



Connect+®/SendPro® P Series

UK Connectivity Guide

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Introduction

This document details the networking technical considerations for the Connect+®/SendPro® P Series system.

Network Requirements

- The Connect+®/SendPro® P Series system will require a high-speed network connection.
- The Connect+®/SendPro® P Series system will initiate all communication.
- The Connect+®/SendPro® P Series system will initiate all communication (via HTTP or HTTPS), so it can safely sit behind most corporate firewalls.
- The Connect+®/SendPro® P Series system will communicate to external Web Services via HTTP over Port 80.
- The Connect+®/SendPro® P Series system will communicate to PB secure server(s) via HTTPS over port 443.
- The Connect+®/SendPro® P Series system will use Port 53 for DNS lookup.
- Pitney Bowes requires a minimum network bandwidth of 384 kbps (upstream and downstream) to operate, but we recommend 1 Mbit/sec for best performance.
- It is recommended that 3G modem devices are not shared across multiple Connect+®/SendPro® P Series systems.
- Customer owned web filtering devices or software, as well as SSL packet inspection should be disabled for these ports as they can affect performance.

Port/Communication Requirements

All communication is initiated from the Connect+®/SendPro® P Series system via ports 80 (HTTP) and 443 (HTTPS). All communication from the Connect+®/SendPro® P Series system to the back end system is in the form of XML messages.

Port 80 (HTTP)

- OS Update
- AV Updates
- Web Services
- TeamViewer

Port 443 (HTTPS)

- The Connect+®/SendPro® P Series system will send requests to refill or audit its PSD (Postal Security Device) based on a low funds or inspection date. Audits occur if the PSD inspection date has expired.
- Transaction Records from the Connect+®/SendPro® P Series system are automatically uploaded when:
 - The System goes into Sleep Mode.
 - While powering down the system.
 - Activating Web Accounting Services.
 - Uploading Postal Information.
- On power up the System refreshes the Web Service (checks for Software, Rates and Graphic Updates. It will also contact Supplies, My Account, Tracking etc.) configuration data.

Port 53

- DNS lookup
 - IT departments that use a "rules based" method for allowing specific ports to pass traffic on their network for port 53 and make sure to allow BOTH UDP and TCP traffic for this port. Port 53 listens for DNS requests and may respond on either protocol, based on the type of request it receives. Short responses should come in over UDP. Longer, more detailed responses on TCP.

URL Information

It is strongly recommended that the firewall reference the URL rather than IP address, which can change over time.

The following URLs must be accessible from the Connect+®/SendPro® P Series system, without any obstructions.

If IP addresses must be referenced, it is suggested to keep open the block of IP addresses below:

199.231.32.0 to 199.231.47.255 152.144.128.0 to 152.144.128.255 209.85.128.0 to 209.85.255.255 193.242.234.1 to 193.242.234.255 74.125.230.80 to 74.125.230.84 130.57.1.88 31.193.129.122

Teamviewer

104.91.38.137

TeamViewer is used by service and sales for remote diagnostics and training. A TeamViewer session can only be initiated by someone on the customer end and therefore the system cannot be accessed without the customers knowledge. All communication is initiated from the Connect+®/SendPro® P Series system via ports 80 (HTTP) and 443 (HTTPS). All communication from the Connect+®/SendPro® P Series system to the back end system is in the form of XML messages.

There are two options to unblock Teamviewer:

1. General unlocking of Port 5938 TCP for outgoing connections (recommended). Port 5938 is only used by a few programs and therefore is no security risk. This traffic should then neither be filtered or cached.

- 2. Unlocking of URLs of the following formats (to any Server)
 - GET /din.aspx?s=...&client=DynGate...
 - GET /dout.aspx?s=...&client=DynGate...
 - POST /dout.aspx?s=...&client=DynGate...

Regardless of which method is chosen to unblock TeamViewer, also check that no content filter or similar is blocking one of the following URLs:

- *.teamviewer.com
- *.dyngate.com.

Required firewall exceptions

• Network Test:

Description: Built in tools that pings select PB servers for connectivity testing. Used by PB Service (Resides on Linux Desktop).

• Network Test URLs:

http://www.google.com, http:// www.l.google.com, http://www.novell.com

• Network Test IP Addresses:

74.125.230.80, 74.125.230.81, 74.125.230.82, 74.125.230.83, 74.125.230.84

SUSE Linux Proxy Test

• SUSE Linux Proxy Test URLs:

ftp.novell.com, http://www.l.google.com

• SUSE Linux Proxy Test IP Addresses:

74.125.230.80, 74.125.230.81, 74.125.230.82, 74.125.230.83, 74.125.230.84, 130.57.1.88

Distributor

Description: Main PB Server that authenticates machine for access to other PB web service.

Domain: distservp1.pb.com

• Distributor URLs:

http://distservp1.pb.com/dstproduct.asp, https://distservp1.pb.com/dstproduct.asp

• Distributor IP Addresses:

152.144.128.244, 152.144.128.230, 199.231.44.31, 199.231.43.31, 199.231.45.46

• Funds (Funds Management & Refills)

Description: Funds are managed through a separate Funds Server system.

• Funds URLs:

https://ukcometlb12mdc.pb.com, https://decometlb20.pb.com, https://ukcometlb12k.pb.com, https://decometlb5.pb.com

• Funds IP Addresses:

193.242.234.86, 193.242.234.25, 199.231.34.130, 193.242.234.5

Rates and Updates (Download Services)

Description: Downloads, new software, graphics, rate price data etc.

Domains: pbgdspp1.pb.com, clamserver.pb.com, pbdlsp1.pb.com, MyMS1Configuration.pb.com, SMT.pb.com, pbgdspp1.pb.com

• Misc. Data Upload URL:

https://pbgdspp1.pb.com/MS1ConfigurationUpload/MS1ProductConfigurationUpload.svc

• Misc. Data Upload IP Addresses:

199.231.44.148, 199.231.44.222, 199.231.45.35, 199.231.45.41

• ClamAV URL:

http://clamserver.pb.com

• ClamAV IP Addresses:

199.231.33.54, 199.231.35.165, 199.231.44.54, 199.231.45.165

• Error log upload URL:

http://pbdlsp1.pb.com

- Error log upload IP Addresses:
 199.231.44.30, 199.231.45.38
- Configuration web page URL: https://MyMS1Configuration.pb.com
- Configuration web page IP Address:
 199.231.44.166
- OS Updates URL:

https://SMT.pb.com

• OS Updates IP Addresses:

199.231.35.165, 199.231.44.54

• File Updates URL:

https://pbgdspp1.pb.com/MS1/DIaService.svc

• File Updates IP Address:

199.231.44.222

• Orders (CCD) URL:

https://pbgdspp1.pb.com/MS1CCD/DIaCCDService.svc

• Orders (CCD) IP Address:

199.231.44.222

Manage Accounts (Accounting):

Description: Separate PB Server that manages Accounting including Account Creation, Reports etc.

Domain: ms1app.pb.com

• Accounting Web Application URL:

https://ms1app.pb.com

• Accounting Web Application IP Address:

199.231.32.67

• Accounting Web Services URL:

https://ms1app.pb.com/ms1atweb/services/

• Accounting Web Services IP Address:

199.231.32.47

On Line Help

Description: This is the online website.

Domain: personalpost.info

• On Line Help URLs:

http://www.personalpost.info/uk_en/connect_plus_help.htm, http://www.personalpost.info/uk_en_4w/Default.htm

• On Line Help IP Address:

31.193.129.122

• Health Data Update

Description: Machine Health Information upload

Domain: pb.com

• Health Data Update URL:

https://cplus-logs-fusion.pb.com/api/v1/uploads

• Health Data Update IP Addresses:

199.231.33.6, 199.231.44.12

Optional firewall exceptions (enabled by default)

Connect with PB

Description: Utility website to contact Pitney Bowes

Domain: pitneybowes.co.uk

• Connect with PB URL:

http://www.pitneybowes.co.uk/connect-plus/conect-with-pb.shtml

• Connect with PB IP Address:

199.231.33.134

• Apps

Description: Utility website for additional applications and tools.

• Apps URL:

http://www.pitneybowes.co.uk/connect-plus/apps.shtml

• Apps IP Address:

199.231.33.134

• Parcels

Description: Utility website for tracking and sending parcels.

• Parcels URL:

http://www.pitneybowes.co.uk/connect-plus/parcels.shtml

• Parcels IP Address:

199.231.33.134

• Buy Supplies

Description: Utility website to order Connect+®/SendPro® P Series supplies.

• Buy Supplies URL:

https://www.pitneybowes.co.uk/shop/ink-supplies/franking-machine-supplies/connect-series/en-uk/storeuk?cm_sp=connect_sendpro_buy_supplies_uk

• Buy Supplies IP Address:

199.231.33.134

News and Offers

Description: Utility website for promotions and mailing news.

• News and Offers URL:

http://www.pitneybowes.co.uk/connect-plus/news-and-offers.shtml

• News and Offers IP Address:

199.231.33.134

Royal Mail

Description: Utility website for Royal Mail links.

• Royal Mail URL:

http://www.pitneybowes.co.uk/connect-plus/royal-mail.shtml

• Royal Mail IP Address:

199.231.33.134

Optional firewall exceptions (disabled by default)

Receive a Package

Description: Receive a Package application.

Domain: pitneybowes.com

• Receive a Package URL:

http://sendsuitetracking.pitneybowes.com/

• Receive a Package IP Addresses

199.231.33.6, 199.231.44.12

FAQ's

- 1. What OS does this device run?
 - SUSE Linux Sled 11.
- 2. What controls are in place to protect this device against network-based malware (viruses/worms) threats?
 - White list of URLs.
 - HTTPS.
 - Anti Virus Software
 - Only executes services needed to perform activities.
- 3. Does it have a firewall?
 - Yes
 - a. Who controls the firewall rules?
 - Pre-configured and not modifiable.
 - b. How are the firewall rules configured?
 - Allow only the ports Http, Https and DNS.
- 4. Describe the security patch process.
 - Emergency updates via PB only.
 - Regular schedule through PB services.
- 5. Describe the anti-virus controls in place.
 - ClamAv installed on every system, AV signature updates regularly updated.
- 6. Describe the software update process.
 - a. How often does this occur?
 - As required, in some cases monthly.
- 7. Describe the network traffic flow to/from this device.
 - a. What firewall rules need to be in place to allow the necessary communication?
 - Outgoing contact initiated (no push) utilizing HTTPS, URLs provided by PB services.
 - Outgoing-transactional data.
 - Incoming is both transactional data and files and Web Services.
- 8. Can you identify suspicious activity with respect to this device?
 - a. If so, please describe in detail.
 - An audit process exists to validate the financial integrity of the system.
 - Error logs are available and can be uploaded to the PB data centre.
 - Regularly scheduled physical visits from PB Service.

- 9. What are the access controls in place to secure this device?
 - Unique passwords for each machine cryptographically strong restricts access to the O/S.
 - Application access managed by the customer user ID and password available.
- 10. How do you authenticate an individual? A service?
 - See 9, above, for individual.
 - Machine does not provide services over a network so authentication not required.
- 11. Are there audit trails in place?
 - a. If so, what types of events are audited?
 - PSD transactional audits, extensive logs all financial transactions are audited by the PB infrastructure.
 - Logs for all error conditions.
 - Ink usage logs, print usage logs etc.
- 12. Is data stored on the device?
 - a. If so, what type of data?
 - Transactional data, graphic images, customer profiles and settings. files (rates etc.).
 - b. Describe the controls in place to protect the data.
 - All files and data interface utilising HTTPS.
 - Incoming data and files are signed and verified prior to use.
 - If consumed by the printer it is verified on each use, if used by the application is verified on load.
- 13. Does the Connect+®/SendPro® P Series allow remote administration?
 - a. Pitney Bowes will use TeamViewer to troubleshoot system problems remotely. The end user will initiate/ authenticate the session by supplying Pitney Bowes with a unique security code.