

# Hybrid Access Management and Security



## Executive Summary

Customer started cloud transformation and needed to create a hybrid access management and security for future applications and service needs. Utilizing existing access management solution with **AWS Directory Services, AWS EC2 servers, AWS VPN / Direct Connect** and **AWS SSO** customer together with Hardys Digital achieved a robust, fault tolerant and lean solution for future hybrid access management needs.

## Customer challenge

Among the very first steps of cloud transformation customer needed to setup access management solution ready for hybrid cloud architecture, utilize existing assets efficiently and fulfill the low latency needs for both cloud and on-premise services

## Why AWS

Wide AWS Directory Services and ready-made EC2 AMIs give various possibilities to address specific access management needs. For example, AWS Managed Microsoft AD, enables directory-aware workloads and AWS resources to use managed Active Directory in the AWS cloud. AWS AD Connector service gives the possibility to connect to existing domain controller a utilize existing access controls, users and groups configurations. AWS SSO is a powerful service which enables provision access to specific applications centrally.

## Why Hardys Digital

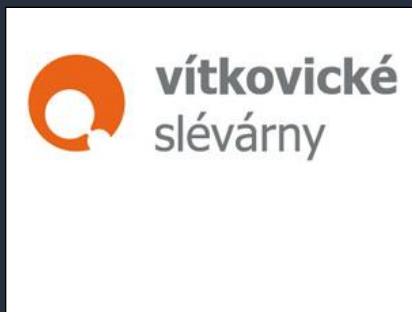
**Agility and Integration** - As an experienced partner Hardys Digital can provide best practices with networking, security, and cloud services access within enterprise IT for a quick start. It provides AWS integration with ERP, IT management and project management systems.

**Customer Experience** - Hardys Digital offers pre-built integration of cloud services with monitoring, notification and alarms and their interaction with IT service management tools.

Complex approach and project management - Hardys Digital guides end-to-end through the cloud project professionally, clearly and with proven procedures.

**Ensuring highest data security** - Hardys Digital implement security services aligned with AWS well architected framework for network setup, security, and access to cloud services to ensure security and meet existing security requirements.

## About Vítkovické Slévárny

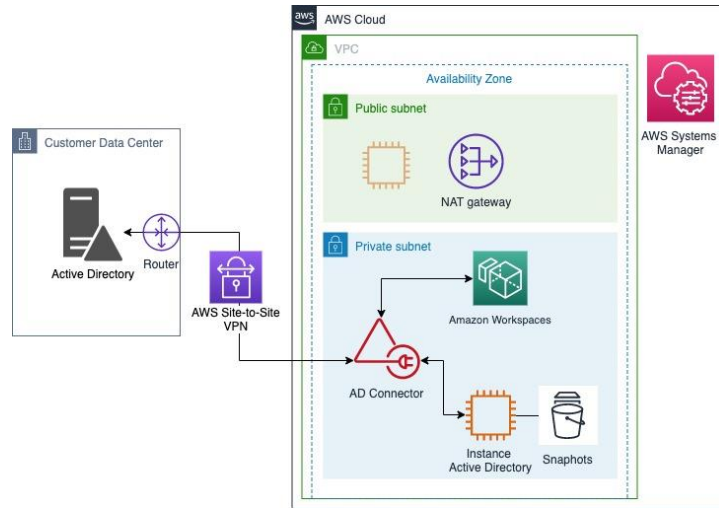


The company **Vítkovické slévárny** is a traditional manufacturer of rolls for metal rolling, steel and cast-iron shaped castings, and since year 2004 also copper alloy castings.

It is a dynamically developing company with a tradition of castings manufacturing dating back to 1828 and rolls manufacturing dating back to 1910. At present, the company ranks among the top work rolls manufacturers for hot rolling mills on the European market, due to modern licensed technology of centrifugal casting.

## Solution

The solution is based on **both Microsoft** (Windows Server, Active Directory and Hyper-V as virtualization layer) **and AWS** (AWS EC2, AWS EBS, Lifecycle Manager, AWS AD Connector, AWS VPN / Direct Connect, AWS Systems Manager and AWS Workspaces) technologies.



**AWS AD Connector** acts as the main connector in hybrid access management architecture. Access control is optimized so that applications and services communicate with the closest Active Directory based on lowest latency. Access management for applications both on-premise and in the AWS cloud is centralized and customer can run applications both on-premise and in the cloud such as AWS Workspaces.

**AWS EC2 Domain Controller** is built on Microsoft Server 2019 AMI and provisioned and managed through **AWS CloudFormation**. To manage a disaster recovery the daily snapshot with **Lifecycle Manager** are in place.

Service layer takes care of automatic monitoring, notifications, alarms and patching through **AWS CloudWatch**, **AWS CloudTrail** and **AWS Systems Manager** and its automation and integration by **AWS Lambda** with ITSM system.

## Results and benefits

The customer has achieved lower TCO and got more stable and fault tolerant solution for access management. This architecture efficiently utilizes customer assets and is ready for future hybrid cloud service architecture. It is built and managed by Hardys Digital and AWS without the need for further capital investments from customer.

## About Hardys Digital

Hardys Digital is a cloud native company based in the Czech Republic. It provides cloud transformation and managed services on AWS and long term focuses on AWS Industrial IoT, Data Analytics and cloud ERP services in Central and Eastern Europe. Hardys Digital mission is to be a reliable implementation partner for customers' digital transformation objectives such as increasing agility, automation and growth. Its key values are excellent customer experience and professional services.

**Hardys Digital**