

W3C Workshop on the Future of Social Networking : DIT-UPM Position

DIT-UPM vision is to achieve a simple architecture for distributed social networking, an architecture that allows collaboration into multiple scenarios, between different partners and with different scopes and security requirements and restrictions. The architecture should be flexible enough to support different scenarios:

- Distributed Flexible Virtual Organizations (FVO). VOs appear on-the-fly for fulfilling specific projects or for achieving a task group's common goal. A virtual space is usually created supported by a website or a portal where different people, from different organizations, play diverse roles in such a working space, using a variable set of resources.
- Distributed User Generated Content (UGC). Different people with a weakly linked may produce, share and modify some (user-generated) content in a flexible and creative way.
- Flexible Learning Content Generation (LCG). We have many people in different stages of their own Life-Long-Learning processes, in the context of a connectivism-based flexible educational landscape, where the different peers (learners, facilitators) may be producers and/or consumers.
- Flexible Multimedia Content Distribution (MCD). We'll be addressing the setting up and management of on-the-fly multimedia CDNs.

We believe that identity must play a key role in the design of a sustainable Social Networking Architecture. It is the base for authentication and authorization issues. OpenID seems to be a good starting point as distributed identity scheme; while Oauth is an emerging protocol for authorization that should be taken into account.

Users' activity in Social Networking Services (SNS) websites is usually related with resources' --usually content- management. Examples of resources are articles, images, videos, contacts, events, etc. We propose Atom and AtomPub, the IETF standards, as suitable protocols for resource interchange between websites, and also with clients. These protocols follow a REST approach, and are flexible enough for being used within different scenarios, even with various User Interface technologies that may include native applications, Rich User Interfaces (Flash/Flex) or HTML/AJAX interfaces.

We miss a standard way for associating identity and resources; hence it should be one of our goals in the short term. The vision is to have some kind of Identity Management System, IMS ;-) as the key component for the Next Generation' Web (WebNG as we call it) the same way CMSs (Content Management Systems) currently are. A first approach for achieving such an ambitious goal could be using the user's social network as their identity proxy.

There is already previous work done in the field of Social Networking APIs development. Some examples are Facebook's API, and Google's OpenSocial API. The opening of the Facebook API was an important milestone in the SNSs evolution. Google's reaction, issuing OpenSocial, was the next milestone, clearly defining the identity problem. OpenSocial is based in some of the standards we propose, and the recent movements of Google and other actors towards OpenID (e.g. Yahoo! and Microsoft, Inc.) and OAuth confirm our vision.

This architectural vision is strongly supported by our complexity model --OITP, that stands for Organization, Individual, Technology, and Processes- that could be summarized considering three structural dimensions (Content, People, Technology) and the dynamics connecting the three of them in the realm of the socio-technical relationships we could establish in different scenarios and landscapes. Hence, in the long-term we'll be redefining identity itself in a distributed manner, beyond the soft-identity model OpenID proposes and we are considering to be evolved into a kind of IMS, as we defined it here.