

Lock States used by gTLDs

1. Introduction

In relation to domain names, lock states control the extent to which a domain can be changed. There are two sets of lock states linked to one of the two main official registry protocols: Registry Registrar Protocol (RRP) and Extensible Provisioning Protocol (EPP). Lock states prevent fraudulent or erroneous changes to domains.

2. Names and purpose of lock states within RRP^{1, 2}

ACTIVE: This is the default status of a domain at registration time. The registry sets the domain to this status. The domain is modifiable by the registrar. The domain can be renewed. The domain SHALL be included in the zone file when in this status if the domain has at least one associated name server.

REGISTRY-LOCK: The registry sets the domain to this status. The domain cannot be modified or deleted by the registrar. The registry MUST remove the REGISTRY-LOCK status for the registrar to modify the domain. The domain can be renewed. The domain SHALL be included in the zone file when in this status if the domain has at least one associated name server.

This status is not that common and is sometime used in disputes or during redemption (see below).

REGISTRAR-LOCK: The registrar of the domain sets the domain to this status. The domain cannot be modified or deleted when in this status. The registrar MUST remove REGISTRAR-LOCK status to modify the domain. The domain can be renewed. The domain SHALL be included in the zone file when in this status.

This status is very common. It's used to prevent unauthorized transfers and often enabled by Registrar by default.

REGISTRY-HOLD: The registry sets the domain to this status. The domain cannot be modified or deleted by the registrar. The registry MUST remove the REGISTRY-HOLD status for the registrar to modify the domain. The domain can be renewed. The domain SHALL NOT be included in the zone file when in this status.

Not a very common status but use before a domain is set to delete and when a domain is subject to a legal dispute.

REGISTRAR-HOLD (client lock): The registrar of the domain sets the domain to this status. The domain can not be modified or deleted when in this status. The registrar MUST remove REGISTRAR-HOLD status to modify the domain. The domain can be renewed. The domain SHALL NOT be included in the zone file when in this status.

Typically denotes non-payment, expiration, or a domain subject to a legal dispute.

REGISTRY-DELETE-NOTIFY: A domain is set on this status if it has expired and has child name servers that are hosting other domains. Only the registry may set this status. The domain SHALL be included in the zone file when in this status if the domain has at least one associated name server.

3. Redemption Service Statuses within RRP

These status codes are used as a domain progresses towards deletion from a registry.

REDEMPTIONPERIOD: Registry sets this status when a registrar requests that the domain name be deleted from the registry and the domain has been registered for more than 5 calendar days (if the delete request is received within 5 days of initial domain registration it will instead be deleted immediately). The domain will not be included in the zone. The domain cannot be modified or purged; it can only be restored. Any other registrar requests to modify or otherwise update the domain will be rejected. A domain will be held in this status for a maximum of 30 calendar days.

¹ <http://www.wdbc.com/domain/status-codes.cfm>

² For RRP RFC (2832) see, <http://www.ietf.org/rfc/rfc2832.txt> (section 6.1.)

PENDINGRESTORE: Registry sets this status after a registrar requests restoration of a domain that is in REDEMPTIONPERIOD status. The domain will be included in the zone. Registrar requests to modify or otherwise update the domain will be rejected. The domain will be held in this status while the registry waits for the registrar to provide required restoration documentation. If the registrar fails to provide documentation to the registry within 7 calendar days to confirm the restoration request, the domain will revert to REDEMPTIONPERIOD status. The domain status will be set to ACTIVE only if the registrar provides documentation to the registry within 7 calendar days to confirm the restoration request.

PENDINGDELETE: Registry sets this status after a domain has been set in REDEMPTIONPERIOD status and the domain has not been restored by the registrar. The domain will not be included in the zone. Once in this status all registrar requests to modify or otherwise update the domain will be rejected. The domain will be purged and dropped from the registry database after being in this status for 5 calendar days. Once deletion occurs, the domain is available to be registered by anyone on a first come, first served basis.

4. Types of locks or status values within EPP ³

There are 23 different EPP Status codes. In EPP, the word <client> typically refers to <registrar> in the RRP system (e.g. CLIENT LOCK is REGISTRAR-LOCK) while the absence of <client> or the use of the word <server> usually refers to <registry> (e.g. LOCKED or SERVER LOCK is REGISTRY-LOCK).

In EPP, "Status values can be set only by the client [registrar] that sponsors a domain object and by the server [registry] on which the object resides. ... "Status values that can be added or removed by a client are prefixed with "client". Corresponding status values that can be added or removed by a server are prefixed with "server". Status values that do not begin with either "client" or "server" are server-managed." ⁴

CLIENTDELETEPROHIBITED, SERVERDELETEPROHIBITED: Requests to delete the object MUST be rejected.

CLIENTHOLD, SERVERHOLD: DNS delegation information MUST NOT be published for the object.

CLIENTRENEWPROHIBITED, SERVERRENEWPROHIBITED: Requests to renew the object MUST be rejected.

CLIENTTRANSFERPROHIBITED, SERVERTRANSFERPROHIBITED: Requests to transfer the object MUST be rejected.

CLIENTUPDATEPROHIBITED, SERVERUPDATEPROHIBITED: Requests to update the object (other than to remove this status) MUST be rejected.

INACTIVE: Delegation information has not been associated with the object.

OK: This is the normal status value for an object that has no pending operations or prohibitions. This value is set and removed by the server as other status values are added or removed.

PENDINGCREATE, PENDINGDELETE, PENDINGRENEW, PENDINGTRANSFER, PENDINGUPDATE: A transform command has been processed for the object, but the action has not been completed by the server. Server operators can delay action completion for a variety of reasons, such as to allow for human review or third-party action. A transform command that is processed, but whose requested action is pending, is noted with response code 1001.

With one exception, transform commands MUST be rejected when a pendingCreate, pendingDelete, pendingRenew, pendingTransfer, or pendingUpdate status is set. The only exception is that a <transfer> command to approve, reject, or cancel a transfer MAY be processed while an object is in "pendingTransfer" status.

When the requested action has been completed, the pendingCreate, pendingDelete, pendingRenew, pendingTransfer, or pendingUpdate status value MUST be removed. All clients involved in the transaction MUST be notified using a service message that the action has been completed and that the status of the object has changed.

"ok" status MUST NOT be combined with any other status.

³ See RFC <http://gim.org.pl/rfc/rfc3731.html>

⁴ RFC 3731. 2.3.

"pendingDelete" status MUST NOT be combined with either "clientDeleteProhibited" or "serverDeleteProhibited" status.

"pendingRenew" status MUST NOT be combined with either "clientRenewProhibited" or "serverRenewProhibited" status.

"pendingTransfer" status MUST NOT be combined with either "clientTransferProhibited" or "serverTransferProhibited" status.

"pendingUpdate" status MUST NOT be combined with either "clientUpdateProhibited" or "serverUpdateProhibited" status.

The pendingCreate, pendingDelete, pendingRenew, pendingTransfer, and pendingUpdate status values MUST NOT be combined with each other.

Other status combinations not expressly prohibited MAY be used.