OWG Summary 2013-02-26

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

From previous meeting:

- Some hardware (no longer at UCL) needs returning to Nick Hill. Grant/Andy to make a delivery to Nick's house w/ StreetCar. [still no response from Nick Hill, Grant to poke again.]
- Still need RA/VPN access to IC. Grant has sent emails, needs to follow up. Andy will help out. [still pending, low priority]
- What happens to smaug?
  - Needs setting up as a Postgres 9.1 replicated mirror [Action: TomH, DONE]
  - CGImap needs to support the readonly backend [Action: Matt, pending]
  - Running out of disk space - 90% used.
    - i. replace 450GB disks with 600GB disks x 17 = £4,250
    - ii. totally new machine - £13,200 + VAT.
    - iii. move to RAID6? ← try this first.
- Ramoth:
  - Ramoth disk utilisation is 100% (almost all reads), but there is still capacity left (just with more than one writer). May need to consider expansion plans in the next 6mo.
  - Need to upgrade firmware for RAID controller & RAM upgrade (double to 256GB). Temporary failure on OS disk has "consumed" the hot-spare and needs to be reset. Also add a second hot-spare. Need schedule some downtime for this. [Action: Grant, will be next Friday (8th)]
- Yevaud
  - We (still) could do with finding a proxy server in North America. Ian Dees has proposed a site / pair of machines, but they're pretty limited. Also, OSUOSL has space + bandwidth, but lacking hardware (we'd have to buy - £4k guess).
  - We could do with finding proxy server hardware in Asia Pacific, too.
  - 3 new caches: Pau (France), Amsterdam & Oslo. We're currently pretty flush with EU-based tile caches.
  - Plan:
    - i. Get more cache servers (reach out for donors)
    - ii. Stop using Orm as a cache.
    - iii. Upgrade Orm so that it can be a renderer - SSD disks, RAM?
    - iv. Chef-up Orm & Yevaud.
    - v. Switch to Orm as rendering primary.
    - vi. Re-image Yevaud + second SSD.

- Spike-02 replaced with another machine.
- Smaug now running as a replica, but currently unused. Software to use it is under development. Following, will replace smaug with bigger h/w.
- More backup space for off-site backups.
- New machine for wiki [Got machine, install on 8th, £1.3k]
- Upgrade / replacement for munin machine? [Done, now on a DL360G5]

New Stuff

- UCL - building will be closed over the summer. We use ~22U of rack space. Options:
  - Move hardware to different UCL building under same management, which has been graciously offered.
  - Move hardware to a server room sans carpet at UCL - need to find out if such a thing even exists. Ask Muki.
  - Move hardware to IC (+£5k/yr).
- Zoom 19 tiles: seems possible. Might be small style issues. Would be nice to have, so go for it.
- Poldi / Nominatim - update SSDs to RAID1 - need a second SSD.
- Horntail needs replacing:
  - £9,900 w/ lots of disk. or re-use smaug hardware w/ different disks.

Priority-Immediacy matrix

	High priority	Medium priority	Low priority
Urgent (now)	* Upgrade Orm disks + ram (£2.7k) * Ramoth RAM (£877) [DONE]	* Spike-02 replacement (£350) [DONE]	
Planned (<6mo)	* DB replica (£17.5k) * Second SSD for Yevaud (£350) * Another cache server (£0 - donation?) * Replacement for horntail (£10k).	* GigE switch (£850) * new wiki machine (£1.3k) [DONE] * Second SSD for Poldi (£350)	* NA tile cache (£4k)
Future (6-18mo)			* Routing machines (2x £7.5k)