The VO Services Project, formerly Privilege Project, implements and supports VO identity registration and fine-grained authorization for access to grid-enabled resources and services on the Open Science Grid.

In the OSG model, users register with a VO, using the Virtual Organization Management Registration Service (VOMRS). Users can then access computational or storage resources on the grid, using credentials enhanced with personal attributes, such as membership to VO groups and group roles. The authorization call-out interfaces of such grid services allow for external policy decision point to inspect site-wide black/white-lists and to flexibly and dynamically determine a local identity mapping.

The project is a collaboration of Fermilab and Brookhaven and it is sponsored by US CMS and US Atlas. The VO Services infrastructure is deployed on the OSG as well as on several facilities in the US and around the world.

This paper discusses the architecture, deployment models, operational practices, and future roadmap for the project.