

Setting PI Settings in labElephant

PI Settings allow the PI to initiate renewal of a licence, control many of the application-wide features that are implemented in labElephant, and to monitor and control which computers have access to labElephant.

Section 1: License Details

1. When the labElephant back end is not yet on a network, “No license needed” is displayed. After the back end is moved to a network location, the user on re-start is prompted to have the PI get a network license from the labElephant Website, and to enter the resulting keycode. When that is done, and the keycode entered, license details are displayed on the Splash form, and also here in PI Settings.
2. Also displayed here, however, is the button “Renew License/Keycode”, which allows the PI to renew the network license (if it is expiring) and/or to get a new keycode (in the event the back end location changes, or the license is renewed).

Section 2: Application Settings

1. *Lab Title*: In this field enter a name for your lab. Three lines are allowed. To go to a new line, press ctrl-Enter.
2. *Error Reports*: In the event there is an error in labElephant that causes the application to terminate, an e-mail will automatically be sent to labElephant Software containing de-identified information, if the “Auto Send” checkbox is checked. The default setting is to do this, as this provides information that will enable the error to be fixed, which benefits all labElephant users. Any errors are also recorded in a table, accessible via the “Error Log” button.
3. *Bad Paths*: Bad Paths are links made in labElephant that no longer reach an existing file. This usually happens when the user moves the file from its original location from when the link was made. When users check in to labElephant, they will be notified if they have any bad paths, if the “Show users their own bad paths” checkbox is checked. This enables them to correct the bad path, which they are best equipped to do, since they are the ones that made the link and are usually the ones who moved the file. If the “Show me lab bad paths” checkbox is checked, the PI on check in is shown a list of non-PI users with uncorrected bad paths, and the number of such paths. This is a valuable feature, as it allows the PI to easily monitor path integrity in the labElephant database, which is key to being able to find data at a later time. The number of bad paths shown in the list is the number calculated when the user last checked in. If other users correct the bad paths of a user, and the user is no longer available to check in, the user bad paths can be recalculated using the “Recalculate All Bad Paths” button.
4. *Lab Folder Name*: When labElephant is first started, the lab folder name comes up as the “Documents” folder as that is where the back end database resides. However, your lab folder is likely on a server. Use the “Set Folder” button to navigate to your lab folder, and “Select

Folder”. When you are ready to move the back end to the server (Section 3), the lab folder is where it should be moved to.

5. *Path to PubMed*: This path is entered by default, but if PubMed changes the path to its website, this is where to enter the new path.
6. *Path to Vault*: labElephant provides a way to create digitally signed reports of Experiments that are automatically stored in a folder specifically for that purpose. That can be a folder that you create in the lab drive, or any location that you specify that is recognizable to your file system. This is important because these records constitute evidence for intellectual property claims. Enter this path using the Set Folder button.
7. *Vault File Type*: The digitally signed reports can be saved either as .pdf files or as .xps files. The first is viewable in Adobe Reader, the second with Microsoft XPS viewer.
8. *Path to Materials Reports*: Reports generated on the Materials form that list inventory will be placed in the folder specified here. Enter this path using the Set Folder button.
9. *Allow Making of OLE Objects*: OLE is an acronym for Object Linking and Embedding. If you wish to disallow the making of OLE object links for Figures, uncheck this box. The advantage of OLE object links is twofold: first, data shown in labElephant is automatically updated when the original data is updated, and second, a double-click on the Figure opens the file to the original figure that the OLE object links to. The disadvantages of OLE links are threefold. First, they occupy a lot of space in the back end. This can be managed by retiring them on a schedule (see below). Second, the link is hard-coded when the link is made, so that if the link is broken (such as when the data file is deleted, or the server is changed), the link will not only fail to show the data but may also cause labElephant to hang so that the OLE object link cannot easily be deleted. In the event that happens, there is a utility (Edit/Remove OLE object links) that will allow bad OLE object links to be deleted. Finally, if you have remote access to your lab folder via (e.g.) Citrix Server, the OLE server software will need to be on that server for the links to work remotely. This may require a special license for that OLE server software. If you decide OLE object links are not worth the trouble, and unselect the Make OLE objects box, then figure data will still be stored as Pics. Pics do not take up space in the back end, and links to them are easily remade if/when the server changes, using the Edit/Globally Replace Path Data utility. A double click on the Pic does not open the original data file, but a click on the Open button next to the Figure will do that.

When making an OLE object, select “Paste Link” option from the Paste Special dialog. “Paste Link” should be enabled for figures that come from applications that are servers for OLE objects. Paste Link has three advantages over the Paste option: first, any updates made to the figures will show automatically in labElephant; second, a double click on the figure in labElephant will open the original file at the figure in the original application; and third, the figure is not itself stored in labElephant, which is a more efficient utilization of available space. If the Paste Link option is not enabled, and if embedding the OLE object is an option, decide whether you want to do that, and click OK if so. Embedded OLE objects take up much more space in the back end. Otherwise select Cancel. The Pic will be displayed instead.

A fair compromise is to allow OLE objects, but only use them for Summary File Figures, which by definition aggregate data over time. Then, set them to retire when the data set in

the Figure is complete, so they give up their space in the back end (after a “Compact and Repair”).

10. *Retire OLE objects*: This button when selected will initiate the automatic deletion of OLE objects from Experiment Figures (if checked in “settings”) and/or Summary File Figures (if checked in “settings”). Only OLE objects made before today minus the number of days shown in the “Interval” will be deleted. Before deletion, a Pic is made of the *current* state of the OLE object.
11. *Close after idle*: If users forget to close labElephant, this could cause labElephant to crash if connection to the back end is lost. Best practice is to close labElephant when done, rather than leaving it always open. Checking “enable close” will close labElephant after the number of minutes of idle time set in the “min idle” box, in the event that labElephant is left open.

Section 3: Authorize user computers

The primary gateway to labElephant use is via user check-in on the Switchboard form. However, labElephant also allows the PI to control the computers that are permitted to access the labElephant back end, and to monitor currently connected computers. Any number of computers can be connected, regardless of the number of users licensed.

The default setting is to allow new computers to connect to labElephant without explicit approval by the PI: “Automatically authorize all” is checked. This speeds up the joining process when the back end is first moved to the network location. New computers will automatically show up in the listbox on the right. If the “Automatically authorize all” checkbox is unchecked, then a new computer trying to join labElephant will show up in the listbox on the left, and will not be allowed to use labElephant until the PI specifically authorizes it:

1. Select the computer to be authorized in the left listbox.
2. Check that the computer name entered by the user on the new computer is recognizable. If you wish to change it, select the “Edit computer name” button:



Edit the name on the form, and select “Done”.

3. To authorize the computer, select the right-arrow button.
4. Authorization for computers can be revoked by selecting them in the right listbox, then selecting the left-arrow button.
5. To delete computers, select the computers in the left listbox, and select the “delete selected computer(s)” button:



6. Finally, the connected state of each computer can be found by selecting the “View connected computers” button.