March 3, 2020

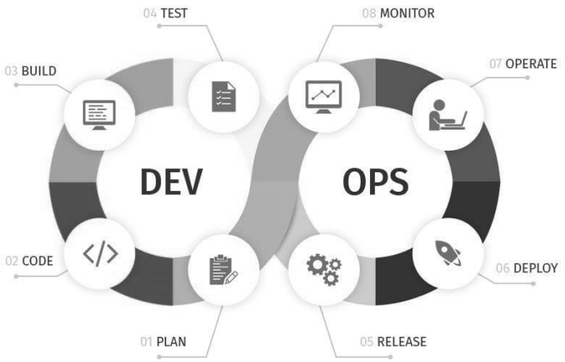
Drive SAP with the Speed of Digital

DXC’s CLEVER CI/CD Platform for SAP

DXC.technology

DevOps and CI/CD are common in Agile teams

DevOps *is a combination of software development (Dev) and operations (Ops). It is defined as a software engineering methodology which aims to integrate the work of software development and software operations teams by facilitating a culture of collaboration and shared responsibility.*



Collaboration

Adopting a DevOps model creates alignment between development and operations teams; handoff friction is reduced and, everyone is all in on the same goals and objectives.

Shorter cycle time

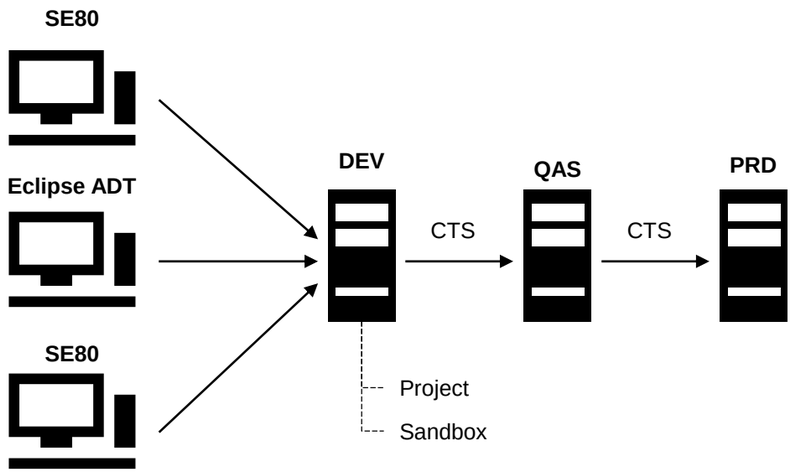
Improved efficiency and frequent communication between teams shortens cycle time; new code can be released more rapidly while maintaining quality and security.

Fluid responsiveness

More collaboration leads to real-time feedback and greater efficiency; changes and improvements can be implemented quicker and guesswork is removed.

… but why ~~is~~ was DevOps in ABAP so “hard”?

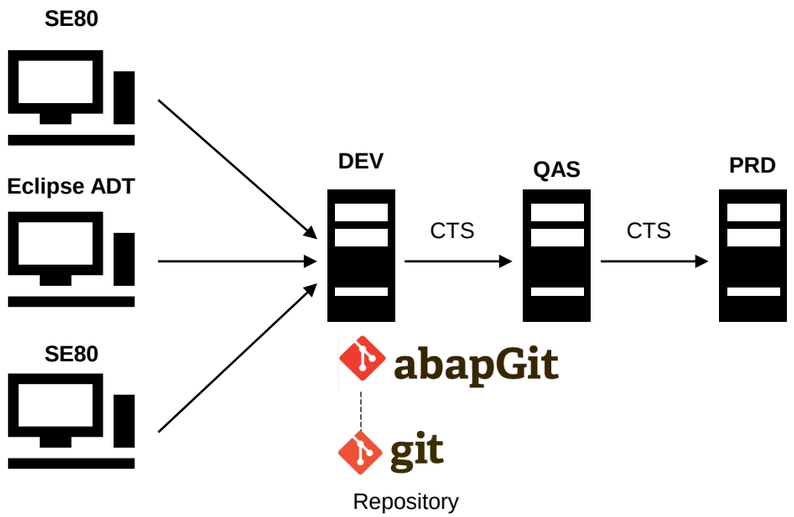
Classic ABAP Development…



Dev System

- Source code Repository
- Build Environment
- Artefact Repository
- Runtime environment

… and then we got abapGit!



abapGit

- Enabler for social coding and code review
- Enabler for experiments and rollbacks
- Code versioning and backup
- No replacement of CTS

We have proved significant benefits in our projects

75%
Functional, scenario and regression testing from 8 weeks to 2 weeks

100%
Execution of planned tests

50%
Improved efficiency between BAU and development

Zero
Close to zero defects after deployment

20%
Improved efficiency in quality review and development effort

60%
Creation of 500 test scripts and 100 scenarios from 75 to 30 days

50%
time savings on end-user trainings

100%
Re-use of developers and code across Git-clients

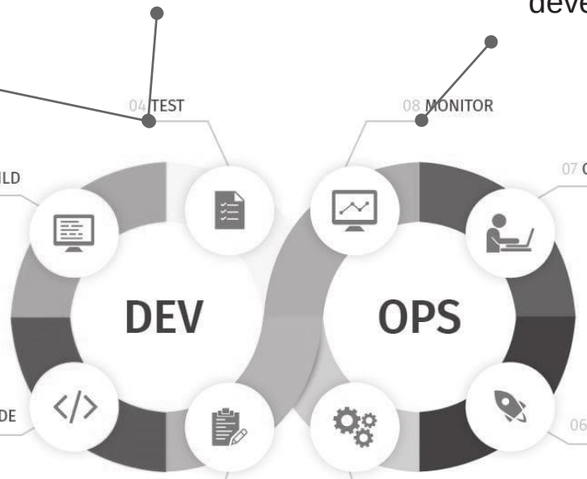
100%
Execution regression test cycles every time

Zero
No extra SAP, developer keys and object locking

1500%
Setup of project (infra)structure and team from 2 weeks to 1 day

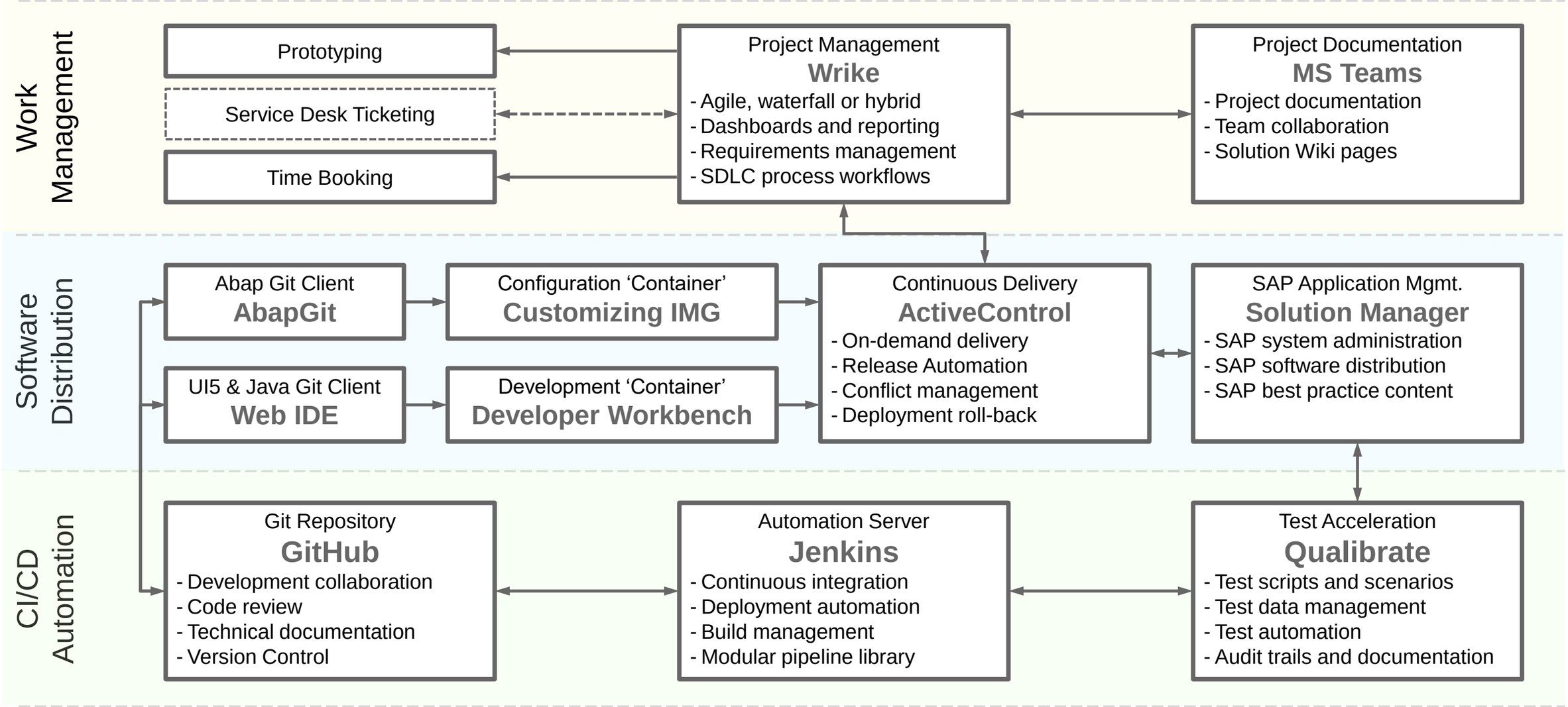
75%
Less design time through mock-ups and wireframes

80%
time savings for process, technical and functional documentation



Our Agile platform helps clients to thrive on change

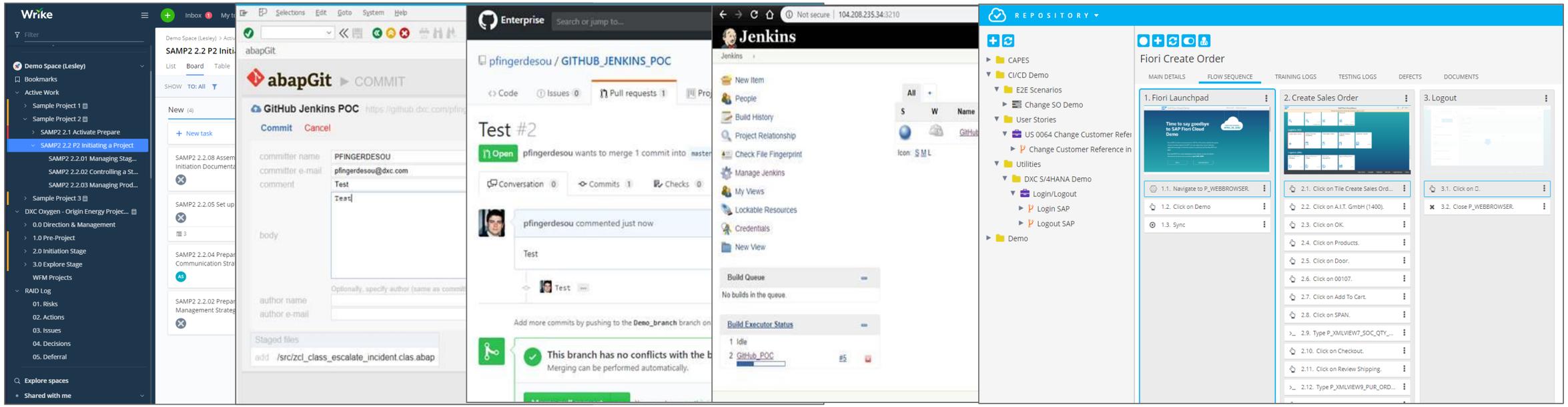
DXC's CLEVER platform enables digital transformation and its building blocks allow clients to adopt digital concepts one at a time



Next level automation is an end-to-end CI/CD workflow

We have setup a suite of digital tools to realise a true DevOps framework.
By doing this we have realised true CI/CD in any ABAP system landscape, today.

Wrike → abapGit → GitHub → Jenkins → Qualibrate



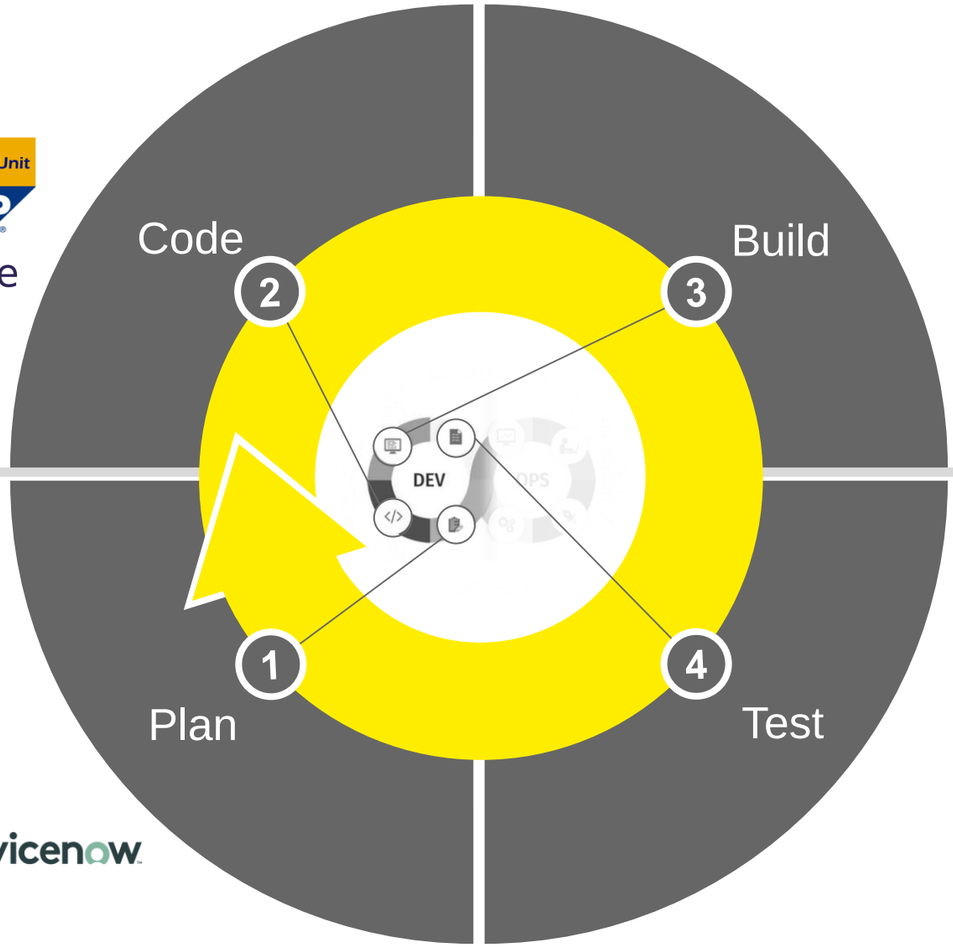
Automation and smart use of advanced tooling enable true CI/CD workflow in any SAP environment

- Social coding
- Test Driven Development
- Automated Unit Tests
- True version control
- Code review

ABAP Unit SAP
eclipse
abapGit
Wrike GitHub axure

- Build management
- Continuous integration
- Test results dashboard

Jenkins ActiveControl



- Sprint planning
- Local Test Classes
- Defect Management
- Central Test Catalogue

ABAP Unit SAP
axure
QUALIBRATE Wrike servicenow

- Automated testing:
- Functional
- Integration
- Regression

QUALIBRATE Wrike

The platform leverages DXC offerings such as CBO4SAP and PaaS4SAP to automate Operations

- CBO4SAP: AutoDetect, autoResolve, autoImprove, autoManage and autoHealth
- Detect-to-correct predictive analytics

Wrike
servicenow
SAP Cloud ALM
SAP Solution Manager 7.2

- Automated scale up and down and provision SAP resources
- One-click start, stop, suspend and resume of SAP instances
- Basis and database automation

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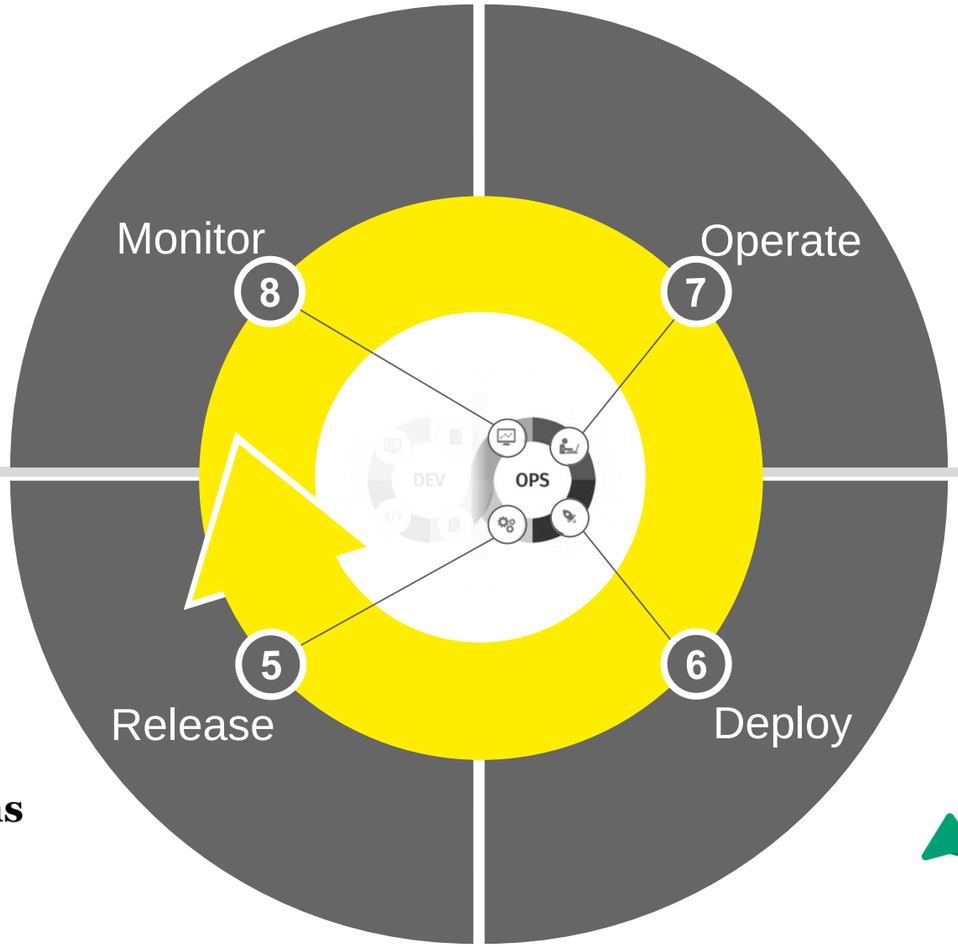


- Semantic versioning
- Release strategy & planning
- SAP transport management
- Audit & compliance

QUALIBRATE
Jenkins

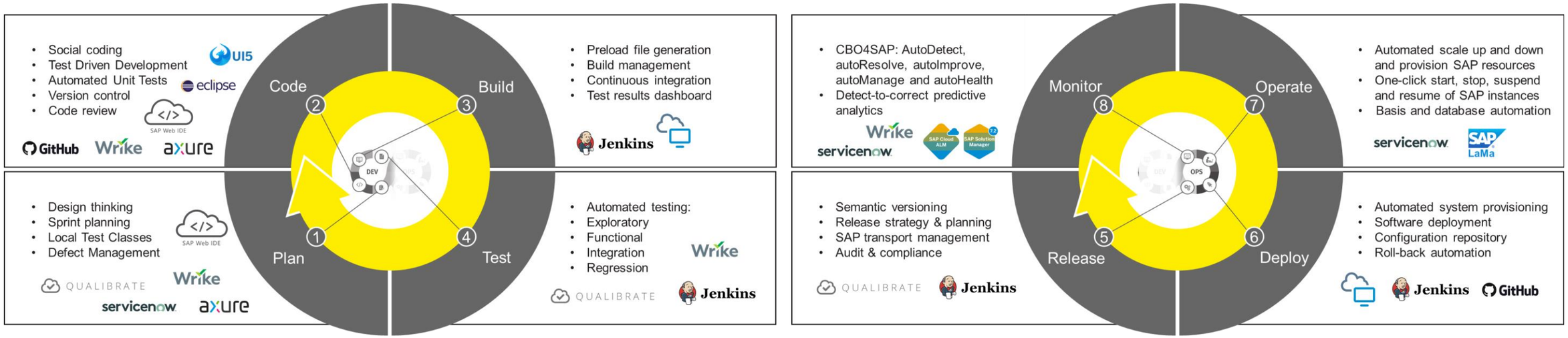
- Automated system provisioning
- Software deployment
- Configuration repository
- Roll-back automation

ActiveControl
Jenkins
GitHub

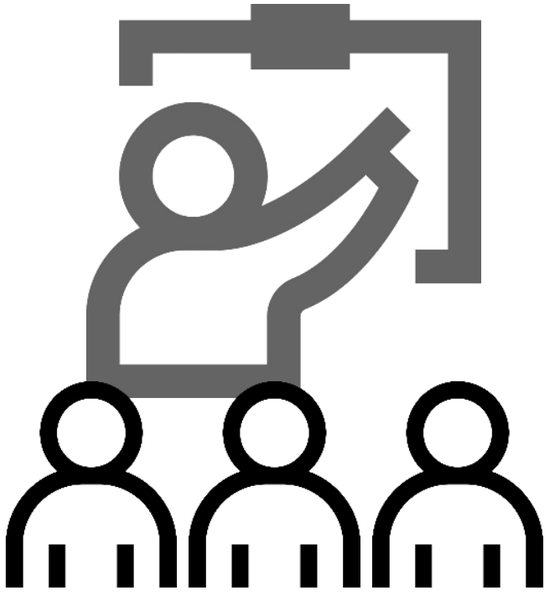
The CLEVER platform includes a complete set of tools for SAP UI5 (HTML5) developments too

SAP UI5 is the development tool from SAP toolkit, offering various features that the users can use to enhance their user experience to create apps with rich user interfaces for Web business applications. This tutorial explains the architecture, various key concepts, and important components of SAP UI5.

SAP Web IDE is a powerful, extensible, web-based tool that simplifies both the development of end-to-end SAP Fiori apps and the full-stack (UI, business logic and database) application lifecycle. You can develop, debug, build, test, extend and deploy role-based, consumer-grade apps.



Next Steps: Learn to walk before you really RUN SAP



1. Identify the gaps in your SAP value delivery streams

2. Analyze what’s causing these gaps

3. Decide where to start and learn to walk

Thank you