

# Local caching of OCDB remote files

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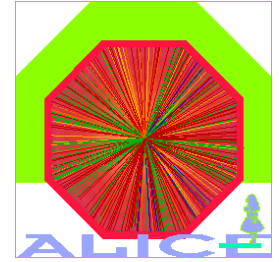


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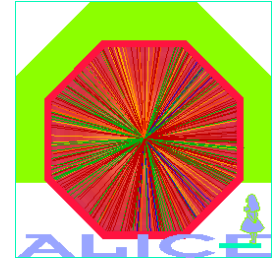
# TFile's caching functionality

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- Implementation in ROOT by **Andreas Peters**
- Local caching of a file prevents multiple retrieval of the same file
- If TFile caching functionality is activated:
  - ➔ At first query the remote file is copied to the local cache folder
  - ➔ If the same file is queried again, TFile first looks into the cache
- Implementation in the CDB access framework will reduce the access to the remote storage, especially for what concerns the “long lived parameters”

# Implementation in CDB framework



- CDB access framework can now exploit TFile caching functionality
- Local cache in the CDB framework can be set at storage activation, specifying a cache folder name in the storage URI through the option:

→ `cacheFolder=<localCachePath>`

— Default: NULL (cache disabled)

→ Example:

```
AliCDBManager::Instance()->SetDefaultStorage  
("alien://dbFolder=/alice/CDB?cacheFolder=/tmp/LocalCache");
```

- Besides the cache folder, user can specify the further settings used by  
`TFile::SetCacheFileDir(<cacheFolder>, Bool_t operateDisconnected)`  
and

```
TFile::ShrinkCacheFileDir(Long64_t shrinksize, Long_t cleanupinterval):
```

→ `operateDisconnected=<kTRUE, kFALSE, 0, 1>` (default: **kTRUE**)

→ `cacheSize=<size in bytes>` (default: **1 GB**)

→ `cleanupInterval=<interval in seconds>` (default: **0**)

# Status of local caching implementation



- Available on AliRoot **HEAD** and **v4-07-Release**
- Will be tested in the prosecution of PDC07