



## IP-based POS-TV solution for Polish Pharmacies

IP Access

WLAN

ITC

VoIP

## P R O J E C T - P R O F I L E

### Project requirements:

- Network with approx. 1,000 connections
- Secure data transfer and guaranteed data throughput
- Unified platform for the administration and configuration of network components
- Future-proof, solution-independent Internet access for pharmacies

### Concept / solution:

Use of VPN encryption, QoS services and redundant systems

### Partner:

Internationally operating system house based in Germany as well as the Polish software company Power Media

### Products used:

bintec series VPN routers, VPN Access, bintec XAdmin



This program is presented to you by your pharmacy - a dream of many retail and distribution companies come true: The customer is provided with information at the Point of Sales (POS), which relates to his current needs. POS TV makes it possible. Funkwerk Enterprise Communications (FEC) realized this project for Polish pharmacies together with an internationally operating system house based in Germany and the Polish software company Power Media. The customers of the pharmacies involved are informed via POS TV directly at the point of sale - both on the medicines on offer and health promotions, as well as other world news. The Polish POS TV project is the first of its type worldwide based on the latest Internet technology.

### Individually informed at the POS

New competition to conventional product advertising and information media, such as brochures or posters, through POS-TV. The new advertising mode can be deployed flexibly and offers a significant cost advantage. In comparison, conventional advertising is very expensive and time consuming and only allows a much delayed reaction to market events. Not infrequently are brochures on autumn flu already published in the summer, for example. And worse still: A pharmaceutical company spends considerable amounts for information literature whose exposure is far from optimal and fails to reach the targeted customer group.

The new POS TV system represents a solution with which multimedia content can be displayed on plasma screens at several locations. At the beginning of the project 200 pharmacies in Warsaw and the surrounding area were equipped with Pharmacy TV. They

The interactive capabilities of the system mean that product information can be updated and transmitted in a few hours or even minutes - not after weeks or days as was previously the case.

receive individual content tailored to their region, city, district or pharmacy. Thanks to this flexibility, marketing activities can be better coordinated and the content offered can be adapted to current promotions. Over 100 pharmacies in Southern Poland now also profit from the new POS TV offerings.

The interactive capabilities of the system mean that product information can be updated and transmitted in a few hours or even minutes - not after weeks or days as was previously the case. A large plasma screen installed at a prominent place at the POS quickly brings the information directly to the customer. Furthermore, POS TV allows the quantity, type and transmission time of the content to be planned and regulated.

### Transmission - yes, but how?

It would have been possible to implement the POS TV system using conventional TV technology. That would have had the advantage that the system would have been broadly available and only limited by the range of the transmitter. However, the investment volume in this case is disproportionately high and the legal situation extremely complicated. The project architects therefore decided for broadband connections via the Internet. The transmission quality of multimedia content roughly corresponds to that of television. The Internet connection is

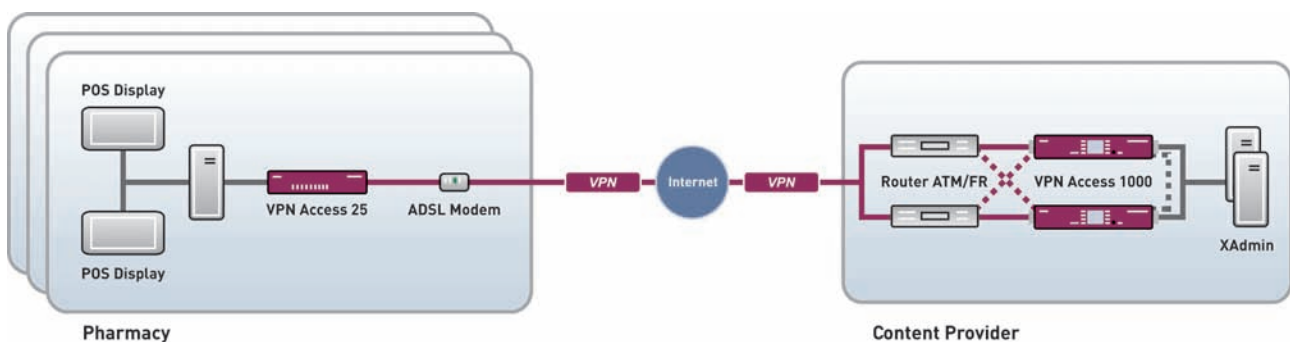
facilitated by means of xDSL broadband technology via telephone lines. This access is available almost nationwide in Poland so that an extensive system can be established, which covers nearly all pharmacies in the country.

### Project contract and award

A solution was called for, with which a network for around 1,000 connections could be constructed. Data had to be transmitted securely and a certain throughput of content transmitted had to be guaranteed. The configuration and administration of the network components had to be based on a unified platform. In addition, the pharmacies had to receive futureproof, solution-independent Internet access.

On the basis of its positive experience with FEC on the German market, the system house commissioned decided for bintec routers from FEC as the core component. Funkwerk offers top-class, efficient and reliable solutions at an attractive price - this was the reasoning. FEC also won out with its proven processes and experience with large-scale projects.

The system architects for the project decided on the FEC solution as they had already had positive experience with FEC products on the German market. The synopsis - FEC offers highly modern, high performance and proven solutions at an attractive price.



## Security and reliability with VPN and QoS

The system is based on public Internet architecture. This places certain demands on the solution: Data security must be ensured and a sufficient minimum broadband for smooth data transmission of the operationally critical applications. For this reason the POS system is supported with modern VPN encryption and works with QoS solutions from FEC. The project managers turned to the QoS mechanisms implemented in the bintec routers thereby guaranteeing the defined minimum throughput rate for the core applications.

Two worldwide proven standards protect against unauthorized access: Stateful Inspection Firewall and the IPSec protocol, which use modern and, at the same time, efficient encryption algorithms.

## Numerous functions and 100 percent compatible

A decentralized network of any number of Internet connections can be established with the aid of the routers from the bintec VPN Access series. Two types of routers are used: bintec VPN Access 1000 in the central system hub and bintec VPN Access 25 in the pharmacies. The use of devices from the same product family ensures compatibility and offers the opportunity of fully exploiting the range of functions of the devices, such as VLAN (division of the network into virtual sections). VLAN allows the pharmacies to use the Internet for other purposes without compromising the POS system.

## Available 24 hours a day, 365 days a year

The system architecture requires uninterrupted availability of the devices transmitting content to the pharmacies. The bintec VPN Access 1000 routers are equipped with 2 WAN interfaces to which independent Internet lines are connected. The router distributes the data flow using load balancing technology. This means that the network operates even in the case of a main line failure.

Thanks to the special BRRP (Bintec Router Redundancy) protocol, the bintec routers guarantee uninterrupted network operation, also following a complete hardware failure: Two identically configured devices then work like a virtual router. Under normal circumstances the main router undertakes the actual work, whereby its availability is monitored by the back-up router. In the case of failure of the hardware or LAN/WAN line, the back-up router immediately takes over the functions of the main router. This takes place automatically, without intervention of the network administrator and without the user noticing anything.

## Remote monitoring with bintec XAdmin

An additional challenge is to provide a tool for monitoring and maintaining the respective components of the overall system for the numerous, widely separated pharmacies. An option would be that the pharmacies report problems by telephone. In practice however this would lead to a considerable administrative workload. The cost budget

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XAdmin: Software tool for centralized rollout



would also be exceeded if, for example, a technician had to be dispatched simply to undertake a software update. The product management team therefore decided for proactive remote monitoring of the system.

For a large-scale system of this type the manual configuration and monitoring of each individual system is almost impossible. This is where the capability of bintec XAdmin to administrate all network components centrally pays off. XAdmin is a software platform to administrate bintec router groups, which allows the administrator to continuously monitor the function of individual components and to react in emergencies. Individual routers or complete router groups can be configured and administrated at any time, and the firmware and software can be updated whenever required. For large projects, such as pharmacy television, the diverse deployment options of bintec XAdmin represent enormous savings in time and labor - and therefore financial resources. Widespread network reconfigurations are only possible through bintec XAdmin operations without exceeding cost budgets.

## Pharmacy Television is just the start

Between 30 and 40 new locations per month are currently being connected up to the system. Up until the end of 2006, it is planned to link over 1,000 pharmacies in Poland to the POS TV solution. But pharmacy television is just the start: Other sectors have already expressed interest in a similar solution. It is to include even more functions than those described above.



"The success of IP television in the pharmacy sector is only the start. Other sectors are similarly interested", according to Guy Goodman, Vice President International Sales at Funkwerk Enterprise Communications.



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