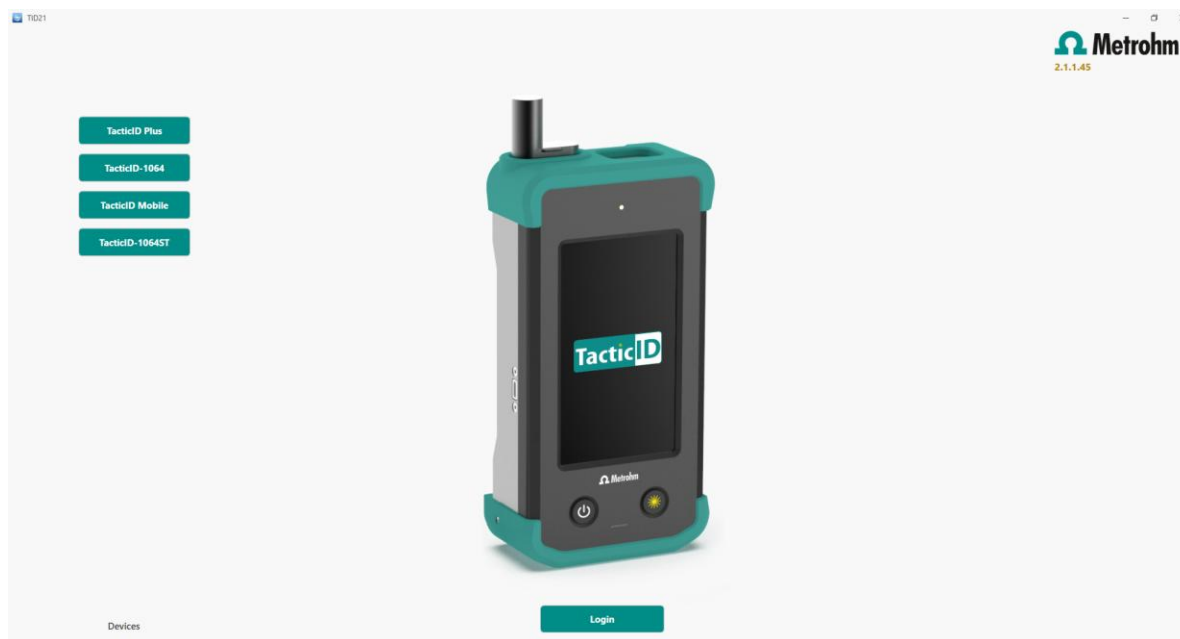


# TID21 Tutorial



## Contents

Contents .....	2
TID21 Installation Pre-requisites .....	4
a. Scope and Released Software Versions.....	4
b. Minimum PC System Requirement .....	4
c. Operating System Supported .....	5
d. Windows Firewall Configurations .....	5
Allow a program through firewall .....	5
Windows Firewall Inbound Rule Configuration .....	6
Installation and Configuration.....	11
a. Uninstall previous versions TID21, TID Plus, TID EX Software.....	11
b. Installing TID21 2.1.X.XX .....	11
c. First time Setup and Configuration .....	18
Start Up .....	18
First-time Setup.....	19
Configuration.....	20
First Time Connecting a Device .....	21
Sign into device in TID21 .....	24
First time synchronization .....	25
Restore an Existing MySQL Database.....	28
Troubleshooting Guide (For IT professionals Only).....	29
a. Device tab is greyed out for ITADMIN login .....	29
b. Device Doesn't show up in the Device Group.....	35
c. Failure to set IP address/connect device after click "Check USB" .....	35
d. Failure to Connect to the device using USB .....	36
e. Failure in getting Library information.....	37
f. ITADMIN password reset.....	37
User Manual.....	38
a. Device.....	38

b.	Sync .....	39
c.	Update .....	39
	Update TOS .....	39
	Update Library .....	40
	Import Library .....	41
d.	Record .....	42
	Export Records .....	43
	Record Reports .....	43
e.	Library .....	47
	Chemical Info .....	48
	Transfer .....	49
	Regroup .....	50
	Export .....	53
f.	Performance .....	54
g.	Account .....	56
h.	Settings .....	57
	About .....	57
	General .....	57
	Report Logos .....	58
i.	Filtering and Searching .....	59
j.	IT Login .....	61
	ITADMIN .....	61
	Backup & Restore .....	62

## TID21 Installation Pre-requisites

### a. Scope and Released Software Versions

This installation and setup guide details the intended installation, configuration, and operation of below software version:

- **TID21 2.1.1.45** as installed on the PC

The TID21 2.1.1.45 version supports the following instrument and their embedded software versions:

- |                                    |                                  |
|------------------------------------|----------------------------------|
| • TactiID-1064 ST                  | – TOX_XM v2.1.2105 or latest     |
| • TactiID Mobile                   | – TOS_XM v2.1.1371 or latest     |
| • TactiID-1064/ST (BWS492-1064 ST) | – TOS_1064 v2.01.227.0 or latest |
| • TactiID Plus                     | – TOS_Plus v2.01.227.0 or latest |

The TID21 v2.1.1.x version also supports MySQL Data migrations from these PC software versions:

- |            |             |
|------------|-------------|
| • TID21    | v1.01.78.1  |
| • TID Plus | v2.77.22    |
| • TID EX   | v2.01.77.22 |

To ensure compatibility for software operation, you must use matching versions of TID21 on the PC and TOS on the device as indicated above or indicated in the Release Note.

### b. Minimum PC System Requirement

Meets or exceeds the System Requirements for your PC's Operating System respectively:

- Processor: 2GHz or faster
- RAM: 2GB or more
- Hard disk space: 2GB available or more\*

\* Excluding additional hard disk space required to store data generated by the application.

### c. Operating System Supported

The following operating systems have been verified compatible with this software:

Windows 11 (64-bit)

---

#### *Important Notice*

*The user must have Windows administrative rights on the computer with the TacticID series instrument. After installation is completed, the user does not necessarily need Windows administrative account to run the software.*

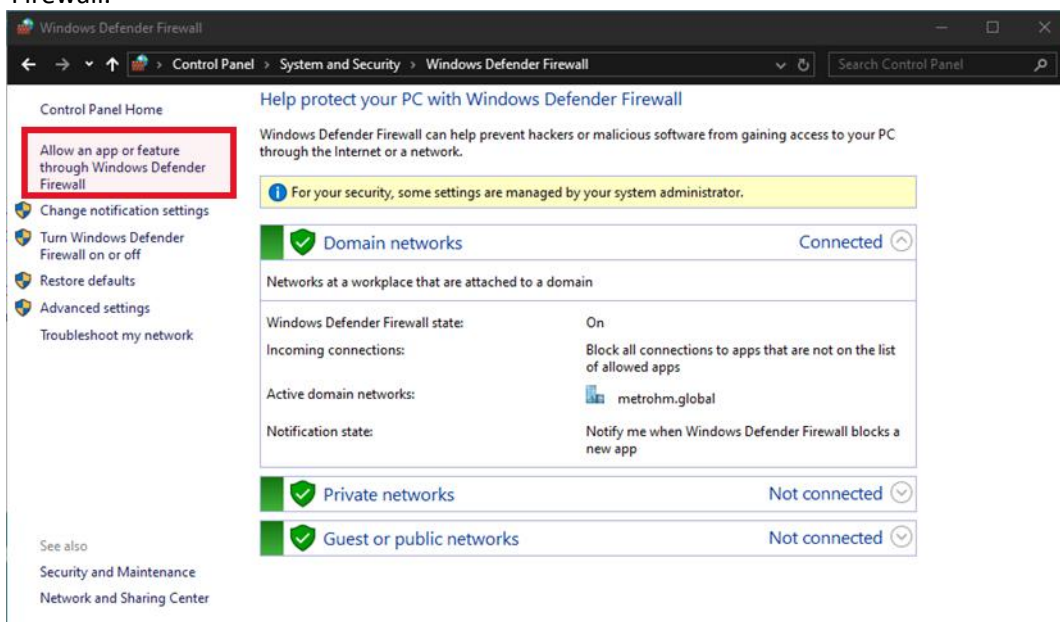
*To ensure compatibility for software operation, user must use matching versions of TID21 on the PC and TOS on the device as indicated in Installation Guide or in Release Note.*

---

### d. Windows Firewall Configurations

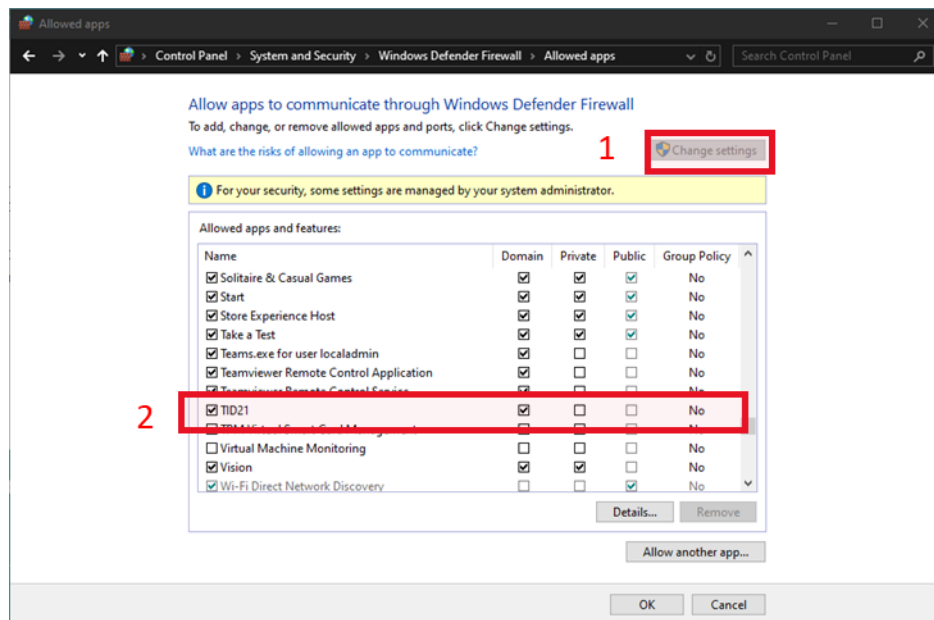
#### *Allow a program through firewall*

1. Open Windows Firewall in Control Panel. Click on Allow a program or feature through Windows Firewall.



- The following program path needs to be granted both private and domain access. It should show up as TID21 if TID21 is installed.

C:\Program Files (x86)\BWTEK\TID21\TID\TID21 Client.exe



NOTE: In a scenario where “TID21” is not listed, the program will need to be added manually. Click "Allow another app". Find the program in the following directory: “C:\Program Files (x86)\BWTEK\TID21\TID\TID21 Client.exe”. Click Add then follow step 2 above.

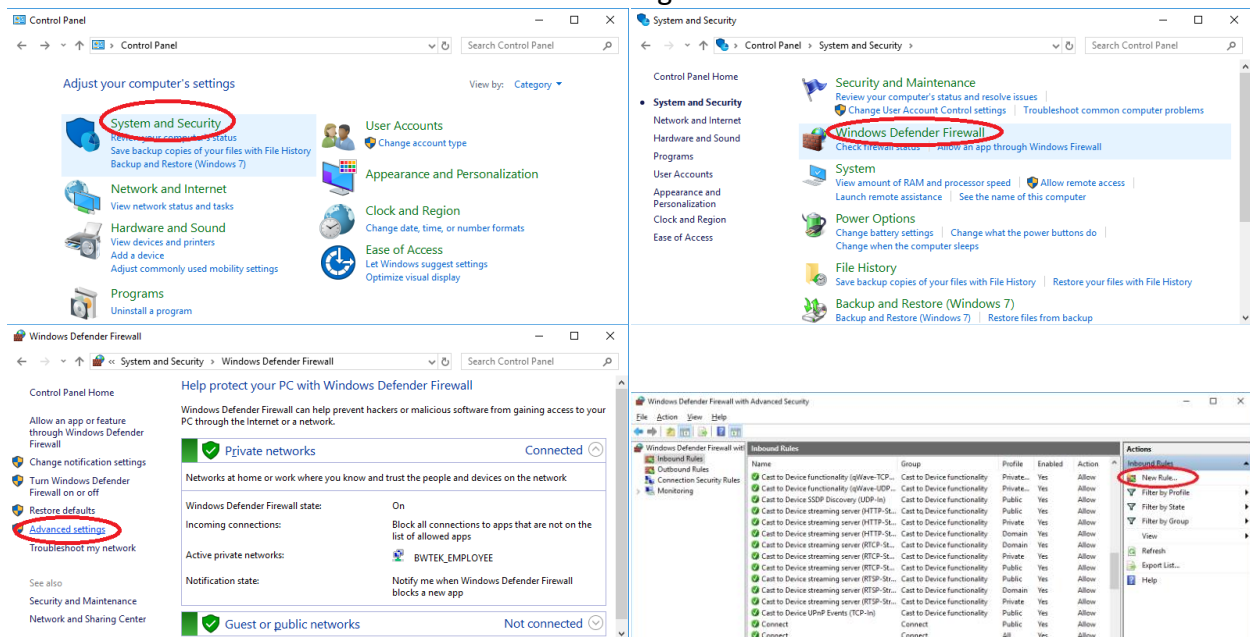
### Windows Firewall Inbound Rule Configuration

In order for the device to be recognized and connected with PC, these firewall inbound rules must be enabled, including:

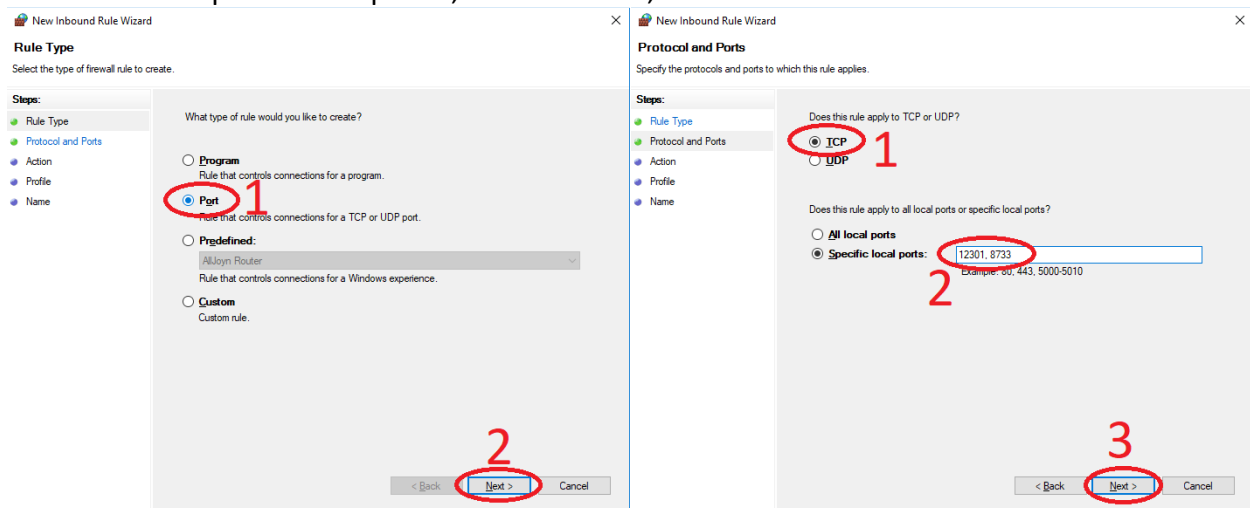
TacticID Mobile: TCP port: 22101, 22102, 12501, 8735  
UDP port: 12502, 12503  
TacticID-1064/ST: TCP port: 12301, 8733  
UDP port: 12302, 12303  
TacticID Plus: TCP port: 12201, 8732  
UDP port: 12202, 12203

Here is an example of how to setup Inbound Rules for TacticID-1064ST:

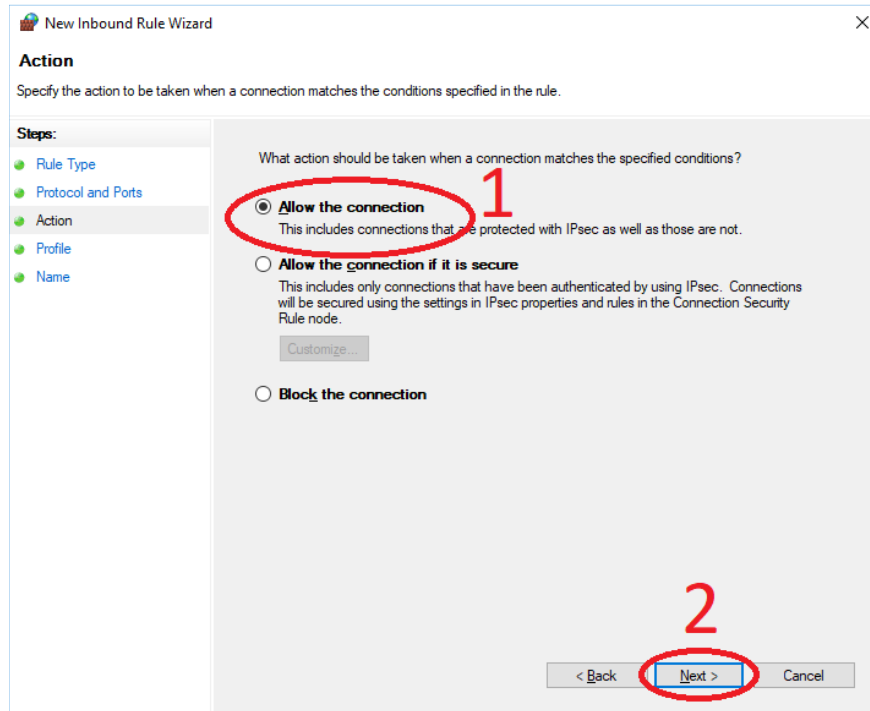
1. Navigate to “Control Panel” (Category View) -> “System and Security” -> “Windows Defender Firewall” -> “Advanced settings” -> “Inbound Rules” -> “New Rule”.



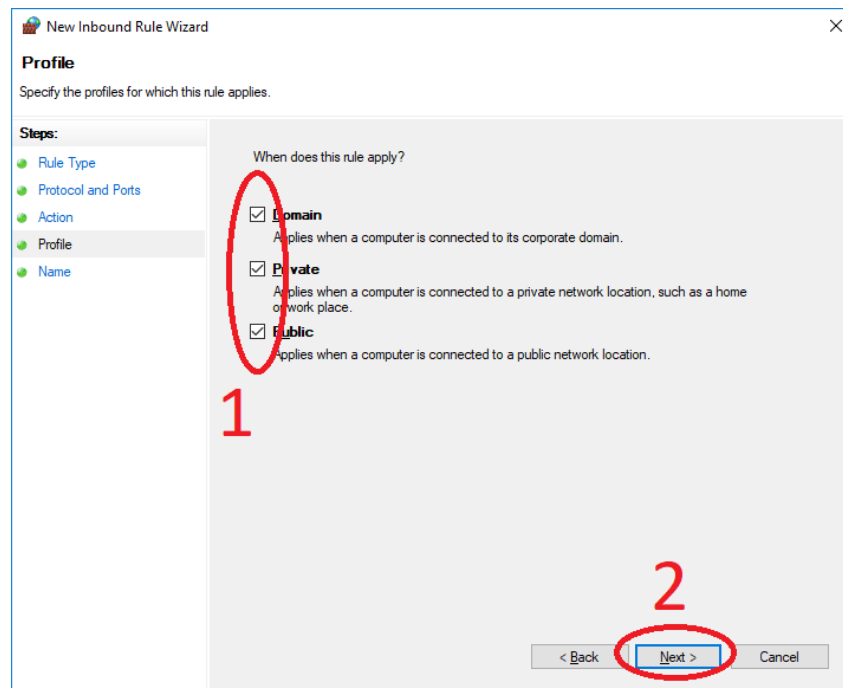
2. “Rule Type”, select “Port” and click Next.  
“Protocol and Ports”: choose “TCP”.  
In “Specific local ports”, enter: “12301, 8733” and click Next.



3. “Action”: choose “Allow the connection” and click Next.



4. “Profile”: check “Domain”, “Private”, and “Public” and click Next.

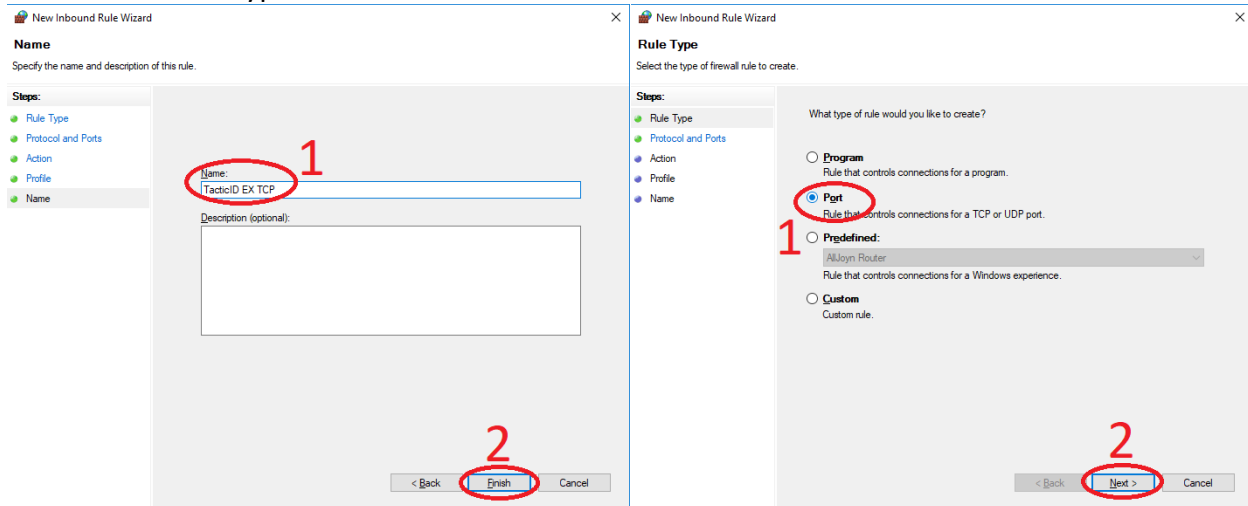




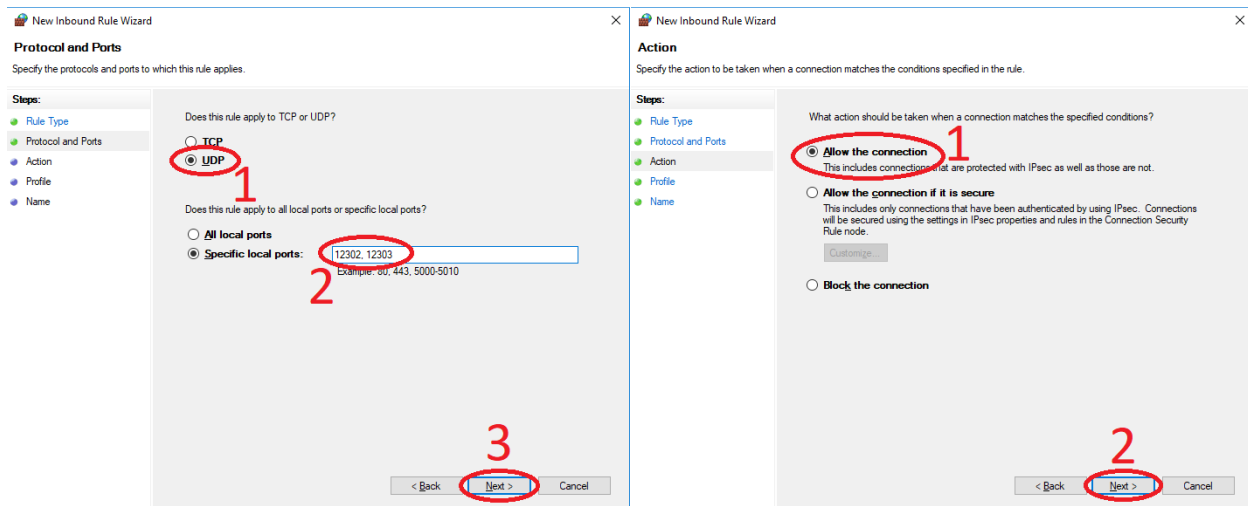


Metrohm Spectro, Inc.  
313 Enterprise Dr  
Plainsboro Township, NJ 08536  
(732) 230-1601  
[www.metrohm.com](http://www.metrohm.com)

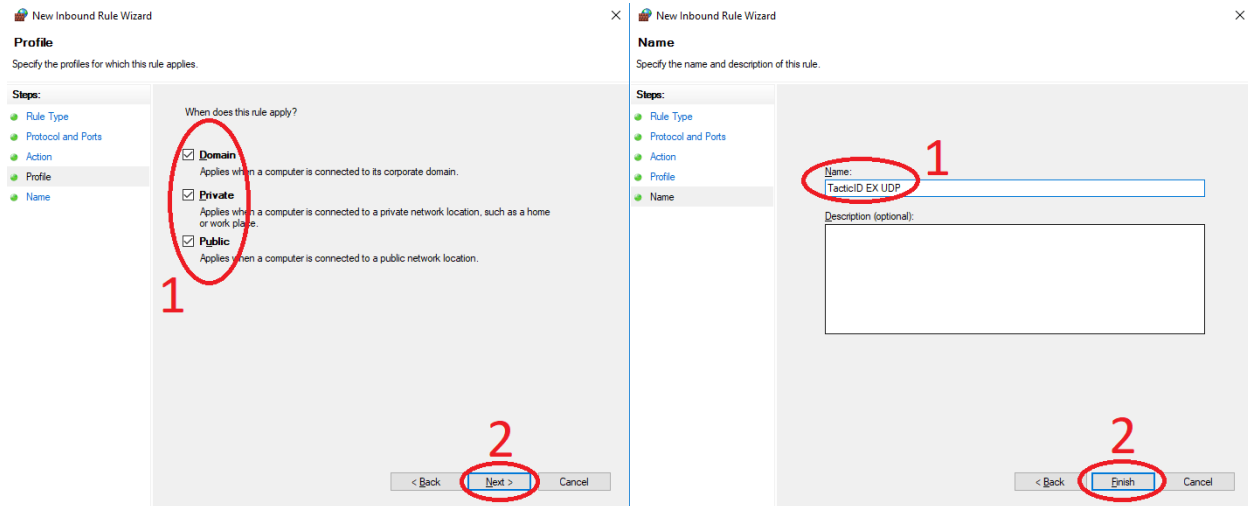
5. "Name": use name "TacticID TCP" and click Finish.  
Then "Create" another "New Rule".  
"Rule Type: select "Port" and click Next.



6. "Protocol and Ports": choose "UDP". In "Specific local ports", enter: "12302, 12303". Click Next.



7. “Profile”: check “Domain”, “Private”, “Public” and click Next. “Name”: use name “TacticID UDP” and click Finish.



## Installation and Configuration

### a. Uninstall previous versions TID21, TID Plus, TID EX Software

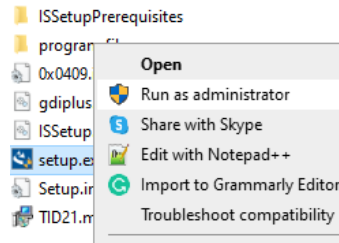
If a prior TID21 v1.x.x.x version, or any versions of TID Plus, TID EX has been installed on the computer and the user wishes to update to TID21 v2.1.1.x, complete the steps below.

1. Uninstall the existing version of TID21, TID Plus, TID EX.
2. **Do not uninstall MySQL.** Data migration is possible from MySQL database into the new SQL Express database installed in TID 21 v2.1.1.x. All new data, regardless of data migration from MySQL will be saved in the new SQL Express database.

### b. Installing TID21 2.1.X.XX

1. Locate the installation folder for the new version of TID21. Unzip the folder then open the TID21\_X.X.X.X folder.

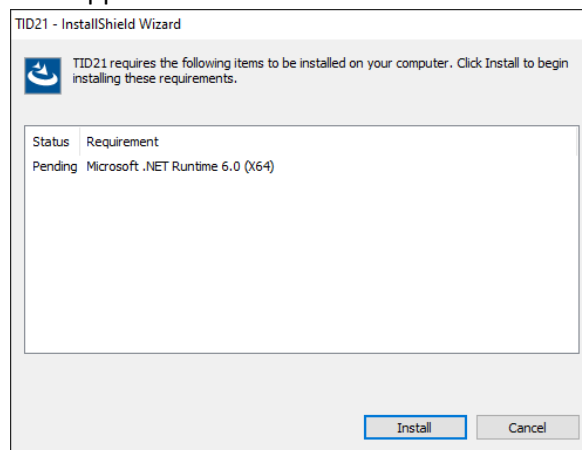
2. Right click the setup.exe application and select "Run as an Administrator".



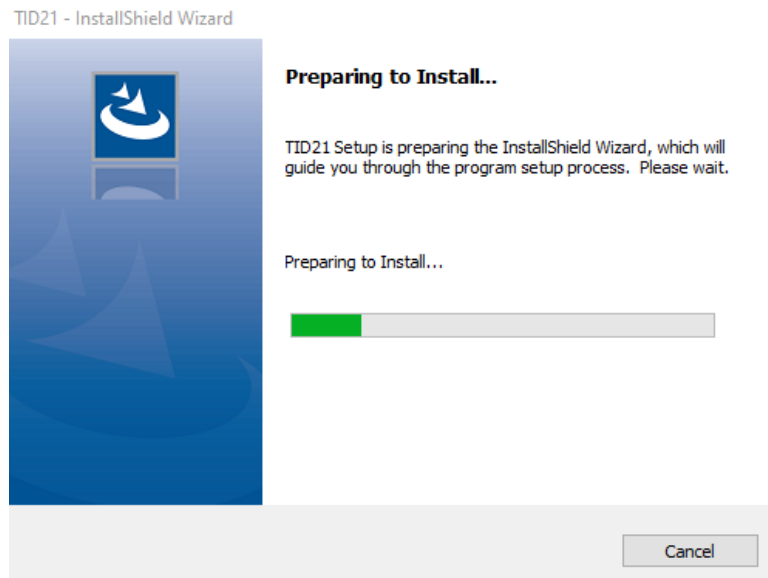
3. If installation is blocked by Microsoft Defender, please click the More info and the button "Run anyway" to start the installation



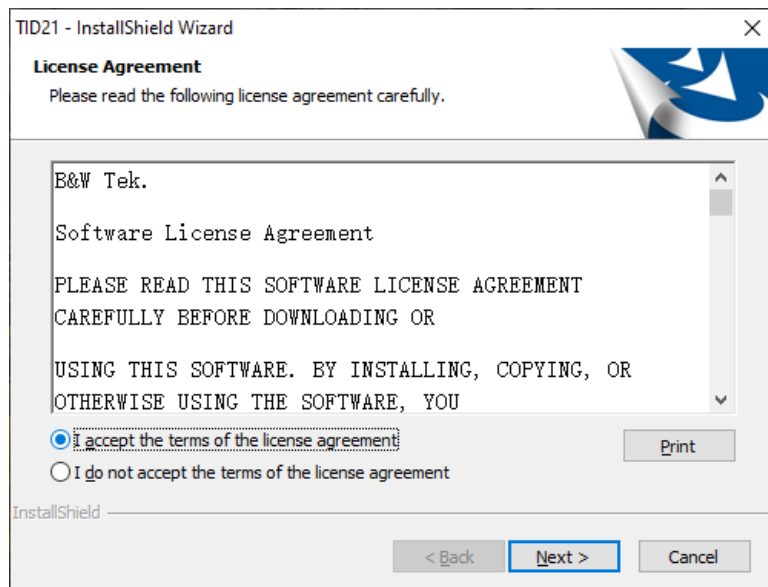
4. The Install Shield Wizard will appear. Press Install.



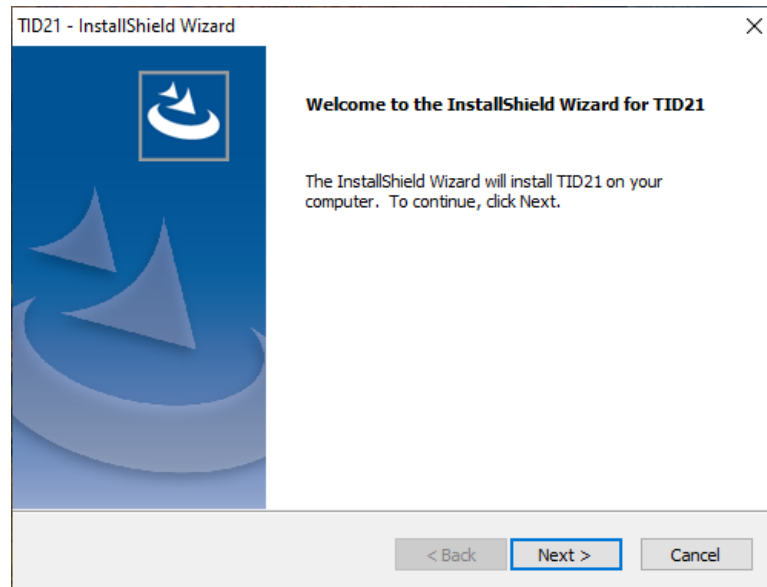
5. The installer will begin preparing to install TID21.



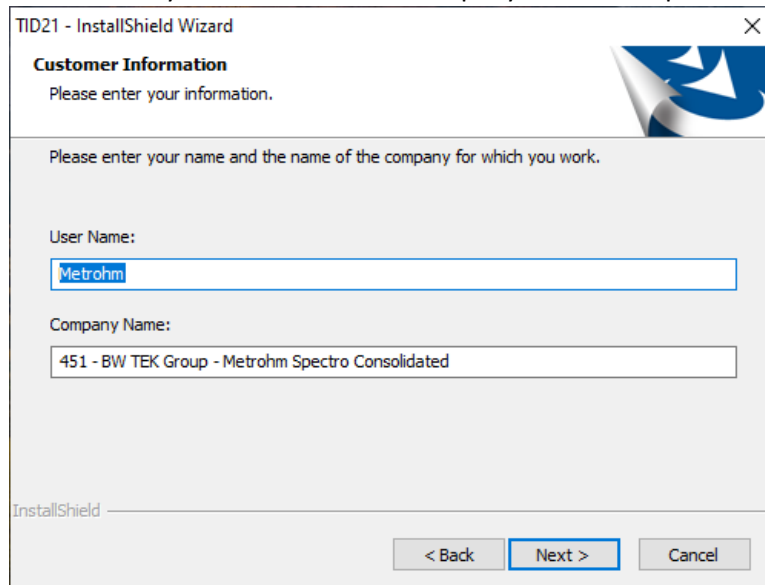
6. This license agreement must be accepted for TID21 to be installed. Choose 'I accept the terms...' and press Next to continue.



7. Press Next to continue.

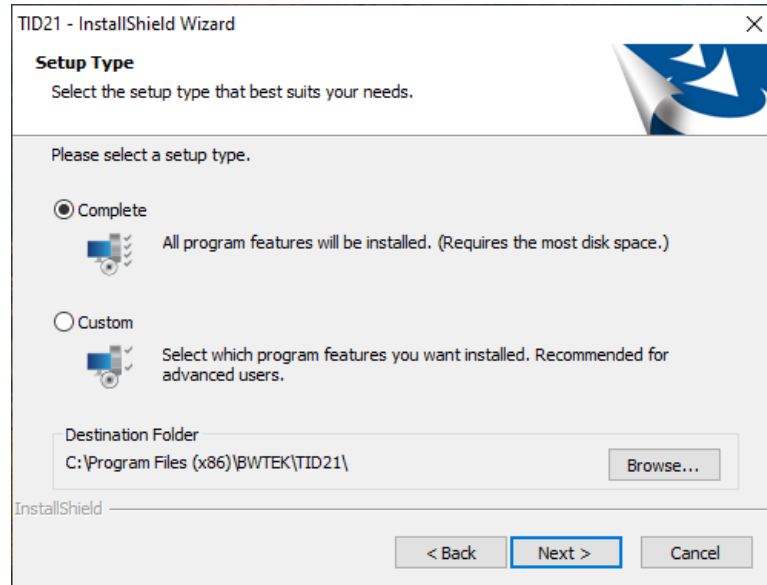


8. Customer Information: enter your Username and Company Name then press Next to continue.

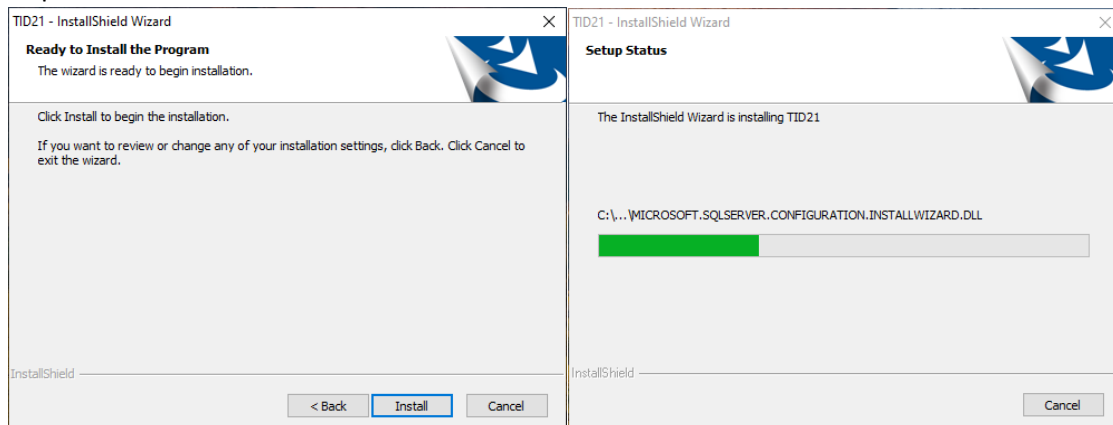


The screenshot shows the 'TID21 - InstallShield Wizard' window at the 'Customer Information' step. The title is 'Customer Information' with the instruction 'Please enter your information.' Below this, it says 'Please enter your name and the name of the company for which you work.' There are two text input fields: 'User Name:' with 'Metrohm' entered, and 'Company Name:' with '451 - BW TEK Group - Metrohm Spectro Consolidated' entered. At the bottom are three buttons: '< Back', 'Next >' (highlighted with a blue border), and 'Cancel'.

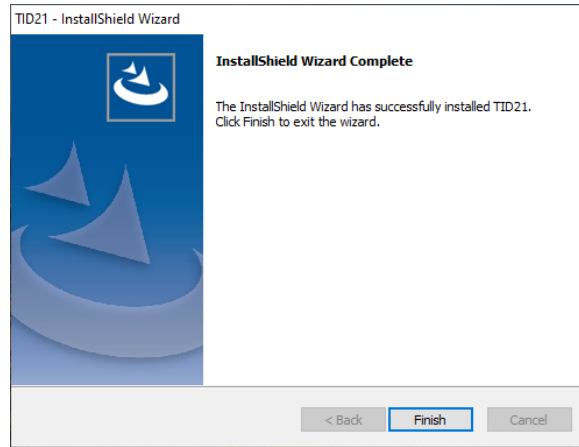
9. For Setup Type, always choose Complete. We do not recommend performing a custom setup. Press Next to continue.



10. Finally, to install TID21, press Install. It may take a minute or two to install, the progress bar will complete.



11. Once TID21 has been installed, a completion message will appear. Press Finish to close it.



12. A Windows terminal will appear which will install the TID21 Windows Service  
At the bottom it instructs the user to 'Press any key to continue...'  
Press any key to close this window.

```
C:\Windows\system32\cmd.exe
[SC] OpenService FAILED 1060:
The specified service does not exist as an installed service.

C:\Program Files (x86)\BWTEK\TID21>sc create "TID21 Service" binpath="C:\Program Files (x86)\BWTEK\TID21\TID\WindowsWork
erService.exe" displayName="TID21 Service"
[SC] CreateService SUCCESS

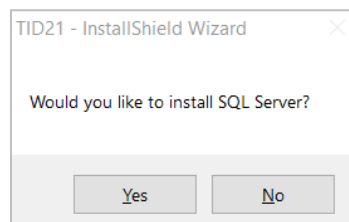
C:\Program Files (x86)\BWTEK\TID21>sc description "TID21 Service" "TID21 Service"
[SC] ChangeServiceConfig2 SUCCESS

C:\Program Files (x86)\BWTEK\TID21>sc config "TID21 Service" start= auto
[SC] ChangeServiceConfig SUCCESS

C:\Program Files (x86)\BWTEK\TID21>sc start "TID21 Service"

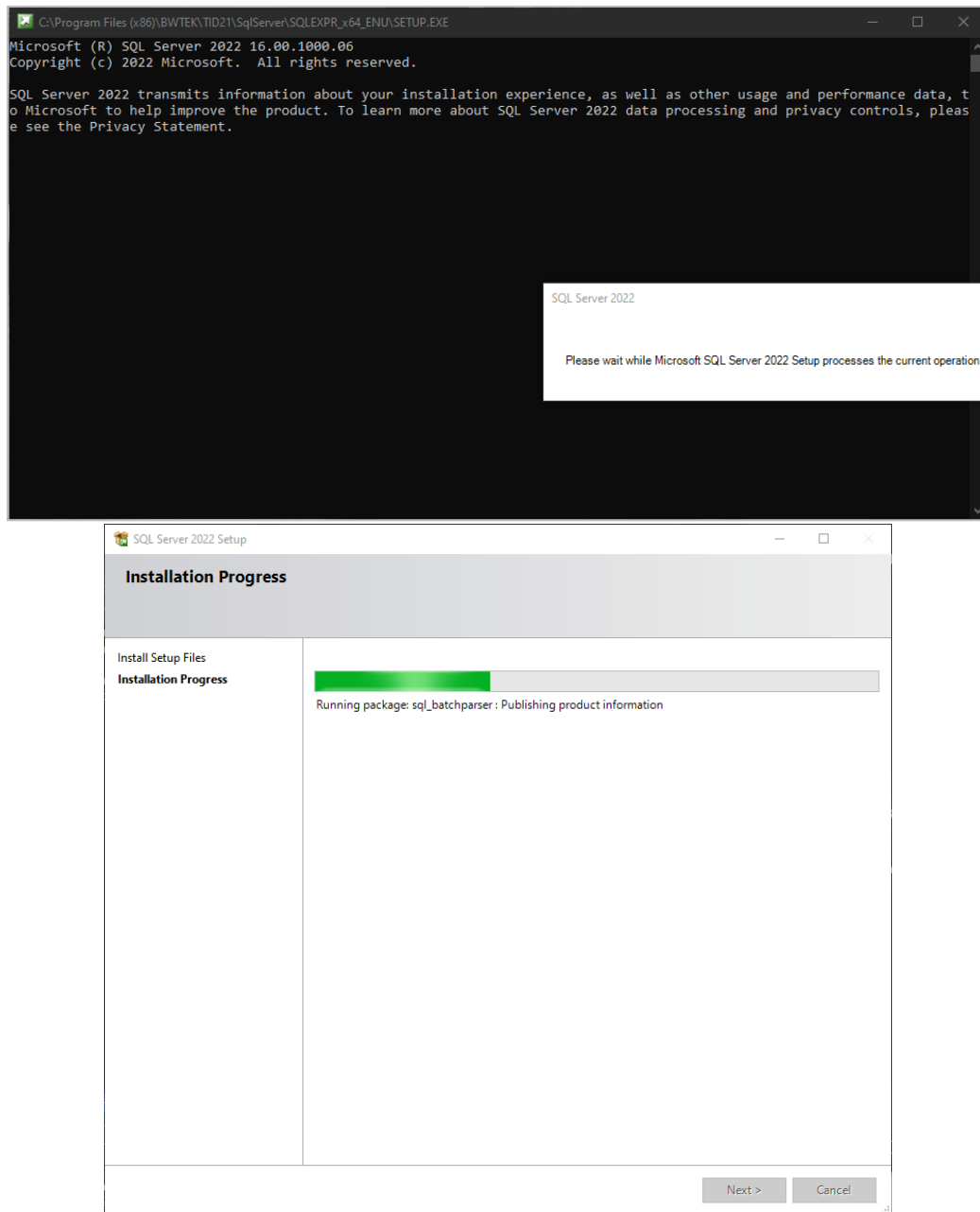
SERVICE_NAME: TID21 Service
        TYPE               : 10  WIN32_OWN_PROCESS
        STATE                : 2   START_PENDING
                           (NOT_STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN)
        WIN32_EXIT_CODE      : 0    (0x0)
        SERVICE_EXIT_CODE   : 0    (0x0)
        CHECKPOINT          : 0x0
        WAIT_HINT            : 0x7d0
        PID                : 6672
        FLAGS                :
C:\Program Files (x86)\BWTEK\TID21>pause
Press any key to continue . . .
```

13. If Microsoft SQL Server is not installed, the software will prompt the user to install SQL Server Express version 2022 by default. Choose Yes at this message popup. The installation should finish automatically.

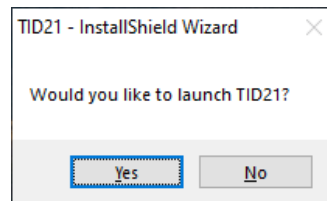


*This dialog box will install SQL 2022 automatically.*





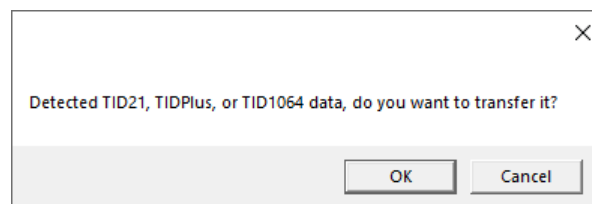
14. The user is asked if they would like to launch TID21. The user can launch TID21 at any time using the desktop shortcut.



### c. First time Setup and Configuration

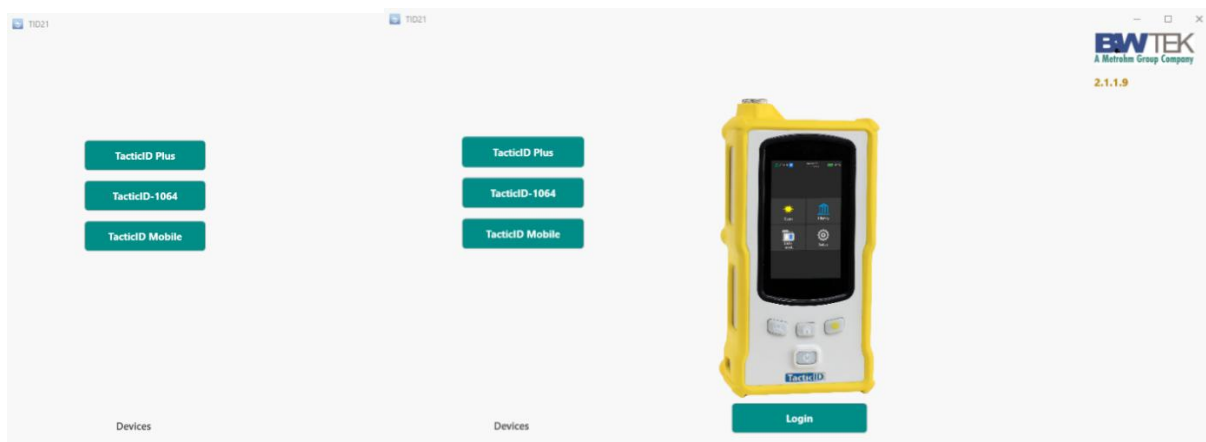
#### Start Up

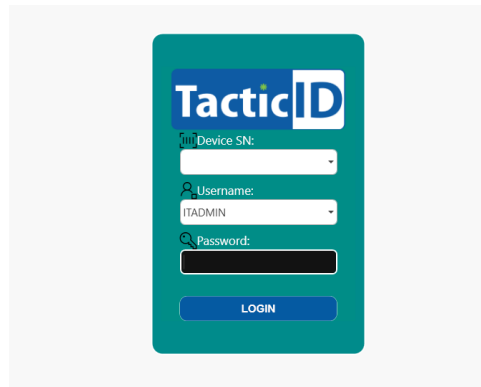
After installation completes and TID21 is opened for the first time, if there is an existing MySQL Server database from a previous version of TID21, TID Plus, or TID1064, TID21 will automatically detect it and ask the user if they would like to transfer it to the new version of TID21.



If the user presses OK, the data from MySQL databases will be copied into the new SQL database. If the user presses Cancel, the data will not be transferred but the user may later. In either case, the original data in MySQL Database will be kept and not removed.

When TID21 is launched, the screen shows the options for which branch of the database to log into based on TacticID model you have. Press the green button of the model you wish to login to. An icon of that device will appear on screen. Press on the Login button to enter the login page.





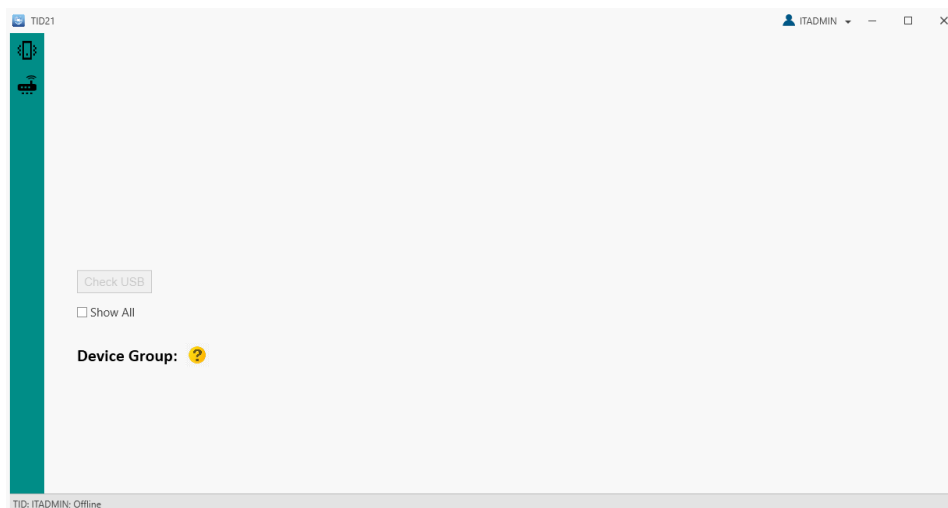
To edit which options appear on the initial screen, click the Devices menu, which is located on the bottom left, then check or uncheck device models to appear. All are selected by default



### First-time Setup

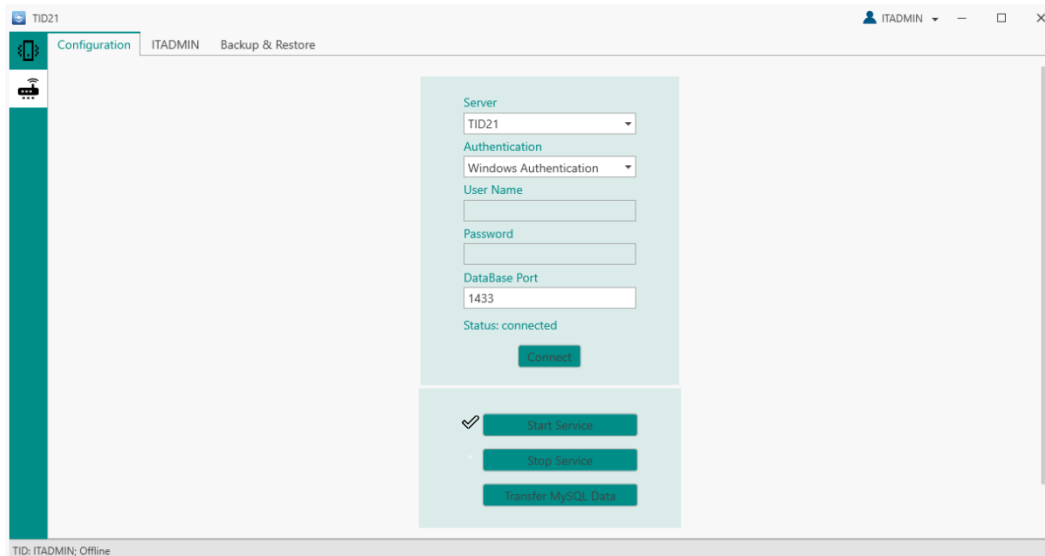
For first time users without previous MySQL data, select the ITADMIN account from the Username drop down list and enter default password 999999.

TID21 may open to the Device page first after login. The image below shows this page without a device connected.



TID21 may open the Configuration page first, which indicates additional action needs to be taken before login and synchronization to a device would be successful.

## Configuration



The Configuration tab contains controls for setting up SQL Server Express in the top section.

The bottom section has controls for starting and stopping the database service, and for transferring existing MySQL Data.

The default server name is Plainsboro, which is automatically set up by the TID21 Installer for a new installation. If there is an existing database, it will appear in the list.

---

*SQL Server 2022 must be used with TID21, it has been verified to perform as expected.*

*It is not advised to use TID21 with SQL Server 2019*

---

Under Server, select the Plainsboro server (if new installation), or choose your existing server name. For Authentication, select Windows Authentication, then press Connect. This will establish connection to the selected server and if necessary setup the database within that server.

The "status: connected" messages indicates a successful connection to the selected server.

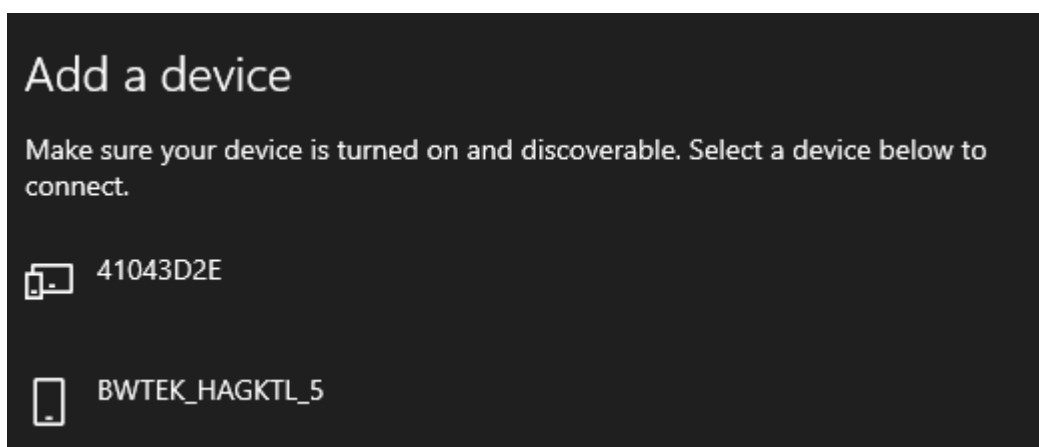
Next press Stop Service. After a checkmark appears next to Stop Service, press Start Service. If successful, the Start Service button will have a checkmark next to it. The Device page will become selectable if it was not able to be initially.

#### *First Time Connecting a Device*

On the TactiClD device, go to Data Transfer screen and select the connection type. You can select either Wi-Fi, USB or Bluetooth.

**When using Wi-Fi**, the device and the PC must be connected to the same Wi-Fi network. The Wi-Fi network must support device to device sharing.

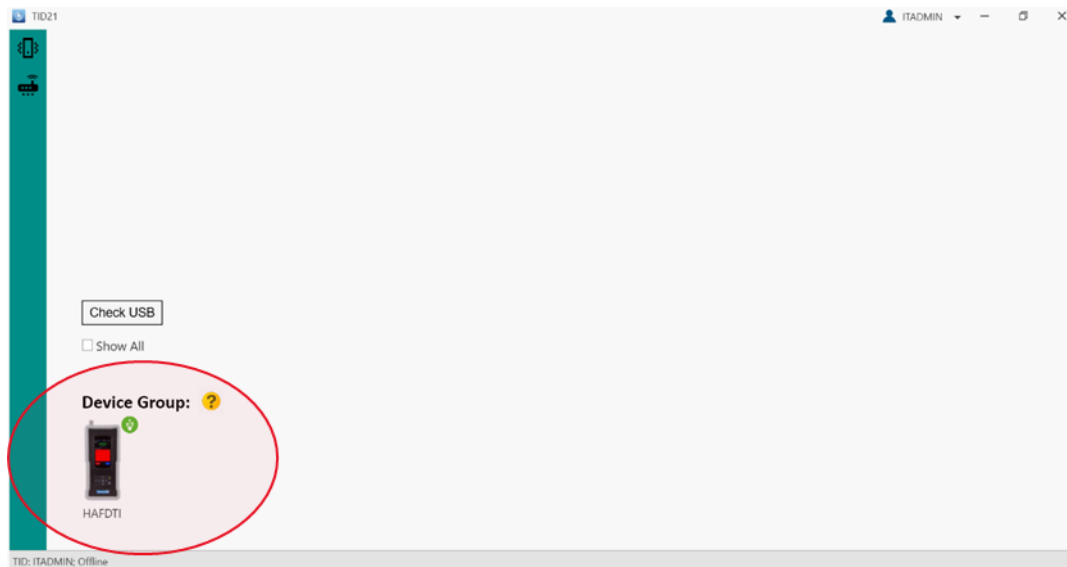
**When using Bluetooth connections:** In Windows go to Bluetooth and other devices, click "Add a device". Then the handheld TactiClD device should show up as a BWTEK\_XXXXXX with the corresponding serial number. Click on the device to connect.



You might see messages show up on device that requires you to pair with the PC. Click Yes to confirm. Once paired, you should see a "Paired" status under the Bluetooth device, then the device is ready to be connected with TID21.



It may take a few seconds for software to refresh the connection, and the device icon with correct SN will appear under Device Group:



When using USB, make sure the device is plugged into the PC. There are two different methods of USB connectivity depending on which device is connected:

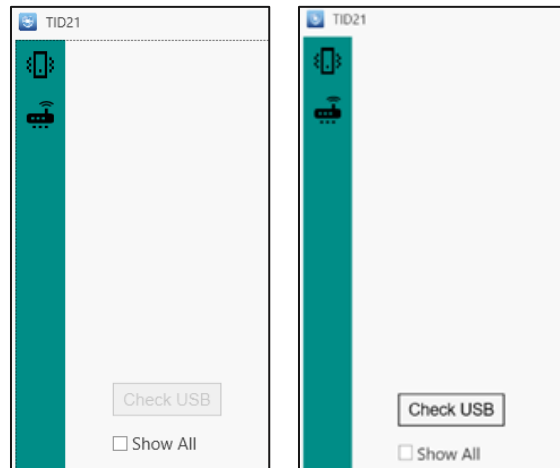
Device	TacticID-1064 ST	TacticID Mobile	TacticID Plus	TacticID-1064 (BWS492-1064/ST)
Driver	adb	adb	RNDIS gadget	RNDIS gadget
<Check USB> button available	No	No	Yes	Yes
IP Address must be properly setup	No	No	Yes	Yes

The TacticID-1064 ST and TacticID Mobile do not have a “Check USB” button in TID21. If you are connecting either of these devices, skip to **Sign into device in TID21**.

#### Setting up IP address and RNDIS driver:

The TacticID Plus and TacticID-1064 (BWS492-1064 and BWS492-1064ST) use the RNDIS driver and require the IP address on the device and at the USB port of the PC to be properly configured.

When trying to connect a TacticID Plus or TacticID-1064 (BWS492), TID21 will have a “Check USB” button.

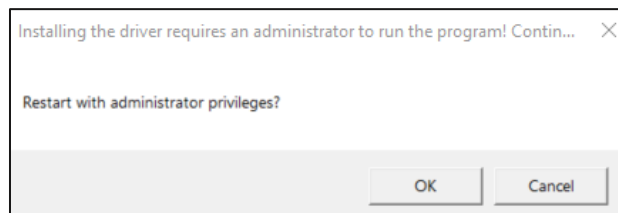


The “Check USB” button is enabled after connecting a TacticID Plus or TacticID-1064 to the PC. The device must be in Data Transfer mode.

---

*Clicking the “Check USB” button will set a pre-defined IP address to communicate with the TacticID Plus and TacticID-1064. After clicking this button, you do not need to adjust any IP Address settings on the device.*

*“Check USB” requires running TID21 with Administrator privileges on the PC. When selecting “Check USB”, TID21 will ask if you would like to restart the application in this mode:*

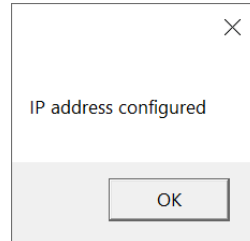


*After relaunching TID21 as administrator, select TacticID Plus or TacticID-1064ST again, and login as ITADMIN. You should then click “Check USB” again.*

---

If the user still cannot connect after clicking the “Check USB”, please see section C of the trouble shooting instructions.

If the IP address is set successfully, it will show the following message:

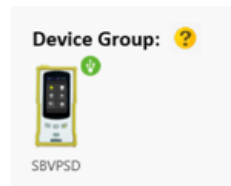


The user does not need to click "Check USB" after first time connection and if the same USB port is used.

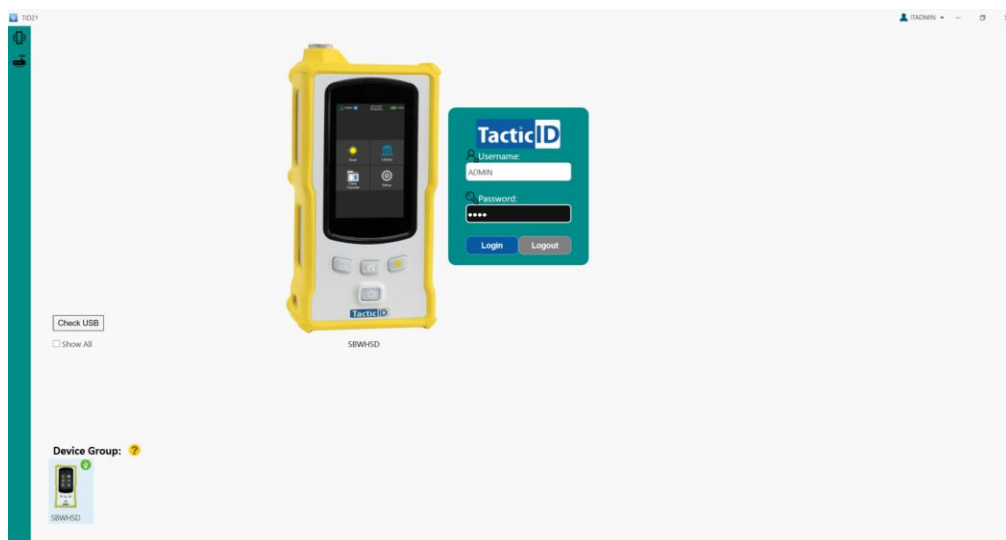
If you switch the USB port used on the PC to connect your device, you must press the "Check USB" button to reconfigure the new USB port with the proper driver and IP address.

#### *Sign into device in TID21*

Select the device to connect to by clicking the device icon under the device group.



In the Username and Password fields, enter the account information used to log into the TacticID device, then press Login.

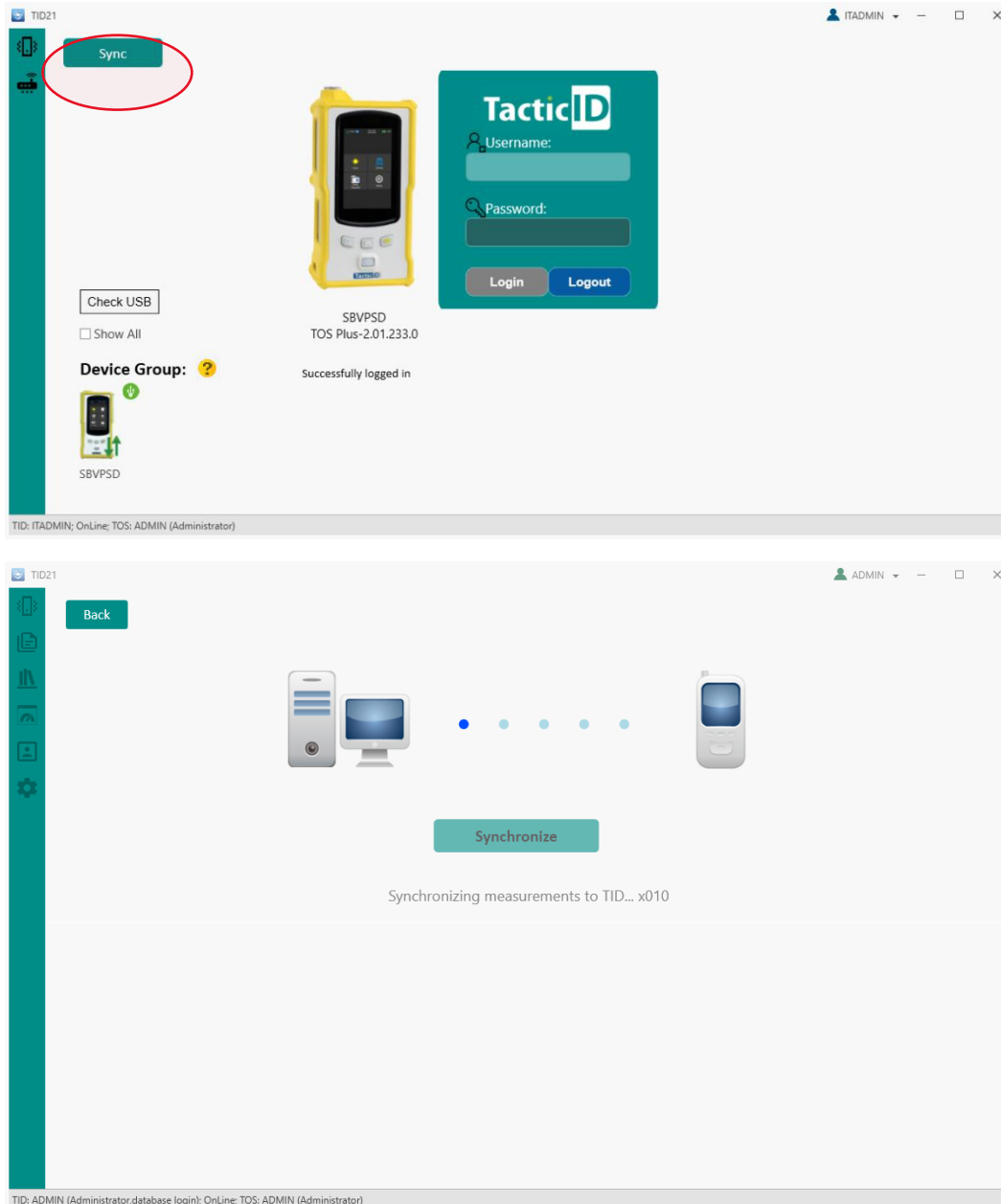


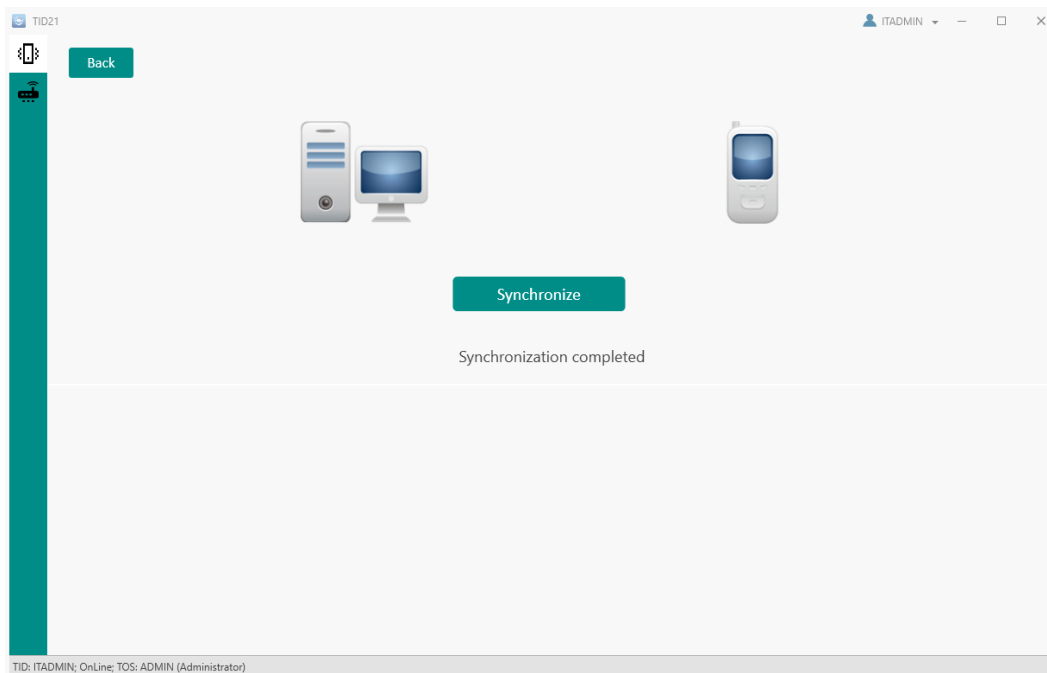
It will show two green arrows to indicate the device is connected, as well as a 'Successfully logged in' message.



### First time synchronization

Press the Sync button at the top left of the screen to begin synchronization.





Synchronization from the ITADMIN account will only synchronize user information.

After synchronization in ITADMIN account, you can use the login credentials from the device to login to TID21 to access the normal synchronization function, scan records, libraries, and other information.

To log out of ITADMIN, click the user icon at the top right and log out.

The Device SN should now appear in the drop-down. The user accounts from that device should be selectable in the username field. Login to an Administrator level account:

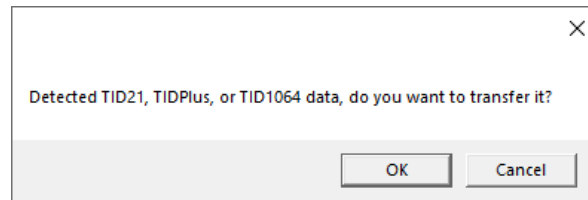


To view all devices currently connected to TID21, check the box for Show All. Instruments with names in red are connected but not compatible with the selected database type. Connection type is shown in the top right corner of device icon.

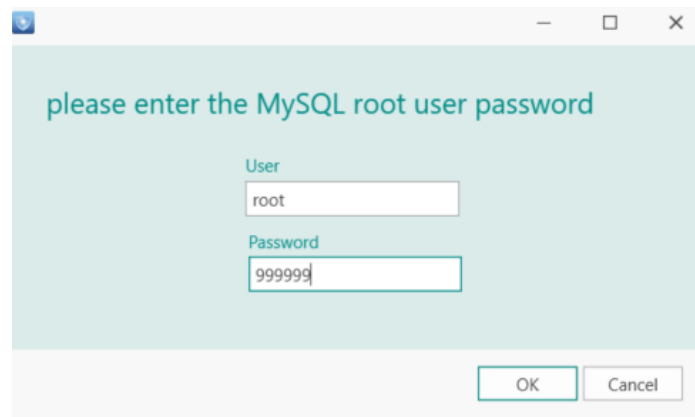


### Restore an Existing MySQL Database

Open the ITADMIN page. At the bottom of the page there is a button to Transfer MySQL Data which will bring up the 'Detected TID21, TIDPlus, or TID1064 data, do you want to transfer it?' dialogue below. Press OK to transfer data.



If an existing database is not detected, this option to Transfer MySQL Data will not be present. Input MySQL credentials to start the transfer.

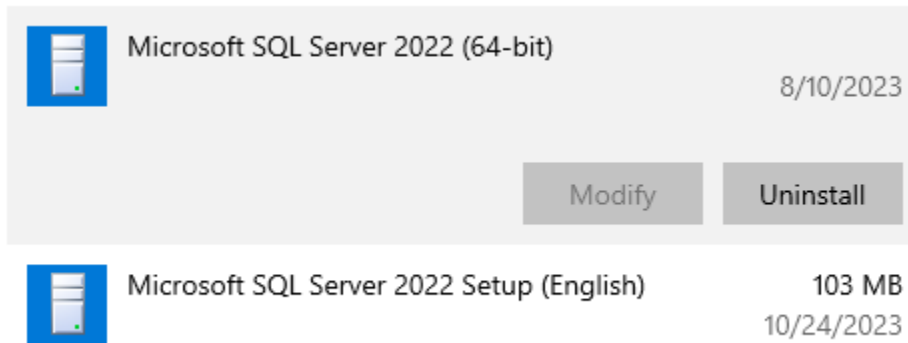


## Troubleshooting Guide (For IT professionals Only)

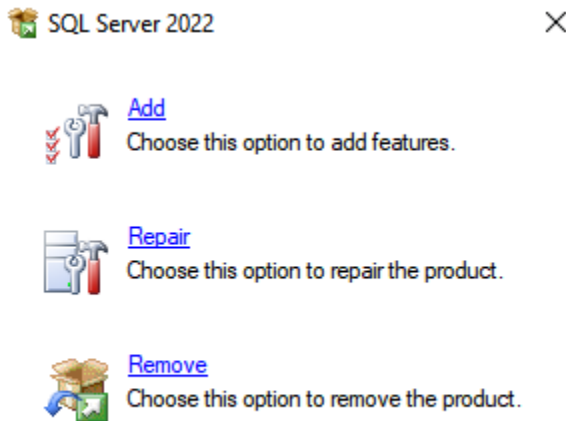
- a. Device tab is greyed out for ITADMIN login

This indicates the database or services are not configured or started correctly. Here is how to fix this problem.

1. From the PC's Control Panel, uninstall Microsoft SQL Server 2022 (64-bit) and Microsoft SQL Server 2022 Setup (English).



2. This will Open a setup kind of dialogue; choose Remove.



3. Select the instance “SQLEXPRESS” which host the TacticID data info. Click Next.

Remove SQL Server 2022

### Select Instance

Specify the instance of SQL Server to modify.

Global Rules  
**Select Instance**  
Select Features  
Feature Rules  
Ready to Remove  
Removal Progress  
Complete

Select the instance of SQL Server to remove. To remove shared features only, select "Remove shared features only" and then click next.

Instance to remove features from:

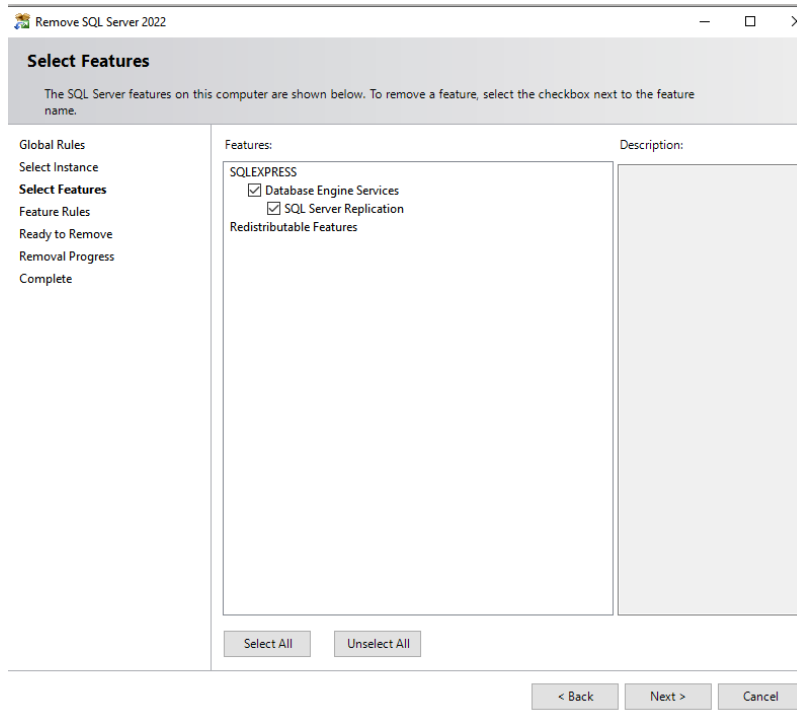
SQLEXPRESS

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
SQLEXPRESS	MSSQL16.SQLEXPRESS	SQLEngine,SQLEng...	Express	16.0.1105.1

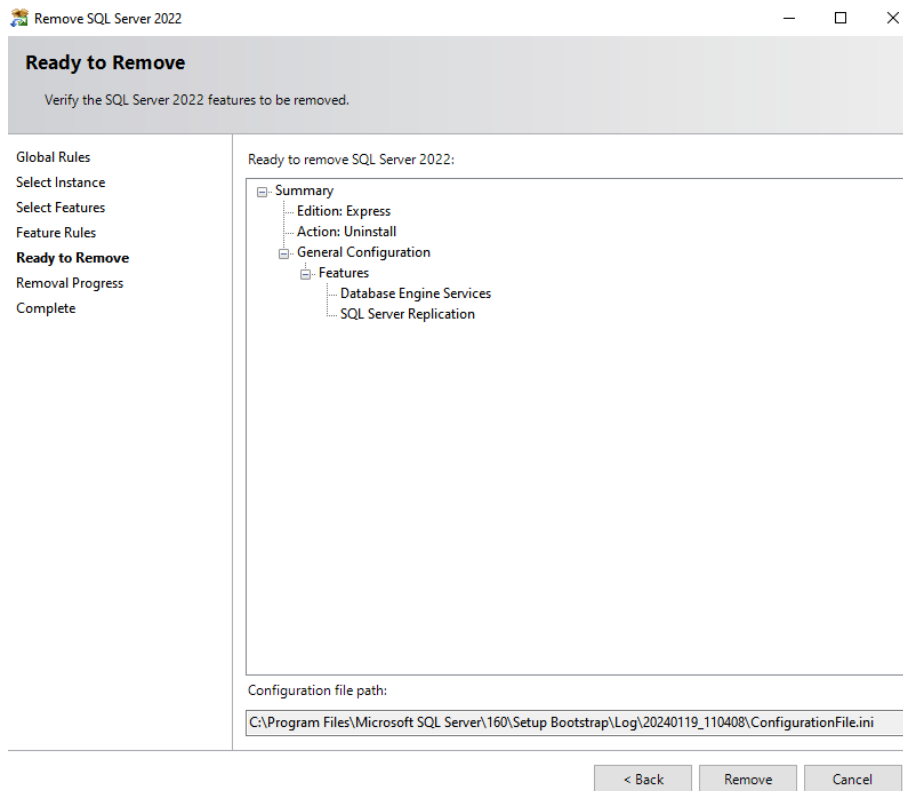
< Back   Next >   Cancel

4. Select Database Engine Services then click Next:

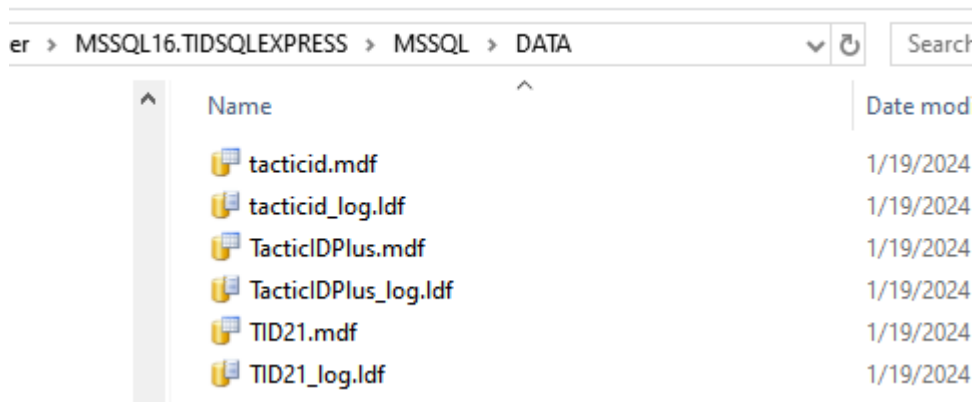


The screenshot shows the 'Remove SQL Server 2022' wizard window. The title bar reads 'Remove SQL Server 2022'. The main heading is 'Select Features'. Below the heading, a message states: 'The SQL Server features on this computer are shown below. To remove a feature, select the checkbox next to the feature name.' On the left, a vertical list of steps includes 'Global Rules', 'Select Instance', 'Select Features' (which is highlighted), 'Feature Rules', 'Ready to Remove', 'Removal Progress', and 'Complete'. The main area is divided into two columns: 'Features:' and 'Description:'. Under 'Features:', the following items are listed: 'SQLEXPRESS', 'Database Engine Services' (with a checked checkbox), 'SQL Server Replication' (with a checked checkbox), and 'Redistributable Features'. At the bottom of the 'Features:' column are two buttons: 'Select All' and 'Unselect All'. At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'.

5. Click Remove:



6. Go to C:\Program Files\Microsoft SQL Server\MSSQL16.SQLEXPRESS\MSSQL\DATA, delete all the mdf and ldf files that starts with "TacticiD" or "TID"



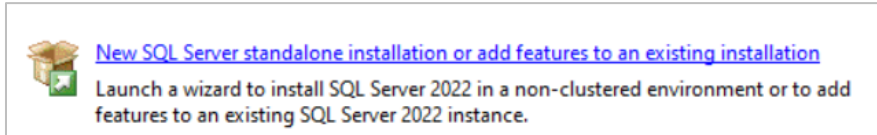
7. Next, re-install the SqlServer.

In the Installation folder path:

C:\program files (x86)\BWTEK\TID21\SqlServer\SQLEXP\_x64\_ENU

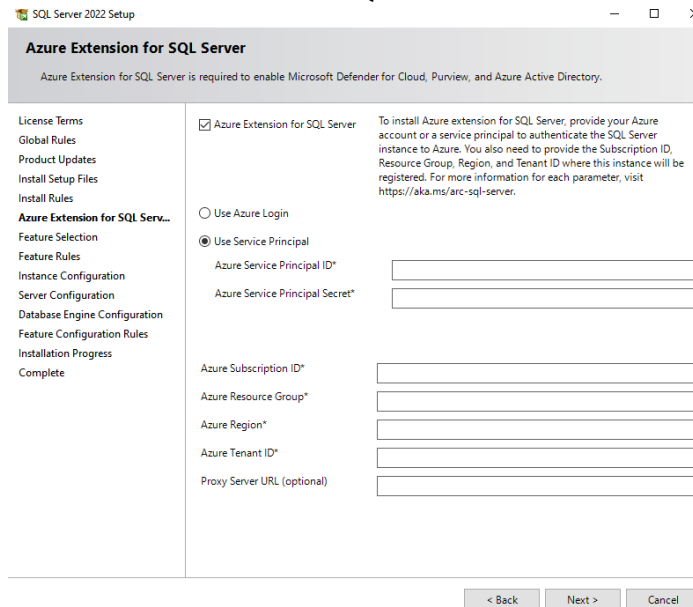


8. Run the SETUP application. Choose New SQL Server standalone installation, then follow the setup instructions.

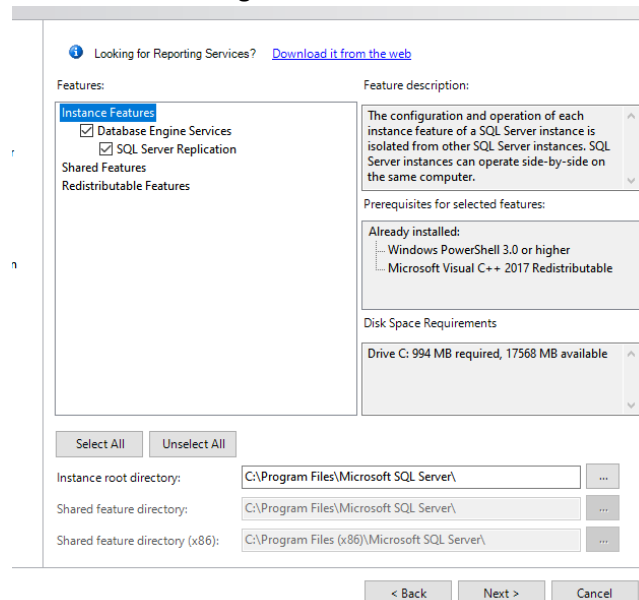


9. Follow the instructions step by step to install SQL Server instance. Here are the settings you might need to change:

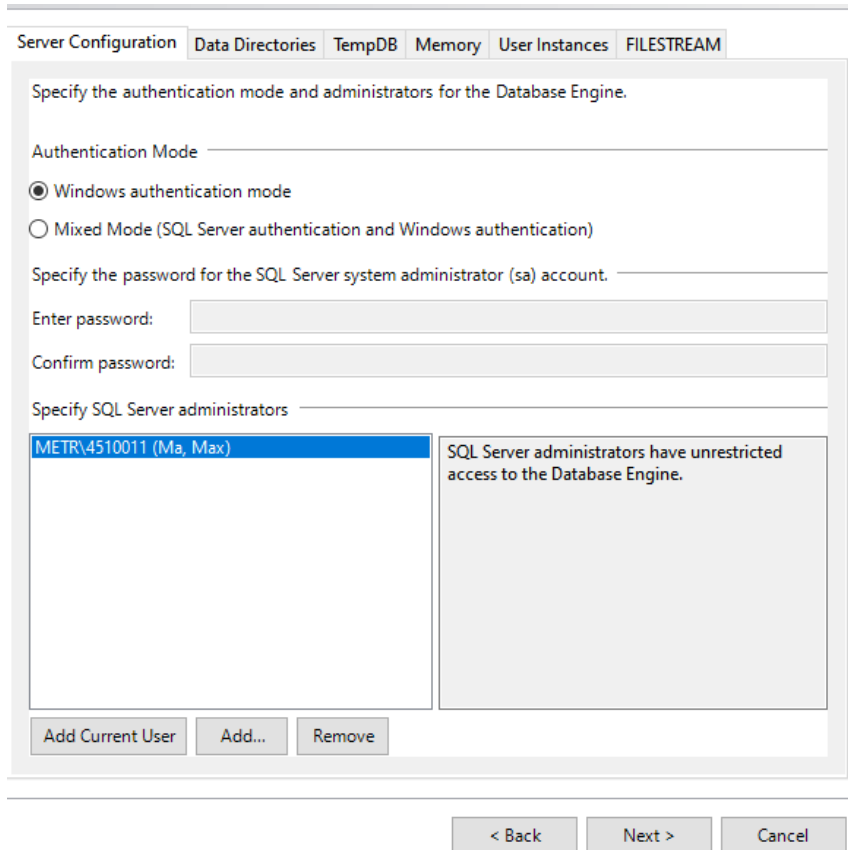
A. Disable Azure Extension for SQL Server.



B. Select Database Engine Services



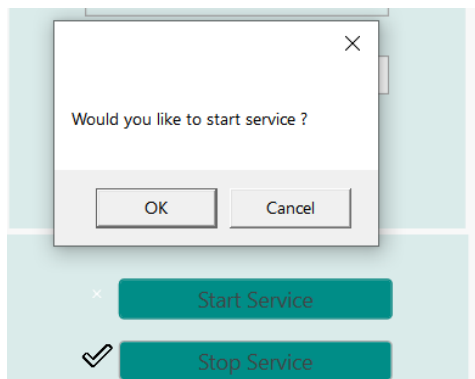
- C. Name the instance “SQLExpress” or your own choice. Choose Windows authentication mode. Specify Administrators.



- D. Once the server has successfully been installed, launch TID21 and login to ITADMIN.  
E. Select the database from the drop down menu, click connect database. You should see database connected successfully.

Status: connected

- F. Click start service. Wait for successful message.



- G. Once the service is started, the Device tab should be available for all device types.

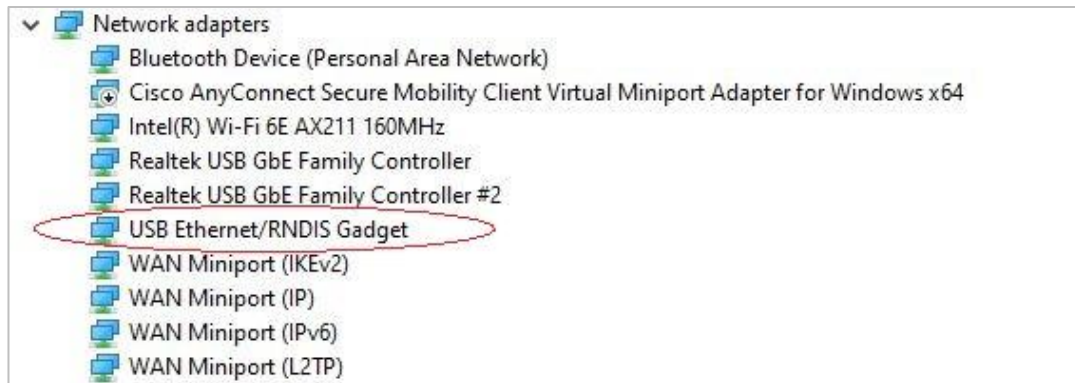
#### b. Device Doesn't show up in the Device Group

If a user has connected the device using USB with the computer, but the device doesn't show up in the device group, it is typically caused by firewall settings and the installation pre-requisite is not met. Follow the pre-requisite firewall setup section to fix this issue.

#### c. Failure to set IP address/connect device after click "Check USB"

For TacticID Plus and TacticID-1064ST, if after clicking check USB button, a failure to set IP address message is returned, user may manually set the IP address for the USB port. Here's how to fix this:

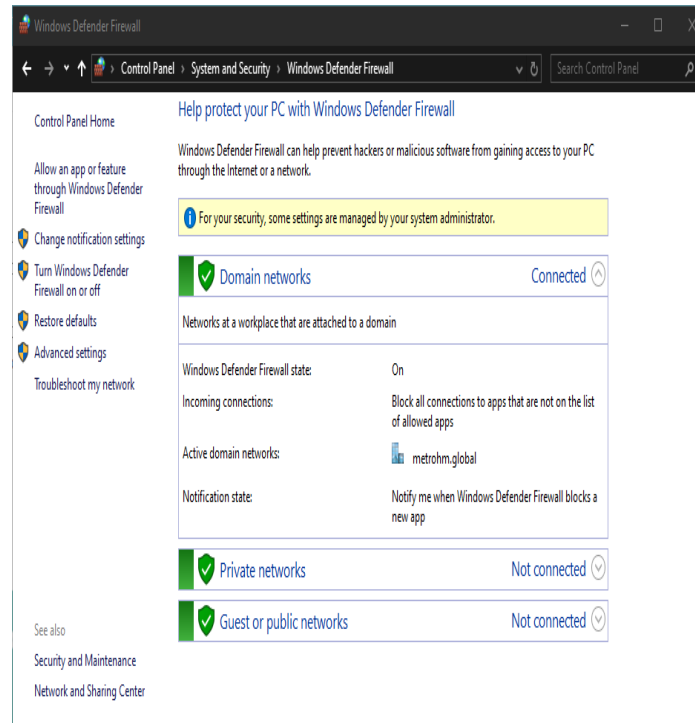
1. Check if RNDIS driver is installed correctly. If this driver is installed successfully, this device will be displayed as "USB Ethernet/RNDIS Gadget" in Device Manager:



If you do not see "RNDIS Gadget" in your Network Adapters, it means the driver is not installed successfully. The device might show up as a COM port device under device manager.

2. Locate the connected device, then choose "Browse my computer for drivers" and install driver provided in the installation file.

3. Then Go to Network Setting, locate the RNDIS Ethernet connection, settings should be like this:



4. Click Edit and set the IP settings to the following:

IPv4 address: 192.168.7.5

IPv4 subnet prefix length: 24 (subnet 255.255.255.0)

IPv4 gateway: 192.168.7.1

IPv4 DNS servers: 192.168.7.1

---

*Note that the device's IP address can be found by clicking into the USB tab on the device. The default IP address is 192.168.7.2 for the device. User can set any IP address ranges from 192.168.7.3 to 192.168.7.254 for the RNDIS gadget.*

---

#### d. Failure to Connect to the device using USB

When the device connection is not configured correctly, user might see issues connecting the device with TID21 and login to the device. Here's what to check in order to diagnosis different scenarios:

1. The username and password used for device login should be used to connect the device with PC. Ensure the correct username and password are used.
2. The device should show up as RNDIS Gadget under device manager. If not, click the check USB button. It will install the driver and correct the IP address.
3. The same USB port during first installation should be used to connect device to PC. If USB port is changed, click the Check USB button again.

#### e. Failure in getting Library information

A message may appear after synchronizing the TacticID saying “Failure in getting library information”.

1. Go to the following location:  
C:\ProgramData\BWTEK\TIDxx Server\Library
2. check for a folder with a name like {f7ec650a-1ce4-44dc-850f-03254555c1f8}.
3. Delete this folder, then attempt synchronization again.

#### f. ITADMIN password reset

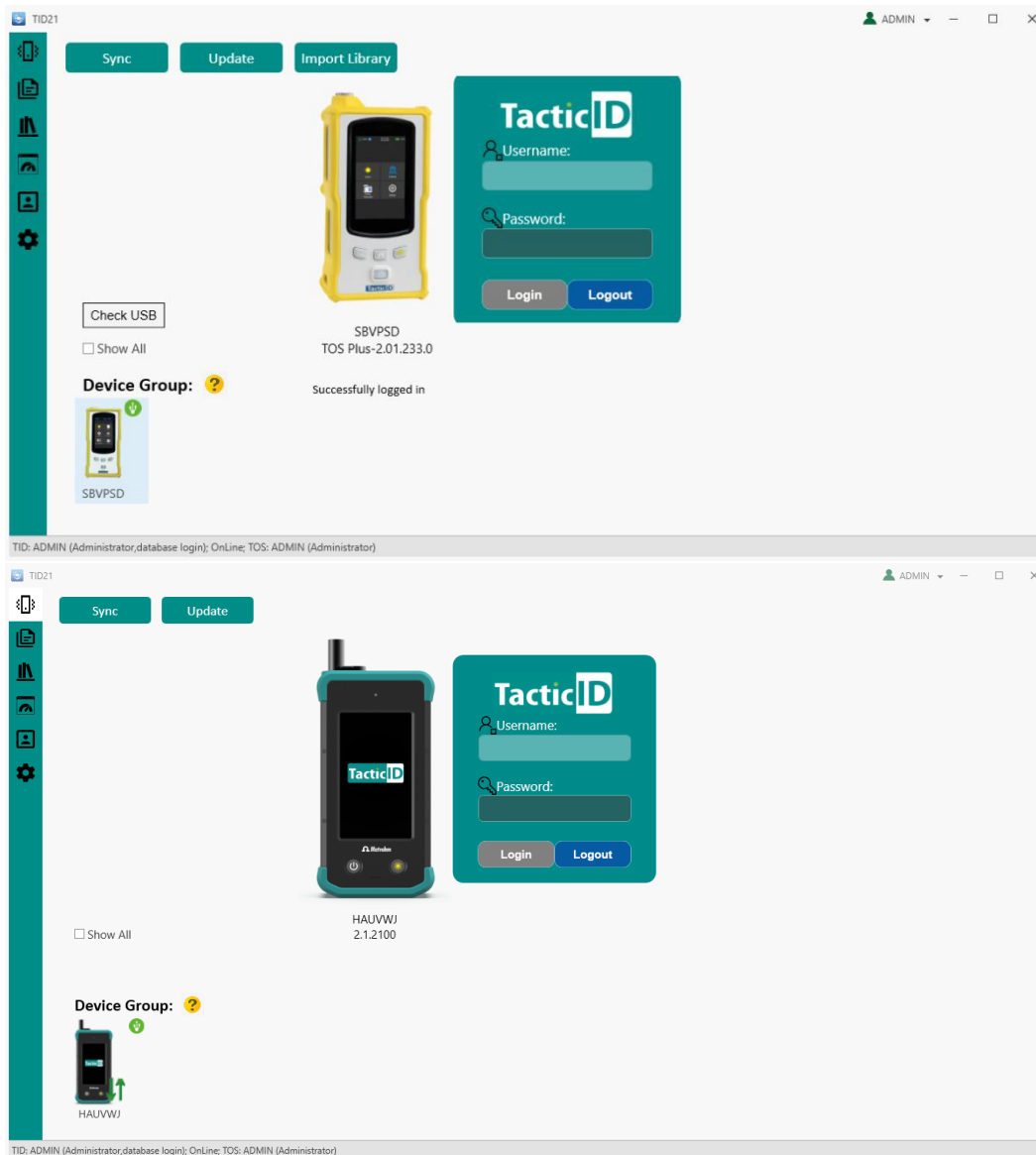
In some cases, the user might forget their original password for a specific account and will encounter errors when logging into the PC software. Here’s how to recover the ITADMIN passwords:

1. Close TID21 software
2. Go to  
C:\Program Files (x86)\BWTEK\TID21\TID
3. Delete the file Serversettings.ini



4. Restart TID21 software. Now you should be able to login with the default password 999999.

## User Manual



Once TID21 is installed and a device has been synchronized, users can login to access all features.

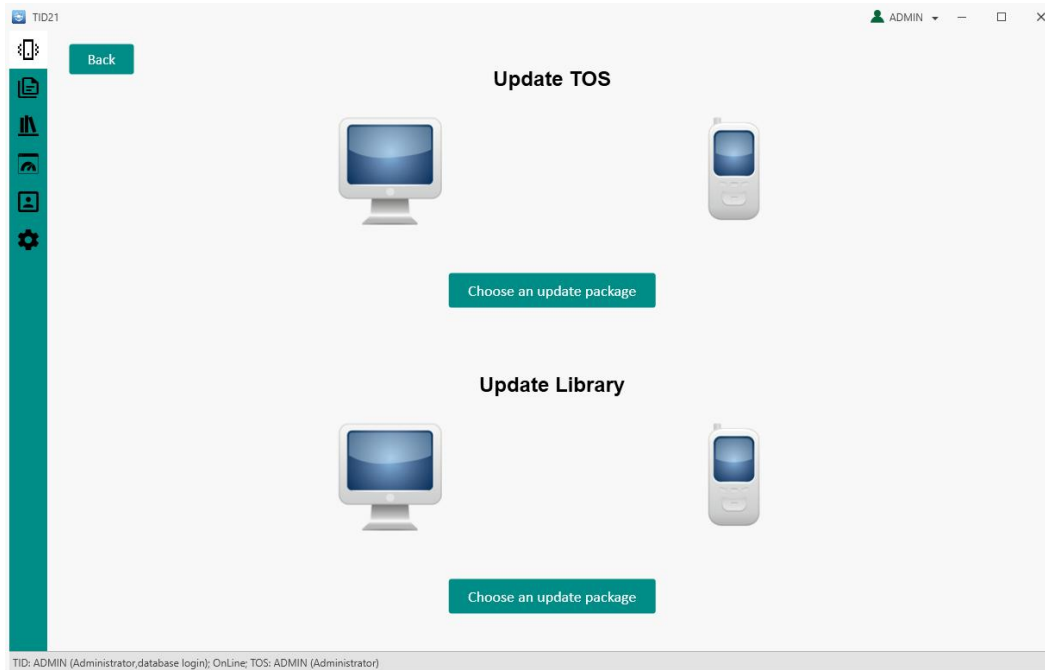
### a. Device

The user can login to TID21 and connect to the device the same way as described in the Setup guide. On the Device page, you can find additional options to Sync the device, Update the TOS firmware or licensed libraries, and Import Library to the database and TacticID.

b. Sync

When logged in as ITADMIN, only users are synchronized. It must be synchronized again while logged into a user account to transfer all device data into TID21.

c. Update

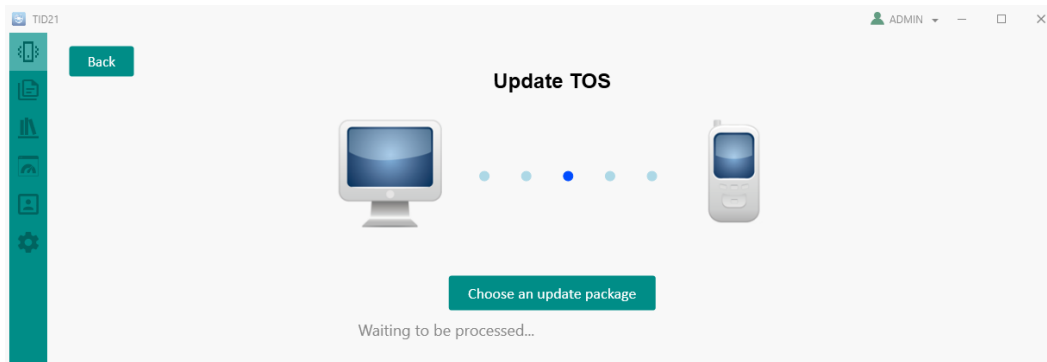


The Update screen has two sections, one to Update TOS and the other to Update Library.

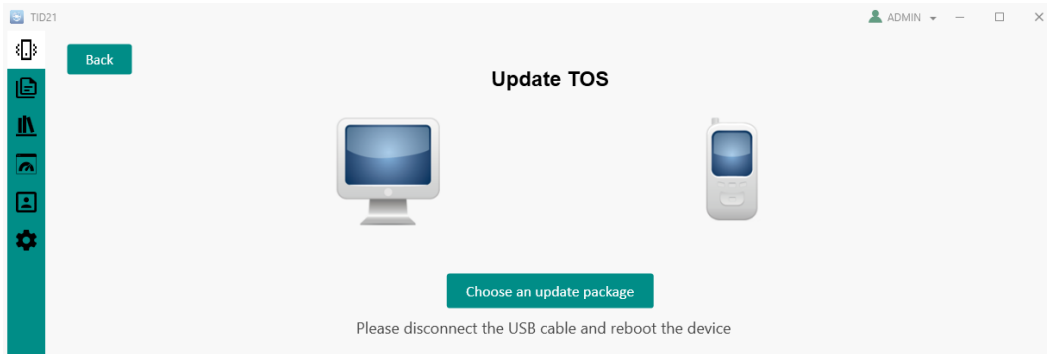
*Update TOS*

TOS is the operating system on the TacticID and can be updated either using the OTG adaptor to the device directly, or through TID21. Here is how to update through TID21:

First, obtain the TOS update package. Keep the package as a compressed (zipped) file, otherwise update will not work. Then, in the Update TOS section, press the 'Choose an update package' button. In the file browser, choose the TOS update package. The update will begin right away.



After the package has been uploaded, a message will appear to instruct the user to 'Please disconnect the USB cable and reboot the device'. Reboot the device, then on the device, go to Setup > General > About. Verify the update was successful by confirming the TOS Version matches the package version.

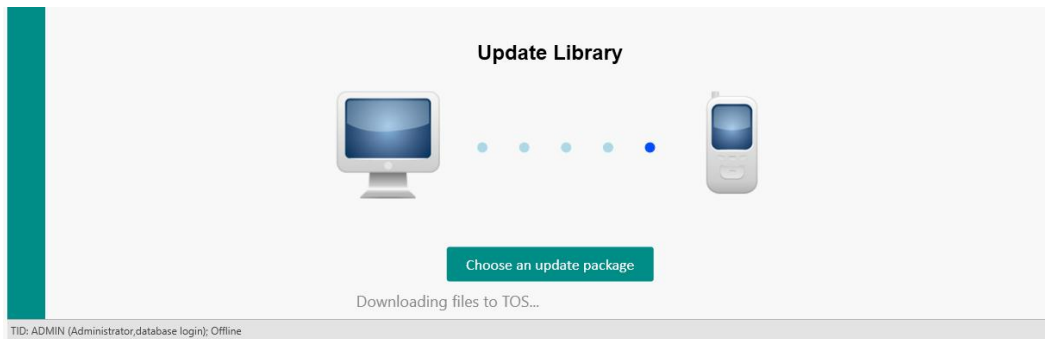


### *Update Library*

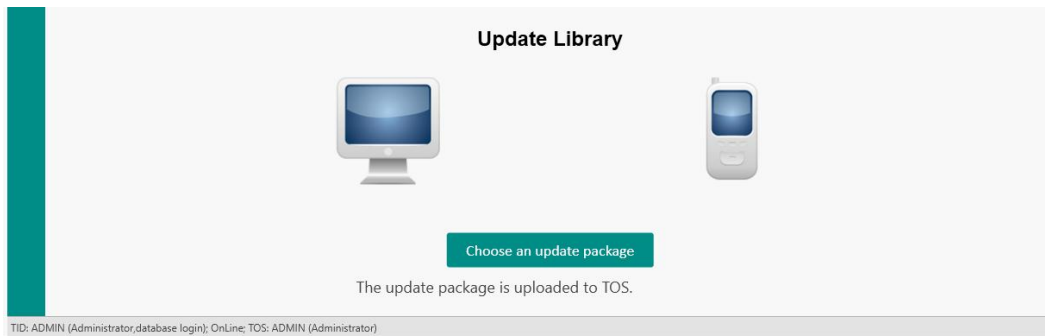
Licensed libraries provided by Metrohm can be loaded either using the OTG adaptor or through TID21. Here is how to load through TID21:

First, obtain the library package. Keep the package as a compressed (zipped) file, otherwise update will not work. Then, in the Update Library section, press the 'Choose an update package' button. In the file browser, choose the correct Library package. The loading will begin right away. This process may take several minutes depending on the size of the library.





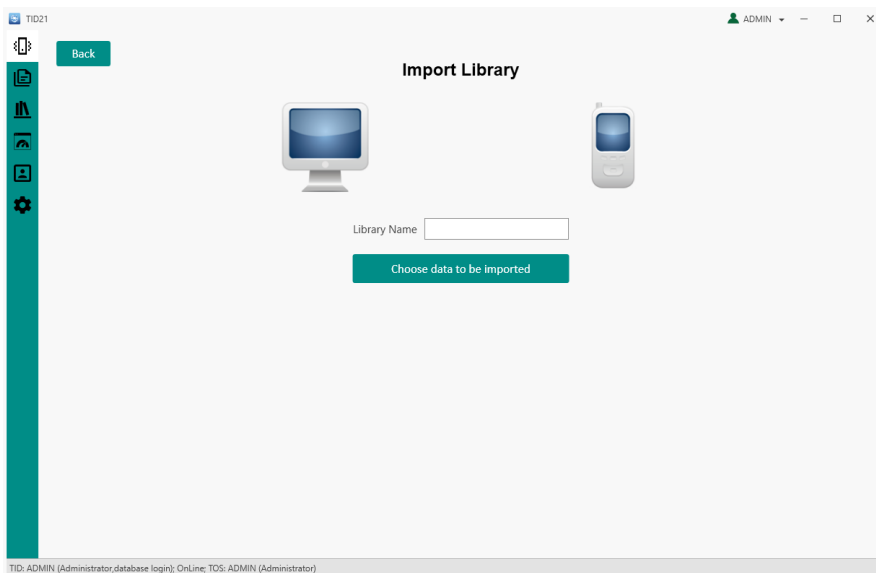
After the package has been uploaded, a message will appear that 'The update package is uploaded to TOS'. Reboot the device, then on the device, go to Setup > General > About and verify the Library Version listed is the expected version for the library. Ensure the library is in the Library list on the device.



### *Import Library*

Import Library allows the user to create a new library using external data.

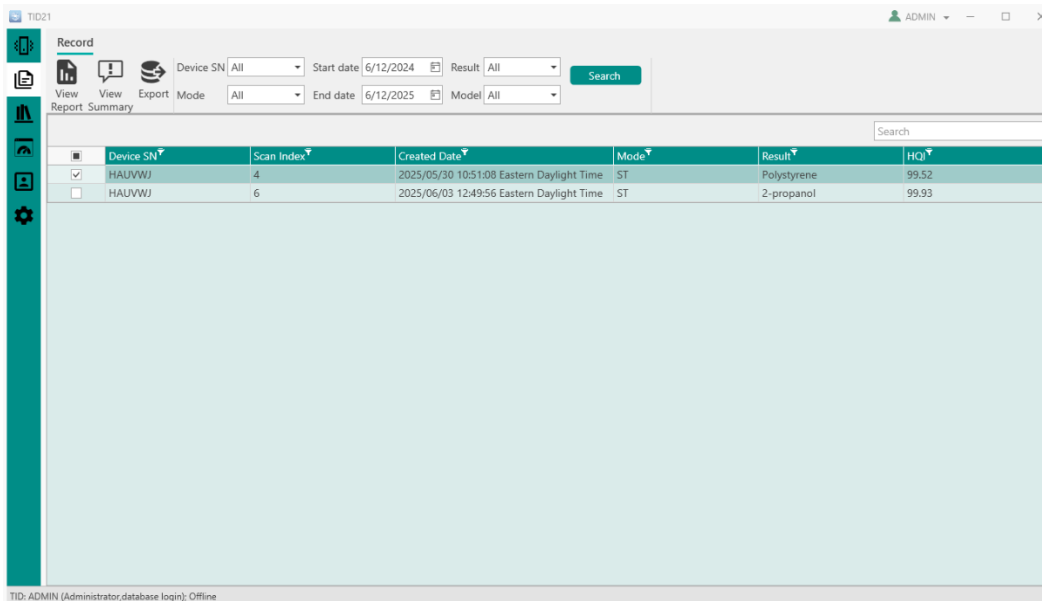
(Note: This option is not available for TacticID-1064ST)



Enter a library name, then press 'Choose data to be imported'. From the file browser, select all data files you wish to add to the library and press Open.

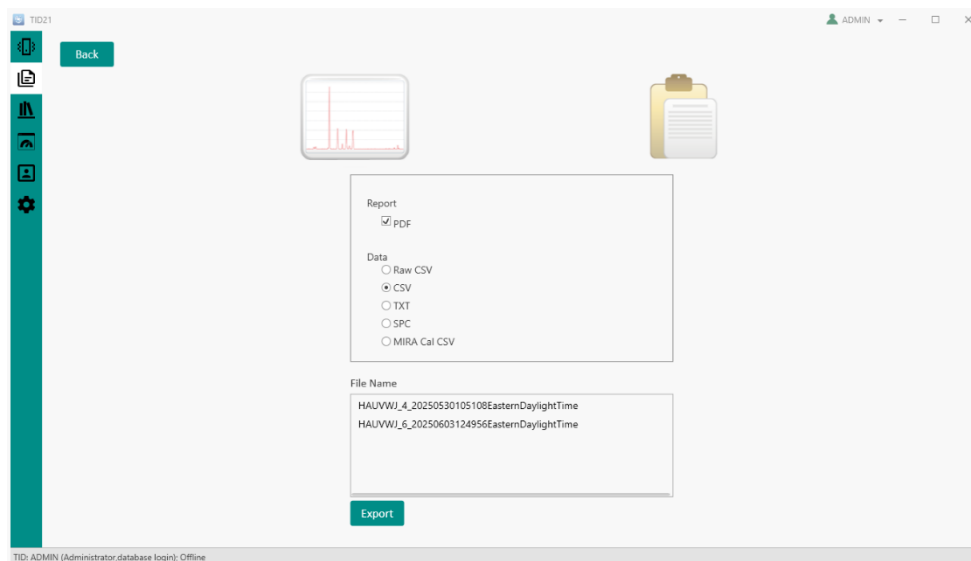
The data will be loaded into a library on the device with the name entered.

#### d. Record



The Record page shows a list of scan data collected on the Tactic ID. Data can be sorted or filtered by device serial number, date, and result. The details of each scan record can be viewed by checking the box for the scan record, then View Report.

### Export Records



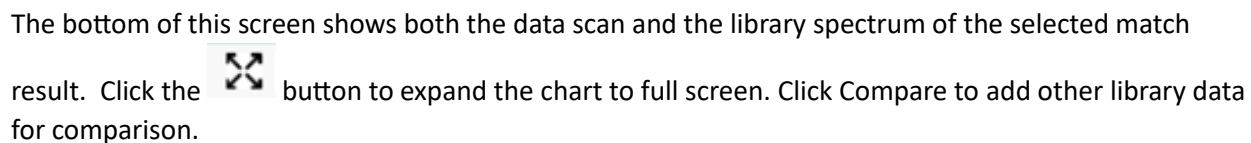
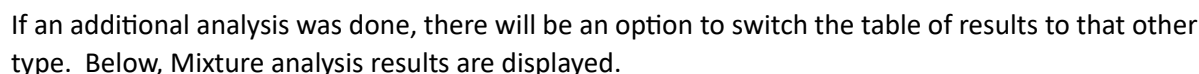
On the Records list screen, the Export button allows the user to select multiple scan files to be exported as the following file types:

- Raw .CSV
- .CSV
- .TXT
- .SPC
- MIRA Cal CSV

TXT, CSV, and SPC file types are all compatible with BWSpec. The MIRA Cal CSV file type is compatible with MIRA Cal.

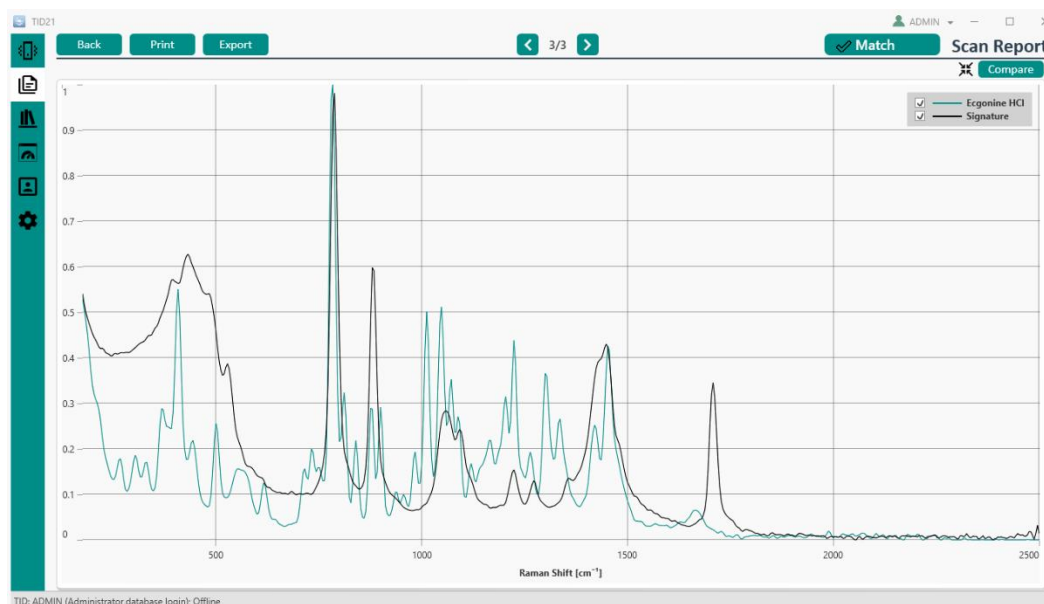
### Record Reports

Each scan report will appear on its own page. The top of the page holds scan information like acquisition settings and device info. The table lists the match results. The table next to it shows the library information for the chemical selected in the match results. User-added information (Location, notes, and an image) can be viewed in the right table.

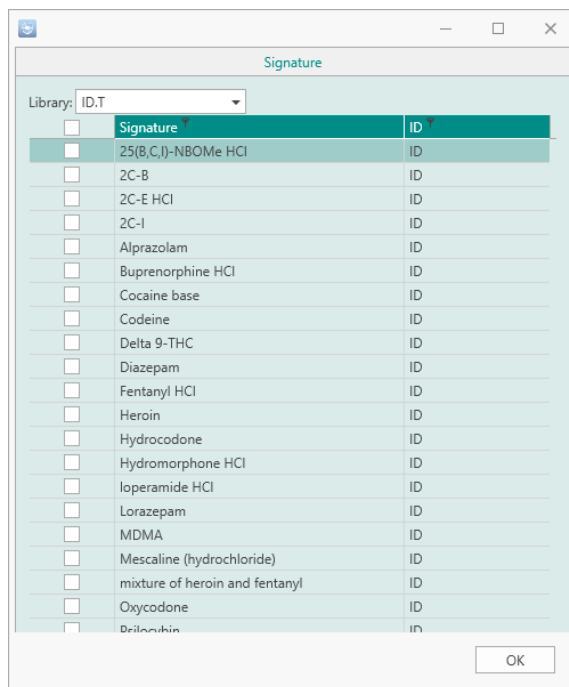


In full screen mode, the chart will display two spectra: the Signature from the device and the selected match result. If the user wants to compare the data to a spectrum outside of the selected library, they can choose Compare.

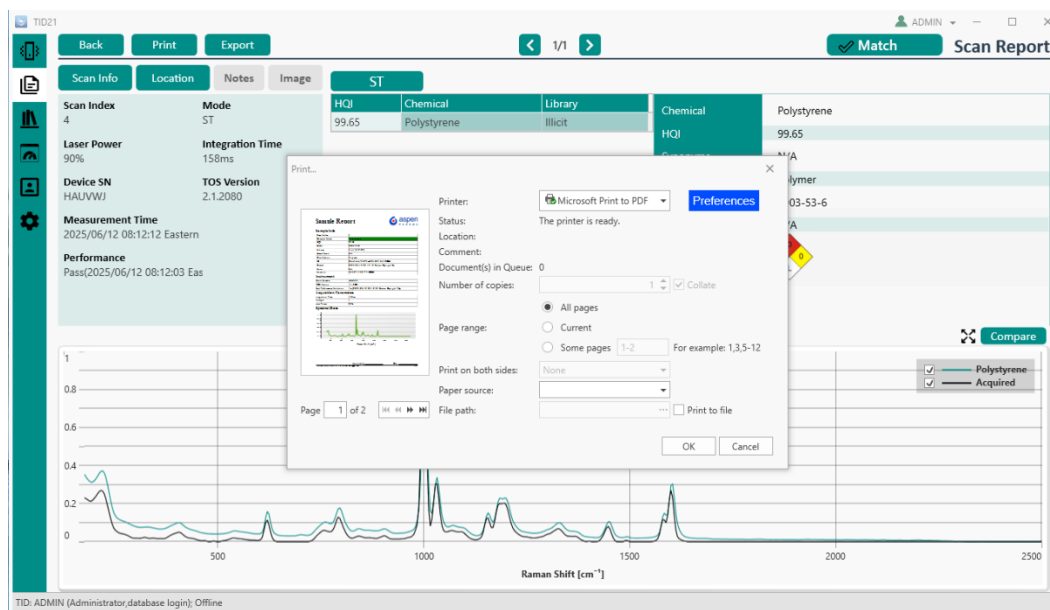
From here, the Export button will only export the report and/or the data of the viewed record/



In the Compare window, a library can be chosen from the Library dropdown menu, then check the box(es) for Signatures and press OK. The additional spectra will be overlayed in the chart and the legend will update to include these new scans. Note: only 5 library signatures can be selected at a time.

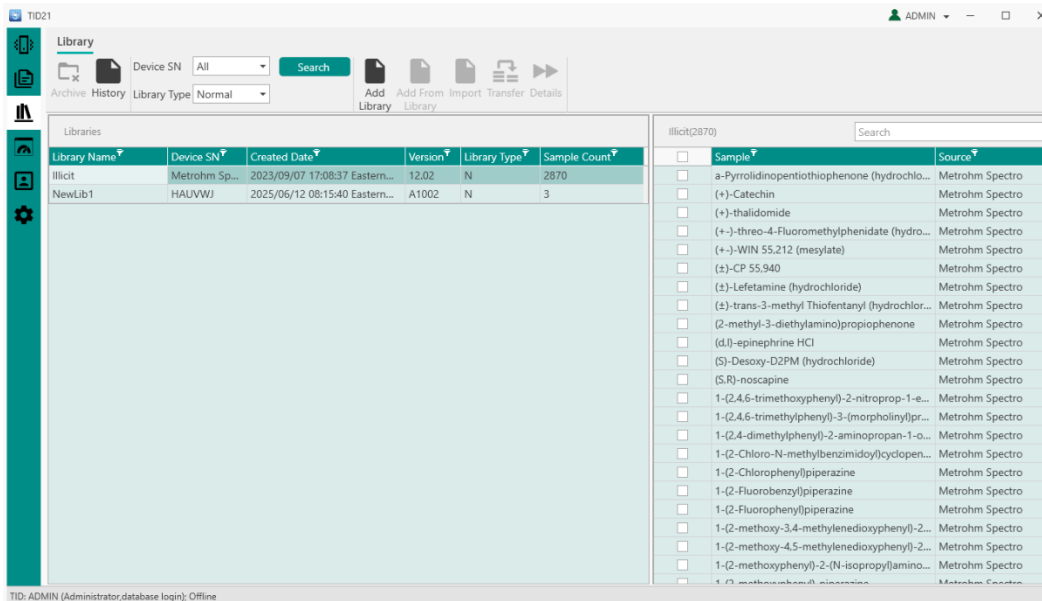


From the Record info, choose Print to open print settings for the Record's full report. The full Scan Report contains all the same information from the previous page optimized for printing.



On the main Record page, selecting one or more records then pressing View Summary will open the print settings for the summary report.

## e. Library

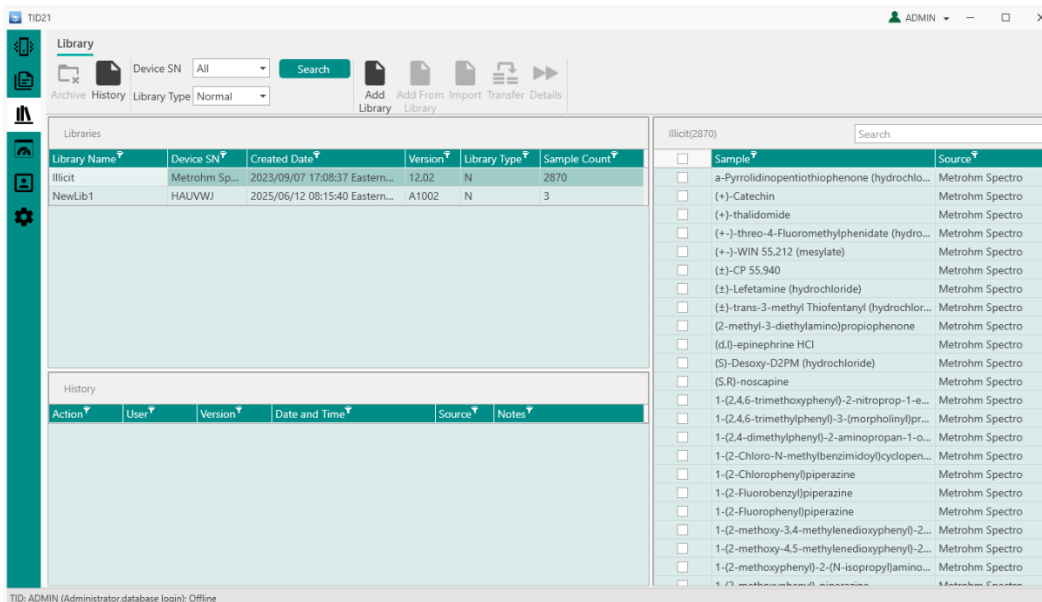


The screenshot shows the TID21 Library page. The top navigation bar includes 'Archive', 'History', 'Library Type', and 'Normal'. The main area displays a table of libraries:

Library Name	Device SN	Created Date	Version	Library Type	Sample Count
Illicit	Metrohm Sp...	2023/09/07 17:08:37 Eastern...	12.02	N	2870
NewLib1	HALUVWJ	2025/06/12 08:15:40 Eastern...	A1002	N	3

Below the table, the 'History' tab is selected, showing a list of samples for the 'Illicit' library. The list includes columns for 'Sample' and 'Source'.

The Library page contains a list of all libraries synced from the device to the TID21 database. Libraries can be filtered by the SN of the device that created them and by the library's mode. To show or view the history table for the selected library, press History.



The screenshot shows the TID21 Library page with the 'History' tab selected. The main area displays a table of history records:

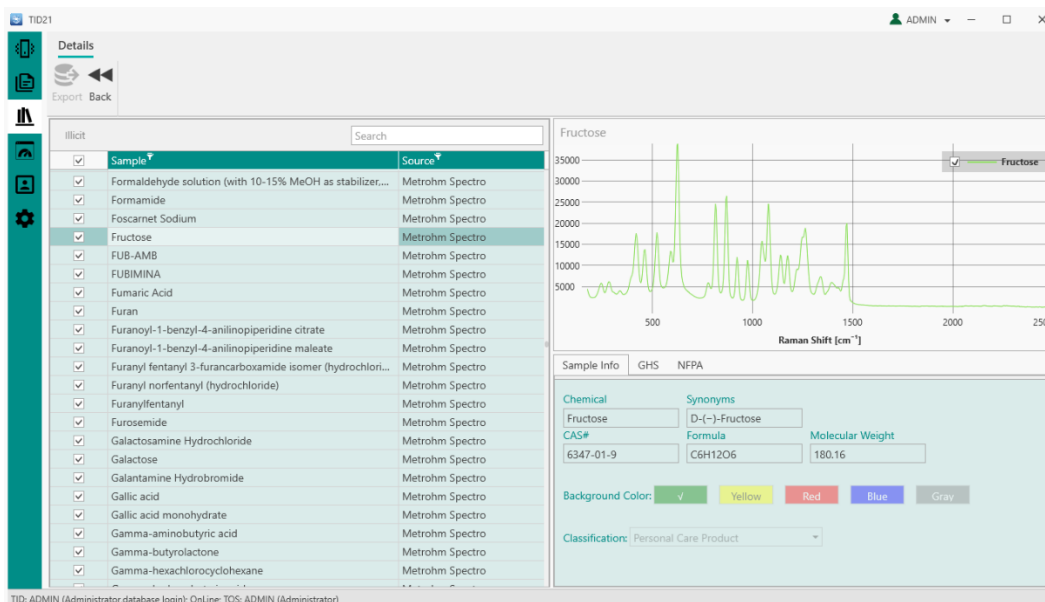
Action	User	Version	Date and Time	Source	Notes

Below the table, the 'History' tab is selected, showing a list of samples for the 'Illicit' library. The list includes columns for 'Sample' and 'Source'.

Check the box next to a library signature to select it, then select Details to view details of the sample.

### Chemical Info

From the list on the left, only one chemical can be selected at a time for viewing details on the right. The library spectra will appear in the chart and details populate the tabs below.



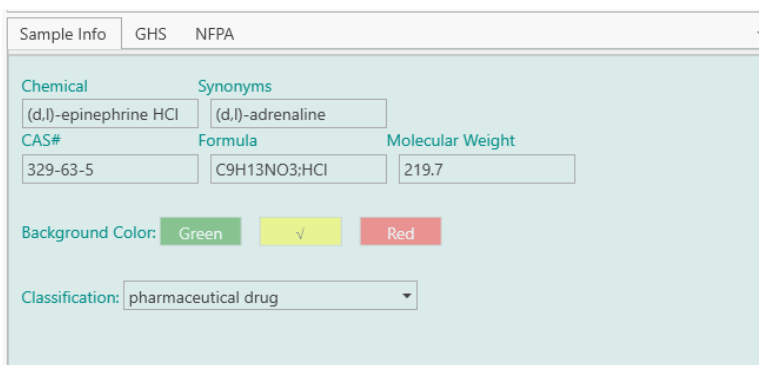
The screenshot shows the Metrohm Spectro software interface. On the left, there is a list of chemicals with checkboxes. The 'Fructose' entry is selected. On the right, there is a Raman spectrum plot for Fructose. Below the plot, there is a 'Sample Info' tab with the following information:

Chemical	Synonyms	CAS#	Formula	Molecular Weight
Fructose	D-(-)-Fructose	6347-01-9	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>	180.16

Background Color: ☒ Green ☐ Yellow ☐ Red ☐ Blue ☐ Gray

Classification: Personal Care Product

The Sample Info tab shows the Chemical name, synonyms, CAS#, chemical formula, molecular weight, background color, and classification.



The screenshot shows the Metrohm Spectro software interface with the 'GHS' tab selected. It displays GHS pictograms and hazard statements for (d,l)-epinephrine HCl.


Chemical	Synonyms	CAS#	Formula	Molecular Weight
(d,l)-epinephrine HCl	(d,l)-adrenaline	329-63-5	C <sub>9</sub> H <sub>13</sub> NO <sub>3</sub> ·HCl	219.7

Background Color: ☒ Green ☐ Yellow ☐ Red

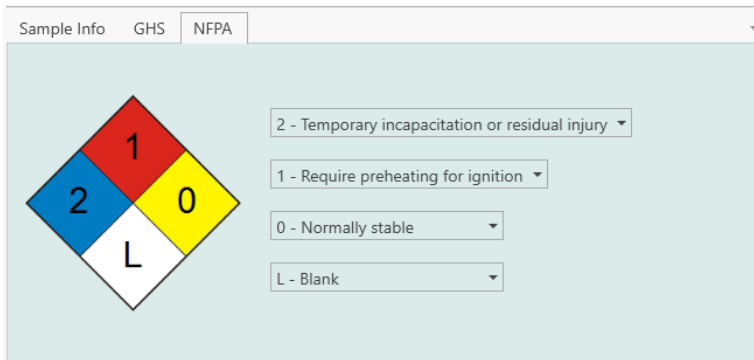
Classification: pharmaceutical drug

The GHS tab displays GHS pictograms and hazard statements.



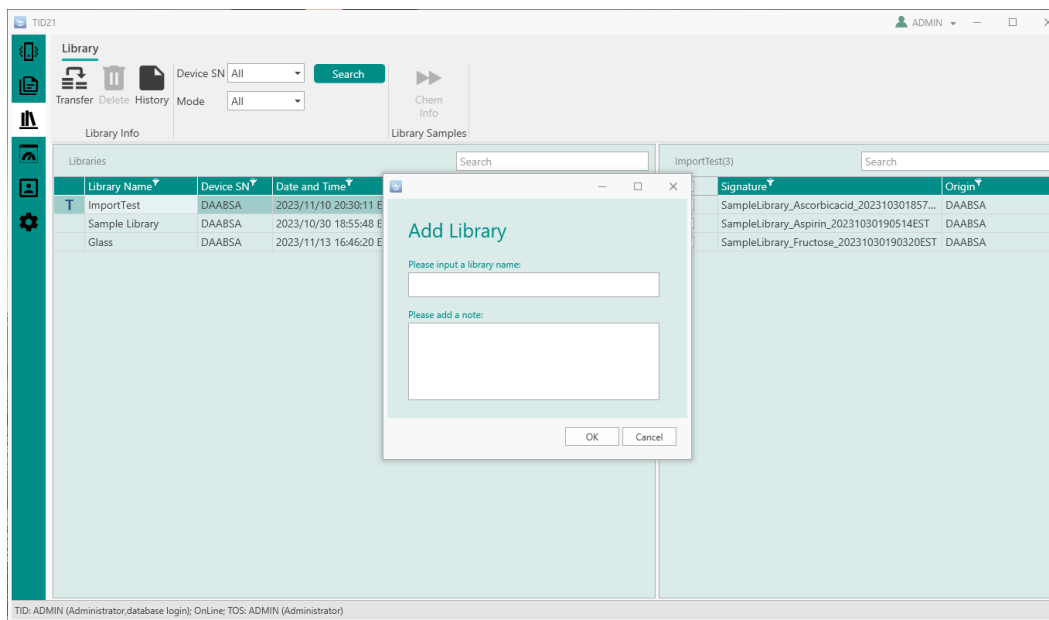


The NFPA tab has a diamond containing reactivity, fire hazard, health hazard, and other hazard information.

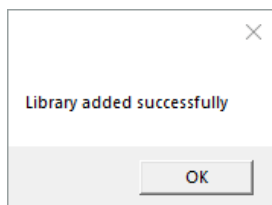


### Transfer

The transfer feature becomes available when a user-created library from one device is synchronized to TID21 then another Tactic ID of the same model is connected. This feature allows use of the same library across multiple devices of the same model. Select the library to transfer then click the Transfer button. A library name and a note must be entered before the transfer is allowed.



Press OK. Once the library has been added to the other TactiCID, a message will appear that the Library was added successfully.



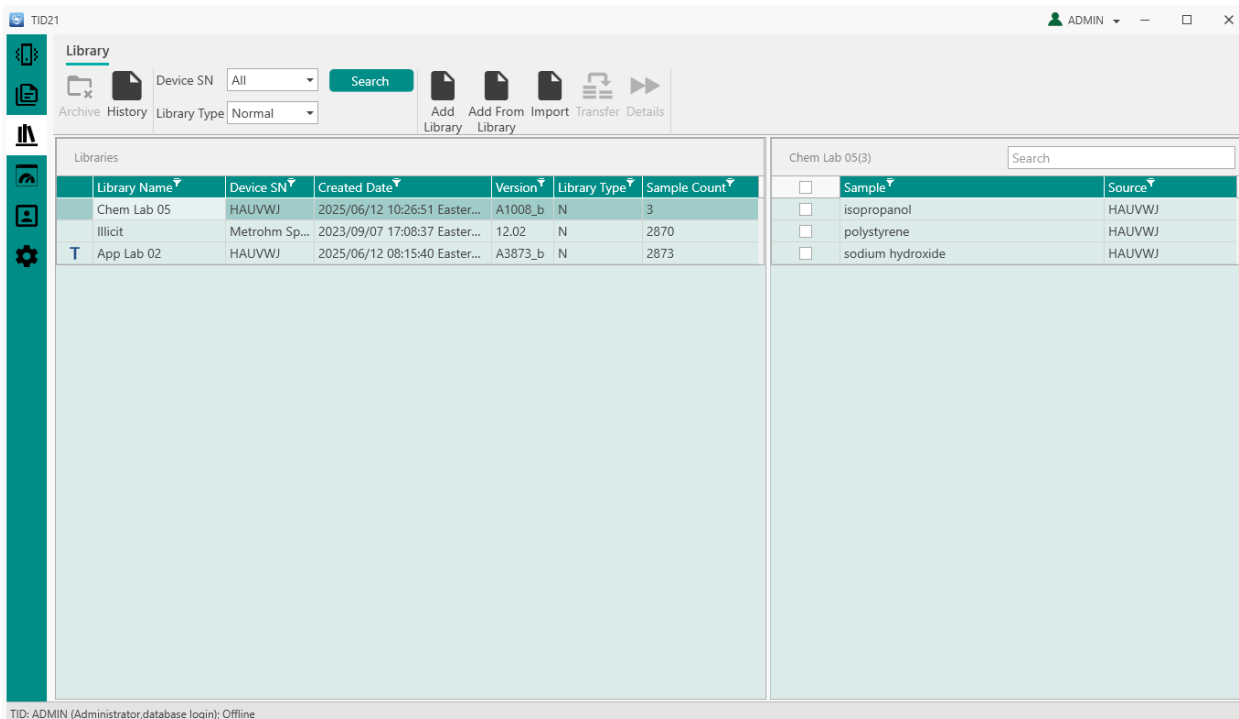
On the TactiCID, go to Library > View/Edit and the transferred library will now be available under its library type.

Licensed libraries are not allowed to be transferred, and libraries cannot be transferred from one device to itself. Libraries made on one model cannot be transferred to a TactiCID of a different model.

For TactiCID-1064ST, the Transfer function behaves a little differently.

### Regroup

A new library can be created in TID21 using library sample data already in the TID21 database.



TID21 ADMIN

Library

Device SN: All Search

Archive History Library Type: Normal Add Library Add From Library Import Transfer Details

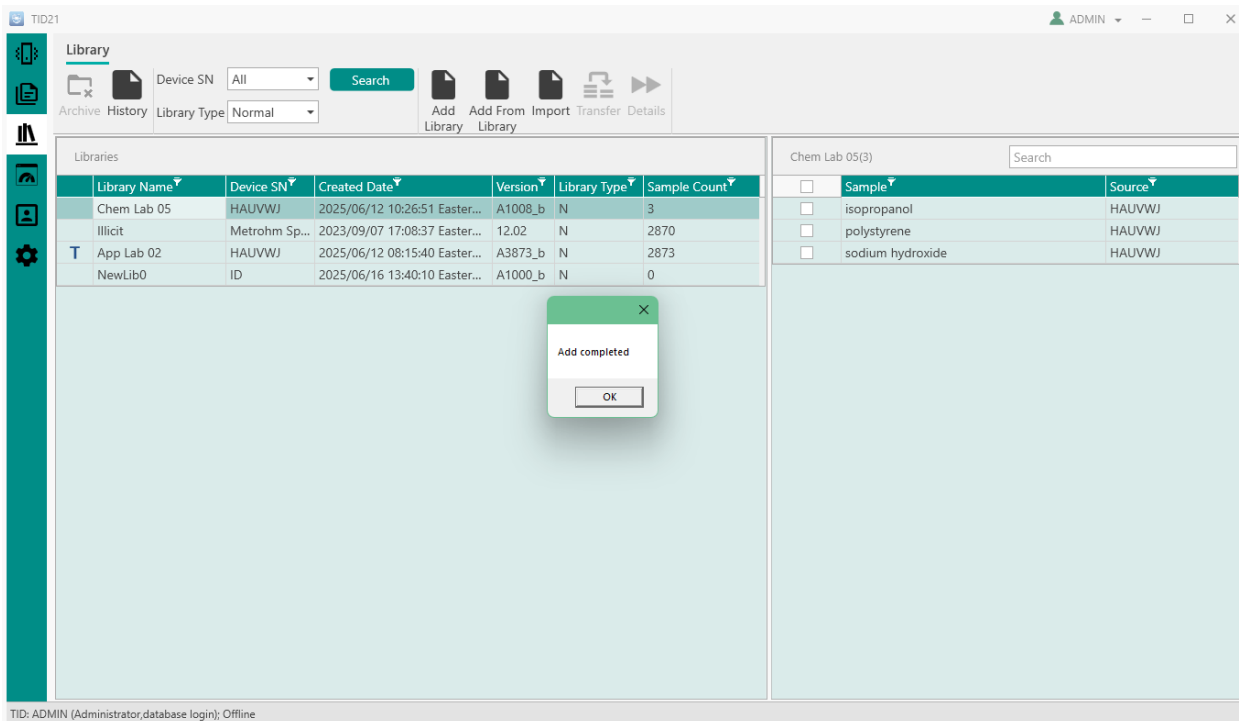
Library Name	Device SN	Created Date	Version	Library Type	Sample Count
Chem Lab 05	HAUVWJ	2025/06/12 10:26:51 Easter...	A1008_b	N	3
Illicit	Metrohm Sp...	2023/09/07 17:08:37 Easter...	12.02	N	2870
App Lab 02	HAUVWJ	2025/06/12 08:15:40 Easter...	A3873_b	N	2873

Chem Lab 05(3)

Sample	Source
isopropanol	HAUVWJ
polystyrene	HAUVWJ
sodium hydroxide	HAUVWJ

TID: ADMIN (Administrator,database login); Offline

Add Library will create a new library in the library list.



TID21 ADMIN

Library

Device SN: All Search

Archive History Library Type: Normal Add Library Add From Library Import Transfer Details

Library Name	Device SN	Created Date	Version	Library Type	Sample Count
Chem Lab 05	HAUVWJ	2025/06/12 10:26:51 Easter...	A1008_b	N	3
Illicit	Metrohm Sp...	2023/09/07 17:08:37 Easter...	12.02	N	2870
App Lab 02	HAUVWJ	2025/06/12 08:15:40 Easter...	A3873_b	N	2873
NewLib0	ID	2025/06/16 13:40:10 Easter...	A1000_b	N	0

Chem Lab 05(3)

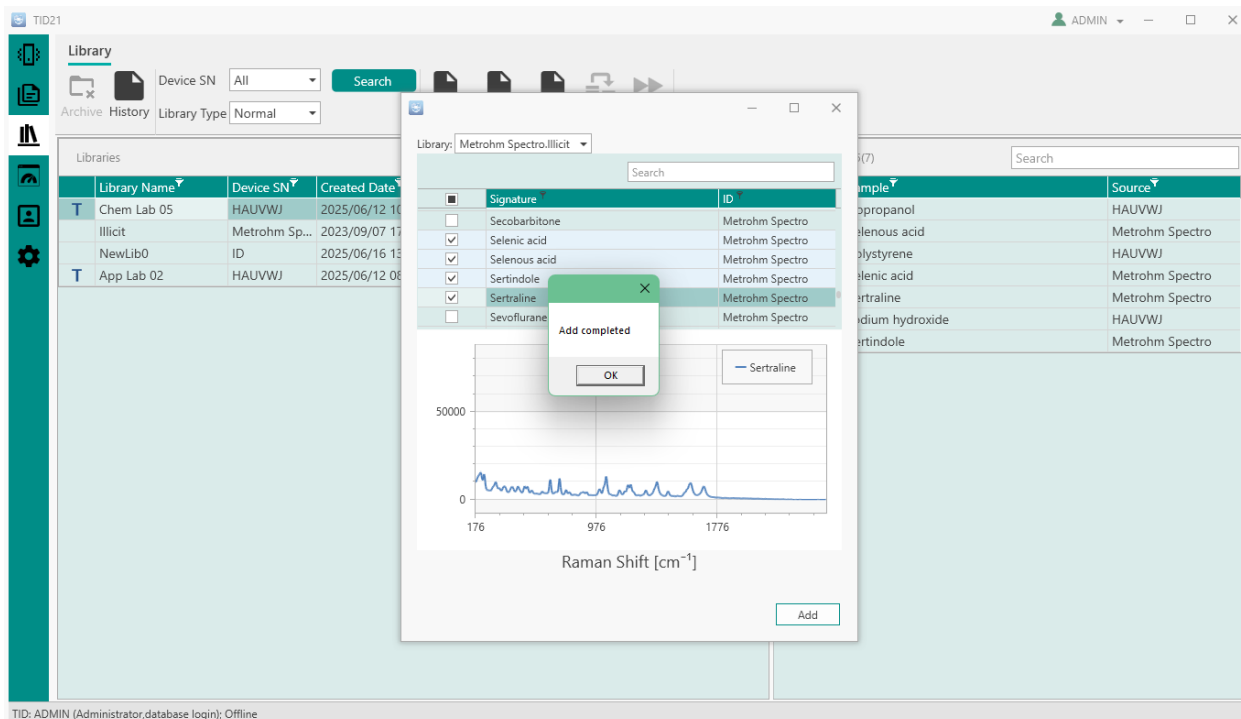
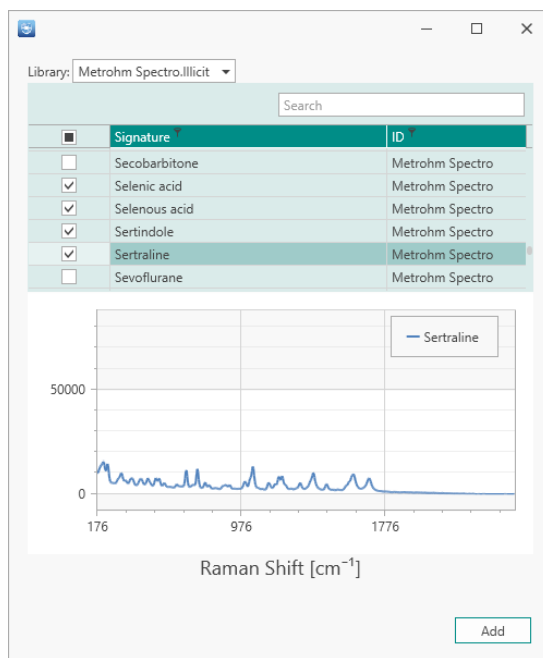
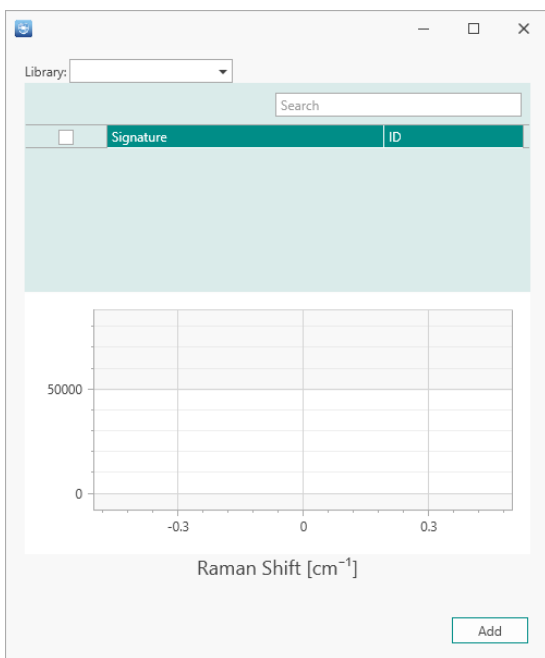
Sample	Source
isopropanol	HAUVWJ
polystyrene	HAUVWJ
sodium hydroxide	HAUVWJ

Add completed

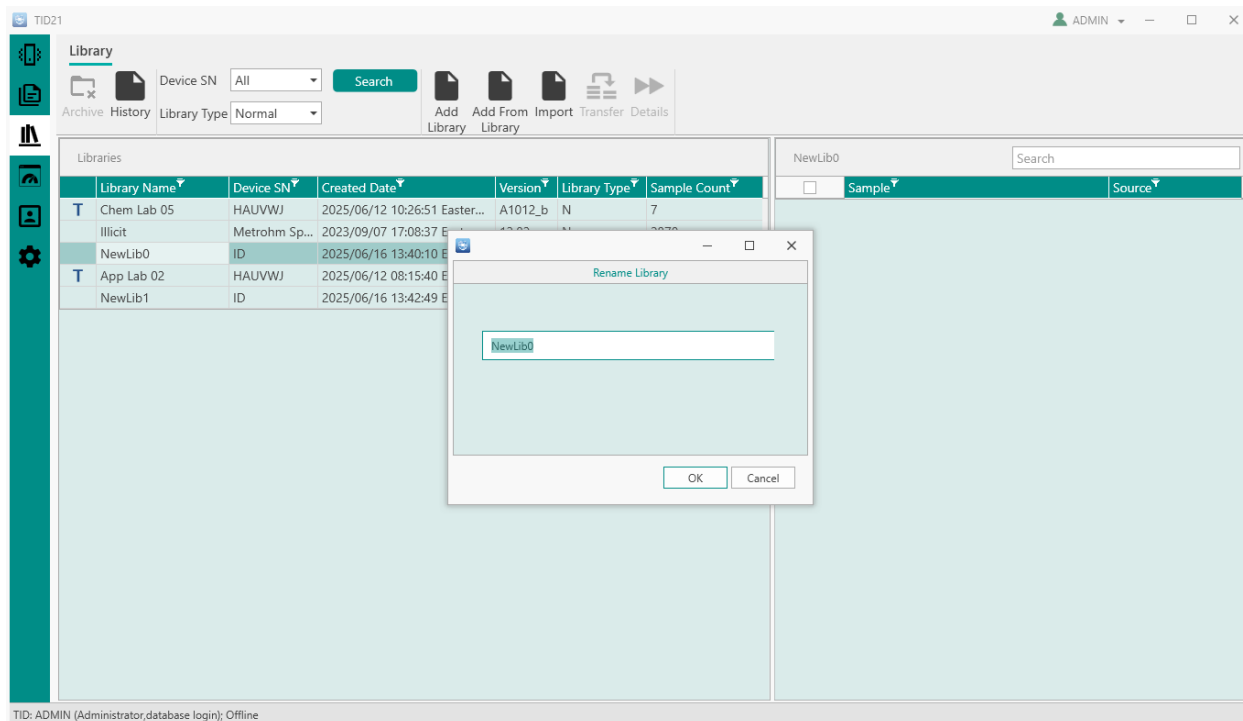
OK

TID: ADMIN (Administrator,database login); Offline

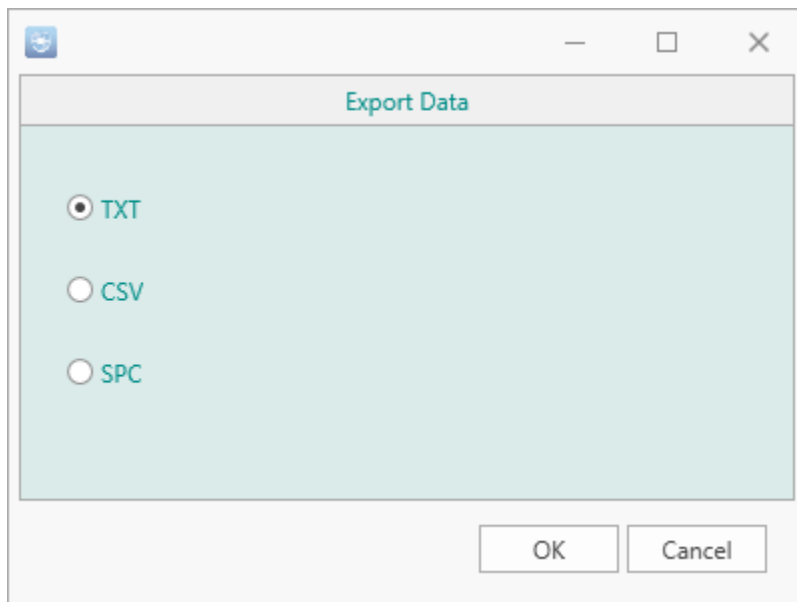
Select any user library then press Add From Library to open the selector. In the top left dropdown, select a library, then select which samples should be added. Press Add to finish. Note: selecting a large number of samples will result in a long loading time.



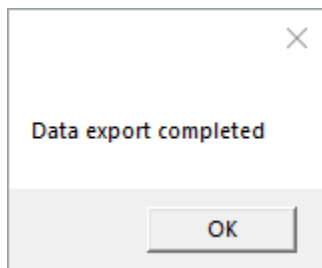
User libraries can be renamed in TID21 by double clicking the library's name in the library list.



## Export

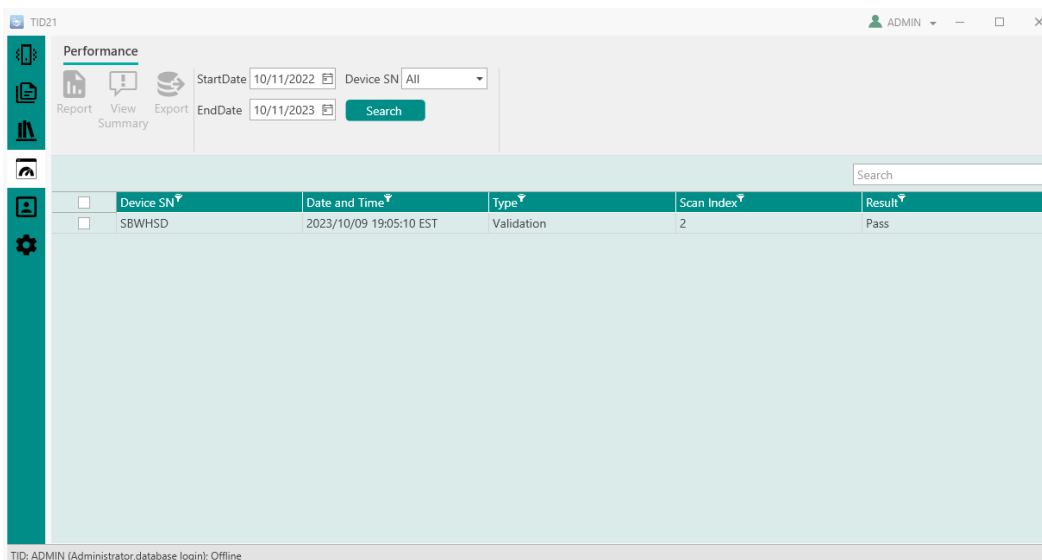


User-created library data can be chosen and exported as .TXT, .CSV, or .SPC files. Choose a file type, then press OK to choose a save location. Once the files are exported, a 'Data export completed' message appears.

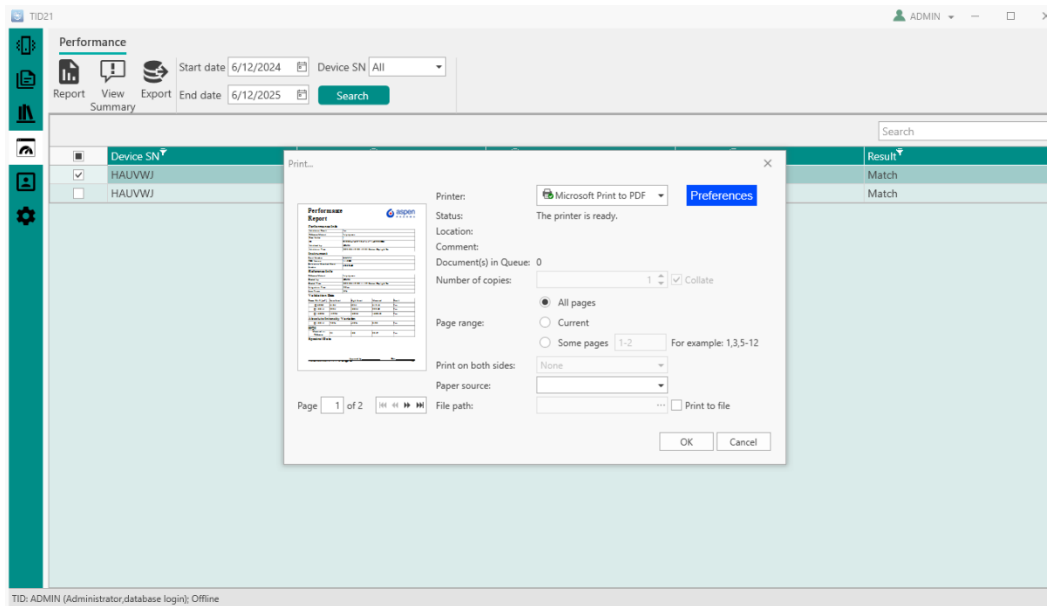


#### f. Performance

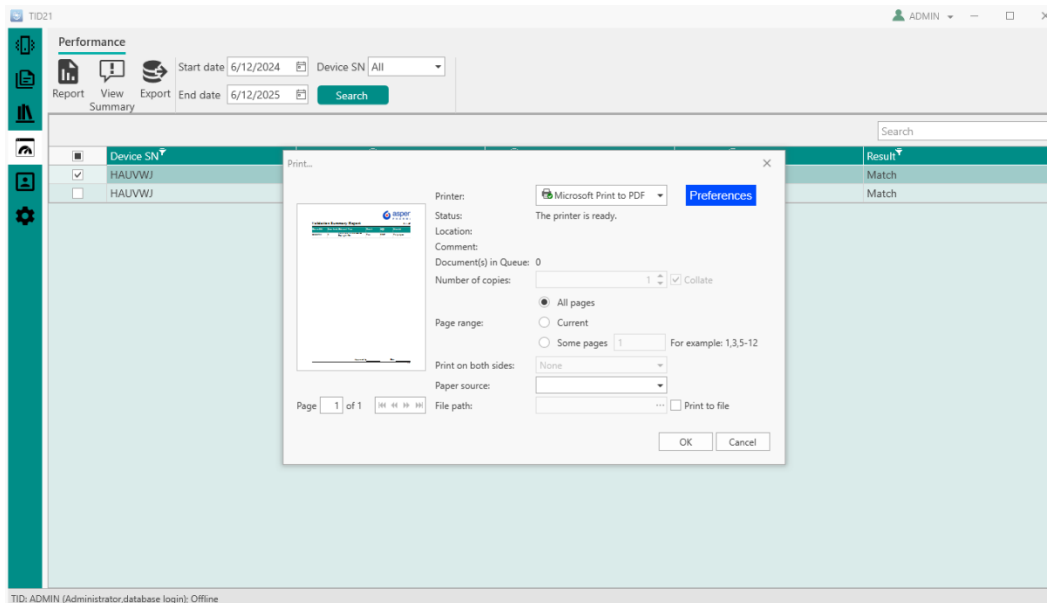
Performance Validation records are shown on the Performance page. Individual Performance reports can be viewed or summarized in a table when multiple Performance records are selected. Performance data may be exported as a CSV, TXT, SPC, or MIRA Cal CSV file. Performance reports are exported as a PDF. Records can be sorted by date range and device serial number.



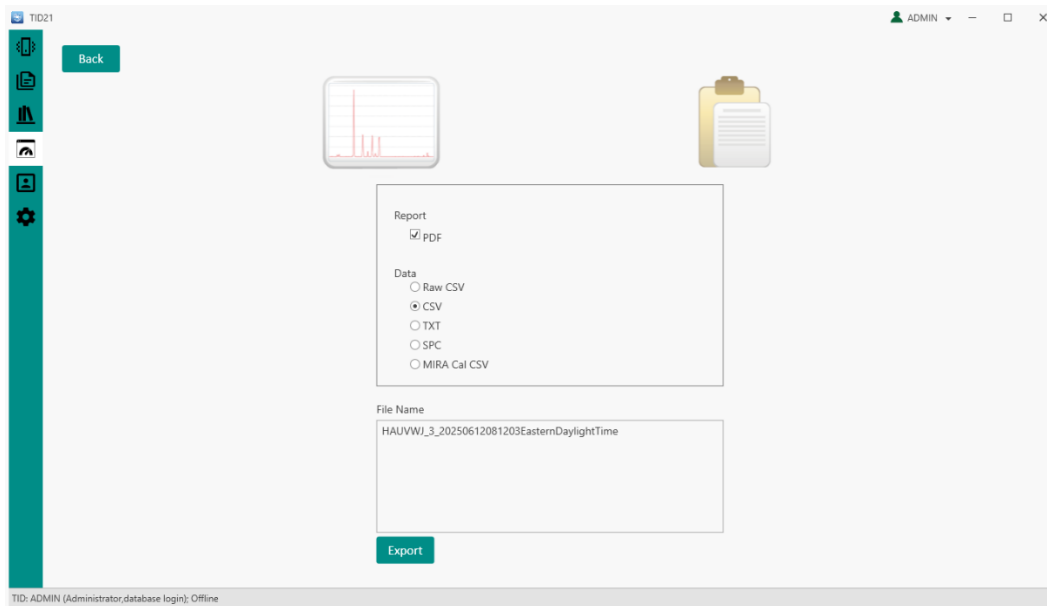
Checking the box next to a Performance record will enable the Report, View Summary, and Export options. Report opens the Performance Validation full report print options.



View Summary opens the Performance Validation summary report print options

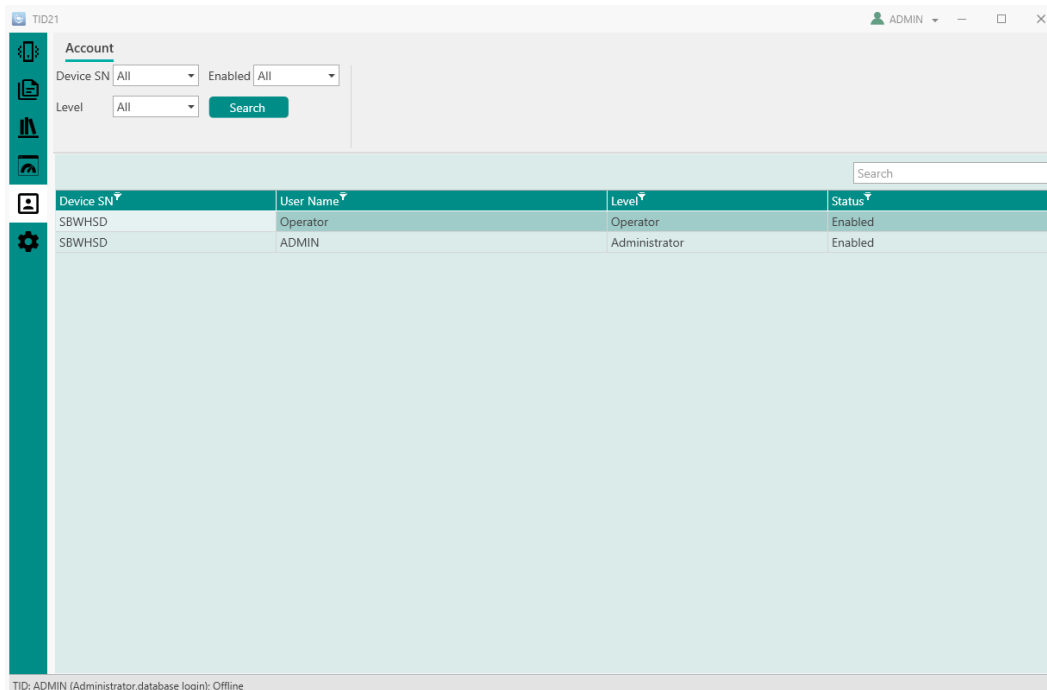


Export opens the export screen where the performance spectrum can be exported as a .TXT, .CSV, or .SPC file.



#### g. Account

A list of user accounts on each device is listed on the Accounts page. For Administrator and Developer level users, ALL accounts can be seen. Operator accounts can only view their own account. Accounts can be filtered and sorted by Device SN, Level, and if they are Enabled or Disabled.

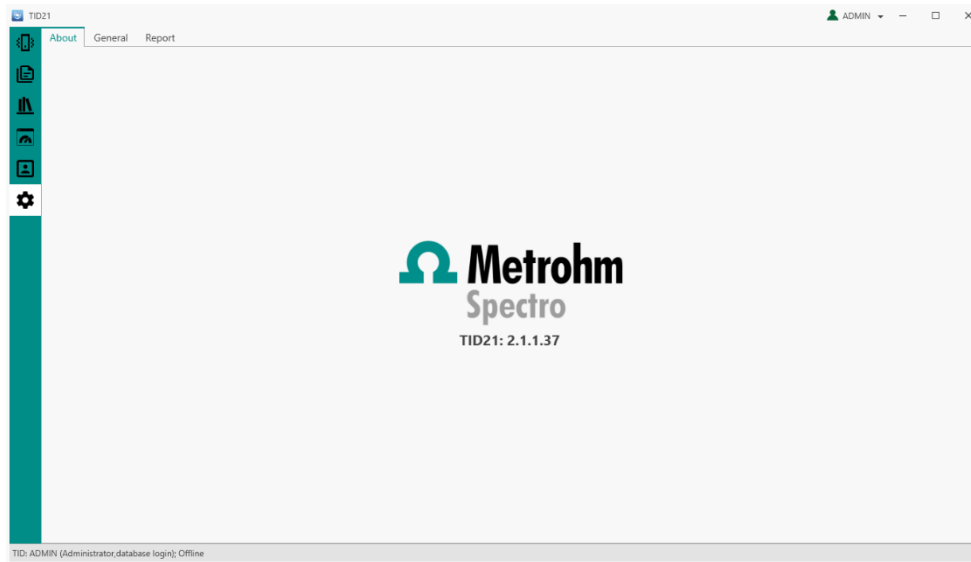




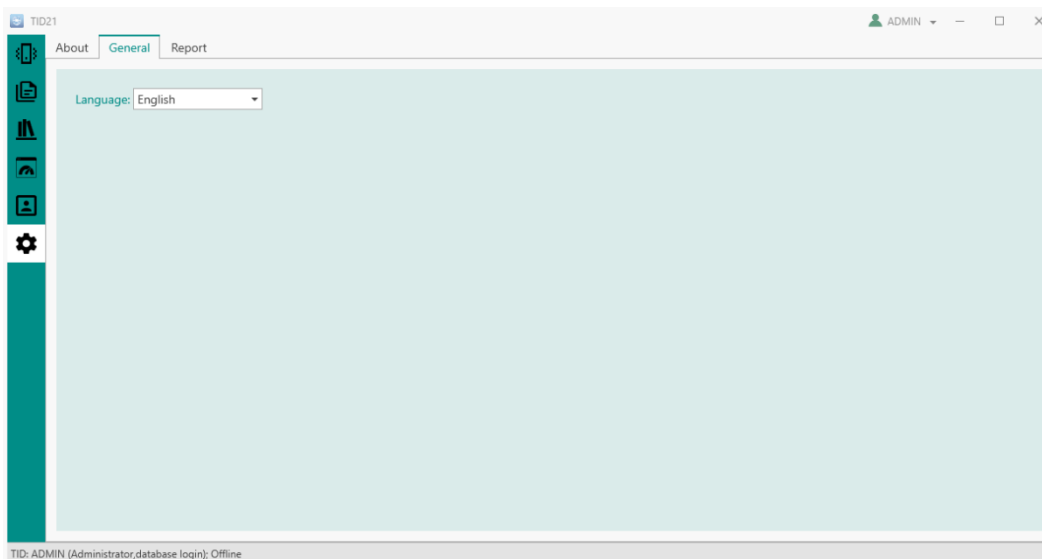
## h. Settings

### About

The About screen shows the TacticID logo as well as the version of TID21 installed.



### General

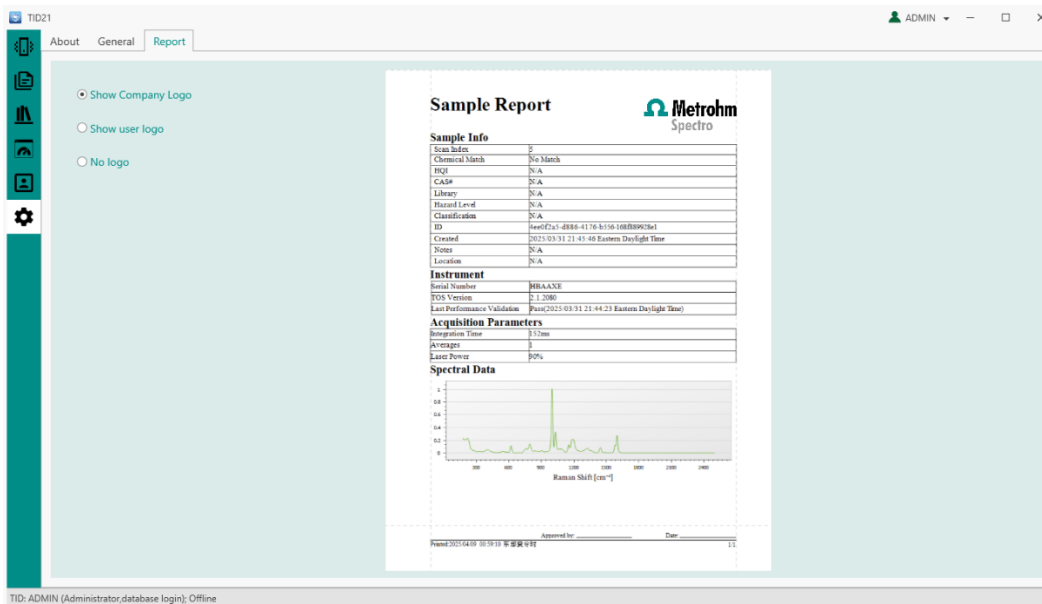


The general settings screen only contains the location to change the language of the software. The available translations are:

- English
- Chinese (traditional) (繁體中文)
- Chinese (simplified) (简体中文)
- Spanish (Español)
- French (Français)
- Japanese (日本語)
- German (Deutsch)
- Korean (한국인)
- Polish (Polskie)
- Turkish (Türkçe)
- Vietnamese (Tiếng Việt)
- Arabic (عربي)
- Hungarian (Magyar)
- Croatian (Hrvatski)
- English (United Kingdom)
- English (Australia)
- Dutch (Nederlands)
- Italian (Italiano)
- Portuguese (Português)
- Czech (Čeština)
- Romanian (Română)
- Ukrainian (українська)

### *Report Logos*

A personalized logo can be added to any reports from the Report settings. To load an image, select the Show user logo radio button; the file browser will open to select an image file. Once an Image is uploaded, it can be previewed on the sample report. To remove any logo, select 'No logo'. A different image can be uploaded to replace the existing one. The logo will apply to all reports throughout TID21.

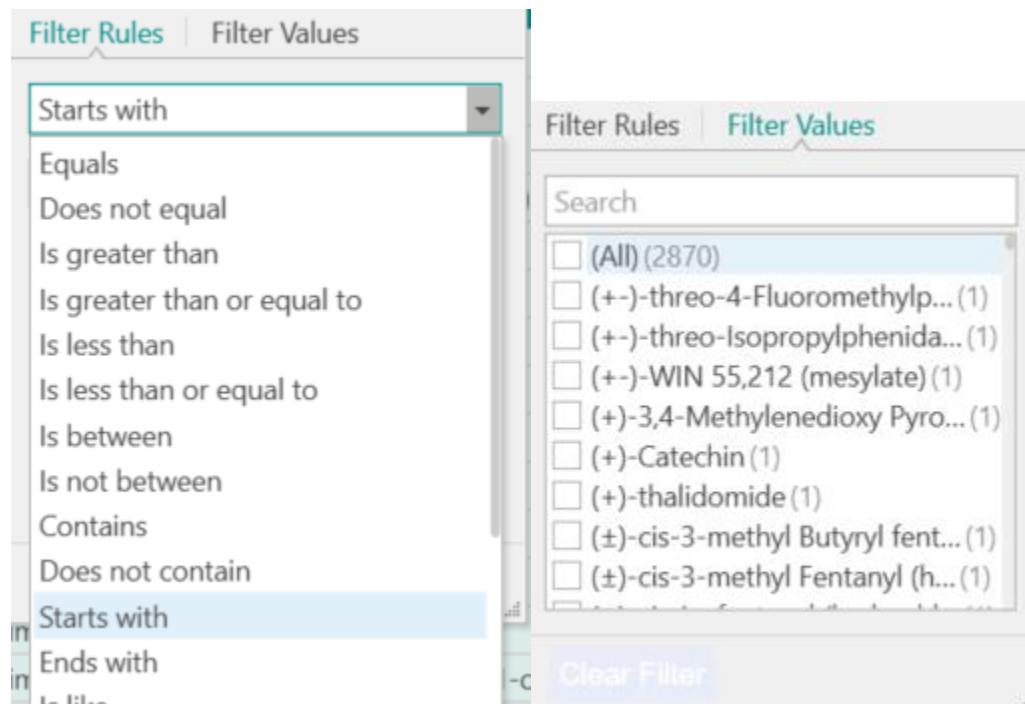


### i. Filtering and Searching

User can click on the filter icon to search and filter individual columns in the table. This function is available with all the tables and their columns. User can set specific filters such as “starts with” or “Contains”, or filter directly through values

Device SN <sup>▼</sup>	Scan Index <sup>▼</sup>	Created Date <sup>▼</sup>	Mod
DAABSA	47	2024/01/04 22:13:18 EST	Nor
DAABSA	46	2024/01/04 22:12:21 EST	Nor

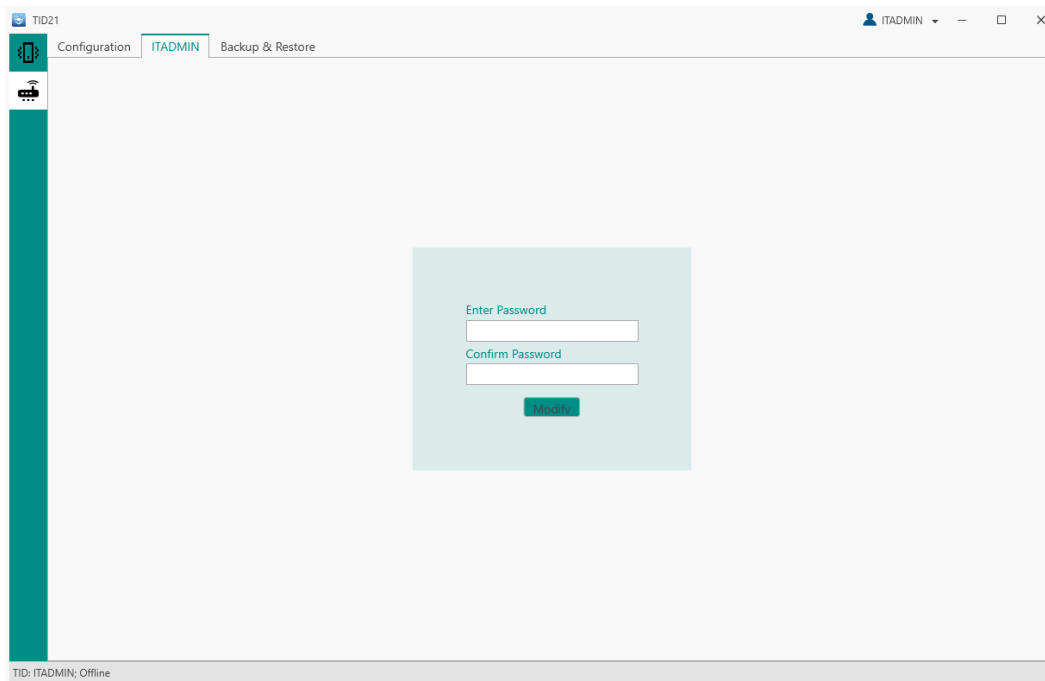




## j. IT Login

When logging in as ITADMIN (default password: 999999), there are different options than for any other account or account type.

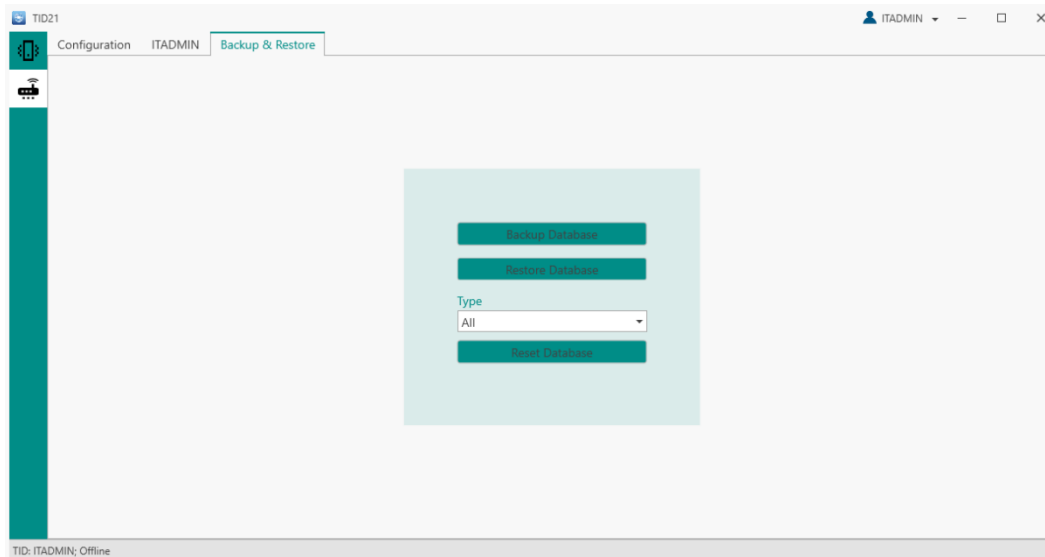
### ITADMIN



The screenshot shows a web browser window titled "TID21" with a user profile icon and the text "ITADMIN". The interface has a teal sidebar on the left with icons for Configuration, ITADMIN, and Backup & Restore. The main content area has three tabs: Configuration, ITADMIN (selected), and Backup & Restore. In the center of the ITADMIN tab is a light blue box containing a password change form. The form has two input fields: "Enter Password" and "Confirm Password", followed by a teal "Modify" button. At the bottom left of the browser window, a status bar reads "TID: ITADMIN; Offline".

The ITADMIN tab allows the user to change the current password for the ITADMIN account. Enter the new password in the top box, then retype it in the second box and press Modify to save the new password.

### Backup & Restore



The Backup & Restore tab allows the ITADMIN to Backup, Restore, Archive, and Retrieve the TID21 database.

- Backup Database – a copy of all the data in the current TID21 database will be saved. None of the data will be removed. It is recommended that the database be backed up at a regular interval to avoid accidental data loss.
- Restore Database – all data in TID21 will be replaced with the contents of the selected TID21 backup.
- Reset Database – all data in the existing database is deleted and cannot be retrieved later unless the database is backed up.