

[Tutorial] Use of Btune for finding best codecs/filters for Blosc2

Thursday 21 September 2023 09:00 (3h 30m)

Btune (<https://www.blosc.org/pages/btune/>) is a dynamic plugin for Blosc2 that can help you find the optimal combination of compression parameters for datasets compressed with Blosc2. Blosc2 can easily be used from HDF5/h5py via the hdf5plugin (<https://www.silx.org/doc/hdf5plugin>).

Depending on your needs, Btune has three different tiers of support for tuning datasets:

- **Genetic (Btune Free):** A genetic algorithm tests different combinations of compression parameters to meet the user's requirements for both compression ratio and speed for each chunk in the dataset.
- **Trained (Btune Models):** The Blosc development team train neural network models that enable Btune to predict the best compression parameters for user's datasets.
- **Fully managed (Btune Studio):** Enables users for doing on-site training of an unlimited number of datasets. Requires a license.

In this tutorial, we will use Btune in these three different modes. Users wanting to explore the best compression codecs/filters for their cases are advised to bring their own datasets and use the techniques learnt for finding them out.

Time for the tutorial: 3.5 hours (including a 30 min break).

Website

<https://www.blosc.org/pages/btune/>

Primary author: Mr ALTED, Francesc (Blosc project)

Presenter: Mr ALTED, Francesc (Blosc project)

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