paměť národa



To Save the Memories for Future Generations – Data Storage for Post Bellum



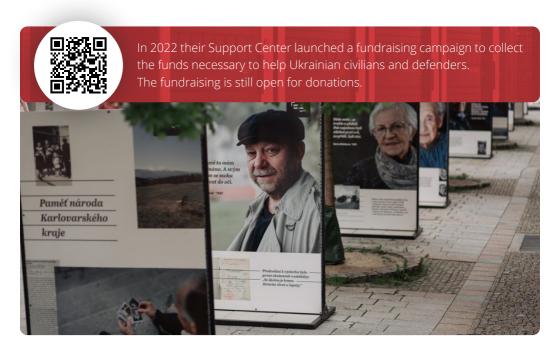


Post Bellum is a non-governmental organization (NGO) that documents the witnesses' memories of significant events and phenomena of the 20th century. The mission of this organization is to pass these testimonies, collected in the "Memory of the Nation" ("Paměť národa") archive, to a broader audience and the next generations. Post Bellum was founded in 2001 in Czechia. Since then, they have expanded their operations to other regions as well - the documentary teams work in Myanmar (Burma), Cuba, Belarus, and other places across the globe.

The "Memory of the Nation" Archive (pametnaroda.cz) includes:

- More than 13,000 witness accounts
- Over 6,500 published stories

By the end of 2019, the company established a Ukrainian branch of the organization in Lviv to record testimonies of the witnesses of Stalinist repressions, as well as testimonies of dissidents and political prisoners of the communist era. The Post Bellum members are also engaged in numerous charity and support activities for Ukraine to provide the country with defensive equipment, such as vests and helmets, but also with medical supplies.



Challenge

After more than twenty years of Post Bellum's mission, they have several NAS servers from various manufacturers offering varied capacities and features. During that time, the researchers and documentalists collected 550TB of raw data, mainly video files with the witness interview recordings. Moreover, the amount of data is rapidly growing, with an average annual increase of more than 300 TB. The main goal of the Post Bellum IT administrators was to consolidate the infrastructure and prepare it for further data volume increase.

To meet this goal, Post Bellum headed to Abacus Electric, a long-term Open-E Platinium Partner. Abacus is one of the top Czech data storage providers, with over 20 years of experience in end-to-end solutions tailored to specific customer needs and budget requirements. Since Post Bellum is a non-profit organization, and their mission and charity activities are close to the Open-E and Abacus values, both companies decided to give up part of the profit to support the project.



Partner Feedback

Abacus has delivered more than 600PB of disk space in 20 years. Each of the business cases is unique and interesting in some way. We often work with technology focused partners such as cloud providers or universities. That's also why the two Open-E JovianDSS storage boxes we were able to deliver to Post Bellum are so special to us, and we are honored to have been able to help their efforts in this way as well. Recognition and thanks go to Open-E and WDC for their exceptional support.

Jan Petrák, Purchase Manager at Abacus

The Solution: Abacus a-2610Q-KRPA 4U powered by Open-E JovianDSS

After considering multiple options and approaches, Post Bellum decided on **the Abacus a-2610Q-KRPA 4U Server powered by the ZFS and Linux-based Open-E JovianDSS data storage system**. The new data storage architecture consists of two single-node servers to ensure excellent performance and almost unlimited scalability. ZFS file system, which is the base of the data storage system, is well known and established thanks to the supported storage capacities that can exceed dozens of PBs of data.

Key Features of the Solution:

Scale-up architecture

Easy capacity expansion based on financial resources

Commodity, non-proprietary x86 hardware

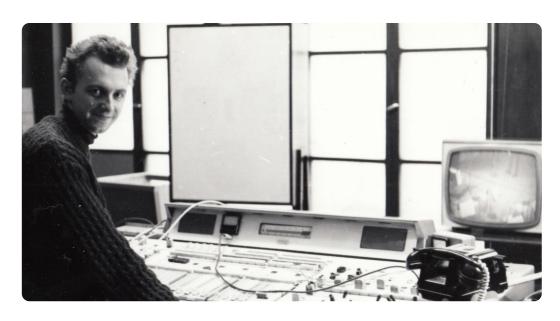
No vendor lock-in

Possibility of using a cluster data storage solution

Snapshot support

Cloud services support

Software Defined Storage approach



Hardware Details: Abacus a-2610Q-KRPA 4U Server

Chassis AIC RSC-4H 60bay toploaded storage chassis

CPU AMD EPYC2 Rome 7252

Motherboard Asus KRPA-U16 single socket EPYC3

RAM 128GB DDR4

HBA Controller 3×Broadcom 3008 ITmode HBA SAS

Boot Medium 2×Samsung SSD PM893 480GB

Data Drives 60×20TB = 1,2PB Raw Capacity Western Digital Ultrastar HC560

Ethernet Controller Ethernet Converged Network Adapter X540-T2, Dual port 10GbE-T



Open-E JovianDSS Data Storage Software

Open-E JovianDSS provides unlimited options to create data storage environments with iSCSI, Fibre Channel (FC) and NFS, SMB (CIFS) protocols for companies of any size - from small family businesses through medium companies to large enterprises. Open-E JovianDSS is a perfect choice for any virtualized storage environment as it supports VMware, Citrix, Microsoft Hyper-V, and Proxmox. It can be set up on physical servers or as a virtual storage appliance (e.g., in hyperconverged environments).

Postbellum appreciated most the following system features:

ZFS-based unlimited snapshots and resistance to silent data corruption

Support for various High Availability scenarios, such as shared JBOD or Metro Cluster

On- & Off-site Data Protection for synchronous and asynchronous replication, and flexible snapshot retention plans

Easy configuration and management - wizards, intuitive GUI

Excellent support

Excellent price/performance ratio



Customer Feedback

We are constantly getting bigger and bigger files to work with and back up. It's important to keep data secure at a reasonable total cost of ownership. Abacus Electric, our integration partner, combined hardware from Western Digital and software from Open-E to provide us with a tailored solution at a very reasonable price.

Jan Polouček, COO at Post Bellum

Software Details Open-E JovianDSS

Open-E JovianDSS Licensing 2× Single Node

Raw Storage Capacity 2× 1,2PB

Support 5 Years Premium Support





About Abacus Electric, s.r.o.

Abacus Electric is the largest Czech server manufacturer with ISO9001 certification and over a twenty-year tradition on the market. In 2021, more than 2,700 servers were produced, and Abacus Electric has long remained in the top three server suppliers in the Czech market. Abacus Electric supplies a wide range of server and storage devices for web hosting, server and desktop virtualization, private and public cloud, HPC, GPU, data storage, and other applications. Thanks to partnerships with key manufacturers (Supermicro, AMD, Intel, Broadcom, Adaptec, Areca, Asus, NVIDIA, Open-E, Promise, QLogic, WDC), the range of servers and storage solutions is exceptional in its variety and features. For more information about Abacus Electric, visit www.abacus.cz

About Post Bellum

Post Bellum is a non-profit organization established in 2001 that seeks out and records witnesses' memories of historical events from throughout the 20th and recently also 21st century. The organization was founded by a group of journalists and historians from the Czech Republic who kept meeting at press conferences and anniversary commemorations. They believed that witnesses should have the opportunity to tell their stories and that these stories should be accessible to everyone. Post Bellum was created from this vision. For more information about Post Bellum, visit: www.postbellum.cz

About Open-E

Open-E, founded in 1998, is a well-established developer of IP-based storage management software. Its flagship product, Open-E JovianDSS, is a robust, award-winning storage application that offers excellent compatibility with industry standards. It's also the easiest to use and manage. Additionally, it is one of the most stable solutions on the market and an undisputed price performance leader. Thanks to its reputation, experience, and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies. Open-E accounts for over 38,000 installations worldwide. Open-E has also received numerous industry awards and recognition for its product, Open-E DSS V7. For further information about Open-E, its products and partners, visit www.open-e.com

More information:

Abacus Electric, s.r.o. +420 387 001 450 | servery@abacus.cz

Post Bellum, z. ú.

+420 257 316 966 | info@postbellum.cz

Open-E GmbH +49 898007770

| info@open-e.com