**[@transmute/vc.js](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js" \l "transmutevcjs)**

npm i @transmute/vc.js --save

[**Usage**](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js#usage)

npm t

This package contains a series of fixtures generated by Digital Bazaar libraries. To freshly generate these fixtures for testing using the following command

npm run generate:fixtures

[**Create Verifiable Credential**](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js#create-verifiable-credential)

Also known as credential issuance.

This library supports issuing in as a vc or vc-jwt.

import {

JsonWebKey,

JsonWebSignature,

JsonWebKey2020,

} from "@transmute/json-web-signature";

import { documentLoader } from "path/somewhere";

import { verifiable } from "@transmute/vc.js";

const key = {

id: "did:key:z6MkokrsVo8DbGDsnMAjnoHhJotMbDZiHfvxM4j65d8prXUr#z6MkokrsVo8DbGDsnMAjnoHhJotMbDZiHfvxM4j65d8prXUr",

type: "JsonWebKey2020",

controller: "did:key:z6MkokrsVo8DbGDsnMAjnoHhJotMbDZiHfvxM4j65d8prXUr",

publicKeyJwk: {

kty: "OKP",

crv: "Ed25519",

x: "ijtvFnowiumYMcYVbaz6p64Oz6bXwe2V\_9IlCgDR\_38",

},

privateKeyJwk: {

kty: "OKP",

crv: "Ed25519",

x: "ijtvFnowiumYMcYVbaz6p64Oz6bXwe2V\_9IlCgDR\_38",

d: "ZrHpIW1JBb-sK2-wzKV0mQjbxpnxjUCu151QZ9\_F\_Vs",

},

};

const credential = {

"@context": [

"https://www.w3.org/2018/credentials/v1",

"https://w3id.org/security/suites/jws-2020/v1",

],

id: "http://example.edu/credentials/3732",

type: ["VerifiableCredential"],

issuer: {

id: "did:key:z6MkokrsVo8DbGDsnMAjnoHhJotMbDZiHfvxM4j65d8prXUr",

},

issuanceDate: "2010-01-01T19:23:24Z",

credentialSubject: {

id: "did:example:ebfeb1f712ebc6f1c276e12ec21",

},

};

const result = await verifiable.credential.create({

credential,

format: ["vc", "vc-jwt"],

documentLoader: documentLoader,

suite: new JsonWebSignature({

key: await JsonWebKey.from(key as JsonWebKey2020),

}),

});

[**Create Verifiable Presentation**](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js#create-verifiable-presentation)

import {

JsonWebKey,

JsonWebSignature,

JsonWebKey2020,

} from "@transmute/json-web-signature";

import { documentLoader } from "path/somewhere";

import { key } from "path/somewhere";

import { verifiable } from "@transmute/vc.js";

const presentation = {

"@context": [

"https://www.w3.org/2018/credentials/v1",

"https://w3id.org/security/suites/jws-2020/v1",

],

type: ["VerifiablePresentation"],

holder: {

id: key.controller,

},

};

const result = await verifiable.presentation.create({

presentation,

format: ["vp", "vp-jwt"],

documentLoader: documentLoader,

challenge: "123", // this is supplied by the verifier / presentation recipient

suite: new JsonWebSignature({

key: await JsonWebKey.from(fixtures.key as JsonWebKey2020),

}),

});

[**Verify Presentation**](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js#verify-presentation)

import {

JsonWebKey,

JsonWebSignature,

JsonWebKey2020,

} from "@transmute/json-web-signature";

import { documentLoader } from "path/somewhere";

import { verifiable } from "@transmute/vc.js";

import { presentation } from "path/somewhere";

const result = await verifiable.presentation.verify({

presentation,

format: ["vp", "vp-jwt"],

documentLoader: documentLoader,

challenge: "123", // this is supplied by the verifier / presentation recipient

suite: new JsonWebSignature(),

});

[**Verify Credential**](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js#verify-credential)

import {

JsonWebKey,

JsonWebSignature,

JsonWebKey2020,

} from "@transmute/json-web-signature";

import { documentLoader } from "path/somewhere";

import { verifiable } from "@transmute/vc.js";

import { credential } from "path/somewhere";

const result = await verifiable.credential.verify({

credential,

format: ["vc", "vc-jwt"],

documentLoader: documentLoader,

suite: [new JsonWebSignature()],

});

[**About**](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js#about)

This library has been adapted from older versions of [digitalbazaar/vc](https://github.com/digitalbazaar/vc).

The primary changes have been adding support for vc-jwt, changes to validation and documentLoader requirements.

[**License**](https://github.com/transmute-industries/verifiable-data/tree/main/packages/vc.js#license)

See the License for [digitalbazaar/vc](https://github.com/digitalbazaar/vc/blob/master/LICENSE).

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