

Puffalanche - WIP report

OpenBSD + Vagrant + autoinstall

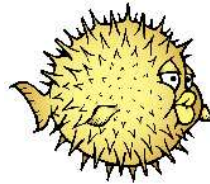
bhyvecon, Tokyo, March 9, 2018

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Trivia:

Technical lead at sysfive.com GmbH
Hacking computers since 1983
OpenBSD user since 2.7 (2000)
Developer (pf) 2002-2005

14 people — we're hiring
Apple][e
on i386, amd64, sparc64, macppc
slacked too much



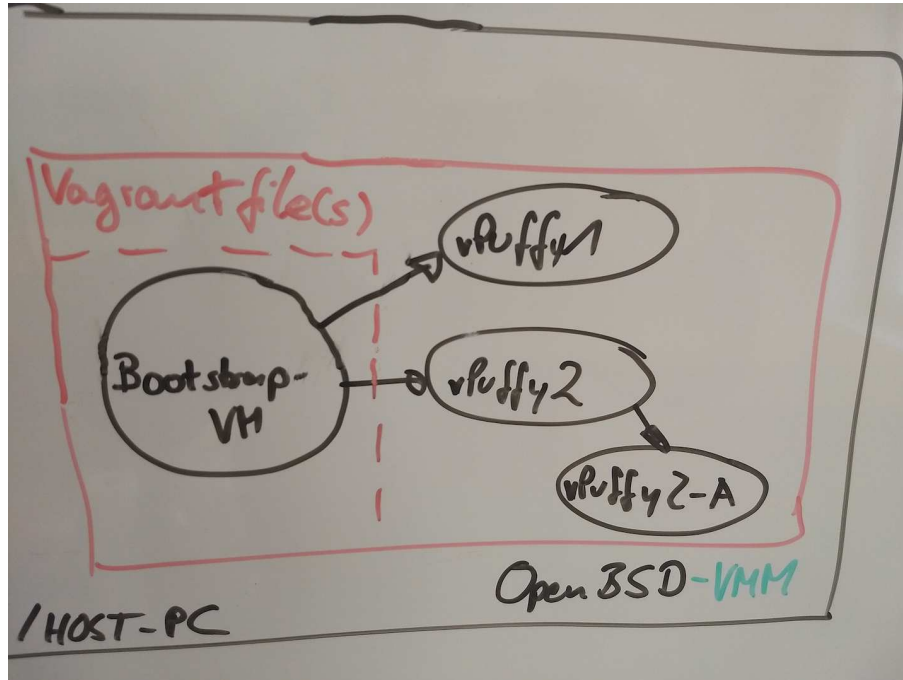
Contents

- Solving what?
- What do we need?
- What do we have already?
- Putting it together
- Provisioning (autoinstall)

Solving what?

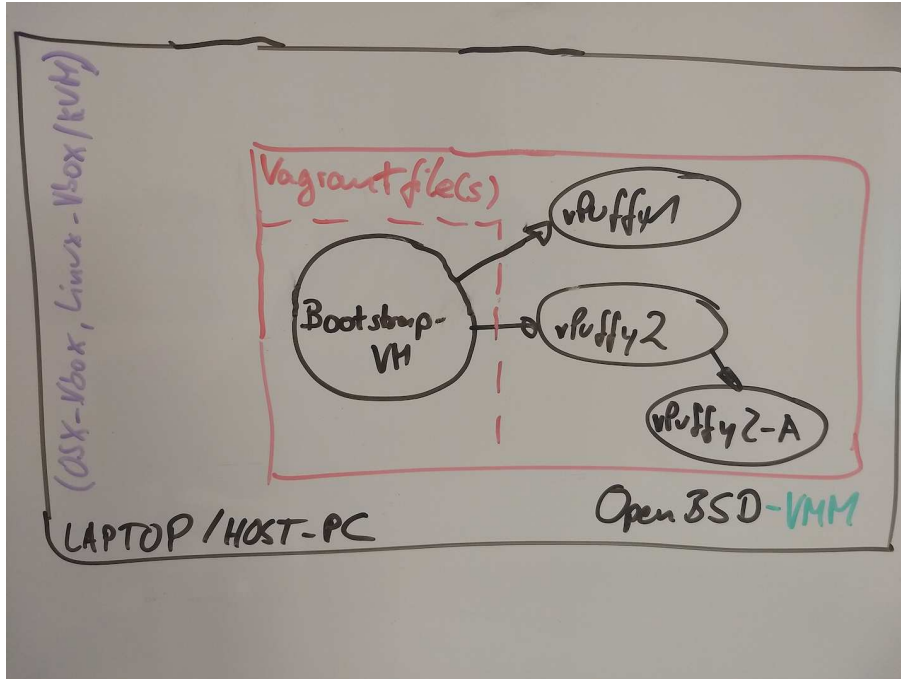
- Run multiple OpenBSD VMs on OpenBSD - w/o dealing with vm.confs at all
- make inter/intra-networking "just work" - no switchd(8) "hassle"
- use the same(!) Vagrantfile on OSX/Linux/Windows(?)
- develop+TEST autoinstall at 30,000ft (or -50)
- installs reproducible - even "me so unique" ones
- and retrospective

Puffy boxed in OpenBSD (Dev#1)



- Bootstrap-VM: might be based on manual install -> better in packer
- vPuffy1+2: auto-install from B-VM directly
- vPuffy2a: auto-install (PXE via dhcrelay on Puffy2)

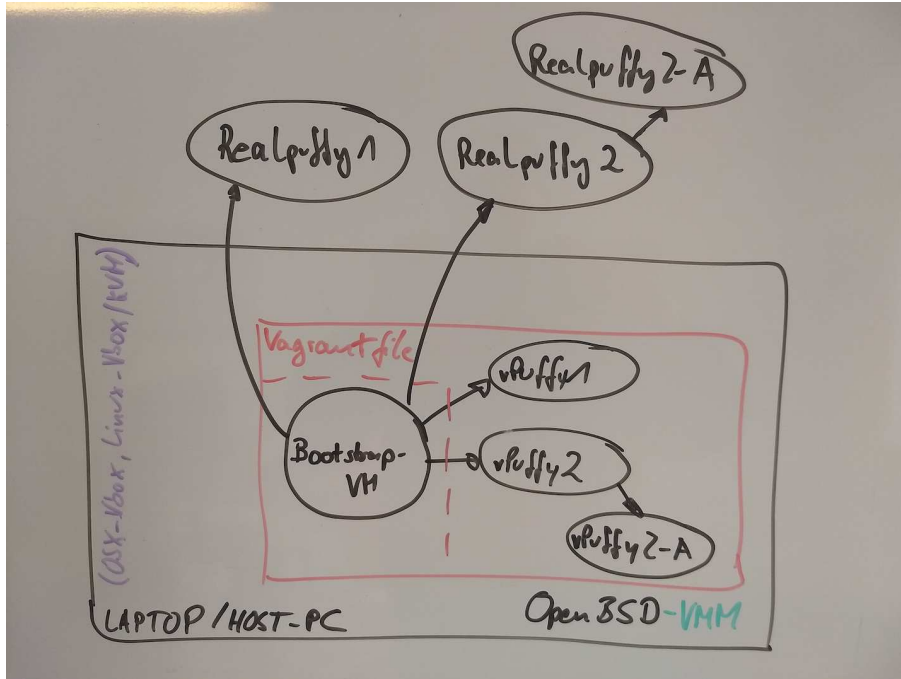
Puffy boxed in Linux/OSX/.. (Dev#2-n)



Just run the SAME
"infrastructure" on

- OSX
- Linux
- Cloud.. AWS(?)
- basically everything that Vagrant supports (given enough capabilities)

Puffy BREAKOUT to physical.



- Not impressed so far?
Let's go physical..
- Run the very SAME "infrastructure" on REAL puffymachines
- Test virtually, expand physically..
- Confidence in rollouts
- debug functional problems on Laptop, roll solution to Realpuffy

What do we need?

- OpenBSD - kid you not
- Vagrant "Core" (plugin-loader)
- Vagrant host-capability plugin
- OpenBSD's VMM as a Vagrant provider-plugin
- [Ruby development tools - only for plugin development ("build-depends")]
- integrate switch(8)/bridge(8) setup
- deeper knowhow on installer features
- [installer enhancements (pre-install.sh)]

What do we have already?

- OpenBSD 6.2
- Vagrant 2.0 (but likely works with 1.5+)
- host-plugin: 0.1.0 - "done"
- provider-plugin: 0.1.0 - build infra + skeleton created
- autoinstall concepts:
 - PXE response steering (tftp per IP, dhcrelay)
 - install.conf steering
 - diskable templates
 - multiple set sources
 - siteNN.tgz
 - siteNN-hostname.tgz
 - install.site

Ohai + Links + Thanks

- Working prototype of provider-plugin and full presentation at BSDCan 2018 in Ottawa
- Repo/Code/Slides - <https://github.com/double-p/>
- Work - <https://sysfive.com>
- Kickoff - Glarus, Switzerland / <https://ungleich.ch>

Questions?

