openZIM – Wikipedia Offline
standardized offline storage for websites

The ZIM File Format

Header
- Magic Number
- Version
- ...
- Index Pointer List
- Cluster Pointer List
- Main Page
- Layout Page
- ...

Cluster Pointer List
- 1st Cluster
- 2nd Cluster
- 3rd Cluster
- ...

Cluster
- 1st Blob
- 2nd Blob
- 3rd Blob
- ...

Index Pointer List
- 1st Directory Entry
- 2nd Directory Entry
- 3rd Directory Entry
- ...

Directory Entry
- Redirect Flag
- MIME Type
- Namespace
- Cluster Number
- Blob Number
- ...

Entry Meta Data

compressed or uncompressed (lzma, gzip, bzip2, ...)
data clustered for higher compression rate

actual article / file
data like text / HTML,
CSS, JavaScript, Images
...