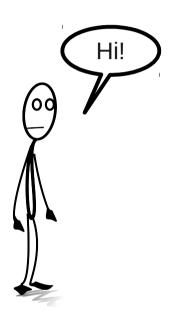


webSS0

Nathaniel McCallum Sr. Software Engineer - Security, Red Hat

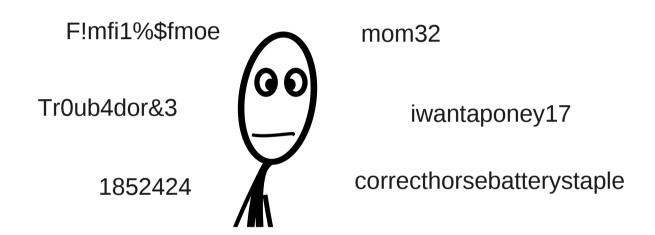
RED HAT'
ENTERPRISE LINUX'

Meet Al



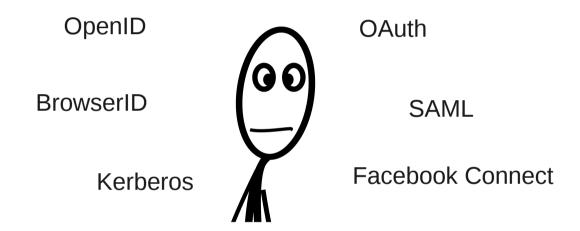


Al has a lot of passwords...





Al also has a lot of protocols...





A story of protocol proliferation

- 1. His enterprise (Kerberos) ID is useless outside his company.
- 2.New Internet authentication standards don't provide SSO, are restricted to HTTP, complex to implement, have a bad security track record and lack usefulness in complex network topologies.
- 3. Secure sharing between data silos is an afterthought.





Al needs...

an easy to deploy, secure, federated SSO experience built on scalable, web-based technologies that transcends local, Internet and cloud infrastructure, manages trust relationships dynamically across complex network topology, and handles delegation as a primary concern.





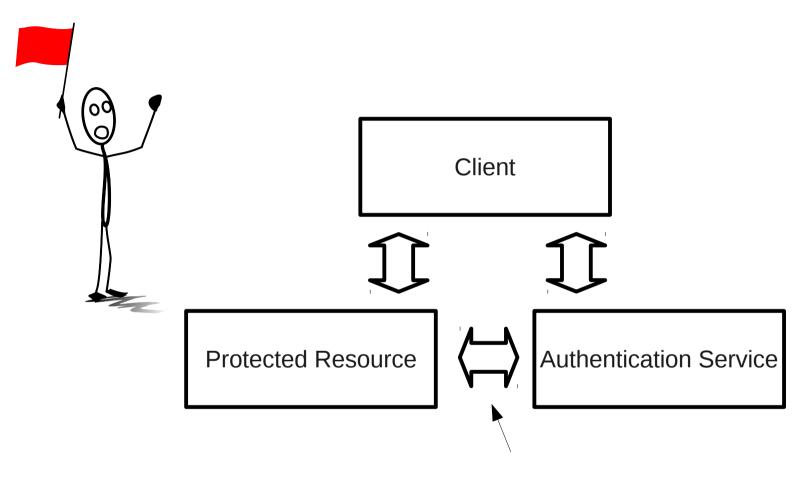
SSL/TLS Client Certificate Authentication

- ✓ easy to deploy, secure, federated SSO experience
- ✓ built on scalable, web-based technologies
- ✓ transcends local, Internet and cloud infrastructure
- manages trust relationships dynamically
- works across complex network topology
- handles delegation as a primary concern





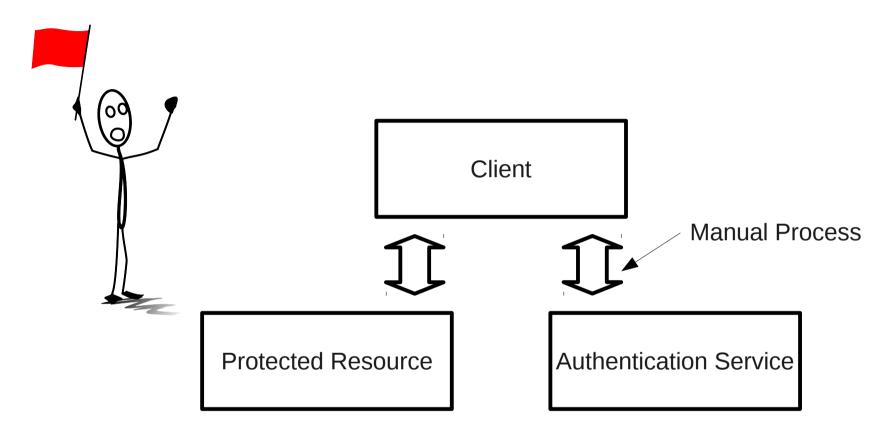
Anatomy of a Typical Authorization System



Requires AS to be publicly available



Anatomy of TLS Client Certificate Authentication





Introducing... webSSO

SSL/TLS Client Certificate Authentication PLUS:

- HTTP REST service for obtaining short-term certificates with full support for secure credential delegation
- Additional security validations to permit globally unique identities via established certificate authorities
- Standard client behavior for a secure (a.k.a. no phishing), polished user experience
- DNS integration



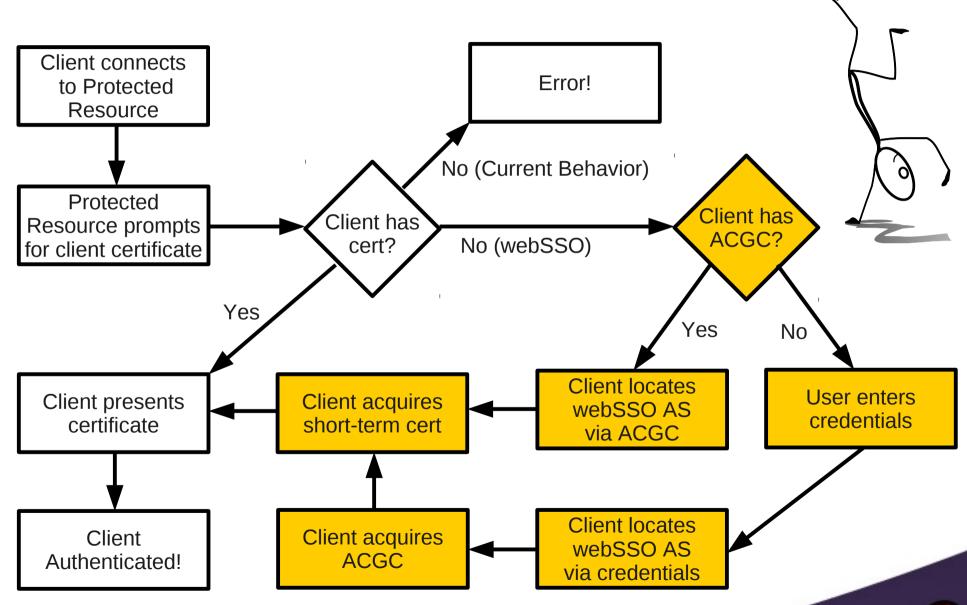
webSSO Authentication

- ✓ easy to deploy, secure, federated SSO experience
- ✓ built on scalable, web-based technologies
- ✓ transcends local, Internet and cloud infrastructure
- manages trust relationships dynamically
- works across complex network topology
- handles delegation as a primary concern





webSSO – Typical Workflow



webSSO - Additional Features

- Deploys on existing HTTP stacks
 (dynamic trust mgmt. requires additional validations)
- Verifies all parties in every transaction
- Protected resources can suggest identity providers
- Integration with existing solutions (Kerberos, multi-factor auth, etc)





webSSO Status

- IETF Internet Draft
- User experience mock-ups
- Working webSSO AS implementation (Apache 2.0 licensed; release imminent)







