



# Finalist<sup>®</sup>

## Release 9.1.0

# Release Notes

This document contains information on the Finalist<sup>®</sup> 9.1.0 release. Complete documentation is located at <http://www.g1.com/support>.

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### Who should upgrade to Release 9.1.0?

Finalist<sup>®</sup> users on all platforms.


### Is this Finalist<sup>®</sup> release required?

Yes, the Finalist<sup>®</sup> 9.1.0 release is required if you wish to continue processing in a CASS<sup>™</sup>-certified mode after July 31, 2016.

No, if you do not wish to continue processing in a CASS<sup>™</sup>-certified mode after July 31, 2016.

UNITED STATES  
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# Release 9.1.0 Highlights

The Finalist<sup>®</sup> 9.1.0 release includes the following enhancements and updates:

- Updated Finalist<sup>®</sup> Software License Key
- USPS Upcoming Changes
- USPS<sup>®</sup> CASS<sup>™</sup> Cycle N Support
- Address Coding Process Changes
- New PBFNTransact API for On-Line Processing
- DPV<sup>®</sup> Door Not Accessible (DNA) Table
- Structure Changes
- API Changes
- JCL Changes
- Sample Changes
- Compatibility Interface (CI) Changes
- User Interface (UI) Changes
- CICS Screen Changes
- IMS Screen Changes
- Report Changes

## Updated Finalist<sup>®</sup> Software License Key

The Finalist<sup>®</sup> 9.1.0 release requires an updated software license key. This updated software license key was sent to the current (Primary User or Ship To) contact in our database automatically based on the System (CPU) ID information we have on file from your previous Finalist<sup>®</sup> software license key. If your System ID has changed, or you will be processing on a system different from your previous key, please contact your Pitney Bowes Account Manager to update your System ID information and request an updated key.

### Finalist<sup>®</sup> 9.0.0 Software License Key

The Finalist<sup>®</sup> 9.0.0 software license key expires CASS<sup>™</sup> certification on July 31, 2016. Finalist<sup>®</sup> 9.0.0 will continue to operate in non-CASS mode only after July 31, 2016. The Finalist<sup>®</sup> 9.0.0 key is only valid for Finalist<sup>®</sup> 9.0.0.

### Finalist<sup>®</sup> 9.1.0 Software License Key

The Finalist<sup>®</sup> 9.1.0 software license key expires CASS<sup>™</sup> on July 31, 2017. The Finalist<sup>®</sup> 9.1.0 key is only valid for Finalist<sup>®</sup> 9.1.0 versions of the Finalist<sup>®</sup> software.

## USPS Upcoming Changes

During a 2015 audit, the USPS<sup>®</sup> was found to not be using the proper Secure Hash Algorithm (SHA) logic in the USPS<sup>®</sup> Link products.

On October 21, 2015, the USPS<sup>®</sup> formally announced a change to the Link products (DPV<sup>®</sup>, LACSLink<sup>®</sup>, SuiteLink<sup>®</sup>, RDI<sup>™</sup>, and others) that will require implementation of newer/compliant SHA code in all USPS<sup>®</sup> Link products before August 1, 2017. The USPS<sup>®</sup> will ship the last old style SHA databases in July 2017.

At the same meeting, the USPS<sup>®</sup> told CASS<sup>™</sup> developers that there will not be a CASS<sup>™</sup> release in 2017 in order to provide the development community with time to implement the SHA changes. Although the SHA changes will not require CASS<sup>™</sup> changes, there is a mandated change to support the new SHA changes by August 1, 2017.

On October 28, 2015, the USPS<sup>®</sup> formally announced extension of the current CASS<sup>™</sup> Cycle N expiration to July 31, 2018.

Finalist® 9.1.0 will ship with CASS™ expiration keys set to July 31, 2017 as that will be the last date for the old SHA logic. The next release of Finalist® will include the new USPS® mandated SHA changes and will extend the CASS™ expiration date to July 31, 2018.

Finalist® will continue with a yearly release schedule. As an end user, you should start your planning now for the USPS® mandated SHA change for the Finalist® release that follows the Finalist® 9.1.0 release. That change will require database changes. We will continue to provide information as details become available.

## USPS® CASS™ Cycle N Support

The Finalist® 9.1.0 release fully supports USPS® CASS™ Cycle N requirements. The Finalist® 9.1.0 release is a major update to your Finalist® software that includes enhancements and resolved reported issues. We recommend that you upgrade to Finalist® 9.1.0 at your earliest convenience to take advantage of the highest possible software product performance and reliability available with your Finalist® software.

You may continue to run Finalist® 9.0.0 as a CASS™-certified release through July 31, 2016. After July 31, 2016, Finalist® 9.0.0 will operate only in a non-CASS™ certified mode.

Release Version	Effective Date	CASS™ Expiration Date
9.0.0	November 2014	July 31, 2016
9.1.0	November 2015	July 31, 2017

## Address Coding Process Changes

The Finalist® 9.1.0 release includes changes that affect the address coding process and may result in some address records coding differently than in previous Finalist® releases.

- In releases prior to the Finalist® 9.1.0 release, when the address parser encountered a primary range after a street name, processing ignored all address data following the range. With the Finalist® 9.1.0 release, Finalist® now looks for a unit designator beyond the primary range that follows the street name and, when found, continues processing. For example:

Input address:

ESCOBA DR 3015 APT 129  
PALM SPRINGS CA 92264

Previous releases, prior to Finalist® 9.1.0, dropped "APT 129":

3015 E ESCOBA DR  
PALM SPRINGS CA 92264-5580

Finalist® 9.1.0 now codes the address correctly without dropping "APT 129":

3015 E ESCOBA DR APT 129  
PALM SPRINGS CA 92264-5573



This change may affect the coding of some records in your input file.

---

- Processing of trailing primary ranges has been enhanced for the Finalist® 9.1.0 release. When a trailing primary range is encountered, and a suffix was provided on input, the coded address must match the suffix. If no suffix was provided on input, the street name must match exactly. With the Finalist® 9.1.0 release, coding can no longer accept a trailing primary range if doing so causes the street or suffix to change. For example:

Input address:

MADISON HWY BOX 831  
EATONTON GA 31024

Previous releases, prior to Finalist® 9.1.0, coded the address as follows by dropping "BOX", using "831" as the primary range, and changing the suffix:

831 MADISON RD  
EATONTON GA 31024-6177

Finalist® 9.1.0 now handles the address correctly without dropping "BOX 831" and changing the suffix:

MADISON HWY BOX 831  
EATONTON GA 31024

---

**i** This change may affect the coding of some records in your input file.

---

## New PBFNTransact API for On-Line Processing

The Finalist® 9.1.0 release includes a new API for single address on-line processing. Instead of requiring a PBFNInit, PBFNProcess, and PBFNTerminate call for each address to be processed, the new PBFNTransact API performs all three functions in a single API.

The CICS sample PBFN transaction (PBFNFC00) has been updated to work with the new PBFNTransact API.

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**i** The PBFNTransact API is designed for single address coding. PBFNTransact does not include the USPS® Form 3553 (CASS™ Summary Report) or other reporting options. If specified, Finalist® ignores the CASS™ and reporting options.

---

### C Syntax

```
int PBFN_API PBFNTransact(PBFNSetupDef *pSetup,
                          PBFNAddressDataDef *pAddressData,
                          PBFNAddressDataDef *pRtnAddressData);
```

### COBOL Syntax

```
CALL PBFNTRAN USING
                                BY REFERENCE PBFN-GCFG-SETUP,
                                BY REFERENCE PBFN-ADRS-ADDRESSDATA,
                                BY REFERENCE PBFN-RRTN-RRTN,
                                RETURNING WS-PBFN-RETURN-CODE.
```

## Parameters

### PBFNTransact API Parameters

Parameter	Description
pSetup PBFN-GCFG-SETUP	Pointer to a data structure of type PBFNSetupDef. The PBFNSetupDef structure contains file names, paths, etc. for the configuration and database files. If you do not need the information in this structure, pass a pointer set to NULL. Values specified in the setup structure override the default (and configured) values for the engine. The Finalist <sup>®</sup> engine will attempt to load a configuration file by default. The values in the configuration file also override the default values for the engine unless the value is already specified in the setup structure.
PBFNAddressDataDef PBFN-ADRS-ADDRESSDATA	Pointer to a data structure of address data type PBFNAddressDataDef with the ID set to "ADRS". This is used to send address data to the engine for coding. If no return structure is provided, the engine fills this structure with the coded address information.
PBFNAddressDataDef PBFN-RRTN-RRTN	Optional argument. Pointer to a data structure of address data type PBFNAddressDataDef with ID set to "RRTN". The engine fills this structure with the coded address information. If you do not need the information in this structure, pass a pointer set to NULL.  If the return PBFNAddressData parameter is not passed in, Finalist <sup>®</sup> updates the input PBFNAddressData structure (as is typical with PBFNProcess).

## Return Values

### PBFNTransact Return Values

Return Value	Description	Value
PBFN_SUCCESS	Successfully processed single address.	1
PBFN_FAIL	Unsuccessful process of single address.	0



If PBFNTransact cannot be initialized, the return code is based on the PBFNInit API. Otherwise, the PBFNTransact return code is based on the PBFNProcess API. In this second case, the PBFNInit return code is still available in a new field in SetupDef called iInitRtnCode (C) or PBFN-GCFG-IINITRTNCODE (COBOL). These fields would typically include warning messages that the database is about to expire.

For a normal PBFNInit API call, the iInitRtnCode (PBFN-GCFG-IINITRTNCODE) field can be ignored as the field simply represents the return code for that call.

The ExtendedError portions of both the SetupDef and AddressDataDef structures are populated if an error occurs. Either structure can be used to report any kind of failure on the API call.

### Related APIs

PBFNInit  
PBFNProcess  
PBFNTerminate

### Related Structures

PBFNAddressDataDef  
PBFNSetupDef

## DPV<sup>®</sup> Door Not Accessible (DNA) Table

The Finalist<sup>®</sup> 9.1.0 release includes the new USPS<sup>®</sup> DPV<sup>®</sup> Door Not Accessible (DNA) Table. The Door Not Accessible (DNA) Table is a DPV<sup>®</sup> hash table that identifies addresses where carriers cannot knock on the door for mail delivery or where carriers cannot physically access a residence/building. Some examples include rural/highway contact route (HCR), long driveway, or gated community addresses. The USPS<sup>®</sup> introduced the DNA file in July 2015.

Pitney Bowes distributes the DNA file as part of all DPV<sup>®</sup> file types:

- DPV.DB (Flat)
- DPVH.DB (Full)
- DPVS.DB (Split)

The DPV<sup>®</sup> DNA Table is not required for CASS<sup>™</sup> certification.

### Activating the DNA Table Using the Configuration File (pbfncfg)

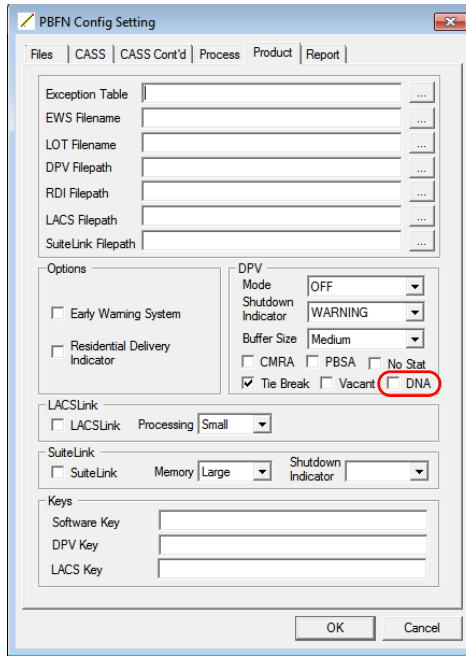
A new field has been added to the configuration file to activate the Door Not Accessible (DNA) Table for DPV<sup>®</sup>.

```
.
.
Product Section:
-----
Exception Table Filename =
EWS Filename =
LOT Filename =
DPV Filepath =
RDI Filepath =
LACSLink Filepath =
SuiteLink Filepath =
Early Warning System =
Delivery Point Validation =
DPV Shutdown Indicator =
Delivery Point Validation Tie Break =
DPV No-Stat Table =
DPV Vacant Table =
DPV PBSA Table =
DPV DNA Table =
DPV Buffer Size =
Residential Delivery Indicator =
Commercial Mail Validation =
LACSLink =
LACSLink Processing =
SuiteLink =
SuiteLink Small Memory Flag =
SuiteLink Shutdown Indicator =
Return SLK Input Secondary =
SOFTWARE KEY =
DPVKey =
LACSLink Key =
.
.
.
```

pbfncfg Field	Description
DPV DNA Table	<p>DPV<sup>®</sup> processing uses the Door Not Accessible (DNA) Table to identify delivery addresses where carriers cannot knock on the door for mail delivery or where carriers cannot physically access a residence/building. Indicate whether to use the DNA Table and return the proper DNA code to the output. Indicate whether to use the DNA Table and return the proper DNA code to the output:</p> <ul style="list-style-type: none"><li>• <b>OFF</b> — Do not perform DNA Table processing.</li><li>• <b>ON</b> — Perform DNA Table processing. For memory loading options, refer to the section "Maximizing Performance" in your <i>Finalist<sup>®</sup> Installation Guide</i>.</li><li>• Blank — Defaults to <b>OFF</b>.</li></ul>

## Activating the Door Not Accessible (DNA) Table Using the Workbench or Lookup Tool

A new check box has been added to the Product Tab on the PBFN Config Setting dialog box to activate the Door Not Accessible (DNA) Table for DPV<sup>®</sup> processing.



## Definition File Layout Changes for Door Not Accessible (DNA) Information

A new keyword has been added for a Definition File Layout using component keywords for processing.

### Definition File Layout Using Component Keywords

Definition Keyword	Description	Recommended Length
oDPVDNA=x,y,a[,y]	Identifies the position (x) and length (y) of the output Delivery Point Validation (DPV <sup>®</sup> ) Door Not Accessible (DNA) return code.	1

## VeriMove™ Move Update - External CASS™ Support

A new DPV<sup>®</sup> Door Not Accessible (DNA) information code has been added for VeriMove™ Move Update Product External CASS™ Support.

Information Code	Length (bytes)	Description
DPV <sup>®</sup> DNA Flag	1	DPV <sup>®</sup> DNA status. <ul style="list-style-type: none"> <li>• <b>Y</b> — Match to DNA Table.</li> <li>• <b>N</b> — No match to DNA Table.</li> </ul>

## Structure and Copybook Changes for DPV<sup>®</sup> Door Not Accessible (DNA) Table

New fields have been added to the following structures and copybooks for the new DPV<sup>®</sup> Door Not Accessible (DNA) Table feature. For detailed information on structure changes, please refer to ["Structure Changes" on page 10](#).

New Field	Description	Structure	Copybook(s)
cAssignDPVDNA	Indicate whether to use the DPV <sup>®</sup> DNA Table and return the proper DNA code to the output: <ul style="list-style-type: none"> <li><b>OFF</b> — Do not perform DPV<sup>®</sup> DNA Table processing.</li> <li><b>ON</b> — Perform DPV<sup>®</sup> DNA Table processing.</li> <li>Blank — Defaults to <b>OFF</b>.</li> </ul>	PBFNSetupDef	PBFNGCFG
IDPVDNAFound	Total number of records found in the DPV <sup>®</sup> DNA Table.	PBFNDPVStatsDef	PBFNSDPV
cDPVDNAFound	DPV <sup>®</sup> DNA Table status indicator. <ul style="list-style-type: none"> <li><b>Y</b> — Found in the DPV<sup>®</sup> DNA Table.</li> <li><b>N</b> — Not found in the DPV<sup>®</sup> DNA Table.</li> </ul>	PBFNAddressDataDef	PBFNADRS PBFNRRTN
		PBFNParsedAdrAltDef	PBFNVPDS PBFNWRPA
		PBFNParsedAdrDef	PBFNLPDS PBFNJRPA
		PBFNProcessDataAltDef	PBFNXPDS PBFNZRTN
		PBFNProcessDataDef	PBFNAPDS PBFNHRTN

## Finalist<sup>®</sup> Batch Report

The Finalist<sup>®</sup> Batch Report - Page 3 includes a new line, DPV<sup>®</sup> DNA Table, that indicates whether Finalist<sup>®</sup> used the Door Not Accessible (DNA) Table for DPV<sup>®</sup> processing to return the proper DNA code for the job.

Finalist Batch Report © YYYY Pi tney Bowes Inc.

Page 3

Product Section:

Exception Table Filename:

EWS Filename: C:\Pi tneyBowes\Aug15\BASE\ews.txt

LOT Filename: C:\Pi tneyBowes\Aug15\ELOT\elot.dir

DPV Filepath: C:\Pi tneyBowes\Aug15\DPV\DNA

RDI Filepath: C:\Pi tneyBowes\Aug15\RDI\

LACSLink Filepath: C:\Pi tneyBowes\Aug15\LACS

SuiteLink Filepath: C:\Pi tneyBowes\Aug15\SUITELINK

Early Warning System: ON

Delivery Point Validation: FLT

DPV Shutdown Indicator: W

Delivery Point Validation Tie Break: ON

DPV Vacant Table: ON

DPV No-Stat Table: ON

DPV PBSA Table: ON

DPV DNA Table: ON

DPV Buffer Size: L

LACSLink: ON

LACSLink Memory: L

Residential Delivery Indicator: OFF

Commercial Mail Validation: ON

SuiteLink: ON

SuiteLink Small Memory Flag: L

SuiteLink Shutdown Indicator: S

Return SLK Input Secondary: B

⋮



The Finalist<sup>®</sup> Batch Report - Page 7 provides statistics for the total number of Door Not Accessible (DNA) addresses found during DPV<sup>®</sup> processing for the job.

Finalist Batch Report © YYYY Pitney Bowes Inc.

Page 7

DPV Processing Statistics	Count	%
Total Records Through DPV Processing	0	0.00
Total DPV Y Type	0	0.00
Total DPV S Type	0	0.00
Total DPV D Type	0	0.00
Total DPV Not Validated	0	0.00
Total DPV Vacant Found	0	0.00
Total DPV No-Stat Found	0	0.00
Total DPV PBSA Found	0	0.00
Total DPV DNA Found	0	0.00
Total DPV CMRA Found	0	0.00

### Workbench Screen Changes

The Finalist<sup>®</sup> 9.1.0 release includes changes to the Workbench Job Definition Dialog Box for the DPV<sup>®</sup> Door Not Accessible (DNA) Table to allow you to add the new DPV<sup>®</sup> DNA Table indicator to your output. For more information, please refer to "[Workbench Changes](#)" on page 16.

### Lookup Tool Screen Changes

The Finalist<sup>®</sup> 9.1.0 release includes changes to the following Lookup Tool dialog boxes for the new DPV<sup>®</sup> Door Not Accessible (DNA) Table.

- Code an Address dialog box
- Standard Address Data Returned dialog box
- Parsed Information dialog box

For more information, please refer to "[Lookup Tool Changes](#)" on page 17.

### CICS Screen Changes

The following CICS screens have been updated for DPV<sup>®</sup> Door Not Accessible (DNA) Table processing:

- Main Menu screen
- Return Area screen

For more information, please refer to "[CICS Screen Changes](#)" on page 18.

### IMS Screen Changes

The following IMS screens have been updated for DPV<sup>®</sup> Door Not Accessible (DNA) Table processing:

- Main Menu screen
- Return Area screen

For more information, please refer to "[IMS Screen Changes](#)" on page 20.

## Structure Changes

With the addition of the new AddressDataDef (PBFNADRS) structure and the revised SetupDef (PBFNGCFG) structure introduced in the Finalist® 9.0.0 release, the following structures have been replaced and will be deprecated and eventually deleted in future releases of Finalist®.

API	Structure	Replacement
<b>PBFNInit</b>	PBFNExtendedErrorDef	PBFNSetupDef (PBFNGCFG)
<b>PBFNProcess</b>	PBFNDPVDetailDef (PBFNUDPH)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNExtendedErrorDef (PBFNIERR)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNLabelLineDef (PBFNKLBL)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNLACSSeedDetDef (PBFNODTL)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNParsedAdrAltDef (PBFNWRPA PBFNVPDS)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNParsedAdrDef (PBFNJRPA PBFNLPDS)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNProcessDataAltDef (PBFNXPDS PBFNZRTN)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNProcessDataDef (PBFNAPDS PBFNHRTN)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNRtnFirmDef (PBFNFRTF)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)
	PBFNRtnOrigDataDef (PBFNMRTN)	PBFNAddressDataDef (PBFNADRS PBFNRRTN)

### PBFNAddressDataDef (PBFNADRS) Structure

The PBFNAddressDataDef (PBFNADRS) structure includes a new "cDPVDNAFound" (PBFN-ADRS-DPVDNAFOUND) field to indicate whether an address is found in the DPV® Door Not Accessible (DNA) Table. A portion is shown below to illustrate this addition.

#### *PBFNAddressDataDef*

```

.
.
char      cStelkFi del i tyCode;
char      cStelkRtnCode[SLK_RTN_CODE];
char      cDPVDNAFound;
char      cExtra[256];
.
.

```

#### *PBFNADRS*

```

.
.
10 PBFN-ADRS-STELNKRTNCODE          PIC X(003).
   88 PBFN-ADRS-SUCCESS              VALUE ' A ' .
   88 PBFN-ADRS-FAIL                 VALUE ' 00 ' .
10 PBFN-ADRS-DPVDNAFOUND           PIC X(001).
   88 PBFN-ADRS-DNA                  VALUE ' Y ' .
   88 PBFN-ADRS-NOT-DNA              VALUE ' N ' .
10 PBFN-ADRS-EXTRA                  PIC X(256).
.
.

```

## PBFNDPVStatsDef (PBFNSDPV) Structure

The PBFNDPVStatsDef (PBFNSDPV) structure includes a new "IDPVDNAFound" field to indicate the total number of records found in the DPV<sup>®</sup> Door Not Accessible (DNA) Table during processing. A portion is shown below to illustrate this addition.

### PBFNDPVStatsDef

```
.
.
.   unsigned int    IPB;
.   unsigned int    IDPVDNAFound;
.   unsigned int    IR7;
.   char            cFiller2[74];
.
.
```

### PBFNSDPV

```
.
.
10 PBFN-SDPV-DPVVACANTFOUND      PIC S9(08) BINARY.
10 PBFN-SDPV-PB                  PIC S9(08) BINARY.
10 PBFN-SDPV-DPVDNAFOUND        PIC S9(08) BINARY.
10 PBFN-SDPV-R7                 PIC S9(08) BINARY.
10 FILLER                        PIC X(074).
.
.
```

## PBFNParsedAdrAltDef (PBFNVPDS) Structure

The PBFNParsedAdrAltDef (PBFNVPDS) structure includes a new "cDPVDNAFound" field to indicate whether an address was found in the DPV<sup>®</sup> Door Not Accessible (DNA) Table during processing. A portion is shown below to illustrate this addition.

### PBFNParsedAdrAltDef

```
.
.
.   char            cSteLnkRtnCode[SLK_RTN_CODE];
.   char            cDPVDNAFound;
.   char            cFiller8x[128];
.   char            cExtra[128];
.
.
```

### PBFNVPDS

```
.
.
10 PBFN-VPDS-STELNKRTNCODE      PIC X(003).
   88 PBFN-VPDS-SUCCESS          VALUE 'A'.
   88 PBFN-VPDS-FAIL             VALUE '00'.
10 PBFN-VPDS-DPVDNAFOUND        PIC X(001).
   88 PBFN-VPDS-DNA              VALUE 'Y'.
   88 PBFN-VPDS-NOT-DNA          VALUE 'N'.
10 FILLER                        PIC X(128).
.
.
```

## PBFNParsedAdrDef (PBFNLPDS) Structure

The PBFNParsedAdrDef (PBFNLPDS) structure includes a new "cDPVDNAFound" field to indicate whether an address was found in the DPV<sup>®</sup> Door Not Accessible (DNA) Table during processing. A portion is shown below to illustrate this addition.

### *PBFNParsedAdrDef*

```
.  
. .  
char      cSteLnkRtnCode[SLK_RTN_CODE];  
char      cDPVDNAFound;  
char      cFiller19b[2];  
char *    cExtra;  
. .
```

### *PBFNLPDS*

```
.  
. .  
10 PBFN-LPDS-STELNKRTNCODE          PIC X(003).  
   88 PBFN-LPDS-SUCCESS              VALUE ' A ' .  
   88 PBFN-LPDS-FAIL                  VALUE ' 00' .  
10 PBFN-LPDS-DPVDNAFOUND            PIC X(001).  
   88 PBFN-LPDS-DNA                   VALUE ' Y' .  
   88 PBFN-LPDS-NOT-DNA               VALUE ' N' .  
10 FILLER                            PIC X(002).  
. .
```

## PBFNProcessDataAltDef (PBFNXPDS) Structure

The PBFNProcessDataAltDef (PBFNXPDS) structure includes a new "cDPVDNAFound" field to indicate whether an address was found in the DPV<sup>®</sup> Door Not Accessible (DNA) Table during processing. A portion is shown below to illustrate this addition.

### *PBFNProcessDataAltDef*

```
.  
. .  
char      cSteLnkRtnCode[SLK_RTN_CODE];  
char      cDPVDNAFound;  
char      cFiller7[128];  
char      cExtra[128];  
. .
```

### *PBFNXPDS*

```
.  
. .  
10 PBFN-XPDS-STELNKRTNCODE          PIC X(003).  
   88 PBFN-XPDS-SUCCESS              VALUE ' A ' .  
   88 PBFN-XPDS-FAIL                  VALUE ' 00' .  
10 PBFN-XPDS-DPVDNAFOUND            PIC X(001).  
   88 PBFN-XPDS-DNA                   VALUE ' Y' .  
   88 PBFN-XPDS-NOT-DNA               VALUE ' N' .  
10 FILLER                            PIC X(128).  
. .
```

## PBFNProcessDataDef (PBFNAPDS) Structure

The PBFNProcessDataDef (PBFNAPDS) structure includes a new "cDPVDNAFound" field to indicate whether an address was found in the DPV<sup>®</sup> Door Not Accessible (DNA) Table during processing. A portion is shown below to illustrate this addition.

### *PBFNProcessDataDef*

```
.  
. .  
    char          cSteLnkRtnCode[SLK_RTN_CODE];  
    char          cDPVDNAFound;  
    char          cFiller26[2];  
    char *        cExtra;  
. .
```

### *PBFNAPDS*

```
.  
. .  
10 PBFN-APDS-STELNKRTNCODE          PIC X(003).  
   88 PBFN-APDS-SUCCESS              VALUE ' A ' .  
   88 PBFN-APDS-FAIL                  VALUE ' 00' .  
10 PBFN-APDS-DPVDNAFOUND            PIC X(001).  
   88 PBFN-APDS-DNA                    VALUE ' Y' .  
   88 PBFN-APDS-NOT-DNA                VALUE ' N' .  
10 FILLER                            PIC X(002).  
. .
```

## PBFNSetupDef (PBFNGCFG) Structure

The PBFNSetupDef (PBFNGCFG) structure includes a new "cAssignDPVDNA" field to indicate whether to perform DPV<sup>®</sup> Door Not Accessible (DNA) Table processing. A portion is shown below to illustrate this addition.

### *PBFNSetupDef*

```
.  
. .  
    int          iIniTrtnCode;  
    char         cAssignDPVDNA[ON_OFF_FLAG];  
    char         cFiller7[159];  
    char         cFiller8[5];  
} PBFNSetupDef, *pPBFNSetupDef;  
. .
```

### *PBFNGCFG*

```
.  
. .  
10 PBFN-GCFG-IINI TRTNCODE          PIC S9(08) BINARY.  
10 PBFN-GCFG-ASSIGNDPVDNA          PIC X(004).  
   88 PBFN-GCFG-DPV-DNA              VALUE ' ON' .  
   88 PBFN-GCFG-NO-DPV-DNA           VALUE ' OFF' .  
10 FILLER                            PIC X(159).  
. .
```

## API Changes

The Finalist<sup>®</sup> 9.1.0 release includes API changes.

### PBFNInfo API Changes

The PBFNInfo API functionality has been added to the PBFNInit API. The PBFNInfo API will be deprecated and eventually deleted in a future release of Finalist<sup>®</sup>. The PBFNInfoDef information is now returned as part of PBFNGCFG via PBFNInit. For more information, please refer to your *Finalist<sup>®</sup> 9.1.0 Reference Guide*.

### New PBFNTransact API for On-Line Processing

The Finalist<sup>®</sup> 9.1.0 release includes a new API for single address on-line processing. Instead of requiring a PBFNInit, PBFNProcess, and PBFNTerminate call for each address to be processed, the new PBFNTransact API performs all three functions in a single API. For more information on the new PBFNTransact API, please refer to "[New PBFNTransact API for On-Line Processing](#)" on page 4.

## JCL Changes

The following JCL members have been modified for the Finalist<sup>®</sup> 9.1.0 release.

JCL Member	Source	Description
JCOBLENH	hlq.INSTALL.FNSOURCE	Updated to compile and link source COBLENH without 'DLL,PGMN(LM)'. 
JFNCIRC	hlq.INSTALL.FNSOURCE	Updated for better linkage. 
JPBFNFC0	hlq.INSTALL.CISOURCE	New sample JCL demonstrates how to compile and use PBFNFC0. 


## Sample Changes

The following samples have been modified for the Finalist® 9.1.0 release.

Sample	Source	Description
FNCIRCAC	hlq.INSTALL.FNSOURCE	Updated to use the new AddressDataDef structure. To use the new version of FNCIRCAC, any applications that call sample program FNCIRCAC must be modified to pass in the new AddressDataDef (PBFNADRS) structure.
COBOL	hlq.INSTALL.FNSOURCE	Updated to no longer require the LONG MIXED compile option. Updated to work with the AddressDataDef structure.
COBOLENH	hlq.INSTALL.FNSOURCE	Updated to no longer require the LONG MIXED compile option. Also updated to work with the revised FNCIRCAC.
PBFNFC00	hlq.INSTALL.CISOURCE	Updated to use the new AddressDataDef structure. Updated to use the new PBFNTransact API. For more information on the new PBFNTransact API, please refer to <a href="#">"New PBFNTransact API for On-Line Processing" on page 4</a> .
C	hlq.INSTALL.FNSOURCE	Updated to work with the new AddressData structures. 64-bit compile options added.
CPP	hlq.INSTALL.FNSOURCE	Updated to work with the new AddressData structures. 64-bit compile options added.
Java	hlq.INSTALL.FNSOURCE	Updated to work with the new AddressData structure. 64-bit compile options added. Updated to use the new PBFNTransact API. For more information on the PBFNTransact API, please refer to <a href="#">"New PBFNTransact API for On-Line Processing" on page 4</a> .

## Compatibility Interface (CI) Changes

The parameter list for the CI, LPFNCL0x, has been updated to use the new AddressDataDef structure. Applications using any of the structures in LPFNCL0x must be modified and re-compiled.

- 
-  If you reference the native structures in the CI parameter list, review the LPFNCL0x changes for impact to your existing applications. At a minimum, existing CI users must recompile with the latest copybooks.
-

## User Interface (UI) Changes

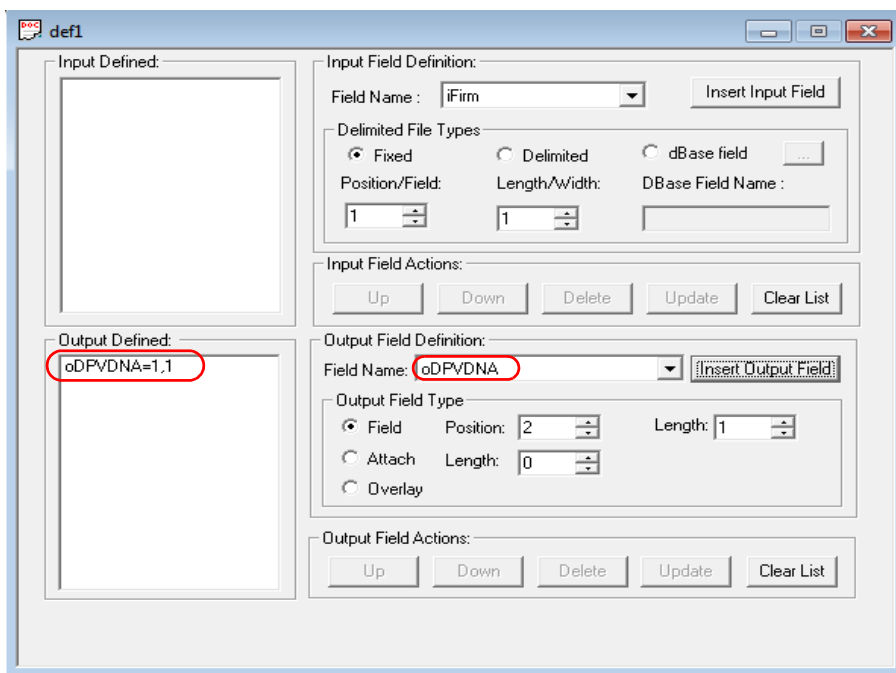
The Finalist® 9.1.0 release includes the following UI changes.

### Workbench Changes

The Finalist® 9.1.0 release includes changes to the Workbench screens for the new DPV® Door Not Accessible (DNA) Table.

### Job Definition Dialog Box

The Definition dialog box includes changes to allow you to add the new DPV® Door Not Accessible (DNA) Table indicator to your output.





## Lookup Tool Changes

The Finalist® 9.1.0 release includes the changes to the Lookup Tool screens for the DPV® Door Not Accessible (DNA) Table.

### Code an Address Dialog Box

The Code an Address dialog box tab names have been changed to reflect the new AddressDataDef structure.

Code an Address

Address Data | Parsed Addr | AddrScan | Address Data2

Code

Clear

Firm

URB

Address 1

Address 2

City, State ZIP

Output Label

Parsed Info

Suggestions

Address Info

Process Info

DPV | RDI | Suite Link

Delivery Point

Commercial Mail

### Standard Address Data Returned Dialog Box

The Standard Address Data Returned dialog box displays a new DPV® DNA field that indicates whether an address was found on the DPV® Door Not Accessible (DNA) table during processing.

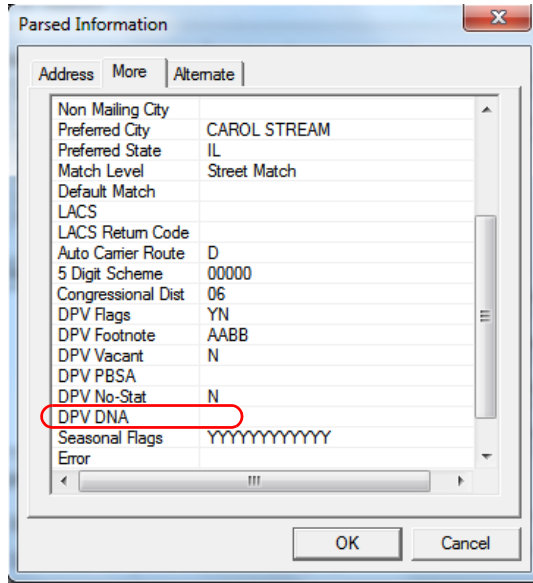
Standard Address Data Returned

County	DUPAGE
Adv Barcode	!601883358008!
5 Digit Barcode	!601887!
LOT	
Alt Street	
Alt Type	
Full City	CAROL STREAM
Abbr City	
Non Mailing City	
Preferred City	CAROL STREAM
Preferred State	IL
Match Level	S
Default Match	
cDPVFlags	YN
cDPVFootnote	AABB
DPV Vacant	N
DPV PB5A	
DPV No-Stat	N
DPV DNA	
LACS	
LACSIndicator	
LACSRetCode	
Auto CRRT	D

OK

**Parsed Information Dialog Box**

The Lookup Tool Parsed Information dialog box displays a new DPV<sup>®</sup> DNA field that indicates whether an address was found on the DPV<sup>®</sup> Door Not Accessible (DNA) table during processing.



**CICS Screen Changes**

The Finalist<sup>®</sup> 9.1.0 release includes CICS screen changes.

**Product Information Screen**

The Finalist<sup>®</sup> 9.1.0 release includes changes to the CICS Product Information Screen. The CICS Product Information Screen provides you with database and software version information for the Finalist<sup>®</sup> CICS product. The CICS Product Information Screen and the IMS Product Information Screen have been enhanced to be more consistent.

```

FINALIST ON-LINE N.N.N                (C) YYYY PITNEY BOWES SOFTWARE, INC.
                                         PRODUCT INFO   HH:MM:SS

FINALIST STREET DATA FILE
VERSION          : N.NN.NN.N.NN
CREATED DATE    : MM-DD-YYYY
EXPIRATION DATE : MM-DD-YYYY
TYPE            : FULL (ZIP, ZIP+4 AND CARRIER ROUTES)
COVERAGE       : NATIONAL

FINALIST CITY FILE                      USPS EWS DATA FILE
VERSION          : N.NN.NN.N.NN        COPYRIGHT DATE: MM-DD-YYYY
CREATED DATE    : MM-DD-YYYY
EXPIRATION DATE : MM-DD-YYYY

SOFTWARE VERSIONS
ENGINE          : N.NN.NN.N.NN

PF KEYS=====
PF1:  N/A    PF2:  N/A    PF3:  N/A    PF4:  N/A    PF5:  N/A    PF6 :  N/A
PF7:  N/A    PF8:  N/A    PF9:  N/A    PF10: N/A   PF11: N/A   PF12: EXIT
    
```

## CICS Main Menu

The Finalist® 9.1.0 release includes changes to the CICS Main Menu screen for LPCF for the new DPV® Door Not Accessible (DNA) Table.

```

FINALIST ON-LINE N.N                                (C) YYYY PITNEY BOWES INC.

Option Code: 1 (Valid options listed below)          hh:mm:ss

1-Address Lookup      3-ZIPCODE Information    5-Street Information
2-City Information    4-Street Name List      6-Product Information

Exception Table: N (Y/N)
EWS: N (Y/N)
RDI: N (Y/N)
LACSLink: N (Y/N)
Sui teLink: N (Y/N)
  SLK Secondary: B (B/S/I/N)
DPV: N (Y/N/S/F)
  NoStat: Y CMRA: Y Tie Break: Y (Y/N)
  Vacant: Y PBSA: Y DNA: Y (Y/N)

ALSLBL : N (Y/N/1/2/3/4/5/6)
FIRMLBL: D (I/D)
ASM      : N (Y/N)
DUALADR: F (F/A/1/2/P/C)
CTYLONG: Y (Y/N)
R777 Deliverable: Y (Y/N)
Cnvt Sec to PMB: N (Y/N)

PF1: OPT 1  PF2: OPT 2  PF3: OPT 3  PF4 : OPT 4  PF5 : OPT 5  PF6 : OPT 6
PF7: N/A     PF8: N/A     PF9: RESET  PF10: N/A   PF11: N/A   PF12: EXIT
  
```

## CICS Return Area Screen

The Finalist® 9.1.0 release includes changes to the CICS Return Area screen for LPCF for the new DPV® Door Not Accessible (DNA) Table.

```

FINALIST ON-LINE N.N                                (C) YYYY PITNEY BOWES INC.
INPUT INFORMATION:                                RETURN AREA
FIRM LINE : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
URB LINE : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
ADDR LINE 1: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
ADDR LINE 2: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CITY/STATE: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
ZIP: NNNNN SEC-SEG: NNNN CR: XXXXX

ISOLATION RESULTS:                                ISOLATION ATTEMPTS: N
RANGE: XXXXXXXXXX                                SUFFIX1: AAAA
PRE-DIRECT: AA                                  SUFFIX2: AAAA
POST-DIR: AA                                    APARTMENT: XXXXXX
STREET: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX        EXTRANEIOUS: XXXXXXXX

DI RECTI ON/SUFFI X COMBI NATI ONS                OUTPUT I NFORMATI ON
PRE-DIR SUFX1 SUFX2 POST-DIR                      ZI PCODE: NNNNN
-----
1) AA AAAA AAAA AA                                CR: XXXX
2) AA AAAA AAAA AA                                CI TY: XXXXXXXXXXXXXXXX RDI: X PBSA : X
3) AA AAAA AAAA AA                                STATE: XX                                DNA: X POBZNE: N

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
PF KEYS=====
PF1: N/A PF2: N/A PF3: N/A PF4 : N/A PF5 : N/A PF6 : N/A
PF7: N/A PF8: N/A PF9: N/A PF10: N/A PF11: RETCODE PF12: EXIT
  
```

## IMS Screen Changes

The Finalist® 9.1.0 release includes IMS screen changes.

### Product Information Screen

The Finalist® 9.1.0 release includes changes to the IMS Product Information Screen. The IMS Product Information Screen provides you with database and software version information for the Finalist® IMS product. The IMS Product Information Screen and the CICS Product Information Screen have been enhanced to be more consistent.

```
FINALIST ON-LINE N.N.N                (C) YYYY PITNEY BOWES SOFTWARE, INC.
                                         PRODUCT INFO   HH: MM: SS

FINALIST STREET DATABASE
VERSION      : N.NN.NN.N.NN
CREATED DATE : MM-DD-YYYY
EXPIRATION DATE : MM-DD-YYYY
TYPE        : FULL (ZIP, ZIP+4 AND CARRIER ROUTES)
COVERAGE    : NATIONAL

FINALIST CITY FILE
VERSION      : N.NN.NN.N.NN
CREATED DATE : MM-DD-YYYY
EXPIRATION DATE : MM-DD-YYYY

SOFTWARE VERSIONS
ENGINE       : N.NN.NN.N.NN

PF KEYS-----
PF1:  N/A   PF2:  N/A   PF3:  N/A   PF4:  N/A   PF5:  N/A   PF6 :  N/A
PF7:  N/A   PF8:  N/A   PF9:  N/A   PF10: N/A  PF11: N/A  PF24: EXIT
```

### Main Menu

The Finalist® 9.1.0 release includes changes to the IMS Main Menu screen for S56LPWNH for the new DPV® Door Not Accessible (DNA) Table.

```
S56LPWNH      FINALIST ON-LINE INQUIRY VERSION X.XX          (C) PITNEY BOWES INC. XXXX
OPTION CODE: 1  (VALID OPTIONS LISTED BELOW)                HH: MM: SS

1-Address Lookup      3-ZIPCODE Information      5-Street Information
2-City Information    4-Street Name List      6-Product Information

Exception Table: N (Y/N)
EWS: N (Y/N)
RDI: N (Y/N)
LACSLink: N (Y/N)
Sui teLink: N (Y/N)
SLK Secondary: B (B/S/I/N)
DPV: N (Y/N/S/F)
NoStat: Y CMRA: Y Tie Break: Y (Y/N)
Vacant: Y PBSA: Y DNA: Y (Y/N)

ALSLBL : N (Y/N/1/2/3/4/5/6)
FIRMLBL: D (I/D)
ASM      : N (Y/N)
DUALADR: F (F/A/1/2/P/C)
CTYLONG: Y (Y/N)
R777 Deliverable: Y (Y/N)
Cnvt Sec to PMB: N (Y/N)

PF1: OPT 1  PF2: OPT 2  PF3: OPT 3  PF4 : OPT 4  PF5 : OPT 5  PF6 : OPT 6
PF7: N/A     PF8: N/A     PF9: RESET  PF10: N/A   PF11: N/A   PF12: EXIT
```

## IMS Return Area Screen

The Finalist® 9.1.0 release includes changes to the IMS Return Area screen for S56LPWNH for the new DPV® Door Not Accessible (DNA) Table.

S56LPWNH	FINALIST ON-LINE N.N	HH: MM: SS
INPUT INFORMATION: RETURN AREA		
+FIRM LINE : XXX		
URB LINE : XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
ADDR LINE 1: XXX		
ADDR LINE 2: XXX		
CITY/STATE: XXX		
ZIP: NNNNN SEC-SEG: NNNN CR: XXXXX		
ISOLATION RESULTS: ISOLATION ATTEMPTS: N		
RANGE: XXXXXXXXX	SUFFIX1: AAAA	
PRE-DIRECT: AA	SUFFIX2: AAAA	
POST-DIR: AA	APARTMENT: XXXXXX	
STREET: XXXXXXXXXXXXXXXXXXXXXXX	EXTRANEOUS: XXXXXXXX	
DI RECT ION/SUFFI X COMBI NATIONS OUTPUT I NFORMAT I ON		
PRE-DIR SUF X1 SUF X2 POST-DIR	ZI PCODE: NNNNN	DPV: X NOSTAT: X
-----	SEC-SEG: NNNN	LLK: X VACANT: X
1) AA AAAA AAAA AA	CR: XXXX	SLK: X CMRA : X
2) AA AAAA AAAA AA	CITY: XXXXXXXXXXXXXXX	RDI: X PBSA : X
3) AA AAAA AAAA AA	STATE: XX	DNA: X POBZNE: X
XX		
PF KEYS=====		
PF1: N/A	PF2: N/A	PF3: N/A PF4: N/A PF5: N/A PF6: N/A
PF7: N/A	PF8: N/A	PF9: N/A PF10: N/A PF11: RETCODE PF12: EXIT

## Report Changes

The Finalist® 9.1.0 release includes report changes.

### Address Detail Report

The Finalist® 9.1.0 release includes changes to the following Address Detail Report sections.

#### Info Codes Report - Match Section

The Info Codes Report - Match Section includes additional fields from the PBFNAddressInfoDef structure.

- **cChars30Flag (cChars30Flag)** — Information on the reason for a label line change. Per USPS® regulations, when a preferred Alias is presented as input, CASS-certified software must return the Preferred Alias address and follow the USPS 30-character abbreviation rule.
- **Input Alias (cAliasInputInd)** — Indicates whether an alias address was present on input.
- **DPV Results (cDPVFlags)** — Information on DPV® processing results. This line also includes information on whether the input address matched to any DPV® table(s) (CMRA, DNA, NoStat, PBSA, Vacant).

The Info Codes Report - Match Section includes an additional value for the General field.

- **PO BOX Only ZIP (cPOBoxZone)** — "PO BOX Only ZIP" displays to indicate that the input address ZIP Code™ is a P.O. Box™ only delivery zone.

#### Info Codes Report - Types Section

The Info Codes Report - Types Section includes an additional value for the City field. The "Output Preferred City Name Override" value indicates that the returned city is the preferred city override name.

### Batch Summary Report

The Finalist® 9.1.0 release includes changes for the new DPV® Door Not Accessible (DNA) Table to the following Batch Summary Report pages.

- The Finalist® Batch Report - Page 3 includes a new line, DPV® DNA Table, that indicates whether Finalist® used the DPV® Door Not Accessible (DNA) Table for DPV® processing to return the proper DNA code.
- The Finalist® Batch Report - Page 7 includes a new line, Total DPV DNA Found, that provides statistics for the total number of Door Not Accessible (DNA) addresses found during DPV® processing for the job.

For more information on the Batch Summary Report changes for the new DPV® Door Not Accessible (DNA) Table, please refer to "Finalist® Batch Report" on page 8.

## Installation Changes

Always follow the installation procedure provided in the *Finalist® Installation Guide* for the current release. Do not use installation procedures or JCL from previous releases of Finalist® to install the Finalist® 9.1.0 release.

### Support Added for Windows Server 2012 (or Windows 8)

The Finalist® 9.1.0 release includes support for Windows Server 2012 (or Windows 8). For more information, please refer to the section "Installing Finalist® on Windows Server 2012 (or Windows 8)" in Chapter 1, Installing Finalist® for Windows, in your *Finalist® Installation Guide*.

### Recompile of All Programs Required

If you are currently processing with a Finalist® release prior to 9.1.0, you must recompile all of your drivers with the Finalist® 9.1.0 changes. As a result of changes in the API version, changes within several APIs, and copybook changes, all programs should be recompiled to run with Finalist® 9.1.0.

## Database Changes

This section provides important information on database changes effective with the Finalist® 9.1.0 release.

### Database Compatibility

Database Version	Compatible Finalist® Versions
9.0.0	Finalist 9.0.0 Finalist 9.1.0
9.1.0	Finalist 9.0.0 Finalist 9.1.0

### Database Delivery

The Pitney Bowes AutoDelivery process automatically delivers the most current version of databases. With the Finalist® 9.1.0 release, the 9.0.0 database version will be renamed to 9.1.0. There are no other changes to the database. AutoDelivery will begin delivering the Finalist® 9.1.0 databases. Databases can be manually download from the support website at <http://www.g1.com/support> and the eStore. The eStore is the fastest way to download software and data.

### DPV® Full (Hash) File Size Change

The approximate physical file size for the DPV® Full (hash) database has changed from 885 MB to 890 MB for the Finalist® 9.1.0 release. For more information on the approximate physical files sizes for all Finalist® databases, refer to the section "File Sizes" in Chapter 8, Finalist® Databases in your *Finalist® Installation Guide*.

## Recommended Finalist Option Settings


The recommended Finalist options settings have changed for LACSLink® for the Finalist® 9.1.0 release.

<b>Platform</b>	<b>Recommended Processing Settings</b>
Mainframe Batch	LACSLink® with Small Memory Model
Windows and Unix	LACSLink® with Small Memory Model

For more information on the recommended Finalist® options settings for all Finalist® options, refer to the section "Processing Options" in Chapter 8, Finalist® Databases in your *Finalist® Installation Guide*.

## Virtual Memory Requirements

Refer to the following table for the approximate virtual memory requirements for the DPV<sup>®</sup>, LACS<sup>Link</sup><sup>®</sup>, and Suite<sup>Link</sup><sup>®</sup> databases effective with the Finalist<sup>®</sup> 9.1.0 release.

 Results can vary by month.

Database	Setting	Virtual Memory Required	
DPV <sup>®</sup> FLAT	Huge	2.2GB	
	<b>NOTE:</b> Not recommended.		
	<b>NOTE:</b> For Huge and Large settings, subtract 4M if not using the DPV <sup>®</sup> Door Not Accessible (DNA) table.	Large	55MB
		Medium	51MB
		Small	1MB
		Ultra-Small	1MB
Pico		0MB	
<b>NOTE:</b> Not recommended on mainframes.			
DPV <sup>®</sup> Full	Huge	889MB	
	<b>NOTE:</b> For Huge and Large settings, subtract 64M if not using CMRA, 128M if not using the No-Stat table, 64M if not using the Vacant table, 64M if not using the PBSA table, 4M if not using the DPV <sup>®</sup> Door Not Accessible (DNA) table.	Large	375MB
		Medium	115MB
		Small	2MB
		Ultra-Small	0MB
		Pico	0MB
DPV <sup>®</sup> Split	Huge	457MB	
	<b>NOTE:</b> For Huge and Large settings, subtract 64M if not using CMRA, 128M if not using the No-Stat table, 64M if not using the Vacant table, 64M if not using the PBSA table, 4M if not using the DPV <sup>®</sup> Door Not Accessible (DNA) table.	Large	391MB
		Medium	67MB
		Small	4MB
		Ultra-Small	30KB
		Pico	0MB
<b>NOTE:</b> Pico memory model does not load any files or indexes.			
LACS <sup>Link</sup> <sup>®</sup>	Huge	380MB	



Database	Setting	Virtual Memory Required
	Large	290MB
	Medium	250MB
	Small	35MB
	Ultra-Small	1MB
	Pico	0MB
SuiteLink®	Huge	525MB
	Large	50MB
	Medium	10MB
	Small	0MB
	Ultra-Small	0MB
	Pico	0MB

**i** USPS® CASS™ regulations require DPV®, LACSLink®, and SuiteLink® processing for CASS™ certification. If you do not perform DPV®, LACSLink®, and SuiteLink® processing, Finalist® does not generate a USPS® Form 3553 (CASS™ Summary Report).

## StreamWeaver®

StreamWeaver® 6.6.2 was designed to call Finalist® 9.0.0. StreamWeaver® 6.6.2 can call Finalist® 9.1.0 but a deprecation message will be issued. Other than the deprecation message, there is no impact to jobs.

StreamWeaver® 7.0.0 is tentatively scheduled for 1Q 2016 and will support Finalist® 9.1.0. If you are a StreamWeaver® customer, you may decide to wait for the StreamWeaver® 7.0.0 release before you implement Finalist® 9.1.0 and implement the Finalist® 9.1.0 and StreamWeaver® 7.0.0 releases in parallel to avoid the deprecation messages.

## VeriMove™

VeriMove™ 3.6.0, scheduled for release in the first half of 2016, will include Finalist® 9.1.0 as the Internal CASS™ Processing engine. VeriMove™ customers who use External CASS™ Processing may use Finalist® 9.1.0 as their External CASS™ Processing engine immediately. Information on the next VeriMove™ release will be shared as details becomes available.

# Corrected Issues

The Finalist® 9.1.0 release corrects issues for:

- All Platforms
- CICS
- IMS
- Unix
- Windows
- z/OS

## All Platforms

### Change Requests Resolved for All Platforms (Part 1 of 6)

Change Request	Change Description
FINALIST-376	<p>Resolved an issue where the following valid address did not code. Finalist® now allows "DR" before some street names to code appropriate addresses.</p> <p>Input address:</p> <p>11401 MARTIN LUTHER KING JR ST N ST PETERSBURG, FL 33716</p> <p>Address did not code.</p> <p>Correctly coded address:</p> <p>11401 DR MARTIN LUTHER KING JR ST N SAINT PETERSBURG FL 33716-2345</p>
FINALIST-2478	<p>Corrected an issue where AddrScan was unable to recognize a single trailing alpha as a secondary when unit is "TRLR". "TRLR n" (numeric) was processed correctly but "TRLR x" (alpha) was not processed correctly. For example, AddrScan was flagging "TRLR A" in the following address as a firm name instead of as secondary information.</p> <p>Input address:</p> <p>TRLR A 4720 BAKER RD NEEDVILLE TX 77461</p> <p>Incorrectly coded address:</p> <p>TRLR A (Identified as firm name) 4720 BAKER RD NEEDVILLE TX 77461</p> <p>Correctly coded address:</p> <p>4720 BAKER RD TRLR A (Identified as unit information and combined with main address line) NEEDVILLE, TX 77461</p>
FINALIST-2555	<p>Updated the Address Detail Report to display the following information:</p> <ul style="list-style-type: none"><li>• Chars30Flag field values</li><li>• Input Alias Indicator</li><li>• Output Preferred City Name Override</li><li>• P. O. Box™ only ZIP Code™</li><li>• DPV® Results (only displays if DPV® processing results exist)</li></ul>
FINALIST-2558	<p>Updated SHOW INFO panels for CICS and IMS to display consistent information. Also, corrected an issue where an LPAM info call was not properly indicating National DB coverage.</p>
FINALIST-2583	<p>Corrects an issue that occurred with the Keystore command. If an open failure occurred or an output folder was read only, a crash occurred. The code now checks for an open failure when creating the output folder.</p>

## Change Requests Resolved for All Platforms (Part 2 of 6)

Change Request	Change Description
FINALIST-2584	Corrected an issue where Finalist® issued the message "Could not read Reference db partition: Military Alias Table – Header" instead of the appropriate message "Database and Engine Version differ" when a Finalist® 8.3.0 City File was passed to the Finalist® 9.0.0 engine. Finalist® was validating database without first checking database version.
FINALIST-2617	Corrected an issue that occurred when AddrScan encountered two address lines separated by a firm line, AddrScan returned only one address line. Input address: 1 LINCOLN CTR STE 900 GREEN & SEIFIER 1100 W FAYETTE ST SYRACUSE NY 13202-1324 Incorrectly coded address: 1100 FAYETTE ST  SYRACUSE NY GREEN & SEIFIER Correctly coded address: 1 LINCOLN CTR STE 900 1100 FAYETTE ST SYRACUSE NY 13202-1324 GREEN & SEIFIER
FINALIST-2618	Corrected an issue where AddrScan was ignoring user-specified line length when concatenating PMB to address line. Input address: 1300 MERRILL LYNCH DRIVE MSC: 03-03 ATTN MOIRA BANNISTER PEMINTON NJ 05634 Incorrectly coded address: 1300 MERRILL LYNCH DRIVE MSC: 03-03 ATTN MOIRA BANNISTER PEMINTON NJ Correctly coded address: 1300 MERRILL LYNCH DRIVE MSC: 03-03 ATTN MOIRA BANNISTER PEMINTON NJ 05634
FINALIST-2629	Corrected an issue where the output parsed range was blank for failed RR/HC/Military addresses with box numbers. For example, the following address is a failed RR/HC style address. Prior to this correction, the output parsed range was blank. The output parsed range now displays correctly as 784. Input address: HC 1 BOX 784 27299

## Change Requests Resolved for All Platforms (Part 3 of 6)

Change Request	Change Description
FINALIST-2633	<p>The Finalist® 9.0.0 release returned addresses containing ordinal versions of secondary ranges in the ordinal format if the address did not code to the secondary. However, this change only worked when the ordinal number was on a separate address line. The Finalist® 9.1.0 release applies that same logic to all secondary ranges, no matter where the secondary range originates.</p> <p>Input address: 506 RALPH AVE 1ST FLOOR BROOKLYN NY 11221</p> <p>Incorrectly coded address: 506 RALPH AVE 1ST FLOOR BROOKLYN NY 11221</p> <p>Correctly coded address: 506 RALPH AVE FL 1ST BROOKLYN NY 11233-4405</p>
FINALIST-2635	<p>Resolved an issue where coding was not able to match "US HIGHWAY X" to "HIGHWAY X".</p> <p>Input address: 12016 W US HWY 290 STE 3 AUSTIN TX 78737</p> <p>Address did not code.</p> <p>Correctly coded address: 12016 W HIGHWAY 290 STE 3 AUSTIN TX 78737-2837</p>
FINALIST-2636	<p>Corrected an issue where the stack size value for Java drivers was exceeded. For the Finalist® 9.1.0 release, moved some data from the stack to heap storage.</p>
FINALIST-2647	<p><b>ENHANCEMENT</b> — Enhanced processing of secondary ranges.</p> <p>Stuttering secondaries — Now identifies and removes "stuttering" secondaries (secondaries repeated twice in an address). When encountering two identical secondary ranges in a row that are not separated by a unit designator, Finalist® now processes the two secondary ranges as separate entities. Where appropriate, Finalist® writes the repeated secondary range to the AddressDataDef structure Extra field.</p> <p>Input address: 1565 N WILDFLOWER DR APT 511 511 CASA GRANDE AZ 85122</p> <p>Correctly coded address (511 written to the AddressDataDef structure Extra field): 1565 N WILDFLOWER DR APT 511 CASA GRANDE AZ 85122-6071</p> <p>Hyphenated secondary — When the secondary range contains a dash (hyphen) and the input range does not code, Finalist® now splits the hyphenated range into two parts and reprocesses the secondary range in an additional coding attempt.</p> <p>Input address: 197 WOODLAND PKWY 104 591 SAN MARCOS CA 92069-3020</p> <p>Previously coded address: 197 WOODLAND PKWY # 104-591 SAN MARCOS CA 92069-3020</p> <p>Correctly coded address: 197 WOODLAND PKWY STE 104 PMB 591 SAN MARCOS CA 92069-3020</p>

## Change Requests Resolved for All Platforms (Part 4 of 6)

Change Request	Change Description
FINALIST-2664	Corrected an issue with delimited file processing related to input definition fields that end a record. The Finalist <sup>®</sup> executable (Finalist.exe or ./finalist) was not interpreting and null terminating the data resulting in data being carried over from the previous record. The Finalist <sup>®</sup> executable now null terminates the input definition field when end of line is found.
FINALIST-2671	<b>ENHANCEMENT</b> — Created a new PBFNTransact API that combines PBFNInit, PBFNProcess, and PBFNTerminate into a single call for use by online address processing. This interface does not produce reports.
FINALIST-2675	<b>ENHANCEMENT</b> — Updated COBOL samples to use AddressDataDef structure. Updated COBOLENH COBOL sample to no longer require LONG MIXED compile option. Updated PBFNFC00 COBOL sample to use new PBFNTransact API.
FINALIST-2684	<p><b>ENHANCEMENT</b> — Support added for accent characters. Finalist<sup>®</sup> now translates Tilde characters to Latin equivalent. For example:</p> <p>Input address:            22 Calle Muñoz Rivera Apt 1            Adjuntas PR 00601</p> <p>Incorrectly coded address (fails - street name parsed as CALLE MU OZ RIVERA):            22 CALLE MUÑOZ RIVERA APT 1            ADJUNTAS PR 00601</p> <p>Correctly coded address:            22 CALLE MUNOZ RIVERA STE 1            ADJUNTAS PR 00601-2279</p>
FINALIST-2689	<p>Corrected an issue that occurred when standardizing RR/HC/Military addresses. The issue occurred when the input city/state did not match input ZIP Code™ and the input city/state was not in the same finance area as the input ZIP Code™. An example of an input address that was not being standardized correctly follows.</p> <p>Input address:            UNIT 3130 Box 79            APO AA 34034-0079</p>
FINALIST-2695	Corrected an issue where failed RR/HC addresses that have a separate UNIT1 field crashed when using the Finalist <sup>®</sup> AddressData structure.
FINALIST-2721	<p>Added RUR ROUTE as an accepted variation of RR for coding purposes.</p> <p>Input address:            RUR ROUTE 3 BOX 265D            STAUNTON VA 24401</p> <p>Incorrectly coded address (failed to code):            RR 3            STAUNTON VA 24401            EXTRA-DATA was ROUTE BOX 265D</p> <p>Correctly coded address (now codes using LACS<sup>Link</sup><sup>®</sup>):            441 NISWANDER RD            STAUNTON VA 24401-7003</p>

## Change Requests Resolved for All Platforms (Part 5 of 6)

Change Request	Change Description
FINALIST-2728	<p>Added address isolation steps to the address coding process to correctly recognize and code input addresses that include:</p> <ul style="list-style-type: none"><li>• COUNTY ROAD</li><li>• COUNTY RD</li><li>• COUNTY HIGHWAY</li><li>• COUNTY HWY</li></ul> <p>Input address: 364 COUNTY ROAD 229 CHAFFEE MO 63740</p> <p>Address did not code.</p> <p>Correctly coded address: 364 COUNTY HIGHWAY 229 CHAFFEE MO 63740-7120</p>
FINALIST-2732	<p>Corrected an issue where processing ignored the remainder of an address line when the primary range came after the street name and the next word was APT. Also, corrected processing to not accept a trailing primary range if that range causes the suffix to change.</p> <p>Input address: ESCOBA DR 3015 APT 129 PALM SPRINGS CA 92264</p> <p>Incorrectly coded address: 3015 E ESCOBA DR PALM SPRINGS CA 92264-5580</p> <p>Correctly coded address: 3015 E ESCOBA DR APT 129 PALM SPRINGS CA 92264-5573</p>
FINALIST-2740	<p>Corrected an issue that occurred when UNIT information was passed in for processing in a field separate from the address lines. Previously, the initial parsing process used Address Line 1, Address Line 2, and the Unit field. The secondary parsing process only used Address Line 1 or Address Line 2. Finalist® now accepts a separate UNIT field for all parsing processes.</p> <p>Input address: 201 AVE ARTERIAL HOSTOS GALERIA STE 207 SAN JUAN PR 00918-1405</p> <p>Incorrectly coded address: 235 AVE ARTRL HUSTOS STE 201 SAN JUAN PR 00918-1453</p> <p>Correctly coded address: GALERIA 201 AVE ARTRL HUSTOS STE 207 SAN JUAN PR 00918-1405</p>
FINALIST-2744	<p>Corrected an issue where PBCSGetCityList did not return all cities. PBCSGetCityList was terminating the city list when a deleted or abbreviated city was encountered.</p>

## Change Requests Resolved for All Platforms (Part 6 of 6)

Change Request	Change Description
FINALIST-2748	<p>Corrected an issue where a range suggestion was expected but instead error message "E421 - Invalid house number or range" was issued and no suggestions were available for selection. Previously, suggestions for ranges were based on the input ZIP Code™. With the Finalist® 9.1.0 release, if no suggestions exist for the input ZIP Code™, Finalist® returns suggestions based on the city and state.</p> <p>Input address:            5841 W 8TH ST            CLEVELAND OH 44130</p> <p>Incorrectly coded address (address does not code - no suggestions available):            5841 W 8TH ST            CLEVELAND OH 44130</p> <p>The following suggestions are now provided based on the city and state:</p> <pre>           2400-2598 EVEN W 8TH ST 44113-4601           2401-2505 ODD W 8TH ST 44113-4666           2000-2198 EVEN E 8TH ST 44115-11ND           2001-2199 ODD E 8TH ST 44115-1147           5000-5098 EVEN W 8TH ST 44131-1104           5001-5099 ODD W 8TH ST 44131-1103           5100-5138 EVEN W 8TH ST 44131-1106           5101-5199 ODD W 8TH ST 44131-1105           5140-5198 EVEN W 8TH ST 44131-1157           </pre>
FINALIST-2752	<p>Corrected an issue that occurred when using AddrScan option 38N. URB information was being returned as a firm and not in the URB field. AddrScan option 38N now correctly returns URB information in the URB field.</p>
FINALIST-2758	<p><b>ENHANCEMENT</b> — Updated Finalist® for DPV® Door Not Accessible (DNA) Table processing.</p>
FINALIST-2761	<p>Increased the recommended length for oAdsInfo to 42 (from 41). Corrected oNonMailingCityName to correctly return 28 bytes. Previously, oNonMailingCityName was incorrectly returning only 13 bytes.</p>
FINALIST-2769	<p>Updated structures version to 9.1.0.</p>
FINALIST-2774	<p>Updated Finalist® for new version 9.1.0 software keys.</p>
FINALIST-2813	<p>Corrected an issue that occurred when AddrScan processed an address where the city name contained a number that was spelled out, no ZIP Code™ was provided, and the state abbreviation could also be interpreted as a suffix. For example:</p> <p>Input address:            P O BOX 414            TEN SLEEP WY</p> <p>Correctly coded address:            PO BOX 414            TEN SLEEP WY 82442-0414</p>

## CICS

### Change Requests Resolved for CICS

Change Request	Change Description
FINALIST-2558	Enhanced the Finalist® CICS and IMS Product Info Screens to be more consistent.
FINALIST-2608	Corrected CICS abend 4088 that occurred in module CEECCICS. Added missing RDO definitions for new COBOL interface modules. Corrected additional issues found with Exceptions Table processing in CICS. Corrections documented in the <i>Finalist® Installation Guide, Reference Guide, and User's Guide</i> .
FINALIST-2705	Corrected issues and copybook errors that resulted in an LP71 abend in CICS. Updated the sample program for calling Finalist® CICS in Chapter 3, Interactive Address Lookup, in the <i>Finalist® User's Guide</i> .
FINALIST-2786	Correct an ASRA ABEND that occurred when processing the following address in CICS. Input address: 1261 Liberty Hall Rd Morristown TN 37815

## IMS

### Change Requests Resolved for IMS

Change Request	Change Description
FINALIST-2558	Corrected an issue where Finalist® IMS was not displaying the NATIONAL database message because LPAM (dbxlpam.c) was not returning the proper value. The LPAM/GETCNTL function for IMS was not returning the proper value for LPAM-GETCNTLD-COVERAGE in copybook LPAMCCTL. Enhanced the Finalist® CICS and IMS Product Info Screens to be more consistent.
FINALIST-2608	Corrected issues found with Exceptions Table processing on the IMS platform. Corrections documented in the <i>Finalist® Installation Guide, Reference Guide, and User's Guide</i> .

## Unix

### Change Requests Resolved for Unix

Change Request	Change Description
FINALIST-2783	Corrected an issue where the Unix databases were displaying incorrect creation dates.

## Windows

### Change Requests Resolved for Windows (Part 1 of 2)

Change Request	Change Description
FINALIST-2475	Resolved an issue where the Workbench State Cut feature would not allow selection of states for building a Finalist® database containing only selected states. In addition, the syntax for related State Cut error messages was corrected.
FINALIST-2613	Updated Workbench and Lookup Tool for new Pitney Bowes logos.



## Change Requests Resolved for Windows (Part 2 of 2)

Change Request	Change Description
FINALIST-2646	Added missing COBOL copybooks (PBNFADRS, PBNFRRTN) to the Windows installation.
FINALIST-2736	Updated the Lookup Tool Code an Address screen tab names to reflect the new AddressDataDef structure.

## z/OS

### Change Requests Resolved for z/OS

Change Request	Change Description
FINALIST-2585	Corrected an issue with the placement of an EXPORT command in Finalist <sup>®</sup> 64-bit mode only. The relevant EXPORT command has been added for Finalist <sup>®</sup> 31-bit mode processing.
FINALIST-2652	Corrected a crash that occurred when calling LPFNMSPL or LPFNORP and passing only one parameter.
FINALIST-2717	<b>ENHANCEMENT</b> — The FNCIRCAC module is now provided as a callable load module in all z/OS environments (batch, CICS, and IMS).

## Documentation Changes

The Finalist<sup>®</sup> 9.1.0 documentation provides detailed information on all enhancements and changes for the Finalist<sup>®</sup> 9.1.0 release. The following table describes the Finalist<sup>®</sup> 9.1.0 release documentation changes and additions and where you can find more information on these release changes in your Finalist<sup>®</sup> documentation.

Finalist <sup>®</sup> Guide	Description
<i>Finalist<sup>®</sup> Installation Guide</i>	<p>The Finalist<sup>®</sup> 9.1.0 release changes to the <i>Finalist<sup>®</sup> Installation Guide</i> include:</p> <ul style="list-style-type: none"> <li>• Documentation changes for the Finalist<sup>®</sup> 9.1.0 release enhancements and updates.</li> <li>• Documentation changes for DPV<sup>®</sup> DNA Table processing.</li> <li>• Chapter 1, Installing Finalist<sup>®</sup> for Windows — New section "Installing Finalist<sup>®</sup> on Windows Server 2012 (or Windows 8)" has been added.</li> </ul>
<i>Finalist<sup>®</sup> User's Guide</i>	<p>The Finalist<sup>®</sup> 9.1.0 release changes to the <i>Finalist<sup>®</sup> User's Guide</i> include:</p> <ul style="list-style-type: none"> <li>• Documentation changes for the Finalist<sup>®</sup> 9.1.0 release enhancements and updates.</li> <li>• Documentation changes for DPV<sup>®</sup> DNA Table processing.</li> <li>• Chapter 9, Exceptions Table Option — New and updated information on using the Finalist<sup>®</sup> Exceptions Table Option.</li> </ul>
<i>Finalist<sup>®</sup> Reference Guide</i>	<p>The Finalist<sup>®</sup> 9.1.0 release changes to the <i>Finalist<sup>®</sup> Reference Guide</i> include:</p> <ul style="list-style-type: none"> <li>• Documentation changes for the Finalist<sup>®</sup> 9.1.0 release enhancements and updates.</li> <li>• Documentation changes for DPV<sup>®</sup> Door Not Accessible (DNA) Table processing.</li> <li>• Chapter 1, Using the Finalist<sup>®</sup> APIs — Information on the new PBFNTransact API.</li> <li>• Chapter 2, Using the Structures and Constants — Information on Finalist<sup>®</sup> 9.1.0 structure changes.</li> </ul>

For more information on the Finalist<sup>®</sup> 9.1.0 release changes, download the Finalist<sup>®</sup> 9.1.0 documentation from the Pitney Bowes Support Site at <http://www.g1.com/support>.

## Help File Changes

The Finalist<sup>®</sup> 9.1.0 release includes an updated help file. The updated help file is provided with the Windows UI.

## Finalist<sup>®</sup> 9.1.0 Release Availability

The Finalist<sup>®</sup> 9.1.0 release is available for download from Pitney Bowes at <http://www.g1.com/support>. Log in to Support>My Products>Finalist>View Available Downloads>Software tab.

## Technical Support

If you have any questions, you can contact us at [software.support@pb.com](mailto:software.support@pb.com) or by telephone at 1-800-367-6950 to speak with a Finalist<sup>®</sup> Technical Support Representative.