

CCPM Data Security and Copyright Protection

Content Ownership and Privacy: The content uploaded by a user of the portal, and the copyright for that content, belongs to that user, and does not belong to the CCPM team. It is visible only to the project team which uploaded that content. However, content marked by the project team as *published* will be published on the portal and be open to all. The CCPM team is not responsible for the validity of the content.

Backup: Backup of the whole data as on disk will be made, on a weekly and monthly basis. Only the latest backups (that is, of last week and last month) will be available and the earlier backups may be replaced to recover disk-space. To be fully safe, users are also encouraged to keep backups of their data, especially if they desire a frequency different from weekly and monthly backups.

Storage: 5GB of disk-space quota is allocated to each of the PIs of projects. If additional space is needed, a request can be put forth.

Security: The CCPM portal features modern security policies and protocols as it is based on web2py, a modern python-based platform. This makes it immune to several well-known security flaws common on other platforms including cross site scripting (XSS), injection flaws, malicious file execution, insecure direct object reference, etc. Details are available at <http://www.web2py.com/book/default/chapter/01#Security>

Role Based Access Control: Three roles are defined for each project in the portal: *Investigator* (PI), Co-investigator, and *Experimentalist*. The PI, being the lead authority can start and publish projects, and provide time-bound permission for experimentalists to add or modify samples to the project for later analysis. Co-investigators, who are approved by the PI, have permissions to only view sample data for analysis, but cannot add or modify samples. The PI can revoke all these permissions at any point of time. Experimentalists and co-investigators cannot start or publish a commenced project.

In addition to the above three project-specific roles, the portal also has a fourth role of *regular users* who can only view published project data, but have no access to data that is not yet unpublished.