Service Levels for Root Zone Management

APTLD Dubai, June 2007

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Agenda

- What brought this on?
- What do we measure?
- What are our obligations today?
- What are the caveats?
- An approach

What brought this on?

- One ccTLD asked for specific service levels prescribed in their accountability framework with ICANN
- ICANN believes it is not appropriate to have differentiated service levels on a TLD-to-TLD basis, instead there should be one agreed by the whole community.
- IANA has been approached by APTLD and CENTR to talk about possible service level agreements

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What do we measure?

- IANA maintains all root zone related requests in a ticketing system:
  - “root-mgmt” queue for Root Zone Change Requests
  - “questions” queue for questions on process (shared with other tasks)
- Statistics generated from root-mgmt queue:
  - Time/duration of tickets
  - Class of ticket
  - Time divided into IANA time, third party time, DOC time and Verisign time

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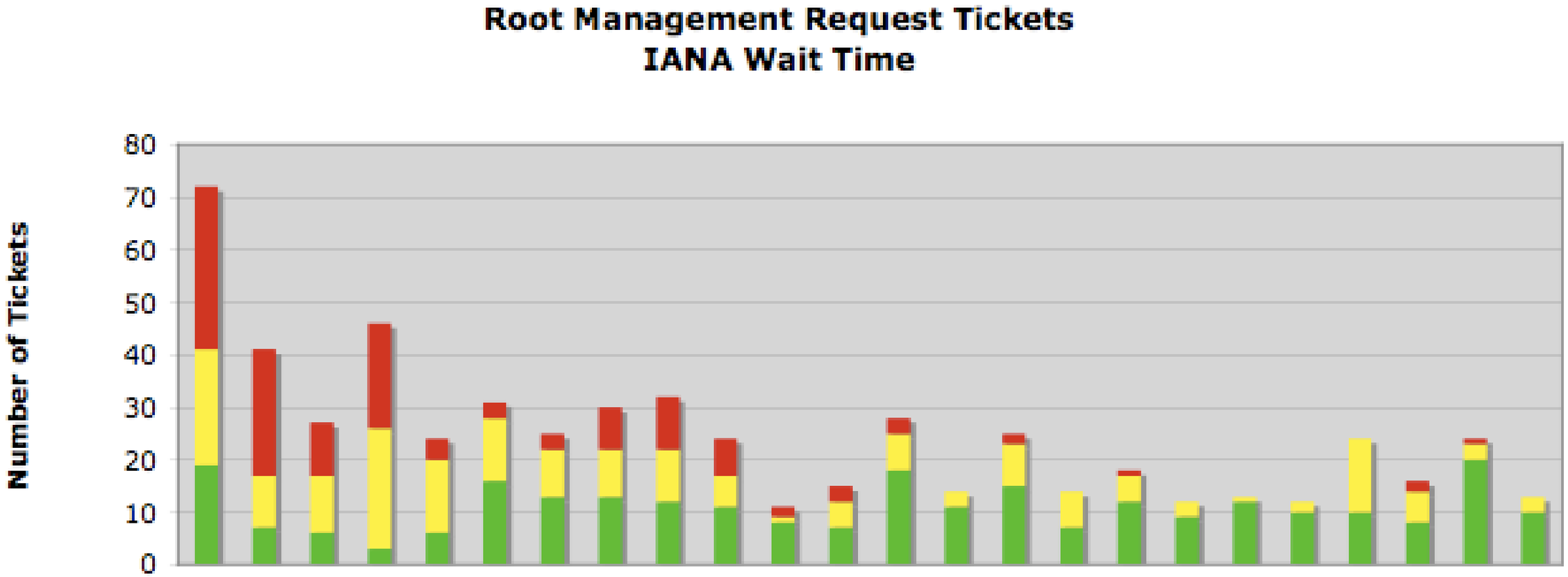

	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07
>30 days	31	24	10	20	4	3	3	8	10	7	2	3	3	0	2	0	1	0	0	0	0	2	1	0
7-30 days	22	10	11	23	14	12	9	9	10	6	1	5	7	3	8	7	5	3	1	2	14	6	3	3
0-7 days	19	7	6	3	6	16	13	13	12	11	8	7	18	11	15	7	12	9	12	10	10	8	20	10

RZM Performance (1)

- Red tickets do not meet current timeframe requirements

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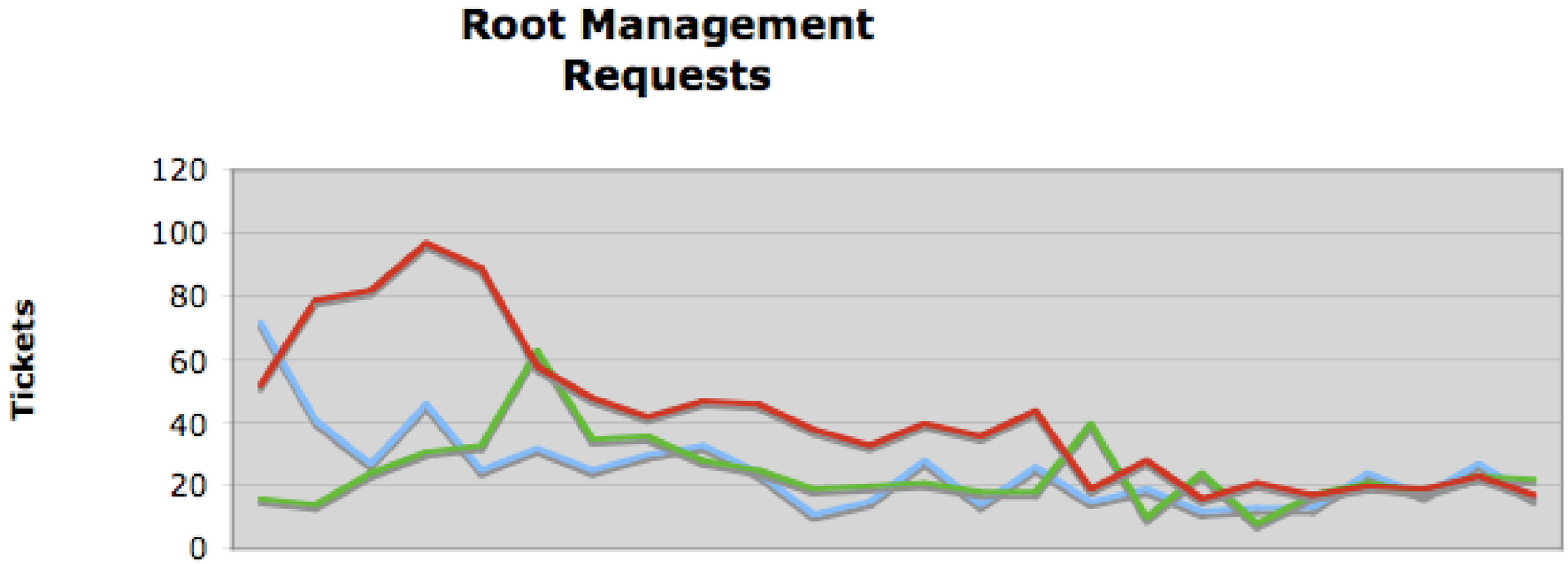

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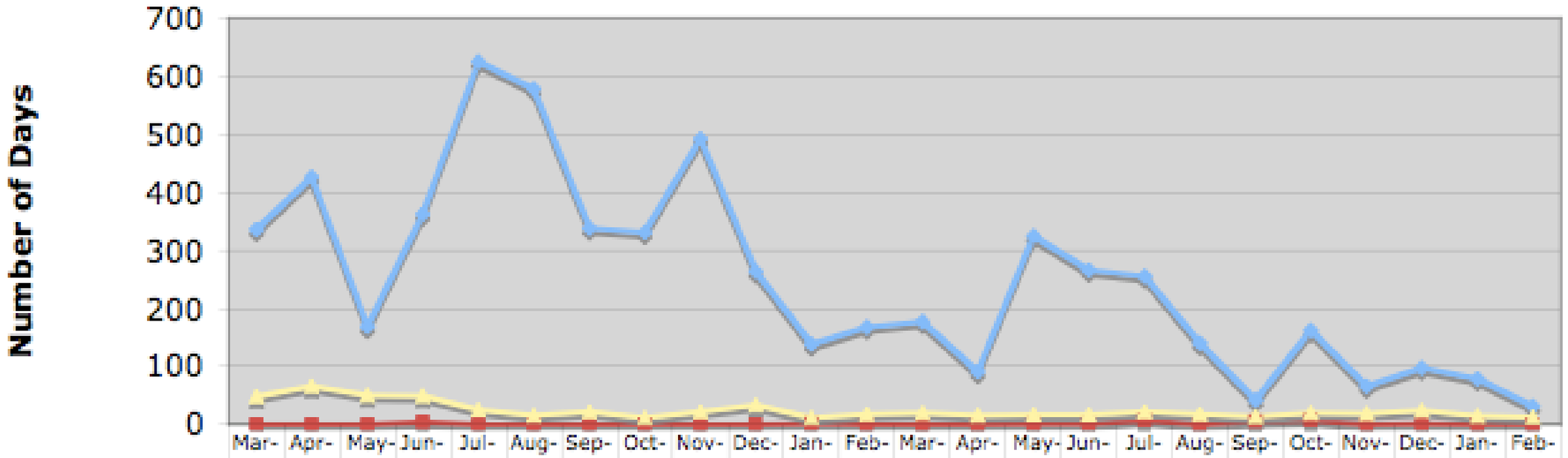
Created	72	41	27	46	25	32	25	30	33	24	11	15	28	14	26	15	19	12	13	13	24	17	27	16
Closed	16	14	24	31	33	63	35	36	28	25	19	20	21	18	18	40	10	24	8	17	21	18	23	22
Enqueued	52	79	82	97	89	58	48	42	47	46	38	33	40	36	44	19	28	16	21	17	20	19	23	17

RZM Performance (2)

- Average pending queue (red) trending down
- Reached “steady state”

Root Management Requests
Total Processing Time



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Maximum	335	426	169	362	625	578	338	330	491	264	138	167	177	91.4	325	266	256	140	42	162	66.2	96.9	78.8	31.9
Minimum	0.01	0.12	0	4.2	0.01	0.06	0.28	0.45	0.41	0.05	0.74	0.05	0.01	0.24	1.2	0.87	7.12	0.19	4.87	7.1	0.26	1.34	0.01	0.01
Median	48.3	66.3	49.8	49	25.6	15.5	21.9	11.6	22.3	33.9	11.4	17.9	19.6	15.4	16.8	16.3	22.5	17.3	14.1	19.4	18.8	23.8	14.7	12.1

Number of Requests

RZM Performance (3)

- Long requests trending down

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What are IANA's obligations already? (1 of 5)

- Within three business days of date of receipt (which is measured from a business day between 9am and 5pm US Pacific Time) IANA must send a confirmation of receipt of a request and a transaction number to the requestor

What are IANA's obligations already? (2 of 5)

- After issuance of a receipt confirmation, IANA will determine if the requestor has provided all information necessary to complete the request, if not, within seven calendar days issue a notice of deficiency to the Requestor.

What are IANA's obligations already? (3 of 5)

- If a Requestor fails to cure any deficiency in its request within fourteen calendar days, IANA will close the request.

What are IANA's obligations already? (4 of 5)

- Once a request is deemed "complete", Requestor is provided with seven calendar days to confirm changes. If not received, a reminder is sent an an additional seven calendar days is provided, after which the request is closed.

- If after closure, the requestor confirms the ticket within thirty calendar days, the request should be re-opened.

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What are IANA's obligations already? (5 of 5)

- After confirmations are received, IANA has thirty calendar days to complete a request.
- IANA reports explicitly on each breach to the Department of Commerce in its monthly report.

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The reality

- IANA is far more lenient on requestors than these stipulations
  - IANA provides many months for some requests to have deficiencies cured (particularly redelegations) when there appears to be forward progress toward fulfilling the task.
  - IANA issues a “notice of administrative closure” giving 30 calendar days for the applicant to cure all deficiencies before administrative closure, in cases where the request appears to not be progressing to resolution.
  - Note that these closures are without prejudice - applicant may submit a new template at any time when they are ready, and the process begins again.

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What are the caveats?

- IANA does not control most of the delays in a root zone change request
  - Internal delays essentially resolved through thorough process reviews in 2005-2006. Minor additional IANA human delays will be reduced by pending automation software.
- IANA has little control over the process currently conducted
  - Accreted through years of precedent, ccTLD expectations, contracts (i.e. IANA contract, VRSN-DOC contract)
- Differing levels of sophistication between first-world and third-world operators (i.e. expectation of completeness)
- Anything deviating from straightforward routine requests can cause substantial delays
  - Redelegations, change of contact, etc.

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A possible approach

- Set a suitable advisory benchmark as a starting point
  - e.g. mean time to perform requests, or current DOC benchmark
- Perform periodic reviews (say, every 1-2 years):
  - Analyse data over the performance period
  - Collaborate on what key issues explain deviation
  - Identify on whether to alter the benchmark
- Identify what level of “bindingness” this benchmark has
  - Anything more than informative likely needs to involve ccNSO more formally

Where to from here?

- We want to hear what you need:
  - What performance of IANA is important to you? What is IANA not succeeding in today?
  - SLAs work both ways - what time frames should be incumbent on requestors and other actors?
  - How would you like this procedure to move forward?
- IANA is happy to have logical metrics for performance

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Thank you for your attention!

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