



iSHARE

List of Conformance Test Cases

Below we list, per endpoint, the test cases that the Conformance Test Tool runs and the expected response that a server should give. The list is non-exhaustive and may be updated to reflect changes to the scheme.

<u>/CONNECT/TOKEN (SERVICE PROVIDER, AUTHORIZATION REGISTRY, IDENTITY PROVIDER)</u>	<u>2</u>
<u>/CAPABILITIES (SERVICE PROVIDER, AUTHORIZATION REGISTRY, IDENTITY PROVIDER)</u>	<u>3</u>
<u>/DELEGATION (AUTHORIZATION REGISTRY)</u>	<u>4</u>



/connect/token (Service Provider, Authorization Registry, Identity Provider)

ENDPOINT		Test case				Test Case content
Endpoint Id	Endpoint	Category	Response	#	Case short	Case description long
200						
1	TOKEN	valid-requests	200	1	VALID_REQUEST	Sends a valid token request, expected response contains the access token, expiry time and 'bearer' type
1	TOKEN	valid-requests	200	2	ADDITIONAL_PARAMS	Sends a valid token request but with more parameters than expected. Additional params should be ignored and access token should be provided
400						
1	TOKEN	oauth	400	3	MISSING_GRANT_TYPE	Request has no grant type
1	TOKEN	oauth	400	4	INVALID_GRANT_TYPE	Request has other value than "client_credentials"
1	TOKEN	oauth	400	5	MISSING_SCOPE	Request has no scope
1	TOKEN	oauth	400	6	INVALID_SCOPE	Request scope has other value than iSHARE
1	TOKEN	oauth	400	7	MISSING_CLIENT_ID	Request has no client id
1	TOKEN	oauth	400	8	INVALID_CLIENT_ID	Request client ID is not same value as Test certificate Serial Number
1	TOKEN	oauth	400	9	MISSING_CLIENT_ASSERTION_TYPE	Request has no client assertion type
1	TOKEN	oauth	400	10	INVALID_CLIENT_ASSERTION_TYPE	Request client assertion type has other value than "urn:ietf:params:oauth:client-assertion-type:jwt-bearer"
1	TOKEN	oauth	400	11	MISSING_CLIENT_ASSERTION	Request has no client assertion
1	TOKEN	client-assertion	400	12	ASSERTION_MISSING_ALG	Client assertion JWT header 'alg' field missing
1	TOKEN	client-assertion	400	13	ASSERTION_INVALID_ALG	Client assertion JWT header 'alg' field is different algorithm than RS or a lower value than RS256 (i.e. 128, 64 etc)
1	TOKEN	client-assertion	400	14	ASSERTION_MISSING_TYP	Client assertion JWT header 'typ' field missing
1	TOKEN	client-assertion	400	15	ASSERTION_INVALID_TYP	Client assertion JWT header 'typ' field is other value than "jwt"
1	TOKEN	client-assertion	400	16	ASSERTION_MISSING_X5C	Client assertion JWT header contains no 'x5c' array
1	TOKEN	client-assertion	400	17	ASSERTION_INVALID_X5C	Client assertion JWT header 'x5c' contains other value than a x509 certificate
1	TOKEN	client-assertion	400	18	ASSERTION_MISSING_ISS	Client assertion JWT payload 'iss' field missing
1	TOKEN	client-assertion	400	19	ASSERTION_INVALID_ISS	Client assertion JWT payload 'iss' field is different value from Client_id request parameter
1	TOKEN	client-assertion	400	20	ASSERTION_MISSING_SUB	Client assertion JWT payload 'sub' field missing
1	TOKEN	client-assertion	400	21	ASSERTION_INVALID_SUB	Client assertion JWT payload 'sub' field is different value than 'iss' field
1	TOKEN	client-assertion	400	22	ASSERTION_MISSING_AUD	Client assertion JWT payload 'aud' field missing
1	TOKEN	client-assertion	400	23	ASSERTION_INVALID_AUD	Client assertion JWT payload 'aud' field is different value than the server's iSHARE client id
1	TOKEN	client-assertion	400	24	ASSERTION_MISSING_JTI	Client assertion JWT payload 'jti' field missing
1	TOKEN	client-assertion	400	25	ASSERTION_MISSING_EXP	Client assertion JWT payload 'exp' field missing
1	TOKEN	client-assertion	400	26	ASSERTION_INVALID_EXP	Client assertion JWT payload 'exp' field is different value than 'iat' field + 30 seconds
1	TOKEN	client-assertion	400	27	ASSERTION_MISSING_IAT	Client assertion JWT payload 'iat' field missing
1	TOKEN	client-assertion	400	28	ASSERTION_INVALID_IAT	Client assertion JWT payload 'iat' field is after current time
1	TOKEN	client-assertion	400	29	ASSERTION_MISSING_SIGNATURE	Client assertion JWT signature missing
1	TOKEN	http	400	30	HTTP_BODY_INVALID_TYPE	POST Request body is not 'x-www-form-urlencoded'
1	TOKEN	scheme-auth	400	31	CLIENT_ID_NOT_ACTIVE	Request client ID value is known at scheme owner but not listed as 'active'
1	TOKEN	scheme-auth	400	32	UNKNOWN_CLIENT_ID	Request client ID value is unknown with scheme owner
1	TOKEN	scheme-auth	400	33	INVALID_CERTIFICATE	Client assertion JWT header 'x5c' contains invalid certificate
1	TOKEN	scheme-auth	400	34	UNTRUSTED_CERTIFICATE	Client assertion JWT header 'x5c' contains certificate(s) not issued by iSHARE trusted root
1	TOKEN	scheme-auth	400	35	ASSERTION_INVALID_SIGNATURE	Client assertion JWT signature key used does not correspond with public key from the x5c certificate
1	TOKEN	scheme-auth	400	36	WRONG_CERTIFICATE	Client assertion JWT header 'x5c' contains valid certificate, but from different party
405						
1	TOKEN	http	405	37	HTTP_WRONG_METHOD	HTTP method is not POST



/capabilities (Service Provider, Authorization Registry, Identity Provider)

ENDPOINT		Test case				Test Case content
Endpoint Id	Endpoint	Category	Response	#	Case short	Case description long
		200				
2.a	CAPABILITIES (without tokens)	valid-requests	200	1	VALID_REQUEST	Sends a valid capabilities request without access token, expected response contains the public capabilities overview
2.a	CAPABILITIES (without tokens)	valid-requests	200	2	ADDITIONAL_PARAMS	Sends a valid request + additional GET query string parameters, parameters should be ignored and public capabilities response should be given
		405				
2.a	CAPABILITIES (without tokens)	http-requests	405	3	HTTP_WRONG_METHOD	HTTP method is not GET

ENDPOINT		Test case				Test Case content
Endpoint Id	Endpoint	Category	Response	#	Case_short	Case description long
		200				
2.b	CAPABILITIES (with token)	valid-requests	200	1	VALID_REQUEST	Sends a valid capabilities request, expected response contains full capabilities overview
2.b	CAPABILITIES (with token)	valid-requests	200	2	ADDITIONAL_PARAMS	Sends a valid access token + additional GET query string parameters, parameters should be ignored and full capabilities response should be given
		400				
2.b	CAPABILITIES (with token)	oauth	400	3	AUTHORIZATION_NOT_BEARER	Authorization' header is not 'Bearer' + 'value'
2.b	CAPABILITIES (with token)	oauth	400	4	ACCESS_TOKEN_MISSING_SIGNATURE	Access token JWT signature missing
		401				
2.b	CAPABILITIES (with token)	scheme-auth	401	5	ACCESS_TOKEN_INVALID_SIGNATURE	Access token used is not signed correctly by the server exposing the capabilities endpoint (extract header+payload from access token and sign with different key)
2.b	CAPABILITIES (with token)	scheme-auth	401	6	ACCESS_TOKEN_EXPIRED	Wait for the expiry time described in the /token response and then uses this access token
2.b	CAPABILITIES (with token)	scheme-auth	401	7	ACCESS_TOKEN_INVALID	Access token used does not correspond to party using the access token or is not intended for iSHARE use
		405				
2.b	CAPABILITIES (with token)	http-requests	405	8	HTTP_WRONG_METHOD	HTTP method is not GET



/delegation (Authorization Registry)

ENDPOINT		Test case				Test Case content
Endpoint Id	Endpoint	Category	Response	#	Case short	Case description long
200						
3	DELEGATION	valid-requests	200	1	MASK_MANUAL_PERMIT	Client assertion ID (from previous_steps) is contained in mask, manually configured mask resolves to Permit
3	DELEGATION	valid-requests	200	2	MASK_MANUAL_DENY	Client assertion ID (from previous_steps) is contained in mask, manually configured mask resolves to Deny
3	DELEGATION	valid-requests	200	3	MASK_DUMMY_DENY	Client assertion ID (from previous_steps) is contained in mask, dummy mask resolves to Deny
400						
3	DELEGATION	oauth	400	4	AUTHORIZATION_NOT_BEARER	Authorization' header is not 'Bearer' + 'value'
3	DELEGATION	oauth	400	5	ACCESS_TOKEN_MISSING_SIGNATURE	Access token JWT signature missing
3	DELEGATION	oauth	400	6	MISSING_AUTHORIZATION_HEADER	Request contains no 'Authorization' header
3	DELEGATION	oauth	400	7	AUTHORIZATION_NOT_BEARER	Authorization' header is not 'Bearer' + 'value'
3	DELEGATION	oauth	400	8	ACCESS_TOKEN_MISSING_SIGNATURE	Access token JWT signature missing
3	DELEGATION	previous-steps	400	9	MISSING_CLIENT_ASSERTION	Request has no client assertion
3	DELEGATION	previous-steps	400	10	ASSERTION_MISSING_ALG	Previous steps Client assertion JWT header 'alg' field missing
3	DELEGATION	previous-steps	400	11	ASSERTION_INVALID_ALG	Previous steps Client assertion JWT header 'alg' field is different algorithm than RS or a lower value than RS256 (i.e. 128, 64 etc)
3	DELEGATION	previous-steps	400	12	ASSERTION_MISSING_TYP	Previous steps Client assertion JWT header 'typ' field missing
3	DELEGATION	previous-steps	400	13	ASSERTION_INVALID_TYP	Previous steps Client assertion JWT header 'typ' field is other value than "jwt"
3	DELEGATION	previous-steps	400	14	ASSERTION_MISSING_X5C	Previous steps Client assertion JWT header contains no 'x5c' array
3	DELEGATION	previous-steps	400	15	ASSERTION_INVALID_X5C	Previous steps Client assertion JWT header 'x5c' contains other value than valid x509 certificate
3	DELEGATION	previous-steps	400	16	ASSERTION_MISSING_ISS	Previous steps Client assertion JWT payload 'iss' field missing
3	DELEGATION	previous-steps	400	17	ASSERTION_INVALID_ISS	Previous steps Client assertion JWT payload 'iss' field is different value from Client_id request parameter
3	DELEGATION	previous-steps	400	18	ASSERTION_MISSING_SUB	Previous steps Client assertion JWT payload 'sub' field missing
3	DELEGATION	previous-steps	400	19	ASSERTION_INVALID_SUB	Previous steps Client assertion JWT payload 'sub' field is different value than 'iss' field
3	DELEGATION	previous-steps	400	20	ASSERTION_MISSING_AUD	Previous steps Client assertion JWT payload 'aud' field missing
3	DELEGATION	previous-steps	400	21	ASSERTION_INVALID_AUD	Previous steps Client assertion JWT payload 'aud' field is different value than the server's iSHARE client id
3	DELEGATION	previous-steps	400	22	ASSERTION_MISSING_JTI	Previous steps Client assertion JWT payload 'jti' field missing
3	DELEGATION	previous-steps	400	23	ASSERTION_MISSING_EXP	Previous steps Client assertion JWT payload 'exp' field missing
3	DELEGATION	previous-steps	400	24	ASSERTION_INVALID_EXP	Previous steps Client assertion JWT payload 'exp' field is different value than 'iat' field + 30 seconds
3	DELEGATION	previous-steps	400	25	ASSERTION_MISSING_IAT	Previous steps Client assertion JWT payload 'iat' field missing
3	DELEGATION	previous-steps	400	26	ASSERTION_INVALID_IAT	Previous steps Client assertion JWT payload 'iat' field is after current time
3	DELEGATION	previous-steps	400	27	ASSERTION_MISSING_SIGNATURE	Previous steps Client assertion JWT signature missing
3	DELEGATION	mask	400	28	MISSING_MASK	Request has no delegation mask
3	DELEGATION	mask	400	29	MASK_MISSING_PI	Delegation mask contains no policyIssuer
3	DELEGATION	mask	400	30	MASK_MISSING_AS	Delegation mask contains no accessSubject
3	DELEGATION	mask	400	31	MASK_MISSING_RESOURCE_TYPE	Delegation mask contains no resource type
3	DELEGATION	mask	400	32	MASK_MISSING_RESOURCE_ID	Delegation mask contains no resource identifier
3	DELEGATION	mask	400	33	MASK_MISSING_RESOURCE_ATT	Delegation mask contains no resource attribute
3	DELEGATION	mask	400	34	MASK_RESOURCETYPE_IS_STAR	Delegation mask resource type is star, which is not allowed
3	DELEGATION	mask	400	35	MASK_INVALID_JSON	Delegation mask is invalid JSON structure
3	DELEGATION	mask	400	36	MASK_INVALID_SYNTAX	Delegation mask is valid JSON, but syntax errors in object naming
3	DELEGATION	http-requests	400	37	HTTP_BODY_INVALID_TYPE	POST Request body is not 'application/json'
3	DELEGATION	scheme-auth	400	38	CLIENT_ID_NOT_ACTIVE	Request client assertion client ID value is known at scheme owner but not listed as 'active'
3	DELEGATION	scheme-auth	400	39	UNKNOWN_CLIENT_ID	Request client assertion client ID value is unknown with scheme owner
3	DELEGATION	scheme-auth	400	40	INVALID_CERTIFICATE	Client assertion JWT header 'x5c' contains certificate(s) not issued by iSHARE trusted root
3	DELEGATION	scheme-auth	400	41	ASSERTION_INVALID_SIGNATURE	Client assertion JWT signature key used does not correspond with public key from the x5c certificate
3	DELEGATION	scheme-auth	400	42	CLIENT_ID_NOT_ALLOWED	Client assertion ID is not the policyIssuer/accessSubject of the requested mask
3	DELEGATION	scheme-auth	400	43	UNKNOWN_MASK_ID	Delegation mask policyIssuer/accessSubject not registered at the Scheme Owner
3	DELEGATION	scheme-auth	400	44	MASK_ID_NOT_ACTIVE	Delegation mask policyIssuer/accessSubject is known at scheme owner but not listed as 'active'
401						
3	DELEGATION	scheme-auth	401	45	ACCESS_TOKEN_INVALID_SIGNATURE	Access token used is not signed correctly by the server exposing the capabilities endpoint (extract header+payload from access token and sign with different key)
3	DELEGATION	scheme-auth	401	46	ACCESS_TOKEN_EXPIRED	Wait for the expiry time described in the /token response and then uses this access token
3	DELEGATION	scheme-auth	401	47	ACCESS_TOKEN_INVALID	Access token used does not correspond to party using the access token or is not intended for iSHARE use
405						
3	DELEGATION	http-requests	405	48	HTTP_WRONG_METHOD	HTTP method is not POST