

Creating vSphere templates using Packer

THIS IS THE WAY

80s Flashback

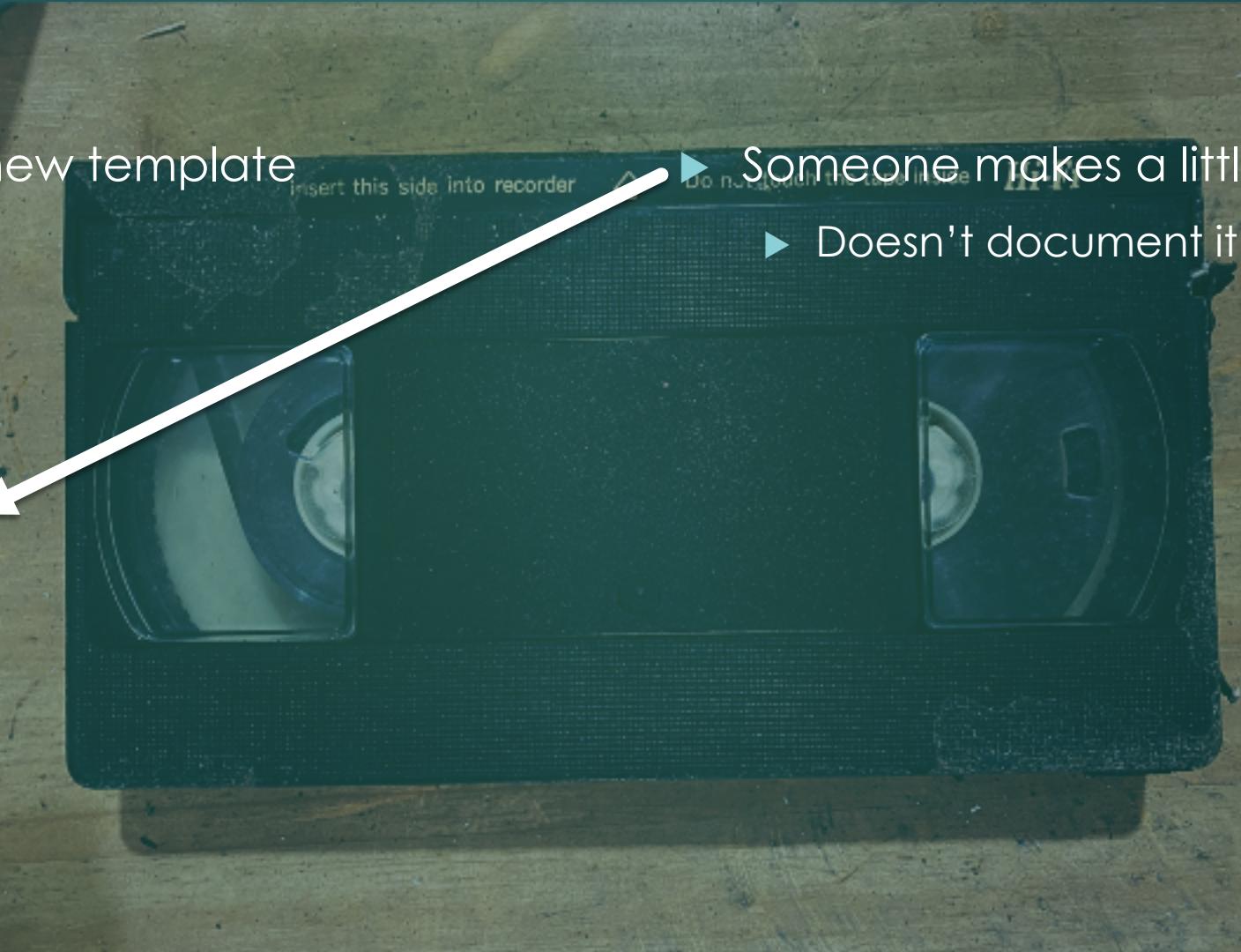
- ▶ Make a new template
 - ▶ Use it
 - ▶ Patch it
 - ▶ Use it
 - ▶ Patch it
 - ▶ Use it
 - ▶ Patch it
 - ▶ Use it
- 
- ▶ Someone makes a little change
 - ▶ Doesn't document it

Photo by [JC Gellidon](#) on [Unsplash](#)

Start with “Why?”

- ▶ Documented template build
 - ▶ Known configuration
- ▶ “Evergreen” template
 - ▶ Latest patches
 - ▶ Latest software versions
 - ▶ Current configuration (SSL certs etc)
- ▶ Automated build
 - ▶ Installing OSs is boring!
- ▶ Smaller footprint – quicker to deploy

Packer: en_windows_server_2019_updated_dec_2020_x64_dvd_36e0f791

Name	Size
vmware.log	647.52 KB
ws2019std_210127-1413-3f1c9...	0.26 KB
ws2019std_210127-1413.nvram	8.48 KB
ws2019std_210127-1413.vmdk	15,902,920 KB
ws2019std_210127-1413.vmsd	0 KB
ws2019std_210127-1413.vmtx	3.13 KB
ws2019std_210127-1413.vmxn	3.51 KB

Hand-rolled: en_windows_server_2019_updated_nov_2019_x64_dvd_56432a3e

Name	Size
vmware.log	928.64 KB
vmware-1.log	195.94 KB
ukw-d-win-01.vmxn	3.61 KB
ukw-d-win-01.vmtx	3.4 KB
ukw-d-win-01.vmsd	0 KB
ukw-d-win-01.vmdk	19,351,940 KB
ukw-d-win-01.nvram	264.49 KB
ukw-d-win-01-5b762595.hlog	0.24 KB

How does Packer help?

- ▶ Command line tool
- ▶ Automates OS build from a template (text file)
 - ▶ There's your documentation!
- ▶ Repeatable
- ▶ Extensible
- ▶ Scriptable

What's in a template?

- ▶ Can be JSON or HCL2
- ▶ Minimum requirements: builder {}
- ▶ More advanced use cases:
 - ▶ User variables
 - ▶ Environment variables
 - ▶ Provisioners
 - ▶ OS updates
 - ▶ Scripts
 - ▶ Post-provisioners



Demo Time!

What's next?

- ▶ Move to HCL2
- ▶ Ubuntu 20.04 desktop
- ▶ CentOS Stream
- ▶ Vault SSH authentication

Resources

- ▶ Blog – blog.v12n.io
- ▶ Packer page – blog.v12n.io/packer
- ▶ Packer articles – blog.v12n.io/tag/packer
- ▶ GitHub - github.com/v12n-io
- ▶ Docker Hub - hub.docker.com/r/v12nio/codestream-ci-packer
- ▶ Repo for this session: github.com/v12n-io/autoug-demo

- ▶ Twitter - twitter.com/mpoore