

EPP RESTful Transport

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Is there a problem?

RFC5730: *“The original motivation for this protocol was to provide a standard Internet domain name registration protocol”*

Why are registries developing incompatible provisioning APIs?

- CIRA (.ca, .nz, .ie, .nl)
- Afnic (.fr)
- Nask (.pl)
- Registro.it (.it)
- Estonian Internet Foundation (.ee)
- ...

Registry Motivation

- Operational challenges when deploying EPP over TCP in modern (cloud) environments
 - Load balancing
 - Rate limiting
 - Identity and Access Management (IAM)
- Registrars are requesting modern APIs based on web standards
 - Simplifies development of registrar-registry integration
 - REST is the defacto standard for API development

Previous Work

- RESTful interface for the Extensible Provisioning Protocol, 2012 [1]
 - HTTP(s) Transport
 - EPP command mapping to REST endpoint
 - Standard EPP XML messages + EPP extension

- Extensible Provisioning Protocol (EPP) Mapping over HTTP, 2022 [2]
 - HTTP(s) Transport
 - Standard EPP XML messages

1 <https://datatracker.ietf.org/doc/draft-wullink-restful-epp/>

2 <https://datatracker.ietf.org/doc/draft-loffredo-regext-epp-over-http/>



Proposed New Work

Create a new standard for EPP over RESTful transport

- Mapping EPP objects to REST endpoints
- HTTP session management
- Optional mapping of XML schema to JSON?
- HTTP/3 multiplexing?

In the CENTR^[1] community there exists widespread support for this work.

[1] CENTR: The association of European country code top-level domain name registries, <https://www.centri.org/>



Discussion

The question for this working group

- Is something we should spend time on?
- If so, who would like join and participate?

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Thank You

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