Contribution ID: **353**   Type: **Presentazione orale**

StoRM WebDAV Authorization with Open Policy Agent: Implementation and Performance Enhancements

StoRM WebDAV is a widely used storage service that provides WebDAV access to distributed storage systems. Initially, its authorization mechanism was simplistic, granting uniform access privileges to all members of trusted VOMS Virtual Organizations. With the introduction of support for trusted OpenID Connect/OAuth token issuers, starting from version 1.3.1, StoRM WebDAV includes a fine-grained authorization policy engine, enabling more detailed access control policies within storage areas.

In this work, we present an alternative approach by integrating StoRM WebDAV with Open Policy Agent (OPA), a flexible and scalable policy decision engine. This integration aims to provide a more dynamic and decoupled authorization mechanism, improving maintainability and extensibility.

We describe the implementation of the OPA-based authorization layer and evaluate its performance in comparison with the existing fine-grained StoRM WebDAV authorization engine. Our analysis focuses on request processing times and policy evaluation efficiency. This work aligns with the broader objective of establishing a uniform authorization layer within the Ri-SCALE project, in which the INFN is involved.

Primary author: AGOSTINI, Federica (CNAF-INFN)

Co-authors: VIANELLO, Enrico (Istituto Nazionale di Fisica Nucleare);   GIACOMINI, Francesco (Istituto Nazionale di Fisica Nucleare);   GASPARETTO, Jacopo (Istituto Nazionale di Fisica Nucleare);   BASSI, Luca (Istituto Nazionale di Fisica Nucleare);   MICCOLI, Roberta (Istituto Nazionale di Fisica Nucleare)

Presenter: AGOSTINI, Federica (CNAF-INFN)

Session Classification: Calcolo distribuito

Track Classification: Calcolo distribuito