



CUSAX: Combined Use of SIP and XMPP

draft-ivov-xmpp-cusax

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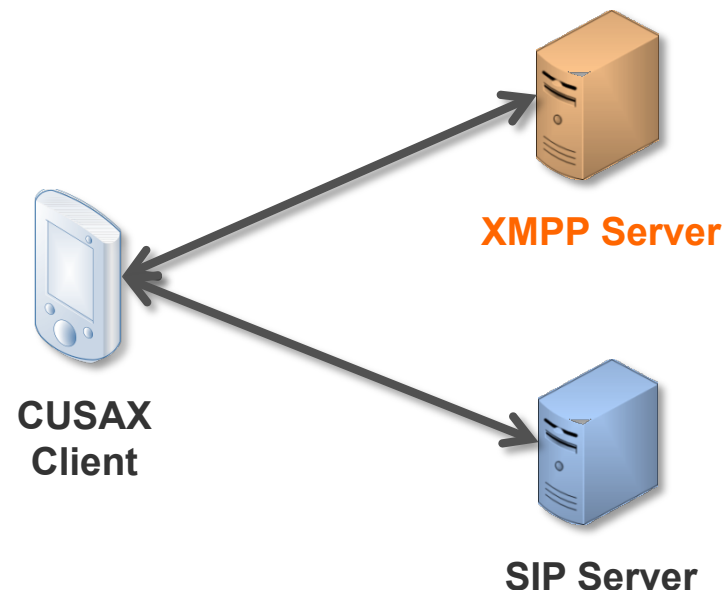
CUSAX: Why?

- Existing SIP server implementations often have:
 - Rich sets of telephony features (voicemail, call queues, call parking, 3PCC ...)
 - Support for media services (transcoding, call mixing, HNT etc.)
 - Abundance of PSTN gateways
 - Relatively poor support for things like presence, instant messaging, server stored contact lists, file transfer, etc.
- Existing XMPP server implementations often have:
 - Great support for things like presence, instant messaging, server stored contact lists, file transfer, etc.
 - Poor or no support for anything related to telephony
 - Mostly an implimentation issue
- Entirely based on requests from Unified Communication service provider



CUSAX: What?

- Double stack clients SIP+XMPP clients
- Connect simultaneously to SIP and XMPP infrastructure
- Use SIP for VoIP (only!). No XCAP, no MSRP
- XMPP for IMP and everything else (no Jingle)





CUSAX Approach

- Not specifying new stuff.
- Reuse
 - vCard-s
 - SIP (Contact) headers



CUSAX: Matching JIDs to AORs

- Retrieve SIP AORs from vCard-s

```
<vCard xmlns='vcard-temp'>
  <TEL>
    <CELL/>
    <WORK/>
    <NUMBER>+33.1.77.62.43.39</NUMBER>
  </TEL>
</vCard>
```

```
<vCard xmlns='vcard-temp'>
  <TEL>
    <CELL/>`
    <WORK/>
    <NUMBER>sip:alice@atlanta.com</NUMBER>
  </TEL>
</vCard>
```



CUSAX: Matching JIDs to AORs

- Retrieve JIDs from additional SIP (Contact) headers

```
INVITE sip:bob@biloxi.com SIP/2.0
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
...
Contact: <sip:alice@pc33.atlanta.com;gr=some-rsrc>
Contact: <xmpp:alice@atlanta.com/some-resource>
```



CUSAX: Related Work

- Similar to SIXPAC but:
 - Does not introduce new SIP headers
 - Does not add new stanza
 - Little interaction between both protocols



CUSAX: Other Details

- SIP and XMPP infrastructure are likely to have a single maintainer.
- Account provisioning recommended but out of scope

Service Login

Service ID:
Service Passwd:

OK!

Service Login

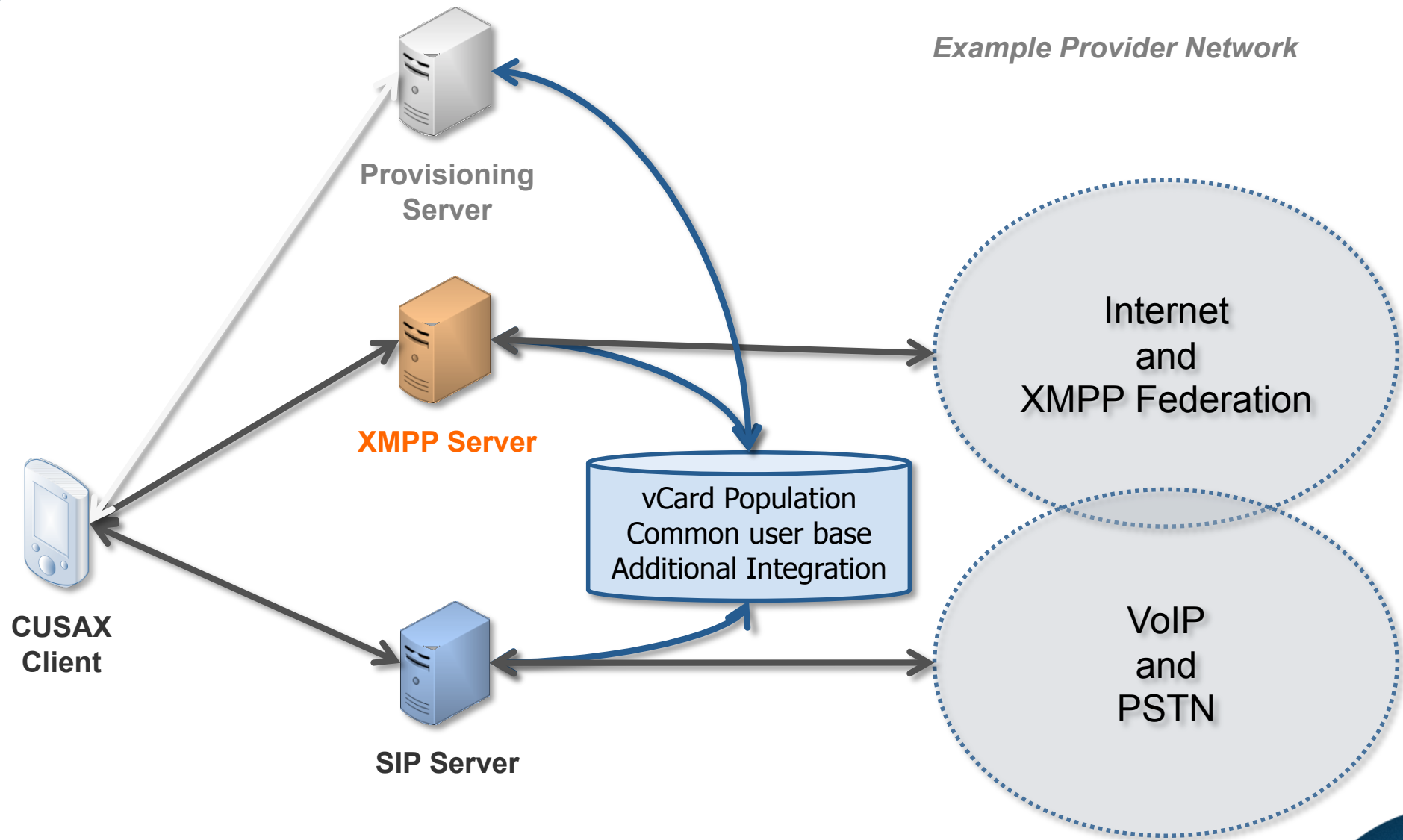
SIP ID:
SIP Passwd:
SIP Server:

XMPP JID:
XMPP Passwd:

NOT REALLY OK!



CUSAX: Example Deployment





CUSAX: (Kind of) Open Issues

- Federation
 - How do we handle x-domain contacts?
 - How do we handle x-domain calls?



CUSAX: Other Issues

- Provisioning
 - Do we keep this out of scope?
 - Do we try to put something on paper?
 - Do we use existing tools?
(Paul suggested using the digest “domain” param)



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Next Steps?

- Small piece of work
- 80% done
- People are asking for it