


Banking institutions often offer a service called *Positive Pay*. This is a specially formatted file listing all valid checks written on the bank account. The file is sent to the bank and only checks identified in this file are cashed by the bank. If the bank receives checks that are slightly different, the bank will not accept the checks. This feature is offered for fraud prevention.

PrintBoss can generate a Positive Pay file for each check in a batch. The form must be edited to add and assign a copy to enable this feature. The copy is designated as a Positive Pay file. The structure of the Positive Pay file is designed to match individual bank requirements. Rarely are requirements the same for different banks.

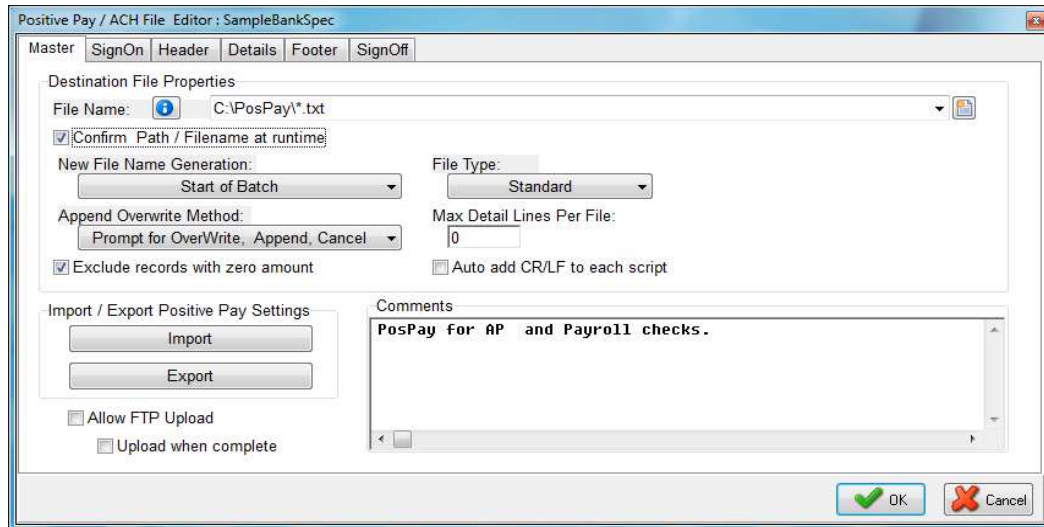
The Positive Pay specifications become part of the Form File. The specifications can be exported to a PrintBoss Positive Pay file (extension of ".ppx" in the PosPay subdirectory of PrintBoss). This file can then be selected in another form. Note that the .ppx files exported from within the PrintBoss Form Editor are NOT the actual Positive Pay files sent to the bank. They are simply the scripts PrintBoss uses to create the file.

SETUP IN PRINTBOSS

1. Open the PrintBoss Master Application.
2. Click on the **Edit** menu and select **Form Files**.
3. Highlight the appropriate form and click the **Editor** button.
4. Increase the number of **Copies** by 1 on the **Settings** tab.
5. Click on the **Multi-Parts & Printers** tab and select **<Positive Pay File>** as the **Destination** for the new copy. A page symbol will appear in the column to the right of the Destination column.

Settings	Special Controls	Block Mirrors	Multi-Parts & Printers	Comments	RunTime Objects
Copies	Print Time	Destination Printer/Device*	Source Tray*	Copy Name	
Original	Immediate	<Default PrintBoss Printer>	Default		
Copy 1	Immediate	<Positive Pay File>	 SampleBankSpec		

6. Click on the page symbol to open the Positive Pay Editor.



7. It is usually easier to import a sample Positive Pay spec and modify it to meet the specifications of the current bank. Start with <Embedded in Form> prior to opening the Positive Pay / ACH File Editor, then click the Page symbol.
8. Click on the **Import** button on the **Master** tab of the Positive Pay Editor. The browse opens to the PosPay folder in the PrntBoss Home directory
9. Select the **SampleBankSpec** included with PrintBoss and click **Open**. You may also select the **SampleCSVPosPay** spec.
10. Enter a **File Name** and path for this Positive Pay file. This field is limited to 80 characters. The Enterprise edition of PrintBoss allows macro characters to be used in the file name to create a dynamic file name when a batch of checks is printed.
11. Select **Confirm Path/Filename at runtime**. (This can be skipped in the Enterprise edition).
12. Choose a **New File Name Generation** method. The default is **Start of Batch**. The choices are:
 - a. Start of Batch
 - b. Each new page
 - c. Each new DocNo – Select this option when using variables in the file name. The use of variables in file names is only available in the Enterprise edition of PrintBoss.
13. Select the **File Type**. The default of **Standard** should always be used when creating Positive Pay files.
14. Choose **Append Overwrite Method**. The default is **Overwrite existing File**. The choices are:
 - a. Overwrite existing File
 - b. Append to existing File
 - c. Prompt for Overwrite, Append, Cancel
- P** 15. **Max Detail Lines Per File** allows you to enter a maximum number of detail lines when required by the bank. This feature is only available in the Enterprise edition of PrintBoss. PrintBoss will automatically increment the file name using the {##} variable when the max detail lines are exceeded.
16. You may select the **Exclude records with zero amount** option.
17. Select **Auto add CR/LF to each script** only when you are creating a new Positive Pay File and would like PrintBoss to automatically add this carriage return/line feed command at the end of each script.
18. Only select one or both of the FTP options after FTP is setup. See Chapter 21, FTP, for more information.
 - a. **Allow FTP Upload** – Only select this option when FTP has been setup for ACH. This feature is only available when Security is enabled.
 - b. **Upload when complete** – Select this option to automatically upload the FTP file once it is created by PrintBoss. Only select his option after FTP has been setup. This feature is only available when Security is enabled
19. The **Comments** field is optional and for your use.
20. The **SignOn** tab is provided for the rare occasion when a sign on or introduction to the Positive Pay file is required by the bank. This is also known as a File Header.
21. Fill in the **Header** section when a Batch header is required by the bank. This information usually includes:
 - a. Account number

- b. Company name
 - c. Batch date
22. Fill in the **Details** section according to the bank's specifications. This section is always required for a Positive Pay file and often includes:
- a. Account number
 - b. Check number
 - c. Check amount
 - d. Check date
 - e. Check recipient
23. Fill in the **Footer** section according to the bank's specifications. This section is often required and provides a summary of the batch. This may include:
- a. Batch count
 - b. Batch amount sum
 - c. Batch date
24. The **SignOff** tab is provided for the rare occasion when a sign off or File Footer is required for a file summary, such as a File Count or File Amount value.
25. Click OK at the bottom of the Positive Pay Editor to save changes and close the window.
26. Click OK on the Editing Form window.

NOTE:

The following are tips for the Header, Details, and Footer sections.

- Each line is usually treated as a field with the content enclosed in quotes.
- Often it is helpful to add comments to the end of a line, starting the comment with the pipe character (|). The pipe character is the Shift and \ keys on your keyboard.
- Substitution functions are available within PrintBoss. Right click on any Positive Pay tab, except the Master, to select **List / Stuff Assignments** and then select the plus sign next to **Positive Pay / ACH Fields** to view a list of available substitution functions specific to Positive Pay. PrintBoss evaluates each function and substitutes the resulting value in place of the function including the braces that surround the function. Functions can be nested within other functions. Use caution. Confusion may occur with delimiting the functions and parameters. Sometimes it is preferable to create a value from a series of steps with delimiters to eliminate confusion and make the command clearer. See Chapter 10, *#Text Command* – Substitution Function Description, for an example.
- Most sections usually end with a Carriage Return/Line Feed. This is represented with the expression Chr(13)+Chr(10) or {CF/LF}.
- Often there are fields relative to a bank account that need to be entered into the Positive Pay file. It is helpful to make use of the miscellaneous 1 through 5 fields in the PrintBoss bank record and reference the information using the variable names {BMisc1} ... {BMisc5}.

Sample Script

You can view the sample Positive Pay script from the Positive Pay sub-directory in the PrintBoss folder. The file is named SampleBankSpec.ppp. Open the file to view the script or import it from Positive Pay Master tab.

Header

Fill in the Header tab when a header is required by the bank. This information usually includes:

- 1) Account number
- 2) Company name
- 3) Batch date

Example:

"H" |Record Type

```
"{Pad:{BCName}', 30, T}" |Company Name
"{CurrentDate: 'mmdyyy}'|Date
"{Pad:", 41}" |Filler
"{CR/LF}"
```

Headers often begin with a character that identifies this is a header line. Our example uses the letter H. The company name is filled with the company name from the Bank Record in PrintBoss. Our sample bank requires only the first 30 characters of the company name, so any characters beyond 30 will be truncated. The date is in the format of two digit month, two digit day, and four digit year. Filler is used to create an 80 character file and the section ends with a carriage return and line feed. The next section will start on the next line of the file.

Details

Fill in the Details tab according the bank's specifications. This section is always required for a Positive Pay file and often includes:

- 1) Account number
- 2) Check number
- 3) Check amount
- 4) Check date
- 5) Check recipient

Example:

```
"I" |Issue Type
"{Pad: +{StrTran: +{BMICRACCTNO}+, "-",""}, 10, LT, '0'}" |Account Number
"{Pad: '{Trim:+{DocNo}+, B}', 10, LT, '0'}" |Check or document number
"{FormatNum: '{DocAmnt}', 8, 2, '0', '0', Hide}" |Check Amount
"{FormatDate: +{DocDate}+, 'MMDDYYYY'}" |Check Date
"{Pad: +{DocRecip}+, 25, RT, ' '}" |Recipient or Payee
"{Pad: ' ',16}" |Filler
"{CR/LF}"
```

Detail sections often include Issue types. Though the bank may provide several possible codes, PrintBoss only includes valid checks in the batch (not cancelled or void checks). Typically, the code for Issued checks is "I". The Account Number is filled from the Account Number entered on the MICR tab of the Bank Record. Occasionally, the account number may include dashes or characters not allowed in a Positive Pay file. These characters, such as the dash in our example, can be removed from the account number before creating the Positive Pay file.

The DocNo, or check number, is captured from the check and is normally right justified. The above example trims both ends of the DocNo and fills, or pads, the left side of the number with zeros. The 10 indicates there must always be 10 characters in this field.

The DocAmnt or check amount is also captured from the check. This field is formatted to display 8 characters to the left of the decimal for the dollar amount and two digits to the right of the decimal for the cents. The spaces on either side of the decimal are padded to fill with zeros to display the correct number of characters. The decimal itself is hidden and will not display in the Positive Pay file.

The FormatDate substitute function defines the mask used to display the date characters as defined in Chapter 9 of the PrintBoss Manual under the "Date & Time Format Masks" section. PrintBoss has a FormatDate2 function to define to input mask as well as the output mask when needed. The mask is applied to the date printed on the check.

The DocRecip or payee name is captured from the check. This field is often left justified and truncated after a specified number of characters. Our example truncates the name after 25 characters. The DocRecip is normally filled with spaces when the payee name is less than the specified number of characters.

Filler is used to fill the line to a standard length specified by the bank. Our example pads or fills each line to a length of 80 characters. Spaces are normally used to fill the line.

The carriage return and line feed function will create a new line for each check in the Details section.

Footer

Fill in the Footer tab according to the bank's specifications. This section is often required and provides a summary of the batch. This may include:

- 1) Batch count
- 2) Batch amount sum
- 3) Batch date

Example:

"T"	Record Type
"{FormatNum: '{BatchCount}', 10, 0, ' ', ' ', Hide}"	Total Number of Documents
"{FormatNum: '{BatchAmnt}', 8, 2, '0', '0', Hide}"	Sum of all Checks
"{Pad: ' ', 59, T}"	Filler
"{CR/LF}"	

This section typically begins with a Record type identifier, such as T for Trailer record. There are two totals often found in this section: Batch Count and Batch Amount. The BatchCount function in PrintBoss counts the total number of documents in the Details section. The FormatNum substitute function formats the value. In our example, the batch count is formatted to display 10 digits to the left of the decimal and zero to the right of the decimal. The left side of the decimal is padded with spaces to guarantee a 10 character field. The decimal is hidden. The BatchAmnt function in PrintBoss sums all the check amounts. The resulting total is formatted to display 8 digits to the left of the decimal for the dollar amount and two digits to the right of the decimal for the cents. The spaces on either side of the decimal are padded to fill with zeros to display the correct number of characters. The decimal itself is hidden and will not display in the Positive Pay file.

Similar to the other sections, this line is padded to create a line length of 80 characters. The carriage return and line feed function end this section.

ENTERING ACCOUNT/ROUTING NUMBERS

There are 3 ways to enter an Account Number or Routing number into a Positive Pay spec.

1. Explicitly type the Account or Routing number into the spec. This is the most direct method, but it becomes a problem when more than one bank account is used by the same form since these values will not change dynamically.
2. Enter the Account or Routing number into one of the five MISC fields on the bank record. An advantage to this method is that you can type the number exactly as the bank wants it to appear. On rare occasion, the display of these values on the MICR line is not the way the bank wants them expressed in the PosPay file. The down side is remembering to keep the MISC field current in the bank record.

3. Use the calculated fields, {BMicrAcctNo} and {BMicrRoutNo}, in PrintBoss. The values of these fields are calculated each time they are accessed by examining the full MICR line and pulling out the appropriate sections. The advantage is no additional support is needed. The disadvantage is that on rare occasion the format of the account number in the Positive Pay file needs to be a different than the MICR line.

OPERATION

Once the Positive Pay file is configured, it is treated as another printer. Select the Multi-Parts & Printers tab in the Form Editor and set the Print Time to print Immediate or as a Batch. Click on the File menu, select Open Document Work Files and select the form name to print when the Print Time is set to Batch. Print the whole file or set a range in the Scope to print only part of the file.

The work file may also be used to reprint or test print portions of the file. Be sure to check **Allow Reprints** as well as the copy marked **Positive Pay** when reprinting checks from the work file.

NOTE:

The **Printed** column in the Browse list of the work file indicates the status of the printed documents. Positive Pay copies display the letter O (for pOsitive pay) when printing is successful.

It is important that the form's **Auto Archiving** method on the Settings tab is NOT set to *Overwrite Work File at Start of Batch* when the Print Time for the Positive Pay copy is set to Batch on the Multi-Parts & Printers tab of the Form Editor. You could potentially overwrite a work file before the Positive Pay copies have been printed to a file.



See Chapter 9, *Form Files*.

COMMON SUBSTITUTION FUNCTIONS USED

There are a number of functions in PrintBoss that are helpful when setting up the Header, Details, and Footer sections. A list of these functions can be accessed by right clicking in the scripting areas and choosing List / Stuff Assignments.

A few of the most commonly used functions are defined in Chapter 10, *#Text Command*, under *Substitution Functions*. These include: CurrentDate, CurrentTime, FormatNum, Pad, RECDDate, and RECTime. See Chapter 10 for the complete explanation of these functions.

In addition, there are several Substitution functions specific for Positive Pay files. A complete list of Positive Pay variables and substitution functions can be found in Appendix E. A few of the commonly used functions follow.

BatchAmnt

{BatchAmnt}

This function provides the sum of all the checks in a batch and is placed in the Footer tab of the Positive Pay File Editor. Use this function with the FormatNum function to specify the length.

Example: "{FormatNum: '{BatchAmnt}', 8, 2, '0', '0', Hide}" |This function formats the batch amount to 8 digits to the left of the decimal, 2 digits to the right of the decimal, fill left with zeros, fill right with zeros, and hide decimals.

BatchChkNoSum

{BatchChkNoSum}

This function provides the sum of the check numbers in a batch and is typically placed in the Footer tab of the Positive Pay File Editor.

BatchCount

{BatchCount}

This function provides the number of checks in a batch and is placed in the Footer tab of the Positive Pay File Editor. Use this function with the FormatNum function to specify the length.

Example: "{FormatNum: '{BatchCount}', 10, 0, ' ', ' ', Hide}" |This function formats the batch count to 10 digits to the left of the decimal, 0 digits to the right of the decimal, fill left with spaces, no fill right, and hide decimals.

CR/LF

{CF/LF}

This function adds a carriage return / line feed at the end of each Positive Pay tab that is used. This is the same as using: Chr(13)+Chr(10). Unlike most of the other functions, there are no double quotes around CR/LF.

CSV or TSV

{CSV: ÷ <string> ÷ [, <ForceQuotesY/N> [, <SuppressTrailingCommaYN>]]}

{TSV: ÷ <str> ÷ [, <ForceQuotesY/N> [, <SuppressTrailingTABYN>]]}

This function creates a complete line for csv fields and encloses commas occurring in the string in double quotes as well as quotes occurring in the string in double quotes. Unlike the CommaDelimit and DBQuotes functions, quotes are not used to offset this function. An option allows forcing a field without quotes to be encapsulated in double quotes if double quotes may occur in the field for uniformity in displaying the data.

TSV works the same as CSV to create a tab delimited file.

Example: {CSV: ÷ {DocRecip} ÷, 'Y'} |Forces all DocRecip fields to be enclosed in double quotes. Note there are no quotes surrounding this function. The 'Y' at the end removes the last comma or tab.

DBQuotes

{DBQuotes: '<string>'}

This function is similar to the Comma Delimit function, but it only looks for double quotes in the string and applies to Positive Pay files saved to the .txt format. The function can be used in either the Detail or Footer tab of the Positive Pay File Editor.

Example: "{DBQuotes: '{DocRecip}'}" |The name Robert "Bud" Shipman will display fully in the Positive Pay file using this function. Otherwise the name would display as Robert only.

FileAmnt

{FileAmnt}

This function returns the sum of all checks in a file and is usually placed in the SignOff tab of the Positive Pay File Editor.

FileBatches

{File Batches}

This function returns the sum of all batches in the Positive Pay file and is usually placed in the SignOff tab of the Positive Pay File Editor.

FileChkNoSum

{FileChkNoSum}

This function provides the sum of all check numbers in the Positive Pay file and is usually placed on the SignOff tab of the Positive Pay File Editor.

FileCount

{FileCount}

This function returns the number of records in a file and is usually placed in the SignOff tab of the Positive Pay File Editor.

PosPayFileCounter

{PosPayFileCounter: '<ZeroFillDigits>'}

This function adds a unique file creation number for those banks who require this feature and is normally added to the Header tab of the Positive Pay File Editor. The value after the function indicates the number of characters in the file counter. PrintBoss will automatically increment the counter by 1 every time a Positive Pay file is printed.

Example: "{PosPayFileCounter: '8'}" |This function creates a unique file creation number filled with zeros up to 8 characters.

PosPayFileExt

{PosPayFileExt}

This function provides the extension of the current positive pay file that is created by PrintBoss.

PosPayFileName

{PosPayFileName}

This function provides the name that is being used for the current positive pay file.



See Chapter 10, *#Text Command*, for additional information on Substitution Functions or Appendix C, Positive Pay Substitution Functions.

PosPayLineCount

{PosPayLineCount}

This counter increments with each new PosPay line created for a total count. Use with the Pad function to set the length when displaying this field.

PosPaySeqNo

{PosPaySeqNo}

This function adds a sequence number for each line added. This value is retained between batches and is most commonly used in ACH files to generate the Trace Number. Use with a Pad function to set the length for displaying this field.