



# Fast, secure, agile: a new back-end infrastructure for the ARI data centres.

As an IT service provider, AR Informatik AG (ARI) is the full service provider for the public sector in the Swiss canton of Appenzell Ausserrhoden. ARI operates around 4,000 workstations at over 200 locations for the local administrations, municipalities, the cantonal police as well as hospitals and

schools. ARI's highly centralised IT infrastructure must meet the highest demands in terms of performance and availability. For this purpose, Bechtle implemented a new server and SAN infrastructure in ARI's two data centres based on HPE hardware and software.

## PROJECT DETAILS

- **Services**  
Server & Storage
- **Industry**  
Public Sector
- **Company size**  
> 65 employees

## TECHNOLOGY

- HPE ProLiant Gen10+ Server, AMD CPU with 100-Gigabit-Ethernet
- HPE OneView
- HPE/Brocade SAN Switches with 32/64 Gigabit und NVMe over FC ready

## OUR PARTNERS

  
**Hewlett Packard  
Enterprise**

“Our customers need a secure, highly available IT infrastructure. Thanks to the HPE server technology with AMD CPUs and 100Gbit connection installed by Bechtle, we have been able to improve the efficiency and performance of our data centres enormously. The software-defined management of the infrastructure with HPE OneView also increases the agility of our new server environment. But the most important thing for us was that our intervention times are met in the event of a critical system failure: a callback within 30 minutes and someone on site after two hours. Bechtle can do that.”

**Marcel Zoller**, Division Manager Infrastructure, AR Informatik AG

**CHALLENGE.** AR Informatik AG (ARI) operates its high-quality, high-performance and fail-safe services on around 600 virtual and 20 physical servers. On these, the IT service provider provides the Virtual Desktop Infrastructure (VDI) for around 1,400 clients and maintains storage and backup solutions in the two data centres in Herisau and in Gais, 35 km away in eastern Switzerland. When the latter was to be set up more performantly, two things had top priority. On the one hand, the move and the new system had to function without interruption 24/7, as it had done before for the canton and its organisations such as the police or hospitals. Secondly, ARI wanted a server and storage landscape with fast data transfer rates at a good price-performance ratio. With the new, modern data centre architecture, all of ARI's systems should be able to be operated with high availability either in one data centre alone or mirrored in both data centres. It also had to be possible to move the systems from one data centre to the other without interruption. In addition to the appropriate server hardware and a redundant SAN network, ARI also needed a smooth migration of the existing environment and its data to the new server and SAN infrastructure, as well as a partner who could meet the existing service level agreements (SLA). Finally, the IT service provider must be able to react quickly in the event of a failure of critical systems and restore them quickly. The requirement: A callback must be made after 30 minutes, and an expert must be able to fix the problem on site after two hours.

**SOLUTION.** Bechtle participated in ARI's public tender for the new backend infrastructure. The expertise available at Bechtle, the personal service and the great flexibility convinced ARI. As an HPE Platinum Partner - the manufacturer's highest partner status - Bechtle again proposed HPE servers for the new infrastructure. The previously good experiences with HPE at ARI, its excellent price-performance ratio and Bechtle's well thought-out concept were decisive for ARI to award the contract to Bechtle. ARI decided to implement the new server infrastructure with HPE ProLiant servers of the 300 series Generation 10+, most of which are equipped with AMD EPIC CPUs. The HPE servers are connected to the HPE/Brocade 7th generation SAN switches (NVMe over FC ready) via Fibre Channel and to the network with 2x 100 Gigabit. In this way, Bechtle created the desired modern infrastructure with redundantly designed SAN switches (32 Gigabit), which are

self-learning thanks to HPE technology and have automatic troubleshooting. For the management of this environment, Bechtle implemented HPE OneView. The software-defined access (SDA) integrated in HPE OneView automates complex tasks with template-based policies. In this way, Bechtle increased the agility of ARI's server environment, because new components can be integrated quickly and almost fully automatically within a very short time. In addition, ARI implements compliance requirements more quickly and also automatically, which minimises the risks of the network environment. Using the simple and clear user interface of HPE OneView and functions such as Map View, Dashboard, Smart Search, Reports or Mobile Access, ARI's administrators can quickly find all the information they need about the network. After Bechtle had implemented the SAN infrastructure, the VMware vSphere hypervisor was updated. ARI uses this to operate separate clusters for the technical areas and the various customer segments, such as the schools. This was followed by the commissioning of the servers and their migration with a minimum downtime of less than one hour in the data centres. Bechtle primarily trained ARI's employees during the implementation of the hardware and software. In addition, Bechtle prepared a comprehensive operating manual for the new server and SAN infrastructure and is available to ARI with its specialists within the required times (30-minute callback and 2-hour on-site) both in Herisau and in Gais within the framework of an SLA contract.

**BUSINESS BENEFITS.** With the new backend infrastructure designed and implemented by Bechtle, ARI achieved an enormous increase in the performance of the entire network. Some functions, such as outsourcing virtual machines or copying large amounts of data from one data centre to the other, no longer take hours, but only seconds, thanks to the 100 gigabit high-end connection of both data centres and the very powerful HPE servers. Thanks to the HP OneView software-defined infrastructure, ARI also maintains the compliance of the operated data centres and scales their capacities agilely. This saves time and costs that ARI can invest elsewhere.

**FURTHER** Information:

**bechtle.ch**



As a full service provider, AR Informatik AG (ARI) provides professional services in the field of information and communication technology for the cantonal and municipal administrations, the cantonal police, schools, hospitals and other customers in the public sector. ARI supports around 3,000 users and various business-critical applications at over 200 locations for its customers. The service provider also supports them in the digitalisation of their business processes and in the introduction of innovative e-government services for the population and the economy. ARI emerged in 2013 from the vision of the canton and the municipalities to proceed together in the area of eGovernment and IT. By coordinating IT development and pooling forces and resources, ARI can offer all customers secure, cost-effective and yet innovative solutions.. [ari-ag.ch](http://ari-ag.ch)

