Registered Name Deletions:

Recommendations to Verisign Global Registry Services to Modify Registered Name Deletion Processes

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Summary

Verisign-GRS has requested that interested ICANN participants provide VGRS with recommendations that will assist them in addressing the challenges faced by the registry during the domain name deletion cycle.

There are a number of possible solutions to this problem, so it is important VGRS adopt a solution that conforms to the basic principles endorsed by ICANN stakeholders.

This proposal attempts to document these basic principles and proposes a simple recommendation that will allow VGRS to undertake a rational delete cycle process without inadvertently harming or hinder the various stakeholders.

This document is not intended to act as a "final offer" from various ICANN stakeholders, but rather as a first step towards a rational solution. As progress thus far indicates, only together can this problem truly be solved to the benefit of all involved.

While not an IETF RFC, this document is offered in conformance with the intent and spirit of section 10 of RFC 2026.

Principles

The process of deleting registered names and making them available for re-registration needs to be conducted in accordance with a set of operating principles. These recommendations are offered in accordance with the following principles;

1. New deletion and re-registration processes must not accrue undue advantage to any individual, registrar or registry.

2. New deletion and re-registration processes must be conducted in accordance with established ICANN policy.

3. New deletion and re-registration processes should be determined by VGRS. This determination should occur in consultation with the ICANN community.

4. The determination by VGRS of new deletion and re-registration processes must include an analysis of the root cause of the problems faced by the registry.

5. New deletion and re-registration processes must allow Registrars to continue to operate in a competitive manner. This specifically refers to the capability of Registrars to determine business model, pricing and technical environment.

6. Registrars must be able to continue to use the existing RRP protocol for the normal shared registration system processes.

7. New deletion and re-registration processes must not impact on the performance of the normal shared registration system processes. Normal SRS processes can be defined as the creation of "new" domains, modification of existing domain name records, inter-registrar domain name transfers and deletion of domain names. Not normal is defined as the land rush for deleted domains the instant they become available. The interim procedures currently employed by VGRS as a temporary solution to this issue are also not defined as normal processes[i].

8. New deletion and re-registration processes MUST be fair to all ICANN Accredited Registrars

9. New deletion and re-registration processes SHOULD work within the current registries protocol such as RRP or EPP

10. New deletion and re-registration processes SHOULD NOT encourage the use of the CHECK DOMAIN command to find out available names in the pool of names to be deleted.

11. New deletion and re-registration processes SHOULD NOT give a greater benefit to a registrar that uses more RRP Connections over a registrar with a single RRP connection.

Recommendations

It is the recommendation of this document that Verisign Global Registry Services (VGRS) modify their existing delete-cycle processes to accommodate the following process:

1. VGRS registry collects list of deleted names and withholds them from registration in the normal registry

2. VGRS publishes the list on day one to all ICANN accredited registrars registered for the delete pool service via the registrar reports secure FTP server.

3. VGRS collects pre-registrations from the registered registrars at any time after day one and until day [x]. Only one pre-registration per registrar is permitted for any particular domain name. The registry software must check for multiple entries in the queue prior to processing.

4. On day [x], VGRS randomly allocates the names in the queue, and charges registrars for each domain registered as per the existing ICANN/VGRS Registry contract pricing schedule.

5. On day [x]+1, VGRS removes the lock on unallocated names in the normal registry, and allows normal first-come first served registration. VGRS starts the cycle again using the names deleted since day one, when the last list was published.

Commentary to the Recommendations

1. The length of cycle "x" is a variable. 14 days would be a reasonable time period that would allow time for a sufficient pool of names to develop, and justify the effort of running the pre-registration cycle. It would also minimize the burden on both the registry and registrars of managing the process.

2. A variety of competitive models are accommodated by this arrangement. For example, "back-order" providers could license their software to registrars that wish to allow people to back order domain names, and help the registrar manage the problem of only being allowed to register one pre-registration request per domain name. Registrars could also choose to cater to secondary market speculators and provide them with "pure access" to the registry on a retainer basis, or some other pricing model.

3. This proposition does not rely on the relative network distances and performance between the registrar and the registry. It also does not require significant infrastructure or resources to be allocated by the registry or registrars. The system could easily run on a low-end server, during a time period when there are no peak load issues. The number of pre-registration requests from individual registrars should also be relatively low (as opposed to a real time system where the incentive is to keep sending messages).

4. Registrars do not have to join the system and can continue to register names as normal. They can also put in normal registration requests for the names that were unallocated in the first 14 days of the cycle (most likely relating to speculators).

5. The markets for the normal registration process and the deleted-names process will be completely separated, with ICANN accredited registrars allowed to participate in either or both.

6. Companies that are not ICANN accredited registrars will not have direct access to the system or direct access to the list of deleted names. Third party companies will need to obtain the list of names from an ICANN accredited registrar. Third parties companies will also need to access the delete pool service via an ICANN Accredited Registrar.

7. This system could be launched as a test-bed with little or no impact on the current operations of the registry or registrars.

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VGRS Status update to ICANN Accredited Registrars re: Interim Delete-cycle Solution

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Envelope-to: rwmrader@          .tucows.com
Delivery-date: Thu, 23 Aug 2001 15:07:56 -0400
Received: from                   ([              ])
     by                               with esmtp (Exim        )
     id 15Zzpc-0001yU-00; Thu, 23 Aug 2001 15:07:56 -0400
Received: from                   ([              ])
     by                    with esmtp (Exim        )
     id 15Zzpv-0000fB-00; Thu, 23 Aug 2001 15:08:15 -0400
Received: from verisign-grs.com ([192.153.247.4])
     by                     (8.9.3/8.9.3) with ESMTP id PAA12457;
     Thu, 23 Aug 2001 15:07:58 -0400
Received: (from majordomo@localhost)
     by verisign-grs.com (8.9.3/8.9.3) id OAA24808
     for registrars-outgoing; Thu, 23 Aug 2001 14:55:04 -0400
X-Authentication-Warning: imx3.pvt.lks.verisign-grs.net: majordomo set
sender to owner-registrars@verisign-grs.com using -f
Received: from hdbreg (csrmailserver.verisign.com [10.131.98.32])
     by verisign-grs.com (8.9.3/8.9.3) with SMTP id OAA24804;
     Thu, 23 Aug 2001 14:54:32 -0400
Reply-To: <info@verisign-grs.com>
From: "VeriSign Global Registry Services" <info@verisign-grs.com>
To: <registrars@verisign-grs.com>
Subject: [RegistrarsList] Announcement Regarding Suspension of Delete
Batch Job and Connection Utilization within the SRS
Date: Thu, 23 Aug 2001 14:56:57 -0400
Message-ID: <BPEAKCLABGAAKIMHIGKBGEMAECAA.info@verisign-grs.com>
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
X-Priority: 3 (Normal)
X-MSMail-Priority: Normal
X-Mailer: Microsoft Outlook IMO, Build 9.0.2416 (9.0.2910.0)
Importance: Normal
X-MimeOLE: Produced By Microsoft MimeOLE V5.00.2919.6700
Sender: owner-registrars@verisign-grs.com
Precedence: bulk
Content-Transfer-Encoding: quoted-printable
X-MIME-Autoconverted: from 8bit to quoted-printable by
id PAA12457
Status: RO
```

To all Registrars:

Summary

On Friday August 10, 2001, VeriSign Global Registry Services (VeriSign GRS) temporarily suspended the batch releases of deleted .com, .net, and .org domain names to ensure continued service quality within the Shared Registration System (SRS). As described in the announcement of the suspension, VeriSign GRS has been working with ICANN and the registrar community to devise an appropriate plan to handle expiring names in a

manner that is fair and does not interfere with other activities in the
SRS.

VeriSign GRS believes that a long-term solution will require fundamental
changes in the way expiring names are handled. Nonetheless, in view of
concerns that an ultimate solution might be made more difficult by an
accumulation of expiring names during the suspension, VeriSign GRS has
been evaluating short-term measures for addressing the issues that
caused the suspension. The purpose of this email is to communicate the
details of these short-term measures and the schedule for their
implementation.

VeriSign GRS will continue to work with the Registrar Constituency, the
DNSO, and the Names Council to develop better policies and processes for
registrations being returned to the available pool. To the extent that
the short-term measures described below provide relevant experience,
VeriSign GRS will endeavor to share that information in a manner
consistent with the confidentiality it accords to its customers'
business information.

Goals

The goals of this new session management process are:

   -   To re-enable the registry batch release process.
   -   To ensure each registrar is able to obtain RRP sessions reasonably
       necessary to support its business practices.
   -   To support the business practices of each registrar in such a way
       that the business practices of one would not impact the business
       practices of another.
   -   Improve performance and lower system latency during peak
       processing periods.

Implementation Details

To facilitate the above goals, additional capacity has been added to the
SRS and three (3) session pools have been created.

1. Guarantee Pool
2. Overflow Pool
3. Automated Batch Pool

Each of these pools is described in detail below. In summary, we expect
the implementation of these three session pools to provide the following
advantages:

   -   A larger and more reasonable number of guaranteed sessions that
       will better support small to medium registrars that have a
       traditional business model and that have been experiencing
       difficulties obtaining sessions.
   -   Support for registrars whose business model involves more
       extensive use of automated batch processing, without adversely
       impacting other registrars.
   -   Eliminate the need for "session squatting=94 (acquiring and
       holding sessions that are not needed or used).

Guarantee Pool

The Guarantee Pool is a session pool in which each registrar is
guaranteed 15 sessions. Registrars should continue using the current
hostname access (rrp.verisign-grs.com) in order to obtain their
guaranteed sessions. There is no change required for registrars to
access this pool. Registrars should be aware that due to the load-
balancing technology currently employed, it may take multiple connection
attempts to obtain these guaranteed sessions. Our data show that over
75% of registrars use 15 or less sessions. Intensive automated batch
processing will not be permitted in this pool.

Overflow Pool

The Overflow Pool is a first-come-first-served pool of additional
sessions. As with the Guarantee Pool, the Overflow Pool is accessed via
the rrp.verisign-grs.com hostname. VeriSign GRS has added sufficient
capacity to this pool to accommodate historical registrar session
activity, with the movement of intensive batch processing to the
Automated Batch Pool described below. Intensive automated batch
processing will not be permitted in this pool. We believe the increased
capacity coupled with the movement of batch processing to another pool
will enable registrars to obtain the sessions they need when they need
them, thus eliminating the need for session=93hoarding=94 or
=93squatting=94.

Automated Batch Pool

This pool of sessions has been established specifically to support
registrars whose business practices include the execution of intensive
automated batch processing. This pool is completely separate from the
Guarantee Pool and Overflow Pool, and is accessed only via a separate
hostname (rrp_auto.verisign-grs.com). Intensive automated batch
processes (such as the daily automated CHECK activity) must be performed
in this pool only. Registrars that desire to perform this type of
activity in this pool should request access from VeriSign GRS. VeriSign
GRS will grant access only to those registrars that request it, and will
permit up to 50 sessions to each requesting registrar. This pool is
specifically allocated to intensive automated batch processing. The
purpose of this pool is to provide an are a where intensive automated
batch activities can be performed without impacting other activities.

Monitoring

VeriSign GRS closely monitors registrar session activity and will work
with registrars to assist them in using the session pool(s) that will
best support their business activities. Registrars that perform
intensive automated batch processing will be required to modify their
systems (i.e., use a different RRP hostname address) so that these
activities are performed only in the Automated Batch Pool. VeriSign GRS
believes that these measures will permit all registrars to obtain as
many sessions as needed to perform business. Thus, there should no
longer be a need for registrars to =93hoa=rd=94 or =93squat=94 on
sessions unnecessarily. VeriSign GRS is ready to implement technology

that will automatically close unused sessions; however, we will only implement this technology if session =93hoarding=94 or =93squatting=94 continues to be a problem.

VeriSign GRS will utilize several monitoring mechanisms to detect inappropriate session utilization. We will inspect for inappropriate utilization if events such as the following occur:

- A sudden change in a registrar=92s transaction or session profile
- Activity causing impact to system performance
- Complaints about system response or inability to obtain session s

Following the occurrence of these types of events, VeriSign GRS will evaluate session activity, looking for the following specific behaviors:

- Loops of repeated transactions (e.g., multiple attempts of the same CHECK or ADD command for the same domain n ame)
- A high ratio of =93unsuccessful=94 to =93successful=94 SRS responses

If these characteristics exist, this behavior will be determined to be inappropriate for the Guarantee and Overflow Pools and the registrar will be notified and directed to move this activity to the Automated Batch Pool. If you have any additional questions about what constitutes =93intensive automated batch processing=94, please contact VeriSign GRS Customer Service.

Enforcement

The following enforcement procedures will be employed.

- A 1st offense will result in the registrar having its bandwidth and sessions immediately limited in the Guarantee and Overflow Pools so that the behavior does not impact the system or other registrars. The registrar will receive an email and telephon e notification. When the registrar has notified VeriSign GRS of the resolution of the issue (e.g., the activity has been moved to the Automated Batch Pool), these bandwidth and session limitations will be removed.

- A 2nd offense will result in the same act ion as the 1st, with the added action that the registrar will be notified that subsequent offenses will result in it being blocked entirely from the Guarantee and Overflow Pools.

- A 3rd offense will result in the registrar being blocked from the Guarantee and Overflow Pools for 7 days, requiring that all transactions be performed in the Automated Batch Pool.

- Subsequent offenses will result in the registrar being blocked from the Guarantee and Overflow Pools for 30 days, requiring that all transactions be performed in the Automated Batch Pool.

Enforcement of these procedures will begin with the resumption of batch releases described below.

Implementation Schedule

These three pools are available now. Registrars that do not engage in
intensive automated batch processing may continue to access the SRS
through rrp.verisign-grs.com as they do now. No system changes are
necessary. No intensive automated batch processing is to be performed
in the Guarantee Pool or Overflow Pool. Registrars that do engage in
intensive batch processing are required to request access to, and move
that activity to, the Automated Batch Pool. This will require a minor
modification to use the rrp_auto.verisign-grs.com access host.

Resumption of Batch Releases

VeriSign GRS believes that the prompt resumption of registry batch
releases is in the best interests of the registrars and the Internet
community. Therefore, the batch release process will be resumed at 18:00
UTC (1400 hrs EDT) on Thursday, August 30, 2001. Registrars that
anticipate resuming associated intensive automated batch processing must
modify their systems to access the Automated Batch Pool via
rrp_auto.verisign-grs.com by that time. Registrars that perform this
type of activity in the Guarantee or Overflow Pools will be subject to
the enforcement procedures noted above. Registrars will not be permitted
more than 200 total sessions across all pools. This upper limit is not a
guarantee. The plan described here only guarantees 15 sessions. However,
if registrars use the Automated Batch Pool for intensive batch
processing, and use no more sessions than necessary to perform business
(e.g., no session 93hoarding=94), there should be no shortage of
sessions.

Subsequently, all batch releases will be performed daily at 18:00 U TC
(1400 hrs EDT). Note this time change. Batch releases are always
completed within 15 minutes. Therefore, registrars that utilize
intensive batch processing associated with the registry daily batch
release have no need to start that processing prior to 17:45 UTC (1345
hrs EDT), or to continue it past 18:30UTC (1430 hrs EDT).

Assistance

The VeriSign GRS Customer Service and Technical Operations staffs are
standing by to assist registrars as needed. We will closely monitor the
utilization and activity in each pool. If, at any time, a registrar is
unable to obtain a session in the Guarantee or Overflow Pools after
repeated attempts, please notify VeriSign GRS Customer Service
immediately. Registrars should be aware that the ability to obtain
sessions can also be impacted by registrar session management practices
and Internet Service Provider issues. Sessions that are broken or
otherwise terminated uncleanly may require up to 15 minutes to time -out
and reset, and depending on the current number of sessions, may inhibit
the creation of new sessions until the broken sessions have timed -out.

We strongly believe that this process will ensure all registrars can
acquire the sessions they need when they need them.

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VeriSign GRS is committed to ensuring continued SRS  service quality,
with equitable access to every registrar.  As appropriate, this plan may
be adjusted in the future to meet that commitment.

Best Regards,

Chris Sheridan
Manager, Customer Service
VeriSign Global Registry Services
www.verisign-grs.com
info@verisign-grs.com


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Participants on the VeriSign Global Registry Services registrars list
are requested to not cross-post messages.
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