

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 vigen: 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 / contrackd) [update: looks like ~4% of flows are from tile scrapers]

Priority-Immediacy matrix

	High priority	Medium priority	Low priority
Urgent (now)	DB replica (£11-19k)		Fold-away monitor
Planned (<6mo)		GigE switch (£850)	
Future (6-18mo)		New XAPI machine (£7k)	