

Job Control File File format

The supported file formats are either XML or JSON. For our purpose, JSON and XML files can be regarded as collections of key+value pairs. The key is always a string (or an XML tag). The value is either a string or in turn a collection of key+value pairs, which allows a hierarchical structure. We call a collection of key+value pairs a “dictionary”. In the example below the value of “InputFile” is a string, the value of “Configuration” is a dictionary containing the entries “Name”, “BaseConfiguration” (both strings) and “Options” (dictionary).

ExampleJSON file

```
{
  "InputFile": "C:/Documents/sample.pdf",
  "Configuration":
  {
    "BaseConfiguration": "Convert_ISOcoatedV2_2_ISOnewspaper26v4",
    "Options":
    {
      "DstProfile": "ISOuncoated.icc",
      "DocumentConversionRenderingMode": "Relative Colorimetric"
    }
  }
}
```

Example XML file

```
<?xml version="1.0" encoding="UTF-8" ?>
<JobControlFile>
  <InputFile>C:/Documents/sample.pdf</InputFile>
  <Configuration>
    <BaseConfiguration>Convert_ISOcoatedV2_2_ISOnewspaper26v4</BaseConfiguration>
    <Options>
      <DstProfile>ISOuncoated.icc</DstProfile>
      <DocumentConversionRenderingMode>Relative Colorimetric
    </DocumentConversionRenderingMode>
    </Options>
  </Configuration>
</JobControlFile>
```

In these Job Control File examples a PDF with the name *sample.pdf* located in the C drive in the folder *Documents* shall be converted with the given configuration *Convert_ISOcoatedV2_2_ISOnewspaper26v4*. In that configuration the target color space shall be changed to *ISOuncoated.icc* profile and the rendering intent shall be changed to *Relative*

Colorimetric.

Description of entries

InputFile

The path of the file to be processed. When used with hot folder queues, this can be a pure file name without absolute path. In this case, ZePrA assumes that the file is put into the hot folder together with the job ticket. If the entry is missing, ZePrA assumes that the file has the same base name (without extension) like the job control file.

OutputFile

The path of the output file. When used with hot folder queues, this is usually the desired file name under which the file will be saved in the output folder. The variable \$Id will be replaced by the job ID.

Configuration

Dictionary containing the configuration definition. See “Configuration dictionary.”

Configuration dictionary

Name

The name of the created configuration (optional)

BaseConfiguration

The name of an existing configuration. If this entry is present, a new temporary configuration is copied from the existing configuration.

AutoSetup

Dictionary containing an auto setup definition. If this entry is present, a new temporary configuration is created accordingly. See “AutoSetup dictionary” for details.

Options

Dictionary containing configuration options, which modify the configuration. See *ConfigurationOptions.pdf* for details.

Note

If neither BaseConfiguration nor AutoSetup is specified, the default configuration is used. When used with queues, the default configuration is that one which is assigned to the queue. If there is no configuration assigned, the new configuration will be created solely based on the information in the *Options* dictionary. When used with the CLI, the default configuration is that one which is specified on the command line. If none is specified, the new configuration will be created solely based on the information in the *Options* dictionary.

AutoSetup dictionary

Type

Type of auto setup.

- 0: Normalize Color to Document Color Space or Output Intent
- 1: Normalize and convert Colors to new Output Condition
- 2: Direct Color Conversion to new Output Condition
- 3: Save inks
- 4: Apply Gradation Curves only
- 5: Optimize Total Area Coverage (TAC)
- 9: Proofing
- 10: Copy and change an existing configuration

Mode

Specifies how conversion between document color space and output color space is performed. Only valid for AutoSetup type 1, 2, 3, 5, 6, 7.

- 0: Apply device link profile
- 1: Apply SmartLink

DocumentColorSpaceProfile

The profile that defines the document color space (AutoSetup types 0, 1, 2, 3, 4, 5, 9)

PreferOI

Specifies if an embedded output intent shall be used as document color space instead of the profile specified in *DocumentColorSpaceProfile*.

- 0: Ignore output intent
- 1: Use output intent

DstProfile

The profile that defines the target color space (AutoSetup types 1, 2, 9)

RenderingIntent

Rendering intent for conversion between document color space and target color space (AutoSetup types 1, 2, 9). See ConfigurationOptions.pdf for a list of possible values.

CalcInkAmount

Specifies if the ink amount and ink saving percentage shall be calculated (AutoSetup type 3).

- 0: Don't calculate ink amount
- 1: Calculate ink amount

Normalize

Specifies if colors not in the document color space shall be converted into the document color space (AutoSetup type 4).

- 0: Don't normalize
- 1: Normalize

GradationsMode

Defines how gradation curves specified (AutoSetup type 4).

- 0: external file
- 2: curves by name
- 3: internal file (e.g. a linearization DeviceLink profile)

ExternalFile

An external file, specified with full path, containing gradation curves (AutoSetup type 4)

CyanGradation, MagentaGradation, YellowGradation, BlackGradation, AllSpotColorsGradation

Name of the gradation curve for Cyan, Magenta, Yellow, Black, spot colors respectively (AutoSetup type 4)

InternalFile (AutoSetup type 4)

Name of an internal file containing gradation curves (AutoSetup type 4)

Required options for AutoSetup cases

The set of relevant options depends on the AutoSetup type and in many cases on the value of the *Mode* option (DeviceLink/SmartLink). This section lists required options for the most common cases.

Normalize Color to Document Color Space or Output Intent

Option	Remark
Type	0
DocumentColorSpace	
PreferOI	0 or 1

Normalize and convert Colors to new Output Condition using a DeviceLink profile

Option	Remark
Type	1
Mode	0
DLProfile	

Normalize and convert Colors to new Output Condition using SmartLink

Option	Remark
Type	1
Mode	1
DocumentColorSpace	
DstProfile	
PreferOI	0 or 1
RenderingIntent	
SmartLinkMethod	

Direct Color Conversion to new Output Condition using a DeviceLink profile

Option	Remark
Type	2
Mode	0
DLProfile	

Direct Color Conversion to new Output Condition using SmartLink

Option	Remark
Type	2
Mode	1

Option	Remark
DocumentColorSpace	
DstProfile	
PreferOI	0 or 1
RenderingIntent	
SmartLinkMethod	

Save inks using a DeviceLink profile

Option	Remark
Type	3
Mode	0
DLProfile	
CalcInkAmount	0 or 1

Save inks using SmartLink

Option	Remark
Type	3
Mode	1
DocumentColorSpace	
PreferOI	0 or 1
SmartLinkMethod	
CalcInkAmount	0 or 1

Apply Gradation Curves only using an external file

Option	Remark
Type	4
GradationsMode	0
ExternalFile	full path to external file
Normalize	0 or 1
DocumentColorSpaceProfile	required only if <i>Normalize = 1</i>
PreferOI	0 or 1; required only if <i>Normalize = 1</i>

Apply Gradation Curves only using registered curves by name

Option	Remark
Type	4
GradationsMode	2
CyanGradation	name of curve applied on Cyan
MagentaGradation	name of curve applied on Magenta
YellowGradation	name of curve applied on Yellow
BlackGradation	name of curve applied on Black
AllSpotColorsGradation	name of curve applied on all spot color channels
Normalize	0 or 1
DocumentColorSpaceProfile	required only if <i>Normalize = 1</i>
PreferOI	0 or 1; required only if <i>Normalize = 1</i>

Apply Gradation Curves only using an internal file

Option	Remark
Type	4
GradationsMode	3
InternalFile	name of internal file, e.g.
Normalize	0 or 1
DocumentColorSpaceProfile	required only if <i>Normalize = 1</i>
PreferOI	0 or 1; required only if <i>Normalize = 1</i>

Optimize Total Area Coverage (TAC) using a DeviceLink profile

Option	Remark
Type	5
Mode	0
DLProfile	

Optimize Total Area Coverage (TAC) using SmartLink

Option	Remark
Type	5
Mode	1
DocumentColorSpace	
PreferOI	0 or 1
SmartLinkTAC	

Proofing using a DeviceLink profile

Option	Remark
Type	9
Mode	0
DLProfile	
MediaWedgeActive	0 or 1
MediaWedgeDynamic	0 or 1, required only if <i>MediaWedgeActive = 1</i>
MediaWedge	required only if <i>MediaWedgeActive = 1</i> and <i>MediaWedgeDynamic = 0</i>

Proofing using SmartLink

Option	Remark
Type	9
Mode	1
DocumentColorSpace	
DstProfile	
PreferOI	0 or 1
RenderingIntent	
SmartLinkMethod	
MediaWedgeActive	0 or 1
MediaWedgeDynamic	0 or 1, required only if <i>MediaWedgeActive = 1</i>
MediaWedge	required only if <i>MediaWedgeActive = 1</i> and <i>MediaWedgeDynamic = 0</i>