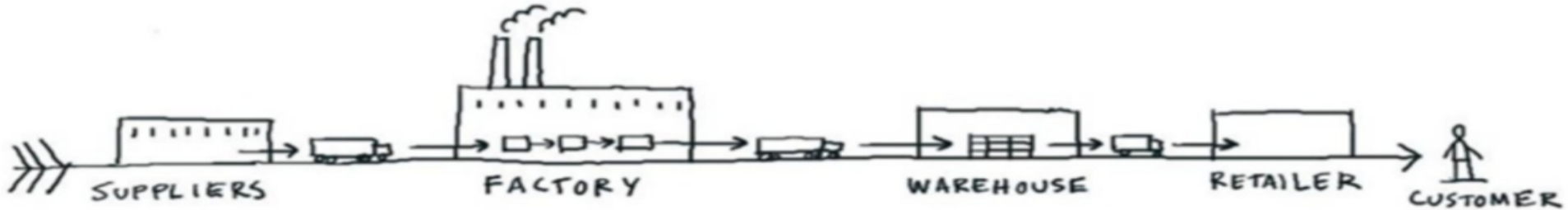


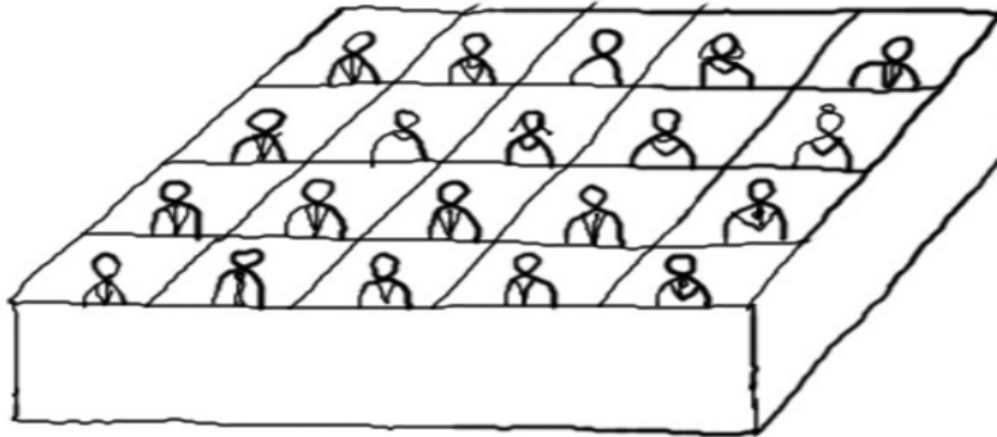
Culture of Automation CI/CD

Martin Sauvé
Solutions Architect,
msauve@redhat.com

Supply Chain

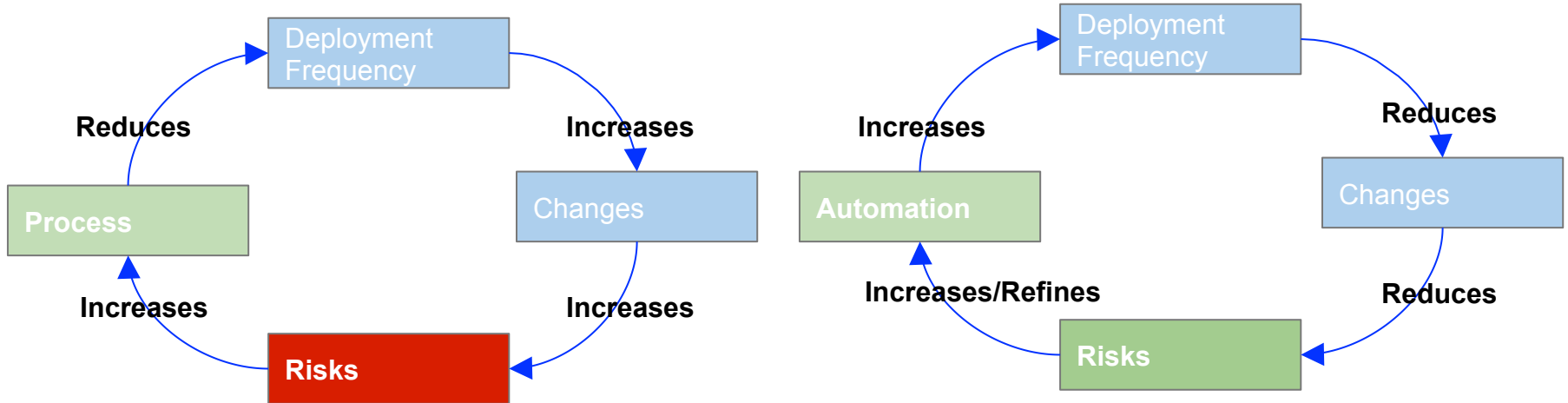


Source: Dave Gray, The Connected Company



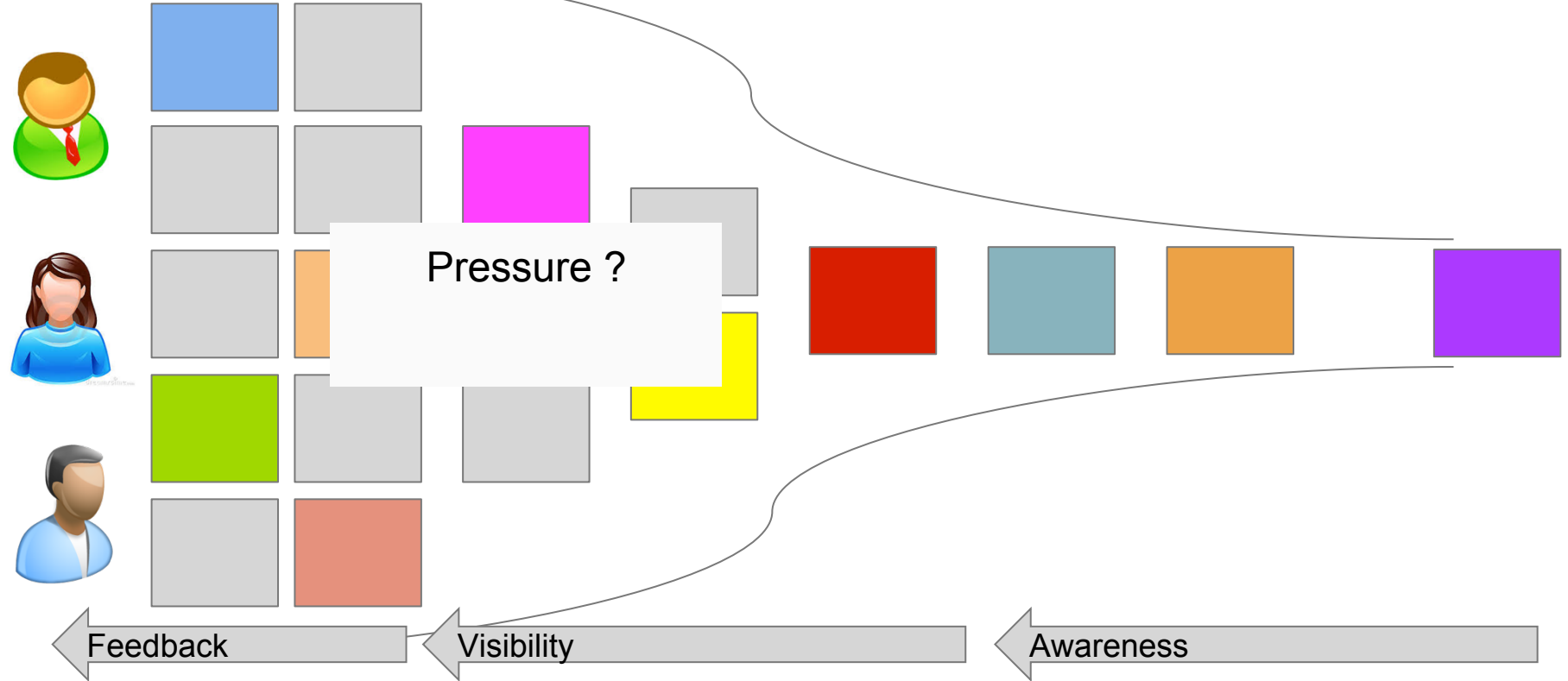
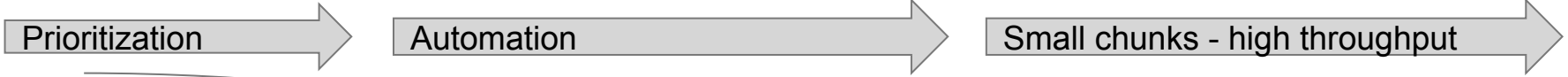
THE MORE IDIOT-PROOF
THE SYSTEM, THE MORE PEOPLE
WILL ACT LIKE IDIOTS.

Why Automation Matters



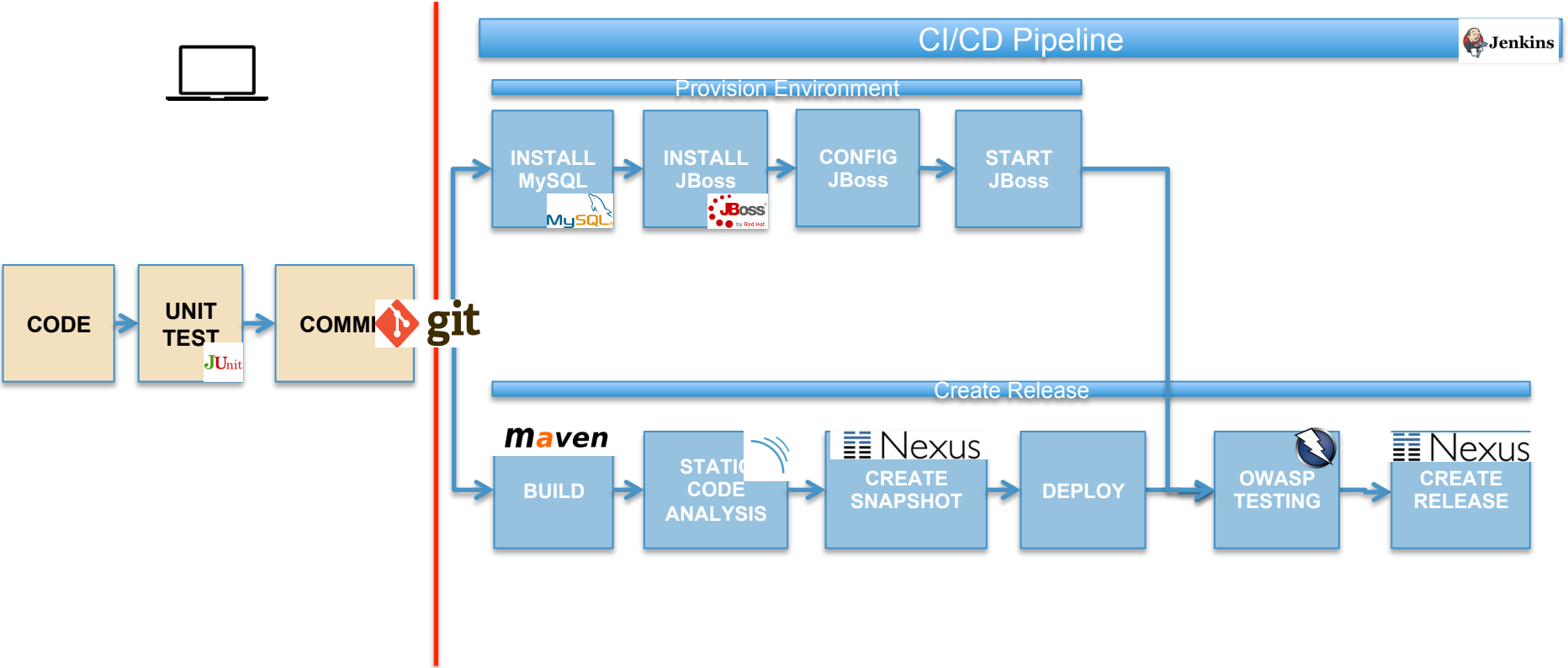
Culture of automation

- Faster Delivery
- Higher Quality
- Less Risks



- Single source of truth
- Infrastructure as Code
- Build Code for Production
- Provide Visibility to everyone who needs
- Automate to deployment in a clone of production/production – “Happy Path”

Developer Workflow



Developer Workflow

What about Ansible ?

USE CASE #1 – Pipeline installation and configuration

- Several Roles available in Galaxy or in Communities supporting the toolchain
- Strong Ecosystem
- Demo was installed exclusively with Ansible. Very few manual intervention

USE CASE #2 – Jenkins Ansible Plugin/Integration

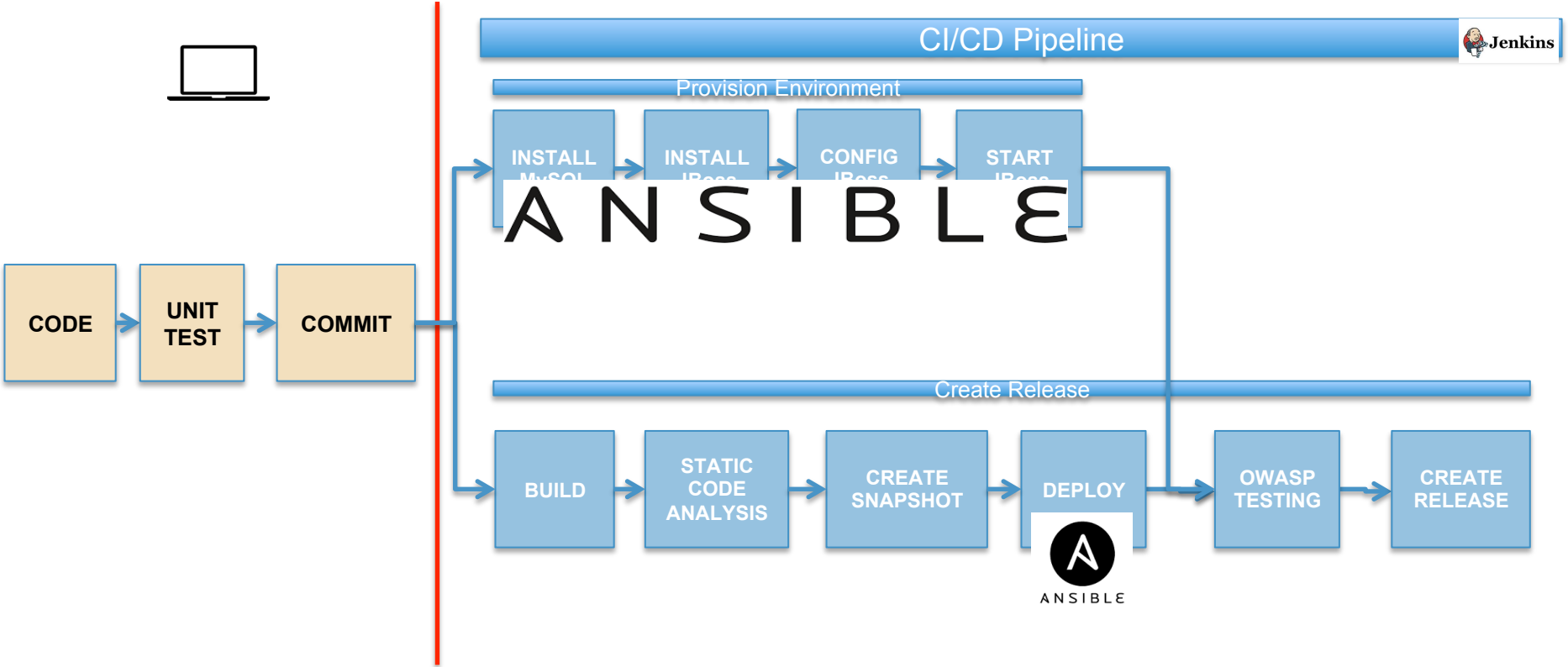
- Several Jobs in the Pipeline are done by Ansible Playbooks
- For example, dynamic provisioning and configuration of dev environment

USE CASE #3 – Provision Environment

- Provision nodes and OS configuration
- Provision Application Server/Database



Developer Workflow



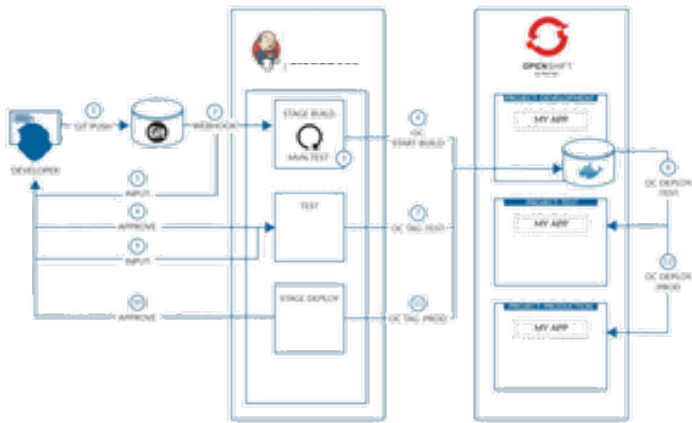
DEMO !!!

In the demo:

- Single source of truth - GitHub
- Infrastructure as Code - Ansible playbooks/roles in source control
- Build Code for Production – Sonar/ZAP/JUnit
- Provide Visibility to everyone who needs - Jenkins UI, Sonar UI, ZAP Report
- Automate to deployment in a clone of production/production – “Happy Path” – Jenkins/Ansible

Part 2 – Coming soon

CICD with Containers



Ansible plugin – This plugin lets you invoke Ansible playbooks using Jenkins and Ansible Core.

You can also use Dynamic Inventories from places like Cobbler, OpenShift, OpenStack, Amazon EC2 and more.

OpenShift Sync plugin – Sync OpenShift Builds and BuildConfigs with the state of Jenkins and Jenkins Jobs.

OpenShift Pipeline plugin – Exposes OpenShift’s functionality (such as triggering builds/deployments, promoting images from dev to test to production, or scaling deployed apps) to Jenkins

WildFly / JBoss EAP plugin – Enables Jenkins to automatically deploy apps to local or remote, standalone or domain WildFly and/or JBoss EAP

Kubernetes plugin – The base Kubernetes plugin primarily exists to allow you to dynamically provision Jenkins slaves within a Kubernetes cluster, for scalability as well as providing pods with specific runtimes for specific jobs.

Jenkins in the Red Hat CI/CD Ecosystem

Follow me on Github:

<http://github.com/masauve/>

<http://github.com/masauve/cicd-pipeline>

posted soon

- Demo setup to be