

#### **The Customer**

One of the largest online retail shops in Central Europe.

## The Challenge

The customer faces sudden peaks in online orders, mainly before highly popular events. In the past, due to the bottleneck of the back-end database, their webshop was not able to manage these peaks and crashed or temporarily froze. Failure to handle online transactions during peak periods cost the customer millions of forints, not to mention the mass of dissatisfied buyers and the damage to the webshop's reputation. Since the webshop was part of a critical legacy system, replacing or updating it was not an option. As a result, the customer decided to search for a solution to control webshop traffic so they could reliably serve every buyer, even under extreme loads.

# MAJOR WEBSHOP

#### The Solution

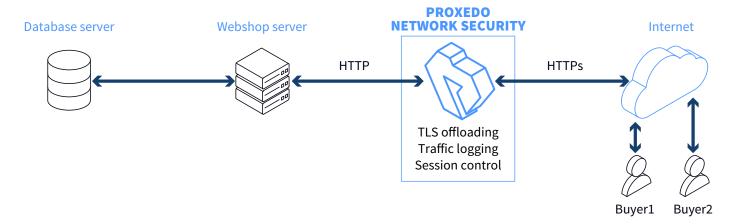
Mainly thanks to Balasys's responsiveness and flexibility, the customer chose Balasys's multipurpose network security suite, Proxedo Network Security (PNS). Beyond the comprehensive traffic control functionality built into PNS, Balasys was also able to serve the customer's specific needs with a few days of additional development.

### **Graceful degradation of services**

PNS was deployed in the customer's virtual environment. To avoid system crashes, PNS limits the number of concurrent HTTP sessions. Sessions are divided into three distinct groups:

- 1. Critical users
- 2. Browsing users
- 3. Newcomers

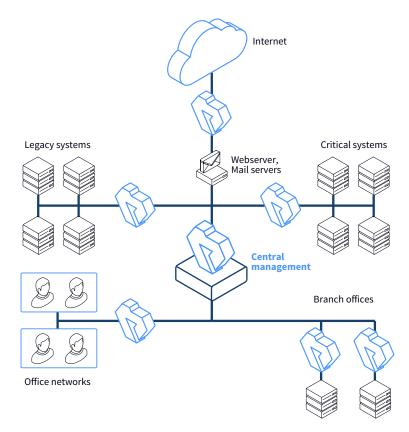




Traffic control at major online shop

Based on preconfigured thresholds and rules, PNS can control the user sessions on each level. It provides the highest priority for critical user sessions those are in the payment transaction process. The second highest priority are provided for browsing users who signed in and have started the ordering process. All the others (i.e. newcomers) are informed by PNS about the increased traffic and put in a queue until free capacity is released.

PNS continuously monitors the system parameters. It logs each session in the queue and records the total number of concurrent sessions in the webshop. Based on these parameters – and the preconfigured rules – it makes complex decisions about who can access the webshop and who should be placed in a queue for a short period. PNS can handle hundreds of HTTP(s) session simultaneously. Beyond session cookies, the implemented solution can potentially handle authenticated users as well.



Proxedo Network Security sample architecture



#### **Learn more**

Proxedo Network Security homepage Request a trial



## **RESULTS**

Balasys Proxedo Network Security helps the webshop manage extreme loads during peak periods without system crashes or downtime. PNS can be adjusted to the performance and throughput of the webshop. Traffic data provided by PNS also help in scaling the system and starting new online promotions when free capacity is available