

Shipping & Mailing Outbound and Inbound Package Management

# DeviceHub for SendSuite Live

Peripheral Management Solution for Internet Explorer Retirement

# Introduction

Microsoft has announced <u>retirement for Internet Explorer</u>, a critical dependency for SendSuite Live project operation and peripheral communication and management, effective June 15<sup>th</sup>, 2022. Furthermore, Microsoft announced their intention to remove IE from all targeted operating systems by way of a Windows Update which can take place any time after June 15<sup>th</sup>, 2022.

In response, Pitney Bowes has developed a solution to retain peripheral connectivity and management for SendSuite Live using our existing DeviceHub platform that provides similar functionality for our other shipping platforms in conjunction with our PB Shim Proxy. This document provides a technical overview of DeviceHub for SendSuite Live.



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#### Overview

DeviceHub is a software component that simplifies device connectivity to multiple Pitney Bowes shipping and receiving platforms. DeviceHub centralizes and simplifies driver management for supported printers, scales, and tracking assistants.

DeviceHub uses secure transport security and does not store any Personally Identifiable information.

#### Benefits of DeviceHub

DeviceHub provides the most comprehensive solution for SendSuite Live customers affected by this decision.

- Multi-browser support allows SendSuite Live projects\* to run in Edge, Chrome, or FireFox.
- Intuitive UI for managing all connected peripherals.
- Support for all PB-provided peripherals.

#### Alternative to DeviceHub

SendSuite Live users may elect instead to run projects in Edge's Internet Explorer mode (refer to <u>Microsoft's IE retirement Blog</u> for more information on this feature, how to use it, and its limitations. Here are some important facts to consider:

- Suspension of Windows Updates SendSuite Live peripherals depend on ActiveX plugins in IE. When running in Internet Explorer mode, Edge inherits the ActiveX functionality from IE. This means that IE must be present on the machine. The machine, therefore, must be configured in such a manner to prevent IE from being removed in a future Windows Update.
- IE Mode requires added sites to be refreshed every 30 days.
- Termination of support for Internet Explorer by Microsoft is effective June 15<sup>th</sup>, 2022.



#### Features

DeviceHub has the following features / benefits:

- Automatically discover and install peripheral drivers
- Manage supported peripherals including printers, scales, and scanners
- Replaces the SendSuite Live ActiveX components for Scale, Printer and Meters

DeviceHub supports the following peripherals:

Scales	• JP85
	• JP94
	• JP67
	• JR76
	• JR64
Label Printers	• JZ20
	• JZ30
	• 1E23
	• 1E26
Mailing Machines	DM Series
	• Connect+

#### Architecture



Figure 1: DeviceHub Software Architecture

# Protocols, Output, Storage, and Whitelist

#### DeviceHub Ports

DeviceHub uses the following Ports for communication with SendSuite Live and hardware peripherals:

- 8091 HTTP connection for Scale and Printers communication (local host only)
- 8092 HTTP connection for Meters (local host only)
- 4042 RPC for local messaging communications (local host only)

# PB Shim Proxy Ports

PB Shim Proxy uses the following ports

- 8084 HTTP local only
- 443 External (data aggregator and update server)

# DeviceHub Outputs

DeviceHub creates the following Outputs:

- Scale Data
- Printer Data
- Meter Transitions Data
- Scanned address (ASCII format) using OCR scanner

#### PB Shim Proxy Outputs

For information on PB Shim Proxy output, see Appendix A of this document.

#### DeviceHub Data Storage

DeviceHub stores the following:

- Configurations number of devices, registered devices, scales, and last shadow state
- Logs for diagnostics & troubleshooting No PII stored in logs
- No PII info stored in DeviceHub
- No local database

# PB Shim Proxy Data Storage

*PB Shim Proxy stores the following:* 

- Configuration data.
- Logs for diagnostics and troubleshooting No PII stored in logs

#### Firewall URL Whitelist:

- DeviceHub: <u>https://devicehubsetuppackages.s3.amazonaws.com</u> (software updates only)
- PB Shim Proxy: <u>https://api.sendpro360.pitneybowes.com/connectship</u> (data aggregator and software update server).

# Software Installation Prerequisites

#### DeviceHub Installation Requirements

The following must be installed on the target machine:



- SendSuite Live v7.15 or higher
- Microsoft Visual C++ Redistributable for Visual Studio 2017
- Microsoft .NET Framework v4.7.2

#### PB Shim Proxy Installation Requirements

PB Shim Proxy must be installed on the SendSuite Live server and is supported by the technologies currently required to operate SendSuite Live, therefore no additional software or platform requirements exist for installation.

#### **Application Dependencies**

#### DeviceHub Dependencies

Requires PB Shim Proxy software to be installed on the SendSuite Live application server.

#### PB Shim Proxy Dependencies

Must be installed on the SendSuite Live application server.

#### **Recommended Deployment Method**

The DeviceHub solution relies on a server component and workstation component. DeviceHub on workstations will not activate and take over peripheral management duties until the PB Shim Proxy is available. DeviceHub installation will not interrupt existing ActiveX peripheral management in Internet Explorer. Given these considerations, it is recommended that IT professionals install DeviceHub on workstations, configure the peripherals, then deploy PB Shim Proxy on the cutover date.

Turnkey (single-computer) solutions, should follow this same method.



# DeviceHub Workstation Software Installation

DeviceHub should be installed on each SendSuite Live workstation having a connected scale, label printer, or mailing machine.

- 1. Download DeviceHub
- 2. Execute installer
- 3. Select Install
- 4. Select **Finish** upon completion

DeviceHub will have started successfully when the DH icon appears in the system tray.

#### Optional: Set DeviceHub to Start with Windows

Complete these optional steps to have DeviceHub start with Windows:

- 1. Select the Windows Start button.
- 2. Locate the **DeviceHub** *folder*, expand it, then *right-click* the **DeviceHub** *application*.
- 3. Select More.
- 4. Select **Open file location** (we'll reference this window as W1).
- 5. Keeping W1 open, hold '**R**' while selecting the **Windows Start** button.
- 6. Type shell:startup then press Enter (we'll reference this window as W2).
- 7. Copy the DeviceHub shortcut in W1 then paste it in W2.
- 8. Close all open windows.

DeviceHub will now start automatically when the user logs into Windows.



# DeviceHub Workstation Software Configuration

Scales

- 1. Right-click the DH icon in the system tray.
- 2. Select SendSuite Live Scale Configuration
- 3. Select the **Interface Type**
- 4. Select the **Scale Type**
- 5. Optional
  - a. Timeout
  - b. Wait Time
- 6. Optionally select Weigh or Zero to test scale functionality
- 7. Select OK

#### Printers

- 1. Right-click the DH icon in the system tray.
- 2. Select SendSuite Live Printer Configuration
- 3. Select the appropriate target printer for:
  - a. Thermal Label Printer
  - b. Laser Document
  - c. Form Printer
- 4. Optionally select **Test Print** to test printer functionality
- 5. IMPORTANT: Select **Documents and Labels** to configure target printers and number of copies to print for specific document types. For example, configure the **Label** item to print to the target label printer.
- 6. Select OK

#### Mailing Machines

- 1. Right-click the DH icon in the system tray.
- 2. Select SendSuite Live Meter Configuration
- 3. P-Series & Connect+
  - a. Produce the configuration XML file from the meter:
    - i. Select Connect + Series from the Meter Type drop-down list.
    - ii. Go to the Home screen on the Connect+ Mailing Machine.
    - iii. In the lower left, select Shut down > Service Login.
    - iv. Sign in with the Service Password:
      - 1. Prior to Version 24.03.0005 = 55555
      - 2. After Version 24.03.0005 = PBtech16!!
  - b. Insert a USB Thumb Drive (Storage Device) into the Connect+ (left side, rear of Connect+).
  - c. Select the Settings Icon (double-click if remoted in).
  - d. Expand the Internet & Network option on the left side of the screen.
  - e. Select Communication Settings.
  - f. Under the API section, ensure the setting is set to On.
  - g. Select the Export settings to USB drive button in the upper right of the screen.
  - h. Under the Export to: option, select Browse. Your USB Drive should appear. Select the USB Device and Select the Open button.



- i. Select the Ok button to Export. This will Export the XML file need to set up SendSuite Xpress or Ascent to communicate with the Connect+.
- j. Once the export has completed, select the Home icon at the top of the screen.
- k. Select **CHOOSE FILE TO IMPORT** then follow the prompts to import the XML file created in the preceding step.
- 1. Select Connect + Series from the Meter Type drop-down in the Configure Postal Meter Connection section.
- m. Select the Meter ID.
- n. Enter a name for the meter.
- o. Batch Mode Timeout of 600
- p. Optionally, enter a description for the meter.
- q. Select Save.
- r. Optionally use the **TEST CONNECTION** button to test the meter connection.
- s. Important: Minimize the Meter Configuration dialog
- 4. DM Series
  - a. Select DM Series from the Meter Type drop-down list in the Configure Postal Meter section.
  - b. Choose USB from the Connection Type drop-down list.
  - c. Enter a name for the meter.
  - d. Batch Mode Timeout of 600
  - e. Optionally, enter a description for the meter.
  - f. Select Save.
  - g. Optionally use the **TEST CONNECTION** button to test the meter connection.
  - h. Important: Minimize the Meter Configuration dialog
- 5. Grant Full Access to 'Everyone' for c:\ProgramData\Pitney Bowes\

Important: The Meter Configuration dialog must be open and running to work properly and should therefore only ever be minimized; do not close the Meter Configuration dialog.



#### PB Shim Proxy Server Installation

PB Shim Proxy must be installed on the SendSuite Live application server.

NOTE: The PB Shim Proxy installer will restart IIS. Please take necessary precautions before proceeding.

- 1. Download PB Shim Proxy
- 2. Execute ShimProxyInstaller.exe as an Administrator
- 3. Optionally select **Online Documentation** to be taken to the PB Shim Proxy knowledge article.
- 4. Select Next
- 5. Optionally change the destination folder then select **Next**
- 6. The installer will attempt to detect the SendSuite Live website location. Manually select it with the **Browse** button if automatic detection failed.
- 7. Select Next
- 8. Optionally enter proxy server information
- 9. Optionally select **Agree**.
  - a. Enter a Name. This should be a business name. If you are installing in a Quality Assurance environment, please add "QA" to the end of the Business Name, for example, Bill's Widgets-QA.
- 10. Optionally change the default port and timeout values
- 11. Select Install
- 12. Select **Close** upon installation completion.

PB Shim Proxy will have installed successfully when the PB logo icon appears in the system tray.



FAQs Where can I get details on Microsoft's announcement? Please refer to Internet Explorer 11 Desktop App Retirement FAQ.

#### *How is SendSuite Live impacted?*

Connectivity with a Scale, Label Printer, or Mailing Machine requires ActiveX controls that are dependent upon Internet Explorer and cannot be used with other browsers. Should IE be removed from the system, users would be unable to weigh packages, print labels, and communicate with a mailing machine.

#### When will Microsoft remove IE?

Microsoft has only announced their intent to remove IE from Windows 10 systems through a future Windows Update that "...may be applied at any time after June 15, 2022."

#### How is Pitney Bowes going to address this impact?

Pitney Bowes has developed a strategy to mitigate this issue by leveraging two existing software utilities in our library: DeviceHub and PB Shim Proxy. This solution will ensure your shipping platform survives IE removal by supporting SendSuite Live Gen 2 and Gen 3 projects to run on Edge, Chrome, or FireFox and communicate with attached peripherals.

#### What is PB Shim Proxy?

The PB Shim Proxy is the solution provided to replace with the PB Carrier Library the functionality currently handled by ConnectShip due to the termination of our relationship with that vendor. For more information, visit <u>PB Shim Proxy and PB Carrier Library</u>.

#### Are both PB Shim Proxy and DeviceHub required?

Yes. DeviceHub runs on workstations with peripherals connected. It requires an agent from which it will receive instructions to process, and command attached peripherals. PB Shim Proxy affords this service due to its integration with and installation proximity to (same machine) SendSuite Live. Note that stand-alone combination server/workstations will still require installation of both products on the machine.

#### How do I install these solutions?

While Pitney Bowes is currently considering customer-installable options, at this time you must contact our support department at 1-800-888-0286 for assistance installing this solution.

#### Is there an alternative solution to DeviceHub?

Yes. Users may instead elect to run SendSuite Live in Microsoft Edge while in Internet Explorer mode. Edge will inherit the ActiveX functionality from IE. Edge will permit a site to run in Internet Explorer mode for 30 days, after which the permission must be refreshed.



#### Will all my peripherals be supported by DeviceHub?

The following peripherals are supported by DeviceHub:

- Label Printers
  - o JZ20
  - o JZ30
  - o 1E23
  - o 1E26
- Scales
  - o JP85
  - o JP94
  - o JP67
  - o JR76
  - o JR64
- Mailing Machines
  - DM Series
  - Connect+

#### What if I have peripherals that are not listed as being supported?

Please contact Pitney Bowes Software Support at 800-888-0286.

*I know SendSuite Live consists of Project Server, Shipping Configuration Server (Admin), and Project Configuration Server (Composer). How would each be impacted by removal of Internet Explorer?* 

- **Project Server:** Peripheral connectivity and management.
- Shipping Configuration Server: None. Users may access Shipment Server using any browser.
- **Project Configuration Server (Composer):** Must use Edge in Internet Explorer mode to access.

# Are all SendSuite Live projects (shipping screens) affected the same way by removal of IE?

No.

- **Generation 1 Projects**: These projects are browser dependent they must run in Internet Explorer. Should IE be removed, these projects *cannot* be accessed from alternate browsers?
- Generation 2 Projects: Though accessible from other browsers, projects will lose required ActiveX functionality for connecting to and managing peripherals. With Shim Layer Proxy and DeviceHub implemented, however, these projects may be run in Edge, Chrome, or FireFox and retain communication with peripherals.



## How do I learn whether a project is Generation 1 or Generation 2/3?

The most obvious means by which the project's generation version can be detected is by observing the visual difference in the project's controls. Generation 2 and 3 projects implement a different control library than Generation 1. Generation 1 projects have textbox controls with sharp corners whereas Generation 2 & 3 projects boast rounded corners. Refer to figure 2 below.

Generation 1	Generations 2 & 3
Ship To Attention: Company: Address:	Shipping Details Shipping Details Ship to search attention company

Figure 2: Gen 1 vs Gen 2 & 3 text controls

What if I or my IT department require that my SendSuite Live system be upgraded to Windows 11?

Windows 11 does not support Internet Explorer. Should the system be upgraded to Windows 11, DeviceHub will be required to restore peripheral functionality to SendSuite Live.



#### Appendix A: XML Data Collection

Appendix A contains examples of the XML data collected by the PB Shim Proxy and forwarded to the aggregator.

Note: This information only applies to system in which the user selected the option to "Agree to allow Pitney Bowes to collect identifying information from my ConnectShip database for the purpose of onboarding my carriers in the new PB Carrier Library" when installing the PB Shim Proxy.

```
Shipment Request
<?xml version="1.0" encoding="utf-8"?>
<SHIPMENTREOUEST>
    <LOGIN>
        <LOGINID>test</LOGINID>
        <PASSWORD>test</PASSWORD>
    </LOGIN>
    <DEFATTRIBUTES>
        <CONSIGNEE>
            <COMPANY>NAS WHIDBEY ISLAND OFFICIAL MAIL MANAGER</COMPANY>
            <CONTACT></CONTACT>
            <ADDRESS1>1080 W Lexington St</ADDRESS1>
            <ADDRESS2></ADDRESS2>
            <address3></address3>
            <CITY>Oak Harbor</CITY>
            <STATEPROVINCE>WA</STATEPROVINCE>
            <POSTALCODE>98278-4959</postalcode>
            <PHONE>(800) 962-4088</PHONE>
            <COUNTRYSYMBOL>US</COUNTRYSYMBOL>
            <CONSIGNEECODE>NAS WHIDBEY ISLAND OFFICIAL MAIL MANAGER</CONSIGNEECODE>
        </CONSIGNEE>
        <SHIPPERINFO>
            <SHIPPER>PSC</SHIPPER>
        </SHIPPERINFO>
        <TERMS>SHIPPER</TERMS>
        <CURRENCYCODE>USD</CURRENCYCODE>
        <SHIPDATE>2021-09-21</SHIPDATE>
        <SHIPMENTSERVICEOPTIONS />
    </DEFATTRIBUTES>
    <PACKAGES>
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                <WEIGHTVALUE>17</WEIGHTVALUE>
            </PKGWEIGHT>
            <PACKAGING>CUSTOM</PACKAGING>
            <REFERENCE>
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                <SHIPPERREFERENCE></SHIPPERREFERENCE>
                <MISCREFERENCE1></MISCREFERENCE1>
                <MISCREFERENCE2></MISCREFERENCE2>
                <MISCREFERENCE3></MISCREFERENCE3>
                <MISCREFERENCE4></MISCREFERENCE4>
                <MISCREFERENCE5></MISCREFERENCE5>
            </REFERENCE>
            <PIECE COUNT></PIECE COUNT>
            <PACKAGESERVICEOPTIONS>
                <LTL>
                    <COMMODITYCLASS>85</COMMODITYCLASS>
                </LTL>
                <DELIVERYOPTIONS />
            </PACKAGESERVICEOPTIONS>
            <LABELFORMAT>CONNECTSHIP UPS MAXICODE PACKAGE LABEL.STANDARD</LABELFORMAT>
            <LABELPRINT>
                < PORT>STRING< / PORT>
                <STOCKSYMBOL>THERMAL_LABEL_6</STOCKSYMBOL>
                <printermodelsymbol>Zebra.Zebra3844z</printermodelsymbol>
                <ENCODE>BASE64</ENCODE>
            </LABELPRINT>
            <PACKAGE INFO>
                <PACKAGE ELEMENTS>
                    <ELEMENT ITEM>
                        <ITEM NAME>SHIP NOTIFICATION EMAIL</ITEM NAME>
                        <ITEM_VALUE>FALSE</ITEM_VALUE>
                    </ELEMENT_ITEM>
<ELEMENT_ITEM>
                        <ITEM NAME>USER DATA 2</ITEM NAME>
                        <ITEM_VALUE></ITEM_VALUE>
                    </ELEMENT ITEM>
                </PACKAGE_ELEMENTS>
```



```
cttonary>
                      <DICTIONARY_NAME>USER_DATA_4</DICTIONARY_NAME>
                      <DICTIONARY ITEM>
                          <ITEM NAME>Sender-SentBy</ITEM NAME>
                          <ITEM_VALUE>DMT Prom Shop Zebra</ITEM_VALUE>
                      </DICTIONARY_ITEM>
<DICTIONARY_ITEM>
                          <ITEM_NAME>Sender-CompanyName</ITEM_NAME>
                          <ITEM VALUE>Pitney Bowes</ITEM VALUE>
                      </DICTIONARY ITEM>
                      <DICTIONARY ITEM>
                          <ITEM_NAME>Sender-Street</ITEM NAME>
                          <ITEM VALUE>27 Waterview Drive</ITEM VALUE>
                      </DICTIONARY_ITEM>
                      <DICTIONARY ITEM>
                          <ITEM_NAME>Sender-Locale</ITEM_NAME>
<ITEM_VALUE></ITEM_VALUE>
                      </DICTIONARY ITEM>
                      <DICTIONARY ITEM>
                          <ITEM_NAME>Sender-Other</ITEM_NAME>
                          <ITEM_VALUE></ITEM_VALUE>
                      </DICTIONARY ITEM>
                      <DICTIONARY ITEM>
                          <ITEM NAME>Sender-City</ITEM NAME>
                          <ITEM_VALUE>Shelton</ITEM_VALUE>
                      </DICTIONARY_ITEM>
<DICTIONARY_ITEM>
                          <ITEM NAME>Sender-Region</ITEM NAME>
                          <ITEM VALUE>CT</ITEM VALUE>
                      </DICTIONARY_ITEM>
                      <ITEM VALUE>CONNECTICUT</ITEM VALUE>
                      </DICTIONARY_ITEM>
                      <DICTIONARY ITEM>
                          <ITEM_NAME>Sender-PostalCode</ITEM_NAME>
<ITEM_VALUE>06484</ITEM_VALUE>
                      </DICTIONARY ITEM>
                      <DICTIONARY ITEM>
                          <ITEM_NAME>Sender-Country</ITEM_NAME>
<ITEM_VALUE>US</ITEM_VALUE>
                      </dictionary_item>
<dictionary_item>
                          <ITEM_NAME>Sender-Phone</ITEM_NAME>
                          <ITEM_VALUE>9999999999/ITEM_VALUE>
                      </dictionary_item>
<dictionary_item>
                          <ITEM NAME>Sender-Email</ITEM NAME>
                          <ITEM_VALUE>dmtpromshopz@pb.com</ITEM_VALUE>
                      </dictionary_item>
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                          <ITEM_VALUE></ITEM_VALUE>
                      </dictionary_item>
<dictionary_item>
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                          <ITEM VALUE>UNITED STATES</ITEM VALUE>
                      </DICTIONARY_ITEM>
                      <DICTIONARY ITEM>
                          </re>
                          <ITEM VALUE></ITEM VALUE>
                      </dictionary_item>
<dictionary_item>
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<ITEM_VALUE></ITEM_VALUE>
                      </DICTIONARY ITEM>
                      <DICTIONARY ITEM>
                          <ITEM_NAME>Item-Length</ITEM_NAME>
<ITEM_VALUE>0</ITEM_VALUE>
                      <ITEM_NAME>Item-Width</ITEM_NAME>
                          <ITEM_VALUE>0</ITEM_VALUE>
                      </DICTIONARY_ITEM>
                          <ITEM_NAME>Item-Height</ITEM_NAME>
                          <ITEM_VALUE>0</ITEM_VALUE>
                      </DICTIONARY_ITEM>
                 </DICTIONARY>
             </PACKAGE INFO>
        </PKG>
    </PACKAGES>
    <SHIPMENTSERVICE>
         <SCS>CONNECTSHIP_UPS.UPS.GND</SCS>
    </SHIPMENTSERVICE>
    <PACKAGEDETAIL>TRUE</PACKAGEDETAIL>
    <CLOSEOUTMODE>1</CLOSEOUTMODE>
</SHIPMENTREQUEST>
```

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```
Shipment Response
<?xml version="1.0"?>
<SHIPMENTRESPONSE>
    <RESPONSE>
        <TRANSACTIONREFERENCE>
            <CUSTOMERCONTEXT>Local mode using Progistics XML Processor</CUSTOMERCONTEXT>
            <XPCIVERSION>6.5.6</XPCIVERSION>
        </TRANSACTIONREFERENCE>
        <RESPONSESTATUSCODE>0</RESPONSESTATUSCODE>
        <RESPONSESTATUSDESCRIPTION>Success</RESPONSESTATUSDESCRIPTION>
    </RESPONSE>
    <RATEDSHIPMENT>
        <ERROR>
            <ERRORCODE>0</ERRORCODE>
            <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
        </ERROR>
        <SHIPMENTSERVICE>
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            <DESCRIPTION>UPS Ground</DESCRIPTION>
        </SHIPMENTSERVICE>
        <BILLINGWEIGHT>
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            <WEIGHTVALUE>17</WEIGHTVALUE>
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            <SCHEDULEDDELIVERYTIME>None</SCHEDULEDDELIVERYTIME>
            <ARRIVEDATE>None</ARRIVEDATE>
        </DELIVERYINFO>
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                <ERRORCODE>0</ERRORCODE>
                <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
                <LABELSTATUS>
                    <ERRORCODE>0</ERRORCODE>
                    <ERRORDESCRIPTION>No error - Label(s) Printed to STRING</ERRORDESCRIPTION>
                </LABELSTATUS>
                <htmlstatus>
                    <ERRORCODE>2428</ERRORCODE>
                    <ERRORDESCRIPTION>Not Requested</ERRORDESCRIPTION>
                </HTMLSTATUS>
                <EMAILSTATUS>
                    <ERRORCODE>2428</ERRORCODE>
                    <ERRORDESCRIPTION>Not Requested</ERRORDESCRIPTION>
                </EMAILSTATUS>
            </PKGERROR>
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            </PACKAGETOTALCHARGES>
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                <CURRENCYCODE>USD</CURRENCYCODE>
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            </PACKAGEBASECHARGES>
            <PACKAGESERVICEOPTIONSCHARGES>
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                <MONETARYVALUE>0</MONETARYVALUE>
            </PACKAGESERVICEOPTIONSCHARGES>
            <MONETARYVALUE>0</MONETARYVALUE>
            </PACKAGEDISCOUNT>
            <TRACKINGNUMBER>126E538F0300246570</TRACKINGNUMBER>
            <REFERENCE>
                <shipperreference/>
                <CONSIGNEEREFERENCE/>
            </REFERENCE>
            <PKGWEIGHT>
```

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```
<WEIGHTUNITS>LB</WEIGHTUNITS>
<WEIGHTVALUE>17</WEIGHTVALUE>
</PKGWEIGHT>
<BILLINGWEIGHT>
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<MSN>42934</MSN>
<BUNDLEID>57111</BUNDLEID>
<POSTALCODE>98278-4959</POSTALCODE>
```

<LABELSTRING>flNEMjANXlhBDV5QVzEyMTkNXkNJMTMNXkxIMCwwDV5QUjQsNCwyDV5GVDAsMTY3Nl5HQjEyMTMsMCwzMF5GUwleRlQwLDEyODleR0IxMj EzLDASM15GUwleRlQwLDExMzdeR0IxMjEzLDASMzBeRLMNXkZUMzYLDExMDZeR0IwLDMyMywZKZTDV5GVDASMrgzXkdcMTIxMywwLDNeRLMNXkZUMjEWL DIyOV5BME4sNTUSNjleRkQxNyBMQlNeRLMNXkZUOQ1LDIyOV5BME4sNDIsNJERkQxIB9GIDFeRLMNXkZUMzASMjAZXkEwTiwyOCwzNV5GRFBJVE5FWSBC TldFUyBUUkFOU1BPU1RBVE1FT15GUwleRlQzMcwyNDBeQTBOLDI4LDM1XkZIXkZEKDgwMCkgOTYyX0YwNDA4OF5GUwleRlQzMcwyNzdeQTBOLDI4LDM1XkZ EUELUTkVZIEJPV0VTXkZTDV5GVDMwLDMxM15BME4sMjgsMzVeRkQyNyBXQVRFULZJRVcgRFJJVkVeRLMNXkZUMzASMzUwXkEwTiwyOCwzNV5GRFNIRUxUT0 4gQlQgMDY00DReRLMNXkZUMzASND13XkEwTiw0Miw1M15GRFNISVBeRLMNXkZUMzASNDg4XkEwTiw0Miw1M15GCCUTzpeRLMNXkZUMTgzLDQwOF5BME4sN DISNTJeRkheRkQoDAwKSA5NjJfRjA0Mg4XkZTDV5GVDE4Myw0NTZeQTBOLDQyLDUyXkZETkFTIFdISURCVkgSVNMQU5EIE9GRklDSUFM1E1BSUwgTUFe RLMXkXZUMTgzLDUwNV5BME4sNDISNTJeRkQxMDgwIFcgTEVYSU5HVE90IFNUXkZTDV5GVDE4Myw1NjReQTBOLDULLDV5XkZIXkZET0FILEhBukJPU1BXQSA 50D130F9GMDQ5NT1eR1MNXkZUMzASMTA5N15CRDJeRkheRkQwMDMADA5DD130DQ5NT1bKT5fMUUWW8xRDk2MvoMD10NjU3MF8xRFVQU05fMU2RTUzOE 2fMUUWxZ130jhKWULJUIKSS5GRZEQQ1YUJUBARDdXS1hDIF8xQ1JaLkQ6TV8wREggS1pMUF8wRF8xRV8wNF5GUwleRLQ0MjcS0Dk2XkEwTiw5NywMjFeR kheRkQgV0Eg0TgyIDFfRjAwMV5GUwleQ1k2LcwxNTJeR1Q00TYSMTA4M15CQ04sLE5eRkQ+02QMDk4Mjc4hDk10Dx5GUwleRlQxMswNzEwXkEwTi w2NSw0NF5GREJJTExJTkc6IFAvUF5GUwleRLQ2MjISMT2LDE2MjJeQkNOLCx0XkZEPjoxWj2FNTM4Rj41MDMwD10NjU3MF5GUwleRlQxNswxzEwXkEwTi wzNSw0NF5GREJJTExJTkc6IFAvUF5GUwleRLQ3MjISMTK10V5BME4SMjgsMzVeRkQ5MTguQ84wMDA6WJM4NDRaIDQ4LjVWIDA3LzIWMjFERLMNXLAZ

```
<ZONE>8</ZONE>
<ROUTING_CODE> WA 982 1-01</ROUTING_CODE>
</LABELREQUESTINFO>
<MMSPIECEID>NONE</MMSPIECEID>
<ORIGINATOR_TRACKING_NUMBER/>
</RATEDPACKAGE>
</RATEDPACKAGE>
</RATEDPACKAGE>
</SHIPMENTRESPONSE>
```

#### Rate Request

```
<?xml version="1.0" encoding="utf-8"?>
<RATEREOUEST>
    <LOGIN>
        <LOGINID>test</LOGINID>
        <PASSWORD>test</PASSWORD>
    </LOGIN>
    <DEFATTRIBUTES>
        <CONSTGNEE>
            <COMPANY>Banking By Mail M1</COMPANY>
<CONTACT>HSBC Bank USA</CONTACT>
            <ADDRESS1>2929 Walden Ave</ADDRESS1>
            <ADDRESS2></ADDRESS2>
            <ADDRESS3></ADDRESS3>
            <CITY>Depew</CITY>
            <STATEPROVINCE>NY</STATEPROVINCE>
            <POSTALCODE>14043</POSTALCODE>
            <PHONE>9542672228</PHONE>
            <COUNTRYSYMBOL>US</COUNTRYSYMBOL>
        </CONSIGNEE>
        <SHIPPERINFO>
            <SHIPPER>CITRIX1</SHIPPER>
        </shtppertnfo>
        <TERMS>SHIPPER</TERMS>
        <CURRENCYCODE>USD</CURRENCYCODE>
        <SHIPDATE>2021-09-20</SHIPDATE>
        <SHIPMENTSERVICEOPTIONS />
    </DEFATTRIBUTES>
    <PACKAGES>
        <PKG>
            <PKGWEIGHT>
                 <WEIGHTUNITS>LB</WEIGHTUNITS>
                 <WEIGHTVALUE>2</WEIGHTVALUE>
            </PKGWEIGHT>
            <PACKAGING>CUSTOM</PACKAGING>
            <REFERENCE>
                 <CONSIGNEEREFERENCE></CONSIGNEEREFERENCE>
                 <SHIPPERREFERENCE></SHIPPERREFERENCE>
            </REFERENCE>
            <PACKAGESERVICEOPTIONS>
                 <piece_count></piece_count>
                 <DELIVERYOPTIONS />
            </PACKAGESERVICEOPTIONS>
            <PACKAGE INFO>
                 <PACKAGE_ELEMENTS>
                     <ELEMENT ITEM>
```

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#### Rate Response

<?xml version="1.0"?> <RATERESPONSE> <RESPONSE> <TRANSACTIONREFERENCE> <CUSTOMERCONTEXT>Local mode using Progistics XML Processor</CUSTOMERCONTEXT> <XPCIVERSION>6.5.6</XPCIVERSION> </TRANSACTIONREFERENCE> <RESPONSESTATUSCODE>0</RESPONSESTATUSCODE> <RESPONSESTATUSDESCRIPTION>Success</RESPONSESTATUSDESCRIPTION> </RESPONSE> <RATEDSHIPMENT> <ERROR> <ERRORCODE>0</ERRORCODE> <ERRORDESCRIPTION>No error</ERRORDESCRIPTION> </ERROR> <SHIPMENTSERVICE> <scs>connectship\_ups.ups.nda</scs> <DESCRIPTION>UPS Next Day Air</DESCRIPTION> </shipmentservice> <BILLINGWEIGHT> <WEIGHTUNITS>LB</WEIGHTUNITS> <WEIGHTVALUE>2</WEIGHTVALUE> </BILLINGWEIGHT> <TOTALCHARGES> <CURRENCYCODE>USD</CURRENCYCODE> <MONETARYVALUE>19.11</MONETARYVALUE> </TOTALCHARGES> <TRANSPORTATIONCHARGES> <CURRENCYCODE>USD</CURRENCYCODE> <MONETARYVALUE>77.69</MONETARYVALUE> </TRANSPORTATIONCHARGES> <SERVICEOPTIONSCHARGES> <CURRENCYCODE>USD</CURRENCYCODE> <monetaryvalue>0</monetaryvalue> </SERVICEOPTIONSCHARGES> <CURRENCYCODE>USD</CURRENCYCODE> <MONETARYVALUE>58.58</MONETARYVALUE> </DISCOUNT> <GUARANTEEDDAYSTODELIVERY>1</GUARANTEEDDAYSTODELIVERY> <SCHEDULEDDELIVERYTIME>10:30:00</SCHEDULEDDELIVERYTIME> <ARRIVEDATE>9/21/2021</ARRIVEDATE> <RATEDPACKAGE> <PKGERROR> <ERRORCODE>0</ERRORCODE> <ERRORDESCRIPTION>No error</ERRORDESCRIPTION> </PKGERROR> <PKGSERVICE> <scs>connectship ups.ups.nda</scs> <DESCRIPTION>UPS Next Day Air</DESCRIPTION> </PKGSERVICE> <REFERENCE> <SHIPPERREFERENCE/> <CONSIGNEEREFERENCE/> </REFERENCE> <PACKAGETOTALCHARGES> <CURRENCYCODE>USD</CURRENCYCODE> <MONETARYVALUE>19.11</MONETARYVALUE> </PACKAGETOTALCHARGES> <PACKAGEBASECHARGES> <CURRENCYCODE>USD</CURRENCYCODE> <MONETARYVALUE>77.69</MONETARYVALUE> </packagebasecharges> <PACKAGESERVICEOPTIONSCHARGES> <CURRENCYCODE>USD</CURRENCYCODE> <monetaryvalue>0</monetaryvalue> </PACKAGESERVICEOPTIONSCHARGES> <PACKAGEDISCOUNT> <CURRENCYCODE>USD</CURRENCYCODE> <MONETARYVALUE>58.58</MONETARYVALUE> </PACKAGEDISCOUNT> <PKGWEIGHT> <WEIGHTUNITS>LB</WEIGHTUNITS>



```
<WEIGHTVALUE>2</WEIGHTVALUE>
</PKGWEIGH7>
<BILLINGWEIGHT>
<WEIGHTUNITS>LB</WEIGHTUNITS>
<WEIGHTVALUE>2</WEIGHTVALUE>
</BILLINGWEIGHT>
</RATEDPACKAGE>
</RATEDSHIPMENT>
</RATERSPONSE>
```

#### Address Validation Request

<?xml version="1.0" encoding="utf-8"?> <ADDRESSVALIDATEREQUEST> <LOGIN> <LOGINID>test</LOGINID> <PASSWORD>test</PASSWORD> </LOGIN> <ADDRESS DATA> <ADDRESS1>328 W. MAIN</ADDRESS1> <address2></address2> <address3></address3> <CITY>AZLE</CITY> <STATEPROVINCE>TX</STATEPROVINCE> <POSTALCODE>76020</postalcode> <COUNTRYSYMBOL>US</COUNTRYSYMBOL> </ADDRESS DATA> <VALIDATION TYPE>FLEX</VALIDATION TYPE> </ADDRESSVALIDATEREQUEST>

#### Address Validation Response

```
<?xml version="1.0"?>
<ADDRESSVALIDATERESPONSE>
    <RESPONSE>
        <TRANSACTIONREFERENCE>
             <CUSTOMERCONTEXT>Local mode using Progistics XML Processor</CUSTOMERCONTEXT>
             <XPCIVERSION>6.5.6</XPCIVERSION>
         </TRANSACTIONREFERENCE>
        <RESPONSESTATUSCODE>0</RESPONSESTATUSCODE>
        <RESPONSESTATUSDESCRIPTION>Success</RESPONSESTATUSDESCRIPTION>
    </RESPONSE>
    <RETURN>
         <ADDRESS DATA>
             <ERRORCODE>0</ERRORCODE>
             <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
             <ORIGINALADDRESS>
                 <ADDRESS1>328 W. MAIN</ADDRESS1>
                 <CITY>AZLE</CITY>
                 <STATEPROVINCE>TX</STATEPROVINCE>
                 <postalcode>76020</postalcode>
                 <COUNTRYSYMBOL>UNITED STATES</COUNTRYSYMBOL>
                 <RESIDENTIAL>False</RESIDENTIAL>
             </ORIGINALADDRESS>
             <CANDIDATE_ADDRESSES>
                 <CANDIDATE ADDRESS>
                      <ADDRESS1>328 W MAIN ST</ADDRESS1>
                      <CITY>AZLE</CITY>
                     <STATEPROVINCE>TX</STATEPROVINCE>
<POSTALCODE>76020-2995</POSTALCODE>
<COUNTRYSYMBOL>UNITED_STATES</COUNTRYSYMBOL>
                      <RESIDENTIAL>False</RESIDENTIAL>
                      <CONSVALIDATED>False</CONSVALIDATED>
                      <RESI_COMM>False</RESI_COMM>
                 </CANDIDATE ADDRESS>
             </CANDIDATE_ADDRESSES>
         </ADDRESS_DATA>
    </RETURN>
</ADDRESSVALIDATERESPONSE>
```

#### Closeout Request

#### 19



# Closeout Response

```
<?xml version="1.0"?>
<CLOSEOUTRESPONSE>
    <RESPONSE>
         <TRANSACTIONREFERENCE>
             <CUSTOMERCONTEXT>Local mode using Progistics XML Processor</CUSTOMERCONTEXT>
             <XPCIVERSION>6.5.6</XPCIVERSION>
         </TRANSACTIONREFERENCE>
         <RESPONSESTATUSCODE>0</RESPONSESTATUSCODE>
         <RESPONSESTATUSDESCRIPTION>Success</RESPONSESTATUSDESCRIPTION>
    </RESPONSE>
    <RETURN>
         <CLOSEOUTRETURN>
             <CLOSEOUTREQUESTED>(CONNECTSHIP UPS.UPS) CITRIX1</CLOSEOUTREQUESTED>
             <ERRORCODE>0</ERRORCODE>
             <ERRORDESCRIPTION>No error</ERRORDESCRIPTION>
             <CLOSEOUTRESULTS>
                  <SHIPFILEITEM>2518</SHIPFILEITEM>
                  <SHIPFILEDETAIL>
                      <CARRIERINFO/>
                      <CATEGORYINFO/>
                      <FRIENDLYNAME>September 20, 2021 #1</FRIENDLYNAME>
                      <IDENTITY>2518</IDENTITY>
                      <SEQUENCENUMBER>1</SEQUENCENUMBER>
<SHIPDATE>9/20/2021</SHIPDATE>
                      <SHIPFILEITEM ATTRIBUTES>
                           <attribute item>
                               <ITEM_NAME>SHIPDATE</ITEM_NAME>
<ITEM_VALUE>9/20/2021</ITEM_VALUE>
                           </attribute_item>
<attribute_item>
                               <ITEM NAME>PICKUP RECORD NUMBER</ITEM NAME>
                               <ITEM VALUE>4440161272</ITEM VALUE>
                           </ATTRIBUTE_ITEM>
                           <attribute_ITEM>
<ITEM_NAME>PLD_BOOK_NUMBER</ITEM_NAME>
                               <ITEM_VALUE>4440161</ITEM_VALUE>
                           </ATTRIBUTE_ITEM>
                           <ATTRIBUTE ITEM>
                               \LIGHT ITEM>
<ITEM_NAME>PLD_PAGE_NUMBER</ITEM_NAME>
<ITEM_VALUE>27</ITEM_VALUE>
                           </ATTRIBUTE ITEM>
                      </shipfileitem_Attributes>
                  </SHIPFILEDETAIL>
                  <TRANSMITFILEITEM>PLD_1_20210920_2518_1</TRANSMITFILEITEM>
                  <TRANSMITFILEDETAIL>
                      <TRANSMITFILEPATH>D:\Program
Files\ConnectShip\Projistics\AdditionalComponents\Servers\TanData\UPS\PLD_1_20210920_2518_1_T.txt</TRANSMITFILEPATH>
<CARRIERINFO/>
                      <CATEGORYINFO/>
                      <FRIENDLYNAME>September 20, 2021 #1 (PLD)</FRIENDLYNAME>
                      <IDENTITY>PLD 1 20210920 2518 1</IDENTITY>
<SEQUENCENUMBER>1</SEQUENCENUMBER>
                      <shipDate>9/20/2021</shipDate>
                       <TRANSMITSTATUS>(2) Transmitted</TRANSMITSTATUS>
                  </TRANSMITFILEDETAIL>
                  <ERRORCODE>0</ERRORCODE>
                  <ERRORDESCRIPTION>CloseOutItem (SHIPDATE 20210920) was successfully CLOSED.</ERRORDESCRIPTION>
             </CLOSEOUTRESULTS>
         </CLOSEOUTRETURN>
    </RETURN>
</CLOSEOUTRESPONSE>
```