

Configuration and Setup for HDF5 Read Only S3 VFD

The external software libraries required by the HDF5 Read Only S3 VFD are:

- libcurl
- libssl

Access to objects in S3 will depend on the correct URL, user AWS configuration on the local machine, and sufficient permission in AWS to access the S3 bucket and object.

Instructions

- Build the HDF5 library with read only s3 enabled:

1. Autotools: Run configure with the `--enable-ros3-vfd` configure option.
2. CMake: Add the `HDF5_ENABLE_ROS3_VFD` option in one of the following ways:

- Add `set (ADD_BUILD_OPTIONS "${ADD_BUILD_OPTIONS} -DHDF5_ENABLE_ROS3_VFD:BOOL=ON")` to the `HDF5options.cmake` file.

- Add `-DHDF5_ENABLE_ROS3_VFD:BOOL=ON` to the `cmake configure` command.

- To verify that the ROS3 VFD was enabled in this or another HDF5 build, check for a status of "(Read-Only) S3 VFD" in the `libhdf5.settings` file, or check the output of the `h5ls` or `h5dump` tools for the string `--s3-cred`.
- Making use of the ROS3 VFD is dependent on an AWS S3 Url for an S3 bucket containing an `hdf5` file and appropriate credentials to access the bucket and file.
- Credentials can be supplied to the tools (`h5dump`, `h5ls`) via the `--s3-cred` argument in application code via `H5P_SET_FAPL_ROS3` (`fapl_id`, `fa`), or in an AWS credentials file for the user according to AWS requirements.

Installation and Use

The following video contains information on installing and using the HDF5 Read Only S3 VFD.

Click on the arrow and select "YouTube" at the bottom.