

RapidID™ Network Mapping System

User Manual

Documentation Revision History

Version Number	Modifications	Date
1.0	Initial Release	5/24/2023
1.1	New "Review" section for " <i>RapidID</i> Software for Windows® OS PC"	8/2/2023
1.2	Third-Party Scanner Support	9/6/2023

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Introduction to *RapidID* Network Mapping System

The *RapidID* Network Mapping System automates labor-intensive and error-prone cable documentation, resulting in a faster, easier way to place and trace cables and patch cords. It is a practical alternative to traditionally manual approaches that is ideally suited for building a new telecommunications room, locating installed cabling, or replacing a network switch. Reduce the time and cost of patch cord documentation by up to 50%. With *RapidID*, the painstaking labeling process is already done. Now network engineers can easily, quickly, and accurately place and trace cables to focus on more strategic initiatives. Minimize the risk of a network outage. Network documentation can drastically reduce downtime during an outage, but documenting physical infrastructure is extremely time-consuming and often overlooked or outdated. *RapidID* makes the documentation process less painful and reduces human error by eliminating the need for manual data entry.

Features

- Pre-labeled patch cords that automate the labor-intensive and error-prone cable documentation process that can lead to an outage
- An easy to use scanner that saves time on tracing, labeling, and documenting connections, thus freeing-up network engineers to focus on more rewarding and strategic initiatives
- A feature-rich application for Apple® and Android® mobile devices and Windows-OS desktop that reduces time and cost of patch cord documentation by up to 50%* while helping control cost and risk associated with cable installation and management

*Panduit internal time study, May 2021.

Required Components

1. *RapidID* Enabled connectivity products.
 - a. Pre-labeled patch cords that contain *RapidID* labels
2. *RapidID* Barcode Scanner (RPDSCN)
 - a. The *RapidID* handheld barcode scanner is a Bluetooth Low Energy scanner that pairs with the *RapidID* application. Use it to quickly scan *RapidID* barcodes on *RapidID* enabled connectivity products.
3. *RapidID* Software:
 - a. The *RapidID* software application is available for mobile and tablet applications through the [Apple iOS](#) and [Android](#) play stores

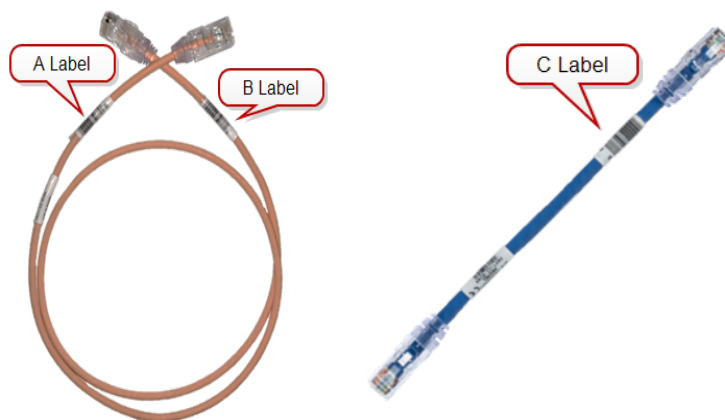
- b. The *RapidID* software application is also available for Windows – PC through <https://www.panduit.com>

Components

RapidID-Enabled Connectivity Products

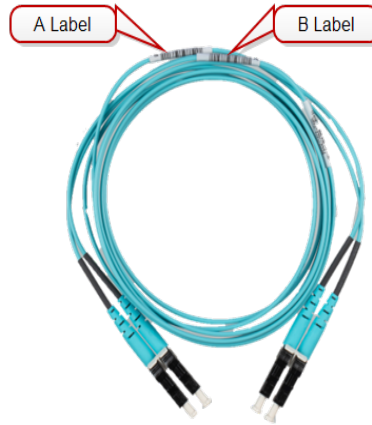
Copper Patch Cords

RapidID-enabled copper patch cords are pre-labeled with unique *RapidID* labels in addition to a product information label. *RapidID* barcode labels have a designated barcode with an 'A' & 'B' on them. The *RapidID* barcode is a unique identifier that is placed on the product when manufactured. For patch cords shorter than 12", a single *RapidID* barcode is placed on the product, with a 'C' label.



Opti-Core Fiber Patch Cord

RapidID-enabled Opti-Core fiber patch cords are pre-labeled with unique *RapidID* labels in addition to a product information label. *RapidID* labels have a designated barcode with an 'A' & 'B' on them. The *RapidID* barcode is a unique identifier that is placed on the product when manufactured.



Fiber Trunk Assemblies

RapidID -enabled trunk assemblies are pre-labeled with unique *RapidID* labels in addition to a product information label. *RapidID* labels have a designated barcode with an 'F' & 'G' on it. The *RapidID* barcode is a unique identifier that is placed on each connection when manufactured.



Retrofit Labels

A reel of *RapidID* labels specifically enable existing infrastructures for *RapidID*. Labels are pre-printed with unique identifiers at the manufacturing facility. Retrofit labels are available by request through your local Panduit salesperson.



RapidID Software

- The *RapidID* software application is available for mobile and tablet applications through the [Apple iOS](#) and [Android](#) play stores
- The *RapidID* software application is also available for Windows® – PC through <https://www.panduit.com>

See [Software](#) for details.

RapidID Bluetooth-Enabled Handheld Barcode Scanner (RPDSCN)

The *RapidID* handheld barcode scanner is a Bluetooth Low Energy scanner that pairs with the *RapidID* application. Use it to quickly scan *RapidID* barcodes on *RapidID*-enabled connectivity products.



Packaging Contents

- Barcode Scanner
- Cable Clip
- Wrist Strap
- USB-C to USB-A Charging Cable (3 feet)

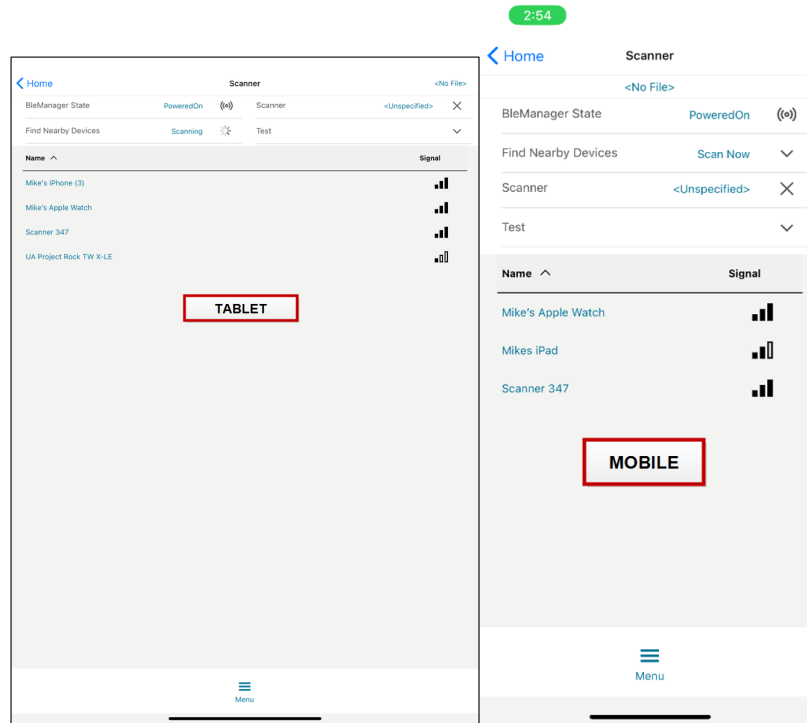
Panel Description



1. **Display:** Shows working mode, power, time, barcode scans, and Navigation menus
2. **Scan Button:** Used for scanning barcodes and exiting menus
3. **Menu Button:** Hold for access to Scanner Menu, touch to navigate down on menu selections when inside of a menu
4. **Select Button:** Select highlighted content
5. Indicator Light: RGB LED status indicator
 - a. Blue = On/Connected
 - b. Flashing Blue = Connecting
 - c. Flashing Purple = Disconnected

Connect Scanner to Application

1. Open the menu and navigate to **Scanner** page.
2. Select **Scan Now** to scan for nearby devices. Ensure the scanner is turned on and in BLE mode.
3. Click the appropriate scanner to connect from the list.
4. The scanner will confirm the connection with a "beep," and a Test message will open on the app.



Power

- The scanner contains an auto shut-off feature to save battery life.
 - The default time for auto turn off is 2 minutes.
 - See barcode settings for changing the timeout.

Scanner Settings

General

- **Shut Down:** Shuts down device
- **Restore Defaults:** Restores device to default settings
- **Match (Bluetooth)**
- **Keys Trigger**
- **Continuous Mode:** Turns scanner laser on indefinitely
- **Not Sleep:** Turns off the auto-turn off feature
- **Delete Last**
- **Change Language:** Change from English to Chinese or from Chinese to English

Working Mode

- **Instant Upload (Default)**
- **Storage Mode**
- **Total Storage**
- **Upload Data**
- **Zero Cleaning**






Communication





- **Bluetooth_HID**
- **Bluetooth_SPP**
- **Bluetooth_BLE** (Default)
- **Wireless 2.4G**
- **WireUSB_HID**
- **WireUSB_COM**

Time Settings

- **Disable** (Default)
- **Time Prefix:** Attaches time to the beginning of the scanned barcode
- **Time Suffix:** Attaches time to the end of the scanned barcode
- **Time Correction:** Manual time correction

Barcodes for Setting Changes

Automatic Shutoff Timer	
 90s	 2min (Default)
 5min	 30min
 60min	

Turn On/Off Sounds	
 Turn on all sounds (Default)	 Turn off all sounds
 Set Sound frequency to 2048HZ	 Set Sound frequency to 2731HZ

Scanner Volume		
 Low volume	 Medium volume	 High volume (Default)

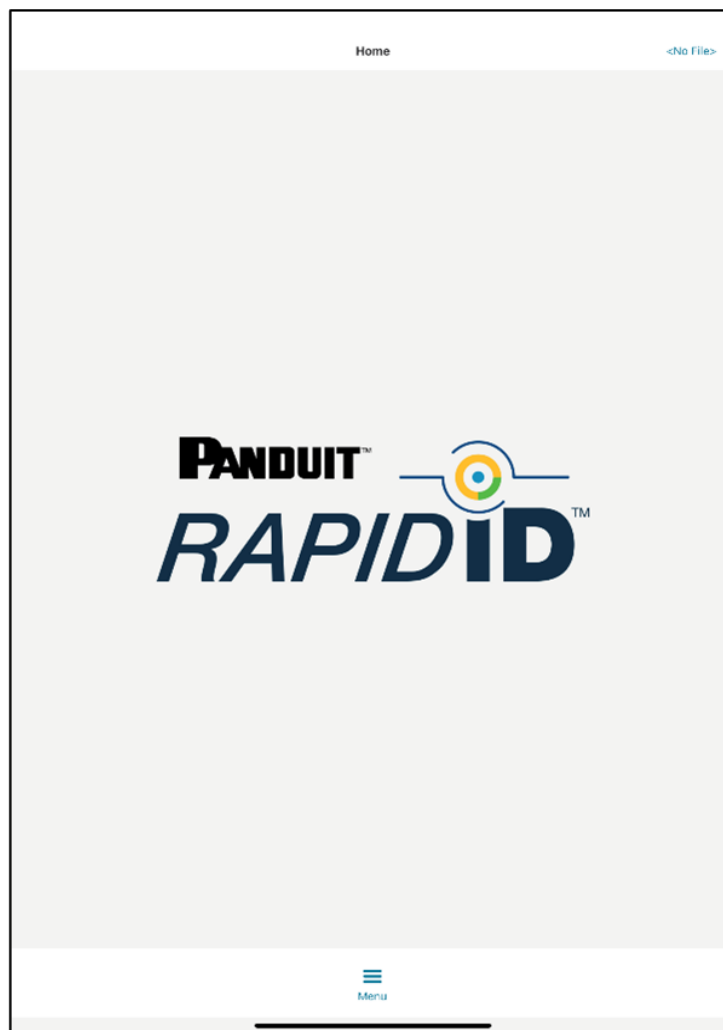
Set Communication to Bluetooth (BLE)
 Bluetooth-BLE (Default)

RapidID Software for Tablet/Mobile

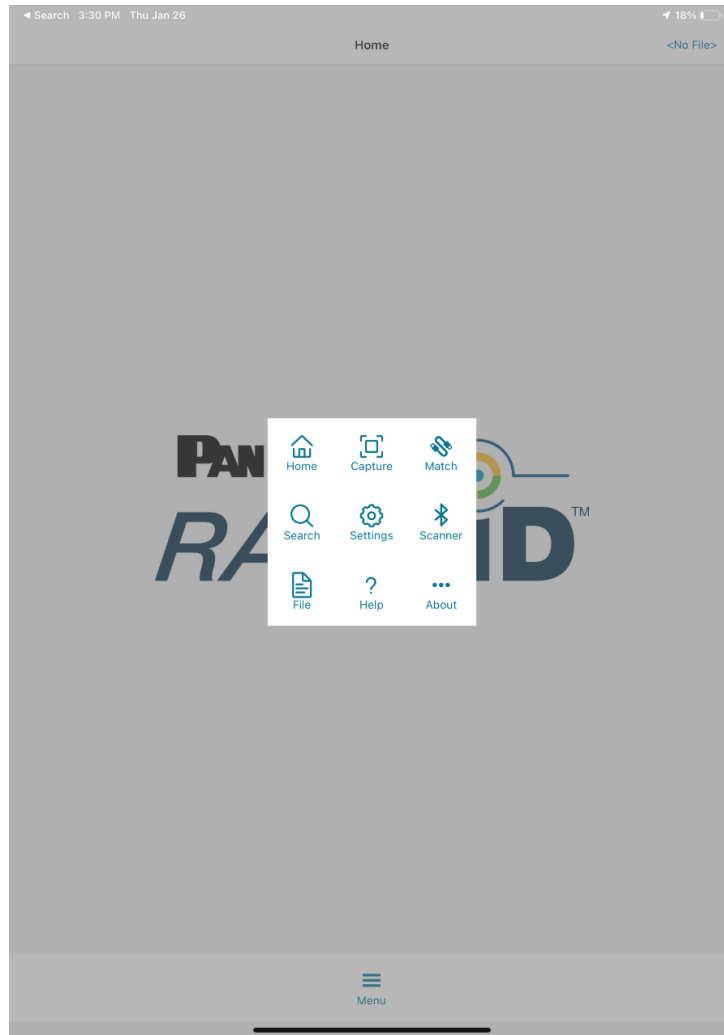
The *RapidID* software provides a feature rich application that aides in the documentation and troubleshooting processes. It is available as a free software application download for mobile devices and tablets. For information about the *RapidID* PC application, available for Windows OS, see [RapidID Software for PC](#).

Users can download the software at www.panduit.com/rapid-id

Home and Navigation



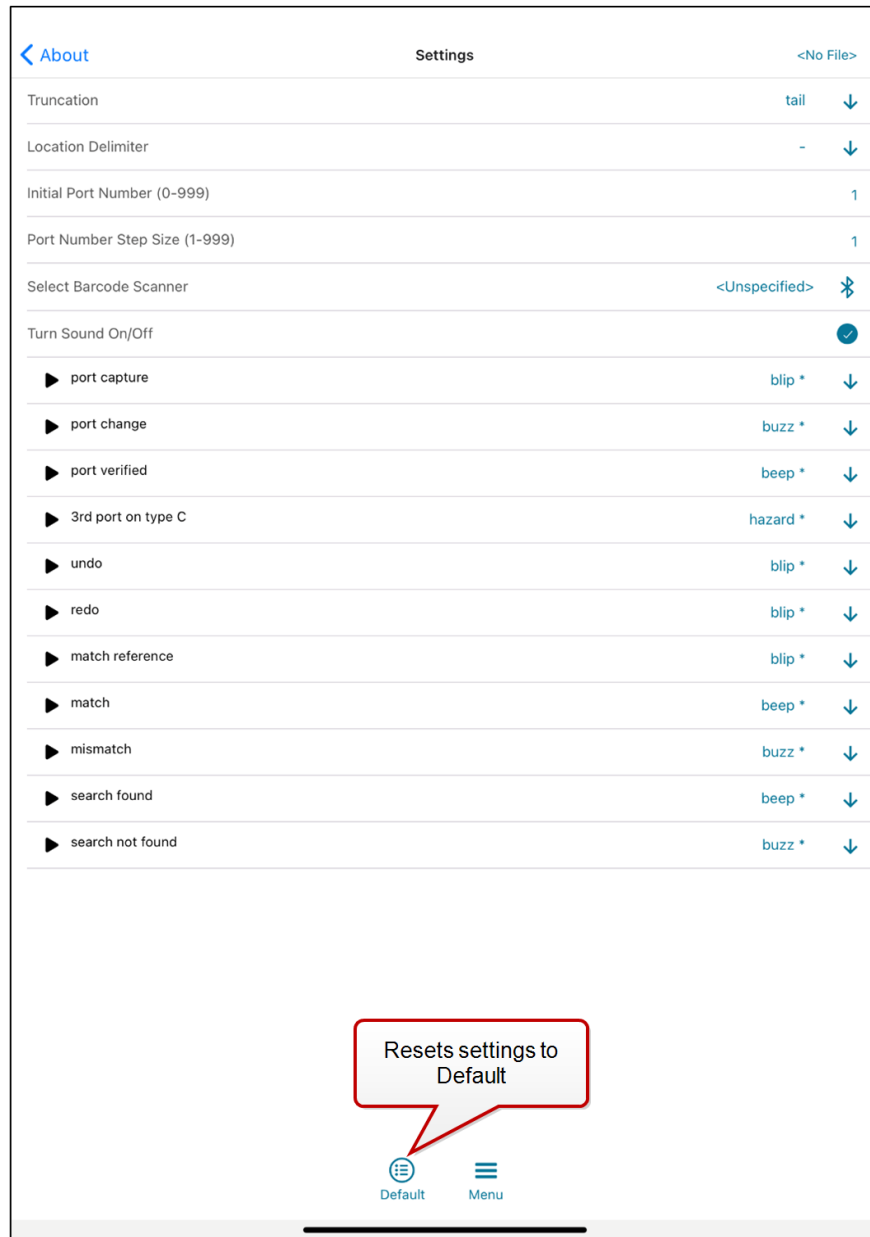
The *RapidID* Homepage shows the **Navigation** menu.



The navigation menu shows the following menus:

Menu	Description
Home	<i>RapidID</i> Home screen
<u>Capture</u>	Navigate to the Capture page
<u>Match</u>	Navigate to the Match page
<u>Search</u>	Navigate to the Search page
<u>Settings</u>	Navigate to the Settings page
<u>File</u>	Navigate to File Save
Help	Navigate to FAQs
About	Navigate to About page

Settings



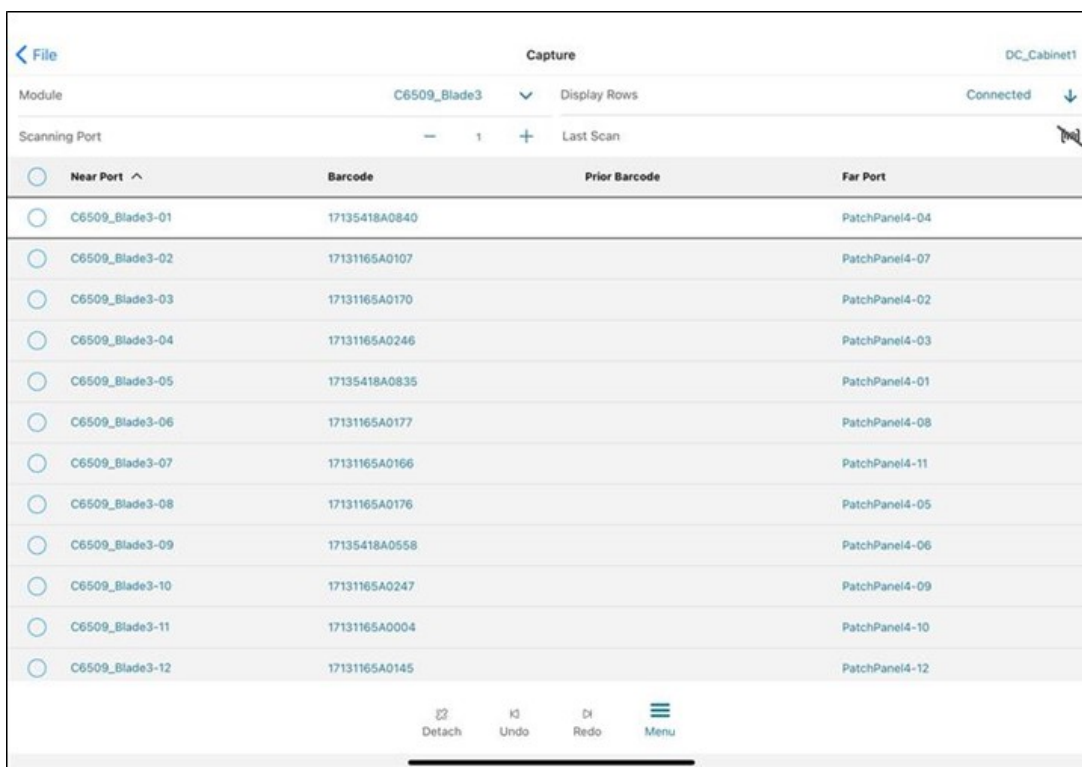
Item	Description
Truncation	Adjusts the truncation of text in the Module Page
Location Delimiter	Adjusts the connector between Module and Port
Port Number Step Size	Adjusts the step size from one port to the next when scanning
Select Barcode Scanner	Shortcut to the scanner page

Item	Description
Turn Sound On/Off	Turns app sounds on/off
Sounds	Change sound response on individual actions

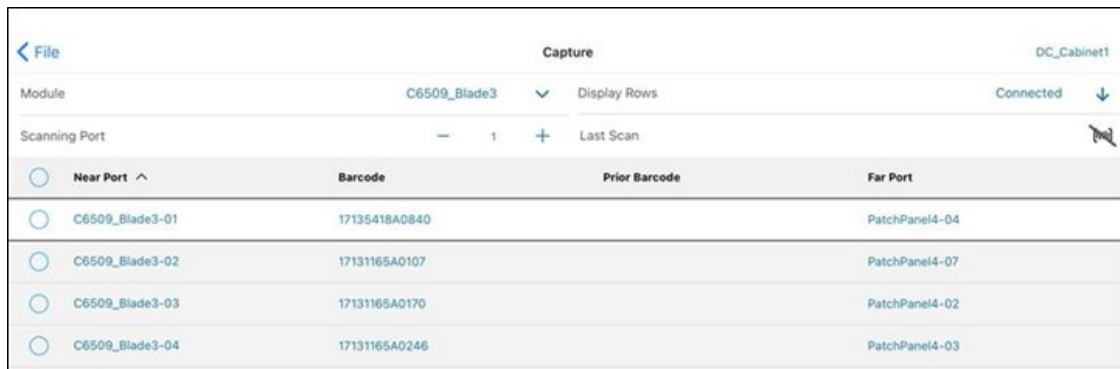
Capture Page

The **Capture** page collects information regarding the location of patch cords. Using the **Module** field, a user can set the scanning location of the barcode scanner and begin documenting connections.

As the user scans, the scanning port auto-updates to the next consecutive port in the module.



- **Module:** User-defined field that groups ports
- **Scanning Port:** The port the *RapidID* barcode will scan to
 - **Display Rows:** Setting for visual layout of data
 - **Connected:** Only shows rows of data which contain port connections
 - **Contiguous:** Shows all rows of data regardless of port connections
 - **Changed:** Only shows connections of ports that have been changed
- **Last Scan:** Provides the last barcode scanned and a visual indicator for when the scanner is connected to the software.
- **Undo/Redo**



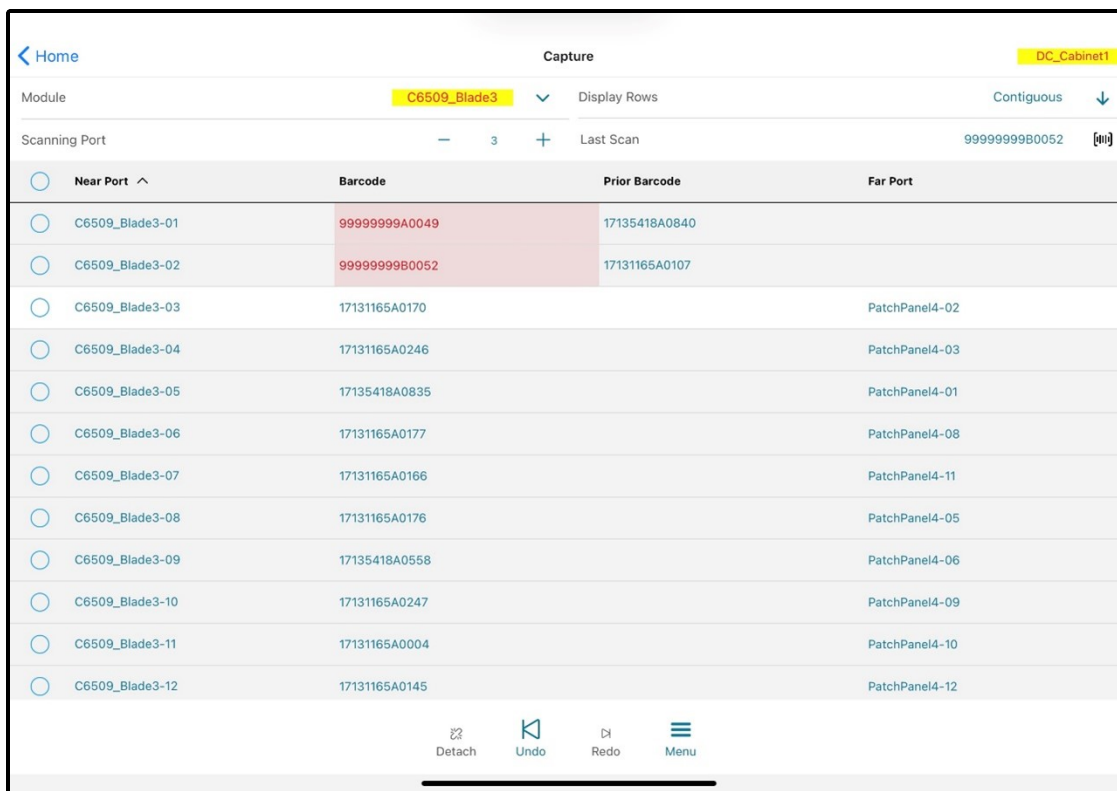
The screenshot shows a software interface with a top navigation bar containing a back arrow, the word "File", a "Capture" button, and the text "DC_Cabinet1". Below this is a header row with "Module" set to "C6509_Blade3", a dropdown arrow, "Display Rows", and "Connected" with a dropdown arrow. A second row shows "Scanning Port" with a minus sign, the number "1", a plus sign, and "Last Scan" with a mouse cursor icon. The main content is a table with four columns: "Near Port", "Barcode", "Prior Barcode", and "Far Port". Each row in the table has a radio button in the "Near Port" column. The data rows are as follows:

Near Port	Barcode	Prior Barcode	Far Port
C6509_Blade3-01	17135418A0840		PatchPanel4-04
C6509_Blade3-02	17131165A0107		PatchPanel4-07
C6509_Blade3-03	17131165A0170		PatchPanel4-02
C6509_Blade3-04	17131165A0246		PatchPanel4-03

- **Near Port:** Combination of Module + Scanning port to provide the location of the patch cord.
- **Barcode:** The *RapidID* barcode mapped to the near port.
- **Prior Barcode:** Used in validation, the prior barcode shows the previous barcode data associated with the Near Port.
- **Far Port:** When both sides of the patch cord are connected, this field displays the Far Port.

Verify

The verification function, located within capture page, allows for a comparison to be made between current patch cord locations and previously saved results. This enables users to verify the connection location during troubleshooting or an audit, after initial documentation has been completed.



To Verify:

1. Navigate to the area where connections need to be verified.
2. Confirm the starting location.
3. Scan cables connected to the port locations.

Cables that are confirmed to be in the correct position will highlight green.

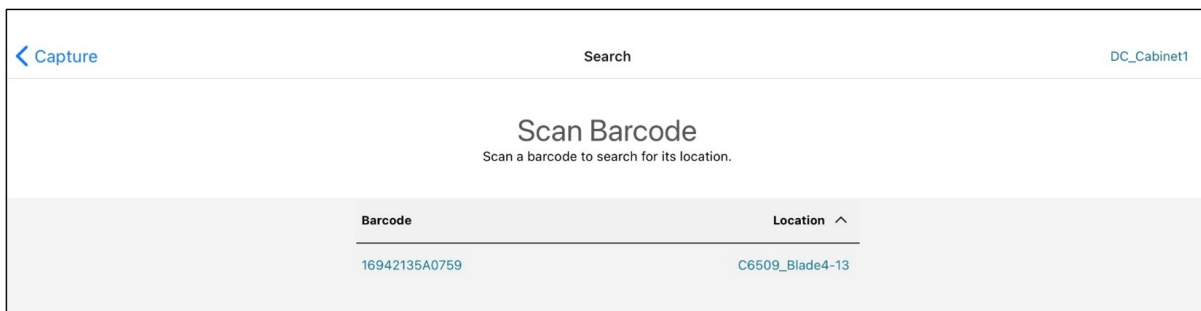
Cables that are incorrect will highlight red (see below: port 1 & 2) with an indication of the previous *RapidID* barcode.

Near Port	Barcode	Prior Barcode	Far Port
C6509_Blade3-01	99999999A0049	17135418A0840	
C6509_Blade3-02	99999999B0052	17131165A0107	
C6509_Blade3-03	17131165A0170		PatchPanel4-02
C6509_Blade3-04	17131165A0246		PatchPanel4-03
C6509_Blade3-05	17135418A0835		PatchPanel4-01

Note: When cabling is being updated, such as during a move, adds, and changes process, the verification function can be overridden/ignored by saving the new cables to their respective positions. After the new cables are installed and scanned into their positions, the user can save the new connections to the database, which will overwrite the previously saved connection data.

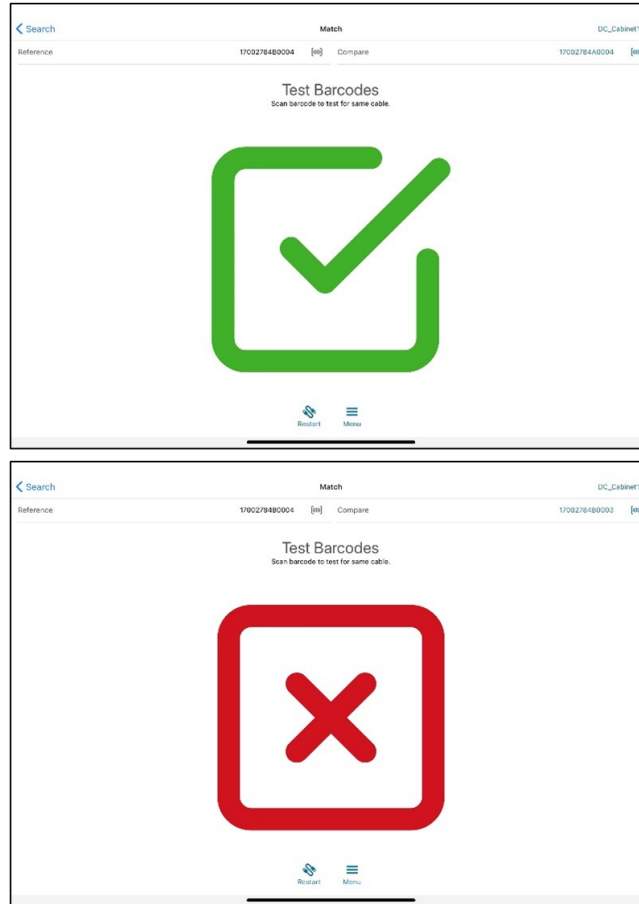
Search Function

By utilizing the currently opened file, the **Search** function can provide the port location of a patch cord. Once a barcode is scanned, the search function will then display the module and port location of the patch cord to the user.



Match Function

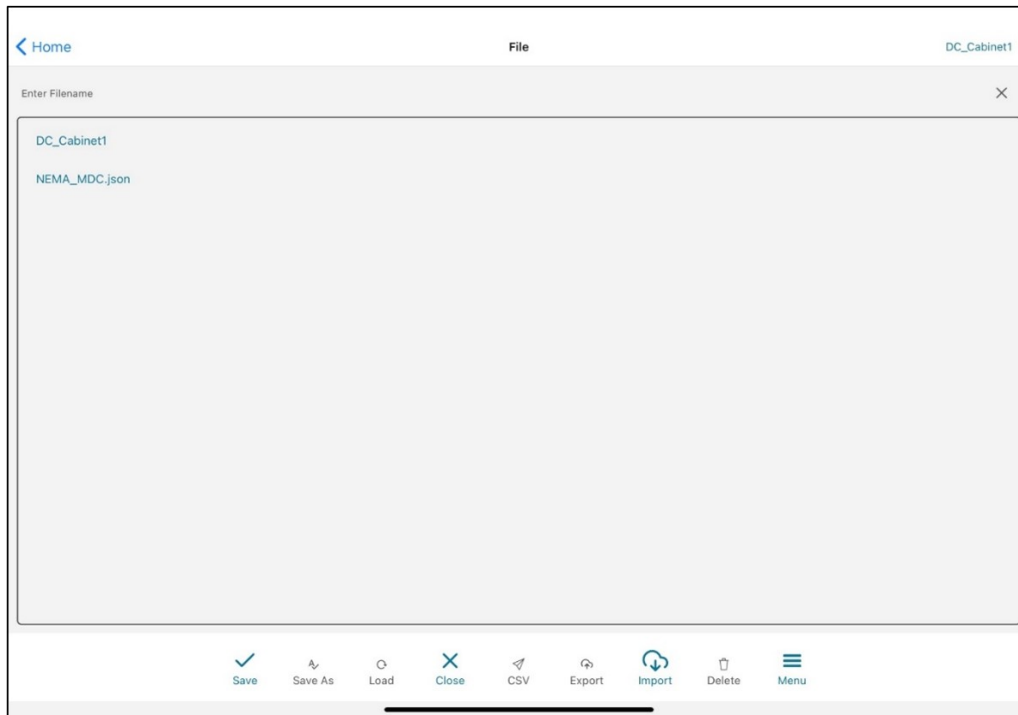
The **Match** page feature enables users to easily locate each end of a patch cable, without the need to manually trace cables or document their findings. This is done by scanning a *RapidID* barcode into the reference field, and then scanning other cables until the correct one is identified.



- **Reference:** Scan the *RapidID* barcode for which you're trying to find the other side
- **Compare:** Scan *RapidID* barcodes continuously until you find the correct other side of the reference cable
 - **Green Checkbox** = Correct other side of the cable
 - **Red "X"** = Incorrect other side of the cable
- **Restart:** Clears the Reference and Compare fields, and resets the page for another match connection

File Function

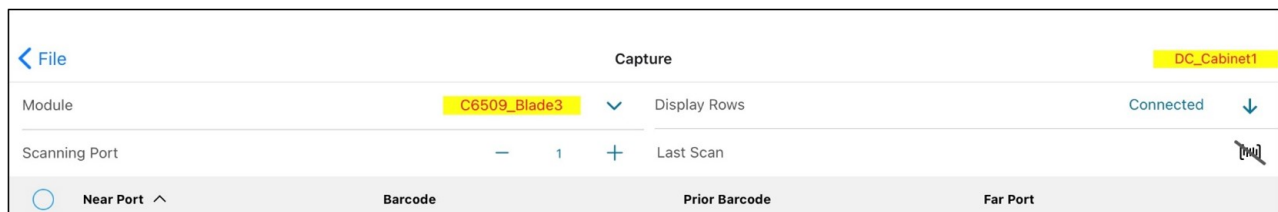
The **File** page provides the user capabilities to save, delete, import, and export files and data.



- **Save:** Saves progress in the current session
- **Save As:** Saves the current session as a new file
- **Load:** Loads a user selected file
- **Close:** Closes the current session
- **CSV:** Exports a file as a comma-separated values (.CSV) text file
- **Export:** Exports a file as a JSON. (Allows the file to be transferred to other hardware devices)
- **Import:** Imports JSON files from other hardware devices
- **Delete:** Deletes the selected file

Unsaved Changes

When a user makes changes to a file but do not save them, the file and modules with changes will be highlighted.



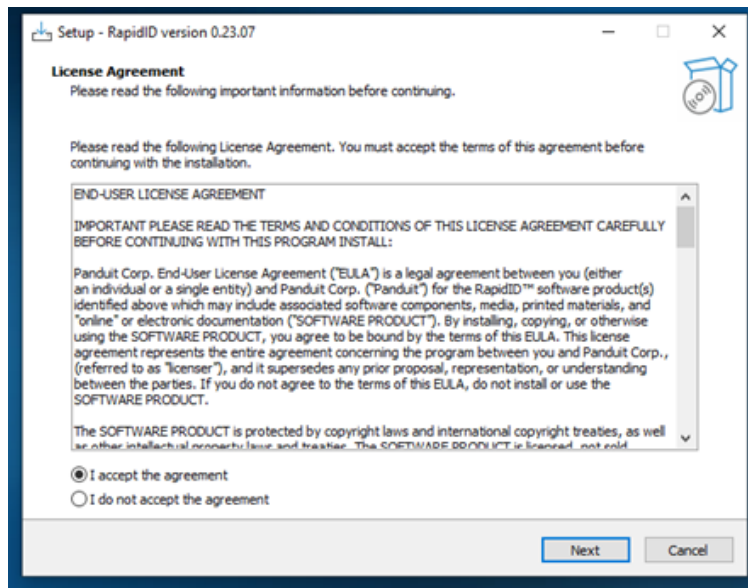
RapidID Software for Windows® OS PC

RapidID for PC is a local host application that can be run on any Windows machine.

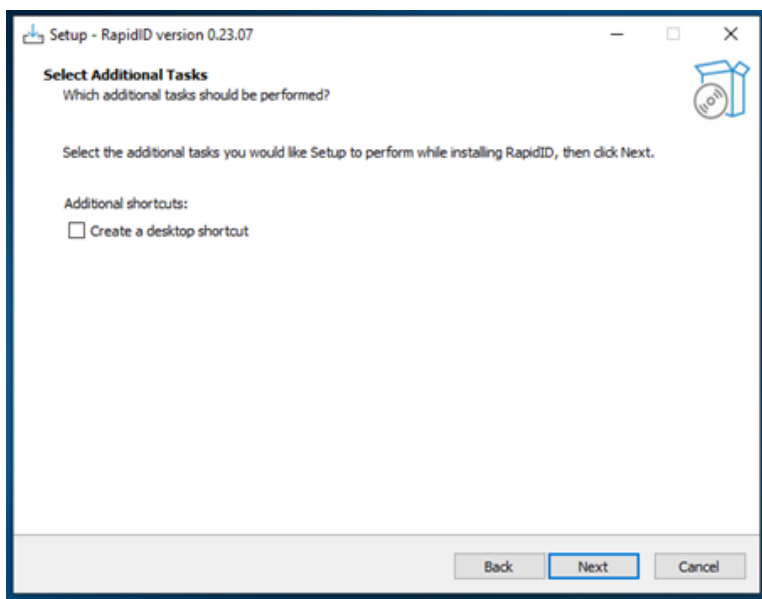
Users can download the software at www.panduit.com/rapid-id

To install RapidID onto a local Windows Device:

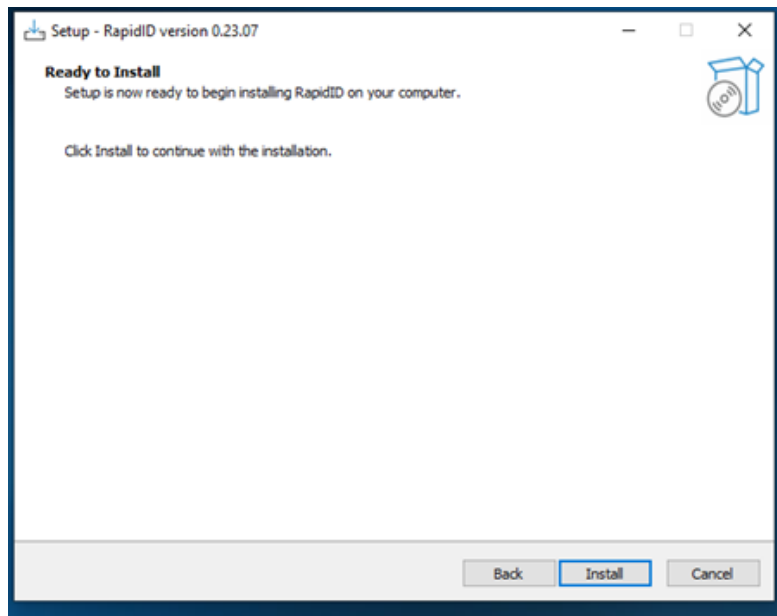
1. Agree to the terms of the End-User License Agreement.



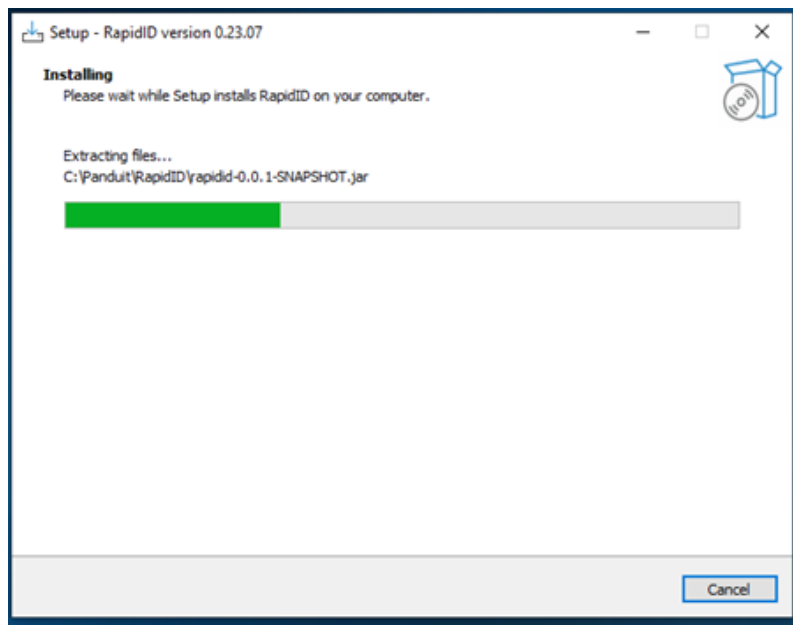
2. Create desktop shortcut (*optional*).



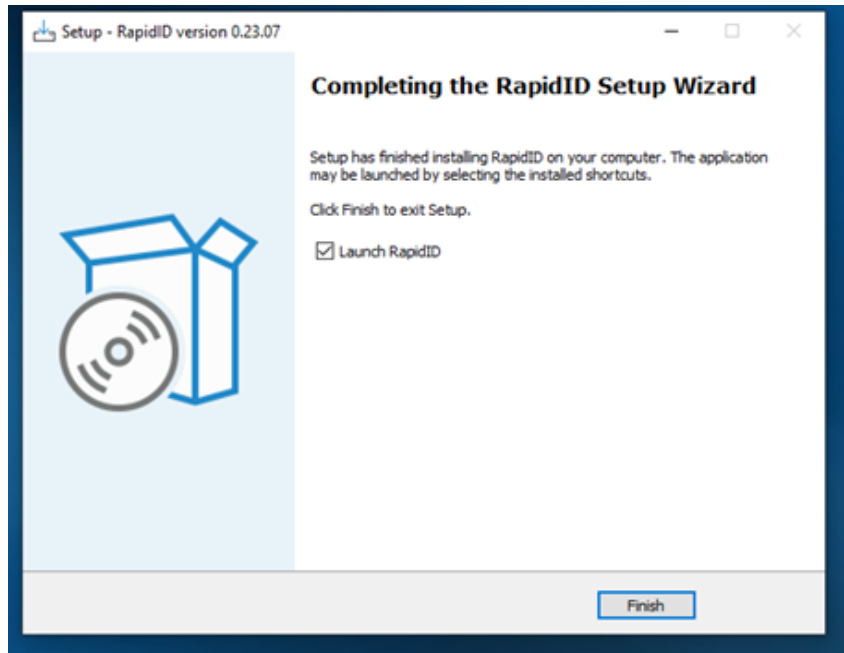
3. Start the installation.



RapidID software begins installing.

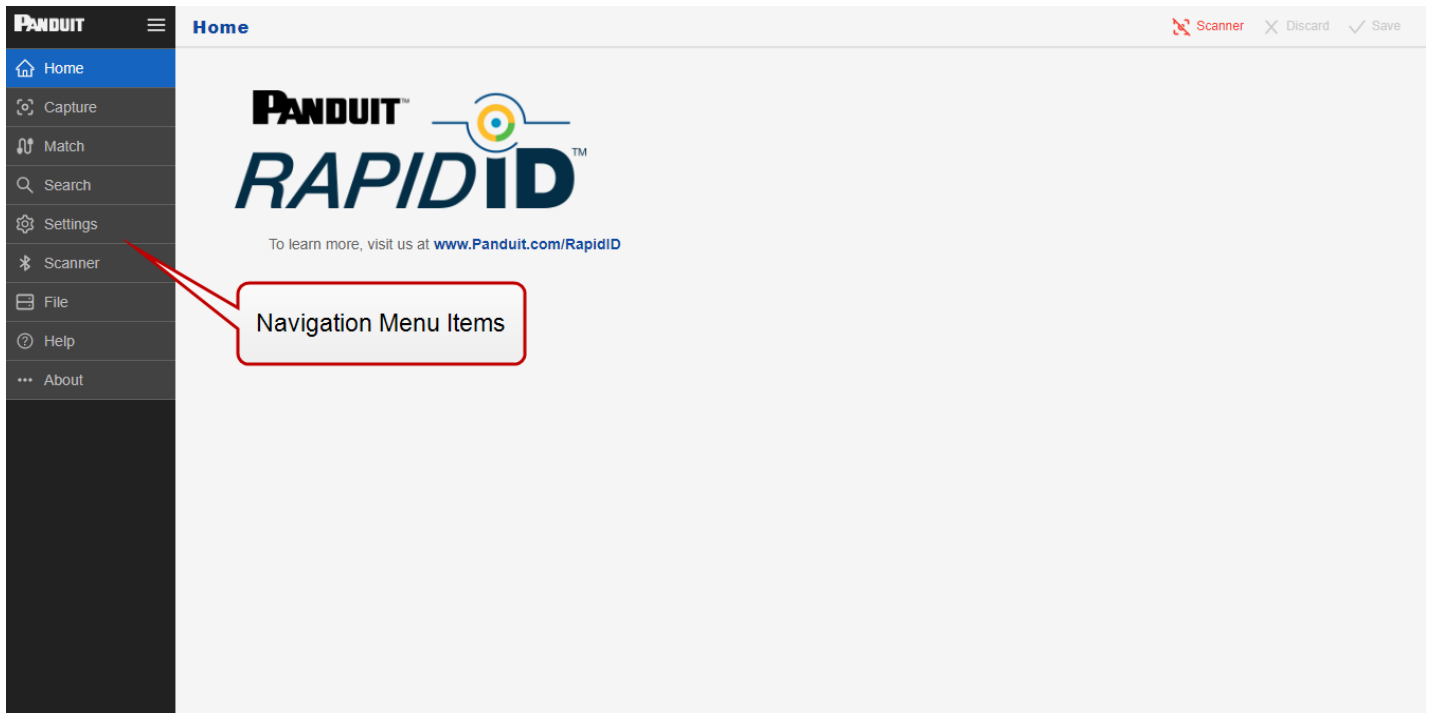


4. When installation completes, click **Finish** to launch the application.



Navigation

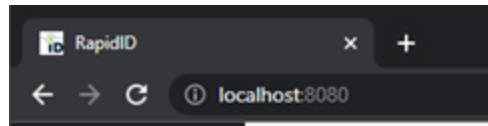
Starting the application takes the user to the home page.



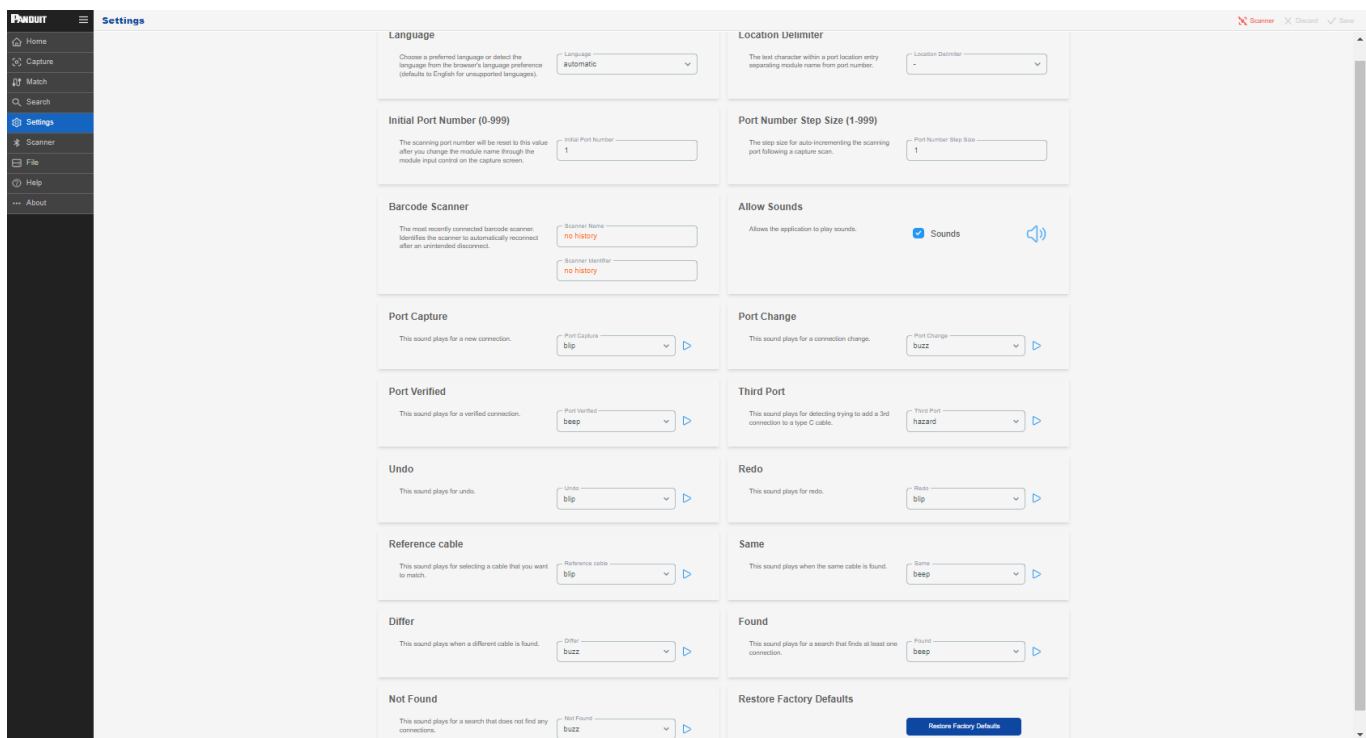
Application Launch

When launched, the *RapidID* application will launch the server, open the local browser, and navigate to 'localhost:8080'

Note: Only one instance of the *RapidID* software is allowed at a time.



Settings



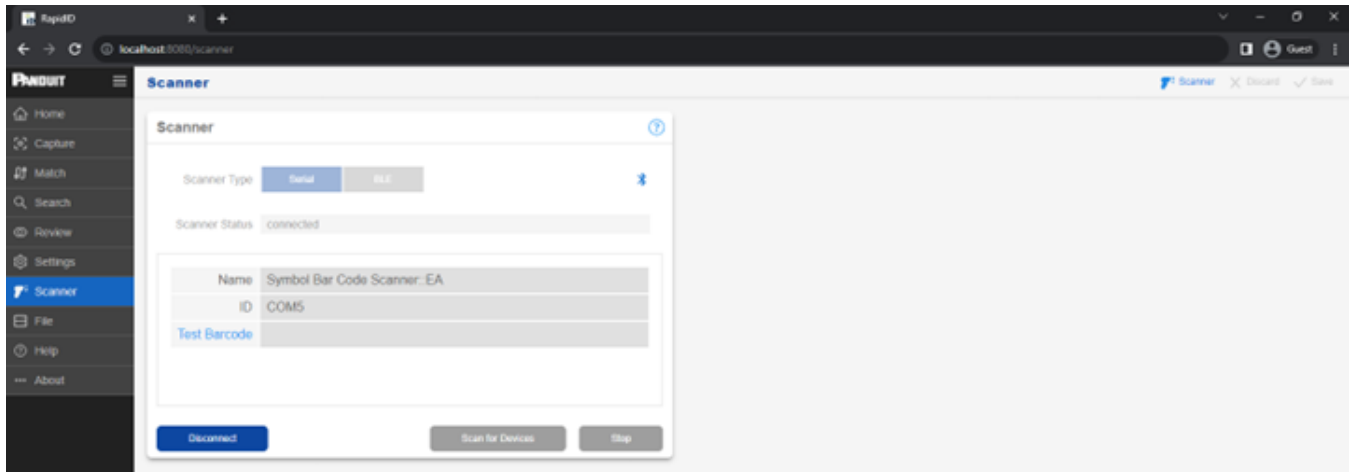
Scanner

The Scanner Page within the *RapidID* application serves as the central hub for connecting and managing your barcode scanners. Whether you're using *RapidID*'s native scanner solutions or third-party devices, this page is where you'll set up and configure your scanners for optimal performance.

New in Version 1.2.0: Third-Party Scanner Support

The version 1.2.0 update of *RapidID* now incorporates support for third-party barcode scanners. This new functionality allows users to connect barcode scanners using Serial

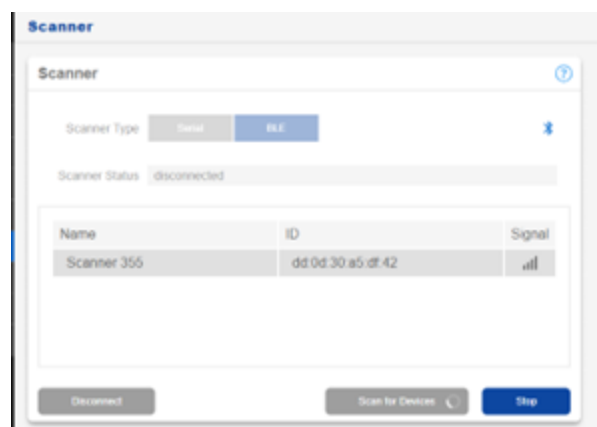
COM interfaces, including both Bluetooth Serial Port Profile (SPP) and Wired USB COM. For more details, visit the [Third Party Scanner Certification Guide](#).



- **Scanner Type:** Sets the type of scanner that you're connecting to the *RapidID* application. Choose between 'Serial' for Serial COM scanners and 'BLE' for Bluetooth Low Energy scanners.
- **Scanner Status:** Provides real-time status updates on the connection state of your barcode scanner. The statuses include Connected, Disconnected, and Re-Connecting.
- **Name & ID:** Displays the name and the unique identification number (ID) of the connected barcode scanner.
- **Test Barcode:** This feature is designed for troubleshooting and confirming that the scanner is functioning correctly with the application.

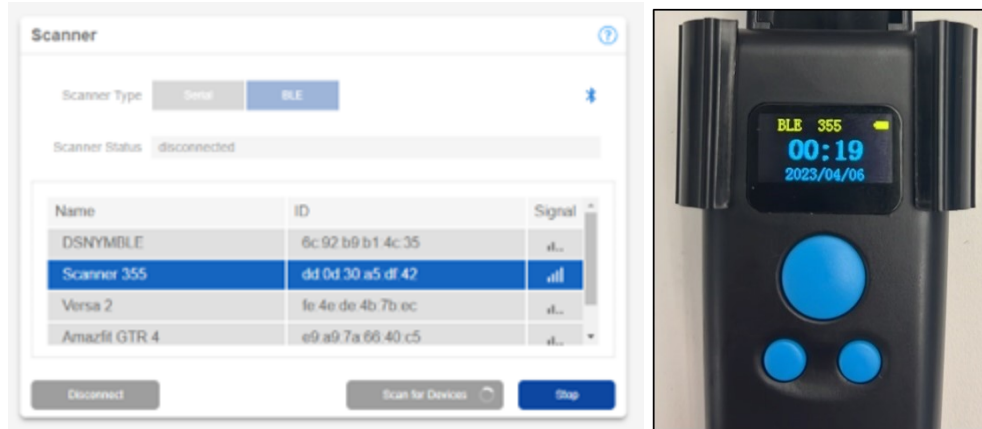
Connecting a Scanner in BLE Mode (RPDSCN)

1. Select scanner and scanner type **BLE**.
2. If not already scanning, click the **Scan for Devices** button.



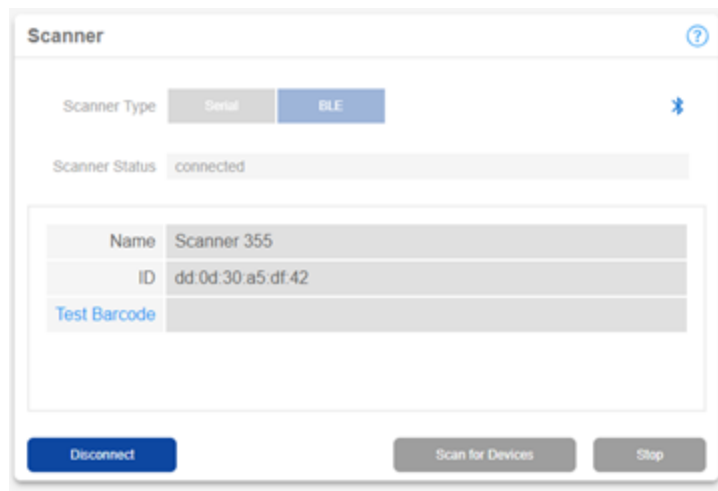
3. Select the scanner (The scanner name **ie. 355** will match the ID of the RPDSCN)

Note: Ensure scanner is in BLE mode.



The scanner is now connected to the *RapidID* application.

Note: The application will attempt to auto-reconnect when the scanner goes into sleep mode.



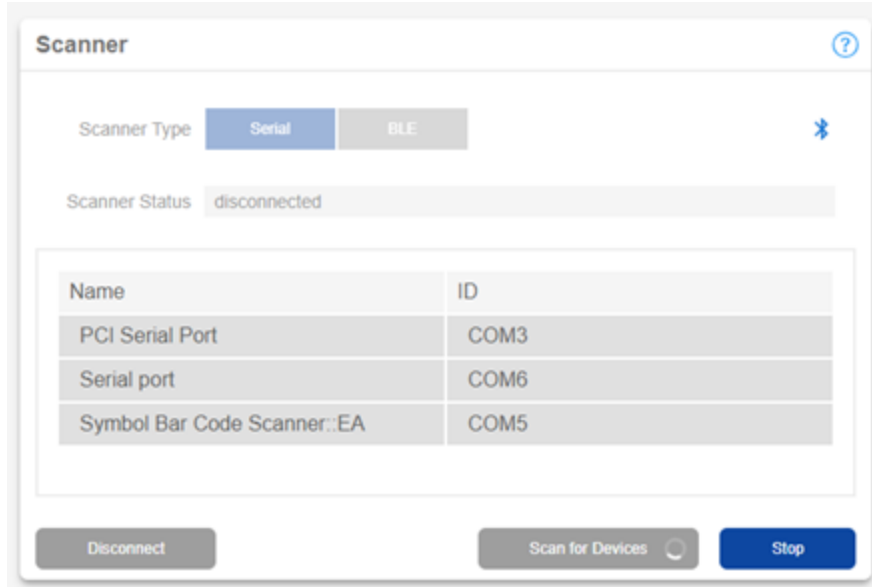
Connecting a Scanner in Serial Mode (Third Party Scanners)

Serial mode gives users the ability to connect a third party scanner to the *RapidID* application. It's enabled for customers who are looking for a reliable wired connection as well as customers who want to use their own barcode scanners.

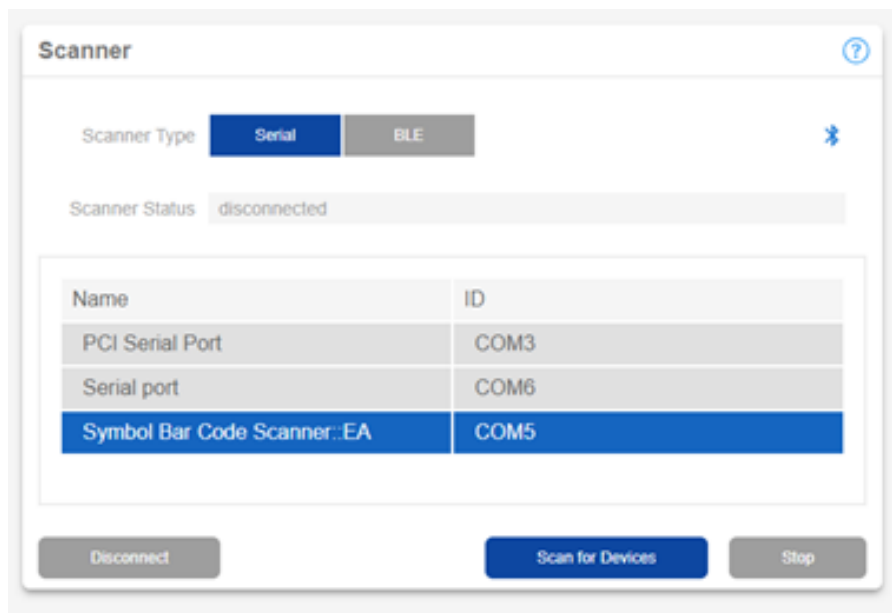
1. Ensure that your barcode scanner is in the appropriate connection mode and is connected to the windows operating system via the appropriate protocol (Bluetooth

Serial Port Profile, Wired COM, etc.). For more information, see the Third Party Scanner Certification Guide.

2. Select scanner type **Serial**.
3. Click the **Scan for Devices** button.

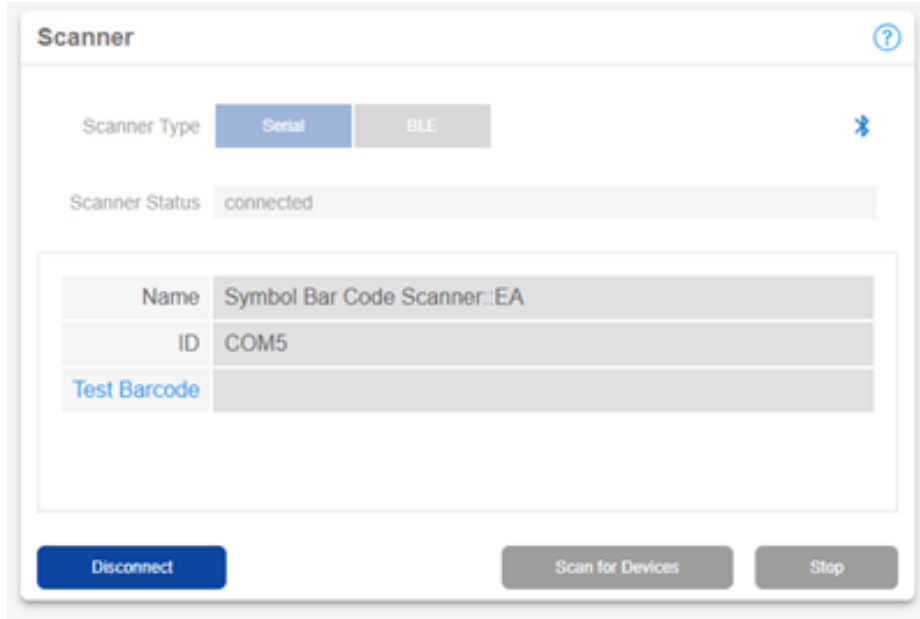


4. Select the scanner (Serial scanners will show their ID as the connected COM port).



The scanner is now connected to the RapidID application.

Note: The application will attempt to auto-reconnect when the scanner goes offline

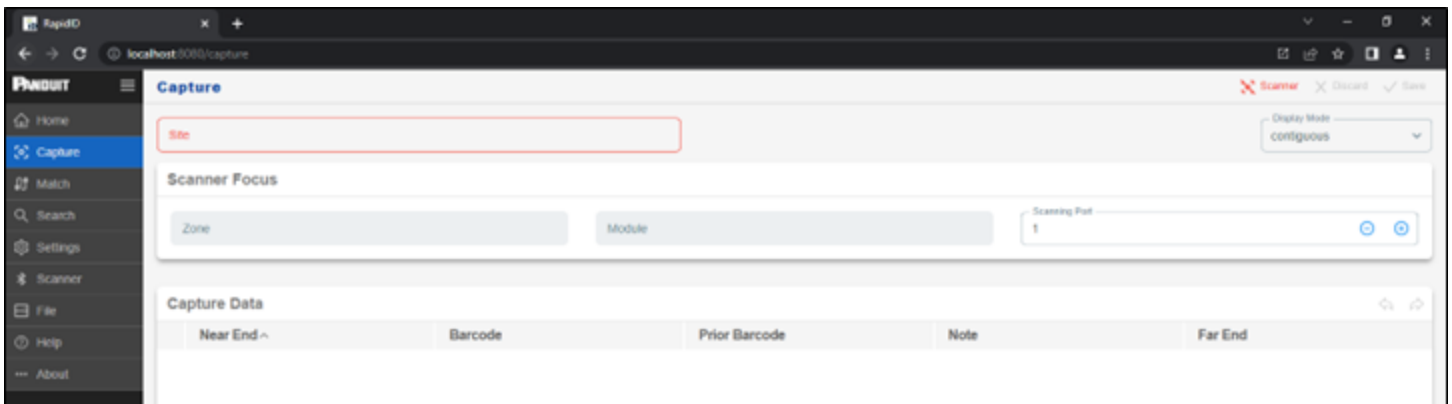


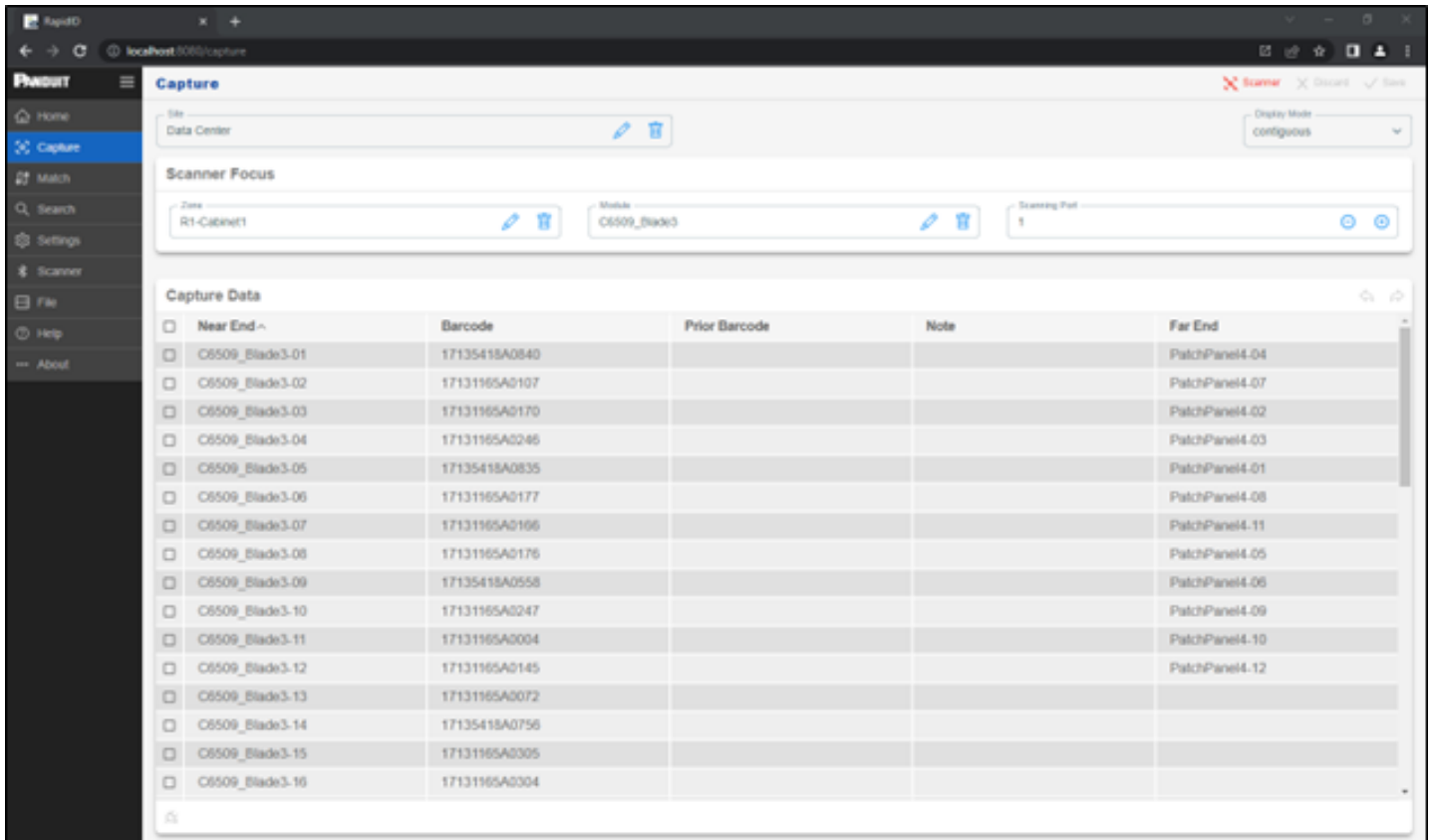
Capture

The **Capture** page collects information regarding the location of patch cords. In *RapidID* for PC, the user defines the location of patch cords using the **Site**, **Zone**, and **Module** fields.

Note: A Site, Zone, and Module must be defined and selected before beginning to scan.

As the user scans, the scanning port auto-updates to the next consecutive port in the module.





A user can add a note to a cable with the free form text field in the note's column. Notes are connected to each side of a connection.



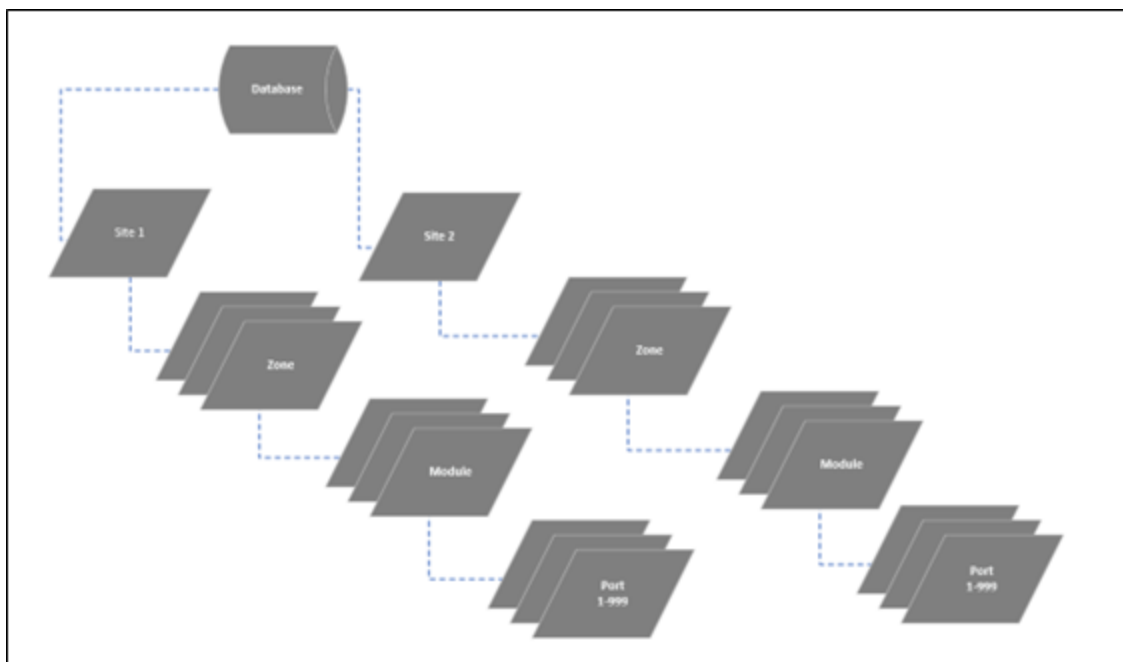
Data Structure: Site – Zone – Module – Ports

- **Sites:** The top level which represents a physical location or site where data is stored or processed. Examples could include a building, or a campus.
- **Zone:** The second level is the Zone, which represents a specific area within a site. They can have varying levels of detail, and a site can contain many zones. Examples could include a cabinet in a data center, or an entire telecommunications room.
- **Module:** The third level is the module, which represents a specific functional unit within a zone. Zones can have multiple modules. Examples could include

networking equipment such as switches, servers, patch panels, and/or rack units.

Note: Module names cannot contain spaces

- **Ports:** The fourth level is the port, which represents a specific interface or connection within a module. For example, a network switch has several ports. Ports range from 1-999.



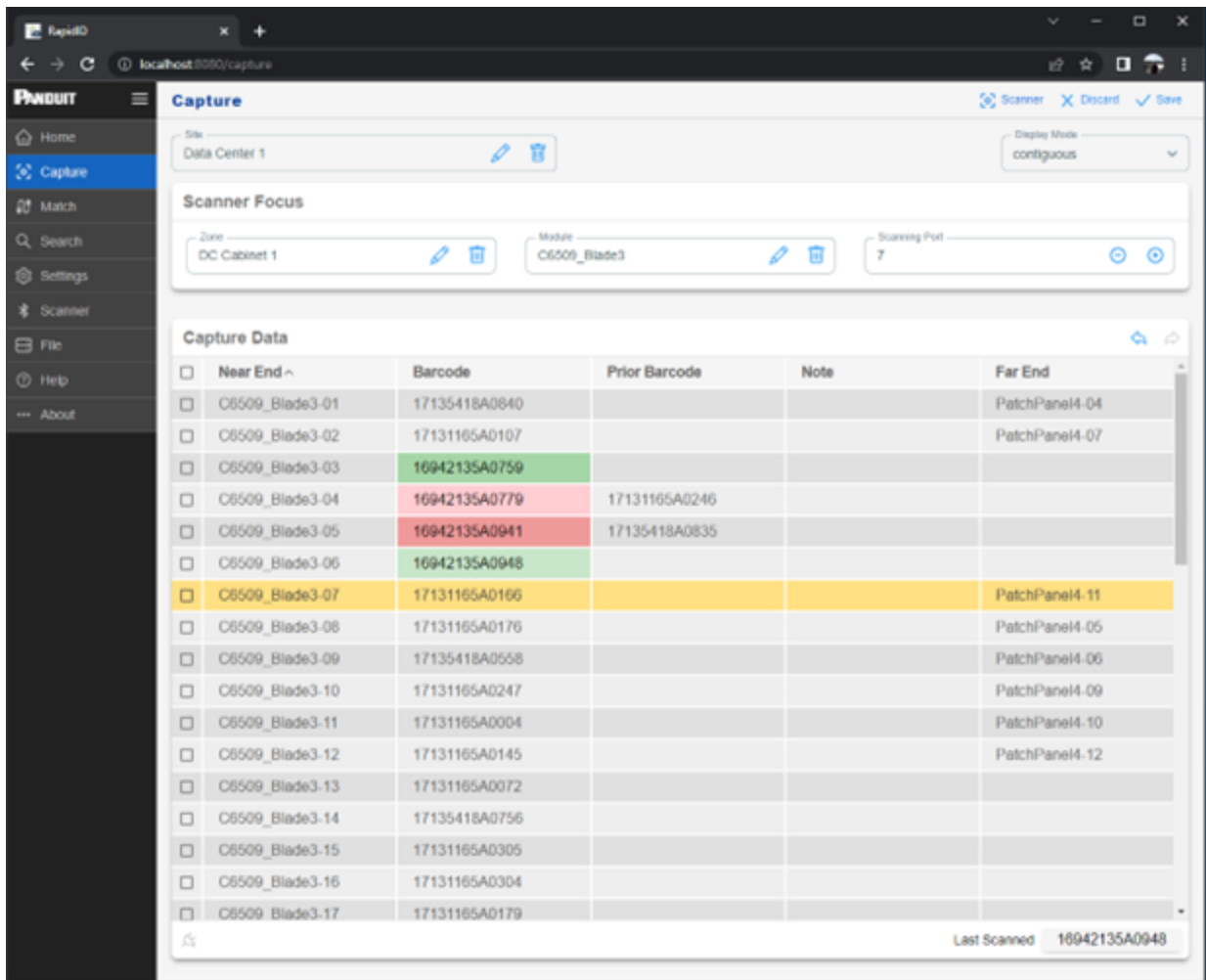
Tip: Setting up a data structure that makes sense for your organization is important. Define a structure ahead of time to ensure clean data.

Verify

The verification function, located within Capture, allows for a comparison to be made between current patch cord locations and previously saved results. This enables users to verify the connection location during troubleshooting or an audit, after initial documentation has been completed.

To Verify:

1. Navigate to the area where connections need to be verified.
2. Confirm the starting location.
3. Scan cables connected to the port locations.



Cables that are confirmed to be in the correct position will highlight green.



Cables that are incorrect will highlight red with an indication of the previous *RapidID* barcode.

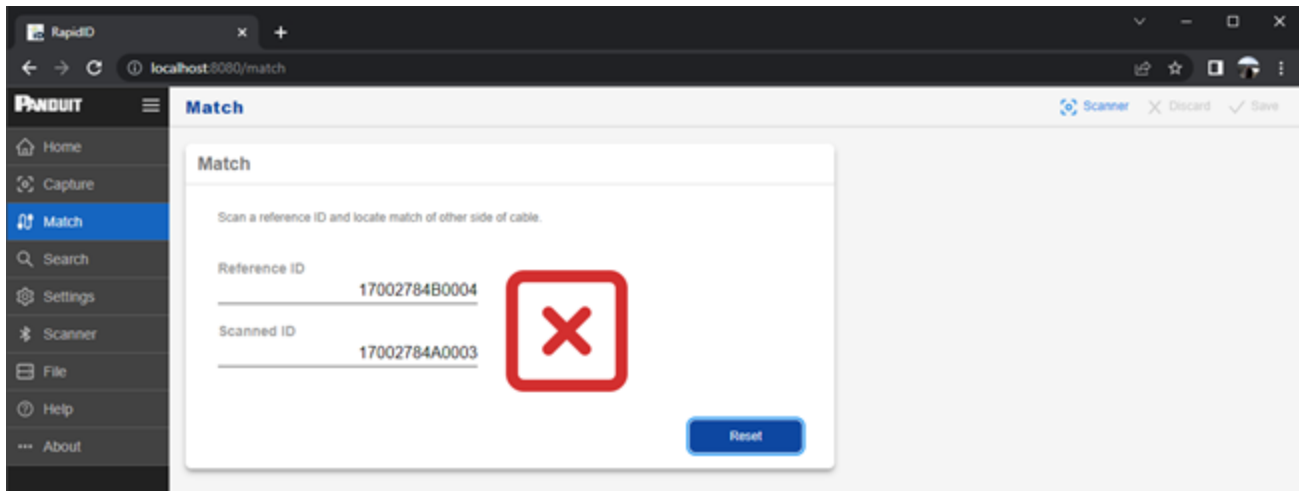


Note: When cabling is being updated, such as during a move, adds, and changes process, the verification function can be overridden/ignored by saving the new cables to their respective positions. After the new cables are installed and scanned into their positions, the user can save the new connections to the database, which will overwrite the previously saved connection data.

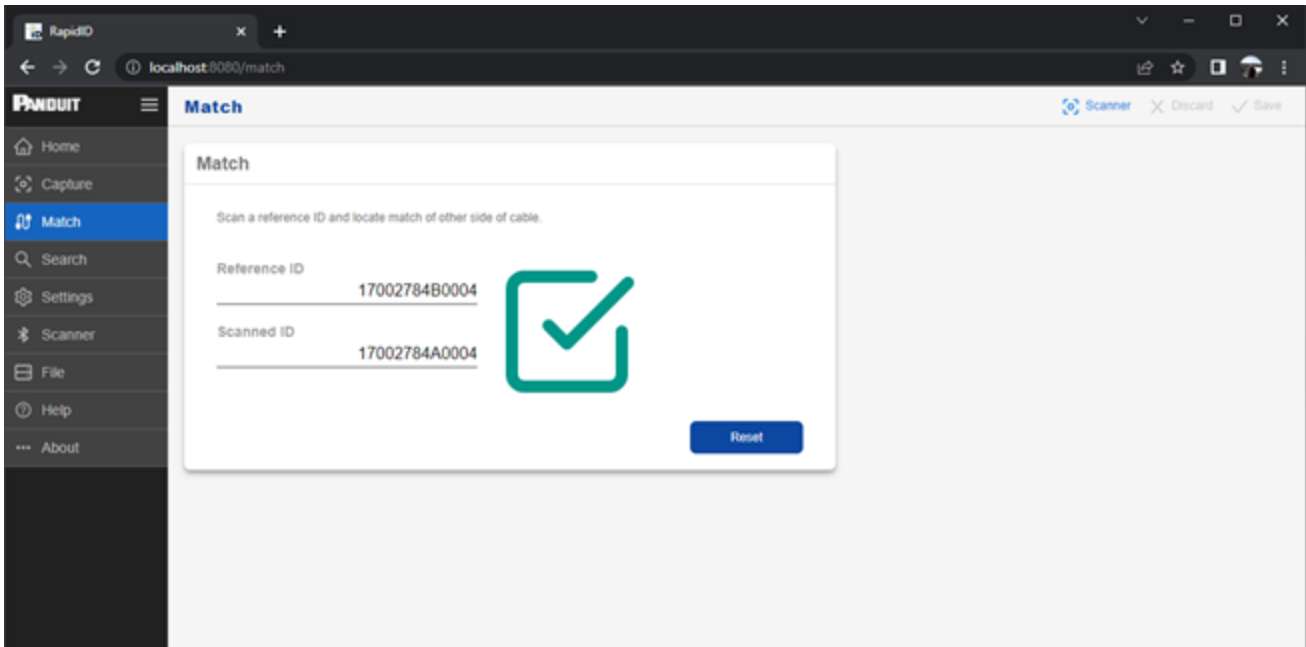
Match

Like *RapidID Mobile*, the Match page feature enables users to easily locate each end of a patch cable, without the need to manually trace cables or document their findings. This is done by scanning a *RapidID* barcode into the reference field, and then scanning other cables until the correct one is identified.

Result of Incorrect Match – Cable ends compared *are not* the same.

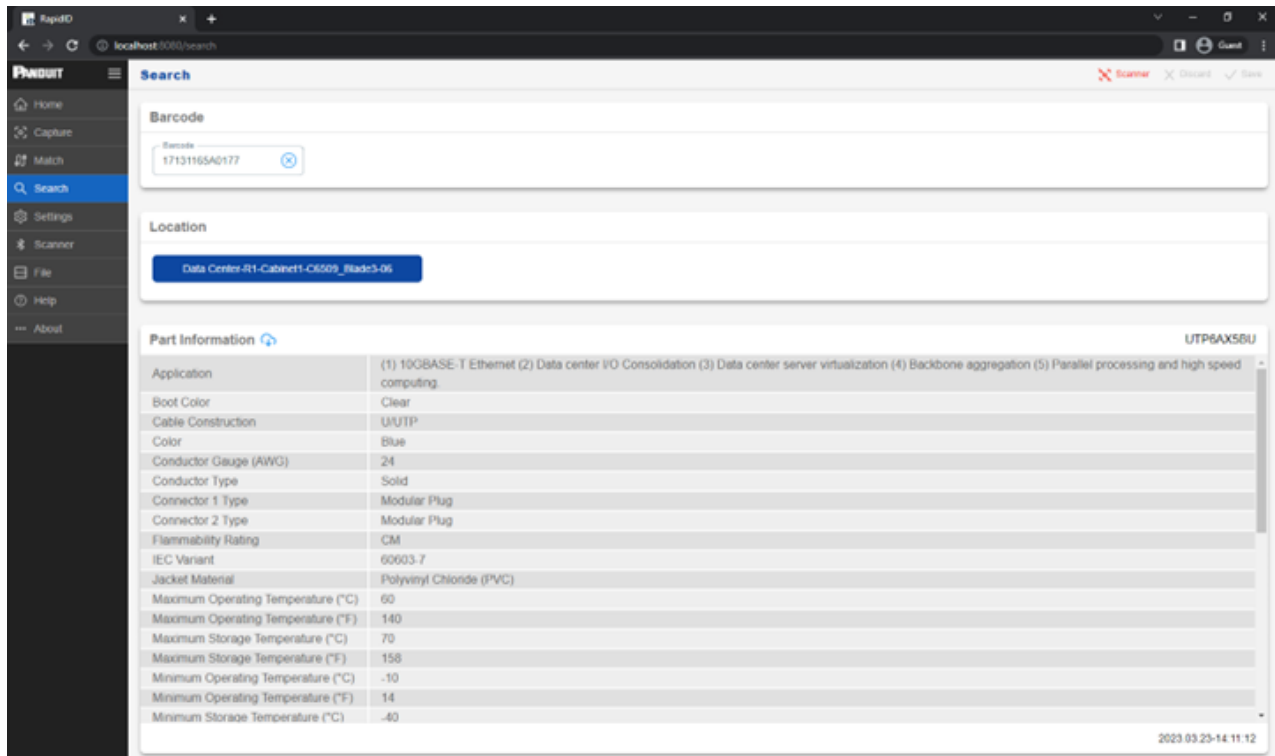


Result of Correct Match – Cable ends compared *are* the same.



Search

The search function provides the user with information regarding the physical location of a cable. Using the user defined location within the capture, the search function will return the location of the cable.



Part Information

Users can now use *RapidID* to find out more information about a product. A *RapidID* label is scanned or typed into the barcode text box, the user can find out more information about the cable. Click the cloud image to retrieve information about the product. Information includes the part number, cable color, length, flame rating among many others.

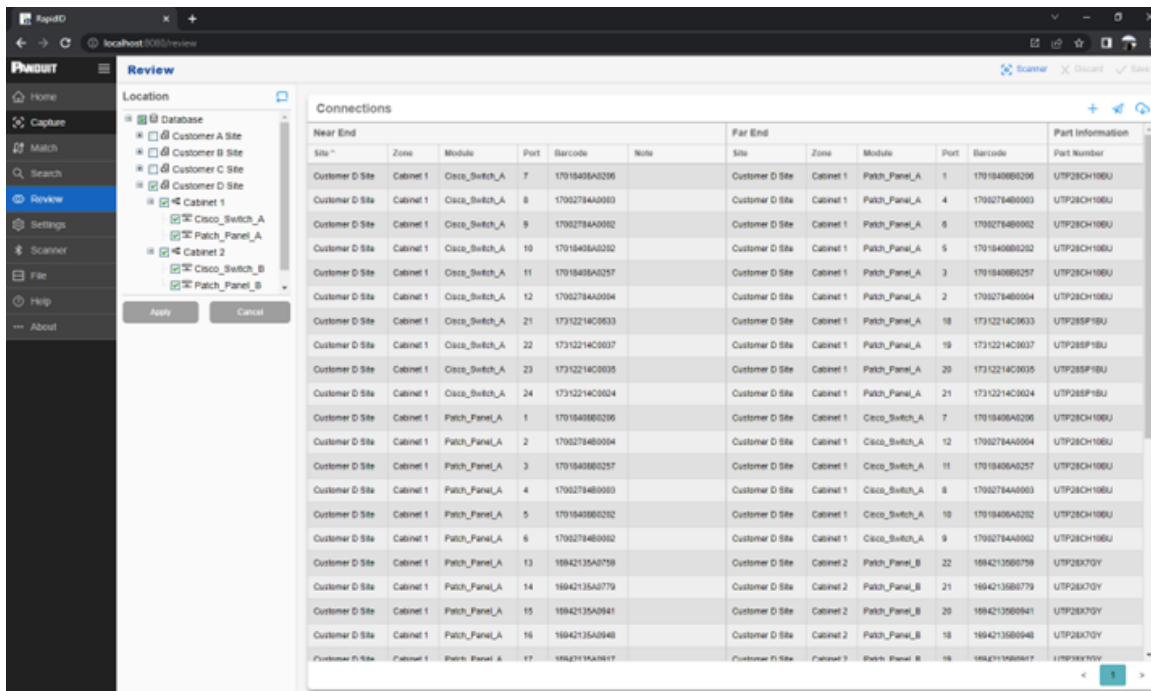
Once information is received, it will be stored on the local machine.

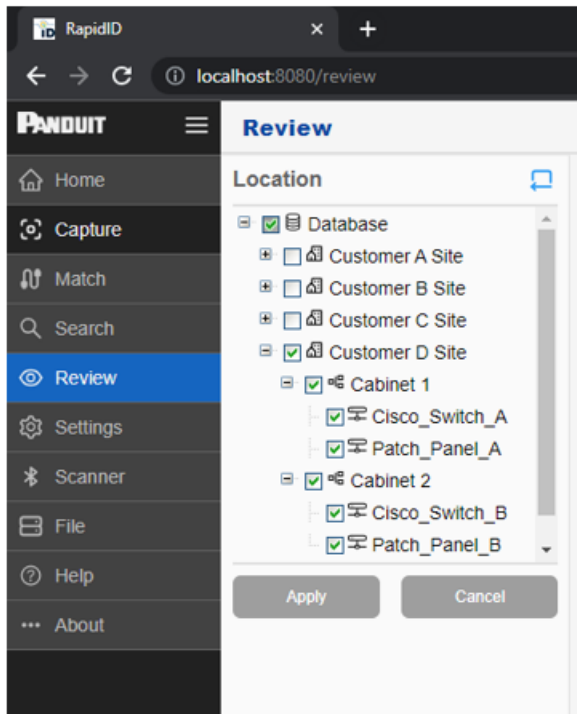
Note: An internet connection is required.

Review

The Review Page offers a thorough analysis and evaluation of all connections housed within the *RapidID* database. It also enriches this data by incorporating connection information sourced from the Capture Page and layering it with relevant part details.

This feature proves to be beneficial when a user must examine several connections simultaneously, generate a bill of materials, or delve into the finer details of connectivity at a given location.






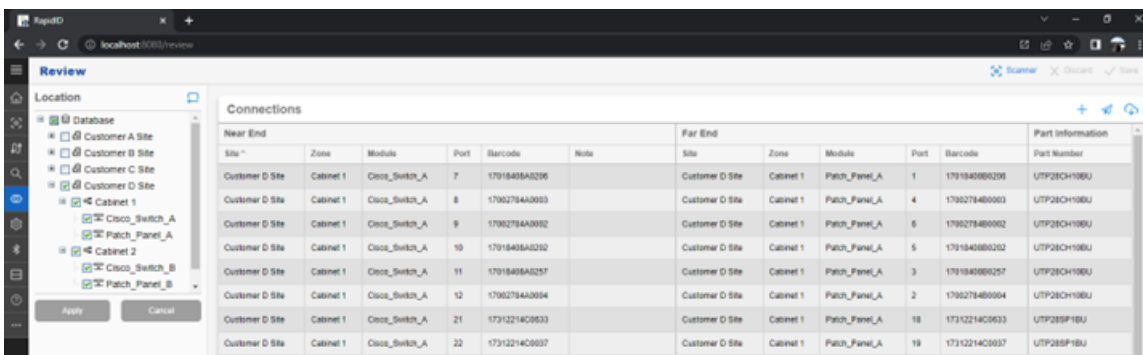
The left-hand navigation panel serves as a convenient tool for users to pinpoint the desired data location, and it also provides a precise filtering function for your needs.


To Access Data:

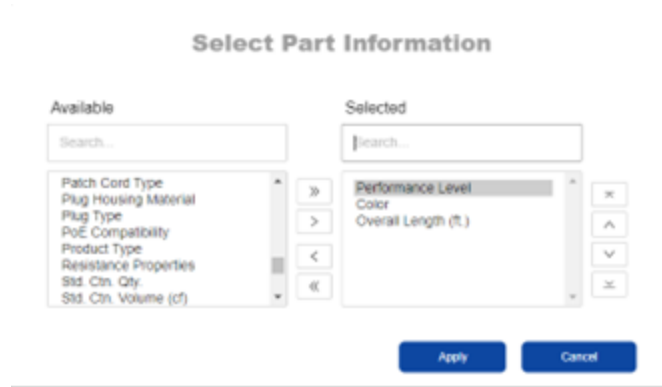
1. Use the '+' button to unfold the hierarchical view.
2. Choose your required data points (Site, Zone, Module). Keep in mind that selecting a site will, by default, include all the zones and modules under it.
3. Hit the 'Apply' button to display the selected data.


Tip: To make your workspace less cluttered, use the  button to minimize the location navigation panel.


Review Page Functions



Setting Up Additional Columns: This feature lets users augment the table with extra columns of part information, such as color, length, and performance. By clicking the  button, a window will appear, where users can select from all available fields within the part information tab, arrange them, and determine their order of importance before they appear on the table.

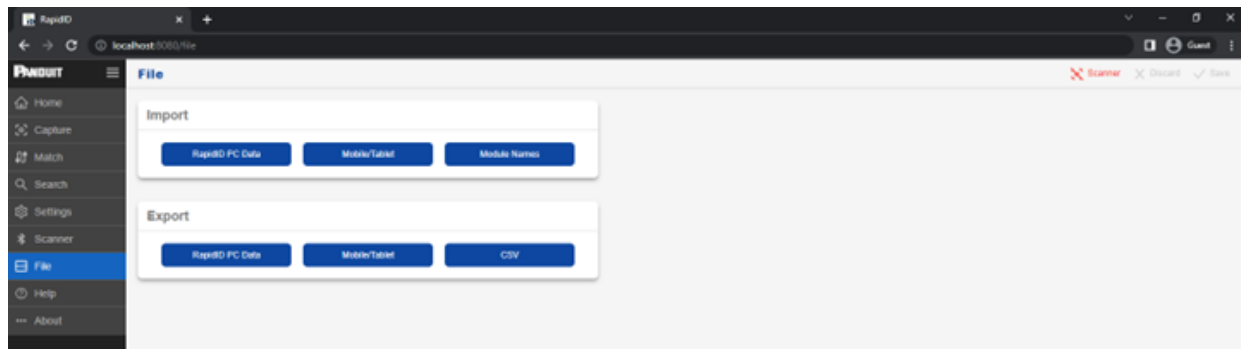


 **Downloading Part Information:** In a similar fashion to the search page, the part information button enables users to access and download supplementary part details about the products housed in the database. Unique to the review page, activating this button will conduct a bulk update of all parts currently chosen for review. If you wish to bulk update the whole database, simply click on the database filter in the location tab to reveal all connections, followed by clicking the download part information button.

 **Exporting as CSV:** This function allows users to export the data table currently visible on the review page as a '.CSV' file, making it compatible for use with other applications.

File

The file page contains six options for importing and exporting data within *RapidID PC*, each with a unique function.



Import

- **RapidID PC Data:** Imports data from another version of *RapidID* for PC. Includes Site & Zone files. Data will be recognized as a '.ZIP' file. Clicking the button opens a guided setup.

- **Mobile/Tablet:** Imports data from *RapidID* Mobile/Tablet. Data will be recognized as a '.JSON' file. Clicking the button opens a guided setup.

Note: Upon import, the user will need to define what Site and Zone the file should import to.

- **Module Names:** Imports module data in mass from a text file. Examples include '.TXT', '.CSV'. Clicking the button will open a guided setup.

Note: Upon import, the user will need to define what Site and Zone the file should import to.

Export

- **RapidID PC Data:** Exports data from *RapidID* for use with another instance of *RapidID* PC. The user can select an individual site or zone to export. Data will be exported as a '.ZIP' file.
- **Mobile/Tablet:** Exports data from *RapidID* for use with an instance of *RapidID* Tablet/Mobile. The is only able to select an individual zone to export. Data will be exported as a '.JSON' file.
- **CSV:** Exports data from *RapidID* as a '.CSV' file for use with other programs. The user can select an entire site or zone to export.

Database Backup/Restore

To preserve your database, Panduit recommends periodically backing up your *RapidID* database. Database backups are an essential way to preserve data in the event of a system failure.

Note: It is recommended that databases are backed up before importing other files into *RapidID* .

Database Backup:

1. Navigate to: 'C:\Panduit\RapidID'.
2. Run: 'dbbackup.bat'.
3. Once database backup is completed, the file will be available in 'C:\Panduit\RapidID\backup'.

Note: it is recommended that the backup file is saved to a secure location.

Database Restore:

1. Navigate to: 'C:\Panduit\RapidID'.
2. Run: 'dbrestore.bat'.

3. Select the database backup file where you want to restore the database.
4. Once the database restore has been completed, close program and restart *RapidID* application.