

PBX on a non-specialized distro

How and why we included an easy FreePBX setup in NethServer

Why Asterisk and FreePBX?



Add a GUI to Asterisk: FreePBX

Web interface

Store configs in its DB

Writes Asterisk configuration files

PHP

Modular



Should a sysadmin choose a specialized distro?

Pro:	Cons:
Easy	Bleeding edge
Cutting edge	You can't use your server for something else too
Commercial modules	Manual configuration for everything that you don't configure with FreePBX...
Paid support	... but you can't manually configure everything you want

Why we wanted to put PBX on NethServer

(and why you maybe want to package it for your favourite distro)

- Have more users

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Why we wanted to put PBX on NethServer

(and why you maybe want to package it for your favourite distro)

- Have more users
- Provide a PBX to our current users
- Have a PBX on a multipurpose server
- Easier support
- ...

Our starting point: NethServer

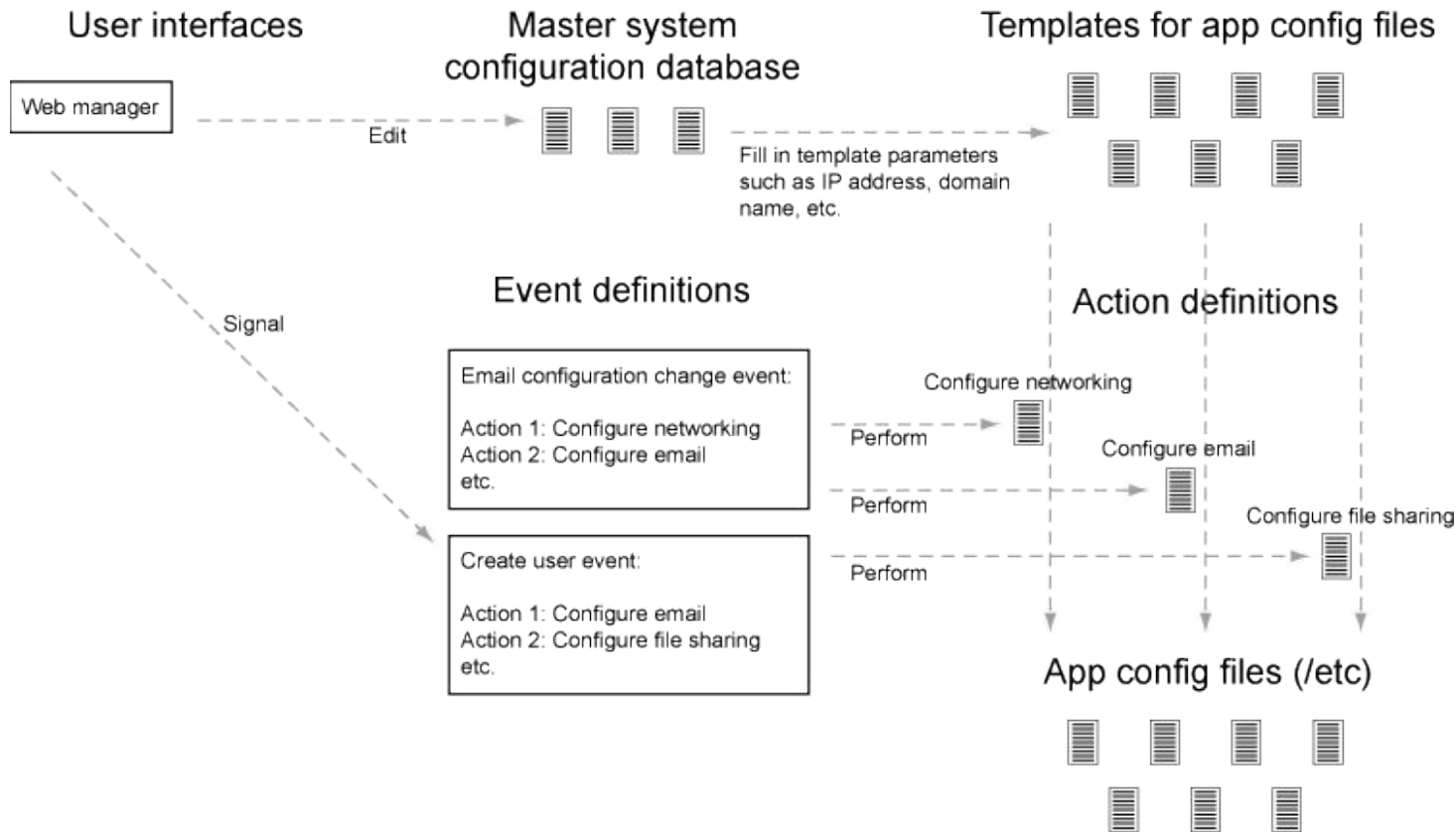
CentOS based

Configuration layer on the top of CentOS

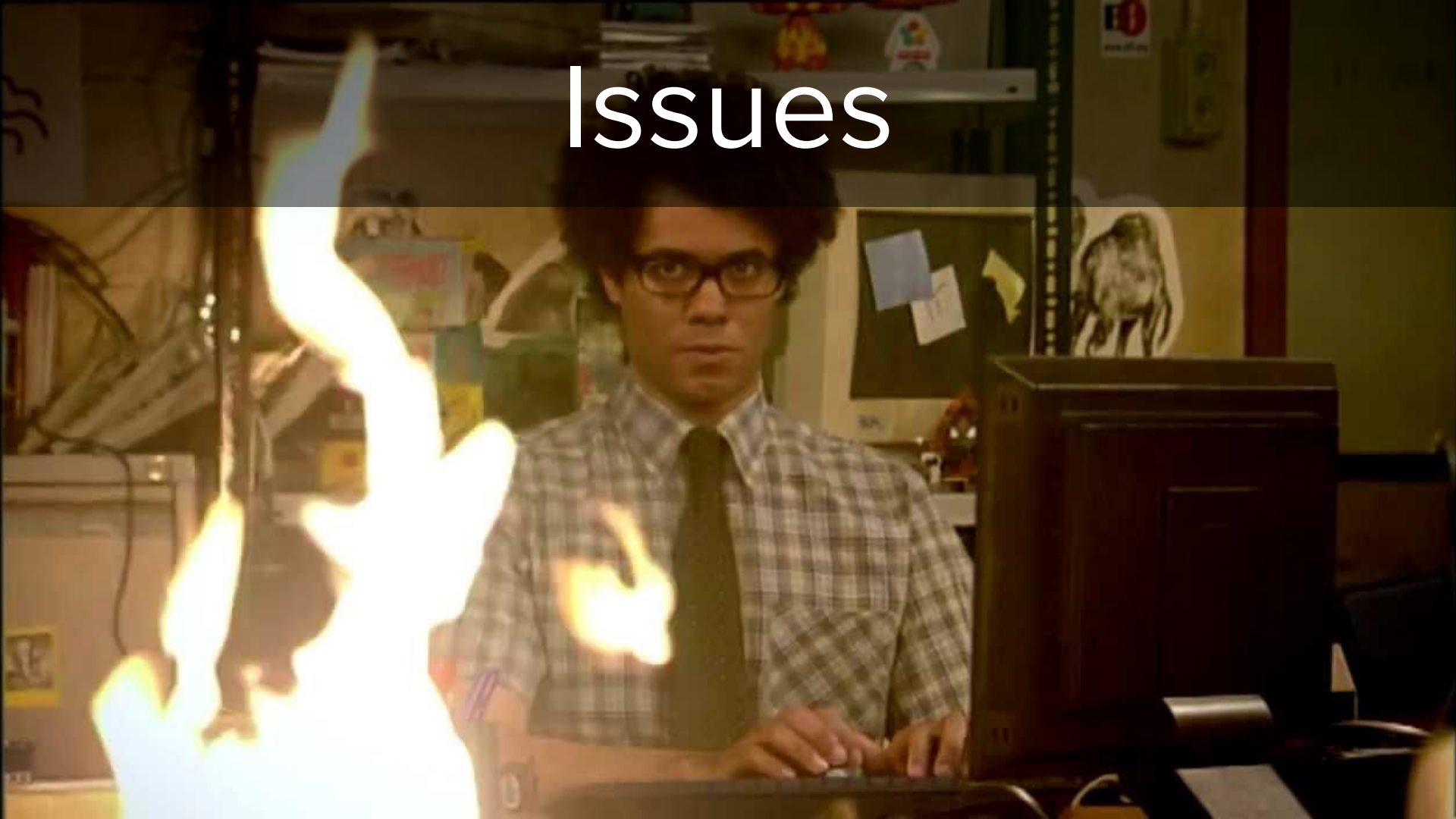
Configuration DB, templates, events, actions, services (SME Server)

Web interface

Our starting point: NethServer



Issues



Issue: httpd as asterisk user

FreePBX requires to run httpd as asterisk user

Solution:

- Another HTTPD instance that runs as asterisk user
- Proxypass on standard HTTPD instance

Issue: FreePBX 14 requires PHP version > CentOS version

FreePBX 14 requires PHP 5.6, but CentOS has 5.4

Solution:

- PHP 5.6 from SCL
- php-fpm on Asterisk HTTPD instance

Issue: missing or outdated RPMs

Existing RPMs for FreePBX, Asterisk and its dependencies are usually outdated

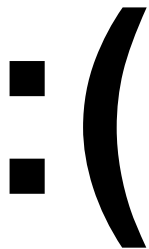
Solution:

- We just rebuilt everything
- Sangoma Source RPMs are a very good starting point
- If you are building packages, probably NethServer RPMs are a better starting point because you can find them on GitHub

Issue: Installation scripts vs RPMs

FreePBX has an installation script, like many other applications. This script puts files around, manipulates DB, starts services, checks versions, changes permissions...

Solution:



Backup and Restore

FreePBX has its own backup module, but we didn't want to use it

Solution:

- Dump all DBs
- When restoring a backup, install FreePBX like it is a fresh installation
- Throw away DBs and restore those from backup

Kernel modules

Asterisk has DAHDI kernel modules: if we aren't fast enough to build it, we risk that kernel updates from upstream fails

Solution:

- Use weak-updates

Bonus: WebRTC

Janus-gateway: <https://janus.conf.meetecho.com/>

Thank you

GitHub: [Stell0](#)

Twitter: [@Stell00](#)

NethServer Community: [Stell0](#)

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