

- Application access data
 - the descriptors defined per gateway
 - these data are available for all users in the gateway
 - frequently retrieved (eg: when scheduling and a data transfer or a job submission occurs)
 - considered as a one time configuration but may have modifications from time to time

- private Workflow template data
 - per user workflow catalog
 - size of a workflow is not constant
 - frequently saved and retrieved only when users are testing their workflows
 - considered as one time configuration but may have modifications more frequently than "Application access data"

- published workflow data
 - per gateway per project workflow catalog
 - size of a workflow is not constant
 - frequently retrieved once in production
 - considered as a one time configuration but may have modifications from time to time

- user data
 - defined per user per gateway
 - considered as a one time configuration but may have modifications from time to time
 - might have frequent retrieval, but less frequent updates
 - Will contain user related data such as,
 - groups belonged to
 - access permissions for projects
 - access permissions for applications
 - access permissions for experiment data

- User Group data
 - set of groups defined per gateway
 - considered as a one time configuration but may have modifications from time to time
 - might have frequent use
 - will contain
 - access permissions for projects
 - access permissions for applications
 - access permissions for experiment data

- Project data
 - will be defined per gateway
 - no of projects will grow slow with time
 - a project will harbour multiple experiments and multiple published workflows
 - will contain
 - access permissions for applications

- User Workspace data
 - This will contain users,
 - private workflow catalog
 - references to experiment which the user is the owner

- Experiment data
 - defined per project (experiment id globally unique throughout the system)
 - grows rapidly over time
 - size of the data of an experiment is not constant
 - frequent addition of data
 - frequent updates of certain parts of an existing experiment data structure until completion/termination/failure
 - summary of each experiment data will be frequently retrieved
 - Complete experiment data structure will have non-linear data persistence needs
 - eg:
 - statuses of will frequently change down the experiment data structure,
 - depending upon middleware resource availability gfac jobs may be retried predefined number of times
 - application level data persistence (such as application-level statuses) is undefined and will be based on user/gateway preference

- Configuration data
 - defined per Airavata deployment
 - eg: server urls, server configurations
 - frequently retrieved if load-balancing and fault tolerance is implemented