


Python Client Library

	Latest version: 2.3.1 (14/08/2019)
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The Python Client Library provides easy access to the [Oceans 2.0 Web API](#) by providing a class that hides the complexity of consuming ONC's web services. The class methods provided by this package allow to request and download ONC data and files using a single line of code.

If this is your first time using this library, you might want to visit the [Installation](#) and [Getting started](#) pages.

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Summary

Discovery methods

Search for available locations, deployments, device categories, devices, properties, and data products ([documentation](#)).

Method	Description	
<code>getLocations</code> (<i>filters</i>)	Returns a filtered list of locations	link
<code>getLocationHierarchy</code> (<i>filters</i>)	Returns a filtered tree of locations with their children	link
<code>getDeployments</code> (<i>filters</i>)	Returns a filtered list of deployments	link
<code>getDeviceCategories</code> (<i>filters</i>)	Returns a filtered list of device categories	link
<code>getDevices</code> (<i>filters</i>)	Returns a filtered list of devices	link
<code>getProperties</code> (<i>filters</i>)	Returns a filtered list of properties	link
<code>getDataProducts</code> (<i>filters</i>)	Returns a filtered list of data products	link

Data product download methods

Order the generation and download of more than 120 different types of [ONC data products](#), with your own configuration ([documentation](#)).

Method	Description	
<code>orderDataProduct</code> (<i>filters</i> , <i>maxRetries</i> , <i>downloadResultsOnly</i> , <i>includeMetadataFile</i>)	Request, run and download a data product	link
<code>requestDataProduct</code> (<i>filters</i>)	Request a data product	link
<code>runDataProduct</code> (<i>dpRequestId</i> , <i>waitComplete</i>)	Run a data product request	link
<code>downloadDataProduct</code> (<i>runId</i> , <i>maxRetries</i> , <i>downloadResultsOnly</i> , <i>includeMetadataFile</i> , <i>overwrite</i>)	Download an available data product	link

Near real-time data access methods

Extract sensor data as time-series, either as processed scalar data or as raw data directly from the device ([documentation](#)).

Method	Description	
<code>getDirectByLocation</code> (<i>filters</i> , <i>allPages</i>)	Obtain scalar data readings from a device category in a location	link
<code>getDirectByDevice</code> (<i>filters</i> , <i>allPages</i>)	Obtain scalar data readings from a device	link
<code>getDirectRawByLocation</code> (<i>filters</i> , <i>allPages</i>)	Obtain raw data readings from a device category in a location	link

<code>getDirectRawByDevice</code> (filters , allPages)	Obtain raw data readings from a device	link
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Archive file download methods

Download previously generated data product files from our archive ([documentation](#)).

Method	Description	
<code>getListByLocation</code> (filters , allPages)	Get a list of archived files for a device category in a location	link
<code>getListByDevice</code> (filters , allPages)	Get a list of archived files for a device	link
<code>getFile</code> (filename , overwrite)	Download a file with the given filename	link
<code>getDirectFiles</code> (filters , overwrite, allPages)	Download a list of archived files that match the filters provided	link

Utility methods

Methods included as convenience shortcuts for end users. ([documentation](#)).

Method	Description	
<code>print</code> (dict , filename)	Prints a dictionary in a format easier to read	link
<code>formatUtc</code> (dateString)	Formats the provided date string to meet ISO8601	link



The latest library version works with the current version of [Oceans 2.0 Web API](#).

New versions are created to resolve known client library issues, add new functionality or handle changes to the underlying Web Services.

Please report all issues with the web services, documentation and client libraries to the [Oceans 2.0 Help Centre](#).