ELEMENTS SPECIFICATION

# SPLITTER

The working assumption for now is that a precomposed matrix in MTX format will be preloaded into a splitting system, which will reside on a server. This is reasonable since matrix splitting is considered to be an unparallelizable task.

The sequence of tasks will be as follows:

1. MTX file handle is opened
2. Matrix dimensions are read
   1. If matrix is not square, file is rejected – appropriate error message is produced
3. Matrix is conceptually divided into parts of configurable heights
4. File handles for the parts are opened
5. MTX is read and entries are passed on to appropriate files
6. MTX file handle is closed
7. Part file handles are closed
8. **FUTURE** Files are encrypted
9. Files are compressed
10. Files are recorded as parts in the database
11. 0-Wave is recorded composed of the parts
12. Splitter exits