# Domain Suggestion API Side Meeting

IETF 106, Singapore, IETF 106

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# Report from the Side Meeting

- Tuesday morning
- ~15 people in the room
- Mostly registry side people

- What's Domain Suggestion
- Why standardize an API
- Existing work
- Discussion

# What's "Domain Suggestion"?

• User / Customer wishes to register a domain name

- Desired domain name is unavailable for registration, eg. because:
  - Already registered (most common case)
  - Syntactically incorrect (underscores, dots within labels, emojis, too short ...)
  - Reserved
- Instead of turning away customer, propose available alternatives
  - Related / Similar (...) to desired name

# Example: nic.at work

wunderbar wunder-bar.at barwunder.at bewunderbar.at wunderbarshop.at wunderbaronline at diewunderbar.at bar-wunder.at wien-wunderbar.at linz-wunderbar.at graz-wunderbar.at wunderbarcooler.at wunderbare-haut.at wunderbar-tulln.at wunderbar-leben.at wunderbarfrisch.at wunderbarebahnen.at bregenz-wunderbar.at wunderbarwertvoll.at wunderhargelassen at

Registry side of things

Internal "typeahead" prototype

Website

Ergebnis der Domain-Suche		
wunderbar.at	Bere	its delegiert
wunderbar.co.at	Bereits delegiert	
wunderbar.or.at	Bereits delegiert	
Weitere Vorschläge für Sie	e: <b>()</b>	
Wunschdomain finden leich möglichen Domainnamen in		
wunder-bar.at	Noch frei	36 € Jährlicl
barwunder.at	Noch frei	36 € Jährlich
bewunderbar.at	Noch frei	36 € Jährlich
wunderbarshop.at	Noch frei	36 € Jährlich

#### Registrars?

- They also face losing a customer when a domain is unavailable
- Integrate suggestions into their business processes
  - Some level of "suggestions" already available
  - External (eg. Registry)? API!
- Registrars deal with many registries
  - Each might offer an API
  - Undesireable to have one API per registry
  - Standardization?

# Potential protocol arena

- Which "channel"?
  - EPP
  - RDAP
  - (other) REST
  - .. ?
- Which input data?
  - Desired Name
  - Keywords?
  - User location?
  - Meta-info (desired min./max. length, IDN yes/no, ...?)
  - ..?

### Existing work

- EPP (Verisign)
  - https://www.verisign.com/assets/epp-sdk/EPP-Suggestion-Mapping.pdf? inc=www.verisigninc.com (2008 – 2013)
  - Deprecated, moved to REST-based interface instead
- RDAP (Mario Loffredo, it)
  - "link" in standard RDAP domain response points to "suggestion" RDAP server
  - That "suggestion" RDAP returns lightweight "domainSearchResults" array
    - objectClassName, ldhName, (unicodeName)
- EPP (A. Mayrhofer, .at)
  - Extends "<domain:check>" response
  - draft-mayrhofer-epp-domain-suggest

# Side Meeting Discussion, major points

- Registrar is better positioned for that
  - Has more data about the customer
  - "Suggestion" belongs to the free market "free market"
  - Registry has only slightly better vantage point
- EPP is not a good protocol choice
  - Is a static interface, provisioning rather than querying, quota
  - Suggestions will introduce additional delay / dependencies
  - Addresses a different client set
- Relation to "availability" information
  - And for that, RDAP seems the prime choice
- Room was full of Registries few Registrars

#### Discussion

- View from registrars? Is this a real world problem?
- Preferred protocol?

- Is this interesting?
- If yes, is regext the right venue?