

Kaleidoscope Pro 5 Cloud Support

Welcome to Kaleidoscope Pro from Wildlife Acoustics.

This video will explore the new Cloud Storage and Cloud-Based Computing functions in Kaleidoscope Pro 5.

The Kaleidoscope Pro workflow can involve large amounts of data. Data can be stored on a local computer, portable storage devices, or a local network. Now Kaleidoscope Pro version 5 introduces integrated Cloud-Based Storage.

Kaleidoscope Pro offers two choices for Cloud storage. A user can set up an S3 Bucket on Amazon Web Services. A simpler and more powerful solution is to use a Wildlife Acoustics Managed Cloud Account.

In addition to providing storage, a Wildlife Acoustics Managed Cloud Account also provides Cloud-Based Computing and Database functions.

If you have a Kaleidoscope Pro subscription, you can create or log in to an existing Managed Cloud Account for no cost. A Kaleidoscope Pro subscription includes a limited amount of Managed Cloud Account storage and computing access for no additional charge. Depending on the amount of data that is handled by the account there can be additional costs. Please check the Wildlife Acoustics web site for pricing schedules.

If you would like to create your own Managed Cloud Account, log on to your user account at <u>WildlifeAcoustics.com</u>. Click on the Cloud tab. Create an Organization Name for the Cloud Account. Accept the Terms of Use and click the button to Create An Account. You do need to have billing information on file to create the Managed Cloud Account. As a Kaleidoscope Pro subscriber, you will be provided monthly credits towards using the account. If you go over the amount of use that's covered by the credits, you'll be billed for the difference.

A Managed Cloud Account can have one or more administrators, and can have users who do not have admin privileges. Check the Kaleidoscope Pro 5 manual for complete details on managing the Cloud Account.

It's also possible to join an existing Managed Cloud Account. To do this you must be invited by an administrator of that account.

Once the Managed Cloud Account is set up or you've been invited to join, launch Kaleidoscope Pro. Click on the Cloud tab. Click on the Setup menu and you'll see log-in instructions.

Enter the user name and password you have assigned to your Wildlife Acoustics web



account. Currently the available region for the Cloud server is US East-1. It is possible for one user to have access to multiple Managed Cloud Accounts. For this example you see I have access to the Wildlife Acoustics company account as well as an account I've set up for myself. I'll choose the Dave World account and log in.

Once you're logged in you'll see buttons to Browse files, as well as buttons to select Input and Output folders for batch processing.

The browser provides a simple way to access the account, as well as upload and download files. You also have functions such as copying and pasting files within the account, downloading files or deleting files or folders.

You can upload and download files through the browser.

As far as storage goes, it's that simple. The Managed Cloud account provides secure storage and management for your files.

The next steps involve using your Managed Cloud Account for batch processing and database functions. You can specify Cloud locations for batch Input and Output directories under the Cloud tab. If you want either an Input or Output directory to be on the local computer, that's specified under the Batch tab. For this example I'm going to select Input and Output directories that are both in the Cloud.

If both the Input and Output directories are in a Managed Cloud Account, that provides an additional option. If both directories are in the Cloud, you can use Cloud-Based Computing to do the batch process. Essentially, there's a version of Kaleidoscope Pro built into the Wildlife Acoustics Managed Cloud Account.

I've set up to do a cluster analysis batch process of files in my Managed Cloud Account. When I press the button to Process Files I see a message that asks me if I want to do the batch process using Cloud-Based Computing. The advantage of Cloud-Based Computing is that once I queue the batch process I can take my local computer off line. The work is all done in the Cloud. Amazon super-computers go to work while I go out for dinner! This can be much faster and more convenient than local processing when working with large amounts of data.

You'll receive an email when the batch process is started. Once the Cloud-Based batch process is complete, you'll receive a second notification email. You can go back on line any time and check your Output directory for the batch process results. For example, double-click on the cluster.csv file and that will open the Viewer and Results window for the batch.

While the batch process is running in the Cloud you can check the progress anytime by going to the Managed Cloud Account web page. You'll see the status of any currently running batch process, as well as a record of recent batch processes that have been run using Cloud-Based Computing.

A Managed Cloud Account also provides database functions. If you run a batch process using Cloud-



Based Computing, the results of the batch process are automatically added to the Cloud database. If you run batch processes on a local computer, you can upload the results to the Cloud database. As a matter of fact, you don't have to have any actual audio or zero-crossing files stored in the Cloud in order to use database functions with Kaleidoscope Pro. The database contains references to files regardless of their location.

Here I am setting up the Query functions to look for vocalizations with a .3 or less distance to cluster center. I'll ask the Query to sort the results first by clusters and then ascending distance to cluster center. I press the Run Query button and Kaleidoscope Pro looks through the database records in the Cloud and returns the results I want to examine.

If you'd like to use Cloud-Based Storage with Kaleidoscope Pro, but don't want to use a Wildlife Acoustics Managed Cloud Account, you also have the choice to create an S3 bucket using Amazon Web Services. Kaleidoscope Pro supports Cloud storage with AWS S3. The built-in database and Cloud-Based Computing functions are not included- with AWS S3. To use the built-in database and Cloud-computing functions of Kaleidoscope Pro you do need a Wildlife Acoustics Managed Cloud Account.

Kaleidoscope Pro 5 provides advanced features for Cloud-Based Storage, Cloud-Based Computing, and integrated database functions.

Thank you for watching.