Google
Google Registrant Verification EPP Extension
Version 1.0
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1. Introduction

This document describes a registrant verification extension for version
1.0 of the Extensible Provisioning Protocol (EPP) as described in RFC
5730 [1]. This mapping is an extension of the domain name mapping as
described in RFC 5731 [2]. The mapping is specified using XML 1.0 as
described in [6] and XML Schema Notation as described in [7]. This
extension follows the guidelines set forth in RFC 3735 [5].

2. Object Attributes

This extension adds additional elements to the EPP domain name mapping
[2]. In particular, this extension adds attributes which confirm that
the registrant is qualified to manage the domain name. Pre-qualification
is distinct from the contact information associated with the domain,
and is not to be presented in a WHOIS query for privacy reasons.
Subordinate objects in the registry, such as hosts as described in [3]
are transitively owned by the Google account owner of the domain.

3. EPP Command Mapping

EPP syntax and semantics are defined in [1]. The command mappings below describe the association and associating of a domain with a Google account.

3.1. EPP Query Commands

EPP provides the <check>, <info>, <poll>, and <transfer> query commands to retrieve information about the domain and its provisioning. See [2] for more information on how domains are queried with EPP.

3.1.1. EPP <check> Command

This extension does not add any elements to the EPP <check> command request or response.

3.1.2. EPP <info> Command

This extension does not add any elements to the EPP <info> request. Additional elements are added to the EPP <info> response.

When an <info> request completes successfully for a domain, the <resData> element will contain information about the domain as specified in [2]. In the following <extension> element will be a <google-prequal:info> element identifying the namespace and schema location for the extension. Within <google-prequal:info> a <google-prequal:prequalID> element containing the Prequalification ID of the registrant of the domain.

As detailed below, the transform command <create> requires both <google-prequal:prequalID> and <google-prequal:prequalKey>. For security reasons, the response to <info> will only return <google-prequal:prequalID>.

Domain name registries which implement this EPP extension must only return domain objects to registrars which are sponsoring the domain. This is to preserve the privacy of the Google account owner such that only registrars which are and have sponsored the domain know about the Google account that owns it.

Below is a sample <info> containing Google account information. Sections of the response have been omitted for brevity.

```
<?xml version="1.0" encoding="UTF-8"?>
<epp:epp xmlns:epp="urn:ietf:params:xml:ns:epp-1.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0
epp-1.0.xsd">
```

```
    <epp:response>
        <epp:result code="1000">
            <epp:msg/>
        </epp:result>
        <epp:resData>
            <domain:infData

xmlns:domain="urn:ietf:params:xml:ns:domain-1.0" xmlns:xsi="http:/
/www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0
domain-1.0.xsd">

                    <domain:name>foo.com</domain:name>

                ... LINES REMOVED FOR BREVITY ...

            </domain:infData>
        </epp:resData>
        <epp:extension>
                <google-prequal:info
                        xmlns:google-prequal="urn:google-
prequal:google-prequal-epp-1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:google-prequal:google-prequal-epp-1.0 google-
prequal-epp-1.0.xsd">
<google-prequal:prequalVerfToken>asd97f-h1k23j</google-
prequal:prequalVerfToken>

                </google-prequal:info>
        </epp:extension>

                ... LINES REMOVED FOR BREVITY ...

    </epp:response>
</epp:epp>
```

3.2. EPP Transform Commands

EPP provides the <create>, <delete>, <renew>, and <transfer>, and
<update> transform commands. See [2] for more information on how domains
are provisioned with EPP.

3.2.1. EPP <create> Command

This extension adds elements to the EPP <create> request. No additional elements are added to the EPP <create> response.

If a domain is to be created for a pre-qualified registrant, after the <create> command for a domain, the <extension> element must follow it containing a <google-prequal:create> element identifying the namespace and schema location for the extension. Within the <google-prequal:create> element must be a single element, <google-prequal:prequalVerfToken>, containing a token returned as part of an off-line pre-qualification process.

Below is an example of the EPP <create> command for a domain containing an email for the Google account owner. Lines have been removed for brevity.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>

<epp xmlns="urn:ietf:params:xml:ns:epp-1.0" xmlns:xsi="http:/
/www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0
epp-1.0.xsd">

  <command>
    <create>
      <domain:create

      xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0
      domain-1.0.xsd">

        <domain:name>foo.com</domain:name>

                  ... LINES REMOVED FOR BREVITY ...

      </domain:create>
    </create>
    <extension>
      <google-prequal:create
              xmlns:google-prequal="urn:google-prequal:google-prequal-
      epp-1.0"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="urn:google-prequal:google-prequal-epp-1.0
      google-prequal-epp-1.0.xsd">
                      <google-prequal:prequalVerfToken>asd97f-h1k23j</
```

```
google-prequal:prequalVerfToken>

            </google-prequal:create>
    </extension>

                    ... LINES REMOVED FOR BREVITY ...

   </command>
</epp>
```

3.2.2. EPP <delete> Command

This extension does not add any elements to the EPP <delete> command
request or response.

3.2.3. EPP <renew> Command

This extension does not add any elements to the EPP <renew> command
request or response.

3.2.4. EPP <transfer> Command

This extension does not add any elements to the EPP <transfer> command
request or response.

3.2.4. EPP <update> Command

This extension does not add any elements to the EPP <transfer> command
request or response.

4. Formal Syntax

EPP object mapping is specified with XML Schema notation. The schema is
below between is --BEGIN-- and --END-- tags.

```
--BEGIN--
<?xml version="1.0" encoding="UTF-8"?>

<schema xmlns:google-prequal="urn:google-prequal:google-prequal-epp-
1.0" xmlns:eppcom="urn:ietf:params:xml:ns:eppcom-1.0" xmlns="http://
www.w3.org/2001/XMLSchema" targetNamespace="urn:google-prequal:google-
prequal-epp-1.0" elementFormDefault="qualified">

      <!--   Import common element types.   -->
```

```
<import namespace="urn:ietf:params:xml:ns:eppcom-1.0"
schemaLocation="eppcom-1.0.xsd"/>
<annotation>
      <documentation>
            Extensible Provisioning Protocol v1.0 extension for
            Google registrant prequalification association with
            provisioned domains.
      </documentation>
</annotation>

<element name="info">
      <complexType>
            <sequence>
                  <element name="prequalVerfToken"
                        type="eppcom:pwAuthInfoType"/>
            </sequence>
      </complexType>
</element>

<element name="create">
      <complexType>
            <sequence>
                  <element name="prequalVerfToken"
                         type="eppcom:pwAuthInfoType"/>
            </sequence>
      </complexType>
</element>
</schema>

--END--
```

5. References

[1] Hollenbeck, S., "Extensible Provisioning Protocol (EPP)", RFC 5730, August 2009.

[2] Hollenbeck, S., "Extensible Provisioning Protocol (EPP) Domain Name Mapping", RFC 5731, August 2009.

[3] Hollenbeck, S., "Extensible Provisioning Protocol (EPP) Host Mapping", RFC 5732, August 2009.

[4] Hollenbeck, S., "Extensible Provisioning Protocol (EPP) Contact Mapping", RFC 5733, August 2009.

[5] Hollenbeck, S., "Guidelines for Extending the Extensible Provisioning Protocol (EPP)", RFC 5735, March 2004

[6] Paoli, J., Sperberg-McQueen, C., Bray, T., and E. Maler, "Extensible Markup Language (XML) 1.0 (Second Edition)", W3C   FirstEdition REC-xml-20001006, October 2000.

[7] Maloney, M., Beech, D., Mendelsohn, N., and H. Thompson, "XML Schema Part 1: Structures", W3C REC REC-xmlschema-1-20010502, May 2001.