GEM SYSTEM

Specification of solution deployment options Keycloak by GEM System

(Keycloak is a Red Hat product)

Red Hat

GEM System a.s. has implemented a number of projects addressing the issue of identity management or the flexibility of identity federation in corporate information systems. One of the solutions implemented by GEM System is the deployment of the opensource Keyloack system (Red Hat SSO with Red Hat subscription). Keycloak allows to independently manage entrusted identities or take them over from existing providers. It also allows to provide a unified and secure communication interface to target applications based on various authentica-

tion protocols (e.g. SAML, OAuth2 or others such as separate form authentication, OTP, etc.).

Keycloak can be easily run on existing virtualized infrastructures or on containerised platforms. Its advantage is the flexibility of setup or scalability, and thus enables the deployment of such a solution for differently variable needs of our clients.

KEYCLOAK

IMPLEMENTATION DELIVERED BY GEM SYSTEM HAS BEEN IMPLEMENTED

✔ In a pharmacy chain environment where Keycloak is used for identity management within the client's e-commerce solution.

✔ Specific solution for approving internal regulations in the environment of State Administration (Financial Administration of the Czech Republic and Ministry of Agriculture) where Keycloak represents the integration module between identity providers (primarily Active Directory) and sophisticated management of the institution's organizational structure.

Integration and development

Business intelligence

Safety

Management and support

KEYCLOAK INTRODUCTION

✔ Keycloak is an open source software product with source code that allows single sign-on by using identity and access focused on the modern applications and services. Since March 2018 this community project has been under the administration of the Red Hat company that uses it as an upstream project Red Hat Single Sign-On (RH-SSO).

✔ Keycloak is an open source software product that allows single sign-on (IdP) through identity management and access management for modern applications and services. This software is written in Java and by default supports SAML v2 and OpenID Connect identity federation protocols (OIDC) / OAuth2. It is licensed by Apache and supported by Red Hat.

✔ The identity provider allows the application (often called service provider) to delegate their authentication.

✔ GEM System is a Red Hat Advanced Business Partner.

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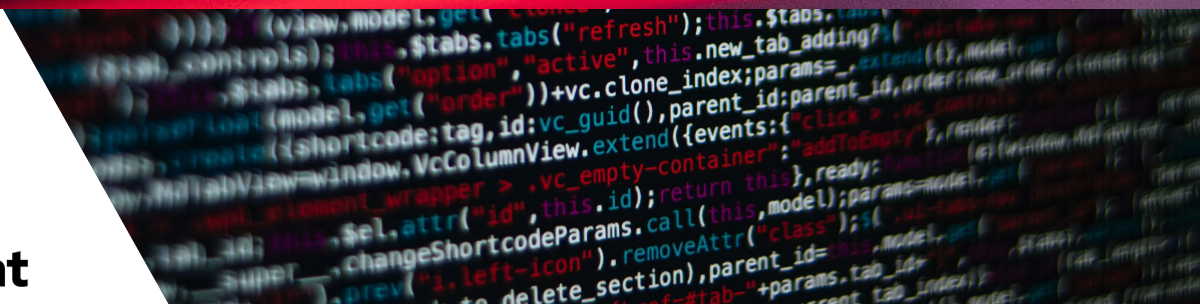
ABOUT SSO (SINGLE SIGN-ON)

The essence of SSO is that instead of a multitude of login attributes (usually a login name and password for each application or service), the user only needs to remember attributes for one type of login. Other attributes, if any, are remembered by the SSO system on his/her behalf while the credentials comply with all policies and requirements.

REASONS FOR THE KEYCLOAK SSO

Unlike other SSO solutions, Kecloak is free to use with the option to purchase enterprise support. This gives the solution a significant head start when implementing or replacing the original SSO solution. Customers pay experts to put Keycloak into operation and no more licenses/fees. This makes Keycloak the most cost-effective SSO solution of recent years as evidenced by its massive deployment with world-class companies.

ARGUMENTS FOR KEYCLOAK SOLUTIONS

✔ **Integration with existing solution (ability to integrate Open LDAP and Active Directory via a connector).**

✔ **Modern technologies (OpenID Connect and SAML 2.0 SSO for Single Log Out in browser applications).**

✔ **Within the client's enterprise environment, Keycloak allows to acquire or connect identities and social brokers (such as Twitter, Google, Facebook, etc. or delegate requests via SAML 2.0 and OIDC).**

✔ **Security policies (easy to set up password and revocation policies).**

✔ **Impersonation (possibility of authenticated administrator login instead of user for easy and fast solution of user problems).**

✔ **Appearance and localization themes (Keycloak allows easy styling of the login page, admin consoles, account management consoles, email, plus the entire system is fully localized).**

✔ **Modern solution (Keycloak includes a REST API for calling all SSO functions such as login, logout, refresh user token, etc.).**