

## KIFÜ, The Hungarian Mandated Organisation and its Open Science Activities

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# KIFÜ – Hungarian e-infrastructure services



### NIIF Program since 1986

Member of NREN community since 1992

NIIFI + KIFU merger 2016

IVIOSOIIII ayyarova

### **NETWORK** technologies

MPLS (2002), IPv6(2003), Segment routing (2013), 100 Gbps (2012)

Hybrid network (IP/MPLS +DWDM) – up to nx100 Gbps access

Reaching 44 R&E networks in Europe and 60+ in Worldwide

#### Services

Federated AuthN/AuthZ, eduID, eduGAIN, eduroam, CSIRT, Supercomputing, storage, cloud (laaS), Videoconferencing, VoIP, Videotorium

#### **USERS - ACCESS**

- Serving 1.5+ Million PEOPLE
- 1000 universities, research, public collections and public cultural institutions, hospitals
- 6500 educational endpoints, all Primary and secondary schools





### ICT services – for users





# **Network Services**

Data network and
Internet
(connectivity, VPN,
multicast, IP, DNS)
Network security and
filtering
Domain name
eduID
eduroam
Managed IdP
TCS
Public IP



#### **Cloud services**

Server hosting
Virtualisation
Webhosting
Mail
VoIP
Videoconferencing
Videostreaming
Videorepository
Groupware, Collaboration



### Supercomputing

HPC capacity Competence Centre Scientific applications



# Schoolnet Programme

Internet
Managed WiFi
eduID
eduroam, webhosting,
Mail



### Tisztaszoftver (Clean Software) Programme

O365/M365 licenses



# Consulting and expert service

System development, IT architecture design,
Training, Web accessibility
Field
system engineering
Quality assurance



# Specific services

**OSZK** 

JMCS DJP FIR KÁBER HUNOR Hulladék Radar (Waste Radar)

USER SUPPORT



### HPC current development phase



- The system name: Komondor
- A new, ~5.5 PFlops machine (aggregated capacity)
- 4 partitions (CPU only, GPU accelerated, AI, high-mem)
- •20,000+ CPU cores
- 200+ GPU boards
- Free-air cooling all year round
- Manufacturer: HPE Cray
- To be launched for all researchers in April 2023
- Location: KIFU's Debrecen HPC datacenter upgraded
- Waste heat used to heat swimming pool







### Mandated Organisation roles and KIFU





### **Ensure wider national position is represented**

- Interaction with all relevant stakeholders
- Coordinating input to and from their respective countries or constituencies NOSCI forums, <u>e-mail lists</u>, blogs, <u>https://kifu.gov.hu/ni4os, contributing to https://openscience.hu</u>

### Serve as the bridge between national stakeholders and EOSC-A

- Complementing/expanding the role of individual EOSC A members
- National research area and national EOSC ecosystem In some countries the Mandated Organisations already have a special role in the national EOSC implementation – KIFÜ as an e-infrastructure provider

#### Serve as the stable backbone of EOSC-A

- Coming from the governmental appointment
- Complementing independent decision of individual institutions becoming members

### Call for active engagement

- Regular interaction/meetings with EOSC A Board and Secretariat
- Help to grow the membership and engagement in EOSC at national level
- Promote and assist with completion of monitoring surveys e.g. AAP





### KIFÜ EOSC related activities /2







- Regional EOSC event in September 2022 with DEENK with support of Ni4OS-Europe
  - EOSC in the Eastern European region, EOSC projects, NI4OS-Europe thematic services, Policy implementation, ORDM tools
- EOSC Symposium November 2022 TF discussions
- Champion program to Support Researchers and academic staff to transfer of open science-related knowledge materials in their own institutions (2021)
- KIFÜ Open science workshops 34 workshops on 22 occasions in 8 locations in autumn 2022. With a total of more than 370 participants. Online, hybrid and inperson. Partners:









NYELVTUDOMÁNYI KUTATÓKÖZPONT

- E-learning in Hungarian: <a href="https://elearning.kifu.hu/">https://elearning.kifu.hu/</a>
- Interviews with well known researchers about Open Science and RDM (2021)



# 2022 KIFÜ Open Science Workshop topics



Introduction to Open Science

Open access

Research Data Management

Modern Research Assessment Systems

**EOSC** 

Scientific Publications

Open Science Café KIFÜ Research Support Services



### **Questions?**

