The Chicken, the Egg and the Rooster: Why Internet Identity is Still Unsolved

By Dick Hardt

In the relatively short history of the Internet, there have been numerous attempts to solve the internet identity problem. HTTP Authentication (RFC 2617), PKI, PGP, Passport, Liberty, XRI, CardSpace and OpenID have all failed to be broadly adopted. Proprietary identity services from Twitter and Facebook have more deployment, even though identity is not the focus of those services.

Reviewing the previous attempts at solving internet identity, some characteristics of a successful system emerge:

An internet identity system has a number of players: users, replying parties and identity providers. All of these parties need to see value in a solution. If there is only a chicken and an egg, then it looks like progress, but without a rooster, nothing more will happen.

The solution needs to be simple to deploy by users, replying parties and identity providers with a simple migration path from existing systems. Relying parties and users need a simple process for account linking.

There are many platforms now on the internet. Existing browsers, mobile browsing, mobile apps, desktop apps, internet connected devices. A solution needs to work across most if not all of them.

Different applications have different security and risk profiles. A broadly adopted solution will scale across a broad spectrum of security requirements.

A user experience that is easy for users to understand and is relatively transparent that can work across all platforms: plain browser, enhanced browser, and mobile.

Identity is more than authentication. The success of Facebook et al is driven by access to information about the user rather than just which user it is. A broadly adopted solution will enable the user to share profile information and delegate authorization.