**HRM CODE TUTORIAL COLLECTION**

**Collection By:** R&D Team

Contents

[Authentication Login Flow 2](#_Toc63152444)

[Mvc Application 2](#_Toc63152445)

# Authentication Login Flow

## Mvc Application

Với một Mvc Application sử dụng một Identity Server để thực hiện chứng thực, và nếu người dùng muốn truy cập một Protected Resource thì quá trình xử lý diễn ra theo các bước sau

1/ Người dùng chưa được chứng thực truy cập một Protected Resource (ví dụ <https://test-client1.local/home/privacy>)

Response cho Request (1) sẽ có location theo dạng

<https://test-host.local/connect/authorize>

?client\_id=client1

&redirect\_uri=https%3A%2F%2Ftest-client1.local%2Fsignin-oidc

&response\_type=code

&scope=openid%20email%20profile

&code\_challenge=gzaxDyYkfFmqurioIQNlHdjpUnbWi2SwaYxWiJ3t4hU

&code\_challenge\_method=S256

&response\_mode=form\_post

&nonce=637478289282528941.YzAyN2I0YTgtMWU0OS00YTRiLTk3ODUtNzEwZTFjYzBhZmVjZWM3MGUwZDYtMTU3MC00MWJiLWE4ODYtMzMzNjRhNDVlZDk5

&state=CfDJ8PQ8MCz7\_5RDjmuAAsckLRRVUtxY7NoI-jYRKJuhh4IQPxyHyGcSgSeHPnXi3XjfwzCIx2fAofM7d8ktKcD1lOkjSg9x1K\_RzZpYoqtIdF3jWFyA9CrrTMQgplof\_68l2TAo6l9s11baqE\_8P0CwTudjhmFdonELtvxvUKlm\_x7aj8O0MjtjpfcY7y1wksFDiD3si5FMAjGiL4bLFFNWISVH6dCd1yP0A-znqdy-iSRsFLLFfG6MNyBKkmMwMB-c\_JqFeEZSh2GUhFk1-F0ht2czJ1SbmOKKS9uOibcpNyv5Omtzt2B8klJSStmd4DHW\_pvh\_cOP6jzhyI9J4P98cSs9P8gXvyLEz7SUF3Y8I9mzauonn8wSnX10cWSwn6osxeG9zlhrDfNcy5PvNsf47LY

&x-client-SKU=ID\_NETSTANDARD2\_0

&x-client-ver=5.5.0.0

Response còn bao gồm 2 set-cookies

* .AspNetCore.OpenIdConnect.Nonce.CfDJ8PQ8MCz7\_5RDjmuAAsckLRS1JeQWPGiWvDnoLKoI5zM2r8NDREI\_0ek3AB7R0rl4ZxA5TZRyqsI0Re\_-vKj6joDMJXdfiy\_zwiSewiRsT7gwL3ihcNG1VPRH\_7\_OO0kJlFhoqxEmpFVKer8EnEyY\_nEZdSvWO-4SH\_Qpdp7JUlpUlBsvtHClHIF9IxEXfj3YKTQC\_w6sRAyZ8yiRwpxV-Rl2Qp6wOsCaT8NPAFufLfaOM9anJ6RLJDmBosMKxaoSZNte5fb0OeV4\_Y-HwNB\_Ccg=N; expires=Tue, 02 Feb 2021 02:30:28 GMT; path=/signin-oidc; secure; samesite=none; httponly
* .AspNetCore.Correlation.oidc.-31NECCGCgmquVMiUYKgq3BE1hDJyYlDsh1kQLt3cvM=N; expires=Tue, 02 Feb 2021 02:30:28 GMT; path=/signin-oidc; secure; samesite=none; httponly

Nhờ vào location Response mà Browser sẽ điều hướng người dùng tới Authorize Endpoint tại Authorization Server.

Authorize Endpoint response với Location là Login Action tại Authorization Server

**location:**

<https://test-host.local/Account/Login>

?ReturnUrl=%2Fconnect%2Fauthorize%2Fcallback%3Fclient\_id%3Dclient1

%26redirect\_uri%3Dhttps%253A%252F%252Ftest-client1.local%252Fsignin-oidc

%26response\_type%3Dcode

%26scope%3Dopenid%2520email%2520profile

%26code\_challenge%3DgzaxDyYkfFmqurioIQNlHdjpUnbWi2SwaYxWiJ3t4hU

%26code\_challenge\_method%3DS256

%26response\_mode%3Dform\_post

%26nonce%3D637478289282528941.YzAyN2I0YTgtMWU0OS00YTRiLTk3ODUtNzEwZTFjYzBhZmVjZWM3MGUwZDYtMTU3MC00MWJiLWE4ODYtMzMzNjRhNDVlZDk5

%26state%3DCfDJ8PQ8MCz7\_5RDjmuAAsckLRRVUtxY7NoI-jYRKJuhh4IQPxyHyGcSgSeHPnXi3XjfwzCIx2fAofM7d8ktKcD1lOkjSg9x1K\_RzZpYoqtIdF3jWFyA9CrrTMQgplof\_68l2TAo6l9s11baqE\_8P0CwTudjhmFdonELtvxvUKlm\_x7aj8O0MjtjpfcY7y1wksFDiD3si5FMAjGiL4bLFFNWISVH6dCd1yP0A-znqdy-iSRsFLLFfG6MNyBKkmMwMB-c\_JqFeEZSh2GUhFk1-F0ht2czJ1SbmOKKS9uOibcpNyv5Omtzt2B8klJSStmd4DHW\_pvh\_cOP6jzhyI9J4P98cSs9P8gXvyLEz7SUF3Y8I9mzauonn8wSnX10cWSwn6osxeG9zlhrDfNcy5PvNsf47LY

%26x-client-SKU%3DID\_NETSTANDARD2\_0

%26x-client-ver%3D5.5.0.0

Lúc này Browser lại được điều hướng tới Login Action tại Authorization với một query string là returnUrl

Người dùng thực hiện đăng nhập bằng username và password thông qua HTTP Post

Response nhận được sẽ có Status Code = 302 và location

**location:**

/connect/authorize/callback

?client\_id=client1

&redirect\_uri=https%3A%2F%2Ftest-client1.local%2Fsignin-oidc

&response\_type=code

&scope=openid%20email%20profile

&code\_challenge=gzaxDyYkfFmqurioIQNlHdjpUnbWi2SwaYxWiJ3t4hU

&code\_challenge\_method=S256

&response\_mode=form\_post

&nonce=637478289282528941.YzAyN2I0YTgtMWU0OS00YTRiLTk3ODUtNzEwZTFjYzBhZmVjZWM3MGUwZDYtMTU3MC00MWJiLWE4ODYtMzMzNjRhNDVlZDk5

&state=CfDJ8PQ8MCz7\_5RDjmuAAsckLRRVUtxY7NoI-jYRKJuhh4IQPxyHyGcSgSeHPnXi3XjfwzCIx2fAofM7d8ktKcD1lOkjSg9x1K\_RzZpYoqtIdF3jWFyA9CrrTMQgplof\_68l2TAo6l9s11baqE\_8P0CwTudjhmFdonELtvxvUKlm\_x7aj8O0MjtjpfcY7y1wksFDiD3si5FMAjGiL4bLFFNWISVH6dCd1yP0A-znqdy-iSRsFLLFfG6MNyBKkmMwMB-c\_JqFeEZSh2GUhFk1-F0ht2czJ1SbmOKKS9uOibcpNyv5Omtzt2B8klJSStmd4DHW\_pvh\_cOP6jzhyI9J4P98cSs9P8gXvyLEz7SUF3Y8I9mzauonn8wSnX10cWSwn6osxeG9zlhrDfNcy5PvNsf47LY

&x-client-SKU=ID\_NETSTANDARD2\_0

&x-client-ver=5.5.0.0

Và set-cookie

**set-cookie:**

idsrv.session=F4669C1689BC5A4F1A24AAFD94001704; path=/; secure; samesite=none

**set-cookie:**

idsrv=CfDJ8HwKx9rhJ15OksRdZkEGmNKcqRUv2zYjvt21\_Yyfnq5tvyQYMpWgVcDTtpKw64Rywxz6dMcrLgC0yC\_mDlgElb58\_kBcu\_ucnEHUbtMSLaof6WYt9f1G4LQPyl4ris678Iajg1RXcvqSF9iuJ2c5SJlqEstGx3lxrZ2Mgy2CNjhS-wfUxf0ulC74ytXxn7s0wL-FR0sbdFw00c9Po3qIucunmO1OSRGEs5mCHmBOWSu-FBt2AUxIciem-N\_gI8DbCNoshzW0-JI1GI8QMuR6DaQlfes-zlqpGYhPa1cxAJ-bwhj9Dzfs7R6ovGwoLLiMNHCcuSMfTHUfI6W38CE9wTq3xE9T3zlejjNdEGsYItM1mz3blh82Y3G4-GbzYt7tak4J-\_Yq6-NjDeuKjBNeziFND3L8JV3s21m23tokTmyIUOvogUSFwA6YN9wV95oTtVfpq\_q97CqlVP2OPwPgK65zeIqi1StZ3Z9TNY2pQPyjnGKYWj23LgPZz7OA19RtyHNKEG2\_pFfSnKsyVPoL23BM4yf3aIkFnfAr0WuxUxJI; path=/; secure; samesite=none; httponly

Authorize Callback Endpoint parse Query String và xử lý

Response trả về một Location

**location:**

<https://test-host.local/consent>

?returnUrl=%2Fconnect%2Fauthorize%2Fcallback%3Fclient\_id%3Dclient1

%26redirect\_uri%3Dhttps%253A%252F%252Ftest-client1.local%252Fsignin-oidc

%26response\_type%3Dcode

%26scope%3Dopenid%2520email%2520profile

%26code\_challenge%3DgzaxDyYkfFmqurioIQNlHdjpUnbWi2SwaYxWiJ3t4hU

%26code\_challenge\_method%3DS256

%26response\_mode%3Dform\_post

%26nonce%3D637478289282528941.YzAyN2I0YTgtMWU0OS00YTRiLTk3ODUtNzEwZTFjYzBhZmVjZWM3MGUwZDYtMTU3MC00MWJiLWE4ODYtMzMzNjRhNDVlZDk5

%26state%3DCfDJ8PQ8MCz7\_5RDjmuAAsckLRRVUtxY7NoI-jYRKJuhh4IQPxyHyGcSgSeHPnXi3XjfwzCIx2fAofM7d8ktKcD1lOkjSg9x1K\_RzZpYoqtIdF3jWFyA9CrrTMQgplof\_68l2TAo6l9s11baqE\_8P0CwTudjhmFdonELtvxvUKlm\_x7aj8O0MjtjpfcY7y1wksFDiD3si5FMAjGiL4bLFFNWISVH6dCd1yP0A-znqdy-iSRsFLLFfG6MNyBKkmMwMB-c\_JqFeEZSh2GUhFk1-F0ht2czJ1SbmOKKS9uOibcpNyv5Omtzt2B8klJSStmd4DHW\_pvh\_cOP6jzhyI9J4P98cSs9P8gXvyLEz7SUF3Y8I9mzauonn8wSnX10cWSwn6osxeG9zlhrDfNcy5PvNsf47LY

%26x-client-SKU%3DID\_NETSTANDARD2\_0

%26x-client-ver%3D5.5.0.0

gd

Tới màn hình Consent với Query String returnUrl, nếu người dùng đồng ý Consent, IdentityServer4 sẽ xử lý … và điều hướng người dùng về lại redirectUrl của Client lúc đầu đã đăng ký (http post)

https://test-client1.local/signin-oidc

Request lúc này kèm theo hai Cookie tại IdentityServer là .AspNetCore.OpenIdConnect.Nonce….. và .AspNetCore.Correlation.oidc…

Và một Form Data bao gồm code, scope, state, session\_state

1. **code:**

BDEC8819C415FE760E03DDF78D4471AE8EC6BC5DAA88025E2A257529799DC155

1. **scope:**

openid email profile

1. **state:**

CfDJ8PQ8MCz7\_5RDjmuAAsckLRRVUtxY7NoI-jYRKJuhh4IQPxyHyGcSgSeHPnXi3XjfwzCIx2fAofM7d8ktKcD1lOkjSg9x1K\_RzZpYoqtIdF3jWFyA9CrrTMQgplof\_68l2TAo6l9s11baqE\_8P0CwTudjhmFdonELtvxvUKlm\_x7aj8O0MjtjpfcY7y1wksFDiD3si5FMAjGiL4bLFFNWISVH6dCd1yP0A-znqdy-iSRsFLLFfG6MNyBKkmMwMB-c\_JqFeEZSh2GUhFk1-F0ht2czJ1SbmOKKS9uOibcpNyv5Omtzt2B8klJSStmd4DHW\_pvh\_cOP6jzhyI9J4P98cSs9P8gXvyLEz7SUF3Y8I9mzauonn8wSnX10cWSwn6osxeG9zlhrDfNcy5PvNsf47LY

1. **session\_state:**

QLMcqLm7Gs3F-KQk9cF8BzuWz6UoQLg6a8yQOtjFpug.79CA5466B7B823025BFA424A18819F4B

CfDJ8Ei-MYE9BIxDsTW705COnwf-VCjVy-UHAEFjq7W9bEhPInpJyj\_Ke8dOErw9BE-lia7C8Ax5Ee9GRmgmPrBUHFNoSOcsZIwRPCL9nOO5uwXYkMiGyYO-uMcutG1IFeCVcMxXV3bXUiRAu7kWO2Ta53xzufaxApWjhMTH798e4eYRKP3E7YLP4bF1Uv-StIgoOMPRY5EkKjXakmC\_et4L3YlXKMJrutY0DmeXbEQQQ0zZIW9sw2smkMYezo39mAvlgr85VfxrTjyHimm8mVksngDvMIwf7QRO70YbdGh1x6e3quXpVbC9Nm1ZIrsw2pe2BS8FtZhmzuMPs-n7h3NVM8muTVAsWCoP5MYovJ9qO7EeEyGFbSbL6ikIQFqpQSVr9mZ\_Ghuwhd8Lvm9hWA1tZUU

CfDJ8Ei-MYE9BIxDsTW705COnwf-VCjVy-UHAEFjq7W9bEhPInpJyj\_Ke8dOErw9BE-lia7C8Ax5Ee9GRmgmPrBUHFNoSOcsZIwRPCL9nOO5uwXYkMiGyYO-uMcutG1IFeCVcMxXV3bXUiRAu7kWO2Ta53xzufaxApWjhMTH798e4eYRKP3E7YLP4bF1Uv-StIgoOMPRY5EkKjXakmC\_et4L3YlXKMJrutY0DmeXbEQQQ0zZIW9sw2smkMYezo39mAvlgr85VfxrTjyHimm8mVksngDvMIwf7QRO70YbdGh1x6e3quXpVbC9Nm1ZIrsw2pe2BS8FtZhmzuMPs-n7h3NVM8muTVAsWCoP5MYovJ9qO7EeEyGFbSbL6ikIQFqpQSVr9mZ\_Ghuwhd8Lvm9hWA1tZUU