DHCP Authentication Using EAP

- we all like RFC3118, but none of us is using it
- many us are using 802.1x, or another EAP-based form of NAC
  - ... and in order to do so, have credentials provisioned at the AAA server
- can we come up with a way to take advantage of those credentials?
Client

“outside” the network

Relay Agent

“inside” the network

EAP Authenticator

AAA Service

DHCP Server

DHCP Backup

DHCP Server

DHCP Backup
Some problems

- Can the AAA server be extended to generate a DHCP session key?
- Only client and AAA can generate session keys
- How to do key rollover
- Edge cases involving failover
What are the pieces?

- EAP Session-key generation mechanism
- Relay-agent suboption to carry session key
- Failover option to carry ... session key (?)