



# Challenges to Network Automation Adoption

Chris Cummings

Full Stack Network Automation Software Engineer

Energy Sciences Network (ESnet)

Lawrence Berkeley National Laboratory

U.S. Department of Energy

#### 

### Overview

- Automation != Orchestration
- Organizational Vision Matters
- Defining Services is hard.
- How to Do An Orchestration

### Automation



The automatic operation or control of equipment, a process, or a system. This often encompasses a linear process.

## Orchestration



The execution of (multiple) automations to achieve the desired state of a process or system.

### Organizational Vision Matters

- Is Automation/Orchestration viewed as a cost center?
- What is the benefit?
- Who can drive this initiative?
- We're gonna need a bigger team...



### Defining Services is Hard

- What are our services we offer?
- What is required to deliver those services?
- Who is responsible for delivering those services?
- What is the lifecycle of this service?

### How to Do An Orchestration

- Have strong organizational alignment
- Define your services
- Understand your service owners
- Have an army of good people



## Questions?

3