Internet Assigned Numbers Authority
Monthly Report
January 15, 2009

For the Reporting period of
December 1, 2008 – December 31, 2008

Prepared By: Michelle Cotton
michelle.cotton@icann.org
Date: 15-January-09

Table of Contents

Table of Contents ................................................................................................................. 1
Executive Summary .................................................................................................................. 2
Statistics .................................................................................................................................. 2
IESG approved documents (a) ............................................................................................... 2
Reference Updates (b) .............................................................................................................. 3
Last Calls (c) ............................................................................................................................ 3
Evaluations (d) .......................................................................................................................... 4
Media (MIME) type requests (e, f) .......................................................................................... 4
New Port number requests (g) .................................................................................................. 5
Modification to and/or deletions of Port number requests (h) .............................................. 5
New Private Enterprise Number (PEN) requests (i) .............................................................. 5
Modification to and/or deletions of PEN requests (j) ............................................................ 6
New IANA TRIP ITAD Numbers (k) ...................................................................................... 6
Requests relating to other IETF-created registries for which the request rate is more than five per month (l) .................................................................................................................. 6
Deliverables ............................................................................................................................. 7
Provide publicly accessible, clear and accurate periodic statistics ....................................... 7
Track and publicly report on a monthly basis (monthly report) ............................................ 7
Single points of failure documentation to IETF-IANA Working Group (continual) .......... 8
Review output from RFC Inventory project to complete any incomplete actions – 12 month summary ......................................................................................................................... 8
Conclusions ........................................................................................................................... 9
Executive Summary

This monthly report provides statistical information of IANA operations as they relate to the IETF. Also included are the deliverables for this reporting period in accordance with the SLA between ICANN and the IAOC with the effective date 1 January 2008.

Statistics

As outlined in the IETF–IANA SLA, IANA is tasked with collecting and reporting on IETF-related statistics.

Below you will find the list of statistics as requested by the SLA, a description of what queue’s statistics are being provided to fulfill that deliverable and an analysis of the data for each queue. The actual charts representing the data can be found at http://www.iana.org/reporting-and-stats/index.html.

This month’s statistics were generated through running scripts against a ticketing system log database. The charts were generated using java program using Jfreechart library.

The following types of charts have been defined for each queue for the reporting year 2008:

- Month to month comparison histogram of requests created/closed/open
- Month to month comparison histogram of age groups of closed tickets
- This month’s absolute age of closed requests
- Month to month comparison histogram of age groups of open tickets
- This month’s absolute age and current state of open requests
- Month to month comparison of mean, median and standard deviation for processing times of closed tickets
- Histogram for cumulative IETF requests for created/closed/resolved at the end of the reporting period and the year to date.

IESG approved documents (a)

Requests in the “drafts-approval” queue begin at the time IANA receives a notification of an approval or intent to publish a document and end when the RFC-Editor has acknowledged receipt of the notification of completed actions by IANA.

DRAFTS-APPROVAL QUEUE

IANA completed a total of 32 requests for the month of December (12 of which were NO IC). 69% of the total requests (including documents with NO IC) were completed within the goal of 14 IANA days or less. One document had 37 IANA days due to needing considerable time to perform the actions as there were 15 new registries to be created. Another document, which had 35 IANA processing days was later determined to be
waiting on an approval of another document. The remaining 8 documents took between 16 and 25 IANA days due to the influx of approvals received in the queue.

As of the last day of December, there were 14 requests open. Five requests remain on hold and are waiting for other documents before the actions can be performed. Three of the 9 remaining documents being processed (not on hold) have total IANA days of more than 14 as of the end of the month. The other 5 requests were being processed as normal.

**Reference Updates (b)**

The requests in the “drafts-update-refs” queue begins at the time the RFC-Editor notifies IANA of the RFC number assigned to a document that had actions performed by IANA and ends with IANA updating all references to the document in IANA registries.

**DRAFSTS-UPDATE-REFS QUEUE**

IANA completed a total of 6 requests for the month of December. 100% of the requests were completed within the 7 IANA day goal range. The highest total processing days for these requests was 1 day. As of the end of the month, there was 1 open request. This request had been open for 22 days and is waiting on a response from the RFC-Editor. There were changes in Authors 48 hours that might have an affect on the IANA actions, therefore this document remained open in the queue.

**Last Calls (c)**

Requests begin at the time IANA receives a notification of Last Call from the IESG and ends with IANA submitting official comments to the IESG. Each request in the statistics represents a separate/individual Last Call, even if the Last Call is being repeated.

**DRAFSTS-LASTCALL QUEUE**

A total of 44 requests were completed for the month of December. 70% of the requests were completed within their time goals (breakdown below). Of the 28 requests that did not meet the processing goal times as outlined in the SLA, 4 requests were completed for the Last Call due date and 5 were 1 day late. For the remaining 4 requests that were not completed within the processing goals, they were 7 days late possibly due to the large amount of time allotted for reading the document and the due date being on an observed holiday.

<table>
<thead>
<tr>
<th>Last Call Time Frame</th>
<th>Total Requests</th>
<th>Completed on time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 weeks</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td>3 weeks</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3 weeks + 2 days</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4 weeks</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>4 weeks + 3 days</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9 weeks + 2 days</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>
As of the end of the month there were 9 open requests. Most all of the open requests were still within the goal times and were following normal processing. Two requests had reached their due dates and were submitted after the holiday break.

**Evaluations (d)**

Requests begin at the time IANA receives a notification of Evaluation from the IESG and ends with IANA submitting official comments to the IESG. Each request in the statistics represents a separate/individual Evaluation, even if the Evaluation is being repeated.

**DRAFTS-EVALUATION QUEUE**

A total of 33 requests were completed in the month of December. 61% of the requests had IANA days of 7 or less. The IANA days do not include the time that the document is waiting for Last Call to finish. There were 8 requests that had totals of 8 IANA days. The remaining 5 requests had IANA days of more than 8. These delays were partly due to some staffing issues and an influx in some of the IETF related queues.

As of the last day of the month there were 7 open requests. Four of the 7 requests has higher IANA processing days. The remaining requests were being processed as normal.

**Media (MIME) type requests (e, f)**

IANA receives requests for registration of new Media types. Also received, but rarely, are modification and deletion requests for Media types. All of these are processed in the “iana-mime” queue. These requests begin with the receipt of an application for (or modification/deletion of a Media type and end with the request being resolved with a successful registration, removal or modification. In some cases the requests are closed due to withdrawal of the request by the requester or via administrative closure, typically due to lack of response from the requester. We understand that MIME Media types are currently referred to as just “Media Types”. The queue “iana-mime” however, was named prior to this change.

**IANA-MIME QUEUE**

A total of 8 requests were closed in the month of December. 100% of the requests had IANA days of 14 or less. One request had a total processing time of 89 days due to larger period of times with both the expert and requester.

At the end of the month, there were a total of 19 open requests. Sixteen of those requests were waiting on the expert to review the request. The other 3 requests were waiting on the requester for a response. The maximum number of days any of these requests had been in IANA time as of the end of the month was 8 days.
New Port number requests (g)

IANA receives requests for assignment of new user port numbers. These requests are processed in the “iana-ports” queue. Port requests begin with the receipt of an application for a user port number and end with the request being resolved with a successful registration, withdrawn by the requester, or administratively closed.

IANA-PORTS QUEUE

There were a total of 26 requests closed in the month of December. 100% of those requests were processed with an IANA time within the 14-day goal. There were 2 requests with a total processing time of 210 and 188 days. One request had additional clarification and internal processing while the other was rejected after multiple communications with the requester.

As of the end of the month there were 26 requests that were open. All of these requests had IANA days of 6 or less and all but 3 were waiting on the expert or requester.

Modification to and/or deletions of Port number requests (h)

PORT-MODIFICATION QUEUE

IANA receives requests for modification of existing port numbers. Also received, but are rare, are deletion requests. Both of these are processed in the “port-modifications” queue. These requests begin with the receipt of a modification (or deletion) request and end with the request being resolved with a successful modification (or removal) or closed due to withdrawal or administrative closure.

During this reporting period, there were a total of 32 closed requests. 97% of these requests were completed within the goal processing time of 7 IANA days or less. The total days for all these requests was not more than 23 days. One request had total IANA days of 10 due to numerous communications between IANA and the requester. There were 14 requests that were considered spam and resolved in the port modification queue. Normally these types of requests would be removed from the queue however because when the initially arrived they appeared to be real requests, they were resolved in the queue after careful review.

At the end of December, there were 2 requests open at the end of the month. Both requests had IANA days of 1 and were waiting for a response from the requester.

New Private Enterprise Number (PEN) requests (i)

All PEN (Private Enterprise Numbers) type requests are processed in an automated program that does not go through IANA’s ticketing system. The tool includes new, modification and deletion requests. The tool does not yet produce statistics similar to what is available for the other protocol parameter queues. Raw data shows that 177 new PENs were assigned in December 2008.
Modification to and/or deletions of PEN requests (j)
Modifications and/or deletions of PENs occur in a separate tool in which the statistics production is not yet available. More information can be found above in the “New Private Enterprise Number (PEN) requests” section. Raw data shows that 18 existing PENs were modified in December 2008.

New IANA TRIP ITAD Numbers (k)
IANA receives requests for assignment of new TRIP ITAD numbers. These requests are processed in the “iana-trip” queue. Requests begin with the receipt of an application for a TRIP ITAD number and end with the request being resolved with a successful registration, withdrawn by the requester, or administratively closed.

IANA-TRIP QUEUE
There were a total of 26 IANA-TRIP requests closed in the month of December. 42% of the closed requests had an IANA time of 7 days or less. There were 15 requests that had IANA processing days of 8 or more. These delays were due to some staffing issues that have since been resolved. The total times for these requests did not exceed 3 weeks. As of the last day of December, there were 2 requests that remained open and were being processed as normal.

Requests relating to other IETF-created registries for which the request rate is more than five per month (l)
For those registries where there are more than 5 requests per month, IANA creates a separate queue for tracking those tickets.

IANA-MULTICAST QUEUE
There were 3 multicast request closed during the month of December. All three requests were processed within the IANA time of 14 days or less. Two requests had total processing times of 39 and 42 days, both due to long review periods with the expert.

As of the end of the month there were 3 open requests. All three were being processed as normal and had no more than 3 IANA days as of the end of the month.

IANA-PROT-PARAM QUEUE
Note: The IANA-PROT-PARAM queue is for all the miscellaneous requests that are not processed in a separate queue due to the lack of volume for any one type of request. These requests can be first-come first-served, expert review, IESG approval or another review method. In the SLA, processing goals are determined on the type of request. However, for this queue there is no separation of request type.
There were 5 requests closed during the month of December. 100% of the requests were processed within the appropriate IANA time goals (see breakdown below). The highest total number of processing days for these requests was 7 days.

<table>
<thead>
<tr>
<th>Request Type</th>
<th>Number of Requests</th>
<th>IANA goal time</th>
<th>Requests completed within goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Come First Serve</td>
<td>5</td>
<td>7 days or less</td>
<td>5</td>
</tr>
</tbody>
</table>

There were 19 requests open as of the end of the month. Eleven of these requests were waiting on the expert or requester to respond. Seven requests had total days of 83 or more. For those tickets where the parameter requested is not clear, IANA is working towards trying to resolve the issues with the appropriate parties as soon as possible. Of the total amount of open requests, only 5 had IANA days of more than 14 as of the end of the month. IANA will be working expeditiously to resolve these requests in the new year.

**Deliverables**

In accordance with the SLA, the IANA is reporting on the following deliverables due within twelve (12) months of implementation of the agreement for the reporting year 2008:

1) Provide publicly accessible, clear and accurate periodic statistics (continual)
2) Track and publicly report on a monthly basis (monthly report - continual)
3) Single points of failure documentation to IETF-IANA Working Group (continual)

*Provide publicly accessible, clear and accurate periodic statistics*

See “Statistics” section of this report and also http://www.iana.org/reporting-and-stats/index.html.

*Track and publicly report on a monthly basis (monthly report)*

The SLA describes 3 items IANA will provide monthly reports. These items are outlined below along with a description of actions taken for each.

a. Resource allocation statistics as described in SLA item 18

In item 18 of the SLA, there is a detailed list of statistics to be produced for the monthly report. The agreed upon partial statistics are found in the “Statistics” section of this report.

b. The utilization of all identified finite resources defined within ICANN/IANA registries
The IANA is undertaking a project to review all registries to identify those that are finite and additionally those that are in danger of being exhausted. As of the end of this reporting period, no registries have been identified as being in danger of exhaustion. IANA will continue to report findings in future monthly reports.

c. Efforts that have addressed single points of failure/expertise (see item 3 in the SLA)

**Single points of failure documentation to IETF-IANA Working Group (continual)**

In conjunction with the monthly report, the IANA submits a separate document to the IETF-IANA Group documenting what steps have taken place to examine all known single-points of failure related to the IETF work. For those known single-points of failure, IANA will describe what actions were taken to correct where the point existed or what plan has been put in place for future resolution. During this reporting period, no single-point of failure was identified.

**Review output from RFC Inventory project to complete any incomplete actions – 12 month summary**

During 2007, IANA reviewed RFCs 1-4500 and gathered data about any IANA actions that were not completed through publication. Incomplete actions included typos, reference updates, to missing registries. As part of the deliverables for the 2008 SLA, data output for 1500 RFCs was reviewed and proposed actions were categorized. Part of the deliverable included having the actions completed or communications to clarify the proposed actions initiated.

IANA provided a 3-month status update in the April 15, 2008 report on the progress of the project and a 6-month status update in the July 15, 2008 report. An extension was requested and granted to move the 9-month deliverable to 12 months. This is the summary of the complete deliverable.

During the first 6 months of 2008 (January-June), IANA reviewed the results of the data for all of blocks of RFCs and created action tickets to perform the incomplete actions or modifications. A total of 427 tickets have been created for the project. See breakdown below:
To better understand the types of additions/modifications that are proposed by the reviews of the RFCs, IANA categorized the types of changes requested in each ticket. It is possible for a ticket to have more than one type of change. See below for the results:

<table>
<thead>
<tr>
<th>Type of Change</th>
<th>Total Tickets created for RFC-Inventory Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Registry</td>
<td>91</td>
</tr>
<tr>
<td>Matrix Update</td>
<td>69</td>
</tr>
<tr>
<td>Reference Update</td>
<td>152</td>
</tr>
<tr>
<td>Registration Procedures</td>
<td>31</td>
</tr>
<tr>
<td>Typo Fix</td>
<td>15</td>
</tr>
<tr>
<td>Update existing registry</td>
<td>73</td>
</tr>
<tr>
<td>Other (not part of above categories)</td>
<td>76</td>
</tr>
<tr>
<td>TOTAL TICKETS</td>
<td>427</td>
</tr>
</tbody>
</table>

As of the end of December, all communications had been initiated for all tickets having further questions. IANA has completed actions for 82 tickets and are still in progress for the remaining 345 tickets. Currently those tickets are either waiting for a response from an expert or other person where IANA has requested advice on the proposed action or the appropriate persons have responded and IANA needs to complete the action and/or resolve the ticket. It is possible that the proposed actions in the ticket do not get fulfilled after an expert concludes that they are not appropriate or not needed.

A revised deliverable schedule for completing the work items has been proposed for the next SLA period for 2009. A status report on outstanding and completed work will be provided in the 3-month report for 2009.

**Conclusions**

December 2008 was the most challenging month for IETF related queues. This was partly due to an influx in tickets with large amounts of IANA actions, staffing issues and the holiday season. IANA met processing goals for 6 of 10 queues for this reporting period. Additional time will be spent on getting through backlog and bringing the queues up to their normal processing times.