## PCRCo Developer API

Welcome to the PCRCo API documentation! If you're not sure where to begin, we've put together a guide for getting started with the PCRCo API.

If you're looking for detailed documentation about specific API methods, you can dive right into the documentation itself. If you're encountering issues with rate limits or other scale issues, please have a look at our best practices guide.

## API Documentation

PCRCo exposes its data via an Application Programming Interface (API), so developers can interact in a programmatic way with the PCRCo application. This document is the official reference for that functionality. The current API version is 0.1.

* Authentication
* Request / Response Formats

## Authentication Most PCRCo API endpoints require an OAuth access token. **If you only need a token for your own account and will not be authenticating any additional end-users, you can generate a developer access token from https://23.21.97.98/authorizationserver/.**

## OAuth

**PCRCo currently supports the OAuth 2 draft specification. All OAuth2 requests MUST use the SSL endpoint available at https://23.21.97.98/Authorizationserver/**

**OAuth 2.0 is a simple and secure authentication mechanism. It allows applications to acquire an access token for PCRCo via a quick redirect to the PCRCo site. Once an application has an access token, it can access a PCRCo API. Authentication with OAuth can be accomplished in the following steps:**

**OAuth authentication is made by adding the access\_token parameter with a user's access token. All requests with OAuth tokens must be made over SSL to https://23.21.97.98/Authorizationserver/.**

**access\_token=\*\*access\_token\*\***

## OAuth Web Flow [Response Type : code]

**Web applications can easily acquire an OAuth access token for a PCRCo end user by following these steps:**

* **Register your application\* - your application will be assigned a client\_id and a client\_secret.**
* **Redirect the user to https://23.21.97.98/authorizationserver/oauth/authorize, using the client\_id and redirect\_uri parameters to pass your client ID and the page you would like to redirect to upon acquiring an access token. You can also pass an optional state parameter which will be included unchanged in the redirect. An example redirect URL looks like: https://23.21.97.98/authorizationserver/oauth/authorize?client\_id=...&state=...&redirect\_uri=http://myexamplewebapp.com/oauth\_page**
* **Upon authorizing your application, the user is directed to the page specified in the redirect\_uri parameter. We append a code parameter to this URI that contains a value that can be exchanged for an OAuth access token using the oauth/access\_token endpoint documented below. For example, if you passed a redirect\_uri value of http://myexamplewebapp.com/oauth\_page, a successful authentication will redirect the user to http://myexamplewebapp.com/oauth\_page?code=..... If the state parameter was included in the request, it will be added unchanged to the redirect URI, eg. http://myexamplewebapp.com/oauth\_page?code=...&state=...**
* **Use the /oauth/access\_token API endpoint documented below to acquire an OAuth access token, passing the code value appended by PCRCo to the previous redirect and the same redirect\_uri value that was used previously. This API endpoint will return an OAuth access token, as well as the specified PCRCo user's login and API key, allowing your application to utilize the PCRCo API on that user's behalf.**

**An example request might look like:**

**POST /OAuth/Token HTTP/1.1  
Host: 23.21.97.98/authorizationserver  
Content-Type: application/x-www-form-urlencoded  
  
client\_id=YOUR\_CLIENT\_ID&client\_secret=YOUR\_CLIENT\_SECRET&code=CODE&redirect\_uri=REDIRECT\_URI&state=STATE**

**And an example response:**

**HTTP/1.1 200 OK  
Content-Type: application/x-www-form-urlencoded  
Content-Length: 57  
  
access\_token=TOKEN&state=STATE**

**Parameters for OAuth Web Flow:**

* **client\_id - your application's PCRCo client id.**
* **client\_secret - your application's PCRCo client secret.**
* **code - the OAuth verification code acquired via OAuth's web authentication protocol.**
* **scope - Allowed api name with the spaces.**
* **redirect\_uri - the page to which a user was redirected upon successfully authenticating.**
* **state - optional state to include in the redirect URI.**
* **response\_type - optional, if present must be code.**

## OAuth Web Flow **[Response Type : Token]**

**Web applications can easily acquire an OAuth access token for a PCRCo end user by following these steps:**

* **Register your application\* - your application will be assigned a client\_id.**
* **Redirect the user to https://23.21.97.98/authorizationserver/oauth/authorize, using the client\_id and redirect\_uri parameters to pass your client ID and the page you would like to redirect to upon acquiring an access token. You can also pass an optional state parameter which will be included unchanged in the redirect. An example redirect URL looks like: https://23.21.97.98/authorizationserver/oauth/authorize?client\_id=...&redirect\_uri=http://myexamplewebapp.com/oauth\_page&state=nonce&scope=scop1 scop2 ..&response\_type=token**
* **Upon authorizing your application, the user is directed to the page specified in the redirect\_uri parameter. We append a access\_token parameter to this URI that contains OAuth access token.**

**An example request might look like:**

**POST /oauth/authorize HTTP/1.1  
Host: 23.21.97.98/authorizationserver  
Content-Type: application/x-www-form-urlencoded  
  
client\_id=YOUR\_CLIENT\_ID&scope=scope1 scope2 scope3 scopen&response\_type=token&redirect\_uri=REDIRECT\_URI&state=nonce**

**And an example response:**

**HTTP/1.1 200 OK  
Content-Type: application/x-www-form-urlencoded  
Content-Length: 57  
  
access\_token=TOKEN**

**Parameters for OAuth Web Flow**

* **client\_id - your application's PCRCo client id.**
* **scope - Allowed api name with the spaces.**
* **redirect\_uri - the page to which a user was redirected upon successfully authenticating.**
* **state - optional state to include in the redirect URI.**
* **response\_type - token.**

**Response Value**

**By default, a URL encoded string in the format of access\_token=token. If you set the Accept request header to application/json, we'll return a JSON dictionary and appropriate Content-Type response header.**

* **access\_token - the OAuth access token for specified user.**

## Request / Response Formats

**All PCRCo APIs support an json is the default response format. but xml is also available. Some endpoints also support a simple txt format.**

* **All API requests should be against the domain https://23.21.97.98/authorizationserver/ or https://23.21.97.98/resourceserver/ .**
* **HTTP Response Status Code is 200 on all valid response in json and xml formats. In json and xml responses, the status\_code and status\_txt values indicate whether a request is well formed and valid.**
* **The status\_code is 200 for a successful request, 403 when rate limited, 503 for temporary unavailability, 404 to indicate not-found responses, and 400 for all other invalid requests or responses.**
* **If the status\_code is not 200, only status\_code and status\_txt are guaranteed to be present and valid.**

***Example Outputs:***

* **json { "status\_code": 200, "status\_txt": "OK", "data" : ... }**

\* Register your application : Provide us redirect URL. We will send you the credentials for your application.

\* The Implementation is in beta stage and we are still working to make it better.