

Provision Of Back-end Registry Services for future rounds of New gTLDs

What are the options?

Issues

The majority of 2012 New gTLD applicants relied upon the expertise of their chosen registry service provider (RSP) to prepare answers to the technical questions in the New gTLD Application, and respond to clarifying questions.

- This process was repetitive and resource intensive for the RSP
- The applicant incurred additional costs related to responding to clarifying questions, which were also repetitive and resource intensive for the RSP
- Some applicants incurred these costs only to be unsuccessful in their bid for the TLD

The 2012 New gTLD program resulted in a limited number of RSPs

- 90% of the 1930 applicants share one of 13 technical infrastructure providers or RSPs

Pre-Delegation Testing is repetitive and largely ineffective.

- Each RSP was required to undergo the same Pre-Delegation Testing (PDT) for every registry operator
- The PDT did not consider the number of TLDs the RSP was supporting and therefore did not test the capacity of the RSP to support additional TLDs or x number of TLDs or domains under management
- Little in the existing PDT criteria serves stability and resiliency, ie. capacity in excess of activity or addressing threats

RSPs do not have a formal relationship with ICANN

- ICANN has a contractual relationship with the registry operator, who in turn has a contractual relationship with the RSP

Security and Stability of the DNS

- This is ICANN's core mission and concern has been expressed that this was not adequately addressed in the 2012 round

Problems we're trying to solve

1. How can the technical components of the application and evaluation processes from 2012 be streamlined to remove the burden on applicants and the repetitive answers provided by RSPs, but still satisfy ICANN's requirement for technical competence?
2. How can PDT repetitive testing be resolved?
3. What options are available to satisfy ICANN that an RSP is technically competent to manage the operation of multiple TLDs, while also ensuring security and stability of the DNS.
4. How can ICANN and RSPs engage on matters of security and stability absent a contractual arrangement?
5. How can the process to swap out an RSP be more streamlined?

Possible Solutions

- RSP Accreditation has been suggested by many as the solution to solving the identified problems.
- While we don't disagree that this may be a possible solution we believe that there are a number of other possible solutions that should also be considered as part of the discussion, for example
 - ICANN Proven Providers
 - ICANN Pre-Certified Providers
 - ICANN Post-Application Certified Providers

ICANN Proven Providers

- As a result of the 2012 new gTLD application and evaluation processes and Pre-Delegation Testing (PDT) ICANN approved a number of RSPs to provide the technical infrastructure to registry operators.
- ICANN continues to monitor the performance of those RSPs via the Registry Agreement that contains SLAs and technical requirements that Registry Operators, via their RSPs, are required to meet on an ongoing basis.
- In any future round of new gTLDs, applicants could select from the current pool of Proven Providers to satisfy ICANN's requirements related to technical competence.
- As Proven Providers there would be no requirement for those RSPs to submit to any additional evaluation or testing during any future new gTLD round.

ICANN Pre-certified Providers

- New RSPs not approved by ICANN through the 2012 process would be afforded the opportunity to become Pre-Certified Providers, at their own cost and up to one year before the commencement of the next new gTLD process.
- The new RSPs would be required to prepare responses to technical questions related to their technical infrastructure, which would in turn be evaluated by a technical panel.
- Those that pass the theoretical evaluation would also be subjected to a Pre-Delegation Test that is tailored to test the technical infrastructure as described in the responses to the technical questions.
- In any future round of new gTLDs, applicants could select from the ICANN Pre-certified Providers to satisfy ICANN's requirements related to technical competence.

ICANN Post Application-Certified Providers

- In any future round of new gTLDs, applicants could opt to satisfy ICANN's requirements related to technical competence at the time they submit their application.
- The applicant would be required to prepare responses to technical questions related to their technical infrastructure, which would in turn be evaluated by a technical panel.
- Those that pass the theoretical evaluation would also be subjected to a Pre-Delegation Test that is tailored to test the technical infrastructure as described in the responses to the technical questions.
- Note: It is possible that some applicants for single strings may want to run their own infrastructure. This option may be most appropriate for such applicants. In the event that the applicant is in a contention set, they could be provided the option to defer PDT until the contention set is resolved.

How would these solutions address the problems we're trying to solve?

1. How can the technical components of the application and evaluation processes from 2012 be streamlined to remove the burden on applicants and the repetitive answers provided by RSPs, but still satisfy ICANN's requirement for technical competence?

- Applicants now have three options in the application process:
 - 'tick a box' indicating that they will engage an ICANN Proven Provider; or
 - 'tick a box' indicating that they will engage an ICANN Pre-Certified Provider; or
 - Opt to complete technical component of their application and go through the evaluation process and PDT testing.
- In the event that the applicant uses the services of an ICANN Proven Provider or and ICANN Pre-Certified Provider there would be no requirement to provide answers to technical questions or be subject to technical evaluation or PDT.
- Applicant would be required to acknowledge their responsibilities as it relates to meeting the technical and service levels of the Registry Agreement.

2. How can PDT repetitive testing be resolved?

- An ICANN Proven Provider would not be required to undertake an additional PDT.
- An ICANN Pre-Certified Provider would only undertake PDT once as would an ICANN Post-Application Provider

3. How can ICANN and RSPs engage on matters of security and stability absent a contractual arrangement?

- Individual RSPs could agree to an [exchange of letters](#) (similar to ccTLDs) with ICANN outlining respective responsibilities relating to the DNS.
- The RSP should be nominated by the Registry Operator as the Technical point of contact and the initial point of contact where issues of security and stability arise.
- The RSP will remain accountable to the Registry Operator through the provision of services in accordance with SLAs in the Registry Agreement.

4. What options are available to satisfy ICANN that an RSP is technically competent to manage the operation of multiple TLDs, while also ensuring security and stability of the DNS?

- ICANN Proven Providers will have been subject to monitoring of their technical performance over an extended period of time by the commencement of another application round for new gTLDs. ICANN should have knowledge of the performance and capabilities of those RSPs and as such no further testing would be required.
- Pre-Certified Providers and Post-application certified Providers may be subject to additional testing once details are known of the number of TLDs to be supported to address any concerns or security and stability.
- All RSPs could voluntarily submit to annual performance test conducted by an independent third party, which is intended to assess if the infrastructure of the RSP is requisite to meet the scale of the respective RSPs operation.

5. How can the process to swap out an RSP be more streamlined?

- Gather feedback from the community about what is and is not working
- Formation of a Working Group to examine processes that are already in place and to propose adjustments to existing processes or new processes that will smooth the process

