



Importer Preprocessor – Guide for Programmers

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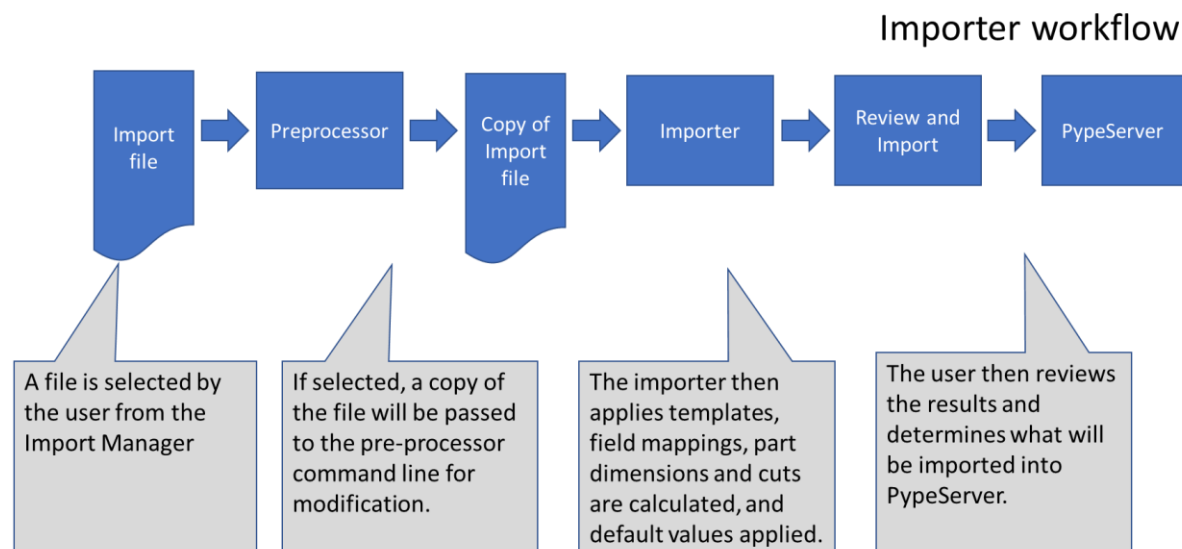
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1 Overview

A preprocessor is a computer program that modifies data to conform with the input requirements of another program. The Import Manager provides a means to automatically run a program or script that will preprocess a copy of the import file prior to importing that copy of the file into PypeServer. Any program or script can be used, allowing automated replacement of data with new values, adding additional data, and cross-referencing data with other files.

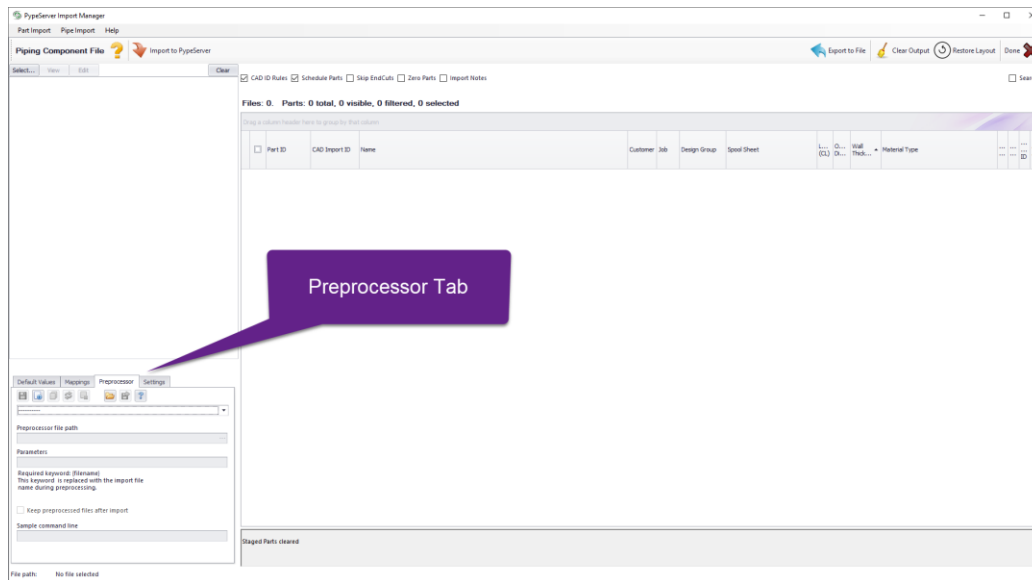
1.1 Workflow

When an importer pre-processor is selected, the Import Manager will create a copy of the original file and pass that file to the selected pre-processor for processing. When the preprocessor is no longer running and has exited, the Importer Manager will pass the pre-processed file to the importer where the import processing will occur.



2 Configuration

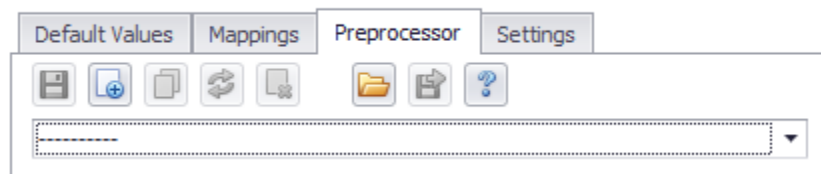
Preprocessors can be configured and selected from the Preprocessor tab of the Import Manager



2.1 Managing Preprocessors

A preprocessor configuration consists of a command line, one or more optional parameters, and a choice of deleting or keeping the preprocessed file copies after importing. Each preprocessor configuration can be created, saved, renamed, deleted, exported and imported.

A set of buttons at the top of the Preprocessor tab handle the creation and management of all of an importer's preprocessors.



Preprocessor toolbar area

Preprocessor buttons – from left to right

- Save - Save the current preprocessor
- Create – Create a new preprocessor
- Copy – Copy the current preprocessor to a new one
- Rename - Rename the current preprocessor
- Delete - Delete the current preprocessor
- Import - Import a preprocessor
- Export - Export the selected preprocessor

- Help – Displays help documentation

Preprocessor dropdown list

- Selects a preprocessor from a list of saved preprocessors for this importer

2.2 Configure a Preprocessor

Once a new preprocessor has been created using the Create button, it can be configured using the remaining controls below preprocessor dropdown list.

The screenshot shows the 'Preprocessor' configuration window. At the top, there are tabs: 'Settings ->', 'Preprocessor ->', and 'Default Values'. Below the tabs is a toolbar with icons for file operations. The main configuration area is titled 'PreProcessor1'. It contains the following fields and controls:

- Preprocessor file path:** A text field containing 'C:\PyServer\MyScriptOrAppOrBatOrWhatever.bat'. A blue callout box points to this field with the text: 'The item to run. (Can be any executable item.)'
- Parameters:** A text field containing '{filename} MyParam1 MyParam2'. A blue callout box points to this field with the text: 'Params for the executable item'.
- Required keyword:** A text field containing '{filename}'. A blue callout box points to this field with the text: 'What is going to run on your file before it is run through the import processor.'
- Keep preprocessed files after import:** A checkbox that is currently unchecked.
- Sample command line:** A text field containing 'C:\PyServer\MyScriptOrAppOrBatOrWhatever.bat "InputFile.csv" MyParam1 MyParam2'.

At the top right of the window, there is a button labeled 'Create a new PreProcessor Directive'.

2.2.1 Preprocessor configuration values

2.2.1.1 Preprocessor file path - required

The filename of the preprocessor executable or script, without any parameters. If a full path is specified it will be used. If just the filename is specified, then the operating system will use the paths environment variable to locate the file.

2.2.1.1.1 Examples

- powershell.exe
- c:\windows\SysWOW64\WindowsPowerShell\v1.0\powershell.exe

2.2.1.2 Parameters - required

Contains one or more parameters that will be passed on the command line after the preprocessor file path. These parameters must always include the mandatory parameter keyword "{filename}", as this keyword is replaced during preprocessing with the import file name.

2.2.1.2.1 Examples

Pass just the import filename to the preprocessor on the command line

- {filename}

Pass a list of parameters which include the filename token

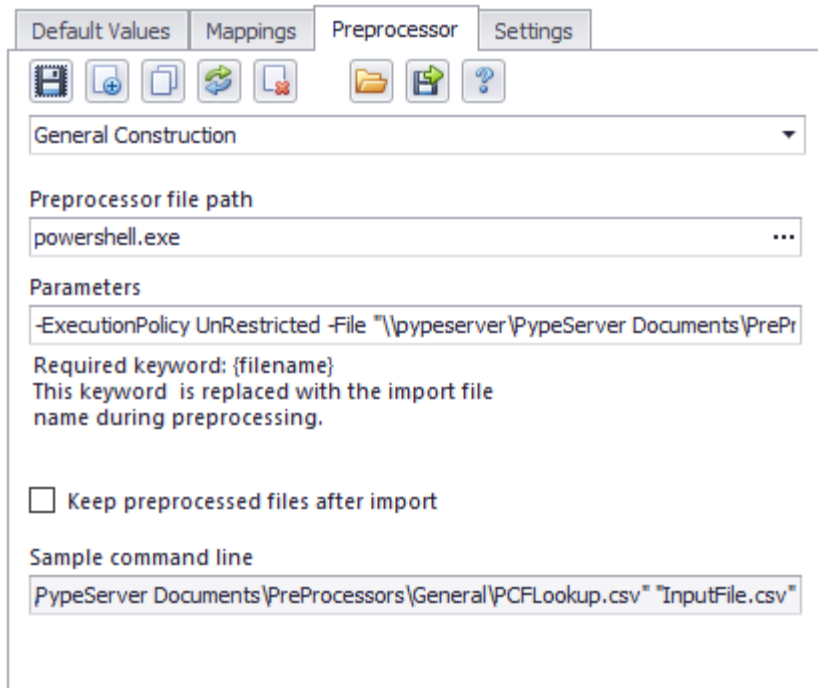
- -ExecutionPolicy UnRestricted -File "\\pypeserver\PypeServer Documents\PreProcessors\General\PCFReplacePreProcessor.ps1" "\\pypeserver\PypeServer Documents\PreProcessors\General\PCFLookup.csv" {filename}

2.2.1.3 Keep preprocessed files after import

The preprocessed copy of the import file is usually deleted after import. Check this box to keep the preprocessed file from being deleted. These files can be found in the same folder as the original import files. These files will have the same names as the originals with the suffix “_Preprocessed” appended.

2.3 Example configuration

Below is a sample configuration that starts a custom PowerShell script located on the “PypeServer Documents” share. For this example, the preprocessor is powershell.exe, and the parameters contain the remainder of the command line. The parameters line contains the mandatory {filename} keyword that will be replaced with the actual file name when starting the preprocessor command line.



The screenshot shows a configuration window with four tabs: 'Default Values', 'Mappings', 'Preprocessor', and 'Settings'. The 'Preprocessor' tab is active. Below the tabs is a toolbar with icons for various actions. The main configuration area is titled 'General Construction' and contains the following fields:

- Preprocessor file path:** A text box containing 'powershell.exe' with a browse button (three dots) to its right.
- Parameters:** A text box containing the command: `-ExecutionPolicy UnRestricted -File "\\pypeserver\PypeServer Documents\PrePr`. Below this text box, a note states: 'Required keyword: {filename}. This keyword is replaced with the import file name during preprocessing.'
- Keep preprocessed files after import:** A checkbox that is currently unchecked.
- Sample command line:** A text box containing the command: `PypeServer Documents\PreProcessors\General\PCFLookup.csv" "InputFile.csv"`.

The name of the preprocessor is “General Construction”

2.3.1 Preprocessor file path

powershell.exe

Note that this is not the full path to where powershell.exe is installed. In this case the operating system will search for the file in the paths stored in the paths system environment variable.

2.3.2 Parameters

```
-ExecutionPolicy UnRestricted -File \\PypeServer\PypeServer  
Documents\PreProcessors\General\PCFReplacePreProcessor.ps1 "\\PypeServer\pypeServer  
Documents\PreProcessors\General\PCFLookup.csv" {filename}
```

Parameters breakdown

-ExecutionPolicy Unrestricted

- Sets the PowerShell execution policy for this script runtime

-File \\PypeServer\PypeServer Documents\PreProcessors\General\PCFReplacePreProcessor.ps1

- Full network url file path to the PowerShell script to be run

\\PypeServer\pypeServer Documents\PreProcessors\General\PCFLookup.csv

- Full network url file path to a custom lookup file being used by the PowerShell script

{filename}

- Placeholder keyword that will be replaced by the actual file name during preprocessing