



# Shaping the future of Developer Experience

Ben Lambert & Francesco Corti  
Spotify



## Ben Lambert

benjdlambert

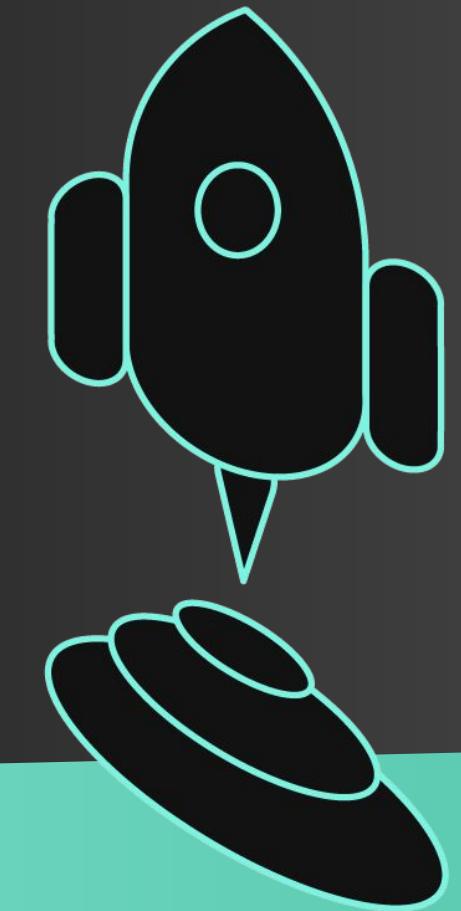
Engineer @ Spotify  
Maintainer | Backstage



## Francesco Corti

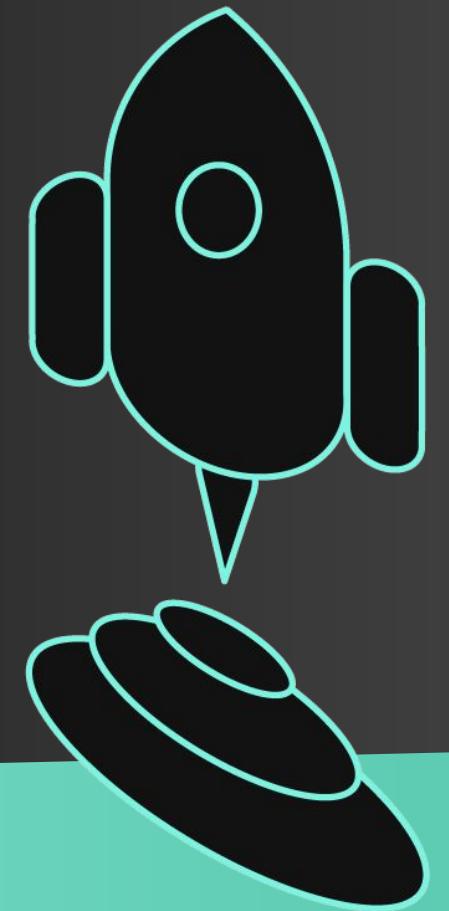
fcorti

Senior Product Manager @ Spotify



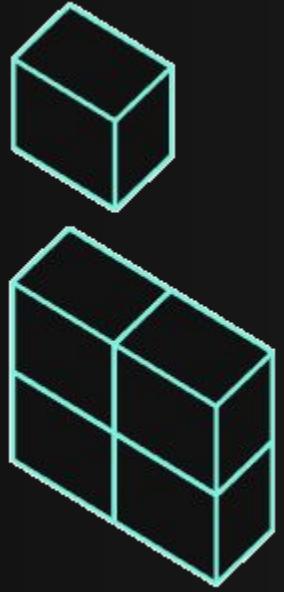


So what on earth is  
**Backstage** anyway?

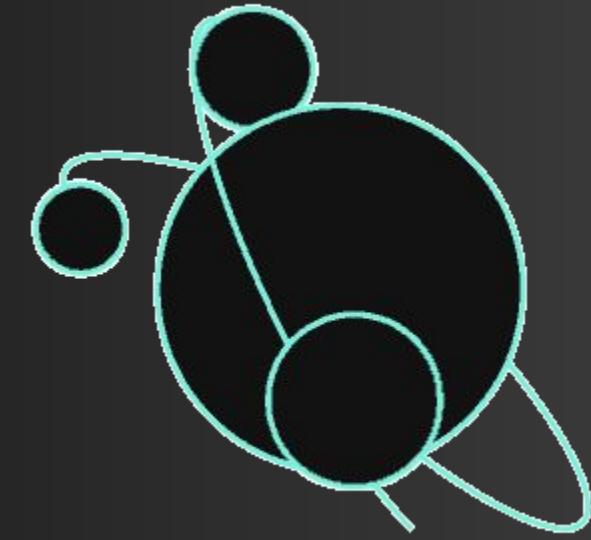




**Speed**



**Standards**



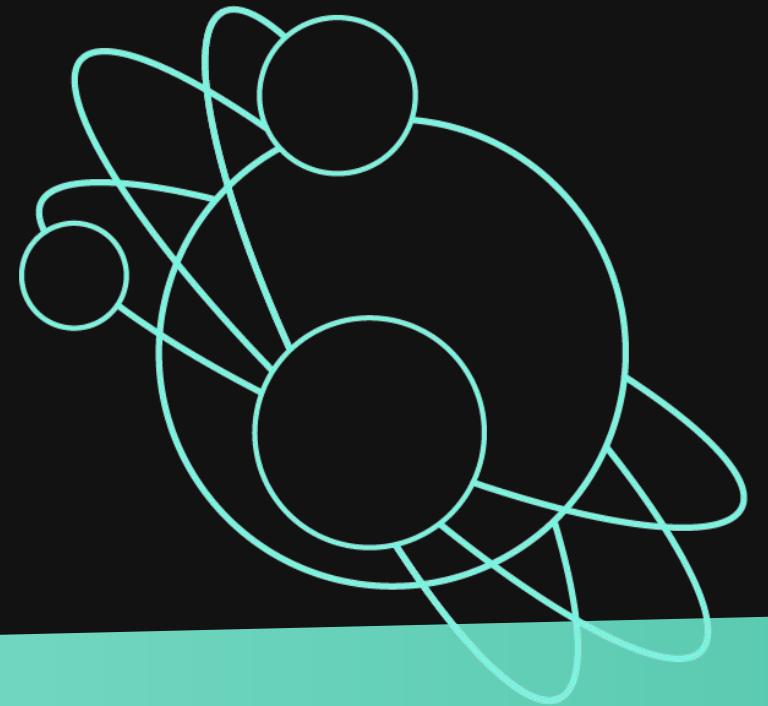
**Ecosystem**

# Powered by a passionate community

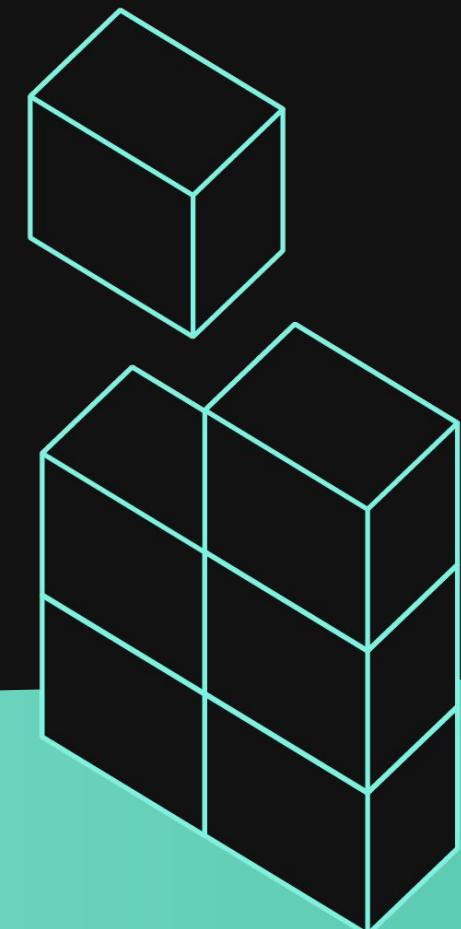
The screenshot shows the Backstage.io plugin marketplace. The top navigation bar includes links for GITHUB, DOCS, PLUGINS (which is highlighted in green), BLOG, DEMOS, and NEWSLETTER, along with a search bar. Below the header, a section titled "Plugin marketplace" displays a grid of 16 plugin cards. Each card contains a plugin icon, its name, the developer, and a brief description. At the bottom right of each card is a green "Explore" button.

Plugin	Developer	Description	Action
API Docs	by SDA SE	Components to discover and display API entities as an extension to the catalog plugin.	Explore
CircleCI	by Spotify	Automate your development process with CI hosted in the cloud or on a private server.	Explore
Cost Insights	by Spotify	Visualize, understand and optimize your team's cloud costs.	Explore
GitHub Actions	by Spotify	GitHub Actions makes it easy to automate all your software workflows, now with world-class CI/CD. Build, test, and deploy your code right from GitHub.	Explore
GitHub Pull Requests	by roadie.io	View GitHub pull requests for your service in Backstage.	Explore
GitOps Clusters	by Weaveworks	Create GitOps-managed Kubernetes clusters. Currently, it supports provisioning EKS clusters on GitHub via GitHub Actions.	Explore
GraphQL	by Spotify	Integrates GraphQL as a tool to browse GraphQL API endpoints inside Backstage.	Explore
Jenkins	by @timja	Jenkins offers a simple way to set up a continuous integration and continuous delivery environment.	Explore
Lighthouse	by Spotify		
New Relic	by @timwheeler.com		
Rollbar	by @andrewthauer		
Sentry	by Spotify		

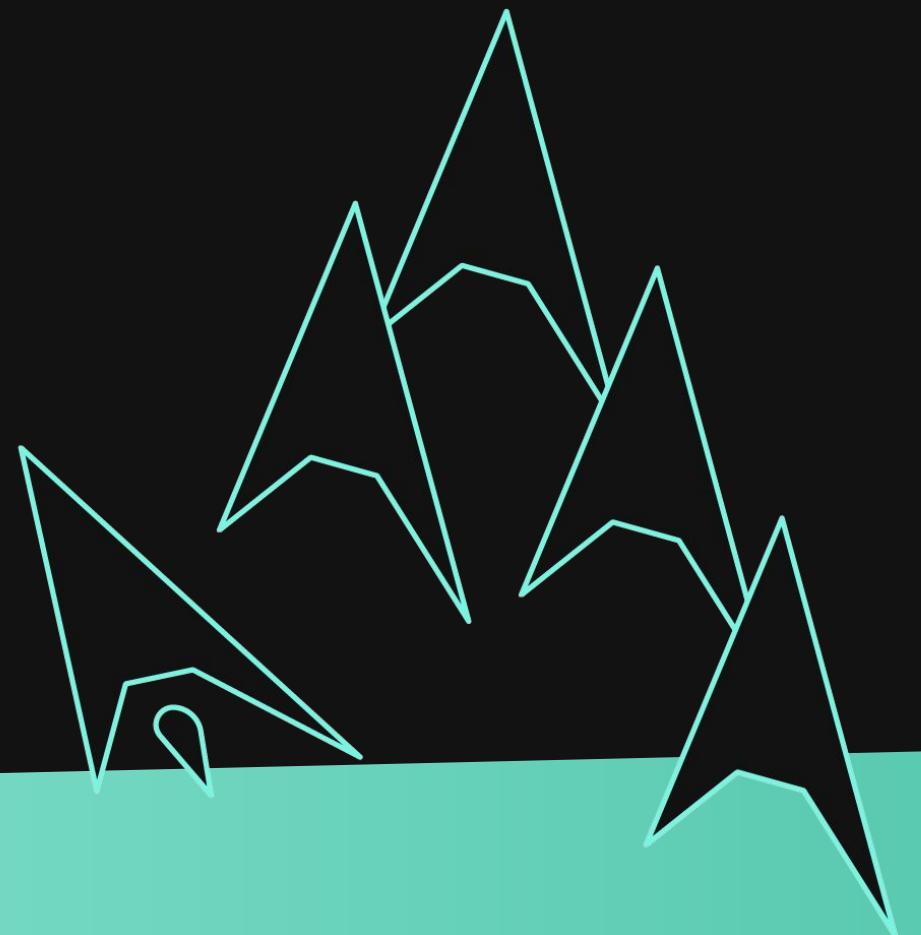
# Centralization of technology assets



# Software creation



# Onboarding





# 1.2 Million\*

\*approximate number of developers impacted by Backstage

440+

Companies  
adopting\*

240~

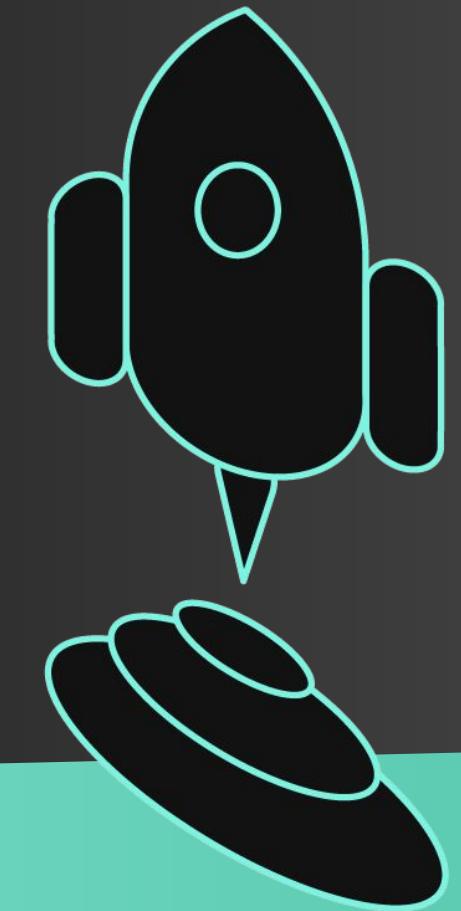
Companies  
evaluating\*

200~

Companies  
attending  
Office Hours  
(in 5 months)



How companies are  
creating the future  
of DevEx  
with **Backstage**

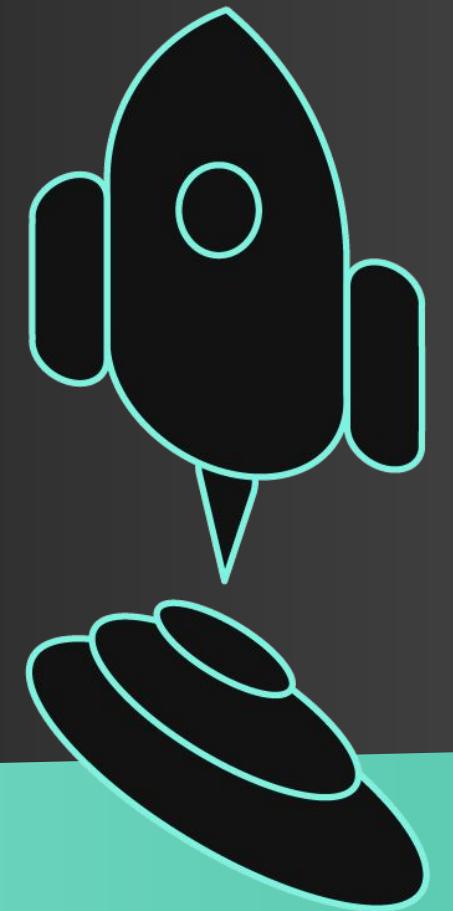




What current adopters are doing with **Backstage**?

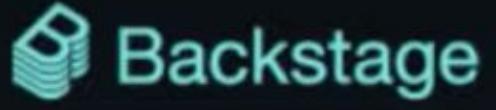
What do they see as the evolution of their DevEx?

Let's be inspired by them!



*Disclaimer: if you are an adopter and you are not mentioned here, it does not mean that you are not innovating. 😊*

***Central repository  
for technology assets  
(Software Catalog)***



Home | Deutsche Bank Catalog... X +  
localhost:3000

Home

Search

BalhamGDR

Catalogue i  
Explore Reusable entities like API's, Components, Libraries and More...

Tech Docs i  
Discover Architecture Documents (A More...)

Type here to search

Adopters

SUPPORT

**We did not face any major pushback because of the community support**

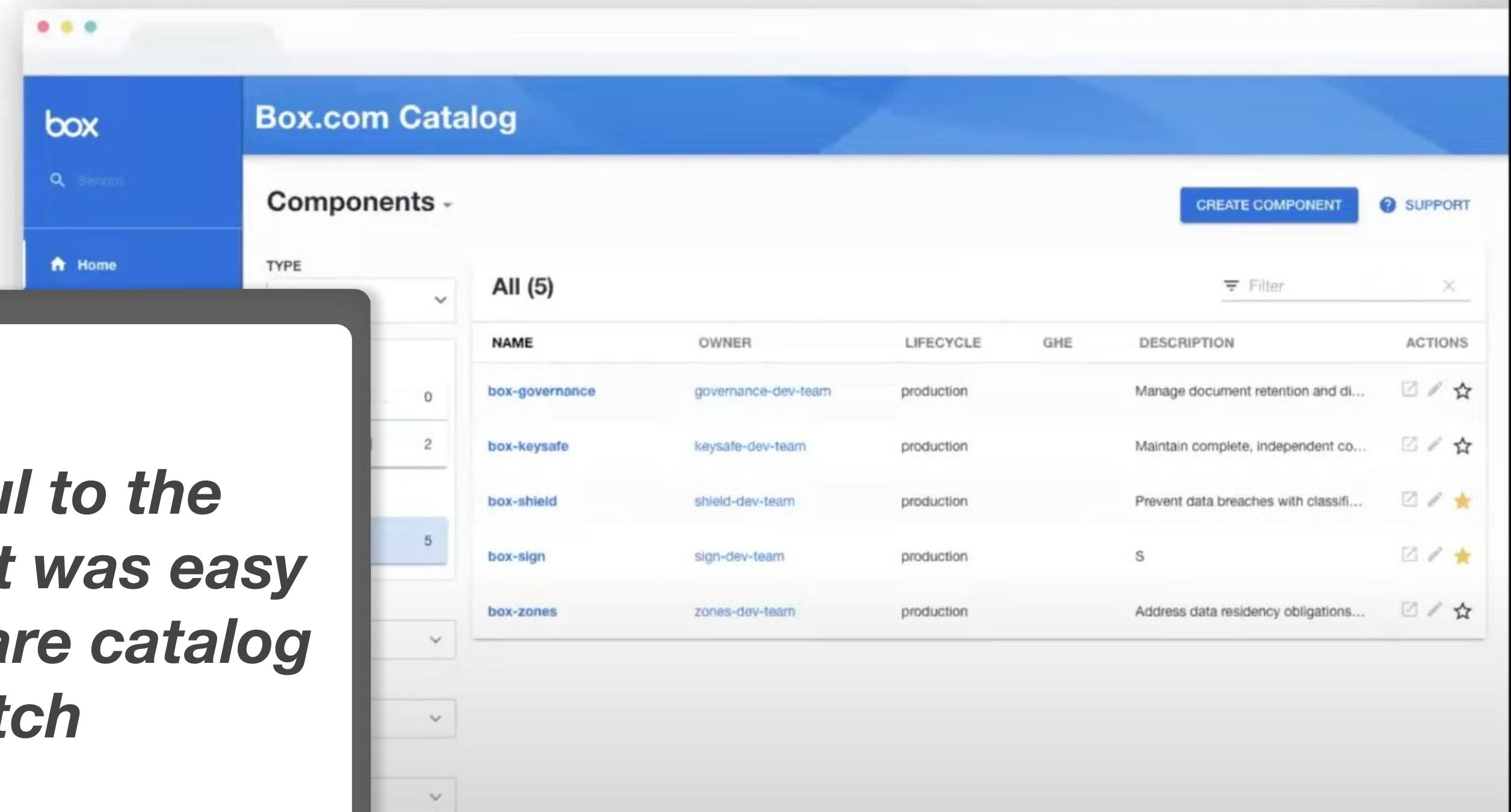
**The bigger challenge is to go to people to ask to contribute to the Catalog**



Box Backstage Journey

# Box DevPortal

*We are thankful to the project because it was easy to create a software catalog from scratch*



The screenshot shows the Box.com Catalog interface. At the top, there's a search bar and a 'Components' dropdown menu. Below that is a table titled 'All (5)' showing five components:

NAME	OWNER	LIFECYCLE	GHE	DESCRIPTION	ACTIONS
box-governance	governance-dev-team	production		Manage document retention and di...	 
box-keysafe	keysafe-dev-team	production		Maintain complete, independent co...	 
box-shield	shield-dev-team	production		Prevent data breaches with classifi...	 
box-sign	sign-dev-team	production	S		 
box-zones	zones-dev-team	production		Address data residency obligati...	 

# Service Home Page

Some inspiration

The screenshot shows a web browser window with the URL `backstage.sda-se.io`. The main title is "COMPONENT — SERVICE user-preferences-service ☆". The top right shows "Owner team-moneypenny" and "Lifecycle production". Below the title, there are tabs for "OVERVIEW", "QUALITY", "API", and "CI/CD". The "OVERVIEW" tab is selected, displaying the following information:

- About**: Includes links to "VIEW SOURCE", "VIEW TECHDOCS", and "VIEW API".
- DESCRIPTION**: A service that stores user preferences so that they are available on different devices.
- OWNER**: group:team-moneypenny
- SYSTEM**: user-preferences
- TYPE**: service
- LIFECYCLE**: production
- TAGS**: business

Below this, there's a "Latest Release" section with a "0.1.4" tag published on "26.01.2021". The release notes link to "0.1.4 (2021-01-26)". At the bottom, there's a "Bug Fixes" section and a footer with a welcome message and dependency update information.

**SDA SE uses the Software Catalog to align different Companies on available services and API as well as ownership**

*Technical  
documentation  
and finding what a  
developer is looking for*

ath

Component  
backend-golden-pathSite Owner  
pulp-fictionPage Owner  
fabricLast Updated  
a month ago

Top Contributors



Search Backend Golden Path

Stack Overflow

#backend #apollo #tingle  
#golden-path

## Introduction



This tutorial is the first in the Backend Golden Path series which covers the development and operation of our server-side infrastructure. It will introduce you to the tools we use in our everyday work.

The tutorial shows you how to set up your local environment for backend development and how to get access to the tools you need.

We strongly recommend that you complete this tutorial before continuing with other tutorials in the series; we have extensively tested the instructions given here and believe they will work correctly if you have followed them. We have also been set up by exactly following the instructions given here.

### Operating System Variations

These tutorials are written for Apple machines running MacOS. If you have a Linux or Windows machine, you may find alternative instructions online. If you have any questions about the commands given here, feel free to ask someone who has added them. Feel free to help out by offering alternative commands in document feedback.

***Treating docs like code...  
but getting it all in one place***

## Prerequisites

Before starting this tutorial, make sure you have:

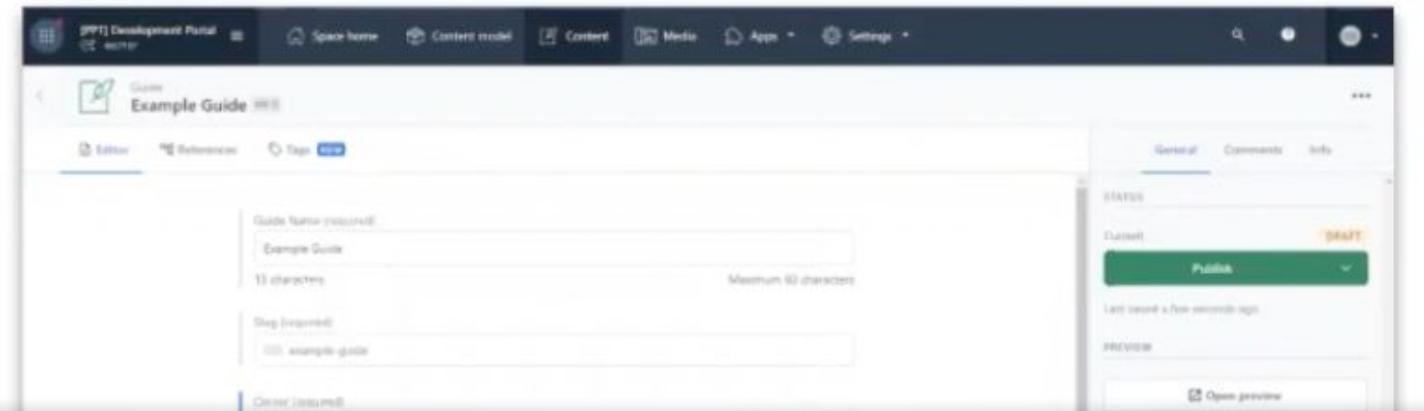
- A Google account (so that you can access Gmail and Google Drive)
- An Internal Services account (so that you can log in to the Spotify wifi)



Sebastien Barre

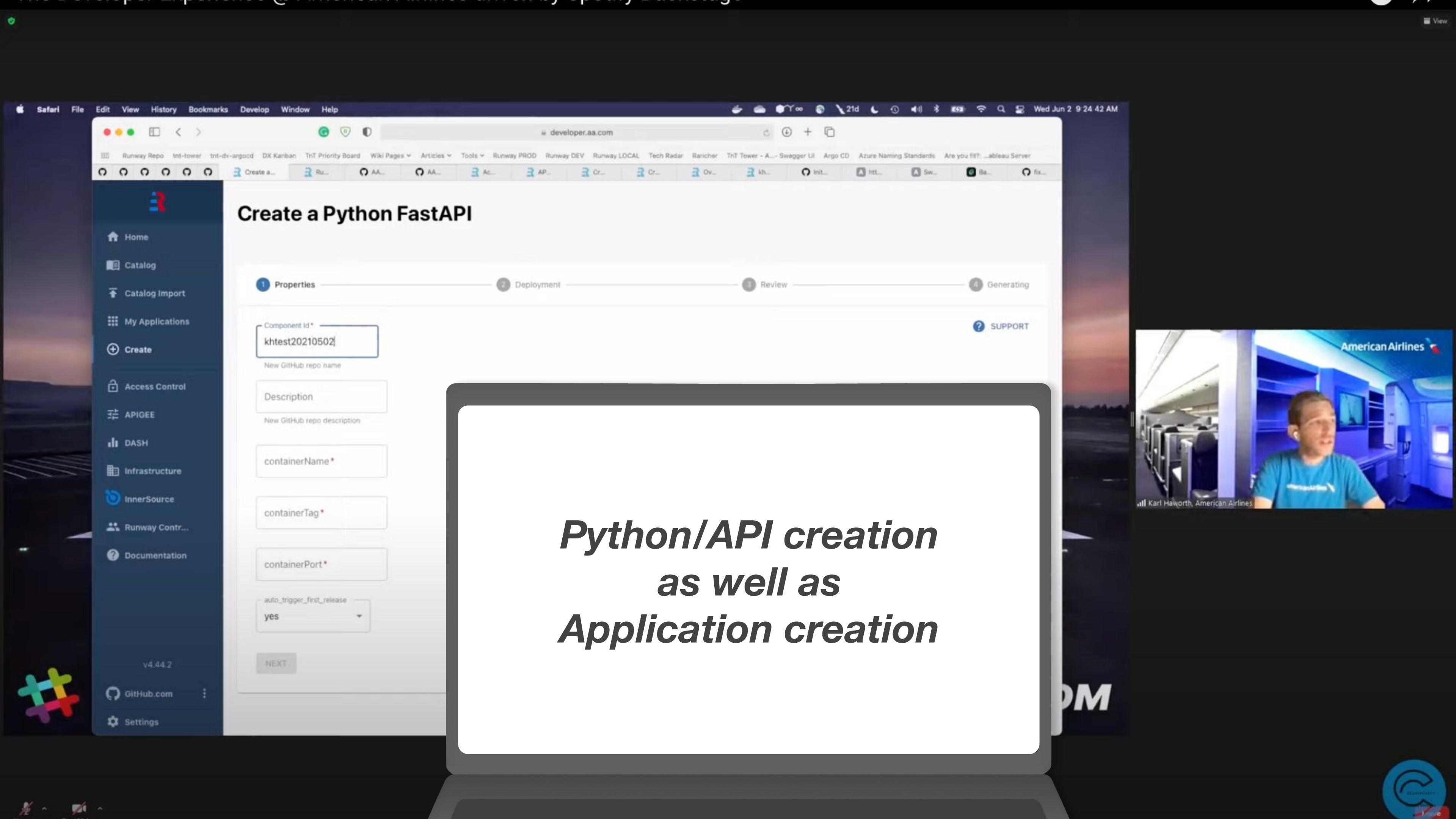
# CMS Integration

- We needed a content editing experience that was approachable by non-developers.
- Contentful is an existing platform within the TELUS ecosystem.
- Contentful's headless API-first approach made it straightforward to integrate with Backstage.



**A *content-editing experience approachable by non-developers***

*Creating  
software components  
in seconds, not weeks*



*Python/API creation  
as well as  
Application creation*

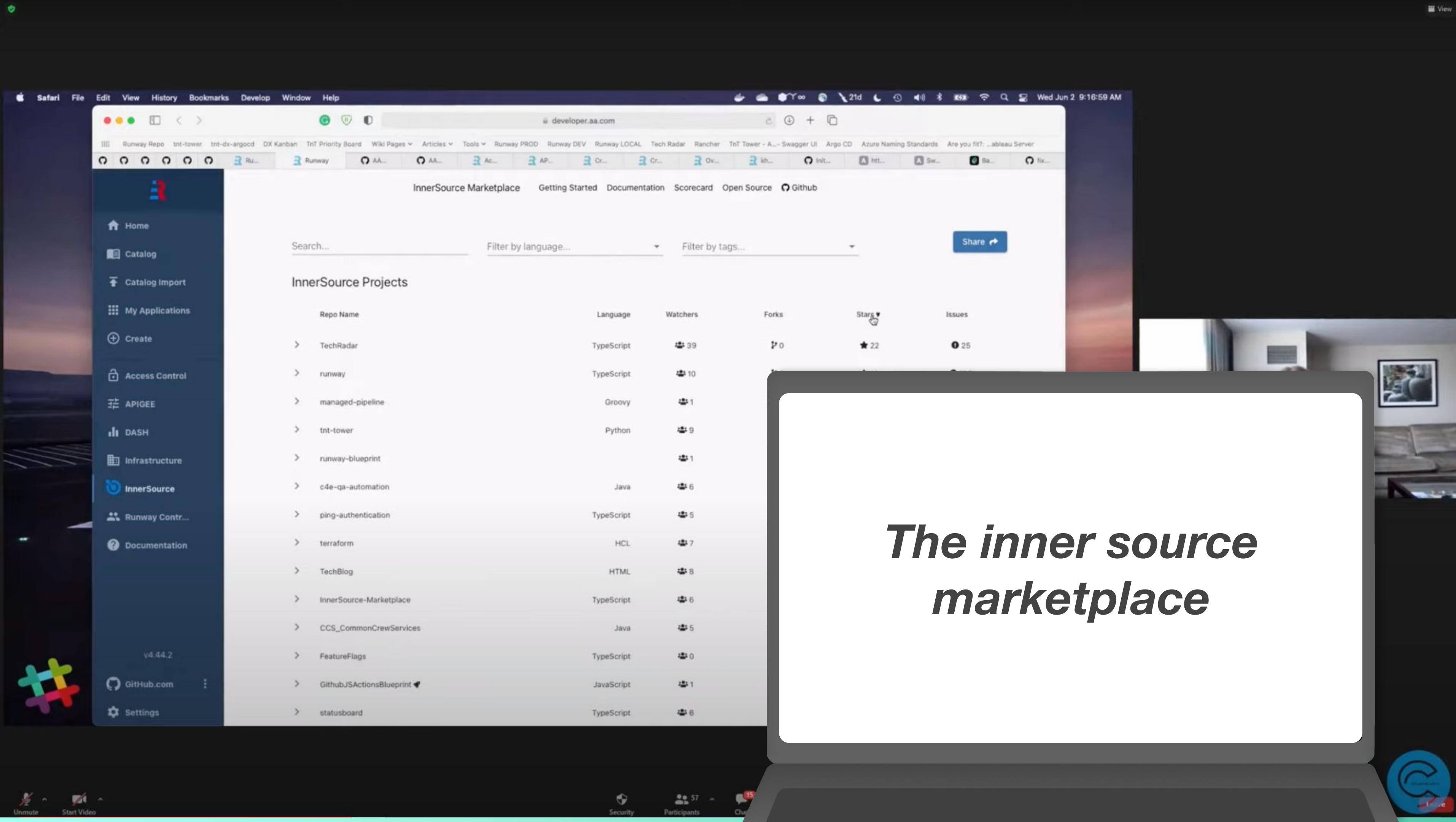


## Box Backstage Journey

The monitor screen shows a dark-themed dashboard with a white central area. At the top left is a search bar labeled 'Search'. Below it are navigation links for 'Home' and 'Dashboard'. The main title 'Service onboarding with human centric workflow' is displayed prominently. To the right of the title is a section titled 'Has subcomponents'.

DESCRIPTION	NAME	STATE	WAITING FOR
Onboarding Workflows	service-onboarding-flow	Running	Waiting for 'ABC-123' Jira ticket status 'Closed'
	service-onboarding-flow	Cancelled	-
	service-onboarding-flow	Success	-

***Reuse of components***



*The inner source  
marketplace*



Shanthisagar (Personal)

Taxonomy-based asset view | Asset Taxonomy

localhost:3000/taxonomy/assetTaxonomy?id=AT0002

## Taxonomy-based asset view

Sales

FUNCTIONAL TAXONOMY ASSET CLASSIFICATION PB CAPABILITY MAP TECHNOLOGY FUNCTION IASC CAPABILITY MAP

Search

UI Entities (0)

UI

- Frameworks
- Controls
- Libraries
- Data Science
- Code
- Data Models
- Workflow
- Security
- Services
- Monitoring
- Content Management
- Automation
- Reusable Implementations
- Unclassified

NAME

3:21 PM 8/17/2022

Adopters

SUPPORT

**Taxonomy  
to reuse services**

***Jobs to be done***



# Welcome to Sunrise!

Your daily starting point

## Take Action

### Pipeline Activity

-  **feat: add logistics-clarification-cases (#534,#535)**  
succeeded [github.bus.zalan.do/team-architecture/functional-component-registry](https://github.com/bus.zalan/do/team-architecture/functional-component-registry) [VIEW](#)
-  **Add missing filter on search query**  
succeeded [github.bus.zalan.do/pitchfork/sunrise](https://github.com/bus.zalan/do/pitchfork/sunrise) [VIEW](#)
-  **Merge pull request #329 from pitchfork/redirect-search Redirect De**  
succeeded [github.bus.zalan.do/pitchfork/cockpit-skipper](https://github.com/bus.zalan/do/pitchfork/cockpit-skipper)

### Open Pull Requests

-  **feat: add application support URL (#150)**  
review requested [pitchfork/gs-indexer](#): 9 months ago by tkrop
-  **temporarily enable locations refresh during startup**  
authored [pitchfork/sunrise](#): 5 days ago by gnagarajan
-  **Add test environment**  
authored [pitchfork/sunrise](#): 8 days ago by gnagarajan

## Performance of your Team(s)

### Productivity Last Week

PITCHFORK

Metrics

This Team

Target

5 deploy days

*Home page with overview of PRs*

BER      NYC      LA  
02:04 PM    08:04 AM    05:04 AM

## Announcements Inbox X

Since you last visited, new announcements have been posted!

Check them out:

- Eng-Doc will be replaced by a printed book.
- Decommissioning of mothership scheduled to the end of 2022.  
[Read more on the link.](#)
- We are moving our datacenter to the Polar Circle. Please buy warm coats.

GOT IT. DON'T NOTIFY ME ABOUT  
THESE AGAIN.

example-  
service

This is a  
placeholder



*Daily Ritual Support*

***Health check  
and  
quality improvement***

# Team Page

Some Inspiration

The screenshot shows a team page for "team-dock-marshals" on the "backstage.sda-se.io" platform. The page has a dark theme with a teal header. The top right corner features a small video feed of a person with glasses and a blue shirt. The main content area includes:

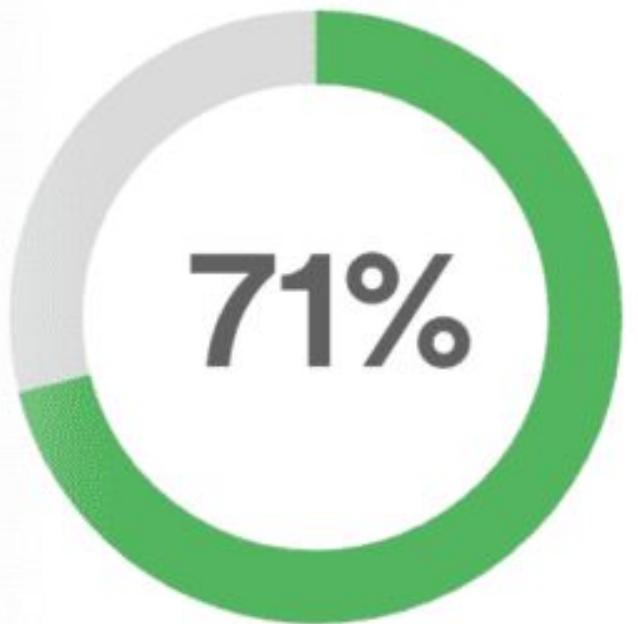
- OVERVIEW** section with a summary card for "Team Dock Marshals". It shows a profile picture with "TD", an envelope icon, and a "sda se open industry solutions" tag.
- Security Champions** section, which includes a "SECURITY CHAMPION" card for "Dominik Henneke (Oliver Sand)" and a "SECURITY PINS (38)" grid. The grid contains numerous circular badges with various security-related icons and names like "CRYPTOGRAPHIC", "SSRF", "OPEN SOURCE", "SECURITY MISCONFIGURATION", and "SQL INJECTION". A "Learn more →" button is at the bottom of this section.
- Ownership** section, which is currently empty.
- Members (3)** section, which lists three team members: Dominik Henneke, Oliver Sand, and Michael Schäfer.

A large callout box on the right side of the page contains the text:

***Badges and gamification***

## Gabito

Upgraded event registrations



← View more →

Upgrade Leaderboard

## Bionic

Migrated components



← View more →

## Java 11

Migrated components



## Python 3

Migrated components



*Domain-specific  
technical health*

# Branding

**Measuring engineering productivity**

**Platformization**

**Automation hub  
for Business Processes**

**Serving internal and external  
use cases for developers**

**Providing transparency**

*And many more...*



VMware Tanzu Application Platform

Build the apps that make the world run. Join us at SpringOne in San Francisco, Dec 6–8. >

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Why Tanzu Products Consulting Get Started Resources

VMware Tanzu Application Platform DOWNLOAD DOCS

A superior multi-cloud developer experience on Kubernetes

VMware Tanzu Application Platform is a modular, application-aware platform that provides a rich set of developer tooling and a prepared path to production to build and deploy software quickly and securely on any compliant public cloud or on-premises Kubernetes cluster.

SEE HOW IT WORKS GET STARTED

BLOG Elevate App Development and DevSecOps Experience with New Integrations in VMware Tanzu Application Platform

Krateo PlatformOps - Self-service

IT | EN

KIRATECH® RE DISCOVER IT

Home About Us What We Do Cloud Native Resources News Jobs Contacts

f t in d

Run your Resources on Every Cloud  
Krateo PlatformOps, a multi-cloud control plane to create, manage and deploy any kind of resource easily and centrally wherever you want

Get Started

***Backstage as frontend app for solutions and technology stack***

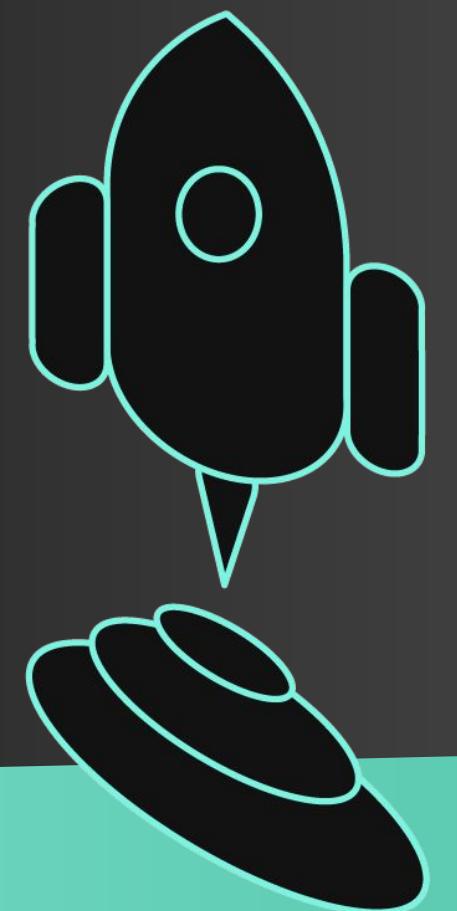


We created Backstage to make developers happy

**19k~**  
Starred

**800+**  
Contributors

**7.5k~**  
Discord  
Members



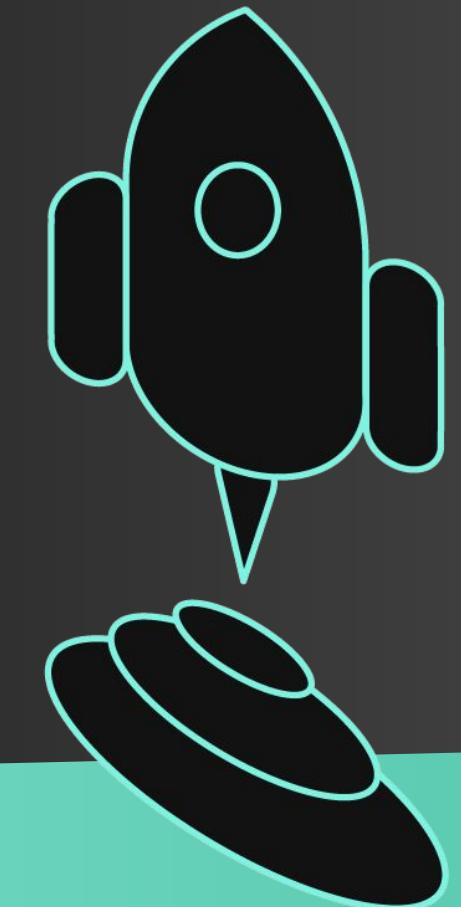


Adopters are shaping the future of DevEx

Open Source rocks!

**Backstage** rocks!

The future of DevEx is now!





Join the **Backstage** community



<https://backstage.io>

<https://backstage.spotify.com>



Rate this talk!