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# Lessons from *Public Cloud* Ideas for an Automated Future

AUTOCON  
THE NETWORK AUTOMATION CONFERENCE

- Culture Eats a *Heavy Breakfast*
- Network Management (*Historically*)
- How is Cloud *Different?*
- One API to *Rule Them All*

# Culture Eats a *Heavy Breakfast*



*“Automation applied to an inefficient operation will magnify the inefficiency”*

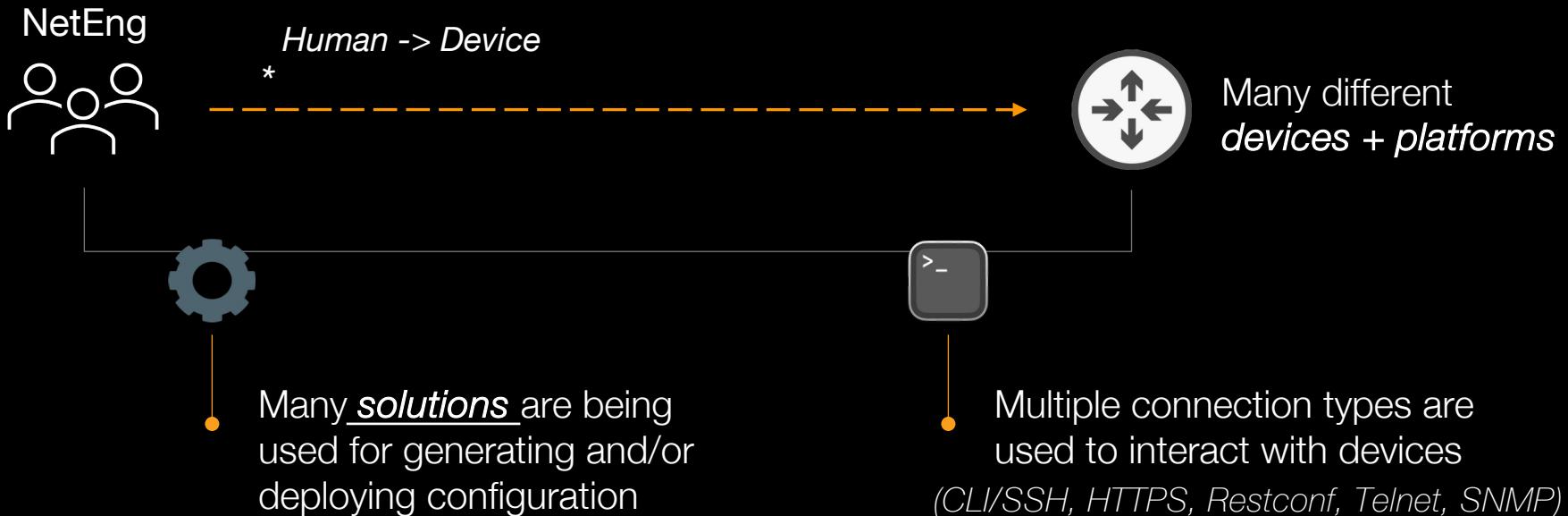
- Gandalf the Grey



# Network Management (*Historically*)

## Complex [dictionary.com](#)

“characterized by a very complicated or involved arrangement of parts, units, etc”

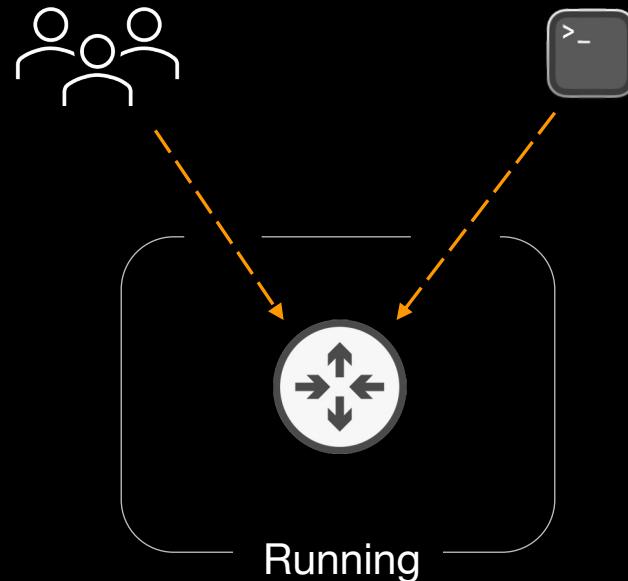




## Runtime Automation (*Mutable*)

### Deploy

Procure, install, and apply base config to hardware



### Automate

Configure, update, and modify network infrastructure “in-place”



Think in terms of vendor, device type, OS version, and connectivity medium

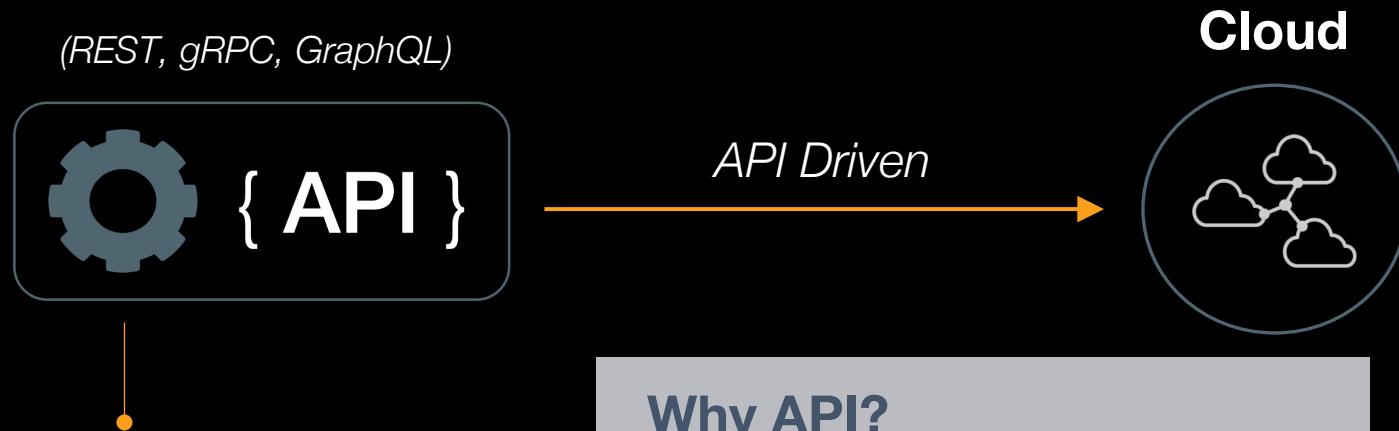


# How is Cloud *Different*?



# How is Cloud *Different*?

## New Connection Methods



APIs replace traditional  
connection types

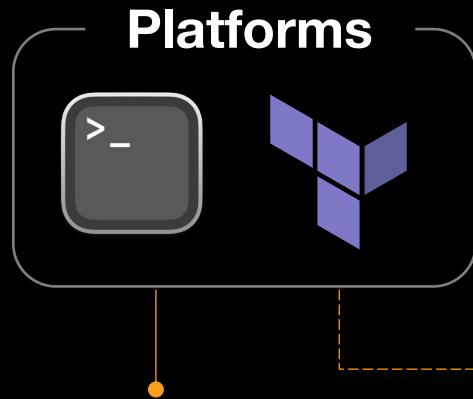
### Why API?

API protocols provide a blueprint for building and interacting with APIs. This includes the formatting of responses, methods, and data structures.



# How is Cloud *Different*?

## Controlled Abstractions



Terraform Providers are  
*a logical abstraction* of  
the upstream API



## Cloud



Think in terms of  
complete environments  
when using automation

A black and white photograph of a large audience seated in rows of theater-style chairs, facing towards the left side of the frame. The seating is arranged in a semi-circular pattern, filling most of the visible space. The lighting is dramatic, coming from the front, which creates strong highlights on the audience's faces and shadows in the rows behind them.

One API to *Rule Them All*



One API to Rule Them ALL



# One Does Not Simply

Build One API to Rule them All





One API to Rule Them ALL

What did the Hobbits *do?*

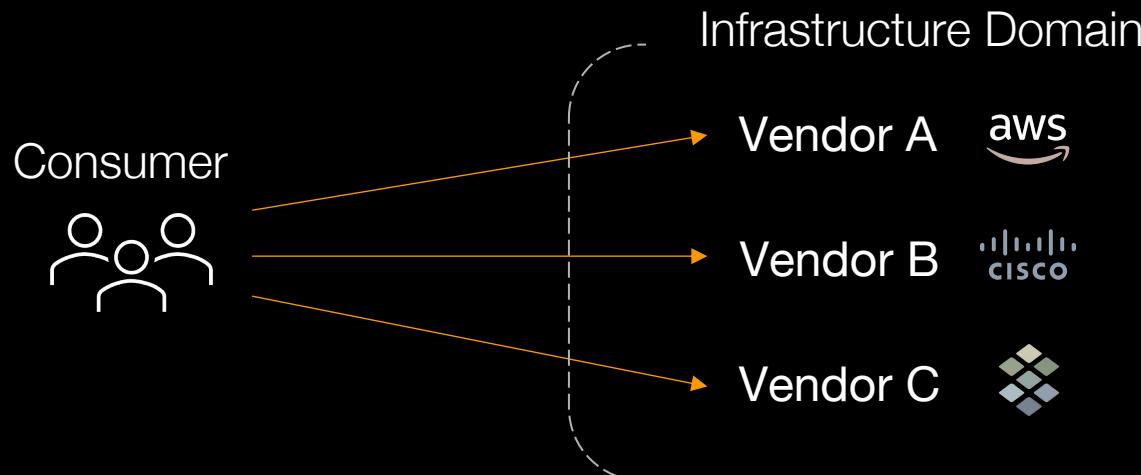




# One API to Rule Them ALL



Why not Integration?

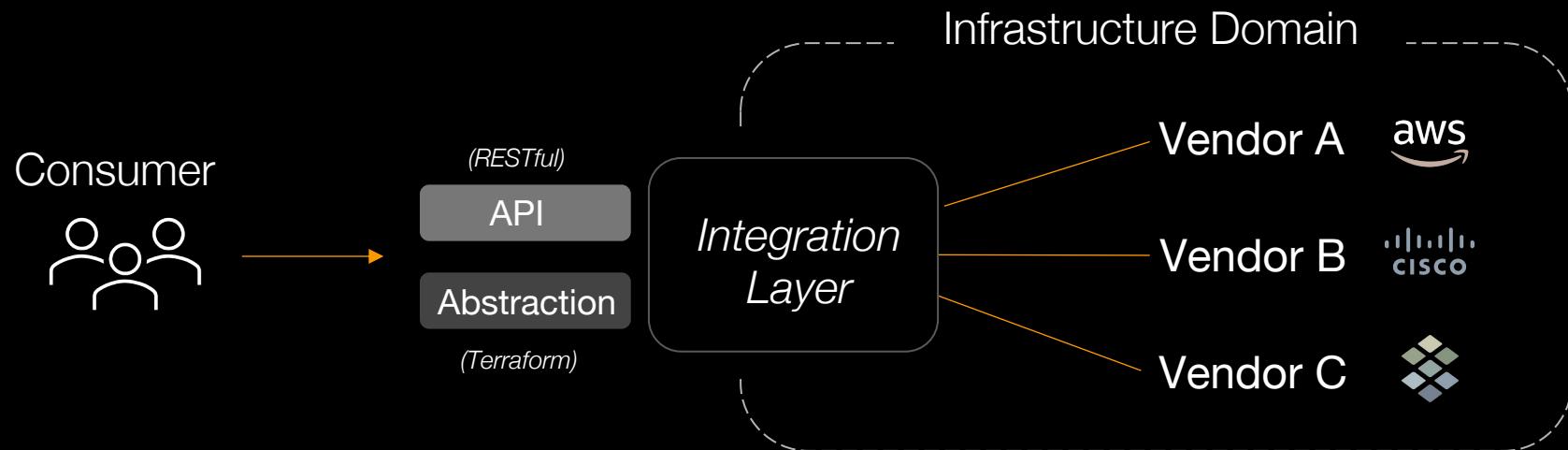




# One API to Rule Them ALL

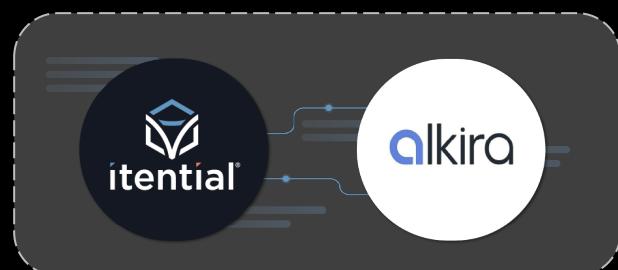


Why not Integration?

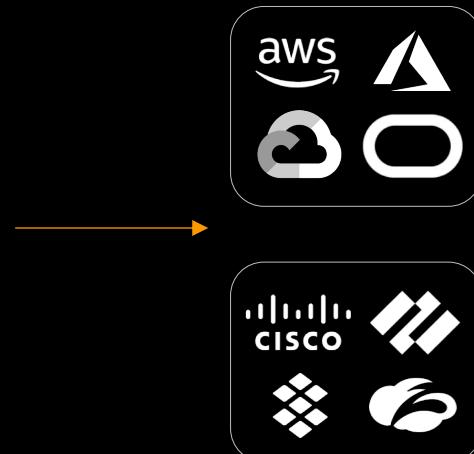


 Looking at Network as-a-Service

Consumer



*API Level Integration*



## Thank You! Want to Connect?



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