Automatic SIP Trunking and Peering (ASAP)
draft-ietf-asap-sip-auto-peer-02

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Agenda

• High-Level Refresher
• Additions to Newer Draft Versions.
• Open Items
Purpose of draft (High-Level Overview)

1. Capability Server Discovered or Manually Configured
2. HTTPS GET (Capability Set Request)
3. HTTPS Response (Capability Set)
4. Parse Capability Set & Configure Trunk

*** Body encoded in XML or JSON
Additions to Newer Draft Versions
Identifying Request Target Using WebFinger

• For cases in which the Capability Set URL is not communicated by service providers beforehand, WebFinger may be used.
• The enterprise network targets a WebFinger query to the SIP service provider domain. In the response, one of the objects in the “links” array, which when dereferenced, provides the capability set document.
• More on this in the “Open Items” section.
Section On STIR

• A node indicating whether the SIP Service Provider is STIR compliant. Peering with a STIR compliant SIP service provider has ramifications for both incoming & outgoing calls.

• A node indicating whether the SIP Service Provider is willing to delegate authority over one or more number ranges to the enterprise.

• A node indicating the ACME directory URL to be used to obtain delegate certificates

NOTE: We make the assumption that the ACME account for the enterprise network is pre-authorized.
Minor Modifications

- Section on “Processing the Capability Set Response” (Section 8)
- Reordering sections and making formatting changes.
Open Items
1. WebFinger Link Relation Type

- Responses to WebFinger queries are likely to generate a large “links” object array. For example, the array could contain objects that dereference to documentation on licensing, SLAs, customer support FAQs, pricing, among others.

- It probably makes sense to register a new link relation type specific to the ASAP effort.

```
GET /.well-known/webfinger?resource=http%3A%2F%2Fssp1.example.com
rel=capabilitySet
HTTP/1.1
Host: ssp1.example.com

HTTP/1.1 200 OK
Access-Control-Allow-Origin: *
Content-Type: application/jrd+json
{
    "subject" : "http://ssp1.example.com",
    "links" :
    [
        {
            "rel" : "capabilitySet",
            "href" : "https://capserver.ssp1.com/capserver/capdoc.xml"
        }
    ]
}
```
2. Section to Allow SIP Service Providers to Proactively Communicate Changes

• While capability set parameters are expected to remain largely invariant over considerable spans of time, it nonetheless might be useful for SIP service providers to communicate newer versions of capability set documents ahead of time.

• A section could be added to allow just that.

<revision>
  <notBefore>Some_future_date</notBefore>
  <location>URL to fetch future version</location>
</revision>
3. Minor Open Items

• Any additional parameters to be added for STIR/SHAKEN?
• XML or JSON?
Thank You