

# AC Lab System

Tracker v0.7.2

User Guide



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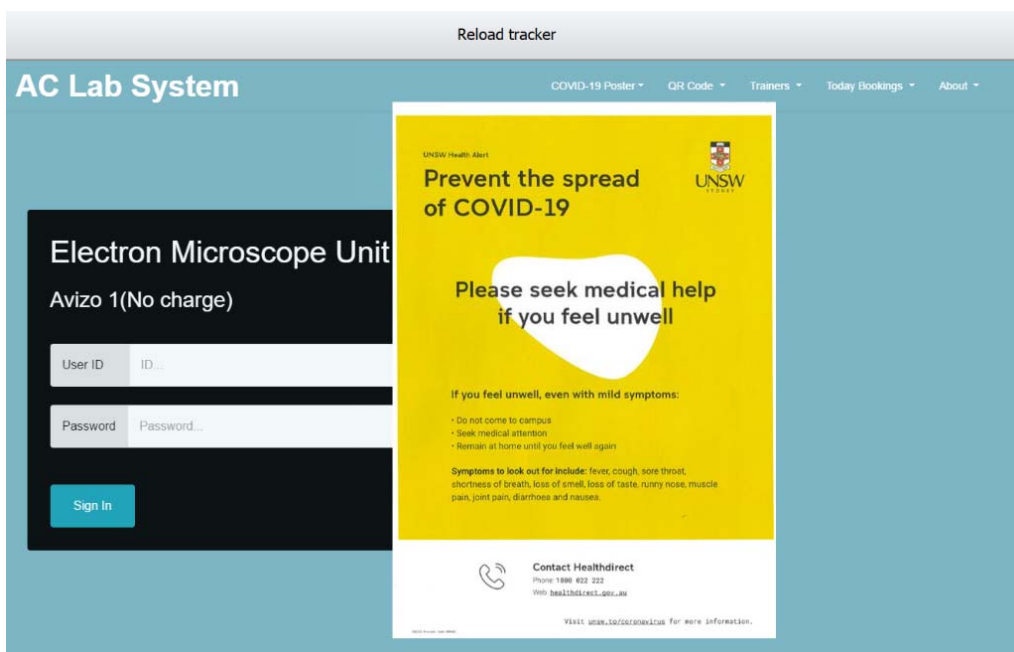
For further information about the Software, call the MWAC IT at +61 (0)2 9385 6680 or e-mail [dm.zheng@unsw.edu.au](mailto:dm.zheng@unsw.edu.au).

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## SOFTWARE DESCRIPTION

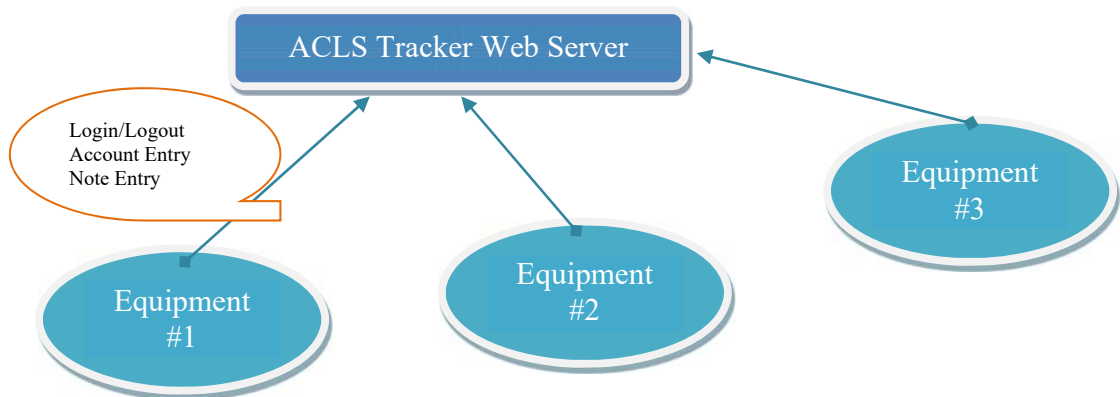
ACLS Python Tracker is a cross-platform software desktop app written in Python which working with ACLS web server to provide a web-based desktop app. The tracker is to record user's usage of the instruments, to restrict instrument access, to alert any OHS related issues in lab to the lab staff through 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 which is useful for today's COVID-19 outbreak.



## Description

The tracker is able to run on Windows XP/7/10 for v0.7.

## 1. Working Mechanism of Tracker with ACLS Server



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.

## 2. Tracker Operation

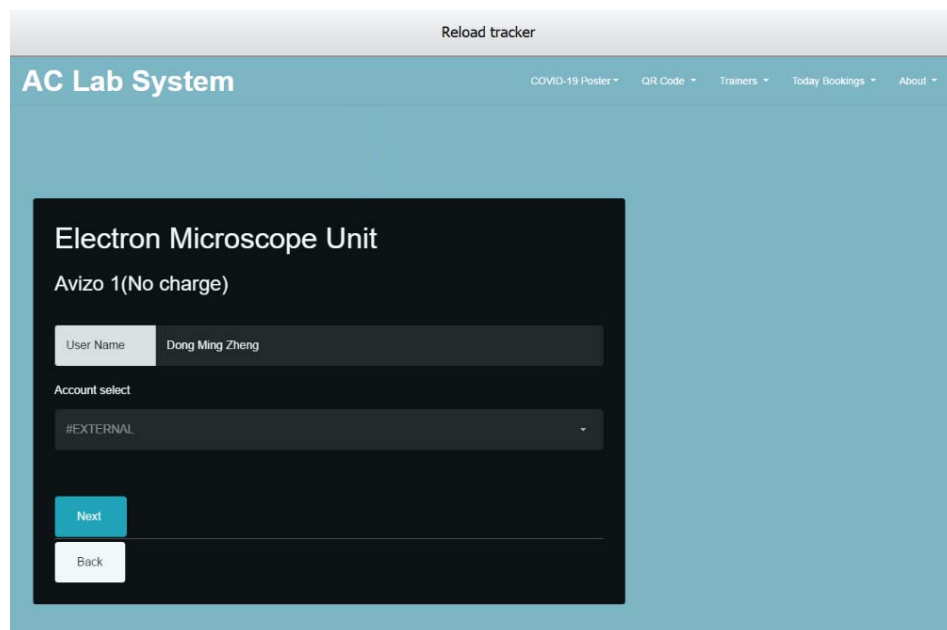
### - Login process

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

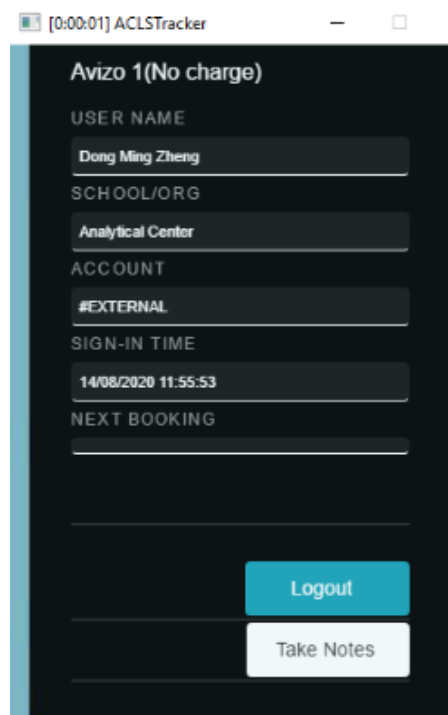
- Reload tracker: click Reload tracker button to refresh the home login page if you encounter any issues

- 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

- 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.

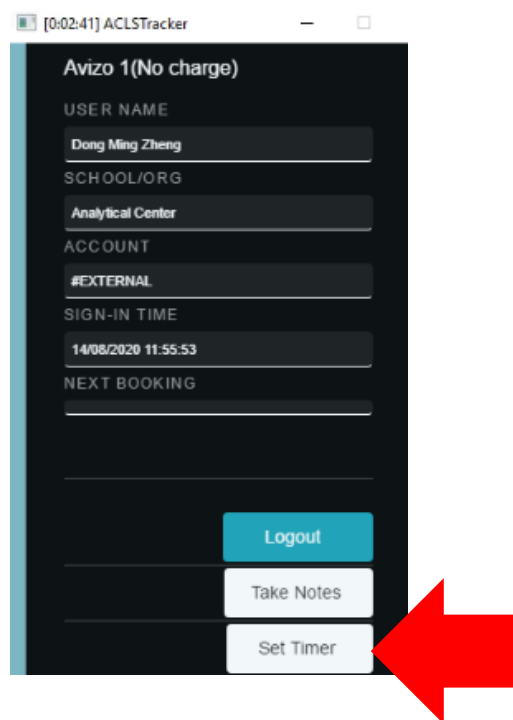


- Upon accepting the login, Tracker stays at the top corner of the right-hand side of the screen. Tracker shows the escaped time at the tracking app bar.

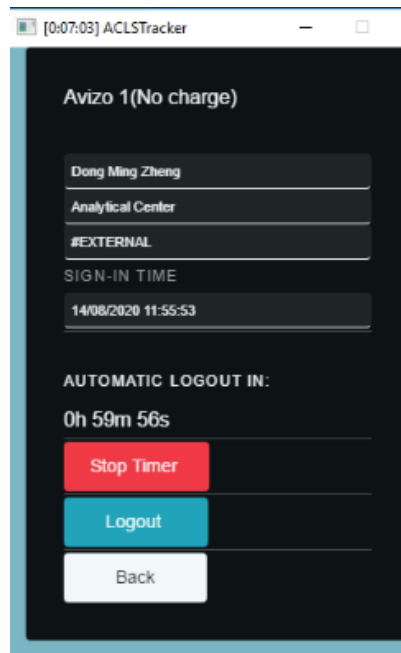
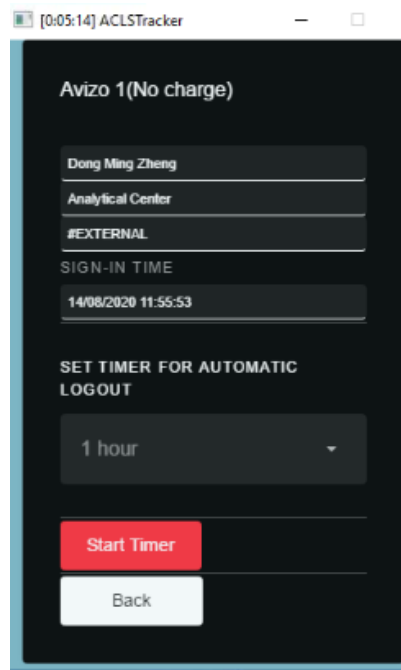


- **Logout timer (optional)**

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.

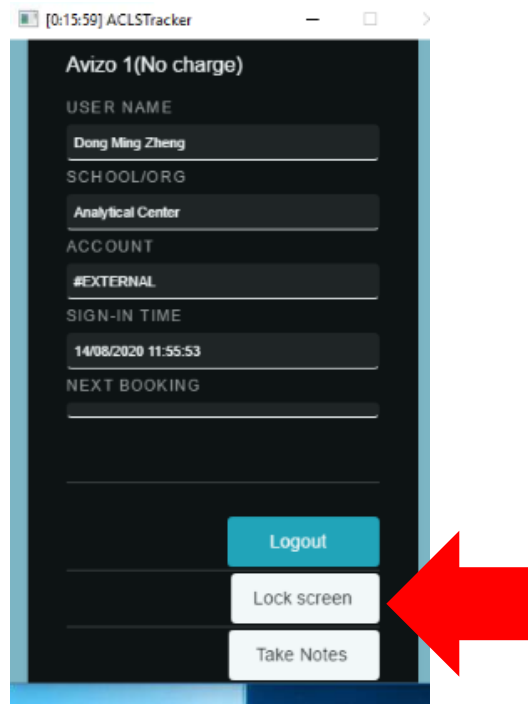


To stop timer, simply click on 'Stop Timer'.

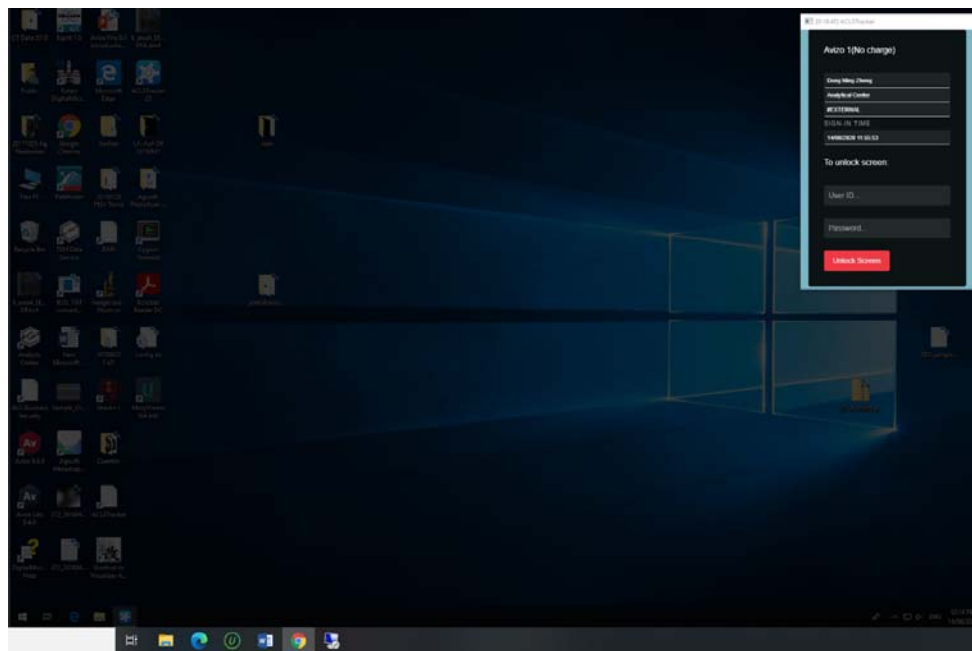
- **Lock screen (optional)**



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.

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Enter notes ...

Submit Notes

Close

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.

The screenshot shows a window titled "[0:00:01] ACLSTracker". Inside, the header says "Avizo 1(No charge)". Below it are several input fields: "USER NAME" with the value "Dong Ming Zheng", "SCHOOL/ORG" with "Analytical Center", "ACCOUNT" with "#EXTERNAL", "SIGN-IN TIME" with "14/08/2020 11:55:53", and "NEXT BOOKING" which is empty. At the bottom right, there are two buttons: "Logout" (blue) and "Take Notes" (white).

### 3. Tracker Configuration in ACLS Web Portal

This is for lab admin or system administrator to set up. Login to ACLS, go to Resource Manager to edit the resource property.

The screenshot shows a configuration page for "Avizo 1(No charge)". It has a tabbed interface with tabs: General Profile, Booking Profile, Lab Space, Catalogue Profile, Booking Form, Training Certificate, Trainer, Certified Users, Java Tracker, and Python Tracker. The "Python Tracker" tab is active. Below the tabs is a table with configuration options:

Resource	Avizo 1(No charge)
Host ID	da904634
ID Type	<input checked="" type="radio"/> Host ID
Block Hot-Keys	<input checked="" type="radio"/> Blocked
Block Task Manager	<input checked="" type="radio"/> Blocked <input type="radio"/> Unblocked
Enable Account/Project Selection	<input checked="" type="checkbox"/> (Enabled, users must select account/project on tracker login)
Enable Locking Screen	<input checked="" type="checkbox"/> (Enabled, lock screen feature is enabled so users can lock screen after tracker login)
Enable Auto-Logout	<input type="checkbox"/> (Disabled, auto-logout feature is disabled)
Allow Connection	<input checked="" type="checkbox"/>
Note	
Tracker Installation Status	Installed
Tracker Connection Status	Connected

At the bottom right, there is a blue button labeled "Accept".

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. However, if the tracker is already connected, ID reset will make the tracker disconnected.
- **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 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	<input checked="" type="checkbox"/> (Enabled, auto-logout feature is enabled, upon login, tracker logout automatically after pre-defined logout hours)
Auto-Logout Hours	2 ▾
Allow Connection	<input checked="" type="checkbox"/>
Note	
Tracker Installation Status	Installed
Tracker Connection Status	Connected

- **Allow connection:** If you don't tick this checkbox, tracker connection would be declined.

- **Notes:** for admin use

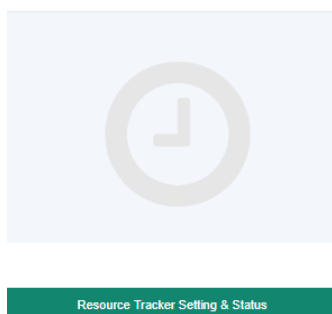
Since the tracker is web based, a web URL is available for demo purpose, or used for the other devices such as tablets. Please contact us for the further discussion if you want to run the tracker for the non-computerised equipment or tools.

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	<a href="#">Tracker for 4000 QTRAP LC-MS (C27)</a>
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 login/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.

#### 4. ACLS Tracker Status

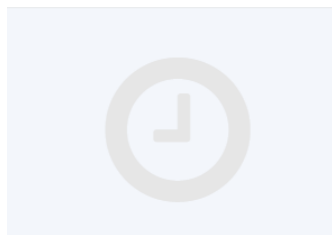
You are able to check tracker status including installation status, connection status and IP address of the connected equipment/devices and tracker version.



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

## 5. ACLS Poster

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



### Resource Tracker Setting & Status

Post Menu Name	COVID-19 Poster	(if you set to none, the poster menu is disabled on tracker menu)
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Accept



[Upload Poster Image \(jpg\)](#)

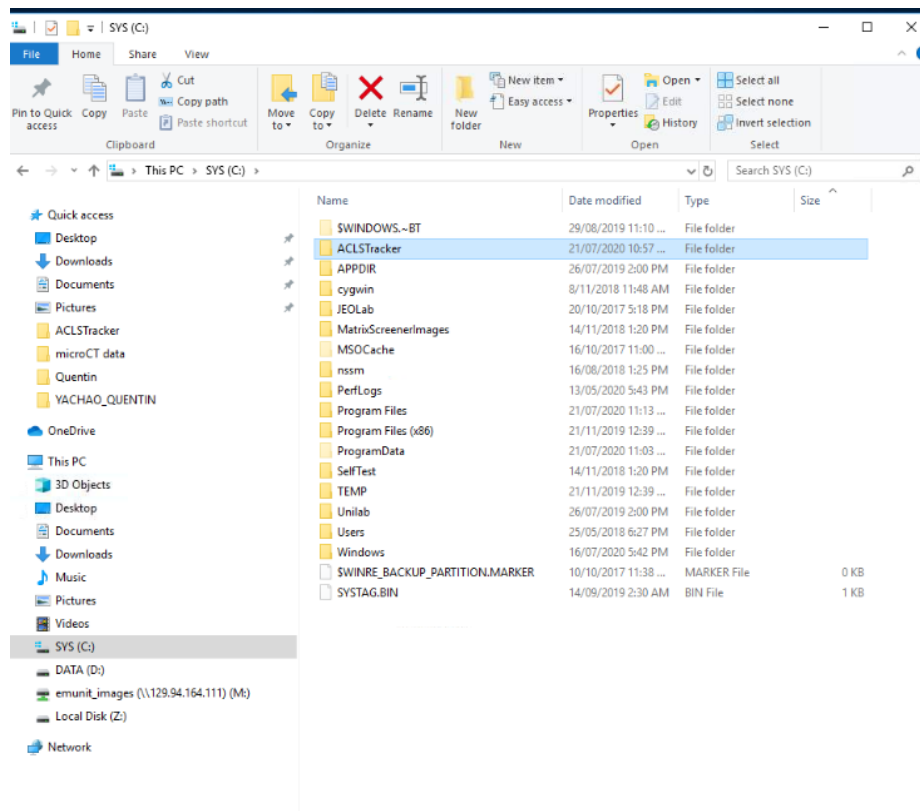
## 6. ACLS Tracker Server

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.

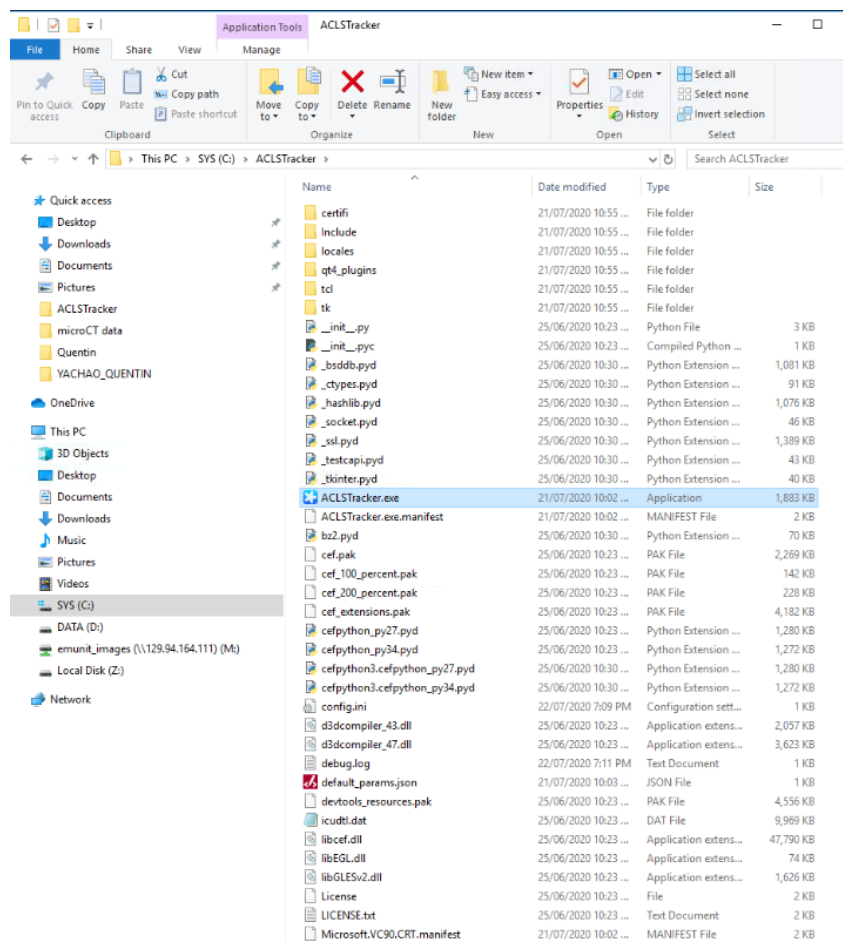
## 7. Tracker Installation

ACLS tracker can be downloaded with the dedicated download link provided by ACLS team. Please contact ACLS team if you want to try out.

- 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.







- Create a shortcut to the desktop

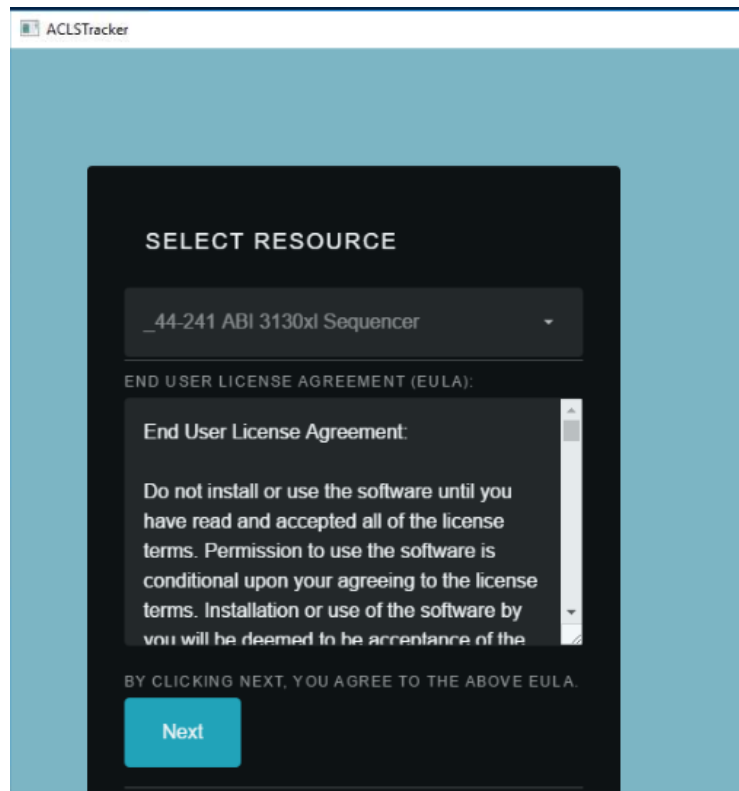


- Set up ACLS tracker as the startup program app.
  1. Press START + R to open the Windows Run window.
  2. Type in "shell:startup" and press OK.

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.



- That's it. Tracker is ready to run.

## 8. 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.

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.

## 9. Frequently Asked Questions

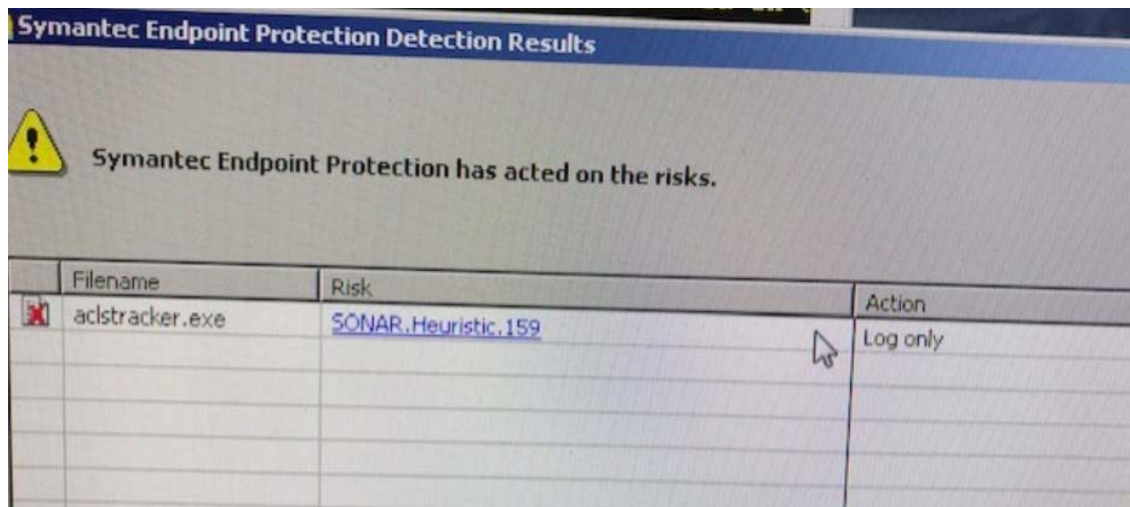
Tracker can't connect to the ACLS tracker server, why?

Answer:

There are a number of causes for that as followings:

- Loss of network
- ACLS server down
- ACLS server reject tracker request due to the wrong Host ID setting in tracker configuration file
- Firewall of network

My antivirus software says the tracker is a virus.



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.

For technical details for why this happens, refer the following link about PyInstaller, the compiler used by this application:

<https://github.com/pyinstaller/pyinstaller/issues/2501>

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

Answer:

See Section 8: 'Disable Task Manager for Windows 7 and Windows 10'