

Integrating Federations into the International Grid Trust Fabric

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Today's virtual communities in the grid today extend far beyond mere computing, and rapidly outgrow the scale of the 'happy few' where traditional authentication methods like in-person meetings, sponsorship and the trusted feeling of personal acquaintance still worked. To face these new challenges in authentication and authorization, grid methods are now being combined with federation techniques to allow the broad user base in academia and research to gain access to grid resources by simply translating the credentials they already have from their home organisation. Following the rapid growth of academic and research federations, and based on technologies like SAML and its implementations in simpleSAMLphp, Shibboleth and others, there is a recent flurry of activity in setting up such credential translation services in the grid arena. The International Grid Trust Federation, overseeing the quality of grid authentication through its accreditation process and authentication profiles, sees a new influx these Short-Lived Credential Services (SLCS) and Member Integrated Credentials Services (MICS). At times fronting only a single institution, but more often bridging entire national and even transnational academic federations into the grid world. With the closer integration of collaboration tools (of which computing and data storage are only a small element), such services will be a great benefit for extending the grid beyond its traditional user base. In this contribution, we will review the status of this federation integration into grids, but also look at the challenges in assurance levels between current federations and grids and what additional requirements on federations emanate from the accreditation of federative SLCS and MICS CAs.

