OWG Summary 2011-09-27

Present: Matt Amos, Andy Allan, Tom Hughes, Jon Burgess, Grant Slater
Apologies: Emilie Laffray

From previous meeting:

- Andy has written the tileserver hosting “credible plan” and has shared it with OWG.
  To be put on OSM wiki. Grant to finish off hardware requirements & software setup for
  the “hosted” part of it.
- Old hardware at UCL is still there and still needs throwing away / returning to Nick Hill.
  Grant/Andy to make a delivery to Nick’s house w/ StreetCar.
- GPX dumper - nothing new. Matt to have a look at it.
- Nominatim - need to kick Brian to get this working again / find other maintainer /
  repurpose the hardware.
- OWL - new hardware installed. Need to kick Matt to move the dev instance to zark.
- jXAPI - running on azure. But needs better hardware (reclaim poldi?).
- Redundancy: Quotes from viglen: Intel £10.5k (12 cores, 96GB), AMD £12.5k (16 cores,
  128GB). both with 13x600GB 15k SAS disks. Alternative supplier of the latter at £11.5k
  (and with 6Gb/s SAS backplane). (remember + £1220/yr in IC hosting). Send to Mgmt
  Ctte. The options are:
    a. Do nothing and run the risk of 3-4 weeks of downtime if smaug fails
       catastrophically. Zero cost.
    b. New machine (AMD above) with 128GB RAM, 17x SAS2 600GB disks: £13,183.
    c. As above, but minimal useful config: 64GB RAM, 11x SAS2 600GB disks:
       £10,152.
    d. As above, but SSDs for moar speed: 64GB RAM, 13x SSD 600GB disks:
       £18,796.
- Smaug’s disk utilisation is still very high, only being below 100% for a few hours each
  night. Best option is to swap with new machine above after new machine is settled in
  (RAM too expensive otherwise).
- Puff/fuchur replaced with new G4p machines (fiddlestick/soup), and will be recovered
  back to UCL Friday.
- Grant now has 24TB (raw) backup space. Should be enough for the near future.

New stuff

- Yevaud currently at 93% tile utilization (at about 1% increase per week). So Jon will have
  to start purging some stuff. No point expanding the hardware - reckon there’s 20% to be
  claimed easily. Purge rate is not yet high enough to warrant increasing hardware.
- Need operations@osmf mailing list with sysadmins@osmf as a backward-compatible alias. Grant to set up. admins@osm.org to stay as-is with munin alerts, etc... Update wiki to reflect.
- Float a 15k donation drive at the next Mgmt Ctte - we have a definite goal (new DB backup machine) to aim for.
- Need GigE switch for IC - Grant to ask what’s laying around at IC.
- Still need RA/VPN access to IC. Grant has sent emails, needs to follow up. Andy will help out.
- Flows! Unique (src IP, src port, dst IP, dst port) near-concurrent connections too high at both UCL and IC. Mitigations:
  - Moving all tile traffic to IC (helps UCL)
  - IC <-> UCL tunnel
  - Persistent connections with Squid to client (might be already enabled) & upstream (is it possible?)
  - External (.ru, .us, etc...) caches => Grant to sort out squid configs. GeoDNS + DNS updates on failure (pDNS) => Tom.
  - Can we identify legitimate / non-legitimate traffic? (iptables log / conntrackd)
    [update: looks like ~4% of flows are from tile scrapers]

### Priority-Immediacy matrix

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<thead>
<tr>
<th></th>
<th>High priority</th>
<th>Medium priority</th>
<th>Low priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urgent (now)</td>
<td>DB replica (£11-19k)</td>
<td></td>
<td>Fold-away monitor</td>
</tr>
<tr>
<td>Planned (&lt;6mo)</td>
<td></td>
<td>GigE switch (£850)</td>
<td></td>
</tr>
<tr>
<td>Future (6-18mo)</td>
<td></td>
<td>New XAPI machine (£7k)</td>
<td></td>
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