In Grid We Trust: using identity and user attributes in a distributed world

The recent flurry of ‘federated’ identity systems is establishing the concept of ‘global trust’ using a far more fine-grained distribution of identity and attribute sources. Federated certification authorities like the TERENA Certificate Service rely on institutes and universities to provide high-quality identity vetting, and community member management systems are increasingly populated from or linked to external sources of attributes. This is sometimes seen as altering the qualities of these identities and attributes – since grid participants historically assumed trust flows from personal acquaintance and tight relationships. The additional level of indirection appears to change this trust level. On the other hand, the release of identity and attribute information by the home organisations also expresses their own trust in grid as a proposition for their users: organisations have to make a dedicated and at times costly effort to mature their identity management policies and processes to be able to join the global trust fabric through the federations – and can thereby provide strong and binding assertions about their users and employees. Trust works both ways. In this contribution we will review the status of federated identity and multi-authority trust in grids, how the new federated CAs link in to the research and educational federations, what can be done for common grid scenarios such as delegation in this federated context, and look at what this means for trust at both the global level as well as at the institutional scale.

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