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

Redirect or Article / File

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

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

lightning bolt