RapidID™ Network Mapping System

User Manual

Release 1.0
Version 1
## Documentation Revision History

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Modifications</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Initial Release</td>
<td>5/24/2023</td>
</tr>
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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downtime during an outage, but documenting physical infrastructure is extremely time-consuming and often overlooked or outdated.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.

![Copper Patch Cord Image]

**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

<table>
<thead>
<tr>
<th>Automatic Shutoff Timer</th>
</tr>
</thead>
<tbody>
<tr>
<td>10s</td>
</tr>
<tr>
<td>5min</td>
</tr>
<tr>
<td>60min</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Turn On/Off Sounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn on all sounds (Default)</td>
</tr>
<tr>
<td>Turn off all sounds</td>
</tr>
<tr>
<td>Set Sound frequency to 2048HZ</td>
</tr>
<tr>
<td>Set Sound frequency to 2731HZ</td>
</tr>
</tbody>
</table>
## Scanner Volume

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Low volume" /></td>
<td>Low volume</td>
</tr>
<tr>
<td><img src="image" alt="Medium volume" /></td>
<td>Medium volume</td>
</tr>
<tr>
<td><img src="image" alt="High volume" /></td>
<td>High volume (Default)</td>
</tr>
</tbody>
</table>

## Set Communication to Bluetooth (BLE)

<table>
<thead>
<tr>
<th>Communication Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Bluetooth-BLE" /></td>
<td>Bluetooth-BLE (Default)</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td><em>RapidID™ Home screen</em></td>
</tr>
<tr>
<td>Capture</td>
<td>Navigate to the Capture page</td>
</tr>
<tr>
<td>Match</td>
<td>Navigate to the Match page</td>
</tr>
<tr>
<td>Search</td>
<td>Navigate to the Search page</td>
</tr>
<tr>
<td>Settings</td>
<td>Navigate to the Settings page</td>
</tr>
<tr>
<td>File</td>
<td>Navigate to File Save</td>
</tr>
<tr>
<td>Help</td>
<td>Navigate to FAQs</td>
</tr>
<tr>
<td>About</td>
<td>Navigate to About page</td>
</tr>
</tbody>
</table>
# Settings

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truncation</td>
<td>Adjusts the truncation of text in the Module Page</td>
</tr>
<tr>
<td>Location Delimiter</td>
<td>Adjusts the connector between Module and Port</td>
</tr>
<tr>
<td>Port Number Step Size</td>
<td>Adjusts the step size from one port to the next when scanning</td>
</tr>
<tr>
<td>Select Barcode Scanner</td>
<td>Shortcut to the scanner page</td>
</tr>
</tbody>
</table>

![Settings Diagram]

![Resets settings to Default]

- **Default**
- **Menu**
### Item Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn Sound On/Off</td>
<td>Turns app sounds on/off</td>
</tr>
<tr>
<td>Sounds</td>
<td>Change sound response on individual actions</td>
</tr>
</tbody>
</table>

**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**
- 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.
**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 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
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.

Tips: 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 user 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.