ACLS Tracker User Guide

For ACLS Tracker v0.10

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About

ACLS Tracker is a cross-platform desktop app (end-point software). The tracker is to record user's usage of the instruments, to restrict instrument access, to alert any OHS related issues in lab to the lab staff through the email, to show the next booking on the current day booking calendar, to show trainer contacts, to provide QR code for mobile device to scan and check lab resources, and also poster feature for branding and lab announcements.

The tracker supports Windows XP/7/8/10/11 and Linux (contact us for linux version details).
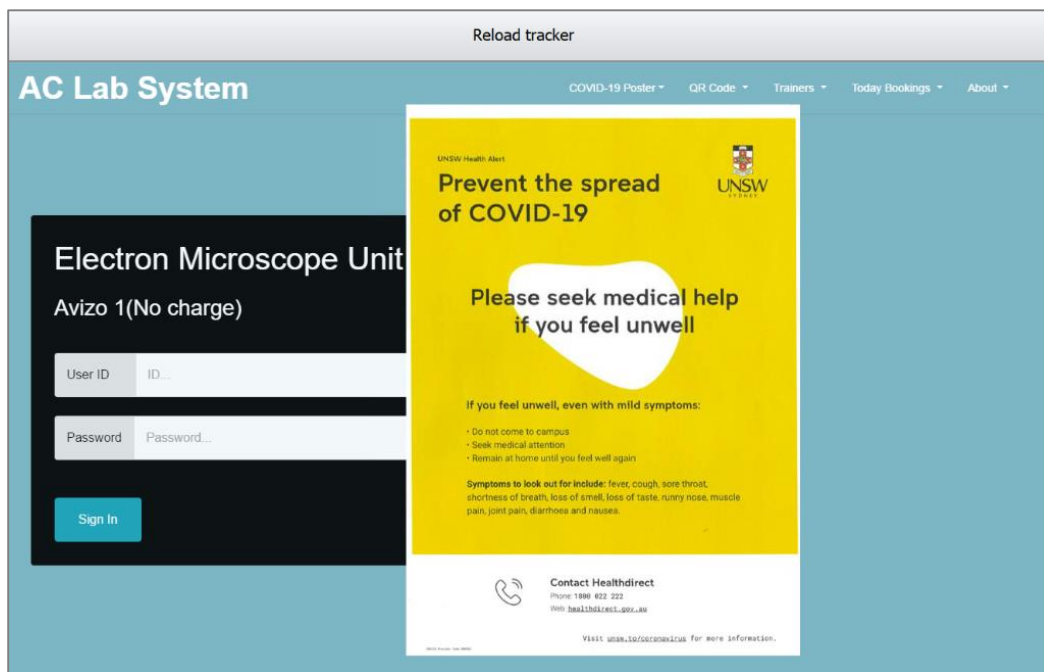
Through the tracker, you can implement a secured access to instrument or equipment by "No Login, No Operation" policy.

Before user can operate the instrument or equipment, he needs to login through the tracker. The tracker checks if user has a valid account, if user has the valid certificate to operate the equipment by himself or require the supervision of the staff member before permitting. During the period of operation or experiment, user can record the experimental notes, see the next booking to better manager his time of operation, and receive the notification sent by staff.

Tracker integrates the sensor app which details are provided in the separate sensor app user guide.

The other feature that tracker could be used is to logoff Windows account when users logoff tracker, which could used as a handy feature for some special situations as a security measure.

ACLS Sensor

ACLS Sensor is an application that gathers system information about your lab resource. The resulting report is automatically uploaded to ACLS. Examples of the gathered information include: operating system, cpu info, memory, disk usage, installed software.

ACLS Sensor can be downloaded as a standalone application that you can run on any computer.

Additionally, ACLS Sensor comes pre-installed with ACLS Tracker. The ACLS Tracker can be used to automatically run ACLS Sensor on regular intervals.

Please see the ACLS Sensor User Guide for more information.

ACLS Tracker: Installation (Windows XP/7/8/10/11)

ACLS tracker can be downloaded with the dedicated download link in ACLS. You can find it by navigating to Utility Manager > Resource Tracker & Sensor Manager.
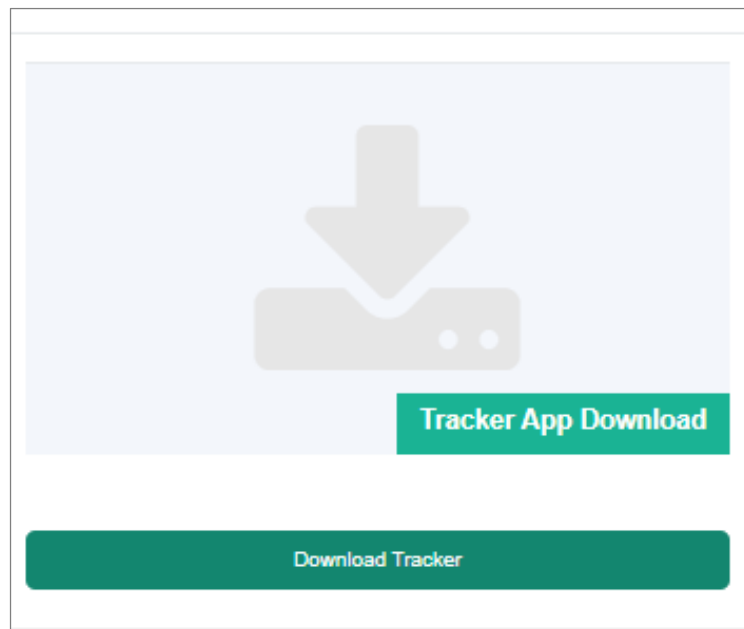
➢ Upon download, unzip the package, Copy ACLSTracker to System Drive C. The new python tracker does not require installation, it simply double click and run.

Name	Date modified	Type	Size
$WINDOWS.~BT	29/08/2019 11:10 ...	File folder	
ACLSTracker	21/07/2020 10:57 ...	File folder	
APPDIR	26/07/2019 2:00 PM	File folder	
cygwin	8/11/2018 11:48 AM	File folder	
JEOLab	20/10/2017 5:18 PM	File folder	
MatrixScreenerImages	14/11/2018 1:20 PM	File folder	
MSOCache	16/10/2017 11:00 ...	File folder	
nssm	16/08/2018 1:25 PM	File folder	
PerfLogs	13/05/2020 5:43 PM	File folder	
Program Files	21/07/2020 11:13 ...	File folder	
Program Files (x86)	21/11/2019 12:39 ...	File folder	
ProgramData	21/07/2020 11:03 ...	File folder	
SelfTest	14/11/2018 1:20 PM	File folder	
TEMP	21/11/2019 12:39 ...	File folder	
Unilab	26/07/2019 2:00 PM	File folder	
Users	25/05/2018 6:27 PM	File folder	
Windows	16/07/2020 5:42 PM	File folder	
$WINRE_BACKUP_PARTITION.MARKER	10/10/2017 11:38 ...	MARKER File	0 KB
SYSTAG.BIN	14/09/2019 2:30 AM	BIN File	1 KB

Name	Date modified	Type	Size
certifi	21/07/2020 10:55 ...	File folder	
Include	21/07/2020 10:55 ...	File folder	
locales	21/07/2020 10:55 ...	File folder	
qt4_plugins	21/07/2020 10:55 ...	File folder	
tcl	21/07/2020 10:55 ...	File folder	
tk	21/07/2020 10:55 ...	File folder	
__init__.py	25/06/2020 10:23 ...	Python File	3 KB
__init__.pyc	25/06/2020 10:23 ...	Compiled Python ...	1 KB
_bsddb.pyd	25/06/2020 10:30 ...	Python Extension ...	1,081 KB
_ctypes.pyd	25/06/2020 10:30 ...	Python Extension ...	91 KB
_hashlib.pyd	25/06/2020 10:30 ...	Python Extension ...	1,076 KB
_socket.pyd	25/06/2020 10:30 ...	Python Extension ...	46 KB
_ssl.pyd	25/06/2020 10:30 ...	Python Extension ...	1,389 KB
_testcapi.pyd	25/06/2020 10:30 ...	Python Extension ...	43 KB
_tkinter.pyd	25/06/2020 10:30 ...	Python Extension ...	40 KB
ACLSTracker.exe	21/07/2020 10:02 ...	Application	1,883 KB
ACLSTracker.exe.manifest	21/07/2020 10:02 ...	MANIFEST File	2 KB
bz2.pyd	25/06/2020 10:30 ...	Python Extension ...	70 KB
cef.pak	25/06/2020 10:23 ...	PAK File	2,269 KB
cef_100_percent.pak	25/06/2020 10:23 ...	PAK File	142 KB
cef_200_percent.pak	25/06/2020 10:23 ...	PAK File	228 KB
cef_extensions.pak	25/06/2020 10:23 ...	PAK File	4,182 KB
cefpython_py27.pyd	25/06/2020 10:23 ...	Python Extension ...	1,280 KB
cefpython_py34.pyd	25/06/2020 10:23 ...	Python Extension ...	1,272 KB
cefpython3.cefpython_py27.pyd	25/06/2020 10:30 ...	Python Extension ...	1,280 KB
cefpython3.cefpython_py34.pyd	25/06/2020 10:30 ...	Python Extension ...	1,272 KB
config.ini	22/07/2020 7:09 PM	Configuration sett...	1 KB
d3dcompiler_43.dll	25/06/2020 10:23 ...	Application extens...	2,057 KB
d3dcompiler_47.dll	25/06/2020 10:23 ...	Application extens...	3,623 KB
debug.log	22/07/2020 7:11 PM	Text Document	1 KB

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➢ Create a shortcut to the desktop

➢ Set up ACLS tracker as the startup program app.
1. Press START + R to open the Windows Run window.
2. Type in "shell:startup" and press OK.
3. Copy the desktop shortcut and paste it in this folder.

This will make the computer run ACLS Tracker automatically every time it turns on.

➢ For the first time run, tracker brings up the resource selection page, simply select and save the selection, and close the tracker. If the resource is not listed, you need to go to ACLS web portal to check the resource tracker settings s described in the Tracker Configuration chapter.
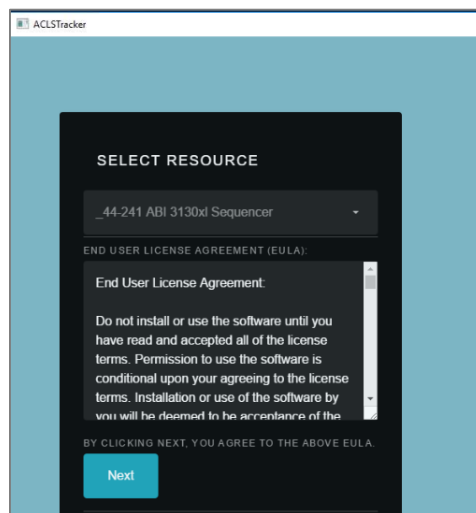
➢ Tracker is ready to run.

ACLS Tracker: Updating to the latest version

➢ Locate the existing ACLS Tracker installation. This is usually inside the C drive, in a folder called ACLSTracker

➢ Open the folder and locate the file "config.ini". Identify the field named "hostid" and copy out the value. As an example, if the field says

<div align="center">

host_id = 780eb107

</div>

Then copy out the value "**780eb107**" (*This is just an example value*). Save this value in a text document.

➢ Delete the "ACLSTracker" folder.

➢ Download the latest version of ACLS tracker. It can be downloaded with the dedicated download link in ACLS. You can find it by navigating to Utility Manager > Resource Tracker & Sensor Manager.

➢ Unzip the downloaded file and copy the ACLSTracker folder to System Drive C. This should be the same location as the previous tracker installation.

➢ Go into the folder and locate the config.ini file. Identify the field named "hostid" and fill in the empty value with the previously saved value.

➢ Ensure the desktop shortcut for ACLS Tracker is still working. If it no longer works, you should recreate the shortcut. You can do this by

deleting the old shortcut and creating a new one by right clicking ACLSTracker.exe and creating a new shortcut. Then you should copy and paste the shortcut to the desktop.
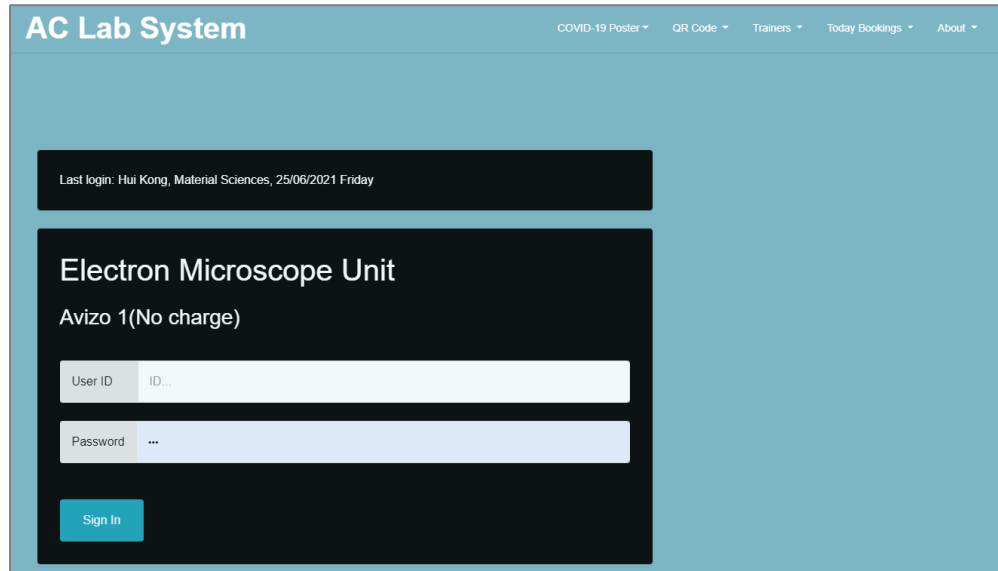
➢ Ensure the run-on-startup for ACLS Tracker is still working. You can check this by going to the startup folder (START+R, then enter shell:startup) and double clicking the ACLS shortcut there to see if ACLS Tracker launches. If it does not launch, you can fix this by deleting the shortcut in this folder and then copying the desktop shortcut into this folder.

Tracker Operation

- **Login process**
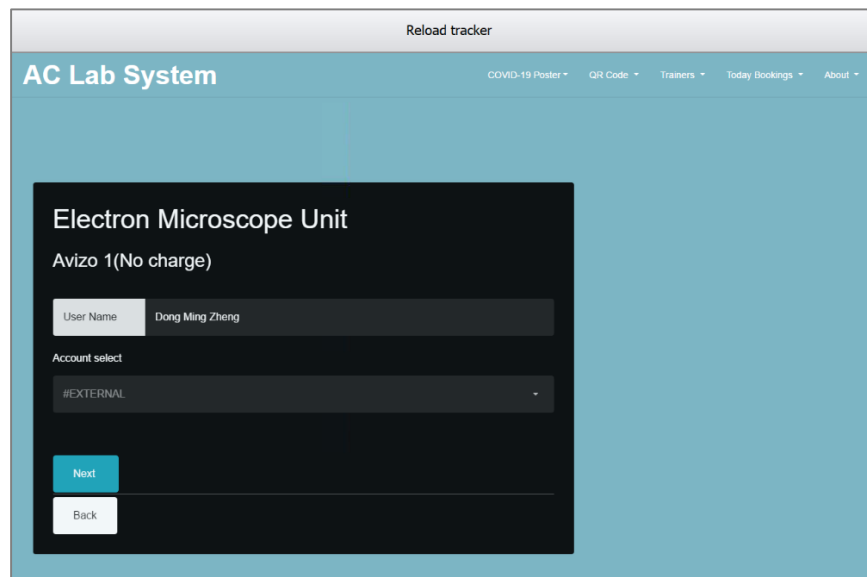
Upon executing the tracker program, home page shows up as illustrated below. Home page indicates the following information:

- Reload tracker: click Reload tracker button to refresh the home login page if you encounter any issues
- COVID-19 Poster: this is the default setting in ACLS resource manager. It can be customised by lab to set up different posters
- QR code: use mobile phone to scan QR code and access to resource dashboard
- Trainer: show the trainer contacts
- About: app name and version
- Lab name: ACLS Demo in the snapshot
- Resource name: 3D camera in the snapshot
- Last login: show last login user name, school or organisation name and login day timestamp
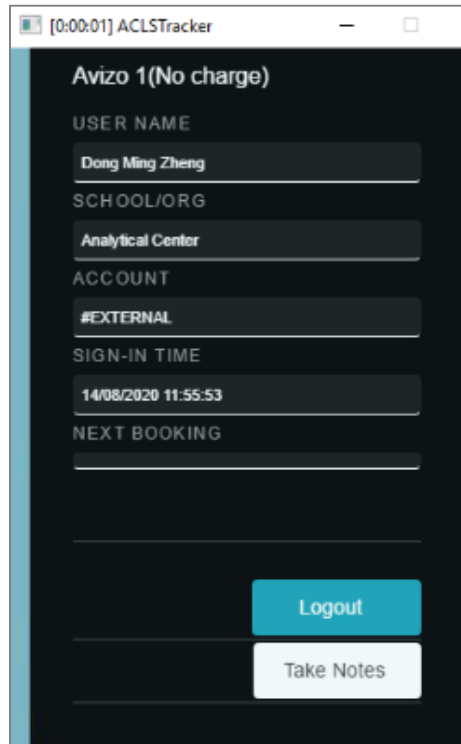
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- Enter User ID and Password to sign in.

- Depending on the tracker settings in ACLS resource manager, you might need to select account or project to continue.


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➢ Upon accepting the login, Tracker stays at the top corner of the right-hand side of the screen. Tracker shows the escaped time at the tracking app bar.


- **Logout timer (optional)**

A logout timer can be activated to logout the tracker automatically when timer runs out of the pre-set hours. It is featured to give the option control to the labs where instrument or equipment operation may need to end at midnight without the human interference.
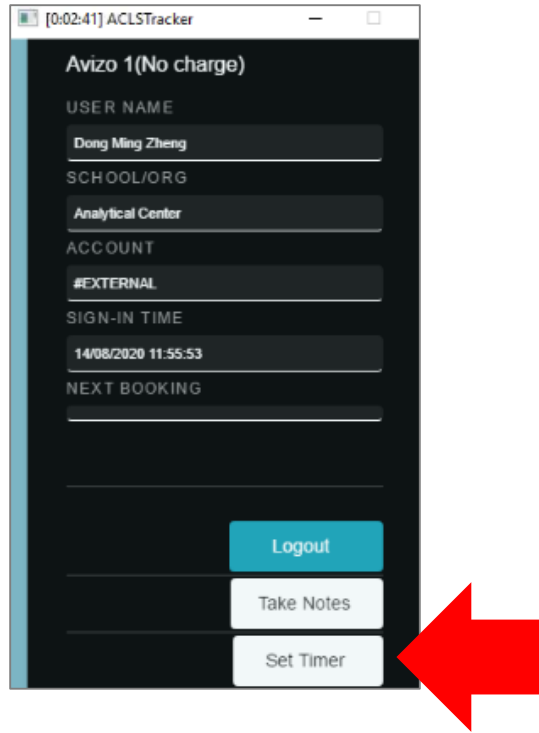
> ➢ Select the desired hours, and click 'Start Timer' to begin the countdown.
> Tracker logs out user automatically when countdown ends.
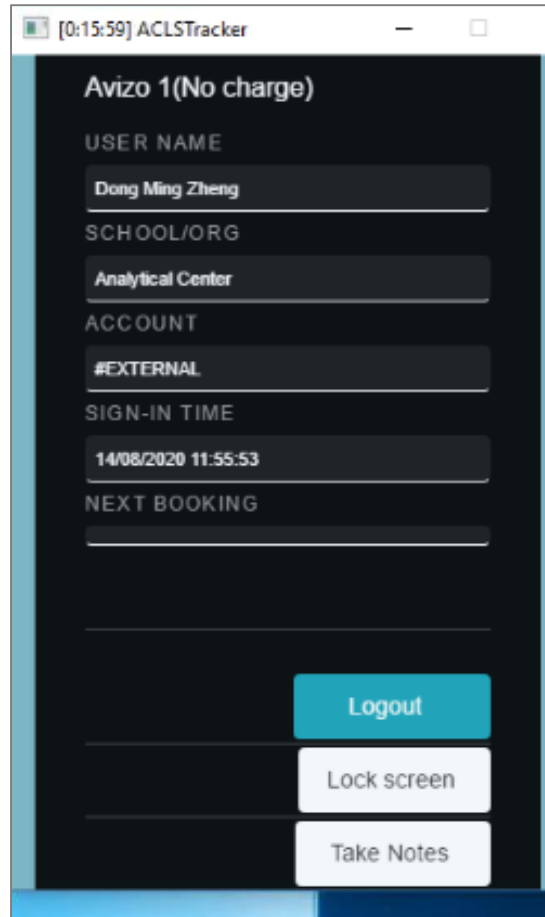

ACLS Tracker v0.10
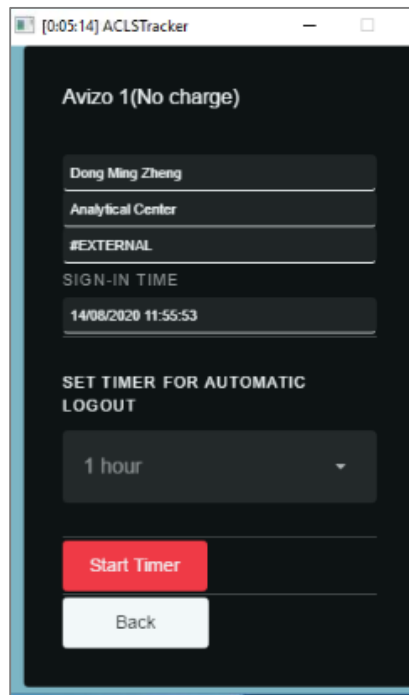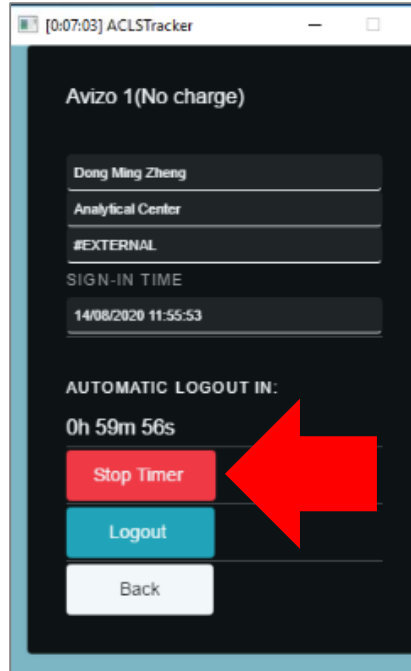
To stop timer, simply click on 'Stop Timer'.

- **Lock screen (optional)**

Lock-screen feature is available as an option. The lock screen is useful for staff and users to lock screen while they are away for lunch break or any other short break. Staff can unlock screen anytime no matter whoever login.
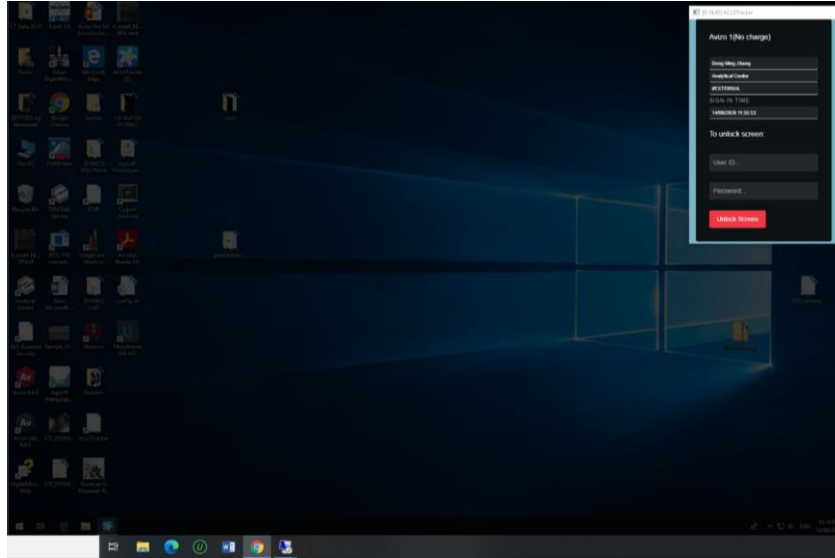
> ➢ Click Lock Screen to get the screen locked. The entire screen becomes semi-transparent in lock-screen mode.

- **Record Notes**

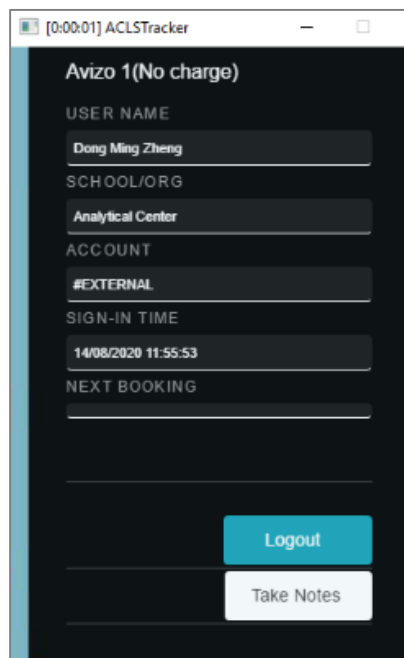 You can record and submit notes during an experiment by clicking the 'Note' button.

➢ Enter your experiment notes in the textbox provided, and click 'Submit' to save the notes.

The user can make simple notes by clicking the 'Submit Notes' button. Once the submit button is clicked the note will be submitted to the server, saved and available in ACLS web tracker notes.

- **Logging Out**

Once you are finished using the instrument, click the 'Logout' button to terminate the session.

Tracker Configuration in ACLS Web Portal

This is for lab admin or system administrator to set up. Login to ACLS, go to Utility Manager > Resource Tracker & Sensor Manager > Installed Resource Tracker Status to edit the resource property.

The obsolete Java tracker is still on the page for information. The new tracker is configured with the Python tracker page. Here is the explanation of the configuration parameters.

- **Resource**: instrument or equipment name
- **Host ID**: it is auto-generated by system used for tracker connection, you can reset the ID if needed. If the tracker is already connected, ID reset will disconnect the tracker.
- **ID Type**: fixed and not changeable
- **Block hotkeys**: block all the hotkey combination to stop users from bypassing the tracker login. However, this is only effective if the tracker runs on pc admin account on the instrument or equipment Windows pc.
- **Block task manager**: tick to block task manager on Windows pc when running Tracker on pc admin account.
- **Enable account/project selection**: tick to enable account/project selection if you simply use tracker to record instrument/equipment access, or/and safeguard the access.
- **Enable locking-screen**: tick to enable locking screen feature.

- **Enable Show Last Login User**: tick to display the last logged in user on the tracker login page
- **Enable auto-logout**: tick to enable auto-logout. This is different from the timer feature. Timer is controllable on site by staff and users. If auto-logout is turned on, tracker logout upon auto-logout timer countdown is over.

Enable Auto-Logout	☑ (Enabled, auto-logout feature is enabled, upon login, tracker logout automatically after pre-defined logout hours)
Auto-Logout Hours	2 ▾
Allow Connection	☑
Note	
Tracker Installation Status	Installed
Tracker Connection Status	Connected

- **Enable Full-Screen Mode**: This option is enabled by default. If it is ticked, the tracker will be full screen on the login page and the user cannot bypass it. If it is unticked, the user can freely bypass the tracker without logging in. You should only untick this if you plan on disabling the tracker temporarily.
- **Enable booking first policy:** Tick to deny login if the user doesn't have a booking.
- **Enable data drive mapping**: Tick to enable automatic network drive mapping on the resource computer. Configuration for this network drive is in ACLS System Settings.
- **Enable email for sign in and sign out:** Tick to send an email to the user and trainers when they sign in and sign out.
- **Enable sensor app execution with tracker:** Tick to enable ACLS Sensor functionality (See ACLS Sensor user guide for more details).
- **Enable Windows account logoff**: If ticked, signing out of the tracker will also sign out the windows user account.
- **Allow connection**: If you don't tick this checkbox, tracker connection would be declined.
- **Notes**: for admin use

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Since the tracker is web based, a web URL is available for demo purpose, or used for the other devices such as tablets. Please contact us for the further discussion if you want to run the tracker for the non-computerised equipment or tools.

Tracker installer	Please contact ACLS support team for ACLS tracker installer. ACLS tracker can be used to safeguard the equipment and resources. Tracker supports Windows, MAC and Linux OS.
Tracker demo	Tracker for 4000 QTRAP LC-MS (C27)
Important notes	Please do not sign in the tracker demo after you install the tracker onto this resource as your login/logout might be conflicted with the true loign/logout on the tracker of the resource

➢ The tracker adds back the missing logout when the next user login. However, this might cause the incorrect usage time. For example, user A login at 12pm, then reboot pc when leaving without logout at 1pm. User B login at 3pm, tracker automatically adds the logout for user A at 3pm instead of 2pm.

➢ Connection logs are available for cross-check for the situation that users might reboot pc after usage and system logs the longer time session than the actual usage.

ACLS Tracker Installation Status

You are able to check tracker status including installation status, connection status and IP address of the connected equipment/devices and tracker version.

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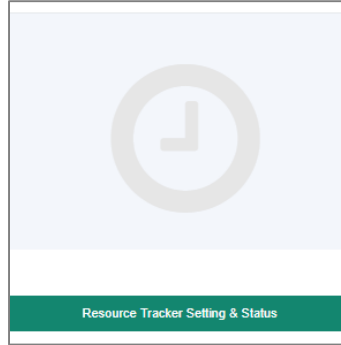
Resource	IP Address	Tracker Installation	Tracker Connection	Tracker Version
Avizo 1(No charge)	129.94.164.57	Installed	Connected	0.7
Avizo 2(No charge)	129.94.164.77	Installed	Connected	0.7
EPMA 8500	129.94.165.3	Installed	Connected	0.7
FIB Auriga	129.94.164.105	Installed	Connected	0.7
FIB Auriga - Oxford	129.94.165.77	Installed	Connected	0.7
FIB NanoLab	129.94.164.64	Installed	Connected	0.7
Leica Lift-Out	129.94.165.181	Installed	Connected	0.7

ACLS Poster

You are able to change poster menu and poster image at tracker status page.

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ACLS Tracker Server

ACLS tracker server requires the special configuration with Abyss Web Server X2. ACLS tracker is web based and https connection on the separate port. Please contact ACLS team for assistance.

Automatically Mapping Network Drive

To enable this setting, tick "enable data drive mapping" on the resource configuration page. Configuration for this network drive is in ACLS System Settings.

Navigate to Staff > System Settings. Click on "Configure Data Links" on the left. Then click on "Net Drive".

From here, you can add the network drive details required to connect.

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When the tracker logs in, this network drive will be automatically mapped. When the tracker logs out, the network drive is unmapped.

Automatically setting up user folders with ACLS Tracker

ACLS Tracker can automatically create folders for each user that logs onto the lab computer. The user can store their files in the folder designated for them.

To enable folder creation:

1. Log into ACLS
2. Navigate to Staff, then System Settings, then "User Data Folder Setting (Tracker)" in the bottom right corner
3. Tick "Create user folder" and press save.

After these steps, you will need to set up a default directory for the user folders to reside in.

1. Log into ACLS
2. Navigate to Staff, then Utilities -> Resources, then "Resource Tracker Home Drive" at the bottom

Resource Tracker Home Drive
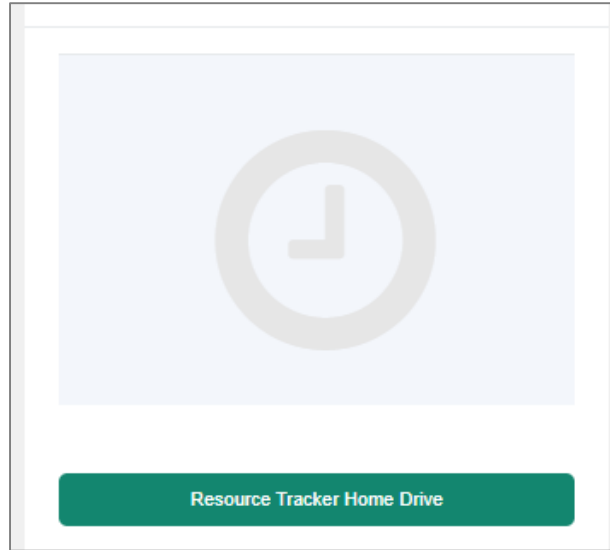
3. A list of resources will be displayed. For each resource, you must input a directory that will contain all the user folders. This directory will be created on the resource computer. The director can be local folders or on networked drives.

    For example, to have all the user folders placed into the data drive, input "D:\".

Resource	Home Drive Folder
Avizo 1(No charge)	D:\
Avizo 2(No charge)	D:\users

4. System admin will need to select a naming format for the user folder on System Settings -> Configure System -> User Folder Setting (Tracker). The green button on the right.

ACLS Tracker v0.10
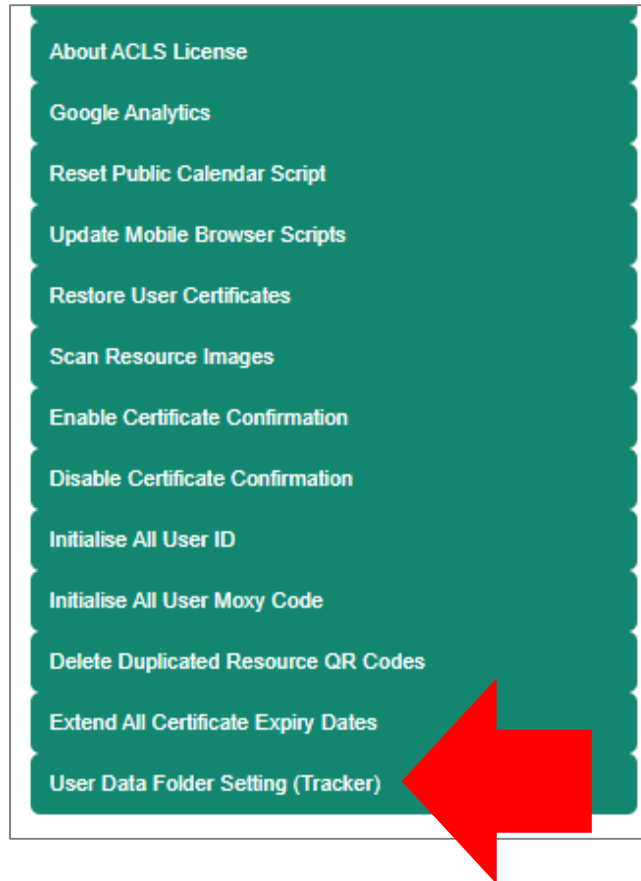
There are three options available:

- "User name" will create folders based on the user's first and last name
- "Login name" will create folders based on the user's login e.g their zid
- "Alias" will create folders based on their provided alias, if it is registered in ACLS.

5. Press Save to accept the changes

After these steps, ACLS Tracker will automatically create user folders for users to store their data in.

Disable Task Manager for Windows 7 and Windows 10

The tracker needs administrator rights to disable the task manager on Windows 7 and Windows 10. Instead, you can manually disable it by following these instructions.

1. Press WINDOWS key and R (WIN+R) to open the Run window.
2. Type in regedit.exe and press OK.
3. Click and expand the folder named 'HKEY_CURRENT_USER'.
4. Click and expand the folder named 'Software'.
5. Click and expand the folder named 'Microsoft'.
6. Click and expand the folder named 'Windows'.
7. Click and expand the folder named 'CurrentVersion'.
8. Click and expand the folder named 'Policies'.
9. Click and expand the folder named 'System'.
10. On the right panel, double click 'DisableTaskMgr' and change the value data from 0 to 1. Press OK.

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NOTE: If there is no 'DisableTaskMgr' in the right panel, then follow these steps:

1. Right click an empty space in the right panel.
2. Select New > DWORD.
3. Give it the name DisableTaskMgr.

To re-enable task manager, follow the above steps but in step 10, change the value data from 1 to 0 instead.

ACLS Tracker for Linux (No sensor feature)

ACLS Tracker is available to run on Linux platforms such as Ubuntu and CentOS. Please contact the ACLS team if you would like to inquire about specific Linux platforms.

The Linux tracker supports the main ACLS Tracker functionality of logging in and tracking login time.

The Linux Tracker does not support the following advanced features:

•   Automatic network drive mounting
•   Hotkey blocking
•   Automated folder creation and ACLS Sensor functionality

ACLS Tracker Installation: CentOS 7

ACLS tracker can be downloaded with the dedicated download link provided by ACLS team. Please contact the ACLS team for a download link.

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- ➢ Place the application folder in the home directory (/home/[user])

- ➢ Open the terminal

- ➢ This step will add a desktop launcher for ACLS Tracker.
  Type and run "sudo nano /home/[user]/Desktop/ACLSTracker.desktop",
  substituting [user] with the user of your account.
  In the text editor that appears, type in the following bolded block.
  Substitute [user] with the user of your account. When you finish, save the
  file by pressing CTRL+O and then enter. Then exit by typing CTRL+X.

  [Desktop Entry]
  Type=Application
  Name=ACLS Tracker
  Icon=/home/[user]/ACLSTracker-0.8.3-CentOS7/icon.png
  Exec=/home/[user]/ACLSTracker-0.8.3-CentOS7/ACLSTracker

- ➢ Run the desktop launcher at least once, and select Trust so that the
  launcher will be usable. If the application fails to launch, see the
  troubleshooting section.

- ➢ This step will make ACLS Tracker launch automatically on login, so it can
  be skipped if it is not required.

  Type and run "sudo nano /etc/xdg/autostart/ACLSTracker.desktop".
  In the text editor that appears, type in the following bolded block.
  Substitute [user] with the user of your account. When you finish, save the
  file by pressing CTRL+O and then enter. Then exit by typing CTRL+X.

  [Desktop Entry]
  Type=Application
  Name=ACLS Tracker
  Icon=/home/[user]/ACLSTracker-0.8.3-CentOS7/icon.png
  Exec=/home/[user]/ACLSTracker-0.8.3-CentOS7/ACLSTracker
  X-GNOME-Autostart-enabled=true

  Troubleshooting (Linux)

  Confirm the tracker is compatible with the operating system by manually
  running it. This can be done by opening a terminal and running
  "/home/[user]/ACLSTracker-0.8.3-CentOS7/ACLSTracker".

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If the tracker is able to run manually, then ensure the [Desktop Entry] files are formatted correctly.

If the tracker does not run manually, then the Linux system may not have the correct package prerequisites. These prerequisites are met by most Linux distributions, but some systems may not meet requirements.

One required package is libXScrnSaver. This is a small utility package with few requirements and it comes preinstalled on most Linux systems, so it should not cause any disruption to existing systems. It can be installed through a package manager e.g On CentOS, type and run "sudo yum install –y libXScrnSaver".
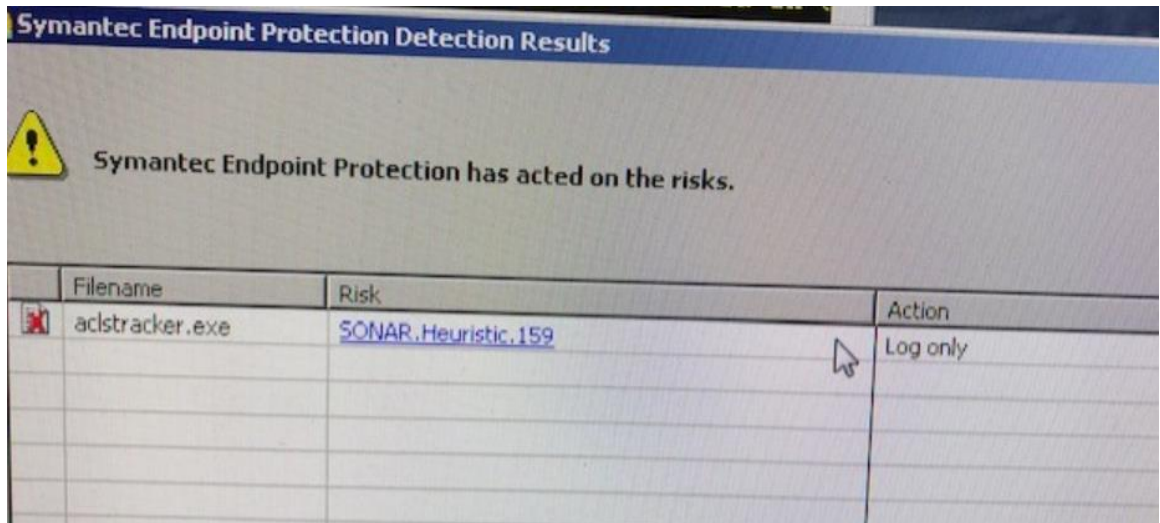
Frequently Asked Questions

1. Tracker can't connect to the ACLS tracker server, why?

Answer:

There are a number of causes for that as followings:
   o Loss of network
   o ACLS server down
   o ACLS server reject tracker request due to the wrong Host ID setting in tracker configuration file
   o Firewall of network

2. My antivirus software says the tracker is a virus.

Symantec Endpoint Protection Detection Results

Symantec Endpoint Protection has acted on the risks.

	Filename	Risk		Action
	aclstracker.exe	SONAR.Heuristic.159		Log only

Answer:

This is an uncommon false positive on some machines, caused by the compilation process. You will need to add aclstracker.exe to an exception list.

3. The Task Manager isn't disabled even though I chose that option.

Answer:

See Section: 'Disable Task Manager for Windows 7 and Windows 10'

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