

RapidID™ Network Mapping System

User Manual

Documentation Revision History

Version Number	Modifications	Date
1.0	Initial Release	5/24/2023

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Table of Contents

Introduction to RapidID™ Network Mapping System	5
Features	5
Required Components	5
Components	7
RapidID™ -Enabled Connectivity Products	7
Copper Patch Cords	7
Opti-Core Fiber Patch Cord	7
Fiber Trunk Assemblies	8
Retrofit Labels	8
RapidID™ Software	9
RapidID™ Bluetooth®-Enabled Handheld Barcode Scanner (RPDSCN)	9
Packaging Contents	10
Panel Description	10
Connect Scanner to Application	10
Power	11
Scanner Settings	11
General	11
Working Mode	11
Communication	12
Time Settings	12
Barcodes for Setting Changes	12
RapidID™ Software for Tablet/Mobile	14
Home and Navigation	14
Settings	16
Capture Page	17
Verify	18
Search Function	20
Match Function	20
File Function	21
Unsaved Changes	22
RapidID™ Software for PC (Windows)	23
Navigation	25
Application Launch	26
Settings	26
Connect Scanner	27
Capture Page	29
Data Structure: Site – Zone – Module – Ports	30
Verify	31
Match	33
Search	34
Part Information	35

File 35

 Import 35

 Export 36

Database Backup/Restore 36

 Database Backup: 36

 Database Restore: 36

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downtime during an outage, but documenting physical infrastructure is extremely time-consuming and often overlooked or outdated.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

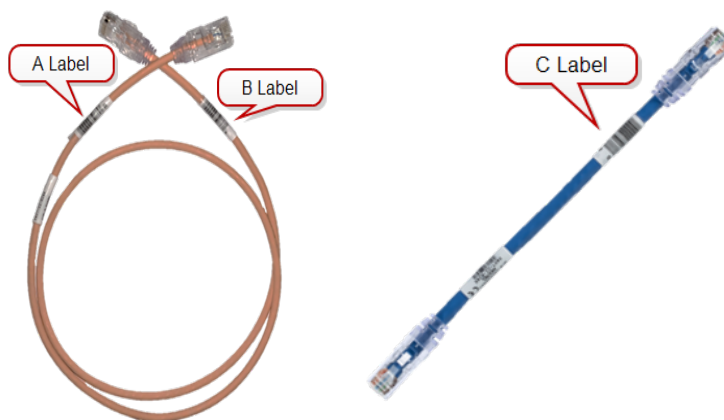
- b. The *RapidID*™ software application is also available for Windows® – PC through <https://www.panduit.com>

Components

RapidID™ -Enabled Connectivity Products

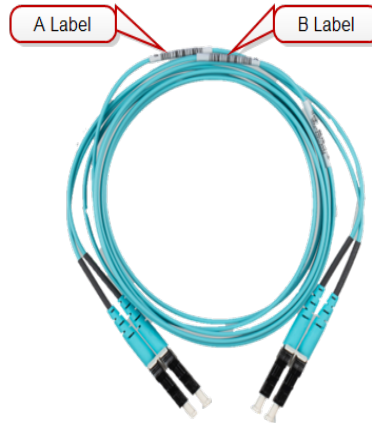
Copper Patch Cords

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)

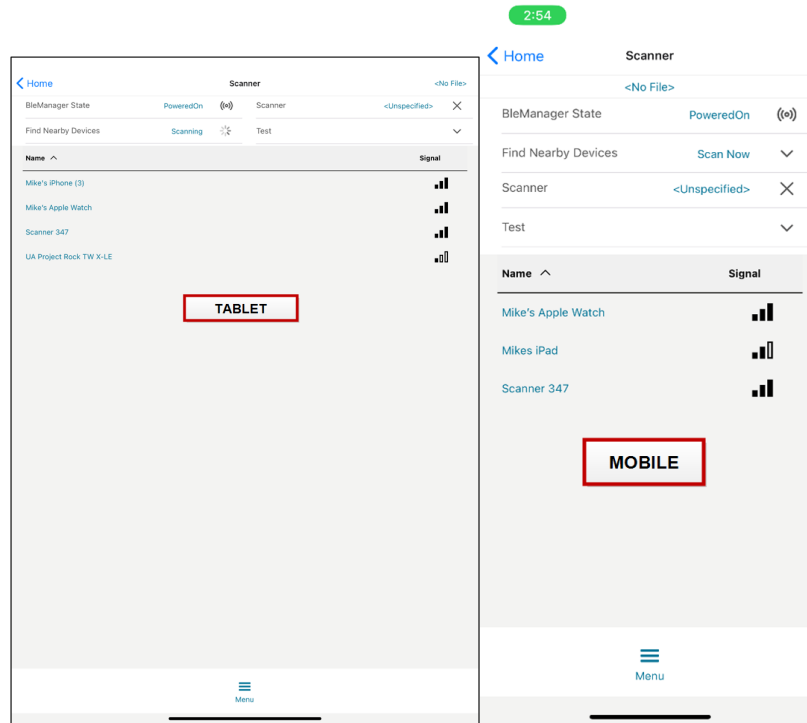
Panel Description



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)

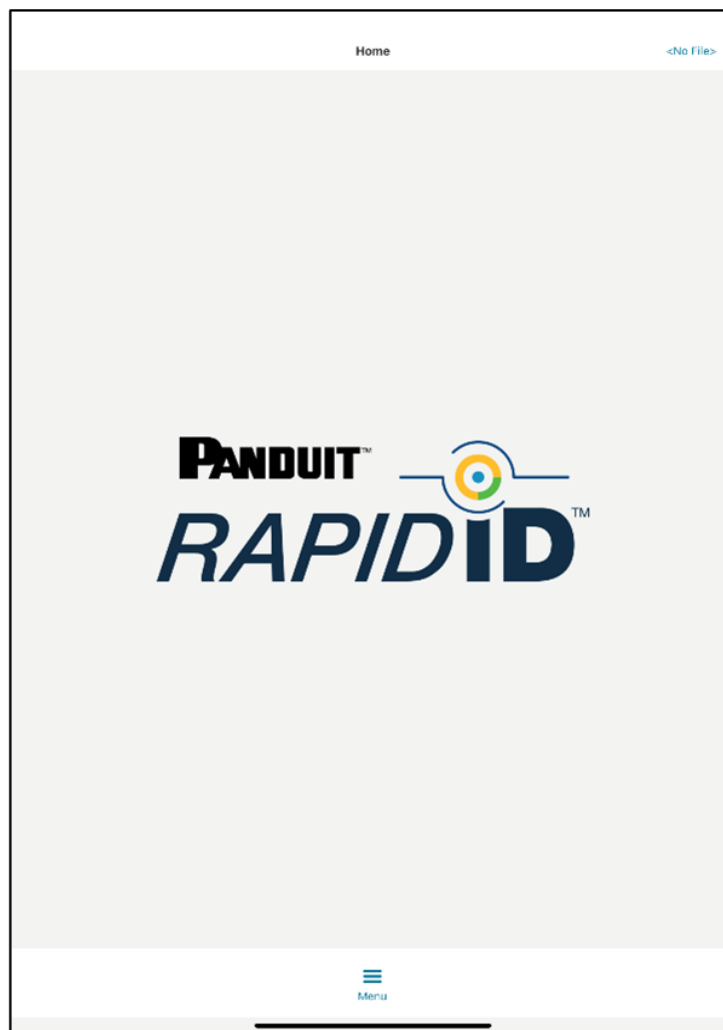
Set Communication to Bluetooth (BLE)
 Bluetooth-BLE (Default)

RapidID™ Software for Tablet/Mobile

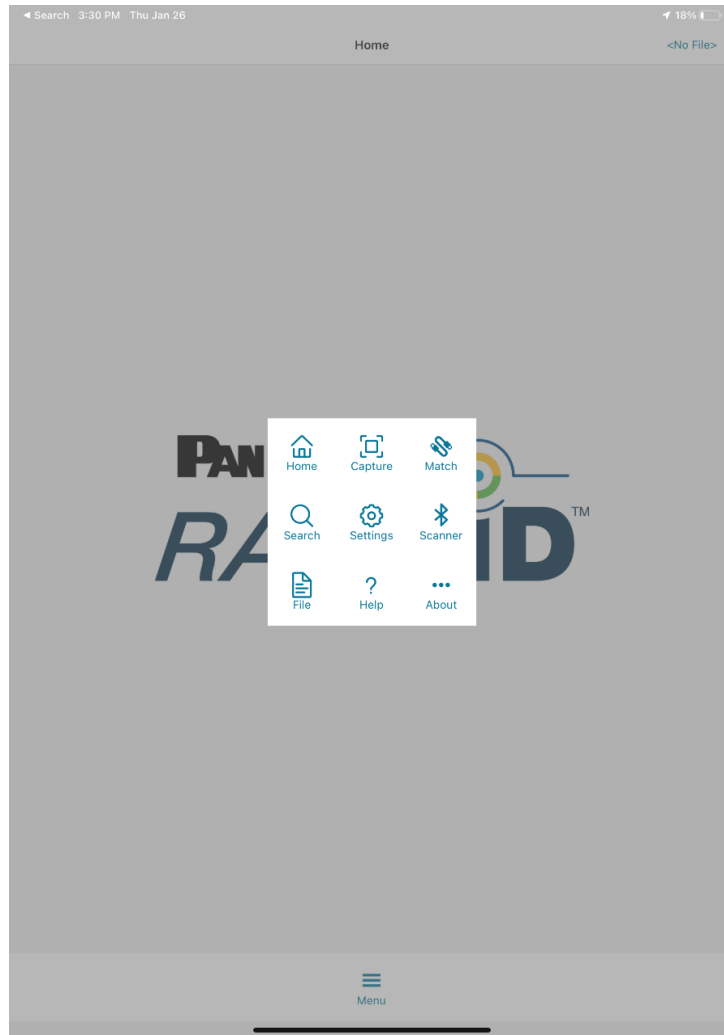
The *RapidID™* software provides a feature rich application that aides in the documentation and troubleshooting processes. It is available as a free software application download for mobile devices and tablets. For information about the *RapidID™* PC application, available for Windows OS, see [RapidID™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

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

Home and Navigation



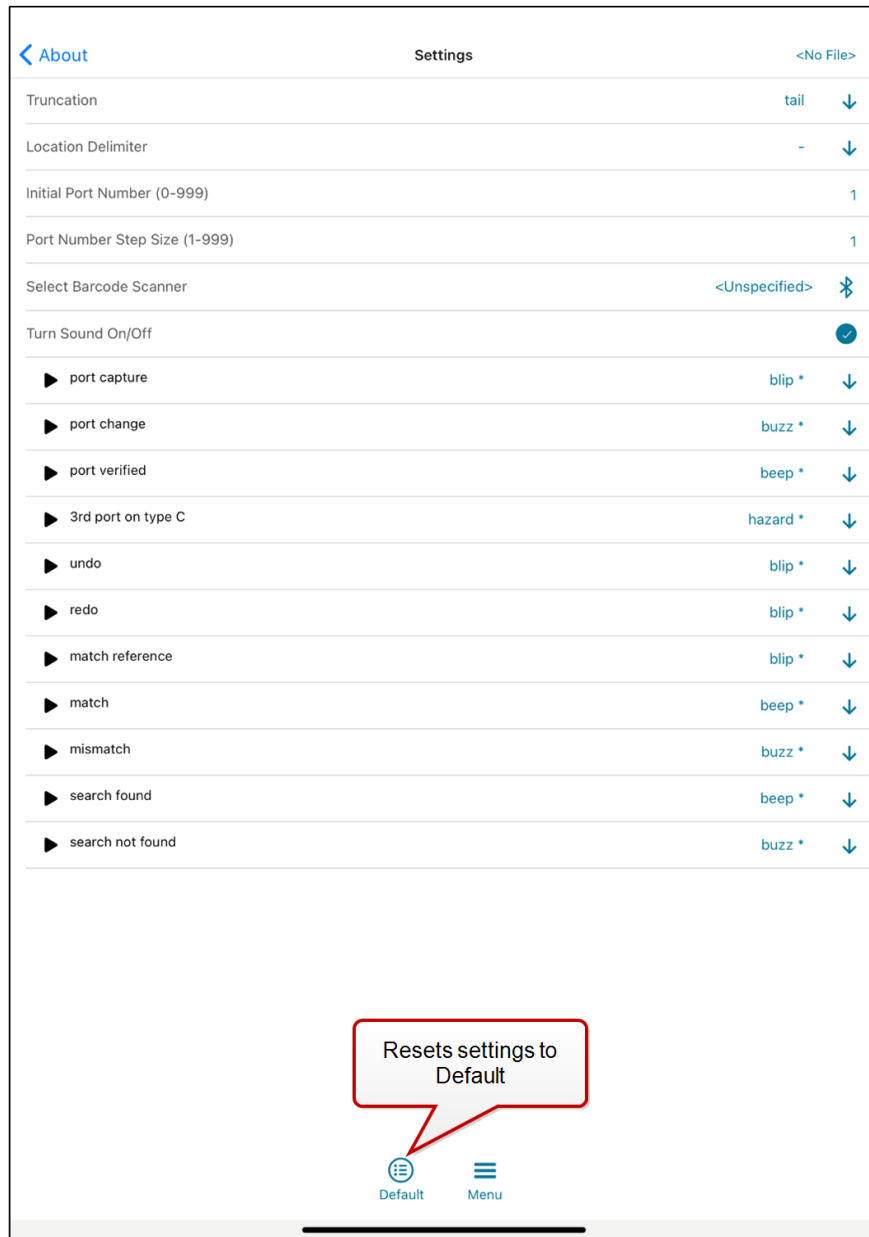
The *RapidID™* Homepage shows the **Navigation** menu.



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



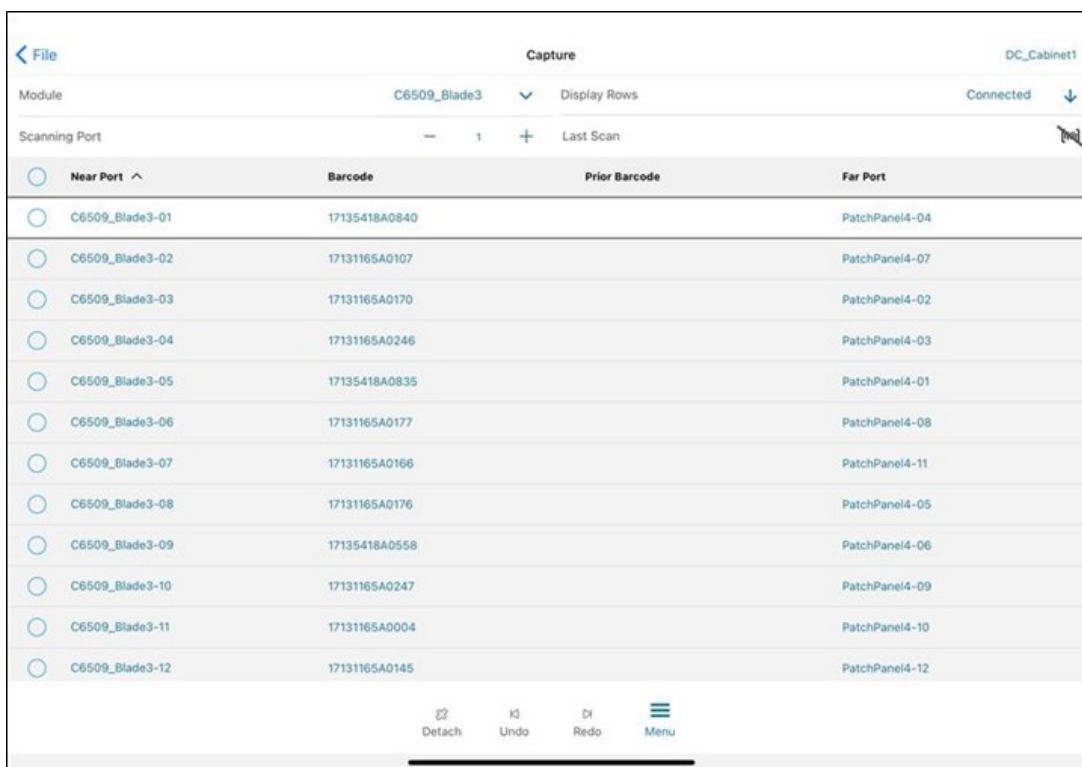
Item	Description
Truncation	Adjusts the truncation of text in the Module Page
Location Delimiter	Adjusts the connector between Module and Port
Port Number Step Size	Adjusts the step size from one port to the next when scanning
Select Barcode Scanner	Shortcut to the scanner page

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

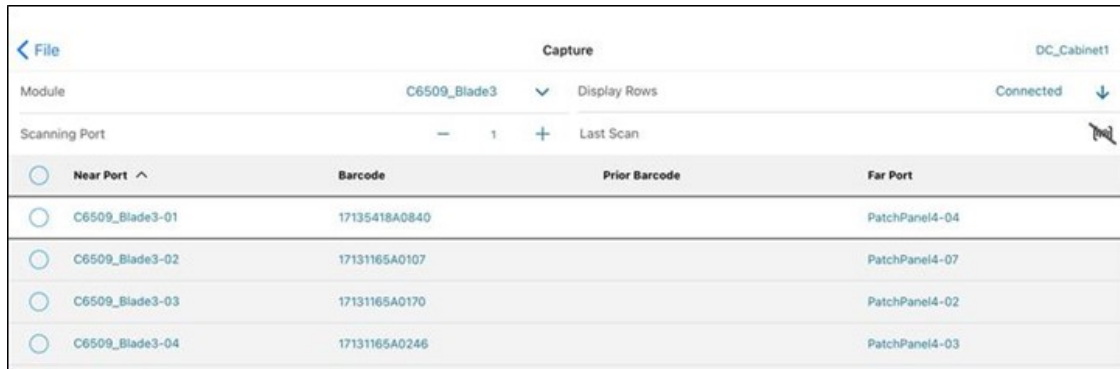
Capture Page

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**



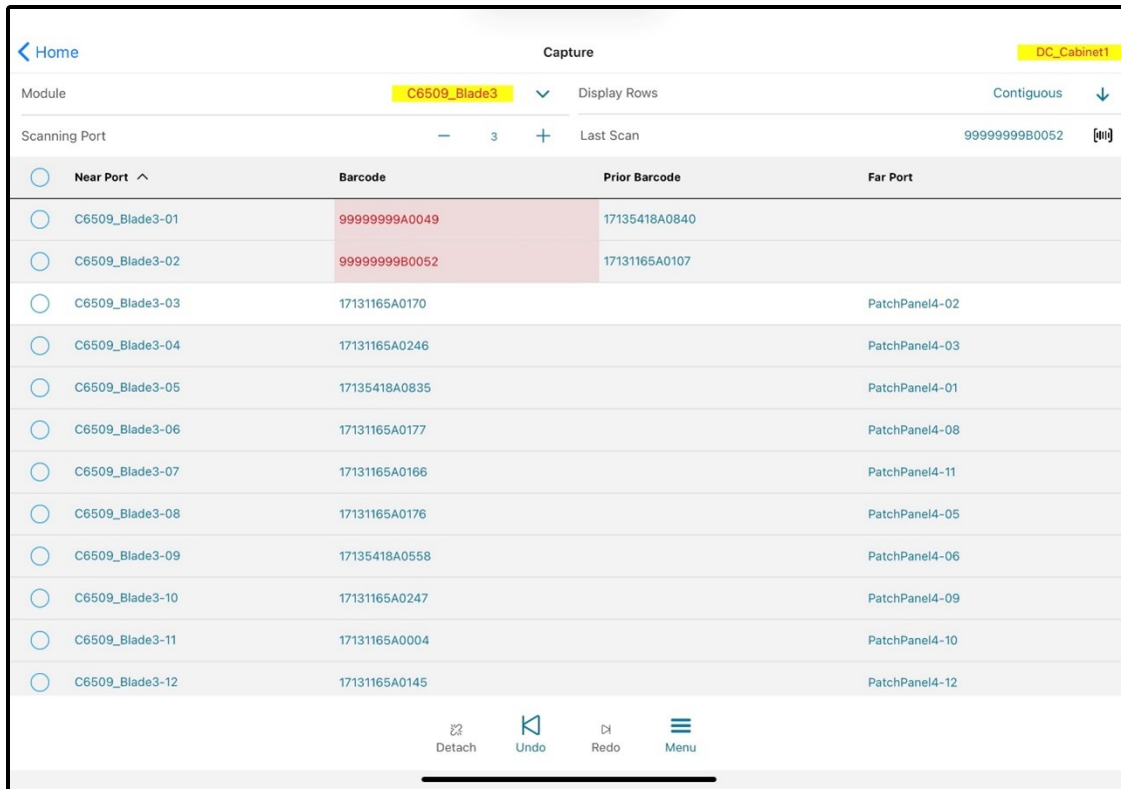
The screenshot shows a software interface with a 'Capture' section. At the top, there are navigation elements: '< File' on the left, 'Capture' in the center, and 'DC_Cabinet1' on the right. Below this, there are controls for 'Module' (set to 'C6509_Blade3'), 'Display Rows' (set to 'Connected'), and 'Scanning Port' (set to '1'). A 'Last Scan' button is visible. The main part of the interface is a table with four columns: 'Near Port', 'Barcode', 'Prior Barcode', and 'Far Port'. Each row represents a scan of a specific blade and port.

<input type="radio"/> Near Port ^	Barcode	Prior Barcode	Far Port
<input type="radio"/> C6509_Blade3-01	17135418A0840		PatchPanel4-04
<input type="radio"/> C6509_Blade3-02	17131165A0107		PatchPanel4-07
<input type="radio"/> C6509_Blade3-03	17131165A0170		PatchPanel4-02
<input type="radio"/> 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
<input type="radio"/>	C6509_Blade3-01	99999999A0049	17135418A0840	
<input type="radio"/>	C6509_Blade3-02	99999999B0052	17131165A0107	
<input type="radio"/>	C6509_Blade3-03	17131165A0170		PatchPanel4-02
<input type="radio"/>	C6509_Blade3-04	17131165A0246		PatchPanel4-03
<input type="radio"/>	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.

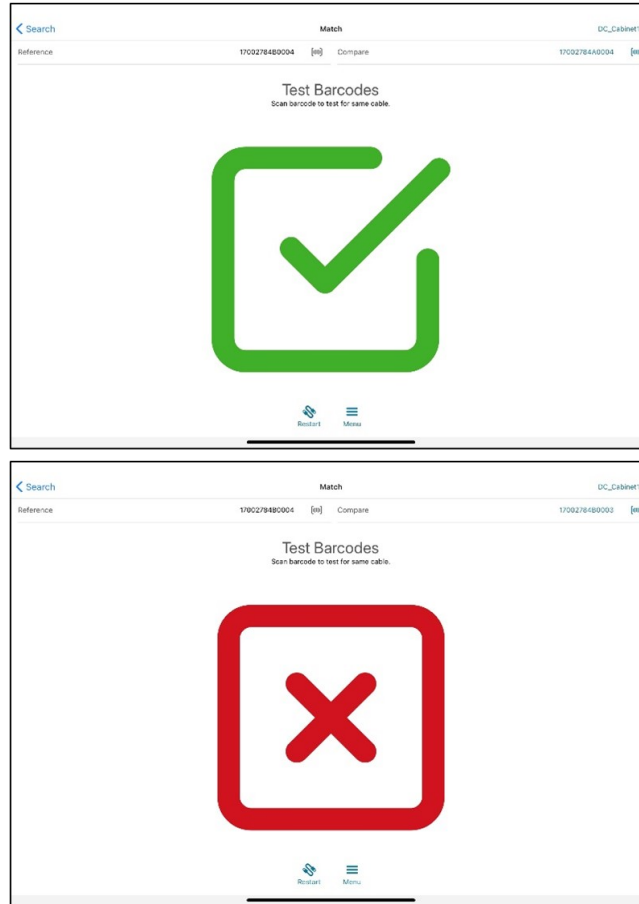
Search Function

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.

Barcode	Location ^
16942135A0759	C6509_Blade4-13

Match Function

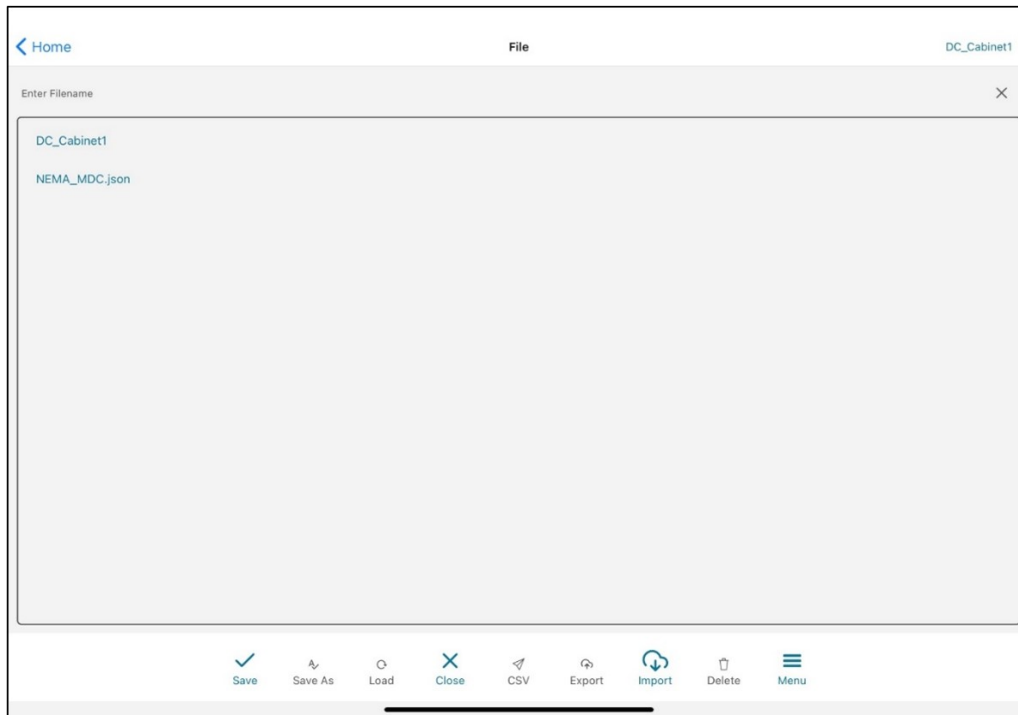
The **Match** page feature enables users to easily locate each end of a patch cable, without the need to manually trace cables or document their findings. This is done by scanning a *RapidID™* barcode into the reference field, and then scanning other cables until the correct one is identified.



- **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

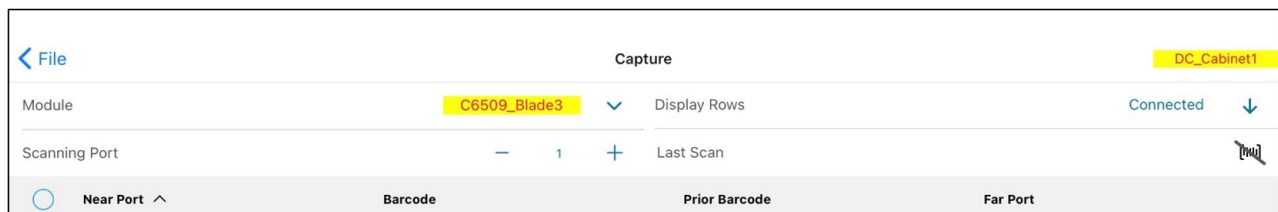
The **File** page provides the user capabilities to save, delete, import, and export files and data.



- **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.



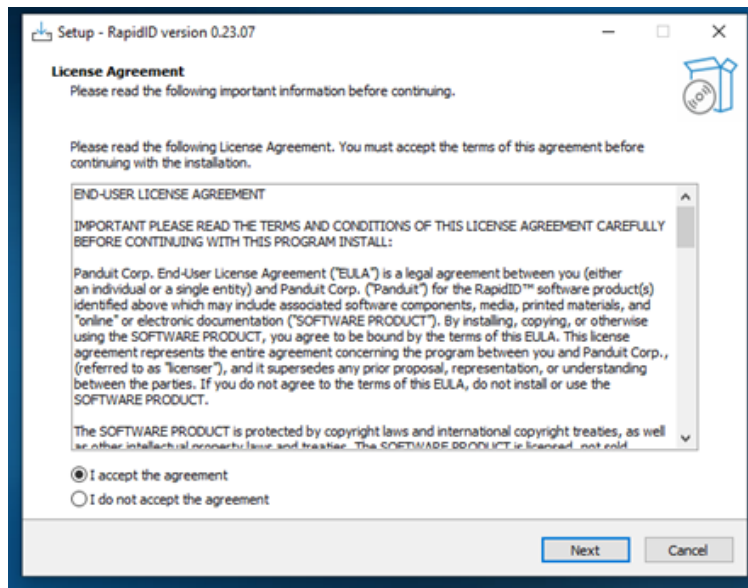
RapidID™ Software for PC (Windows)

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

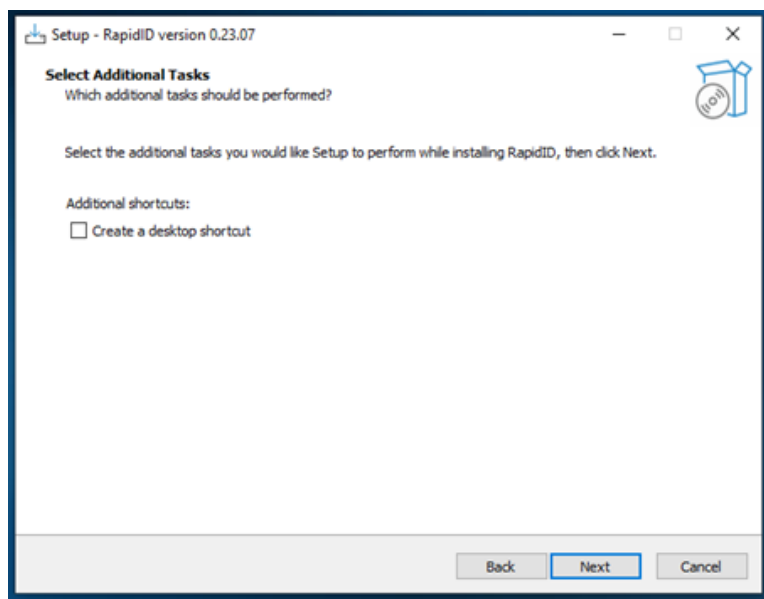
Users can download the software at www.panduit.com/rapid-id

To install RapidID™ onto a local Windows Device:

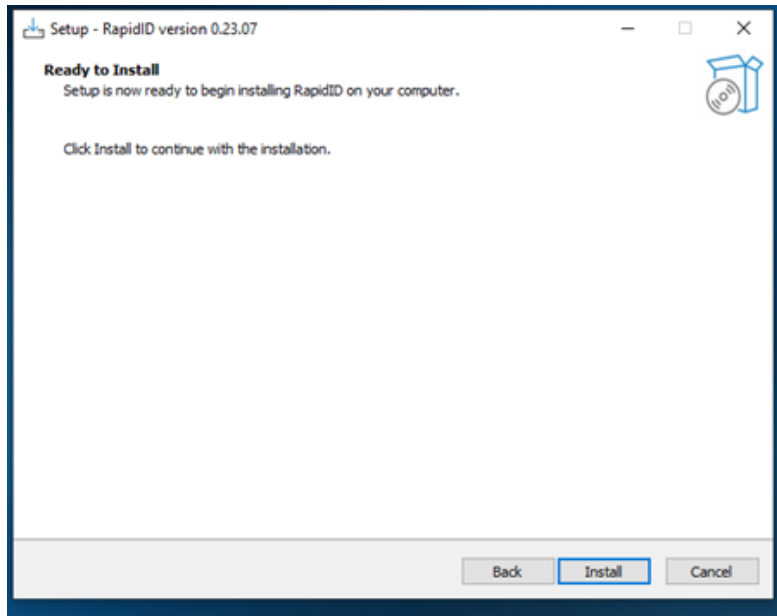
1. Agree to the terms of the End-User License Agreement.



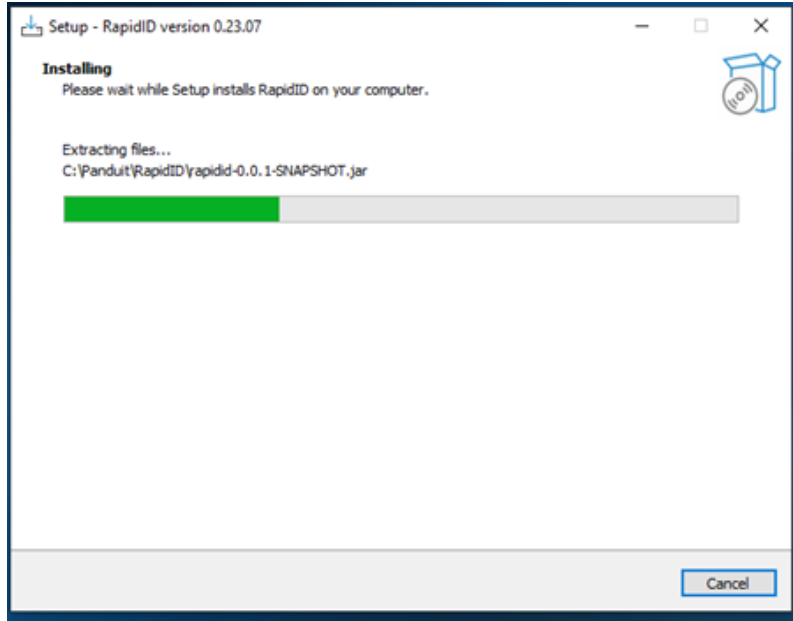
2. Create desktop shortcut (*optional*).



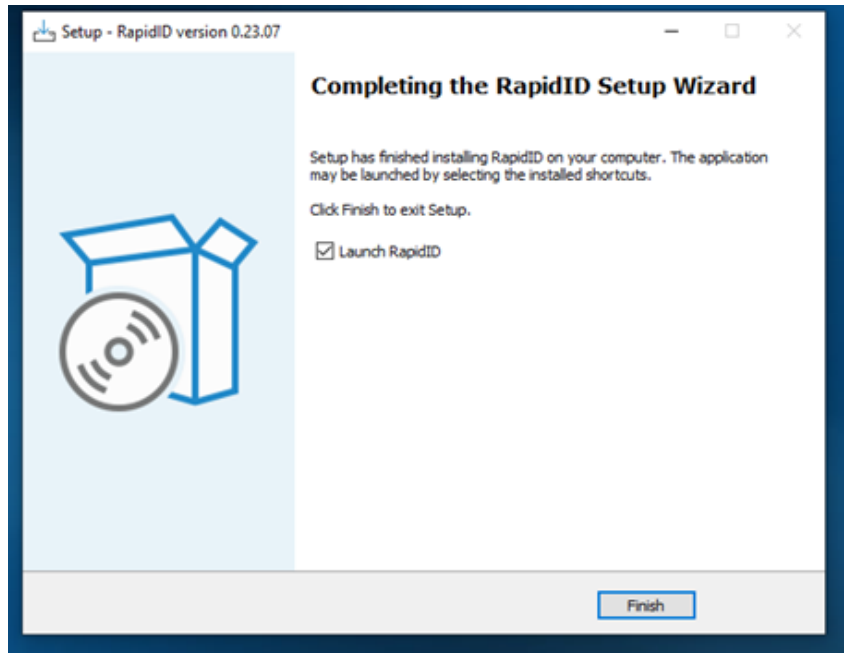
3. Start the installation.



RapidID™ begins installing.

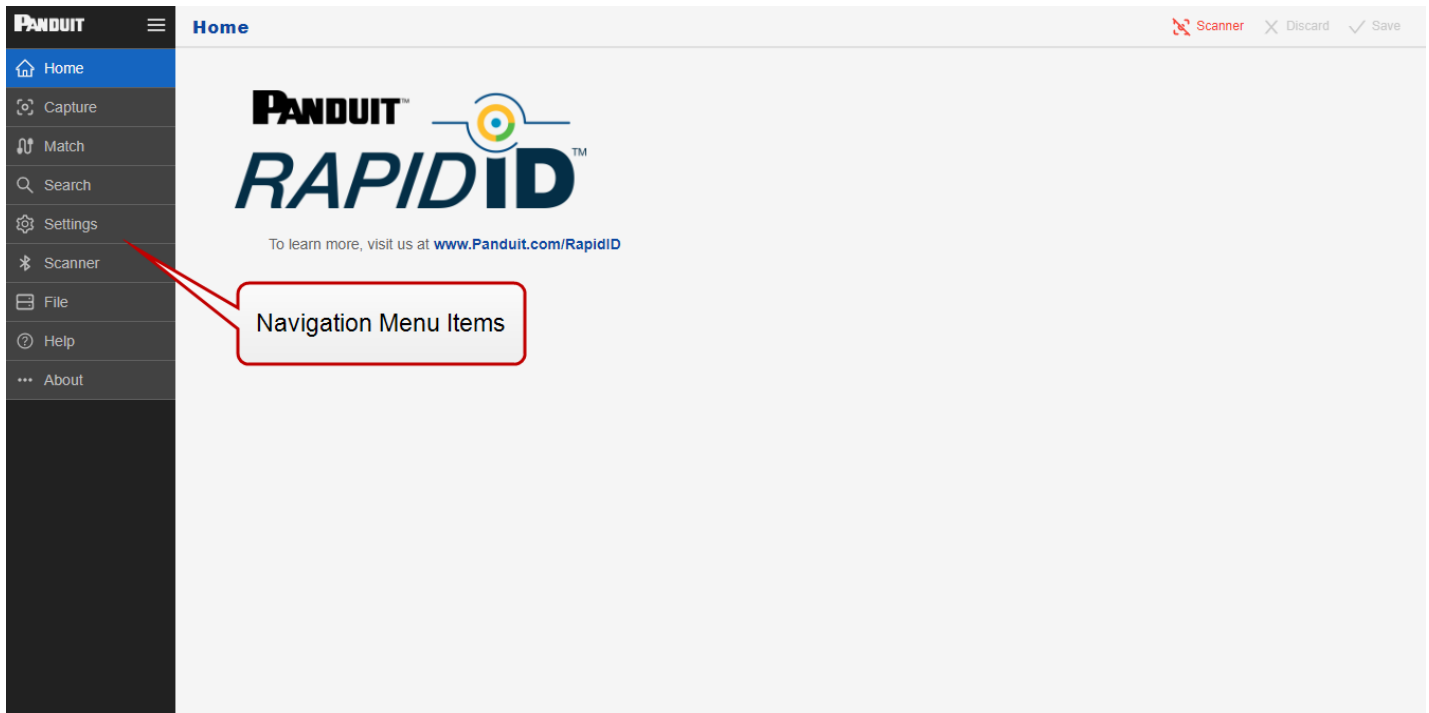


4. When installation completes, click **Finish** to launch the application.



Navigation

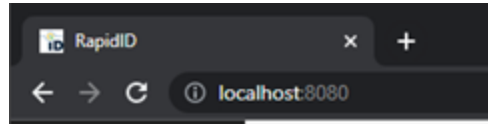
Starting the application takes the user to the home page.



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.

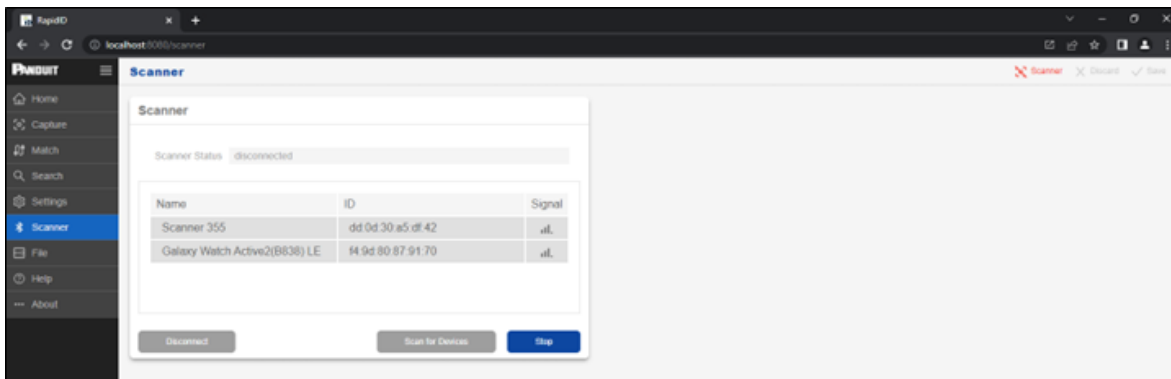


Settings

A screenshot of the 'Settings' application interface. The interface is divided into a left sidebar and a main content area. The sidebar contains a 'PRODUCT' header and a list of menu items: Home, Capture, Match, Search, Settings (highlighted), Scanner, File, Help, and About. The main content area is titled 'Settings' and contains various configuration options in a grid layout. Each option includes a description and a control element (dropdown menu, input field, or checkbox).

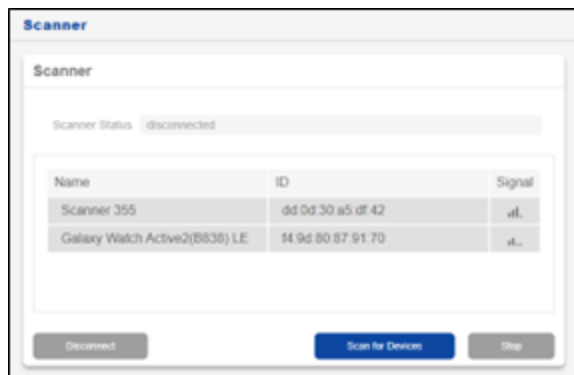
Setting Name	Description	Control
Language	Choose a preferred language or detect the language from the browser's language preference (defaults to English for unsupported languages).	Language dropdown: automatic
Location Delimiter	The last character within a port location entry separating module name from port number.	Location Delimiter dropdown: -
Initial Port Number (0-999)	The scanning port number will be reset to this value after you change the module name through the module input control on the capture screen.	Initial Port Number input: 1
Port Number Step Size (1-999)	The step size for auto incrementing the scanning port following a capture scan.	Port Number Step Size input: 1
Barcode Scanner	The most recently connected barcode scanner. Identifies the scanner to automatically reconnect after an unintended disconnect.	Scanner Name dropdown: no history Scanner Identifier dropdown: no history
Allow Sounds	Allows the application to play sounds.	Checkbox: Sounds (checked)
Port Capture	This sound plays for a new connection.	Port Capture dropdown: blip
Port Change	This sound plays for a connection change.	Port Change dropdown: buzz
Port Verified	This sound plays for a verified connection.	Port Verified dropdown: beep
Third Port	This sound plays for detecting trying to add a 3rd connection to a type C cable.	Third Port dropdown: hazard
Undo	This sound plays for undo.	Undo dropdown: blip
Redo	This sound plays for redo.	Redo dropdown: blip
Reference cable	This sound plays for selecting a cable that you want to match.	Reference cable dropdown: blip
Same	This sound plays when the same cable is found.	Same dropdown: beep
Differ	This sound plays when a different cable is found.	Differ dropdown: buzz
Found	This sound plays for a search that finds at least one connection.	Found dropdown: beep
Not Found	This sound plays for a search that does not find any connections.	Not Found dropdown: buzz
Restore Factory Defaults		Restore Factory Defaults button

Connect Scanner



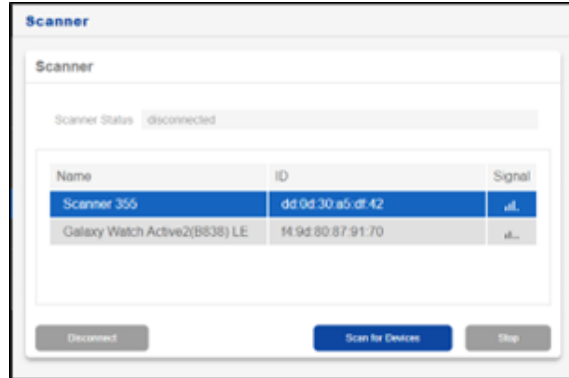
The scanner page provides connection information about the [RPDSCN](#). To connect the Bluetooth® scanner, use the following steps.

1. Click **Scanner** in the Navigation menu.
2. If not already scanning, click the **Scan for Devices** button.



3. Select the scanner.

Note: The scanner name, for example "355", will match the ID of the RPDSCN.

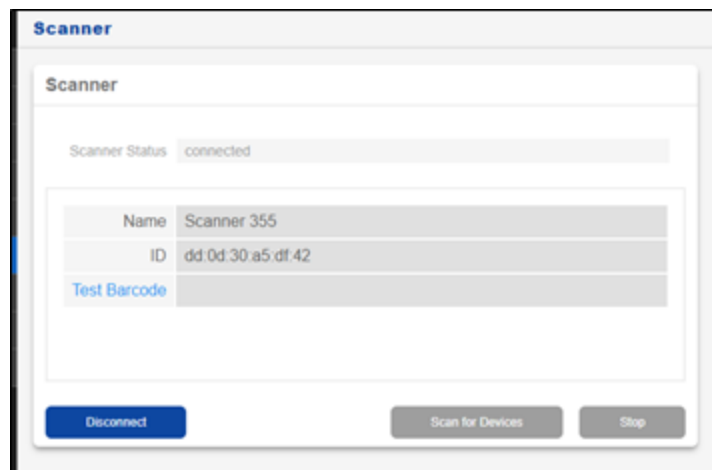


4. Ensure that the scanner is in BLE (Bluetooth Low Energy) mode.



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

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

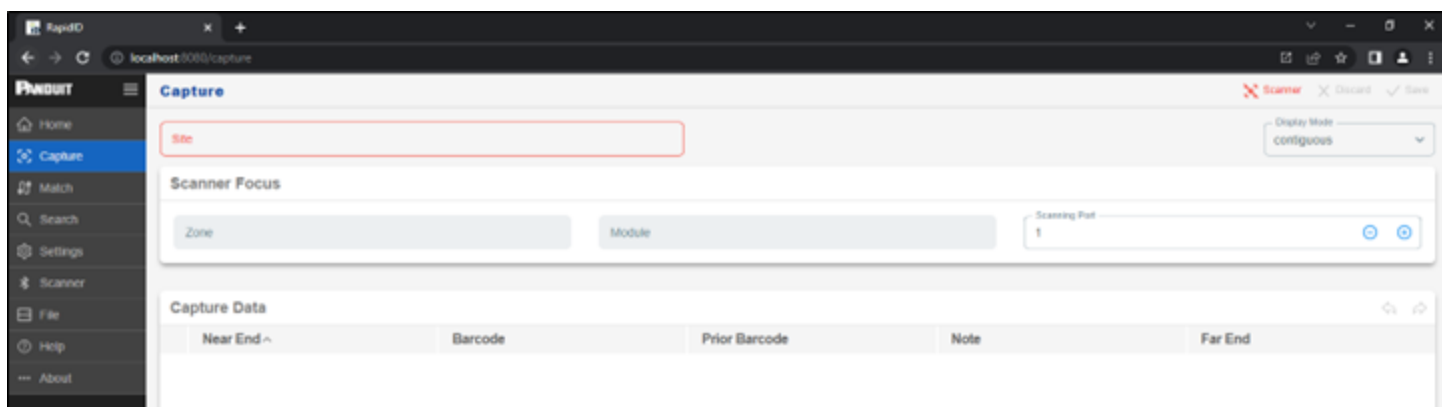


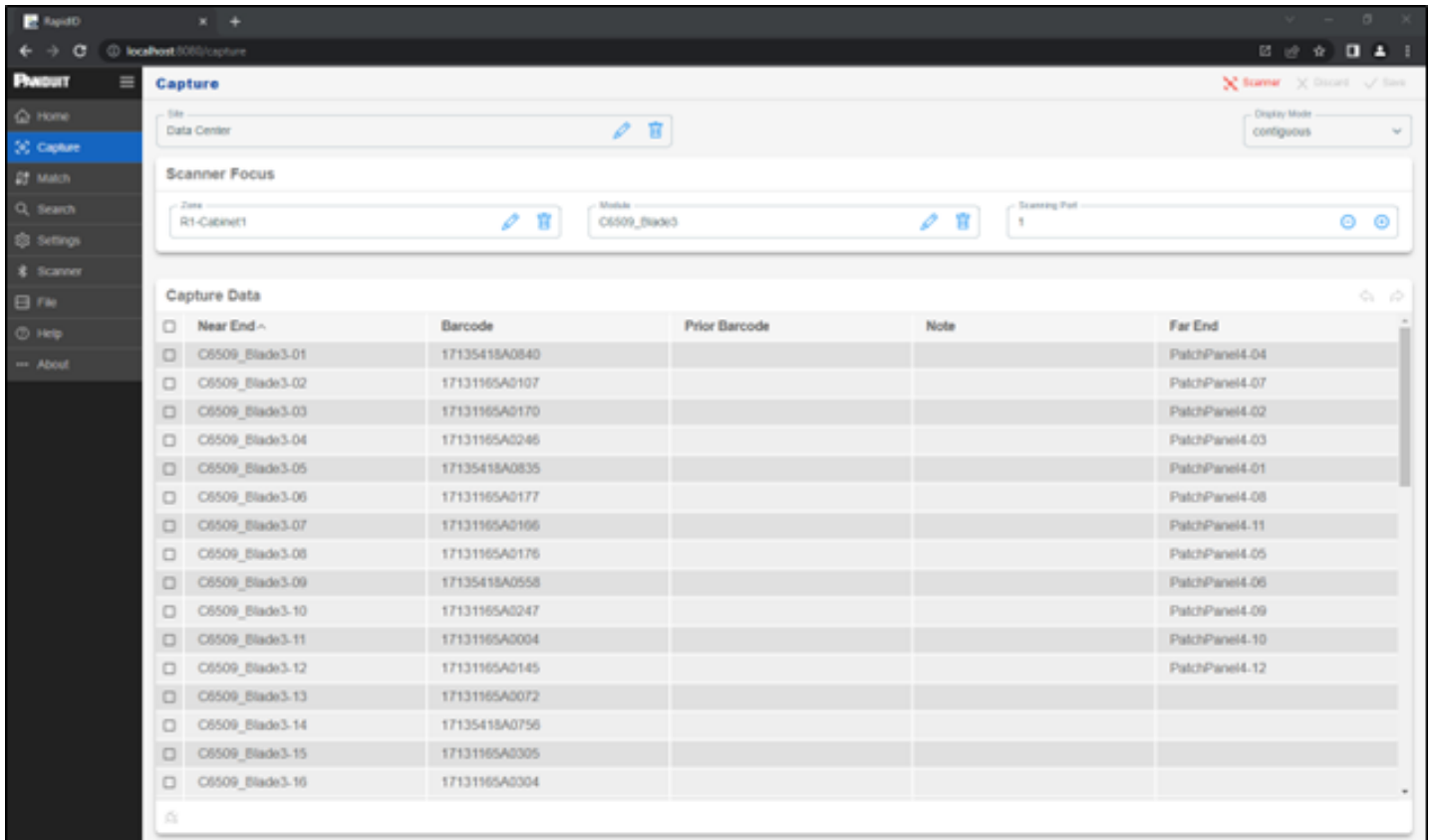
Capture Page

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.



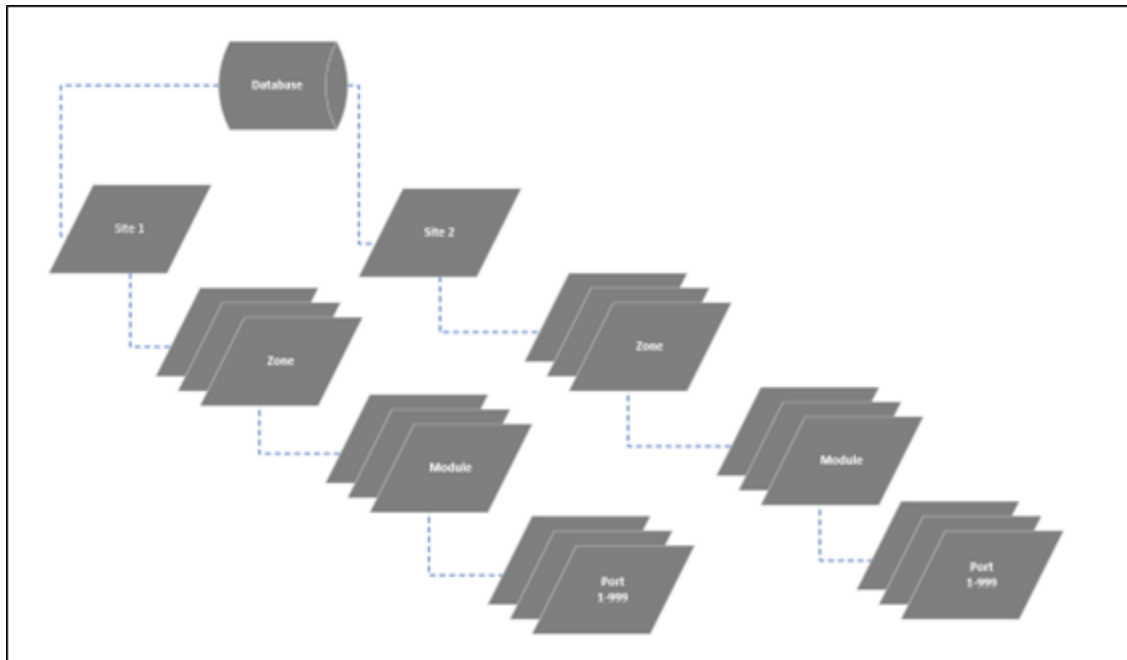
Data Structure: Site – Zone – Module – Ports

- **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.



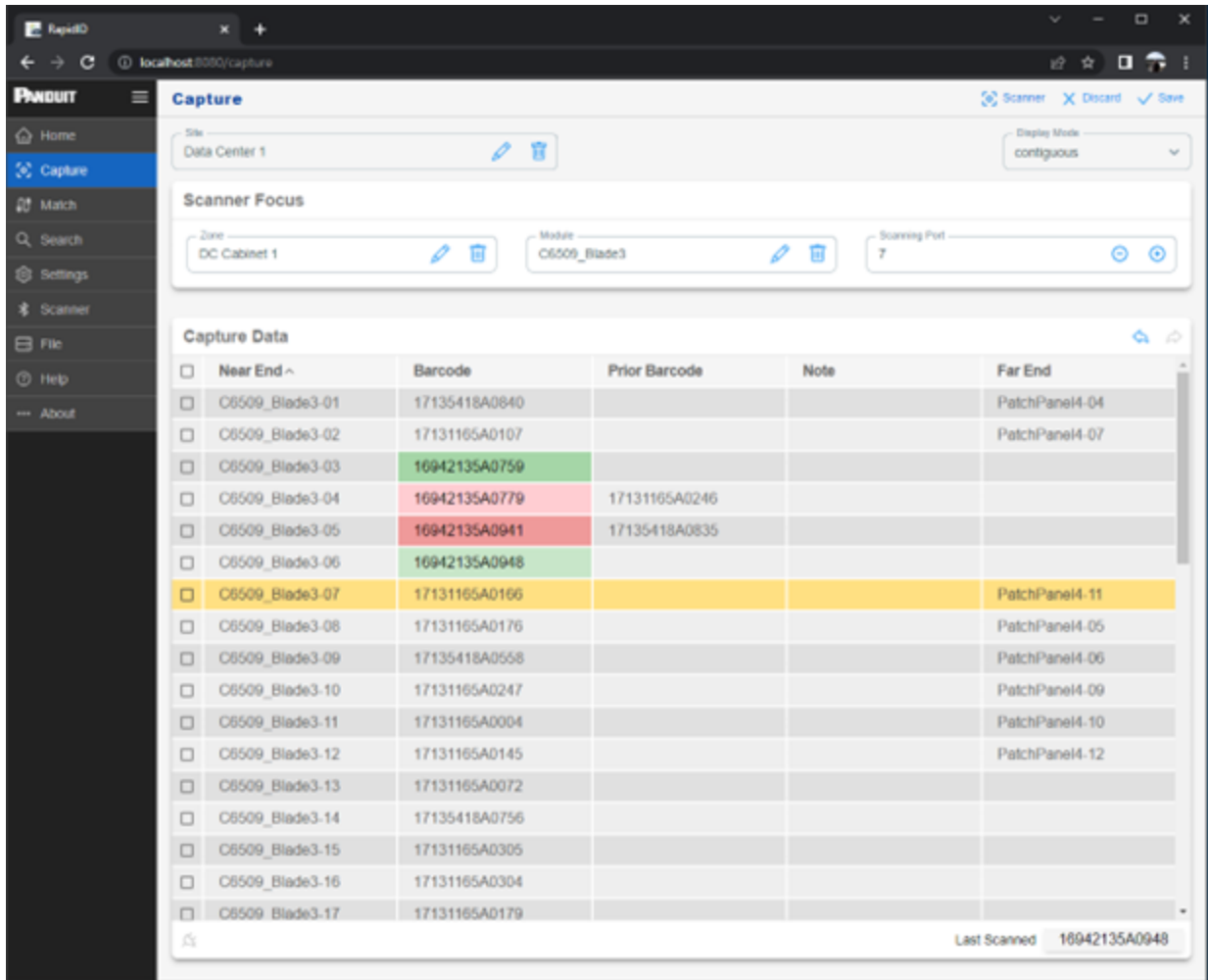
Tip: Setting up a data structure that makes sense for your organization is important. Define a structure ahead of time to ensure clean data.

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:

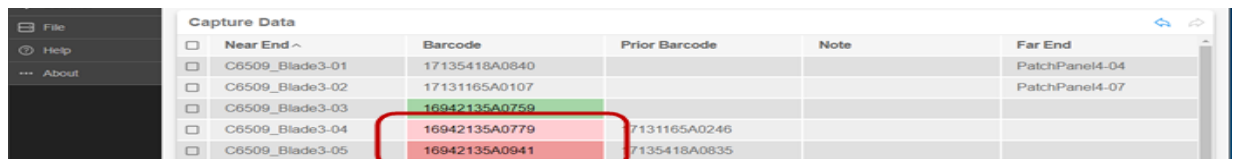
1. Navigate to the area where connections need to be verified.
2. Confirm the starting location.
3. Scan cables connected to the port locations.



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.

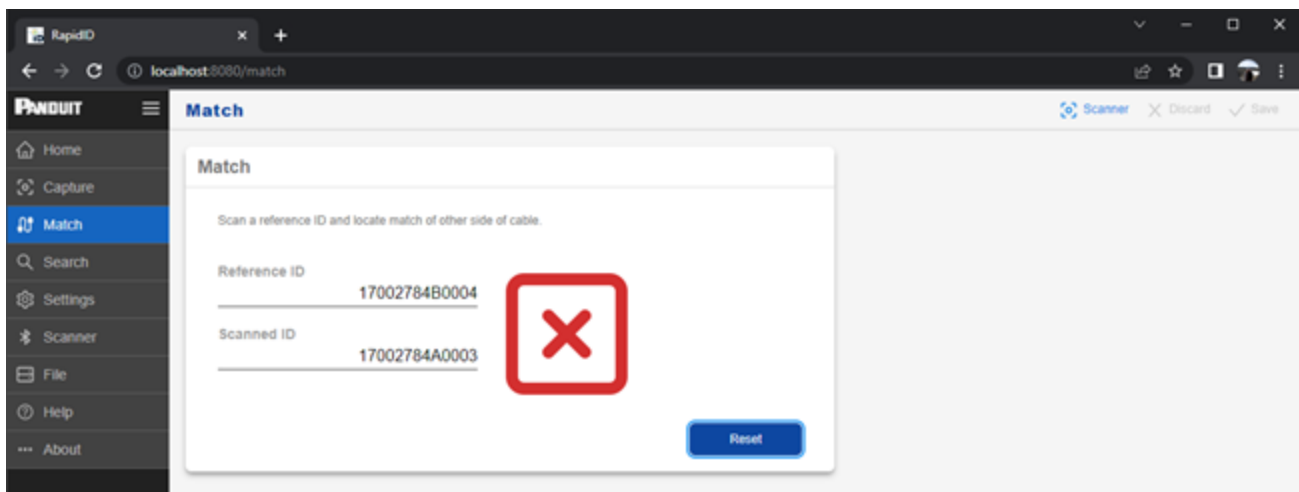


Note: When cabling is being updated, such as during a move, adds, and changes process, the verification function can be overridden/ignored by saving the new cables to their respective positions. After the new cables are installed and scanned into their positions, the user can save the new connections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

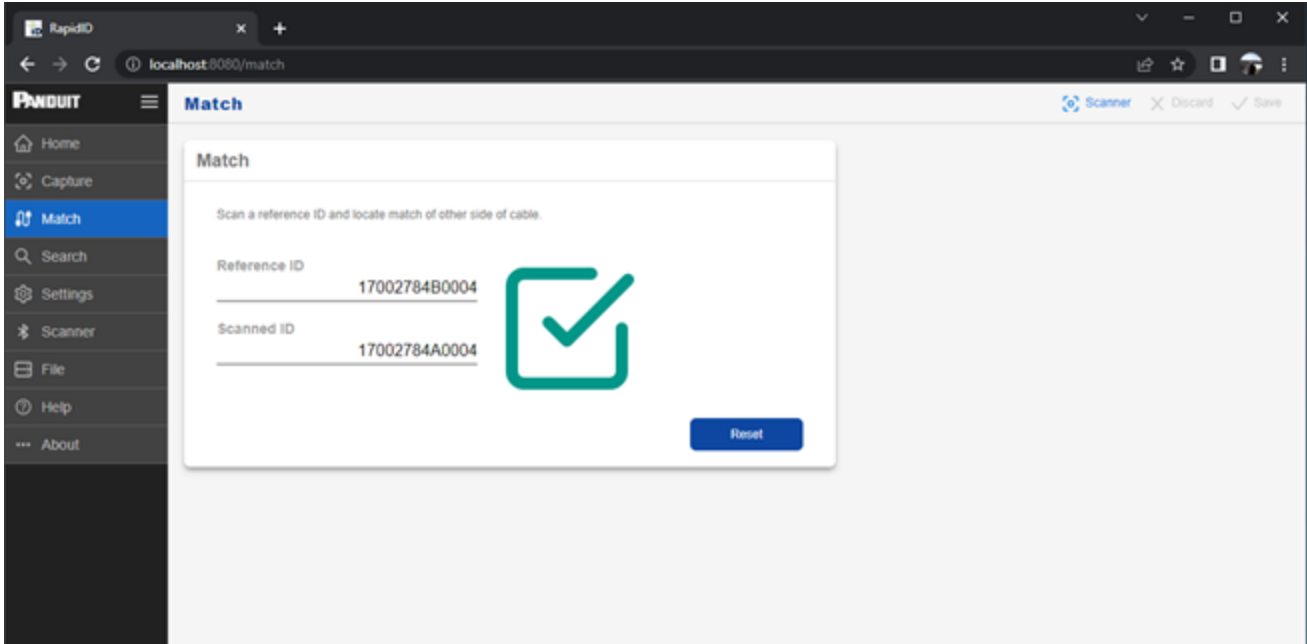
Match

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.

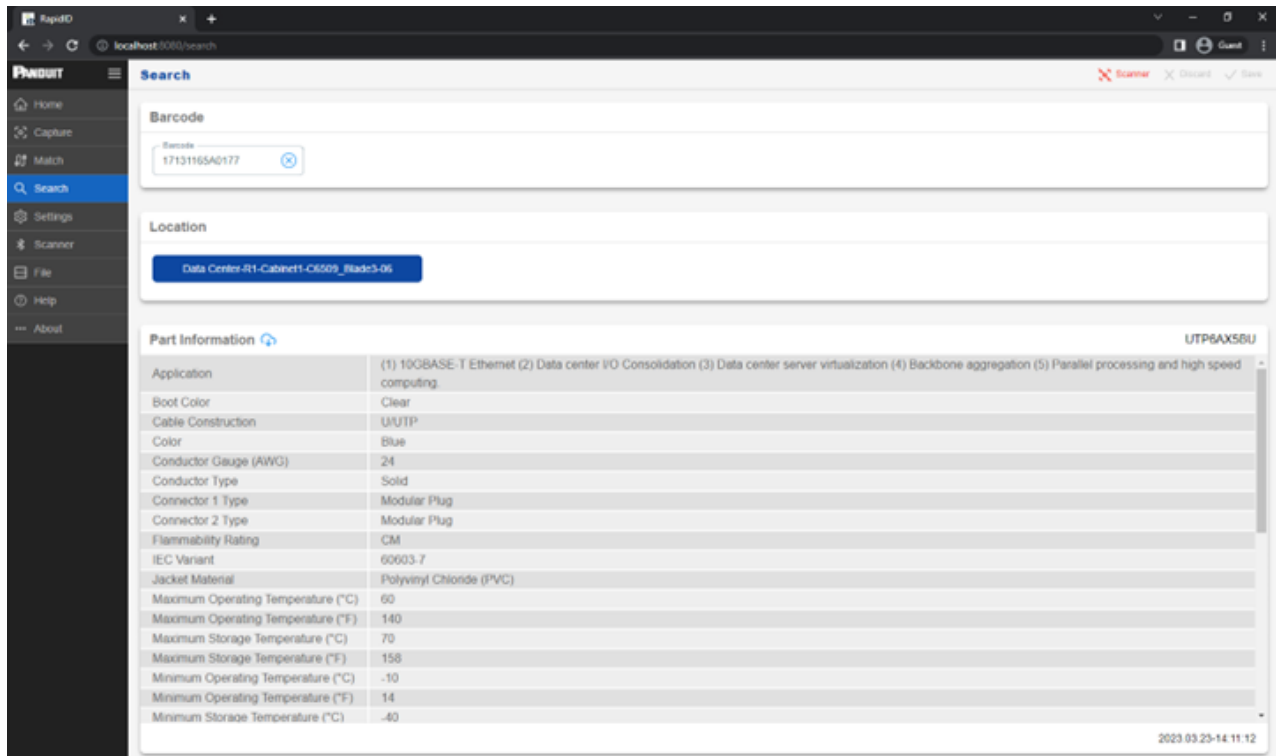


Result of Correct Match – Cable ends compared *are* the same.



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

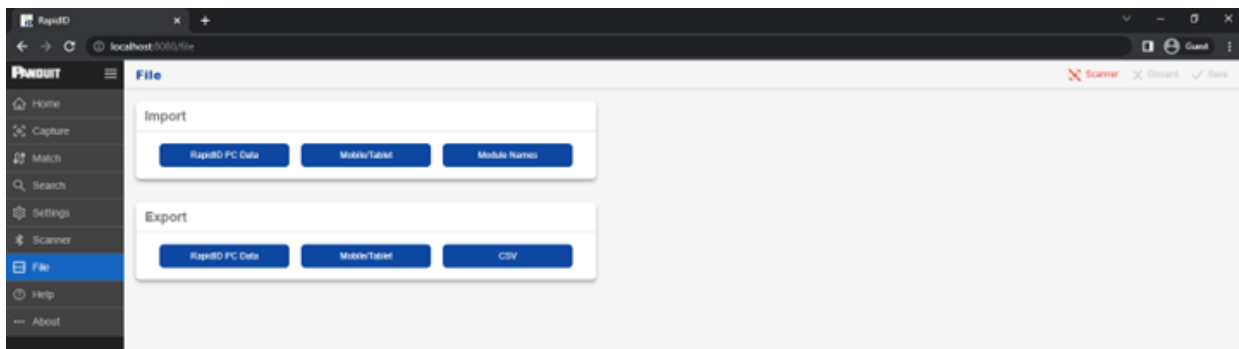
Users can now use *RapidID™* to find out more information about a product. A *RapidID™* label is scanned or typed into the barcode text box, the user can find out more information about the cable. Click the cloud image to retrieve information about the product. Information includes the part number, cable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

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.