Quick intro to SPIFFE

IETF 118 WIMSE BoF

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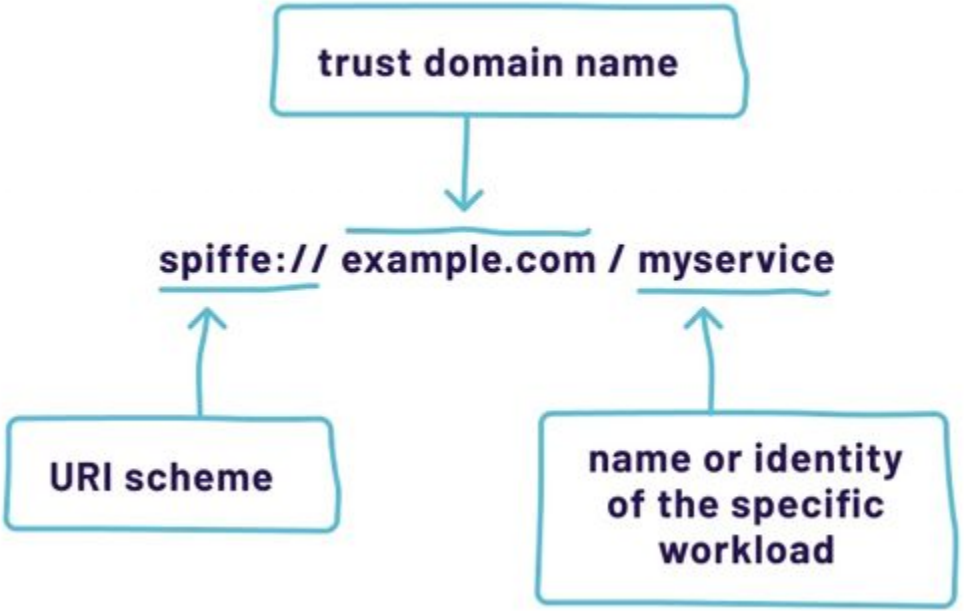
SPIRL

What is it and what does it do

- workload identity spec living in the CNCF
- widely adopted (for some measure of widely)
- authz is out of scope
- solves a few key challenges:
  - platform-agnostic identifiers
  - credentialing via “profiles”
  - platform-agnostic issuance
  - federation

How does it do it: platform-agnostic identifiers



How does it do it: credentialing via “profiles”

SVID (SPIFFE Verifiable Identity Document)

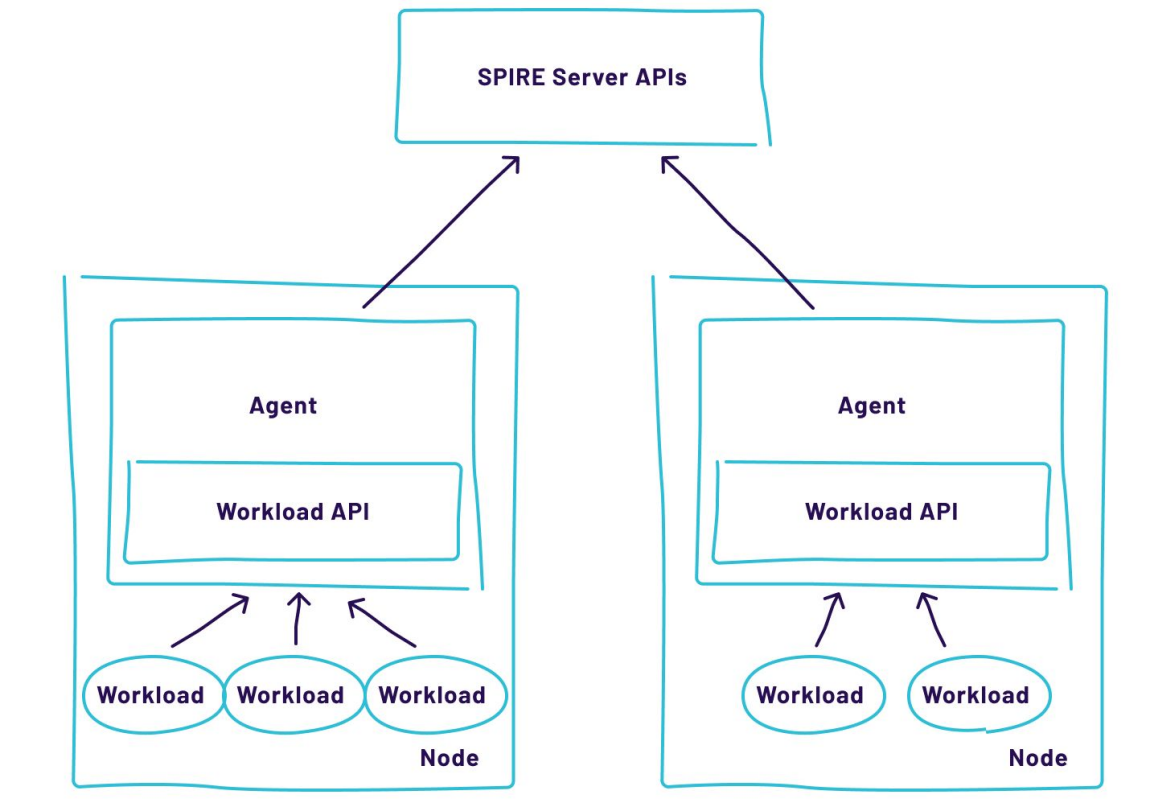
X.509

- URI SAN
  - len == 1
- Key usages
- Name constraint

JWT

- alg
- sub
- aud
- exp
- serialization

How does it do it: platform-agnostic issuance



How does it do it: federation

signs

X509-SVID

signs

JWT-SVID

bundles[“example.com”] ⇒ com_bundle_data
bundles[“example.net”] ⇒ net_bundle_data
bundles[“example.org”] ⇒ org_bundle_data

SPIRL

Why am I here?

- SPIFFE already has a home
- Many related use cases out-of-scope for SPIFFE
    - SPIFFE doesn’t invent document types
- Token situation in particular is difficult
    - Security/availability/perf
- Many related works across various standards bodies
- We should be talking more 😊

spiffe

Questions?

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