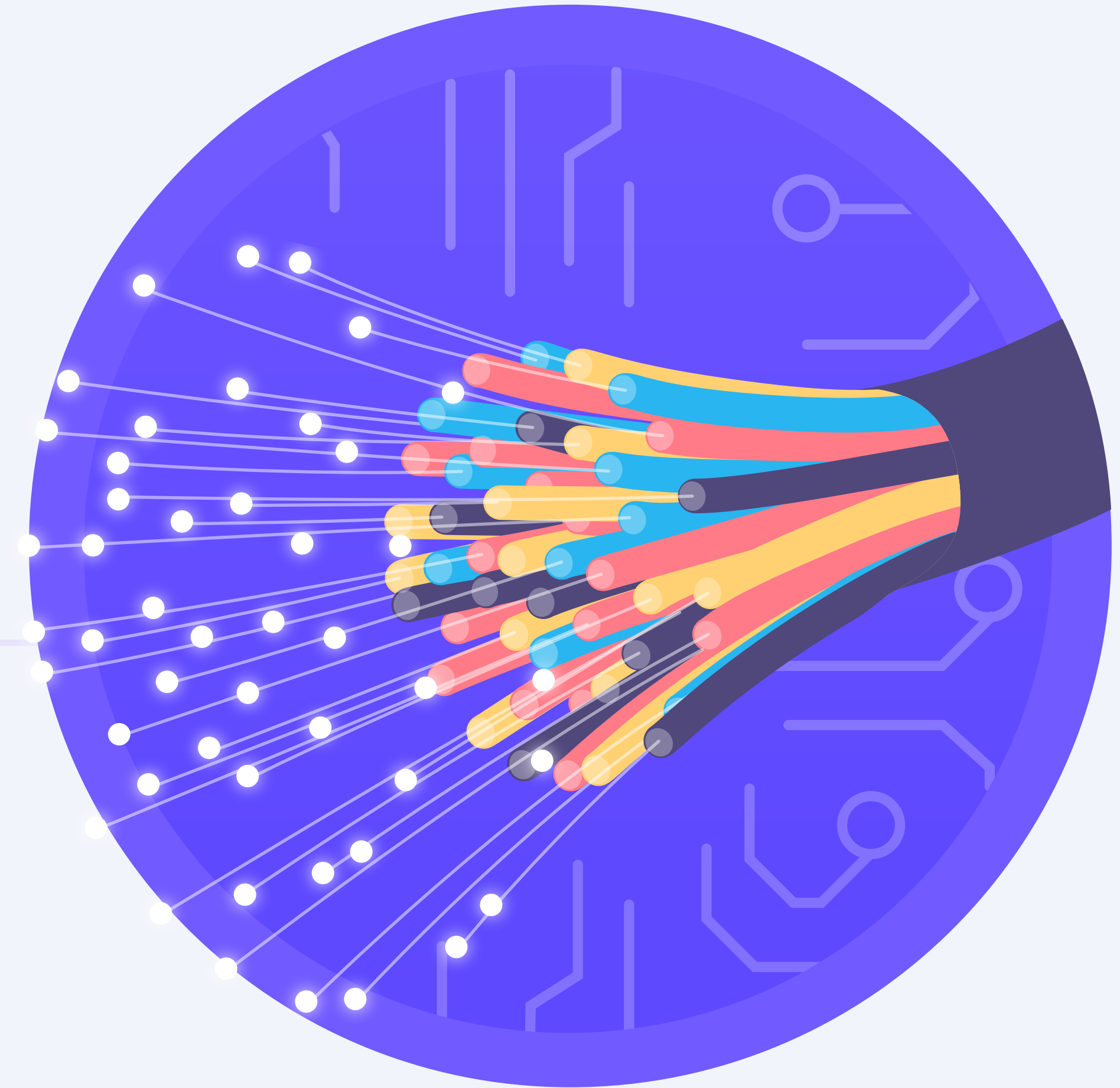


WiFiBot GPON module

by hotelinking

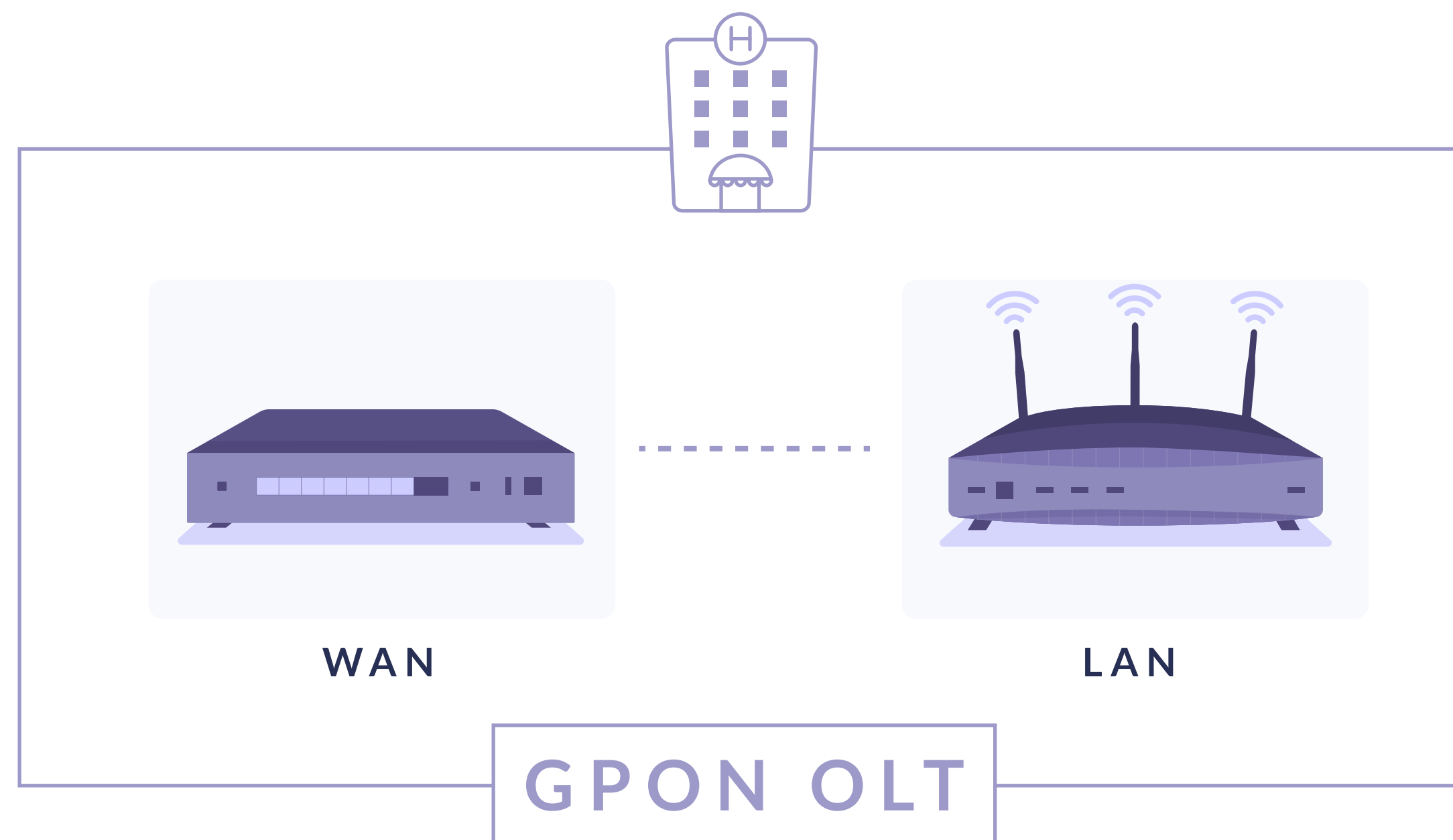


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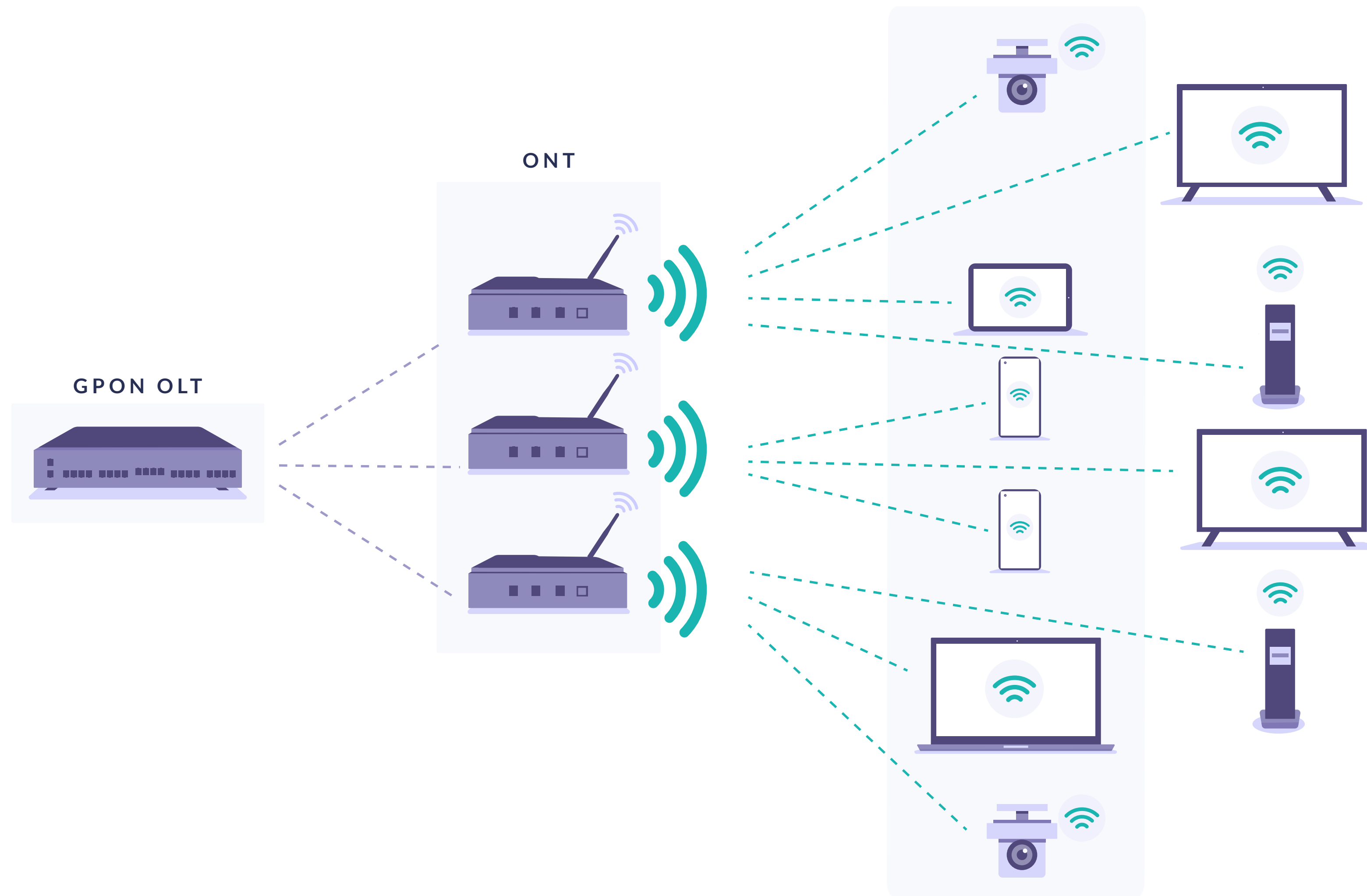
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What is GPON technology and how does it work?



The **Gigabit-capable Passive Optical Network (GPON)** is a telecommunications access technology that uses fibre optics to bring Internet connection to individuals, businesses or, in this case, hotel properties. This technology allows multiple services to be distributed to various locations through a single fibre optic line, reducing infrastructure costs.

The main advantage of such networks is that they **provide high download and upload speeds, thus providing an efficient solution to the increasing needs of guests who increasingly demand higher speeds to connect their different devices during their stay.**

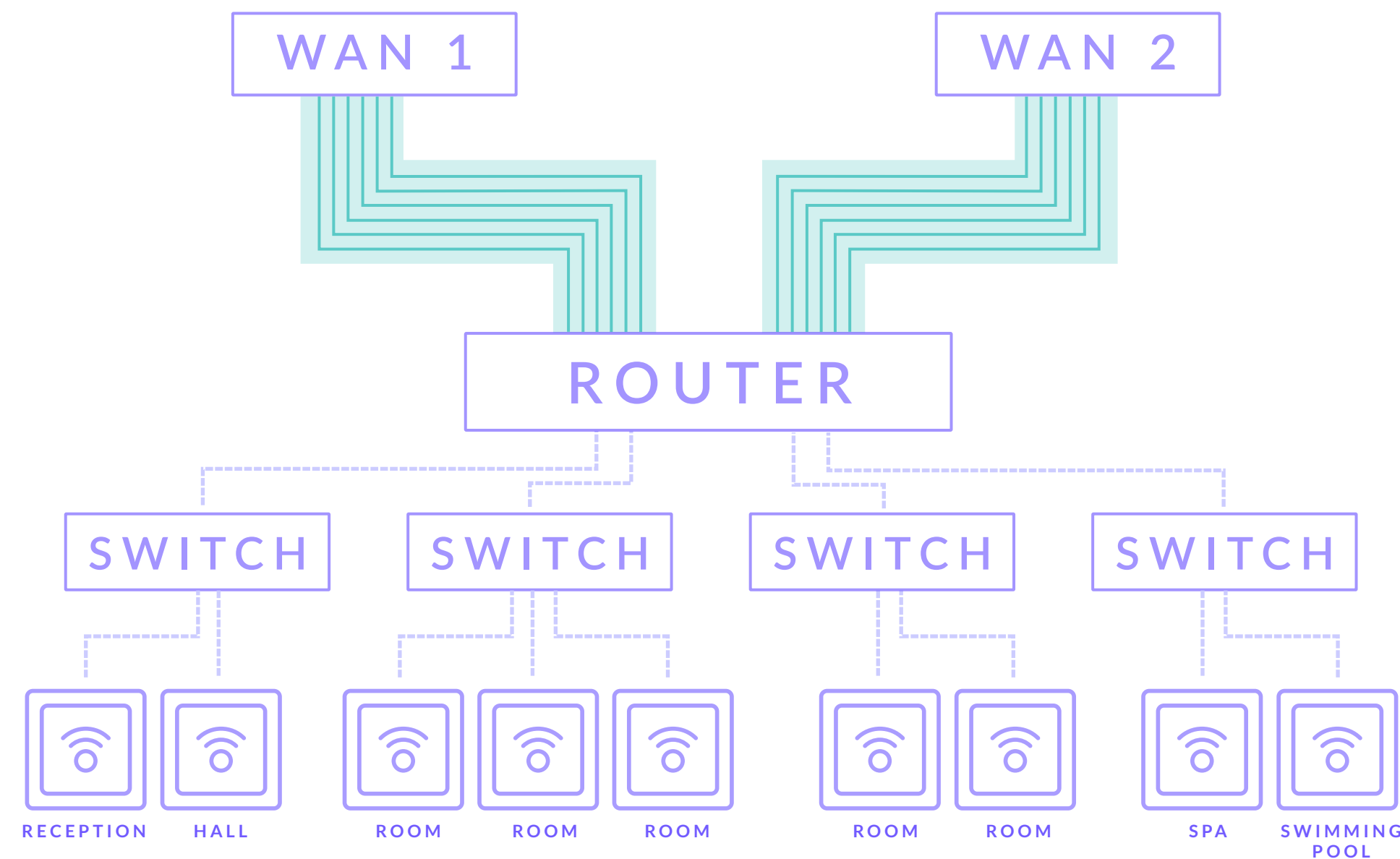


All fibre optic operators in Spain use it. **GPON networks** comprise different equipment that allows connection to the network and the Internet through fibre optics. It is essential to understand the function of each piece of equipment.

However, they are usually installed and maintained by network operators, which can lead to inconvenience when technical problems occur within the hotel and depend on third parties for resolution.

**What advantages
do GPON fibre optics
offer hotels over other
networks?**

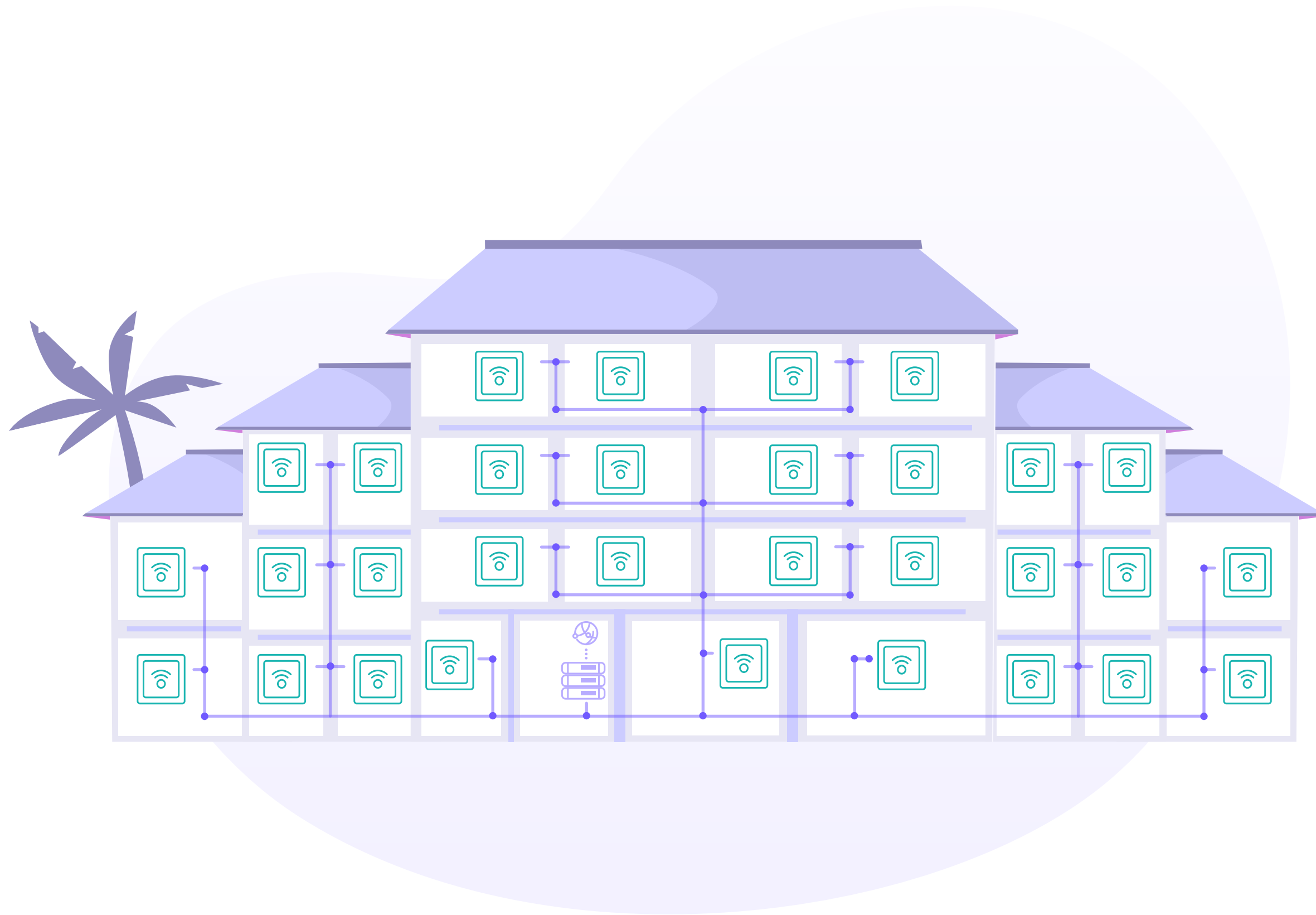




✓ Higher speed and bandwidth

GPON fibre optics provide faster download and upload speeds than other network technologies.

This gives **guests a faster and smoother internet connection experience**, allowing them to enjoy high-demand online services such as video streaming, video conferencing and large file downloads without performance issues.



✓ **Stable, high-quality connectivity**

GPON fibre optics offer a stable and reliable connection. This is essential in a hotel environment, where guests expect constant and seamless connectivity. Fibre **optics are less susceptible to electromagnetic interference and signal loss**, ensuring consistent connection quality in all hotel areas.

✓ **Increased capacity and scalability**

GPON fibre optics have a greater capacity to handle multiple devices and services simultaneously. This is especially beneficial in hotels with a high guest volume and many connected devices. In addition, fibre optic infrastructure allows easy scalability to meet growing connectivity demands without significant changes to the existing network.

✓ Increased security

GPON fibre optics offer greater security than other networks, since they are more difficult to intercept and less vulnerable to external interference. This **ensures data protection and guest privacy**, which is especially critical in the hotel environment where information confidentiality is vital.

✓ Less latency and higher throughput

GPON fibre optics provide lower latency compared to other network technologies. This means **online communications and interactions are faster and more responsive**, improving the user experience. In addition, fibre optics have a higher capacity to withstand heavy traffic loads, resulting in optimal performance even in times of high demand.



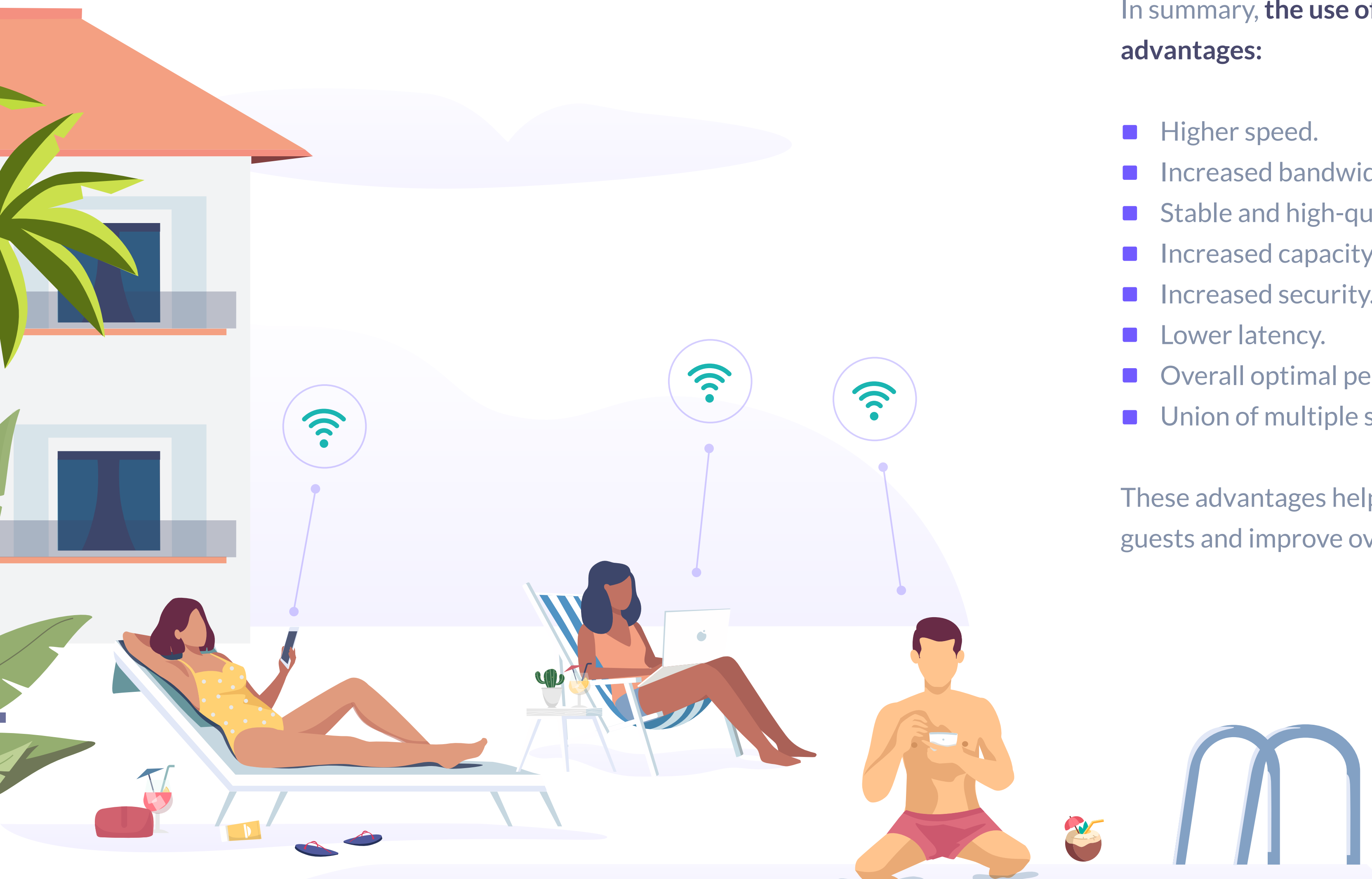


✔ Transmission distance

Fibre optics have a much higher transmission capacity compared to **UTP cables**. While UTP typically has a transmission distance limit of about 100 meters before the signal decreases, fibre optics can transmit data over much longer distances, making it ideal for deployments in larger hotels.

✔ Convergence of services on a single cable

The GPON fibre optic network enables the convergence of multiple services on a single cable. This means that Internet, television, telephony and other services data **can be transmitted simultaneously over the same fibre optic**.



In summary, **the use of GPON fibre optics in hotels offers significant advantages:**

- Higher speed.
- Increased bandwidth.
- Stable and high-quality connectivity.
- Increased capacity and scalability.
- Increased security.
- Lower latency.
- Overall optimal performance.
- Union of multiple services into a single cable.

These advantages help provide an exceptional connectivity experience for guests and improve overall guest satisfaction in the hotel environment.

**What problems do hotels
have in managing GPON
fibre optic networks
efficiently?**





Initial cost

Implementing a GPON fibre optic infrastructure can be costly compared to other network options.

It **requires significant investment** in equipment, cables and skilled labour for installation.

Dependence on external suppliers

Hotels using GPON fibre optics **often rely on third-party** providers for network set-up, maintenance and troubleshooting. This can lead to delays in resolving technical issues and increased reliance on third parties.

Management complexity

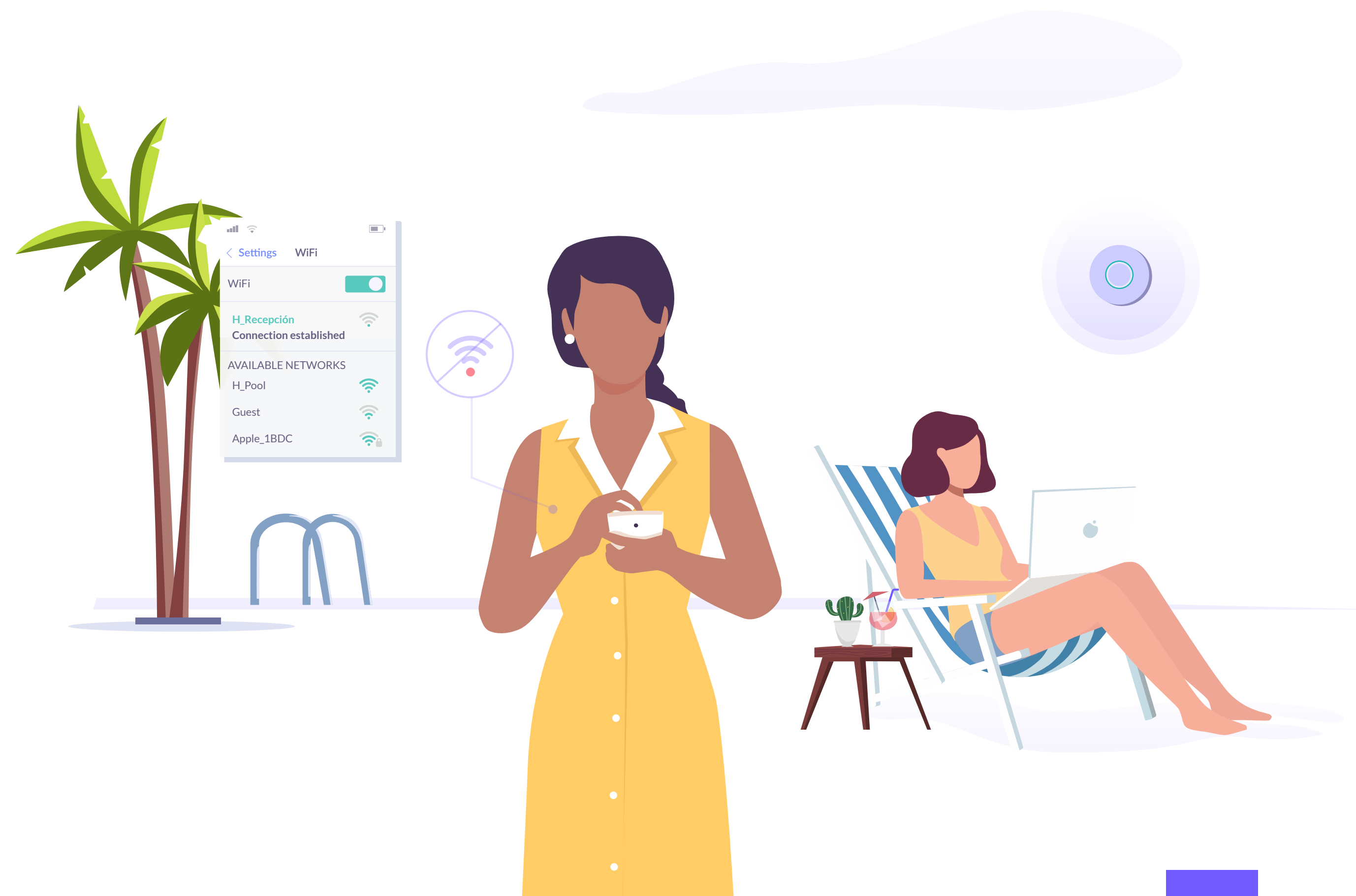
Managing a GPON fibre optic network can be more complex than other technologies.

It requires technical expertise and dedicated resources to ensure optimal network operation.

Physical vulnerability

Although fibre optics are less susceptible to electromagnetic interference, they **may be more vulnerable to physical damage**, such as cable breaks due to excavations or other incidents.

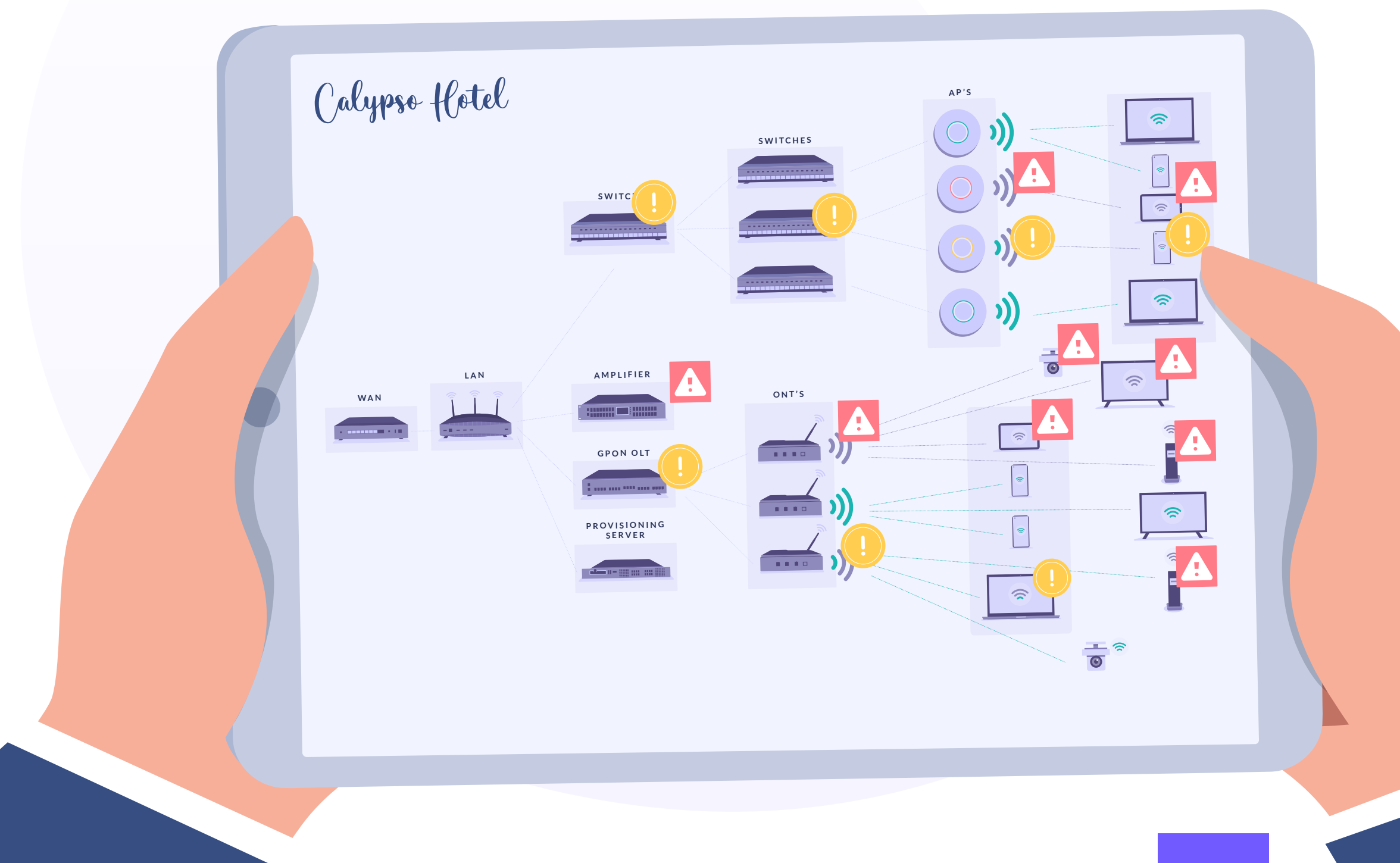
This may require additional effort in terms of infrastructure maintenance and protection.

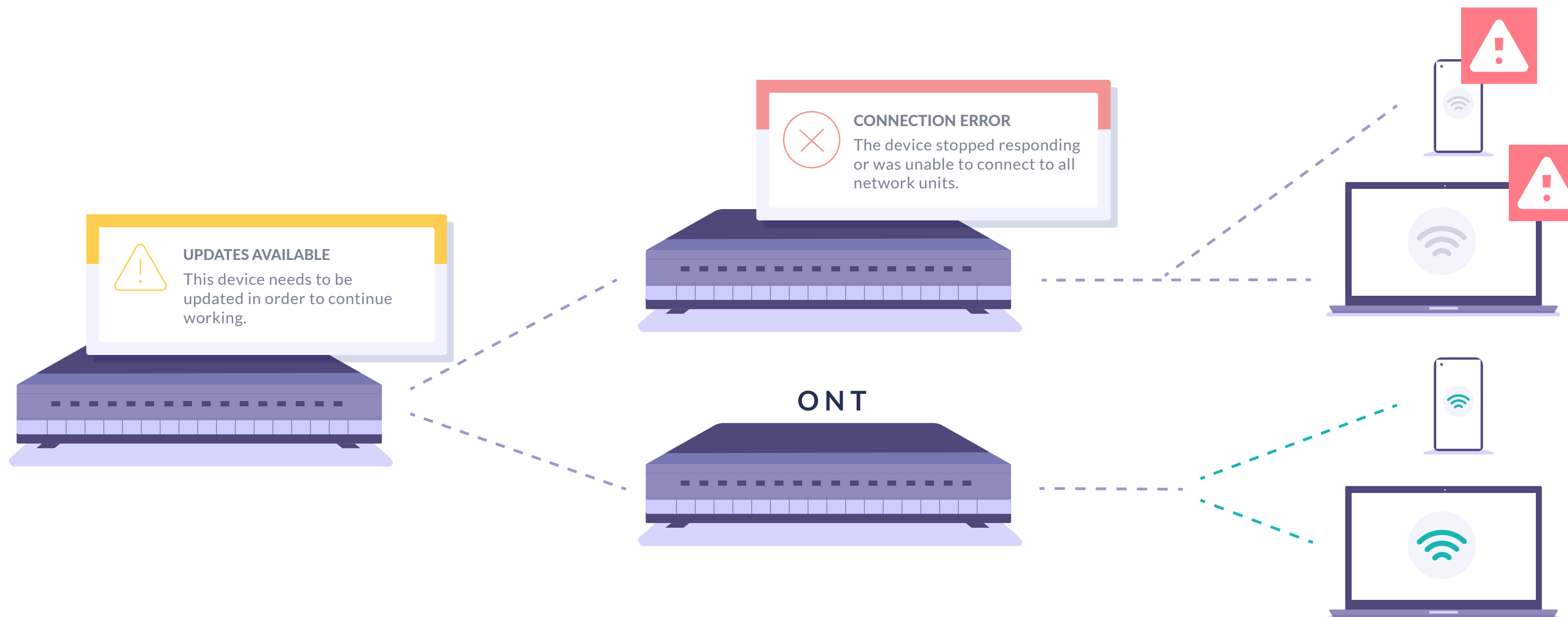


Roaming management between ONTs

Another disadvantage of GPON technology is roaming management between ONTs (Optical Network Terminals). **The challenge of managing roaming efficiently** can arise in hotel environments with multiple ONTs distributed in different areas of the hotel. Roaming allows guests' devices to connect transparently to different ONTs as they move around the hotel.

Proper roaming management is crucial to ensuring a seamless connectivity experience for guests. It requires careful set-up and monitoring to avoid interruptions or connection problems when switching ONTs.





Difficulty in identifying specific problems

If a problem occurs in a specific service in a particular ONT, it is **difficult to identify the root cause without a detailed view of the services in that ONT.**

Monitoring at the aggregation level does not provide the granularity needed to diagnose problems at a deeper level.

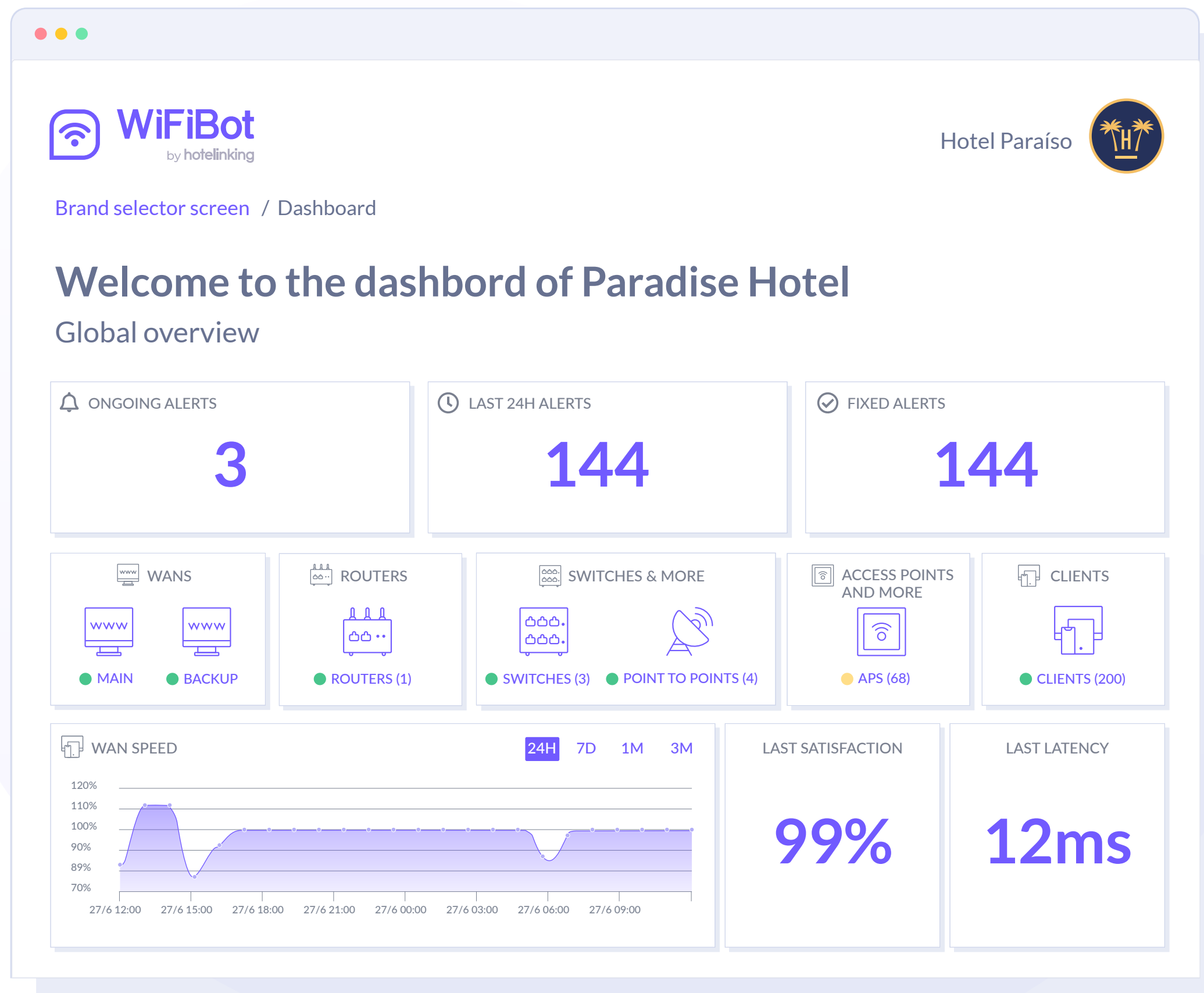
In conclusion, it is essential to consider these disadvantages and carefully assess a hotel's needs and resources before deciding to implement a GPON fibre optic network.

While it can offer significant benefits, it is essential to consider the related costs and challenges to ensure successful implementation and efficient long-term operation.



Our solution





- The GPON part of WiFiBot includes **equipment set-up and monitoring** to simplify the complexity of maintaining GPON networks in hotels. Unlike other Internet service provider-oriented solutions, WiFiBot focuses on the quality of service and not just infrastructure.
- With WiFiBot monitoring, you not only get information about the physical condition and performance of the devices in the GPON network, but **also monitor the health of the services of each ONT**. This provides a complete view of network operation and enables proactive and accurate management when services fail for some reason.
- **WiFiBot makes it easy to manage GPON networks by eliminating the dependency on third parties**, such as external operators. This allows hotels to have greater control over their network and automate the resolution of incidents on the GPON network.



- It is possible to configure and manage all aspects related to the GPON network from the hotel itself. This provides greater flexibility and agility in decision-making and set-up adjustments.
- By contracting the **GPON module with WiFiBot**, the hotel technician can make changes and setups directly from a mobile device. This is convenient and allows new networks to be installed in other hotels without relying on external market solutions.

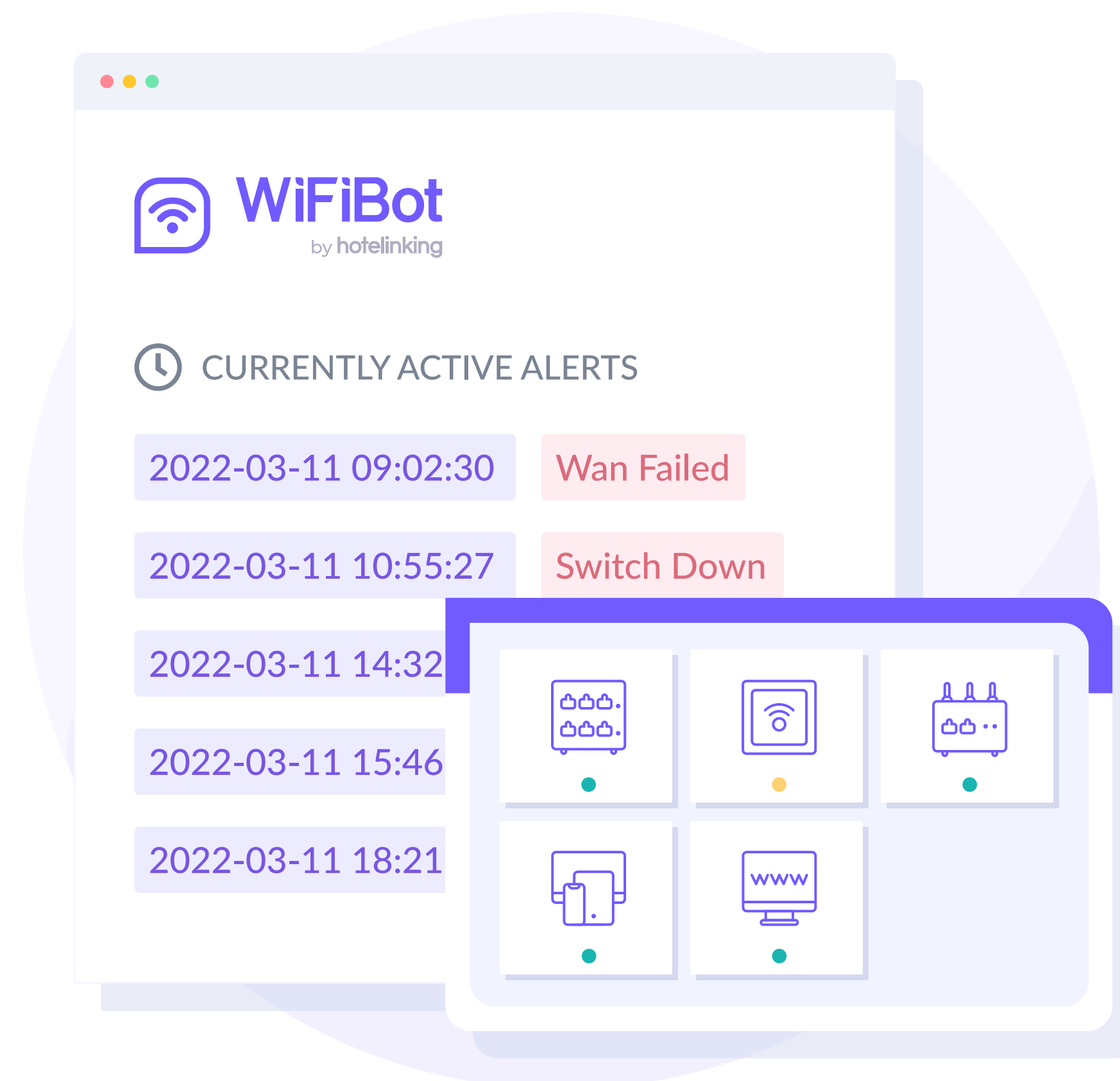
Strength:

Service orientation rather than infrastructure

Unlike other solutions focused on Internet service providers, WiFiBot focuses on providing a quality service to hotel guests. This implies that the main focus is on **ensuring stable, secure and high-speed connectivity and providing efficient support to resolve any incidents that may arise.**

WiFiBot cares about the end-user experience and seeks to meet the specific needs of hotels regarding connectivity and service.

These points highlight how WiFiBot, through its GPON module, offers a comprehensive solution for managing GPON networks in hotels, prioritising hotel service and autonomy in setting up, managing and resolving incidents.



How it works

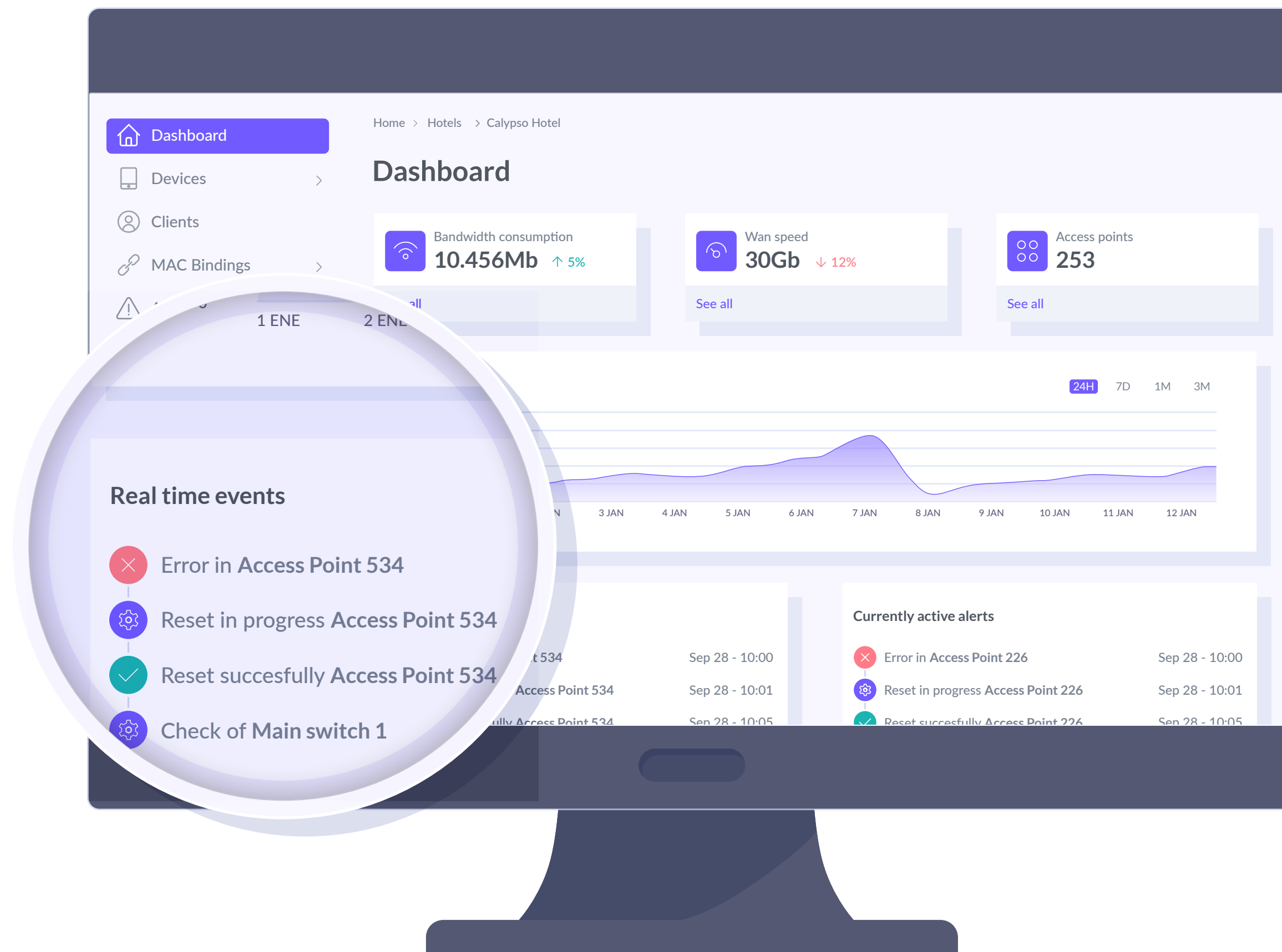
The screenshot displays the WiFiBot management interface. At the top left, the logo 'wifibot by hotelinking' is visible. Below it, there are three summary cards: 'ONGOING ALERTS' with a value of 10, 'LAST 24H' with a value of 20, and 'FIXED ALERTS'. Below these cards is a list of recent alerts:

- 2022-08-03 09:02:30 Wan Failed
- 2022-08-03 09:13:58 Wan Failed
- 2022-08-03 12:45:07 Switch Down
- 2022-08-03 21:16:40 Access Point Down

On the right side, there is a 'MAC Bindings' section for 'Hotel Paraíso'. It includes a search bar, a 'Sort by: Choose' dropdown, and a 'Filter by...' field. Below this is a table with the following data:

| Mac | Disabled | Comments |
|-------------------|----------|----------|
| 44:21:B5:A4:9A:A6 | No | Created |

At the bottom right of the MAC Bindings section, there are 'Previous' and 'Next' navigation buttons.



WiFiBot is a fully cloud-based solution that requires no on-premise physical device. It extracts information from connected devices, makes decisions and performs actions in response to specific events. It can be configured on existing networks or used as a deployment tool on new networks.

One of the main advantages of WiFiBot is its **ability to integrate any other devices that are not part of the core network infrastructure** but provide services to hotel guests or are critical to hotel operations. By integrating these devices into the WiFiBot ecosystem, their management is centralised and seamless coordination between them and the network infrastructure is achieved.

WiFiBot
by hotelinking

Hotel Paraíso

Devices

List of devices

Sort by: Choose... Filter by...

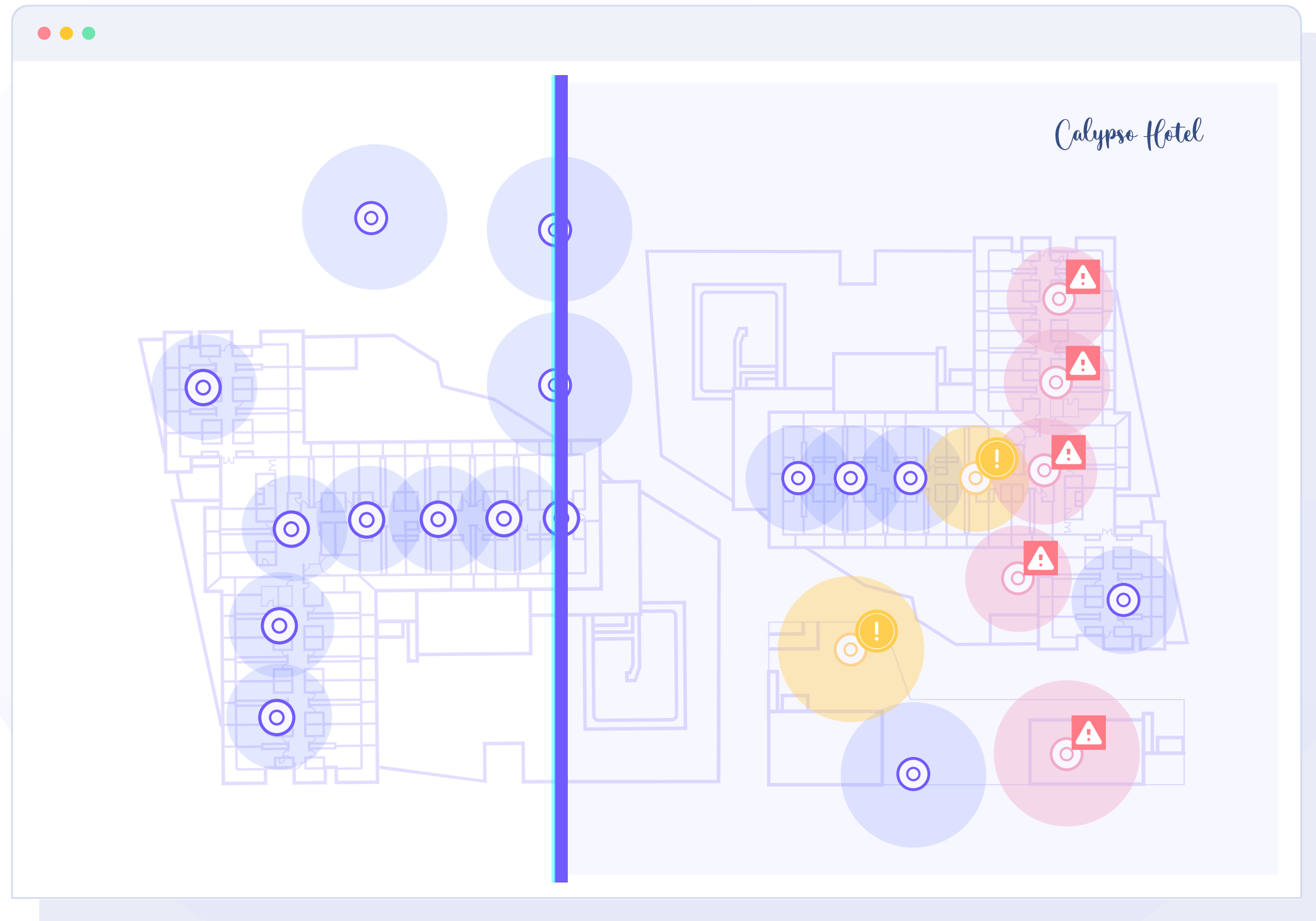
Update devices automatically

| Name | Type | Model | Location | IP | MAC | Health | Alert |
|----------|-------------|-----------------|-----------------|-----------------|-------------------|--------|-------|
| hotspot | router | RB1100 | Living room | 192.168.161.121 | 00:08:44:B5:F0:AD | ● | ● |
| SWITCH 2 | switch | USW-24P-250 | Reading room | 192.168.198.197 | 3F:21:AA:8D:35:23 | ● | ● |
| AP 6 | accesspoint | UAP-AC-Pro-Gen2 | Swimming pool | 192.168.62.140 | 44:21:B5:A4:9A:A6 | ● | ● |
| AP 9 | accesspoint | UAP-AC-Mesh-Pro | Swimming pool | 192.168.96.24 | 4D:82:CF:EF:76:48 | ● | ● |
| AP 7 | accesspoint | UAP-AC-LR | Conference room | 192.168.187.152 | 4A:62:61:16:B0:54 | ● | ● |
| AP 8 | accesspoint | UAP-AC-Mesh-Pro | Living room | 192.168.162.23 | 1D:AA:CA:AB:F0:BB | ● | ● |
| AP 9 | accesspoint | UAP-AC-Mesh-Pro | Reading room | 192.168.96.24 | 4D:82:CF:EF:76:48 | ● | ● |
| AP 7 | accesspoint | UAP-AC-LR | Conference room | 192.168.187.152 | 4A:62:61:16:B0:54 | ● | ● |
| AP 8 | accesspoint | UAP-AC-Mesh-Pro | Living room | 192.168.162.23 | 1D:AA:CA:AB:F0:BB | ● | ● |
| AP 7 | accesspoint | UAP-AC-LR | Conference room | 192.168.187.152 | 4A:62:61:16:B0:54 | ● | ● |
| AP 8 | accesspoint | UAP-AC-Mesh-Pro | Living room | 192.168.162.23 | 1D:AA:CA:AB:F0:BB | ● | ● |

1

Previous Next

WiFiBot is a powerful tool for deploying new networks, streamlining the set-up process and ensuring consistent performance in different locations. Its cloud-based nature facilitates scalability and adaptability, making it an ideal solution for hotel chains or businesses with multiple locations.



With WiFiBot, you get a comprehensive solution that goes beyond traditional network management. It allows you to optimise guest experiences, automate routine tasks, and proactively address network issues. **By leveraging WiFiBot's capabilities, you can improve operational efficiency, provide better connectivity and provide superior service to your guests.**

Integrations

WiFiBot is highly compatible and integrable with most solutions and manufacturers available on the market. Its flexible design and architecture allow easy integration with a wide range of devices, systems and service providers.

Regardless of the brand or type of network infrastructure you use, WiFiBot can adapt seamlessly. It supports both wired and wireless networking solutions.

WiFiBot can also integrate with hotel management systems (PMS), access control systems, security solutions, automation systems and any other platform relevant to hotel operations.

This enables seamless data synchronisation and centralised management of multiple systems from a single interface.

The screenshot displays the WiFiBot management interface for Hotel Paraiso. The interface is divided into several sections:

- Top Left:** Key performance indicators for hotel operations: 23 ARRIVALS, 08 DEPARTURES, and 19 ROOMS.
- Top Right:** 'Information' section with alert counts: 10 ONGOING ALERTS, 20 LAST 24 H ALERTS, and 10 FIXED ALERTS.
- Middle:** 'TODAY'S ACTIVITY' section with tabs for Sales, Cancellations, and Overbookings. It shows 07 BOOKED TODAY, 14 ROOM NIGHTS, and 1958.00€ REVENUE.
- Bottom:** A table listing guest activity:

| GUEST | REVENUE | CHECK-IN | NIGHTS |
|--------------|---------|------------|--------|
| Diana López | 478.00 | 20. 09. 21 | 3 |
| Jürgen Klaus | 160.00 | 20. 09. 21 | 1 |

Alerts Section:

CURRENTLY ACTIVE ALERTS

- 2020-08-11 09:02:30 Wan Failed - Switch down AP6
- 2020-08-11 09:02:30 Wan Failed - AP down AP9
- 2020-08-11 09:02:30 Switch Down - AP down AP7
- 2020-08-11 09:02:30 Wan Failed - Switch down AP8

Televés



ZYXEL



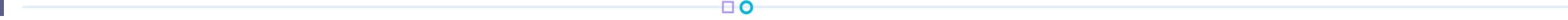



TP-LINK



With WiFiBot, you can choose the solutions and devices that best suit your needs while having a centralised and unified platform to manage and optimise your network services in a hotel environment.

In short, **WiFiBot is designed to be compatible and integrable with a wide variety of solutions and manufacturers**, giving you the freedom to select the best options for your hotel and ensuring unified and efficient management of your network infrastructure.

Related content

- WiFiBot video  
- WiFiBot manual  
- WiFi quality is key to improving guest satisfaction and increasing hotel reputation  

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