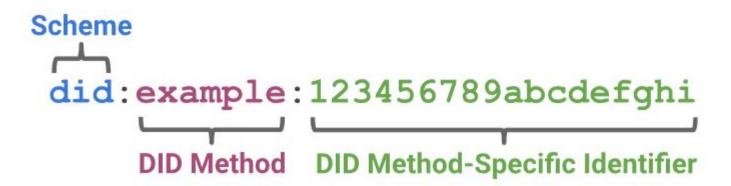
# DID

A DID is a simple text string consisting of three parts:

- 1) the did URI scheme identifier,
- 2) the identifier for the DID method, and
  - 3) the DID method-specific identifier.



Goal	Description
Decentralization	Eliminate the requirement for centralized authorities or single point failure in identifier management, including the registration of globally unique identifiers, public verification keys, <u>services</u> , and other information.
Control	Give entities, both human and non-human, the power to directly control their digital identifiers without the need to rely on external authorities.
Privacy	Enable entities to control the privacy of their information, including minimal, selective, and progressive disclosure of attributes or other data.
Security	Enable sufficient security for requesting parties to depend on <u>DID documents</u> for their required level of assurance.
Proof-based	Enable <u>DID controllers</u> to provide cryptographic proof when interacting with other entities.
Discoverability	Make it possible for entities to discover <u>DIDs</u> for other entities, to learn more about or interact with those entities.
Interoperability	Use interoperable standards so <u>DID</u> infrastructure can make use of existing tools and software libraries designed for interoperability.
Portability	Be system- and network-independent and enable entities to use their digital identifiers with any system that supports <u>DIDs</u> and <u>DID methods</u> .
Simplicity	Favor a reduced set of simple features to make the technology easier to understand, implement, and deploy.
Extensibility	Where possible, enable extensibility provided it does not greatly hinder interoperability, portability, or simplicity

portability, or simplicity.

## **DID Document**

The example <u>DID</u> above resolves to a <u>DID document</u>. A <u>DID document</u> contains information associated with the <u>DID</u>, such as ways to cryptographically authenticate a <u>DID</u> controller.

```
EXAMPLE 1: A simple DID document
 "@context": [
   "https://www.w3.org/ns/did/v1",
   "https://w3id.org/security/suites/ed25519-2020/v1"
 "id": "did:example:123456789abcdefghi",
 "authentication": [{
   // used to authenticate as did:...fghi
   "id": "did:example:123456789abcdefghi#keys-1",
   "type": "Ed25519VerificationKey2020",
   "controller": "did:example:123456789abcdefghi",
   "publicKeyMultibase": "zH3C2AVvLMv6gmMNam3uVAjZpfkcJCwDwnZn6z3wXmqPV"
 }]
```

## DID COMM

Comunicación cifrada y autenticada



#### KeyAgreement





Private Key

#### KeyAgreement

```
"@context": [
  "https://www.w3.org/ns/did/v1",
  "https://w3id.org/security/suites/ed25519-2020/v1"
"id": "did:example:123456789abcdefghi",
"authentication": [{
 // used to authenticate as did:...fghi
  "id": "did:example:123456789abcdefghi#keys-1",
  "type": "Ed25519VerificationKey2020",
  "controller": "did:example:123456789abcdefghi",
  "publicKeyMultibase": "zH3C2AVvLMv6gmMNam3uVAjZpfkcJCwDwnZn6z3wXmqPV"
}]
```

### **DID COMM**

Comunicación cifrada y autenticada



#### KeyAgreement

```
{
  "@context": [
    "https://www.w3.org/ns/did/v1",
    "https://w3id.org/security/suites/ed25519-2020/v1"
]
  "id": "did:example:123456789abcdefghi",
  "authentication": [{
    // used to authenticate as did:...fghi
    "id": "did:example:123456789abcdefghi#keys-1",
    "type": "Ed25519VerificationKey2020",
    "controller": "did:example:123456789abcdefghi",
    "publicKeyMultibase": "zH3C2AVvLMv6gmMNam3uVAjZpfkcJCwDwnZn6z3wXmqPV"
}]
```

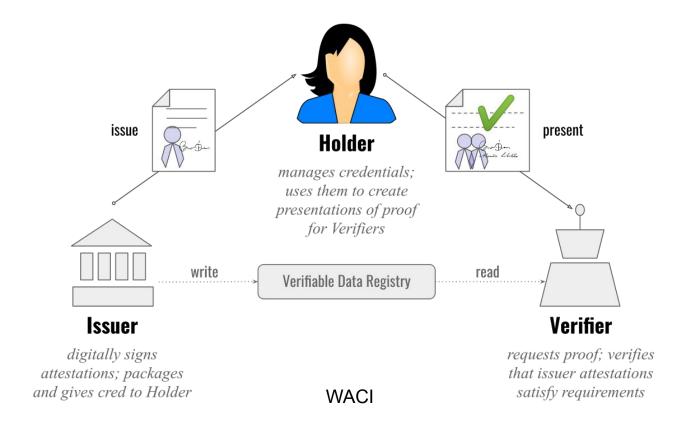


Private Ke

#### KeyAgreement

```
{
  "@context": [
    "https://www.w3.org/ns/did/v1",
    "https://w3id.org/security/suites/ed25519-2020/v1"
]
  "id": "did:example:123456789abcdefghi",
  "authentication": [{
    // used to authenticate as did:...fghi
    "id": "did:example:123456789abcdefghi#keys-1",
    "type": "Ed25519VerificationKey2020",
    "controller": "did:example:123456789abcdefghi",
    "publicKeyMultibase": "zH3C2AVvLMv6gmMNam3uVAjZpfkcJCwDwnZn6z3wXmqPV"
}]
}
```

## Credenciales Verificables - Actores



## Credenciales Verificables - Ejemplo

