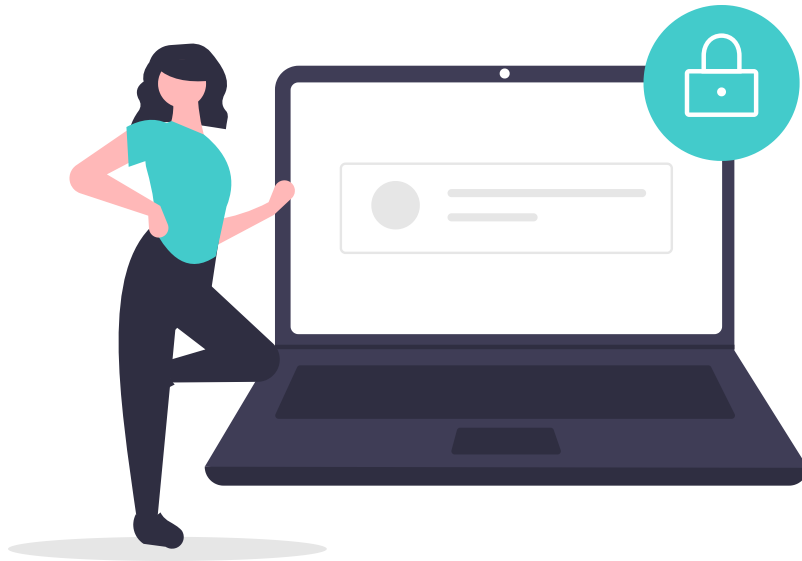


DHIS2 Security Features

Michael Markevich, DHIS2 Security Lead



DHIS2 Security Features

Access Control

- Core functionality
- Users can belong to groups and can have role assignments
- Roles contain fine-grained authorities
- Users can have restrictions based on the analytics dimension

LDAP Authentication

- Core functionality
- Active Directory, Azure AD, OpenLDAP, or compatible service supported

Multi-Factor Authentication

- Available in DHIS2 2.30+
- Based on Google Authenticator or any other compatible application for smartphones or feature phones

Single Sign-On

- Available in DHIS2 2.35+
- We support OpenId Connect (OIDC), which is compatible with popular identity management systems like Okta, Keycloak, etc.

Personal Access Tokens

- Available in DHIS2 2.37+
- Personal access tokens are an alternative to using password-based authentication for automation using API calls

User Impersonation

- Available in DHIS2 2.40+
- Using a special privilege, DHIS2 administrators can impersonate other users and execute commands on their behalf (similar to `sudo` in Linux).

Auditing and Logging

- Core functionality
- User activity log
- System event log

Backup

- Data backup applies to the DHIS2 database (PostgreSQL)
- It can be configured with external tools outside of the DHIS2 instance

Virtual Patching

If you run a DHIS2 instance behind Nginx in a reverse proxy mode, we can provide configuration snippets to mitigate known security vulnerabilities or protect against selected attacks.



Security Team Updates

Reference Setup

We have created a [reference setup of DHIS2](#), which can be used for public penetration testing of our recommended security configuration.

Security Hall of Fame

We have created the [Security Hall of Fame](#) page, acknowledging contributions from independent security researchers.

We also plan to promote our security program publicly and attract more experts to evaluate the security of DHIS2.

Thank You

