Abeille Informatique becomes one of the first alternative Internet Service Providers in France to deploy XGS-PON FTTH

In the heart of the Auvergne region, Abeille Informatique's clients are also partners to whom Abeille brings a specific know-how and support. Abeille provides tailored solutions to real needs, favoring cost-effective, sustainable, and energy-efficient equipment solutions.

On its fiber network deployed several years ago, Abeille extensively employs 2.5 Gbit/s GPON technology. In response to a growing demand for higher speeds, Abeille has decided to introduce and then generalize, based on real customer demand, the 10 Gbit/s XGS-PON technology..

Remaining true to its principles of choosing tailored, sustainable, and efficient solutions that contribute to its success, Abeille has selected the MicroPlug™ TiBiT OLT technology and its management application, MicroClimate™, to enable XGS-PON on its existing PON infrastructure.

Pine Networks successfully supported the 'proof of concept' phase and field trials on Abeille's fiber network. Pine Networks is now working closely with Abeille to expand the XGS-PON network on the existing fiber infrastructure and into new areas.

Lilian Coupat, General Manager of Abeille Informatique, states: "The unique compact form-factor of this OLT, a low-consumption SFP+ module that plugs directly into a switch or router, and its ease of implementation, completely met our main prerequisite, namely the introduction of XGS-PON in proportion to the demand. Its broad compatibility with different router and ONT models has completed the picture of a truly Open solution.

Abeille Informatique is a high-speed internet service provider, hosting company, and information technology firm. Its clients are primarily located in the Auvergne region and within the metropolitan area of Clermont-Ferrand.

Abeille Informatique's ISP offerings range from WIFI Max for professionals or individuals in the area to a premium fiber offering: Beezness, dedicated to businesses and professionals whose activities rely heavily on this connectivity.

Abeille Informatique also offers solutions for IP telephony, WIFI Hotspot, dynamic display, and video surveillance.

The challenge

Abeille needed a solution that addressed the following critical requirements :
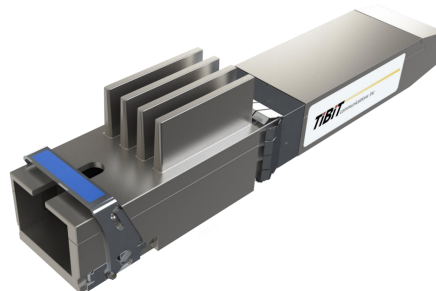- Introduction of XGS-PON in proportion to customer demand.
- Ease of implementation.
- Low power consumption.

Furthermore, the solution had to take into consideration the durability of equipment, aligned with Abeille's approach. To continually adapt its offerings to the needs of its clients while minimizing equipment obsolescence, the solution needed to be interoperable with the existing network and compatible with XGS-PON ONTs available in the market without vendor lock-in.

The solution

The selected solution, aligning with the principles of Open Networking, is the MicroPlug™ TiBiT OLT, along with its management application, MicroClimate™.
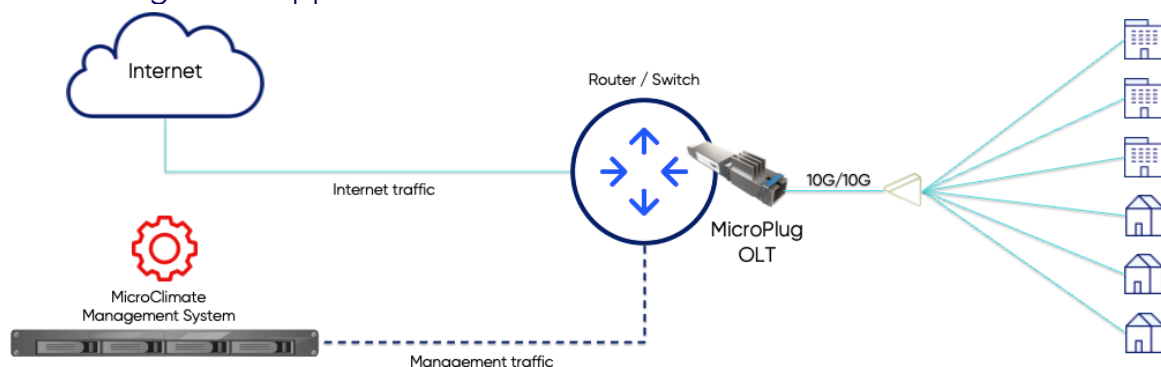
This OLT, incorporating XGS-PON and 10G EPON technologies, takes the form of a simple SFP+ module. It is hot-pluggable into an SFP+ port of a third-party router or switch, forming an integrated 10G Ethernet-to-PON MAC bridge.

OLT MicroPlug™ SFP+ TiBiT – 2.5 W

Its use has allowed the introduction of the 10 Gbit/s PON service at a fraction of the cost of traditional OLT chassis and a fraction of their energy consumption, without requiring additional rack space. It has subsequently facilitated the gradual expansion of this service while maintaining costs proportional to customer demand.
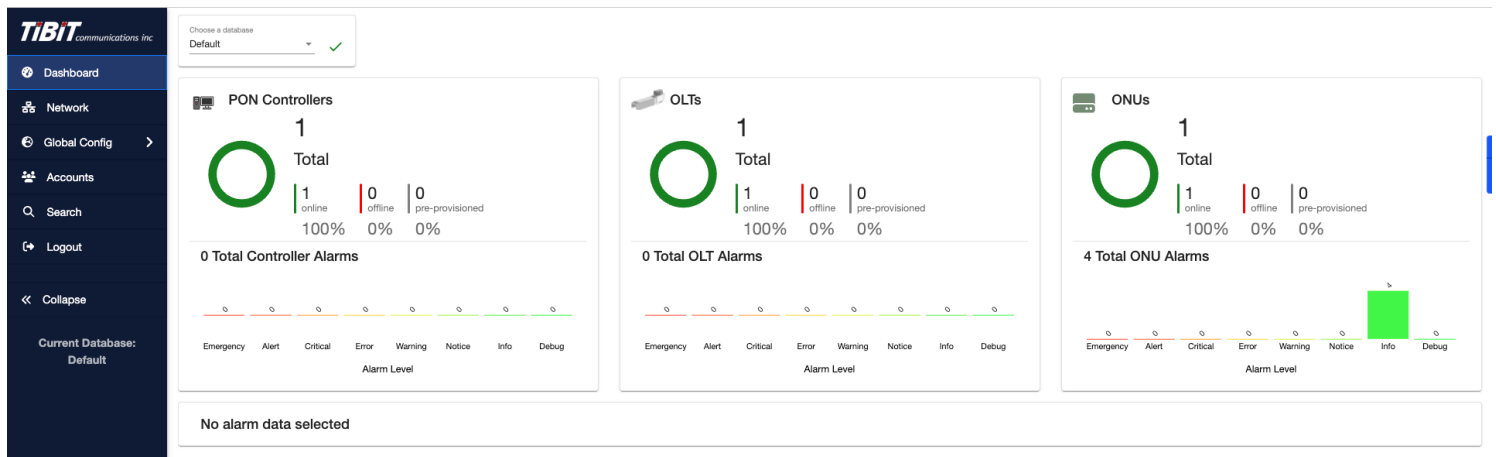
Since the solution is compatible with the majority of switches and routers, its implementation on the PON network was immediate, requiring only the installation of the PON controller software and the MicroClimate™ management application on virtual machines.

As the solution is also interoperable with most ONTs available on the market, Abeille's desire to choose high-performance XGS-PON ONTs that meet the actual needs of the customer has been fully satisfied.

Network management

For provisioning and performance monitoring, the MicroClimate™ management application provides user-friendly and efficient interfaces.

Dashboard MicroClimate™

"Pine Networks presented us to the MicroPlug™ technology and its environment perfectly suitable to our needs. For Abeille, this solution brings superior value compared to traditional equipment suppliers," says Lilian Coupat.

Hadi Choueiry, General Manager of Pine Networks, adds: *"Solutions that adhere to the principles of Open Networking allow us to respond more flexibly to our clients' needs than traditional solutions. Once again, we see that these principles align well with Abeille's requirements for cost-effectiveness, sustainability, and efficiency.'*

Pine Networks

Pine Networks transforms your network into an open, controllable and flexible network by relying on disaggregated, virtualized and open technology. This new approach delivers multiple benefits such as cost savings, scalability, no vendor lock-in and efficiency.

Our promise to our customers is a faster time-to-market, operational simplicity and major TCO savings.

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