SWORN: Secure Wake on Radio Nudging

draft-bormann-t2trg-sworn

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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