

WHOS brokering framework homepage

WHOS is the [WMO Hydrological Observing System](#). These pages collect short technical guides and tutorials to ease end user and developers interactions with WHOS. Example given it is documented **how to search and access datasets from WHOS** using the supported tools and libraries.

Each tool requires specific service and format standards, that are provided in the background by a brokering framework maintained by CNR-IIA that empowers WHOS, by acting as a middleware: the broker mediates and harmonizes search and access functionalities that are in the first place provided by the heterogeneous data providers that compose the WHOS system of systems.

WHOS offers many views, corresponding to subset (portions) of the entire hydrological information globally available. Views are defined on a given area or temporal extent, or on a particular subject (e.g. discharge parameter).

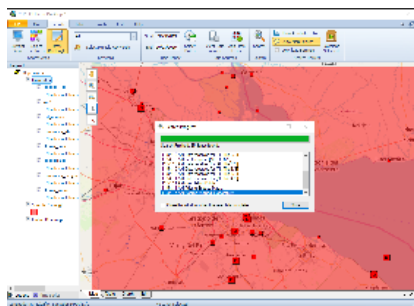
Each view can be accessed by means of different clients, corresponding to the standard protocol interfaces published by the broker. Same major views include:

- La Plata river basin
- Arctic

WHOS - supported clients

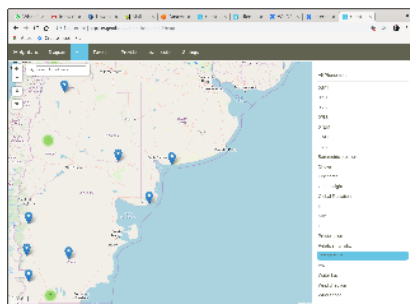
Here is an updated list of known tools and libraries capable of search and access hydrological time series offered by WHOS. Detailed instructions on how to use them to access the available WHOS views are given in separate pages.

HydroDesktop



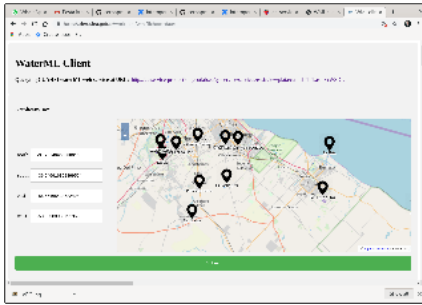
HydroDesktop is a Microsoft Windows application made by Brigham Young University leveraging CUAHSI Water One Flow protocol

Helgoland



Helgoland is a web based client made by 52North leveraging OGC SOS v.2.0.0 protocol

Node.js WaterML client



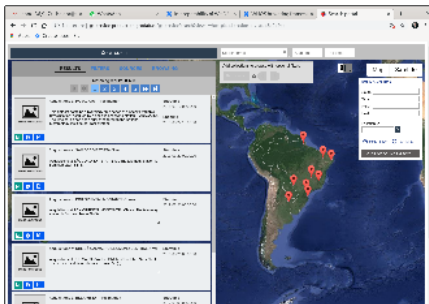
Node.js WaterML client made by National Water Institute of Argentina (INA) makes available a REST API and a web GUI

GeoNetwork



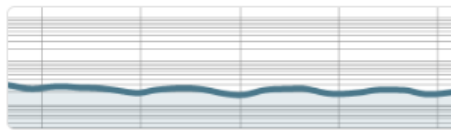
GeoNetwork is a catalog application to manage spatially referenced resources. It provides metadata editing and search functions, as well as an interactive map viewer.

GI-suite JS API



GI-suite JS API is Javascript API that can be used by a web portal developer to easily interact with WHOS. A sample portal using the API is available for demo.

USGS GWIS JavaScript API



GWIS JavaScript API

USGS GWIS JavaScript API is Javascript API for plotting time series. Time series published by WHOS can be plotted on a web page using this library.

R WaterML library



R WaterML library made by Jiri Kadlec can be used to programmatically interact with WHOS leveraging CUAHSI Water One Flow protocol

C# library provided by WCF Data Service Template plugin



C# applications can programmatically use WHOS broker functionalities through the WCF Data Service Template plugin.

Your own application / library



Let us know what are the applications and libraries you are using in every day work as an hydrologist. We can work to have it added to this list. As a result, you will be able to integrate data coming from WHOS directly in your tool.

Recent space activity



Enrico Boldrini

[WHOS brokering framework homepage](#) updated Jun 01, 2020 • [view change](#)

[Interoperability of WHOS with R WaterML library](#) updated Apr 28, 2020 • [view change](#)

[Interoperability of WHOS with GeoNetwork](#) updated Jan 27, 2020 • [view change](#)

[Interoperability of WHOS with 52North Helgoland](#) updated Jan 27, 2020 • [view change](#)

[Interoperability of WHOS with C# applications](#) updated Dec 17, 2019 • [view change](#)

Space contributors

- [Enrico Boldrini](#) (38 days ago)