**Case Study**

# Teldat-4Ge - Wireless WAN Resilience & Failover

Teldat-4Ge is a unique device offering LTE/4G resilience to end-user network scenarios and it is easily compatible with any corporate router. PoE on the Teldat-4Ge and LAN communication to the main line router, allows a fast and easy installation.

**Teldat**®

# Teldat-4Ge – Wireless WAN Resilience & Failover

| Challenge | Solution | Why Teldat |
|---|---|---|
| ▶ The carrier used to have ISDN on 128kb or 64kb, as their standard resilience lines. | ▶ The carrier's clients are offered the Teldat-4Ge with either HSPA+ or LTE resilience. | ▶ Teldat adapted to the carrier's challenge by creating a state-of-the-art backup device meeting all demands. |
| ▶ The carrier's main line moved to broadband while the number of clients & data volumes over failover increased. | ▶ Teldat-4Ge can be placed wherever cellular coverage is best. | ▶ Teldat solved the problem of calculated and actual installation costs. |
| ▶ The carrier required a new failover system with appropriate bandwidth for their clients. | ▶ Teldat-4Ge has a discreet design, an embedded module offers anti-theft, is fan-less and easy to install. | ▶ PoE (Power over Ethernet) on the Teldat-4Ge is a unique selling point. |
| ▶ A cost-effective and scalable solution for a cellular resilience line with adequate bandwidth had to be found. | ▶ Teldat-4Ge works on PoE and is compatible to any kind of corporate router by using standard protocols. | ▶ Teldat is a prime supplier for the carrier. Their resilience service entirely bases on Teldat's devices. |

## Client Summary

Our client is a telecommunications company and one of largest network providers (carrier) in the world. Starting as a public telecommunications company in the early twentieth century, its head office is located in Spain. Operating globally, it has also a significant presence in Europe, Asia, North and South America. Especially in Spain, Europe and Latin America the company focuses an important part of its growth strategy. Its customer base amounts to more than 300 million accesses around the world. The company is a 100% listed company, with well over 1 million direct shareholders.

**Teldat-4Ge**

## Challenge

The carrier used to have ISDN on 128kb or 64kb, as their standard resilience lines. However, as the size of the carrier's main line moved to broadband ( from narrow ADSL to up to FTTH/Fiber) the amout of clients as well as data over failover lines have increased, ISDN as resilience was no longer viable. Hence the carrier required a new failover system that would give their customers an adequate backup system. The carrier has decided that cellular would be the best type of failover system to offer their clients. However, various points had to be solved regarding their installed base of main line routers.

- Compact routers without the possibility of having a fixed main line with a celllar resilience line, would theoretically need to be replaced by a new router. The router with both types of communications would be much more expensive than traditional compact routers.

- Routers with both fixed line and cellular communication tend to have the problem of getting an adequate level of cellular coverage to the router. Hence additional antennas had to be connected to the routers and depending on the building and where the main line router was installed, the cellular resilience connection was more or less difficult to obtain. So this caused two basic problems:
  - Pre-Sales department found it difficult to calculate the cost and final price of the failover set up.
  - Post sales department had difficulty to keep to the costs calculated by the Pre-Sales department, as anomalies always arose, when the installation of the external antennas and laying of cables for the external antennas took place.

## Solution Value

The carrier's clients are offered the Teldat-4Ge with either HSPA+ or LTE resilience, depending upon the service that they decide to contract. Teldat-4Ge is placed wherever the cellular coverage is best within the building and wherever the location best fits the carrier. At the same time, Teldat-4Ge has a discreet, elegant design with an embedded module offering anti-theft and is also fanless, so that it can be installed in any location and does not need to be hidden. Furthermore, Teldat-4Ge is easy to install. The device only needs to be placed on a wall or ceiling and then connected to the LAN.

As Teldat-4Ge works on PoE, no extra work is needed in order to power the device. So a simple LAN connection is sufficient. This is a unique characteristic that only the Teldat-4Ge has, in comparison to its competitors. Teldat-4Ge is easily compatible with any corporate router and therefore is a standard corporate backup device. The communication between the main line router and the 4G device is made by creating a layer 2 virtual LAN scenario, using Ethernet and standard protocols. The main line router uses the cellular connection as if the module was installed within the router itself. Indeed, the overall control is within the main line router.
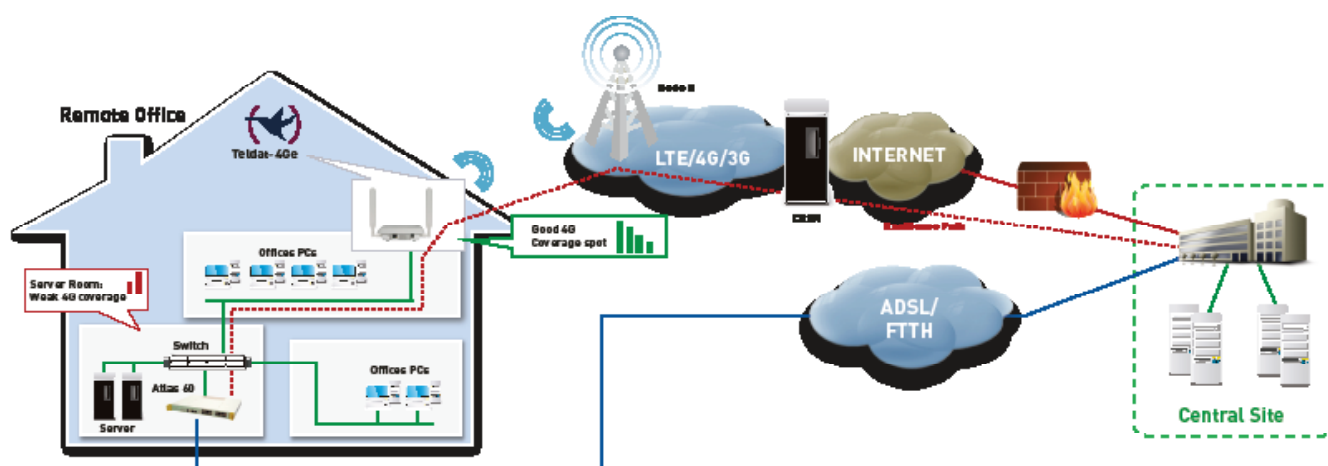


## Results

The challenge that the carrier faced of the Pre-Sales department having to calculate the installation costs is eliminated. For Post-Sales it is easy to keep to the installation costs.

Moreover, the end customer has backup with adequate bandwidth, because the Teldat-4Ge can be installed where it is most appropriate. As the Teldat-4Ge is compatible with any corporate router, this Teldat device can be applied by the carrier on both their currently installed main line routers or with end users related to new projects. Due to this flexibility the carrier has a huge installed base of Teldat-3Ge/4Ge devices.

## Why Teldat Got the Deal

Teldat entirely adapted to the carrier's challenge by creating a specific state-of-the-art backup device that suited all the carrier's requirements and enabled them to use their WWAN network as the resilience scenario. The huge issue of installation costs that the carrier had faced was solved with the Teldat-4Ge.

PoE (Power over Ethernet) on the Teldat-4Ge totally differentiated Teldat from the rest of the competitors and as a prime supplier for the carrier, it knew that Teldat is a strong partner to work with. Hence the carrier's resilience service is entirely based on Teldat's devices.

Teldat has worked with WWAN since the early years when GPRS began to be used in some corporate data scenarios. Therefore Teldat is a strong partner for cellular scenarios, especially backup.

# FLEXIBLE
## COMMUNICATIONS SOLUTIONS
## THAT GROW WITH YOU.

# Teldat-4Ge

The ultimate 4G LTE peripheral for enterprise routers

▶ WWAN 4G peripheral for installed routers. No WIC slot, PCMCIA or USB port needed.

▶ Compatible with most routers thanks to use of standard protocols

▶ Normal Ethernet connectivity between Teldat-4Ge and existing routing

▶ Wall-mountable with PoE to reduce installation time and expense

▶ Small and inconspicuous for installation in businesses without drawing attention

▶ No management needed

The **Teldat 4Ge** is as an external interface card that provides 4G connectivity for enterprise routers. This cutting-edge peripheral does not force you to use up available interface card slots, PCMCIA slots, or USB ports on the router. The **Teldat 4Ge** uses Ethernet to connect to the router.

The **Teldat 4Ge** is not a router itself, but only a peripheral for routers. The management of this new 4G device is seamlessly integrated into the router, so that the service intelligence offered by the router for landline WAN service is fully available for the additional wireless WAN (WWAN) service. The standards-based Ethernet communication between the **Teldat 4Ge** and the router guarantees compatibility with most existing third-party enterprise routers.