TP-Link Offered Citynet Reliable and High-Speed Data Transfer for Network Service

**CUSTOMER PROFILE**

Customer Name: Citynet  
Capacity: 7 employees and over 4000 users  
Industry: ISP  
Location: Poland  
Year of Project: 2017

**BACKGROUND**

Established in Poland in 2004, Citynet is an ISP company with 7 employees and over 4000 users, providing internet access, IPTV and VoIP telephony, as well as data transmission for private and business customers in Rzeszów and its surroundings.

**CHALLENGE**

It became necessary for Citynet to install a gigabit-based access layer network to keep up with the demands that come with IPTV technology and an increasing number of customers. Previously, HP, Huawei and D-Link network switches using Ethernet and FTTB technologies were in place. However, these devices were no longer able to meet Citynet’s basic requirements.

- **High-Speed Performance for IPTV Service**

Due to the high network speeds required for IPTV, gigabit switches supporting multicast traffic and connected to a hybrid FTTH/FTTB network were needed to build a fail-proof and reliable network. Individual ports dedicated to LACP and VLAN functions were also a must.
• Easy Management
An ever-increasing number of users meant centralized management and an intuitive user interface for the network administrator was important.

• Layer 2 Control Functions and SFP Ports
Switches with multiple L2 control functions and two to four SFP ports were needed for Citynet to obtain a high-performance hybrid FTTH/FTTB network.

• High Price-to-Performance Ratio
The solution should be cost-effective and within budget. The use of high price-to-performance ratio products was vital for the customer.

• High-Speed Data Transmission
The T3700G-28TQ core switch is able to support a scalable network with abundant L3 routing protocols, including RIP/OSPF/ECMP/VRRP. Four Gigabit SFP slots and four 10Gigabit SFP+ slots enable the T3700G-28TQ to provide high-speed data transmission.

• Wide Array of Performance-Enhancing Functions
Multicast traffic control, along with port separation, LACP, VLAN, loopback detection and 802.1p CoS/DSCP priority are the most commonly used functions of Jetstream switches. Their extensive security features help keep every device on the network safe. As a result, Citynet chose Jetstream products from TP-Link after evaluating various devices from competitors.

• Experienced Technical Support and Product Warranty
A crucial element of Citynet’s collaboration with TP-Link was the dependable technical support and professional service provided by the manufacturer. As always, TP-Link offered technical support throughout the testing and configuration process. At the same time, the quality of Jetstream products minimized the possibility of physical failure. Products were covered with either a lifetime warranty or 5-year warranty at no additional cost to the consumer.

SOLUTION
The solution in this case was based on a hybrid (FTTC / PON) fiber optic network in the star topology, with Gigabit Ethernet in the Access layer. As can be seen in the topology, the solution comprises of a whole range of Jetstream devices, including a T3700G-28TQ, 28-Port Gigabit Stackable L3 Managed Switch as the core switch.

Solution topology of Citynet
Flexible Management

Jetstream switches support various management methods: intuitive web-based Graphical User Interface (GUI), industry-standard Command Line Interface (CLI), SNMP (v1/v2c/v3) and RMON. The GUI provides administrators with a convenient method to configure and monitor the entire network.

RESULTS

The solution provided by TP-Link fully met the needs and expectations of the customer. The gigabit-based access layer network ensures Citynet’s staff and customers can enjoy reliable, secure and fast internet access. Over the course of the project a trusted relationship was nurtured with Citynet, who expressed great interest in purchasing TP-Link devices in future. Citynet can now look forward to expanding without issues and providing high quality IPTV with the help of their newly deployed network.

“We could see that the TP-Link devices simply work as they’re meant to, and even when a problem did occur, their great technical support were on hand to help. After consultation and identification of the problem, they provided us with updated firmware. I would like to emphasize that of the large number of devices deployed, not one of them has suffered any type of physical failure. There was a point at which the price of TP-Link’s Jetstream series was something we no longer considered important since they’re so reliable. We stopped looking at other manufacturers because we were so satisfied with the products we purchased.” — Skynet