SendSuite® Live
Technical Requirements

Purpose
This document defines the technical requirements for SendSuite Live.

Minimum Hardware Specification
The following is the *minimum* hardware specification for all server and workstation machines:

Item:	Minimum specification:
Processor speed	2 GHz or faster.
RAM	4 GB, although we recommend 8 GB.
Available hard-disk space	80 GB. If there is more than one drive, then the boot drive should have at least 30 GB of available disk space and the other drive should have at least 80 GB available.

Note that this specifies only the minimum requirements for machines on which SendSuite Live is installed. You may need significant specification increases for workstations and servers, depending upon the installation configuration, and upon the customer's requirements for SendSuite Live. Typical examples for some standard SendSuite Live installation configurations are:

Installation configuration:	Description:	Recommended hardware specification:	
Workstation installation	SendSuite Live is installed on a single workstation.	Processor speed	2 GHz
		RAM	2 GB
		Available hard disk space	80 GB
Single server installation	SendSuite Live is installed on a single master server. This hosts both the database and the application server.	Processor speed	2 GHz
		RAM	8 GB
		Available hard disk space	100 GB
Multi-server installation	The SendSuite Live database is installed on a database server, and the SendSuite Live applications are installed on one or more application servers (one master server and multiple node servers).	Processor speed	2 GHz
		RAM	4 GB
		Available hard disk space	40 GB

Required Software and Supported Versions

The following software must be installed and enabled:

Required for:	Item:	Supported software:
All servers	Server operating system	**Microsoft Windows Server only** Supported versions: • Microsoft Windows Server 2016 • Microsoft Windows Server 2012 • Microsoft Windows Server 2012 R2 • Microsoft Windows Server 2008 SP2 • Microsoft Windows Server 2008 R2 Supported editions (for all listed versions): • Standard • Enterprise • Datacenter • Web Server
Database server only *Notes:* • This can be a dedicated database server, or the master server. • Microsoft SQL Server Express is installed as part of a workstation installation. It therefore does not need to be installed in advance.	Database	**Microsoft SQL Server only** Version 2016 supported editions: • Standard • Enterprise • Express • Web Version 2014 supported editions: • Standard • Enterprise • Express • Web Version 2012 supported editions: • Standard • Enterprise • Express • Web Version 2008 and version 2008 R2 supported editions: • Standard • Enterprise • Datacenter • Web Server • Workgroup • Express **Note:** The SendSuite Live database requires the

		Latin1_General_CI_AS Collation. This collation must be available on the server and must not be overridden by any server-side defaults or by any other environmental settings.
Workstations	Operating system	**Microsoft Windows only** Supported versions: • Microsoft Windows 7 • Microsoft Windows 8 • Microsoft Windows 8.1 • Windows 10 NOTE: Windows 11 is *not* supported. Supported editions (for all listed versions): • Ultimate 64-bit • Ultimate 32-bit • Professional 64-bit • Professional 32-bit

Required For:	Item:	Supported Software
All machines	Internet browser	The list of supported browsers changes frequently, therefore to see the most up-to-date list of all supported internet browsers, consult the *Browser Support Matrix*. **Notes:** If any machines fall under the following categories*, then you must use Microsoft Internet Explorer only*: • If the machine has a scale installed that must integrate with SendSuite Live. • If the machine has a meter installed that must integrate with SendSuite Live. • If SendSuite Live will be used for response printing from the machine. • If the machine will be used to modify Project Templates via the SendSuite Live Composer. **Note that to use the Composer, the machine must have the 32-bit version of Internet Explorer. The Composer will not work with the 64-bit version.**

Required Windows Operating System Roles and Features

For any machine serving SendSuite® Live, the following Roles and Features for the Windows operating system must be installed.

Windows Item	Item	Version and notes
Role	Microsoft Internet Information Services (IIS)	Version 7.0, version 7.5, or version 8.5. **Note:** IIS must be configured **BEFORE** installing .NET Framework.
Feature	.NET Framework	Install **BOTH** .NET Framework 3.5 **AND** .NET Framework 4.5.1 **Note:** .NET Framework must be configured **AFTER** the IIS role. The introduction of support for .NET 4.5 in 7.9.00 means that TLS 1.2 is also supported, provided the OS being used supports .NET 4.5 and the version of SendSuite Live being used is 7.9.00 or later.
Feature	Microsoft Message Queuing	• For all machines, enable MSMQ Message Triggers • Only for the database server(s) and only if using a post shipment updater, enable Message Queuing Server.

Required IIS Role Services

For any machine serving SendSuite® Live, the following Role Service options must be installed for Microsoft Internet Information Services (IIS).

Role Service:	Role Service option:	Required?
Application Development	.NET Extensibility	Mandatory.
	ASP	Conditional. Required only for installations using ConnectShip.
	ASP.NET	Mandatory.
	ISAPI Extensions	Mandatory.
	ISAPI Filters	Mandatory.
Common HTTP Features	Default Document	Mandatory.
	HTTP Errors	Mandatory.
	Static Content	Mandatory.
Health and Diagnostics	HTTP Logging	Mandatory.
	Logging Tools	Optional.
	Request Monitor	Mandatory.
	Tracing	Optional.
Management Tools *Not available nor required for workstations running Microsoft*	IIS Management Console	Conditional. Required only for installations using ConnectShip.
	IIS Management Scripts and Tools	Conditional. Required only for installations using ConnectShip.

Windows 7 operating system.		
Performance	Static Content Compression	Mandatory.
Security	Basic Authentication	Mandatory.
	IP and Domain Restrictions	Mandatory. *Not available nor required for workstations running Microsoft Windows 7 operating system.*
	Request Filtering	Mandatory.
	Windows Authentication	Mandatory.

Notes:

- The order in which IIS Role Services and their options are displayed on a machine varies between different versions and types of operating system. This table therefore lists all Role Services and their options alphabetically.

- All Role Service options that are shaded in grey are not included as part of a standard IIS installation. Typically, you therefore will be required to add these options.

- This table lists only those Role Service options that are required by SendSuite Live. Other Role Service options may be installed for other purposes, if required.

Required Windows Security Feature Settings

If any of these optional Windows security features are installed, ensure that they have the following required settings:

Check this feature for:	Security feature:	Required setting:
All machines	UrlScan	UrlScan must be configured to allow dots (periods) to be included in website URLs: In UrlScan.ini, the Key Value: AllowDotInPath=1
Machines where the customer will use Internet Explorer to access the SendSuite Live applications.	IE ESC - Internet Explorer Enhanced Security Configuration	IE ESC must be switched OFF for both Server Administrators and Users.
All machines that will have a postage meter installed.	UAC - User Account Control	UAC Settings must be set to Never notify.

Workstation File Access

Workstations require read/write access to the following folders for the peripheral control plug-ins to work properly. Within these folders are the files that retain settings for Printers, Documents, Scales, and Meters.

- C:\ProgramData\IsolatedStorage
- C:\ProgramData\Pitney Bowes
- C:\ProgramData\Pierbridge

Web Browser Support

The matrix below summarizes template, peripheral, and administration support with commonly used web browsers. This matrix applies to SendSuite Live versions 6.6.x through 7.16.0.

Generation 1: Generation 1 templates use older technologies (HTML Components (HTC) and XML data islands) specific to Internet Explorer. Microsoft removed these technologies with Internet Explorer v10, although these templates work with v10 when the browser mode is set to v9 through Tools > Developer Tools. The browser mode will not work with Internet Explorer v11 or greater.

NOTE: Generation 1 templates may run in Internet Explorer v7, although it is no longer tested and supported.

Generation 2: Generation 2 templates use newer technologies (based on JQuery, JavaScript and JSON entity framework) supported across browsers and operating systems.

Peripherals: Currently, integration to peripherals such as thermal printers, USB/Serial scales and postage meters is supported with Internet Explorer only

	Templates		Peripherals (Client Utilities)			
	Gen. 1	Gen. 2	Scale Component	Thermal Printer	Shipment Server Administration	Composer (Template Admin)
Windows Operating Systems						
IE8	✔	✔	✔	✔	✔	✔ *
IE9	✔	✔	✔	✔	✔	✔ *
IE10	✔	✔	✔	✔	✔	✔ *
IE11	✔	✔	✔	✔	✔	✖
Edge	✖	✔	✖	✖	✔	✖
Chrome	✖	✔	✖	✖	✔	✖
Firefox	✖	✔	✖	✖	✔	✖
Apple Operating Systems						
Chrome	✖	✔	✖	✖	✖	✖
Firefox	✖	✔	✖	✖	✖	✖

*Composer can only be run directly on the server/machine on which the platform is installed.

Ports

SendSuite Live will access the following ports:

Port	Used By	Notes
110	EEI Email Service (SMTP)	Origin Depends on EEI email settings Destination will be local
995	EEI Email Service (SSL)	Origin Depends on EEI email settings Destination will be local
2000	Default port used by FSMS	Depends on FSMS server location and setting
9549	End of Day (Local)	Address will be local to the application
9519	Consolidated Shipping Service (Local)	Address will be local to the application
7778	Remote Printer Service (Network)	Address will be the remote printer's address (managed by customer)

Proxy Settings

SendSuite Live supports proxies for both FTP and TCM traffic.

Windows Account

Credentials for an administrator level Run As Account must be used by SendSuite Live to run Windows on the machine. This Run As Account will be associated in IIS with the SendSuite Live applications and also will be associated with any services and utilities that are executed by SendSuite Live.

Additional Considerations

- This Run As Account must have administrator privileges. See the following table for details.
- This Run As Account and the Administrators group must be in the following Local Security Policies:
    - Log on as a service.
    - Log on as a batch job
- If the customer will be using SendSuite Live with FedEx Ship Manager Server, then this Run As Account must also have permission to browse, open and delete files in the FedEx Label Folder directory.
- A pre-existing Run As Account is not a prerequisite for a workstation installation. You will be prompted to create the Run As Account as part of the workstation installation procedure.

Login and Run As Account Permissions

Required?	Item
Mandatory	Read/write access to all files and folders within the Installation & Updates Utility's installation directory.
Mandatory	Read/write access to all files and folders within the SendSuite Live installation directory.
Mandatory	Permission to read from the local registry. A number of controls are registered during installation in the standard hives, such as HKEY_CLASSES_ROOT. The only non-standard Key that both the Installation & Updates Utility and SendSuite Live require read access to is: `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Un install\{DE24FA24-AC42-4BCC-91CE-5EE4E5OEF4BD}\InstallLocation`
Mandatory	Read/write access to SendSuite Live's unique Microsoft Message Queues and Triggers.
Conditional: Required only if customer is using Windows Authentication.	Permission to enumerate either the Local or the Domain Active Directory, as appropriate.
Conditional: Required only if the customer uses a printer server.	Permission to access the printer server and its printers.

Web Access

The following server addresses are used by SendSuite Live to communicate with the various carrier engines as well as its own internal update and installation engine. If you are installing on a server behind a firewall or proxy server or running a firewall or proxy server software locally, the following addresses must be configured to allow communication to and from.

SendSuite Live Setup

The SendSuite Live Setup installer will attempt to connect to the following web service end points and domains:

Locale	Target	Purpose
All	http://update.sendsuitelive.com/Service.asmx	Works out what updates are available and where they reside on the update server.
All	http://update.sendsuitelive.com/licensing/service/service.asmx	Sends and receives license information.
US	http://update.us.sendsuitelive.com	US-based server
UK	http://update.sendsuitelive.com	UK-based server

The installer will read from both of these addresses when it starts up and make options available depending on the data returned. If updates are available and the user attempts to install them, the installer will try to download them directly from the update site. The path is different for each update but they are all rooted at the same *http://update.sendsuitelive.com* address. An example is shown below; one .zip file is downloaded for each update.

UK: http://update.sendsuitelive.com/Repository/SendSuiteLive/25/Patch v6.6.23a.zip

US: http://update.us.sendsuitelive.com/Repository/SendSuiteLive/25/Patch v6.6.23a.zip

Firewall Configuration URLs – Internal/External Web Addresses

Internet access from the installation server is necessary to download the SendSuite Live installation and update components at update.sendsuitelive.com (UK) or update.ussendsuitelive.com (US).

ConnectShip Setup

ConnectShip provides rating and communication services to SendSuite Live for select carriers. ConnectShip will connect to the following URLs:

Type	Target	Purpose
Updates	http://www.connectship.com	Updates to ConnectShip software, carrier updates e.g., rates & labels.
Address Validation	http://www.iship.com	CASS certify address at the request of SendSuite Live.

External

If a remote management session with file transfer capability or removable media is not permitted as a means by which the initial setup files may be introduced to the installation server, connection to following FTP address must be permitted until all required files are transferred:

- ftp://199.231.34.204

SendSuite Live will also need access to the following external web addresses for the specific carrier and function listed below:

Carrier	Function	URI
Canada Post Server	Track	http://canadaposttracking.carrier-tracking.com/cpotools/apps/track/business/findByTrackNumber?contentType=xml
Canada Post (ConnectShip)	File Transmission	secure.cpclink.ca (secure FTP over port 22)
Canpar (ConnectShip)	File Transmission	ftp://ftp.canpar.com (ftp over port 21)
CTSI LTL	Order Optimize	https://services.pierbridge.net/optimization/xmlservice.aspx?mode=live
	Order Optimize Query	https://services.pierbridge.net/optimization/xmlservice.aspx?mode=live
DHL	CycloneActivator	http://b2bgwy.dhl.com:80/ https://b2bgwyadm.dhl.com:443/ https://webservices.cyclonecommerce.com:443/ http://www.cyclonecommerce.com:80/
	Paperless Clearance	Test: http://wsbuat.dhl.com:80/ws/DocumentManagement.WSConsumer.WS:DocumentManagement Prod: http://wsb.dhl.com:80/ws/DocumentManagement.WSConsumer.WS:DocumentManagement
Endicia (ConnectShip)	All	Live: https://labelserver.endicia.com Test: https://elstestserver.endicia.com
Falvey Cargo	Insurance	http://services.pierbridge.net/services/xmlservice.aspx
	Insurance Rate	http://services.pierbridge.net/services/xmlservice.aspx
	Insurance Void	http://services.pierbridge.net/services/xmlservice.aspx
FedEx 3PL Server	Track	https://gateway.fedex.com:443/GatewayDC
FedEx Web Services	All Functions	Live: https://ws.fedex.com:443/web-services/ Test: https://wsbeta.fedex.com:443/web-services/

Management Dynamics	Denied Party Screening	https://services.pierbridge.net/mdi/xmlservice.aspx?mode=live
	Export License	https://services.pierbridge.net/mdi/xmlservice.aspx?mode=live
OnTrac	Rate	http://www.shipontrac.net/OnTracAPI/RateRequest.ashx
	Ship	http://www.shipontrac.net/OnTracAPI/ShipmentRequest.ashx
	Track	http://www.shipontrac.net/OnTracAPI/TrackingRequest.ashx
Pitney Bowes Shipping API	All functions	Live: https://api.pitneybowes.com Live: https://web-prd3.gcs.pitneybowes.com Live: https://web-prd4.gcs.pitneybowes.com Test: https://ap-sandboxi.pitneybowes.com Test: https://web-sandbox.gcs.pitneybowes.com **It is recommended that https://*.pitneybowes.com be whitelisted to avoid future changes.**
PostNL (ConnectShip)	File Transmission	*Must be acquired from PostNL representative.
Progistics ConnectShip	Licensing	https://progistics.connectship.com
	Updates	www.connectship.com
	Address Validation	https://progistics.iship.com/
Purolator (ConnectShip)	File Transmission	*Must be acquired from Purolator representative
TNT Express (ConnectShip)	File Transmission	ftp3.tnt.com Note: ACTIVE FTP only. FTP port 21/SFTP port 22. For PASSIVE, see https://connectship.com/docs/components/6.5/carriers/tnt/#Transmit for instructions.
UPS API	Rate	https://www.ups.com/ups.app/xml/rate
	Time in Transit	https://www.ups.com/ups.app/xml/TimeInTransit
	Track	https://www.ups.com/ups.app/xml/Track
UPS Canada Server	Track	http://upstracking.carrier-tracking.com/WebTracking/processInputRequest?contentType=xml
UPS Mail Innovations	Track	https://www.ups.com/ups.app/xml/Track
UPS Server	Track	https://www.ups.com/ups.app/xml/Track
UPSLink (ConnectShip)	File Transmission	https://153.152.x.x Note: UPSLink.exe must be allowed to communicate through the firewall. The entire 153.152.x.x network must be reachable. Production: https://www.upslinkvendor.ups.com Certification: https://www.pld-vcertify.ups.com
USPS PDX	Electronic File Transmission	https://pdx.usps.com/api/
USPS SFTP	File Transmission	sftp.usps.com:22
Endicia	Track	https://labelserver.endicia.com/LabelService/EwsLabelService.asmx/CalculatePostageRateXML
	Ship	https://labelserver.endicia.com/LabelService/EwsLabelService.asmx/GetPostageLabelXML
	Void	https://www.endica.com/ELS/ELSServices.cfc?wsdl
Velocity Express	Ship	https://www.velocityexpress.com/online/externalPlaceOrder.jsp
	Track	https://www.velocityexpress.com/online/externalPlaceOrder.jsp

Transtream/Regional Carriers	All Functions	**Production Servers**	
		184.173.71.68:	carrierportalserver001.production.pierbridge.net
		50.97.181.61:	carrierportalserver002.production.pierbridge.net
		108.168.157.210:	carrierportal.production.pierbridge.net (Load Balancer)
		Test Server	
		50.97.89.202:	carrierportal.test.pierbridge.net
Yodel (ConnectShip)	File Transmission	*Must be acquired from Yodel representative.	

Note:

Pitney Bowes Shipping API is secured by implementation of TLS 1.2 and OAUTH2.0.