



## 03 Adding Revocation Feature in Inji

*Build a mechanism that ensures interoperability, strengthens data security, and enhances the Inji stack.*

**Complexity Level:** Medium

**Overview:** Inji is a comprehensive digital Verifiable Credentials (VCs) stack, designed to foster a high-trust, low-cost ecosystem. The revocation of VCs is crucial to maintaining the integrity, security, and accuracy of this system, ensuring that the credentials in circulation are trustworthy and up-to-date.

Participants are challenged to implement a privacy-preserving revocation mechanism for Inji, in line with open standards.

**Recommended Tech Stack:** Since this is an enhancement to the existing module, same tech stack as of the modules to be maintained.

1. [Inji-web](#)
2. [Inji-certify](#)
3. [Inji-verify](#)

### Exact Task:

#### Mandatory Tasks:

- Develop an API in Inji Certify to revoke a particular verifiable credential. The API should be designed based on the [Verifiable Credentials API v0.3](#) standard.
- Develop a mechanism to check the status of a credential in a privacy-preserving way from verification tools like Inji verify. This mechanism should be based on [W3C Status List 2021](#) specification and all the necessary APIs should be built into Inji Certify module. Enable status information by adding a credentialStatus property to the VC generated in the [mock certify plugin](#). This should follow the data model described in [this](#) specification.
- Create endpoints in Inji Certify to expose the StatusList2021Credential verifiable credential which contains the latest status as bitstrings.
- Create internal facing APIs in Inji Certify to revoke a credential based on [this](#) specification, which should update the bit string in the respective StatusListCredential.
- Inji verify module code changes to consume the StatusListCredential and validate the revoke status of the VC

#### Good-to-Have Tasks:

- Inji wallet module code changes to consume the StatusListCredential and validate the revoke status of the VC and reflect the revoked status in the UI

### Deliverables:

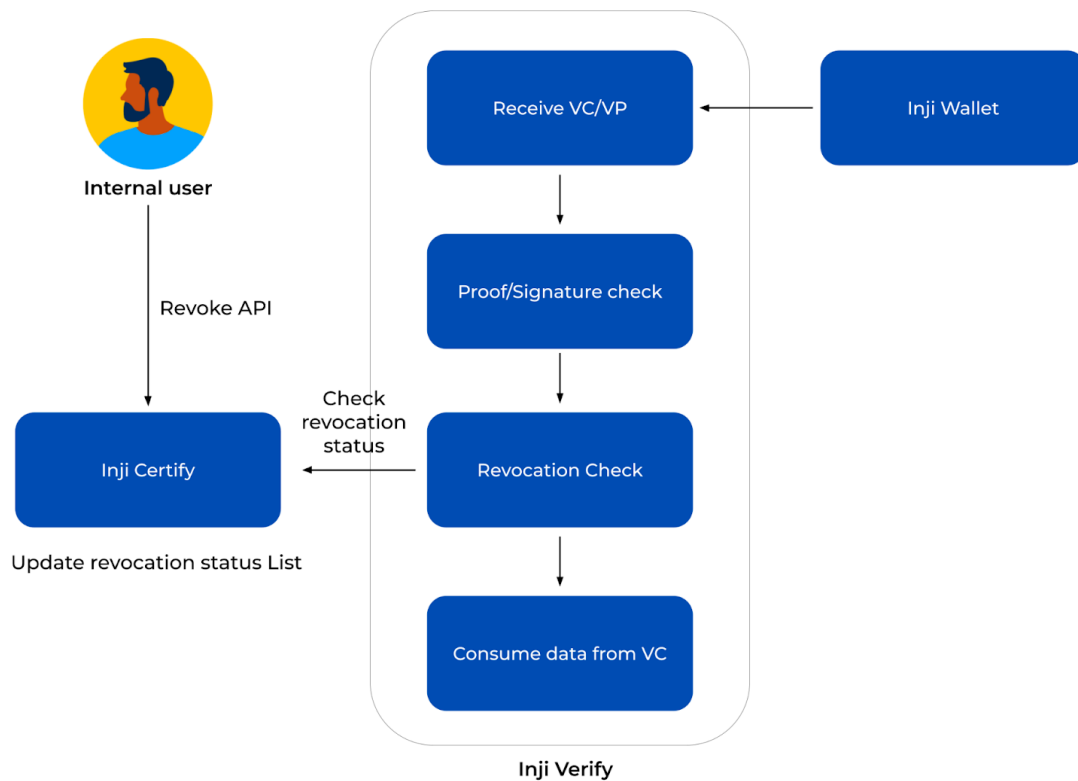
- Source code of the solution on GitHub/GitLab.
- A demonstration video showcasing the solution in action.



- PPT with the approach, results, and potential impact.
- Documentation:
  - Detailed workflow documentation on the design and implementation approach of the tool such as Architectural Design, Data Flow Structure of the tool, Integration and installation guidance (if any)
  - OpenAPI 3.x API document with all the new APIs introduced to facilitate this new enhancement
- Test case/ scenarios and test data (if applicable)

### Resources:

- Inji documentation link: [📄 Inji | Inji](#)
- Inji stack docker compose with the default insurance use case: [📄 inji-certify/docker-compose at master · mosip/inji-certify](#)
- Inji Certify [📄 Overview | Inji](#)
- Inji Verify [📄 Overview | Inji](#)
- MOSIP Sandbox environment: [MOSIP collab](#)
- UIN request form: [Link](#)
- Collab user Guide link: [📄 Collab Environment Setup Guides | MOSIP Docs 1.2.0](#)



Assumption: VC already exists and is downloaded on Inji Wallet