



# Agenda

- What is Internal Developer Portal?
- Challenges for Developers & Org without IDP
- What is DORA?
- IDP and DORA metrics as a service
- What is Comorin?
- DEMO: Comorin and Dev Insights Platform
- Benefits of Comorin IDP
- 12 reasons to buy Comorin

# What is Internal Developer Portal?

Have you ever been in any of these situations?

Where is the source repository?

[Bookmark Hell]

*look for bookmarks or browse through file system*

Where is the Documentation?

[Graveyard of Docs]

*search where? sharepoint or confluence or devops*

Is this commit deployed in production?

[Monday Blues]

*where? k8s portal or ci/cd pipeline or git commits?*

What about monitoring?

[Where is the Metrics?]

*what and where are the links to those tools?*

Incident reported, where is the logging?

[What is the Key?]

*what is the project key to search for in Elasticsearch*

Now I want to check the code quality?

[Where is the Q GATE?]

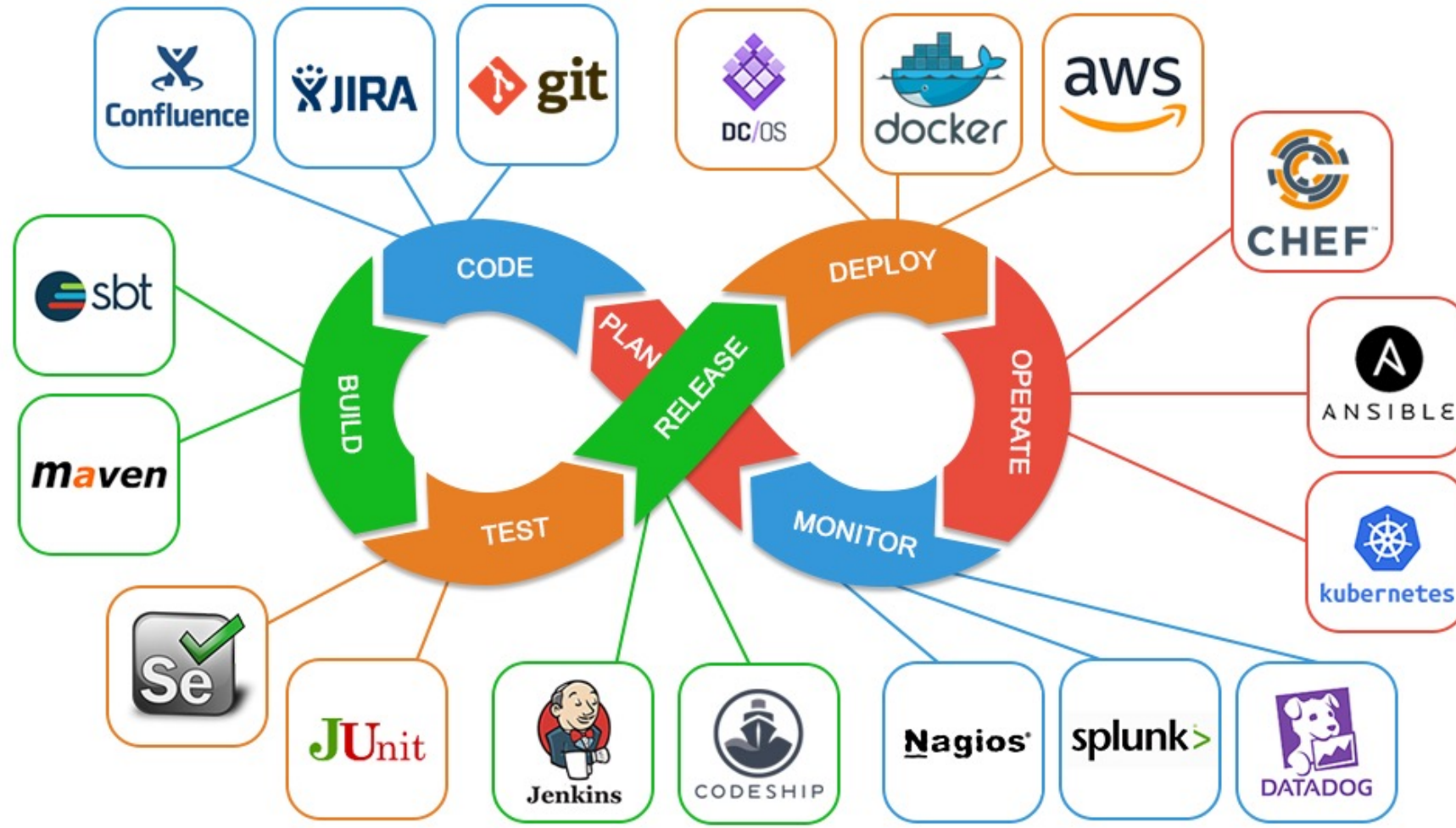
*Where is sonarqube link? what is the project key?*

Which browser TAB should I switch?

[Welcome to the ABYSS!]

*Which one to click? getting lost in the sea of open tabs.*

# DevOps State: That is lot of TOOLS



# Without Internal Developer Portal

- Developers in organizations without an Internal Developer Portal (IDP) often face several pain points that can hinder
  - Productivity,
  - Collaboration,
  - Motivation,
  - Overall efficiency.
- We have identified 10 challenges that every organization faces without centralized Internal Developer Portal and Developer Insights Platform

# Challenges

## 1. Fragmented Tooling and Processes

- **Tool Overload:** Developers need to navigate and integrate multiple tools manually, leading to tool fatigue.
- **Inconsistent Processes:** Lack of standardized workflows can result in inconsistencies and errors in development, testing, and deployment.

## 2. Onboarding Difficulties

- **Complex Onboarding:** New developers face a steep learning curve, as they need to understand various systems, tools, and processes without a centralized resource.
- **Lack of Documentation:** Absence of centralized and up-to-date documentation makes it difficult for new hires to get up to speed.

# Challenges

## 3. Inefficient Collaboration

- **Siloed Information:** Information and knowledge are often siloed within teams, making cross-team collaboration challenging.
- **Communication Breakdowns:** Without integrated communication tools, keeping track of discussions and decisions can be cumbersome.

## 4. Operational Overhead

- **Manual Configurations:** Developers spend significant time on manual configurations and environment setups, which could otherwise be automated.
- **Repetitive Tasks:** Lack of automation for repetitive tasks such as deployments, testing, and monitoring increases the operational burden.

# Challenges

## 5. Limited Visibility and Control

- **Lack of Insights:** Without centralized dashboards and metrics, tracking project progress, code quality, and system health is difficult.
- **Poor Monitoring:** Inefficient monitoring and alerting mechanisms lead to delayed responses to issues and increased downtime.

## 6. Difficulty in Maintaining Consistency

- **Versioning Issues:** Ensuring consistency across different environments (development, staging, production) is challenging without automated processes.
- **Dependency Management:** Managing dependencies and ensuring compatibility across projects can be error-prone and time-consuming.



# Challenges

## 7. Security and Compliance Challenges

- **Inconsistent Security Practices:** Without a centralized platform, enforcing consistent security practices and compliance policies is difficult.
- **Vulnerability Management:** Identifying and mitigating vulnerabilities across disparate systems is more complex.

## 8. Performance Bottlenecks

- **Slow CI/CD Pipelines:** Inefficient and fragmented CI/CD pipelines lead to slow build, test, and deployment cycles.
- **Resource Constraints:** Optimizing resource usage without centralized management tools is challenging, leading to performance bottlenecks.

# Challenges

## 9. Limited Developer Experience

- **Frustration and Burnout:** Cumbersome processes and lack of streamlined workflows contribute to developer frustration and burnout.
- **Innovation Stifling:** Developers spend more time on operational tasks rather than focusing on innovative and value-adding activities.

## 10. Scalability Issues

- **Scaling Challenges:** As the organization grows, scaling processes, tools, and infrastructure without a centralized platform becomes increasingly difficult.
- **Resource Allocation:** Efficiently managing and allocating resources across projects and teams without centralized control is challenging.

# Backstage by Spotify

- **Backstage** : an open-source developer portal created by Spotify.
- **Centralized Hub**: It provides a central hub for managing the tools, services, and documentation that software teams need to streamline their development workflows and improve their productivity.
- **Dev. Experience**: The platform is designed to simplify the experience of developing, managing, and operating software systems.
- **Custom IDP**: Backstage provides set of libraries and plugins to build your own Internal Developer Portals
- **COMORIN**: Is our answer to bring order into chaos of Developer's life and clarity in development process for Leaders.

# Comorin: Features

## Software Catalog



Comorin IDP makes it easy for one team to manage 10 services — and makes it possible for your company to manage thousands of them

## Single Pane View



Every team can see all the services they own and related resources (deployments, data pipelines, pull request status, etc.) in a single window pane.

## Discoverability



No more orphan software hiding in the dark corners of your tech stack. IDP knows all about it, including who owns it, dependencies, and more

## Multi-Tenancy Security



The platform is designed for Tenant isolation and security from ground up supporting OIDC federation and the data is encrypted at rest and in transit.

## Plugin System



In-addition to the array of existing plugins, The developer portal can be extended with custom plugins to add new features and capabilities

## Developer Insights



Ingest and analyze fragmented data from DevOps tools like AzureDevops, Jenkins and Jira to visualize DevOps metrics and optimize engineering throughput using the DORA framework.

## Developer Empowerment




Comorin allow developers to focus on building features and solving business problems rather than managing infrastructure and tooling complexities.

## Centralized Docs



Comorin's TechDocs is centralized and lets developers write docs alongside code, making it easy for developers to navigate the read them in their Internal Developer Platform.

# Comorin: Catalog View



Search

Home

APIs

Docs

Create...

Tech Radar

Settings

Comorin Catalog

CREATE

SUPPORT

Kind

Component

Type

all

PERSONAL

Owned

0

Starred

0

COMORIN

All

1

OWNER

LIFECYCLE


PROCESSING STATUS

All components (1)

Filter

NAME	SYSTEM	OWNER	TYPE	LIFECYCLE	DESCRIPTION	TAGS	ACTIONS
<a href="#">example-website</a>	<a href="#">examples</a>	<a href="#">guests</a>	website	experimental			<a href="#">New</a> <a href="#">Edit</a> <a href="#">Star</a>

# Component: Component View



Search

Home

APIs

Docs

Create...

Tech Radar

Settings

COMPONENT — WEBSITE

example-website ☆

Owner  
guests

Lifecycle  
experimental

OVERVIEW

CI/CD

DEPENDENCIES

DOCS

About

<> VIEW SOURCE

VIEW TECHDOCS

DESCRIPTION

No description

OWNER

guests

SYSTEM

examples

TYPE

website

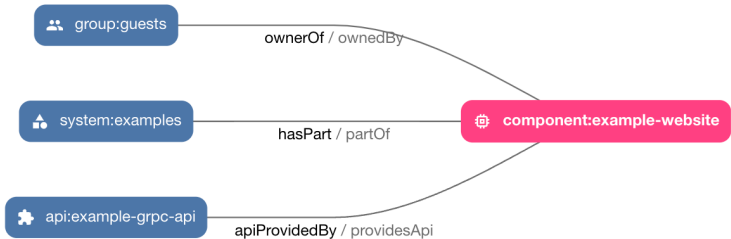
LIFECYCLE

experimental

TAGS

No Tags

Relations



```
graph LR; A[group:guests] -- "ownerOf / ownedBy" --> D[component:example-website]; B[system:examples] -- "hasPart / partOf" --> D; C[api:example-grpc-api] -- "apiProvidedBy / providesApi" --> D;
```

View graph →

Links

Has subcomponents

# What is DORA?

- The DevOps Research & Assessment (DORA) program that has been running for 10 years and gathered data from 32,000 professionals worldwide.
- DORA program provides an independent view into practices and capabilities that drive high performing technology organisations.
- Every year, the State of DevOps report is released with an updated research model. This enables the project to keep up to date with the industry as new methodologies and technologies are embraced.
- It provides an independent assessment of how organisations deliver software through FOUR key metrics, to determine practices that drive software delivery excellence and demonstrate how this is key to organisational success.

# What is DORA metrics?

## Key DORA Metrics



### Deployment Frequency

The number of times per day that a release is deployed into production.



### Lead Time for Changes

Total time between the initiation of a feature request to the delivery of that feature to a customer.



### Mean Time to Recovery (MTTR)

Average time it takes the team to restore service when a failure/outage occurs in production.



### Change Failure Rate

Percentage of changes that resulted in degraded services, like the service impairment or outage, and need to be fixed.



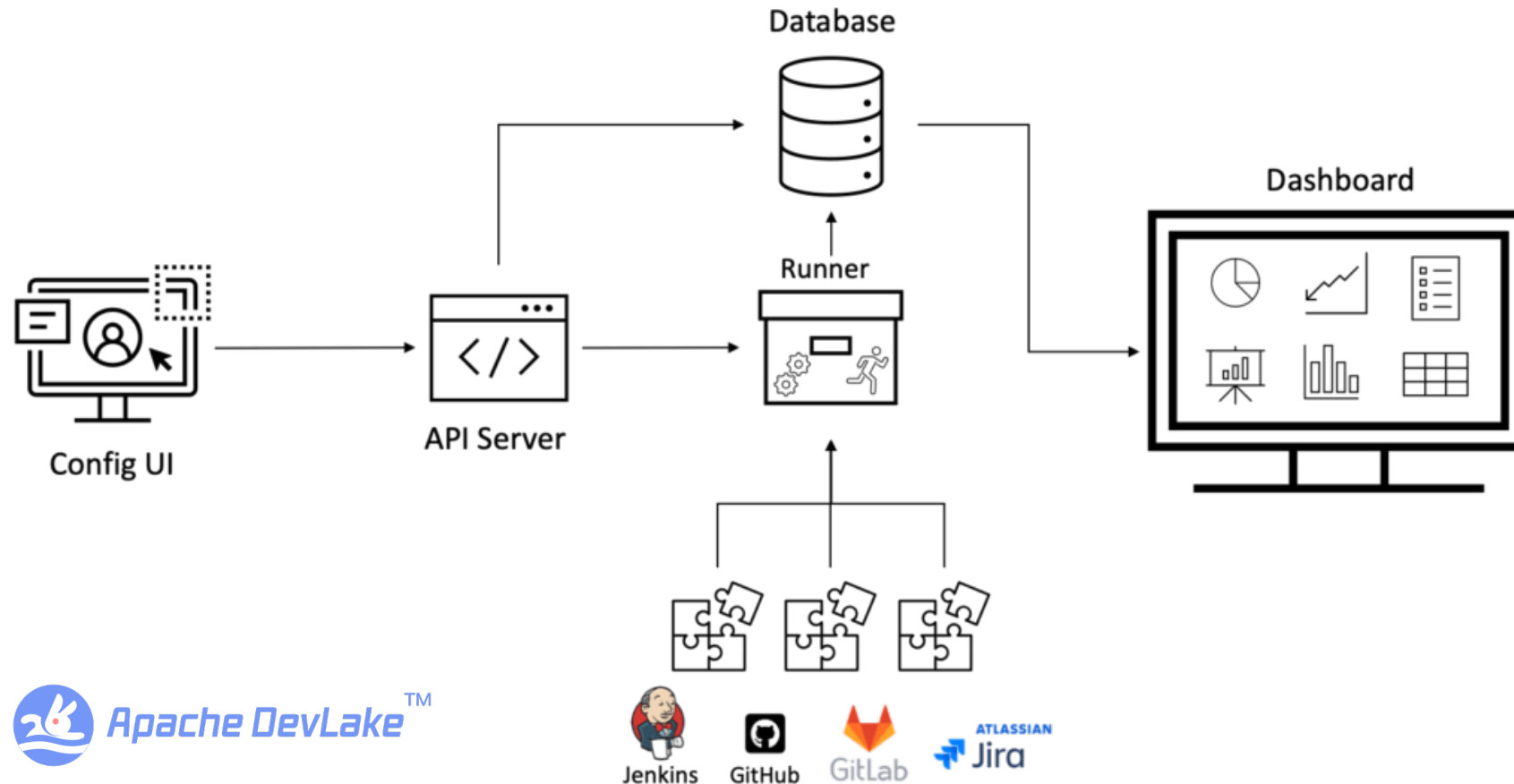
# Developer Insight Platform



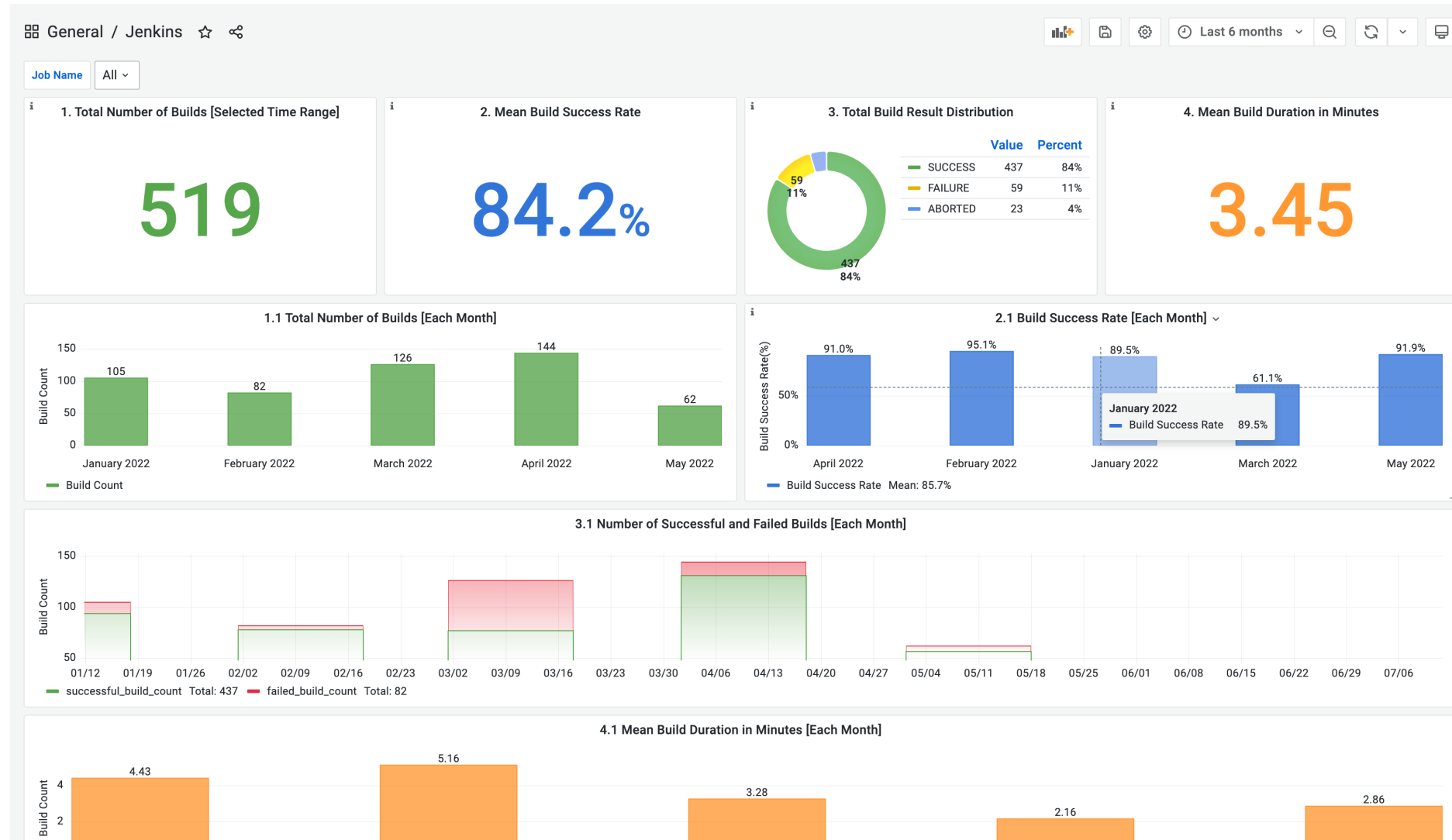
**If you can't measure it, you can't improve it.**

- To measure DORA metrics, an Developer Insight Platform is used to collect data from various DevOps tools, like AzureDevops, Jenkins, Jira, PagerDuty, GitLab, SonarQube.
- These collected data are crunched and FOUR key DORA metrics are derived and can be visualized in Grafana or Comorin portal
- For engineering leaders, utilizing DORA metrics provides a roadmap to success.
- By measuring and tracking these metrics over time, teams often gain the insights they need to inform decisions and drive improvements throughout the development process.

# Devlake: Developer Insight Platform

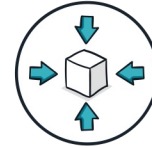


# Devlake: Developer Insight Platform



# To improve DORA metrics

To improve  
Deployment  
Frequency



Reduce batch size  
of changes

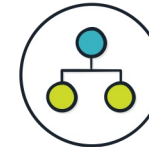


Implement automated  
continuous delivery pipeline

To improve  
Lead Time  
for Changes



Remove silos and have  
cross-functional teams



Break projects into smaller and  
more autonomous domains

To improve  
Mean Time  
to Recovery



Involve developers in  
production changes

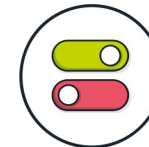


Improve automated testing  
and QA strategy

To improve  
Change  
Failure Rate



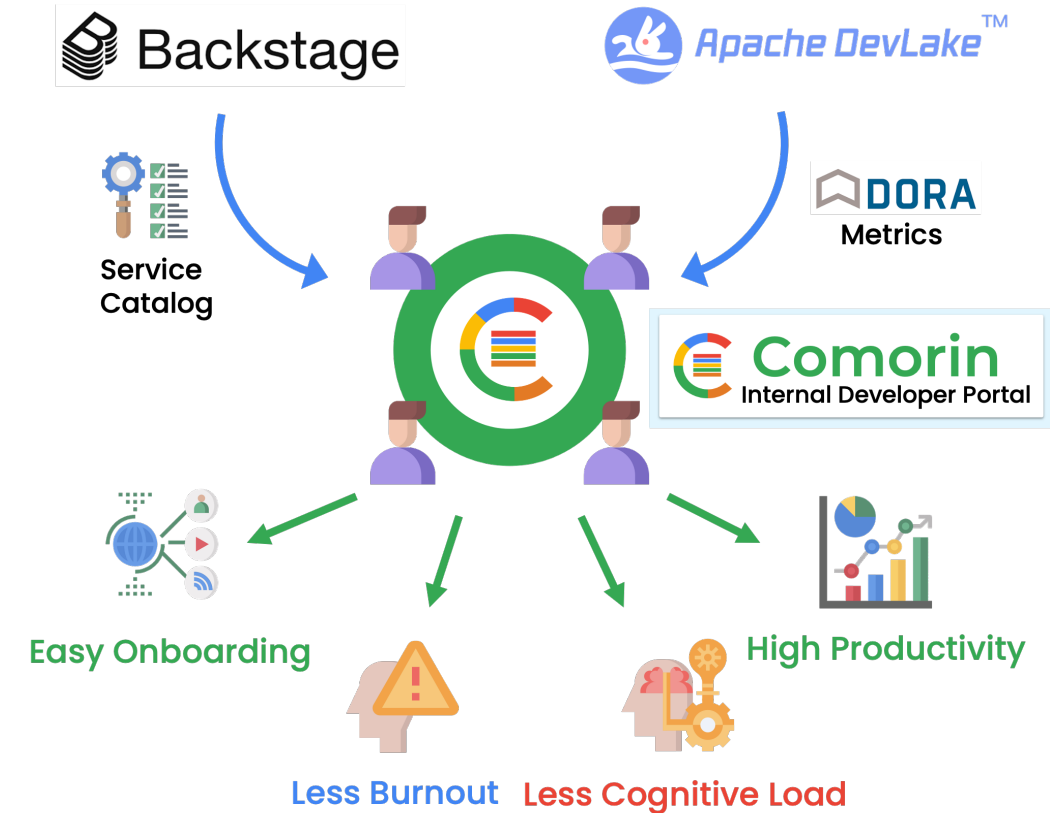
Improve automated  
test coverage



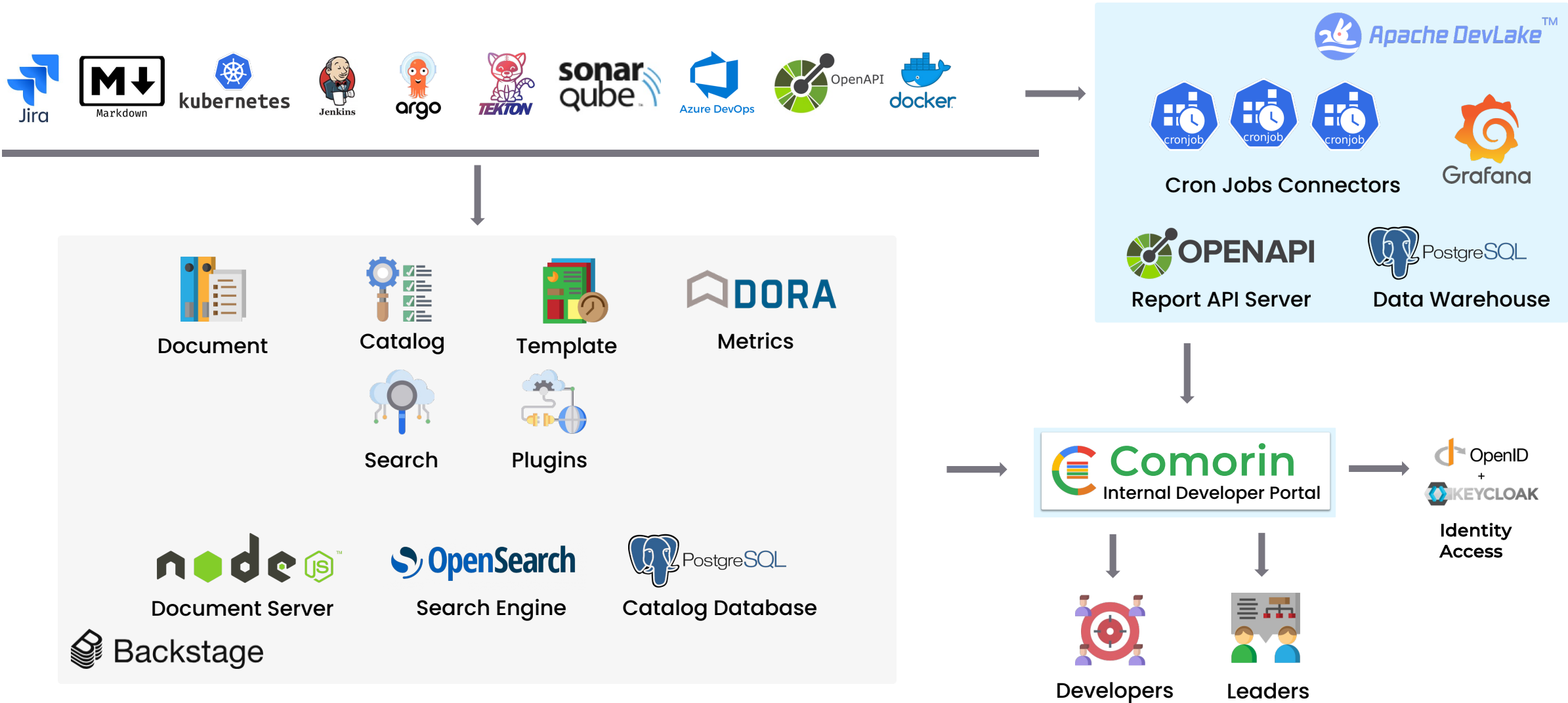
Feature flagging

# What is Comorin?

- Comorin is a Developer Portal built on,
  - Backstage, by Spotify
  - Apache DevLake
- Enterprise Grade instance of Backstage
- Developer Insight Platform for DORA metrics
- Provides Golden Path to Developers and Platform Engineers



# Comorin: Technical



**DEMO**

# Comorin IDP : Benefits

- 1) **Improved Developer Productivity:** By providing a centralized platform for all development tools and services, Backstage reduces the time developers spend navigating disparate systems.
- 2) **Reduce Cognitive Load:** Developers are freed from Bookmark hell, Context Switching and eliminate excessive open Browser Tabs syndrome. Easy to remember one URL of your IDP.
- 3) **Consistency and Standardization:** Templates and scaffolding ensure consistent project setup and development practices across the organization.
- 4) **Enhanced Collaboration:** Facilitates better communication and collaboration among team members by providing shared resources and documentation.
- 5) **Scalability:** Helps organizations scale their development processes efficiently by standardizing workflows and centralizing management.
- 6) **Improved Performance Measurement:** DORA metrics provide objective, quantifiable data to assess the performance of software delivery processes.
- 7) **Increased Efficiency and Productivity:** By analyzing DORA metrics, organizations can streamline and optimize their software development and delivery processes.
- 8) **Better Quality and Reliability:** Metrics like mean time to recovery (MTTR) ensure that any issues are resolved quickly, minimizing downtime and enhancing reliability.



# 12 reasons to buy Comorin:

## 1) Comorin cuts the time to value

- With Comorin, in less than an hour you can go from clicking the “Request a free trial” button to having a catalog populated with components, basic TechDocs for documentation, and plugins installed and integrated.

## 2) We prioritize security

- We take security seriously at Comorin. Our founding team comes from enterprise companies like Comodo (security), Boeing, Toyota and we understand what it takes to keep data and processes safe.

## 3) Strict Multi Tenancy

- We understand the importance of enterprise data and Comorin provides highest level of Tenant Isolation on every level, providing dedicated Namespace dedicated instance of Comorin Portal, Dedicated Database, Dedicated data platform, Dedicated cloud storage

## 4) We handle the upgrades

- At Comorin, we upgrade every instance approximately once in 2 weeks, and you’re typically not much more than 2 weeks behind the latest release.

# 12 reasons to buy Comorin:

## 5) You don't have to edit the code

- Many people expect that the Backstage repository works like a standard UI application. In reality, It's a framework or set of plugins that you can compose together to make a developer portal for your organization.

## 6) 25+ plugins work straight out of the box

- Backstage wouldn't be much without its plugins. From TechDocs documentation to Kubernetes integration, it's the plugins which give Backstage much of its discoverability value and power.

## 7) You can bring your own plugins

- Every company has home-grown tools and technologies that only make sense in the context of the place they were invented.

## 8) We run Developer Insight Data platform (DORA)

- We run and manage the Developer Insight Platform to derive DORA metrics and you can focus on improving your organisation's efficiency and growth

# 12 reasons to buy Comorin:

## 9) We help you adopt Internal Dev Portal & DORA Metrics

- Deployment and maintenance is only half the battle. The other side of the challenge is adoption. We've built features into Backstage to help your engineering teams get the most from the technology.

## 10) We track the community

- We keep track of the Internal Developer Portal and Developer Insights, DORA DevOps report and keep applying the advancement in our product as well.

## 11) We've got the scaffolder

- By making it easier to start new projects, your engineers get to the good part of coding features faster. And your organization's best practices are built into the templates, encouraging standards and reducing complexity in your tech ecosystem.

## 12) We're here to support you

- Every customer gets a dedicated support channel in Slack or Discord. If something is not working as expected, we're there to help you debug it. Anyone in your company is free to join the conversation.

**THANK YOU**