Task — "File Storage Data"

Develop a system storage file

Requirements:  
1. Data in the file received continuous stream at a rate of 100,000 entries per minute from different sources.  
2. The size of each record varies from 128 bytes to 1 MB.  
3. File size is limited up to 2 GB, then should be created next file, and so on.  
4. The data received for writing to a file may be represented in binary and text form.  
5. For each entry in the data packet has a label ID and the type of data source.  
6. It must be implemented search function or any record Interval records in the data array. Search options - time range Available data identifier of the data source, the data source type (search parameters may be used both separately and together).