draft-janfred-eap-fido A new EAP method based on FIDO keys

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Why do we need something new?



- ► Eduroam configuration is not trivial
 - It's too easy to misconfigure eduroam
- Certificate check is hard. There is no implicit way to derive the expected certificate names, users need to configure it manually
- ► Bootstrapping problem especially in BYOD environment

What are the new requirements?



- ► Trivial configuration
 - Security properties must not depend on the ability of users to configure their security parameters correctly
 - Users have no idea what the parameters mean and what implications they have
- ▶ Don't use passwords
 - Authentication by Knowledge with the requirement to reveal the knowledge is a bad idea.

How do we solve this?



- ▶ Use asymmetric crypto that is easy to provision:
 - FIDO keys \o/
 - Should be available on most new devices in Software.
 - Can also be used with hardware-token
- Provisioning via web frontend (currently out of scope for EAP-FIDO spec)
 - EAP server just needs access to the DB of known FIDO Public Keys
- ▶ TLS certificate parameters are implicit through realm configuration
 - Users do not need to configure anything security related.
 - We just use WebPKI, it's used for WebAuthn during registration anyway.

What now?



- ▶ See the EAP-FIDO Draft (draft-janfred-eap-fido)
- ▶ We have a side-meeting on Monday (tomorrow) 18:00 in Karlin 4
 - We are looking for
 - Feedback on Design
 - Experience of EAP operators
 - Input from EAP/RADIUS server and/or supplicant implementers
 - Input from people with FIDO/WebAuthn/CTAP experience
- ▶ The work will also be presented in the emu WG session
- Or find me in the hallways.

DFN

▶ Contact

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