Abstract

The Extensible Provisioning Protocol (EPP) includes features to add functionality by extending the protocol. It does not, however, describe how those extensions are managed. This document describes a procedure for the registration and management of extensions to EPP and it specifies a format for an IANA registry to record those extensions.

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1. Conventions Used in This Document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [RFC2119].

1.1. Acronyms and Abbreviations

    EPP: Extensible Provisioning Protocol
    IANA: Internet Assigned Numbers Authority
    IPR: Intellectual Property Rights

2. Introduction

Domain name registries implement a variety of operational and business models. The differences in these models made it impossible to develop a "one size fits all" provisioning protocol, so the Extensible Provisioning Protocol (EPP, [RFC5730]) was designed to
focus on a minimal set of common functionality with built-in extension capabilities that allow new features to be specified on an "as needed" basis. Guidelines for extending EPP are documented in Informational RFC 3735 [RFC3735].

RFCs 5730 and 5735 do not describe how extension development can be managed and coordinated. This has led to a situation in which server operators can develop different extensions to address similar needs, such as the provisioning of Value Added Tax (VAT) information. Clients then need to support multiple extensions that serve similar purposes, and interoperability suffers.

An IANA registry can be used to help manage and coordinate the development of protocol extensions. This document describes an IANA registry that can be used to coordinate the development of EPP extensions.

3. Extension Specification and Registration Procedure

This section describes the format of an IANA registry and the procedures used to populate and manage registry entries.

3.1. Extension Specification

The "Specification Required" policy described in RFC 5226 [RFC5226] MUST be followed. Extension specifications MUST be written and available in the English language. Non-English specifications are OPTIONAL.

Note that the "Specification Required" policy implies review by a Designated Expert. Section 3 of RFC 5226 describes the role of Designated Experts and the function they perform.

3.2. Registration Procedure

The registry contains information describing each registered extension. Registry entries are created and managed by sending forms to IANA that describe the extension and the operation to be performed on the registry entry.

3.2.1. Required Information

Name of Extension: A case-insensitive text string that contains the name of the extension specification.

Specification Location: A URL [RFC3986] that describes the location of the specification.
Registrant Name and Email Address: The case-insensitive name and email address of the person that is responsible for managing the registry entry.

TLDs: A case-insensitive text string description of the top-level domain (or domains) for which the extension has been specified. "Any" or "ANY" MUST be used if the extension is not associated with a specific top-level domain. Multiple TLDs SHOULD be specified as a list of domain names separated by commas, e.g. ".com, .net".

IPR Disclosure: Either "None", "NONE", or a URL that describes the location of an IPR disclosure document. Depending on the type of specification the IPR disclosure MAY be filed with the IETF in accordance with RFCs 3979 [RFC3979] as updated by RFC 4879 [RFC4879]. Non-IETF IPR disclosures MUST clearly identify the claimed intellectual property rights and terms of use. "None" or "NONE" indicates that the extension is freely available for use with no claimed intellectual property rights.

3.2.2. Registration Form

The required information MUST be formatted consistently using the following form:

-----BEGIN FORM-----
Name of Extension: 
<text string> (quotes are OPTIONAL)

Specification Location: 
<URL>

Registrant Name and Email Address: 
<registrant name>, <email address>

TLDs: 
"Any"|"ANY"|<one or more TLD text strings separated by commas>

IPR Disclosure: 
"None"|"NONE"|<URL>
-----END FORM-----
Example form with RFC specification:

------BEGIN FORM------
Name of Extension:
"An Extension RFC for the Extensible Provisioning Protocol (EPP)"

Specification Location:

Registrant Name and Email Address:
John Doe, jdoe@example.com

TLDs:
Any

IPR Disclosure:
None
------END FORM------

Example form with non-RFC specification:

------BEGIN FORM------
Name of Extension:
"An Example Extension for the .example Top-Level Domain"

Specification Location:
http://www.example.com/html/example-epp-ext.txt

Registrant Name and Email Address:
John Doe, jdoe@example.com

TLDs:
.example

IPR Disclosure:
http://www.example.com/ipr/example-epp-ext-ipr.html
------END FORM------

3.2.3. Registration Processing

Each registration form sent to IANA MUST contain a single record for incorporation into the registry. The form will be sent via email to <iana@iana.org> by the extension registrant. It MUST have a subject line indicating whether the enclosed form represents an insertion of a new record (indicated by the word "INSERT" in the subject line) or a replacement of an existing record (indicated by the word "MODIFY")
in the subject line). At no time can a record be deleted from the registry.

4. IANA Considerations

IANA is requested to create a new protocol registry to manage EPP extensions. The information to be registered and the procedures to be followed in populating the registry are described in Section 3.

Name of registry: Extensions for the Extensible Provisioning Protocol

Required information: See Section 3.2.1.

Review process: "Specification Required" as described in RFC 5226 [RFC5226].

Size, format, and syntax of registry entries: See Section 3.2.1.

Initial assignments and reservations: None.

In addition, the form used to populate and manage the registry is to be added to the table of Protocol Registration Forms maintained by IANA.

5. Security Considerations

Using email to deliver forms to IANA carries a risk of registry entries being created or updated by an attacker who is able to spoof the email address of a legitimate extension registrant. This risk can be mitigated by replying to received messages with a request to confirm the requested action. The reply will be delivered to the specified registrant, who can validate or refute the request.

6. Acknowledgements

The information described in the registry is based on a suggestion posted to the provreg mailing list by Jay Daley in August 2013.

The author would like to acknowledge the following individuals for their contributions to this document: TBD.

7. References
7.1. Normative References


7.2. Informative References


Appendix A. Change Log

Initial -00: Initial version.

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