

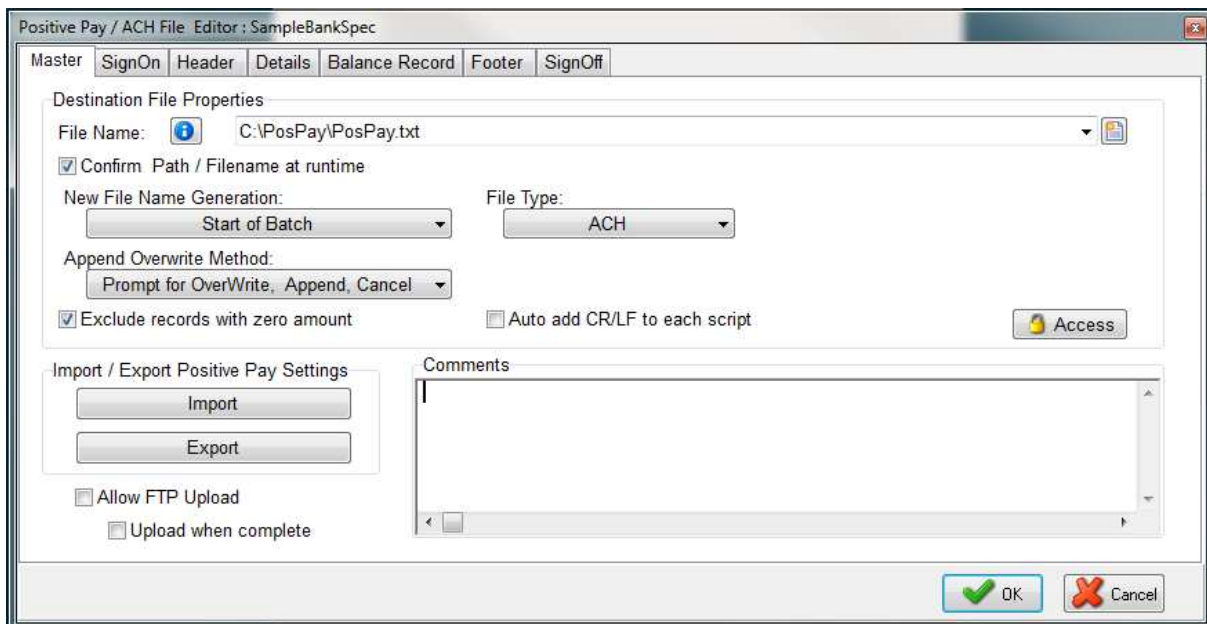
An increasing number of banking institutions are offering a service often called *Positive Pay* for check fraud protection. This is a formatted text or csv file listing all valid checks written on a bank account. The file is transmitted to the bank and only checks identified in this file are cashed by the bank. If the bank receives checks that are slightly different, the bank will not accept the checks.

PrintBoss generates a Positive Pay file for each check in the batch. The PrintBoss form must be edited to add 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. Contact Wellspring Software, Inc., to provide a quote on the cost to create a Positive Pay file if you would like assistance.

The Positive Pay specifications become part of the PrintBoss Form File. The specifications can be exported to a PrintBoss Positive Pay file (extension of ".ppp" in the PosPay subdirectory of PrintBoss). This file can then be imported into another form. Note that the .ppp files imported and 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.
6. Click on the page symbol to open the Positive Pay Editor.



The screenshot shows the "Positive Pay / ACH File Editor" window for "SampleBankSpec". The window has a menu bar with "Master", "SignOn", "Header", "Details", "Balance Record", "Footer", and "SignOff". The "Details" tab is active. The "Destination File Properties" section includes a "File Name" field set to "C:\PosPay\PosPay.txt", a checked "Confirm Path / Filename at runtime" checkbox, "New File Name Generation" set to "Start of Batch", "File Type" set to "ACH", and "Append Overwrite Method" set to "Prompt for OverWrite, Append, Cancel". There are also checkboxes for "Exclude records with zero amount" (checked) and "Auto add CR/LF to each script" (unchecked), along with an "Access" button. The "Import / Export Positive Pay Settings" section has "Import" and "Export" buttons, and checkboxes for "Allow FTP Upload" (unchecked) and "Upload when complete" (unchecked). A "Comments" text area is at the bottom right. The "OK" and "Cancel" buttons are at the bottom right.

7. It is usually easier to import an existing Positive Pay spec and modify it to meet the specifications of the current bank. 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.
8. Select the **SampleBankSpec** included with PrintBoss and click **Open** if you do not have another positive pay spec to use. Otherwise, choose your positive pay spec.
9. 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.
10. Select **Confirm Path/Filename at runtime**. (This can be skipped in the Enterprise edition).
11. 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.
12. Select the **File Type**. The default of **Standard** should always be used when creating Positive Pay files.
13. 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
14. **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.
15. You may select the **Exclude records with zero amount** option.
16. 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.
17. Only select one of both of the FTP options after FTP is setup. See Chapter 22, 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
18. The **Comments** field is optional and for your use.
19. 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.
20. Fill in the **Header** section when a header is required by the bank. This information usually includes:
 - a. Account number
 - b. Company name
 - c. Batch date
21. 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
22. 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
23. The **SignOff** tab is provided for the rare occasion when a sign off is required to indicate the end of the Positive Pay file. This tab can also be used to display a File Count or File Amount value.
 24. Click OK at the bottom of the Positive Pay Editor to save changes and close the window.
 25. 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 with PrintBoss. Right click on any Positive Pay tab except Master and select the plus sign next to **Positive Pay Fields** to view a list of available substitution functions. 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 – Substitute 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: 'mmdyyyy'}" |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 little 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 to 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 that were previously printed.

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. The capital O turns into a small case "o" when the copy has been reprinted.

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



See Training Notes entitled *Form Files* for more information.

COMMON SUBSTITUTE 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.

A few of the most commonly used functions are defined in Chapter 10 under *Substitute Functions*. These include: CurrentDate, CurrentTime, FormatNum, FormatDate, and Pad. See Chapter 10 of the PrintBoss Manual for the complete explanation of these functions.

In addition, there are several substitute functions specific for Positive Pay files. Descriptions of those functions follow.

BatchAmnt

{BatchAmnt}

This function provides the sum of all the checks in a batch.

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 usually placed in the Footer tab of the Positive Pay File Editor. .

BatchCount

{BatchCount}

This function provides the number of checks in a batch.

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.

CommaDelimit

{CommaDelimit: +<string>+[,<ForceQuotesY/N>]}

This function prepares a string for a csv file and encloses commas occurring in the string in double quotes as well as quotes occurring in the string in double quotes. This allows all the data in the field to display. Otherwise, the field will cut off at the comma our double quote. The function can be used in the Detail or Footer tab of the Positive Pay File Editor and only applies to files that are saved to a csv format. 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.

Example: "{CommaDelimit: '{DocRecip}'}" |

A name enclosed in quotes in the DocRecip field will evaluate properly instead of cutting off part of the line. The name Robert "Bud" Shipman displays in full instead of stopping after the name Robert. The same example would work if there was a comma in the DocRecip field, such as James King, III.

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 of TSV

{CSV: ±<string>÷[,<ForceQuotesY/N>]}

{TSV: ±<string>÷[,<ForceQuotesY/N>]}

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.

Example: `{CSV: ÷{DocRecip}÷,'Y'}`

Forces all DocRecip fields to be enclosed in double quotes. Note there are not quotes surrounding this function.

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 functions 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 Training Notes entitled *Text Command* for additional information on Substitute Functions.