RDAP Extension Identifier and rdapConformance

REGEXT - IETF114

Agenda

- Summary of mailing list discussion
  - THANKS to Jasdip Singh and his detailed technical analysis document
  - Thanks to all who participated in the discussion on the mailing list
- What problem are we trying to solve?
- A proposal
- Discussion

Summary of Mailing List Discussion (1 of 2)

- Option 1

- RDAP extension registry <Extension Identifier> = <opaque string>
- rdapConformance = <Extension Identifier>
- No version semantics
  - New Spec for each new iteration

- Option 2

- RDAP extension registry <Extension Identifier> = <prefix>
- rdapConformance = <prefix> [<version-suffix>]
- Need <version-suffix> semantics
  - Maybe registry for rdapConformance
  - New spec for each new version of rdapConformance

- Option 3

- RDAP extension registry <Extension Identifier> = <opaque identifier>
- rdapConformance = <Extension Identifier>
- Registered in the IANA RDAP Extensions registry
- Version semantics needed if <Extension Identifier> not registered
  - New spec for each new iteration of the extension; lists prefix(es) used for naming

Summary - (2 of 2)

- All options have merit, advantages and disadvantages
- Solid opinions on the best choice from everyone involved
- What we don't have is consensus

- As a technical problem, we have an Internet Standard with a well-enough defined solution to what we are doing
- If that's true, there's a pretty high bar for proposing changes
- Let's consider if we're trying to solve the right problem

What Problem Are We Trying to Solve?

- RFC7480 - Section 8.1
  - RDAP Extensions … The purpose of this registry is to ensure **uniqueness of extension identifiers**. The extension identifier is used as a prefix in JSON names and as a prefix of path segments in RDAP URLs.
- RFC9083 - Section 4.1
  - When custom JSON values are inserted into responses, conformance to those custom specifications MUST be indicated by including a **unique string literal value registered in the IANA RDAP Extensions registry** specified in [RFC7480].
- Programming is not a first-order metric for evaluation
  - Complexity is important
- Protocol behavior is a preferred metric
  - Includes protocol performance
- First principles
  - Extension uniqueness
  - Extension optionality

A Proposal

- From the perspective of the base protocol, the primary problems to be solved are the uniqueness and optionality of the extensions.
- In general, simplicity is always preferred.

- Explicit support for version is not an integral part of the extension mechanism
- Certainly, you can choose to include version inside the specification for your extensions, but in the context of the base protocol an extension is either supported or its not, and when supported it simply means there is a shared understanding of what is to be done between the client and server

Discussion

- First of the Proposal

- Other questions:
  - Need an errata for RFC9083 that changes "lunarNIC_level_0" to "lunarNIC" in Section 4.1.
  - Opportunity for additional clarity regarding versioning?