

SEI's implementation of the OAuth 2.0 framework allows the application to obtain access to SEI APIs on behalf of the resource owner or on the behalf of the application itself in a secure and controlled fashion.

TAGS: AccessToken,

ENDPOINT: Token v2

ENDPOINT DESCRIPTION: An application making SEI API Requests from a Client/Server or Server/Server type of infrastructure will leverage the grant_type client_credentials while minting an OAuth from the Token API. The OAuth has a 60 minutes active TTL and 30 minutes inactive TTL. The OAuth obtained from client_credentials cannot be refreshed.

PROD URL: https://api.seic.com/v2/oauthtoken

TEST URL: https://test.api.seic.com/v2/oauthtoken

TLS URL*: https://api.seic.com:444/v2/oauthtoken

*The TLS endpoint is only used if Server Based Application was selected during the App Registration process.

STEP 1

OAuth Token

Based on the grant_type selection made the URL that the application needs to invoke with relevant parameters to obtain an OAuth Token will vary

grant_type	STEP 1
client_credentials password refresh_token	The application needs to pass required parameters to the /oauth token endpoint to obtain an OAuth Token
invalidate_token	The application needs to pass a valid access_token to the /oauth token endpoint to kill the OAuth Token

REQUEST PARAMETERS:

Name	Description	Data Type	Parameter Type
Authorization	The Base64 Encoded form of the Appkey:secret provided during app registration	string	header
Content-Type	Request content type. The valid values are application/xxx-form-urlencoded	string	header

REQUEST PAYLOAD MODEL:

Name	Description	Data Type(L)
grant_type	OAuth 2.0 grant types available depending on the characteristics of the authorization required.	string
username	The SiteMinder service account userid that is used to mint the OAuth Token.	string
password	The SiteMinder service account password that is used to mint the OAuth Token.	string

SAMPLE REQUEST:

```
#Client Credentials grant with username and password:  
curl -X POST \ https://api.seic.com/v2/oauthtoken \  
-H 'appkey: ADsgdnkjnfIKJN' \  

```

```
-H 'authorization: Basic aVhxZG9vTUmpXamJHSw==' \
-H 'content-type: application/x-www-form-urlencoded' \
-d 'grant_type=client_credentials&username=jdoe&password=samplepassword'
```

REQUEST HEADER:

#Depending upon the grant_type two or more of below request headers need to be passed while making the request.

Authorization: Basic b65939a0b6f0a21b6y9257f4516e416f5aec5k15939a0b==

AppKey: 516e416f5aec5k15939a0b

content-type: application/x-www-form-urlencoded

RESPONSE PAYLOAD MODEL:

Name	Description	Data Type(L)
api_product_list	This is the list of API products for which the OAuth token can be used.	string
organization_name	This is an internal identifier of the organization within our API management software.	string
refresh_token_expires_in	This is the expiration in seconds of the refresh token.	string
token_type	Identifies the type of token issued.	string
developer.email	The email of the developer who has registered the application in the SEI Developer portal.	string
issued_at	The date the access token was issued. This time value is the string representation of the corresponding 32-bit timestamp quantity. For example, ' Wed, 21 Aug 2013 19:16:47 UTC' corresponds to the timestamp value of 1377112607413.	string
client_id	The SEI system client id.	string
access_token	The OAuth access token.	string
application_name	The registered application identifier.	string
scope	The list of available OAuth scopes.	string
expires_in	The lifespan or time-to-live (TTL) of the access token seconds.	string
refresh_count	The number of times the token has been refreshed.	string
status	Defines the status for a specific pending transaction, such as 'Active' or 'Cancel'.	string(30)

RESPONSE ERRORS:

Name	Description
200	OK- The request has succeeded and the response has been returned.
400	Bad request - The server cannot or will not process the request due to an inaccurate request submitted by the client application. Please resubmit the request after making the required corrections indicated in the error response. For more Info on SEI Error Standards please refer to the API Standards FAQ under Support.
401	Unauthorized - Invalid authentication details have been provided. Also useful to trigger an authorization pop up if the API is used from a browser.
403	Forbidden-The SEI Server understood the request but refuses to fulfill it.
404	Not Found- The requested resource or the underlying resource does not exist. Please resubmit the request after making the required corrections

500

Internal Server Error - The server was unable to fulfill the request due to an unknown condition. Please contact SEI for support. For More Info please refer to the "Response & Errors" FAQ under support.

SAMPLE RESPONSE:

```
#Client Credentials grant:
{
  "refresh_token_expires_in": "0",
  "api_product_list": "[Investors]",
  "api_product_list_json": [
    "Investors"
  ],
  "organization_name": "sei",
  "developer.email": "jdoe@seic.com",
  "token_type": "BearerToken",
  "issued_at": "1529525648451",
  "client_id": "ADsgdnnkjnfdIKJN",
  "access_token": "QxHKdx0nk2i",
  "application_name": "21c2fcd4-03ed-48815cf168",
  "scope": "",
  "expires_in": "3599",
  "refresh_count": "0",
  "status": "approved"
}
```

RESPONSE HEADER:

```
Content-Type: application/json
Status: 200 OK
requesttrackingid: 67e1ff68-164f-03ad-0f2d-5cbbfda56ec9
```