#### **Ratio Model Proposal**

A registrar may perform at most N Failed Transactions per day, where N is X times the average number of Successful Transactions of that registrar, which average is calculated over the previous 30 days.

"X" being approximately 300

"Failed Transactions" or "Dips" being any of

- 1) Any check command
- 2) A failed add command

"Successful Transactions" being any paid transaction that has left its respective graceperiod and shall include:

- 1) explicit add transaction that has left its 5-day grace period
- 2) transfer transaction
- 3) auto-renewal transaction that has left the 45-day grace period
- 4) explicit-renewal transaction that has left its 5-day grace period
- 5) restore transaction

The number of Successful and Failed Transactions will be based on all transactions, and will include transactions performed in the batch pool and in the guaranteed pools. Also, a two-year registration, for example, will count as two transactions.

Any registrar in violation of this policy will have its privileges in the batch pool removed for a period of time not less than seven days on its first offense. For additional offenses, the time period will be increased. Any registrar that attempts to "burn out", by pounding the registry with many Failed Transactions (say more than twice its allocated limit) during the course of one day, even though it has performed little or no Successful Transactions for the preceding 30 days will have its batch pool access privileges removed as soon as the abuse is discovered and shall remain banned for not less than 30 days.

Today, names drop (become re-available) at approximately Y names per minute, so that the length of time during which the drop lasts is approximately 1 hour for Z names. The approximate rate at which names drop will remain as it is today. And the list of names will continue to be made available in advance, except the order in which they are released will be unknown.

The maximum number of dips per unit of time (the maximum dip rate) which any registrar will be allowed will be capped at approximately the number of dips that a registrar could perform when registrars had 10-15 connections to the batch pool.

The registrar is responsible for keeping track of their dip usage. The registry should provide per-registrar reports, available via ftp and updated daily, to make this task easier.

The policies in all the other pools besides the batch pool will remain the same. The monitoring the registry already does for abuse in all pools other than the batch pool will stay the same and not be affected by the dip model other than the fact that activity in those pools consumes dips.

### Implementation

To implement this method, the registry will need to know two things:

- 1) The number of paid transactions that exit their grace periods for each registrar
- 2) The number of Dips performed by each registrar

The first is already known by the registry's accounting system and the second is known by the registry as well because the registry logs each RRP transaction request. Implementation will simply consists of the registry creating and running a report each evening (say at 11:59pm EST) that shows the 30-day average from #1, multiplies it by 300 (call this result the "Allowed Dips"), and compares the result to #2 for that day (call this the "Actual Dips"). Any registrar for whom the Actual Dips are more than the Allowed Dips would be in violation of the policy and the penalty would be imposed. This method can be implemented quickly because on any day, including the go-live day, all the data for the previous 30 days is known (the registry is already logging all the necessary data during the current normal course of business).

### Advantages

- 1) Implementation
  - a. It is relatively easy for the registry to implement because the ratio is not calculated in real-time, but daily. Nothing needs to happen in real-time that does not already happen: reporting, price changing, or logging.
  - b. Not much work to be done on registrar's part.
    - i. Registrars should conserve dips if they decide to perform many dips to grab deleted names.
    - ii. Speed-bump your API (if you have one) so that your customers do not waist your dips. For example, when doing availability checks, first check the zone for .com using DNS, if it is not in there, only then perform the RRP check, after that, cache the answer for say ½ hour, and return the cached answer for subsequent requests.
    - iii. Most, if not all, registrars who do not participate in the drop, are already below the 300 threshold.
  - c. There is no change to RRP, which means the registrars and registry do not have to change in that regard.
  - d. No change to accounting systems for registry, registrars or ICANN.
- 2) The method is well-specified, thought-out, vetted, and has a cross-section of support from registrars, and has been proposed by the registry.
- 3) There is no fee increase or additional fee
  - a. There are no additional, new, or increased fees
  - b. ICANN continues to receive \$0.25 per name-year or 4% of each \$6.25 (total cost) registration.
  - c. If a new or different fee was required, or if a registration fee increase was required, then ICANN approval would be required
  - d. No need to figure out who-gets-what because there is no new, additional, or increased fee.

- 4) It is not a new registry service, which would require ICANN approval, and PDP process.
- 5) Registrars who wish to transmit many failed add commands during the drop will have to conserve them; therefore an ancillary benefit of the ratio method is that the load on the registry will decrease outside of the drop window.
- 6) Equivalent access to successfully register and maintain names is preserved
  a. Unlimited number of unsuccessful transactions (abuse) no longer allowed

# FAQ

- 1) Why does the list have to be randomized?
  - a. Because if the exact time that a valuable name drops is known, many registrars, having say one average successful transaction per day, could "spike" or "burst" the registry with a relatively few add commands just at the time that name drops.
- 2) Doesn't randomizing the list create the incentive to pound more?
  - a. No, because with the ratio model, registrars will need to conserve dips. The load on the registry during the drop will not be more than today because the total rate is capped below database capacity, the load outside the drop will be less than today because registrars will become more efficient in their use of the check command.
- 3) If a new registrar has not performed any transactions, would they be able to do any failed transactions at all?
  - a. Yes, though the measurement would be across all pools, the policy change does not affect the guaranteed pool. A registrar would not be cut off from the guaranteed pool unless it violated the existing guaranteed pool policies.
- 4) Why does the measurement happen across all pools, and not just the batch pool?
  - a. It is much easier to implement across all pools because the current logging and accounting systems at the registry do not keep track of which pool the command came through.
  - b. If the ratio was based on transactions in the batch pool only, then registrars would switch their live registrations from the guaranteed pool to the batch pool in order to earn more dips, therefore it would result in the same thing.
  - c. Ok, then how about if the ratio was based on the exact list of dropping names and only in the batch pool?
    - i. It could create a runaway "feed-back loop" because a registrar could buy all the dropping names, then that registrar would be locked-in, because only it would have the dips to get more dropping names, and hence earn more dips.
    - ii. Since all the names will be in contention (unlike today where only a small portion of all dropping names are n contention), it will be difficult or impossible for a new player to enter.
    - iii. Without this restriction a new player could easily earn dips by registering non-dropping names that are not in contention (they can easily earn dips without using any dips).

- 5) Why doesn't the ratio only apply to names that are dropping? For example, a registrar can do as many failed transactions as they wish, just not on dropping names.
  - a. It is more difficult to track
  - b. There is no reason, because 300 dips per successful transaction are way more than enough for any registrar if that registrar is not playing the drop game.
- 6) What is the impact on ICANN's budget?
  - a. Any registrar participating in the drop game will likely have more than 350,000 names under management or will likely be above the 200 ratio threshold specified in the ICANN budget; therefore they will not be eligible for relief.
- 7) Why is the rate capped in the batch pool?
  - a. Because there is a finite registry capacity
  - b. But why at the level when registrars had 10-15 connections?
    - i. Because at a higher rate certain registrars would have too much of an incentive to spread their successful adds across a number of registrar creds, at this number it is probably not worth the effort for them to do so.
- 8) Why 300 for the ratio?
  - a. Because it is exactly between 200 and 400, a range which many registrars have already agreed to.
  - b. If it was 200 or lower then no registrar would be above 200 and therefore all registrars except those with more than 350,000 registrations would be on relief according to the ICANN budget.
  - c. If more than 400 or so, then there would be too much incentive for larger registrars to spread their transactions across a number of creds.

## Questions

- 9) To Verisign
  - a. Will you implement the ratio model if ICANN gives OK?
  - b. What if ICANN is silent?
    - i. Will you implement the ratio model if most of the registrars wish it?
    - ii. Will you implement the ratio model if all of the registrars wish it?
    - iii. Under what conditions would you implement the ratio model?
  - c. Assuming you were to implement it:
    - i. How long will it take to implement it?
    - ii. When is the earliest that "go-live" could happen (go-live being the first day that a ratio penalty might be imposed)?

### 10) To ICANN

- a. Are you going to be silent on the issue?
  - i. Will you 1) give approval or 2) disapproval or 3) do nothing?
- b. Would Verisign be in breach of their ICANN agreement if they implemented the ratio method?

- c. Does VeriSign need ICANN's approval to move forward with the ratio method?
- d. Under what conditions would ICANN give the OK for VeriSign to move forward with the ratio model?
- e. Under what conditions would VeriSign, or any other registry, be required to implement the ratio method?

11) To Other registries

- a. Do you provide more connections or bandwidth to some registrars under certain circumstances?
- b. Would you implement the ratio model?
- c. In the near future, do you see a need to do anything different than what you do today?
- d. About how many registrars are going after deleted names in your registry? What happens if this increases to the number that pound Verisign?
- e. What are you doing today?