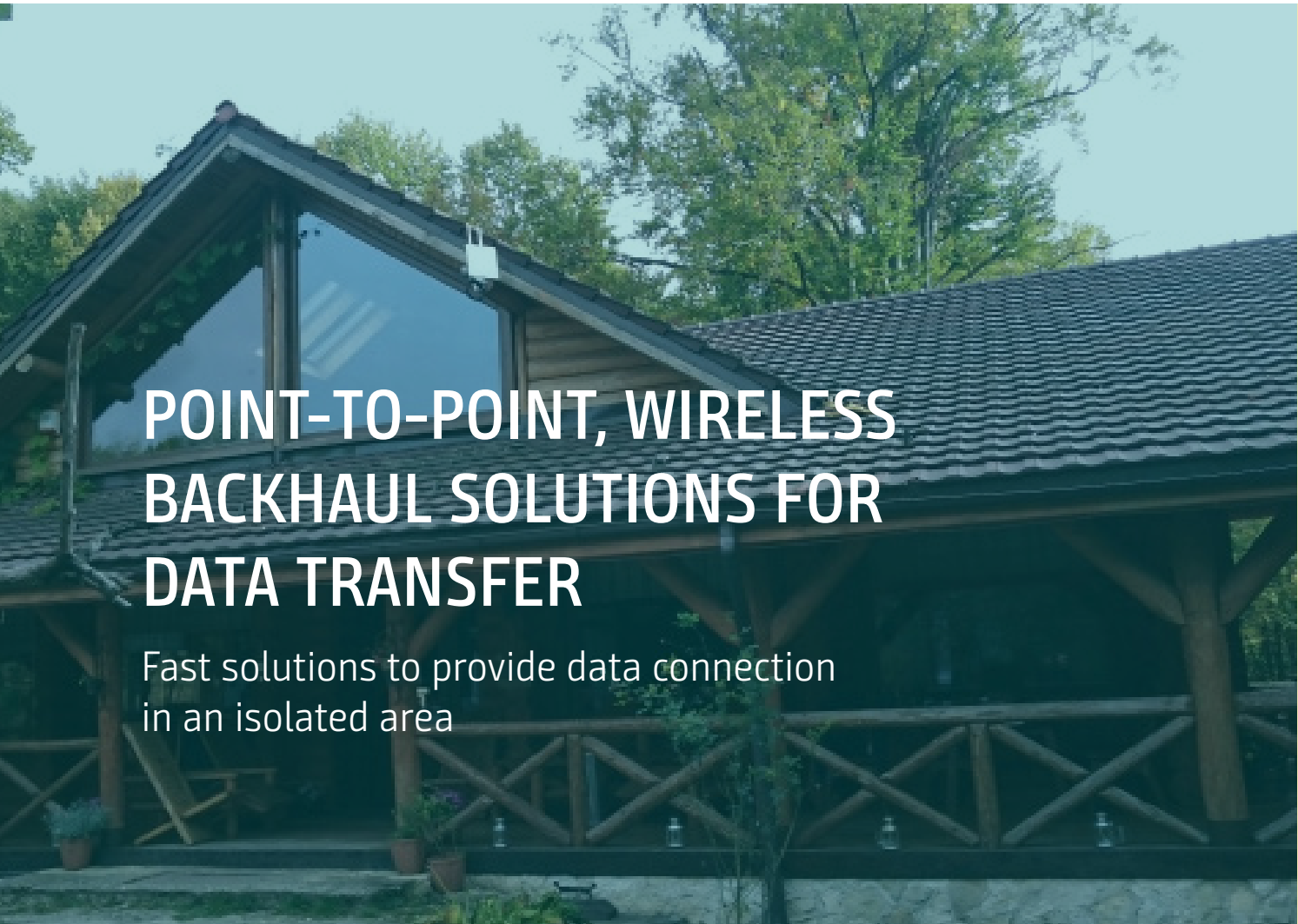




POINT-TO-POINT, WIRELESS BACKHAUL SOLUTIONS FOR DATA TRANSFER

Fast solutions to provide data connection
in an isolated area

Location

Izvoranu village, Tisau, Buzau county, Romania

Customer: Izvoranu Chalet

Type of space

Hotel/ restaurant

Products we used

Proxim Orinoco QB-9150 Access Point with integrated backhaul

Technology

Point to Point, WiFi



THE LOCATION

Izvoranu Chalet is located 26 km outside the town of Buzau, in an isolated place, but, in the same time, very popular for the surroundings with wild forests and beautiful landscapes.

The owners have invested a lot of resources when arranging the accommodation and the restaurant in a sustainable way, without affecting the natural environment, having in mind the inspiration of a traditional Romanian lifestyle. In the same time, they wanted to offer their guests the comfort of a modern life, including a stable WiFi connection, especially since there is no coverage from mobile operators in the area.

THE CHALLENGES

The accommodation already benefited from an Internet connection and WiFi coverage, but the customers who spent most of their time in the restaurant area, weren't satisfied with the lack of connectivity. That's why, the owners' objective was to get WiFi connectivity both inside the restaurant and outdoors for the terrace and the glade.

Our solution had to have a minimal impact on the architecture of the two buildings, without any kind of intervention on the natural environment.

THE SOLUTION

For this project the option of a wired solution was not feasible. We had to orient ourselves to making a wireless connection between the two buildings in order to use the connection already available in the accommodation.

Our plan was to make a point-to-point connection between the accommodation and the restaurant and then distribute it through AP's in the area of interest. The small distance and the level difference between buildings helped us to ensure a stable connection.

We chose to build our solution around the **Orinoco QB-9150 device from the Proxim Wireless portfolio**.



The two buildings are separated by about 100m distance where there is an oak forest and a stream flowing.



THE FEATURES

The Orinoco QB-9150 is an external 802.11n access point with a 2.4 GHz radio unit and a 5 GHz backhaul unit with an integrated antenna. Using this equipment, we've managed to achieve both point-to-point and WiFi distribution through a single device, thus minimizing the impact on building architecture.

The 866 Mbps data rate of the point-to-point backhaul module and the compatibility with the 802.11n standard of the access point with a data rate of up to 300 Mbps, provides the data needs for a wide range of applications that customers could use.

The output power of 20 dBm for 802.11n when using a 40 MHz channel and a transfer rate of over 150 Mbps and the use of the 2.4 GHz band has allowed us to ensure WiFi coverage both on the terrace and in the glade and inside of the building. The PoE power supply and the integrated alignment tool along with the graphical interface that allows quick configuration, have greatly reduced installation time and commissioning, with the entire system being functional in just a few hours.

Proxim Wireless ORiNOCO® QB-9150

- external 802.11n access point
- 2.4 GHz radio unit
- 5GHz backhaul unit with integrated antenna
- transfer speeds of up to 300 Mbps
- fast installation time



THE RESULTS

Izvoranu Chalet has a constant flow of tourists and is one of the best rated hotels in Buzau county on Booking.com. Shortly after deployment, our system was subjected to the demands of the chalet's customers.

Proxim Wireless Point to Point Equipment *Engineered for extremes*



Wide operating
temperature

Unmatched
reliability

IP 67 dust & liquid
protection

Humidity
protection

Since the area where the chalet is located does not benefit from coverage by mobile operators, the system implemented by us for the restaurant area became the only external communication solution for both data and VoIP applications.

We are very pleased to note that in their reviews on the Izvoranu Chalet booking page, customers appreciate the quality of the WiFi network.

WHAT ARE YOUR CHALLENGES?

Point-to-point links are a very suitable solution in providing wireless data transfer for isolated locations or for situations where a fiber optic or copper cable network are not a viable option, both applicable in the case of Izvoranu Chalet.

MULTIPLE SOLUTIONS FOR SOLVING CONNECTION PROBLEMS

We offer point-to-point installation products and services for both unlicensed and licensed spectrum.

For a personalized analysis and a proposal for specific solutions, you can send us more details about your potential projects at contact@claritech.ro.

