KEYCLOAK

10 Years of Keycloak - What's Next for Cloud-Native Authentication and OIDC?

Takashi Norimatsu | Senior OSS Specialist | Hitachi
Alexander Schwartz | Principal Software Engineer | Red Hat
Kubecon NA Chicago | 2023-11-07

Keycloak is an Open Source Identity and Access Management Solution
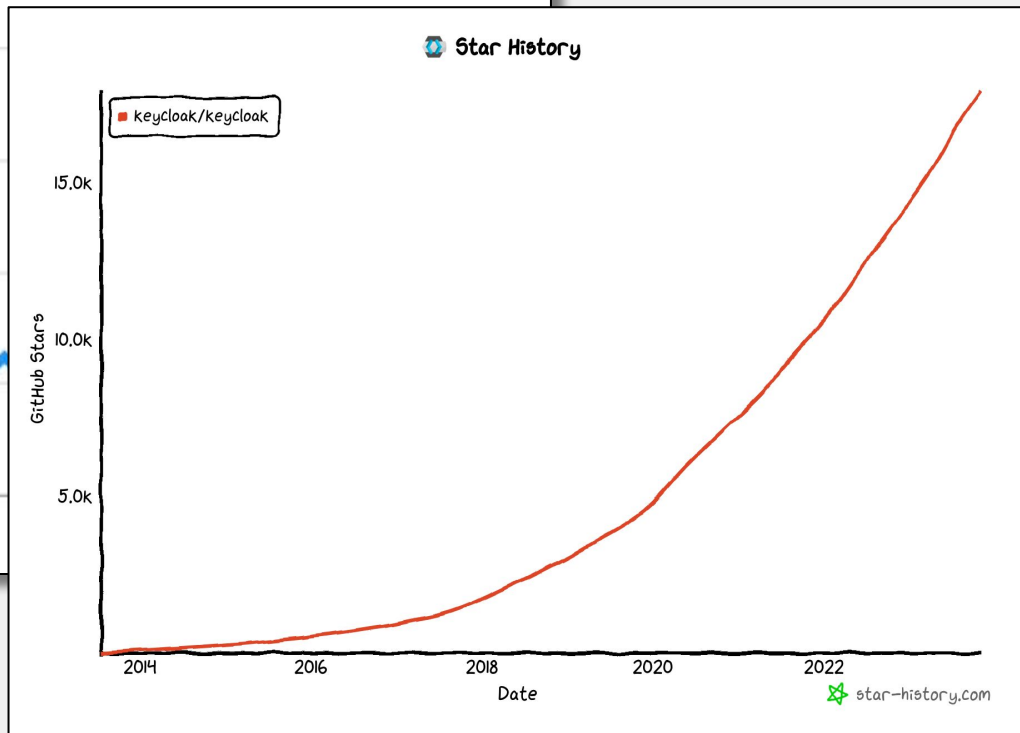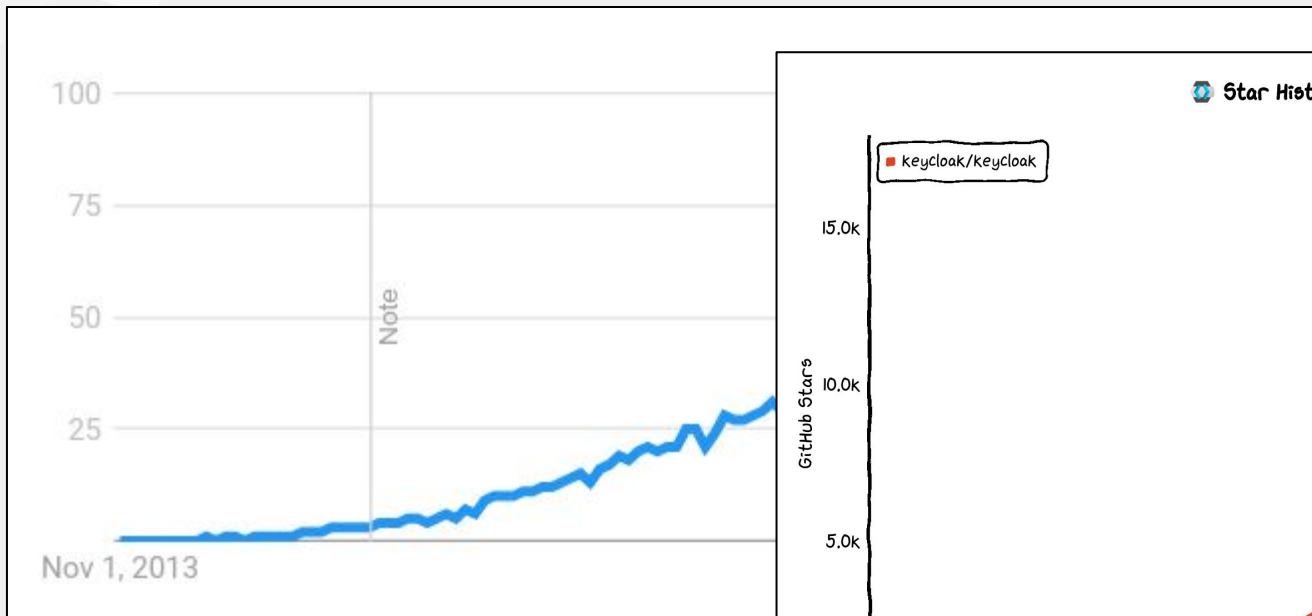
* Initial commit 02.07.13 at 08:38

KEYCLOAK

Keycloak at the Beginning

- OpenID Connect Protocol Implementation for the server
- Services and database to store information about clients and identities
- From Developers for Developers

Soon after that:

- Multi Factor authentication
- Client libraries
- SAML, LDAP, …

KEYCLOAK

How it grew

How it changed

- Logout changed: OpenID RP-Initiated Logout uses the recommended the ID token as a parameter
- Backchannel Logout standardized: No longer the need to use the Keycloak proprietary mechanism for clients to register
- Lots of frameworks support OIDC: Keycloak deprecated its own client implementations except for the JavaScript client it uses itself in the UI
- New Admin UI, soon also new Account UI

KEYCLOAK

Keycloak Book: 2nd Edition!

Based on Keycloak 22 and Quarkus: new and improved user experience and a new admin console with a higher focus on usability. You will see how to leverage Spring Security, instead of the Keycloak Spring adapter while using Keycloak 22.

Unlock 20% off with code '20KEYCLOAK' for KubeCon attendees on amazon.com and packt.com

EXPERT INSIGHT

Keycloak – Identity and Access Management for Modern Applications

Harness the power of Keycloak, OpenID Connect, and OAuth 2.0 to secure applications

Second Edition

Stian Thorgersen
Pedro Igor Silva

‹packt›

KEYCLOAK

Keycloak 23 and beyond

- Declarative User Profile support
- DPoP & FAPI 2.0 support
- Performance improvements, for example Groups in LDAP
- Discontinuation of Keycloak's map store, instead evolve the current store

KEYCLOAK

Demo Keycloak Declarative User Profile

Keycloak-Benchmark Project

- Benchmarks to calculate CPU and memory requirements
- Guides to set up Keycloak in a Cross-DC setup with external Infinispan
- Operational procedures for failover and switchover

KEYCLOAK

Keycloak OpenID Connect CLI

Keycloak OpenID Connect CLI provides a CLI interface to obtain tokens from an OpenID Connect provider.

- Multiple configuration contexts to easily switch between different providers, flows, accounts, etc.
- Supports a range of different OAuth and OpenID Connect flows
- Decode JWT tokens into a human-readable JSON representation
- Integration with kubectl
- Token cache
- …

KEYCLOAK

Keycloak is an Open Source
Identity and Access Management Solution

- Authentication Standards implemented and tested
- Services and APIs for managing client, users, etc.
- Data from a variety of sources (database, LDAP, custom storage)
- Self-registration and self-management for users
- Use tokens everywhere: For applications, Kubernetes clusters, in the browser and on the command line.

KEYCLOAK

Links

- Keycloak

  https://www.keycloak.org
- Keycloak Book 2nd Edition

  https://www.packtpub.com/product/kc/9781804616444
- Keycloak Benchmark

  https://github.com/keycloak/keycloak-benchmark

  https://www.keycloak.org/keycloak-benchmark/kubernetes-guide/latest/running/
- Keycloak OpenID Connect CLI

  https://github.com/stianst/keycloak-oidc-cli#keycloak-openid-connect-cli

KEYCLOAK