

DID Resolution

A work item of the W3C CCG

09th January 2020

IPR rules apply!

Zoom Call:

<https://zoom.us/j/7077077007>

Text Chat:

<http://irc.w3.org/?channels=ccg>
(type q+ to get into the queue)

This call is being recorded!

Agenda Thursday 09 January 2020

Welcome and CCG IPR reminder

Call info and scribe selection

Agenda creation/review/prioritization

DID resolver architectures

Matrix parameters vs. query parameters

AOB

Next meeting

did:ex:123;service=**profilepic**

```
{
  "@context": "https://www.w3.org/ns/did/v1",
  "id": "did:ex:123",
  "publicKey": [{
    "id": "did:ex:123#keys-1",
    "type": "RsaVerificationKey2018",
    "publicKeyPem": "-----BEGIN PUB...01..END PUB -----\r\n"
  }],
  "service": [{
    "id": "did:ex:123#profilepic",
    "serviceEndpoint":
      "https://socialnetwork.com/user/123/profile?image"
  }]
}
```



<https://socialnetwork.com/user/123/profile?image>

```
{
  "@context": "https://www.w3.org/ns/did/v1",
  "id": "did:ex:123",
  "publicKey": [{
    "id": "did:ex:123#keys-1",
    "type": "RsaVerificationKey2018",
    "publicKeyPem": "-----BEGIN PUB...01..END PUB -----\r\n"
  }],
  "service": [{
    "id": "did:ex:123#profilepic",
    "serviceEndpoint":
      "https://newnetwork.com/account022/photo.jpg"
  }]
}
```



<https://newnetwork.com/account022/photo.jpg>

did:ex:123;service=**files**/myresume/doc?version=latest#intro

```
{
  "@context": "https://www.w3.org/ns/did/v1",
  "id": "did:ex:123",
  "publicKey": [{
    "id": "did:ex:123#keys-1",
    "type": "RsaVerificationKey2018",
    "publicKeyPem": "-----BEGIN PUB...01..END PUB -----\r\n"
  }],
  "service": [{
    "id": "did:ex:123#files",
    "serviceEndpoint":
      "https://filestore.org/user123/"
  }]
}
```



https://filestore.org/user123/myresume/doc?version=latest#intro

```
{
  "@context": "https://www.w3.org/ns/did/v1",
  "id": "did:ex:123",
  "publicKey": [{
    "id": "did:ex:123#keys-1",
    "type": "RsaVerificationKey2018",
    "publicKeyPem": "-----BEGIN PUB...01..END PUB -----\r\n"
  }],
  "service": [{
    "id": "did:ex:123#files",
    "serviceEndpoint":
      "https://selfhosted.me:8080/"
  }]
}
```



https://selfhosted.me:8080/myresume/doc?version=latest#intro

did:ex:123;service=files/myresume/doc?version=latest#intro

What if we did not have matrix parameters?

did:ex:123/myresume/doc?_did_service=files&version=latest#intro

How would this get dereferenced?

More matrix parameters! (version-id)

did:ex:123;service=files;version-id=4/myresume/doc?version=latest#intro



Version of the DID document
(Defined by the DID Core spec)

Version of the resource at the service endpoint
(Defined by the service)

More matrix parameters! (hl)

did:ex:123;service=files;hl=zQmWvQ/myresume/doc?hl=zQrMLp#intro

Hash of the DID document
(Verified by the DID resolver)

Hash of the resource at the service endpoint
(Verified by the client application)