

Sign pro PDF API Specification

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Introduction

API functionality is provided by simple JSON structures. The API can be controlled by text tags embedded in the PDF or entirely through the command parameters.

The entire JSON string is Base64 encoded and supplied as a single parameter. The JSON string contains objects with arrays of field types:

- file
- configuration
- signatures[]
- initials[]
- checkboxes[]
- radiobuttons[]
- textfields[]
- dates[]

API Command List

File Options

file: to specify HTTP or Filesystem for IO

input:

Key	Example Value	Type	Description
filesystem	c:\test.pdf	string	Absolute file path to PDF to open
http_get	http://pdf_server.com/pdfs/test.pdf	string	Absolute URL to an http server providing PDFs via GET

output:

Key	Example Value	Type	Description
Filesystem	c:\test_complete.pdf	string	Absolute file path to PDF to be saved on completion
http_post	http://pdf_server.com/pdfs/test.pdf	string	Absolute URL to an http server receiving the PDF via POST (pdf as body)

authentication:

Key	Example Value	Type	Description
pdf_user_password	pass123	string	User password for opening PDF
http_user	user	string	HTTP Basic Authentication Username
http_pass	pass456	string	HTTP Basic Authentication Password

Configuration

configuration: to configure the sign pro PDF user interface and behaviour

Key	Example Value	Type	Description
auto_delete_api_file	true	boolean	Option to delete the ,signpro file when sign pro PDF exits after being started with the command line -apiFile switch.
auto_save	true	boolean	After signing all <i>required</i> signatures the PDF is automatically saved and sign pro PDF exits
embed_fonts	true	boolean	Specify whether to embed fonts in the saved PDF, required for non-Latin fonts used in input fields
error_handler_url	http://www.test.com:9090	string	Absolute URL to a server accepting error messages via POST
fit_width	true	boolean	Zooms the document to fit in the display area
process_text_tags	true	boolean	Specify whether embedded Text Tags should be processed or not. If true, Signatures and Initials provided by the API will be ignored.
show_annotate	true	boolean	Allow freehand annotation on the document
show_document_pane	false	boolean	Option to display the document pane to the left of the document display area
show_manual_signature	false	boolean	Allow manual placement of signature fields (ie no predefined fields are present and none are added via the API)
show_top_bar	false	boolean	Option to display the upper toolbar. When false this also has the effect of forcing auto_save to true. Note that form filling and annotations will not be accessible when the toolbar is not displayed.
show_bottom_bar	false	boolean	Option to display the lower toolbar
tablet_display	true	boolean	If true, sign pro PDF will open on the first detected Wacom tablet display detected. For best results ensure that the tablet is running at native resolution and 100% scaling.

Signature

signature: Array of signatures to predefine in document.

Key	Example Value	Type	Description
name	Signature_1	string	Name of signature field (must be unique)
signer	Christopher Lea	string	Signatory Name
reason	Agreement	string	Signatory Reason
type	FSS	enum	Specify FSS or ISO Signature storage format
biometric	true	boolean	Specify True (default) or False to save Biometric metadata in the document.
required	false	boolean	Specify whether completion of this signature is required before the document can be completed
location	...	Location	See Location Table below

Initial

initials: Array of initials to predefine in document (small signatures)

Key	Example Value	Type	Description
name	initial_1	string	Name of signature field (must be unique)
signer	Christopher Lea	string	Signatory Name
reason	Agreement	string	Signatory Reason
type	FSS	enum "FSS", "ISO"	Specify FSS or ISO Signature storage format
biometric	true	boolean	Specify True (default) or False to save Biometric metadata in the document.
required	false	boolean	Specify whether completion of this signature is required before the document can be completed
location	...	Location	See Location Table below

Text

textfields: Array of text fields to predefine in document.

Key	Example Value	Type	Description
name	text_1	string	Name of text field (must be unique)
value	Christopher Lea	string	Pre-filled default value of text field
location	...	Location	See Location Table below

Date

dates: Array of date fields to predefine in document.

Key	Example Value	Type	Description
name	date_1	string	Name of date field (must be unique)
value	Christopher Lea	string	Pre-filled default value of text field
format	mm/dd/yy	string	Visual format for Date field. Value must match this format. Accepted formats: "m/d" "m/d/yy" "mm/dd/yy" "mm/dd/yyyy" "mm/yy" "d-mmm" "d-mmm-yy" "dd-mmm-yy" "dd-mmmm-yyyy" "yymm-dd" "mmm-yy" "mmmm-yy" "mmm d, yyyy" "mmmm d, yyyy" "m/d/yy h:MM tt" "m/d/yy HH:MM"
location	...	Location	See Location Table below

Checkbox

`checkboxes`: Array of checkboxes to predefine in document.

Key	Example Value	Type	Description
name	checkbox_1	string	Name of checkbox field (must be unique)
value	true	string	"true" or "false" whether the box should be checked by default
location	...	Location	See Location Table below

Radio Button

`radiobuttons`: Array of radio buttons to predefine in document.

Key	Example Value	Type	Description
name	radio_1	string	Name of button (must be unique)
value	true	string	"true" or "false" whether the button should be checked by default If more than one button in the same group is marked "true", the last will be selected
group	group_1	string	Name of the Radio Button group this button belongs to. All buttons must be part of a group, and a group must have at least 2 buttons.
location	...	Location	See Location Table below

Location

`location` common to all field types

Key	Example Value	Type	Description
Page	1:2:3 1-7 1:2:5-9	string	Defines which Page(s) the object should exist on. Can define ranges eg "1-3" or individual pages eg "1:3:5:7". If Location is set but Page is not, Object will repeat on every page.
X	234	int	Horizontal coordinate for Object origin. In default PDF units, from left.
Y	22	int	Vertical coordinate for Object origin. In default PDF units, from bottom.
W	200	int	Width of Object, in default PDF units.
H	50	int	Height of Object, in default PDF units.

JSON API Example

```
{
  "file": {
    "input": {
      "filesystem": "C:\\Dev\\BitBucket\\sign-pro-windows-wpf-api\\SinglePage Quote.pdf",
      "http_get": null
    },
    "output": {
      "filesystem": "C:\\Dev\\BitBucket\\sign-pro-windows-wpf-api\\SinglePage
Quote_complete.pdf",
      "http_post": null
    },
    "authentication": {
      "pdf_user_password": "pass",
      "http_user": null,
      "http_password": null
    }
  },
  "configuration": {
    "show_annotate": false,
    "show_manual_signature": false,
    "error_handler_url": null,
    "process_text_tags": false
  },
  "signatures": [
    {
      "name": "signature_1",
      "signer": "Chris",
      "reason": "fear",
      "type": "FSS",
      "biometric": true,
      "required": true,
      "location": {
        "Page": "1",
        "X": 123,
        "Y": 456,
        "W": 50,
        "H": 200
      }
    },
    {
      "name": "s2",
      "signer": "C2",
      "reason": "f2",
      "type": "FSS",
      "biometric": true,
      "required": false,
      "location": {
        "Page": "1",
        "X": 175,
        "Y": 450,
        "W": 200,
        "H": 260
      }
    }
  ]
}
```



```
    }],  
    "textfields": [  
      {  
        "name": "text1",  
        "location": {  
          "Page": "1",  
          "X": 200,  
          "Y": 600,  
          "W": 150,  
          "H": 44  
        }  
      },  
      {  
        "name": "text2",  
        "value": "testing",  
        "location": {  
          "Page": "3",  
          "X": 200,  
          "Y": 600,  
          "W": 150,  
          "H": 44  
        }  
      }  
    ],  
    "initials": null  
  }  
}
```

Text Tag Schema

When opened via the API, documents containing embedded Text Tags adhering to the schema will be processed and the resulting objects placed according to their text position.

- TextTags must be enclosed with `{[[and]]}` .
- There must be no spaces between Keys.
- Tags can be as small as the PDF creator will allow, or indeed the same colour as the background but they must exist in the main body of the document. Not in annotations, sticky notes, form fields etc.

Defaults

All Tags have these features. Even if not defined below, the tag will support these values:

Key	Optional	Description	Example
Type	No	Defines the tag... each has a specific name.	Type=Signature
Name	No	The Name of the tag for IDML. For tags that occur on multiple pages, an integer is appended for each page it occurs on. Ex. ApprovalSignature1, ApprovalSignature2, ...	Name=ApprovalSignature
Required	Yes	Boolean that states whether filling this field is required to finalize the document. 'true' or 'false' MUST be lowercase Marking a Radio Button as required will mark the Group as required. Checkboxes cannot be marked required.	Type=Signature, Name=ApprovalSignature, Required=true
X	Yes	Define the horizontal location of the converted object. In PDF Units, Left Origin. If this is not set, the location of the TextTag itself will be used.	X=350
Y	Yes	Define the vertical location of the converted object. In PDF Units, Bottom Origin. If this is not set, the location of the TextTag itself will be used.	Y=150

Key	Optional	Description	Example
Page	Yes	<p>Defines which Page(s) the tag should exist on. Can define ranges eg "1-3" or individual pages eg "1:3:5:7".</p> <p>Page ranges must be enclosed in quotation marks "".</p> <p>Ignored if Location is not set.</p> <p>If Location is set but Page is not, Object will repeat on every page.</p>	<pre>Page="1:2:3" Page="1-7" Page="1:2:5-9"</pre>
W	Yes**	<p>Defines the width of the control</p> <p>** All tags have a default Height/Width if values aren't provided - however default values may not match existing document style & formatting so it's strongly encouraged to provide your own values.</p>	W=250
H	Yes**	<p>Defines the height of the control</p> <p>** All tags have a default Height/Width if values aren't provided - however default values may not match existing document style & formatting so it's strongly encouraged to provide your own values.</p>	H=72

Signature

The Signature tag places a signature

Key	Optional	Description	Example
Type=Signature	No	Defines the Signature Tag	
Signer	Yes	Defines the name of the signer. Blank if not defined.	Type=Signature, Signer=Aaron Johnson
Reason	Yes	Defines the reason for signing. Blank if not defined	Type=Signature, Reason=Approval
SigType	Yes	Defines the format of the stored Biometric data, FSS (default) or ISO	Type=Signature, Signer=Aaron Johnson, SigType=ISO

Key	Optional	Description	Example
Biometric	Yes	True/False whether Biometric metadata should be included in the document.	Type=Signature,Signer=Aaron Johnson,Biometric=False

Here is a full example signature tag that might be inline in a PDF document.

```
{[[[Type=Signature,Name=ApprovalSignature,Signer=Aaron Johnson,Reason=Approval,Height=80,Width=250,SigType=FSS]]]}
```

Initial

Use the Initial tag to place an initials box. An Initials box is a small signature.

Key	Optional	Description	Example
Type=Initial	No	Defines the Initial Tag	
Signer	Yes	Defines the name of the signer. Blank if not defined.	Type=Initial,Signer=Aaron Johnson
Reason	Yes	Defines the reason for signing. Blank if not defined	Type=Initial,Reason=Initials
SigType	Yes	Defines the format of the stored Biometric data, FSS or ISO	Type=Initial,Signer=Aaron Johnson,SigType=ISO
Biometric	Yes	True/False whether Biometric metadata should be included in the document.	Type=Initial,Signer=Aaron Johnson,Biometric=False

Here is a full example initial tag, to insert initials boxes in each bottom left corner 1" in.

```
{[[[Type=Initial,Name=InitialsTest,Signer=Aaron Johnson,Reason=Approval,X=72,Y=72,Height=60,Width=60]]]}
```

Text

Key	Optional	Description
Type=Text	No	Defines the TextTag
Value	Yes	Populate the text field with a default text string.

Example

```
{[[[Type=Text,Name=FirstName,Value=Chris,Width=200,Height=50]]]}
```

Date

Key	Optional	Description
Type=Date	No	Defines the DateTag
Format	No	Define the date format to be displayed / tested. Same options as sign pro proper. "m/d", "m/d/yy", "mm/dd/yy", "mm/yy", "d-mmm", "d-mmm-yy", "dd-mmm-yy", "yymm-dd", "mmm-yy", "mmmm-yy", "mmm d, yyyy", "mmmm d, yyyy",
Value	Yes	Populate the Date field with a default text string (must match the format)

```
{{[[Type=Date,Name=Birthday,Page=2,Height=50,Width=200,Value=12/31/2019,Format=mm/dd/yyyy]]}}
```

Checkbox

Key	Optional	Description
Type=Checkbox	No	Defines the TextTag
Value	Yes	Select the checkbox by default. Acceptable values are 'true' or 'false'

```
{{[[Type=Checkbox,Name=Primary,Value=true]]}}
```

Radio Button

Key	Optional	Description
Type=Checkbox	No	Defines the TextTag
Value	Yes	Select this button by default. Acceptable values are 'true' or 'false'. Only one button per group can be selected
Group	No	Define the group for this button. Groups can have no less than 2 buttons, and a Group must be defined.

```
{{[[Type=RadioButton,Name=Male,Value=True,Page=2,Group=Sex,Width=50,Height=50,Y=200]]}}
```

```
{{[[Type=RadioButton,Name=Female,Page=2,Group=Sex,Width=50,Height=50,Y=260]]}}
```