









**Adria Forum 2025** 

From Innovation to Implementation:

## Private Cloud for Modernizing Research and Education

Powered by VMware Cloud Foundation

AIGO x AMRES — real-world example of VMware Cloud Foundation in action









AIGO YOUR PARTNER IN DEVELOPMENT

AIGO is one of the leading system integrators in Serbia that recognizes the needs of the IT market and follows world trends in technological achievements.



100+
PROJECT



400+

Innovation | Efficiency | Reliability | Support

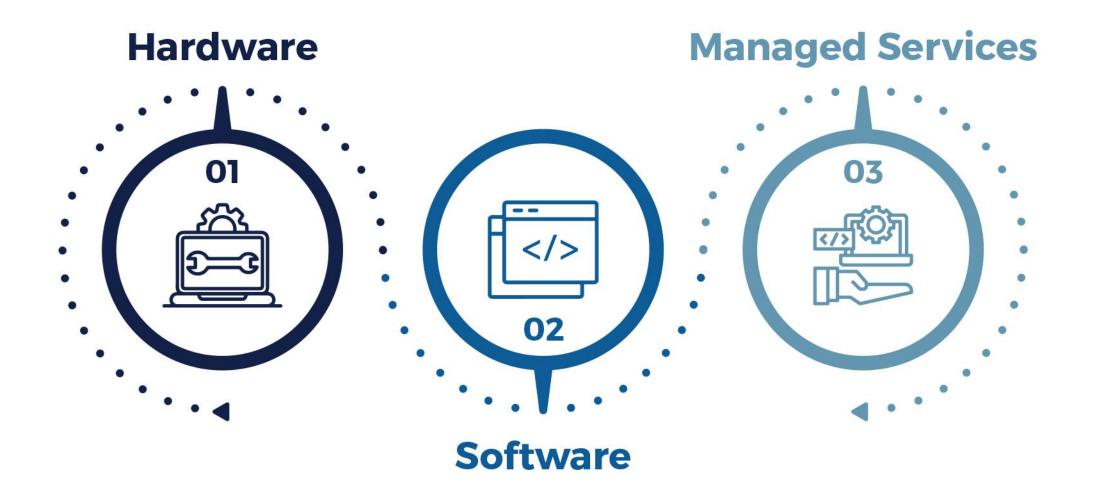








#### AIGO INFRASTRUCTURE ARCHITECTURE









Dell EMC - Associate - Information Storage and Management Version 3.0 | Dell EMC - Specialist - Technology Architect, Midrange Storage Solutions Version 2.0 | Dell EMC - Specialist - Implementation Engineer, PowerStore Solutions Version 1.0 | Dell EMC - Specialist - Platform Engineer, PowerStore Version 1.0 | Dell EMC -Specialist - Implementation Engineer, Dell EMC Unity Solutions Version 2.0 | Dell EMC - Associate - Cloud Infrastructure and Services Version 3.0 | Dell EMC - Spe-

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**AIGO TEAM** 

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**VENDOR STATUSES** 

**DELL EMC TITANIUM** 

LENOVO PLATINUM

VMWARE PRINCIPAL

CERTIFIED ORACLE CORPORATE AND PUBLIC ADDENDUM

- Associate - PowerE 2022 | Dell EMC - SE: High-end Storage Credential 2023

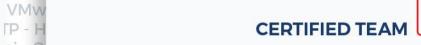
Specialist - Technology Architect, Midrange Storage Solutions

VMware - VCP - Data tified Network Assoc **HCIA Routing & Swit** (Fortinet NSE 4 - For fied Technical Sales F tion Storage and Ma tion Storage and Mai tation Engineer, Pow neer. Dell EMC Unity VxRail Version 2.0 | 3.0 VMware - VCP -VMware - VMware S

**EXPERIENCE** 

15+ years of experience

1000+ projects



**DELL ECM** HUAWEI

**LENOVO VMWARE** CISCO **FORTINET** 

> **HPE** VEEAM

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ential 2023 | Dell EMC - SE: Server Credential 2023 | Dell EMCmplementation Engineer, RecoverPoint Version 2.0 certificate

> nal | Cisco - Cisco Cersign 2022 | Huawei -Security Professional eeam - Veeam Certi-Associate - Informa-Associate - Informapecialist - Implemenaplementation Engimentation Engineer. and Services Version ization Design 2021 nfrastructure 2020) torage Huawei - CSP



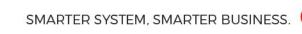
Customized approach and services.

Creating optimal solutions and providing continuous support.











#### A Partnership Built on Trust and Innovation

- Shared values with our partners are the foundation of our success
- Years of investment in technology partnerships have led to close collaboration with industry leaders
- VMware a company with whom we share a vision of digital transformation, reliability, and technological excellence.
- Together, we empower users to leverage cutting-edge cloud technologies, backed by local support and a deep understanding of market-specific needs.







#### A Partnership Built on Trust and Innovation

- The modernization of Serbia's academic network AMRES is the pinnacle of this collaboration
- Through the implementation of VMware Cloud Foundation 5.1, we created a private academic cloud accessible to all universities and institutions across Serbia
- A project aligned with European initiatives like OCRE and even surpassing them
- Unlike public cloud providers offering discounted services (OCRE), AMRES
   delivers a local, sovereign cloud based on state-of-the-art technologies, free of
   charge for users.

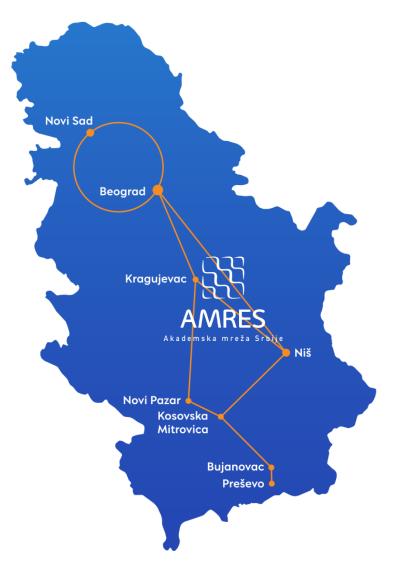






#### **AMRES** – backbone of Serbia's academic network

- A national digital and network infrastructure connecting all universities and research institutions
- Provides communication, security, and cloud services to the academic community
- Mission: To modernize research and education through ICT infrastructure
- Key challenge: How to provide scalable, secure, and easily accessible ICT resources for diverse faculties and research projects?









#### The Challenge | Fragmented infrastructure and the need for centralization

Faculties operate with diverse and inconsistent resources

Short-term projects require rapid provisioning and decommissioning of resources

Demand for a shared, secure, and standardized platform

Limited number of IT professionals at faculties

- → need for automation
- Varying levels of expertise and fields of study (humanities, engineering, medicine)









## The Solution | VMware Cloud Foundation + ARIA Automation

Full-stack private cloud built on VMware Cloud Foundation

AMRES aimed to create a private academic cloud an environment offering the same capabilities as commercial providers, available to all members of the academic network...



All VCF modules and functionalities activated



**vm**ware



VMware Cloud Foundation\*

> VMware Aria Automation'



## **ARIA Automation – The Key to Managing the Entire Solution**

#### **ARIA Automation** component map::

- Self-service resource provisioning and management
- Predefined templates (various categories of virtual servers)
- Automated project, tenant, and access management
- High availability
- Collaborative use of shared platforms by multiple faculties

**ARIA Operations** – performance monitoring, resource tracking, and reporting







## Results & Value | Unified, Automated, High-Performance Cloud

- Production capacity: ~1,000 virtual machines
- Free resource access for faculties
- Unified, secure, and highly available environment
- Standardized access parameters and identity federation
- Optimized infrastructure and maximum resource utilization
- New flexibility: rapid project deployment and decommissioning as needed





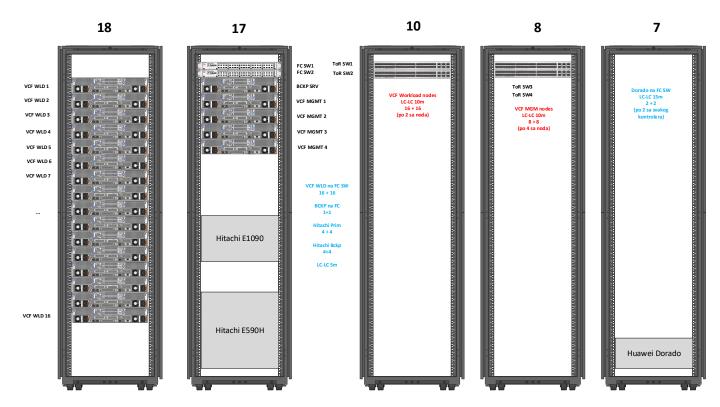






#### **Current State – Infrastructure in Full Production**

- 4 vSAN Ready Nodes for the management domain
- 16 servers + 240TB RAW flash high-performance workload storage
- All servers deployed via Cloud Builder
- Full functionality of all VCF modules
- Backup server and 784TB RAW high-performance backup storage.





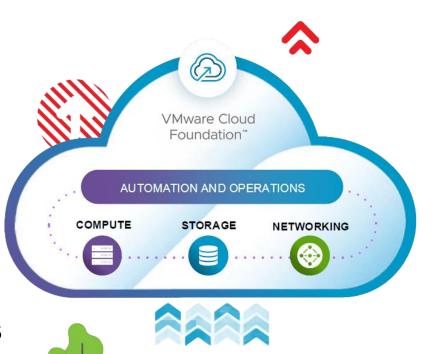




## Next step | Building on a strong foundation

- Upgrade to the latest version of VCF
- Introduction of VCF AI Stack shared AI resources
- Enhanced network orchestration and security layers
- A model for future regional academic cloud initiatives

"With VMware Cloud Foundation,
AIGO helped AMRES build a scalable
and secure academic cloud - a real example
of innovation turned into implementation."

















#### **Adria Forum 2025**

# **Thank You**