

Registry Transition Processes

Presenter

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AsiaPacific
Regional Event of ICANN-Accredited Registrars and gTLD Registries

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Overview

- Purpose
 - Protection of registrants
 - Security/Stability
 - Confidence in the DNS
- Process
 - Preparation for new gTLDs
 - How can you contribute?
- Products
 - Drafts/Finalization for Applicant Guidebook

Motivation

- Affirmation of Commitments, section 9.2, states as one the commitments of ICANN:
Preserving security, stability and resiliency [of the DNS].
- ICANN bylaws identify the core values of the organization. Core value #1 is as follows:
Preserving and enhancing the operational stability, reliability, security, and global interoperability of the Internet.
- The 2006-2007 ICANN Operating Plan (section 1.1.2) states that ICANN will:
Establish a comprehensive plan to be followed in the event of financial, technical, or business failure of a registry operator, including full compliance with data escrow requirements and recovery testing.

Three Processes

1. Registry Transition Process with Proposed Successor (RyTP-PS)
2. Registry Transition Process with Request for Proposals (RyTP-RFP)
3. Emergency Back-End Registry Operator Temporary Transition Process (EBERO-TTP)

Registry Transition Processes Goals

1. Protect registrants
2. Ensure registry services are operational to the greatest extent possible
3. Maximize the chance of success in the operation of the transitioned gTLD for the new registry operator
4. Ensure transitions occurs in a secure, stable and reliable manner, while minimizing the impact on registrants and gTLD users, and providing transparency to the parties involved in the transition

Definitions

- **Back-end Registry Operator (BRO)** – An organization contracted by a registry to run one or more of the Critical Functions of a gTLD registry
- **Critical Functions** – Functions that are critical to the operation of a gTLD registry:
 1. DNS resolution
 2. DNSSEC properly signed zone (if DNSSEC is offered)
 3. Shared Registration System (SRS), usually by means of the Extensible Provisioning Protocol (EPP)
 4. Registration Data Publication Service, usually by means of the Whois protocol and Web based Whois
 5. Registry Data Escrow

Definitions

- **Registry Transition:** A change in the contracting party of a gTLD Registry Agreement with ICANN. Examples of circumstances leading to a Registry Transition are: name change of the organization running the gTLD, a sale or transfer of the registry, current registry is in breach of Registry Agreement, etc.
- **Successor Registry:** The new contracting party of a gTLD Registry Agreement with ICANN after a Registry Transition.

Registry Transition Process with Proposed Successor



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RyTP with Proposed Successor

Will be used:

- When a registry requests that ICANN assign its Registry Agreement to a prospective successor.
- If at the end of the registry agreement term, or by means of a court order by a legal authority with jurisdiction, the relevant Government or Public authority withdraws its support to the registry operator of a gTLD that is a geographic name, and proposes a successor registry.

RyTP-PS Summary

1. Do Brief Assessment of the situation
2. Do Risk Assessment of the registry and gTLD
3. Check support for the proposed registry
4. Evaluate proposed registry
5. Obtain necessary approvals and enter Agreement with successor if approved
6. If there is change in BRO, do predelegation testing and Execute migration of services
7. Update records with IANA

If check for support in evaluation fails, the process ends with no transition.

Registry Transition Process with Request for Proposals



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RyTP with Request for Proposals

It will be used when:

- A registry is in uncured breach of its Registry Agreement (leading to termination) and does not identify a successor registry; or,
- If at the end of the registry agreement term, or by means of a court order by a legal authority with jurisdiction, the relevant Government or Public authority withdraws its support to the registry operator of a gTLD that is a geographic name, and does not provide a proposed successor registry.

RyTP-RFP Summary

1. Do Brief Assessment of the situation
2. Do Risk Assessment of the registry and gTLD
3. Do Request for Proposals
4. Check for support and evaluate the candidate with the strongest proposal
5. If there is no success, check and evaluate the next strongest
6. If there are no successful applicants, do a second RFP. If still no success, TLD will be sunset
7. Once a successful candidate is identified, obtain necessary approvals and enter agreement with successor if approved
8. If there is change in BRO do pre-delegation testing and execute migration of services
9. Update records with IANA

Prospective Registry Evaluation Matrix

Transition type	What is being changed		Evaluation type		
	Registry Front-end	Back-End Operator	Financial	Technical & Operations*	Due Diligence
Name change	Same	Same	Limited	Minimal	Limited
Current registry is not in breach	Same	Same	Limited	Minimal	Limited
	Same	New	Limited	Full	Limited
	New	Same	Full	Limited	Full
	New	New	Full	Full	Full
Registry is in breach	-	Same	Full	Limited	Full
	-	New	Full	Full	Full

* Technical and Operations evaluation includes review of a plan for Migrating Services and data from current registry.

Prospective Registry Evaluation Matrix

- **Full** indicates a review that is similar in scope to the review of applicants in the new gTLD program. Prospective registry will cover the costs associated with the evaluation. It will be performed by one of the firms engaged in evaluating applications for new gTLDs.
- **Limited** indicates a more narrow scope of review. For example, for Technical and Operations, this could consist of ensuring that the new organization has similar arrangements in place with the Back-End Registry Operator. Whether this type of evaluation will be performed internally and with or without cost for the prospective registry will depend on the specific case at hand.
- **Minimal** indicates a very narrow scope of review performed internally by ICANN and therefore without cost to the prospective registry.

Emergency Back-End Registry Operator Temporary Transition Process



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EBERO-TTP

Will be used for **new gTLDs** primarily when the following conditions are met:

- A registry is in breach of its Registry Agreement
- A Critical Function is being performed below the **Emergency Thresholds** resulting in a situation of unacceptable risk

This temporary transition could also be initiated at the request of the registry if it is aware of or anticipates an inability to adequately provide the Critical Functions

Emergency Thresholds for New gTLDs

Critical Function	Emergency Thresholds	
DNS service (all servers)	4-hour continuous downtime	4-hour downtime/week
DNSSEC*	4-hour continuous downtime	4-hour downtime/week
SRS (EPP)	5-day continuous downtime	5-day downtime/month
Whois/Web-based Whois	7-day continuous downtime	7-day downtime/month
Data Escrow	Breach caused by missing escrow deposits	

*DNSSEC threshold will be in effect three years after inclusion of the gTLD in the root zone.

Measurements to detect the Emergency Threshold for Critical Functions (except Data Escrow) will be drawn from the registry-SLA (Service Level Agreement) monitoring system used by ICANN as described in Specification 6 of the draft Registry Agreement.

EBERO-TTP

- Contrary to the previous two processes already presented, EBERO-TTP **does not represent a definitive transition.**
- Emergency operator will operate Critical Functions until the underlying issues are solved, or the gTLD is transitioned to another operator using one of the previously described Registry Transition processes.
- Once the registry has remediated all issues that may have caused the emergency transitions, it can initiate a Registry Transition Process with proposed successor in order to regain control of gTLD operations. The registry will identify itself as the proposed successor in that process.

EBERO-TTP Summary

1. Obtain escrowed data from Escrow Agent
2. Do Risk Assessment of the registry and gTLD
3. Select and notify Emergency Operator from small pool of pre-evaluated and precontracted operators
4. Activate DNS and DNSSEC
5. Activate Whois
6. Activate SRS (EPP)
7. Activate Data Escrow from emergency operator

Data for Emergency Operations

- ICANN will maintain an archive of daily zone files from all the gTLDs to foster quickly resumption of DNS service
- For the rest of the Critical Functions, data will be obtained from the current registry and/or the data escrow deposits
- Escrow Agents will have 24-hour turnaround Service Level Requirement, for emergencies

SLA for the Emergency Operators

Critical Function	Service Level Requirement
DNS/DNSSEC	2 hours upon receipt of zone file
Whois/Web-based Whois	24 hours upon receipt of data
SRS (EPP)*	72 hours upon receipt of data
Data Escrow	24 hours upon start of SRS operation

*SRS servers ready to accept requests from registrars.

Emergency-Operator Applicants

- Every 5 years will be an RFP for Emergency Operators
- Operators will be selected to be from geographically diverse regions
- Operators must have 3 years of experience with DNS operations
- Operators must have 1 year of experience with Whois and EPP services

Emergency Operator and SRS

During emergency operation an Emergency Operator:

- **Will not** accept billable SRS commands from registrars
- **Will not** do automatic domain expirations
- Will accept the rest of SRS commands
- Will work with all the accredited registrars that already have domains under the gTLD

Emergency-Operator Applicants

- Emergency-Operator applicants will be evaluated using similar processes to those for new-gTLD applicants
- Infrastructure must be operative from the moment of the evaluation

Emergency Operators

- Emergency Operators will be paid a fixed retainer fee while in stand-by ready mode, and an active fee that will vary depending on the size of the operation
- Funding for use of the Emergency-Operator's services during the first five years of the new gTLD will be drawn from the respective reserve fund required of new gTLD registry operators

Emergency Operators

- Emergency Operators will offer a lightweight Registry-Registrar Agreement to all registrars that will cover emergency SRS operation
- An active Emergency Operator will not be eligible to become the definitive successor registry or Back-End operator of the gTLD if there is a Registry Transition

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