



FlashPipe

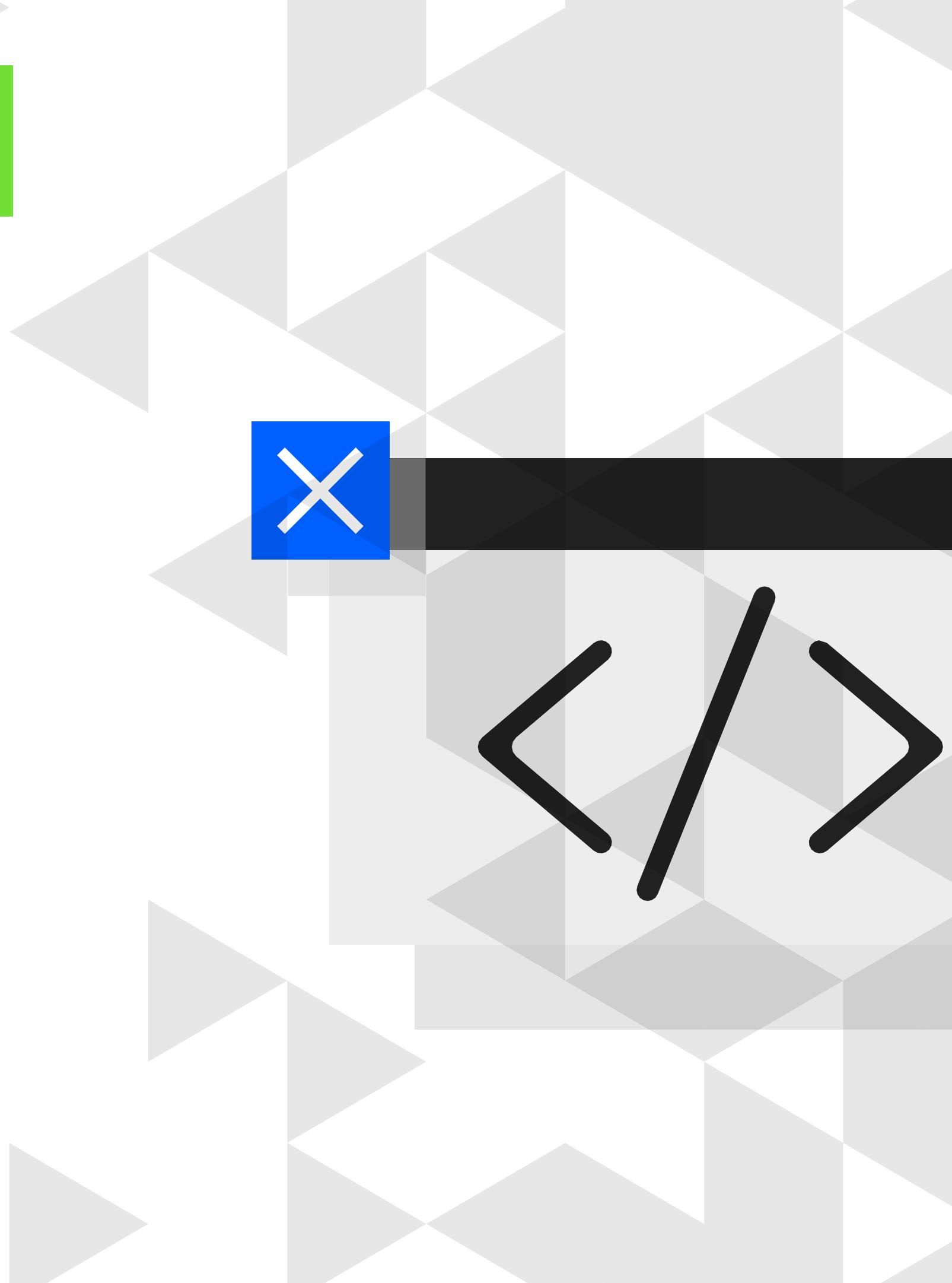
Simplifying CI/CD
for SAP Integration Suite

PI MON
2021



Agenda

- About Me
- What is Continuous Integration and Continuous Delivery/Deployment?
- Introduction to FlashPipe
- Demo of using FlashPipe with SAP Integration Suite
- Questions & Answers



About Me



in [/in/engsweeyeoh](https://www.linkedin.com/in/engsweeyeoh)

Eng Swee Yeoh

people.sap.com/engswee.yeoh

Integration Architect at Int4.

Integrating SAP solutions since 2005.
Working with SAP Integration Suite
since 2015.

Author of multiple open-source solutions
for SAP integration.

SAP Mentor, TechEd Speaker, SAP
PRESS Author



deploys code to production every
11.7 seconds

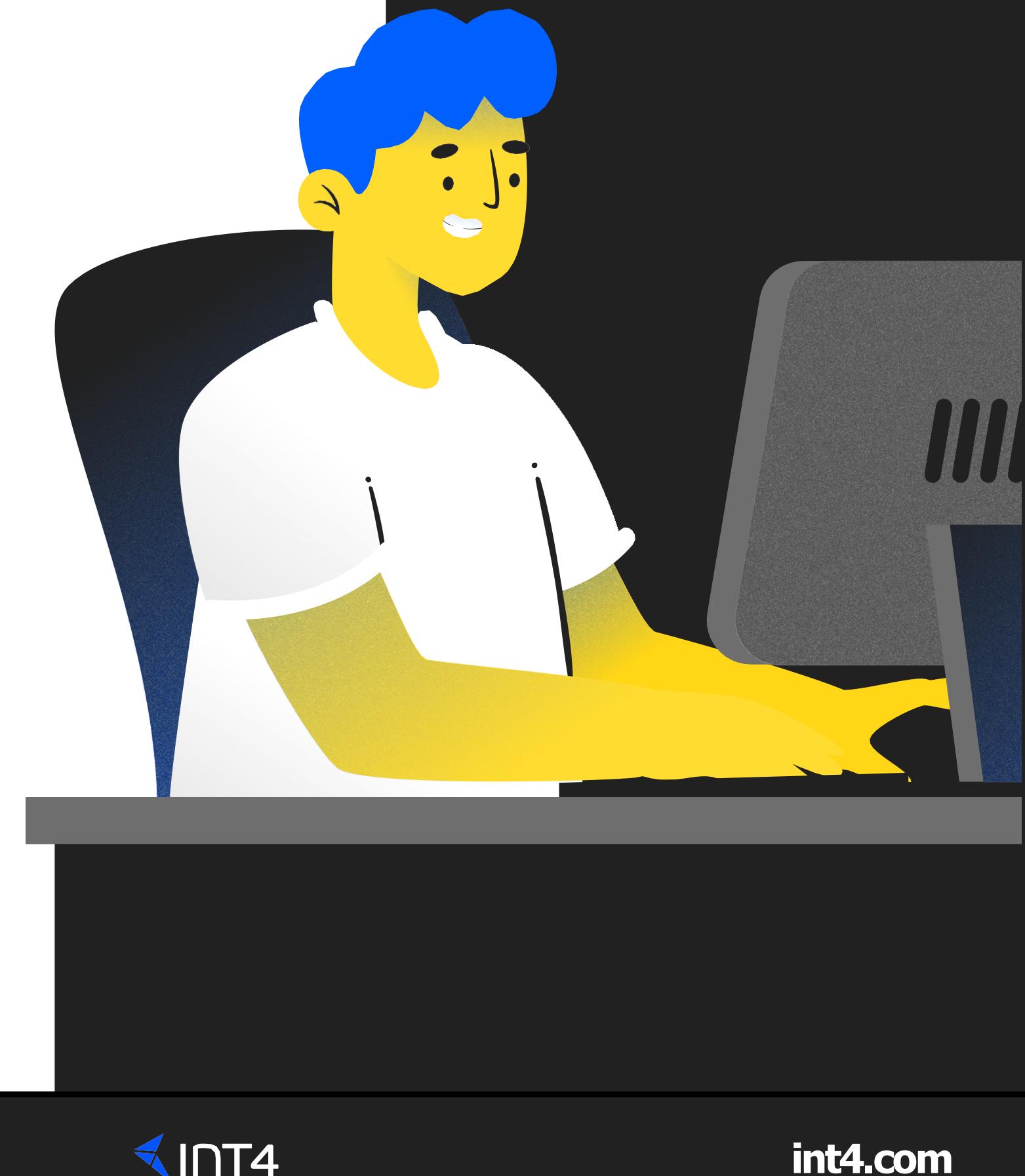
What is Continuous Integration and Continuous Delivery/Deployment?

The ability for rapid deployment to production is backed by automation

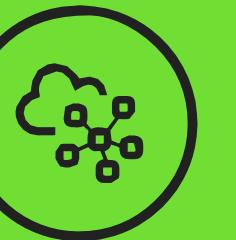
- **Continuous Integration (CI) and Continuous Delivery or Continuous Deployment (CD) enables automation of building, testing and deployment of software**
- **CI/CD capability is now a must-have for IT organizations across all industries**

Point to ponder:

How long does it take for deployment of an average SAP-based development - 1 week, 1 month, 6 weeks?



A Look at the Build-to-Deploy Process for Cloud Integration



The Build-to-Deploy process of software development in SAP ecosystem consists of many **manual** and time-consuming steps – it is no different for Cloud Integration

BUILD

- Develop Integration Flow in Web UI
- Develop Groovy scripts in external IDE (optional)
- **Manual** deployment of design artifact to runtime

TEST

- **Manual** testing using tools or with third party systems

DEPLOY

- **Manual** export of design artifact from development system
- **Manual** import of design artifact into production system
- **Manual** configuration and deployment to runtime



Introduction to FlashPipe

Key features of FlashPipe:

- **Automated** syncing of Integration Flows to Git repository
- **Automated** unit testing & simulation testing with Maven
- **Automated** deployment of Integration Flows to runtime
- **Automated** deployment to QA, Production environments

Enables automation across multiple personas/teams – development, testing/QA, change & release

*Open source (<https://github.com/engswee/flashpipe>)
and licensed under Apache License Version 2.0*



| Key Technologies



■ Closer Look at FlashPipe

FlashPipe is a public Docker image that provides CI/CD capabilities for SAP Integration Suite

It is technically possible to use FlashPipe on any CI/CD tool that supports container-based pipeline execution.

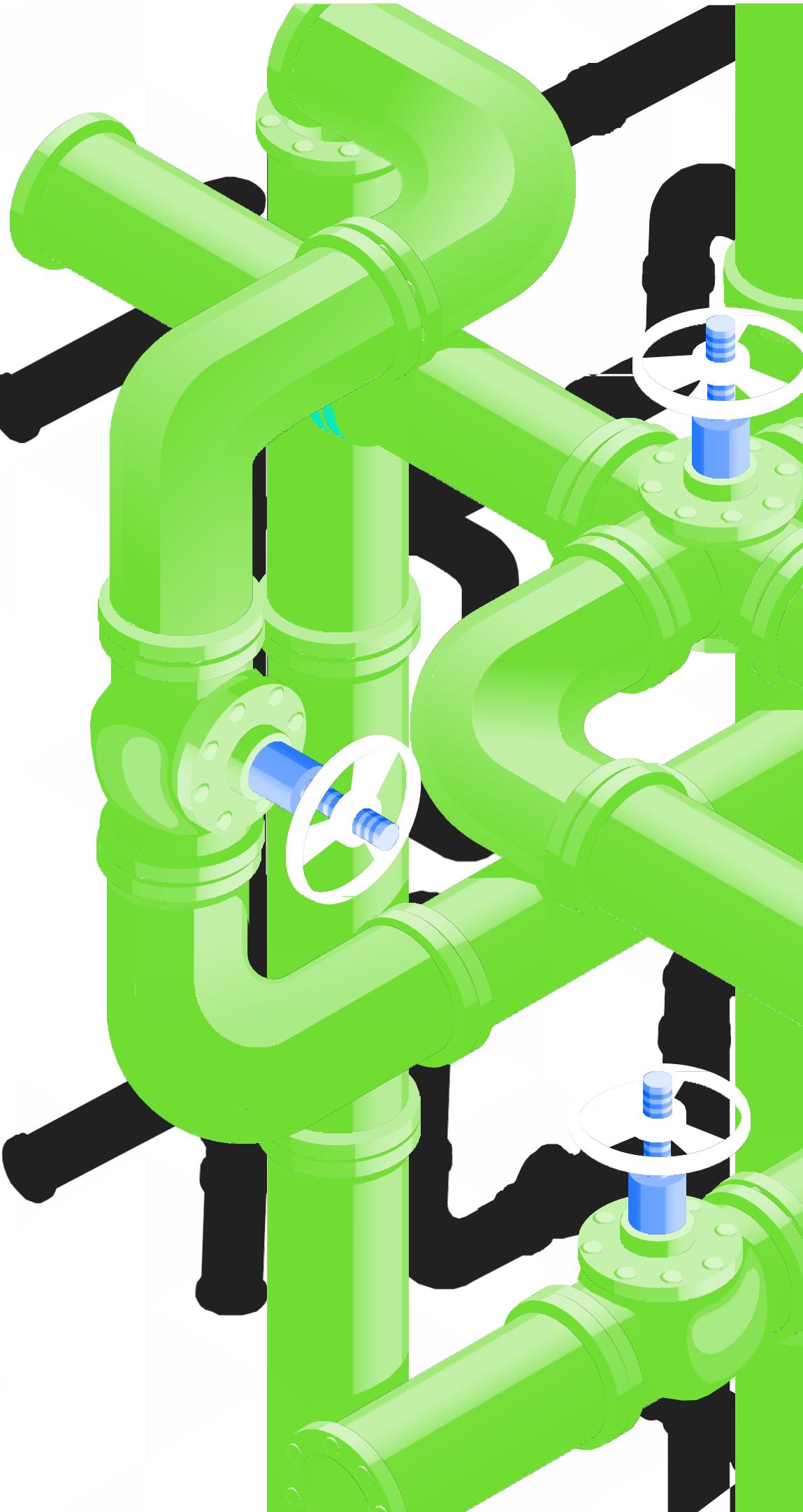
Images comes in two flavors (i.e., tags), and can be mixed-and-matched in different steps/stages of a pipeline.

Full (e.g., tag 2.2.1)

Full image with Maven capabilities and selected third-party libraries

Lite (e.g., tag 2.2.1-lite)

Smaller image without Maven. Faster pull time from Docker Hub.



|- Closer Look at FlashPipe

FlashPipe comprises of the following key components:

Java executables

- **Groovy source codes (compiled as Java binaries) for accessing SAP Integration Suite APIs**

Unix scripts

- **BASH scripts wrapping around Java executables, providing executable steps used in CI/CD pipeline definition**

Local Maven repository (only in full images)

- **Provides cached libraries for faster execution of Maven-based testing**





FlashPipe in Action

1

Create new Integration Flow with dummy Groovy script

2

Sync Integration Flow to Git repository with GitHub Actions

3

Develop Groovy script in IntelliJ IDEA

4

Update and deploy Integration Flow with Azure Pipelines



Open questions,
feedback session

Thank you!



Eng Swee Yeoh
Integration Architect
SAP Mentor

www.int4.com



SAP® Certified
Integration with SAP® S/4HANA

SAP® Certified
Powered by SAP NetWeaver®