

## Security and Permissions

Security in labElephant primarily depends on the security of the local area network (LAN) that labElephant runs on. However, labElephant also enables the PI and users to set parameters that modify the extent to which their own work entered into labElephant is shared with other users.

### Section 1: Permissions in Experiments

1. All Experiments in a Project, and all Figures within an Experiment, are visible to all people given permission by the PI for that Project. That permission for a user, granted by the PI on the Projects form, is visible on the Switchboard form when the user checks in and selects the Project from the drop-down box.
2. If the permission is “read-only”, the person is not able to make new Figures in Experiments done by other people, or to edit their Figures or Figure Ingots or any other fields in the Experiment. They can, however, make new Experiments of their own, and have full control over fields within their own Experiments.
3. If the permission is “edit”, the person has full control over all Experiments within the Project, regardless of who the Experimenter is. The PI has automatic edit permission in all Projects. This is very useful for the PI: the Experimenter can enter their version of Figure Ingots, Issues addressed, etc., and these can be reviewed when meeting together with the PI. It is also useful if multiple people need to contribute Figures to the same Experiment. Alternatively, while maintaining read-only permissions, the experiment can be split into parts, with a different Experiment and Experimenter for each part.
4. The default permission granted to users is “read-only”. This gives users protection from other users making changes to their entries. If they see changes to what they entered, they know who to talk to: the PI. The default permission for users on any Project can be changed by the PI on Edit/Projects.
5. If users are concerned about others with edit permissions (including the PI) changing their data, a good practice is to keep a copy of the original data on the user’s U drive for reference, and a working copy on the lab drive. This concern is no different with or without labElephant: labElephant just makes everyone’s data a lot easier to find.

### Section 2: Permissions in Knowledge

1. Data shown on the Knowledge form is specific to the user who is checked in, unless the user has specifically made some of their Knowledge more public.
2. Users can make their Knowledge more public in three ways:
  - a. They can grant “edit” or “read-only” permission to view their Knowledge form to other specific users. Permission is granted from the People form. To view the user’s Knowledge, the other user would check in on the Switchboard form, then select the user from the “Person” drop-down box, then open the Knowledge form. This permission also enables the other user, when checked in, to view the user’s Nuggets

on papers that they both have made Nuggets for. These are viewed via the “View Nuggets made by others for this paper” button, under the Papers tab.

- b. Coming: Users can make specific Nuggets public by selecting the Public button on the Nugget record in the “Nuggets for Selected Reference” form. This allows any other user to view that specific Nugget the user has made for this particular paper. This way, users can make several Nuggets on a paper but only share the ones they choose to. Moreover, it becomes visible by everyone who has captured that paper. This is useful for promoting dialog in the lab on specific papers, as a virtual journal club.
- c. Finally, when users make Ingots as background for Experiments, the Ingots become visible to all those users who have access to the Project, when the user pastes the Ingot to the Experiment.