

Web 5

$$2 + 3 = 5$$

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WEB5: AN EXTRA DECENTRALIZED WEB PLATFORM

User Control

User in control of their data and identity.

Bring Your Own Keys

The future of the web is where users keep their own keys and bring their identities around.



DIF DID VC DWN

Decentralized Identity Foundation is an open, standards-based ecosystem.

Decentralized Identifiers (DID) is the standard for identity interoperability.

Verifiable Credentials (VC) is the standard for signed data interoperability.

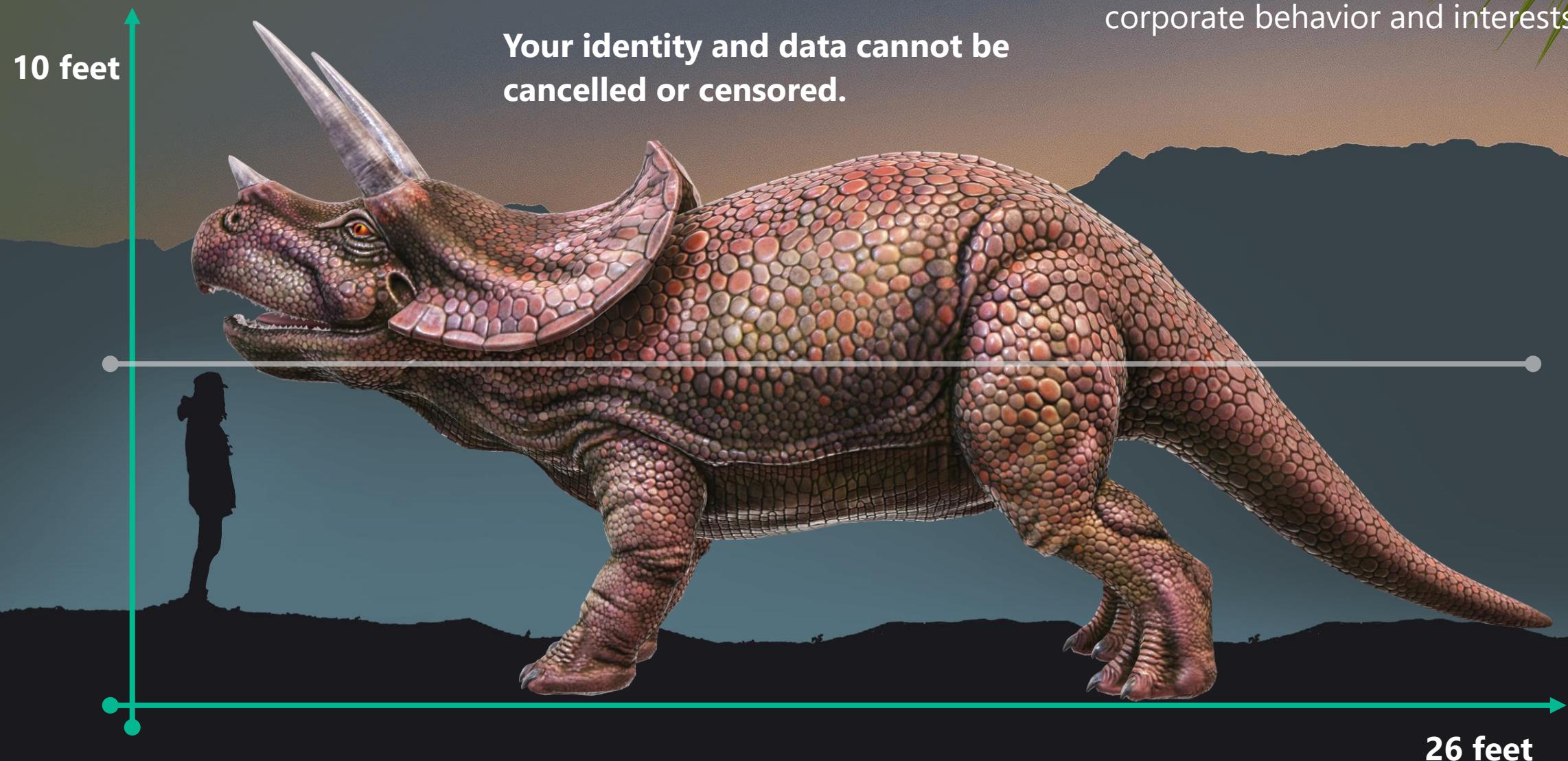
Decentralized Web Node is the standard for keeping and sharing your data.



Empowering the people

Web5 is about empowering the user against the centralized super-powers.

More people are finding their livelihood on the Web and has few, if any rights and protection against corporate behavior and interests...



Beware of T-Rex...

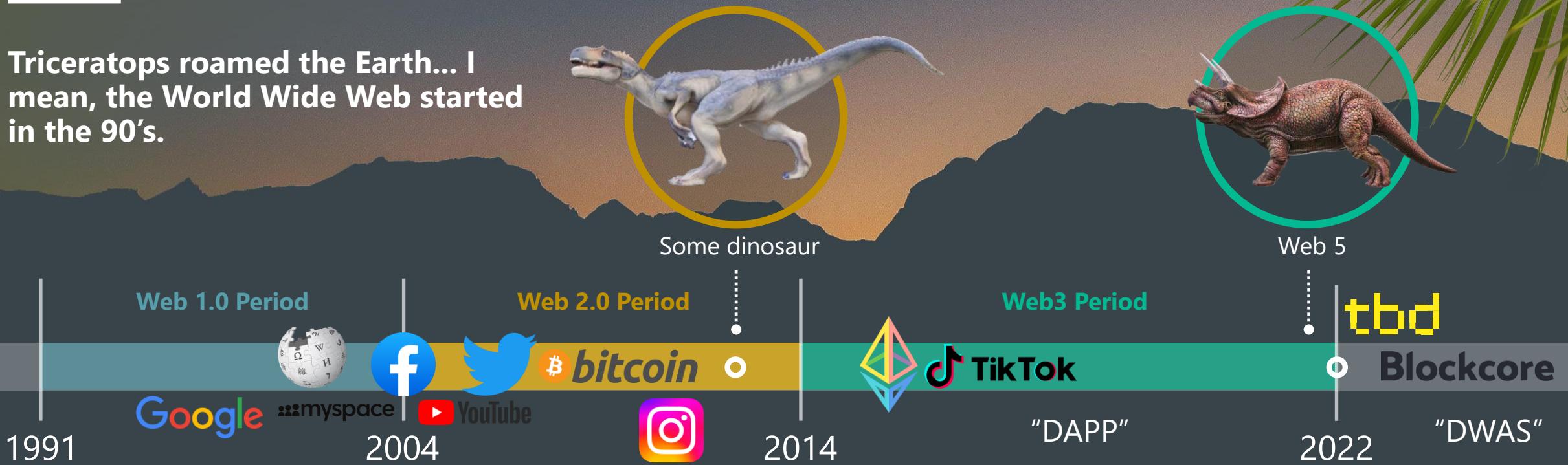
Technology can easily be misused to increase control, surveillance and monitoring. Nation states are adopting the technology at rapid rates with unknown future consequences.

15 to 20
feet



The Web Timeline

Triceratops roamed the Earth... I mean, the World Wide Web started in the 90's.



Web 1.0 was about consumption, few content contributors. Wikipedia came in 2001. **Web 2.0** was all about user contributed content.

Web3 introduced programmable money (valuables), "dapps", crypto-bros, NFTs, rug-pulls, scams, get-rich-schemes.



Web 5!

As more of our lives has become digital, corporations that own our data and identity gain more power and increases the risk and consequences for users who depend on the web for economic income. **Web5** might fix this.



**T-Rex live and controls
“everything” from USA and China**

The future will be decentralized with triceratops everywhere.

Each of us (users) together

Increased responsibility

The main principle of **Web5** is ownership of the data that is yours.

That increases responsibility tremendously and requires more active participation to fully utilize the possibilities.

In a decentralized world, everyone keeps what matters to them more closely.

More freedom and options if you want to, but also centralized services for the majority of people.



What is your role (as a user)?

Bring Your Identity & Data

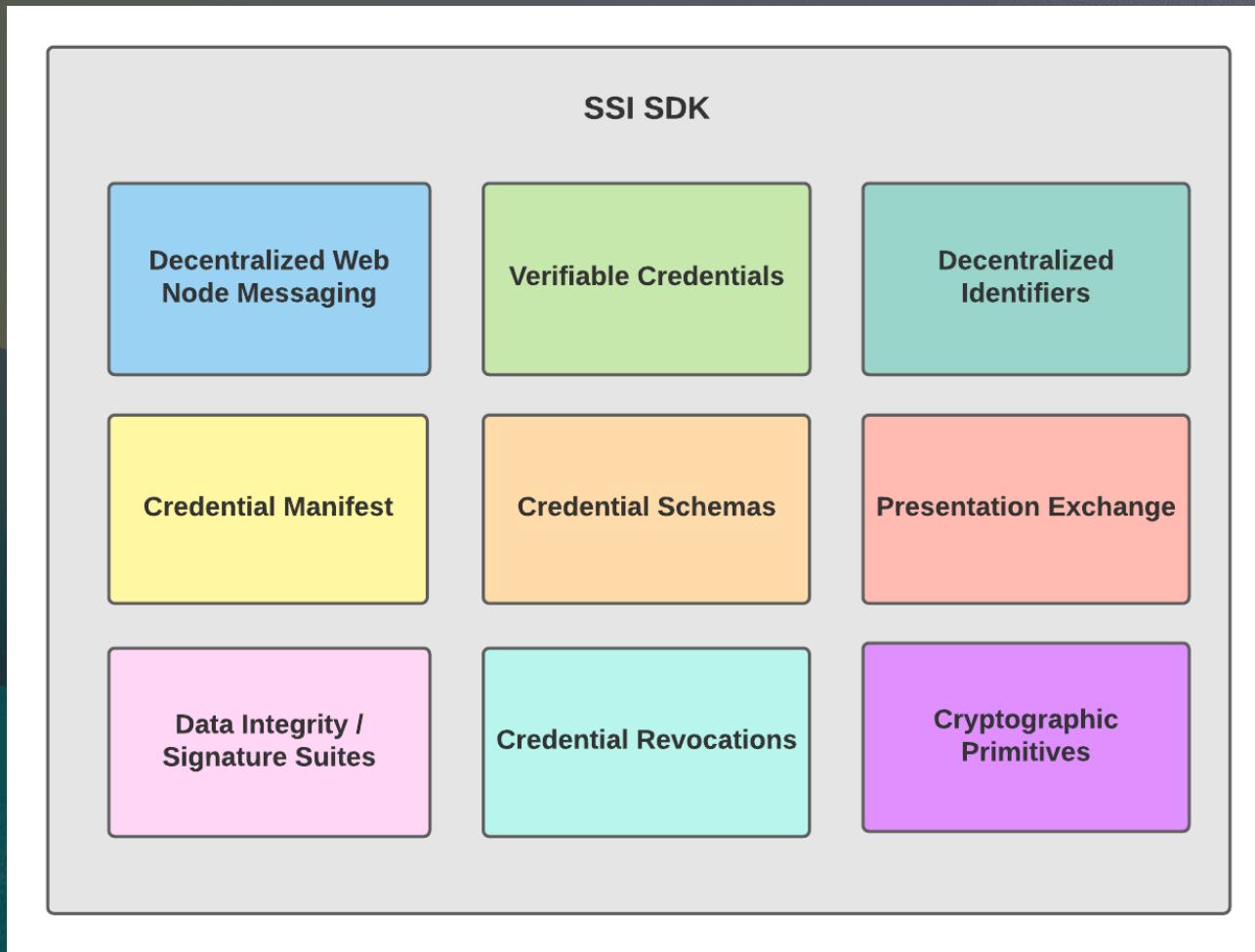
You must host, rent, borrow or share instances of DWN and announce to the world through your DID where your DWN is accessible.

Organizations will host DWNs for their employers. Content creators will host their DWNs to the public. Everyone else will run around with their DWNs in their pockets (phones).

Got data for me? NFC/QR or ad-hoc networks for importing data, from contact information, receipts, tickets, likes, playlists, medical records, diplomas, certifications, DMs. Jam it all into your DWN.



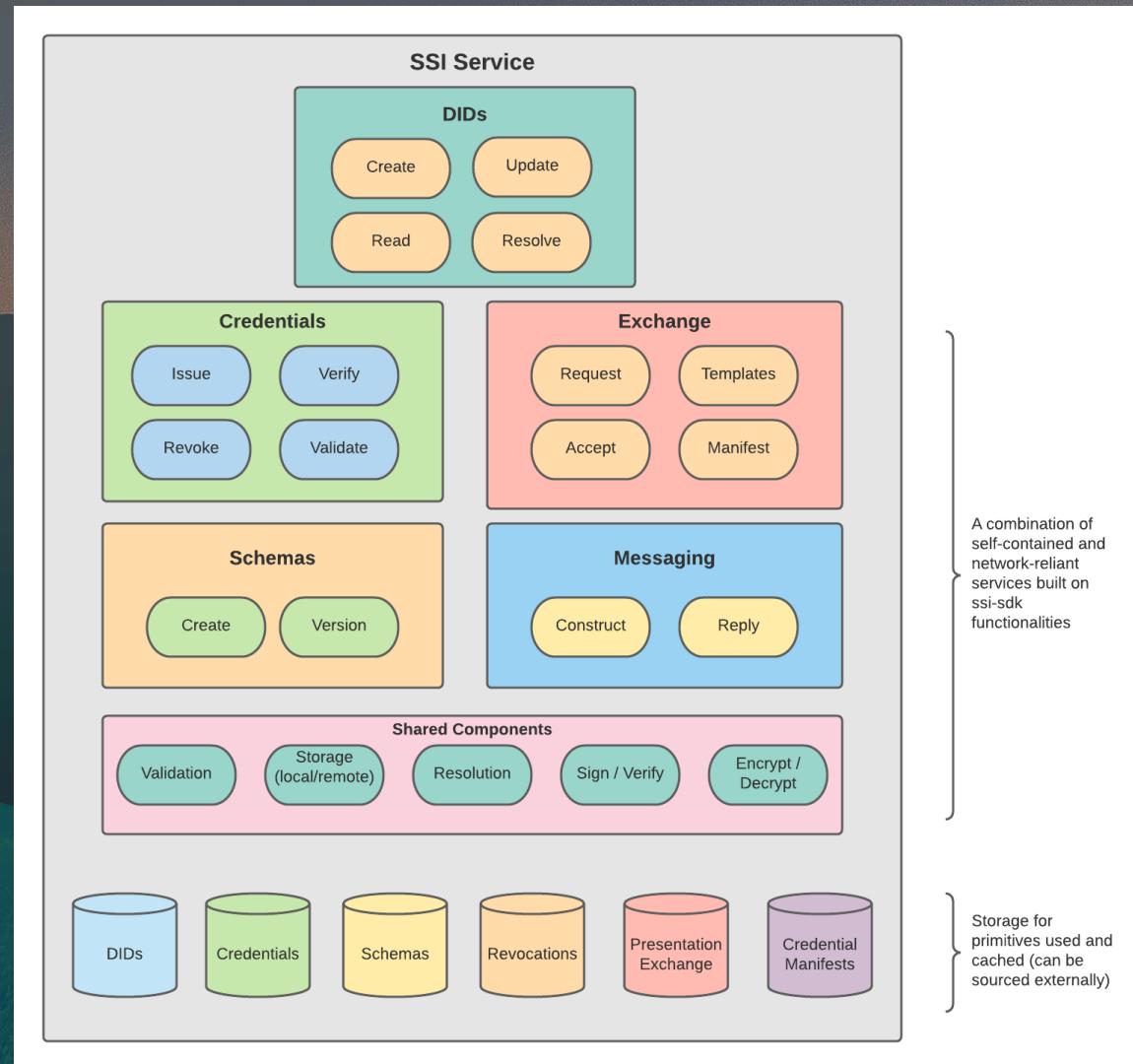
SDKs



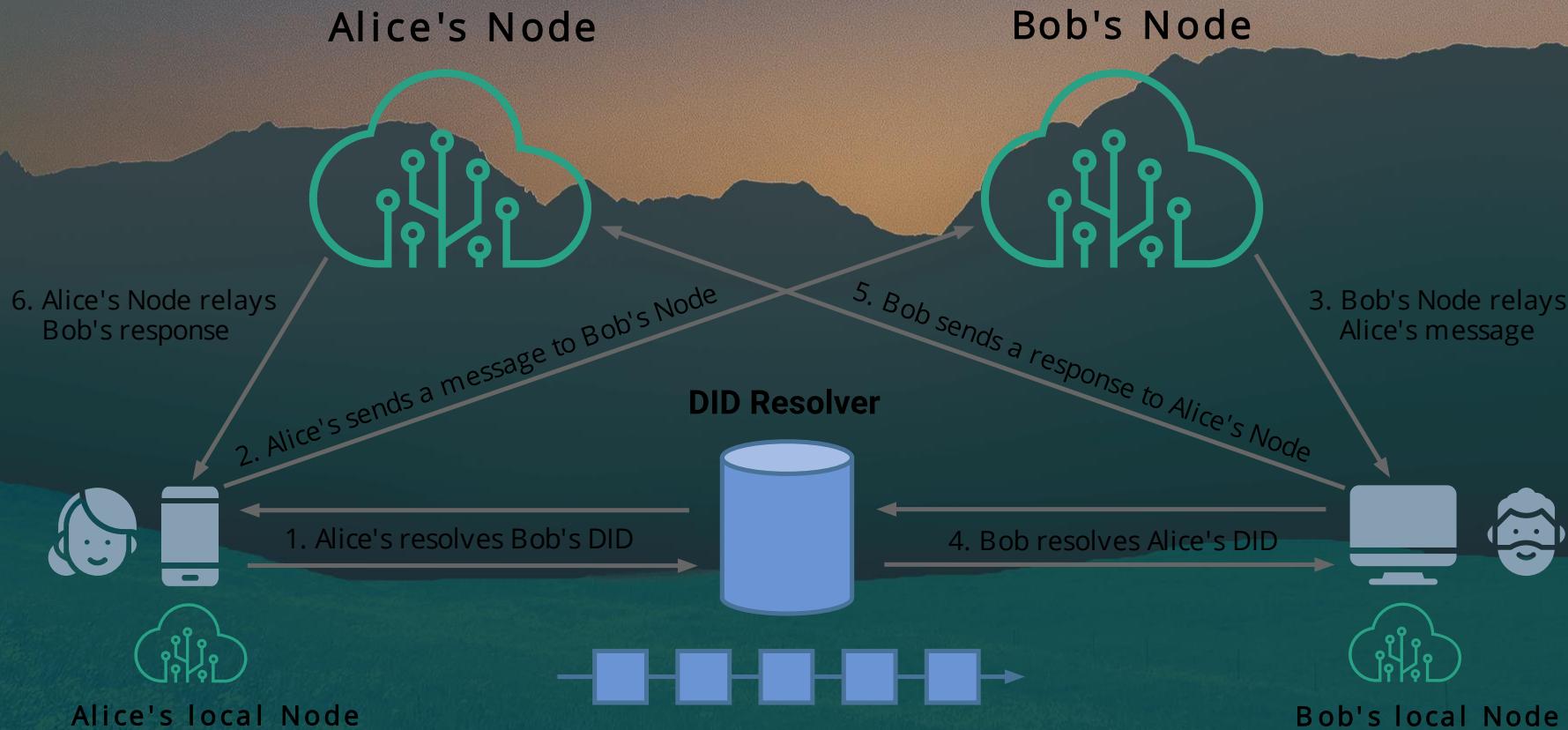
did-jwt
did-jwt-vc
did-resolver

...

tbd's SSI Service



Decentralized Web Node



DWN SDK JS

```
// Get the DID key from somewhere...
const signatureMaterial = Jws.createSignatureInput(didKey);
```

DWN SDK JS

```
// write a protocol definition with an allow-anyone rule
const protocolDefinition: ProtocolDefinition = {
    labels: {
        notes: {
            schema: 'notes',
        },
    },
    records: {
        notes: {
            allow: {
                anyone: {
                    to: ['write'],
                },
            },
        },
    },
};

const protocolsConfigure = await ProtocolsConfigure.create({
    dateCreated: new Date().toString(),
    protocol: 'notes-protocol',
    definition: protocolDefinition,
    authorizationSignatureInput: signatureMaterial,
});

const protocolWriteReply = await dwn.processMessage(
    didKey.did,
    protocolsConfigure.toJSON(),
    undefined
);
```

DWN SDK JS

```
const protocolQuery = await ProtocolsQuery.create({
  filter: { protocol: 'notes-protocol' },
  dateCreated: new Date().toString(),
  authorizationSignatureInput: signatureMaterial,
});

const protocolQueryResult = await dwn.processMessage(
  didKey.did,
  protocolQuery.toJSON(),
  undefined
);
```

DWN SDK JS

```
const query = await RecordsWrite.create({  
  data,  
  dataFormat: 'application/json',  
  published: true,  
  protocol: protocol,  
  schema: 'notes',  
  authorizationSignatureInput: signatureMaterial,  
});
```

DWN SDK JS

```
const recordsQuery = await RecordsQuery.create({
  filter: { schema: 'notes' },
  dateCreated: new Date().toString(),
  authorizationSignatureInput: signatureMaterial,
});

const queryResult = await dwn.processMessage(
  didKey.did,
  recordsQuery.toJSON()
);
```

DWN SDK JS

```
const message = await PermissionsRequest.create({  
    description : 'music',  
    grantedBy   : 'did:jank:ola',  
    grantedTo   : 'did:jank:kari',  
    scope       : { method: 'RecordsWrite' },  
    authorizationSignatureInput  
});
```

How to waste a lifetime... read standard specifications:

[Decentralized Identifiers \(DIDs\) v1.0 \(w3.org\)](#)

[Verifiable Credentials Data Model v1.1 \(w3.org\)](#)

[Verifiable Credentials JSON Schema Specification \(w3c-ccg.github.io\)](#)

[DIF Presentation Exchange \(identity.foundation\)](#)

[DIF Wallet Rendering \(identity.foundation\)](#)

[DIF Credential Manifest \(identity.foundation\)](#)

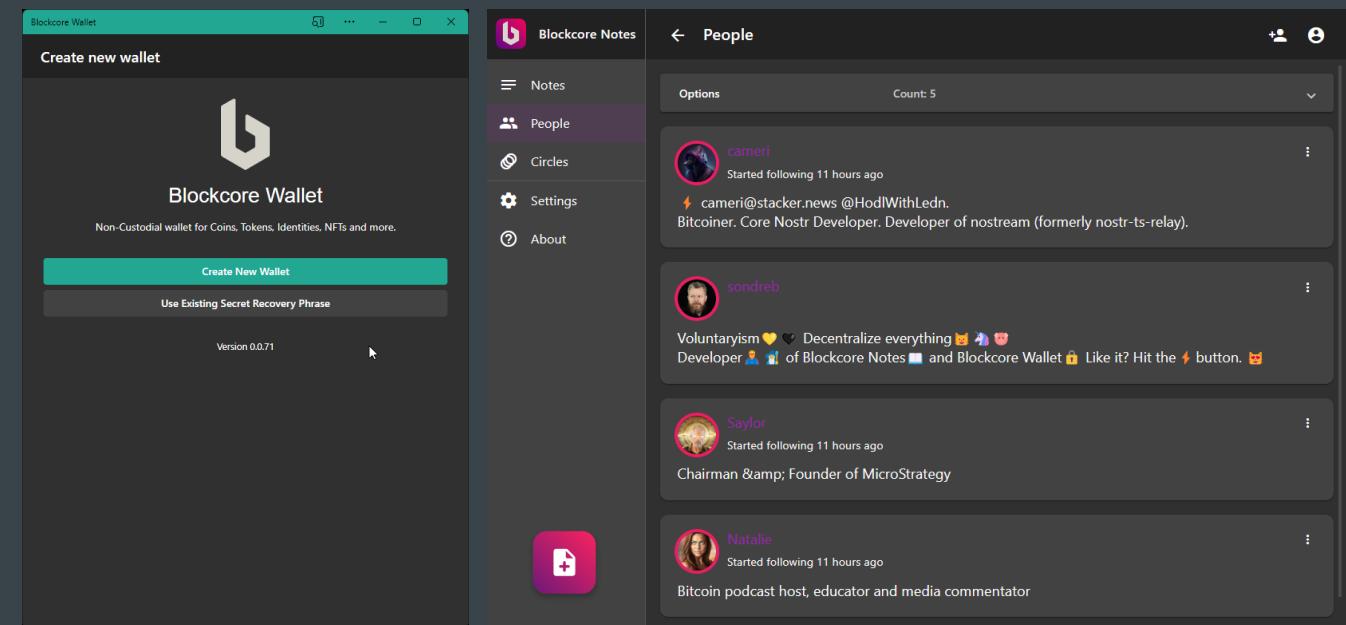
[Status List 2021 \(w3c-ccg.github.io\)](#)

Blockcore

Blockcore is a group of developers and engineers working to realize a decentralized future.

Built multiple Web5 projects:

- Blockcore Wallet
- Blockcore DID Server
- Blockcore Vault
- Blockcore Notes



www.blockcore.net did.is



nostr-protocol

**"The simplest open protocol
that is able to create a
censorship-resistant global
"social" network once and
for all."**

[GitHub - nostr-protocol/nostr: a truly censorship-resistant alternative to Twitter that has a chance of working](#)

The background of the slide features a dark, silhouetted mountain range against a sky transitioning from deep blue at the top to warm orange and yellow hues near the horizon, suggesting a sunrise or sunset.

Thank you!

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