 **Extensible Provisioning Protocol (EPP) and Registration Data Access
                 Protocol (RDAP) Status Mapping**
              draft-gould-epp-rdap-status-mapping-03

Abstract

   This document describes the mapping of the Extensible Provisioning
   Protocol (EPP) statuses with the statuses registered for use in the
   Registration Data Access Protocol (RDAP). This document identifies
   gaps in the mapping, and registers RDAP statuses to fill the gaps to
   ensure that all of the EPP RFC statuses are supported in RDAP.

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   This Internet-Draft will expire on November 24, 2016.

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1. Introduction

   This document maps the statuses defined in the Extensible
   Provisioning Protocol (EPP) RFCs to the list of statuses registered
   for use in the Registration Data Access Protocol (RDAP), in the RDAP
   JSON Values Registry [rdap-json-values].

   The RDAP JSON Values Registry is described in section 10.2 of
   [RFC7483] and is available in the RDAP JSON Values Registry
   [rdap-json-values].

   The EPP statuses used as the source of the mapping include section
   2.3 of the EPP Domain Name Mapping [RFC5731], section 2.3 of the EPP
   Host Mapping [RFC5732], section 2.2 of the EPP Contact Mapping
   [RFC5733], and section 3.1 of EPP Grace Period Mapping [RFC3915].

   Each EPP status MUST map to a single RDAP status to ensure that data
   in the Domain Name Registries (DNRs) that use EPP can be accurately
   presented in RDAP.

1.1. 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].

[2](#). **EPP to RDAP Status Mapping**

   Below is an alphabetically sorted list of EPP statuses from the EPP
   RFCs ([RFC5731], [RFC5732], [RFC5733], and [RFC3915]) mapped to the
   RDAP statuses registered in the RDAP JSON Values Registry
   [rdap-json-values], with the format <EPP Status> '=' <RDAP Status>,
   where a blank <RDAP Status> indicates a gap in the mapping.

      addPeriod =
      autoRenewPeriod =
      clientDeleteProhibited =
      clientHold =
      clientRenewProhibited =
      clientTransferProhibited =
      clientUpdateProhibited =
      inactive = inactive
      linked = associated
      ok = active
      pendingCreate = pending create
      pendingDelete = pending delete
      pendingRenew = pending renew
      pendingRestore =
      pendingTransfer = pending transfer
      pendingUpdate = pending update
      redemptionPeriod =
      renewPeriod =
      serverDeleteProhibited =
      serverRenewProhibited =
      serverTransferProhibited =
      serverUpdateProhibited =
      serverHold =
      transferPeriod =

   The RDAP JSON Values Registry [rdap-json-values] does have a set of
   prohibited statuses including "renew prohibited", "update
   prohibited", "transfer prohibited", and "delete prohibited", but
   these statuses do not directly map to the EPP prohibited statuses.
   The EPP prohibited statuses reflect both what is prohibited ("renew",
   "update", "transfer", "delete") and who set ("client" or "server")
   and can clear the status. In the DNR, the client and server
   prohibited statuses are separate and RDAP MUST support the same
   separation.

   Each of the EPP status values that don't map directly to an RDAP
   status value is described below. Each EPP status value includes a
   proposed new RDAP status value and a description of the value. The
   RDAP status value is derived from the EPP status value by converting

the EPP camel case representation to lower case with a space
character inserted between word boundaries.

addPeriod = add period; For DNR that indicates if the object is
    deleted by the registrar during this period, the registry
    provides a credit to the registrar for the cost of the
    registration.
autoRenewPeriod = auto renew period; For DNR that indicates if the
    object is deleted by the registrar during this period, the
    registry provides a credit to the registrar for the cost of the
    auto renewal.
clientDeleteProhibited = client delete prohibited; For DNR that
    indicates the client requested that requests to delete the object
    MUST be rejected.
clientHold = client hold; For DNR that indicates the client
    requested that the DNS delegation information MUST NOT be
    published for the object.
clientRenewProhibited = client renew prohibited; For DNR that
    indicates the client requested that requests to renew the object
    MUST be rejected.
clientTransferProhibited = client transfer prohibited; For DNR that
    indicates the client requested that requests to transfer the
    object MUST be rejected.
clientUpdateProhibited = client update prohibited; For DNR that
    indicates the client requested that requests to update the object
    (other than to remove this status) MUST be rejected.
pendingRestore = pending restore; For DNR that indicates a object is
    in the process of being restored after being in the
    redemptionPeriod state.
redemptionPeriod = redemption period; For DNR that indicates a
    delete has been received, but the object has not yet been purged
    because an opportunity exists to restore the object and abort the
    deletion process.
renewPeriod = renew period; For DNR that indicates if the object is
    deleted by the registrar during this period, the registry
    provides a credit to the registrar for the cost of the renewal.
serverDeleteProhibited = server delete prohibited; For DNR that
    indicates the server set the status so that requests to delete
    the object MUST be rejected.
serverRenewProhibited = server renew prohibited; For DNR that
    indicates the server set the status so that requests to renew the
    object MUST be rejected.
serverTransferProhibited = server transfer prohibited; For DNR that
    indicates the server set the status so that requests to transfer
    the object MUST be rejected.
serverUpdateProhibited = server update prohibited; For DNR that
    indicates the server set the status so that requests to update
    the object (other than to remove this status) MUST be rejected.

   serverHold = server hold; For DNR that indicates the server set the
      status so that DNS delegation information MUST NOT be published
      for the object.
   transferPeriod = transfer period; For DNR that indicates if the
      domain name is deleted by the registrar during this period, the
      registry provides a credit to the registrar for the cost of the
      transfer.

   The resulting mapping after registering the new RDAP statuses is:

      addPeriod = add period
      autoRenewPeriod = auto renew period
      clientDeleteProhibited = client delete prohibited
      clientHold = client hold
      clientRenewProhibited = client renew prohibited
      clientTransferProhibited = client transfer prohibited
      clientUpdateProhibited = client update prohibited
      inactive = inactive
      linked = associated
      ok = active
      pendingCreate = pending create
      pendingDelete = pending delete
      pendingRenew = pending renew
      pendingRestore = pending restore
      pendingTransfer = pending transfer
      pendingUpdate = pending update
      redemptionPeriod = redemption period
      renewPeriod = renew period
      serverDeleteProhibited = server delete prohibited
      serverRenewProhibited = server renew prohibited
      serverTransferProhibited = server transfer prohibited
      serverUpdateProhibited = server update prohibited
      serverHold = server hold
      transferPeriod = transfer period

3. IANA Considerations

3.1. JSON Values Registry

   The following values should be registered by the IANA in the RDAP
   JSON Values Registry described in [RFC7483]:

   Value: add period

   Type: status

Description: For DNR that indicates if the object is deleted by the registrar during this period, the registry provides a credit to the registrar for the cost of the registration.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: auto renew period

Type: status

Description: For DNR that indicates if the object is deleted by the registrar during this period, the registry provides a credit to the registrar for the cost of the auto renewal.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: client delete prohibited

Type: status

Description: For DNR that indicates the client requested that requests to delete the object MUST be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: client hold

Type: status

Description: For DNR that indicates the client requested that the DNS delegation information MUST NOT be published for the object.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: client renew prohibited

Type: status

Description: For DNR that indicates the client requested that requests to renew the object MUST be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: client transfer prohibited

Type: status

Description: For DNR that indicates the client requested that
requests to transfer the object MUST be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: client update prohibited

Type: status

Description: For DNR that indicates the client requested that
requests to update the object (other than to remove this status) MUST
be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: pending restore

Type: status

Description: For DNR that indicates a object is in the process of
being restored after being in the redemptionPeriod state.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: redemption period

Type: status

Description: For DNR that indicates a delete has been received, but
the object has not yet been purged because an opportunity exists to
restore the object and abort the deletion process.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: renew period

Type: status

Description: For DNR that indicates if the object is deleted by the
registrar during this period, the registry provides a credit to the
registrar for the cost of the renewal.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: server delete prohibited

Type: status

Description: For DNR that indicates the server set the status so that
requests to delete the object MUST be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: server renew prohibited

Type: status

Description: For DNR that indicates the server set the status so that
requests to renew the object MUST be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: server transfer prohibited

Type: status

Description: For DNR that indicates the server set the status so that
requests to transfer the object MUST be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: server update prohibited

Type: status

Description: For DNR that indicates the server set the status so that
requests to update the object (other than to remove this status) MUST
be rejected.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: server hold

Type: status

Description: For DNR that indicates the server set the status so that
DNS delegation information MUST NOT be published for the object.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

Value: transfer period

Type: status

Description: For DNR that indicates if the domain name is deleted by
the registrar during this period, the registry provides a credit to
the registrar for the cost of the transfer.

Registrant Name: VeriSign Inc.

Registrant Contact Information: epp-registry@verisign.com

4. Security Considerations

The mapping described in this document do not provide any security
services beyond those described by RDAP [RFC7483].

5. Normative References

[RFC2119]   Bradner, S., "Key words for use in RFCs to Indicate
            Requirement Levels", BCP 14, RFC 2119, March 1997.

[RFC3915]   Hollenbeck, S., "Domain Registry Grace Period Mapping for
            the Extensible Provisioning Protocol (EPP)", RFC 3915,
            September 2004.

   [RFC5731]   Hollenbeck, S., "Extensible Provisioning Protocol (EPP)
               Domain Name Mapping", STD 69, RFC 5731, August 2009.

   [RFC5732]   Hollenbeck, S., "Extensible Provisioning Protocol (EPP)
               Host Mapping", STD 69, RFC 5732, August 2009.

   [RFC5733]   Hollenbeck, S., "Extensible Provisioning Protocol (EPP)
               Contact Mapping", STD 69, RFC 5733, August 2009.

   [RFC7483]   Newton, A. and S. Hollenbeck, "JSON Responses for the
               Registration Data Access Protocol (RDAP)", RFC 7483, March
               2015.

   [rdap-json-values]
               "RDAP JSON Values Registry",
               <https://www.iana.org/assignments/rdap-json-values/rdap-
               json-values.xhtml>.

Appendix A. Change History

A.1. Change from 00 to 01

   1. Changed the mapping of "linked" to "associated" and removed the
       registration of "linked", based on feedback from Andrew Newton on
       the weirds mailing list.

A.2. Change from 01 to 02

   1. Ping update.

A.3. Change from 02 to 03

   1. Ping update.

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