

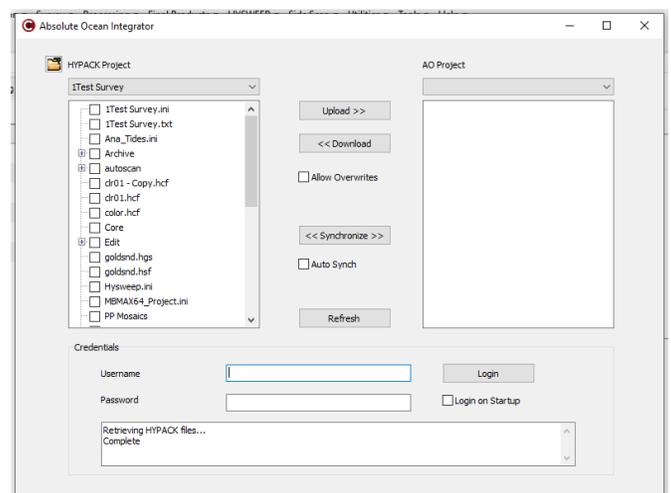
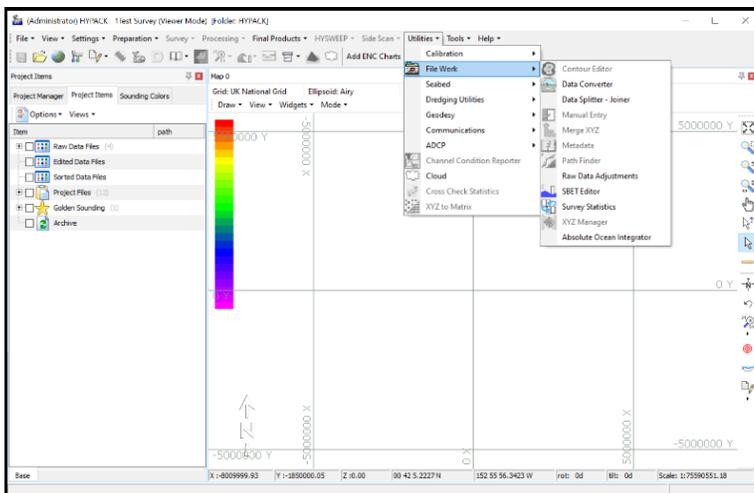


## Absolute Ocean Integration with HYPACK®

By Jocelyn Kane

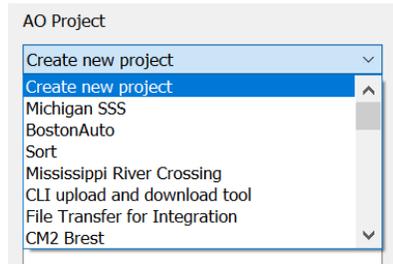
With the quarter 3 release of HYPACK® 2024 comes the integration of Terradepth's Absolute Ocean (AO) platform. In order to combine and leverage the power of both systems and improve our customers' workflow as a result, a new program has been created. Users looking for an efficient way to transfer project files between different computers and coworkers will benefit from the Absolute Ocean Integrator, and I am going to go through the steps here so you can be one of them.

If you do not already have an Absolute Ocean account, the first thing that needs to be done is to get one. On <https://www.terradepth.com/absolute-ocean>, you can learn more about Terradepth's data management system and contact them if you are interested in getting started with AO.



Now we are ready to go into HYPACK®. The program is located in the Shell under Utilities -> File Work -> Absolute Ocean Integrator, and opens with the Username box already selected so you can type your credentials in right away. Click [Login] when you are finished. You'll notice that when Absolute Ocean Integrator opened, if you have the default projects directory structure and location, the left hand combo box automatically populates with your most recent project and the list box beneath is filled with all of the files belonging to it. Then, when you are logged into AO, if that same project exists, it will populate the right hand side, otherwise the first AO project will be listed in the AO Project combo box and its files in the tree below.

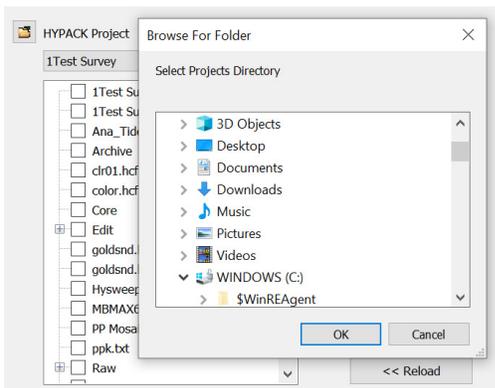
For your first time uploading a specific project, make sure it is listed as the HYPACK Project (it does not need to be the current project you are working on). Next, click the dropdown arrow for the AO Project and select Create New Project, the first option, before clicking [Synchronize]. A new project with the same name will be created in AO and all of the HYPACK® files added to it. You can see the upload occurring as the filenames are listed in the memo box at the bottom of the window as they are completed, and after the entire process is finished, the file tree gets updated to reflect the current state of the project. The files will also now be seen on the Absolute Ocean website.



After the initial upload when you want to add specific files, or if you would like to only add certain files to begin with, click the check boxes next to the files you want and then click [Upload].

The process is identical for downloading projects, simply select the name of the project you are interested in from the AO Project dropdown, select the HYPACK® project you want to add to or click Create New Project, and click [Download]. Afterward, as new files are added online, check the boxes next to their names and [Download] will add them.

The Allow Overwrites checkbox is for when you would like to upload or download a newer version of a file with the same name. The existing file will be overwritten and replaced. However, when not checked, the file will be skipped. You will be able to see the status of the file listed under its name in the memo box as uploading and downloading occur, so if you'd like to go back and force the file transfer of skipped files, you know which ones to include.



Many users have a different projects directory structure, utilizing Groups or placing the directory in a new location. To see these projects, click the folder button next to HYPACK Project and in the folder selection window, navigate to the location you would like to use. The path of this folder is stored after Absolute Ocean Integrator is closed, so that the next time the AO Integrator is opened, this path will be used.

One of the biggest benefits of the Absolute Ocean Integrator is its ability to upload and download files in real time. When you are out surveying, you have the ability to send your files to other individuals for processing as they are created, and you can receive files back as soon as they are ready. The Auto Synch checkbox, when checked, continuously searches for new files in your HYPACK® project that do not exist on the AO server yet and uploads them, and downloads any files from the AO server that you do not have in your project yet.

To be clear, you must select the project on either side, HYPACK® and AO, that you want to transfer files between. This allows the user to transfer files from a project with one name to a project with a different name. Absolute Ocean also allows multiple projects to have the same name on their end, so if you have Create New Project selected and the project already exists, another will be created and the files added there instead.

Another handy tool is the ability to automatically log the user into AO so they do not have to always re-type their credentials. By checking Login on Startup, the next time the Absolute Ocean Integrator is opened, it will automatically log in to AO so you can quickly get to work.