the best possible in-building wireless system, and put out a worldwide request for proposals (RFP). Major concerns identified in the RFP included pervasive, multi-carrier coverage; minimal system complexity, and the ability to support future wireless frequencies as mobile operators rolled them out. The resort's management wanted to ensure that the system would deliver outstanding service for many years without the need for disruptive physical upgrades.

"The Imperial Pacific aims to provide an ultra-luxury experience, and the last thing we want is to interfere with their guests by ripping open ceilings in the public areas," said Pedro Vong, CEO of DC Systems Digital Communications Limited, the system integrator on the project. "It was important to us to get an in-building wireless system that would last for many years."

Although it received many responses, the project management committee chose Zinwave's UNlivity system because it excelled at meeting these needs. Unlike other in-building wireless systems, Zinwave's UNlivity system has a wideband architecture that natively supports frequencies ranging from 150 MHz to 2700 MHz without the need for hardware upgrades as new frequencies come online. This gave the system a level of “future-proofing” that the other vendors couldn’t match.

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ABOUT THE RESORT

Located in the heart of Saipan, the Imperial Pacific Resort Hotel is a luxury resort that offers a combination of luxury casinos (with more than 200 gaming tables and over 350 slot machines), luxury accommodations, and more than 20 exclusive dining and entertainment facilities. The 14-story hotel building has more than 340 hotel suites, including 15 deluxe villas, and a total area of 140,000 square meters.

In a world-class resort hotel like the Imperial Pacific Resort, guests and employees assume that their cellular devices will deliver clear, continuous service throughout the property. However, nearby macro cell towers weren't enough to penetrate the building's thick walls. During the earliest construction phases of the project, Imperial Pacific management identified a need for a comprehensive in-building wireless system to support both cellular and public safety traffic in every guest room, service area, and public area.
CASE STUDY

Imperial Pacific Resort Hotel

CONFIGURING THE SYSTEM

The system currently supports three wireless services: two public cellular services provided by Docomo Pacific and IT&E (using 700MHz LTE, 850MHz UMTS, 1900MHz LTE, and 2100MHz UMTS frequencies), and an in-house public safety service using the 800MHz frequency.

To deliver these frequencies, Zinwave deployed five Primary Hubs, 36 Secondary Hubs, and 283 Remote Units.

Deployment proceeded during the final construction stages of the project and took just a few weeks to complete, thanks to the system’s overall simplicity and all-fiber architecture. The system was installed, commissioned, and ready to go in time for the resort’s opening in 2018.

RESULTS

Thanks to Zinwave’s UNItivity system, visitors, guests, and employees of the Imperial Pacific Resort Hotel have enjoyed clear and consistent cellular and public safety services from day one. Cellular devices and public safety radios work as they should without garbling, static, or disruptions no matter where users are in the property.

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— MR. VONG, CEO

Solutions

• Distributed wireless solution delivers strong public safety and cellular coverage to all parts of the building

• Wideband architecture supports any frequency from 150-2700 MHz without hardware upgrades

• Easy, cost-effective deployment with simple, all-fiber architecture

Challenges

• Provide commercial cellular coverage for two operators with the capability to handle more in the future

• Deliver public safety wireless coverage for first responders

• Support new frequencies over time with minimal added cost and disruption

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