

Smart Space clients authorization based on Smart-M3 platform

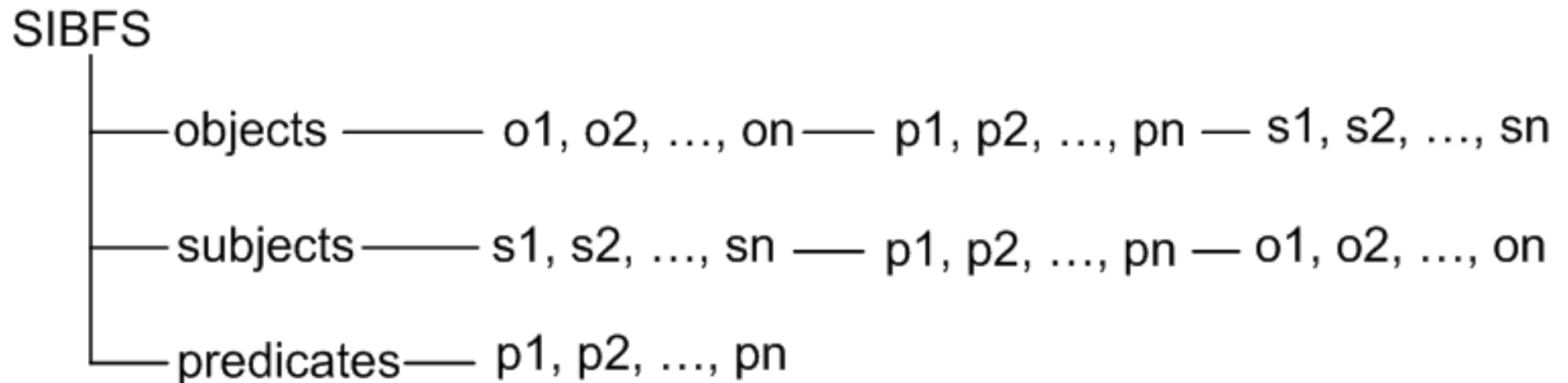
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Smart-M3 authorization idea

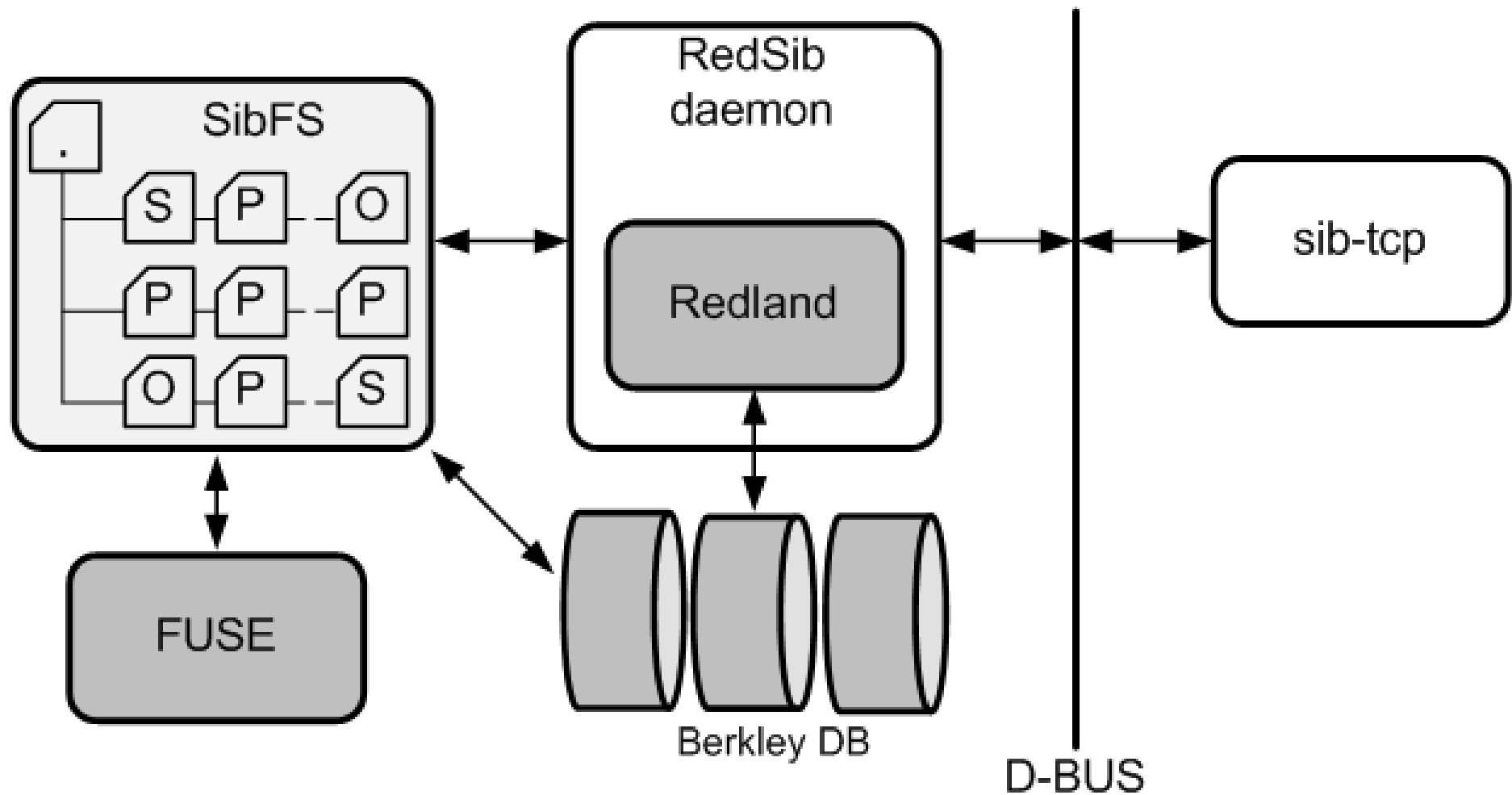
- Smart Space RDF-graph mapping to the virtual file system (VFS);
- Security groups and VFS access rights;
- Smart Space virtual file system have a special directory structure.

VFS directory structure

- special VFS directory structure for a more accurate setting of access rights;



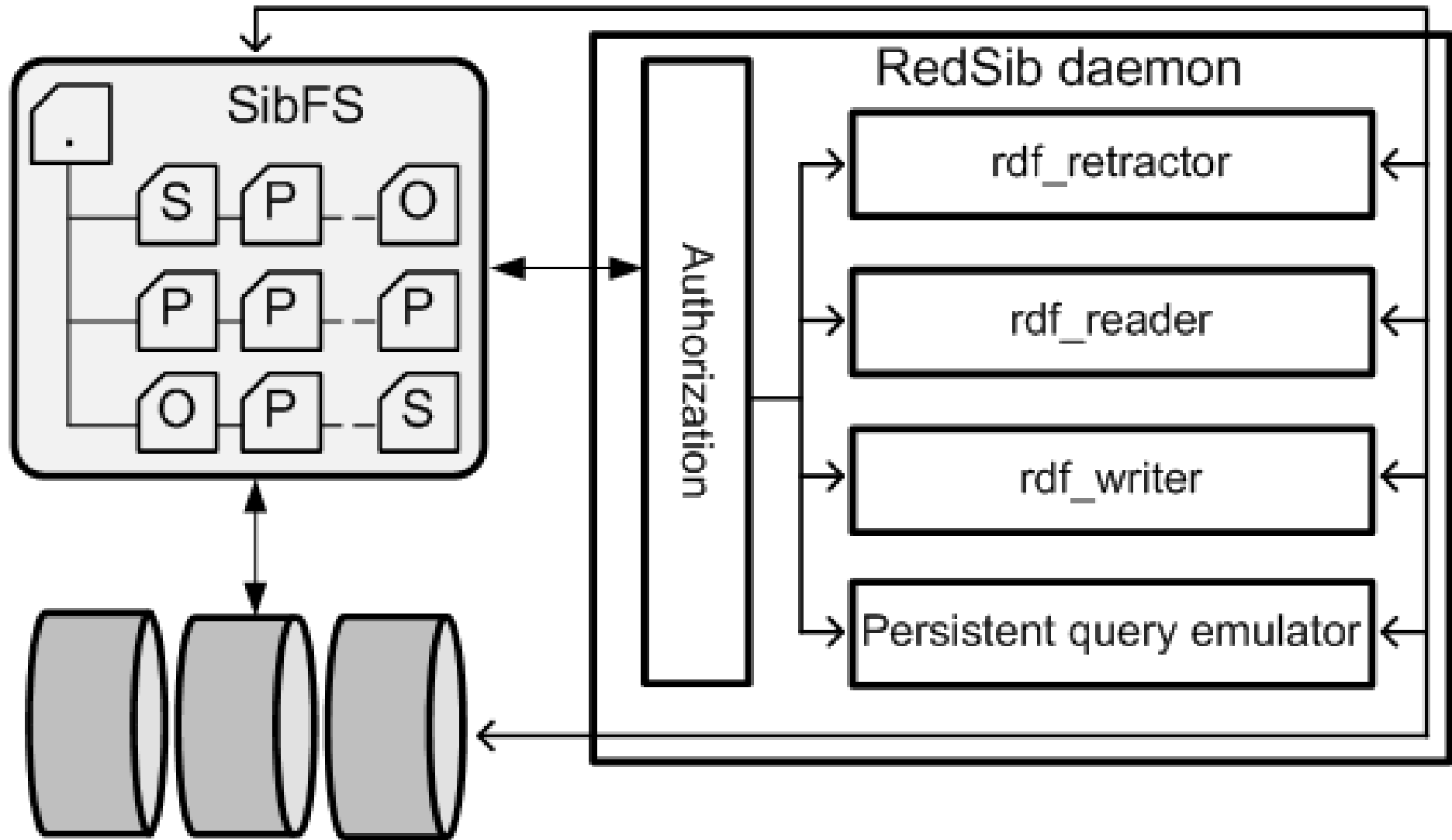
Authorization mapping overview



III main points of overview

- VFS used as a common security model;
- VFS used SIB data as own content;
- VFS operations are similar to RDF operations;

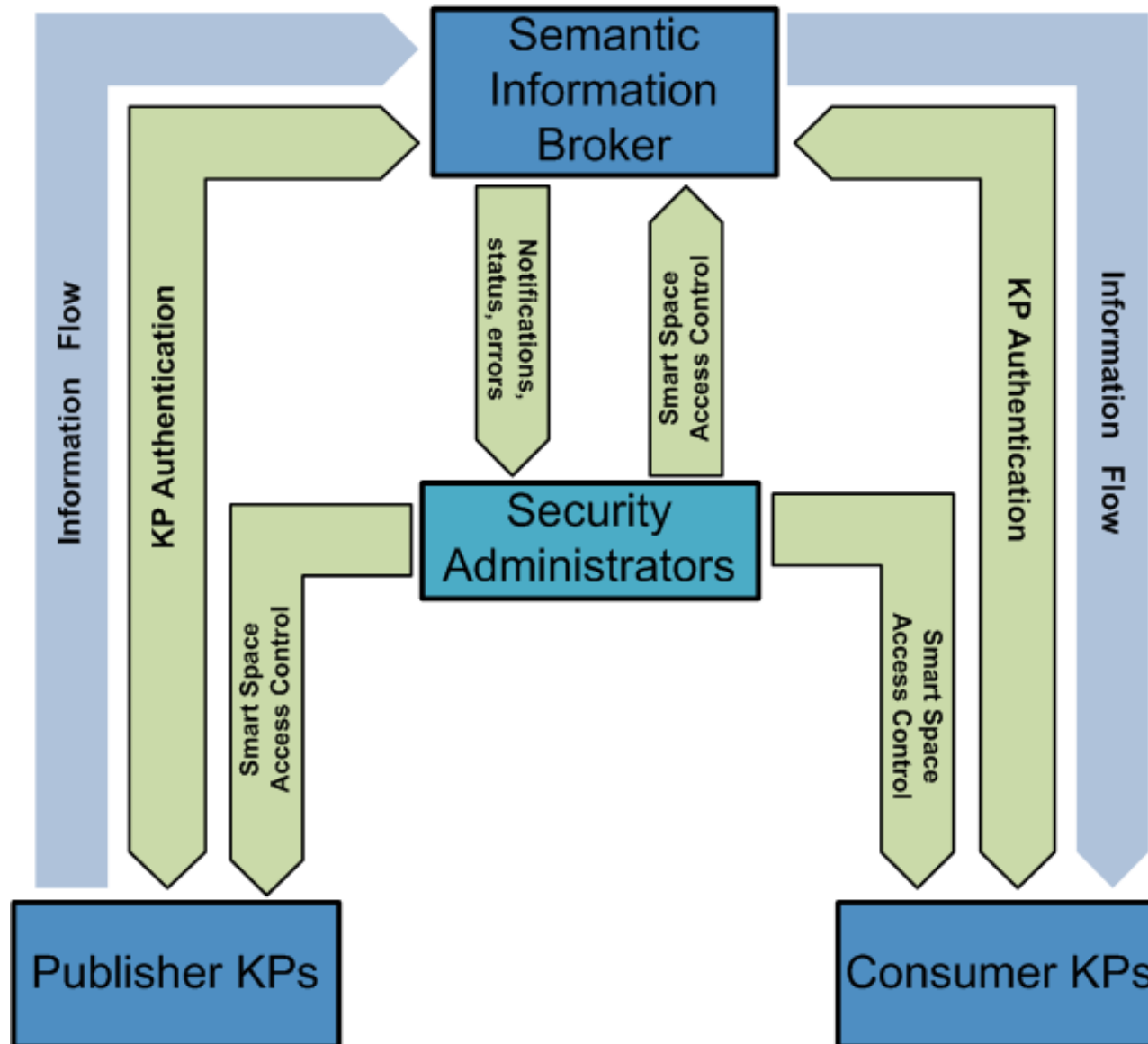
Authorization mechanism scheme



III main points of scheme

- Authorization mechanism is a part of “redsibd” module;
- Access rights are stored in VFS.
- KPs divided to access control permissions groups (readers, writers);

Smart-M3 security architecture



Future steps

- VFS permissions rules and their groups;
- VFS permissions management tool;
- Testing and performance evaluation.

Demo scenario

We try to –

- join various number of KPs;
- set permission group for each KPs;
- run scripts of common SIB operations:
Join/Leave, Insert, Query;
- Independently make some easy tests and check them;

And look –

- Authorization function in ACTION !!!