IANA Stewardship Transition at the IETF

Jari Arkko, May 19, 2015
IETF

• “Make the Internet work better”

• A standards organisation that works on core Internet technology — TCP/IP, HTTP, VoIP, …

• **Openness** — anyone can participate, much of the work is done over the net

• Decisions based on **community rough consensus**

• Participants are individuals, not organisations
Protocol Parameters

• Some IETF standards need a registry of port numbers and other similar values

• Similar to how, say, IEEE registers their values

• Example: HTTP error codes

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>Bad Request</td>
<td>RFC 7231</td>
</tr>
<tr>
<td>401</td>
<td>Unauthorized</td>
<td>RFC 7235</td>
</tr>
<tr>
<td>402</td>
<td>Payment Required</td>
<td>RFC 7231</td>
</tr>
<tr>
<td>403</td>
<td>Forbidden</td>
<td>RFC 7231</td>
</tr>
<tr>
<td>404</td>
<td>Not Found</td>
<td>RFC 7231</td>
</tr>
</tbody>
</table>

Registries and (some) values are specified in RFCs

Thousands of registries

No direct operational Internet impact — all effects take place through vendors and implementors
IETF and IANA Division of Labour

- **Policy** decisions for these allocations are at the IETF
  - IAB provides **oversight**
  - IETF contracts with the IANA service operator for **implementation** of the registry
  - IANA arrangements have matured over time
  - 35+ years of good experience from the basic setups
How Do IETF and IANA Work Together?

- Agreements specify roles
- Problems within IETF are subject to usual IETF processes
- Problems between IETF and IANA are subject to agreement processes
- Oversight provided by the IAB
- Yearly improvements are made when needs/issues arise
- There is no operational USG involvement, nor has there been
What Is Oversight?

- Ensuring that the arrangements continue to match current needs
- Revision and maintenance of relevant processes and contracts on a periodic basis
- Ensuring that the IETF has an IANA service operator that fulfils the community’s needs
  - And we do, ICANN has served us well
- Acting as a final arbiter in disputes
IANA Stewardship Transition for the Protocol Parameters

- IETF discussions took place at the IANAPLAN working group in 2014, resulting in a proposal (draft-ietf-ianaplan-icg-response)

- After analysis, the IETF community determined that the protocol parameters are best served with the current operational model:
  - No change to roles of organisations
  - No new organisation needed
  - IANA (protocol parameters part) continues to be directed by the IETF community
  - While no change to overall arrangements, some fine-tuning in details
The USG stepping away from its stewardship role over the IANA functions does not affect protocol parameters given their "limited to no" role historically.
Does Anything Change?

- The IETF is a part of the transition discussion because we want the whole system to transition
- While the overall arrangements do not change, some fine-tuning happens in the details, in a manner similar to the yearly updates of IETF-IANA agreements
- See the IETF transition proposal, draft-ietf-ianaplan-icg-response, for the details.
Accountability in the IETF and IANA Relationship

- Daily operations involve discussions at the staff and participant level
- Unresolved policy issues or other conflicts can be brought to the IETF steering group (IESG)
- Existing agreements (RFC 2860) give IAB final say in disputes
- Contract termination could be used to move to a new service provider — we think this is very unlikely, but we are prepared for any eventuality
Accountability at IETF

Oversight of the IETF bodies is important

- Far more so than the oversight of clerical functions

- Nominations committee (Nomcom), appeals, and board recall mechanisms have existed in the IETF for decades

- Nomcom mechanisms make it hard to take over IETF boards
Next Steps

- We are in a good position
- Clear community plan
- Well-working IANA operator, no issues
- Ready to implement when the rest of the system catches up
Advice for Getting to Completion

• Continuity
• Simplicity
• Incremental improvement
• Make a plan, start executing