



# VC Lib

# The VC Lib



Typesafe Kotlin/Java-implementation of W3C Verifiable Credentials in order to facilitate interoperability among various applications.

- VC data-models and parser.  
    `.toCredential()` → maps unknown JSON string to known credential types
- VC JSON-Schemas generation & validation.
- Connected to the issuing/verifying processes of the **SSI Kit**.
- **Repo:** <https://github.com/walt-id/waltid-ssikit-vclib>

# Adding Credential Templates.



## The Past

- **Coding**

⇒ *Tedious process as multiple Kotlin files need to be touched.*

## The Present

- **Low-code approach**

⇒ *Only one Kotlin file to be added.*

## The Future

- **No-code approach**

⇒ *Template Lib will be automatically generated based on JSON input.*

# Issuing Options.



## Low-Level API

Issuing via the Core API.

Public endpoint: core.ssikit.walt.id

- Construct credential yourself
- SSI Kit signs/verifies “blob”
- No template support
- Error prone process

## High-Level API

Issuing via the Signatory API.

Public endpoint: signatory.ssikit.walt.id

- Utilize features from VC Lib
- Credentials based on templates
- Various “Data Providers” for populating VC
- Smooth, feature-rich process

⇒ *highly recommended*

Demo

# Issuing Credentials.

# Adding Credential Templates. **The Present.**



## Create Class File

- Copy/Paste an existing credential.
- Alter attributes.
- Register Template:  
`VcTypeRegistry.register()`

## Run Tests

- Validates impl.
- Generates JSON-Schema<sup>1</sup>
- Generates example credential<sup>2</sup>

## Open a Pull Req.

- Open a Pull Request and ask for support if needed.
- The walt.id team will support you and merge the PR.

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Demo

# Adding a Credential Template (the present)

# Adding Credential Templates. **The Future.**



## Generate Class File

- Paste example JSON in VC generator.

## Download VC pack

- A lib with compiled classes will be available to download.

## Use VC Lib2

- VC pack can easily be loaded and used by the VC Lib2.

⇒ *no coding-skills required*



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Demo

# Adding a Credential Template

(a glimpse towards future)