Seafile Object Storage

Library 1

Commit 1 ← Commit 2 ← Commit 3

HEAD Commit

Back Link | Back Link

Dir | Dir | Dir
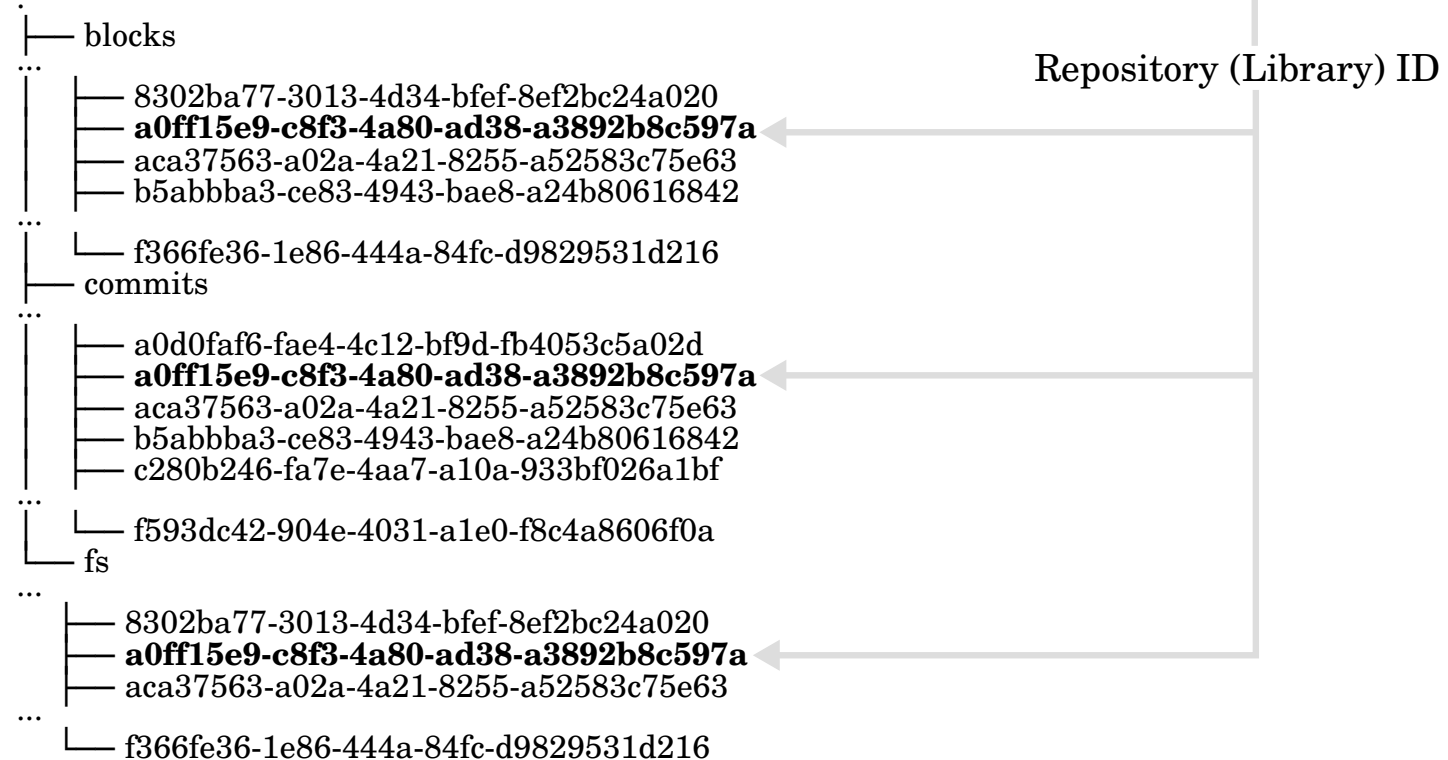
... ...

Dir | File

File

Block 1 | Block 2 | Block 3

Library URL: http://test.mpdl.mpg.de:81/#my-libs/lib/a0ff15e9-c8f3-4a80-ad38-a3892b8c597a

Seafile library name: Libraries / Mine / Vlad Test Library /

Local File System: seafile@vm101:/opt/seafile/seafile-data/storage$ tree -L 2

```
.
├── blocks
...
│   ├── 8302ba77-3013-4d34-bfef-8ef2bc24a020
│   ├── a0ff15e9-c8f3-4a80-ad38-a3892b8c597a
│   ├── aca37563-a02a-4a21-8255-a52583c75e63
│   ├── b5abbba3-ce83-4943-bae8-a24b80616842
...
│   └── f366fe36-1e86-444a-84fc-d9829531d216
├── commits
...
│   ├── a0d0faf6-fae4-4c12-bf9d-fb4053c5a02d
│   ├── a0ff15e9-c8f3-4a80-ad38-a3892b8c597a
│   ├── aca37563-a02a-4a21-8255-a52583c75e63
│   ├── b5abbba3-ce83-4943-bae8-a24b80616842
│   ├── c280b246-fa7e-4aa7-a10a-933bf026a1bf
...
│   └── f593dc42-904e-4031-a1e0-f8c4a8606f0a
├── fs
...
│   ├── 8302ba77-3013-4d34-bfef-8ef2bc24a020
│   ├── a0ff15e9-c8f3-4a80-ad38-a3892b8c597a
│   ├── aca37563-a02a-4a21-8255-a52583c75e63
...
│   └── f366fe36-1e86-444a-84fc-d9829531d216
```

Repository (Library) ID

File System ID

① single file URL: http://test.mpdl.mpg.de:81/lib/a0ff15e9-c8f3-4a80-ad38-a3892b8c597a/file/TestFolder/TestFolder3/glib.zip

② commit descriptor saved in JSON in `commits/` directory :

commits/a0ff15e9-c8f3-4a80-ad38-a3892b8c597a/43/c5f15b8a17003a330bd8c859ee4d62c7e7293e:{"description": "Added \"glib.zip\".", "root_id": "**94d387a62a290484e0c244e1162cf4bc8d1e7867**", "no_local_history": 1, "repo_category": null, "commit_id": "43c5f15b8a17003a330bd8c859ee4d62c7e7293e", "repo_name": "Vlad Test Library",
"parent_id": "3992ee6b21f675d7139cca9d4cf3fd084153c898", "repo_id": "a0ff15e9-c8f3-4a80-ad38-a3892b8c597a", "creator_name": "makarenko@mpdl.mpg.de",
"version": 1, "second_parent_id": null, "creator": "0000000000000000000000000000000000000000", "ctime": 1460549686, "repo_desc": ""}

③ file system object type (directory or file object) saved in `fs/` directory:

seafile@vm101:/opt/seafile/seafile-data/storage$ tree ./fs/a0ff15e9-c8f3-4a80-ad38-a3892b8c597a/94

```
./fs/a0ff15e9-c8f3-4a80-ad38-a3892b8c597a/94
└── d387a62a290484e0c244e1162cf4bc8d1e7867
```

seafile@vm101:/opt/seafile/seafile-data/storage/blocks$ tree

```
.
└── a0ff15e9-c8f3-4a80-ad38-a3892b8c597a
    ├── 07
    │   └── f33ce36d1dacd9e388a36d46b57d41d66f2cfa
    ├── 18
    │   └── 67e0a2bbee78dc842430610d26e7edf661dddb
    ├── 6a
    │   └── 3f84173821b164d3c8a19acc418c96f2db3d5c
    ├── 7b
    │   └── 4699dbc5936ed044b348b6c622c742586eebe6
    ├── 9c
    │   └── 22fee3302f66cfed5d8860dd24f24f6443cc3d
    └── ac
        └── c8510432fce513daa127b732e8dcc1513869b3
```

④ blocks saved in `blocks/` directory, blocks of file calculated by API, see https://github.com/haiwen/seafobj

```
...
def test_read_dir(self):
    commit = commit_mgr.load_commit(self.repo_id, self.repo_version, self.commit_id)
    dir = fs_mgr.load_seafdir(self.repo_id, self.repo_version, commit.root_id)

    # Test read file more than 1 blocks
    file_c = dir.lookup('glib.zip')
    print file_c.blocks
...
>>> ['6a3f84173821b164d3c8a19acc418c96f2db3d5c', 'acc8510432fce513daa127b732e8dcc1513869b3', '1867e0a2bbee78dc842430610d26e7edf661dddb', '07f33ce36d1dacd9e388a36d46b57d41d66f2cfa']
```