



GPScanID Software

User Manual

(Version 1.0)

**Please read these instructions thoroughly before use and
always keep accessible**

GPScanID Limited

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1. Getting Started

The GPScanID Software enables users to transfer the RFID records in GPScanID Series Readers to the host Windows®-based computer for data processing, storage and perform transactions to online databases. The software also allows users to configure the parameters of the GPScanID Series Readers via the supplied Serial Cable or Bluetooth. It is designed with simple operations in mind.

Before using the software, please ensure the personal computer (PC) meets the following system requirements as detailed below.

A serial COM port (such as USB or RS-232) or Bluetooth is required to connect the reader with the PC. It is highly recommended to use serial connection when connecting the reader with the PC for the first time. Here are the main steps to operate the software:

- (1) Obtain the **GPScanID Software**;
- (2) Install and launch the **GPScanID Software**, and
- (3) Power on the reader and connect it to the PC with the data/charging cable, such as the GPScanID100-Cable

1.1 System Requirement

The PC must meet the following minimum system requirements before installing the software:

Central Processing Unit (CPU)

- 1 Giga Hertz (GHz) or faster x86-bit or x64-bit processor with SSE2 instruction set

System Memory

- Minimum 2GB

Disk Space

- Minimum 300MB

Display

- 1280 x 768 screen resolution or higher

Operating Systems

- Windows 7 (32 & 64 bit);
- Windows 8 (32 & 64 bit);
- Windows 10 (32 & 64 bit);

Supported System Environments

- Microsoft .NET Framework 4.8 or higher

1.2 Getting the Software

Your GPScanID reader comes with an installation DVD disc which contains the GPScanID Software (see example below).



The software can also be downloaded from the following website[†]:

<https://www.GPScanID.com/download/software> or via the QR Code



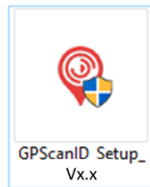
Click the latest Version under **GPScanID Software** to download.

You can save the software in an easily accessible location, such as the Desktop.

[†] It is recommended to use the Microsoft Edge™ web browser to download for stability and security settings.

1.3 Installation

To install the GPScanID Software using the installation DVD disc, double-click the **GPScanID_Setup_Vx.x.exe[†]** icon and follow the prompts.



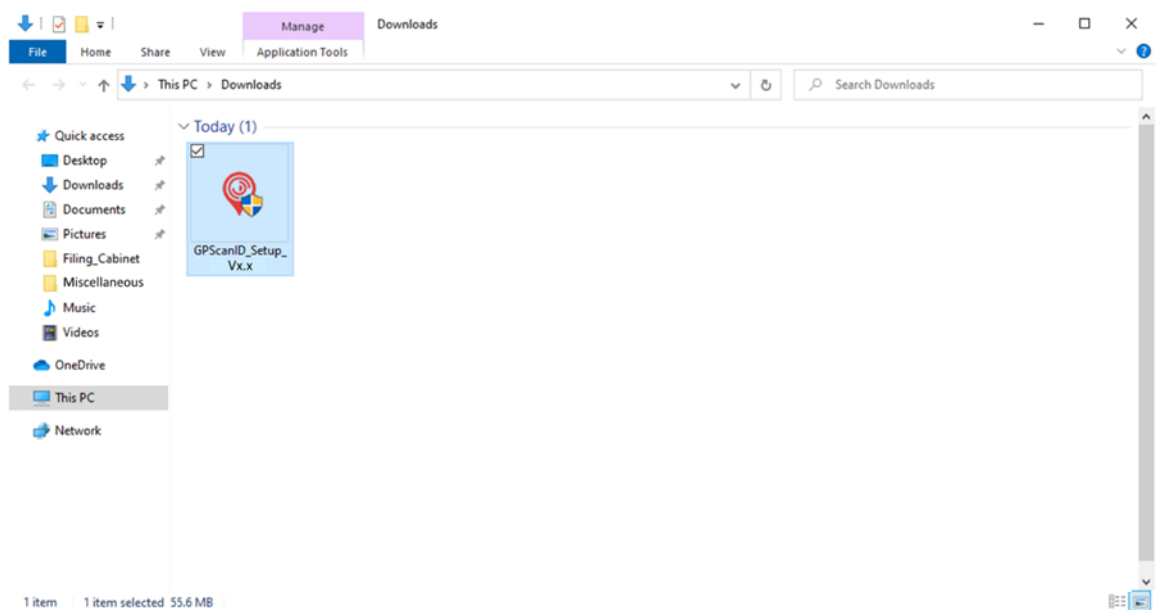
[†]x.x is the version number

To install the software via the internet, follow the steps in Section 1.2 to download the **.rar** file:

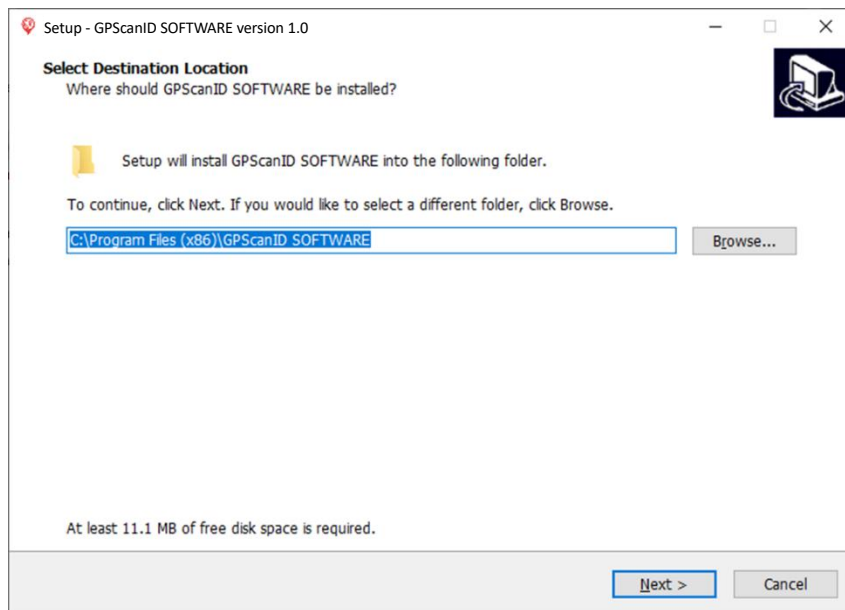
GPScanID_Setup_Vx.x.rar

You will need a file expansion program, such as WinZip, WinRAR, or an online tool to extract the .rar file to .exe format.

After the file is extracted, double-click the file **GPScanID_Setup_Vx.x.exe** to begin installation.

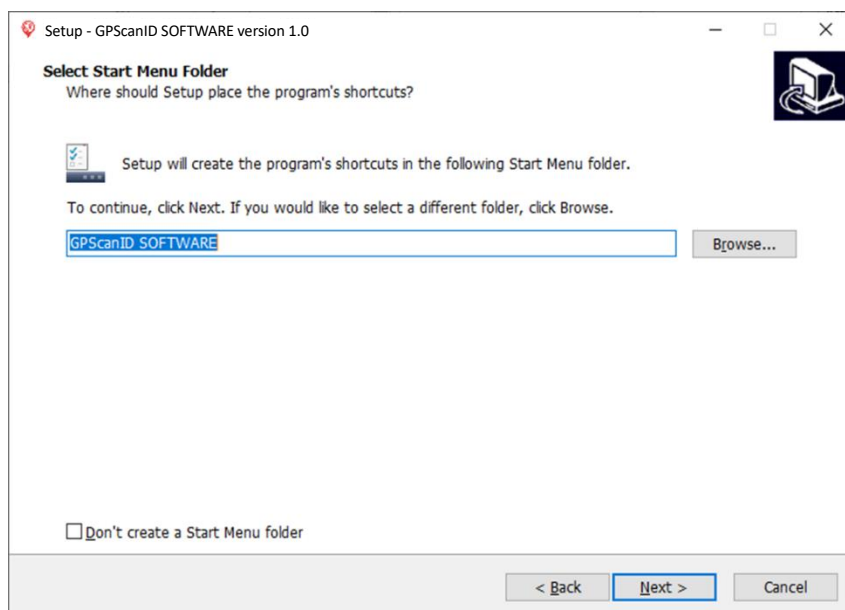


The following screen appears and prompts the user to select the location where the software will be installed. (Unless you have specific file location requirements, you can save the file to the suggested program file location.)



Click **Next >** to continue.

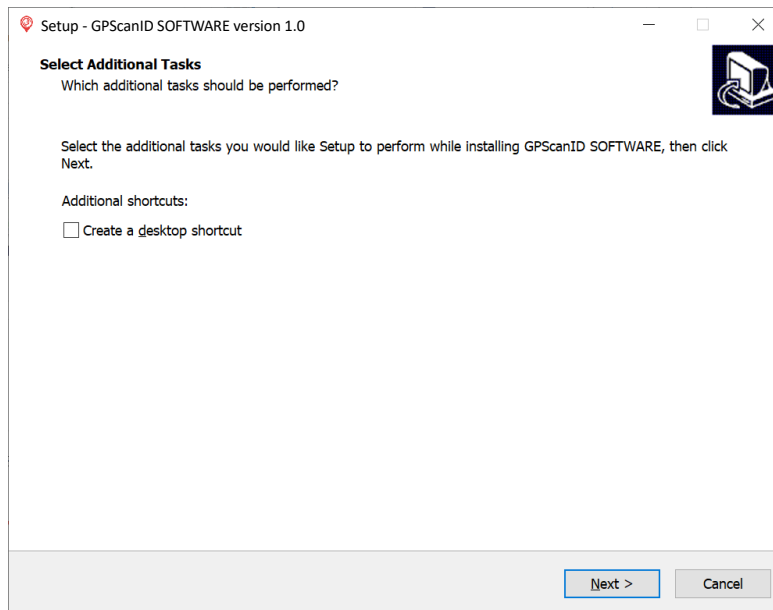
The following window will appear to prompt the user for a **Folder name** in which the software will be placed as a program's shortcut in the Windows™ **Start Menu** folder. (The default name is GPScanID SOFTWARE).



Press **Next >** to continue.

Next, the user will be prompted whether to create a **Desktop Shortcut**.

Click the check box if you wish to create it.

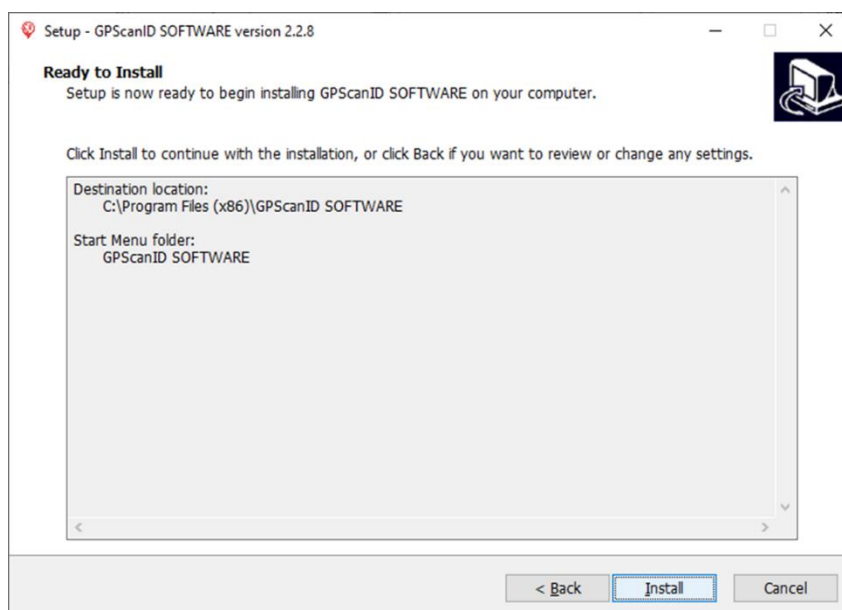


Click **Next >** to continue.

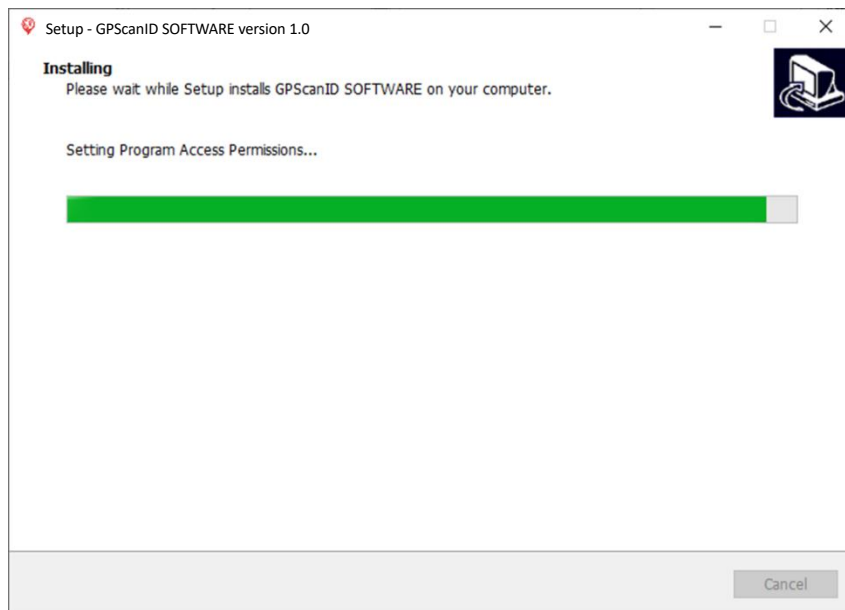
The following screen summarizes the tasks to be performed in the installation.

Press < **Back** to go back for any modifications and/or,

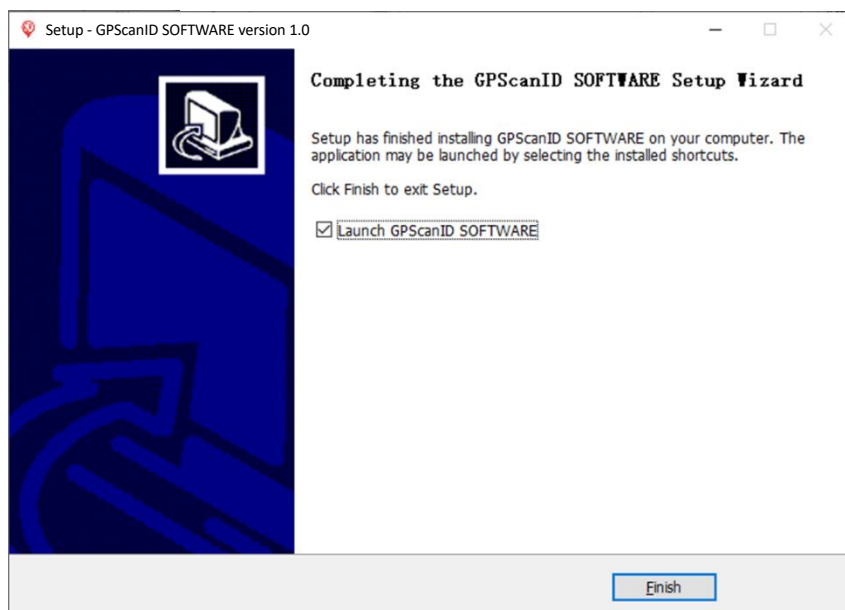
Press **Install** to proceed with the installation.



The following screen will appear and indicate the progress of the installation until completed.



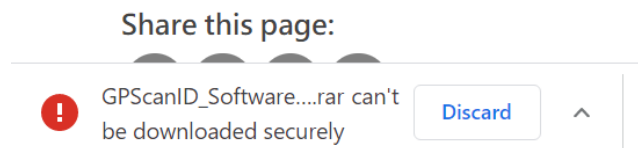
The following screen will appear when installation is complete. Click **Finish** to exit.



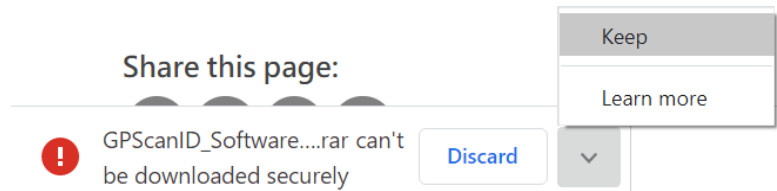
Note 1: If your PC is already installed with an earlier version of the GPScanID Software, some of the above prompts may not be shown. The installer will simply update your Software in the same location with the existing folder name.

Note 2: Depending on the Windows™ version, the web browser and the security settings in your PC, you may encounter the following warning messages during software installation. We have listed the corresponding actions to take. It is recommended to use the Microsoft Edge™ web browser for downloading the software.

1. When downloading the software from the GPScanID website, your browser may show the following security warning and download will pause:

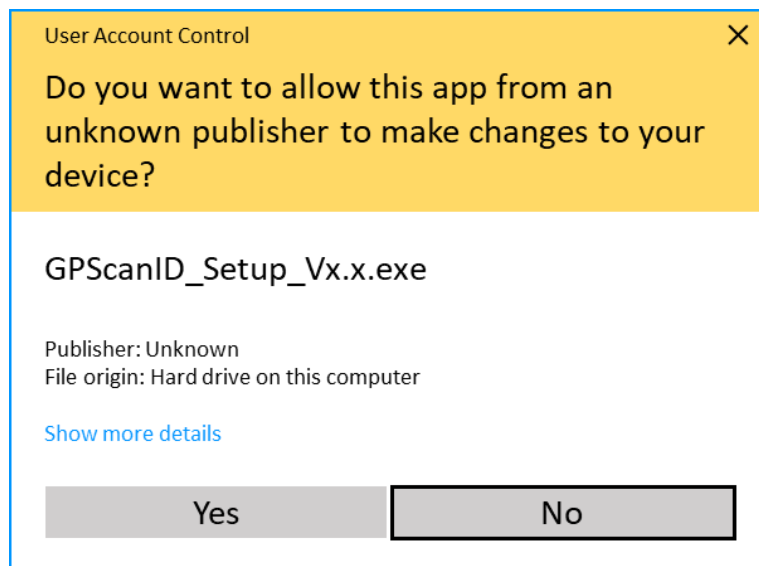


Action: Click the ^ arrow on the right and select **Keep** to start downloading.



2. When double-click to run **GPScanID_Setup_Vx.x.exe**, the following security warnings may appear:

a)

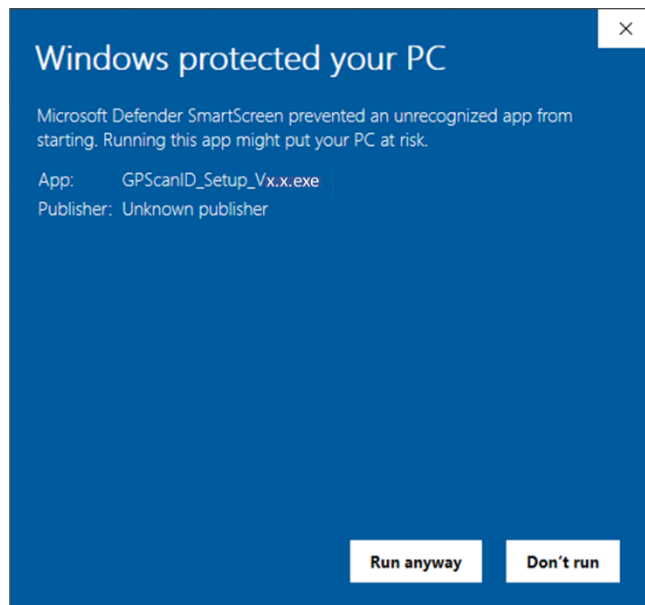


Action: Click **Yes** to continue running the software.

b)



Action: Click **More info**. Then click **Run anyway** in the next screen to proceed

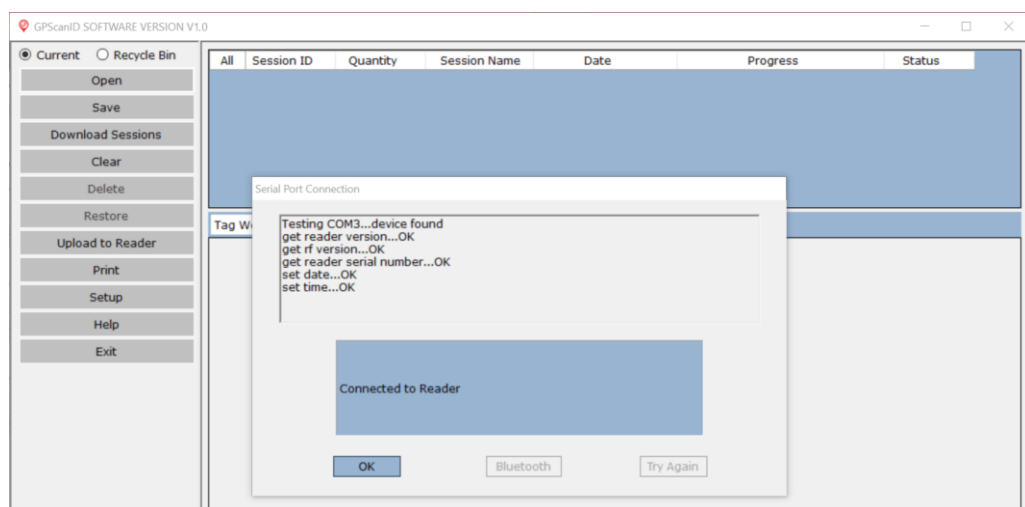


1.4 Establish Connection

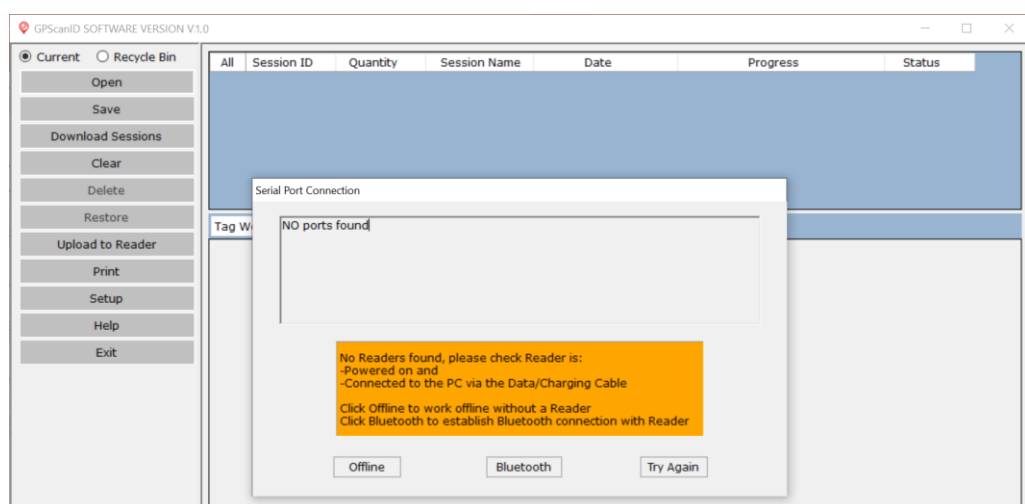
The next step is to establish a connection between the reader and the PC. The GPScanID Series RFID readers can be connected to the PC either by serial connection (such as USB or RS-232) or wireless connection (such as Bluetooth). The GPScanID Software will always try to establish a serial connection first. If this fails, the user is prompted to establish a wireless connection (for example, Bluetooth) or work offline without a reader.

1.4.1 Serial Connection

If the reader is connected to the PC via the serial cable (either USB or RS-232), the software will automatically search the serial COM port once it is launched. If the COM port is available and connection is successful, the following **Connected to Reader** message will be displayed. Click **OK** to continue.



If connection fails, the following message is displayed.



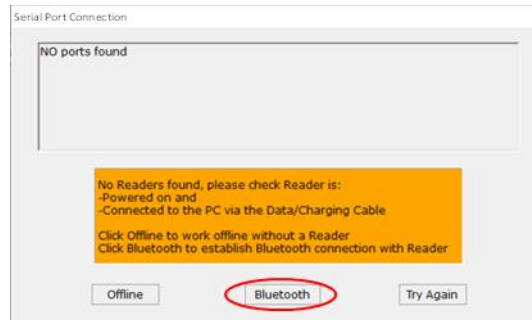
Please check the port and physical connections between the reader, cable and PC.

From the Reader, select **Settings / Connection / Cable / Connect To PC**.

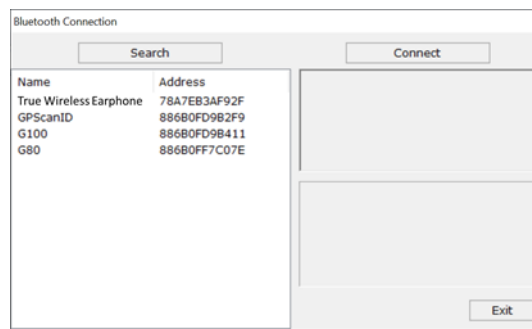
Press **Try Again** to re-connect.

1.4.2 Bluetooth Connection

If serial connection is unavailable, the software will prompt the user to connect via Bluetooth or work offline (without a reader).



To connect via Bluetooth, turn on the Bluetooth function in both the PC and the Reader (refer to the Reader User Manual for detailed instructions). Click the **Bluetooth** button in the bottom-middle of the window. The following window will appear:



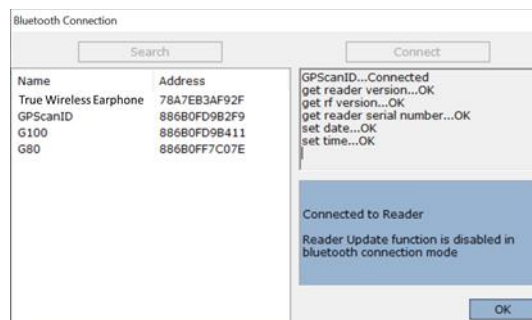
[Search]: Click to **Search** for nearby Bluetooth devices.

[Connect]: Click to **establish a connection** to a selected Bluetooth device.

[Exit]: Click to **Exit** the Bluetooth connection screen and operate the software without connecting to a reader.

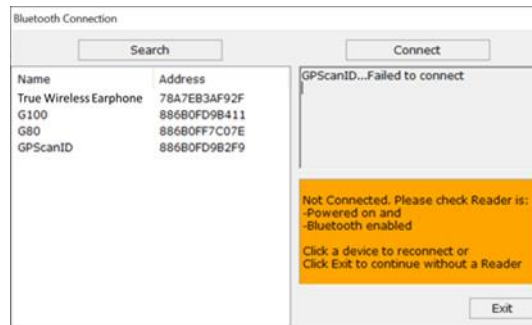
To connect, click the name of the reader then click **Connect**.

If Bluetooth connection is established successfully, the following screen will appear:



Click **OK** to continue.

If the Bluetooth connection cannot be established, the following screen will appear:



Check all Bluetooth settings in the PC and the reader, and they are paired.

Users can either:

- (1) Press **Search** to search again, then select the reader and press **Connect** to try connecting again; or
- (2) Press **Exit** to exit this window to operate the software without connecting to any reader.

Please note that reader firmware updates can only be completed with a serial connection. Bluetooth connection cannot be used for firmware updates.

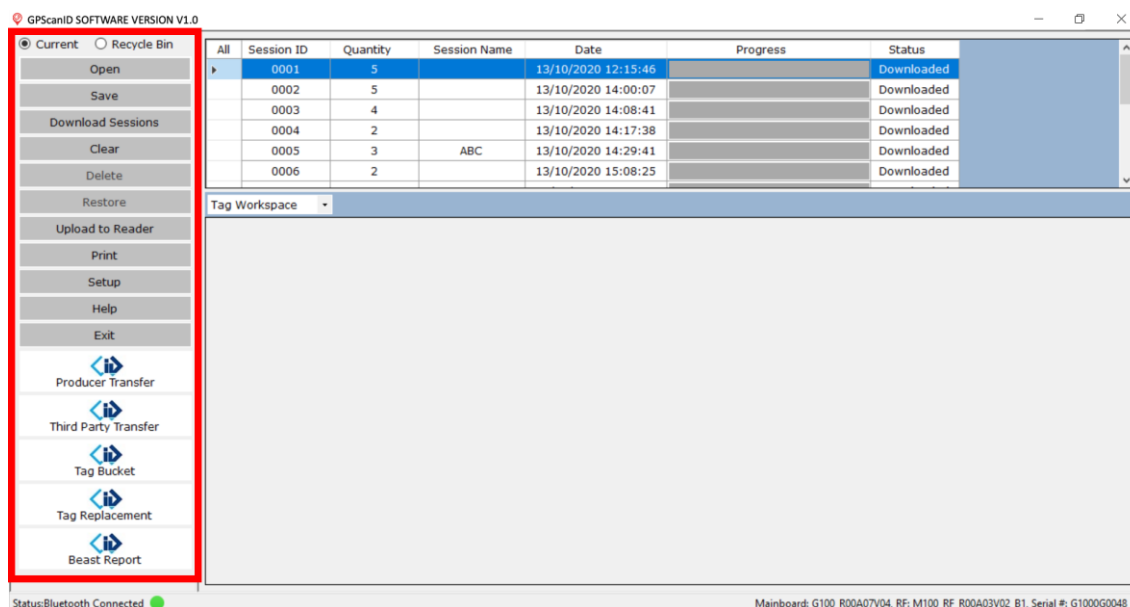
2. Main Screen

Once the software is launched and a connection is established, all sessions in the reader will automatically be downloaded. There are 4 main sections making up the Main screen:

1. Function Sidebar;
2. Session Workspace;
3. Tap/Map Workspace; and
4. Status Bar.

2.1 Function Sidebar

The Function Sidebar lists all functions available to the user. If a function button is greyed-out, it is unavailable. For example, the **Delete** and **Restore** buttons below.



Please note: To access the NLIS functions:

- (1) Click the **Setup** button.
- (2) In the **Upload Configuration** section, select **Australia** from the **Country** pull-down menu and enter the appropriate NLIS login credentials such as **Account Type**, **User Name**, **Password** and **PIC Code**.
- (3) Press **Confirm** to proceed.

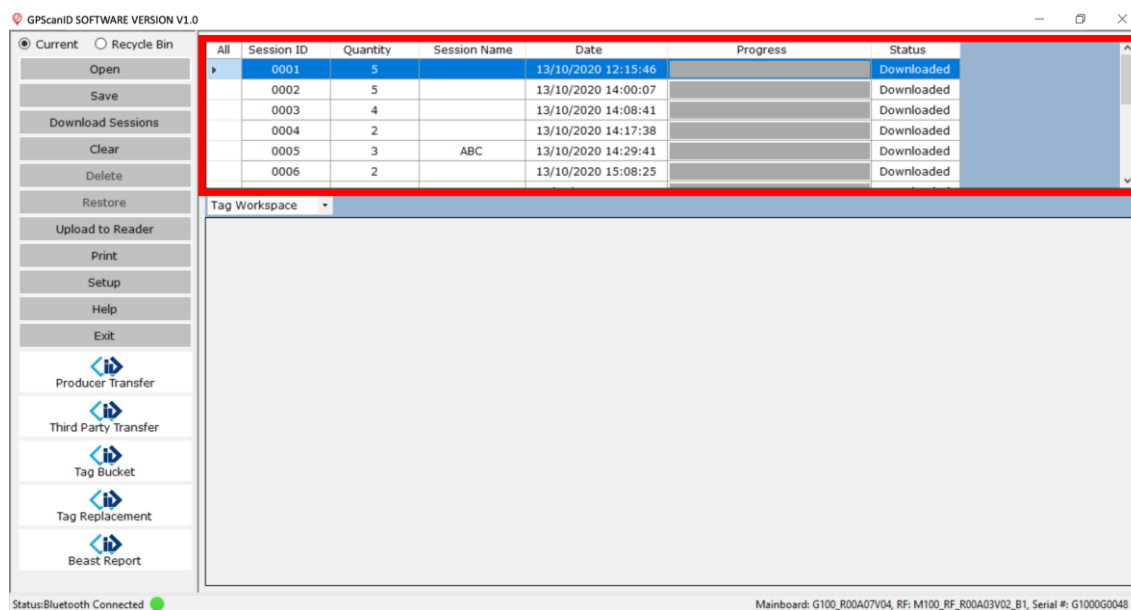
2.2 Workspaces

There are 2 workspaces in the **Main Menu**:

(1) Session Workspace

The workspace lists all the Current Session IDs that have been downloaded to the software or cleared Session IDs stored in the **Recycle Bin**. The following information is available for each session:

- **Session ID:** The session number allocated when it was created.
- **Quantity:** The number of IDs stored in the session.
- **Session Name:** If a specific name was created by the user for the session, the name will appear in this field.
- **Date:** Timestamp when the session was created.
- **Progress:** Displays the session download progress per the grey progress bar.
- **Status:** The status of the session.



(2) Tag/Map Workspace

This workspace shows the details of the IDs recorded in a session. To view the ID details, click on a **Session ID** in the **Session Workspace**.

You can also toggle between **Tag Workspace** (shown below to display ID details of the selected session) and **Map Workspace** (to display the location of the tags in Google Maps™, if recorded) using the ▼ pull-down menu.

Tag Workspace shows the detailed list of all IDs stored in the selected session. The following information is displayed:

- **Count:** Location of ID stored in the session.
- **RFID:** The 15-digit RFID number per ISO standard.
- **GPS:** GPS co-ordinates of the tag at the time it was read, if GPS was activated and available.
- **Date:** Timestamp when the tag was read.
- **UF1 to UF4:** Optional User Fields (UF) 1 to 4 for user comments.

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Current Recycle Bin

Open

Save

Download Sessions

Clear

Delete

Restore

Upload to Reader

Print

Setup

Help

Exit

Producer Transfer

Third Party Transfer

Tag Bucket

Tag Replacement

Beast Report

All	Session ID	Quantity	Session Name	Date	Progress	Status
	0001	5		13/10/2020 12:15:46		Downloaded
	0002	5		13/10/2020 14:00:07		Downloaded
	0003	4		13/10/2020 14:08:41		Downloaded
	0004	2		13/10/2020 14:17:38		Downloaded
	0005	3	ABC	13/10/2020 14:29:41		Downloaded
	0006	2		13/10/2020 15:08:25		Downloaded

Tag Workspace

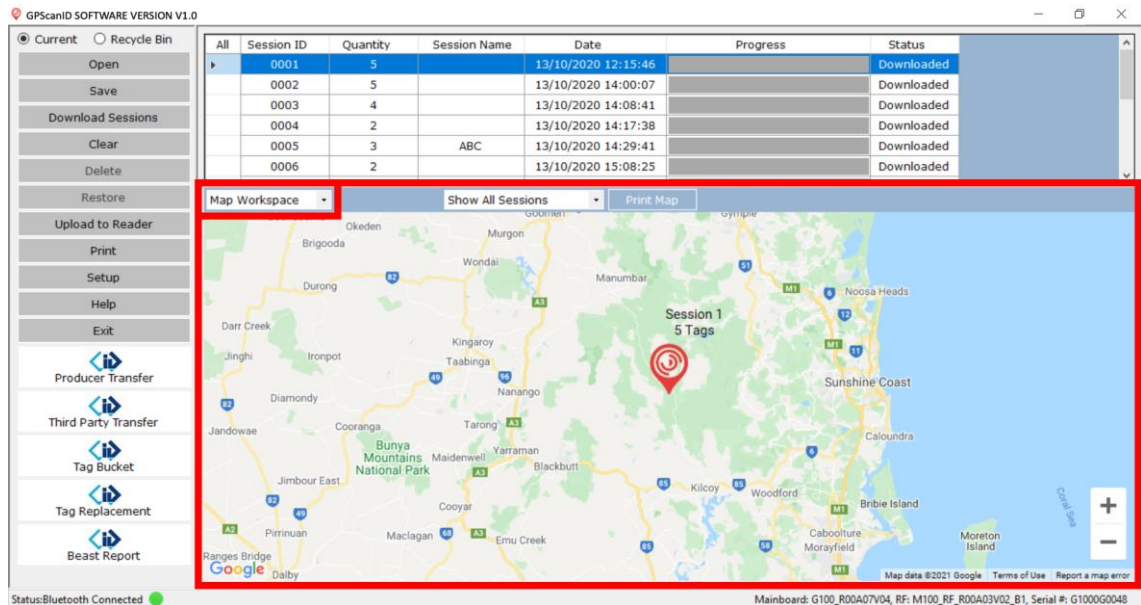
	Count	RFID	GPS	Date	UF1	UF2	UF3	UF4
<input checked="" type="checkbox"/>	1	999 000000000358	-26.691973,152.4509...	13/10/2020 12:16:10	Angus	825kg	Vaccine-A	Feedlot5
<input checked="" type="checkbox"/>	2	951 013001089645	-26.691973,152.4509...	13/10/2020 12:16:13	Brahman	769kg	Vaccine-B	FarmB12
<input checked="" type="checkbox"/>	3	951 013001004942	-26.691973,152.4509...	13/10/2020 12:16:17	Gelbvieh	922kg	Vaccine-C	John'sFarm
<input checked="" type="checkbox"/>	4	951 000502220320	-26.691973,152.4509...	09/03/2021 14:47:43				
<input checked="" type="checkbox"/>	5	951 015000001431	-26.691973,152.4509...	09/03/2021 14:48:00				

Status:Bluetooth Connected

Mainboard: G100_R00A07V04, RF: M100_RF_R00A03V02_B1, Serial #: G1000G0048

Map Workspace displays the location of the tag at the time it was read, if GPS was activated.

To switch from **Tag Workspace** to **Map Workspace**, use the pull-down button on the top-left hand corner to select.



In **Map Workspace**, you can use the pull-down menu to select the following display options:

[Show All Sessions]: To show the location of all sessions.

[Hide All Sessions]: To hide the location of all sessions.

[Show Selected]: To show the location of the selected session.

You can use the + / - buttons to zoom in / out the map and navigate the same way as Google Maps™.

You can also print the location of the sessions in the map by pressing the **Print Map** button.

2.3 Status Bar

The status bar at the bottom left of the window displays the connection status, whether via **COM port**, **Bluetooth**, or **Disconnected**. The bottom right corner shows the Reader's Mainboard, RF Firmware Versions and its Serial Number respectively.

GPScanID SOFTWARE VERSION V1.0

Current Recycle Bin

Open

Save

Download Sessions

Clear

Delete

Restore

Upload to Reader

Print

Setup

Help

Exit

Producer Transfer

Third Party Transfer

Tag Bucket

Tag Replacement

Beast Report

All	Session ID	Quantity	Session Name	Date	Progress	Status
	0001	5		13/10/2020 12:15:46		Downloaded
	0002	5		13/10/2020 14:00:07		Downloaded
	0003	4		13/10/2020 14:08:41		Downloaded
	0004	2		13/10/2020 14:17:38		Downloaded
	0005	3	ABC	13/10/2020 14:29:41		Downloaded
	0006	2		13/10/2020 15:08:25		Downloaded

Tag Workspace

Count	RFID	GPS	Date	UF1	UF2	UF3	UF4
1	999 0000000000358	Not Recorded	13/10/2020 12:16:10	Angus	825kg	Vaccine-A	Feedlot5
2	951 013001089645	Not Recorded	13/10/2020 12:16:13	Brahman	769kg	Vaccine-B	FarmB12
3	951 013001004942	Not Recorded	13/10/2020 12:16:17	Gelbvieh	922kg	Vaccine-C	John'sFarm
4	951 000502220320	Not Recorded	09/03/2021 14:47:43				
5	951 015000001431	Not Recorded	09/03/2021 14:48:00				

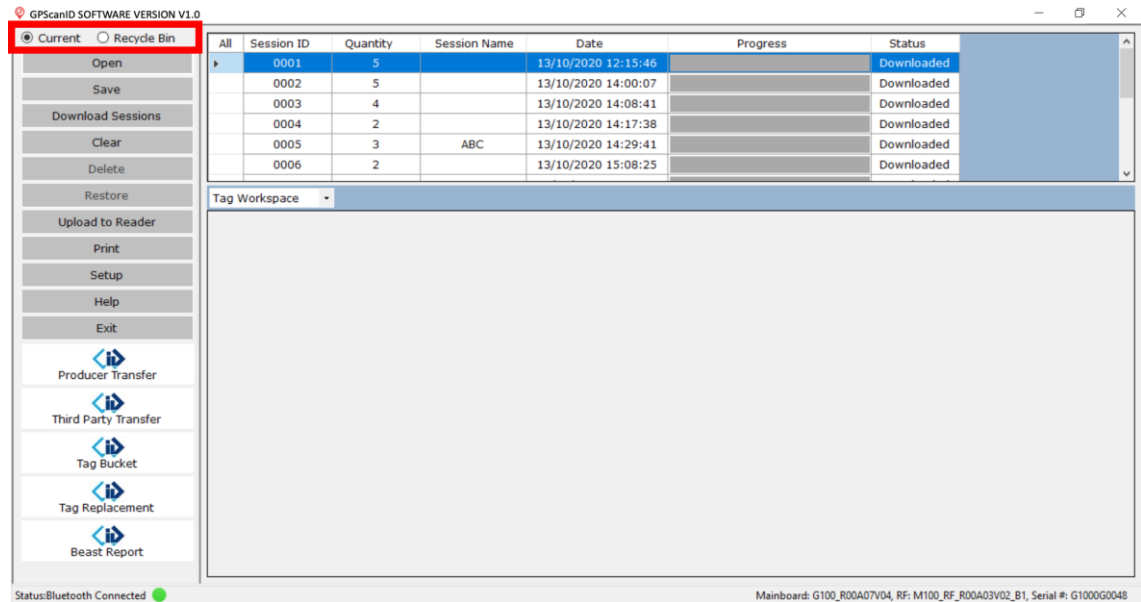
Status:Bluetooth Connected

Mainboard: G100_R00A07V04, RF: M100_RF_R00A03V02_B1, Serial #: G1000G0048

3. Operations

3.1 Memory Space

The reader supports 2 memory spaces: **Current** and **Recycle Bin**. You can choose the memory space you wish to work with by selecting either **Current** and **Recycle Bin**.

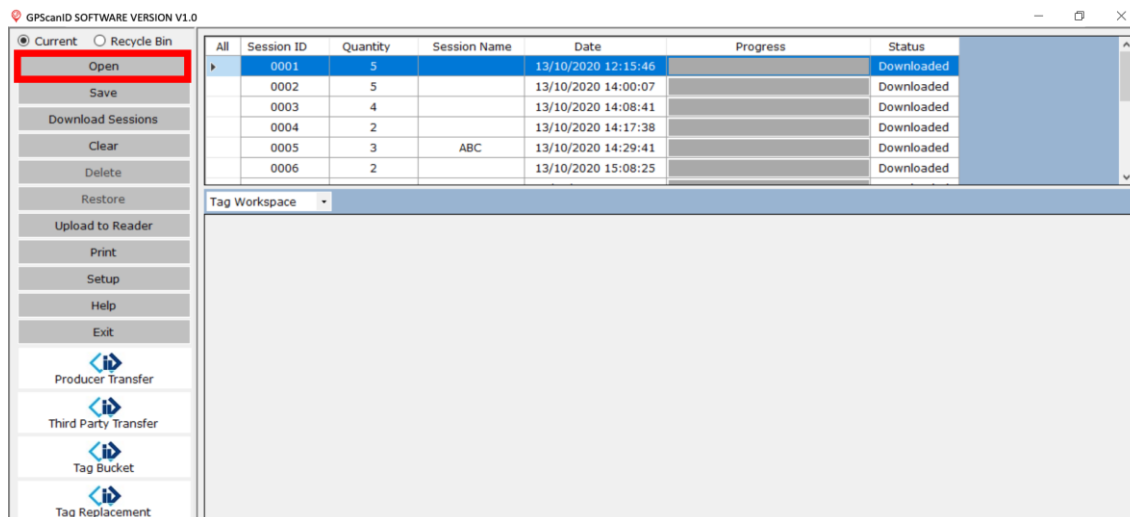


- **Current:** Displays the current sessions downloaded from the reader. This is the default memory displayed in the software.
- **Recycle Bin:** This is a temporary memory space where cleared sessions are stored for later deletion or retrieval. Sessions in the **Recycle Bin** are only assessable from this software and not from the reader. They can be:
 - Permanently deleted (see Section 3.6);
 - Restored back to the **Current** memory space (see Section 3.7);
 - Stored temporarily until the **Recycle Bin** overflows (for example, over 1000 sessions or the memory is full).

As sessions stored in the **Recycle Bin** will be deleted when the memory space or number of sessions are full and overflows, it is highly recommended to restore important sessions back to the **Current** Memory Space or save them in the PC (see Section 3.3).

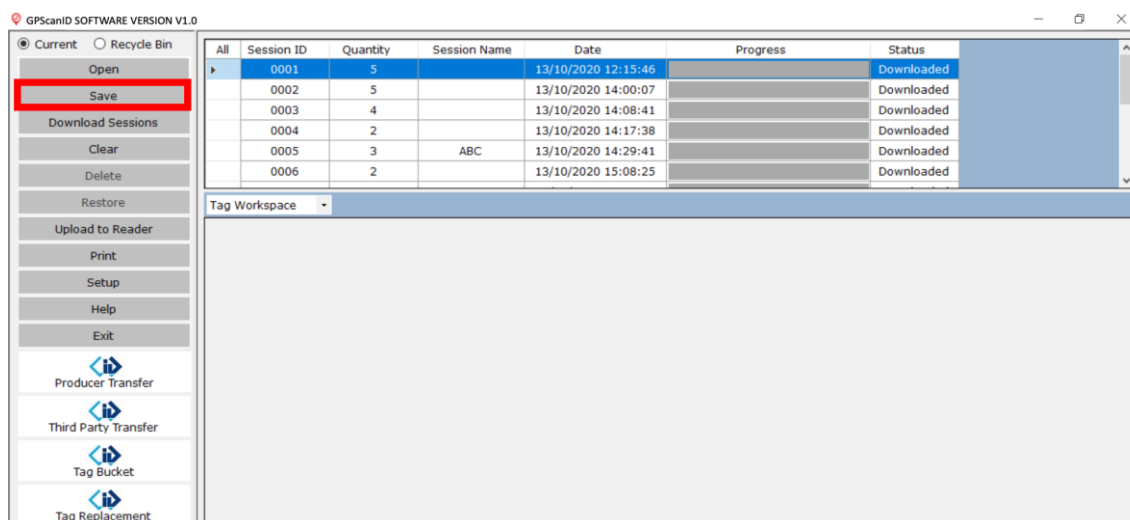
3.2 Open

This function enables the user to open a previously saved session file (in .csv file format) in the software. The records will be displayed in the **Session Workspace** and the **Tag/Map Workspaces**. The software accepts file saved with multiple sessions, and stored in both the **Current** and **Recycle Bin** memory spaces.



3.3 Save

This function enables the user to save session(s) from the software's memory space to the PC in .csv format. The file is saved to C:\\Program File (x86)\\GPScanID_Software\\Filing_Cabinet as the default location. You can specify any other location by navigating to the appropriate location.



You can choose to save a single session, multiple or all sessions from the **Session Workspace**.

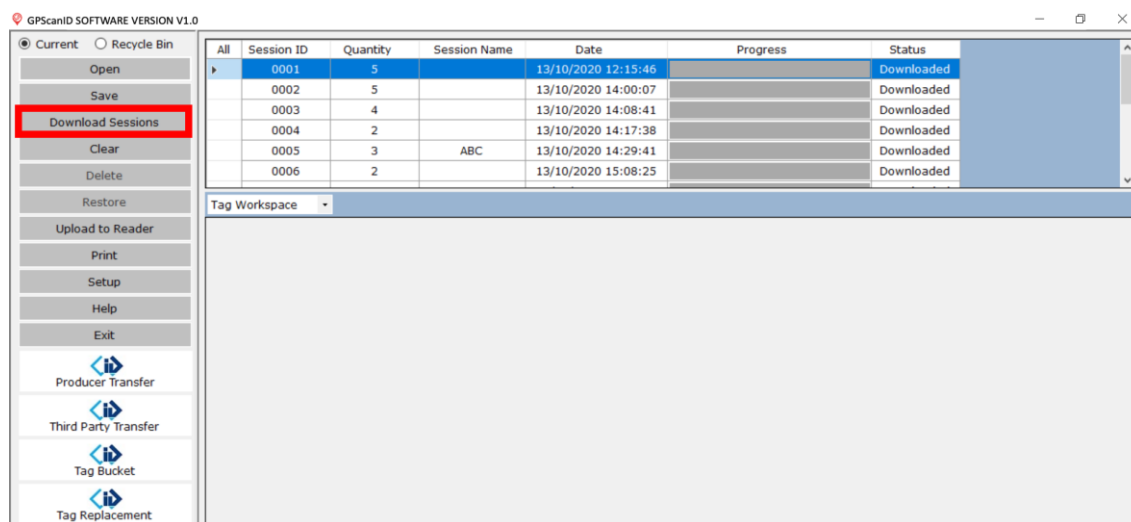
To save a single session, select its **Session ID** to select, then press **Save**.

To save multiple sessions, press and hold the **Ctrl** key to select the **Session IDs**, then press **Save**.

To save all sessions, press **All** next to **Session ID** header to select all sessions, then press **Save**.

3.4 Download Sessions

This function establishes a connection between the reader and the software, then downloads all sessions from the reader to the software (Please refer to Section 1.4 for details on establishing connection with the reader).



3.5 Clear (Session)

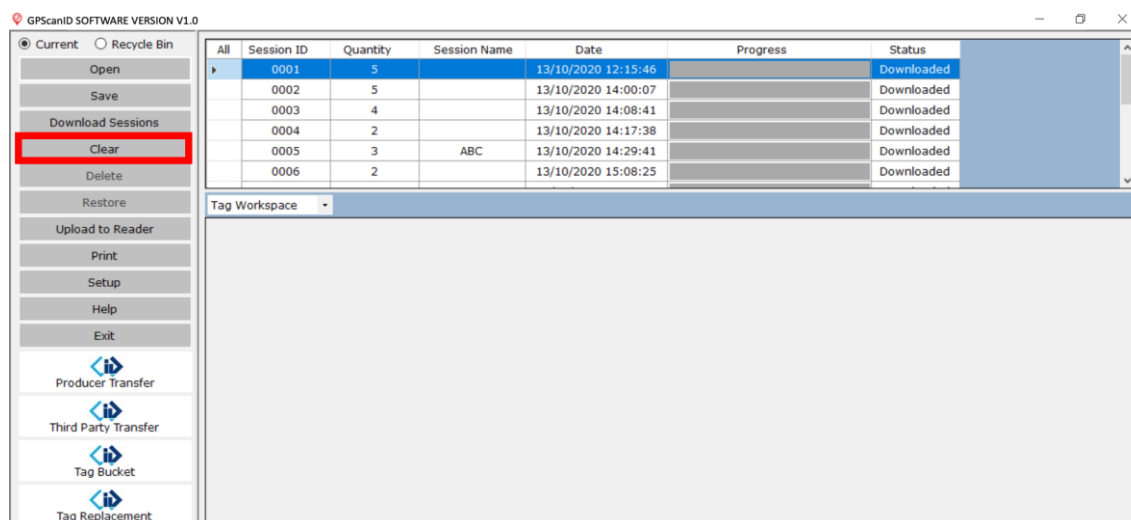
This function pushes the selected session(s) from the **Current** memory space to the **Recycle Bin**. Cleared sessions are not deleted, they are simply moved to another memory location. They can be restored back to the **Current** memory space by using the **Restore** function.

To select multiple sessions, press and hold the **Ctrl** key to select the **Session IDs**.

To select all sessions, press **All** next to **Session ID** header.

Press **Clear** to clear the selected session(s).

If only 1 session is present, clearing the session will cause both the reader and software to automatically create a new session (with the new session number incremented by 1 from the last session number). This enables the reader to be able to read tags at any time.



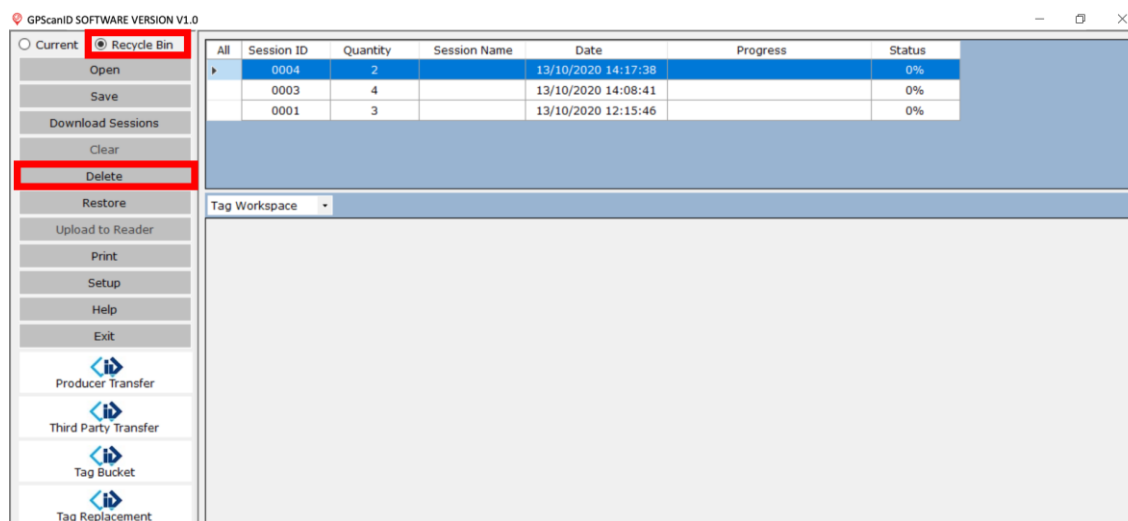
3.6 Delete (Session)

This function is only available in the **Recycle Bin** memory space. It **permanently deletes** the selected session(s) in the **Recycle Bin** and the process **cannot be reversed**. Please pay extra attention when deleting sessions!

To select multiple sessions, press and hold the **Ctrl** key to select the **Session IDs**.

To select all sessions, press **All** next to **Session ID** header.

Press **Delete** to delete the selected session(s).



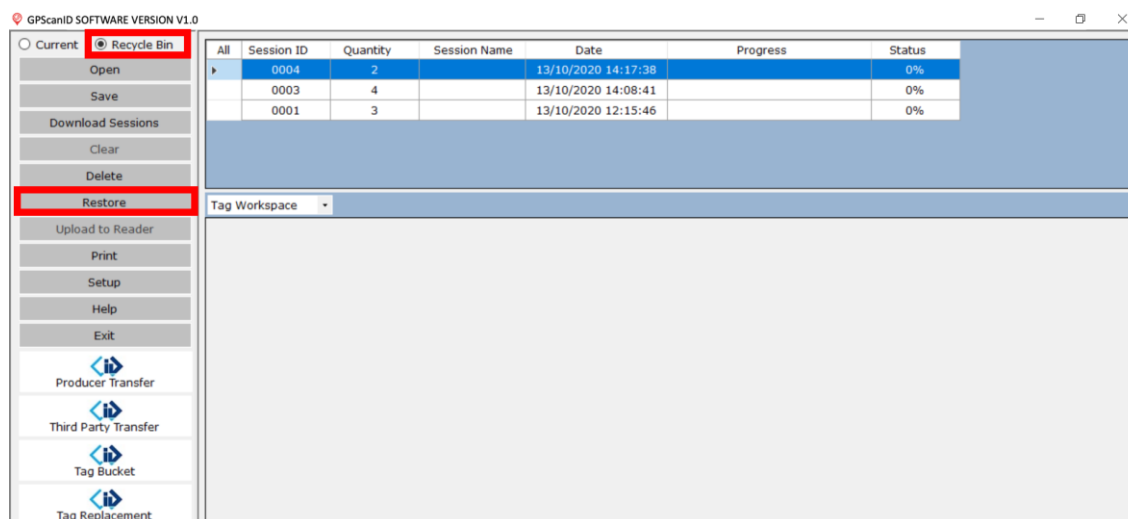
3.7 Restore (Session)

This function is only available in the **Recycle Bin**. It moves the selected cleared session(s) from the **Recycle Bin** back to the **Current** memory space.

To select multiple sessions, press and hold the **Ctrl** key to select the **Session IDs** to be deleted.

To select all sessions, press **All** next to **Session ID** header.

Press **Restore** to restore the selected session(s).



3.8 Upload to Reader

This function saves the user comments entered in the 4 user fields (UF1 to UF4) in **Tag Workspace** to the reader.

You can add comments[†] relevant to the **ID Number** in the cells under columns **UF1 to UF4**, then press **Upload to Reader** to save it in the reader.

[†] You can enter a maximum of 16 characters in each user field. **Space** and **,** are reserved and cannot be saved in the user fields.

GPScanID SOFTWARE VERSION V1.0

☒ Current ☐ Recycle Bin

Open

Save

Download Sessions

Clear

Delete

Restore

Upload to Reader

Print

Setup

Help

Exit

Producer Transfer

Third Party Transfer

Tag Bucket

Tag Replacement

Beast Report

Status: Bluetooth Connected

All	Session ID	Quantity	Session Name	Date	Progress	Status
<input type="checkbox"/>	0001	5		13/10/2020 12:15:46		Downloaded
<input type="checkbox"/>	0002	5		13/10/2020 14:00:07		Downloaded
<input type="checkbox"/>	0003	4		13/10/2020 14:08:41		Downloaded
<input type="checkbox"/>	0004	2		13/10/2020 14:17:38		Downloaded
<input type="checkbox"/>	0005	3	ABC	13/10/2020 14:29:41		Downloaded
<input type="checkbox"/>	0006	2		13/10/2020 15:08:25		Downloaded

Tag Workspace

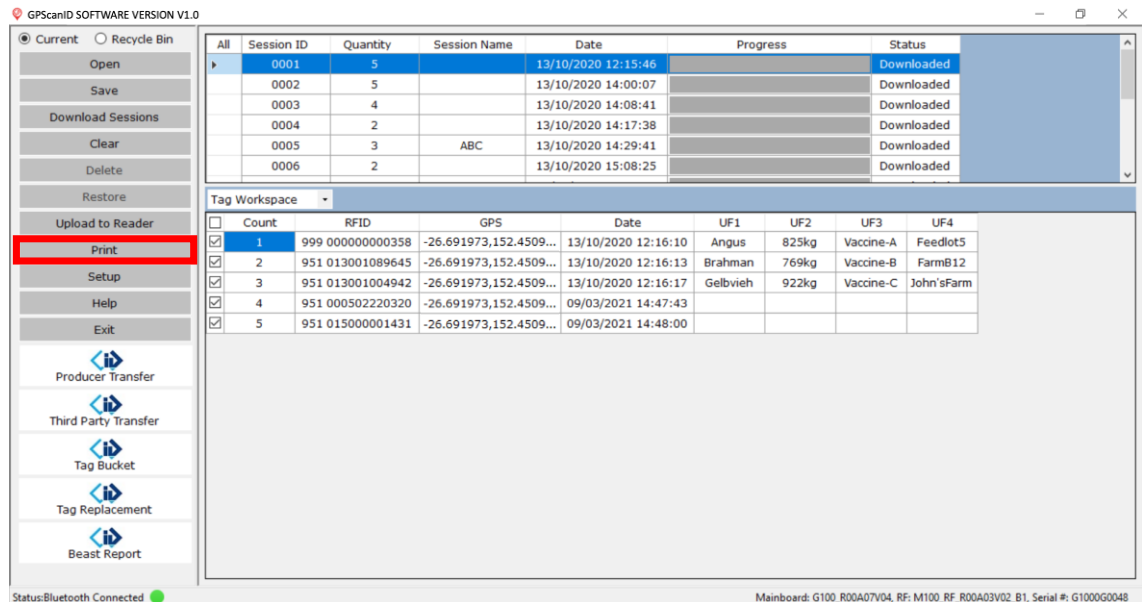
<input type="checkbox"/>	Count	RFID	GPS	Date	UF1	UF2	UF3	UF4
<input checked="" type="checkbox"/>	1	999 000000000358	-26.691973,152.4509...	13/10/2020 12:16:10	Angus	825kg	Vaccine-A	Feedlot5
<input checked="" type="checkbox"/>	2	951 013001089645	-26.691973,152.4509...	13/10/2020 12:16:13	Brahman	769kg	Vaccine-B	FarmB12
<input checked="" type="checkbox"/>	3	951 013001004942	-26.691973,152.4509...	13/10/2020 12:16:17	Gelbvieh	922kg	Vaccine-C	John'sFarm
<input checked="" type="checkbox"/>	4	951 000502220320	-26.691973,152.4509...	09/03/2021 14:47:43				
<input checked="" type="checkbox"/>	5	951 015000001431	-26.691973,152.4509...	09/03/2021 14:48:00				

Mainboard: G100_R00A07V04, RF: M100_RF_R00A03V02_B1, Serial #: G1000G0048

3.9 Print

This function prints the **Tag Workspace** of the highlighted session.

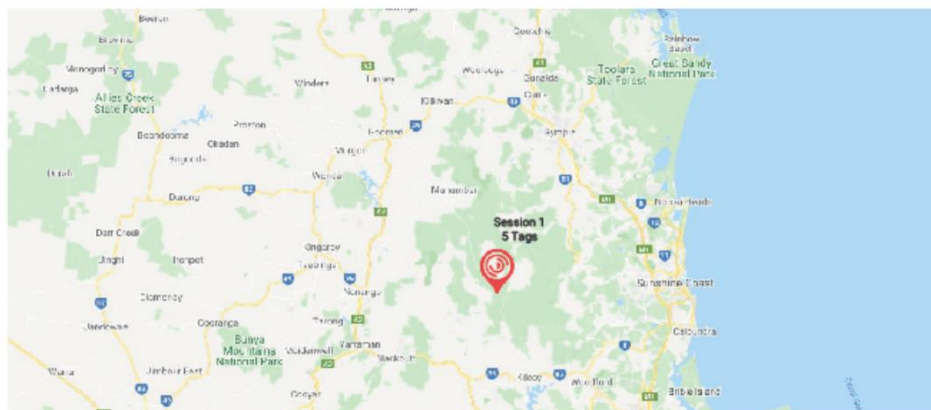
The **Print** function allows you to print one session at a time. To print multiple sessions, please print them one-by-one.



To print the GPS locations of the session(s), select **Map Workspace** from the drop-down options, select which session(s) you want to show, then click the **Print Map** button.

GPScanID MAP

Page 1 of 1



Google

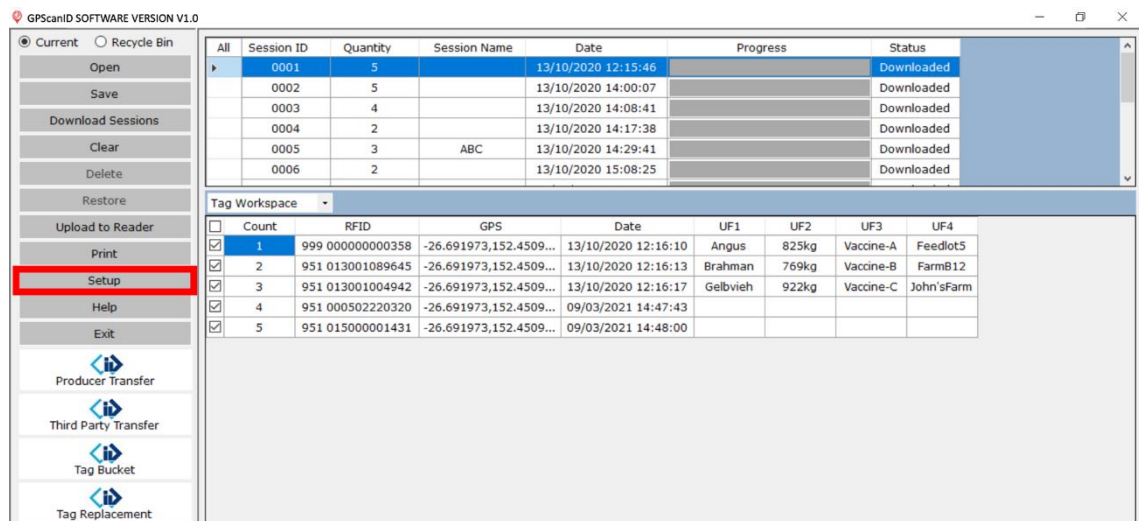
Map data ©2021 Google

file:///C:/Program%20Files%(x86)/GPScanID%20SOFTWARE/Temp_Report/temp_map.html

16/3/2021

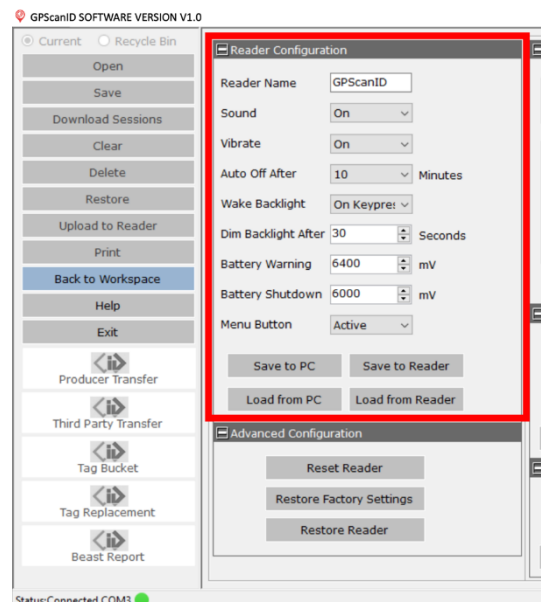
3.10 Setup

The **Setup Menu** hosts a wide range of functions and configurations for both the GPScanID reader and Software.



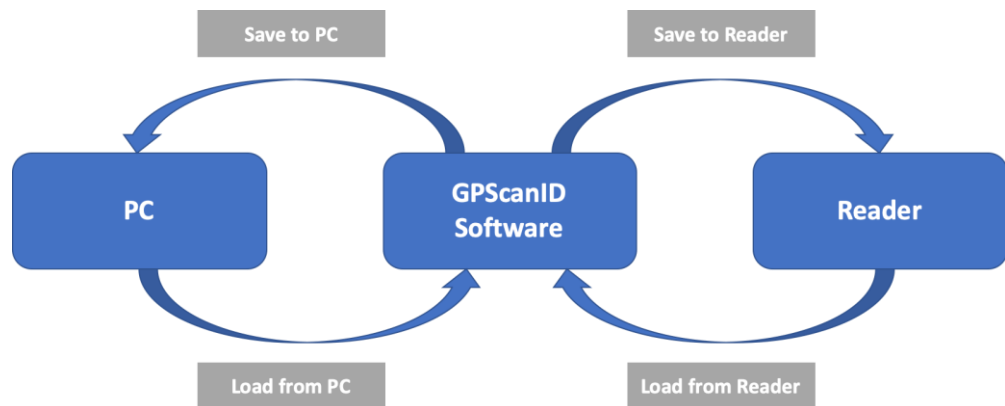
3.10.1 Reader Configuration

This section contains the default operating parameters of the Reader. After entering the appropriate parameters in the software, you can save the default reader settings (from the software) to the reader or the PC. You can also download the parameters from the reader to the software or open a previously saved configuration file and load it to the software.

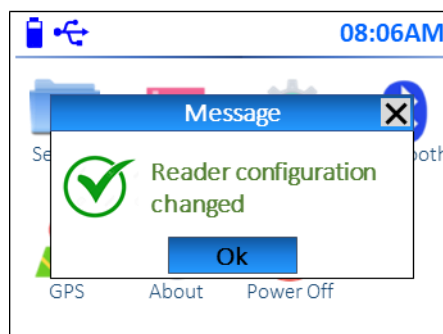


When modifying the **Reader Name**, please note it has a maximum length of 8 alphanumeric digits and only a...z, A...Z, or 0...9 is acceptable. Space or other special characters cannot be used.

The diagram below illustrates the 4 function buttons: **Save to PC**, **Save to Reader**, **Load from PC**, and **Load from Reader**.



If a new configuration is saved to the Reader, the following warning screen is also displayed on the Reader to notify the user.



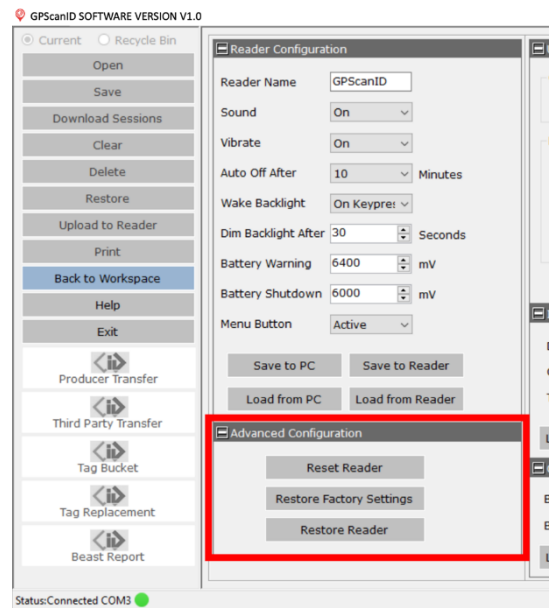
3.10.2 Advanced Configuration

This section contains the functions regarding resetting and restoring the Reader.

Reset Reader: Powers off the reader and restarts it. All contents and settings in the reader remain unchanged.

Restore Factory Setting: Restores the reader to its original factory settings. All recorded Sessions and IDs remain unchanged in the reader and will not be deleted.

Restore Reader: Restores the reader to its original factory settings. **All recorded Sessions and IDs will be erased and cannot be retrieved.** Session 1 is automatically created.



3.10.3 Upload Configuration

This section allows you to select the country where the reader will be used. You can enter user account details to connect with its government databases.

The screenshot displays the GPScanID Software V1.0 interface. The 'Upload Configuration' dialog box is open and highlighted with a red border. It contains the following fields and options:

- Option:** A dropdown menu.
- Country:** A dropdown menu showing 'Australia (NLIS)'.
- NLIS Account Type:** A dropdown menu showing 'Producer'.
- User Name:** A text field containing '2PRODHKA'.
- Password:** A text field with masked characters '*****'.
- PIC Code:** A text field containing 'NE200108'.
- Confirm:** A button to save the configuration.

The background interface shows the 'Reader Configuration' section with fields for Reader Name, Sound, Vibrate, Auto Off After, Wake Backlight, Dim Backlight After, Battery Warning, Battery Shutdown, and Menu Button. There are also buttons for 'Save to PC', 'Save to Reader', 'Load from PC', 'Load from Reader', 'Reset Reader', 'Restore Factory Settings', and 'Restore Reader'. The 'Advanced Configuration' section is also visible.

Supported Countries: Only Australia (NLIS) is supported in this version.

For Australia, the National Livestock Identification System (NLIS) requires the following input fields:

Account Type: Select the account type. Only **Producer** and **Third-Party** account types are supported in this version.

User Name: Username of the NLIS account.

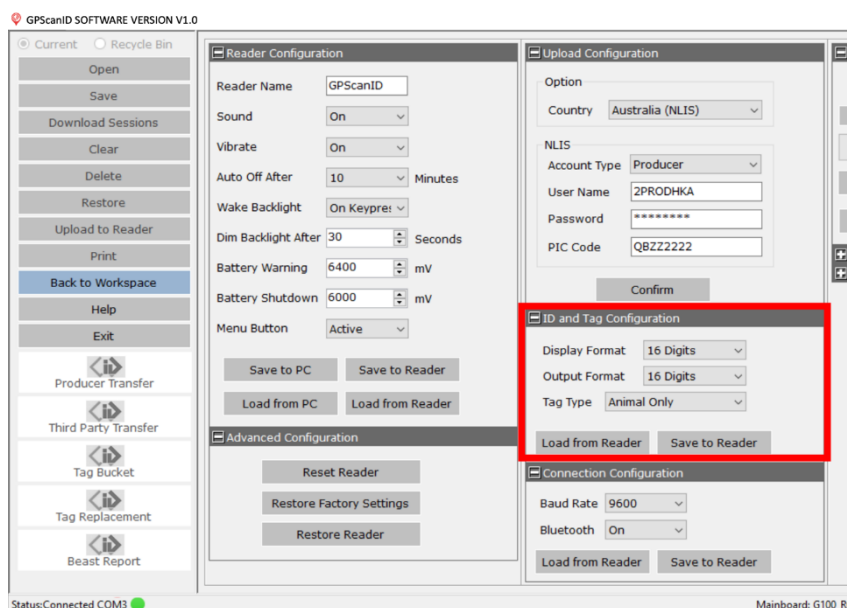
Password: Password of the NLIS account.

PIC Code: Property Identification Code (PIC) where online operations are performed. You can also submit this information later when performing NLIS operations.

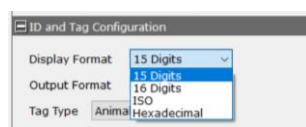
Confirm: When all details have been entered, press **Confirm** to save.

3.10.4 ID and Tag Configuration

This section allows you to select the ID format to be displayed and output from the reader. You can also select the types of tags the reader can read.



To set display format of the IDs, press the pull-down menu in **Display Format** to select any one of the following 4 formats:



1. 15 (Decimal) Digits: For example, 951123456789000
2. 16 (Decimal) Digits: For example, 951 123456789000
3. ISO: For example, A000000951123456789000
4. Hexadecimal: For example, 8000EDDCBE991A08

For the newly selected ID format to take place in both the Software and reader, press **Save to Reader** then **Back to Workspace** in the Software.

**** Note:** The NLIS functions only accepts ID(s) in 16-digit format. That is, a space after the third digit. Hence, all IDs, whether imported from PC or downloaded from the reader, must be saved and displayed as 16-digits.

Similarly, select the pull-down menu in **Output Format** and press **Save to Reader** to change the output format of the IDs transmitted out from the reader. This may be required to interface with some third-party herd management software.

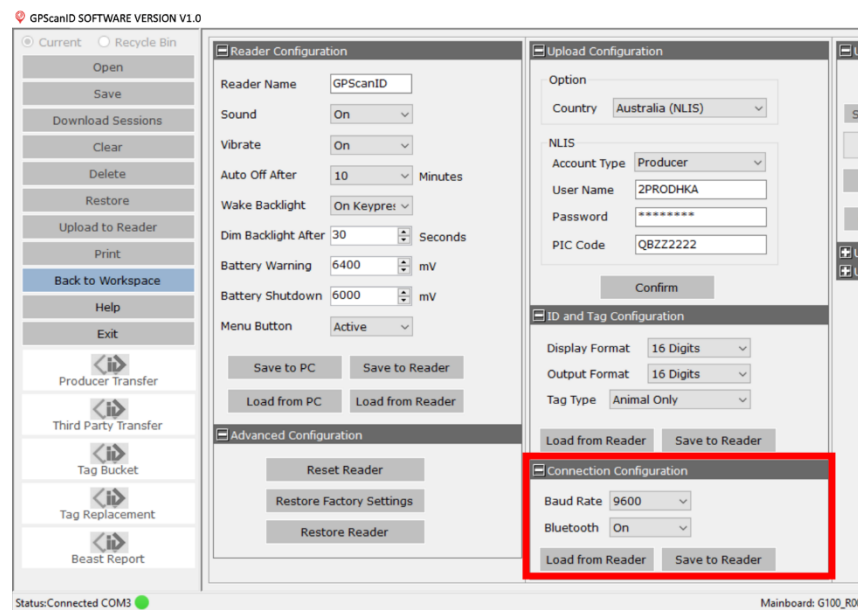
To change the tag type readable by the reader, press the pull-down menu in **Tag Type** to select either **Animal Only** or **Animal and Industrial**, then press **Save to Reader**.

3.10.5 Connection Configuration

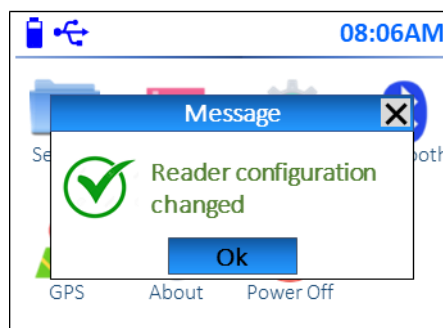
This section allows you to set the connection parameters such as the baud rate and/or enable/disable the Bluetooth function of the reader. Baud rate is the speed in which information is transferred in a communication channel between the reader and the connected device. The default factory baud rate is 9,600 bits per second.

Load from Reader: Downloads the baud rate and Bluetooth On / Off settings from the reader to the software.

Save to Reader: Uploads the baud rate and Bluetooth On / Off settings from the software to the reader.

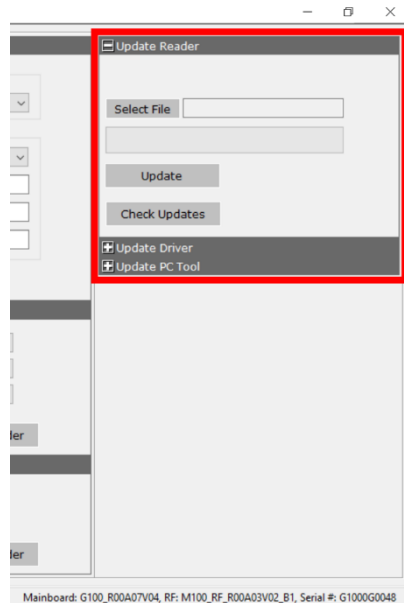


If a new configuration (either the baud rate or Bluetooth On / Off) is saved to the Reader, the following warning screen will be displayed on the Reader.



3.10.6 Software/Firmware Updates

We will provide software fixes, features enhancements and introduce new features to the reader over time. The revised software is available via updates.



There are 3 main sections in this update section:

- i) Update Reader;
- ii) Update Driver; and
- iii) Update PC Tool

The following sections explain the detailed procedures to update each of them.

3.10.6.1 Update Reader

There are 3 different firmware in the reader, each responsible for managing different functions:

Mainboard: Manages the reader functionalities.

RF: Manages the Radio Frequency (RF) circuitry to read tags.

Bluetooth: Manages the Bluetooth module to communicate with external peripherals.

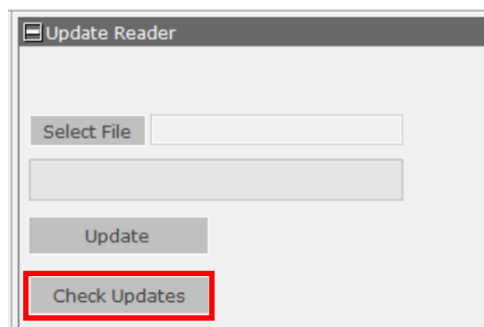
To automatically update any one or all of the reader firmware:

Step 1: Power on the reader and connect with an internet-enabled PC via the serial cable. Please note firmware updates can only be completed using a serial port connection. Bluetooth connection cannot be used.

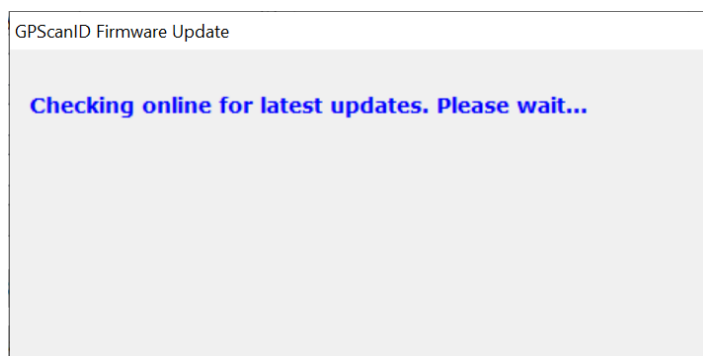
Step 2: Launch the GPScanID software.

Step 3: Press the **Setup** button.

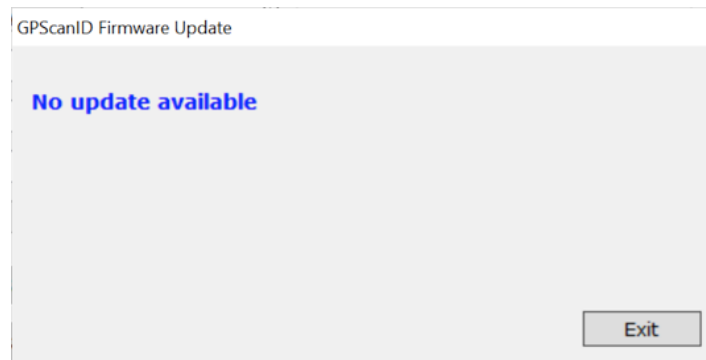
Step 4: Press **Check Updates** in the **Update Reader** section.



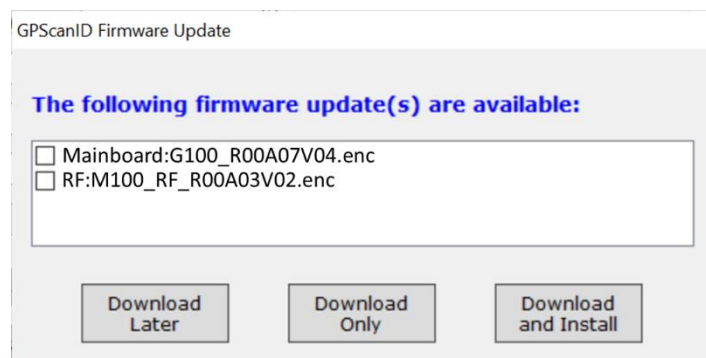
Step 5: The software will check online updates for all 3 firmware.



Step 6a: If no update is available, the following window appears. Press **Exit** to exit this screen.



Step 6b: If update is available, the following window appears. You can select the firmware and what action to take.

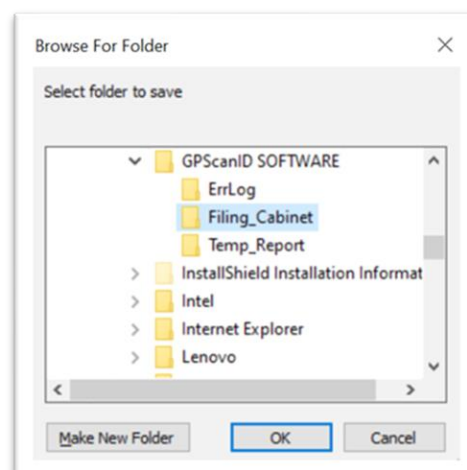


Press **Download Later** to exit this download screen and do not take further actions.

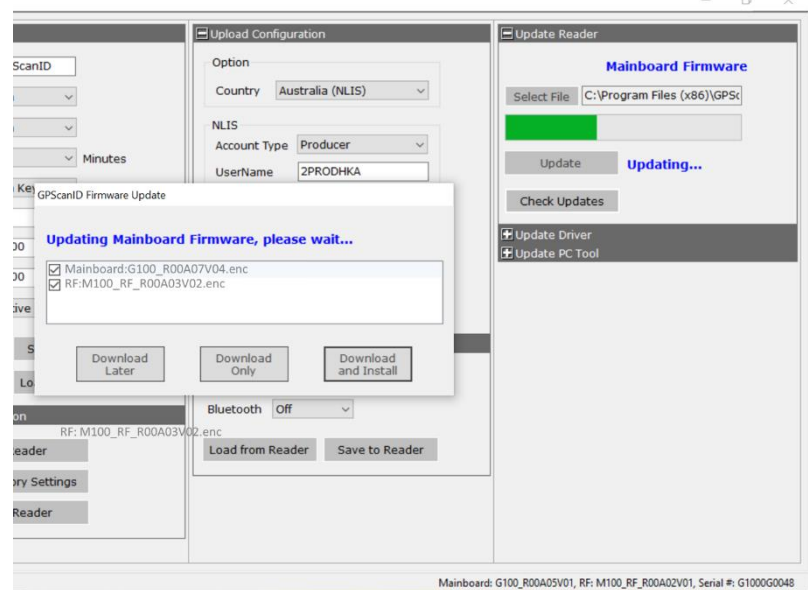
Press **Download Only** to download the updates and install later.

Click **Download and Install** to download the updates and install automatically.

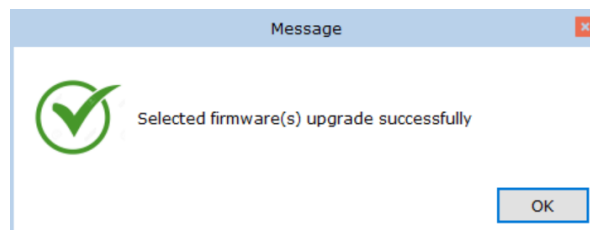
Step 7: If **Download Only** or **Download and Install** is selected, the following screen appears to prompt the user to identify the location where the new firmware will be stored. The default location is the folder where the GPScanID Software is installed. Press **OK** to confirm.



Step 8: Once the location is confirmed, the software will start to download the selected firmware and install automatically. The progress bar in the **Update Reader** section shows the progress of the update.

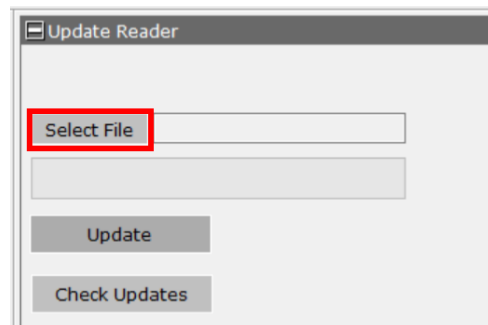


Step 9: The following window will appear when the update is completed. Press **OK** to exit.

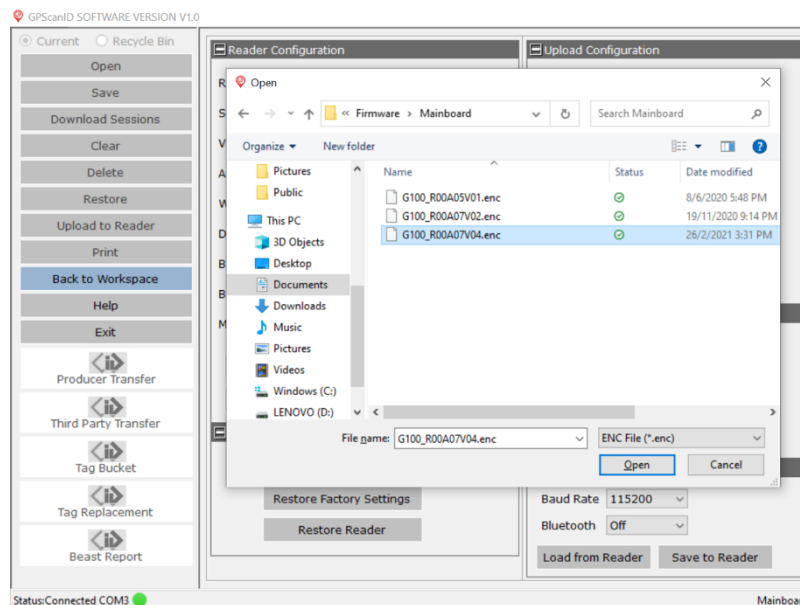


To manually select a specific reader firmware update (whether it is Mainboard, RF or Bluetooth), follow Steps 1 to 3 above to connect the reader with the software, then proceed with the steps below.

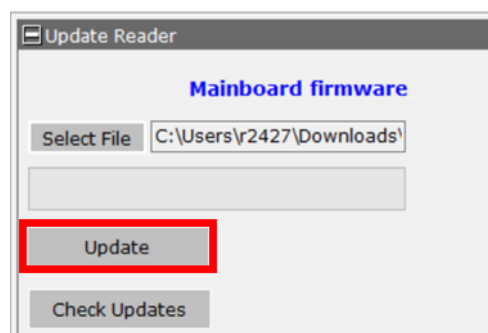
Step 4: Press **Select File** in the **Update Reader** section.



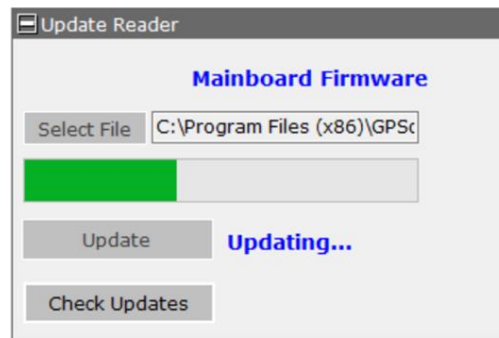
Step 5: Use the File manager window to locate the previously downloaded firmware. Press **Open** to confirm.



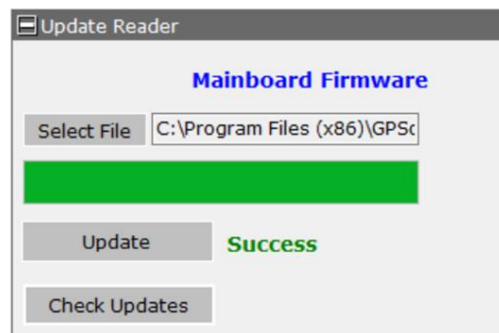
Step 6: The software detects and displays the type of firmware to be updated. Press **Update** to start the update.



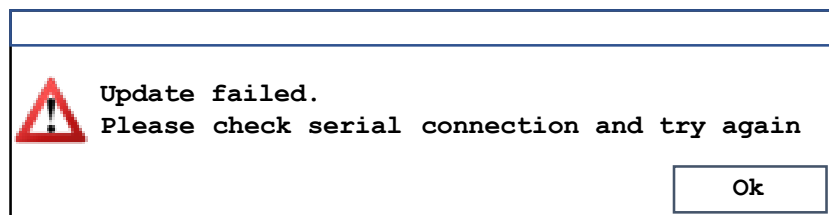
Step 7: The progress bar displays the status of the update and **Updating...** will display next to the **Update** button.



Step 8: If the update is successful, **Success** is displayed (in green) next to the **Update** button.



If either the serial port fails or a power failure occurs during firmware update, and the Reader fails to turn on, the following warning window is displayed on the PC.



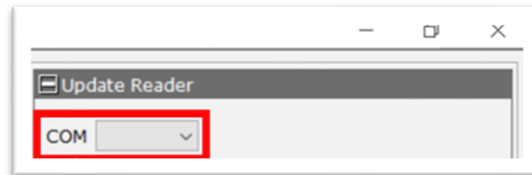
Follow the steps below to reinstall the firmware update.

With the reader still connected to the PC:

Step 1: Close the software and relaunch it as **Offline**.

Step 2: Press **Setup** to enter the **Setup Menu**.

Step 3: Press **Update** in the **Update Reader** section. The following **COM** pull-down menu appears:



Step 4: Choose the Serial Port used in the latest connection.

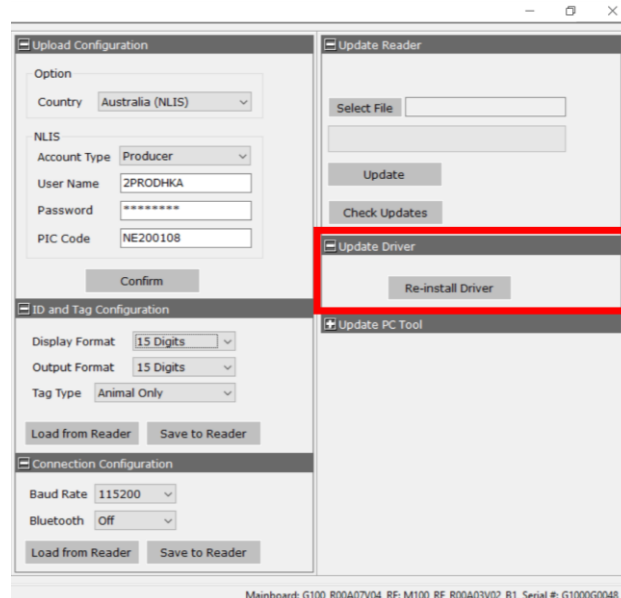
Step 5: Press **Update**. The red LED in the reader will start flashing within 10 seconds. The progress bar indicates the update progress.

Step 6: Wait till the update is completed.

The reader should now turn on. In the event of continued issues, please contact your distributor for technical assistance.

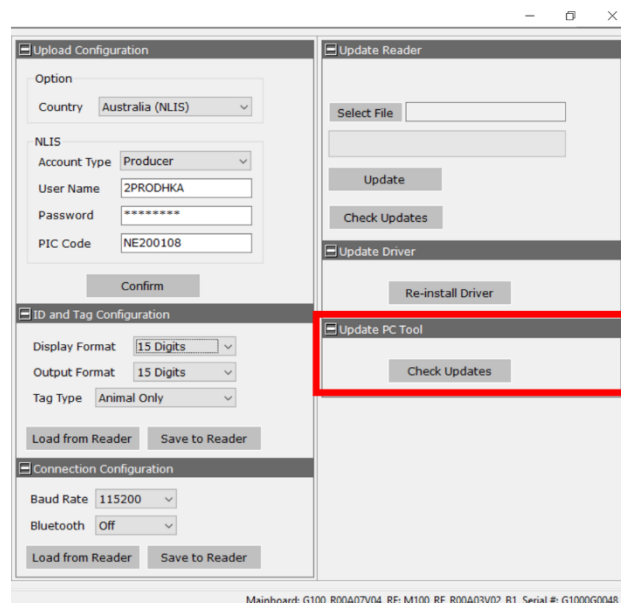
3.10.6.2 Update Driver

To re-install the driver for the GPScanID software, press **Re-install Driver** under the **Update Driver** section and follow the on-screen instructions. Press **Next** on each screen until you come to **Finish**. Press **Finish** to close the screen.



3.10.6.3 Update GPScanID Software

To update the GPScanID Software, press **Check Updates** under **Update PC Tool**. If a new version of the software is available, it will prompt the user to download and update. Otherwise, it will display **No update available**. Press **Exit** to exit.



3.11 Help

The **Help** section lists the **Function Buttons** and **Frequently Asked Questions (FAQ)** in a series of topics about operating the GPScanID software.

Function Buttons list the functionality of each button in the software.

FAQs provide a list of topics of frequently asked questions. You can navigate to each topic for assistance.



3.12 Exit

The **Exit** function prompts the user to exit the GPScanID software. Press **OK** to exit the software.

4. NLIS Function

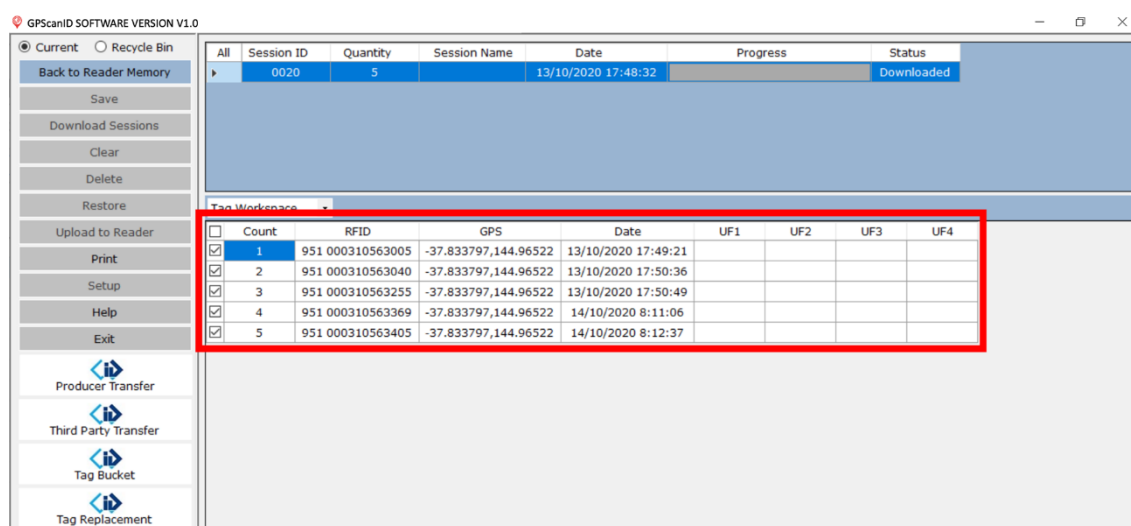
The following section outlines the functions built into the GPScanID software for communicating with the Australia's National Livestock Identification System (NLIS) database.

Please note **IDs** must be in 15-digits format to access these functions. IDs from **Tag Workspace** (whether downloaded from reader or imported Excel files) in different ID format cannot communicate with the NLIS database.

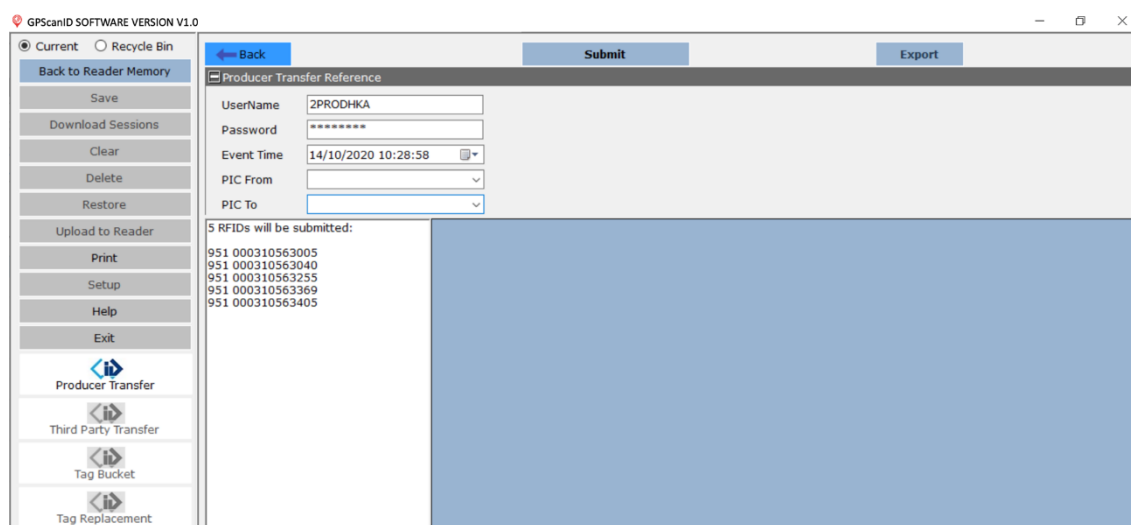
4.1 Producer Transfer

The **Producer Transfer** function allows you to transfer livestock from one location (or Property Identification Code (PIC)) to another.

Step 1: Select a session from the Session Workspace. It can be **Current**, **Recycle Bin** or **Open** from a previously saved file (The example below shows opening a saved file). Select all IDs or specific IDs to be transferred.



Step 2: Press **Producer Transfer**. The following screen appears.



Step 3: Enter and check all input fields and click **Submit**.

User Name: Your NLIS user name.

Password: The corresponding password.

Event Time: Time in which the event takes place. (Optional. This field defaults to the system time).

PIC From: The originating Property Identification Code.

PIC To: The destination Property Identification Code.

When all details and IDs have been verified, press **Submit**. The status of the transfer is shown below:

If the **Transfer** operation fails, an error message will be displayed in the description part of the screen outlining the reason for failure. The operation can fail either partially or in full. The main reasons for failure are:

- The tags are not registered on the PIC being transferred from; or
- The tags are not registered on the Database.

When completing a **Transfer** from the **Open function**, ensure that the data is saved in the correct format as a CSV file prior to commencing.

The data will need to be formatted as shown in the example below:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Session ID	Quantity	Session Name	Session Date	Source	Count	RFID	GPS	Date	UF1	UF2	UF3	UF4
2	20	5		13/10/2020 17:48:32	Current	1	951 000310563005	-37.833797;144.96522	13/10/2020 17:49:21				
3	20	5		13/10/2020 17:48:32	Current	2	951 000310563040	-37.833797;144.96522	13/10/2020 17:50:36				
4	20	5		13/10/2020 17:48:32	Current	3	951 000310563255	-37.833797;144.96522	13/10/2020 17:50:49				
5	20	5		13/10/2020 17:48:32	Current	4	951 000310563369	-37.833797;144.96522	14/10/2020 8:11:06				
6	20	5		13/10/2020 17:48:32	Current	5	951 000310563405	-37.833797;144.96522	14/10/2020 8:12:37				

Note: Date should be saved in **dd/mm/yyyy hh:mm:ss** format in Microsoft Excel™ for seconds to be displayed in the software.

4.2 Third Party Transfer

The Third-Party Transfer function is operated by third party account holder which is an intermediary in livestock transaction (buyer, seller etc). If you are asked to record a livestock movement for someone else's property but their PIC is not linked to your third-party account, submit this transaction to record the movement on the database.

You must log in with a Third-Party Account to use this function.

Step 1: Select a session from the **Session Workspace**. It can be **Current**, **Recycle Bin** or **Open** from a previously saved file in the PC.

Step 2: Press **Third Party Transfer**.

Step 3: Enter the following input fields and press **Submit**.

- | | |
|-------------------------------|---|
| User Name: | User Name for the NLIS Third Party Account. |
| Password: | The corresponding password. |
| Event Time: | Time in which the event takes place (Optional. Default to system time). |
| PIC From: | The originating Property Identification Code. |
| PIC To: | The destination Property Identification Code. |
| Authorisation-Level: | Specifies the level of authorization given by a third party to perform a Producer Transfer transaction:

0: Not authorized.
1: Source PIC or vendor.
2: Destination PIC or buyer.
3: Other or both source PIC and destination PIC. |
| Authoriser-First Name: | Vendor First Name. |
| Authoriser-Last name: | Vendor Last Name. |

The screenshot displays the GPScanID Software Version V1.0 interface. On the left is a sidebar with navigation options: Current (selected), Recycle Bin, Back to Reader Memory, Save, Download Sessions, Clear, Delete, Restore, Upload to Reader, Print, Setup, Help, Exit, Producer Transfer, Third Party Transfer (highlighted), Tag Bucket, and Tag Replacement. The main window has a title bar with 'GPScanID SOFTWARE VERSION V1.0' and standard window controls. Below the title bar are three tabs: 'Back', 'Requesting...' (active), and 'Export'. The 'Requesting...' tab contains the 'Third Party Transfer Reference' form. The form has two columns of input fields:

- Left column: Username (2TPTYSZH), Password (masked with asterisks), Event Time (10/10/2020 11:31:18), PIC From (QHBN0554), and PIC To (3SGNE285).
- Right column: Authorisation-Level (dropdown menu set to '3: Other or both source PIC and destination PI'), Authoriser-Firstname (John), and Authoriser-Lastname (Doe).

 Below the input fields, a text box states '4 RFIDs will be submitted:' followed by a list of four RFID numbers: 951 000310572851, 951 000310572920, 951 000310572937, and 951 000310572941. The bottom half of the window is a large blue rectangular area.

The status of the transfer is shown below:

GPScanID SOFTWARE VERSION V1.0

Current Recycle Bin

Back to Reader Memory

Save

Download Sessions

Clear

Delete

Restore

Upload to Reader

Print

Setup

Help

Exit

Producer Transfer

Third Party Transfer

Tag Bucket

Tag Replacement

Back

Submit

Export

Third Party Transfer Reference

UserName: 2TPTY5ZH

Authorisation-Level: 3: Other or both source PIC and destination PI

Password: *****

Authoriser-Firstname: John

Event Time: 10/10/2020 11:31:18

Authoriser-Lastname: Doe

PIC From: QHBN0554

PIC To: 3SGNE285

Time: 14/10/2020 11:33:50

ThirdParty Transfer:
4-successful
0-failed

If the **Transfer** operation fails, an error message will be displayed in the description part of the screen outlining the reason for failure. The operation can fail either partially or in full. The main reasons for failure are:

- The tags are not registered on the PIC being transferred from; or
- The tags are not registered on the Database.

When completing a **Transfer** from the **Open** function, ensure that the data is saved in the correct format as a CSV file prior to commencing.

The data will need to be formatted as shown in the example below:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Session ID	Quantity	Session Name	Session Date	Source	Count	RFID	GPS	Date	UF1	UF2	UF3	UF4
2	21	4		13/10/2020 19:11:05	Current	1	951 000310572851	-37.833797;144.96522	13/10/2020 19:11:56				
3	21	4		13/10/2020 19:11:05	Current	2	951 000310572920	-37.833797;144.96522	13/10/2020 19:12:47				
4	21	4		13/10/2020 19:11:05	Current	3	951 000310572937	-37.833797;144.96522	13/10/2020 19:13:22				
5	21	4		13/10/2020 19:11:05	Current	4	951 000310572941	-37.833797;144.96522	14/10/2020 19:14:05				

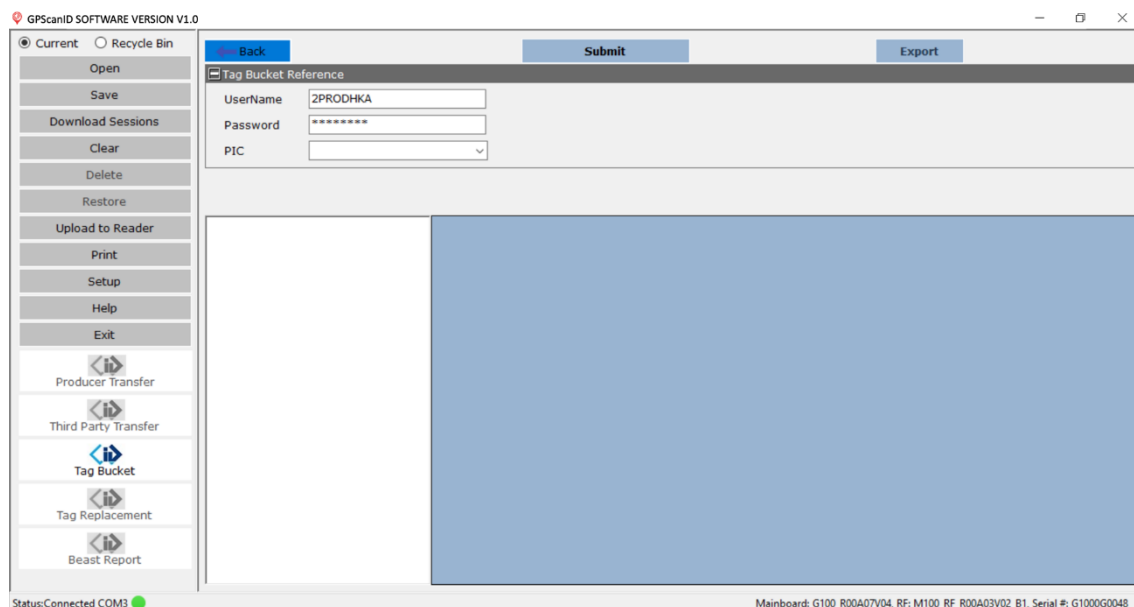
Note: Date should be saved in **dd/mm/yyyy hh:mm:ss** format in Microsoft Excel™ for seconds to be displayed in the software.

4.3 Tag Bucket

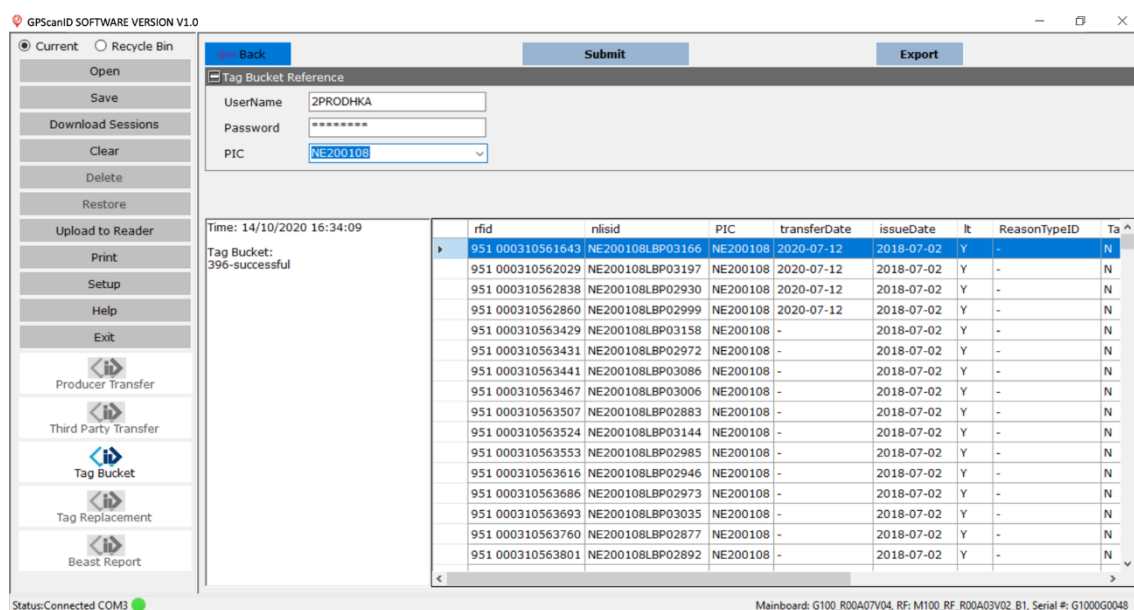
The Tag bucket function searches all IDs registered under the user specified PIC.

Step 1: Press **Tag Bucket**.

Step 2: Enter User Name, Password and PIC to be inquired then press **Submit**.



All IDs registered under the PIC will be displayed.



You can press **Export** to save the records as an excel file in the PC.

4.4 Tag Replacement

The Tag Replacement function is used to replace lost/broken tags with new ones.

Step 1: Select a session from the Session Workspace. It can be **Current**, **Recycle Bin** or **Open** from a previously saved file in the PC.

Step 2: Press **Tag Replacement**.

Step 3: Select the IDs to be replaced and enter the corresponding new IDs under the **New RFID** column (all IDs are being replaced in the following example).

All	Session ID	Quantity	Session Name	Date	Progress	Status
<input checked="" type="checkbox"/>	0022	5		14/10/2020 16:30:31		Downloaded

Count	RFID	GPS	Date	New RFID
<input checked="" type="checkbox"/> 1	951 000310564028	-37.833797,144.96522	14/10/2020 16:31:02	951 000310564164
<input checked="" type="checkbox"/> 2	951 000310564047	-37.833797,144.96522	14/10/2020 16:31:39	951 000310564169
<input checked="" type="checkbox"/> 3	951 000310564067	-37.833797,144.96522	14/10/2020 16:35:47	951 000310564182
<input checked="" type="checkbox"/> 4	951 000310564069	-37.833797,144.96522	14/10/2020 16:36:18	951 000310564186
<input checked="" type="checkbox"/> 5	951 000310564106	-37.833797,144.96522	14/10/2020 16:37:13	951 000310564208

Step 4: Press **Proceed** when all new RFID entries are completed.

Please ensure to enter a space after the 3rd digit. The new IDs should be in the format XXX XXXXXXXXXXXXX.

Step 5: Modify the **Event Time** if required, then press **Submit**.

Back Requesting... Export

Tag Replacement Reference

UserName: 2PRODHKA

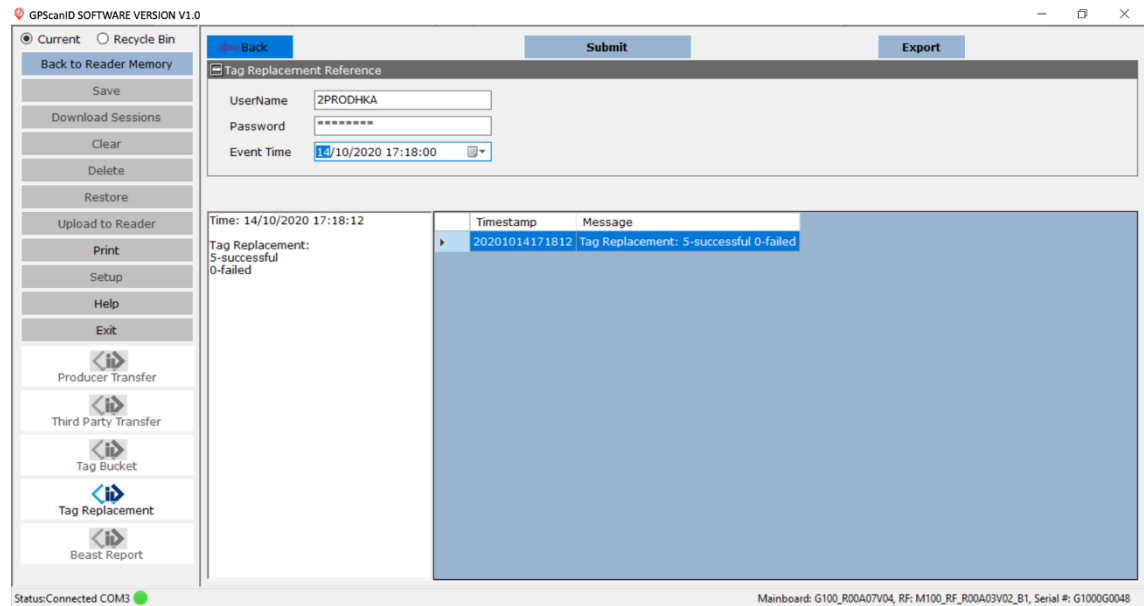
Password: *****

Event Time: 14/10/2020 17:18:00

5 RFID's will be submitted:

951 000310564028
 951 000310564047
 951 000310564067
 951 000310564069
 951 000310564106

The status of the Tag Replacement is updated below:



If the **Tag Replacement** operation fails, an error message will be displayed in the description part of the screen outlining the reason for failure. The operation can fail either partially or in full. The main reasons for failure are:

- The tags are not registered on the PIC being transferred from; or
- The tags are not registered on the Database.

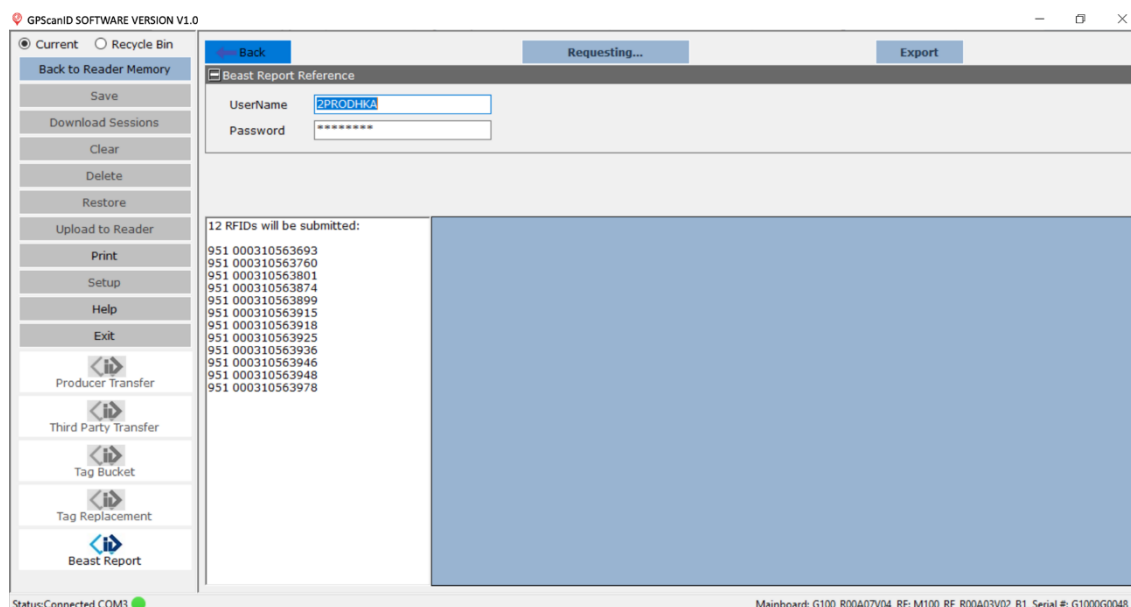
4.5 Beast Report

The **Beast Report** function enables queries to be made about the selected IDs from the NLIS database.

Step 1: Select a session from the Session Workspace. It can be **Current**, **Recycle Bin** or **Open** from a previously saved file in the PC.

Step 2: Select all tags in the session or the tags to be inquired from the session.

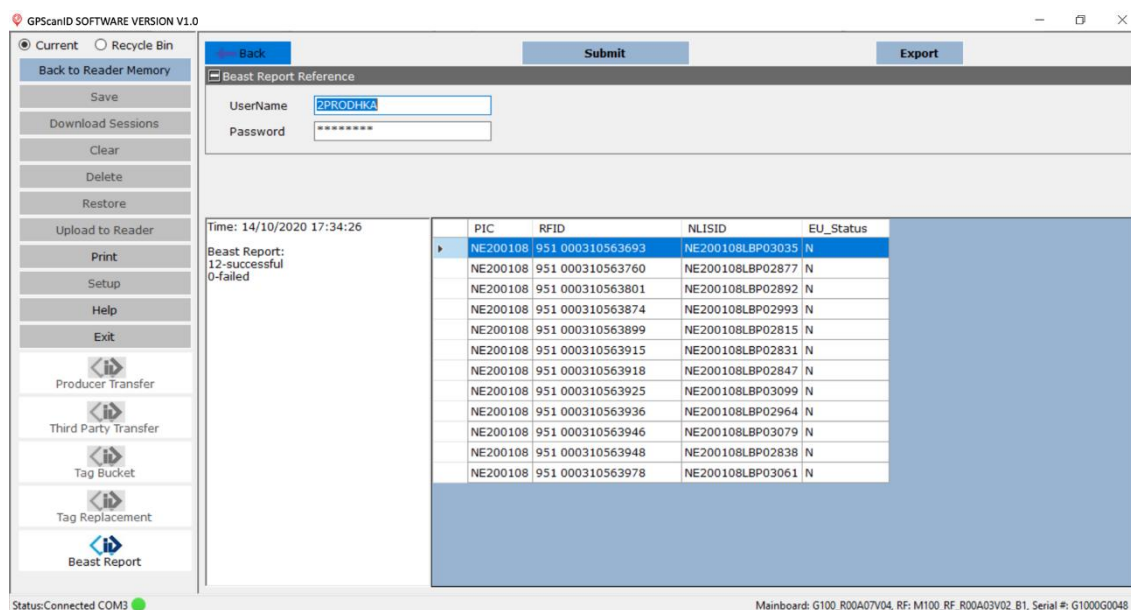
Step 3: Press **Beast Report**.



Step 4: Enter **User Name** and **Password**, if blank.

Step 5: Press **Submit**.

Step 6: Information about the IDs are displayed as follows:



You can press **Export** to save the records as an excel file in the PC.

If the **Beast Report** query fails, an error message will be displayed in the description part of the screen outlining the reason for failure. The query can fail either partially or in full. The main reasons for failure are:

- The tags are not registered on the PIC being queried; or
- The tags are not registered on the Database.