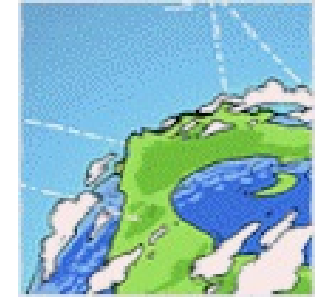


Scott Lowe, VCDX 39
Author, Blogger, Geek
<http://blog.scottlowe.org> / Twitter: @scott_lowe
Colossians 3:17 NIV



Getting Started with Network Automation

Some resources, tips, and advice for getting started with network automation

Before we begin

- Get involved! Audience participation is encouraged and requested
- If you use social media, feel free to post updates about this presentation (on Twitter include the hashtag #NPUG)
- You are welcome to take photos or videos of today's presentation and share them online
- This presentation will be made available online after the event

A quick intro

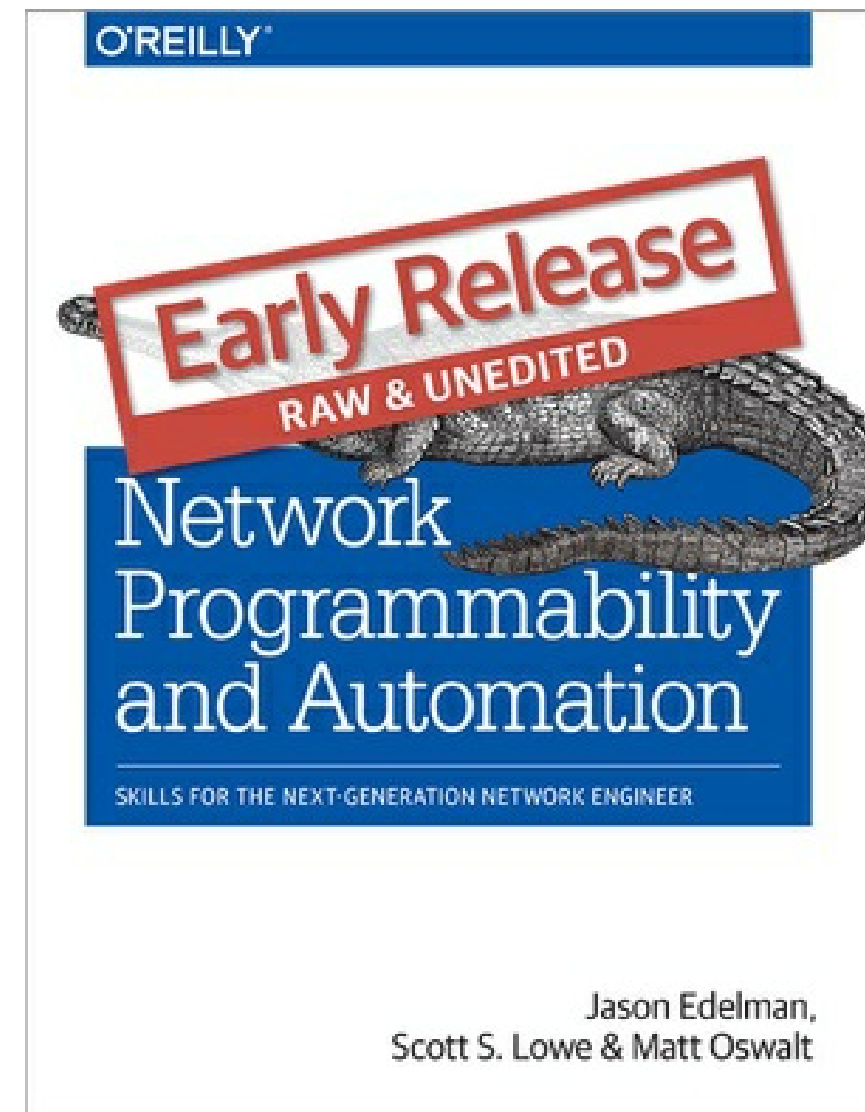
- Husband, father, Jeoper, all-around geek
- Blogger (12+ years at <http://blog.scottlowe.org>)
- Author (7 books so far, #8 due in December)
- Speaker (Interop, VMworld, DevOps Networking Forum, OpenStack Summit, local meetups)
- Podcaster (The Full Stack Journey podcast)
- Employee at VMware, Inc.

Agenda

- New network automation book
- Why you should get started with network automation
- Resources for getting started
- Voices to follow
- Tools you'll commonly encounter in network automation
- Easy ways to get started

New network automation book

- Network Programmability and Automation, from O'Reilly
- Co-authored with Jason Edelman and Matt Oswalt
- Aims to provide information to help you get started with network automation
- Covers Linux, Python, XML/JSON, APIs, configuration management tools, & continuous integration
- More information available at <http://shop.oreilly.com/product/0636920042082.do>



Why you should get started with network automation

- Improved consistency in configuration across devices
- No more “snowflake” configurations
- Less time spent verifying configurations
- The automation artifacts can double as documentation
- More time to spend on strategic efforts

Resources for getting started

- NetworkToCode Slack team (join at <http://slack.networktocode.com>)
 - Lots of great channels here
 - Many of the “who’s who” in network automation frequent these channels
- Python for Network Engineers (<https://pynet.twb-tech.com>)
 - Check out the free email course on learning Python
 - Paid courses also available
- Ivan Pepelnjak’s Building Network Automation Solutions course (http://www.ipspace.net/Building_Network_Automation_Solutions)

Resources for getting started - demo

A quick look at the NetworkToCode Slack team and available channels

Voices to follow

- David Barroso ([@dbarrosop](#) on Twitter, involved with NAPALM)
- Kirk Byers ([@kirkbyers](#) on Twitter, also involved with NAPALM)
- Jason Edelman ([@jedelman8](#) on Twitter, founded NetworkToCode)
- Matt Oswalt ([@mierdin](#) on Twitter, works with StackStorm)
- Mircea Ulinic ([@mirceaulinic](#) on Twitter, works with NAPALM and SaltStack)
- Ivan Pepelnjak ([@ioshints](#) on Twitter, dabbles in most everything)

Tools you'll commonly encounter

- Configuration management tools (Ansible and Salt)
- Python
 - NAPALM (<https://napalm-automation.net>)
 - Netmiko (<https://github.com/ktbyers/netmiko>)
- Jinja (<http://jinja.pocoo.org>; typically called from either Python or Ansible)
- Git (<https://git-scm.com>)

Easy ways to get started

- Retrieving device configurations and storing them in version control
- Verifying device configuration against stored (versioned) configuration
- Templating network device configurations
- Building reports with templates and information from devices

Easy ways to get started - Netmiko demo

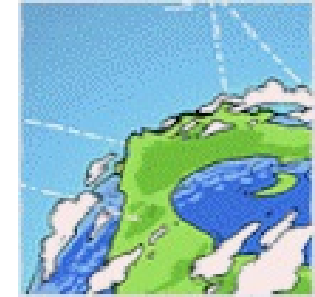
Retrieving device configurations via Python and Netmiko

Easy ways to get started - NAPALM demo

Retrieving structured data from devices via Python and NAPALM

Questions & answers

Scott Lowe, VCDX 39
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Thank you!