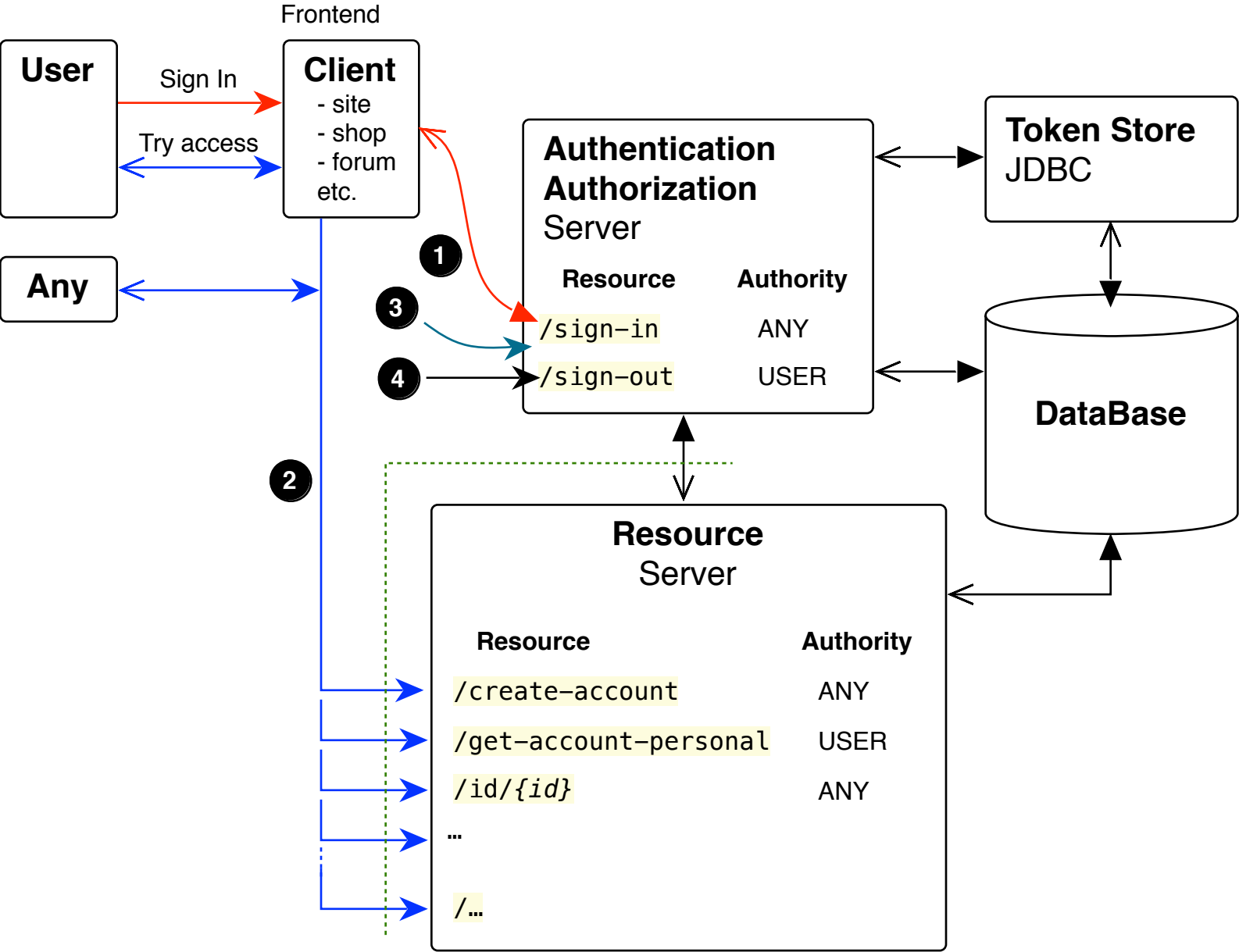


# Lifecycle



## 1 Sign In

```
Req: curl client_id : client_password @ host:port /sign-in
      -d username=username           required
      -d password=password         required
      -d grant_type=password       required
      -d usernameType=usernameType optional
```

If you need to define a table where stored an **username**, then, when sign-in, you need to pass an additional parameter, for example, this assumes that the parameter is named usernameType, its possible values are: - **EMAIL**  
- **PHONE**  
- **NICKNAME**  
- **ID**

To avoid problems the values **username** and **password** passed in the request must contains characters from [US-ASCII](#), and must be [percent-encoded](#).

```
Resp: {
  access_token : access token
  token_type   : "bearer"
  refresh_token : refresh token
  expires_in   : optional access token expiration time in seconds
  scope        : list of scopes
  data: {
    id           : account id
    username
    authorities  : list of authorities: [USER, ADMIN, etc.]
    thirdParty   : null or one of: GOOGLE, FACEBOOK, etc.
    createdOn    : YYYY-MM-DDTHH:MM:SSZ
  }
}
```

## 2 Resource accessing

```
Req: curl host:port /path/to/resource -H "Authorization: Bearer ACCESS_TOKEN" ...
Resp: resource content or error
```

## 3 Token refreshing

```
Req: curl client_id : client_password @ host:port /sign-in
      -d refresh_token=...
      -d grant_type=refresh_token
```

```
Resp: {
  access_token : new access token
  token_type   : "bearer"
  refresh_token : refresh token
  expires_in   : optional access token expiration time in seconds
  scope        : list of scopes
  data: {
    id           : account id
    username
    authorities  : list of authorities: [USER, ADMIN, etc.]
    thirdParty   : null or one of: GOOGLE, FACEBOOK, etc.
    createdOn    : YYYY-MM-DDTHH:MM:SSZ
  }
}
```

## 4 Sign Out

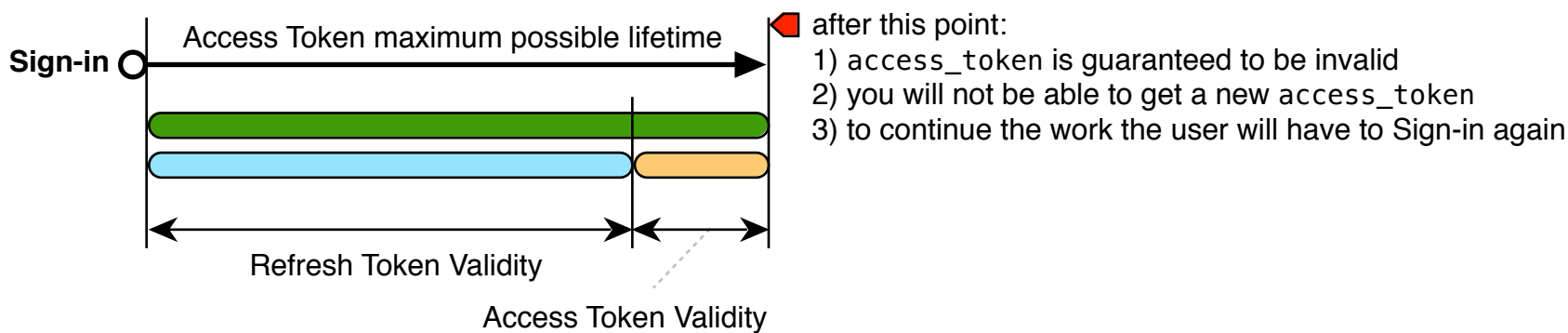
```
Req: curl host:port /sign-out -H "Authorization: Bearer ACCESS_TOKEN"
Resp: success or error
```

## Access Token maximum possible lifetime

By default, the tokens lifetime is as follows (from Spring security oauth2 [DefaultTokenServices](#)):

```
int refreshTokenValiditySeconds = 60 * 60 * 24 * 30; // default 30 days.
int accessTokenValiditySeconds  = 60 * 60 * 12;      // default 12 hours.
```

The maximum possible lifetime can be achieved If the Client is refreshing the Access Token before its expiry:



The Nevis Backend Server is pre-configured to work with three types of Clients:

Client	Token Validity (sec.)		Access Token maximum possible lifetime
	access_token	refresh_token	
Untrusted	60*3 3 min.	1 1 sec.	~ 3 minutes
Trusted	60*60*24*20 20 days	60*60*24*340 340 days	~ 360 days
Unlimited	0 unlimite	1 1 sec.	unlimite

The User will have to **Sign-in again every**

Thus, from the proposed options, it makes sense to periodically refresh the Access Token only for **Trusted** Client

For **Untrusted** and **Unlimited** Clients, attempting to refresh the Access Token will result in automatic Sign-out with the following reason:

```
401 (Unauthorized)
{ "error" : "invalid_token",
  "error_description" : "Invalid refresh token (expired): ..." }
```