

## **Federation-based Identity Systems and Grid Security**

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Federation-based identity systems, such as InCommon, has gained a lot of recognition in the recent past. Existing grid security systems are built on PKI model and uses Certificate Authorities as trust anchors. While federation-based identity systems do not use Certificate Authorities, but they generate identity tokens based on federation members input. Open Science Grid recently examined whether it is possible to use diverse authentication models in the grid infrastructure, using federations and PKI structure. In this talk, we focus on openID and Incommon as federation based systems, and show possible ways to integrate them into the OSG. We will also discuss some open questions such as accreditation of federation-based CAs and how IGTF can be helpful in this arena.