



**THIS WORK IS SUPPORTED BY  
A PROJECT OF RDE CERN COMPUTING  
(CZ.02.1.01/0.0/0.0/1 6013/0001404)  
FROM EU FUNDS AND MEYS**



EVROPSKÁ UNIE  
Evropské strukturální a investiční fondy  
Operační program Výzkum, vývoj a vzdělávání



MINISTERSTVO ŠKOLSTVÍ,  
MLÁDEŽE A TĚLOVÝCHOVY



**cesnet**  
"...."

# NGI\_CZ OPERATIONAL EXPERIENCE

**A. Mikula,**

**A. Prchal, J. Chudoba**

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**CESNET / FZU**

**EGI Conference 2019**

**Amsterdam**



## ■ Sites with EGI middleware

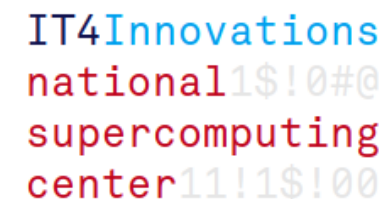
- prague\_cesnet\_lcg2 (CESNET)
- prague\_lcg2 (FZU)
- CESNET-MetaCloud
- CESNET-MCC

## ■ Other NGI\_CZ resources

- Metacentrum (CESNET)

## ■ HPC resources

- IT4Innovations







## ■ Worker nodes

- 30 nodes
- 1344 cores
- 2+ GB RAM / core
- Total HS06 rating: 14900
- 3 HW generations

## ■ Hypervisors

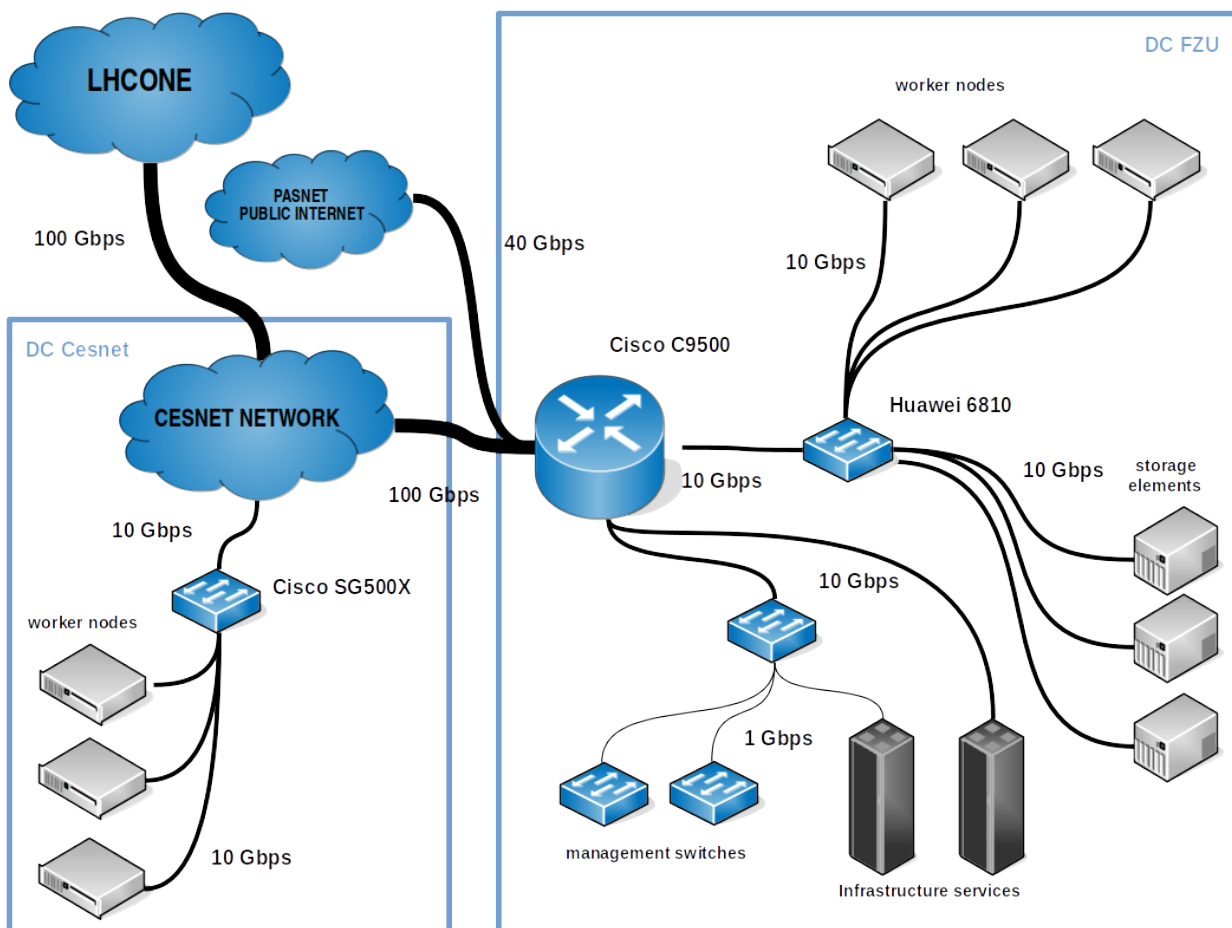
- 4 nodes
- 144 cores
- 1 TB RAM
- KVM based
- used for hosting auxiliary services

## ■ Storage

- DPM
  - 4 servers
  - Total capacity 279 TB
  - Running DPM DOME
- LFC and DFC



## ■ Networking (as planned for 3Q19)





## ■ Authentication and authorization

- VOMS servers
- Argus servers
- MyProxy

## ■ Accounting

- BDII

## ■ Other services

- User Interface servers
- ELOG

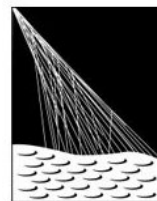


## ■ Supported VOs

- BELLE
- Auger
- ELI
- FedCloud
- Elixir
- Metacentrum
- ...



beamlines



PIERRE  
AUGER  
OBSERVATORY

## ■ Managed by Perun IdP

## ■ Changes in certificate subjects

- Problem: subject changed every year with Terena CA (happened three times in a row)
- Solution: CESNET CA → new problem (CA expires at the end of this year)
- New subject leads to a new operations portal broadcast (which gets somewhat ignored by admins)

## ■ Redundancy

- Geographic locality and network
- Virtualization platform



## ■ **CentOS 7 upgrade of all nodes**

- Scientific Linux 6 EOL in 2020

## ■ **HTCondor, HTCondor-CE (or ARC CE)**

- CREAM CE EOL in 2020

## ■ **IPv6 support**

- Due to the increasing number of IPv6 only clients

cesnet  
"...."

THANK YOU

