Open and distributed nature of Internet assists users to use online services for the benefits of costs, time and efficiency. To avail these services users are required to submit their credentials for the purpose of registration and further verification. The credentials supplied by a user may not be sufficient enough to grant the access to the requested service and a further verification may need to be carried by demanding some confidential and secret credentials from
the user. Much has been talked about federated identity management, which makes possible to utilize the existing Identity management systems for realizing authentication and authorization decisions. In a federated system, identity provider plays an important role and issues the certified credentials which can be utilized at the service provider’s end. The scalability of such system is limited due to the need of identity provider to act as a central authority and maintain credentials of ever growing large number of requesters. As more and more portals are offering online services, there is a strong need to provide authentication and authorization independent of any central authority. This paper proposes a new architecture which eliminates the role of centralized authority for managing and issuing users’ credentials. The proposed architecture allows keeping the right of disclosure of attributes under the sole control of user and also ensures that the user is not able to modify the confidential credentials which have been registered and verified by various trusted authorities. Decentralized diverse attributes based verification architecture can be used as an enabling technology for supporting web based operations.

Reference

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Index Terms

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