

CASE STUDY

Hotel Kollol by J & Z Group

About the Hotel

Hotel Kollol is a 4-star hotel, by J&Z Group located in Laboni beach, Cox's Bazar, Bangladesh with a magnificent sea view along with a spacious majestic restaurant serving visitors regularly. Hotel Kollol is regarded as one of the leading hotels in terms of guest accommodations, quality, sea view, and restaurants in Cox's Bazar, Bangladesh.

Being only 10 minutes away from Cox's Bazar International Airport and the fact that they have excellent customer service puts them on the priority list of tourists visiting Cox's Bazar. With around 160 rooms and a capacity for up to 600 people, there was a need for a strong networking system as stable and reliable Wi-Fi is a musthave benefit for hotel guests.



THE PROBLEM

Previously, Hotel Kollol had a very complex network system that was difficult to manage and there was no centralized management system, so they needed to handle each router individually. They were using D-Link routers to cover their whole premises. On each floor, they placed multiple primary D-Link routers and many D-Link routers in range extender mode with no mesh support. It caused multiple issues at multiple sections, dropas off the network, unstable connection, user disconnections, and difficulty in the management of the whole system. The range was very poor and there was no way for them to create any outdoor network with this system.

To tackle the existing issues and satisfy the hotel's needs, Excel Bangladesh devised a plan to resolve core issues that Hotel Kollol was facing to give them an overall smoother and better experience utilizing the Grandstream's GWN Series Wi-Fi Access Points and free management options.



Provided By Excel Technologies

Excel Technologies Ltd. is one of the leading IT Companies in Bangladesh and started their journey back in 1999. Excel Technologies Ltd. is the most trusted company because of their excellent after sale service and warranty policies. With an experience of more than 24 years and 17 excel+service customer support point available throughout whole Bangladesh.

THE NEEDS

Being in the Hotel Industry, Hotel Kollol regularly sees waves of visitors coming and going every day. Keeping track of these guests, taking reservations, following up with customers, processing bills during checkout, and many more tasks are heavily dependent on a stable and strong networking system. Many guests were complaining and leaving unsatisfied. Upon close inspection, they



found their current Wi-Fi Networking System is a core cause of that. After having a close discussion with the executives at Hotel Kollol, Grandstream's certified partner in Bangladesh, Excel Technologies, found 5 core networking issues the hotel was facing and came up with a solution to fix these:

Bandwidth Fluctuation:

On average, the hotel has between 200 to 250 guests. During peak time this number can go up to 800 people including guests and restaurant visitors, and outside people visiting the hotel park. Even after having 400 Mbps, users were receiving unstable internet speeds. Some guests were getting exceptionally high speeds, however, some were getting no connectivity at all.

Weak Wi-Fi Signal:

Hotel Kollol has around 160 rooms. In many rooms, especially the rooms located in the far corner, customers were getting very weak to no signal. Even in the lobby area, users were getting very poor Wi-Fi connectivity resulting in a poor experience. In addition to Wi-Fi connectivity in the indoor areas, Hotel Kollol wanted to expand its current network to the outdoor areas, which they didn't have.

Continuous Disconnection:

Hotel guests were constantly getting disconnected from the internet whilst they were using it and were unable to connect back to it. Additionally, a vast majority of the guests were not able to connect to the internet receiving messages that displayed "connected but no internet".

Guest Wi-Fi Zone:

With a large number of visitors on daily basis, in addition to the guests and hotel staff, the hotel needed a system to easily provide Wi-Fi access while keeping the existing network secure and clutter-free.

Centralized Management System:

With a big networking system being planned throughout the hotel's indoor and outdoor premises, a central hub for managing the network was mandatory for them.



COMPETITORS CONSIDERED

Besides Excel Bangladesh recommending Grandstream, another distributor tried to pursue Hotel Kollol to consider their access point solution. UniFi6 from Ubiquiti was the alternative that was considered, however, upon close inspection, Hotel Kollol decided that it was Grandstream that was giving them the better value and a more concrete solution that catered to their needs.

PRODUCTS DEPLOYED



Wi-Fi 6 Indoor **Access Point**

Indoor public spaces



GWN7602 Wi-Fi AP with Integrated **Ethernet Switch**

Hotel Rooms



GWN7660LR Outdoor Long-Range Wi-Fi 6 Access Point

Outdoor areas



GWN.Cloud Cloud Management Platform

Access Point Management

WHY GRANDSTREAM?

The reasons for converting to a Grandstream solution were obvious and concrete as all of Hotel Kollol's core problems were easily solvable using Grandstream's Access Points. A total of 160 GWN7660 devices and GWN7602 were used to cater to the indoor areas and hotel rooms, while 4 units of GWN7660LR were placed around the outside areas of the property.

Bandwidth Allocation:

While deploying the solution, Excel Bangladesh used Grandstream's Per IP Bandwidth Fixing technology to distribute the bandwidth amongst all the users and set a bar for the users. Therefore, all hotel guests are now getting similar Wi-Fi speeds and the wastage and fluctuation of bandwidth was no longer present which was a huge issue prior to installing the solution.

Strong Wi-Fi Signal:

As the GWN7660 having a 175-meter indoor range for each access point, it became much easier to reach even the furthest corners of any room on any floor. Its 2x2:2 MU-MIMO with DL/UL OFDMA technology helps the users to stay connected and receive stable signals all around the hotel. Wi-Fi roaming helps clients stay connected on every floor of the hotel.

Increased User Capacity:

High user handling capability devices were required as it was evident that their previous Wi-Fi system was not able to handle high user loads. Choosing Wi-Fi 6 compatible devices were important. Each GWN7660 & GWN7660LR has a capacity for 256+ concurrent users meaning the high traffic load is no longer an issue and hundreds of users could stay connected without any potential disconnections. The advanced QoS that the APs had also ensured good real-time performance of low-latency applications.

Creating Multiple Wi-Fi Networks:

To do this, Excel Bangladesh distributed the network into three different categories, management, staff, and hotel guests. Previously, Hotel Kollol used a single Wi-Fi network to cater to everyone, which proved to be a problem as the management of the staff network is different from that of the Hotel Guests. The next task was to create a guest network for the users who were staying in the hotel as all the guests coming and going needed a system where guests will remain connected based on their stay time. Using Grandstream's Captive Portals Authentication Rule system Excel Bangladesh managed to create a network wherein, if a guest is staying for 3 days, they get a voucher with a code and portal login and once the 3 days are over they will automatically get disconnected from the network.

Wi-Fi Management:

The next-generation cloud management platform, GWN.Cloud offers unlimited AP management. The embedded controller management system has a capacity of 50 APs, so GWN.Cloud was the perfect centralized management system for the large number of APs deployed. The PoE+ feature helped with wire management and any detection of issues that arose. Now with the GWN.Cloud, the networking team can monitor and manage the APs from anywhere using any device at any time, making life a lot easier for them.

THE RESULT



Excel Bangladesh is constantly in touch with Hotel Kollol every week for constant feedback on the usability, after one month of deployment, Excel Bangladesh visited them in person to get their feedback on the new Wi-Fi system. These were the results given by Hotel Kollol to Excel Bangladesh:

- Users were no longer facing any bandwidth issues and received stable speeds while browsing or downloading on the network. Guests and staff were able to make video calls with proper clarity and stability.
- The whole hotel now had strong Wi-Fi signal coverage and guests along with the staff are now receiving stable and strong signals around the entire hotel premises even when in the outdoor areas.
- Disconnection issues are no longer present during peak time at the hotel when there are a lot of guests, creating a much more positive attitude amongst not only the guests but also the employees. Previously, while core work was taking place, employees could not connect to the internet creating a lot of inconveniences.
- Creating multiple Wi-Fi networks has now given Hotel Kollol the ability to manage and distribute proper bandwidth based on the user level. Level of control is now established based on the user. The core staff now get more bandwidth making the workflow much smoother for them as they need internet connection stability for a lot of guest-related information, especially in the reception area.
- Right now, Hotel Kollol is using the captive portal feature of Grandstream, which also helps when they are doing any marketing promotion as it redirects visitors to their designated web portal to enter the voucher code for connection. They are placing different advertisements and promotional material on the web page which encourages customers to spend more time learning about the hotel. As a result, they can increase their sales
- Now that the whole network is under a single cloud management system, the network team finds it
 much easier to manage the entire system. Router and User management is now just a touch away
 from them and they can instantly identify and address any issues with any of the access points on the
 premises.

The executives at Hotel Kollol are also extremely satisfied with the continuous support and engagement of Grandstream's Partner, Excel Technologies who helped them through the whole setup and learning phase. Excel Bangladesh also encouraged the staff at Hotel Kollal to contact them at any point in time for any issues which made them very happy, whereas previously Hotel Kollal was left with no after-sales customer service.









