# Securing Your API



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# Coming Up



The authorization code flow with PKCE protection

Passing an access token to the API and validating it

Using access token claims

Including additional identity claims in an access token

Role-based authorization



#### The Authorization Code Flow + PKCE



Client application (relying party)

**IDP** 



create code\_verifier

hash (SHA256)

code\_challenge authentication request + code\_challenge

authorization request + code\_challenge

authorization endpoint

store code\_challenge

user authenticates

(user gives consent)



token request (code, clientid, clientsecret, code\_verifier)

token endpoint



#### The Authorization Code Flow + PKCE



Client application (relying party)







token request (code, clientid, clientsecret, code\_verifier)

token endpoint



hash code\_verifier



check if it matches the



stored code\_challenge











id\_token access\_token

token is validated



access\_token (as Bearer token in Authorization header)



#### The Authorization Code Flow + PKCE

IDP



API

ode, clientid, clientsecret, code\_verifier)

token endpoint

hash code\_verifier

check if it matches the stored code\_challenge

s Bearer token in Authorization header)







Securing access to our API





Passing an access token to our API





Showing an access denied page





Using access token claims when getting a resource collection



Including
Identity Claims
in an Access
Token

Sometimes an API needs access to identity claims

When defining a resource scope (API resource), include the required claims in the claims list





Including identity claims in an access token





Protecting the API when creating a resource (with roles)



### Summary



Access tokens are passed to the API as Bearer tokens

AccessTokenValidation middleware can be used to validate an access token at level of the API



### Summary



Configure the ApiResource to include additional identity claims in the access token

Role-based authorization is achievable through the Authorize attribute

