IETF 78 – radext 28 jul 2010

RADIUS over TLS

Status of draft

- WGLC completed; in PROTO writeup
- Some unresolved comments
 - Client Identity
 - Packet flow Client -> Server and vice versa
 - Connection backoff
- The end is nigh?

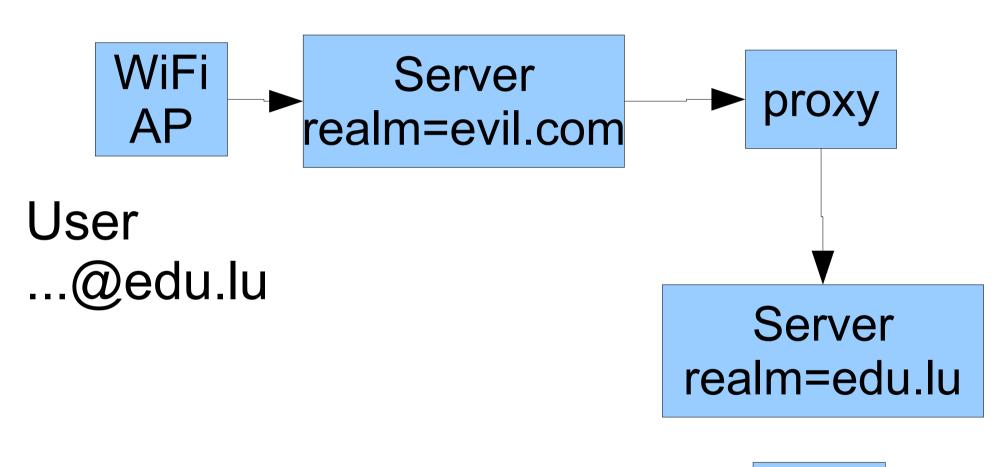
Client Identity

- We've been here before...
- Problem: there are many attributes in a X.509 certificate which can be used to classify connecting clients
 - Be open, by stating "it SHOULD be configurable which of those attributes a deployer considers for denoting a client's identity?
 - Or: provide a "default" identity scheme, like "the CN in combination with the issuing CA uniquely identifies a client"?
 - Or: make it someone else's problem: draft-saintandre-tls-server-id-check-08

Packet flow constraints

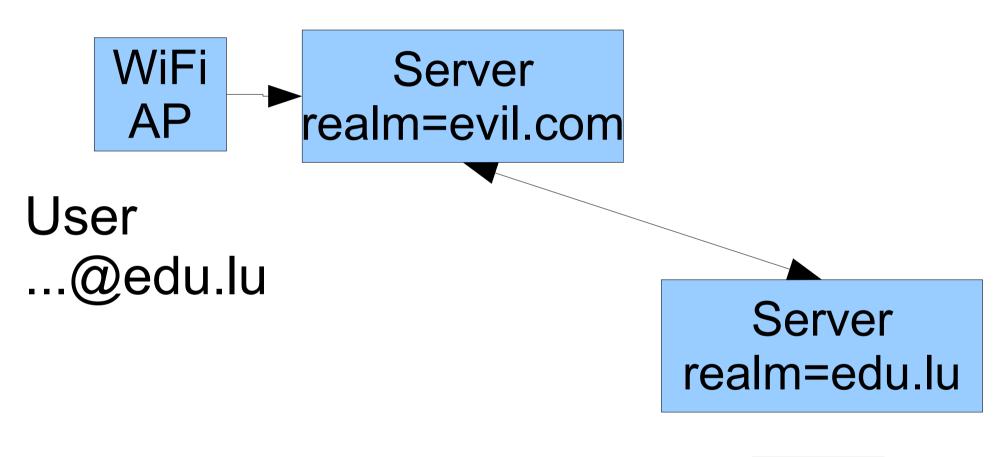
- RADIUS/UDP: sessions flow one way
 (Client sends Access-Request, Server replies with Access-Accept)
- RADIUS/TLS: transport creates bidrectional channel
 - In combination with dynamic discovery, server might think it's a good idea to forward Access-Requests for certain realms to the Client
 - That shouldn't be allowed to happen
- Text right now enumerates packet types which can flow in the respective directions
- There might be more elegant wording.

Example RADIUS



WiFi AP

Example RADIUS/TLS + dynamic discovery



User ...@evil.com WiFi AP

Connection backoff

- What happens if a client attempts to connect to a server, but fails?
 - Retrying immediately could generate DoS
 - Backing off is required
 - Define and put into Security Considerations
- Will check text in Status-Server and use that or produce new text.