# USAGE CONTROL SYSTEM ARCHITECTURE

Usage control is concerned with how data is used after access to it has been granted and usage control systems provide means to specify and enforce policies about the future use of data.

We present an implementation of a usage control system used with an open-source web-based social network named Elgg. Registered users of this network can exercise control over their data. For instance, they can control how their pictures are used by other users.

Web-based Social Network (ELGG)	*Uses a Firefox browser extension to launch*	Usage Control System
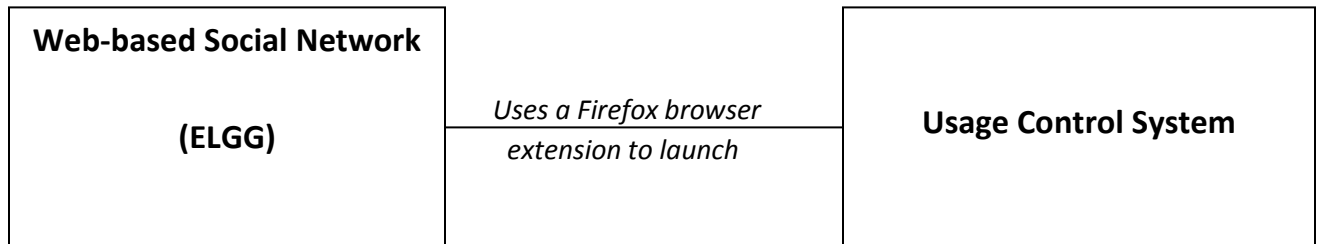
Our usage control system provides a graphical-based environment built on Open Blocks, to define policies using OSL operators. For the policy to be finally enforced, it goes through translation, instantiation and deployment, all of which take a pipe and filter architectural pattern. Translation starts with future-to-past translation, action refinement and Event-Condition-Action (ECA) rules definition.

Translation

Future to past → Action Refinement → ECA Rules definition → Instantiation → Deployment