Risks of the Passport Single Signon Protocol

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Single Signon

- What is single signon?
- Why use it?
Microsoft Passport

- Uses Single Signon
- Uses existing web technologies (HTTP Redirects, Javascript, Cookies, SSL)
- Supports “Wallet” Protocol to store Personal and Credit Card Information
Passport - Subsequent access

From Julien Couvreur's programming blog
Passport - Sign out

From Julien Couvreur's programming blog
General Issues with Passport

- **User Interface**
  - Local Site Logout vs Passport Logout

- **Key Management**
  - Does not talk about key generation and assignment issues
  - Uses same key to encrypt all passport cookies

- **Central Point of attack**
  - Attractive for attackers
  - Susceptible to DOS attacks
General Issues contd.

- Use of cookies
  - when should they expire?
  - Logout using cookies???
- Automatic credential assignment
  - All hotmail accounts were upgraded to passport credentials