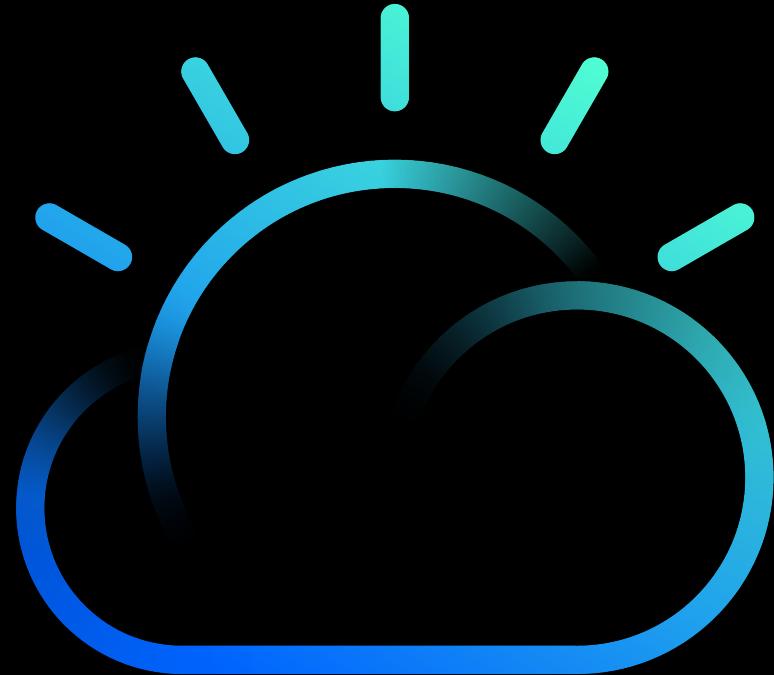


DevOps



Ishani Pandey
Developer Advocate - IBM

Agenda

- What is DevOps?
- The DevOps Culture
- DevOps Phases and Tools
- Implementation of DevOps – example
- CI/ CD
- Deployment strategies
 - Recreate
 - Rolling Update
 - Blue Green
 - A/B
 - Canary Testing
- DevOps Toolchain

Agenda

1

What is DevOps?

2

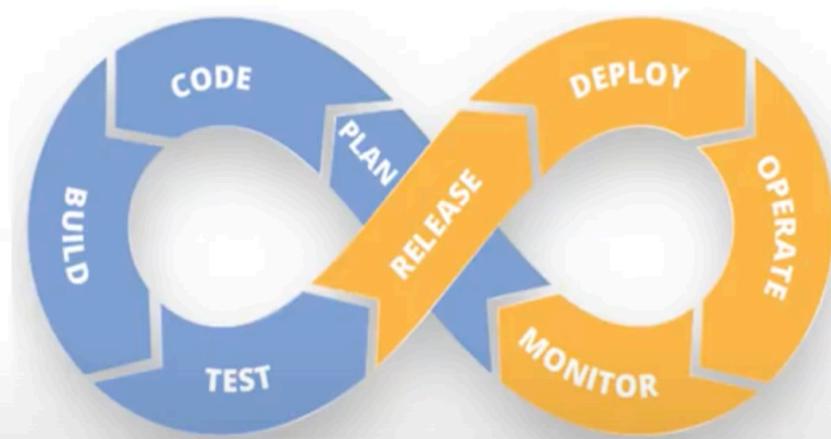
DevOps Phases

3

DevOps Use Case

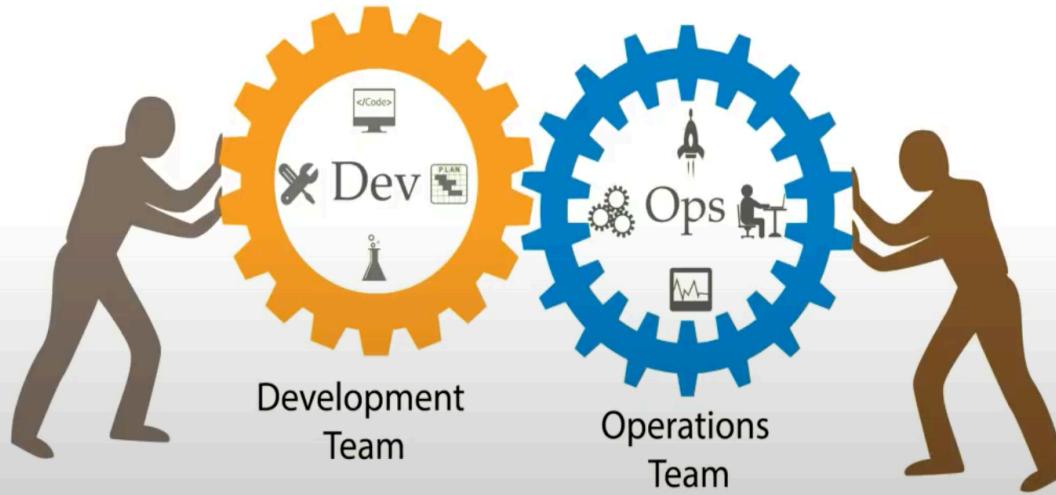
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DevOps Hands-On

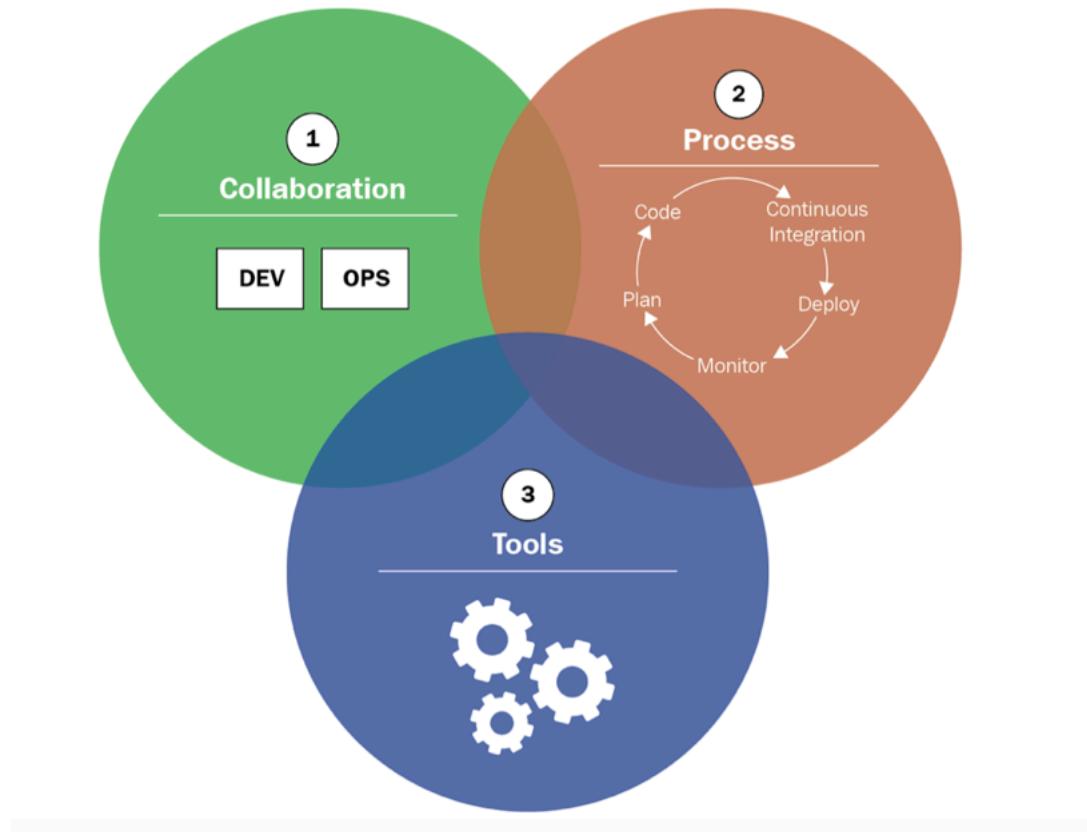


What is DevOps?

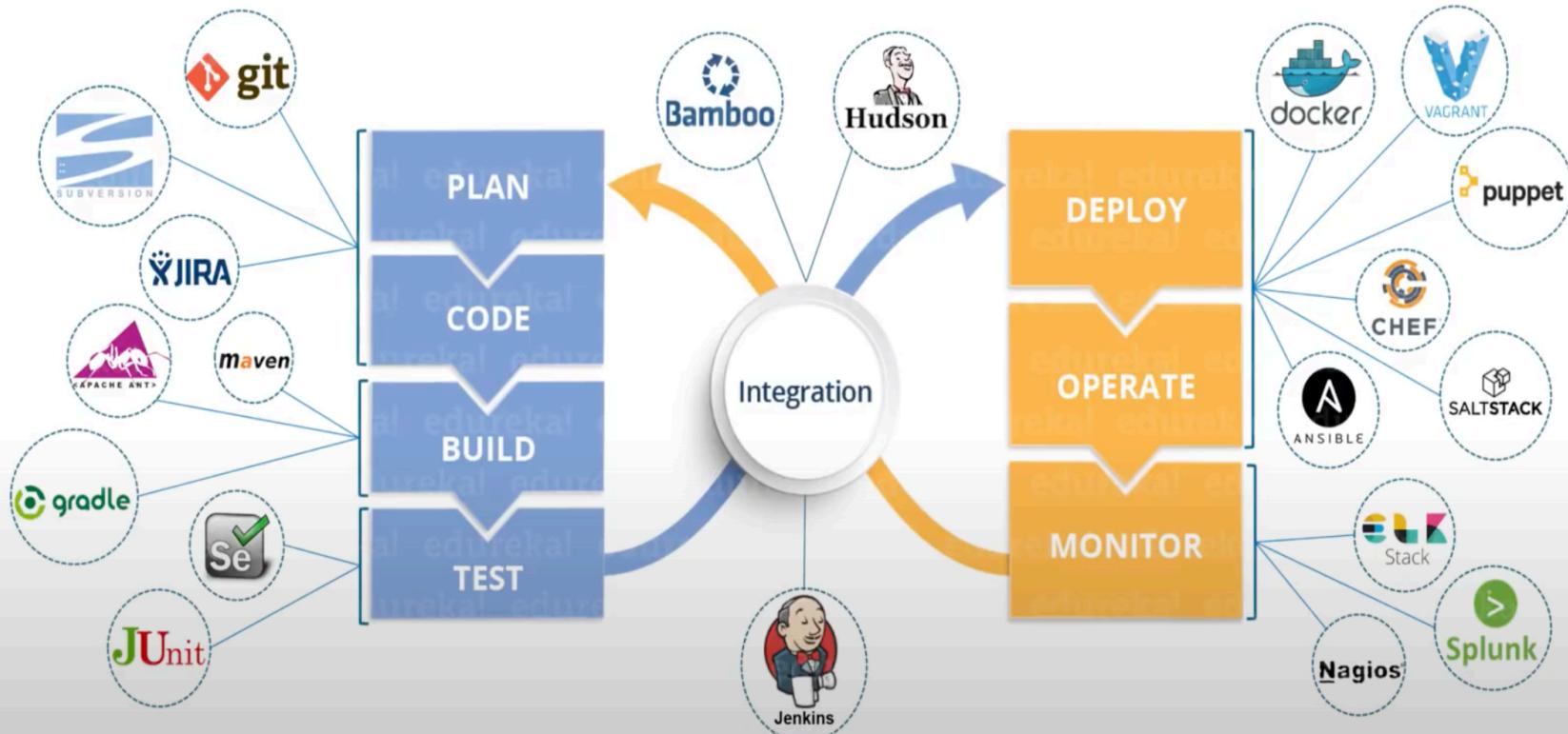
DevOps is a software development strategy which bridges the gap between the Dev and the Ops side of the company



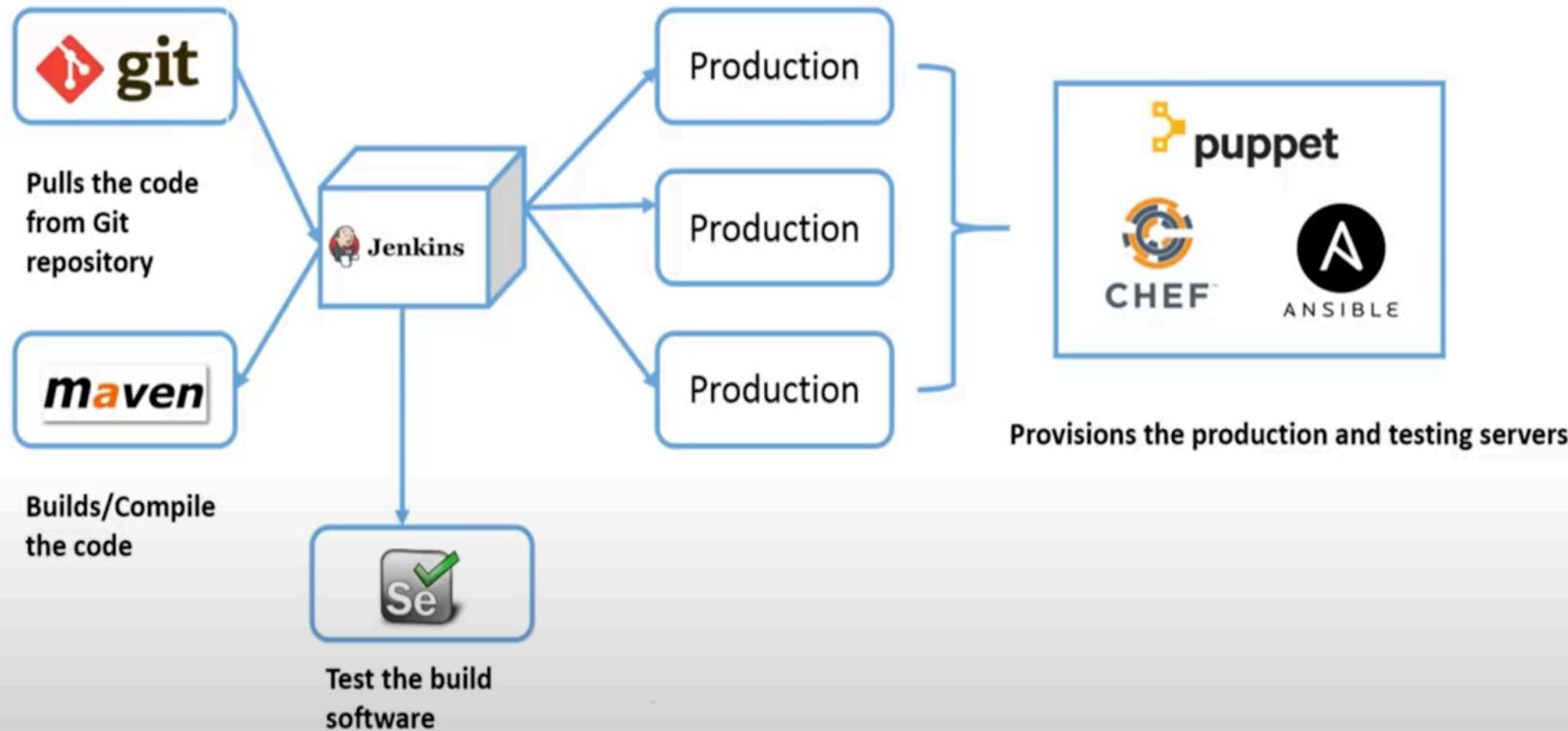
The DevOps culture



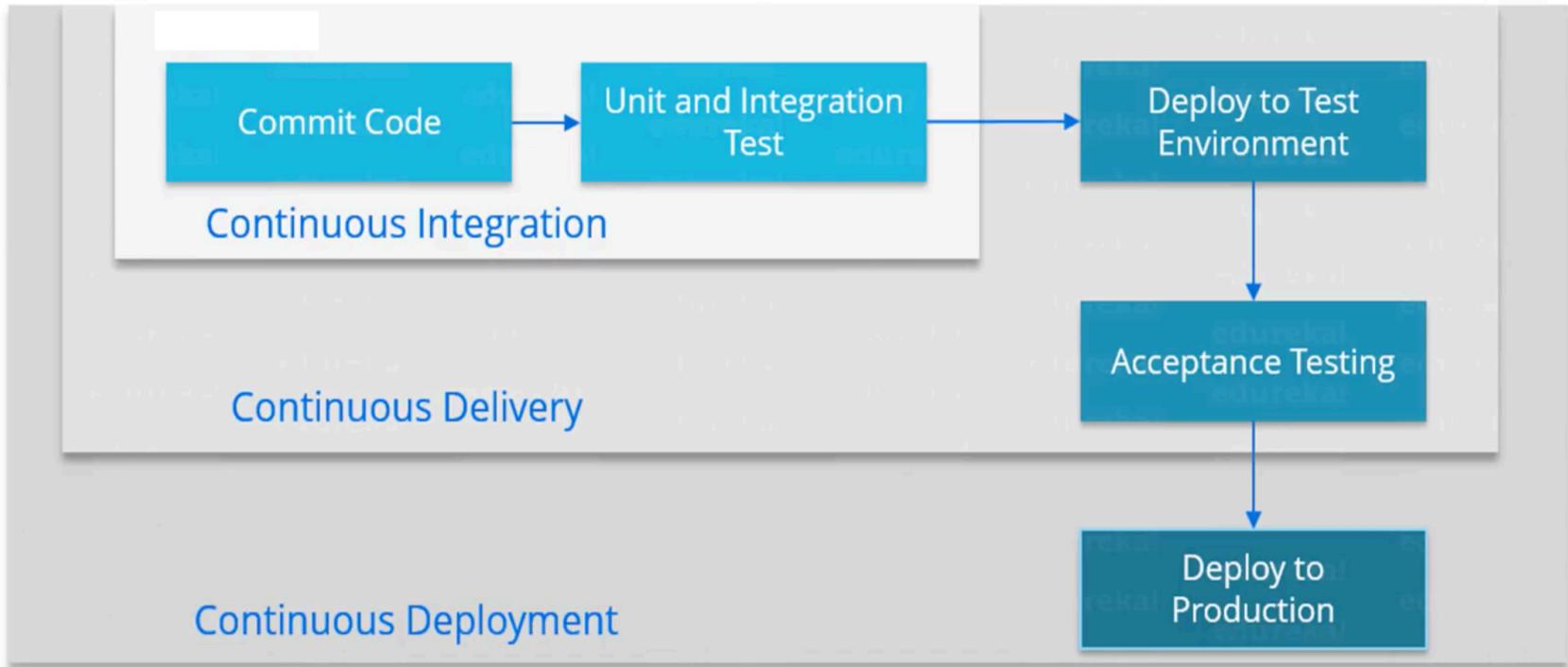
DevOps Phases and Tools



Implementation Of DevOps - Example



CI/CD



Deployment Strategies



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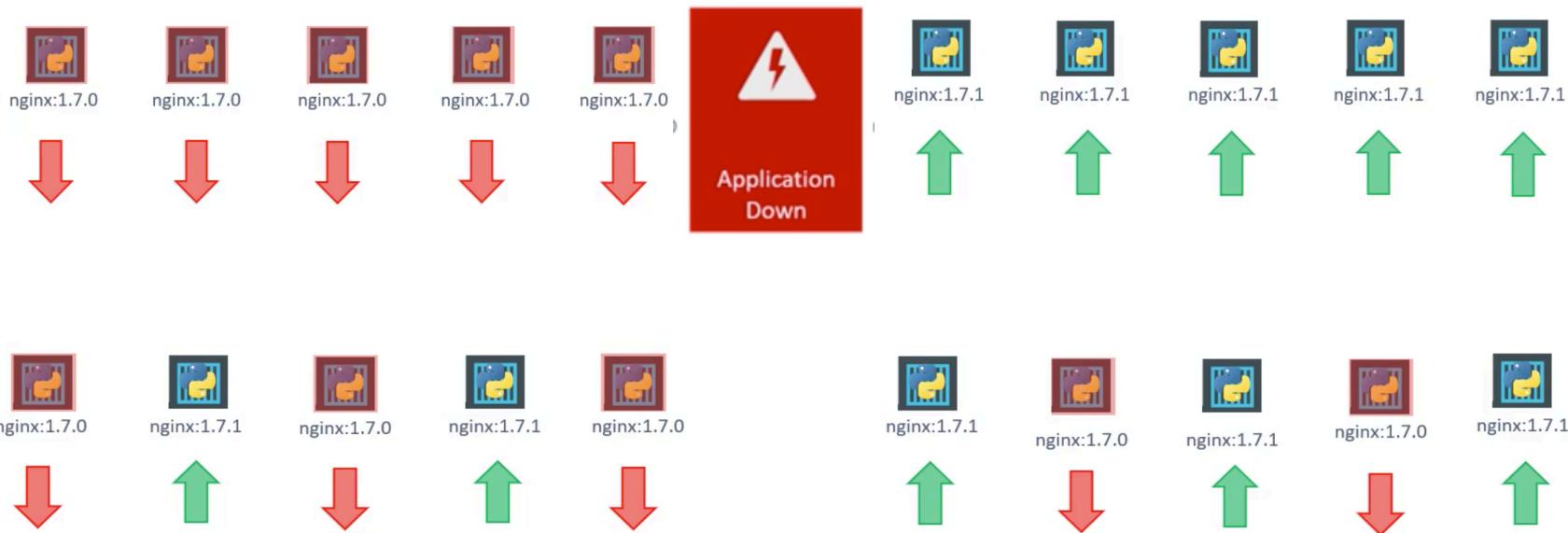


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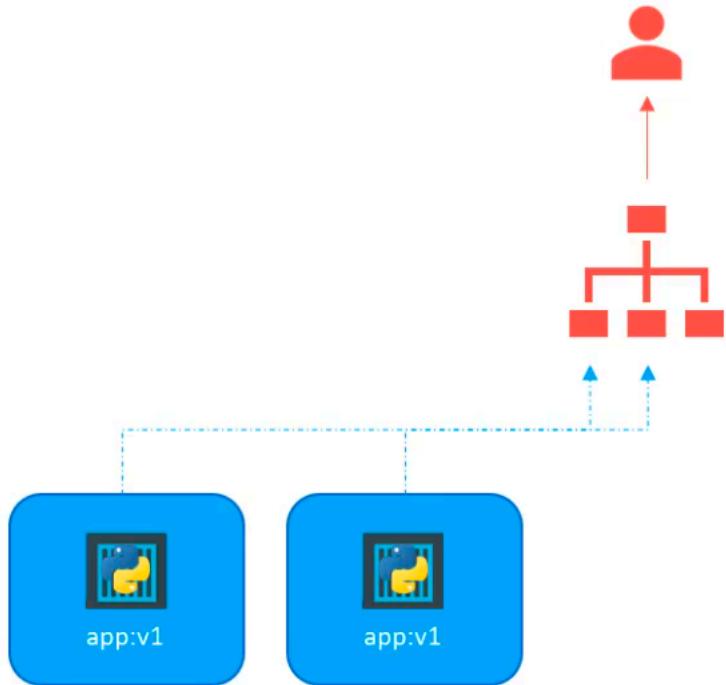
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Deployment Strategies

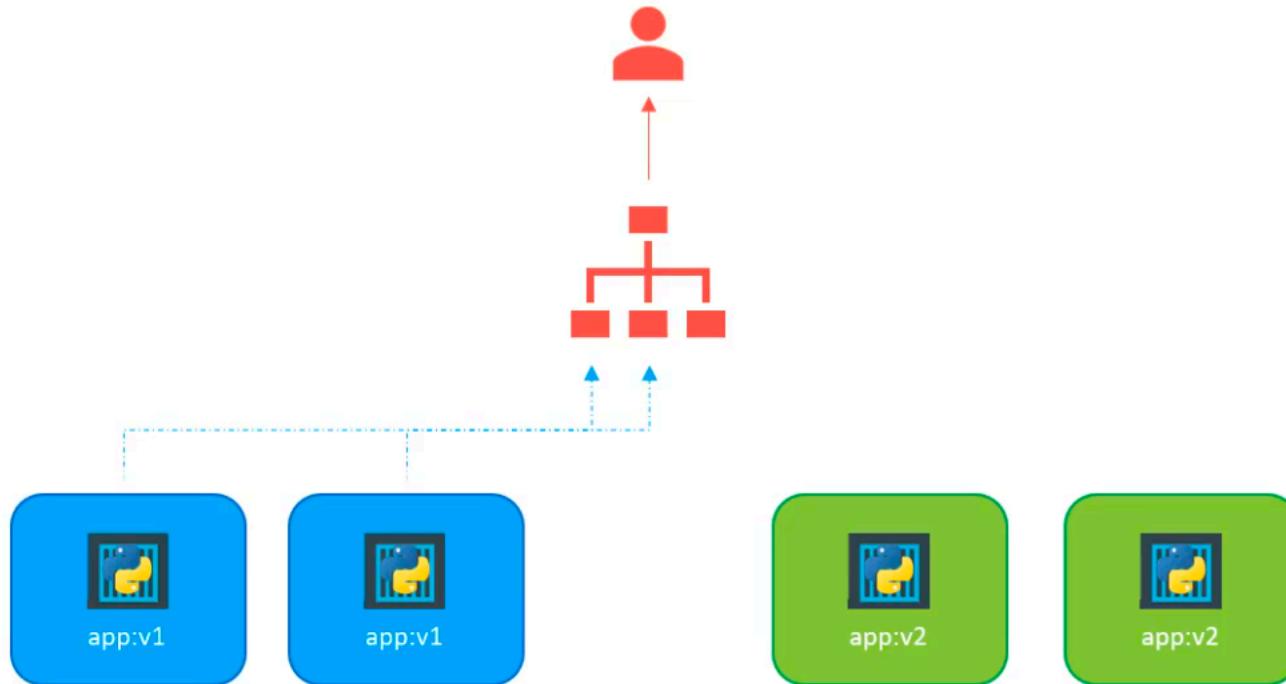


Application Up

Advanced Strategies – Blue Green



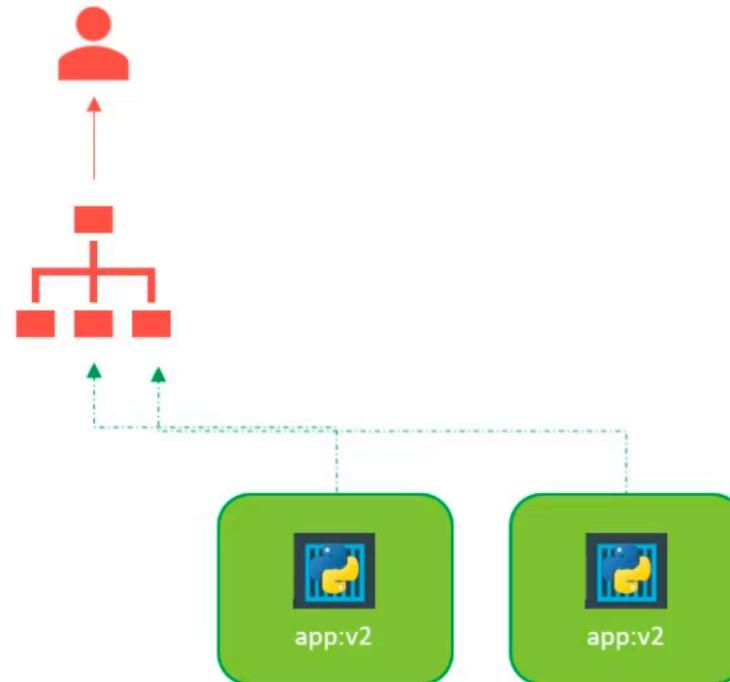
Advanced Strategies – Blue Green



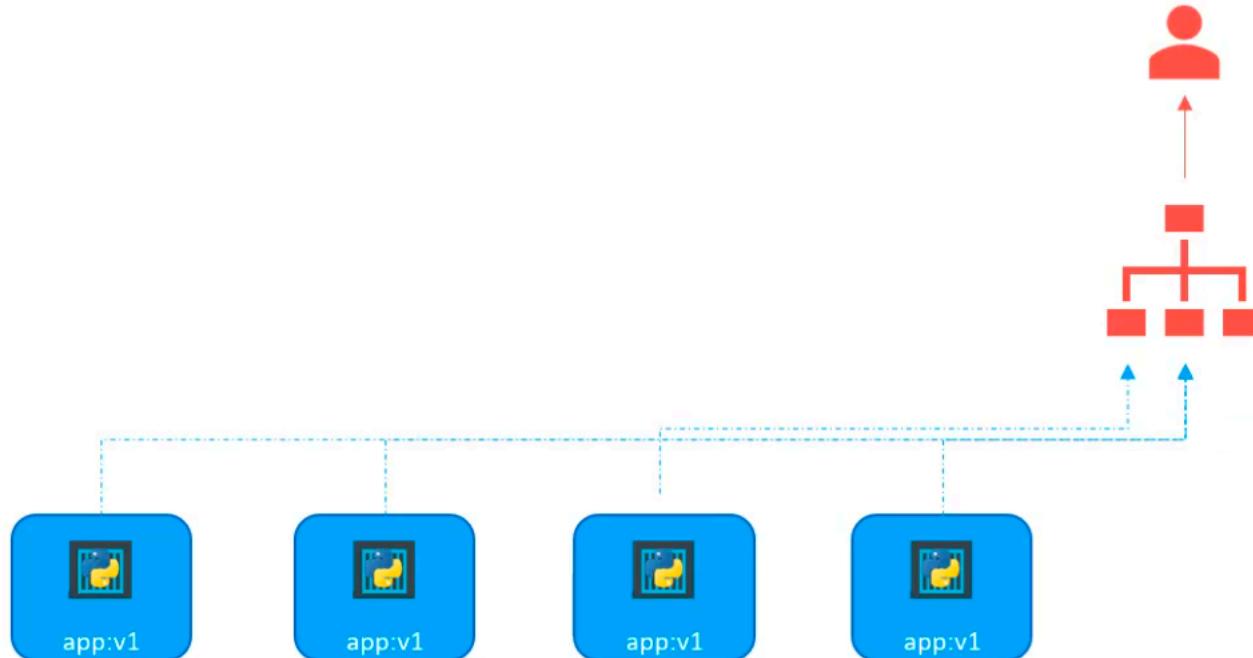
Advanced Strategies – Blue Green

The downside is that you need twice as many compute resources as your application actually needs.

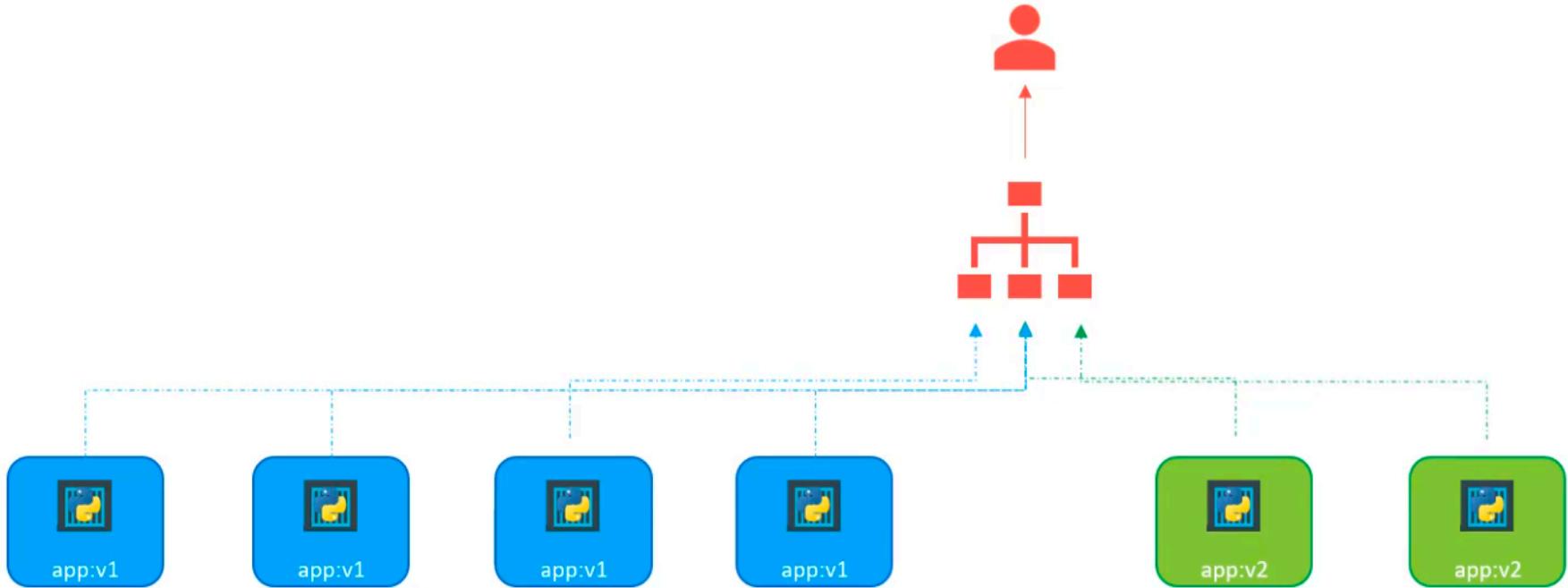
So if your application requires two machines, you need four machines when you are running both deployments.



Advanced Strategies – A/B

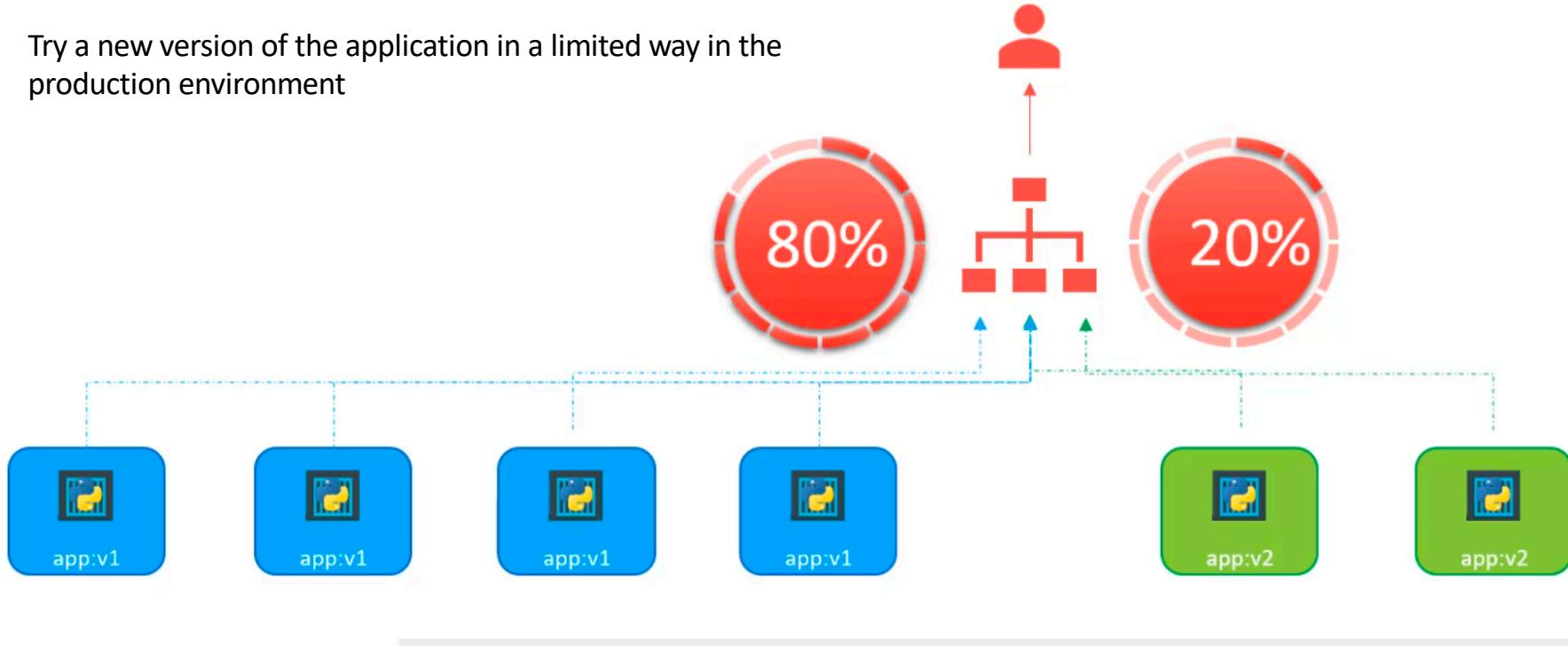


Advanced Strategies – A/B

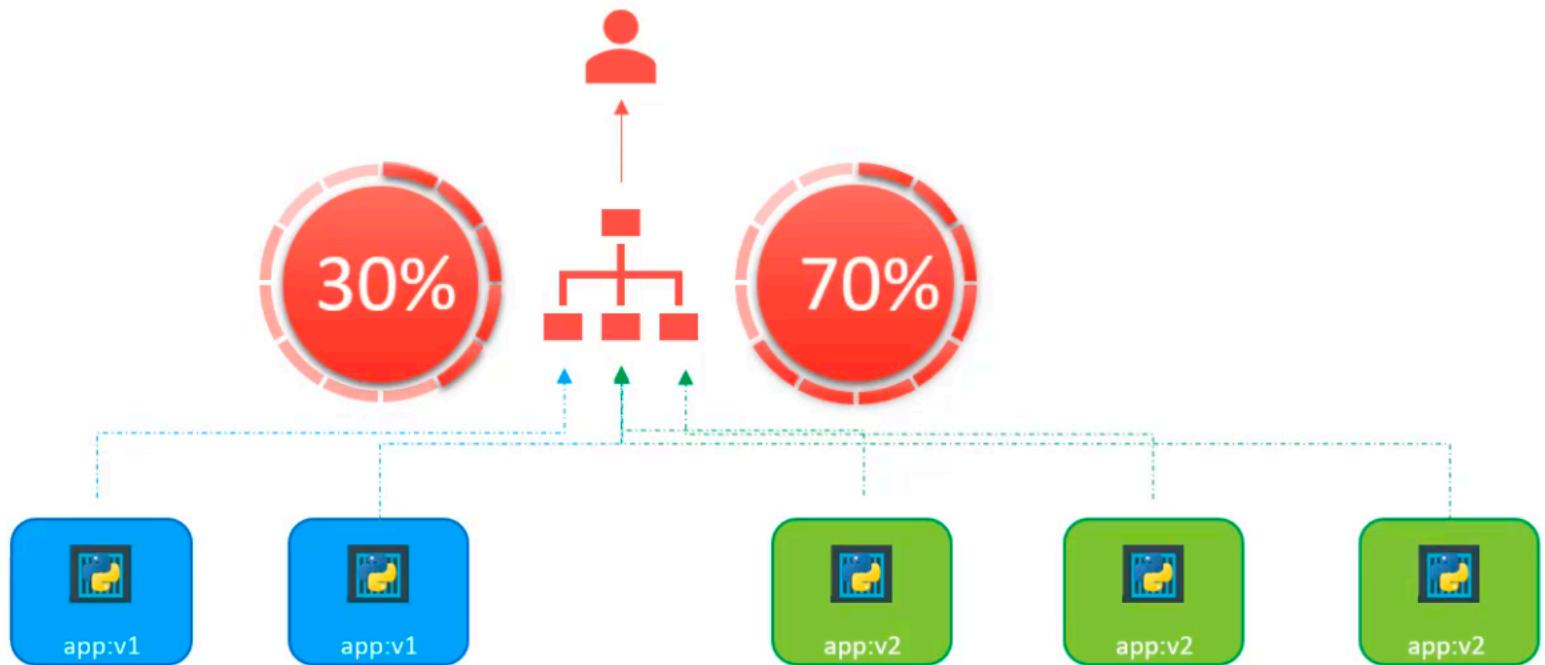


Advanced Strategies – A/B

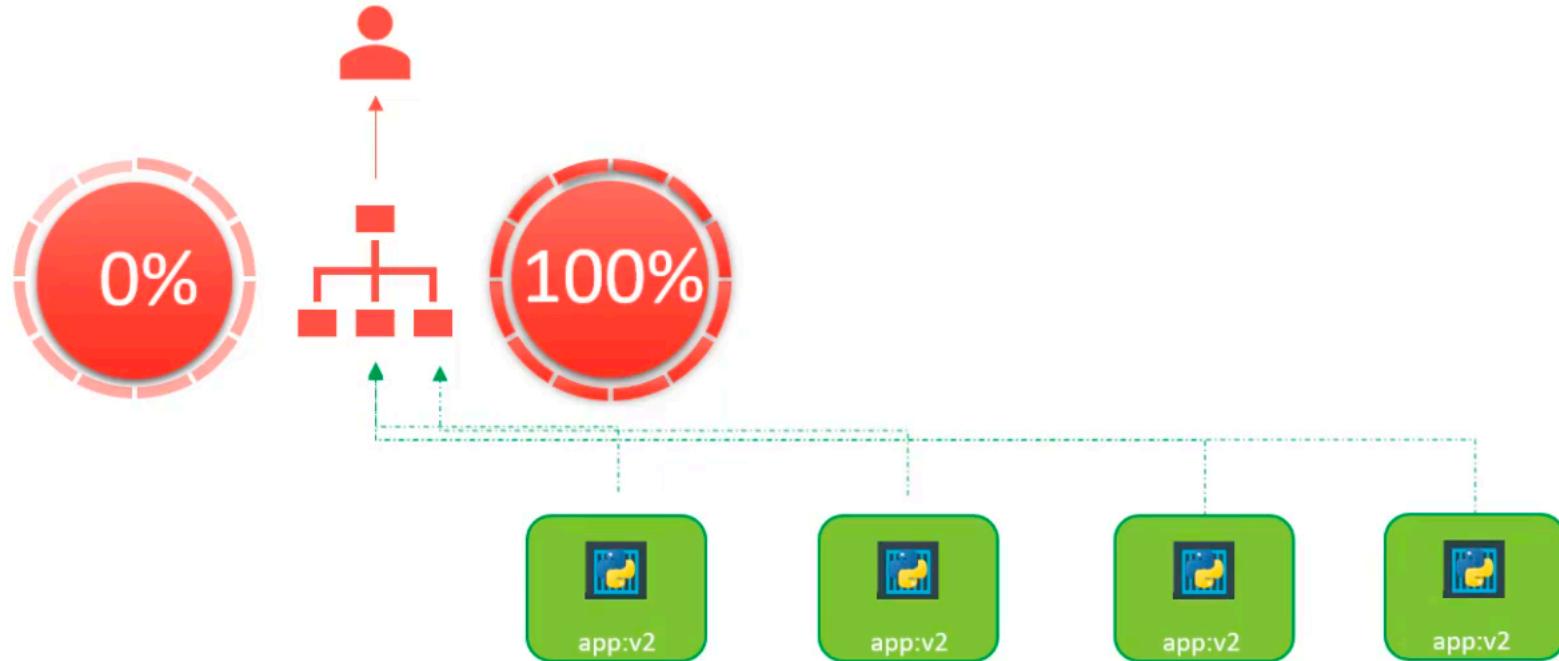
Try a new version of the application in a limited way in the production environment



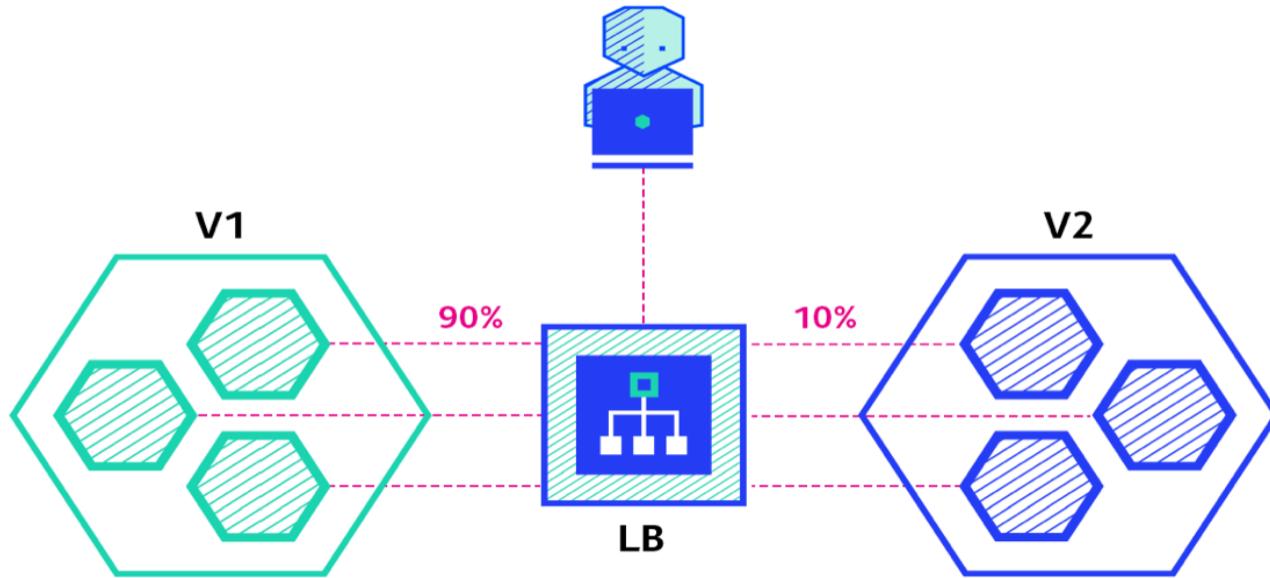
Advanced Strategies – A/B



Advanced Strategies – A/B



Canary Testing



DevOps Toolchain

Combine IBM Cloud services with open source and third-party tools to enable your team and align with your DevOps methodology.

1. Build and deploy toolchains
2. Build, test, and deploy toolchains
3. Other toolchains

<https://www.ibm.com/cloud/architecture/toolchains/>

LAB TIME

<https://github.com/IBMDevConnect/appmod-workshops/tree/master/lab8-devops>

