

CyberSecurity at GRENA

Eastern Partnership E-infrastructure Conference

EaPEC 2022

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Fields of activities

- Providing Information Technology services to users and implementation of new, innovative services
- Preparation and implementation of international and national research and technology projects
- IT education
- Promoting and supporting IT development in Georgia

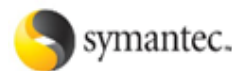


Main services

- GÉANT and internet connectivity
- VPN – Virtual Private Network
- Network traffic monitoring and analyses
- eduroam – education roaming
- eduGAIN – authentication and authorization
- Cloud, Virtualization
- Cybersecurity
- Country top-level domain registration .ge and .გე
- Software licences and subscriptions

Microsoft

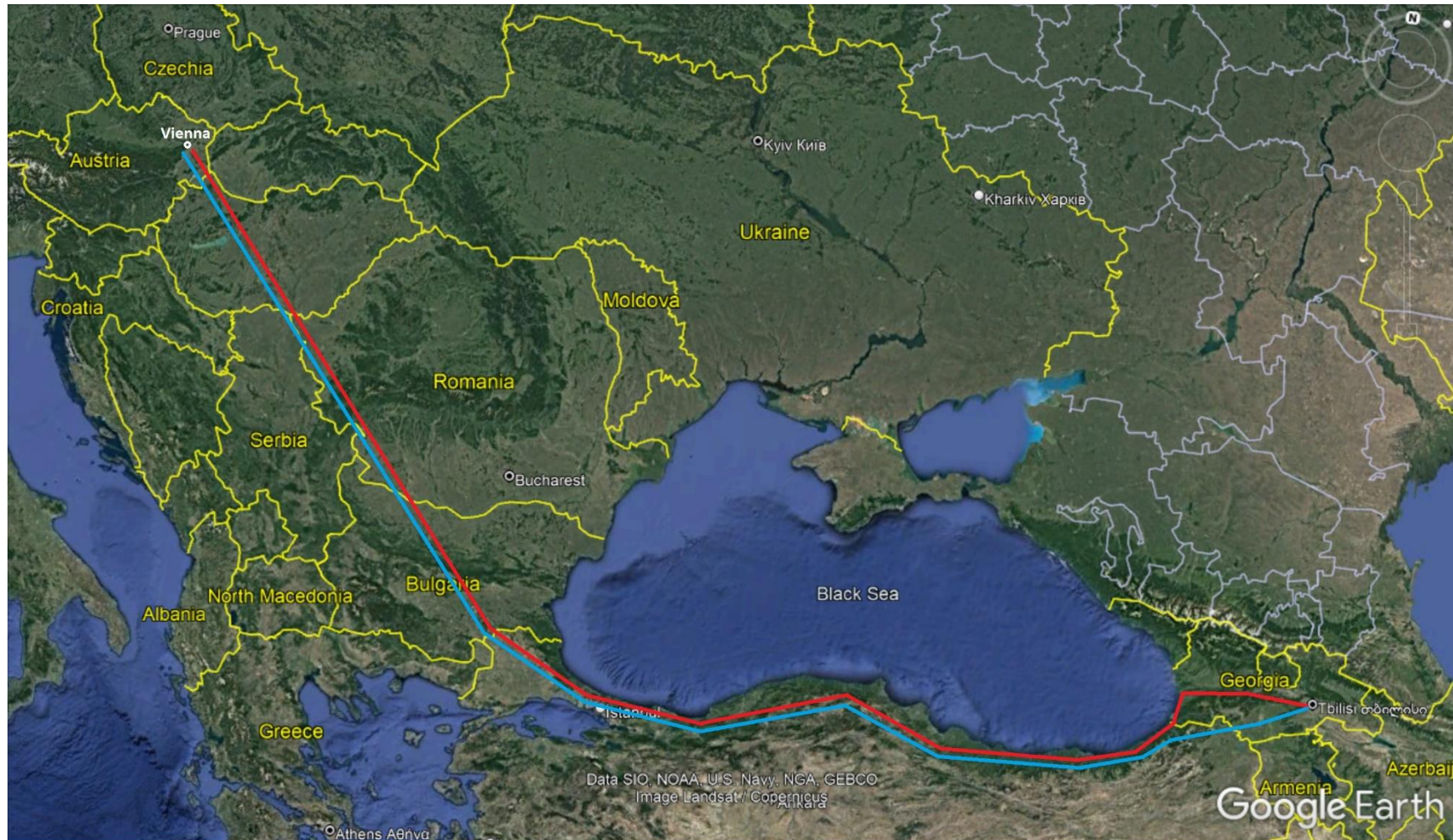
SOPHOS



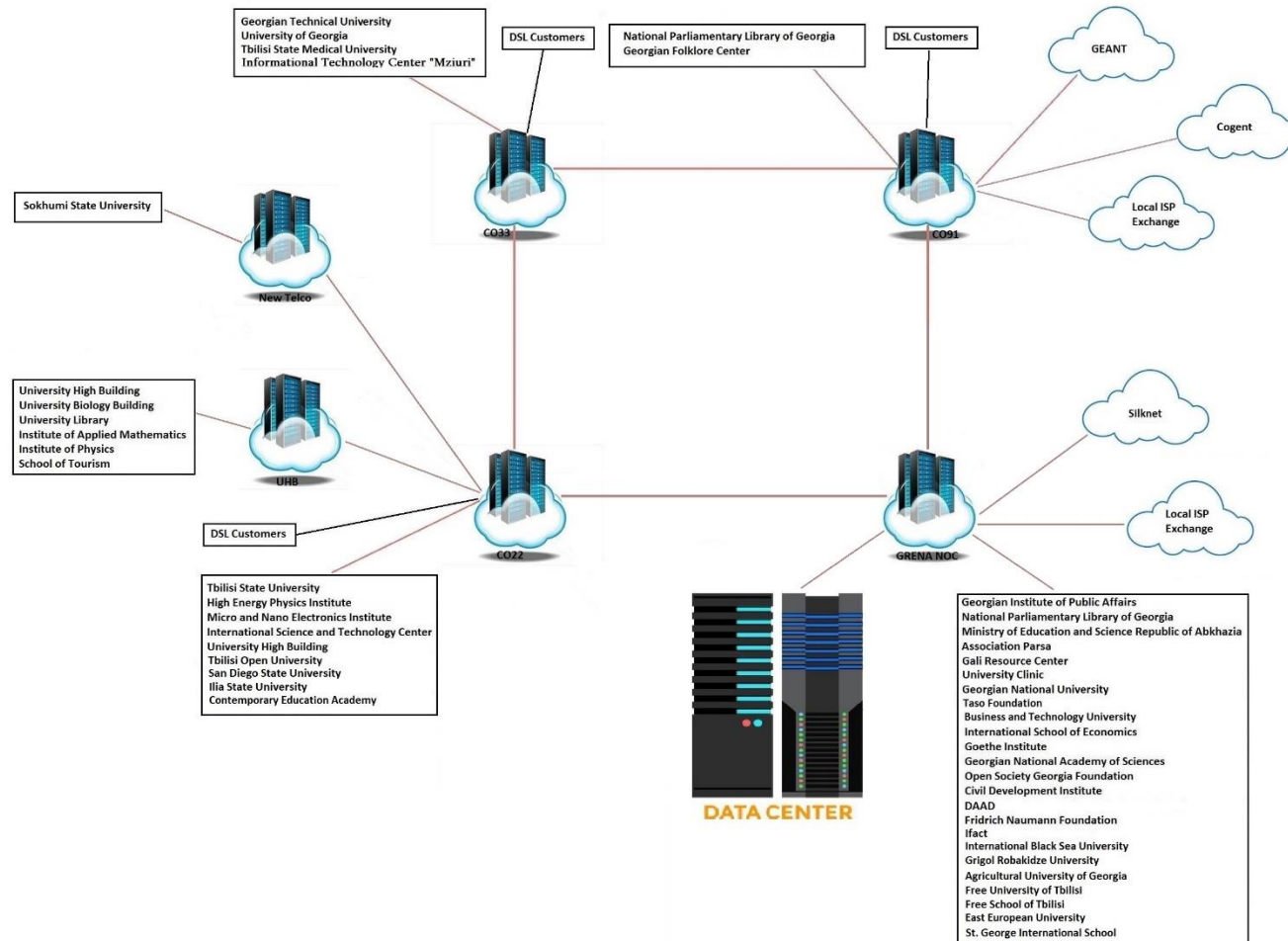
digicert



GRENA international connectivity



GRENA network in Tbilisi

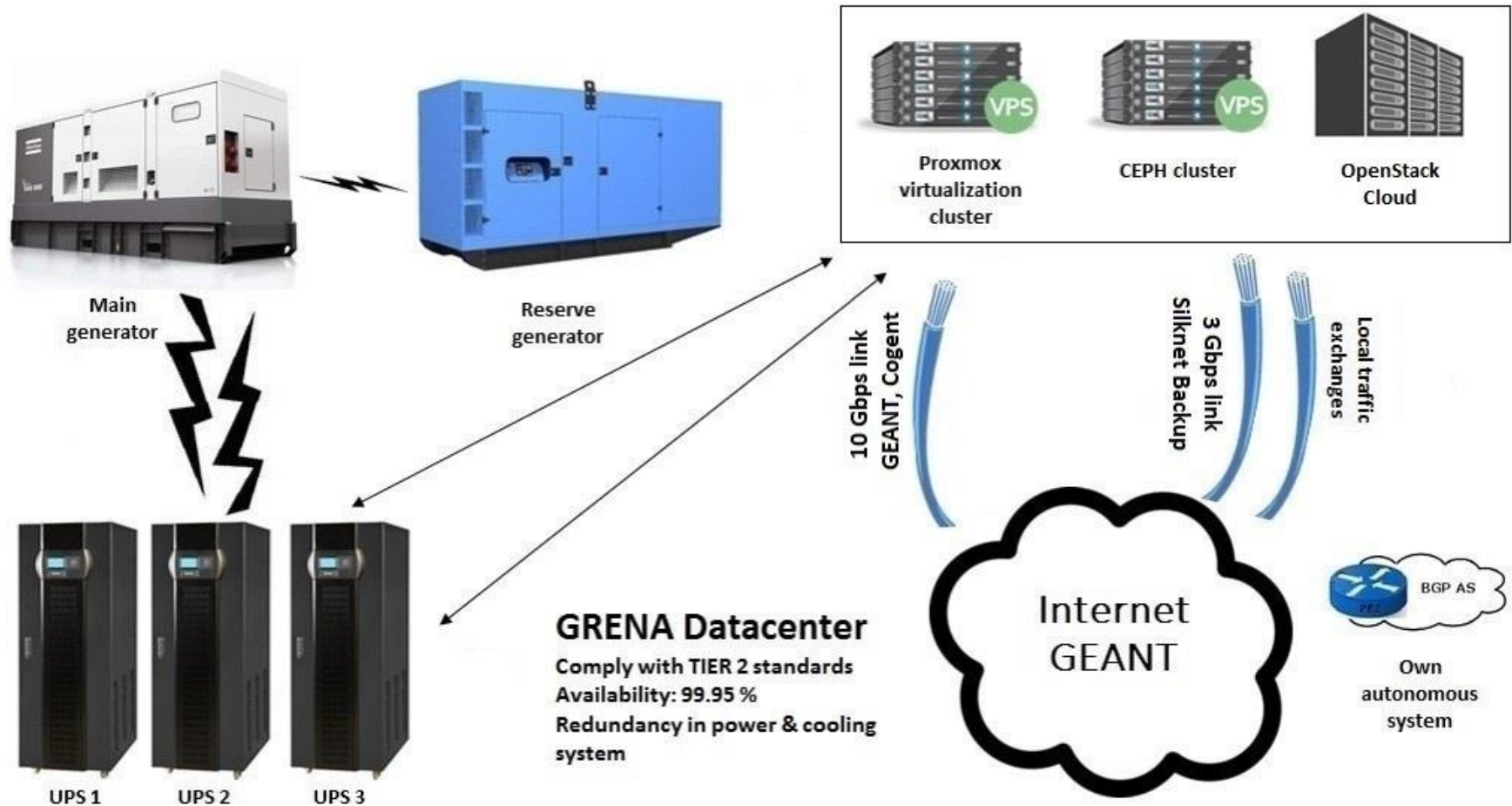


Cloud and virtualization resources

Number of facilities	CPU core	RAM TB	Storage/Backup TB
2	750	13.0	85/760

- Users: research applications, universities, libraries, hospitals, media, government, NGO, etc.
- Research applications in weather forecast, climate change study, biomedicine, particle physics, mathematics, etc.
- Number of users – 80
- Virtualization (ProxMox) and Cloud (OpenStack)
- Remote backup datacenter at NewTelco – 40 Gbps connection capacity to main datacenter

GRENA datacenter



Current EU projects



GN4-3 Research and Education Networking – GÉANT



EU4Digital: Connecting Research and Educational communities
– EaPConnect



Modernization of Environment Protection Studies Programmes
for Armenia and Georgia – MENVIPRO



National Initiatives for Open Science in Europe – NI4OS-Europe



CyberEDU – Creation of sustainable CyberEDU network to
foster internationalization of academic cooperation

- Cisco Networking Academy
- Linux Professional Institute Academic Partner
- Oracle and SQL courses, etc.
- e-Learning center based on Moodle and Math-Bridge
- Partner of Pearson VUE for student's certification



Security appliances and services

- BGP Blackhole service from Cogent
- Radware application layer DDoS protection system
- UTM for Datacenter
- Blacklists from Team Cymru, Shadow Server
- Network traffic monitoring and analyses
- Computer Emergency Response Team – CERT-GE
- Disaster recovery site
- email security barracuda



Portal for cyber exercises

- In cooperation with the CERT-GOV-GE – Governmental Computer Emergency Response Team of the LEPL „Digital Governance Agency” under the Ministry of Justice of Georgia and Georgian Research and Educational Networking Association GRENA have developed cyber exercises portal www.cyberlab.ge
- Works for creating portal are supported by the European Commission's EaPConnect project



CyberSecurity Workshop

- GRENA hosted Second EaPConnect CyberSecurity Workshop
- Experts from EU, EaP countries and USA shared their experience and best practices in CyberSecurity. The event was attended by 146 participants from 32 countries





Thank you for your kind attention

28.09.22, Baku, Azerbaijan