

Architecture and API

🌐 Language: [Deutsch](#) · [English](#)

📖 Architecture and API

How the app works: generic REST interpreter, endpoints used, technology stack and roadmap.

REFERENZ

DEVELOPER

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APPLIES TO NUCLOS APP 1.0

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At its core the app is an **interpreter of the generic Nuclos REST API**. It contains no Nuclet-specific code; structure, layout and data come from the server at runtime.

Endpoints used

POST /rest	Login (Cookie-Session, JSESSIONID)
POST /rest (anonymous/anonymous)	Anonymer Login
GET /rest/ssoAuthEndpoints	konfigurierte SSO-Dienste (Label, Icon, Farbe)
PUT /rest/ssoAuthEndpoints/{id}	SSO-Flow starten -> Authorize-URL (PKCE)
POST /rest (loginUri, serverUri)	SSO-Login abschliessen (Token-Tausch serverseitig)
GET /rest/datalanguages	verfuegbare Datensprachen
PUT /rest/datalanguage	aktive Datensprache setzen
POST /rest/user/register	Selbstregistrierung
POST /rest/user/activate/{code}	Konto aktivieren
PUT /rest/user/{user}/password	Passwort aendern
POST /rest/user/{user}/forgotPassword	Reset-E-Mail anfordern
POST /rest/user/{user}/passwordReset	Passwort per Code zuruecksetzen
GET /rest/bos	Entitaeten (Business Objects)
GET /rest/boMetas/{id}	Metadaten (Attribute, Typen, titlePattern)
GET /rest/bos/{id}?offset=&chunkSize=	Datensaetze (mit Paging)
POST /rest/bos/{id}/query	Suche/Filter
boGenerations	Neuanlage (Objektgeneratoren)

Technology

- **Flutter** (native rendering engine), **Material 3**.
- **dio** + a **persistent cookie jar** (cookie_jar) – REST with a cookie session (like the Web Client's withCredentials); the session is kept on disk and **survives an app restart**.
- **flutter_riverpod** – state management.
- **local_auth** + **flutter_secure_storage** – biometrics & secure credential storage.
- **webview_flutter** – in-app sign-in page for SSO; **flutter_html** – HTML messages from server commands.
- **fl_chart** (charts), **file_picker/image_picker** (attachments/camera).



Session & commands

The session is persisted; when it expires the app attempts a **silent re-login** and only falls back to the login screen on failure. Server **commands** (message, navigation, session end) run after save/rule/status change.



Web & CORS

For the **Web** build, **CORS** is required on the server because of the cookie session. Not needed on iOS/Android.

Roadmap

- Native features: barcode scan, push notifications.
- Advanced search/filter via query (filter editor).
- Further offline capabilities.

Related pages

What is the Nuclos App?

Concept.

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Editing records

Generic layout.

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