The postgresql.org infrastructure
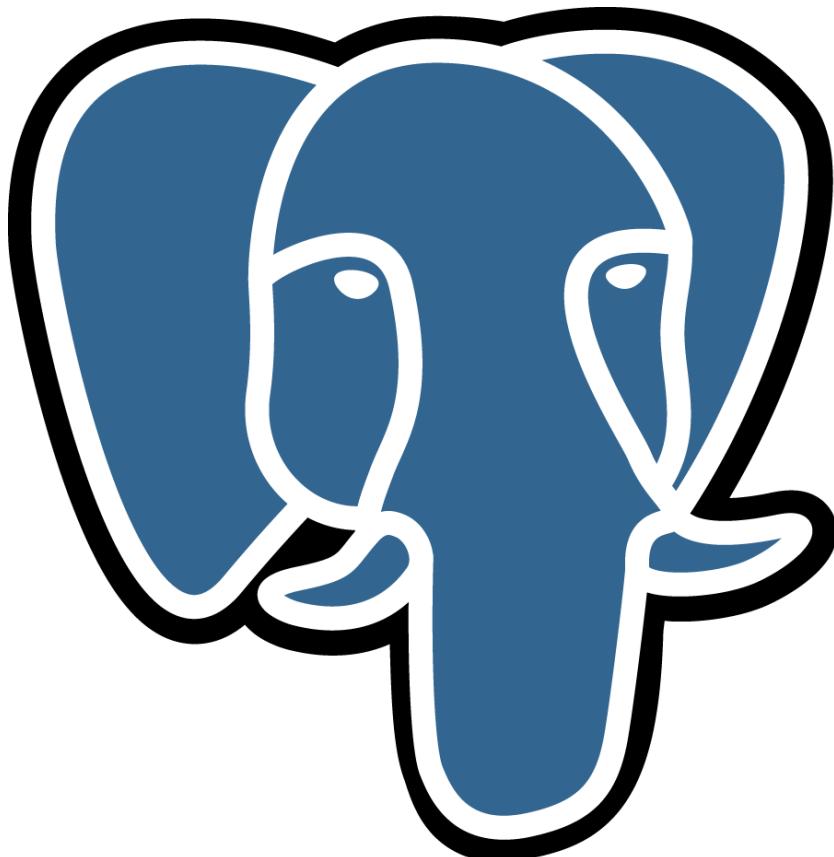
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FOSDEM 2008 - Brussels, Belgium

Agenda

- Infrastructure ?

- Facts and figures

- Website

- Operations

- Future plans and ideas

A marketing problem?

-sysadmins is like -core it's just that -core is doing their "secret stuff" in public ...

... -core is listed on the website but figuring out who is the sysadmin team and how to contact them is way more difficult

German core member on IRC

The need for Infrastructure

- infrastructure ?
  - cvs, website and lists – there is something else ?
- services
  - pugs, pgfoundry,wwwmaster, developer wiki
  - techdocs, anoncvs, git, dns, monitoring
  - web and ftp-mirrors, ftp-master
  - archives, pmt, jabber, pgweb
  - development hosts

Who ?

- pgfoundry team (gforge, project approval)

- web team (website and related services)

- sysadmin team (servers, maintenance, monitoring)

Agenda

- Infrastructure ?
- **Facts and figures**
- Website
- Operations
- Future plans and ideas

Facts and Figures

- ~50 monitored hosts (~50% fully community managed)

- 320 monitored services

- FreeBSD, Debian, Ubuntu, Slackware, CentOS, Redhat Enterprise Linux

- Austria, Canada, France, Israel, Panama, Sweden, USA

Facts and Figures
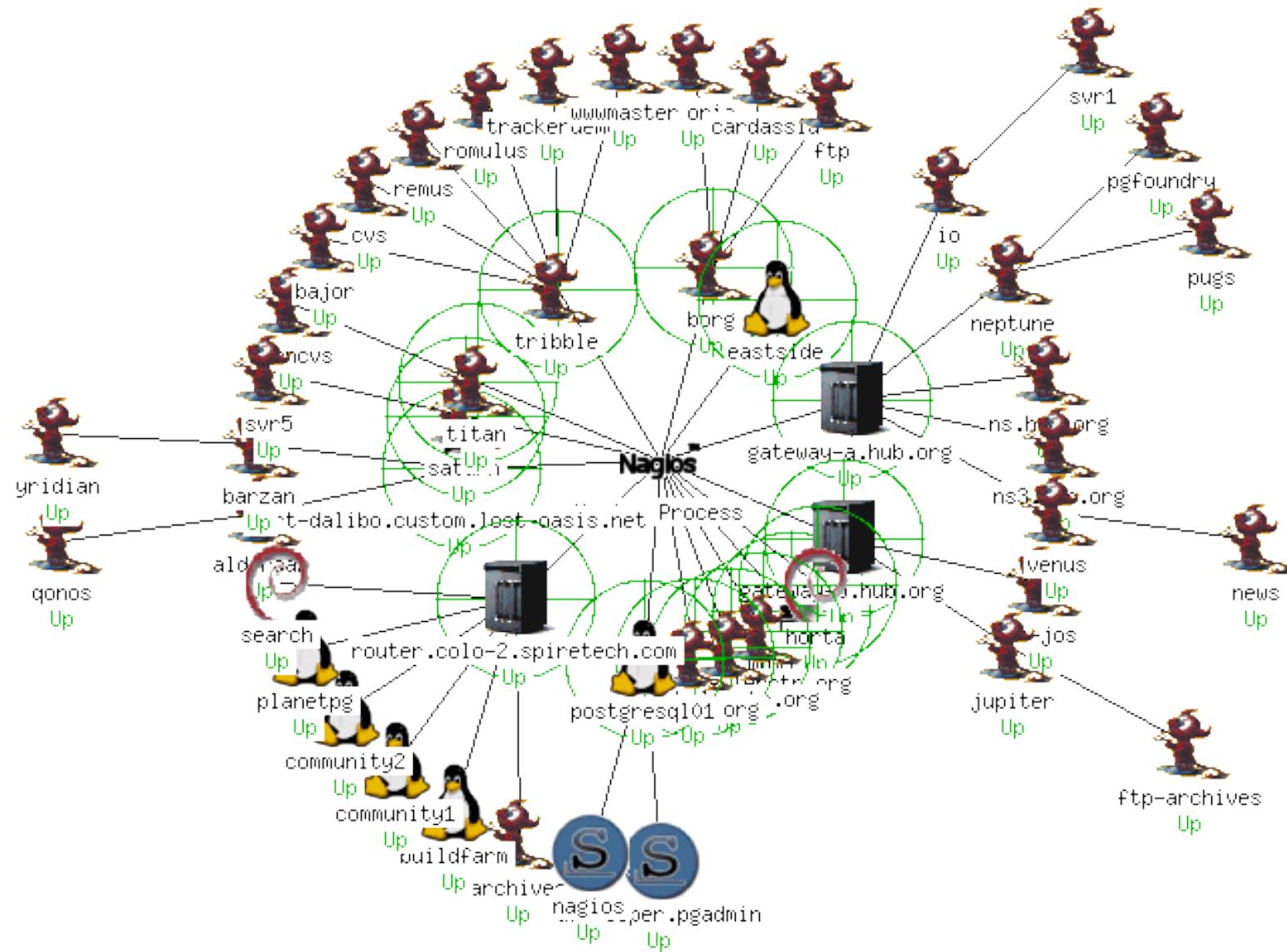
Agenda

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- **Website**

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The website

- http://www.postgresql.org - static and distributed

- http://wwwmaster.postgresql.org - dynamic master

- Subversion repository <10 active commiters

- PHP with PostgreSQL backend

- Hourly generation of static copy and replication

- Interface for news, events, feature matrix, doc comments

The website - problems

- Propagation/synchronization delay

- Release coordination

- PHP/HTML and subversion knowledge required

- Source layout and code hard to understand

- Distributed nature makes for harder debugging

The website - advantages

- robust & reliable

- very low requirements for mirrors (serve static HTML files and you are qualified)

- hosts can be added/removed very quickly

- fast

- scalable

Agenda

- Infrastructure

- Facts and figures

- Website

- **Operations**

- Future plans and ideas

Operations

- Nagios based Monitoring

- Smokeping latency tracking

- Munin graphing

- Trac install for configuration changes, (internal) tickets

- Coordination through IM and Mailinglists

Operations

- FreeBSD jails

- 2-8 jails/host (dedicated hosts)

- Nagios + NRPE

- Munin/smokeping

- custom developed checks (hardware checks, pg specific tasks, security updates)

- freebsd-update(8) needs "check/report"

Operations - Problems

- different hardware

- OOB/remote hands

- operating system zoo

- "timezones"

- global network issues

- territorial issues

Operations
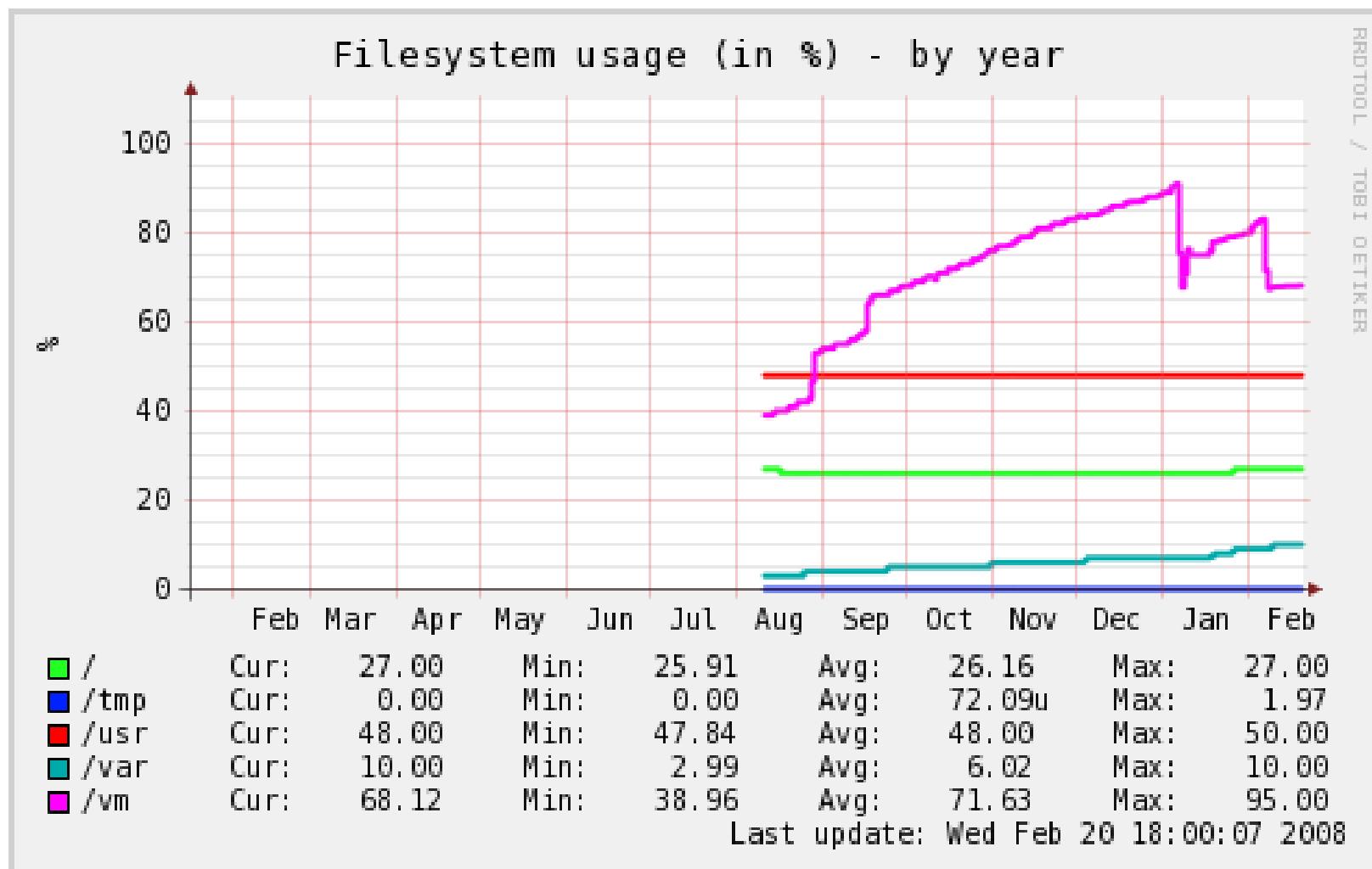
Agenda

- Infrastructure
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Future Plans /Directions

- Centralize/unify community/user account management

- Centralize logging

- More open communication (who, what and how)

- FreeBSD 6.3

- Improve speed and reliability

Thanks

- Infrastructure stuff can be boring but ...

... any questions ?