

PostgreSQL.org

The hidden parts

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Magnus Hagander

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 - Principal database consultant
- PostgreSQL
 - Core Team member
 - Committer
 - PostgreSQL Europe
 - PGinfra

PGInfra

aka postgresql.org

Team

- 7 people
- 6 companies
- 0 hours

How?

- Automation
- Platform conformity
 - Debian
 - Enforced/tracked config
- Avoid exceptions

Services

- www.postgresql.org
- git (x 2)
- Downloads
- Mailing lists + archives
- Wiki
- Buildfarm
- Commitfests

Services

- Release building (source, apt, yum)
- Redmine
- Coverage and Coverity
- Conference systems
 - 5 different orgs
- Internal list archives
- Planet
- Email delivery and hosting
- DNS...

Self-hosting

- Why not just use a service provider?

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 - ~~Sourceforge~~

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 - GitHub

Self-hosting

- Why not just use a service provider?
 - ~~Sourceforge~~
 - GitHub
 - etc etc

Self-hosting

- Maintain control
 - For good or for bad
- More predictable availability
 - Data ownership
- End-user service!
 - Access from embargoed countries

pginfra in numbers

pginfra in numbers

- 13 servers
- Across 4 hosting companies
 - And 5 datacenters
- 1 IaaS cloud
- Total 67 VMs
- And some services

pginfrac in numbers

Well...

pginfra in numbers

- ~~13~~ 9 servers
- Across ~~4~~ 3 hosting companies
 - And ~~5~~ 4 datacenters
- 1 IaaS cloud
- Total 64 VMs
- And some services

www.postgresql.org

- 3 frontend servers (Varnish)
- 1 backend server (Nginx)
- 1 PostgreSQL server (PostgreSQL 15...)

www.postgresql.org

- 80-100 hits / second
- About 150Mbit / second average
 - Short peaks about 700Mbit
- Hit ratio 85-99%
- Approx 275,000 active unique URLs

www.postgresql.org

Guru Meditation (503)

- When frontend can't reach backend
- Different datacenters!
 - Salzburg (+master)
 - Oslo
 - (somewhere in)Texas

ftp.postgresql.org

- AKA download.postgresql.org (RPMs)
- AKA apt.postgresql.org (DEBs)

ftp.postgresql.org

- Used to be 4 machines
- Now 2 machines + Fastly CDN

ftp.postgresql.org

- Approx 66 million hits / day (750 / sec)
 - 16M apt, 47M yum
- Approx 10TB per day
 - 2TB apt, 1TB yum

buildfarm.postgresql.org

- 5 hits / sec

buildfarm.postgresql.org

- 5 hits / sec
- Avg 33Mbit/sec

What about Postgres

What about Postgres

- 32 instances
- Only 7 avg > 1 xact / sec
 - Website 3 xact / sec
 - Wiki: 30 xact / sec
 - List archives: 55 xact / sec
 - List server: 3 xact / sec but peaks 800+

What about Postgres

- 32 instances
- Only 3 > 10Gb
 - List archives: 18GB
 - Buildfarm: 1.8TB
 - Buildfarm archive: 15TB

Painpoints

Painpoints

- "Enterprise" hardware
- One Cisco ASA, in front of one DC
- Weekly (at least) reboots
- Currently being replaced

Painpoints

- Mediawiki....

Painpoints

- Redmine....

Painpoints

- AI bots
 - Especially wiki, gitweb, cvsweb

Contributions

Hosting

- We'd like one more DC again
- Dedicated hardware
- Unmetered bandwidth
- ipv4 + ipv6 native

Can you run X?

Can you run X?

- "Maybe?"

Can you run X?

- Properly maintained stable versions
- Reasonably packaged
 - Preferably Debian
 - Some exceptions
- (Mostly) automated patching

Can you run it?

- Long-term "ownership"
- Avoiding abandonment

Questions?

Thank you!

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