



# Nirva PDF Service

Document Version: 1.14

# Table of Contents

Overview .....	3
Installation .....	4
Configuration .....	5
Reference .....	6
Classes .....	6
Error codes .....	6
COMMAND Class .....	6
OVERLAY Class .....	6
PDF Class .....	7
Permissions .....	7
Commands .....	7
PDF class .....	8
ADD_LINK .....	8
CLIP .....	9
CONCAT .....	9
COPY .....	10
CROP .....	11
GET_NUM_PAGES .....	12
GET_PAGE_INFO .....	12
GET_PAGES .....	13
GET_TEXT .....	14
LIST_FONTS .....	14
MERGE .....	15
MOVE .....	16
ROTATE .....	17
SET_TEXT .....	17

# Overview

The PDF service is a NIRVA external service that provides functionality for processing PDF files:

- Crop
- Clip
- Move
- Copy
- Merge
- Concatenation
- Text extraction
- Text insert
- Rotation

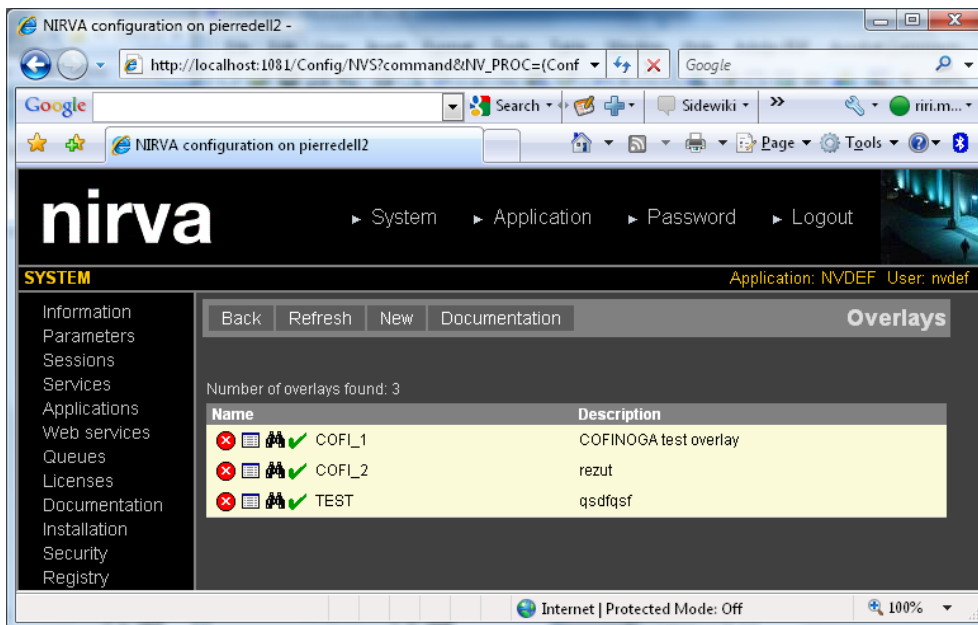
# Installation

The PDF service is delivered as a NIRVA package and can be installed like any NIRVA service directly from the NIRVA configuration web site. Please see the NIRVA configuration chapter in the NIRVA user's guide for further information.

# Configuration

The PDF service configuration is entirely dynamic and available from a web browser.

The configuration just provides the management of an internal overlay repository that can be used with the MERGE command:



# Reference

This chapter gives the complete reference of all the database service commands.

## Classes

Here are the available PDF service classes:

- PDF Main class.

## Error codes

### COMMAND Class

Value	Description
101	Invalid command

### OVERLAY Class

Value	Description
101	Cannot write the overlay file
102	Cannot save the overlay list
103	Cannot get the overlay list
104	Overlay not found
105	No file associated with the overlay
106	The overlay already exists
107	Cannot create the overlay

Value	Description
108	No overlay name given
109	Cannot open the overlay file

## PDF Class

Value	Description
101	Cannot open the file
102	Cannot open the pdf file
103	Bad link data format
104	Error adding links to the pdf file
105	Cannot get the pdf page
106	Bad area data format
107	Cannot create the pdf file
108	Error cropping the pdf file
109	Error clipping the pdf file
110	Bad coordinate data format
111	Error merging the pdf files
112	Error concatenating the pdf files
113	Error setting text into the pdf files
114	Pdf file is password protected
115	Error rotating the pdf file

## Permissions

Name	Description
------	-------------

## Commands

For each command, the reference gives the command name, the sources for which the command may be used, the command description, the eventual command permissions, the parameter list and the eventual list of objects created by the command.

The parameters described in this chapter are command specific parameters. For general parameters, please refer to the Nirva command syntax chapter.

The available sources are:

- Client for all Nirva client interfaces including Nirva client library (nvc).
- Web for commands from a web browser.
- Procedure for commands from a Nirva procedure.
- Service for commands from service to service.

## PDF class

PDF processing.

### ADD\_LINK

PDF:PDF:ADD\_LINK

Source	Use Input Container	Use Output Container
Client		
Web	Yes	Yes
Procedure		
Service		

### Description

Add hypertext links to a PDF.

### Parameters

- IN* Name of the Nirva file object containing the input PDF file. The default value is "IN".
- OUT* Name of the Nirva file object containing the output PDF file. The default value is "OUT".
- URLS* Nirva table object containing 3 columns. The first column contains the page number on which to add the hypertext link, the second column contains the coordinates in points (72 DPI) of the AREA where the hypertext link will be written (format X,Y,W,H as float numbers, origin top left corner) and the last column contains the URL.

### Objects created

- OUT* Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.



---

## CLIP

PDF:PDF:CLIP

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

### Description

Clip the selected pages of a PDF file.

### Parameters

<i>IN</i>	Name of the Nirva file object containing the input PDF file. The default value is "IN".
<i>OUT</i>	Name of the Nirva file object containing the output PDF file. The default value is "OUT".
<i>PAGE</i>	Page number of the input file on which to apply clipping. This can be a single page or a range of pages (for example "1-3") or the string "ALL" for all pages. Attention: the resulting pdf will only contain the given pages. The default is page 1.
<i>AREA</i>	Area to crop. The format is "X,Y,W,H" as float numbers in points at 72 dpi. The origin is the upper left corner.

### Objects created

<i>OUT</i>	Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.
------------	---

---

## CONCAT

PDF:PDF:CONCAT

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

## Description

Concatenate several PDF file into a single one.

## Parameters

- IN* Name of the Nirva file objects containing the input PDF files to concatenate. They must be separated by a semicolon character (;). The default value is "IN;ATTACHMENT".
- OUT* Name of the Nirva file object containing the output PDF file. The output object must point to file that is different than any of the input files. The default value is "OUT".

## Objects created

- OUT* Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.

## COPY

### PDF:PDF:COPY

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

## Description

Copy an area to another place.

## Parameters

- IN* Name of the Nirva file object containing the input PDF file. The default value is "IN".
- OUT* Name of the Nirva file object containing the output PDF file. The default value is "OUT".
- PAGE* Page number of the input file to process. The default is page 1.
- AREA* Area to copy. The format is "X,Y,W,H" as float numbers in points at 72 dpi. The origin is the upper left corner.

**DEST** Destination coordinates of the area to copy. The format is "X,Y" as float numbers in points at 72 dpi. The origin is the upper left corner. The default is "0,0".

#### Objects created

**OUT** Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.

## CROP

### PDF:PDF:CROP

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

#### Description

Change the crop box of the selected pages of a PDF file.

#### Parameters

**IN** Name of the Nirva file object containing the input PDF file.  
The default value is "IN".

**OUT** Name of the Nirva file object containing the output PDF file.  
The default value is "OUT".

**PAGE** Page number of the input file on which to apply cropping. This can be a single page or a range of pages (for example "1-3") or the string "ALL" for all pages. Attention: the resulting pdf will only contain the given pages. The default is page 1.

**AREA** Area to crop. The format is "X,Y,W,H" as float numbers in points at 72 dpi. The origin is the upper left corner.

#### Objects created

**OUT** Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.

---

## GET\_NUM\_PAGES

### PDF:PDF:GET\_NUM\_PAGES

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

#### Description

Return the number of pages of a PDF file.

#### Parameters

*IN* Name of the Nirva file object containing the input PDF file.  
The default value is "IN".

#### Objects created

*NUM\_PAGES* This is a Nirva integer object containing the number of pages of the PDF file.

---

## GET\_PAGE\_INFO

### PDF:PDF:GET\_PAGE\_INFO

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

#### Description

Return information about a page.

#### Parameters

*IN* Name of the Nirva file object containing the input PDF file.  
The default value is "IN".

*PAGE* Page number. The default is 1.

## Objects created

### *PAGE\_INFO*

This is a Nirva indexed string list object containing the following keys:

- **WIDTH**: Page width (media box) in points at 72 dpi.
- **HEIGHT**: Page height (media box) in points at 72 dpi.
- **VISIBLE\_WIDTH**: Visible part page width (crop box) in points at 72 dpi.
- **VISIBLE\_HEIGHT**: Visible part page height (crop box) in points at 72 dpi.
- **ROTATE**: Page rotation (degrees).

---

## GET\_PAGES

### PDF:PDF:GET\_PAGES

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

## Description

Extract several pages from a PDF file.

## Parameters

- IN* Name of the Nirva file object containing the input PDF file.  
The default value is "IN".
- OUT* Name of the Nirva file object containing the output PDF file.  
The default value is "OUT".
- PAGE* Page number of the input file to extract. This can be a single page or a range of pages (for example "1-3") or the string "ALL" for all pages. The default is page 1.

## Objects created

- OUT* Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.

---

**GET\_TEXT**

PDF:PDF:GET\_TEXT

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

**Description**

Extract some text from a page of a PDF file. If 2 consecutive spaces are encountered, they are replaced by a single one. This command works with text orientation equal to 0, 90, 180 or 270. For orientation 0, the command is able to cut characters of the text tokens that are outside the given area. For other orientations, the text token are not taken in care if there are not entirely inside the given area.

**Parameters**

<i>IN</i>	Name of the Nirva file object containing the input PDF file. The default value is "IN".
<i>OUT_TEXT</i>	Name of the Nirva string object containing the extracted text. The default value is "OUT_TEXT".
<i>PAGE</i>	Page number of the input file on which to get text. The default is page 1.
<i>AREA</i>	Area for extracting text. The format is "X,Y,W,H" as float numbers in points at 72 dpi. The origin is the upper left corner. If no area is specified, the command extracts all the text of the page.

**Objects created**

<i>OUT_TEXT</i>	Extracted text. This is a Nirva string object. The name of this object can be changed using the <i>OUT_TEXT</i> parameter.
-----------------	--

---

**LIST\_FONTS**

PDF:PDF:LIST\_FONTS

Source	Use Input Container	Use Output Container
Client Web Procedure Service	No	Yes

## Description

Return the list of available fonts for the SET\_TEXT command.

## Parameters

*FONT\_LIST* Name of the Nirva string list object containing the font list.  
The default value is "FONT\_LIST".

## Objects created

*FONT\_LIST* Font list. This is a Nirva stringlist object. The name of this object can be changed using the FONT\_LIST parameter.

## MERGE

### PDF:PDF:MERGE

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

## Description

Add an overlay to a PDF file.

## Parameters

*IN* Name of the Nirva file object containing the input PDF file (input container).  
The default value is "IN".

*OUT* Name of the Nirva file object containing the output PDF file (output container).  
The default value is "OUT".

*OVERLAY* Name of the Nirva file object containing the overlay PDF file (input container).

*NAME* If the OVERLAY parameter is not given, the NAME parameter is used to retrieve an overlay from the overlay repository managed by the service.

*PAGE* Page number of the input file on which to apply the overlay. This can be a single page or a range of pages (for example "1-3,7-12,15") or the string "ALL" for all pages. The default is page 1.

**DEST** Destination coordinates of the overlay. The format is "X,Y" as float numbers in points at 72 dpi. The origin is the upper left corner. The default is "0,0".

**BACKGROUND** If set to yes, the overlay is merged in background.

**Objects created**

**OUT** Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.

**MOVE**

**PDF:PDF:MOVE**

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

**Description**

Move an area to another place.

**Parameters**

**IN** Name of the Nirva file object containing the input PDF file. The default value is "IN".

**OUT** Name of the Nirva file object containing the output PDF file. The default value is "OUT".

**PAGE** Page number of the input file to process. The default is page 1.

**AREA** Area to move. The format is "X,Y,W,H" as float numbers in points at 72 dpi. The origin is the upper left corner.

**DEST** Destination coordinates of the area to move. The format is "X,Y" as float numbers in points at 72 dpi. The origin is the upper left corner. The default is "0,0".

**Objects created**

**OUT** Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.



---

**ROTATE****PDF:PDF:ROTATE**

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

**Description**

Changes the rotation of pdf pages (pdf Rotate page property).

**Parameters**

<i>IN</i>	Name of the Nirva file object containing the input PDF file. The default value is "IN".
<i>OUT</i>	Name of the Nirva file object containing the output PDF file. The default value is "OUT".
<i>PAGE</i>	Page number of the input file on which to apply rotation. This can be a single page or a range of pages (for example "1-3,7-12,15") or the string "ALL" for all pages. The default is page 1.
<i>ANGLE</i>	Rotation angle in degrees. This must be 0, 90, 180 or 270. The default is 0.

**Objects created**

<i>OUT</i>	Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.
------------	---

---

**SET\_TEXT****PDF:PDF:SET\_TEXT**

Source	Use Input Container	Use Output Container
Client Web Procedure Service	Yes	Yes

## Description

Create a PDF file from text or add text to an existing PDF file.

## Parameters

<i>IN</i>	Name of the Nirva file object containing the input PDF file. If this parameter is not provided, the command will create a new PDF file instead of adding text to an existing one.
<i>OUT</i>	Name of the Nirva file object containing the output PDF file. The default value is "OUT".
<i>WIDTH</i>	Width of the text rectangle. This is a float data in points. The resolution is 72 dpi. The default is 100.
<i>HEIGHT</i>	Height of the text rectangle. This is a float data in points. The resolution is 72 dpi. The default is 100.
<i>BGCOLOR</i>	Color of the text rectangle (background). The format is R G B with float values from 0 to 1. The default is "1.0 1.0 1.0" (white). This parameter can also be set to "TRANSPARENT" for a transparent background rectangle.
<i>BORDER</i>	Border of the text from the text rectangle in points (72 dpi). Float number. The default is 10.
<i>LINE_SPACE</i>	Space between lines in points (72 dpi). Float number. The default is 1.0.
<i>FONT</i>	Font name. Default is "Courier". This can be one of the 14 standard adobe fonts or one of the fonts that reside in the Font subdirectory of the PDF service. The 14 standard fonts are: "Times-Roman", "Times-Bold", "Times-Italic", "Times-BoldItalic", "Helvetica", "Helvetica-Bold", "Helvetica-Oblique", "Helvetica-BoldOblique", "Courier", "Courier-Bold", "Courier-Oblique", "Courier-BoldOblique", "Symbol" and "ZapfDingbats". If the selected font is one of the standard fonts, it's not embedded in the PDF file. Otherwise, the font is embedded and this may increase the size of the resulting file. If a font from the Fonts directory of the PDF service is to be used, the name of the font must be exactly the same than the corresponding filename (without the pdf extension). Please contact Nirva in order to add a new font. Only TrueType and Type1 fonts can be used.
<i>FONT_SIZE</i>	Font size. The default is 10.
<i>TEXT</i>	Text to write. This can contain line and page breaks. Also all "/n" and "/f" strings will be replaced respectively by a line break and a page break.
<i>PAGE</i>	This parameter has meaning only when an input file has been given. This is the page number of the input file on which to insert the text. This can be a single page or a range of pages (for example "1-3,7-12,15") or the string "ALL" for all pages. The default is page 1.
<i>DEST</i>	This parameter has meaning only when an input file has been given. Destination coordinates of the text rectangle. The format is "X,Y" as float

numbers in points at 72 dpi. The origin is the upper left corner. The default is "0,0".

*BACKGROUND*

This parameter has meaning only when an input file has been given. If set to yes, the text is merged in background.

*ANGLE*

Text orientation. This can be 0, 90, 180 or 270. The default is 0.

**Objects created**

*OUT*

Result file. This is a Nirva file object. The name of this object can be changed using the OUT parameter.