

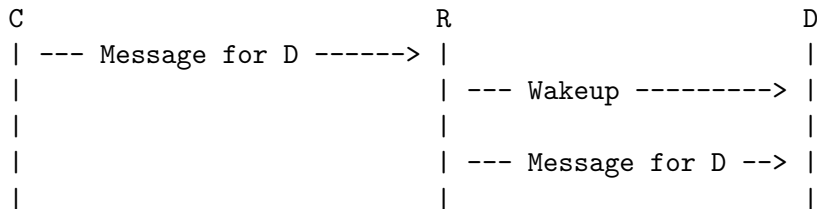
SWORN: Secure Wake on Radio Nudging

draft-bormann-t2trg-sworn

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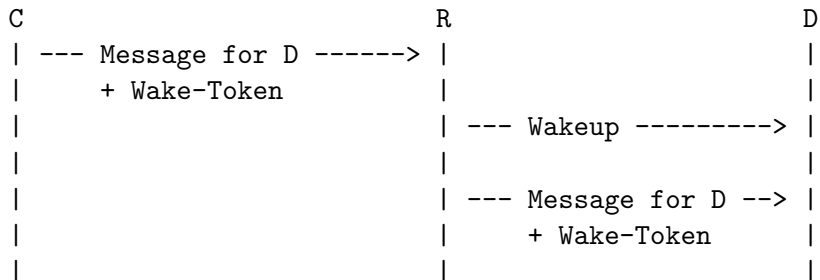
Hackathon @IETF99, 2017-07-15/16, Prague

Basic Scenario



- ▶ Last-mile router R wakes device D before message is forwarded
- ▶ When connected to the Internet, only authorized messages should cause a wakeup

Authorizing The Wakeup



- ▶ C retrieves grant (CWE) from D's overseeing principal
- ▶ C forms authorization token (CWS) with grant key and wakeup information
- ▶ R inspects messages for valid SWORN tokens before and drops not authorized messages

Demonstrator

- ▶ C adds CoAP header and Wake-Token option on-the-fly
- ▶ R checks for SWORN tag and unpacks Wake-Token
- ▶ drop unauthorized messages
- ▶ remove CoAP header when forwarding