

# **CASE STUDY**

Heritage Village Resort and Spa, Goa

## About Heritage Village Resort and Spa, Goa

Heritage Village Resort and Spa, located in Goa, India, is widely regarded as one of the best family resorts in the region, allowing guests to immerse themselves in the rich local culture as they enter the property. The rooms at the resort provide comfort and luxury while at the same time paying respect to the bygone Portuguese era. The Heritage Resort is within proximity to popular tourist spots and travel hubs.



## THE NEED

The resort typically has around 150-200 visitors at any given time staying at the resort. In addition to the guests and staff members, the number of guests present can go up to 400 with customers visiting the restaurants, parks, and beach. Even with Wi-Fi speeds that reached up to 150Mbps, visitors at the resort still experienced inconsistent internet speeds due to the density of the network traffic. Some guests experienced fast internet speeds while at the same time, there were some guests who had major connectivity issues. All of this indicated that there was no proper bandwidth allocation configured with the current Wi-Fi environment. Visitors would also frequently lose connection and would try to reconnect only to encounter a "no internet" notification, further echoing the unstable Wi-Fi connection at the resort.

The resort urgently needed an upgraded system that provides stable Wi-Fi connectivity while at the same time keeping the network safe and clutter-free due to the huge volume of visitors, guests, and staff members of the resort. The administrative team also wanted access points that could easily be managed using a centralized management platform, due to the significant network infrastructure that was being planned for the indoor and outdoor facilities of the resort.



## **Provided By Gigatel Networks**

Gigatel Networks is Delhi's most proactive Internet Service Provider with an enviable presence in the state. The mission of Gigatel Networks is to provide a wide range of fiber optic internet services to clients, ranging from individuals to big organizations, by deploying the latest technology in an economical manner, to facilitate their day-to-day work and boost their business. Gigatel's brand recognition in the Fiber-based Internet Services domain is based on its comprehensive bouquet of IT solutions like Internet bandwidth connectivity and the world-class support it offers to its clientele across the covered areas.

# THE PROBLEM

The Heritage Village Resort and Spa offers a total of 100 rooms throughout the property. The Wi-Fi signal across most of the rooms was subpar, and network speeds were slow. The rooms that were located in the far corners of the resort had very little to no Wi-Fi connectivity. Even in the lobby and administrative areas, there was a consistently unstable network connection that made it difficult for the staff at the resort to conduct their day-to-day operations. Additionally, guests found it difficult to utilize the wireless network in common areas. Moreover, there was no Wi-Fi connection in the external facilities of the resort such as the pool and common grounds, which further reiterated the necessity to revamp the current Wi-Fi setup.

Prior to installing Grandastream's GWN7664 And GWN7664LR, the resort was equipped with TP-Link Deco Mesh Routers which had several problems that the resort needed to address:

#### **Slow Network Speeds:**

The largest issue that the resort faced was the slow internet speed throughout the network, despite their Internet Service Provider providing high connection speeds.

#### **Unstable Internet Connection:**

The wireless connection frequently stopped working, which resulted in a consistent disruption for the resort staff, guests, and visitors.

## **Signal Fluctuation:**

Weak signals in many areas of the resort were a primary concern as many users could not maintain a stable wireless connection if they were able to find one at all.

## **Low Concurrent Clients Supported:**

The previous TP-Link networking solution could not support a high amount of devices at one time, which was a major drawback for the resort where there is frequently a large concentration of guests.

## **Lack of Security:**

The previous networking solution did not allow for captive portals to be configured for the visitors' network. The Wi-Fi authentication method was simply a static password, thereby allowing many unauthorized users to access the internet at any time.



#### COMPETITORS CONSIDERED

Prior to installing Grandstream's Access Points, the team at Heritage Village Resort and Spa was also approached by competitors such as Cambium, unifi and Altai. However, after careful consideration, the team decided to go ahead with Grandstream's GWN7664 and GWN7664LR, as these access points met all the requirements of the resort and could also be managed using Grandstream's network management platform GWN.Cloud.

## PRODUCTS DEPLOYED



GWN7664 Indoor Wi-Fi 6 Access Point

Inside Areas of the resort



GWN7664LR Outdoor Long-Range Wi-Fi 6 **Access Point** 

Outdoor Areas of the resort



**GWN.Cloud Cloud Management Platform** 

Access Point Management

### WHY GRANDSTREAM?

After consulting with Micro Village Communications, Heritage Village Resort and Spa decided to move forward with Grandstream's Wi-Fi 6 Access Points. A total of 30 GWN7664 Indoor Wi-Fi 6 Access Points were deployed across the resort, along with 5 GWN7664LR Outdoor Wi-Fi 6 Access Points. These devices were managed using Grandstream's free Cloud Controller, GWN.Cloud. Grandstream was chosen for the following reasons:

#### Wi-Fi Standards:

Grandstream's GWN7664 and GWN7664LR both support the Wi-Fi 6 standard, 802.11ax. The Wi-Fi 6 standard provides advanced features in the form of DL/UL OFDMA and advanced MU-MIMO technology, which offer better performance for high-density environments. This is especially helpful in deployments such as resorts, which frequently have a high amount of devices being used at the same time.

## **Network Speeds:**

The GWN7664 and GWN7664LR deliver network speeds of up to 3.55Gbps with 2.5Gbps aggregate wired throughput, making them the ideal access points for an establishment with a large user base. The GWN's higher Wi-Fi speeds provide increased performance for activities that require high data transfer rates like streaming, file transfers, and content streaming.

## **Coverage Range:**

The GWN7664 has a coverage range of up to 175 meters ensuring that all users receive proper network access within the indoor areas of the resort. Additionally, the GWN7664LR has a coverage range of up to 300 meters and weatherproof casing, making it an ideal long-range access point for the external areas of the resort.

## **Multiple Antennas:**

The GWN7664 has 8 individual internal antennas and 4 per band and the GWN7664LR has 4 dual-band external antennas, thereby providing better network coverage and range for all the Wi-Fi users at the resort. The GWN7664LR antennas can also be adjusted and set to be unidirectional, focusing the connection to the desired location.

#### **MU-MIMO:**

Both Wi-Fi 6 Access Points have advanced 4x4:4 MU-MIMO with DL/UL OFDMA technology that enables the GWN APs to communicate with multiple devices simultaneously, thereby enhancing the overall network efficiency and performance.

### **Beamforming:**

By utilizing beamforming technology, Grandstream Access Points can focus their transmitting signals to specific locations, which improves signal strength and reduces any external interference.

#### **Quality of Service (QoS) and Security:**

QoS settings on GWN access points enable the prioritization of network traffic, such as video streaming, VoIP, and data transfer for a smoother experience for users. Due to QoS configuration, users can experience a stable network connection despite high network traffic. The APs also support WPA3 Encryption for improved network security. Lastly, client isolation features additionally enhance network security by preventing wireless clients from communicating with one another.

#### **Guest Wi-Fi Network:**

Grandstream's captive portal authentication system allows for a separate network to be created exclusively for guest users. This enables the resort to create a Wi-Fi SSID specifically for guests while having a separate SSID for resort staff. This results in increased security for the resort, while ensuring resort staff will always have their own network with guaranteed bandwidth allocation.

### **Easy Setup and User-Friendly Cloud Controller:**

An access point setup that was both easy to deploy, configure, and manage was a key selling point for Heritage Village Resort. With the GWN.Cloud management platform, the installers connected all 35 Access Points to a single management interface, providing the resort IT personnel with a centralized location to access network settings and troubleshoot Wi-Fi issues.

## **Reliability of the Brand and Good Reviews:**

Grandstream is widely regarded as a reputable and reliable brand, which was one of the key factors that influenced the administrative team at Heritage Village Resort and Spa to move forward with Grandstream's Wi-Fi 6 Access Points.





# THE RESULT



The IT team at Heritage Village Resort and Spa is very pleased with the performance and security features that Grandstream's GWN Access Points offer. The IT team can quickly identify minor issues with any access point and deal with the problem efficiently without much difficulty. This is primarily a result of utilizing GWN.Cloud for its centralized access point management and monitoring features.

The GWN7664 and GWN7664LR access points allow the team at Heritage Resort to regulate and distribute appropriate bandwidth based on the user level through the creation of multiple Wi-Fi network SSIDs. It is essential for the staff at Heritage Resort to have a stable internet connection for their operations which involve registering guests, the check-out process, guest demands, room service, and more. This is especially true with the reception and lobby areas, where they now have greater network bandwidth that improves staff workflow and allows them to perform their tasks with no network disruptions.

Visitors and guests were no longer experiencing bandwidth constraints or interruptions and were getting consistent and reliable download speeds over the network. Both visitors and staff could make stable and clear video conferencing calls. With the installation of Grandstream's Wi-Fi 6 access points, guests, visitors, and staff could access the internet anywhere in the resort including outdoor spaces, which was not the case with the previous Wi-Fi solution. There have been no internet interruption problems since Grandstream's devices have been deployed, even when the resort is extremely busy.

Heritage Resort uses the captive portal feature offered by Grandstream's GWN APs, which has proven to be helpful when it comes to rolling out marketing promotional activity for the resort. The captive portal will direct visitors to the resort's designated web portal to enter their voucher code for an internet connection. The resort is also using a splash page that requires guests to enter their contact details. On this splash page, the marketing staff at Heritage Resort can place various advertisements and promotional materials that encourage customers to learn more about the facilities. This has proven to be a reliable tactic to drive guests to resort events, stores, and restaurants.

By installing Grandstream's Wi-Fi 6 Access Points using GWN.Cloud, the entire network is under a single cloud management platform. The IT team at Heritage Resort has found it much easier to manage the entire system as any issues can be quickly identified and addressed with any access point from the platform. The executive team at Heritage Village Resort and Spa are extremely satisfied with the continuous support and engagement of the installer, Gigatel Network, who helped them through the entire setup process. Additionally, they've been training the resort's IT team and constantly being there to support them in case any issues occur.