

Perun Ecosystem in the context of EGI Federation

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Perun Ecosystem



- Complex AAI solution
 - Identity and Access management (IAM)
 - Supporting tools
- Focused on research and education environment
- Modular architecture
- Customizable
- Following trends in modern AAI
- Open-source
- Maintained by CESNET and Masaryk University
- Backed up by stable development team

Perun team & development process

- ~25 people
 - 22 with technical skills
 - Covering development, operation and projects
- Collaboration with students
- Agile methodology
 - Frequent releases
- Periodic penetration testing
- Code reviews and continuous testing
- Modern devOps processes

Perun in EGI Federation



- EGI Attributes Management service
 - Part of EGI Check-in service
 - <https://perun.egi.eu/>
 - Available in EGI service portfolio
- Custom offering for projects and research communities
 - Standalone instance
 - Customized
 - Example: Life Science AAI

EGI Attributes Management service

- Identity management
- Almost invisible for end users
- VOs, Groups, memberships
- Users, identities, attributes
- Registrations, life-cycles
- Provisioning
 - Through EGI Check-in proxy
 - Direct provisioning to services

Benefits

- Self-service & privilege delegation
 - Self-service for users
 - Self-service for managers
- Flexible attributes
 - Customizable names, syntax, semantics checks, dependencies, derived values, dynamic values
- Registrations and user life-cycle
- Provisioning & deprovisioning
- Flexibility
- Development capabilities
- Multi-level support
 - Integration support, development support, user support

Perun as a custom offering

- Any subset of Perun Ecosystem
- Integration with other components
 - AAI Components
 - Managed systems
- Flexible solution based on requirements
- Fit into existing environment and processes
- Know-how

Life Science AAI

- Common AAI for 13 Life Science Research Infrastructures
- Collaboration of EGI and GÉANT
- Main components
 - Identity management (EGI)
 - Authentication proxy (GÉANT)
 - IdP of last resort (EGI)
- In production since 06/2022



Perun in Life Science AAI

- Group and VO management
 - For Life Science as whole (special “catch-all” VO)
 - For communities (separate VOs)
- (de)provisioning functionality
 - Customizable provisioning services
 - User consent-activated
- User affiliation management
- Policies management (AUP, ToS, ...)
- IdP of last resort
- User profile, account linker, RP self-service management
- EOSC AAI integration

Perun in Life Science AAI - conclusions

- AAI for coherent clusters make sense
- Cost efficient
- Requirements gathering is more complex
- Strong AAI expertise is required
- Integration with other AAI components is possible
 - Flexibility
- Perun can be customized to fit the requirements
 - Policies, processes
 - User experience, workflows
- Implementation takes time

Perun Future

- Following trends in modern AAI
 - Self Sovereign Identities (SSI)
 - Access to sensitive data
 - Support policy compliance (e.g. GDPR)
- Increasing self-service capabilities
- Moving towards identity governance
- Focus on user experience
- Roadmap is influenced by user requirements
- Growing team of AAI experts

Summary

- Perun is a standard part of EGI service portfolio
 - Part of EGI Check-in
- Custom instance available on demand
- Full AAI solution
- Flexibility and adaptability
- Strong integration options
- Cutting edge roadmap
- **Strong team and know-how**



Thank you for attention!

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