

SMART App Launch STU2.2 Report

PASS

FINAL RESULT

1.0.0

VERSION

May 20, 2026, 8:19 PM

REPORT DATE

http://localhost:90/smart\_stu2\_2/926xLlpUJIH

1 Standalone Launch

| INPUT                      | VALUE                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| url                        | https://host.docker.internal:8243/r4                                                                                                 |
| standalone_smart_auth_info | {"auth_type":"symmetric","use_discovery":"true","token_url":"https://patient/Patient.rs","client_id":"kp3os6qrkdK1fpFN1tuW4hgRsKwa"} |

1.1 SMART on FHIR Discovery

1.1.01 FHIR server makes SMART configuration available from well-known endpoint

| TYPE | URL                                                                  | STATUS |
|------|----------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/.well-known/smart-configuration | 200    |

1.1.02 Well-known configuration contains required fields

1.1.03 Optional SMART .well-known/smart-configuration Endpoint Enables Cross-Origin Resource Sharing (CORS)

| TYPE | URL                                                                  | STATUS |
|------|----------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/.well-known/smart-configuration | 200    |

1.1.04 Optional SMART metadata Endpoint Enables Cross-Origin Resource Sharing (CORS)

| TYPE | URL                                           | STATUS |
|------|-----------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/metadata | 200    |

1.2 SMART Standalone Launch

1.2.01 OAuth 2.0 authorize endpoint secured by transport layer security

| TYPE                                                                                   | MESSAGE                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied SSL 2.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied SSL 3.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied TLS 1.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied TLS 1.1 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> accepted TLS 1.2 connection.                     |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> denied TLS 1.3 connection.                       |

 1.2.02 OAuth server redirects client browser to app redirect URI

| TYPE                                                                                     | MESSAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | Inferno redirecting browser to <a href="https://host.docker.internal:9453/oauth2/authorize?response_type=code&amp;client_id=kp3os6qrkdK1fpFN1tuW4hgRsKwa&amp;redirect_uri=d192-44de-a042-606f13863bd4&amp;aud=https%3A%2F%2Fhost.docker.internal%3A9453">https://host.docker.internal:9453/oauth2/authorize?response_type=code&amp;client_id=kp3os6qrkdK1fpFN1tuW4hgRsKwa&amp;redirect_uri=d192-44de-a042-606f13863bd4&amp;aud=https%3A%2F%2Fhost.docker.internal%3A9453</a> |

 1.2.03 OAuth server sends code parameter



| TYPE                                                                                    | URL                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  get | <a href="http://localhost:90/custom/smart_stu2_2/redirect?code=dc45fdcf-13be-38e5-a43e-fff0dd502f22&amp;session_state=a04cb225d0adfe0f7e2008e6e90ee9e1229020c2ea40e31htRbbCYFPLVg&amp;state=04e5ec98-d192-44de-a042-606f13863bd4">http://localhost:90/custom/smart_stu2_2/redirect?code=dc45fdcf-13be-38e5-a43e-fff0dd502f22&amp;session_state=a04cb225d0adfe0f7e2008e6e90ee9e1229020c2ea40e31htRbbCYFPLVg&amp;state=04e5ec98-d192-44de-a042-606f13863bd4</a> |

 1.2.04 OAuth 2.0 token endpoint secured by transport layer security

| TYPE                                                                                     | MESSAGE                                                                                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied SSL 2.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied SSL 3.0 connection as required. |

| TYPE                                                                                   | MESSAGE                                                                                                                                                      |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied TLS 1.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied TLS 1.1 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> accepted TLS 1.2 connection.                     |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> denied TLS 1.3 connection.                       |

 1.2.05 OAuth token exchange request succeeds when supplied correct information  2

| TYPE                                                                                  | URL                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  get | http://localhost:90/custom/smart_stu2_2/redirect?code=dc45fdcf-13be-38e5-a43e-fff0dd502f22&session_state=a04cb225d0adfe0f7e2008e6e90ee9e1229020c2ea40ez1htRbbCYFPLVg&state=04e5ec98-d192-44de-a042-606f13863bd4 |
| post                                                                                  | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>                |

 1.2.06 Token exchange response body contains required information encoded in JSON  1

| TYPE                                                                                        | MESSAGE                                                                                                               |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|  warning | Token exchange response did not include all requested scopes. These may have been denied by user: patient/Patient.rs. |

| TYPE                                                                                     | URL                                                                                                                                                                                               | STATUS |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  | 200    |

 1.2.07 Response includes correct HTTP Cache-Control and Pragma headers  1

| TYPE                                                                                     | URL                                                                                                                                                                                               | STATUS |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  | 200    |

 1.2.08 SMART Token Endpoint Enables Cross-Origin Resource Sharing (CORS)  1

Client type is not public, Cross-Origin Resource Sharing (CORS) is not required to be supported for non-public client types

| TYPE                                                                                   | URL                                                                                                                                | STATUS |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

### ✓ 1.3 OpenID Connect

✓ 1.3.01 ID token can be decoded

✓ 1.3.02 OpenID Connect well-known configuration can be retrieved 

| TYPE | URL                                                                                                                                                                 | STATUS |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:9453/oauth2/token/.well-known/openid-configuration  | 200    |

✓ 1.3.03 OpenID Connect well-known configuration contains all required fields

✓ 1.3.04 JWKS can be retrieved 

| TYPE | URL                                                                                                                              | STATUS |
|------|----------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:9453/oauth2/jwks  | 200    |

✓ 1.3.05 ID token header contains required information

✓ 1.3.06 ID token payload has required claims and a valid signature

✓ 1.3.07 FHIR resource representing the current user can be retrieved 

| TYPE | URL                                                                                                                                   | STATUS |
|------|---------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/Patient/102  | 200    |

✓ 1.3.08 *Optional* SMART FHIR User REST API Endpoint Enables Cross-Origin Resource Sharing (CORS) 

| TYPE | URL                                                                                                                                   | STATUS |
|------|---------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/Patient/102  | 200    |

### ✓ 1.4 SMART Token Refresh Without Scopes

✓ 1.4.01 Server successfully refreshes the access token when optional scope parameter omitted 

| TYPE | URL                                                                                                                                 | STATUS |
|------|-------------------------------------------------------------------------------------------------------------------------------------|--------|
| post | https://host.docker.internal:9453/oauth2/token  | 200    |

✓ 1.4.02 Token refresh response contains all required fields 

| TYPE                                                                                   | URL                                                                                                                                | STATUS |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

✓ 1.4.03 Response includes correct HTTP Cache-Control and Pragma headers 

| TYPE                                                                                   | URL                                                                                                                                | STATUS |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

## ✓ 1.5 SMART Token Refresh With Scopes

✓ 1.5.01 Server successfully refreshes the access token when optional scope parameter omitted 

| TYPE | URL                                                                                                                               | STATUS |
|------|-----------------------------------------------------------------------------------------------------------------------------------|--------|
| post | https://host.docker.internal:9453/oauth2/token  | 200    |

✓ 1.5.02 Token refresh response contains all required fields 

| TYPE                                                                                     | URL                                                                                                                                  | STATUS |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

✓ 1.5.03 Response includes correct HTTP Cache-Control and Pragma headers 

| TYPE                                                                                     | URL                                                                                                                                  | STATUS |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

## ✓ 2 EHR Launch

| INPUT               | VALUE                                                                                                                                                  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| url                 | https://host.docker.internal:8243/r4                                                                                                                   |
| ehr_smart_auth_info | {"auth_type":"symmetric","use_discovery":"true","token_url":"https://host.d<br>patient/Patient.rs","client_id":"kp3os6qrkdK1fpFN1tuW4hgRsKwa","client_ |

## ✓ 2.1 SMART on FHIR Discovery

✓ 2.1.01 FHIR server makes SMART configuration available from well-known endpoint 

| TYPE | URL                                                                                                                                                        | STATUS |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/.well-known/smart-configuration  | 200    |

 **2.1.02** Well-known configuration contains required fields **2.1.03** *Optional* SMART .well-known/smart-configuration Endpoint Enables Cross-Origin Resource Sharing (CORS) 

| TYPE | URL                                                                                                                                                                                                                                         | STATUS |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | <a href="https://host.docker.internal:8243/r4/.well-known/smart-configuration">https://host.docker.internal:8243/r4/.well-known/smart-configuration</a>  | 200    |

 **2.1.04** *Optional* SMART metadata Endpoint Enables Cross-Origin Resource Sharing (CORS) 

| TYPE | URL                                                                                                                                                                                         | STATUS |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | <a href="https://host.docker.internal:8243/r4/metadata">https://host.docker.internal:8243/r4/metadata</a>  | 200    |

 **2.2** SMART EHR Launch  **2.2.01** EHR server redirects client browser to Inferno app launch URI **2.2.02** EHR server sends launch parameter 

| TYPE                                                                                    | URL                                                                                                                                                                                                                                                                                                                                                                                 | STATUS |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|  get | <a href="http://localhost:90/custom/smart_stu2_2/launch?launch=0108899e-a071-48d2-a64b-5fa9e20d2f70&amp;iss=https://host.docker.internal:8243/r4">http://localhost:90/custom/smart_stu2_2/launch?launch=0108899e-a071-48d2-a64b-5fa9e20d2f70&amp;iss=https://host.docker.internal:8243/r4</a>  | L      |

 **2.2.03** OAuth 2.0 authorize endpoint secured by transport layer security

| TYPE                                                                                     | MESSAGE                                                                                                                                                              |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied SSL 2.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied SSL 3.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied TLS 1.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied TLS 1.1 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> accepted TLS 1.2 connection.                     |

| TYPE | MESSAGE |
|------|---------|
|------|---------|



info

<https://host.docker.internal:9453/oauth2/authorize> denied TLS 1.3 connection.



#### 2.2.04 OAuth server redirects client browser to app redirect URI

| TYPE | MESSAGE |
|------|---------|
|------|---------|



info

Inferno redirecting browser to [https://host.docker.internal:9453/oauth2/authorize?response\\_type=code&client\\_id=kp3os6qrkdK1fpFN1tuW4hgRsKwa&redirect\\_uri=https://host.docker.internal:9453/oauth2/callback&code\\_challenge=uuK7IZu1QHvKaEc0iAyYIVh\\_nja32gSfsifT23j0C](https://host.docker.internal:9453/oauth2/authorize?response_type=code&client_id=kp3os6qrkdK1fpFN1tuW4hgRsKwa&redirect_uri=https://host.docker.internal:9453/oauth2/callback&code_challenge=uuK7IZu1QHvKaEc0iAyYIVh_nja32gSfsifT23j0C)



#### 2.2.05 OAuth server sends code parameter



| TYPE | URL |
|------|-----|
|------|-----|



get

[http://localhost:90/custom/smart\\_stu2\\_2/redirect?code=f3907628-63e5-37ff-bcee43e73062b1a0&session\\_state=f949672148c228ed9667e1dd8d31bb97ceccfbaa98c67-457a-a341-bc9e85d05d10](http://localhost:90/custom/smart_stu2_2/redirect?code=f3907628-63e5-37ff-bcee43e73062b1a0&session_state=f949672148c228ed9667e1dd8d31bb97ceccfbaa98c67-457a-a341-bc9e85d05d10)



#### 2.2.06 OAuth 2.0 token endpoint secured by transport layer security

| TYPE | MESSAGE |
|------|---------|
|------|---------|



info

<https://host.docker.internal:9453/oauth2/token> correctly denied SSL 2.0 connection as required.



info

<https://host.docker.internal:9453/oauth2/token> correctly denied SSL 3.0 connection as required.



info

<https://host.docker.internal:9453/oauth2/token> correctly denied TLS 1.0 connection as required.



info

<https://host.docker.internal:9453/oauth2/token> correctly denied TLS 1.1 connection as required.



info

<https://host.docker.internal:9453/oauth2/token> accepted TLS 1.2 connection.



info

<https://host.docker.internal:9453/oauth2/token> denied TLS 1.3 connection.



#### 2.2.07 OAuth token exchange request succeeds when supplied correct information



| TYPE                                                                                  | URL                                                                                                                                                                          |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  get | http://localhost:90/custom/smart_stu2_2/redirect?code=f3907628-63e5-37ff-bcee43e73062b1a0&session_state=f949672148c228ed9667e1dd8d31bb97ceccfbaa98c67-457a-a341-bc9e85d05d10 |
| post                                                                                  | https://host.docker.internal:9453/oauth2/token                                            |



**2.2.08** Token exchange response body contains required information encoded in JSON



| TYPE                                                                                             | MESSAGE                                                                                                               |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|  <b>warning</b> | Token exchange response did not include all requested scopes. These may have been denied by user: patient/Patient.rs. |

| TYPE                                                                                   | URL                                                                                                                                | STATUS |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |



**2.2.09** Response includes correct HTTP Cache-Control and Pragma headers



| TYPE                                                                                     | URL                                                                                                                                  | STATUS |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |



**2.2.10** SMART Token Endpoint Enables Cross-Origin Resource Sharing (CORS)



Client type is not public, Cross-Origin Resource Sharing (CORS) is not required to be supported for non-public client types

| TYPE                                                                                     | URL                                                                                                                                  | STATUS |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |



**2.3** OpenID Connect



**2.3.01** ID token can be decoded



**2.3.02** OpenID Connect well-known configuration can be retrieved



| TYPE | URL                                                                                                                                                                   | STATUS |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:9453/oauth2/token/.well-known/openid-configuration  | 200    |



**2.3.03** OpenID Connect well-known configuration contains all required fields



 **2.3.04** JWKS can be retrieved 

| TYPE | URL                                                                                                                             | STATUS |
|------|---------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:9453/oauth2/jwks  | 200    |

 **2.3.05** ID token header contains required information **2.3.06** ID token payload has required claims and a valid signature **2.3.07** FHIR resource representing the current user can be retrieved 

| TYPE | URL                                                                                                                                 | STATUS |
|------|-------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/Patient/102  | 200    |

 **2.3.08** *Optional* SMART FHIR User REST API Endpoint Enables Cross-Origin Resource Sharing (CORS) 

| TYPE | URL                                                                                                                                 | STATUS |
|------|-------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/Patient/102  | 200    |

 **2.4** SMART Token Refresh Without Scopes **2.4.01** Server successfully refreshes the access token when optional scope parameter omitted 

| TYPE | URL                                                                                                                                 | STATUS |
|------|-------------------------------------------------------------------------------------------------------------------------------------|--------|
| post | https://host.docker.internal:9453/oauth2/token  | 200    |

 **2.4.02** Token refresh response contains all required fields 

| TYPE                                                                                     | URL                                                                                                                                  | STATUS |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

 **2.4.03** Response includes correct HTTP Cache-Control and Pragma headers 

| TYPE                                                                                     | URL                                                                                                                                  | STATUS |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

 **2.5** SMART Token Refresh With Scopes **2.5.01** Server successfully refreshes the access token when optional scope parameter omitted 

| TYPE | URL                                                                                                                               | STATUS |
|------|-----------------------------------------------------------------------------------------------------------------------------------|--------|
| post | https://host.docker.internal:9453/oauth2/token  | 200    |

**2.5.02** Token refresh response contains all required fields

| TYPE                                                                                   | URL                                                                                                                                | STATUS |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |

**2.5.03** Response includes correct HTTP Cache-Control and Pragma headers

| TYPE                                                                                   | URL                                                                                                                                | STATUS |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | https://host.docker.internal:9453/oauth2/token  | 200    |



### 3 Backend Services

| INPUT                            | VALUE                                                     |
|----------------------------------|-----------------------------------------------------------|
| url                              | https://host.docker.internal:8243/r4                      |
| backend_services_smart_auth_info | {"auth_type":"backend_services","use_discovery":"true","r |



#### 3.1 SMART on FHIR Discovery

**3.1.01** FHIR server makes SMART configuration available from well-known endpoint

| TYPE | URL                                                                                                                                                        | STATUS |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/.well-known/smart-configuration  | 200    |

**3.1.02** Well-known configuration contains required fields**3.1.03** *Optional* SMART .well-known/smart-configuration Endpoint Enables Cross-Origin Resource Sharing (CORS)

| TYPE | URL                                                                                                                                                        | STATUS |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/.well-known/smart-configuration  | 200    |

**3.1.04** *Optional* SMART metadata Endpoint Enables Cross-Origin Resource Sharing (CORS)

| TYPE | URL                                                                                                                               | STATUS |
|------|-----------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/metadata  | 200    |



### 3.2 SMART Backend Services

#### Authorization



#### 3.2.01 Authorization service token endpoint secured by transport layer security

| TYPE                                                                                     | MESSAGE                                                                                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info   | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied SSL 2.0 connection as required. |
|  info   | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied SSL 3.0 connection as required. |
|  info   | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied TLS 1.0 connection as required. |
|  info   | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied TLS 1.1 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> accepted TLS 1.2 connection.                     |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> denied TLS 1.3 connection.                       |



#### 3.2.02 Authorization request fails when client supplies invalid grant\_type

 1

| TYPE | URL                                                                                                                                                                                              | STATUS |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| post | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  | 400    |



#### 3.2.03 Authorization request fails when supplied invalid client\_assertion\_type

 1

| TYPE | URL                                                                                                                                                                                              | STATUS |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| post | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  | 401    |



#### 3.2.04 Authorization request fails when client supplies invalid JWT token

 1

| TYPE | URL                                                                                                                                                                                              | STATUS |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| post | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  | 401    |



**3.2.05** Authorization request succeeds when supplied correct information



| TYPE | URL                                                                                                                               | STATUS |
|------|-----------------------------------------------------------------------------------------------------------------------------------|--------|
| post | https://host.docker.internal:9453/oauth2/token  | 200    |



**3.2.06** Authorization request response body contains required information encoded in JSON



## 4 Token Introspection



**4.1** Request New Access Token to Introspect



| INPUT                      | VALUE                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| url                        | https://host.docker.internal:8243/r4                                                                                                 |
| standalone_smart_auth_info | {"auth_type":"symmetric","use_discovery":"true","token_url":"https://patient/Patient.rs","client_id":"kp3os6qrkdK1fpFN1tuW4hgRsKwa"} |



### 4.1.1 SMART on FHIR Discovery



**4.1.1.01** FHIR server makes SMART configuration available from well-known endpoint



| TYPE | URL                                                                                                                                                        | STATUS |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/.well-known/smart-configuration  | 200    |



**4.1.1.02** Well-known configuration contains required fields



**4.1.1.03** *Optional* SMART .well-known/smart-configuration Endpoint Enables Cross-Origin Resource Sharing (CORS)



| TYPE | URL                                                                                                                                                        | STATUS |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/.well-known/smart-configuration  | 200    |



**4.1.1.04** *Optional* SMART metadata Endpoint Enables Cross-Origin Resource Sharing (CORS)



| TYPE | URL                                                                                                                                | STATUS |
|------|------------------------------------------------------------------------------------------------------------------------------------|--------|
| get  | https://host.docker.internal:8243/r4/metadata  | 200    |



### 4.1.2 SMART Standalone Launch



**4.1.2.01** OAuth 2.0 authorize endpoint secured by transport layer security

| TYPE                                                                                   | MESSAGE                                                                                                                                                              |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied SSL 2.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied SSL 3.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied TLS 1.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> correctly denied TLS 1.1 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> accepted TLS 1.2 connection.                     |
|  info | <a href="https://host.docker.internal:9453/oauth2/authorize">https://host.docker.internal:9453/oauth2/authorize</a> denied TLS 1.3 connection.                       |

 4.1.2.02 OAuth server redirects client browser to app redirect URI

| TYPE                                                                                     | MESSAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | Inferno redirecting browser to <a href="https://host.docker.internal:9453/oauth2/authorize?response_type=code&amp;client_id=kp3os6qrkdK1fpFN1tuW4hgRsKwa&amp;redirect_uri=https%3A%2F%2Fhost.docker.internal%2F168-43c3-a1ec-a67375ed9bc2&amp;aud=https%3A%2F%2Fhost.docker.internal%2F168-43c3-a1ec-a67375ed9bc2">https://host.docker.internal:9453/oauth2/authorize?response_type=code&amp;client_id=kp3os6qrkdK1fpFN1tuW4hgRsKwa&amp;redirect_uri=https%3A%2F%2Fhost.docker.internal%2F168-43c3-a1ec-a67375ed9bc2&amp;aud=https%3A%2F%2Fhost.docker.internal%2F168-43c3-a1ec-a67375ed9bc2</a> |

 4.1.2.03 OAuth server sends code parameter



| TYPE                                                                                    | URL                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  get | <a href="http://localhost:90/custom/smart_stu2_2/redirect?code=2ae3a780-309f-3d76-b51d3ac8a02a7&amp;session_state=c8fcdc129fdc2471ad7ea3c72dbf544798ff53ad!e168-43c3-a1ec-a67375ed9bc2">http://localhost:90/custom/smart_stu2_2/redirect?code=2ae3a780-309f-3d76-b51d3ac8a02a7&amp;session_state=c8fcdc129fdc2471ad7ea3c72dbf544798ff53ad!e168-43c3-a1ec-a67375ed9bc2</a> |

 4.1.2.04 OAuth 2.0 token endpoint secured by transport layer security

| TYPE                                                                                     | MESSAGE                                                                                                                                                      |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied SSL 2.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied SSL 3.0 connection as required. |

| TYPE                                                                                   | MESSAGE                                                                                                                                                      |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied TLS 1.0 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> correctly denied TLS 1.1 connection as required. |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> accepted TLS 1.2 connection.                     |
|  info | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a> denied TLS 1.3 connection.                       |

 4.1.2.05 OAuth token exchange request succeeds when supplied correct information  2

| TYPE                                                                                   | URL                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  get | http://localhost:90/custom/smart_stu2_2/redirect?code=2ae3a780-309f-3d76-b51d3ac8a02a7&session_state=c8fcdc129fdc2471ad7ea3c72dbf544798ff53ade168-43c3-a1ec-a67375ed9bc2                          |
| post                                                                                   | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  |

 4.1.2.06 Token exchange response body contains required information encoded in JSON  1

| TYPE                                                                                        | MESSAGE                                                                                                               |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|  warning | Token exchange response did not include all requested scopes. These may have been denied by user: patient/Patient.rs. |

| TYPE                                                                                     | URL                                                                                                                                                                                               | STATUS |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  | 200    |

 4.1.2.07 Response includes correct HTTP Cache-Control and Pragma headers  1

| TYPE                                                                                     | URL                                                                                                                                                                                               | STATUS |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|  post | <a href="https://host.docker.internal:9453/oauth2/token">https://host.docker.internal:9453/oauth2/token</a>  | 200    |





**4.3.01** Token introspection response for an active token contains required fields



**4.3.02** Token introspection response for an invalid token contains required fields