Service Provider OOB

IETF **109**

STIR WG

Jon - @home – Nov 2020

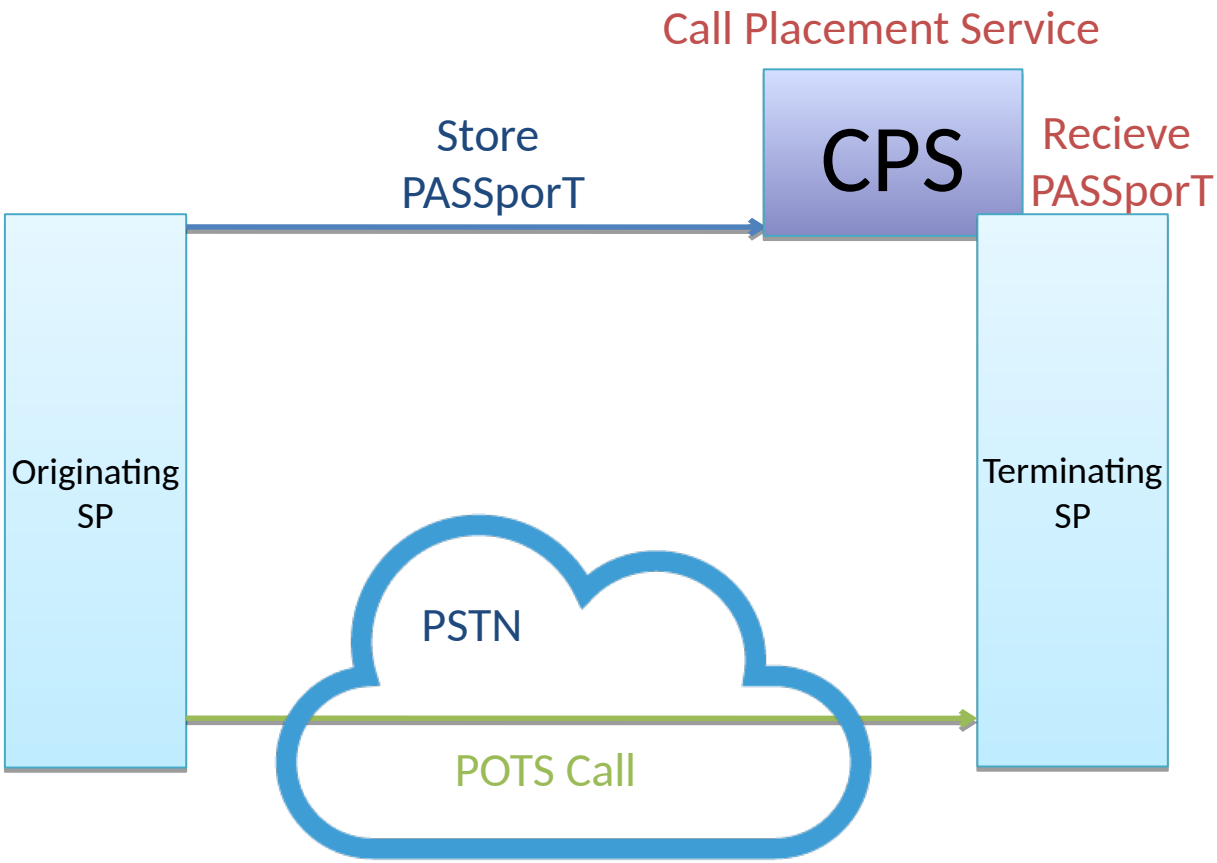
draft-ietf-stir-servprovider-oob

- A new draft about using OOB in a more constrained environment
  - Could you do security differently if you assume the CPS is not a third-party service?
    - Instead something operated by (or for) the originating or terminating domain?
  - i.e., what if the entity operating the CPS would already see call signaling?
    - And hence learn the called/calling party numbers
- Descriptive of emerging efforts in the deployment of STIR
  - Not a science project, aiming for PS

Solution Components

- Currently focused on the CPS being operated by the terminating service provider
  - Use OOB REST interface to store PASSporTs at destination
- Thus, no need to encrypt PASSporTs
  - They go directly from the originating to terminating provider
    - Gateways? Maybe, but only if they have a trust relationship with the originating or terminating provider
- “CPS Advertisement”
  - Some means of making available the CPS discoverable to calling service providers
    - Propose a signed JSON object

Service Provider OOB



CPS is part of the terminating administrative domain, maybe composed with VS

Terminating Side CPS

- May be composed with the OOB-VS
  - Or may be a push interface to the VS
  - Still allows CPS to be run by a third party on behalf of the terminating SP
    - Multiple CPS instances may be housed in the same deployment, each pointing to a particular terminating SP
- Verification process otherwise follows OOB
  - Correlate PASSporT with call signaling
- No need to worry over attackers querying the CPS to learn call state data
  - CPS is effectively a one-way street

Next Steps

- Review
  - Do we need this draft?
  - There is a parallel effort at ATIS, aiming in particular at the SHAKEN IPNNI space
    - I think the considerations here are more generic
- Adoption?

BACK UP