Perun Authentication and Authorization Infrastructure

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To conduct research and foster innovation, collaboration and resource sharing have become the primary focus for research communities and national e-infrastructures. It can reduce duplication of work, leading to reduced costs, while opening possibilities for achieving common goals by combining data, skills, and efforts. However, offering such functionalities brings complex challenges to building an environment that is secure and easy to administer. That's where the authentication and authorization infrastructure (AAI) steps forward.

At CESNET, we are continuously addressing those needs by implementing Perun AAI, which is actively used as a fundamental component for large communities such as the LifeScience cluster on the European Open Science Cloud (EOSC) level and the Czech national e-infrastructure. In terms of collaboration, we create an environment that enables easy integration of services users can access by logging through their own organization accounts without forcing them to remember extra usernames and passwords. Our primary focus is also to protect users'resources by enabling multi-factor authentication, anti-phishing protection, and advanced authorization mechanisms i.e., GA4GH passports that provide a convenient and standardized way of communicating users'data access authorizations based on either their role (e.g. being a researcher), affiliation, or access status. Last but not least, we put our efforts into coming up with automatic processes, such as user life cycle within the organization, together with the automatic provisioning and de-provisioning of accounts without manual interference.

This talk will introduce the benefits Perun AAI can bring to research communities and national e-infrastructures to help them foster collaboration, improve the security of all operations, and lower administration costs.

Topic

Trust and Security: Access control

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