



accenture

**INFRASTRUCTURE
AS CODE**

Juhnke, Marcel
Loran, Johann

REALIZE

**YOUR
POTENTIAL**

LET'S TALK ABOUT THE BASICS

INFRASTRUCTURE AS CODE

**YOU'RE DOING
IT ALREADY –
REALLY?**

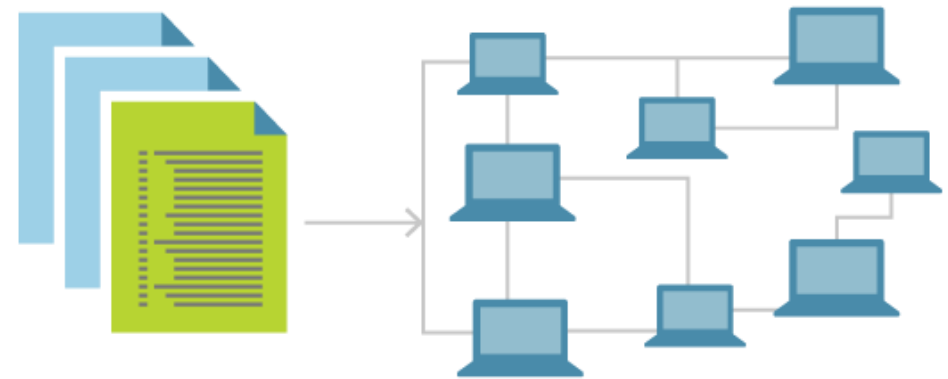
**... LET'S HAVE
A TALK
AFTERWARDS :)**

INFRASTRUCTURE AS CODE

WHAT IS IAC?

- Infrastructure can be build with the same **principles** as software
- It can benefit from proven software development **practices**
- Key building blocks **version control** and **automation**
- Ties in well with DevOps practice

It's all about operations efficiency



IAC AND DEVOPS PRACTICE

- Improve time-to-market (TTM)
- Lower time-to-response (TTR)
- Zero downtime deployments

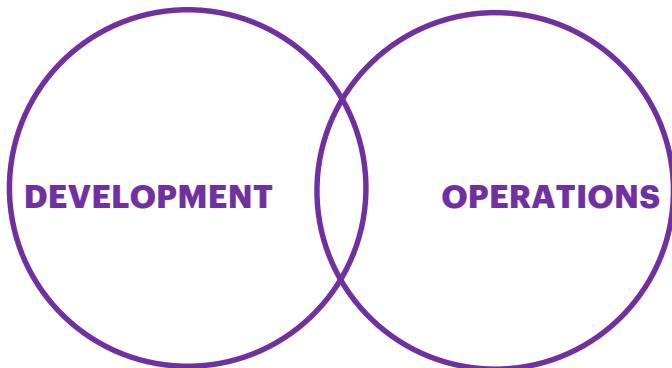
- Automated provisioning
- Speed up the deployments
- Achieve reliability and repeatability

**Collaboration
Culture**

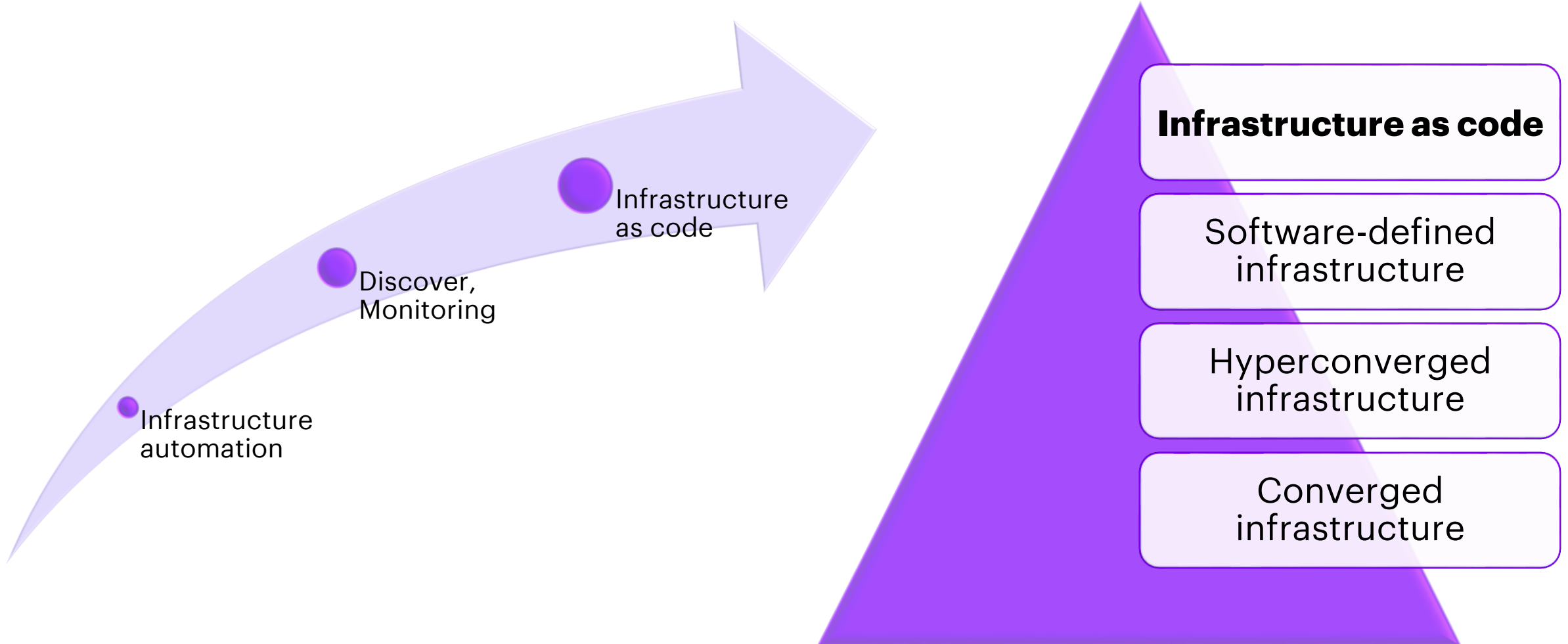
**Infrastructure
as Code**

**Continuous
Delivery**

- Continuous improvement and learning
- Operational efficiency
- Operators are also users of the infrastructure system



INFRASTRUCTURE AS CODE ... IT'S A JOURNEY



INFRASTRUCTURE AUTOMATION

ABOUT SNOWFLAKES AND PETS



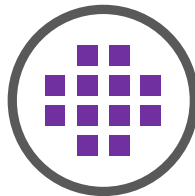
ABOUT CATTLE AND PHOENIXES



... AND WHAT WE AIM FOR



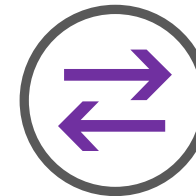
PREDICTABILITY



CONSISTENCY



FLEXIBILITY



THE OPPOSITE OF
"SNOWFLAKES" AND PETS



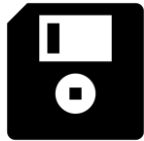
AVOID
CONFIGURATION DRIFT
(LIKE SNOW DRIFT...)

AUTOMATED CHANGE CONTROL

PUT EVERYTHING INTO VERSION CONTROL



Configuraton files



Script Code

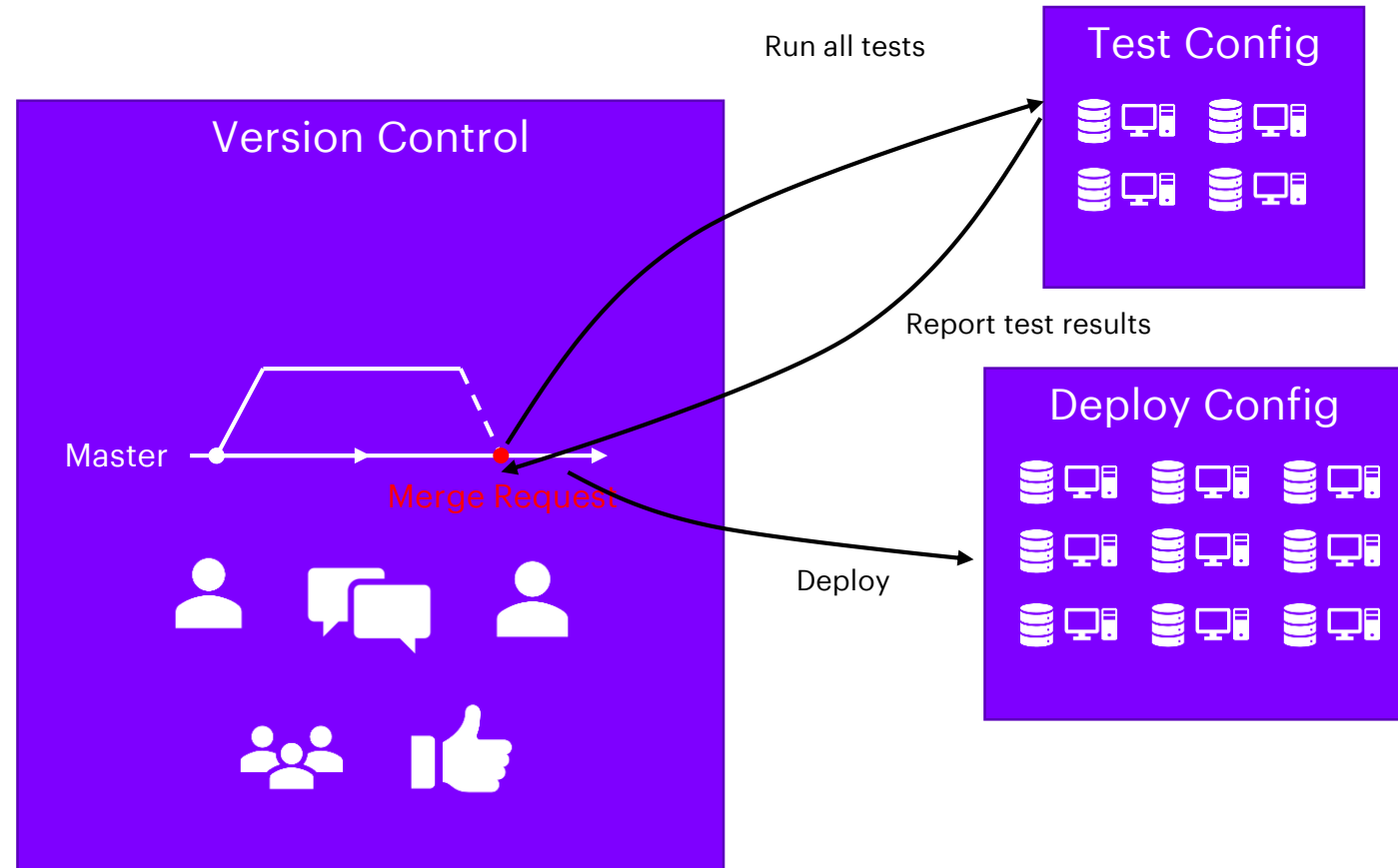
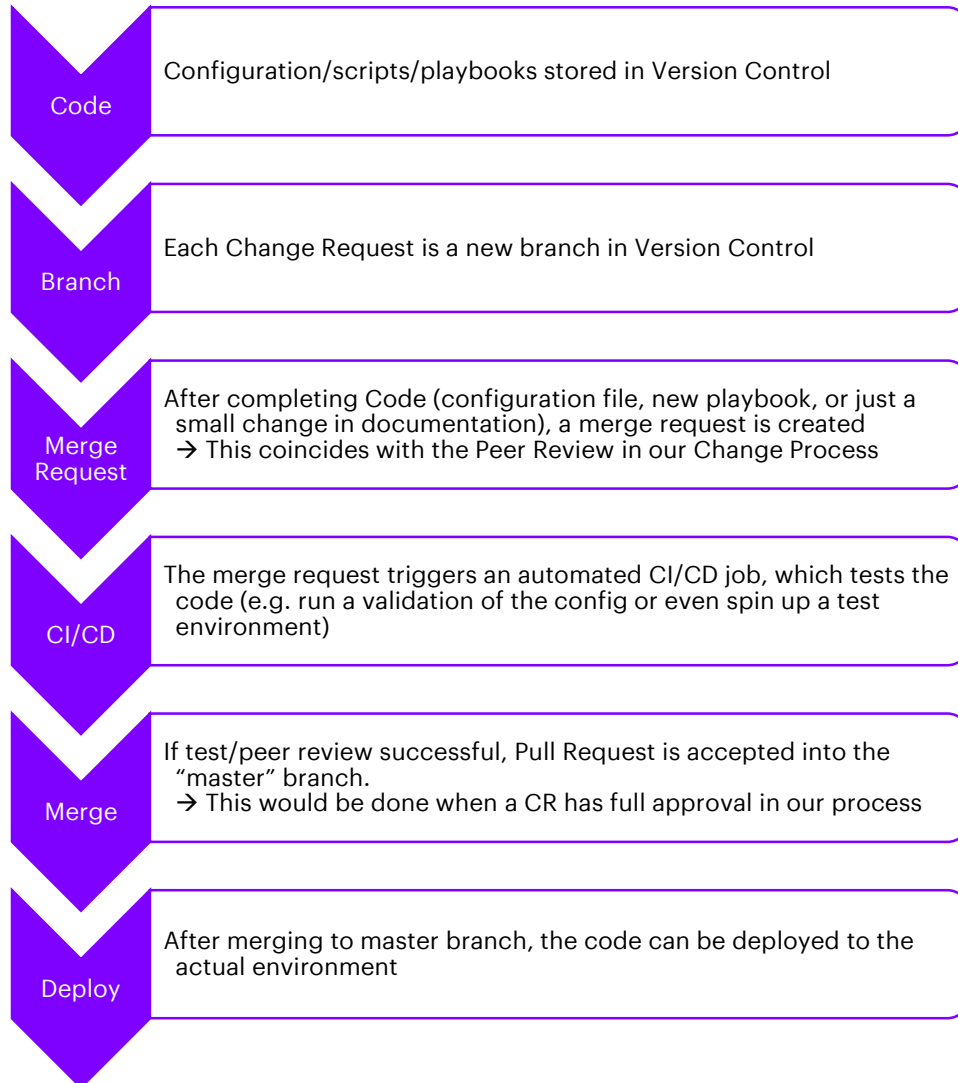


Documentation

VERSION CONTROL

- Master branch always reflects actual **production state**
- Every proposed change is a **new feature branch**, e.g. reflected in a change in ITSM
- Proposed changes have to be **discussed and approved** before being merged into master branch
- Each change has a **fully auditable history**
- **Discipline is key!**

INFRASTRUCTURE AS CODE WORKFLOW



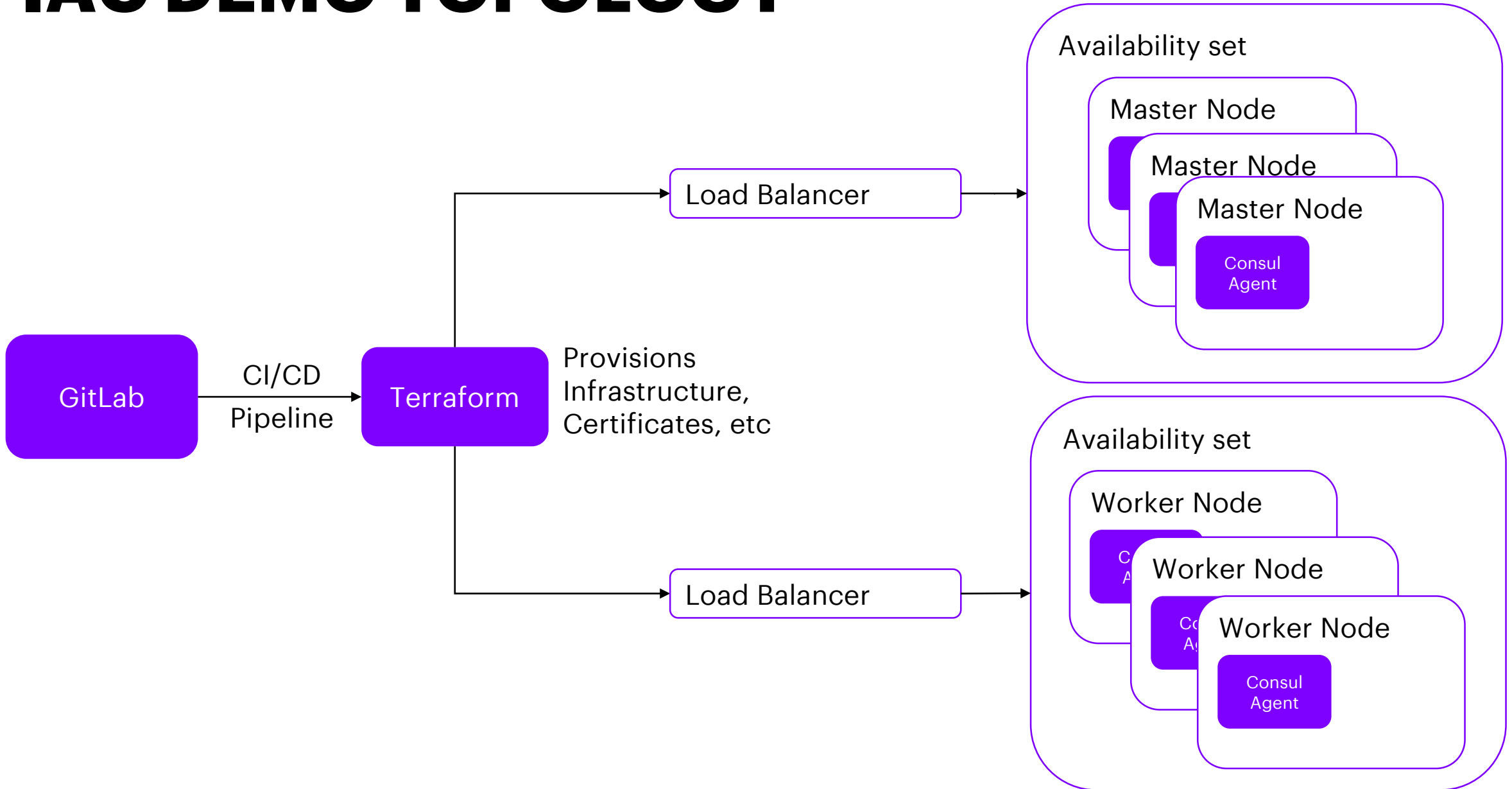
**LET'S NOT ONLY
TALK AND HAVE
A LIVE DEMO**

**UUUH...
YOU ALL SEEM
INTERESTED ;)**

LET'S WATCH!

DEMO TIME!

IAC DEMO TOPOLOGY



QUESTIONS?

