



VeriMove™

Version 3.7.0

pitney bowes

Installation Guide

For All Platforms



Information in this document is subject to change without notice and does not represent a commitment on the part of the vendor or its representatives. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, without the written permission of Pitney Bowes, 3001 Summer Street, Stamford CT 06926-0700.

© 2017, Pitney Bowes Software Inc. All rights reserved.

MapInfo, Group 1, and Group 1 Software are trademarks of Pitney Bowes Software Inc. All other marks and trademarks are property of their respective holders.

Pitney Bowes Inc. holds a non-exclusive license to publish and sell ZIP + 4[®] databases on optical and magnetic media. The following trademarks are owned by the United States Postal Service: CASS, CASS Certified, DPV, eLOT, FASTforward, First-Class Mail, Intelligent Mail, LACS^{Link}, NCOA^{Link}, PAVE, PLANET Code, Postal Service, POSTNET, Post Office, RDI, Suite^{Link}, United States Postal Service, Standard Mail, United States Post Office, USPS, ZIP Code, and ZIP + 4. This list is not exhaustive of the trademarks belonging to the Postal Service.

Pitney Bowes Inc. is a non-exclusive licensee of USPS[®] for NCOA^{Link}[®] processing.

Prices for Pitney Bowes Inc. products, options and services are not established, controlled or approved by the USPS[®] or United States Government. When utilizing RDI[™] data to determine parcel-shipping costs, the business decision on which parcel delivery company to use is not made by the USPS[®] or United States Government.



3001 Summer Street
Stamford CT 06926-0700
USA

www.pitneybowes.com

Table of Contents

Chapter 1: Installing VeriMove on Windows	7
Before You Begin the Windows Installation	8
Windows Requirements	8
Installing VeriMove on Windows	9
Installing VeriMove on Windows from Internet Download	9
Installing VeriMove on Windows from DVD	12
VeriMove Databases	15
Installing NCOA^{Link} Data on Windows and z/OS	15
Obtaining the NCOA ^{Link} Data	16
Using explode.bat to Explode the NCOA ^{Link} Files	16
Explode Process Impact on Business Name Matching Tables	19
Installing the Daily Delete File	19
Installing the USPS Databases	20
Installing Databases for Internal CASS Processing	20
Installing Databases for External CASS Processing	20
Converting the Statistics File for VeriMove	21
Verifying Your Installation	21
Running a Sample Job from the GUI	21
Running a Sample Job from the Command Line Using mu.exe	22
Running a Sample Job from the Command Line Using FTCmd.exe	22
Installing Product Updates	23
Installing Your Software License Keys	23
Installing Your NCOA ^{Link} and Site Support License Keys	23
Installing the VeriMove TM CASS TM Key for Internal CASS TM Processing	23
Getting Started with VeriMove	23
Chapter 2: Installing VeriMove on Unix	25
Before You Begin the Unix Installation	26
Unix Requirements	26
Installing VeriMove on Unix	26
Installing VeriMove on Unix from Internet Download	27
Installing VeriMove on Unix from DVD	30
VeriMove Databases	33
Installing NCOA^{Link} Data	33
Obtaining the NCOA ^{Link} Data	34
Using explode.sh to Explode the NCOA ^{Link} Files	34
Explode Process Impact on Business Name Matching Tables	37
Installing the Daily Delete File	37

Installing the USPS CASS Databases	38
Installing Databases for Internal CASS Processing	38
Installing Databases for External CASS Processing	38
Converting the Statistics File for VeriMove	39
Verifying Your Installation	39
Running a Sample Job Using mu.	39
Installing Product Updates	40
Installing Software License Keys	40
Installing Your NCOA ^{Link} License Key	40
Installing the VeriMove™ CASS™ Key for Internal CASS™ Processing	40
Getting Started with VeriMove	40
Chapter 3: Installing VeriMove on Linux	41
Before You Begin the Linux Installation	42
Linux Requirements	42
Installing VeriMove on Linux	42
Installing VeriMove on Linux from Internet Download	43
Installing VeriMove on Linux from DVD	46
VeriMove Databases	49
Installing NCOA^{Link} Data on Linux	49
Obtaining the NCOA ^{Link} Data	50
Using explode.sh to Explode the NCOA ^{Link} Files	50
Explode Process Impact on Business Name Matching Tables	53
Installing the Daily Delete File	53
Installing the USPS CASS Databases	54
Installing Databases for Internal CASS Processing	54
Installing Databases for External CASS Processing	54
Converting the Statistics File for VeriMove	55
Verifying Your Installation	55
Running a Sample Job Using mu.	55
Installing Product Updates	56
Installing Your Software License Keys	56
Installing Your NCOA ^{Link} License Key	56
Installing the VeriMove™ CASS™ Key for Internal CASS™ Processing	56
Getting Started with VeriMove	56
Chapter 4: Installing VeriMove on z/OS	57
Before You Begin the z/OS Installation	58
z/OS Requirements	58
Installing VeriMove on z/OS	58
Installing VeriMove on z/OS from Internet Download	58
Installing VeriMove on z/OS from Media	62
VeriMove Databases	64
Installing NCOA^{Link} Data on z/OS	64
Obtaining the NCOA ^{Link} Data	65
Using explode.bat to Explode the NCOA ^{Link} Files	65
Uploading Exploded Files to the z/OS Platform	68
Explode Process Impact on Business Name Matching Tables	68

Installing the Daily Delete File	69
Installing the USPS Databases	70
Installing Databases for Internal CASS Processing	70
Installing Databases for External CASS Processing	70
Converting the Statistics File for VeriMove	70
Verifying Your Installation	70
Running a Sample Job	71
Installing Product Updates	71
Installing Your Software License Key	71
Installing Your NCOA ^{Link} License Key	71
Getting Started with VeriMove	71
Chapter 5: Installing on IBM i	73
Before You Begin the IBM i Installation	74
Installing VeriMove on IBM i	74
Installing VeriMove on IBM i from Internet Download	74
Product Selection	75
Global Library Options	76
Product Installation Options	77
Locked Libraries	78
Completing the Installation	78
Installing the VeriMove Software from DVD	79
Product Selection	80
Global Library Options	80
Product Installation Options	81
Locked Libraries	81
Completing the Installation	82
Installing USPS Data	83
Installing the NCOALink Database	83
Obtaining the NCOA ^{Link} Data	83
Installing the NCOA ^{Link} Database from Internet Download or DVD	85
Installing the NCOA ^{Link} Database Using Windows With a DVD Drive	92
Completing the Installation When Using Windows with a DVD Drive	94
Installing the Daily Delete File	96
Installing a Product Update	97
Installing Your Software License Key	98
Installing Your NCOA ^{Link} License Key	98
Getting Started with VeriMove	98
Chapter 6: Configuring Your VeriMove Installation	99
Configuring Your VeriMove Installation	100
Index	111

Installing VeriMove on Windows

In this chapter:

- ◆ Before You Begin the Windows Installation8
- ◆ Installing VeriMove on Windows9
- ◆ VeriMove Databases15
- ◆ Installing NCOA^{Link} Data on Windows and z/OS.....15
- ◆ Installing the Daily Delete File.....19
- ◆ Installing the USPS Databases20
- ◆ Converting the Statistics File for VeriMove.....21
- ◆ Verifying Your Installation.....21
- ◆ Installing Product Updates23
- ◆ Installing Your Software License Keys23
- ◆ Getting Started with VeriMove23

Before You Begin the Windows Installation

Loading the Windows version of VeriMove allows you to use the Windows GUI to create job definitions that you can then transfer to your execution platform. The z/OS platform requires the Windows version of VeriMove to install the USPS NCOA^{Link} data. You can use the VeriMove explode.bat file to explode the USPS compressed databases onto a Windows machine and then transfer that data to your z/OS platform.

Windows Requirements

The Windows system requires:

- A supported version of Windows. For a list of supported versions of Windows, see the “Supported Platforms” document available at <http://www.g1.com/support>.
- 1 GHz processor (2 GHz processor or faster recommended for better performance)
- Appropriate disk capacity for your processing environment. To determine the required disk capacity, multiply the size of the largest file to be processed by at least 2, 3, or 4. Add 30 GB to that total. Each file to be processed must be contained in one logical partition. 10,000 RPM or faster drives are recommended for better performance. Note that the amount of hard disk space required also depends on the type of output required. For example, if you include the input data in the output file, more space is required than if you do not. You will need approximately 20 GB for USPS data. 40 GB (20 GB for production data plus 20 GB for decompressing USPS data updates) is recommended.
- Additional space for databases:

Database	Additional Space Required
Addressing databases (zip4us.dir and city.dir)	Approximately 1.1 GB
Early Warning System (EWS) Option	300 KB
Enhanced Line of Travel (LOT) Option	350 MB
Delivery Point Validation (DPV) Option	900 MB
LACS ^{Link} Option	375 MB
Suite ^{Link} Option	525 MB


- 2 GB RAM
- DVD drive (if loading from DVD)
- Internet Access — The USPS requires all NCOA^{Link} licensees to use the Daily Delete file. The Daily Delete file contains corrections to the currently distributed databases. The Daily Delete file and the NCOA^{Link} data are no longer provided on DVD and are currently provided by Internet download only.
- License for NCOA^{Link}
- User account with administrator rights



VeriMove Access requires Microsoft[®] .Net 4.0 Client Profile or newer. VeriMove installs the .Net 4.0 Client Profile for you as part of the installation process. You can also visit the Microsoft[®] web site to install or upgrade to the Microsoft[®] .Net 4.0 Client Profile.

Installing VeriMove on Windows


This section describes how to install VeriMove on Windows from Internet download or DVD.

 Pitney Bowes delivers VeriMove software for the Windows platform via Internet download. If needed, you can obtain installation media at an additional charge from the Pitney Bowes eStore. Please log in to the Pitney Bowes eStore for media purchasing and shipping.

Installing VeriMove on Windows from Internet Download

Pitney Bowes delivers Internet software in a compressed format as a .zip file. To download and extract your VeriMove software, follow these steps:

1. Access and log in to the Technical Support website at <http://www.g1.com/support>.
2. Click **My Products**.
3. Click **VeriMove**.
4. Click **View Available Downloads**.
5. Download the appropriate installation file to Windows.
6. Extract the setup files from the downloaded .zip file.
7. To begin installation, double-click on the setup.exe file located in the temporary folder where you extracted the installation software. Follow the prompts to complete the installation process.
8. If you are upgrading to a new release, VeriMove may require that the JobStats.dat file be in a new format prior to VeriMove processing. If the new release needs to upgrade the Jobstats file, the install process converts the JobStats.dat file into the new format for you.
If this is a new install or you are installing into a new VeriMove directory, no conversion message displays and the product is ready to use after the configuration file has been verified to meet your needs as described in the next step.
9. Edit your configuration file.

 The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing any preset default values.

- a. If you are a **new** VeriMove user, the installation program installs the config.ini configuration file as part of the normal installation process.
 - Enter the appropriate information in the following fields in the config.ini configuration file.
 - For the remaining fields in the config.ini configuration file, Pitney Bowes recommends you use the default values.

For information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Configuration File Field Descriptions (Part 1 of 2)

Field	Description
Registered Company	PAF registered company name.
Registered User	PAF registered user name.
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA Use High Memory	Specify whether to use high memory: <ul style="list-style-type: none"> • 0 — Turn off the large memory model. Use the small memory model. Use this option when only a small amount of limited system memory is available to you. The default value is 0. • 1 — Turn on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free system memory available (see notes below). <p>This setting may affect the performance of your system. Setting this to 1, causes a number of database tables to be loaded into memory. The set up of the database takes more time at the beginning of a run but may improve performance if your platform has lots of physical memory.</p> <p>When VeriMove is set to "Large Memory Model" (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the "L" (Large) memory model. When VeriMove is set to "Small Memory Model" (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the "U" (Ultra) memory model.</p> <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: For HP-UX Unix, if you are running on an Itanium based machine, the large memory model will not work for NCOA^{Link} processing. Set this option to 0.</p>

Configuration File Field Descriptions (Part 2 of 2)

Field	Description
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order even if you are NOT using the small memory model enhancement to achieve optimum performance.</p>
NCOA Use Flat Single	<p>Specify whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Specify whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).
ReportPath	Path name for generated report files.
CASSerialNumber	Pitney Bowes provided CASS serial number if using VeriMove Internal CASS processing.
DPVKey	To perform DPV processing using the VeriMove Internal CASS processor, enter your Pitney Bowes provided DPV product software key.
LACSKey	To perform LACS ^{Link} processing using the VeriMove internal CASS processor, enter your Pitney Bowes provided LACS ^{Link} product software key.

- b. If you are an existing VeriMove user, the installation program installs the config.ini.distribute configuration file into the installation directory and leaves your original config.ini configuration file intact.

To ensure optimum system performance, compare the config.ini.distribute file configuration options to your current configuration file to determine whether any new options have been added. You can also edit the config.ini.distribute file with your current settings and then replace your current configuration file to have the latest default configuration options.

For detail information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

10. For Windows 2012, To expose VeriMove on the Windows Start screen:
 - a. Click on the down arrow to expose all applications (by name).
 - b. Navigate to Pitney Bowes, then VeriMove.
 - c. Right click on VeriMove and select Pin to Start. The VeriMove icon will then appear on the Windows Start screen (typically, on the far right side).

Installing VeriMove on Windows from DVD

This section describes the process for installing VeriMove on the Windows platform from DVD (only available from the Pitney Bowes eStore for an additional fee). To install VeriMove on Windows from DVD, follow these steps.

1. Insert the DVD into your DVD drive.
2. Launch setup.exe.
3. Follow the prompts to complete the installation process.
4. If you are upgrading to a new release, VeriMove may require that the JobStats.dat file be in a new format prior to VeriMove processing. If the new release needs to upgrade the Jobstats file, the install process converts the JobStats.dat file into the new format for you.

If this is a new install or you are installing into a new VeriMove directory, no conversion message displays and the product is now ready to use after the configuration file has been verified to meet your needs as described in the next step.
5. Edit your configuration file.



The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing any preset default values.

- a. If you are a **new** VeriMove user, the installation program installs the config.ini configuration file as part of the normal installation process.
 - Enter the appropriate information in the following fields in the config.ini configuration file.
 - For the remaining fields in the config.ini configuration file, Pitney Bowes recommends you use the default values.

For information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Configuration File Field Descriptions (Part 1 of 2)

Field	Description
Registered Company	PAF registered company name.
Registered User	PAF registered user name.
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA Use High Memory	Specify whether to use high memory: <ul style="list-style-type: none"> • 0 — Turn off the large memory model. Use the small memory model. Use this option when only a small amount of limited real memory is available to you. The default value is 0. • 1 — Turn on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free real memory available (see notes below). <p>This setting may affect the performance of your system. Setting this to 1, causes a number of database tables to be loaded into memory. The set up of the database takes more time at the beginning of a run but may improve performance if your platform has lots of physical memory.</p> <p>When VeriMove is set to "Large Memory Model" (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the "L" (Large) memory model. When VeriMove is set to "Small Memory Model" (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the "U" (Ultra) memory model.</p> <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: For HP-UX Unix, if you are running on an Itanium based machine, the large memory model will not work for NCOA^{Link} processing. Set this option to 0.</p>

Configuration File Field Descriptions (Part 2 of 2)

Field	Description
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order even if you are NOT using the small memory model enhancement to achieve optimum performance.</p>
NCOA Use Flat Single	<p>Specify whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Specify whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).
ReportPath	Path name for generated report files.
CASSerialNumber	Pitney Bowes provided CASS serial number if using VeriMove Internal CASS processing.
DPVKey	To perform DPV processing using the VeriMove Internal CASS processor, enter your Pitney Bowes provided DPV product software key.
LACSKey	To perform LACS ^{Link} processing using the VeriMove internal CASS processor, enter your Pitney Bowes provided LACS ^{Link} product software key.

If you are an existing VeriMove user, the installation program installs the config.ini.distribute configuration file into the installation directory leaving your original config.ini configuration file intact.

To ensure optimum system performance, compare the config.ini.distribute file configuration options to your current configuration file to determine whether any new options have been made available. You can also edit the config.ini.distribute file with your current settings and then replace your current configuration file to have the latest default configuration options.

For detail information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

6. For Windows 2012, To expose VeriMove on the Windows Start screen:
 - a. Click on the down arrow to expose all applications (by name).
 - b. Navigate to Pitney Bowes, then VeriMove.
 - c. Right click on VeriMove and select Pin to Start. The VeriMove icon will then appear on the Windows Start screen (typically, on the far right side).

VeriMove Databases

The following table describes the VeriMove databases.

Databases, Delivery Methods, and Update Requirements

Database	Delivery Method/Source	Required/Optional	Updates
NCOA ^{Link} Datasets	Download from USPS website or DVD.	Required for all licensees.	Monthly or weekly (depending on license level)
NCOA ^{Link} - Daily Delete File	Download from USPS website.	Required for all licensees.	Daily
<ul style="list-style-type: none"> • CASS • Delivery Point Validation (DPV) • LACS^{Link} • Suite^{Link} 	<ul style="list-style-type: none"> • Pitney Bowes support site at www.g1.com/support. Download at no charge. No backup media. • Pitney Bowes eStore at http://store.pbinsight.com. Download at no charge. Purchase backup media. • Mainframe tape recipients continue to receive physical media shipments at this time. 	<ul style="list-style-type: none"> • VeriMove requires the CASS database for Internal CASS processing. • USPS requires DPV, LACS^{Link}, and Suite^{Link} processing to generate a USPS Form 3553. 	Monthly
Early Warning System (EWS)	Download from USPS website. Pitney Bowes sends a monthly update of the EWS File with the CASS database updates.	Optional for all licensees.	Weekly

Installing NCOA^{Link} Data on Windows and z/OS

This section describes how to install NCOA^{Link} data on the Windows and z/OS platforms. The USPS delivers the NCOA^{Link} data files in a compressed or tarred format. As part of the installation process, you must uncompress/expand the USPS NCOA^{Link} data files using the VeriMove explode process to make the data files fully functional. Prior to installing the NCOA^{Link} data:

- **If you are a new customer**, you must set up your configuration file prior to attempting to install the NCOA^{Link} data. For more information on setting up your configuration file, see [step 9 in "Installing VeriMove on Windows from Internet Download" on page 9](#) or [step 5 in "Installing VeriMove on Windows from DVD" on page 12](#).
- **If there is more than one physical drive on the system that executes VeriMove jobs**, install the NCOA^{Link} data on a separate physical drive from the VeriMove software, operating system, and pagefile/Virtual Memory. This results in a major performance improvement.

Obtaining the NCOA^{Link} Data

Pitney Bowes does not supply the NCOA^{Link} data. You must contact the USPS directly to obtain the NCOA^{Link} data. The USPS requires all licensees to obtain product updates from the USPS Electronic Product Fulfillment (EPF) website. In the event that the USPS sends you NCOA^{Link} data on a DVD, we have included instructions for installing from a DVD. Currently the USPS mandate is to download the NCOA^{Link} data from the USPS EPF website. In most cases you will use the first option below.

1. Download the NCOA^{Link} data from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following additional steps required when downloading the NCOA^{Link} data from the USPS EPF web site:
 - a. Navigate to the location of the downloaded NCOA^{Link} data file.
 - b. The downloaded NCOA^{Link} data from the USPS EPF web site may be in a zipped or tar format. Unzip or untar the data before running the explode process.
 - c. Navigate to the folder that contains the unzipped or untarred NCOA^{Link} data. The number of files in the directory varies depending on the database format you are licensed to use (hash or flat). The following table describes the unzipped/untarred files.

NCOA^{Link} Data Files

File Name	Description
clk.zip	Zipped data file that contains necessary NCOA ^{Link} data files.
dvdhdr01.dat dvdhdr02.dat	Files that store the contents of the NCOA ^{Link} database.
rv9.zip	Zipped data file that contains additional NCOA ^{Link} data files.
clk.*	Additional NCOA ^{Link} tables present when you receive 18 month (hash or flat) or 48 month data (hash or flat).
ank.*	Additional NCOA ^{Link} tables present only when you receive ANK ^{Link} data (hash or flat).
	NOTE: After the explode process, these files are renamed to clk.* file names.

- d. Proceed to the section "[Using explode.bat to Explode the NCOA^{Link} Files](#)" on page 16.
2. If you received NCOA^{Link} data on a DVD, follow these steps:
 - a. Insert the NCOA^{Link} data DVD into the DVD drive of a Windows PC. You must use a Windows PC regardless of your execution platform.
 - b. Proceed to the section "[Using explode.bat to Explode the NCOA^{Link} Files](#)" on page 16.

Using explode.bat to Explode the NCOA^{Link} Files

To explode the NCOA^{Link} data files to your database location using explode.bat, follow these steps:

1. Browse to the location where you installed VeriMove and go to the **Tables** subfolder. For example, C: \PB\Veri Move\Tables.

2. Edit explode.bat as follows.
 - a. Omit all quotes from path names. If you leave the INPUTDATAPATH= and NCOADATADESTINATION= values blank, you will be asked for this information in an interactive query mode.
 - Change set INPUTDATAPATH= to the location of the NCOALink data.
 - Change set NCOADATADESTINATION= to the path where you want to install the NCOALink data. This folder is automatically created if it does not already exist. For example, if you are installing the data to D:\USPSDATA, specify set NCOADATADESTINATION=D: \USPSDATA.
 - b. This item only applies if you are exploding the NCOALink data from a DVD.

The explode.bat script defaults to the values required to explode the NCOALink data from a location (not from a DVD). To explode from a DVD, change set USEDVDLOAD=N to set USEDVDLOAD=Y.
 - c. These items only affect Flat File databases and are otherwise ignored.
 - Change Set MVSONLY=N to Y only if you are installing on an MVS platform. This will avoid a preprocessing step that is needed for other platforms.
 - Change Set FLATSI NGLE=N to Y if you are using the Single Flat File database.
 - Change Set FLATATOZ=Y to N if you set FLATSI NGLE=Y and do not also want to use the 26 Flat File A-Z database.
3. Save and close explode.bat under a new name (i.e., myexplode.bat) that will not be overwritten by future updates and installations.
4. Run your modified version of explode.bat.
5. One of the following messages displays.
 - a. If you are exploding from a location, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****  
  
This script installs an NCOALink database from a download location onto your hard drive.  
This can require up to 20 GBytes of free space on your hard drive.
```
 - b. If you are exploding from a DVD, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****  
  
This script installs an NCOALink database from two DVDs onto your hard drive. This can  
require up to 20 GBytes of free space on your hard drive.
```
6. The following message displays:
 - a. If you are exploding from a location, the following messages displays:

```
Folder dst is about to be loaded from the  
NCOALink database found at location src  
*****  
WARNING -- If you proceed from this point, all data in  
folder dst will be erased first. You may type  
Control -C to abort this process now without erasing anything.  
*****
```

- b.** If you are exploding from a DVD, the following messages displays:
 Folder dst is about to be loaded from the
 NCOALink database found on DVD src

 WARNING -- If you proceed from this point, all data in
 folder dst will be erased first. You may type
 Control -C to abort this process now without erasing anything.

 The warning above only displays if the destination folder contains data.
- 7.** The explode.bat process continues as follows:
 - a.** If you are exploding from a DVD, the following messages display:
 Insert NCOALink data DVD 1 from the USPS into Drive src
 Press any key to continue
 Copying DVD 1 (src) to dst
 DVD 1 copy complete.
 Insert NCOALink data DVD 2 from the USPS into Drive src. Press any key to continue.
 Copying DVD 2 (src) to dst
 DVD 2 copy complete.
 - b.** If you are exploding from a location, the following messages displays:
 Copying from location (src) to dst
 File copy complete.
- 8.** After the NCOALink data has been copied, the .zip (zipped) files are automatically expanded. Then, the .szp (USPS-compressed) files are expanded. Afterward, a series of preprocesses and tests are performed. If there are errors, one of the following messages displays:
 **** FILE NOT FOUND: filename
 **** ERROR COPYING FILE: filename
 **** ERROR PROCESSING FILE: filename
 **** ERROR: message
 This message is followed by:
 FAILURE!!!
 Press any key to continue
- 9.** If the message indicates that there is a file in the VeriMove installation folder missing, there was a problem with your NCOALink data explode process. There may have been a problem copying the NCOALink data from the source location.
 A process called "TestFileSha" produces a file called TablesTestFileSha.log in the parent folder of the folder containing these scripts. This file contains detailed descriptions of the tests performed and any errors that have occurred. If an error occurs, the following message displays:
 **** ERROR: Verifying Data File Signatures
 If you get this message, the data files indicated in the log file were corrupted. You may have corrupted NCOALink data and need to replace the download source (downloaded file or DVD).
- 10.** If there are no problems with the process and tests, the following message displays to indicate that the process completed. You must still check the log file generated during the explode process to ensure the explode process ran error free.
 SUCCESS!!!
 Press any key to continue

Explode Process Impact on Business Name Matching Tables

VeriMove uses three tables during the Business Name Matching process to compare records in your input file against the NCOA^{Link} data. These three tables, formatted and installed in the Tables directory during VeriMove installation, are only used for Business Name Matching. These tables do not change your input records and do not affect VeriMove output of business names but are simply used to aid in comparing your input records against the NCOA^{Link} data to determine a Business Name match.

Table Name	Description
REDEFINES-WORD-LIST.txt	Maps commonly used abbreviations to full words
JUNK-WORD-LIST.txt	Words that are ignored during Business Name Matching
COMMON-WORD-LIST.txt	Words that are given higher value when calculating Business Name Match percentages (used to determine whether or not a match has been achieved)

Each time you explode the NCOA^{Link} files to your database location, these files are copied from the Tables directory to your database location. Subsequent VeriMove installations overwrite these tables with the tables VeriMove used to certify with the USPS. If you customize these tables, be sure to backup these files before installing a new VeriMove release. After installing a new VeriMove release, replace the installed VeriMove USPS-certified tables with the backup versions of your customized tables.

i **IMPORTANT!** Pitney Bowes certifies VeriMove with the USPS using these three tables. Editing these tables may result in an increase or decrease in your Business Name Matching rate. If your Business Name Matching rate changes significantly, the USPS may audit your Business Name Matching results and require you to recertify using your customized versions of these three tables.

For more information, please refer to the section "Using Business Name Matching" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

Installing the Daily Delete File

The USPS require all NCOA^{Link} licensees to use the Daily Delete File. Licensees must download and install this file daily. To install the Daily Delete file, follow these steps.

1. Browse to the location where you installed VeriMove and go to the Utilities subfolder. For example, C:\PB\VeriMove\Utilities.
2. Download the Daily Delete file. The Daily Delete file is available from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following:
 - You can use the getFileHTTps.exe utility to download the Daily Delete file. However, the getFileHTTps.exe utility:
 - Can only be used to download files from the USPS <https://epf.usps.gov> secured web site
 - Only downloads the most current version of the USPS file requested
 - Is only available for the Windows platformFor more information on using the getFileHTTps.exe utility, see Chapter 8, Utilities in your *VeriMove User's Guide*.
- Windows, Unix, and Linux users should download the ASCII version of the Daily Delete file.
- z/OS and IBM i users should download the EBCDIC version of the file.


3. If you run VeriMove jobs on Unix, Linux, or a remote Windows system, follow these steps:
 - a. Start an FTP session with your execution platform
 - b. FTP the files in binary mode to a directory that VeriMove can access.

Installing the USPS Databases

The procedure to use to install the CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases depends on whether you are using the VeriMove Internal CASS processor or an External CASS processor such as Finalist or CODE-1 Plus.

Installing Databases for Internal CASS Processing

Internal CASS processing is available on Windows, Unix, and Linux. To install CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases for use with the VeriMove internal CASS processor, follow these steps:

 Some databases are very large, require a great deal of time to download, and consume a large amount of disk space. Be sure that you have sufficient space before you begin this process.

1. Do one of the following:
 - a. To download the CASS, DPV, LACS^{Link}, or Suite^{Link} databases, go to <http://www.g1.com/support> and log in to the Support site. If you do not have a user ID and password, contact Pitney Bowes Customer Support at 800-367-6950. Locate the file(s) to download and initiate the download.
 - b. To download EWS data, browse to the location where you installed VeriMove and go to the Utilities subfolder. For example, C:\PB\VeriMove\Utilities. Use getFileHttp.exe to download the file from https://ribbs.usps.gov/cassmass/documents/tech_guides/. For more information, see Chapter 8, Utilities in your *VeriMove User's Guide*.
2. Open the .zip file and extract the contents. Or, if the file is an .exe file, double-click on it to extract the contents.
3. If you run VeriMove jobs on a remote Windows system:
 - a. Establish an FTP session with your execution system.
 - b. FTP the files in binary mode to a directory that VeriMove can access.

Installing Databases for External CASS Processing

If you are using an external CASS processor such as Finalist or CODE-1 Plus, see that product's documentation for instructions on how to install the CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases.

After you update your CASS product data, follow these steps only if you are using the Manually Registered Statistics option in VeriMove. For information on manually registered statistics, see the section "Specifying CASS Settings" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

1. Launch VeriMove and open a job.
2. Go to the **CASS** tab.
3. Click the **Edit** button next to **Use Manually Registered Statistics**.
4. Update the date to reflect the date of the database(s) you just downloaded. Click **OK**.

Converting the Statistics File for VeriMove

No changes have been made to the Statistics File for the current release. No conversion is necessary when upgrading from the previous VeriMove release to the current release.

Verifying Your Installation

The VeriMove installation includes sample jobs to validate your software and database installation.

Running a Sample Job from the GUI

1. From the VeriMove main menu, choose either to:
 - a. Double-click IVPSampleJobExternalCASSFormat2 (for External CASS processing) or IVPSampleJobInternalCASSFormat2 (for Internal CASS processing).
 - b. Select the job and then choose **Job > Edit**.
2. Under the General tab:
 - a. Specify the path to your NCOA^{Link} database.
 - b. Specify the path to your Daily Delete database.
3. Under the Files/Reports tab, verify that the paths to the Input file, Output file, and Processing Summary Report file point to your installed location (defaults to C:\PB\VeriMove).
4. If you use External CASS processing, go to [step 6](#).
5. If you use Internal CASS processing:
 - a. Under the CASS tab, select Internal CASS processing and specify the path to the City file, ZIP+4 file, and the location to write the USPS 3553 Report file.
 - b. Under the DPV/LACSLink/SuiteLink tab, specify the path to the DPV, LACS^{Link}, and Suite^{Link} databases.
 - c. Click Ok to save your changes and return to the main menu.
6. Click the GO button or right click and select Run from the drop down menu.
7. When the job completes, the Last Run Status column displays "Completed". If your sample job did not run to successful completion, Last Run Status displays "Failed".
8. If the sample job failed, please see the event.log for details.
9. Review your NCOA^{Link} Processing Summary Report for expected results.

Running a Sample Job from the Command Line Using mu.exe

1. From your installed location (defaults to C:\PB\VeriMove), go to the SampleData folder.
2. Open IVPSampleJobExternalCASSFormat2 (for External CASS processing) or IVPSampleJobInternalCASSFormat2 (for Internal CASS processing) in a text editor. Edit the following sample job fields.

Field	Description
NCOADataPath	Path to the NCOA ^{Link} database.
NCOADailyDelete	Path to the Daily Delete database.
InputFilePath	Path to the input file.
OutputFile1Path	Path to the output file.
StatisticsReportFilePath	Path to the location to write the Statistics Report File.
CityFilePath	Internal CASS processing only. Path to the City file.
PrimaryZip4FilePath	Internal CASS processing only. Path to the Primary ZIP + 4 file.
USPS3553ReportFilePath	Internal CASS processing only. Path to the location to write the USPS Form 3553 (CASS Summary Report).
DPVDataFilePath	Internal CASS processing only. Path to the USPS DPV database.
LACSLinkDataLocation	Internal CASS processing only. Path to the USPS LACS ^{Link} database.
SuiteLinkDataLocation	Internal CASS processing only. Path to the USPS Suite ^{Link} database.

3. Open a command window and navigate to your installed VeriMove location.
4. Run VeriMove from the command line using mu.exe and your newly edited sample job def. For example:

```
mu.exe samplejob C:\PB\VeriMove\SampleData\IVPSampleJobInternalCASSFormat2.def
```
5. When the job completes, the message "Job Completed" displays.
6. If your sample job did not run to successful completion, an error message indicating the issue displays on the screen and in the event log.
7. Review your NCOA^{Link} Processing Summary Report for expected results.

Running a Sample Job from the Command Line Using FTCmd.exe

1. Follow steps 1-5 in "Running a Sample Job from the GUI" on page 21.
2. Open a command window and navigate to your installed VeriMove location.
3. Run VeriMove from the command line using FTCmd.exe and the sample job you edited using the GUI. For example:

```
FTCmd.exe IVPSampleJobInternalCASSFormat2
```
4. When the job completes, you are returned to the command prompt.
5. If the job did not run to completion, check your event log for information.
6. Review your NCOA^{Link} Processing Summary Report and output for expected results.

Installing Product Updates

To install a VeriMove product update, refer to the readme file that accompanies the product update. The readme file contains pertinent information related to the product update and includes a description of the required steps for installing the product update on your system.

Installing Your Software License Keys

Pitney Bowes distributes new VeriMove software license keys on an annual basis.

Installing Your NCOA^{Link} and Site Support License Keys

To install your NCOA^{Link} and Site Support license keys, follow these steps:

1. Launch the VeriMove GUI screen from the Windows Desktop by selecting **Start > Programs > Pitney Bowes > VeriMove > VeriMove**.
2. Select **Tools > Options > NCOA/Link**.
3. Click the Edit button next to the key field that you want to update.
4. Enter your new license key(s) then click **OK**.
5. Click **OK** again once you return to the VeriMove GUI screen.

Installing the VeriMoveTM CASSTM Key for Internal CASSTM Processing

To install your VeriMoveTM CASSTM key for Internal CASSTM processing, follow these steps:

1. Launch the VeriMove GUI screen from the Windows Desktop by selecting **Start > Programs > Pitney Bowes > VeriMove > VeriMove**.
2. Select **Tools > Options > NCOA/Link**.
3. Click the Edit button next to the CASSTM key field to update.
4. Enter your new CASSTM key for Internal CASSTM processing, then click **OK**.
5. Click **OK** again once you return to the VeriMove GUI screen.

Getting Started with VeriMove

For information on getting started with VeriMove, refer to your *VeriMove User's Guide*.

Installing VeriMove on Unix

In this chapter:

- ◆ Before You Begin the Unix Installation26
- ◆ Installing VeriMove on Unix.....26
- ◆ VeriMove Databases.....33
- ◆ Installing NCOA^{Link} Data33
- ◆ Installing the Daily Delete File.....37
- ◆ Installing the USPS CASS Databases.....38
- ◆ Converting the Statistics File for VeriMove.....39
- ◆ Verifying Your Installation39
- ◆ Installing Product Updates40
- ◆ Installing Software License Keys40
- ◆ Getting Started with VeriMove.....40

Before You Begin the Unix Installation

This section describes the requirements for processing with VeriMove on a Unix platform.

Unix Requirements

The Unix system requirements are:


- A supported version of Unix. For a list of supported versions of Unix, see the “Supported Platforms” document available at <http://www.g1.com/support>.
- 1 GHz processor (2 GHz processor or faster recommended for better performance)
- To determine the required disk capacity, multiply the size of the largest file to be processed by at least 2, 3, or 4. Add 30 GB to that total. Each file to be processed must be contained in one logical partition. 10,000 RPM or faster drives are recommended for better performance. Note that the amount of hard disk space required also depends on the type of output required. For example, if you include the input data in the output file, more space is required than if you do not. You will need approximately 20 GB for USPS data. 40 GB (20 GB for production data plus 20 GB for decompressing USPS data updates) is recommended.
- Additional space for databases:

Database	Additional Space Required
Addressing databases (zip4us.dir and city.dir)	Approximately 1.1 GB
Early Warning System (EWS) Option	300 KB
Enhanced Line of Travel (LOT) Option	350 MB
Delivery Point Validation (DPV) Option	900 MB
LACS ^{Link} Option	375 MB
Suite ^{Link} Option	525 MB

- 2 GB RAM
- DVD drive (if loading from DVD)
- Internet Access — The USPS requires all NCOA^{Link} licensees to use the Daily Delete file. The Daily Delete file contains corrections to the currently distributed databases. The Daily Delete file and the NCOA^{Link} data are no longer provided on DVD and are currently provided by Internet download only.
- License for NCOA^{Link}
- User account with administrator rights

Installing VeriMove on Unix

This section describes the steps for installing VeriMove on Unix from Internet download or DVD.

-
-  Pitney Bowes delivers VeriMove software for the Unix platform via Internet download. If needed, you can obtain installation media at an additional charge from the Pitney Bowes eStore. Please log in to the Pitney Bowes eStore for media purchasing and shipping.
-

Installing VeriMove on Unix from Internet Download

To install VeriMove on Unix from Internet download, follow these steps.

1. Access the Technical Support website at <http://www.g1.com/support> and log in accordingly.
2. Click **My Products**.
3. Click **VeriMove**.
4. Click **View Available Downloads**.
5. Download the appropriate installation file to Windows.
6. Extract the files.
7. Use an FTP type of program to binary transfer the 'install', 'nlkxyz.taz', and 'vmrls' files from your Windows machine to your desired platform.
8. Run the install script:

```
./install
```

9. Follow the instructions provided in the installation script. The installation script is a conversational package that queries both you and your system for information.
10. If you are upgrading to a new release, VeriMove may require that the JobStats.dat file be in a new format prior to VeriMove processing. If the new release needs to upgrade the Jobstats file, the install process converts the JobStats.dat file into the new format for you and displays messages similar to the following:

```
Converting old statistics file to new format.
```

```
statconv - VeriMove Statistics File Conversion Utility  
Copyright (C) YYYY, Pitney Bowes Inc.
```

```
100% complete.  
Statistics conversion completed successfully.
```

```
VeriMove install complete.
```

If this is a new install or you are installing into a new VeriMove directory, no conversion message displays and the product is now ready to use after the configuration file has been verified to meet your needs as described in the next step.

11. Edit your configuration file.



The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing any preset default values.

- a. If you are a **new** VeriMove user, the installation program installs the config.ini configuration file as part of the normal installation process.
 - Enter the appropriate information in the following fields in the config.ini configuration file.
 - For the remaining fields in the config.ini configuration file, Pitney Bowes recommends you use the default values.

For detail information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Configuration File Field Descriptions (Part 1 of 2)

Field	Description
Registered Company	PAF registered company name.
Registered User	PAF registered user name.
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA Use High Memory	<p>Specify whether to use high memory using these codes:</p> <ul style="list-style-type: none"> • 0 — Turns off the large memory model. This is referred to as the small memory model. Use this option when only a small amount of limited real memory is available to you. The default value is 0. • 1 — Turns on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free real memory available (see note below). <p>This setting may affect the performance of your system. Setting this to 1, causes a number of database tables to be loaded into memory. The set up of the database takes more time at the beginning of a run but may improve performance if your platform has lots of physical memory.</p> <p>When VeriMove is set to "Large Memory Model" (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the "L" (Large) memory model. When VeriMove is set to "Small Memory Model" (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the "U" (Ultra) memory model.</p> <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: For HP-UX Unix, if you are running on an Itanium based machine, the large memory model will not work for NCOA^{Link} processing. Set this option to 0.</p>

Configuration File Field Descriptions (Part 2 of 2)

Field	Description
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to have VeriMove load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order even if you are NOT using the small memory model enhancement to achieve optimum performance.</p>
NCOA Use Flat Single	<p>Specify whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Specify whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).
ReportPath	Path name for generated report files.
CASSerialNumber	Pitney Bowes provided CASS serial number if using VeriMove Internal CASS processing.
DPVKey	To perform DPV processing using the VeriMove Internal CASS processor, enter your Pitney Bowes provided DPV product software key.
LACSKey	To perform LACS ^{Link} processing using the VeriMove internal CASS processor, enter your Pitney Bowes provided LACS ^{Link} product software key.

- b. If you are an **existing** VeriMove user, the installation program installs the config.ini.distribute configuration file into the installation directory leaving your original config.ini configuration file intact.

To ensure optimum system performance, compare the config.ini.distribute file configuration options to your current configuration file to verify if any new options have been made available. You can also edit the config.ini.distribute file with your current settings and then replace your current configuration file to have the latest default configuration options.

For detail information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Installing VeriMove on Unix from DVD

This section describes the process for installing VeriMove on the Unix platform from DVD (only available from the Pitney Bowes eStore for an additional fee). To install VeriMove on Unix from DVD, follow these steps.

1. Insert the VeriMove DVD into your DVD drive.
2. If your system does not auto-mount DVDs, follow these steps:
 - a. Issue the appropriate command to indicate that the DVD device is a file system, where **xxx** is the DVD device name.
3. Change the directory to the root directory of the DVD (or to where your specific mount point is located).

```
cd <mountpoint>
```

The item <mountpoint> is the name of the mounting point for the system DVD as a file system. Change this to the correct device name for the DVD device on your system. You must have read permission on the DVD device. On some systems, this permission may be limited to root users. Also, on some systems, the file names on the DVD may be changed to all uppercase letters. List the directory on your DVD directory (**ls <mountpoint>**) to see the names of the files.

4. Run the install script:

```
./install
```

5. Follow the instructions provided in the installation script. The installation script is a conversational package that queries both you and your system for information.
6. If you are upgrading to a new release, VeriMove may require that the JobStats.dat file be in a new format prior to VeriMove processing. If the new release needs to upgrade the Jobstats file, the install process converts the JobStats.dat file into the new format for you and displays messages similar to the following:

```
Converting old statistics file to new format.
```

```
statconv - VeriMove Statistics File Conversion Utility
Copyright (C) YYYY, Pitney Bowes Inc.
```

```
100% complete.
```

```
Statistics conversion completed successfully.
```

```
VeriMove install complete.
```

If this is a new install or you are installing into a new VeriMove directory, no conversion message displays and the product is now ready to use after the configuration file has been verified to meet your needs as described in the next step.

7. Edit your configuration file.



The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing any preset default values.

- a. If you are a **new** VeriMove user, the installation program installs the config.ini configuration file as part of the normal installation process.
 - Enter the appropriate information in the following fields in the config.ini configuration file.
 - For the remaining fields in the config.ini configuration file, Pitney Bowes recommends you use the default values.

For information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Configuration File Field Descriptions (Part 1 of 2)

Field	Description
Registered Company	PAF registered company name.
Registered User	PAF registered user name.
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA Use High Memory	Specify whether to use high memory using these codes: <ul style="list-style-type: none"> • 0 — Turns off the large memory model. This is referred to as the small memory model. Use this option when only a small amount of limited real memory is available to you. The default value is 0. • 1 — Turns on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free real memory available (see note below). <p>This setting may affect the performance of your system. Setting this to 1, causes a number of database tables to be loaded into memory. The set up of the database takes more time at the beginning of a run but may improve performance if your platform has lots of physical memory.</p> <p>When VeriMove is set to "Large Memory Model" (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the "L" (Large) memory model. When VeriMove is set to "Small Memory Model" (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the "U" (Ultra) memory model.</p> <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: For HP-UX Unix, if you are running on an Itanium based machine, the large memory model will not work for NCOA^{Link} processing. Set this option to 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>

Configuration File Field Descriptions (Part 2 of 2)

Field	Description
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to have VeriMove load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>
NCOA Use Flat Single	<p>Specify whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Specify whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).
ReportPath	Path name for generated report files.
CASSerialNumber	Pitney Bowes provided CASS serial number if using VeriMove Internal CASS processing.
DPVKey	To perform DPV processing using the VeriMove Internal CASS processor, enter your Pitney Bowes provided DPV product software key.
LACSKey	To perform LACS ^{Link} processing using the VeriMove internal CASS processor, enter your Pitney Bowes provided LACS ^{Link} product software key.

If you are an **existing** VeriMove user, the installation program installs the config.ini.distribute configuration file into the installation directory leaving your original config.ini configuration file intact.

To ensure optimum system performance, compare the config.ini.distribute file configuration options to your current configuration file to verify if any new options have been made available. You can also edit the config.ini.distribute file with your current settings and then replace your current configuration file to have the latest default configuration options.

For detail information on all config.ini configuration file fields, please see Chapter 6, Configuring Your VeriMove installation.

VeriMove Databases

The following table describes the VeriMove databases.

Databases, Delivery Methods, and Update Requirements

Database	Delivery Method/Source	Required/Optional	Updates
NCOA ^{Link} Datasets	Download from USPS website or DVD.	Required for all licensees.	Monthly or weekly (depending on license level)
NCOA ^{Link} - Daily Delete File	Download from USPS website.	Required for all licensees.	Daily
<ul style="list-style-type: none"> • CASS • Delivery Point Validation (DPV) • LACS^{Link} • Suite^{Link} 	<ul style="list-style-type: none"> • Pitney Bowes support site at www.g1.com/support. Download at no charge. No backup media). • Pitney Bowes eStore at http://store.pbinsight.com. Download at no charge. Purchase backup media. • Mainframe tape recipients receive physical media. 	<ul style="list-style-type: none"> • VeriMove requires the CASS database for Internal CASS processing. • USPS requires DPV, LACS^{Link}, and Suite^{Link} processing to generate a USPS Form 3553. 	Monthly
Early Warning System (EWS)	Download from USPS website. Pitney Bowes sends a monthly update of the EWS File with the CASS database updates.	Optional for all licensees.	Weekly

Installing NCOA^{Link} Data

This section describes how to install NCOA^{Link} data on the Unix platform. The USPS delivers the NCOA^{Link} data files in a compressed or tarred format. As part of the installation process, you must uncompress/expand the USPS NCOA^{Link} data files using the VeriMove explode process to make the data files fully functional. Prior to installing the NCOA^{Link} data:

- **If you are a new customer**, you must set up your configuration file prior to attempting to install the NCOA^{Link} data. For more information on the configuration file properties, see [step 11](#) in "Installing VeriMove on Unix from Internet Download" on page 27 or [step 7](#) in "Installing VeriMove on Unix from DVD" on page 30.
- **If there is more than one physical drive on the system that executes VeriMove jobs**, install the NCOA^{Link} data on a separate physical drive from the VeriMove software, operating system, and pagefile/Virtual Memory. This may result in a major performance improvement.

Obtaining the NCOA^{Link} Data

Pitney Bowes does not supply the NCOA^{Link} data. You must contact the USPS directly to obtain the NCOA^{Link} data. The USPS requires all licensees to obtain product updates from the USPS Electronic Product Fulfillment (EPF) website. In the event that the USPS sends you NCOA^{Link} data on a DVD, we have included instructions for installing from a DVD. Currently the USPS mandate is to download the NCOA^{Link} data from the USPS EPF website. In most cases you will use the first option below.

1. Download the NCOA^{Link} data from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following additional steps required when downloading the NCOA^{Link} data from the USPS EPF web site:
 - a. Navigate to the location of the downloaded NCOA^{Link} data file.
 - b. If necessary, transfer the NCOA^{Link} data file to your Unix system.
 - c. The downloaded NCOA^{Link} data from the USPS EPF site may be in zipped or tar format. Unzip or untar the data before running explode.
 - d. Navigate to the folder that contains the unzipped or untarred NCOA^{Link} data. The number of files in the directory varies depending on the database format you are licensed to use (hash or flat). The following table describes the unzipped/untarred files.

NCOA^{Link} Data Files

File Name	Description
clk.zip	Zipped data file that contains necessary NCOA ^{Link} data files.
dvdhdr01.dat dvdhdr02.dat	Files that store the contents of the NCOA ^{Link} database.
rv9.zip	Zipped data file that contains additional NCOA ^{Link} data files.
clk.*	Additional NCOA ^{Link} tables present when you receive 18 month (hash or flat) or 48 month data (hash or flat).
ank.*	Additional NCOA ^{Link} tables present only when you receive ANKLink data (hash or flat).

NOTE: After the explode process, these files are renamed to clk.* file names.

- e. Proceed to the section "[Using explode.sh to Explode the NCOA^{Link} Files](#)" on page 34.
2. If you received NCOA^{Link} data on a DVD, follow these steps:
 - a. Insert the NCOA^{Link} data DVD into the DVD drive of a Windows PC. You must use a Windows PC regardless of your execution platform.
 - b. Proceed to the section "[Using explode.sh to Explode the NCOA^{Link} Files](#)" on page 34.

Using explode.sh to Explode the NCOA^{Link} Files

To explode the NCOA^{Link} files to your database location using explode.sh, follow these steps:

1. Browse to the location where you installed VeriMove and go to the **Tables** subfolder. For example, /PB/Veri Move/nl k/Tabl es.

2. Edit explode.sh as follows.
 - a. Omit all quotes from path names. If you leave the INPUTDATAPATH= and NCOADATADESTINATION= values blank, you will be asked for this information in an interactive query mode.
 - Change SET INPUTDATAPATH= to the location of the NCOA^{Link} data.
 - Change SET NCOADATADESTINATION= to the path where you want to install the NCOA^{Link} data. This folder is automatically created if it does not already exist. For example, if you are installing the data to /PB/data/USPSDATA, specify SET NCOADATADESTINATION=/PB/data/USPSDATA.
 - b. This item only applies if you are exploding the NCOA^{Link} data from a DVD.

The explode.sh script defaults to the values required to explode the NCOA^{Link} data from a location (not DVD). To explode from a DVD, change set USEDVDLOAD=N to set USEDVDLOAD=Y.
 - c. The last three items only affect Flat File databases and are otherwise ignored.
 - Change Set MVSONLY=N to Y only if you are installing on an MVS platform. This will avoid a preprocessing step that is needed for other platforms.
 - Change Set FLATSI NGLE=N to Y if you are using the Single Flat File database.
 - Change Set FLATATOZ=Y to N if you set FLATSI NGLE=Y and do not also want to use the 26 Flat File A-Z database.
 - d. In addition, explode.sh includes the following fields for DVD loading:
 - Change exmount="" to the DVD mount command used for your system.
 - Change exunmount="" to the DVD unmount command used for your system.Examples of different types of mount and unmount commands are located in explode.sh.
3. Save and close explode.sh under a new name (i.e., myexplode.sh) that will not be overwritten by future updates and installations.
4. Run your modified version of explode.sh.
5. One of the following messages displays.
 - a. If you are exploding from a location, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****
```

This script installs an NCOA^{Link} database from a download location onto your hard drive. This can require up to 20 GBytes of free space on your hard drive.
 - b. If you are exploding from a DVD, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****
```

This script installs an NCOA^{Link} database from two DVDs onto your hard drive. This can require up to 20 GBytes of free space on your hard drive.
6. The following message displays:
 - a. If you are exploding from a location, the following messages displays:

Folder dst is about to be loaded from the
NCOALink database found at location src

WARNING -- If you proceed from this point, all data in
folder dst will be erased first. You may type
Control -C to abort this process now without erasing anything.

- b. If you are exploding from a DVD, the following messages displays:
Folder dst is about to be loaded from the
NCOALink database found on DVD src

WARNING -- If you proceed from this point, all data in
folder dst will be erased first. You may type
Control -C to abort this process now without erasing anything.

The warning above only displays if the destination folder contains data.
- 7. The explode.sh process continues as follows:
 - a. If you are exploding from a location, the following messages display:
Copying from location (src) to dst
File copy complete.
 - b. If you are exploding from a DVD, the following messages display:
Insert NCOALink data DVD 1 from the USPS into Drive src
Press any key to continue
Copying DVD 1 (src) to dst
DVD 1 copy complete.
Insert NCOALink data DVD 2 from the USPS into Drive src. Press any key to continue.
Copying DVD 2 (src) to dst
DVD 2 copy complete.
- 8. After the NCOALink data has been copied, the .zip (zipped) files are automatically expanded. Then, the .szp (USPS-compressed) files are expanded. Afterward, a series of preprocesses and tests are performed. If there are errors, one of the following messages displays:
**** FILE NOT FOUND: filename
**** ERROR COPYING FILE: filename
**** ERROR PROCESSING FILE: filename
**** ERROR: message
This message is followed by:
FAILURE!!!
Press any key to continue
- 9. If the message indicates that there is a file in the VeriMove installation folder missing, there was a problem with your NCOALink data explode process. There may have been a problem copying the NCOALink data from the source location.
A process called "TestFileSha" produces a file called TablesTestFileSha.log in the parent folder of the folder containing these scripts. This file contains detailed descriptions of the tests performed and any errors that have occurred. If an error occurs, the following message displays:
**** ERROR: Verifying Data File Signatures
If you get this message, the data files indicated in the log file were corrupted. You may have corrupted NCOALink data and need to replace the download source (downloaded file or DVD).
- 10. If there are no problems with these various processes and tests, the following message displays to indicate that the process completed. You must still check the log file generated during the explode process to ensure the explode process ran error free.
SUCCESS!!!
Press any key to continue

Explode Process Impact on Business Name Matching Tables

VeriMove uses three tables during the Business Name Matching process to compare records in your input file against the NCOA^{Link} data. These three tables, formatted and installed in the Tables directory during VeriMove installation, are only used for Business Name Matching. These tables do not change your input records and do not affect VeriMove output of business names but are simply used to aid in comparing your input records against the NCOA^{Link} data to determine a Business Name match.

Table Name	Description
REDEFINES-WORD-LIST.txt	Maps commonly used abbreviations to full words
JUNK-WORD-LIST.txt	Words that are ignored during Business Name Matching
COMMON-WORD-LIST.txt	Words that are given higher value when calculating Business Name Match percentages (used to determine whether or not a match has been achieved)

Each time you explode the NCOA^{Link} files to your database location, these files are copied from the Tables directory to your database location. Subsequent VeriMove installations overwrite these tables with the tables VeriMove used to certify with the USPS. If you customize these tables, be sure to backup these files before installing a new VeriMove release. After installing a new VeriMove release, replace the installed VeriMove USPS-certified tables with the backup versions of your customized tables.

i **IMPORTANT!** Pitney Bowes certifies VeriMove with the USPS using these three tables. Editing these tables may result in an increase or decrease in your Business Name Matching rate. If your Business Name Matching rate changes significantly, the USPS may audit your Business Name Matching results and require you to recertify using your customized versions of these three tables.

For more information, please refer to the section "Using Business Name Matching" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

Installing the Daily Delete File

USPS regulations require all NCOA^{Link} licensees to use the Daily Delete File. Licensees must download and install this file daily. To install the Daily Delete file, follow these steps.

1. Browse to the location where you installed VeriMove and go to the Utilities subfolder. For example, C:\PB\VeriMove\Utilities.
2. Download the Daily Delete file. The Daily Delete file is available from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following:
 - You can use the getFileHTTps.exe utility to download the Daily Delete file. However, the getFileHTTps.exe utility:
 - Can only be used to download files from the USPS <https://epf.usps.gov> secured web site.
 - Only downloads the most current version of the USPS file requested.
 - Is only available for the Windows platform.

For more information on using the getFileHTTps.exe utility, see Chapter 8, Utilities in your *VeriMove User's Guide*.

 - Windows, Unix, and Linux users should download the ASCII version of the Daily Delete file.
 - z/OS and IBM i users should download the EBCDIC version of the file.


3. If you run VeriMove jobs on Unix, Linux, or a remote Windows system, follow these steps:
 - a. Start an FTP session with your execution platform.
 - b. FTP the files in binary mode to a directory that VeriMove can access.

Installing the USPS CASS Databases

This section describes the procedure for installing the CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases for use with the VeriMove Internal CASS processor or an external CASS processor (such as CODE-1 Plus or Finalist).

Installing Databases for Internal CASS Processing

VeriMove Internal CASS processing is available on Windows, Unix, and Linux platforms. To install CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases for use with VeriMove Internal CASS processing, follow these steps:

 Some databases are very large, require a great deal of time to download, and consume a large amount of disk space. Be sure that you have sufficient space before you begin this process.

1. Download the databases:
 - a. To download the CASS, DPV, LACS^{Link}, or Suite^{Link} databases, go to <http://www.g1.com/support> and log in to the Support site. If you do not have a user ID and password, contact Pitney Bowes Technical Support at 800-367-6950. Locate the file(s) to download and initiate the download.
 - b. To download EWS data, browse to the location where you installed VeriMove and go to the Utilities subfolder. For example, C:\PB\VeriMove\Utilities. Use getFileHttp.exe to download the EWS file from https://ribbs.usps.gov/cassmass/documents/tech_guides/. For more information, see Chapter 8, Utilities in your *VeriMove User's Guide*.
2. Open the .zip file and extract the contents. Or, if the file is an .exe file, double-click on the .exe file to extract the contents.
3. If you run VeriMove jobs on a remote Windows system:
 - a. Establish an FTP session with your execution system.
 - b. FTP the files in binary mode to a directory that VeriMove can access.

Installing Databases for External CASS Processing

If you are using an external CASS processor such as Finalist or CODE-1 Plus, see that product's documentation for instructions on how to install the CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases.

After you update your CASS product data, follow these steps only if you are using the Manually Registered Statistics option in VeriMove. For information on manually registered statistics, see the section "Specifying CASS Settings" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

1. Launch VeriMove and open a job.
2. Go to the **CASS** tab.
3. Click the **Edit** button next to **Use Manually Registered Statistics**.
4. Update the date to reflect the date of the database(s) you just downloaded. Click **OK**.

Converting the Statistics File for VeriMove


No changes have been made to the Statistics File for the current release. No conversion is necessary when upgrading from the previous VeriMove release to the current release.

Verifying Your Installation

The VeriMove installation includes sample jobs to validate your software and database installation.

Running a Sample Job Using mu

1. From your installed location (default /nlk), go to the nlk/IVP/UNIX folder.
2. Open UnixIVPSampleJobExternalCASSFormat2 (for external CASS Processing) or UnixIVPSampleJobInternalCASSFormat2 (for internal CASS Processing) in a text editor.

 Alternately, Unix users can edit the sample job in the VeriMove GUI and then export the sample job to your Unix installation as an XML document.

3. Edit the following sample job fields.

Field	Description
NCOADataPath	Path to the NCOA ^{Link} database.
NCOADailyDelete	Path to the Daily Delete database
InputFilePath	Path to the input file.
OutputFile1Path	Path to the output file.
StatisticsReportFilePath	Path to the location to write the Statistics Report File.
CityFilePath	Internal CASS processing only. Path to the City file.
PrimaryZip4FilePath	Internal CASS processing only. Path to the Primary ZIP + 4 file.
USPS3553ReportFilePath	Internal CASS processing only. Path to the location to write the USPS Form 3553 (CASS Summary Report).
DPVDataFilePath	Internal CASS processing only. Path to the USPS DPV database.
LACSLinkDataLocation	Internal CASS processing only. Path to the USPS LACS ^{Link} database.
SuiteLinkDataLocation	Internal CASS processing only. Path to the USPS Suite ^{Link} database.

4. Navigate to your installed VeriMove location.
5. Run VeriMove from the command line using mu and your newly edited sample job def.
`mu sampl ejob IVP/UNI X/Uni xI VPSampl eJobI nternal CASSFormat2. def`
6. When the job is complete, the message "Job Completed." displays.
7. If the sample job failed, an error message displays on the screen. Please see the event log for details.
8. Review your NCOA^{Link} Processing Summary Report and output for expected results.

Installing Product Updates

To install a VeriMove product update, refer to the readme file that accompanies the product update. The readme file contains pertinent information related to the product update and includes a description of the required steps for installing the product update on your system.

Installing Software License Keys

Pitney Bowes distributes new VeriMove software license keys on an annual basis.

Installing Your NCOA^{Link} License Key

To install your NCOA^{Link} license key, follow these steps:

1. Navigate to the VeriMove™ install on your machine.
2. Open and edit the VeriMove™ configuration file as a text file.
3. Replace the previous NCOA^{Link} key in the "NCOALink Key=" field with your new NCOA^{Link} key.
4. Save the configuration file.

Installing the VeriMove™ CASS™ Key for Internal CASS™ Processing

To install your VeriMove™ CASS™ key for Internal CASS™ processing, follow these steps:

1. Navigate to the VeriMove™ install on your machine.
2. Open and edit the VeriMove™ configuration file as a text file.
3. Replace the previous NCOA^{Link} key in the "CASSSerialNumber=" field with your new CASS™ key for Internal CASS™ processing,.
4. Save the configuration file.

Getting Started with VeriMove

For information on getting started with VeriMove, refer to your *VeriMove User's Guide*.

Installing VeriMove on Linux

In this chapter:

- ♦ Before You Begin the Linux Installation.42
- ♦ Installing VeriMove on Linux.42
- ♦ VeriMove Databases.49
- ♦ Installing NCOA^{Link} Data on Linux49
- ♦ Installing the Daily Delete File.53
- ♦ Installing the USPS CASS Databases.54
- ♦ Converting the Statistics File for VeriMove55
- ♦ Verifying Your Installation55
- ♦ Installing Product Updates56
- ♦ Installing Your Software License Keys.56
- ♦ Getting Started with VeriMove.56

Before You Begin the Linux Installation

This section describes the requirements for processing with VeriMove on a Linux platform.

Linux Requirements

The Windows system requirements are:

- A supported version of Linux. For a list of supported versions of Linux, see the “Supported Platforms” document available at <http://www.g1.com/support>.
- 1 GHz processor (2 GHz processor or faster recommended for better performance)
- To determine the required disk capacity, multiply the size of the largest file to be processed by at least 2, 3, or 4. Add 30 GB to that total. Each file to be processed must be contained in one logical partition. 10,000 RPM or faster drives are recommended for better performance. Note that the amount of hard disk space required also depends on the type of output required. For example, if you include the input data in the output file, more space is required than if you do not. You will need approximately 20 GB for USPS data. 40 GB (20 GB for production data plus 20 GB for decompressing USPS data updates) is recommended.
- Additional space for databases:

Database	Additional Space Required
Addressing databases (zip4us.dir and city.dir)	Approximately 1.1 GB
Early Warning System (EWS) Option	300 KB
Enhanced Line of Travel (LOT) Option	350 MB
Delivery Point Validation (DPV) Option	900 MB
LACS ^{Link} Option	375 MB
Suite ^{Link} Option	525 MB

- 2 GB RAM
- DVD drive (if loading from DVD)
- Internet Access — The USPS requires all NCOA^{Link} licensees to use the Daily Delete file. The Daily Delete file contains corrections to the currently distributed databases. The Daily Delete file and the NCOA^{Link} data are no longer provided on DVD and are currently provided by Internet download only.
- License for NCOA^{Link}
- User account with administrator rights

Installing VeriMove on Linux

This section describes the steps for installing VeriMove on Linux from Internet download or DVD.



Pitney Bowes delivers VeriMove software for the Linux platform via Internet download. If needed, you can obtain installation media at an additional charge from the Pitney Bowes eStore. Please log in to the Pitney Bowes eStore for media purchasing and shipping.

Installing VeriMove on Linux from Internet Download

To install VeriMove on Linux from Internet download, follow these steps.

1. Access the Technical Support website at <http://www.g1.com/support> and log in accordingly.
2. Click **My Products**.
3. Click **VeriMove**.
4. Click **View Available Downloads**.
5. Download the appropriate installation file to Windows.
6. Extract the files.
7. Use an FTP type of program to binary transfer the 'install', 'nlkxyz.taz', and 'vmrls' files from your Windows machine to your desired platform.
8. Run the install script:

```
./install
```

9. Follow the instructions provided in the installation script. The installation script is a conversational package that will query both you and your system for information.

If you are upgrading to a new release, VeriMove may require that the JobStats.dat file be in a new format prior to VeriMove processing. If the new release needs to upgrade the Jobstats file, the install process converts the JobStats.dat file into the new format for you and displays messages similar to the following:

```
Converting old statistics file to new format.
```

```
statconv - VeriMove Statistics File Conversion Utility  
Copyright (C) YYYY, Pitney Bowes Inc.
```

```
100% complete.  
Statistics conversion completed successfully.
```

```
VeriMove install complete.
```

If this is a new install or you are installing into a new VeriMove directory, no conversion message displays and the product is now ready to use after the configuration file has been verified to meet your needs as described in the next step.

10. Edit your configuration file.



The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing any preset default values.

- a. If you are a **new** VeriMove user, the installation program installs the config.ini configuration file as part of the normal installation process.
 - Enter the appropriate information in the following fields in the config.ini configuration file.
 - For the remaining fields in the config.ini configuration file, Pitney Bowes recommends you use the default values.

For detail information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Configuration File Field Descriptions (Part 1 of 3)

Field	Description
Registered Company	PAF registered company name.
Registered User	PAF registered user name.

Configuration File Field Descriptions (Part 2 of 3)

Field	Description
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA Use High Memory	<p>Specify whether to use high memory using these codes:</p> <ul style="list-style-type: none"> • 0 — Turns off the large memory model. This is referred to as the small memory model. Use this option when only a small amount of limited real memory is available to you. The default value is 0. • 1 — Turns on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free real memory available (see note below). <p>This setting may affect the performance of your system. Setting this to 1, causes a number of database tables to be loaded into memory. The set up of the database takes more time at the beginning of a run but may improve performance if your platform has lots of physical memory.</p> <p>When VeriMove is set to "Large Memory Model" (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the "L" (Large) memory model. When VeriMove is set to "Small Memory Model" (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the "U" (Ultra) memory model.</p> <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: For HP-UX Unix, if you are running on an Itanium based machine, the large memory model will not work for NCOA^{Link} processing. Set this option to 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>

Configuration File Field Descriptions (Part 3 of 3)

Field	Description
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to have VeriMove load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>
NCOA Use Flat Single	<p>Specify whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Specify whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).
ReportPath	Path name for generated report files.
CASSerialNumber	Pitney Bowes provided CASS serial number if using VeriMove Internal CASS processing.
DPVKey	To perform DPV processing using the VeriMove Internal CASS processor, enter your Pitney Bowes provided DPV product software key.
LACSKey	To perform LACS ^{Link} processing using the VeriMove internal CASS processor, enter your Pitney Bowes provided LACS ^{Link} product software key.

- b. If you are an **existing** VeriMove user, the installation program installs the config.ini.distribute configuration file into the installation directory leaving your original config.ini configuration file intact.

To ensure optimum system performance, compare the config.ini.distribute file configuration options to your current configuration file to verify if any new options have been made available. You can also edit the config.ini.distribute file with your current settings and then replace your current configuration file to have the latest default configuration options.

For detail information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Installing VeriMove on Linux from DVD

This section describes the process for installing VeriMove on the Unix platform from DVD (only available from the Pitney Bowes eStore for an additional fee). To install VeriMove on Linux from DVD, follow these steps.

1. Insert the VeriMove DVD into your DVD drive.
2. If your system does not auto-mount DVDs, follow these steps:
 - a. Issue the appropriate command to indicate that the DVD device is a file system, where **xxx** is the DVD device name.

```
mount /dev/xxx
```
 - b. If necessary, enter the `/etc/filesystem` command to update your system to recognize this file system. Specify the correct device name for the DVD device on your system.
3. Change to the root directory of the DVD (or to your specific mount point location).

```
cd <mountpoint>
```

i The item `<mountpoint>` is the name of the mounting point for the system DVD as a file system. Change this to the correct device name for the DVD device on your system. You must have read permission on the DVD device. On some systems, this permission may be limited to root users. Also, on some systems, the file names on the DVD may be changed to all uppercase letters. List the directory on your DVD directory (**ls <mountpoint>**) to see the names of the files.

4. Run the install script:

```
./install
```
5. Follow the instructions provided in the installation script. The installation script is a conversational package that will query both you and your system for information.
6. If you are upgrading to a new release, VeriMove may require that the `JobStats.dat` file be in a new format prior to VeriMove processing. If the new release needs to upgrade the `Jobstats` file, the install process converts the `JobStats.dat` file into the new format for you and displays messages similar to the following:

```
Converting old statistics file to new format.
```

```
statconv - VeriMove Statistics File Conversion Utility  
Copyright (C) YYYY, Pitney Bowes Inc.
```

```
100% complete.  
Statistics conversion completed successfully.
```

```
VeriMove install complete.
```

If this is a new install or you are installing into a new VeriMove directory, no conversion message displays and the product is now ready to use after the configuration file has been verified to meet your needs as described in the next step.

7. Edit your configuration file.

i The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing any preset default values.

- a. If you are a **new** VeriMove user, the installation program installs the config.ini configuration file as part of the normal installation process.
- Enter the appropriate information in the following fields in the config.ini configuration file.
 - For the remaining fields in the config.ini configuration file, Pitney Bowes recommends you use the default values.

For information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Configuration File Field Descriptions (Part 1 of 2)

Field	Description
Registered Company	PAF registered company name.
Registered User	PAF registered user name.
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA Use High Memory	Specify whether to use high memory using these codes: <ul style="list-style-type: none"> • 0 — Turns off the large memory model. This is referred to as the small memory model. Use this option when only a small amount of limited real memory is available to you. The default value is 0. • 1 — Turns on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free real memory available (see note below). <p>This setting may affect the performance of your system. Setting this to 1, causes a number of database tables to be loaded into memory. The set up of the database takes more time at the beginning of a run but may improve performance if your platform has lots of physical memory.</p> <p>When VeriMove is set to “Large Memory Model” (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the “L” (Large) memory model. When VeriMove is set to “Small Memory Model” (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the “U” (Ultra) memory model.</p> <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>

Configuration File Field Descriptions (Part 2 of 2)

Field	Description
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to have VeriMove load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>
NCOA Use Flat Single	<p>Specify whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Specify whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).
ReportPath	Path name for generated report files.
CASSerialNumber	Pitney Bowes provided CASS serial number if using VeriMove Internal CASS processing.
DPVKey	To perform DPV processing using the VeriMove Internal CASS processor, enter your Pitney Bowes provided DPV product software key.
LACSSKey	To perform LACS ^{Link} processing using the VeriMove internal CASS processor, enter your Pitney Bowes provided LACS ^{Link} product software key.

- b.** If you are an **existing** VeriMove user, the installation program installs the config.ini.distribute configuration file into the installation directory leaving your original config.ini configuration file intact.

To ensure optimum system performance, compare the config.ini.distribute file configuration options to your current configuration file to verify if any new options have been made available. You can also edit the config.ini.distribute file with your current settings and then replace your current configuration file to have the latest default configuration options.

For detail information on all config.ini configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

VeriMove Databases

The following table describes the VeriMove databases.

Databases, Delivery Methods, and Update Requirements

Database	Delivery Method/Source	Required/Optional	Updates
NCOA ^{Link} Datasets	Download from USPS website or DVD.	Required for all licensees.	Monthly or weekly (depending on license level)
NCOA ^{Link} - Daily Delete File	Download from USPS website.	Required for all licensees.	Daily
<ul style="list-style-type: none"> • CASS • Delivery Point Validation (DPV) • LACS^{Link} • Suite^{Link} 	<ul style="list-style-type: none"> • Pitney Bowes support site at www.g1.com/support. Download at no charge. No backup media). • Pitney Bowes eStore at http://store.pbinsight.com. Download at no charge. Purchase backup media. • Mainframe tape recipients receive physical media. 	<ul style="list-style-type: none"> • VeriMove requires the CASS database for Internal CASS processing. • USPS requires DPV, LACS^{Link}, and Suite^{Link} processing to generate a USPS Form 3553. 	Monthly
Early Warning System (EWS)	Download from USPS website. Pitney Bowes sends a monthly update of the EWS File with the CASS database updates.	Optional for all licensees.	Weekly

Installing NCOA^{Link} Data on Linux

This section describes the steps for installing NCOA^{Link} data on the Unix and Linux platforms. The USPS delivers the NCOA^{Link} data files in a compressed or tarred format. As part of the installation process, you will need to uncompress/expand the USPS NCOA^{Link} data files using the VeriMove explode process to make the data files fully functional. Prior to installing the NCOA^{Link} data:

- **If you are a new customer**, you must set up your configuration file prior to attempting to install the NCOA^{Link} data. For more information on the configuration file properties, see [step 10](#) in "Installing VeriMove on Linux from Internet Download" on page 43 or [step 7](#) in "Installing VeriMove on Linux from DVD" on page 46.
- **If there is more than one physical drive on the system that executes VeriMove jobs**, install the NCOA^{Link} data on a separate physical drive from the VeriMove software, operating system, and pagefile/Virtual Memory. This may result in a major performance improvement.

Obtaining the NCOA^{Link} Data

Pitney Bowes does not supply the NCOA^{Link} data. You must contact the USPS directly to obtain the NCOA^{Link} data. The USPS requires all licensees to obtain product updates from the USPS Electronic Product Fulfillment (EPF) website. In the event that the USPS sends you NCOA^{Link} data on a DVD, we have included instructions for installing from a DVD. Currently the USPS mandate is to download the NCOA^{Link} data from the USPS EPF website. In most cases you will use the first option below.

1. Download the NCOA^{Link} data from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following additional steps required when downloading the NCOA^{Link} data from the USPS EPF web site:
 - a. Navigate to the location of the downloaded NCOA^{Link} data file.
 - b. If necessary, transfer the NCOA^{Link} data file to your Linux system.
 - c. The downloaded NCOA^{Link} data from the USPS EPF site may be in zipped or tar format. Unzip or untar the data before running explode.
 - d. Navigate to the folder that contains the unzipped or untarred NCOA^{Link} data. The number of files in the directory varies depending on the database format you are licensed to use (hash or flat). The following table provides information on the unzipped/untarred files.

NCOA^{Link} Data Files

File Name	Description
clk.zip	Zipped data file that contains necessary NCOA ^{Link} data files.
dvdhdr01.dat dvdhdr02.dat	Files that store the contents of the NCOA ^{Link} database.
rv9.zip	Zipped data file that contains additional NCOA ^{Link} data files.
clk.*	Additional NCOA ^{Link} tables present when you receive 18 month (hash or flat) or 48 month data (hash or flat).
ank.*	Additional NCOA ^{Link} tables present only when you receive ANKLink data (hash or flat).

NOTE: After the explode process, these files are renamed to clk.* file names.

- e. Proceed to the section "[Using explode.sh to Explode the NCOA^{Link} Files](#)" on page 50.
2. If you received NCOA^{Link} data on a DVD, follow these steps:
 - a. Insert the NCOA^{Link} data DVD into the DVD drive of a Windows PC. You must use a Windows PC regardless of your execution platform.
 - b. Proceed to the section "[Using explode.sh to Explode the NCOA^{Link} Files](#)" on page 50.

Using explode.sh to Explode the NCOA^{Link} Files

To explode the NCOA^{Link} files to your database location using explode.sh, follow these steps:

1. Browse to the location where you installed VeriMove and go to the **Tables** subfolder. For example, /PB/Veri Move/nl k/Tabl es.

2. Edit explode.sh as follows.
 - a. Omit all quotes from path names. If you leave the INPUTDATAPATH= and NCOADATADESTINATION= values blank, you will be asked for this information in an interactive query mode.
 - Change SET INPUTDATAPATH= to the location of the NCOA^{Link} data.
 - Change SET NCOADATADESTINATION= to the path where you want to install the NCOA^{Link} data. This folder is automatically created if it does not already exist. For example, if you are installing the data to /PB/data/USPSDATA, specify SET NCOADATADESTINATION=/PB/data/USPSDATA.
 - b. This item only applies if you are exploding the NCOA^{Link} data from a DVD.

The explode.sh script defaults to the values required to explode the NCOA^{Link} data from a location (not DVD). To explode from a DVD, change set USEDVDLOAD=N to set USEDVDLOAD=Y.
 - c. The last three items only affect Flat File databases and are otherwise ignored.
 - Change Set MVSONLY=N to Y only if you are installing on an MVS platform. This will avoid a preprocessing step that is needed for other platforms.
 - Change Set FLATSI NGLE=N to Y if you are using the Single Flat File database.
 - Change Set FLATATOZ=Y to N if you set FLATSI NGLE=Y and do not also want to use the 26 Flat File A-Z database.
 - d. In addition, explode.sh includes the following fields for DVD loading:
 - Change exmount="" to the DVD mount command used for your system.
 - Change exunmount="" to the DVD unmount command used for your system.Examples of different types of mount and unmount commands are located in explode.sh.
3. Save and close explode.sh under a new name (i.e., myexplode.sh) that will not be overwritten by future updates and installations.
4. Run your modified version of explode.sh.
5. One of the following messages displays.
 - a. If you are exploding from a location, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****
```

This script installs an NCOA^{Link} database from a download location onto your hard drive. This can require up to 20 GBytes of free space on your hard drive.
 - b. If you are exploding from a DVD, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****
```

This script installs an NCOA^{Link} database from two DVDs onto your hard drive. This can require up to 20 GBytes of free space on your hard drive.
6. The following message displays:
 - a. If you are exploding from a location, the following messages displays:

Folder dst is about to be loaded from the
NCOALink database found at location src

WARNING -- If you proceed from this point, all data in
folder dst will be erased first. You may type
Control -C to abort this process now without erasing anything.

- b.** If you are exploding from a DVD, the following messages displays:
Folder dst is about to be loaded from the
NCOALink database found on DVD src

WARNING -- If you proceed from this point, all data in
folder dst will be erased first. You may type
Control -C to abort this process now without erasing anything.

The warning above only displays if the destination folder contains data.
- 7.** The explode.sh process continues as follows:

 - a.** If you are exploding from a location, the following messages display:
Copying from location (src) to dst
File copy complete.
 - b.** If you are exploding from a DVD, the following messages display:
Insert NCOALink data DVD 1 from the USPS into Drive src
Press any key to continue
Copying DVD 1 (src) to dst
DVD 1 copy complete.
Insert NCOA^{Link} data DVD 2 from the USPS into Drive src. Press any key to continue.
Copying DVD 2 (src) to dst
DVD 2 copy complete.
- 8.** After the NCOA^{Link} data has been copied, the .zip (zipped) files are automatically expanded. Then, the .szp (USPS-compressed) files are expanded. Afterward, a series of preprocesses and tests are performed. If there are errors, one of the following messages displays:
**** FILE NOT FOUND: filename
**** ERROR COPYING FILE: filename
**** ERROR PROCESSING FILE: filename
**** ERROR: message
This message is followed by:
FAILURE!!!
Press any key to continue
- 9.** If the message indicates that there is a file in the VeriMove installation folder missing, there was a problem with your NCOA^{Link} data explode process. There may have been a problem copying the NCOA^{Link} data from the source location.
A process called "TestFileSha" produces a file called TablesTestFileSha.log in the parent folder of the folder containing these scripts. This file contains detailed descriptions of the tests performed and any errors that have occurred. If an error occurs, the following message displays:
**** ERROR: Verifying Data File Signatures
If you get this message, the data files indicated in the log file were corrupted. You may have corrupted NCOA^{Link} data and need to replace the download source (downloaded file or DVD).
- 10.** If there are no problems with these various processes and tests, the following message displays to indicate that the process completed. You must still check the log file generated during the explode process to ensure the explode process ran error free.
SUCCESS!!!
Press any key to continue

Explode Process Impact on Business Name Matching Tables

VeriMove uses three tables during the Business Name Matching process to compare records in your input file against the NCOA^{Link} data. These three tables, formatted and installed in the Tables directory during VeriMove installation, are only used for Business Name Matching. These tables do not change your input records and do not affect VeriMove output of business names but are simply used to aid in comparing your input records against the NCOA^{Link} data to determine a Business Name match.

Table Name	Description
REDEFINES-WORD-LIST.txt	Maps commonly used abbreviations to full words
JUNK-WORD-LIST.txt	Words that are ignored during Business Name Matching
COMMON-WORD-LIST.txt	Words that are given higher value when calculating Business Name Match percentages (used to determine whether or not a match has been achieved)

Each time you explode the NCOA^{Link} files to your database location, these files are copied from the Tables directory to your database location. Subsequent VeriMove installations will overwrite these tables with the tables VeriMove used to certify with the USPS. If you customize these tables, be sure to backup these files before installing a new VeriMove release. After installing a new VeriMove release, replace the installed VeriMove USPS-certified tables with the backup versions of your customized tables.

i **IMPORTANT!** Pitney Bowes certifies VeriMove with the USPS using these three tables. Editing these tables may result in an increase or decrease in your Business Name Matching rate. If your Business Name Matching rate changes significantly, the USPS may audit your Business Name Matching results and require you to recertify using your customized versions of these three tables.

For more information, please refer to the section "Using Business Name Matching" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

Installing the Daily Delete File

USPS regulations require all NCOA^{Link} licensees to use the Daily Delete File. Licensees must download and install this file daily. To install the Daily Delete file, follow these steps.

1. Browse to the location where you installed VeriMove and go to the Utilities subfolder. For example, C:\PB\VeriMove\Utilities.
2. Download the Daily Delete file. The Daily Delete file is available from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following:
 - You can use the getFileHTTps.exe utility to download the Daily Delete file. However, the getFileHTTps.exe utility:
 - Can only be used to download files from the USPS <https://epf.usps.gov> secured web site.
 - Only downloads the most current version of the USPS file requested.
 - Is only available for the Windows platform.

For more information on using the getFileHTTps.exe utility, see Chapter 8, Utilities in your *VeriMove User's Guide*. Note the following:

 - Windows, Unix, and Linux users should download the ASCII version of the Daily Delete file.
 - z/OS and IBM i users should download the EBCDIC version of the file.


3. If you run VeriMove jobs on Unix, Linux, or a remote Windows system, follow these steps:
 - a. Start an FTP session with your execution platform
 - b. FTP the files in binary mode to a directory that VeriMove can access.

Installing the USPS CASS Databases

The procedure that you follow to install the CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases depends on whether you are using the VeriMove Internal CASS processor or an external CASS processor such as Finalist or CODE-1 Plus.

Installing Databases for Internal CASS Processing

Internal CASS processing is available on Windows, Unix, and Linux. To install CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases for use with the VeriMove internal CASS processor, follow these steps:

 Some databases are very large, require a great deal of time to download, and consume a large amount of disk space. Be sure that you have sufficient space before you begin this process.

1. Do one of the following:
 - a. To download the CASS, DPV, LACS^{Link}, or Suite^{Link} databases, go to <http://www.g1.com/support> and log in to the Support site. If you do not have a user ID and password, contact Pitney Bowes Customer Support at 800-367-6950. Locate the file(s) to download and initiate the download.
 - b. To download EWS data, browse to the location where you installed VeriMove and go to the Utilities subfolder. For example, C:\PB\VeriMove\Utilities. Use getFileHttp.exe to download the file from https://ribbs.usps.gov/cassmass/documents/tech_guides/. For more information, see Chapter 8, Utilities in your *VeriMove User's Guide*.
2. Open the .zip file and extract the contents. Or, if the file is an .exe file, double-click on the .exe file to extract the contents.
3. If you run VeriMove jobs on a remote Windows system:
 - a. Establish an FTP session with your execution system.
 - b. FTP the files in binary mode to a directory that VeriMove can access.

Installing Databases for External CASS Processing

If you are using an external CASS processor such as Finalist or CODE-1 Plus, see the product documentation for instructions on how to install the CASS, DPV, EWS, LACS^{Link}, and Suite^{Link} databases.

After you update your CASS product data, follow these steps only if you are using the Manually Registered Statistics option in VeriMove. For information on manually registered statistics, see the section "Specifying CASS Settings" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

1. Launch VeriMove and open a job.
2. Go to the **CASS** tab.
3. Click the **Edit** button next to **Use Manually Registered Statistics**.
4. Update the date to reflect the date of the database(s) you just downloaded. Click **OK**.

Converting the Statistics File for VeriMove


No changes have been made to the Statistics File for the current release. No conversion is necessary when upgrading from the previous VeriMove release to the current release.

Verifying Your Installation

The VeriMove installation includes sample jobs to validate your software and database installation.

Running a Sample Job Using mu

1. From your installed location (default /nlk), go to the nlk/IVP/UNIX folder.
2. Open UnixIVPSampleJobExternalCASSFormat2 (for external CASS Processing) or UnixIVPSampleJobInternalCASSFormat2 (for internal CASS Processing) in a text editor.

 Alternately, Linux users can edit the sample job in the VeriMove GUI and then export the sample job to your Linux installation as an XML document.

3. Edit the following sample job fields.

Field	Description
NCOADataPath	Path to the NCOA ^{Link} database.
NCOADailyDelete	Path to the Daily Delete database.
InputFilePath	Path to the input file.
OutputFile1Path	Path to the output file.
StatisticsReportFilePath	Path to the location to write the Statistics Report File.
CityFilePath	Internal CASS processing only. Path to the City file.
PrimaryZip4FilePath	Internal CASS processing only. Path to the Primary ZIP + 4 file.
USPS3553ReportFilePath	Internal CASS processing only. Path to the location to write the USPS Form 3553 (CASS Summary Report).
DPVDataFilePath	Internal CASS processing only. Path to the USPS DPV database.
LACSLinkDataLocation	Internal CASS processing only. Path to the USPS LACS ^{Link} database.
SuiteLinkDataLocation	Internal CASS processing only. Path to the USPS Suite ^{Link} database.

4. Navigate to your installed VeriMove location.
5. Run VeriMove from the command line using mu and your newly edited sample job def.
`mu sampl ejob IVP/UNI X/Uni xI VPSampl eJobI nternal CASSFormat2. def`
6. When the job is complete, the message "Job Completed." displays.
7. If the sample job failed, an error message displays on the screen. Please see the event log for details.
8. Review your NCOA^{Link} Processing Summary Report and output for expected results.

Installing Product Updates

To install a VeriMove product update, refer to the readme file that accompanies the product update. The readme file contains pertinent information related to the product update and includes a description of the required steps for installing the product update on your system.

Installing Your Software License Keys

Pitney Bowes distributes new VeriMove software license keys on an annual basis.

Installing Your NCOA^{Link} License Key

To install your NCOA^{Link} license key, follow these steps:

1. Navigate to the VeriMove™ install on your machine.
2. Open and edit the VeriMove™ configuration file as a text file.
3. Replace the previous NCOA^{Link} key in the "NCOALink Key=" field with your new NCOA^{Link} key.
4. Save the configuration file.

Installing the VeriMove™ CASS™ Key for Internal CASS™ Processing

To install your VeriMove™ CASS™ key for Internal CASS™ processing, follow these steps:

1. Navigate to the VeriMove™ install on your machine.
2. Open and edit the VeriMove™ configuration file as a text file.
3. Replace the previous NCOA^{Link} key in the "CASSSerialNumber=" field with your new CASS™ key for Internal CASS™ processing,.
4. Save the configuration file.

Getting Started with VeriMove

For information on getting started with VeriMove, refer to your *VeriMove User's Guide*.

Installing VeriMove on z/OS

In this chapter:

- ◆ Before You Begin the z/OS Installation58
- ◆ Installing VeriMove on z/OS58
- ◆ Installing NCOA^{Link} Data on z/OS64
- ◆ Explode Process Impact on Business Name Matching Tables ..68
- ◆ Installing the Daily Delete File.....69
- ◆ Installing the USPS Databases70
- ◆ Converting the Statistics File for VeriMove.....70
- ◆ Verifying Your Installation70
- ◆ Installing Product Updates71
- ◆ Installing Your Software License Key.....71
- ◆ Getting Started with VeriMove.....71

Before You Begin the z/OS Installation

The z/OS platform requires the Windows version of VeriMove to install the USPS NCOA^{Link} data. You can use the VeriMove explode.bat file to explode the USPS compressed databases onto a Windows machine and then transfer that data to your z/OS platform. Loading the Windows version of VeriMove also allows you to use the Windows GUI to create job definitions that you can then transfer to your execution platform. For information on installing VeriMove on the Windows platform, please see "[Installing VeriMove on Windows](#)" on page 7.

i The UNLOAD.JCL and the IDSINSTL.JCL will delete installed libraries and files before installing new versions. Be sure to back up your SAMPCNFG configuration file before beginning the z/OS installation. Backing up your current SAMPCNFG file can allow you to copy your existing configuration file settings to the new configuration file if you want to use the new installed SAMPCNFG file. If you prefer, you may continue to use your original (pre-install) SAMPCNFG file.

z/OS Requirements

The z/OS system requires:

- A supported version of the IBM z/OS platform. For a list of Pitney Bowes supported versions, see the "Supported Platforms" document available at <http://www.g1.com/support>.
- 1 GHz processor (2 GHz processor or faster recommended for better performance)
- To determine the required disk capacity, multiply the size of the largest file to be processed by at least 2, 3, or 4. Add 30 GB to that total. Each file to be processed must be contained in one logical partition. 10,000 RPM or faster drives are recommended for better performance. Note that the amount of hard disk space required also depends on the type of output required. For example, if you include the input data in the output file, more space is required than if you do not. You will need approximately 20 GB for USPS data. 40 GB (20 GB for production data plus 20 GB for decompressing USPS data updates) is recommended.
- 2 GB RAM
- DVD drive (if loading from DVD)
- Internet Access — The USPS requires all NCOA^{Link} licensees to use the Daily Delete file. The Daily Delete file contains corrections to the currently distributed databases. The Daily Delete file and the NCOA^{Link} data are no longer provided on DVD and are currently provided by Internet download only.
- License for NCOA^{Link}
- User account with administrator rights

Installing VeriMove on z/OS

This section describes the steps for installing VeriMove on z/OS from an Internet download or media.

Installing VeriMove on z/OS from Internet Download

These steps assume you have already downloaded the .zip file and unzipped it to extract the files. For instructions, see "[Installing VeriMove on Windows](#)" on page 7. Pitney Bowes delivers Internet software files in a compressed format. This file includes:

- **IDSINSTL JCL** — Used to upload and install your new software release.

- **Installation JCL** — The \$\$READIN member contains an index of all install library members.
- **Object file(s)** — Contains the software (*.OBJ files).
- **Input data file** — Sample records used for installation verification.
- **Other files** — Files that may be pertinent to your release (*.DAT files).

i The IDSINSTL JCL member is a complete job that performs all functions required to upload specific product libraries and support files to the mainframe. The job is complete. If your site does not utilize FTP as the preferred file transfer protocol, substitute the FTP step with the utility used at your site and the job will continue to be operational.

To install VeriMove from the Internet:

1. Install the Windows version of VeriMove. For instructions, see ["Installing VeriMove on Windows" on page 9](#). You must install VeriMove on a Windows computer before installing VeriMove on the z/OS platform.
2. FTP the file I DSI NSTL. JCL to a z/OS system. Insert a job card at the beginning of the file. Perform "change all" on the lowercase names shown in the comments at the top of the JCL. After the files have been uploaded, you will find the following files and partitioned datasets located relative to 'yourhlq.VERIMOVE'.

Uploaded File Descriptions

File Name	Description
INSTALIB	JCL used to execute various processes
LOADLIB	Executables used by the JCL in INSTALIB
OBJLIB	Object files used by the linking process (see next section)
SAMPJOB	Sample job definitions in XML that may be used to test VeriMove
SAMPMANI	Manifest files in XML format used to control the upload of data to the system
SAMPCNFG	Sample configuration file (equivalent to config.ini on Windows)
SAMPDATA	Sample input file (equivalent to SampleData\SampleData.txt on Windows)
SAMPDATA2	Sample input file (equivalent to SampleData\SampleDataFormat2.dat)

3. (Optional) Relink the executables. Before executables in 'yourhlq.VERIMOVE.LOADLIB' can be executed, the executables may need to be relinked for your particular z/OS platform. Edit "yourhlq.VERIMOVE.INSTALIB(LNKBATC)", inserting a job card at the beginning and doing a "change all" on the lowercase variables as indicated in the comments at the top of the JCL.
4. Edit the configuration file.

i The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Pitney Bowes Technical Support Representative or Professional Services Representative before changing any preset default values.

a. If you are an **existing** VeriMove user:

- The default IDInstall.jcl provided will overwrite your current sampcnfg file if set to the same file qualifier as your current sampcnfg file.
- You may change the qualifier in the IDInstall.jcl to write to a new file qualifier to get the latest configuration file or overwrite and reapply your settings.
- If you decided to edit and use the latest configuration file, edit the new configuration file and replace the current one.

For a complete discussion of all configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

b. If you are a **new** VeriMove user, the installation program installs the SAMPCNFG configuration file as part of the normal installation process.

- Enter the appropriate information in the following fields in the SAMPCNFG configuration file.
- For the remaining fields in the SAMPCNFG configuration file, Pitney Bowes recommends you use the default values.

For a complete discussion of all configuration file fields, please see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

Configuration File Field Descriptions (Part 1 of 2)

Field	Description
Registered Company	PAF registered company name.
Registered User	PAF registered user name.
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none">• 0 — Full Service Provider• 1 — Limited Service Provider• 2 — End User

Configuration File Field Descriptions (Part 2 of 2)

Field	Description
NCOA Use High Memory	<p>Specify whether to use high memory using these codes:</p> <ul style="list-style-type: none"> • 0 — Turns off the large memory model. This is referred to as the small memory model. Use this option when only a small amount of limited real memory is available to you. The default value is 0. • 1 — Turns on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free real memory available (see note below). <p>This setting may affect the performance of your system. Setting this to 1, causes a number of database tables to be loaded into memory. The set up of the database takes more time at the beginning of a run but may improve performance if your platform has lots of physical memory.</p> <p>When VeriMove is set to “Large Memory Model” (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the “L” (Large) memory model. When VeriMove is set to “Small Memory Model” (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the “U” (Ultra) memory model.</p> <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to have VeriMove load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>
NCOA Use Flat Single	<p>Specifies whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Determines whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).

5. Load your new or updated database file(s). See "VeriMove Databases" on page 64.


Installing VeriMove on z/OS from Media

1. Install the Windows version of VeriMove. For instructions, see "Installing VeriMove on Windows from DVD" on page 12. You must install VeriMove on a Windows computer before installing VeriMove on z/OS.
2. Create a job stream (IEBCOPY) similar to the one below to unload the installation library. Edit as needed for your site requirements and replace the variables that appear in lowercase as described in "Modifying JCL Variables for the Installation JCL," on page 62. Add your site-defined job card.

```
//j obcard
//*
//* UNLOAD <PRODUCT NAME> JCL LI BRARY.
//*
//LOAD EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//INDD DD DSN=INSTALIB,DISP=OLD,
// UNIT=devt,VOL=SER=tvolsr,LABEL=(2,NL),
// DCB=BLKSIZE=27920
//OUTDD DD DSN=yourhlq.VERIMOVE.INSTALIB,DISP=(,CATLG),
// DCB=(LRECL=80,BLKSIZE=27920,RECFM=FB,DSORG=PO),
// SPACE=(CYL,(5,1,20)),UNIT=SYSDA
//SYSUT3 DD UNIT=DISK,SPACE=(TRK,(10))
//SYSUT4 DD UNIT=DISK,SPACE=(TRK,(10))
//SYSIN DD *
COPY OUTDD=OUTDD
INDD=INDD
/*
//
```

Modifying JCL Variables for the Installation JCL

Variable	Description
devt	UNIT=name for the input device
tvolsr	Volume serial number of the installation/software tape
yourhlq	High-level qualifier of the installation files

 Please review the information contained in the \$\$\$READIN member in the installation library for the latest information.


3. Make a backup copy of the original installation library before you make any modifications. As an alternative, you can save the edited members under another name and cancel your edits to the unloaded member.
4. Submit the job to unload the installation library.

5. After you unload the installation library, you are ready to customize the JCL variables and submit the job to install the software. The installation JCL is a multi-step process that deletes previously defined datasets and unloads the following:
 - Object library
 - Load library
 - Messages file
 - Configuration file
 - Sample JobDefs library
 - Sample manifest library
 - Sample IVP data file
 - Installation verification
6. Modify variables in the UNLOAD JCL according to the instructions in that member.

After making a backup copy, edit the installation JCL skeleton by replacing the lowercase variables to suit your standards. The variable names that you replace are unique. You can set your text editor, such as ISPF, to do a “change all” function. Add your site-defined jobcard. Comments within the JCL describe this process.

This job deletes the files and libraries that you specify prior to unloading the tape. Ensure that no other files or libraries are using these names. Also, set your text editor to uppercase using the “caps on” command.
7. Submit the job and check the return codes.

The installation JCL copies from tape to disk the application software and IVP file. Check the output from the job to ensure that all steps completed with a zero return code.
8. Edit the configuration file yourhlq.VERIMOVE.SAMPCNFG.

 The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Pitney Bowes Technical Support Representative or Professional Services Representative before changing any preset default values.

- a. If you are a new VeriMove user, the installation program installs the SAMPCNFG configuration file as part of the normal installation process. For more information on populating your initial SAMPCNFG configuration file, see ["Configuring Your VeriMove Installation" on page 99](#).
- b. If you are an existing VeriMove user:
 - The default IDInstall.jcl provided will overwrite your current sampcnfg file if set to the same file qualifier as your current sampcnfg file.
 - You may change the qualifier in the IDInstall to write to a new file qualifier to get the latest configuration file or overwrite and reapply your settings.
 - If you decided to edit and use the latest configuration file, edit the new configuration file and replace the current one.

For more information on the configuration file, see [Configuring Your VeriMove Installation in Chapter 6 on page 99](#).

9. Modify the UPLOAD JCL included in the yourhlq.VERIMOVE.INSTALIB library from the VeriMove installation media. See the comments in the JCL for instructions on how to make the necessary modifications. Use the VERIMOVE member from the sample manifest library.
10. On the Windows computer, open a command prompt.
11. Change to the location where you installed VeriMove. For example, C:\PB\VeriMove.

12. Execute UploadServer.exe using the following syntax:
 UploadServer.exe [Port]
 Where [Port] is the network port to use to transfer the data. This parameter is optional and defaults to 7388.
13. Execute the UPLOAD job on your z/OS system.
14. Load your new or updated database file(s). See "VeriMove Databases" on page 64.

VeriMove Databases

The following table describes the VeriMove databases.

Databases, Delivery Methods, and Update Requirements

Database	Delivery Method/Source	Required/Optional	Updates
NCOA ^{Link} Datasets	Download from USPS website or DVD.	Required for all licensees.	Monthly or weekly (depending on license level)
NCOA ^{Link} - Daily Delete File	Download from USPS website.	Required for all licensees.	Daily
<ul style="list-style-type: none"> • CASS • Delivery Point Validation (DPV) • LACS^{Link} • Suite^{Link} 	<ul style="list-style-type: none"> • Pitney Bowes support site at www.g1.com/support. Download at no charge. No backup media). • Pitney Bowes eStore at http://store.pbinsight.com. Download at no charge. Purchase backup media. • Mainframe tape recipients will continue to receive physical media shipments at this time. 	<ul style="list-style-type: none"> • VeriMove requires the CASS database to perform Internal CASS processing. • USPS requires DPV, LACS^{Link}, and Suite^{Link} processing to generate a USPS Form 3553. 	Monthly
Early Warning System (EWS)	Download from USPS website. Pitney Bowes sends a monthly update of the EWS File with the CASS database updates.	Optional for all licensees.	Weekly

Installing NCOA^{Link} Data on z/OS

The USPS delivers NCOA^{Link} data files in a compressed or tarred format. As part of the installation process, you will need to uncompress/expand the USPS NCOA^{Link} data files using the VeriMove explode process to make the data files fully functional. Prior to installing the NCOA^{Link} data:

- **If you are a new customer**, you must set up your configuration file prior to attempting to install the NCOA^{Link} data. For more information on setting up your configuration file, see [step 4](#) in "Installing VeriMove on z/OS from Internet Download" on page 58 or [step 8](#) in "Installing VeriMove on z/OS from Media" on page 62.
- **If there is more than one physical drive on the system that executes VeriMove jobs**, install the NCOA^{Link} data on a separate physical drive from the VeriMove software, operating system, and pagefile/Virtual Memory. This may result in a major performance improvement.

Obtaining the NCOA^{Link} Data

Pitney Bowes does not supply the NCOA^{Link} data. You must contact the USPS directly to obtain the NCOA^{Link} data. The USPS requires all licensees to obtain product updates from the USPS Electronic Product Fulfillment (EPF) web site. In the event that the USPS sends you NCOA^{Link} data on a DVD, we have included instructions for installing from a DVD. However, per the USPS mandate to download product updates from the EPF website, in most cases you will use the first option below.

1. Download the NCOA^{Link} data from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following additional steps required when downloading the NCOA^{Link} data from the USPS EPF web site:
 - a. Navigate to the location of the downloaded NCOA^{Link} data file.
 - b. The downloaded NCOA^{Link} data from the USPS EPF web site may be in a zipped or tar format. Unzip or untar the data before running the explode process.
 - c. Navigate to the folder that contains the unzipped or untarred NCOA^{Link} data. The number of files in the directory will vary depending on the database format you are licensed to use (hash or flat). The following table provides information on the unzipped/untarred files.

NCOA^{Link} Data Files

File Name	Description
clk.zip	Zipped data file that contains necessary NCOA ^{Link} data files.
dvdhdr01.dat dvdhdr02.dat	Files that store the contents of the NCOA ^{Link} database.
rv9.zip	Zipped data file that contains additional NCOA ^{Link} data files.
clk.*	Additional NCOA ^{Link} tables present when you receive 18 month (hash or flat) or 48 month data (hash or flat).
ank.*	Additional NCOA ^{Link} tables present only when you receive ANK ^{Link} data (hash or flat).
	NOTE: After the explode process, these files are renamed to clk.* file names.

- d. Proceed to the section "Using explode.bat to Explode the NCOA^{Link} Files" on page 65.
2. If you received NCOA^{Link} data on a DVD, follow these steps:
 - a. Insert the NCOA^{Link} data DVD into the DVD drive of a Windows PC. You must use a Windows PC regardless of your execution platform.
 - b. Proceed to the section "Using explode.bat to Explode the NCOA^{Link} Files" on page 65.

Using explode.bat to Explode the NCOA^{Link} Files

To explode the NCOA^{Link} data files to your database location using explode.bat, follow these steps:

1. Browse to the location where you installed VeriMove and go to the **Tables** subfolder. For example, C: \PB\Veri Move\Tables.

2. Edit explode.bat as follows.
 - a. Omit all quotes from path names. If you leave the INPUTDATAPATH= and NCOADATADESTINATION= values blank, you will be asked for this information in an interactive query mode.
 - Change set INPUTDATAPATH= to the location of the NCOALink data.
 - Change set NCOADATADESTINATION= to the path where you want to install the NCOALink data. This folder is automatically created if it does not already exist. For example, if you are installing the data to D:\USPSDATA, specify set NCOADATADESTINATION=D:\USPSDATA.
 - b. This item only applies if you are exploding the NCOALink data from a DVD.

The explode.bat script defaults to the values required to explode the NCOALink data from a location (not from a DVD). To explode from a DVD, change set USEDVDLOAD=N to set USEDVDLOAD=Y.
 - c. These three items only affect Flat File databases and are otherwise ignored.
 - Change Set MVSONLY=N to Y only if you are installing on an MVS platform. This will avoid a preprocessing step that is needed for other platforms.
 - Change Set FLATSI NGLE=N to Y if you are using the Single Flat File database.
 - Change Set FLATATOZ=Y to N if you set FLATSI NGLE=Y and do not also want to use the 26 Flat File A-Z database.
3. Save and close explode.bat under a new name (i.e., myexplode.bat) that will not be overwritten by future updates and installations.
4. Run your modified version of explode.bat.
5. One of the following messages displays.
 - a. If you are exploding from a location, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****  
  
This script installs an NCOALink database from a download location onto your hard drive.  
This can require up to 20 GBytes of free space on your hard drive.
```
 - b. If you are exploding from a DVD, the following messages displays:

```
*****  
NCOALink Database Installation Script.  
*****  
  
This script installs an NCOALink database from two DVDs onto your hard drive. This can  
require up to 20 GBytes of free space on your hard drive.
```
6. The following message displays:
 - a. If you are exploding from a location, the following messages displays:

```
Folder dst is about to be loaded from the  
NCOALink database found at location src  
*****  
WARNING -- If you proceed from this point, all data in  
folder dst will be erased first. You may type  
Control -C to abort this process now without erasing anything.  
*****
```

- b. If you are exploding from a DVD, the following messages displays:
Folder dst is about to be loaded from the
NCOALink database found on DVD src

WARNING -- If you proceed from this point, all data in
folder dst will be erased first. You may type
Control -C to abort this process now without erasing anything.

The warning above only displays if the destination folder contains data.
- 7. The explode.bat process continues as follows:
 - a. If you are exploding from a DVD, the following messages display:
Insert NCOALink data DVD 1 from the USPS into Drive src
Press any key to continue
Copying DVD 1 (src) to dst
DVD 1 copy complete.
Insert NCOALink data DVD 2 from the USPS into Drive src. Press any key to continue.
Copying DVD 2 (src) to dst
DVD 2 copy complete.
 - b. If you are exploding from a location, the following messages displays:
Copying from location (src) to dst
File copy complete.
- 8. After the NCOALink data has been copied, the .zip (zipped) files are automatically expanded. Then, the .szp (USPS-compressed) files are expanded. Afterward, a series of preprocesses and tests are performed. If there are errors, one of the following messages displays:
**** FILE NOT FOUND: filename
**** ERROR COPYING FILE: filename
**** ERROR PROCESSING FILE: filename
**** ERROR: message
This message is followed by:
FAILURE!!!
Press any key to continue
- 9. If the message indicates that there is a file in the VeriMove installation folder missing, there was a problem with your NCOALink data explode process. There may have been a problem copying the NCOALink data from the source location.
A process called "TestFileSha" produces a file called TablesTestFileSha.log in the parent folder of the folder containing these scripts. This file contains detailed descriptions of the tests performed and any errors that have occurred. If an error occurs, the following message displays:
**** ERROR: Verifying Data File Signatures
If you get this message, the data files indicated in the log file were corrupted. You may have corrupted NCOALink data and need to replace the download source (downloaded file or DVD).
- 10. If there are no problems with the process and tests, the following message displays to indicate that the process completed. You must still check the log file generated during the explode process to ensure the explode process ran error free.
SUCCESS!!!
Press any key to continue

Uploading Exploded Files to the z/OS Platform

If you run VeriMove on z/OS, follow these steps to upload exploded files to the z/OS platform:

1. Run UploadServer. Before the USPS database can be uploaded to an MVS system, you must run UploadServer on the PC where the USPS database has been loaded. Go to the folder where VeriMove is installed (i.e. C:\PB\VeriMove) and click on "UploadServer.exe". A DOS window will appear indicating that the program is running. Each time a file is uploaded in the steps described in the following sections, the name of the file will be echoed. When you are done uploading, you may close the DOS window to terminate the UploadServer.
2. Edit the Config File. On the MVS system, edit 'yourhlq.VERIMOVE.SAMPCNFG' and do a "change all" on the lowercase variables described at the top of the file.
3. Upload the VeriMove Data. These are files that originally came from the installation of VeriMove on the PC but were copied (by explode.bat) into the same folder as the USPS database. Edit the file 'yourhlq.VERIMOVE.INSTALIB(UPLOAD)' and do a "change all" as described the comments at the top of the file. In particular, set "manifestmember" to 'VERIMOVE'. When you execute this JCL, which only takes a few seconds, several files are uploaded.
4. Upload the USPS Database. The upload of the USPS database requires one of three JCLs depending on the type of database you are uploading.
 - **Upload Hash Database** — To upload a hash database, edit 'yourhlq.VERIMOVE.INSTALIB(UPLOAD)' as described above, setting "manifestmember" to "USPS" (or "USPSO" for an old style database). The upload may take several hours depending on the speed of your MVS system and your network connection.
 - **Upload the Single Flat File database** — To upload the Single Flat File database, edit 'yourhlq.VERIMOVE.INSTALIB(UPLOADF)' in the same manner as for UPLOAD of a Hash database but includes additional variables to be replaced. Also, set "manifestmember" to "USPSF" (or "USPSFO" for an old style database).
 - **Upload the 26 Flat File A-Z database** — To upload the 26 Flat File A-Z database, edit 'yourhlq.VERIMOVE.INSTALIB(UPLOADFZ)' in the same manner as for UPLOAD of a Hash database but includes additional variables to be replaced. Also, set "manifestmember" to "USPSFZ" (or "USPSFZO" for an old style database).
5. For performance evaluation, you may want to upload both the Single Flat File database and the 26 Flat File A-Z databases. Since they are both derived from the same DVD set, it is not necessary to load two completely separate databases.

If you have already used UPLOADF to upload the Single Flat File database, you may use UPLOADFZ to upload the 26 Flat File A-Z database setting "manifestmember" to "USPSFZF".

If you have already used UPLOADFZ to upload the 26 Flat File A-Z database, you may use UPLOADF to upload the Single Flat File database, setting "manifestmember" to "USPSFF".

The USPS database changed in July 31, 2006. The change is transparent to those running on platforms other than MVS. If you are still running an old version of the database, you need to upload using "manifestmember" being set to "USPSO", "USPSFO", and "USPSFZO".

Explode Process Impact on Business Name Matching Tables

VeriMove uses three tables during the Business Name Matching process to compare records in your input file against the NCOA^{Link} data. These three tables, formatted and installed in the Tables directory during VeriMove installation, are only used for Business Name Matching. These tables do

not change your input records and do not affect VeriMove output of business names but are simply used to aid in comparing your input records against the NCOA^{Link} data to determine a Business Name match.

Table Name	Description
REDEFINES-WORD-LIST.txt	Maps commonly used abbreviations to full words
JUNK-WORD-LIST.txt	Words that are ignored during Business Name Matching
COMMON-WORD-LIST.txt	Words that are given higher value when calculating Business Name Match percentages (used to determine whether or not a match has been achieved)

Each time you explode the NCOA^{Link} files to your database location, these files are copied from the Tables directory to your database location. Subsequent VeriMove installations will overwrite these tables with the tables VeriMove used to certify with the USPS. If you customize these tables, be sure to backup these files before installing a new VeriMove release. After installing a new VeriMove release, replace the installed VeriMove USPS-certified tables with your backed up versions of your customized tables.

i **IMPORTANT!** Pitney Bowes certifies VeriMove with the USPS using these three tables. Editing these tables may result in an increase or decrease in your Business Name Matching rate. If your Business Name Matching rate changes significantly, the USPS may audit your Business Name Matching results and require you to recertify using your customized versions of these three tables.

For more information, please refer to the section "Using Business Name Matching" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

Installing the Daily Delete File

USPS regulations require all NCOA^{Link} licensees to use the Daily Delete File. Licensees must download and install this file daily. To install the Daily Delete file, follow these steps.

1. Browse to the location where you installed VeriMove and go to the Utilities subfolder. For example, C:\PB\VeriMove\Utilities.
2. Download the Daily Delete file. The Daily Delete file is available from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following:
 - You can use the getFileHTTps.exe utility to download the Daily Delete file. However, the getFileHTTps.exe utility:
 - Can only be used to download files from the USPS <https://epf.usps.gov> secured web site.
 - Only downloads the most current version of the USPS file requested.
 - Is only available for the Windows platform.For more information on using the getFileHTTps.exe utility, see Chapter 8, Utilities in your *VeriMove User's Guide*. Note the following:
 - Windows, Unix, and Linux users should download the ASCII version of the Daily Delete file.
 - z/OS and IBM i users should download the EBCDIC version of the file.
3. If you run VeriMove jobs on Unix, Linux, or a remote Windows system, follow these steps:
 - a. Start an FTP session with your execution platform
 - b. FTP the files in binary mode to a directory that VeriMove can access.
4. If you run VeriMove on z/OS, follow these steps:

- a. Modify the UPLOAD JCL included in the yourhlq.VERIMOVE.INSTALIB library from the VeriMove installation media. See the comments in the JCL for the necessary modifications. In particular, set 'manifestmember' to DAILY.
- b. On the Windows computer, open a command prompt.
- c. Change to the location where you installed VeriMove. For example, C:\PB\VeriMove.
- d. Execute UploadServer.exe. Before the database can be uploaded to an MVS system, you must run UploadServer on the PC where the database has been loaded. Go to the folder where VeriMove is installed (i.e. C:\PB\VeriMove) and click on "UploadServer.exe". A DOS window appears indicating that the program is running. Each time a file is uploaded in the steps described in the following sections, the name of the file will be echoed. When you are done uploading, you may close the DOS window to kill the UploadServer.
- e. Execute the UPLOAD job on your z/OS system.

Installing the USPS Databases

The procedure that you follow to install the CASS, DPV, EWS, LACSLink, and SuiteLink databases depends on whether you are using the VeriMove internal CASS processor or an external CASS processor such as Finalist or CODE-1 Plus.

Installing Databases for Internal CASS Processing

Internal CASS processing is only available on Windows, Unix, and Linux.

Installing Databases for External CASS Processing

If you are using an external CASS processor such as Finalist or CODE-1 Plus, see the product documentation for instructions on how to install the CASS, DPV, EWS, LACSLink, and SuiteLink databases.

After you update your CASS product data, follow these steps only if you are using the Manually Registered Statistics option in VeriMove. For information on manually registered statistics, see the section "Specifying CASS Settings" in Chapter 4, Defining a Job in your *VeriMove User's Guide*.

1. Launch VeriMove and open a job.
2. Go to the **CASS** tab.
3. Click the **Edit** button next to **Use Manually Registered Statistics**.
4. Update the date to reflect the date of the database(s) you just downloaded. Click **OK**.

Converting the Statistics File for VeriMove

No changes have been made to the Statistics File for the current release. No conversion is necessary when upgrading from the previous VeriMove release to the current release.

Verifying Your Installation

The VeriMove installation includes sample jobs to validate your software and database installation.

Running a Sample Job

To verify your installation, follow these steps to run a sample job:

1. Depending on your version of the uploaded USPS database, customize MU (for hash file database), MUF (for single flat file database), or MUFZ (for 26 flat file A-Z database).
2. Verify that you have defined 'yourhlq.VERIMOVE.SAMPCNFG' correctly.
3. If you are using MUF or MUFO, verify that you have set NCOA Use Flat Single=1.
4. If you are using MUFZ or MUFZO, verify that you have set NCOA Use Flat Single=0.
5. Do a global replace of the lowercase variables as described at the top of the file. To run the sample job, you will need to set the following variables as shown.
yourJob=' VERI MOVE. SAMPJOB(D I VPXCASS) '
yourInput=' VERI MOVE. SAMPDATA '
yourOutput1=' VERI MOVE. OUTPUT '
yourOutput2=' VERI MOVE. SI DEOUT '
yourSummary=' VERI MOVE. SUMRPT '
6. Execute the JCL.
7. Review your NCOA^{Link} Processing Summary Report and output for expected results.

Installing Product Updates

To install a VeriMove product update, refer to the readme file that accompanies the product update. The readme file contains pertinent information related to the product update and includes a description of the required steps for installing the product update on your system.

Installing Your Software License Key

Pitney Bowes distributes new VeriMove software license keys on an annual basis.

Installing Your NCOA^{Link} License Key

To install your NCOA^{Link} license key, follow these steps:

1. Navigate to the VeriMove™ install on your machine.
2. Open and edit the VeriMove™ configuration file as a text file.
3. Replace the previous NCOA^{Link} key in the "NCOALink Key=" field with your new NCOA^{Link} key.
4. Save the configuration file.

Getting Started with VeriMove

For information on getting started with VeriMove, refer to your *VeriMove User's Guide*.

Installing on IBM i

In this chapter:

- ♦ Before You Begin the IBM i Installation74
- ♦ Installing the VeriMove Software from DVD.....79
- ♦ Installing VeriMove on IBM i from Internet Download.....74
- ♦ Installing USPS Data83
- ♦ Installing the NCOALink Database83
- ♦ Installing the Daily Delete File.....96
- ♦ Installing a Product Update.....97
- ♦ Installing Your Software License Key.....98
- ♦ Getting Started with VeriMove.....98

Before You Begin the IBM i Installation


Before you install VeriMove:

- You must have *SECADM or *SECOFR special authority to perform an installation. However, you do not need to be signed onto the system as QSECOFR.
- You must have your license type (Full, Limited, or End-User), Licensee ID (assigned by USPS), and company name at hand for entering during the installation.

You may be installing the Delivery Point Validation (DPV®), LACSLink®, SuiteLink®, and Early Warning System (EWS) databases as part of your External CASS™ product installation. USPS® regulations require Delivery Point Validation (DPV) processing, LACSLink processing, and SuiteLink processing to generate the USPS Form 3553 (USPS CASS Summary Report). EWS processing is optional for all licensees.

Installing VeriMove on IBM i


This section describes the steps for installing VeriMove on IBM i from an Internet download or DVD.

 Pitney Bowes delivers VeriMove software for the IBM i platform via Internet download. If needed, you can obtain installation media at an additional charge from the Pitney Bowes eStore. Please log in to the Pitney Bowes eStore for media purchasing and shipping.

Installing VeriMove on IBM i from Internet Download

This section describes how to install your VeriMove software from the Internet. To install VeriMove from the Pitney Bowes Technical Support web site at <http://www.g1.com/support>, follow the steps below:

1. Download the ZIP file from the Pitney Bowes web site to your PC.
2. Extract the G1SVINSTL file from the ZIP file.
3. Sign on to the IBM i system with your user profile.

 You do not need to be signed onto the system as QSECOFR to perform an installation. However, you must have *SECADM or *SECOFR special authority.

4. On the IBM i command line, type:
`CRTLIB G1INSTALL`
5. If G1INSTALL already exists, type:
`CLRLIB G1INSTALL`
6. Create a save file for the extracted file:
`CRTSAVF G1INSTALL/G1SVINSTL`
7. From the PC where you downloaded the ZIP file, FTP the extracted G1SVINSTL file to the corresponding save file that you just created. Be sure to transfer the file in binary mode.
8. At the IBM i command line, type:
`RSTOBJ OBJ(*ALL) SAVLIB(QTEMP) DEV(*SAVF) SAVF(G1INSTALL/G1SVINSTL)`

Or, if you prefer to prompt (**F4**) the RSTOBJ command, enter the appropriate information on the *Restore Object* screen.

9. When the command completes, the following message displays:
n objects restored from QTEMP to QTEMP

...where n is a varying number.

10. To start the install program, type:

CALL G1UI

Product Selection

1. The install source is scanned for products to be installed. The *Product Selection* screen (G1INST200) displays.

```
hh:mm:ss          Pitney Bowes - Application Installation          G1UI
mm/dd/yyyy          Product Selection                            G1INST200

Select the products you wish to install and press F6 to continue:
1=Select

1 *PRD @@ G1SV@PGM  PB Software Global Library
1 *PRD NL G1SVNLPGM Veri Move
1 *HLP @@ G1SV@HLP  Global Library Help Text Folder

Bottom

-----
F3/12=Exit  F6=Continue
```

2. To prevent an item from being installed, remove the "1" next to the item as shown above.
3. Press **F6** to continue with the installation.

Global Library Options

1. If you select the "PB Software Global Library," the *Global Library Special Options* screen (G1INST300) displays.

```
hh:mm:ss          Pitney Bowes - Application Installation          G1UI
mm/dd/yyyy        Global Library Special Options                 G1INST300

These steps are part of the Global Function library installation.

Select steps to be performed, press F6.
 1=Select


1 Create GROUP1USER user profile
1 Change initial program to G1MM00 for GROUP1USER
1 Add GROUP1USER to System Distribution Directory

-----
F3/12=Exit  F6=Continue
```

2. To prevent a step from being performed, remove the "1" next to the step.
3. Press **F6** to continue.

Product Installation Options

1. The *Product Installation* screen (G1INST400) displays for each product you selected on the *Product Selection* screen (G1INST200). If the "Install to library" already exists, the "Backup library name" field displays as shown below. The library name is automatically generated as "G1ymmddnn," where *ymmdd* is the current date, and *nn* is a sequential number.

 Keep track of your backup library name in case you want to restore your original library.

```

hh:mm:ss          Pitney Bowes - Application Installation          G1UI
mm/dd/yyyy          Product Installation                          G1INST400

Installation details:


Installing from . . . *SAVF

Product ID/Desc . . . @@ / Global Library
Version on Media . . . NN.N

Enter product installation parameters, press F6.

Global Library. . . . VM@@370I02
Install to library. . G1@@PGMS * Same version already installed!
Backup library name . G115051301
Install IVP job?. . . Y          Y,N

-----
F3=Exit  F6=Continue
  
```

 If a warning in yellow appears on this screen, you must view the warning before you are allowed to proceed to the next screen.

If an error in red appears on this screen, you must resolve the error condition before you are allowed to proceed.

2. To install the product, press **F6**.
3. If the *Locked Library* screen (G1INST401) displays, continue to the section [Locked Libraries](#).
4. After installing the product, the *Product Installation* screen (G1INST400) displays for each remaining product.
5. Proceed to "[Completing the Installation](#)" on page 78".

Locked Libraries

Follow the steps below to resolve a “Locked Libraries” condition.

1. If you are overlaying an existing installation, the library is checked for locks before installation begins. If locks are found, the *Locked Library* screen (G1INST401) displays.
2. You must clear the locks before you can continue the installation. Use a second session to run the command shown on the screen to determine which jobs are locking the library.
3. After releasing the locks, return to this session and press **F6** to continue.

Completing the Installation

To complete your installation, follow these steps.

1. After completing the VeriMove installation, the *Edit CONFIG* screen (G1NLEDTCFG) displays.
2. Enter the appropriate CONFIG file information on the *Edit CONFIG* screen. This information is stored in the CONFIG file. For more information on the configuration file, see ["Configuring Your VeriMove Installation" on page 100](#).

```

                                Pitney Bowes - Application Installation
                                Edit CONFIG                                G1NLEDTCFG
                                                                NLKCFG

Enter values for CONFIG file, press Enter:
NCOA Logging . . . . .
NCOA Platform ID . . . . . CGVM
NCOA License Type . . . . . 0 0=Full, 1=Limited, 2=End User
NCOALink Key . . . . . xxxx-xxxx-xxxx-xxxx xxxx-xxxx-xxxx-xxxx
Licensee . . . . . PITNEY BOWES

Small Memory Model Enhancement . . . . . 0 0=Off, 1=On
Use High Memory? . . . . . N Y
Business Name Matching Enhancements? . . . . . 1 0=Off, 1=On

Interval: Move . . . . . 2 2      Interval: Input . . . . . 6 6
Interval: NCOA . . . . . 2 2      Interval: Output . . . . . 8 8

Queue Size: Move      5000 5000   Queue Size: Input      3000 3000
Queue Size: Job Input  3000 3000   Queue Size: NCOA . . . 4000 4000
Queue Size: Output . . 3000 3000   NCOALink Queue . . . . 3000 3000

                                                                Bottom

F3/F12=Cancel   F6=Save
    
```

Field	Description
NCOA Logging	Turn the NCOA Logging feature on or off.
NCOA Platform ID	Four-character platform ID assigned by the USPS.
NCOA License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.

3. You can use the default values for the remaining fields.
4. Press **F6** to save your changes.
5. The *Installation Complete* screen (G1INST999) displays.

```
hh:mm:ss          Pitney Bowes - Application Installation      G1UI
mm/dd/yyyy          Installation Complete                    G1INST999

Installation of your products has completed.

Please print and save the G1UILOG spool file.

If any products were replaced during this installation, a backup copy has
been made. Review the G1UILOG spool file for those library names and other
details about this installation. The backup libraries should be saved and
deleted after you have completed testing the new version.

If you require further assistance, please contact:
Technical Services
1-800-367-6950

-----
Enter=Exit
```

6. Review the G1UILOG spoolfile. G1UILOG is a log of the installation program processing steps.
7. You have successfully installed your VeriMove software and are ready to load the databases. Go to ["Installing USPS Data" on page 83](#).

Installing the VeriMove Software from DVD

To install your VeriMove software from DVD (only available from the Pitney Bowes eStore for an additional fee), complete the following steps.

1. Sign onto the system with your own user profile.
2. Insert the VeriMove DVD into your optical drive. Enter the following command exactly as shown:
LODRUN DEV(DeviceName)

Where *DeviceName* is the name of the optical drive, such as "OPT01," or "OPT02."

Product Selection

1. The install source is scanned for products to be installed. The *Product Selection* screen (G1INST200) displays.

```
hh: mm: ss          Pitney Bowes - Application Installation          G1UI
mm/dd/yyyy          Product Selection                               G1INST200

Select the products you wish to install and press F6 to continue:
1=Select

1 *PRD @@ G1SV@PGM  PB Software Global Library
1 *PRD NL G1SVNLPGM Veri Move
1 *HLP @@ G1SV@HLP  Global Library Help Text Folder

Bottom

-----
F3/12=Exit  F6=Continue
```

2. To prevent an item from being installed, remove the "1" next to the item as shown above.
3. Press **F6** to continue with the installation.

Global Library Options

1. If you select the "PB Software Global Library," the *Global Library Special Options* screen (G1INST300) displays.

```
hh: mm: ss          Pitney Bowes - Application Installation          G1UI
mm/dd/yyyy          Global Library Special Options                    G1INST300

These steps are part of the Global Function Library installation.

Select steps to be performed, press F6.
1=Select


1 Create GROUP1USER user profile
1 Change initial program to G1MM00 for GROUP1USER
1 Add GROUP1USER to System Distribution Directory

-----
F3/12=Exit  F6=Continue
```

2. To prevent a step from being performed, remove the "1" next to the step.
3. Press **F6** to continue.

Product Installation Options

1. The *Product Installation* screen (G1INST400) displays for each product you selected on the *Product Selection* screen (G1INST200). If the "Install to library" already exists, the "Backup library name" field displays as shown in the example below. The library name is automatically generated as "G1ymmddnn," where *ymmdd* is the current date, and *nn* is a sequential number.

 Keep track of your backup library name in case you want to restore your original library.

```
hh:mm:ss      Pitney Bowes - Application Installation      G1UI
mm/dd/yyyy      Product Installation                      G1INST400

Installation details:


Installing from . . . *SAVF

Product ID/Desc . . . @@ / Global Library
Version on Media. . . NN.N

Enter product installation parameters, press F6.

Global library. . . . VM@@370102
Install to library. . . G1@PGMS * Same version already installed!
Backup library name . . G115051301
Install IVP job?. . . . Y          Y, N

-----
F3=Exit   F6=Continue
```

 If a warning in yellow appears on this screen, you must view the warning before you are allowed to proceed to the next screen.

If an error in red appears on this screen, you must resolve the error condition before you are allowed to proceed.

2. To install the product, press **F6**.
3. If the *Locked Library* screen (G1INST401) displays, continue to the section [Locked Libraries](#).
4. After installing the product, the *Product Installation* screen (G1INST400) displays for each remaining product.
5. Proceed to "[Completing the Installation](#)" on page 78".

Locked Libraries

Follow the steps below to resolve a "Locked Libraries" condition.

1. If you are overlaying an existing installation, the library is checked for locks before installation begins. If locks are found, the *Locked Library* screen (G1INST401) displays.
2. You must clear the locks before you can continue the installation. Use a second session to run the command shown on the screen to determine which jobs are locking the library.
3. After releasing the locks, return to this session and press **F6** to continue.

Completing the Installation

Follow these steps to complete your installation.

1. After completing the VeriMove installation, the *Edit CONFIG* screen (G1INST999) displays.
2. Enter the appropriate CONFIG file information on the *Edit CONFIG* screen. This information is stored in the CONFIG file. For more information on the configuration file, see "[Configuring Your VeriMove Installation](#)" on page 99.

```

Pitney Bowes Software - Application Installation          G1NLEDTCFG
Edit CONFIG                                             NLKCFG

Enter values for CONFIG file, press Enter:
NCOA Logging . . . . .
NCOA Platform ID . . . . . CGVM
NCOA License Type . . . . . 0 0=Full, 1=Limited, 2=End User
NCOALink Key . . . . . xxxx-xxxx-xxxx-xxxx xxxx-xxxx-xxxx-xxxx
Licensee . . . . . PITNEY BOWES

Small Memory Model Enhancement . . . . . 0 0=Off, 1=On
Use High Memory? . . . . . N Y
Business Name Matching Enhancements? . . . . . 1 0=Off, 1=On

Interval: Move . . . . . 2 2      Interval: Input . . . . . 6 6
Interval: NCOA . . . . . 2 2      Interval: Output . . . . . 8 8

Queue Size: Move      5000 5000   Queue Size: Input      3000 3000
Queue Size: Job Input  3000 3000   Queue Size: NCOA . . . 4000 4000
Queue Size: Output . . 3000 3000   NCOALink Queue . . . . 3000 3000

Bottom

F3/F12=Cancel   F6=Save
    
```

Field	Description
NCOA Logging	Turn the NCOA Logging feature on or off.
NCOA Platform ID	Four-character platform ID assigned by the USPS.
NCOA License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
Licensee	Licensee (Company) name associated with the Platform ID defined above. Appears on reports sent to the USPS.

3. You can use the default values for the remaining fields.
4. Press **F6** to save your changes and exit the install program.
5. Review the G1UILOG spoolfile. The G1UILOG is a log of steps taken by the install program.
6. You have successfully installed your VeriMove software and are ready to load the databases. Go to "[Installing USPS Data](#)" on page 83.

Installing USPS Data

The following table summarizes the VeriMove database requirements for the IBM i platform.

VeriMove Databases, Delivery Methods and Update Requirements

Database	Delivery Method/Source	Req/Opt	Updates
NCOA ^{Link} Datasets	Download from USPS website or DVD.	Required for all licensees	Monthly or weekly (depending on license level)
NCOA ^{Link} Daily Deletes	Download from USPS website	Required for all licensees	Daily

Installing the NCOA^{Link} Database

This section describes the steps for installing NCOA^{Link} data on the IBM i platform. The USPS delivers the NCOA^{Link} data files in a compressed or tarred format. As part of the installation process, you will need to uncompress/expand the USPS NCOA^{Link} data files using the VeriMove explode process to make the data files fully functional. Prior to installing the NCOA^{Link} data:

Obtaining the NCOA^{Link} Data

Pitney Bowes does not supply the NCOA^{Link} data. You must contact the USPS directly to obtain the NCOA^{Link} data. The USPS requires all licensees to obtain product updates from the USPS Electronic Product Fulfillment (EPF) website. In the event that the USPS sends you NCOA^{Link} data on a DVD, we have included instructions for installing from a DVD. Currently the USPS mandate is to download the NCOA^{Link} data from the USPS EPF website. In most cases you will use the first option below.

1. Download the NCOA^{Link} data from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. Note the following additional steps required when downloading the NCOA^{Link} data from the USPS EPF web site:
2. Navigate to the location of the downloaded NCOA^{Link} data file.
3. If necessary, transfer NCOA^{Link} data file to your IBM i system.
4. The downloaded NCOA^{Link} data from the USPS EPF site may be in zipped or tar format. Unzip or untar the data before running explode.

5. Navigate to the folder that contains the unzipped or untarred NCOALink data. The number of files in the directory will vary depending on the database format you are licensed to use (hash or flat). The following table provides information on the unzipped/untarred files.

NCOALink Data Files

File Name	Description
clk.zip	Zipped data file that contains necessary NCOALink data files.
dvdhdr01.dat dvdhdr02.dat	Files that store the contents of the NCOALink database.
rv9.zip	Zipped data file that contains additional NCOALink data files.
clk.*	Additional NCOALink tables present when you receive 18 month (hash or flat) or 48 month data (hash or flat).
ank.*	Additional NCOALink tables present only when you receive ANKLink data (hash or flat).

NOTE: After the explode process, these files are renamed to clk.* file names.

When the NCOALink database, distributed by the USPS, is delivered on DVD, you can load the database directly on your IBM i machine if your IBM i machine has a DVD drive. Otherwise, a Windows machine can be used to run the explode.bat script, and the resulting files can be uploaded to your IBM i machine. The methods available for loading the NCOALink database are:

- You can load the NCOALink database from an Internet download file.
- If you receive a DVD from the USPS and have a DVD drive, you can use the Explode screens described below to install the NCOALink database directly from your IBM i DVD drive. For more information, refer to "[Installing the NCOALink Database from Internet Download or DVD](#)" on [page 85](#).
- If you receive a DVD from the USPS but do not have a DVD drive, you can use the manual method to install the NCOALink database using a PC with a DVD drive. For more information, refer to "[Installing the NCOALink Database Using Windows With a DVD Drive](#)" on [page 92](#).

Installing the NCOALink Database from Internet Download or DVD

The Explode process uses an Internet downloaded database file or the USPS DVDs to produce a ready-to-use native database library. To install the NCOALink database, follow these steps.

1. Start VeriMove on your IBM i machine.
2. From the *Work With Jobs* screen, press **F20**. The *Database Functions* screen (NLCPDB01) displays.

```
hh:mm:ss                               Veri Move                               NLCPDB00
mm/dd/yyyy                             Replace with screen heading desired    NLCPDB01
                                         Database Functions                     RI s NN.N

Select one of the following:

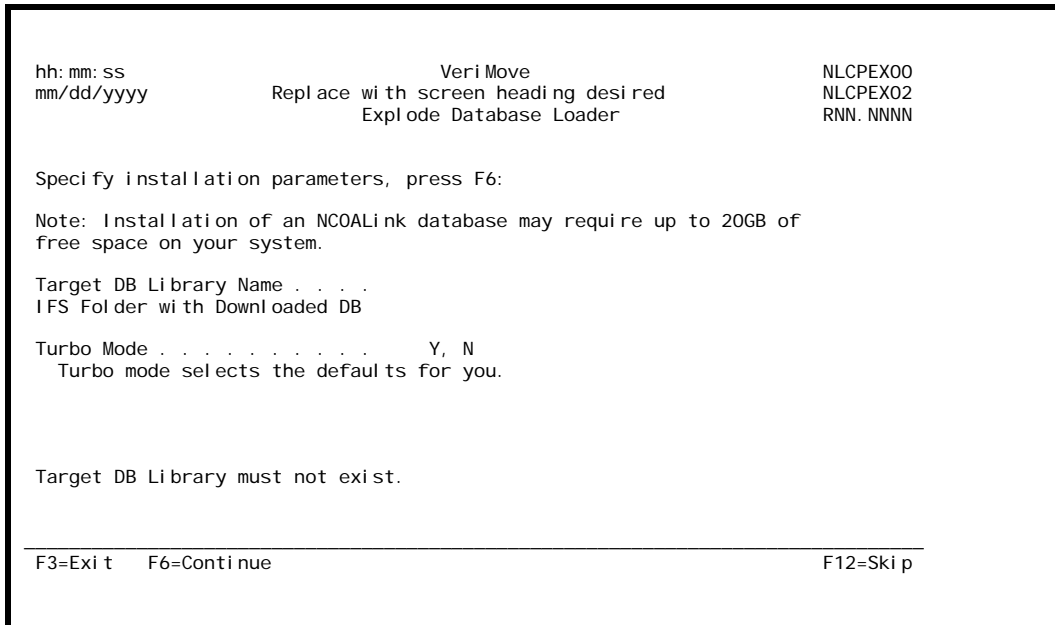
1. Load DB from IFS (after explode.bat on PC)
2. Load Daily Delete file from IFS
3. Install DB from USPS DVD (using iSeries DVD drive)
4. Install DB from Internet download

8. Change default Database Library

Option

F3=Exit
```

- To install from an Internet downloaded file, select **4. Install DB from Internet Download**. The *IFS Installation Screen (NLCPEX02)* displays. This screen allows you to install the database from an Internet downloaded file.



Field	Description
Target DB Library Name	Enter the target database library name.
IFS Folder with Downloaded DB	Enter the name of the folder in which you downloaded the database.
Turbo Mode	Indicate whether to use the database explode process default values. Y — Use the database explode process default values. N — Do not use the database explode process default values.

- Press **F6** to continue. The *Explode DVD Loader — Copying Files* screen (NLCPEX25) displays. Proceed to Step 9 below.

- To install and explode the database from a DVD, select **3. Explode DB from USPS DVD**. The *Explode DVD Loader* screen displays.

```

hh:mm:ss                               Veri Move                               NLCPEX00
mm/dd/yyyy                             Replace with screen heading desired    NLCPEX01
                                           Explode DVD Loader                      RIs NN.N

Specify installation parameters, press F6:

Note: Installation of an NCOALink database may require up to 20GB of
free space on your system.

Target DB Library Name . . . . . NLDB
Temporary IFS Folder Name . . . . /Veri MoveDBLoadTemp

IFS Path to DVD 1 . . . . . /QOPT/18 MONTH DATA D1
IFS Path to DVD 2 . . . . . /QOPT/18 MONTH DATA D2

Turbo Mode . . . . . Y, N
After loading both DVDs, turbo mode selects the defaults for you.

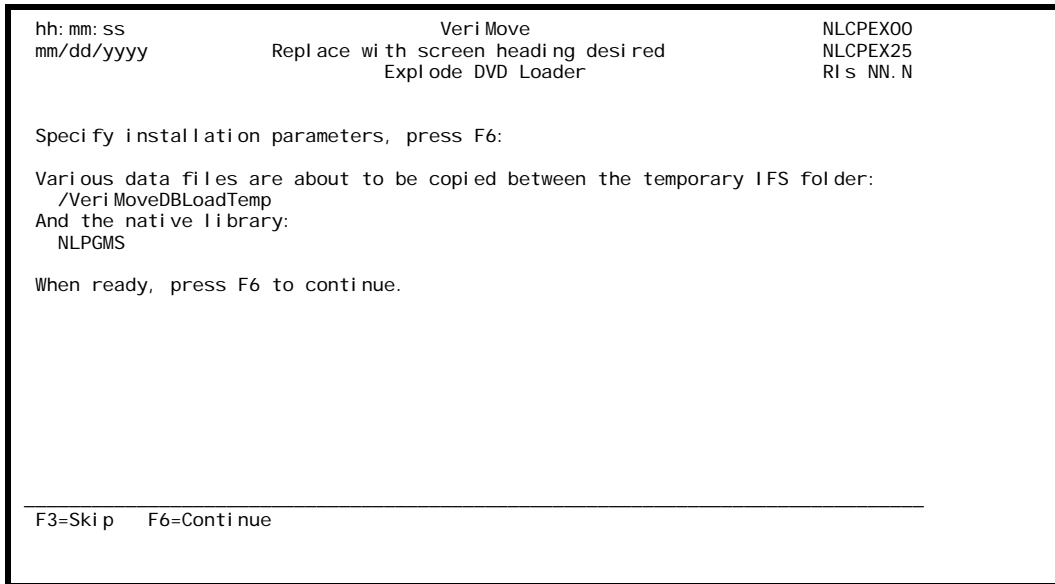
Target DB Library must not exist.

-----
F3=Exit  F6=Continue                               F12=Skip
  
```

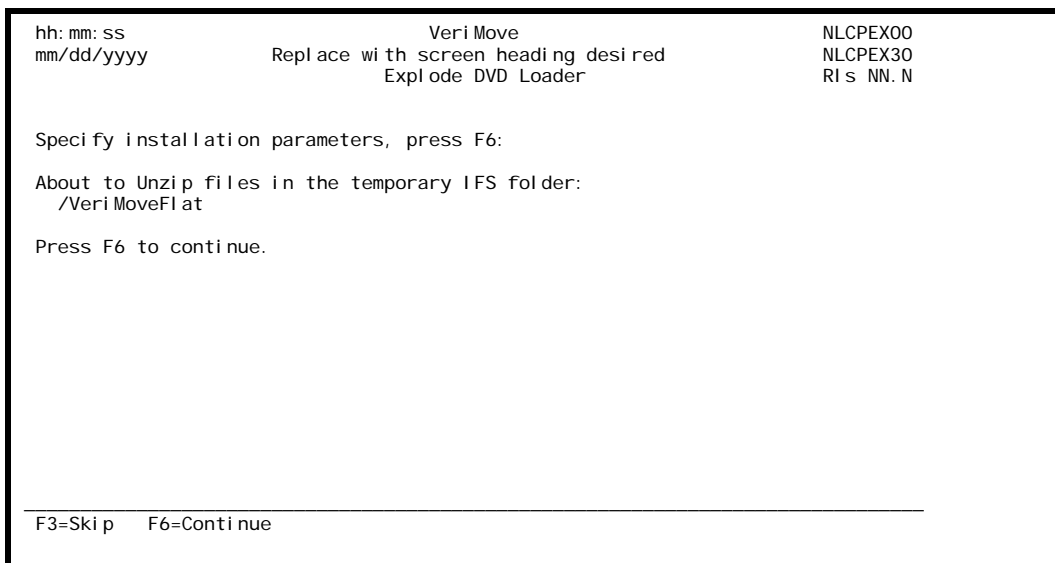
Field	Description
Target DB Library Name	Enter the target database library name.
Temporary IFS Folder Name	Enter the name of the a "temp" folder to use during the installation.
IFS Path to DVD 1	Enter the path to the first USPS DVD.
IFS Path to DVD 1	Enter the path to the second USPS DVD.
Turbo Mode	After loading both DVDs, indicate whether to use the explode DVD process default values. Y — Use the explode DVD process default values. N — Do not want to use the explode DVD process default values

- Press **F6** to continue. The message "Please load DVD 1 or correct path" displays.
- Load the first DVD or correct the path to the first DVD specified in **IFS Path to DVD 1**.
- After loading the first DVD, the message "Please load DVD 2 or correct path" displays. Load the second DVD or correct the path to the second DVD specified in **IFS Path to DVD 2**.

9. After loading the second DVD, the *Explode DVD Loader — Copying Files* screen displays.



10. Press **F6** to begin copying the data files. After the files are copied to the temporary IFS folder, the *Explode DVD Loader — Unzipping Files* screen displays.



11. Press **F6** to unzip the files in the temporary IFS folder:

/Veri MoveFI at

After unzipping the files, press **F6** to continue. The *Explode DVD Loader — Expanding Files* screen displays.

```
hh:mm:ss                Veri Move                NLCPEX00
mm/dd/yyyy             Replace with screen heading desired       NLCPEX32
                                                                RI s NN.N

Specify installation parameters, press F6:

SZP files are about to be expanded in the temporary IFS folder:
/Veri MoveDBLoadTemp
If SZP File exists, this may be a long- running process.

When ready, press F6 to continue.

-----
F3=Skip   F6=Continue
```

12. Press **F6** to expand the SZP files into the /VeriMoveDBLoadTemp folder. This process may take additional time. After the files have been expanded into the /VeriMoveDBLoadTemp folder, the *Explode DVD Loader — Converting File Format* screen displays.

```
hh:mm:ss                Veri Move                NLCPEX00
mm/dd/yyyy             Replace with screen heading desired       NLCPEX34
                                                                RI s NN.N

Specify installation parameters, press F6:

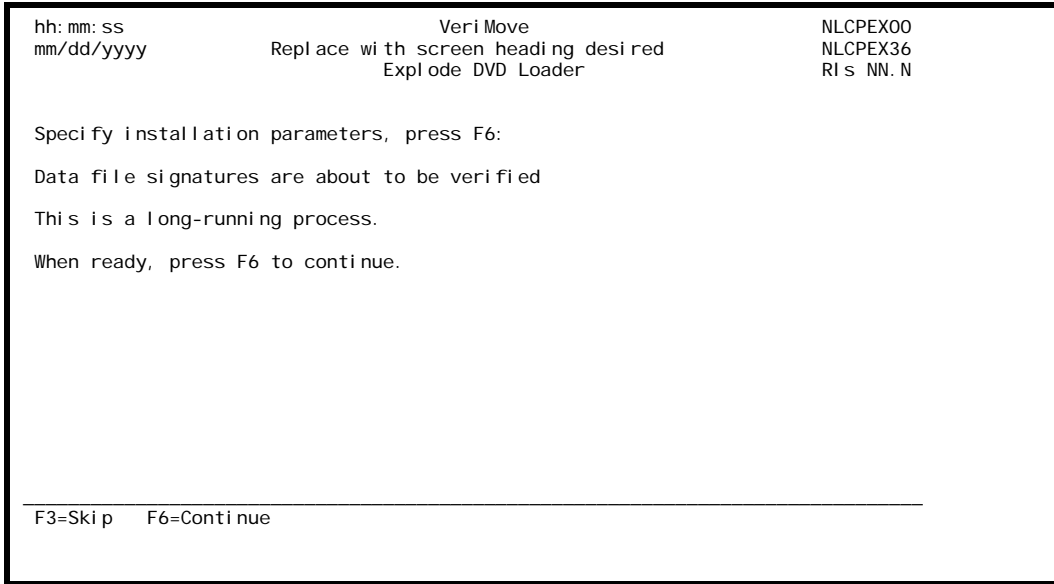
These files are about to be converted to PB format in the temporary IFS folder:
/Veri MoveDBLoadTemp

crd.dat
dsc.dat
lin.dat
nam.dat
pno.dat
sno.dat
suf.dat

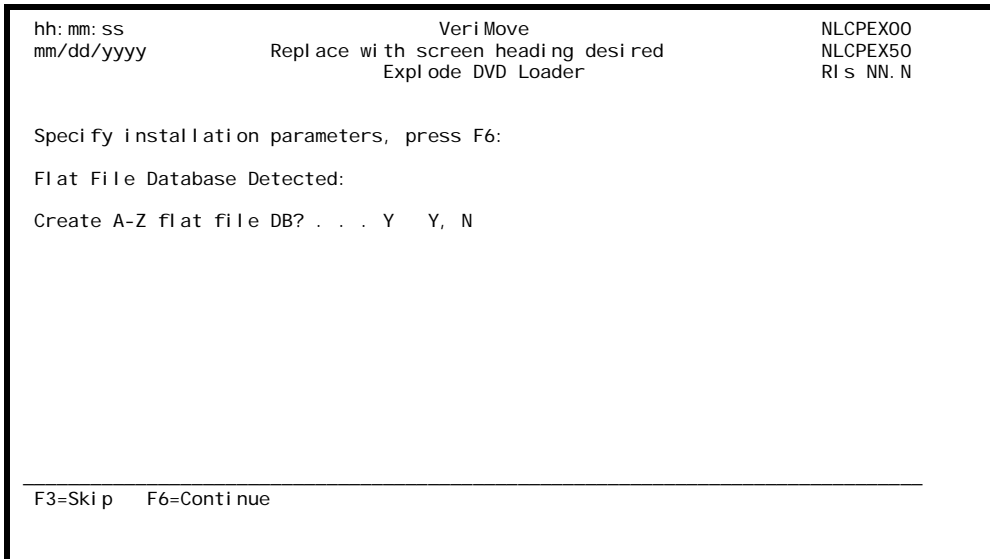
When ready, press F6 to continue.

-----
F3=Skip   F6=Continue
```

13. Press **F6** to begin the process of converting the expanded files to the VeriMove format. After converting the files, the *Explode DVD Loader — Verifying File Signatures* screen displays.



14. Press **F6** to verify the data file signatures. This process may take additional time.
15. If the system detects a Flat File database, the *Explode DVD Loader — Specifying Flat File Format* screen displays.



16. Specify your flat file format:

- To create the 26 flat file A-Z database, enter **Y**.
- If you do not want to create the 26 flat file A-Z database, enter **N**.

After specifying your flat file format, press **F6** to continue. The *Explode DVD Loader — File Transfer* screen displays.

```

hh:mm:ss                               Veri Move                               NLCPEX00
mm/dd/yyyy                             Replace with screen heading desired    NLCPEX60
                                           Explode DVD Loader                       RI s NN. N

Specify installation parameters, press F6:

About to copy files from the temporary IFS folder:
/VeriMoveDBLoadTemp
To the native library:
NLDB

When ready, press F6 to continue.

-----
F3=Skip  F6=Continue
  
```

17. Press **F6** to transfer the temporary IFS files into the native database files. After transferring the files, the *Explode DVD Loader — Deleting Temporary Folder* screen displays.

```

hh:mm:ss                               Veri Move                               NLCPEX00
mm/dd/yyyy                             Replace with screen heading desired    NLCPEX99
                                           Explode DVD Loader                       RI s NN. N

Specify installation parameters, press F6:

About to delete temporary IFS folder:
/VeriMoveDBLoadTemp

When ready, press F6 to continue.

-----
F3=Skip  F6=Continue
  
```

18. Press **F6** to delete the temporary folder. After deleting the temporary folder, the native database library is ready for use.

Installing the NCOALink Database Using Windows With a DVD Drive

To install the NCOALink databases by manually editing the Explode.bat file, browse to the location where you installed the VeriMove GUI and go to the Tables subfolder. For example, C: \PB\Veri Move\Tables. Follow the steps below.

1. Edit the explode.bat file as follows:
 - Change SET DVDPATH=XXXXX to the path to your DVD drive. For example, if your DVD drive is drive E: , you would specify DVDPATH=E: .
 - Change SET DVDDESTINATION=XXXXX to the path where you want to install the NCOALink data. For example, if you wanted to install the data to D: \USPSDATA you would specify DVDDESTINATION=D: \USPSDATA. This folder is created automatically if it does not already exist.

The last items only affect Flat File databases and are otherwise ignored.

- Change Set FLAT SINGLE=N to Y if you are using the Single Flat File database.
- Change Set FLATATOZ=Y to N if you set FLAT SINGLE=Y and do not also want to use the 26 Flat File A-Z database.

i A USPS utility is used to decompress some of the files supplied by the USPS on the DVDs. This utility does not function properly if DVDDESTINATION contains any spaces.

2. Save and close explode.bat under a new name (i.e., myexplode.bat) that will not be overwritten by future updates and installations. The actual work is done by explode_query.bat, which is called from myexplode.bat.

3. Double-click the **myexplode.bat** file which opens a DOS window:

```
*****
NCOALink Database Installation Script.
*****
```

This script installs an NCOALink database from two DVDs onto your hard drive. This can require up to 20 GBytes of free space on your hard drive.

4. The following displays:

```
Folder dvddestination is about to be loaded from the
NCOALink database found on DVD dvdpath
*****
WARNING -- If you proceed from this point, all data in
folder dvddestination will be erased first. You may type
Control -C to abort this process now without erasing anything.
*****
```

The warning above only displays if the destination folder contains data.

5. The following message displays:

```
Insert NCOALink data DVD 1 from the USPS into Drive dvdpath
Press any key to continue

Copying DVD 1 (dvdpath) to dvddestination
DVD 1 copy complete.
Insert NCOALink data DVD 2 from the USPS into Drive dvddestination
Press any key to continue

Copying DVD 2 (dvddestination) to dvdpath
DVD 2 copy complete.
```

6. After both DVDs have been copied, the .zip (zipped) files are automatically expanded. The .szp (USPS-compressed) files are then expanded. Afterward, a series of preprocesses and tests are performed. If there are errors, one of the following messages displays:

```
**** FILE NOT FOUND: filename
**** ERROR COPYING FILE: filename
**** ERROR PROCESSING FILE: filename
**** ERROR: message
```

This message will be followed by:

```
FAILURE!!!
```

```
Press any key to continue
```

7. If the message indicates that there is a file in the VeriMove installation folder, then there was a problem with your VeriMove installation. If the error involves copying a file from the DVD, then you may have a bad DVD or your DVD drive may be unable to properly handle this type of DVD. A process called "TestFileSha" produces a file called TablesTestFileSha.log in the parent folder of the folder containing these scripts. This file contains detailed descriptions of the tests performed and any errors that have occurred. If an error occurs, the following message displays:

```
**** ERROR: Verifying Data File Signatures
```

If you get this message, the data files indicated in the log file were corrupted and you may have a bad DVD or DVD drive. This error is specific to data on the DVD or to "read" problems with the DVD. You may need to request replacement production DVD datasets from USPS NCOA^{Link} support.

8. If there are no problems with these various processes and tests, the following message displays:

```
SUCCESS!!!
```

```
Press any key to continue
```

Completing the Installation When Using Windows with a DVD Drive

After you execute explode.bat, follow these instructions:

1. Map a drive from the PC to the IFS.
2. Create a folder on the IFS, such as /Veri MoveTemp. Copy the exploded data and/or the Daily Delete file to that folder.
3. Start VeriMove on your IBM i machine.
4. From the *Work With Jobs* screen, press **F20** for **Database Functions**. The *Database Functions* screen displays.

```
hh:mm:ss                               Veri Move                               NLCPDB00
mm/dd/yyyy                             Replace with screen heading desired    NLCPDB01
                                         Database Functions                       RI s NN. N

Select one of the following:

1. Load DB from IFS (after explode.bat on PC)
2. Load Daily Delete file from IFS
3. Install DB from USPS DVD (using iSeries DVD drive)
4. Install DB from Internet download

8. Change default Database Library

Option

-----
F3=Exit
```

5. Select option 1, **Install Database from IFS**. The *Database Functions Screen — Install Database from IFS* screen displays.

```

                                Veri Move                    NLCPDB00
                                Replace with screen heading desired NLCPDB01
Job MYJOB                        Database Functions          RI s NN. N

Enter database installation options, press Enter.

To install a new database, first run explode.dat, then copy the resulting
files to a folder on the IFS.

Source IFS folder . . .                               Like: /Veri MoveTemp
Target library . . . . .

Existing files in Target library will be replaced!

Press F6 to install the files from the IFS to the Target library. A job
called INSTDB will be submitted to batch. When the process completes, the
files on the IFS may be deleted.

-----
F3=Exit  F6=Execute

```

Field	Description
Source IFS folder	Enter the Source IFS folder, such as /VeriMoveTemp. This is the folder created in step 2.
Target library	Enter the Target library, such as VeriMoveDB. This native library will be created if it does not exist.

6. Press **F6** to install the files. A job called INSTDB is submitted to batch. When the batch job completes, display the job log to verify that the files were copied successfully.
7. After completing the installation, you can delete the IFS folder created in step 2.

Installing the Daily Delete File

USPS regulations require all NCOALink licensees to use the Daily Delete File. Licensees must download and install this file daily. To install the Daily Delete file, follow these steps.

1. Create a folder on the IFS. Name the folder whatever you like.
2. Download the Daily Delete file. The Daily Delete file is available from the USPS Electronic Product Fulfillment (EPF) web site at <https://epf.usps.gov>. IBM i users should download the EBCDIC version of the file. Save the file to the IFS folder that you created.
3. Log on to your system.
4. Start VeriMove using your usual method, such as by using the "G1" command and selecting option 12 for VeriMove.
5. From the Work with Jobs screen, press F20=Database Functions.
6. Select option 2: "Load Daily Delete file from IFS."
7. On screen NLCPDB01, fill in the "Source IFS folder" field with the IFS folder name that you created.
8. Fill in the "Target library" field with the system library name where you would like the native Daily Delete file to be created.
9. Press F6 and the Daily Delete file will be installed.

To configure your job to use the Daily Delete file, you have two options:

Option 1: Set up a default Daily Delete file location.

1. From the Work with Jobs screen, press F20=Database Functions.
2. Select option 8: Change default Database Library.
3. On screen NLCPDB90, enter the location of the Daily Delete file.
4. Returning to the Work with Jobs screen, select option 16=Submit next to the job you wish to submit.
5. On screen NLCPDB01, specify the value *DEFAULT for the Daily Delete file. Leave the Library and Member names blank.
6. Press F6=Submit.
7. The job will use the values on NLCPDB90 for future job submissions.

Option 2: Specify the Daily Delete file location at job submission time.

1. From the Work with Jobs screen, select option 16=Submit next to the job you wish to submit.
2. On screen NLCPDB01, specify the location of the Daily Delete file.
3. Press F6=Submit.
4. The job will use those specific values for future job submissions.

Installing a Product Update

To install a VeriMove product update:

1. Download the product update file from the Product Updates page of the web site. The downloaded file will either be a self-extracting zip file with a *.exe extension, or a regular *.zip file that should be unzipped.
2. If you download the *.zip file, unzip this file with a standard unzipping utility to extract the contents of the update. If you downloaded a self-extracting *.EXE, double-click the *.EXE file on a Windows-based machine to extract the contents of the file.

One of the extracted files will be an IBM i save file with an *.SVF extension. This file is the actual Product Update and must be on a PC that has file transfer capabilities (such as FTP) to your IBM® i system.

i If there are **two** files with an *.SVF extension, then this patch includes code for both the global library and the product library. You must follow additional instructions to install both sets of code. These instructions are contained in **NOTES** accompanying each affected step.

3. On the IBM i platform, create a save file in your own library. This is the location that will hold the file after it is transferred from the PC. For example:

```
CRTSAVF FILE(YourLib/YourSaveFileName)
```

i Create two save files in your own library. This is the location that will hold the files after they are transferred from the PC. For example:

```
CRTSAVF FILE(YourLib/SAVF@@)  
CRTSAVF FILE(YourLib/SAVFNL)
```

4. Transfer the *.SVF file from the PC to the IBM i save file created in the previous step. Transfer the file using FTP in **binary** mode.

i Transfer the *.SVF files from the PC to the IBM i save files created in the previous step. Transfer the files using FTP in binary mode. The name of one of the *.SVF files will end in "@@." This is the patch for the global library: FTP it into your *Lib/SAVF@@*.


The other *.SVF file will end in the product code. FTP this file into your *Lib/SAVFNL*. FTP the remaining *.SVF file to the remaining save file on your IBM i machine.

5. Verify that the file was transferred successfully using the following command:

```
DPSAVF FILE(YourLib/YourSaveFileName)
```

Installing Your Software License Key

6. Restore the objects to your product library using the following command.
RSTOBJ OBJ(*ALL) SAVLIB(G1NLPGMS) DEV(*SAVF)
SAVF(YourLib/YourSaveFileName) MBROPT(*ALL) ALWOBJDIF(*ALL)
where G1NLPGMS is the default product library. If your product library is not the default of G1NLPGMS, you will need to add an RSTLIB (*YourProductLibrary*) parameter to the above command.

 Restore the objects to your global install library using the following command:

```
RSTOBJ OBJ(*ALL) SAVLIB(G1@@PGMS) DEV(*SAVF) SAVF(YourLib/SAVF@@)
MBROPT(*ALL) ALWOBJDIF(*ALL)
```


...where G1@@PGMS is the default global install library.

If your global library is not the default of G1@@PGMS, you will need to add an RSTLIB (*YourFunctionLibrary*) parameter to the above command. Restore the objects to your product library using the following command:

```
RSTOBJ OBJ(*ALL) SAVLIB(G1NLPGMS) DEV(*SAVF) SAVF(YourLib/SAVFNL)
MBROPT(*ALL) ALWOBJDIF(*ALL)
```

...where G1NLPGMS is the default product library. If your product library is not the default of G1NLPGMS, you will need to add an RSTLIB (*YourFunctionLibrary*) parameter to the above command.

7. Check your job log (DSPJOBLOG) to ensure that all objects were successfully restored. You can compare the results of Step 5 with the job log to ensure that all of the intended objects transferred and installed properly.
8. You may now delete or clear the save file(s) that was created in Step 3.

 If you are ready to install the product database, follow the instructions in "[Installing USPS Data](#)" on page 83.

Installing Your Software License Key

Pitney Bowes distributes new VeriMove software license keys on an annual basis.

Installing Your NCOA^{Link} License Key

To install your NCOA^{Link} license key, follow these steps:

1. Call program G1NLEDTCFG in G1NLPGMS.
2. Replace the previous NCOA^{Link} key in your configuration file with your new NCOA^{Link} key.
3. Save the configuration file.

Getting Started with VeriMove

For information on getting started with VeriMove, refer to your *VeriMove User's Guide*.

Configuring Your VeriMove Installation

In this chapter:

- ◆ **Configuring Your VeriMove Installation100**

Configuring Your VeriMove Installation

The settings in the VeriMove config.ini configuration file (Windows, Unix, Linux) or sampcnfg configuration file (z/OS) determine how VeriMove processes your files.

- If you are a new VeriMove user, the installation program installs the config.ini configuration file as part of the normal installation process.
- If you are an existing VeriMove user, the installation program installs the config.ini.distribute configuration file into the installation directory and leaves your original config.ini configuration file intact.

You can process with VeriMove using the default settings in the config.ini file or you can change the settings in the config.ini file to conform to your specific installation site requirements.

i The configuration file includes preset values tested for optimum performance across platforms. Changing the preset values may adversely affect your system performance. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing any preset default values.

Refer to the table below for information on populating your config.ini configuration file.

Configuration File Properties (Part 1 of 10)

Property	Description
General Attributes (All Environments)	
Registered Company	Name of the PAF registered company.
Registered User	Name of the PAF registered user.
NCOA ^{Link} Key	NCOA ^{Link} key assigned to you by Pitney Bowes.
SerialNumber	Serial number assigned to you by Pitney Bowes.
NCOA ^{Link} Platform ID	Four-character platform ID assigned by the USPS.
Licensee	Customer name as you want it to appear on the reports sent to the USPS.
NCOA ^{Link} License Type	Type of NCOA ^{Link} license: <ul style="list-style-type: none"> • 0 — Full Service Provider • 1 — Limited Service Provider • 2 — End User
Report Attributes (Windows, Unix, and Linux Only)	
ReportPath	Path name for generated report files.

Configuration File Properties (Part 2 of 10)

Property	Description
Matching Attributes (All Environments)	
Business Name Matching Enhancements	<p>Business Name Matching level.</p> <ul style="list-style-type: none"> • 0 — Use the standard Business Name Matching process. The default value is 0. • 1 — Use the enhanced Business Name Matching process. This option, using additional algorithms, may improve Business Name Matching for a small cost in performance and slightly slower run times.
Internal CASS Processing Attributes (Windows, Unix, and Linux Only)	
CASSSerialNumber	<p>CASS serial number that Pitney Bowes assigned to you. If you are a new VeriMove customer, your CASS serial number is included with your product shipment.</p> <p>If you are an existing VeriMove customer and want to continue using external CASS processing, specify your current CASS serial number.</p> <p>If you are an existing VeriMove Unix or Linux customer using external CASS processing and you want to start using the VeriMove internal CASS processor, contact your Technical Support Representative for your CASS serial number. If you decide to switch from external CASS processing to the VeriMove internal CASS processor, in accordance with your USPS license agreement, you must recertify your current VeriMove configuration with the USPS. Your Technical Support Representative can answer any questions you may have on recertifying with the USPS.</p>
DPVKey	To perform DPV processing using the VeriMove internal CASS processor, specify your DPV product software key as provided by Pitney Bowes.
LACSKey	To perform LACS ^{Link} processing using the VeriMove internal CASS processor, specify your LACS ^{Link} product software key as provided by Pitney Bowes.
DPVMemory	<p>(Optional) Memory model for DPV processing:</p> <ul style="list-style-type: none"> • P — Pico. Stores no data in memory. No tables or indexes are loaded. • U — Ultra-small. Stores no data in memory. Partial indexes are loaded. • S — Small • M — Medium • L — Large • H — Huge. Stores all data in memory. • blank or missing — Defaults to: <ul style="list-style-type: none"> – S — When you specify NCOA Use High Memory=0 (default value for NCOA Use High Memory) – H — When you specify NCOA Use High Memory=1

Configuration File Properties (Part 3 of 10)

Property	Description
LACSLinkMemory	<p>(Optional) Indicates the memory model for LACS^{Link} processing:</p> <ul style="list-style-type: none"> • P — Pico. Stores no data in memory. No tables or indexes are loaded. • U — Ultra-small. Stores no data in memory. Partial indexes are loaded. • S — Small • M — Medium • L — Large • H — Huge. Stores all data in memory. • blank or missing — Defaults to: <ul style="list-style-type: none"> – S — When you specify NCOA Use High Memory=0 (default value for NCOA Use High Memory) – L — When you specify NCOA Use High Memory=1
SuiteLinkMemory	<p>(Optional) Indicates the memory model for Suite^{Link} processing:</p> <ul style="list-style-type: none"> • P — Pico. Stores no data in memory. No tables or indexes are loaded. • U — Ultra-small. Stores no data in memory. Partial indexes are loaded. • S — Small • M — Medium • L — Large • H — Huge. Stores all data in memory. • blank or missing — Defaults to: <ul style="list-style-type: none"> – S — When you specify NCOA Use High Memory=0 (default value for NCOA Use High Memory) – L — When you specify NCOA Use High Memory=1

Configuration File Properties (Part 4 of 10)

Property	Description
High Memory Attributes (All Environments)	
NCOA Use High Memory	<p>Specify whether to use high memory using these codes:</p> <ul style="list-style-type: none"> • 0 — Turns off the large memory model. This is referred to as the small memory model. Use this option when only a small amount of limited real memory is available to you. The default value is 0. • 1 — Turns on the large memory model. A large number of data files are loaded into memory to improve performance. Use this option only if you have enough free real memory available (see note below). <p>NOTE: When using the large memory model and internal CASS processing, VeriMove uses approximately 1.7 GB of memory. When using the large memory model and external CASS processing, VeriMove uses approximately 1 GB of memory.</p> <p>NOTE: For HP-UX Unix, if you are running on an Itanium based machine, the large memory model will not work for NCOA^{Link} processing. Set this option to 0.</p> <p>NOTE: When VeriMove is set to “Large Memory Model” (NCOA Use High Memory=1), DPV, LACS^{Link} and Suite^{Link} are configured to the “L” (Large) memory model. When VeriMove is set to “Small Memory Model” (NCOA Use High Memory=0), DPV, LACS^{Link} and Suite^{Link} are configured to the “U” (Ultra) memory model.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>

Configuration File Properties (Part 5 of 10)

Property	Description
Small Memory Attributes (All Environments)	
SmallMemEnh	<p>This feature enhances the small memory model only. To turn on the small memory model, specify configuration variable NCOA Use High Memory = 0. To turn on the small memory model enhancement, you must also specify SmallMemEnh=1. The small memory model enhancement may provide a performance gain when running in small memory model if your list is sorted in ZIP Code order. If your list is sorted in ZIP Code order and there are a large number of records within the same ZIP Code segment (first two digits of the ZIP Code), you can use the small memory model enhancement to have VeriMove load an entire segment into memory and perform memory lookups for each record. This process may improve performance by not performing an I/O lookup on disk for each record.</p> <p>Specify whether to use the small memory model enhancement:</p> <ul style="list-style-type: none"> • 0 — Do not use the small memory model enhancement. The default value is 0. • 1 — Use the small memory model enhancement for a potential performance enhancement. <p>NOTE: To use the small memory model, specify configuration variable NCOA Use High Memory = 0.</p> <p>NOTE: It is recommended that you sort your list(s) in ZIP Code order to achieve optimum performance.</p>
Internal Diagnostic Attributes (All Environments)	
NCOA Logging	Used for internal diagnostics. The default value is 0.

Configuration File Properties (Part 6 of 10)

Property	Description
Footnote Legend (All Environments)	
NCOA Footnote Legend	<p>Defines the appearance of the NCOA^{Link} Footnote Statistics section in the NCOA^{Link} Processing Summary Report.</p> <ul style="list-style-type: none"> • 0 — The NCOA^{Link} Footnote Statistics section in the NCOA^{Link} Processing Summary Report does not include a description for each footnote. • 1 — The NCOA^{Link} Footnote Statistics section in the NCOA^{Link} Processing Summary Report includes a short text description for each footnote. The default value is 1. <p>For information on how the NCOA^{Link} Footnote Statistics section displays in the NCOA^{Link} Processing Summary Report, see the section "NCOA^{Link} Footnote Statistics" in Chapter 6, Reports in your <i>VeriMove User's Guide</i>.</p>
Database Attributes (All Environments)	
NCOA Use Flat Single	<p>Specifies whether to use a single (vs. 26 A-Z) flat file database.</p> <ul style="list-style-type: none"> • 0 — Use the 26 flat file A-Z database. • 1 — Use the single flat file database.
NCOA Use Flat Hash	<p>Determines whether to use the 26 hash files that are used to do a quick test to see if the full data needs to be looked up. The hash files are not strictly necessary for the operation of the flat file database, since a single lookup is done to get all information. Most tests, however, show that using the flat hash files improves performance.</p> <ul style="list-style-type: none"> • 0 — Do not use the flat hash files. • 1 — Use the flat hash files (default value).

Configuration File Properties (Part 7 of 10)

Property	Description
Thread Interval Attributes (All Environments)	
Interval Input	<p>Frequency of the input thread gaining control of processing. The default value is 6. The recommended range is from 0 to 100.</p> <p>CAUTION: A change to this value can impact throughput, wait time, and CPU usage. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing this value.</p> <p>NOTE: The smaller the value specified, the more frequently the thread awakens to determine if work is available.</p> <p>NOTE: A guideline for the Input Thread is to be 1-3 times greater than the value specified for the NCOA Thread to allow for queue transfer to NCOA Thread.</p>
Interval NCOA	<p>Frequency of the NCOA thread gaining control of processing. The default value is 2. The recommended range is from 0 to 100.</p> <p>CAUTION: A change to this value can impact throughput, wait time, and CPU usage. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing this value.</p> <p>NOTE: The smaller the value specified, the more frequently the thread awakens to determine if work is available.</p> <p>NOTE: The NCOA Thread should always be kept at a low value. This thread should rarely sleep, and for very short periods of time, to avoid impacting performance.</p>
Interval Move	Reserved for future use.
Interval Output	<p>Frequency of the output thread gaining control of processing. The default value is 8. The recommended range is from 0 to 100.</p> <p>CAUTION: A change to this value can impact throughput, wait time, and CPU usage. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing this value.</p> <p>NOTE: The smaller the value specified, the more frequently the thread awakens to determine if work is available.</p> <p>NOTE: A guideline for the Output Thread is to be 2-4 times greater than the value of the NCOA Thread to avoid excessive wakes.</p>

Configuration File Properties (Part 8 of 10)

Property	Description
Queue Size Attributes (All Environments)	
Queue Size Input	<p>Number of input records that can be processed through the input thread before the queued records are passed to the next processing step. The default value is 3000.</p> <p>CAUTION: A change to this value can impact throughput and memory usage. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing this value.</p> <p>NOTE: The recommended range is from 200-50,000 in 100 record increments. The queues are held in memory. The higher the queue size specified, the more memory that will be required.</p>
Queue Size Job Input	<p>Number of input records VeriMove processes through the input thread before passing the records to preliminary NCOA^{Link} move prequalification processing. The default value is 3000.</p> <p>CAUTION: A change to this value can impact throughput and memory usage. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing this value.</p> <p>NOTE: The recommended range is from 200-50,000 in 100 record increments. The queues are held in memory. The higher the queue size specified, the more memory that will be required.</p> <p>NOTE: A general guideline is for the size to match the queue size of the input queue.</p>
Queue Size NCOA	<p>Number of prequalified records passed to the move thread or to the output thread. The default value is 4000.</p> <p>CAUTION: A change to this value can impact throughput and memory usage. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing this value.</p> <p>NOTE: The recommended range is from 200-50,000 in 100 record increments. The queues are held in memory. The higher the queue size specified, the more memory that will be required.</p> <p>NOTE: A general guideline is for the size to be two times the queue size of the job queue.</p>
Queue Size Move	Reserved for future use.

Configuration File Properties (Part 9 of 10)

Property	Description
Queue Size Output	<p>Number of output records that can be written to the output file including move and non-move records. The default value is 3000.</p> <p>CAUTION: A change to this value can impact throughput and memory usage. Pitney Bowes recommends you consult with a Technical Support Representative or Professional Services Representative before changing this value.</p> <p>NOTE: The recommended range is from 200-50,000 in 100 record increments. The queues are held in memory. The higher the queue size specified, the more memory that will be required.</p> <p>NOTE: A general guideline is for the size to be equal to the queue size of the job queue.</p>
Mainframe Upload Attributes (z/OS Only)	
UploadSourceFolderUSPS	This is the folder on the Windows computer that will contain the NCOA ^{Link} data that has been decompressed and is ready to upload to the mainframe. For information on the NCOA ^{Link} data installation process, see "Installing NCOA^{Link} Data on Windows and z/OS" on page 15.
UploadSourceFolderVeriMove	The folder on the Windows computer that contains the VeriMove data files to be uploaded to the mainframe. Generally this will be the same as UploadSourceFolderUSPS.
File Allocation Attributes for Sequential Datasets (z/OS Only)	
UploadSeqTargetPrefixUSPS	High level qualifier to be prepended to the file names of the NCOA ^{Link} sequential datasets.
UploadSeqTargetPrefixVeriMove	High level qualifier to be prepended to the file names of the VeriMove sequential datasets.
UploadSeqTargetSuffix	(Optional) Value to append to file names when creating sequential datasets.
UploadSeqTargetVolumes	(Optional) Volume serial number(s) used for allocating sequential datasets.
UploadSeqTargetUnit	Device unit to use when allocating sequential datasets. For example, "SYSDA" or "3390".
UploadSeqRetainFor	(Optional) The number of days to retain the sequential files uploaded to the mainframe. If you specify this parameter, do not specify the UploadSeqRetainTo parameter.
UploadSeqRetainTo	(Optional) The day that uploaded sequential files will expire, in the format YYYYDDD (Julian format). If you specify this parameter, do not specify the UploadSeqRetainFor parameter.
File Allocation Attributes for VSAM RRDS Datasets (z/OS Only)	
UploadRRDSTargetPrefixUSPS	High level qualifier to be prepended to the names of the USPS VSAM RRDS datasets.

Configuration File Properties (Part 10 of 10)

Property	Description
UploadRRDSTargetPrefixVeriMove	High level qualifier to be prepended to the names of the VeriMove VSAM RRDS datasets.
UploadRRDSTargetVolumes	List of volumes to use when allocating VSAM RRDS datasets. The list can be either comma or space separated.
UploadRRDSRetainFor	(Optional) The number of days to retain the VSAM RRDS files uploaded to the mainframe. If you specify this parameter, do not specify the UploadRRDSRetainTo parameter.
UploadRRDSRetainTo	(Optional) The day that uploaded VSAM RRDS files will expire, in the format YYYYDDD. If you specify this parameter, do not specify the UploadRRDSRetainFor parameter.

Index

B

Business Name Matching 101

- Business name matching enhancements 101
- Business name matching tables 19, 37, 53, 68

C

CASS

- Database updates overview 15, 33, 49, 64
- Installing database for external CASS 38, 54
- installing database for external CASS 70
- Installing database for internal CASS 20, 38, 54, 70

CASS key for internal CASS processing

- installing license key on Linux 56
- installing license key on Unix 40
- installing license key on Windows 23

CONFIG.INI 78, 82

Configuration file 10, 13, 27–28, 31, 43, 47, 60, 63

Configuring VeriMove

- CONFIG.INI 78, 82
- on Linux 43, 47
- on Unix 28, 31
- on Windows 10, 13
- on z/OS 60

D

Daily Delete File

- installing
 - on IBM i 96
 - on Linux 53
 - on Unix 37
 - on Windows 19
 - on z/OS 69

- Update overview 15, 33, 49, 64, 83

Databases

- and delivery methods 15, 33, 64, 83
- installing Daily Delete file
 - on IBM i 96
 - on Linux 53
 - on Unix 37
 - on Windows 19
 - on z/OS 69
- installing databases for External CASS 20, 38, 54, 70
- installing for Internal CASS Processing
 - CASS database 20, 38, 54, 70
 - DPV database 20, 38, 54, 70
 - EWS database 20, 38, 54, 70
 - LACSLink database 20, 38, 54, 70
 - SuiteLink database 20, 38, 54, 70

- installing NCOALink data
 - on IBM i 84
 - on Linux 49
 - on Unix 33
 - on Windows 15
 - on z/OS 15

Delivery Point Validation (DPV)

- Database update overview 15, 33, 49, 64
- Installing for internal DPV 20, 38, 54, 70
- memory model 101

Distribution, of databases 83

E

Early Warning System

- Database update overview 15, 33, 49, 64
- Installing EWS data 20, 38, 54, 70

Explode screens

- IBM i 84

explode.bat 17, 35, 51, 66, 92, 94

F

Flat File 17, 35, 51, 66

G

getFileHTTP.exe 19, 37, 53, 69

I

IBM i

- Installing product update 97
- installing VeriMove
 - from DVD 79
 - from internet download 74
 - requirements 74

IDSINSTL 59

Installing NCOALink Data

- on Windows 15
- on z/OS 15

Installing NCOALink data

- on z/OS 64

Installing VeriMove

- global library special options 76, 80
- installing from Internet download 74

installing the database **84**
on Unix **26**
 from DVD **30**
 from internet download **27**
 requirements **26**
on Windows **7**
 from DVD **12**
 from internet download **9**
 requirements **8**
product selection **75, 80**
verifying UNIX installation **39**

L

LACSLink

Database update overview **15, 33, 49, 64**
Installing for internal LACSLink **20, 38, 54, 70**
memory model **102**

License keys

installing on IBM i **98**
installing on Linux **56**
installing on Unix **40**
installing on Windows **23**
installing on z/OS **71**

Linux

installing VeriMove
 from DVD **46**
 from internet download **43**
 requirements **42**

locked library **78, 81**

M

Memory model

DPV **101**
LACSLink **102**
SuiteLink **102**

N

NCOALink

Dataset update overview **15, 33, 49, 64**
installing data on IBM i **83**
Installing data on Linux **49**
Installing data on UNIX **33**
Installing data on Windows **15, 19**
Installing data on z/OS **64**
installing license key on IBM i **98**
installing license key on Linux **56**
installing license key on Unix **40**
installing license key on Windows **23**
installing license key on z/OS **71**

P

Performance **15, 33, 49, 64**

Pitney Bowes website

installing from Internet download **74**

Product updates

installing
 on IBM i **97**
 on Linux **56**

on UNIX **40**
on Windows **23**
on z/OS **71**

S

SAMPCNFG 27, 43

Site Support

installing license key on Windows **23**

Statistics File

conversion **21, 39, 55, 70**

SuiteLink

Database update overview **15, 33, 49, 64**
memory model **102**

U

Unix

installing VeriMove **26**
 from DVD **30**
 from internet download **27**
 requirements **26**

UNLOAD 63

UPLOAD 63, 70

UploadServer.exe **64, 70**

Utilities

getFileHTTP.exe **19, 37, 53, 69**
UploadServer.exe **64, 70**

W

Windows

installing VeriMove **7**
 from DVD **12**
 from internet download **9**
 requirements **8**

Z

z/OS

installing VeriMove
 from internet download **58**
 from media **62**
 requirements **58**

Feedback

Document Title:

Document Date:

Software Version:

Comment regarding page:

Contact Preferences

May we contact you if we have questions about your comments?

Yes

No

Contact Information

Name:

Email:

Phone:

Best time to contact:

Comments

Enter you comments here:

