# Table of Contents

## Part I  novaPDF SDK

1. **Introduction** .............................................................................................................................................................................. 11  
2. **Overview** .................................................................................................................................................................................. 11  
   - Installation .................................................................................................................................................................................. 11  
   - System requirements ................................................................................................................................................................. 12  
   - Components ............................................................................................................................................................................... 12  
   - Network use ................................................................................................................................................................................. 14  
   - Multiple printers .................................................................................................................................................................... 15  
3. **Integration** ................................................................................................................................................................................. 16  
   - How to integrate ........................................................................................................................................................................ 16  
   - How to make the release build .................................................................................................................................................. 16  
   - Customize your setup .............................................................................................................................................................. 18  
   - Co-Branding Tool ................................................................................................................................................................. 18  
      - Folders .................................................................................................................................................................................. 18  
      - Files ..................................................................................................................................................................................... 18  
      - Settings ................................................................................................................................................................................ 20  
         - Add/Modify Printer ............................................................................................................................................................ 20  
         - General ............................................................................................................................................................................. 20  
         - Profile ............................................................................................................................................................................... 21  
         - Page defaults ................................................................................................................................................................... 21  
         - Other defaults ............................................................................................................................................................... 21  
         - Permissions ........................................................................................................................................................................ 22  
   - Results ............................................................................................................................................................................................ 22  
   - Build an installation package bundle ........................................................................................................................................ 23  
   - Installation package bundle ...................................................................................................................................................... 24  

## Part II  novaPDF COM

4. **How to register COM** ......................................................................................................................................................... 27  
   - How to use the COM .............................................................................................................................................................. 28  
   - How to set printer options ..................................................................................................................................................... 28  
   - Private and public profiles ................................................................................................................................................... 29  
   - How to register for messages ................................................................................................................................................ 29  
   - How to use events ................................................................................................................................................................... 30  
   - Multithreading applications ................................................................................................................................................... 30  
   - Use temporary printers .......................................................................................................................................................... 31  
   - Working with Layout ........................................................................................................................................................... 32  
   - Working with Actions .......................................................................................................................................................... 32  

## Reference

- Profile option strings ...................................................................................................................................................................... 33  
- Windows messages ....................................................................................................................................................................... 60  
- What is INovaPdfOptions .......................................................................................................................................................... 62  
- INovaPdfOptions ...................................................................................................................................................................... 68  
   - AddAction ........................................................................................................................................................................... 68  
   - AddAction2 .......................................................................................................................................................................... 69  
   - AddBookmarkDefinition .................................................................................................................................................... 69  
   - AddBookmarkDefinition2 ................................................................................................................................................... 71  
   - AddCustomProperty ............................................................................................................................................................ 72
<table>
<thead>
<tr>
<th>Function</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AddCustomProperty2</td>
<td>73</td>
</tr>
<tr>
<td>AddNovaPrinter</td>
<td>73</td>
</tr>
<tr>
<td>AddNovaPrinter2</td>
<td>74</td>
</tr>
<tr>
<td>AddNovaPrinterExt</td>
<td>75</td>
</tr>
<tr>
<td>AddNovaPrinterExt2</td>
<td>76</td>
</tr>
<tr>
<td>AddOverlay</td>
<td>78</td>
</tr>
<tr>
<td>AddOverlay2</td>
<td>79</td>
</tr>
<tr>
<td>AddProfile</td>
<td>79</td>
</tr>
<tr>
<td>AddProfile2</td>
<td>80</td>
</tr>
<tr>
<td>AddSaveRule</td>
<td>80</td>
</tr>
<tr>
<td>AddSaveRule2</td>
<td>81</td>
</tr>
<tr>
<td>AddUserTag</td>
<td>82</td>
</tr>
<tr>
<td>AddUserTag2</td>
<td>82</td>
</tr>
<tr>
<td>AddWatermarkImage</td>
<td>83</td>
</tr>
<tr>
<td>AddWatermarkImage2</td>
<td>83</td>
</tr>
<tr>
<td>AddWatermarkText</td>
<td>84</td>
</tr>
<tr>
<td>AddWatermarkText2</td>
<td>85</td>
</tr>
<tr>
<td>ClearCustomProperties</td>
<td>85</td>
</tr>
<tr>
<td>ClearFontOptions</td>
<td>85</td>
</tr>
<tr>
<td>ClearSaveRules</td>
<td>86</td>
</tr>
<tr>
<td>ClearUserTags</td>
<td>86</td>
</tr>
<tr>
<td>ConvertExcelDocument</td>
<td>86</td>
</tr>
<tr>
<td>ConvertExcelDocument2</td>
<td>87</td>
</tr>
<tr>
<td>ConvertPowerPointDocument</td>
<td>87</td>
</tr>
<tr>
<td>ConvertPowerPointDocument2</td>
<td>88</td>
</tr>
<tr>
<td>ConvertPublisherDocument</td>
<td>89</td>
</tr>
<tr>
<td>ConvertPublisherDocument2</td>
<td>90</td>
</tr>
<tr>
<td>ConvertVisioDocument</td>
<td>91</td>
</tr>
<tr>
<td>ConvertVisioDocument2</td>
<td>92</td>
</tr>
<tr>
<td>ConvertWordDocument</td>
<td>92</td>
</tr>
<tr>
<td>ConvertWordDocument2</td>
<td>94</td>
</tr>
<tr>
<td>CopyProfile</td>
<td>95</td>
</tr>
<tr>
<td>CopyProfile2</td>
<td>95</td>
</tr>
<tr>
<td>DeleteAction</td>
<td>96</td>
</tr>
<tr>
<td>DeleteAction2</td>
<td>96</td>
</tr>
<tr>
<td>DeleteBookmarkDefinition</td>
<td>97</td>
</tr>
<tr>
<td>DeleteCustomProperty</td>
<td>97</td>
</tr>
<tr>
<td>DeleteLayout</td>
<td>97</td>
</tr>
<tr>
<td>DeleteLayout2</td>
<td>98</td>
</tr>
<tr>
<td>DeleteNovaPrinter</td>
<td>98</td>
</tr>
<tr>
<td>DeleteNovaPrinter2</td>
<td>99</td>
</tr>
<tr>
<td>DeleteOverlay</td>
<td>99</td>
</tr>
<tr>
<td>DeleteOverlay2</td>
<td>99</td>
</tr>
<tr>
<td>DeleteOverrideOptions</td>
<td>100</td>
</tr>
<tr>
<td>DeletePrinterActivePublicProfile</td>
<td>100</td>
</tr>
<tr>
<td>DeletePrinterActivePublicProfile2</td>
<td>100</td>
</tr>
<tr>
<td>DeleteProfile</td>
<td>101</td>
</tr>
<tr>
<td>DeleteProfile2</td>
<td>101</td>
</tr>
<tr>
<td>DeleteSaveRule</td>
<td>102</td>
</tr>
<tr>
<td>DeleteUserTag</td>
<td>102</td>
</tr>
<tr>
<td>DeleteWatermarkImage</td>
<td>102</td>
</tr>
<tr>
<td>DeleteWatermarkImage2</td>
<td>103</td>
</tr>
<tr>
<td>DeleteWatermarkText</td>
<td>103</td>
</tr>
<tr>
<td>DeleteWatermarkText2</td>
<td>103</td>
</tr>
<tr>
<td>Function</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>DisableAction</td>
<td>104</td>
</tr>
<tr>
<td>DisableAction2</td>
<td>104</td>
</tr>
<tr>
<td>DisableActionType</td>
<td>105</td>
</tr>
<tr>
<td>DisableCustomProperty</td>
<td>105</td>
</tr>
<tr>
<td>DisableSaveRule</td>
<td>105</td>
</tr>
<tr>
<td>DisableUserTag</td>
<td>106</td>
</tr>
<tr>
<td>EnableAction</td>
<td>106</td>
</tr>
<tr>
<td>EnableAction2</td>
<td>107</td>
</tr>
<tr>
<td>EnableActionType</td>
<td>107</td>
</tr>
<tr>
<td>EnableCustomProperty</td>
<td>107</td>
</tr>
<tr>
<td>EnableSaveRule</td>
<td>108</td>
</tr>
<tr>
<td>EnableUserTag</td>
<td>108</td>
</tr>
<tr>
<td>GetAction</td>
<td>109</td>
</tr>
<tr>
<td>GetAction2</td>
<td>109</td>
</tr>
<tr>
<td>GetActionCount</td>
<td>110</td>
</tr>
<tr>
<td>GetActionOptionBool</td>
<td>110</td>
</tr>
<tr>
<td>GetActionOptionBool2</td>
<td>111</td>
</tr>
<tr>
<td>GetActionOptionEncryptedString</td>
<td>112</td>
</tr>
<tr>
<td>GetActionOptionEncryptedString2</td>
<td>112</td>
</tr>
<tr>
<td>GetActionOptionFloat</td>
<td>113</td>
</tr>
<tr>
<td>GetActionOptionFloat2</td>
<td>114</td>
</tr>
<tr>
<td>GetActionOptionLong</td>
<td>114</td>
</tr>
<tr>
<td>GetActionOptionLong2</td>
<td>115</td>
</tr>
<tr>
<td>GetActionOptionString</td>
<td>116</td>
</tr>
<tr>
<td>GetActionOptionString2</td>
<td>116</td>
</tr>
<tr>
<td>GetActiveProfile</td>
<td>117</td>
</tr>
<tr>
<td>GetActiveProfile2</td>
<td>117</td>
</tr>
<tr>
<td>GetBookmarkDefinition</td>
<td>118</td>
</tr>
<tr>
<td>GetBookmarkDefinition2</td>
<td>119</td>
</tr>
<tr>
<td>GetBookmarkDefinitionCount</td>
<td>120</td>
</tr>
<tr>
<td>GetContentLayout</td>
<td>121</td>
</tr>
<tr>
<td>GetContentLayout2</td>
<td>121</td>
</tr>
<tr>
<td>GetCustomProperty</td>
<td>122</td>
</tr>
<tr>
<td>GetCustomProperty2</td>
<td>122</td>
</tr>
<tr>
<td>GetCustomPropertiesCount</td>
<td>123</td>
</tr>
<tr>
<td>GetFirstProfile</td>
<td>123</td>
</tr>
<tr>
<td>GetFirstProfile2</td>
<td>124</td>
</tr>
<tr>
<td>GetFontOption</td>
<td>124</td>
</tr>
<tr>
<td>GetFontOption2</td>
<td>125</td>
</tr>
<tr>
<td>GetLayout</td>
<td>125</td>
</tr>
<tr>
<td>GetLayout2</td>
<td>126</td>
</tr>
<tr>
<td>GetLayoutCount</td>
<td>126</td>
</tr>
<tr>
<td>GetLayoutCount2</td>
<td>127</td>
</tr>
<tr>
<td>GetLayoutOptionBool</td>
<td>127</td>
</tr>
<tr>
<td>GetLayoutOptionBool2</td>
<td>128</td>
</tr>
<tr>
<td>GetLayoutOptionFloat</td>
<td>129</td>
</tr>
<tr>
<td>GetLayoutOptionFloat2</td>
<td>129</td>
</tr>
<tr>
<td>GetLayoutOptionLong</td>
<td>130</td>
</tr>
<tr>
<td>GetLayoutOptionLong2</td>
<td>131</td>
</tr>
<tr>
<td>GetLayoutOptionString</td>
<td>132</td>
</tr>
<tr>
<td>GetLayoutOptionString2</td>
<td>132</td>
</tr>
<tr>
<td>GetNextProfile</td>
<td>133</td>
</tr>
<tr>
<td>GetNextProfile2</td>
<td>134</td>
</tr>
<tr>
<td>GetNextProfile2</td>
<td>134</td>
</tr>
<tr>
<td>GetOptionBool</td>
<td>134</td>
</tr>
</tbody>
</table>
GetOptionEncryptedString
GetOptionEncryptedString2
GetOptionLong
GetOptionString
GetOptionString2
GetOverlay
GetOverlay2
GetOverlayCount
GetOverlayOptionBool
GetOverlayOptionBool2
GetOverlayOptionEncryptedString
GetOverlayOptionEncryptedString2
GetOverlayOptionFloat
GetOverlayOptionFloat2
GetOverlayOptionLong
GetOverlayOptionLong2
GetOverlayOptionString
GetOverlayOptionString2
GetOverrideOptionBool
GetOverrideOptionBool2
GetOverrideOptionEncryptedString
GetOverrideOptionEncryptedString2
GetOverrideOptionLong
GetOverrideOptionLong2
GetOverrideOptionString
GetOverrideOptionString2
GetPDFFileName
GetPDFFileName2
GetSaveRule
GetSaveRule2
GetSaveRulesCount
GetSignature
GetSignature2
GetUserTag
GetUserTag2
GetUserTagsCount
GetWatermarkImage
GetWatermarkImage2
GetWatermarkImageCount
GetWatermarkImageOptionBool
GetWatermarkImageOptionBool2
GetWatermarkImageOptionEncryptedString
GetWatermarkImageOptionEncryptedString2
GetWatermarkImageOptionFloat
GetWatermarkImageOptionFloat2
GetWatermarkImageOptionLong
GetWatermarkImageOptionLong2
GetWatermarkImageOptionString
GetWatermarkImageOptionString2
GetWatermarkTextOptionBool
GetWatermarkTextOptionBool2
GetWatermarkTextOptionFloat
GetWatermarkTextOptionFloat2
GetWatermarkTextOptionLong
GetWatermarkTextOptionLong2
GetWatermarkTextOptionString
SetOverlayOptionEncryptedString
SetOverlayOptionEncryptedString2
SetOverlayOptionFloat
SetOverlayOptionFloat2
SetOverlayOptionLong
SetOverlayOptionLong2
SetOverlayOptionString
SetOverlayOptionString2
SetOverrideOptionBool
SetOverrideOptionEncryptedString
SetOverrideOptionEncryptedString2
SetOverrideOptionLong
SetOverrideOptionLong2
SetOverrideOptionString
SetOverrideOptionString2
SetPrinterActivePublicProfile
SetPrinterActivePublicProfile2
SetPrinterOption
SetPrinterPublicProfile
SetPrinterPublicProfile2
SetPrinterServerFlags
SetPrinterServerFlags2
SetSaveRule
SetSaveRule2
SetUserTag
SetUserTag2
SetWatermarkImageOptionBool
SetWatermarkImageOptionBool2
SetWatermarkImageOptionEncryptedString
SetWatermarkImageOptionEncryptedString2
SetWatermarkImageOptionFloat
SetWatermarkImageOptionFloat2
SetWatermarkImageOptionLong
SetWatermarkImageOptionLong2
SetWatermarkImageOptionString
SetWatermarkImageOptionString2
SetWatermarkTextOptionBool
SetWatermarkTextOptionBool2
SetWatermarkTextOptionFloat
SetWatermarkTextOptionFloat2
SetWatermarkTextOptionLong
SetWatermarkTextOptionLong2
SetWatermarkTextOptionString
SetWatermarkTextOptionString2
UnRegisterEventWindow
WaitForNovaEvent

5 Samples

What sample to choose
Access
PDF Reports
ASP.NET
Hello World
Delphi
VCL Converter
Hello World Delphi
Contents

Convert Office Docs ................................................................. 234
Word OLE Delphi ................................................................. 237
Override Options ................................................................. 240

C# ..................................................................................... 243
Hello World CSharp ............................................................. 243
CSharp Converter ................................................................. 246
Word OLE CSharp ................................................................. 249
Convert Office Docs ............................................................. 251
Override Options ................................................................. 254

C++ ..................................................................................... 259
Hello World ......................................................................... 259
Hello World (network) .......................................................... 262
Convert Office Docs ............................................................. 263
MFC Converter ....................................................................... 266
MFC Scribble ......................................................................... 270
Temporary printer ................................................................. 273
Multiple printers ................................................................. 276
Override Options ................................................................. 280

Java ..................................................................................... 285
Hello World ......................................................................... 285
Word OLE ............................................................................. 290

VB ......................................................................................... 296
Hello World VB ...................................................................... 296
VB Converter ........................................................................ 298
Word OLE VB ....................................................................... 302
Override Options ................................................................. 303

VBNet ................................................................................... 306
Hello World VBNet ............................................................... 306
VBNet Converter ................................................................. 308
Word OLE VBNet ................................................................. 310
Convert Office Docs ............................................................. 312
Override Options ................................................................. 315

Install .................................................................................... 319
Installation package bundle .................................................. 319

Index ..................................................................................... 323
novaPDF SDK

Part I
1 novaPDF SDK

1.1 Introduction

novaPDF SDK is a PDF software development kit that programmers can use to add the ability to create PDF files in their own applications. As a COM Object, novaPDF SDK can be integrated in any Windows 2008 Server R2/Vista/Windows 7/Windows 8/Windows 2012 Server/Windows 10/Windows 2016 Server application programmed in a language that supports COM Objects (C/C++/C#, Visual C, Delphi, Visual Basic ...).

novaPDF SDK includes:
- a COM interface for customizing novaPDF printer options.
- novaPDF SDK documentation including several code samples (ASP.NET, C#, C++, Delphi, Java, Ms Access, Visual Basic, VBNet)
- novaPDF SDK printer to distribute (royalty free licensing)

Details regarding novaPDF SDK:
- It is mandatory to distribute the novaPDF SDK printer in your application's setup. This is done under royalty free licensing (you only pay for the SDK license). If you don't want to show novaPDF SDK under the list of Printers, you can use a temporary printer each time your application creates a PDF file (meaning the client won't see novaPDF in the list of printers)
- You can integrate it without ordering, and purchase a license only after you have fully tested it.
- The licensed novaPDF SDK (COM object) lets users create PDFs without the watermark only from your application, not by printing directly to the printer. Registering the COM object does not register the novaPDF SDK printer.
- If you purchase a license you get free priority support.

Restrictions
You are not allowed to create a PDF printer driver using novaPDF SDK, or another application similar to a PDF printer driver (whose main purpose is to create PDF files). You can integrate and distribute novaPDF SDK with your application, as long as your application does some mandatory pre-processing operations to the resulting PDF files.

1.2 Overview

1.2.1 Installation

Install
To install novaPDF SDK on a computer you need to have administrative rights. The installation process does not take much time. All you need to do is to follow the instructions of the "novaPDF 10 SDK Developer Setup" wizard.

There is no need to reboot at the end of the setup; you can run the program right after it is installed on your machine. If you have already installed an older version of novaPDF SDK, you can install the new version on top of the older one, without uninstalling it. Your existing option profiles will be preserved when installing a new version.
Uninstall
You can uninstall the application using the "Add/Remove Programs" icon from the "Control Panel".

1.2.2 System requirements
To install novaPDF 10 SDK Developer you need one of the following operating systems:
- Windows 2016 Server
- Windows 10
- Windows 2012 Server
- Windows 8.1
- Windows 8
- Windows 7
- Windows 2008 Server R2
- Windows Vista

novaPDF 10 SDK Developer requires Microsoft .NET Framework 4.6
If not already installed, it will be downloaded and installed by novaPDF 10 SDK Developer setup.

It needs approximately 350MB of free space.

1.2.3 Components
novaPDF 10 SDK Developer installs files in two folders:

In "C:\Program Files\Softland\novaPDF 9" the installer will create the following folder structure:

Driver
Contains printer driver files and some tools, like Printer Manager

Editor
Contains Profile Manager files

Server
Contains the novaPDF Server service files that works with the profile database

SDK\Doc
Contains the help files and the license files

SDK\Installer
Contains the msi files that will be injected with your application and license information t be distributed with your application.
- novaPDF9PrinterDriver(x64).msi, novaPDF9PrinterDriver(x86).msi - installs printer driver, copies the files needed for driver, service and applications
- novaPDF9COM(x64).msi, novaPDF9COM(x86).msi - installs NovaPdfOptions90 COM
- novaPDF9SDK(x64).msi, novaPDF9SDK(x86).msi - installs configuration files (profiles database, license,...) and adds a printer

SDK\Lib
- novapi9.dll - INovaPdfOptions9 binary file. There are two versions of the dll, one for i386 systems and one for x64 systems

SDK\Tools
- novaPDF Co-Branding tool - customization tool for installers, see Customize your setup

In "C:\Users\Public\Documents\novaPDF 9\SDK" the installer will create the following folder structure:

Include
- definition files for INovaPdfOptions interface
- definitions for Windows messages and Profile option strings

Samples
Contains several samples of how to use INovaPdfOptions:
- Access PDF Reports - make a report on an Access database and convert it to PDF
- ASP.NET Hello World - an ASP.NET application that prints using the Printer object
- C++ Hello World - a console application that prints one page to the novaPDF SDK 10
- C++ Hello World (network) - the same as Hello World sample, but it can be run from any computer in the network, thought the novaPDF SDK 10 is installed on one single computer
- C++ MFC Scribble - the standard MFC Scribble sample extended with generate PDF files
- C++ MFC Converter - a MFC dialogs sample that converts an existing file to PDF using different profiles on novaPDF SDK 10
- C++ Override Options - a console application that uses override options instead of option profiles and prints one page to the novaPDF SDK 10
- C# Hello World CSharp - a simple Windows console application that prints one page to the novaPDF SDK 10.
- C# CSharp Converter - converts an existing file to PDF using different profiles on novaPDF SDK 10
- C# Word OLE CSharp - converts a document created with Microsoft Word to PDF using Word automation
- C# Override Options - a console application that uses override options instead of option profiles and prints one page to the novaPDF SDK 10
- Delphi Hello World Delphi - a Delphi application that prints using the Printer object
- Delphi VCL Converter- a Delphi application that converts an existing file to PDF using different profiles on novaPDF SDK 10
- Delphi Word OLE Delphi - converts a document created with Microsoft Word to PDF using Word automation
- Delphi Override Options - a console application that uses override options instead of option profiles and prints one page to the novaPDF SDK 10
- Java Hello World Java - an Java application that prints using the Printer object
- Java Word OLE (Java) - converts a document created with Microsoft Word to PDF using Word
automation
- VB Hello World VB - a VB application that prints using Printer object
- VB VB Converter - a VB application that converts an existing file to PDF using different profiles on novaPDF SDK 10
- VB Word OLE VB - converts a document created with Microsoft Word to PDF using Word automation
- VB Override Options - a console application that uses override options instead of option profiles and prints one page to the novaPDF SDK 10
- VBNBNet Hello World VBNBNet - a VBNBNet console application that prints one page to the novaPDF SDK 10.
- VBNBNet VBNet Converter - a VBNBNet application that converts an existing file to PDF using different profiles on novaPDF SDK 10
- VBNBNet Word OLE VBNBNet - converts a document created with Microsoft Word to PDF using Word automation
- VBNBNet Override Options - a console application that uses override options instead of option profiles and prints one page to the novaPDF SDK 10
-Wix bundle - setup sample; compresses the msi files in an setup executable

Bin
- sample executables for DotNet, Win32 and Win64

1.2.4 Network use

novaPDF SDK 10 network auto-install

novaPDF SDK 10 can be installed on one computer and can be used by any computer in the network, without having to install it on each computer. This is to ease the work of network administrators both at installation time and future upgrades.

novaPDF SDK 10 supports Point and Print technology. This means that you can install the printer on one computer on the network, share it, and you can connect to it from any other computer. The system copies the necessary files for the driver, without any user interaction. On the server there are installed both i386 and x64 drivers and you can connect from the network with any i386 or x64 computers.

How to use novaPDF SDK 10 in a network

If you have a large network you can install novaPDF SDK 10 and your application which integrates novaPDF 10 SDK Developer on a single computer and use it from any computer in the network. All you need to do in your software is to initialize the INovaPdfOptions interface with the correct printer name, including the name of the computer on which it is installed (like "\server\novaPDF SDK 10").

When the application initiates the first print job to the printer server, the system copies the necessary printer driver files without any user interaction and the print job is completed on the printer server.

You can configure private or public profiles on the printer server. Public profiles will be visible on all client computers and all users. Private profiles are visible only for the user that created them. See Private and public profiles for more details.
The COM has to be installed and registered on every computer that uses it, see here How to register COM.

An alternative solution is to use the reg-free registration-free COM technology that enables your application to use the COM without registering it. You just have to import the COM manifest in your application and copy the COM dll in the same folder with your application executable. (you need the novapi9.dll and novasv9.dll).

1.2.5 Multiple printers

There can be added several printers, each of them using a different active profile. In this way, the users will decide to which printer to print instead of using the same printer and changing its active profile.

The best way to add multiple printers is at installation time. When running the Co-Branding Tool define all printers you wish to install. The msi that will be generated will add all these printer at installation.

novaPDF printers can be added also manually from the Printer Manager tool. On the first page there can be added/deleted printers and on the second page there can be set which public profiles to be used with each printer. Take care that administrative privileges are required for adding / removing printers.

Printer Manager tool can also be run silently from command line. Take care to run it with administrative privileges.

To add a printer call the PrinterManager.exe tool, from the printer driver installation folder C:\Program Files\Softland\novaPDF 9\Driver. Call it for each printer with next command line parameters:

`PrinterManager.exe /silent /oem=<your OEM ID> /port=8501 /add /printer=<printer name> /printerport=<port name>`

It is better to add each printer on a different port so they can work independently. When multiple printers work on the same port, the documents are processed sequentially.

To assign a default active profile for a printer call the Printer Manager tool with next command line parameters:

`PrinterManager.exe /silent /oem=<your OEM ID> /port=8501 /printer=<printer name> /set /profile=<profile id>`

Or you could perform both steps in one call, add a printer and set the active profile

`PrinterManager.exe /silent /oem=<your OEM ID> /port=8501 /add /printer=<printer name> /printerport=<port name> /profile=<profile id>`

You may see the profile id when you start the Profile Manager tool in administrative mode, from
the Printer Manager tool.

Other optional command line parameters for PrinterManager.exe are:

/allowprivates=true (or false) - specify if the printer allows or not private profile to be created
/showselect=true (or false) - specify if Select Profile dialog should be shown when printing
/allowhide=true (or false) - specify if users are allowed to hide Select Profile dialog
/adminmode=true (or false) - specify if Profile Manager should be started in Admin mode only
from Printer Manager; if false, Profile Manager is always started in Admin mode (where public
profiles can be created/modified)

1.3 Integration

1.3.1 How to integrate

You have to follow these steps for integrating novaPDF 10 SDK Developer in your application:

1. **Install novaPDF 10 SDK Developer**
   When installing novaPDF 10 SDK Developer, a "novaPDF SDK 10" printer is added in the Printers list in Control Panel.

2. **Take a sample and test it**
   See What sample to choose topic for directions how to choose the best sample for your situation.

3. **Copy relevant code from the sample in your application**
   Be sure you include all next steps from samples:
   - customize novaPDF SDK 10 settings using INovaPdfOptions10 COM interface (for instance set the output file name and folder, document info,...). See Profile options topic for a list of all option constants. There are global definition files for all supported programming languages.
   - start a print job and write to the printer device context (using functions like CreateDC, StartDoc, StartPage, TextOut,...). Or open a file and print it with other methods, like calling ShellExecute().

4. **Test how your application prints to novaPDF SDK 10**
   When you print to novaPDF SDK 10, the generated PDF files have an unlicensed notice on the bottom of the PDF pages. To remove this text please read the How to make the release build topic.

1.3.2 How to make the release build

After you succeeded to integrate novaPDF 10 SDK Developer in your application (see How to integrate topic) you have to follow next steps:

1. **Purchase a novaPDF 10 SDK Developer license**
If you want to remove the novaPDF notice from the generated PDF files, you have to purchase a license. There are two types of application licenses:

1. **Software application license** - this type of license allows you to develop, market and distribute ONE program or ONE software product that integrates the novaPDF 10 SDK Developer to an unlimited number of end users without any additional fees.

2. **Component application license** - This type of license allows you to develop, market and distribute ONE component, ONE wrapper, ONE library or ONE module that integrates the novaPDF 10 SDK Developer to an unlimited number of end users without any additional fees.

After purchase, you will receive an email with the next information:

- license key
- licence file
- customization file

Each licensed user will received an unique ID that will guarantee your novaPDF 10 SDK Developer customized installers will install separately from the other users'.

**2. Customize redistributable novaPDF installers with your license**

With novaPDF 10 SDK Developer there is installed a tool called "novaPDF Co-Branding". You should run this tool to generate the msi files customized for your license. You can start this tool from the novaPDF 10 SDK Developer installation menu. See Customize your setup for more details. You will need the resulting customized setup files in step 3 below.

**3. Install customized printer installation files**

For testing purposes install novaPDF 10 SDK Developer running the resulting customized setup files (MSI) in the following order:

On Windows 32 bit computers:
- novaPDF9PrinterDriver(x86).msi - installs both 32 and 64 bit versions of the printer driver
- novaPDF9COM(x86).msi - installs the 32 bit version of the COM
- novaPDF9SDK(x86).msi - installs the custom, licensed printer

On Windows x64 computers:
- novaPDF9PrinterDriver(x64).msi - installs both 32 and 64 bit versions of the printer driver
- novaPDF9COM(x64).msi - installs the 64 bit version of the COM
- novaPDF9COM(x86).msi - installs the 32 bit versions of the COM (only install this if your application is 32 bit)
- novaPDF9SDK(x64).msi - installs the custom, licensed printer

You can install the msi silently using the following command line:
msiexec /i <msi file name> /qn

You can install the package bundle silently using the following command line:
<setup name> /q

To create the final release build you need to create an installation package bundle and run it. See
the Build an installation package bundle topic.

4. Print without unlicensed notice
Your printer should be licensed now so the generated PDF files should not have the unlicensed footer notice.
If the footer notice is still showing up, you have to verify that you followed the steps from How to integrate correctly.

1.3.3 Customize your setup
Each developer that integrates a novaPDF 10 SDK Developer license will receive a unique OEM ID so its novaPDF installation does not interfere with other developers installation. In order to have an unique, licensed printer, you have to customize the setup that you will distribute with your application with the “novaPDF Co-Branding” tool. Run the tool and follow the wizard steps to generate the msi.

1.3.4 Co-Branding Tool

1.3.4.1 Folders
Branding folder
When starting the application, you will be asked for the branding folder. This is the folder where the new msi files will be generated. You can create a new folder or use an existing one. If you choose an existing folder, the files from the folder will be deleted and the original msi installers will be copied there and injected with the new properties.

Settings file
If you already have run the tool and you only wish to change some options, select the settings file from the previous run.

1.3.4.2 Files

There are several files that can be injected in the .msi:

Customization (.ctm) and License (.lic) files.
License file contains information about your license and Customization file is used for re-branding options. Contact novaPDF 10 SDK Developer support team for more information about re-branding.
When buying a the novaPDF 10 SDK Developer license will receive these two files. You should use them both to create a licensed printer.
If you do not have the novaPDF 10 SDK Developer license yet, select the "Use default Customizations (*.ctm) and License (*.lic) files" option to use some files that the novaPDF 10 SDK Developer provide for trial testing.

Controls (.ctl) file
Special customization file for the Profile Manager tool. Contact novaPDF 10 SDK Developer support team for more information about customizing Profile Manager tool.

**Forms (.nps) file**

This file contains the printer forms available for the printer. This is a text file and you can modify it to distribute the forms you wish. User defined forms should have a format like this:

```
0;0;281;36x48 inches;36x48 inches;914400;1219200;0;0;0;0;
```

(increase the form number on third position and specify form width and height in thousands of millimeters)

**Resolutions (.npr) file**

This file contains the resolutions available for the printer. This is a text file and you can modify it to distribute the resolutions you wish. Resolutions should be values between 50 and 2400 and you can specify maximum 100 resolutions.

**EULA (*.rtf)**

Default EULA file is empty. You can select the EULA document for your application.

**Help (.chm) file**

If you wish to install a different help file in .chm format.

**Use only default profiles and presets**

It will be installed an empty profiles database, containing only default options. The default profiles database will overwrite existing profiles database from previous installation.

**Use profiles and presets you defined**

If you wish to distribute some public profiles with your application, you can define the public profiles by running the Profile Manager tool. The profiles database will be included in your customized msi.

**Overwrite existing profiles and presets**

If this option is set, the new profiles database will be copied over existing profiles database from previous installation so the new defined profiles will be available on upgrades installations too. If this option is not set, when upgrading over a previous installation the profiles database is not copied so are kept previous profiles.

**Default Files**

All files from Default files folder will be included in the msi. Add there all files (image
watermarks, certificates, overlay files) you wish to distribute.

1.3.4.3 Settings

Your application name
The application name will appear in Windows Start menu, in Control Panel \ Programs and on the About page of the installed printer and tools.

Your company name
The company name will appear on the About page of the installed printer and tools.

Language code
Language for novaPDF printer and installed tools.

Add a start menu folder
Enter the name of the Windows menu. You can also choose what links to be added in the menu (Printer Manager tool, Printer Monitor tool and Help file).

Add Printer
The installer can add one or multiple printers at installation. You can also choose to not add any printer at installation time. For each printer you can configure:
- printer name
- printer port name
- if the printer should be set default printer on the system
- associate a public profile with the printer
- printer defaults (default paper size, resolution, orientation, scale and others)
- printer permissions (permissions to change paper size, resolution, orientation, scale and others)

Inject
When you finish the configuration press the Inject button to create the msi files. There will be shown a dialog asking if you wish to save the configured options in a file so you can reuse it when running again the Co-Branding tool.

1.3.4.3.1 Add/Modify Printer

1.3.4.3.1.1 General

For each printer you can configure:

Printer name
The name of the printer that you wish to install with your application.

Port name
The name of the port for the printer. Choose a name specific to your application so it will be unique. If you add multiple printers, it is better to put them on different ports, otherwise the
documents will be processed sequentially.

Share printer

You can share the printer in the network and choose the share printer name.

Make printer default

You can also choose if the printer should be set as the default printer on the system.

1.3.4.3.1.2 Profile

Allow users to use private profiles

If users can create private profiles with the Profile Manager tool and use them when converting documents.

Show Select Profile dialog before printing

Force the show of Select Profile dialog before printing a document for all users. You can allow users to disable the dialog or not.

GUID of the active profile

The GUID of the public profile that you wish to set as default for the installed printer. You can copy the GUID from the Profile Manager, when it is opened in the Administrative mode (from the Printer Manager tool).
This parameter is not mandatory.

1.3.4.3.1.3 Page defaults

The default page size for the printer can be a predefined paper or a custom paper size.

Use existing page size

Choose from one of the predefined paper sizes.
The page sizes can be changed in the Forms (.nps) file

Define new page size

You can specify a new page size to be added when installed. Enter paper name, description, width and height. This new page size will be the default page size for the printer.

1.3.4.3.1.4 Other defaults

Enter printer specific default options:

Orientation
Default printer orientation can be Portrait or Landscape.

**Resolution**

Default resolution. Usually 300 or 600.

**Scale**

Default printer scale percent. Usually 100.

**Copies**

How many page copies to create. Usually 1.

**Collate**

If creating multiple pages, in what order to add the copies.

**Maximum copies**

How many copies should be maximum allowed.

### 1.3.4.3.1.5 Permissions

Users can be restricted to modify certain printer options:

- page size
- orientation
- resolution
- scale
- copies
- collate

### 1.3.4.4 Results

When pressing the inject button the new customized msi files will be created. The settings you filled in these pages can be saved in an ini file in the branding folder.

After running the tool, next msi files will be available in the branding folder:
- novaPDF9PrinterDriver(x64).msi or novaPDF9PrinterDriver(x86).msi - each of them installs both 32 and 64 bit versions of the printer driver
- novaPDF9COM(x64).msi or novaPDF9COM(x86).msi - install 32 and 64 bit versions of the COM
- novaPDF9SDK(x64).msi or novaPDF9SDK(x86).msi - install the custom, licensed printer

**Note**
After the msi files are injected with your custom parameters, their digital signature becomes invalid so they need to be signed again. See more details in the topic Build an installation package bundle

1.3.5 Build an installation package bundle

If you already have an installation package for your application, you only need to add the novaPDF 10 SDK Developer msi files to your package.

If not, you can start with the installation package sample we included with novaPDF 10 SDK Developer. Follow the steps below to create the bundle:

1. Install WIX Toolset 3.9
This is a free and open source set of tools for building Windows installation packages. You will use this to create the bundle.

2. Sign the novaPDF 10 SDK Developer msi files
All msi files have to be signed with a valid digital signature. You can sign them by running the signtool.exe tool and providing your company digital signature file.
If you do not have a digital signature file you can upload the msi files on our site to be signed with Softland's signature. Log in to your account, go to your license key and press CODESIGN REQUEST button:
https://www.novapdf.com/myaccount.login.html
You will be requested to enter your novaPDF 10 SDK Developer license key, your email address and the path to the msi file.
You have to upload and sign these two msi files:
- novaPDF9SDK(x64).msi
- novaPDF9SDK(x86).msi
You will receive an email with the download link for the signed msi files.

3. Open the Installation package bundle sample and build the setup executable.
In the sample you have to change the defined variables with information about your application: application name, company name, version, company site url.
**It is very important to change the Upgrade code to a new generated GUID, because each application should have its unique GUID so it installs separately on Windows.**

Also, take care to set the correct path of the novaPDF 10 SDK Developer msi files.

If you wish to sign the bundle exe, you have to use your company's signature. Use the signtool.exe and the insignia.exe tools to sign, like this:

"C:\Program Files (x86)\WiX Toolset v3.9\bin\insignia.exe" -ib "C:\Users\Public\Documents\novaPDF 9\OEM\Samples\OEMBundle\OEMBundle\bin\Release\OEMBundle.exe" -o "C:\Users\Public\Documents\novaPDF 9\OEM\Samples\OEMBundle\OEMBundle\bin\Release\tmp.
### 1.3.6 Installation package bundle

This is a sample on how to compress the msi installations packages in a bundle and generate an setup executable to install novaPDF 10 SDK Developer.

If you haven't already done so, you will need to install the Wix Toolset to build this project.

The project contains two files:
1. Variables.wxi - contains variables for application name, company name, version,...; it's important to change the UpgradeCode to an unique new GUID for your application
2. Bundle.wxs - contains the msi files that need to be included and the execution order; .Net Framework 4 is required by novaPDF 10 SDK Developer and is set as prerequisite

#### Variables.wxi

```xml
<?xml version="1.0" encoding="utf-8"?>
<Include>

<!-- change the UpgradeCode to an unique new GUID for your application -->
<?define UpgradeCode="C08317E3-A50E-4D51-802A-92EE332821AD"?>

<?define BundleName="My SDK Application Bundle"?>

<?define MajorVersion="9"?>
<?define MinorVersion="0"?>
<?define BuildNumber="36"?>

<?define AboutUrl='http://www.novapdf.com'?>
<?define SplashImage=" "?>
<?define IconFile=" "?>
<?define MyLicenseFileName="C:\ProgramData\Softland\novaPDF9\nPdfSdk9_Softland\nPdfSdk9_SoftlandEulaExt.rtf" ?>

<!--version-->
<?define Manufacturer="<My SDK Company Name>" ?>
```

Bundle.wxs

<?xml version="1.0" encoding="UTF-8"?>
<Wix xmlns="http://schemas.microsoft.com/wix/2006/wi"
    xmlns:util="http://schemas.microsoft.com/wix/UtilExtension"
    xmlns:bal='http://schemas.microsoft.com/wix/BalExtension'
    xmlns:swid="http://schemas.microsoft.com/wix/TagExtension"
    xmlns:dotNet="http://schemas.microsoft.com/wix/NetFxExtension">
  <Include "Variables.wxi"/>
  <Bundle Name="$(var.BundleName)"
      Manufacturer="$(var.Manufacturer)"
      UpgradeCode="$(var.UpgradeCode)"
      AboutUrl='$(var.AboutUrl)'
      SplashScreenSourceFile='$(var.SplashImage)'
      Compressed='yes'
      IconSourceFile='$(var.IconFile)'>
    <swid:Tag Regid="regid.2008-09.org.wixtoolset" />

    <!--change the UpgradeCode to an unique new GUID for your application-->
    <RelatedBundle Id="$(var.UpgradeCode)" Action="Upgrade"/>

    <!--application license-->
    <BootstrapperApplicationRef Id="WixStandardBootstrapperApplication.RtfLicense"/>
    <bal:WixStandardBootstrapperApplication LicenseFile="$(var.MyLicenseFileName)"
        SuppressOptionsUI="yes"/>
  </Bundle>
</Wix>
<Chain>
<!--prereqs-->
<PackageGroupRef Id="NetFx40Web"/>

<!--COM-->
Cache="yes"
DisplayInternalUI="no"
EnableFeatureSelection="no" ForcePerMachine="yes"
Compressed="yes" SourceFile="$(var.COMPathx86)" Visible="yes" Vital="yes">
</MsiPackage>

Cache="yes"
DisplayInternalUI="no"
EnableFeatureSelection="no" ForcePerMachine="yes"
Compressed="yes" SourceFile="$(var.COMPathx64)" Visible="yes" Vital="yes" InstallCondition="VersionNT64">
</MsiPackage>

<!--driver-->
Cache="yes"
DisplayInternalUI="no"
EnableFeatureSelection="yes" ForcePerMachine="yes"
Compressed="yes" SourceFile="$(var.DriverKitx86)" Visible="yes" Vital="yes" InstallCondition="NOT VersionNT64">
</MsiPackage>

Cache="yes"
DisplayInternalUI="no"
EnableFeatureSelection="yes" ForcePerMachine="yes"
Compressed="yes" SourceFile="$(var.DriverKitx64)" Visible="yes" Vital="yes" InstallCondition="VersionNT64">
</MsiPackage>

<!--oem product-->
Cache="yes"
DisplayInternalUI="no"
EnableFeatureSelection="no" ForcePerMachine="yes"
Compressed="yes" SourceFile="$(var.OemPathx86)" Visible="yes" Vital="yes" InstallCondition="NOT VersionNT64">
</MsiPackage>

Cache="yes"
DisplayInternalUI="no"
EnableFeatureSelection="no" ForcePerMachine="yes"
1.4 novaPDF COM

1.4.1 How to register COM

NovaPDF SDK includes a COM interface, INovaPdfOptions. The COM binary file is located in the Lib sub folder. The COM is first registered when installed with novaPDF SDK. If you want to register/unregister novaPDF COM manually, use the following commands from the command line:

**Register**

```shell
regsvr32.exe "C:\Program Files\Softland\novaPDF 9\SDK\Lib\i386\novapi9.dll"
```
or, for x64 systems:

```shell
regsvr32.exe "C:\Program Files\Softland\novaPDF 9\SDK\Lib\x64\novapi9.dll"
```

**Unregister**

```shell
regsvr32.exe /u "C:\Program Files\Softland\novaPDF 9\SDK\Lib\i386\novapi9.dll"
```
or, for x64 systems:

```shell
regsvr32.exe /u "C:\Program Files\Softland\novaPDF 9\SDK\Lib\x64\novapi9.dll"
```

**msi**

In the "C:\Program Files\Softland\novaPDF 9\SDK\Installer" folder there are two msi that install the x86 or x64 version of the COM and register it. These only install the COM and they are meant to be used on client computers if you install novaPDF printer on a server and run your application.
from different computers:

novaPDF9COM(x86).msi
novaPDF9COM(x64).msi

1.4.2 How to use the COM
To use novaPDF COM in your application you need to follow next steps:

1. **Create an instance of INovaPdfOptions interface**
Create the object when the application starts and use it while printing to novaPDF SDK 10 printer

2. **Call the Initialize method**
Initialize method has one parameter, the name of the printer (for example "novaPDF SDK 10", or when on the network "\\server name\novaPDF SDK 10")

3. **Set novaPDF SDK 10 options by calling SetOptionString or SetOptionLong (...) methods.**
You can also manage profiles with AddProfile, CopyProfile, DeleteProfile, GetFirstProfile, GetNextProfile, GetActiveProfile, SetActiveProfile methods. A good sample for how to use this methods is the MFC Converter sample. Also, all "Hello World" samples have a "nova" unit where there are samples on how to set all options.
This step is optional. If you use the default options or if you already configured the desired options, you can skip it.

4. **Register your application to receive Windows messages**
novaPDF printer sends messages (StartDoc, StartPage, EndPage, EndDoc, FileSent, Print Error) while printing a document. You can register to receive Windows messages using the RegisterEventWindow method. You also need to implement message handlers for the registered messages. See MFC Scribble or MFC Converter samples.
This step is also optional. If you do not need to implement this event handlers you can skip it.

5. **Start a print job. You can do it as follows:**
   - use Win32 API functions: OpenPrinter, DocumentProperties, CreateDC, StartDoc, StartPage,... See the Hello World sample.
   - print a file using the ShellExecute function. For a sample see MFC Converter.
   - use MFC document/view architecture. For more information look at the MFC Scribble sample.

6. **Release the INovaPdfOptions instance**
The object should be released only when all print jobs are finished.

1.4.3 How to set printer options
You can use INovaPdfOptions interface to read or set novaPDF SDK 10 options.

INovaPDFOptions provides the following methods for this:
GetOptionString
SetOptionString
GetOptionLong
SetOptionLong
SetOptionBool
GetOptionBool

[****]

The options are saved in the current loaded profile. See Private and public profiles topic for more details about profiles.

You have to make these settings before starting the print job.

You can find the complete list of option constants that you can use in the GetOptionXXXX and SetOptionXXXX in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

Before setting the options the profile should be loaded with LoadProfile and when finish the profile should be saved with SaveProfile. Before printing a document, set the profile you wish to use with SetActiveProfile.

### 1.4.4 Private and public profiles

Public profiles are visible from all client computers and from all users. You should use public profiles if you want to configure printing options that should be used by several computers in your network. For instance, you can configure a folder where all client computers will save the PDF files.

Private profiles are visible only to the user that created them.

### 1.4.5 How to register for messages

**novaPDF SDK 10** generates the following events when processing a print job:

- Document Started
- Page Started
- Page Ended
- Document Ended
- File Sent
- File Saved
- Print Error
- Email Sent
- Email Error

When the events are fired by the driver, these Windows messages are sent to a registered window handler. To receive a message you need to register your window handle with the RegisterEventWindow method. See the MFC Converter and MFC Scribble samples.
These events are fired when the print job is processed by the driver. When an application sends a print job to the printer, the print job is added in the printer spooler queue. There might be other jobs waiting in the queue that have to be finished before your job starts. So there might be some delay between the moment the application is sending the job to the printer, the moment the job is actually processed and the time when the PDF file is saved. If you need for instance to open the PDF file afterwards, you need to register to the File Saved message and process the PDF file in this message handler.

1.4.6 How to use events

If you want to wait for a print job to be finished, you can register some Windows events and wait for them to be signaled by novaPDF SDK 10.

Before starting the print job, you have to inform novaPDF SDK 10 that you want to be wait for an event. Call RegisterNovaEvent(LPCWSTR p_wsEventName) with one of the next strings:

- "NOVAPDF_EVENT_START_DOC"
- "NOVAPDF_EVENT_END_DOC"
- "NOVAPDF_EVENT_FILE_SAVED"

After you send the job to the printer, call WaitForNovaEvent(ULONG p_nMiliseconds, BOOL* p_bTimeout). This function will return when the event was signaled or when the time was elapsed. If the time was elapsed p_bTimeout is TRUE and if the event was signaled, p_bTimeout is FALSE.

If you just want to be sure that the print job was started, the profile was read, and you want to proceed modifying the profile for the next job, you should wait for the NOVAPDF_EVENT_START_DOC event. If you are interested where the PDF file is ready so you can do further actions with it, you should wait for the NOVAPDF_EVENT_FILE_SAVED event.

1.4.7 Multithreading applications

If you wish to use novaPDF in multi-threading or multi-process applications, there are some restrictions.

novaPDF COM is not thread safe, you should implement your own thread synchronization when using the COM.

When you use third party applications to print, they have to be licensed separately by using the LicenseApplication call. Because this call does not license this application for any print calls, but just for the next print job that will be executed by the printer, the calls of LicenseApplication and the execution of a print job must go in pair. If you call several times LicenseApplication in your code, but the printer processes some of the jobs later, they might not be licensed. So to assure these pair executions use next two calls when printing:

Before starting the print job call:
RegisterNovaEvent("NOVAPDF_EVENT_START_DOC")
After sending the print job, wait for the printer to start processing it and read the licensing for it by calling:

WaitForNovaEvent(-1, &bTimeout)

### 1.4.8 Use temporary printers

If you do not wish a novaPDF printer visible in the Printers list, you could use this approach:

When customizing your installer, do not add a printer (see Customize your setup)
What this means is that only the novaPDF printer driver and the COM are installed, but no printer is added in the Printers list.

In your application code, when you want to use novaPDF to convert to PDF:
- first call AddNovaPrinter to add a temporary printer
- set the printer options using the SetOptionXXX methods
- print a document, or several documents to generate PDF files
- delete the temporary printer with DeleteNovaPrinter

You may call the AddNovaPrinter and DeleteNovaPrinter several times, the only restriction is to call it in pair so you do not leave unused printers in the printers list.

When deleting a printer there might happen that the jobs are not all processed yet and there are still jobs in the printer queue. If you wish those PDF file to be generated, then is better to wait for the PDF to be finished before deleting the printer. It is recommended to use the event methods we provide (How to use events).

**Network printing**

If you wish to install novaPDF printer on a server and share it in the network, then a printer has to be added at installation time on the server, or the AddNovaPrinter and DeleteNovaPrinter must be called from an application running on server. This solution works on client computers by adding a printer connection to the printer on server instead of adding a local printer. So in this situation these are the changes:
- the installer must be run on the server normally, installing a printer there
- the application code is the same, only the printer name must contain the server path, like this: \<server name>\<printer name>, where the <printer name> printer must exist on server

**Restrictions**

On some operating systems you need administrative rights to add/delete a printer. Below you can see a list of operating systems supported by novaPDF, and what type of user accounts are working:

<table>
<thead>
<tr>
<th>System</th>
<th>Administrator</th>
<th>Power user</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows XP</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Windows 2003 Server</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Windows Vista</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Windows 7</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>
1.4.9 Working with Layout

In the Profile Manger tool there is a page called Layout where different objects can be placed and arranged with anchors on the page. There can be added image watermarks, text watermarks, overlay pdf document, signature. Also the printed page content itself can be arranged how to fit on the PDF page.

For each object there can be specified the anchors relative to the page: left, right, top, bottom, center vertically or center horizontally. The values can be absolute or in percentage relative to the page width and height.

When adding such an object from source code, you have to specify all these settings that you can also find on the Layout page (anchors flags and values, size, rotation, keep aspect ratio flag). If you wish to add one of these objects in the profile, configure first how it should appear on page using the Profile Manager tool, then copy generated settings in the source code.

1.4.10 Working with Actions

Action is a notion introduced in version 9 of novaPDF. An action is a task that novaPDF printer driver will execute before or after generating the pdf file. An action can be:
- copy or delete a file
- send an email or upload to ftp/sftp
- open the pdf in the default viewer
- run another application

Actions are saved in a list and they can be arranged in any order. By default, each profile contains two action:
- the "Save PDF" action is the one that generated the pdf file; this action cannot be removed from profile and it is added in the actions list as a referring item, so other actions can be added before or after this action depending at which moment the action should be run
- an "Open PDF" action that will open the PDF after it is generated; this is the default behavior but this action can be disabled if you do not wish to open the PDF

You can:
- add new actions in the list with an AddAction call
- change action properties with SetActionOptionString, SetActionOptionLong,.... for specific action settings
- change the order in which the actions are executed using the SetActionOptionLong (pwsActionID, NOVAPDF_ACTION_INDEX, index);
- enable or disable an action without removing it from the list with EnableAction and DisableAction

<table>
<thead>
<tr>
<th>Windows 2008 Server</th>
<th>yes</th>
<th>no</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 8</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Windows 2012 Server</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>
- enable or disable all actions of a specific type (for instance disable all open actions) with DisableActionType and EnableActionType
- remove actions from the list with DeleteAction

If you wish to not open the PDF after it is generated simply disable all open actions like this:

```
pNova.DisableActionType(NOVA_ACTION_OPEN)
```

### 1.4.11 Reference

#### 1.4.11.1 Profile option strings

`novaPDF SDK 10` settings are saved in a database on the server. The profiles are available for all printers.

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_COMPRESS_ENABLE</td>
<td>9</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBoolean</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_TEXT_GRAPHICS</td>
<td>63</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBoolean</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_HIGH_COLOR</td>
<td>54</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBoolean</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_MONOCHROM</td>
<td>60</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBoolean</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_INDEXED</td>
<td>57</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBoolean</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_TEXT_GRAPHICS_TYPE</td>
<td>64</td>
<td>long</td>
<td>0 - zip compression</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_TEXT_GRAPHICS_LEVEL</td>
<td>65</td>
<td>long</td>
<td>1-9</td>
<td>5</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_HIGH_COLOR_TYPE</td>
<td>55</td>
<td>long</td>
<td>0 - zip compression 1 - JPEG compression</td>
<td>1</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_HIGH_COLOR_LEVEL</td>
<td>56</td>
<td>long</td>
<td>1-9</td>
<td>7</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_COMPRESS_INDEXED_TYPE</td>
<td>58</td>
<td>long</td>
<td>0 - zip compression</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>
### NOVAPDF_COMPRESS_INDEXED_LEVEL

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_COMPRESS_INDEXED_LEVEL</td>
<td>59</td>
<td>long</td>
<td>1-9</td>
<td>5</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>

### NOVAPDF_COMPRESS_MONOCHROM_TYPE

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_COMPRESS_MONOCHROM_TYPE</td>
<td>61</td>
<td>long</td>
<td>0 - zip compression</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>

### NOVAPDF_COMPRESS_MONOCHROM_LEVEL

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_COMPRESS_MONOCHROM_LEVEL</td>
<td>62</td>
<td>long</td>
<td>1-9</td>
<td>5</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>

### GRAPHICS

#### Constant name

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_GR_DOWNSMPL_ENABLE</td>
<td>11</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_HIGH_COLOR</td>
<td>84</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_RES_HIGH_COLOR</td>
<td>86</td>
<td>long</td>
<td>72 - 2400</td>
<td>96</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_TYPE_HIGH_COLOR</td>
<td>85</td>
<td>long</td>
<td>0 - BOX Filter 1 - BILINEAR Filter 2 - BSPLINE Filter 3 - BICUBIC Filter 4 - CATMULLROM Filter 5 - LANCZOS3 Filter</td>
<td>3</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_INDEXED</td>
<td>87</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_RES_INDEXED</td>
<td>89</td>
<td>long</td>
<td>72 - 2400</td>
<td>96</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_TYPE_INDEXED</td>
<td>88</td>
<td>long</td>
<td>0 - BOX Filter 1 - BILINEAR Filter 2 - BSPLINE Filter 3 - BICUBIC Filter 4 - CATMULLROM Filter 5 - LANCZOS3 Filter</td>
<td>3</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_MONOCHROM</td>
<td>90</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_RES_MONOCHROM</td>
<td>92</td>
<td>long</td>
<td>72 - 2400</td>
<td>96</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_DOWNSAMPLE_TYPE_MONOCHROM</td>
<td>91</td>
<td>long</td>
<td>0 - BOX Filter</td>
<td>3</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_GR_CONVERT_ENABLE</td>
<td>10</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_HIGH_COLOR</td>
<td>71</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_INDEXED</td>
<td>76</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_TYPE_HIGH_COLOR</td>
<td>73</td>
<td>long</td>
<td>0</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_DITHER_HIGH_COLOR</td>
<td>72</td>
<td>bool</td>
<td>true</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_DITHER_TYPE_HIGH_COLOR</td>
<td>75</td>
<td>long</td>
<td>0</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_TYPE_INDEXED</td>
<td>78</td>
<td>long</td>
<td>0</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_DITHER_INDEXED</td>
<td>77</td>
<td>bool</td>
<td>true</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_DITHER_TYPE_INDEXED</td>
<td>80</td>
<td>long</td>
<td>0</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_TEXTANDGR</td>
<td>81</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_TYPE_TEXTANDGR</td>
<td>82</td>
<td>long</td>
<td>0</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_TRESH_TEXTANDGR</td>
<td>83</td>
<td>long</td>
<td>0</td>
<td>128</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_TRESH_HIGH</td>
<td>74</td>
<td>long</td>
<td>0</td>
<td>128</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>
### _COLOR

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_IMAGE_CONVERT_THRESH_INDEXED</td>
<td>79</td>
<td>long</td>
<td>0 - 255</td>
<td>128</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>

### FONTS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_FONTS_EMBED_ALL_USED_FONTS</td>
<td>160</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_FONTS_EMBED_SUBSETS</td>
<td>159</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_FONTS_FORCE_EMBED_PROTECTED</td>
<td>161</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
</tbody>
</table>

### DOCUMENT INFO AND VIEWER OPTIONS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_INFO_ENABLE</td>
<td>7</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SHOW_DOCINFO_DLG</td>
<td>16</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_AUTHOR</td>
<td>69</td>
<td>string</td>
<td>[U]</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_CREATOR</td>
<td>67</td>
<td>string</td>
<td>[N]</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_KEYWORDS</td>
<td>70</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_SUBJECT</td>
<td>68</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_TITLE</td>
<td>66</td>
<td>string</td>
<td>[N]</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_INFO_VIEWER_ENABLE</td>
<td>8</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_PAGE_LAYOUT</td>
<td>34</td>
<td>long</td>
<td>0 - Viewer default 1 - single page 2 - column 3 - two columns, left 4 - two columns, right</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>

### DOCUMENT INFO AND VIEWER OPTIONS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_INFO_ENABLE</td>
<td>7</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SHOW_DOCINFO_DLG</td>
<td>16</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_AUTHOR</td>
<td>69</td>
<td>string</td>
<td>[U]</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_CREATOR</td>
<td>67</td>
<td>string</td>
<td>[N]</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_KEYWORDS</td>
<td>70</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_SUBJECT</td>
<td>68</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_DOCINFO_TITLE</td>
<td>66</td>
<td>string</td>
<td>[N]</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_INFO_VIEWER_ENABLE</td>
<td>8</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_PAGE_LAYOUT</td>
<td>34</td>
<td>long</td>
<td>0 - Viewer default 1 - single page 2 - column 3 - two columns, left 4 - two columns, right</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Width</td>
<td>Type</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_PAGE_MODE</td>
<td>38</td>
<td>long</td>
<td>0 - Viewer default 1 - None 2 - show bookmarks panel 3 - show pages panel 4 - Full screen 5 - show layers panel 6 - show attachments panel;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_START_PAGE</td>
<td>33</td>
<td>long</td>
<td>true SetOptionLong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_ZOOM</td>
<td>31</td>
<td>long</td>
<td>0 - Default viewer settings; 1 - Default 2 - Fit Width; 3 - Fit Height; 4 - Fit Page; 5 - Percent; 6 - Fit Visible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_USE_START_PAGE</td>
<td>32</td>
<td>bool</td>
<td>false SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_PAGE_SCALING</td>
<td>40</td>
<td>long</td>
<td>0 - Application Default 1 - None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_HIDE_TOOLBARS</td>
<td>25</td>
<td>bool</td>
<td>false SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_SHOW_DOCTITLE</td>
<td>26</td>
<td>bool</td>
<td>false SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_VIEWOP_TRANSITION_TYPE</td>
<td>27</td>
<td>long</td>
<td>0 - Viewer default 1 - Replace 2 - Split 3 - Blinds 4 - Box 5 - Wipe 6 - Dissolve 7 - Glitter 8 - Fly in 9 - Fly out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>--------------------------------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>NOVAPDF_SEC_ENABLE</td>
<td>13</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SHOW_SECURITY_DLG</td>
<td>15</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_PRINTDOC</td>
<td>112</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_MODIFYDOC</td>
<td>113</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_EXTRACTTEXT</td>
<td>114</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_MODIFYANNOTATION</td>
<td>115</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_ADVANCEDFILL</td>
<td>119</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_ADVANCEDEXTRACT</td>
<td>118</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_ASSMDOC</td>
<td>117</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>----------------------------------------------</td>
<td>---------</td>
<td>----------------------</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_FLAG_PRINTHIGHRES</td>
<td>116</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_USER_PASSWORD</td>
<td>110</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetOptionEncrypted</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_OWNER_PASSWORD</td>
<td>111</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetOptionEncrypted</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_LEVEL</td>
<td>109</td>
<td>int</td>
<td>1 - 40 bits RC4 2 - 128 bits RC4 3 - 128 bits AES 4 - 256 bits AES</td>
<td>4</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_SECURITY_ENCRYPT_XMP</td>
<td>262</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetOptionBool</td>
</tr>
</tbody>
</table>

**SIGNATURE**

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_SIGN_CERTIFICATE_TYPE</td>
<td>131</td>
<td>long</td>
<td>1 - system certificate 2 - certificate file</td>
<td></td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SYSCERT_ISSUE_DTO</td>
<td>125</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SYSCERT_ISSUE_DBY</td>
<td>126</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SYSCERT_FRIENDLYNAME</td>
<td>127</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SYSCERT_SUBJECT</td>
<td>128</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SYSCERT_SUBJECT_NAME</td>
<td>129</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SYSCERT_EXPIRE_DATE</td>
<td>130</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FILECERT_LOCATION</td>
<td>120</td>
<td>long</td>
<td>1 - Local 2 - Server</td>
<td>1</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FILECERT_FILE</td>
<td>121</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FILECERT_FILE_PASSWORD</td>
<td>122</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetOptionEncrypted</td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FILECERT_USER_NAME</td>
<td>123</td>
<td>string</td>
<td>SetOptionEncryptedString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----</td>
<td>--------</td>
<td>---------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FILECERT_USER_PASSWORD</td>
<td>124</td>
<td>string (encrypted)</td>
<td>SetOptionEncryptedString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_GRAPHIC_NAME</td>
<td>132</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_GRAPHIC_IMAGE</td>
<td>133</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_IMAGE_LOCATION</td>
<td>148</td>
<td>long</td>
<td>SetOptionLong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_IMAGE_FILE</td>
<td>149</td>
<td>string</td>
<td>SetOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_IMAGE_USER_NAME</td>
<td>150</td>
<td>string</td>
<td>SetOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_IMAGE_USER_PASSWORD</td>
<td>151</td>
<td>string (encrypted)</td>
<td>SetOptionEncryptedString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_KEEPASPECT_RATIO</td>
<td>134</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_IMAGE_OPACITY</td>
<td>152</td>
<td>long</td>
<td>SetOptionLong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_NAME_OPACITY</td>
<td>147</td>
<td>long</td>
<td>SetOptionLong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_CERTIFICATE_NAME</td>
<td>135</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_SIGN_DATE</td>
<td>136</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_SIGN_LOCATION</td>
<td>139</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_SIGN_REASON</td>
<td>138</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_LABELS</td>
<td>141</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_SHOW_CONTACT_INFO</td>
<td>137</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_CUSTOM_SIZE</td>
<td>145</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FONT_NAME</td>
<td>142</td>
<td>string</td>
<td>SetOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FONT_TYPE</td>
<td>143</td>
<td>long</td>
<td>SetOptionLong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_CUSTOM_SIZE</td>
<td>145</td>
<td>bool</td>
<td>SetOptionBool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_FONT_SIZE</td>
<td>144</td>
<td>long</td>
<td>SetOptionLong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_NAME_COLOR</td>
<td>146</td>
<td>long</td>
<td>SetOptionLong</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_INFO_REASON</td>
<td>154</td>
<td>string</td>
<td>SetOptionString</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### NOVAPDFSIGNINFO

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_SIGN_INFO_LOCATION</td>
<td>155</td>
<td>string</td>
<td></td>
<td>SetOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_INFO_CONTACT</td>
<td>153</td>
<td>string</td>
<td></td>
<td>SetOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_VIEW_VIEW</td>
<td>156</td>
<td>bool</td>
<td>true</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_VIEW_PRINT</td>
<td>157</td>
<td>bool</td>
<td>true</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_SIGN_VIEW_EXPORT</td>
<td>158</td>
<td>bool</td>
<td>true</td>
<td>SetOptionBool</td>
<td></td>
</tr>
</tbody>
</table>

### LINKS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_URL_ANALIZE</td>
<td>5</td>
<td>bool</td>
<td>true</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_URL_DETECT_FILES</td>
<td>163</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_URL_UNDERLINE</td>
<td>166</td>
<td>bool</td>
<td>true</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_URL_OVERWRITE_COLOR</td>
<td>167</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_URL_COLOR</td>
<td>168</td>
<td>long</td>
<td>RGB color</td>
<td>SetOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_URL_CHECK_FILE_EXISTS</td>
<td>164</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_URL_NEWTAB</td>
<td>169</td>
<td>bool</td>
<td>false</td>
<td>SetOptionBool</td>
<td></td>
</tr>
</tbody>
</table>

### OVERLAY

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_OVERLAY_FILE</td>
<td>93</td>
<td>string</td>
<td></td>
<td>SetOverlayOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_FILE_LOCATION</td>
<td>96</td>
<td>long</td>
<td>1 - Local 2 - Server</td>
<td>1</td>
<td>SetOverlayOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_FILE_PASSWORD</td>
<td>97</td>
<td>string (encrypted)</td>
<td>password for the overlay PDF file, if encrypted</td>
<td>SetOverlayOptionEncrypt edString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_USER_NAME</td>
<td>94</td>
<td>string</td>
<td>user name for network path</td>
<td>SetOverlayOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_USER_PASSWORD</td>
<td>95</td>
<td>string (encrypted)</td>
<td>user password</td>
<td>SetOverlayOptionEncrypt edString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_REPEAT_TYPE</td>
<td>99</td>
<td>long</td>
<td>0 - no repeat; 1 - repeat last page 2 - repeat all pages</td>
<td>0</td>
<td>SetOverlayOptionLong</td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-----------------------</td>
<td>---------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_OPACITY</td>
<td>100</td>
<td>long</td>
<td>100</td>
<td>SetOverlayOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_NAME</td>
<td>362</td>
<td>string</td>
<td></td>
<td>SetOverlayOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_AUTHOR</td>
<td>363</td>
<td>string</td>
<td></td>
<td>SetOverlayOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_OVERLAY_DESCRIPTION</td>
<td>364</td>
<td>string</td>
<td></td>
<td>SetOverlayOptionString</td>
<td></td>
</tr>
</tbody>
</table>

### IMAGE WATERMARKS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_WTM_IMG_IMAGE_FILE_NAME</td>
<td>200</td>
<td>string</td>
<td></td>
<td></td>
<td>SetWatermarkImageOptionString</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_IMAGE_LOCATION</td>
<td>201</td>
<td>long</td>
<td>1 - Local 2 - Server</td>
<td>1</td>
<td>SetWatermarkImageOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_IMAGE_USER_NAME</td>
<td>202</td>
<td>string</td>
<td>user name for network path</td>
<td></td>
<td>SetWatermarkImageOptionString</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_IMAGE_USER_PASSWORD</td>
<td>203</td>
<td>string (encrypted)</td>
<td>user password</td>
<td></td>
<td>SetWatermarkImageOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_IMAGE_TRANSPARENCY</td>
<td>204</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetWatermarkImageOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_IMAGE_TRANSP_COLOR</td>
<td>205</td>
<td>long</td>
<td>RGB color</td>
<td>0</td>
<td>SetWatermarkImageOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_IMAGE_OPA City</td>
<td>206</td>
<td>long</td>
<td>100</td>
<td></td>
<td>SetWatermarkImageOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_COLOR_VARIATION</td>
<td>207</td>
<td>long</td>
<td>0</td>
<td></td>
<td>SetWatermarkImageOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_VISIBILITY_VIEW</td>
<td>208</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetWatermarkImageOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_VISIBILITY_PRINT</td>
<td>209</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetWatermarkImageOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_VISIBILITY_EXPORT</td>
<td>210</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetWatermarkImageOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_NAME</td>
<td>211</td>
<td>string</td>
<td></td>
<td></td>
<td>SetWatermarkImageOptionString</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_AUTHOR</td>
<td>212</td>
<td>string</td>
<td></td>
<td></td>
<td>SetWatermarkImageOptionString</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_DESCRIPTION</td>
<td>213</td>
<td>string</td>
<td></td>
<td></td>
<td>SetWatermarkImageOptionString</td>
</tr>
</tbody>
</table>
## TEXT WATERMARKS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_WTM_TXT_WATERMARK_TEXT</td>
<td>240</td>
<td>string</td>
<td></td>
<td></td>
<td>SetWatermarkTextOptionString</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_NAME</td>
<td>241</td>
<td>string</td>
<td></td>
<td></td>
<td>SetWatermarkTextOptionString</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_TYPE</td>
<td>242</td>
<td>long</td>
<td>0 - TrueType 1 - Type1 2 - OpenType 3 - OpenType</td>
<td>0</td>
<td>SetWatermarkTextOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_SIZE</td>
<td>243</td>
<td>long</td>
<td></td>
<td></td>
<td>SetWatermarkTextOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_BOLD</td>
<td>244</td>
<td>bool</td>
<td>false</td>
<td>false</td>
<td>SetWatermarkTextOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_ITALIC</td>
<td>245</td>
<td>bool</td>
<td>false</td>
<td>false</td>
<td>SetWatermarkTextOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_OUTLINE</td>
<td>246</td>
<td>bool</td>
<td>false</td>
<td>false</td>
<td>SetWatermarkTextOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_UNDERLINE</td>
<td>247</td>
<td>bool</td>
<td>false</td>
<td>false</td>
<td>SetWatermarkTextOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_FONT_COLOR</td>
<td>248</td>
<td>long</td>
<td>RGB color</td>
<td></td>
<td>SetWatermarkTextOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_OPACITY</td>
<td>249</td>
<td>long</td>
<td>1-100</td>
<td>100</td>
<td>SetWatermarkTextOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_VISIBILITY_VIEW</td>
<td>250</td>
<td>bool</td>
<td>true</td>
<td>true</td>
<td>SetWatermarkTextOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_VISIBILITY_PRINT</td>
<td>251</td>
<td>bool</td>
<td>true</td>
<td>true</td>
<td>SetWatermarkTextOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_IMG_VISIBILITY_EXPORT</td>
<td>252</td>
<td>bool</td>
<td>true</td>
<td>true</td>
<td>SetWatermarkTextOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_UNDERLINE_POSITION</td>
<td>253</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetWatermarkTextOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_UNDERLINE_THICKNESS</td>
<td>254</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetWatermarkTextOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_WTM_TXT_TEXT_CORRECTION</td>
<td>255</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetWatermarkTextOptionFloat</td>
</tr>
</tbody>
</table>
### BOOKMARKS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_BMARK_EN_AUTO_DETECT_BOOKMARKS</td>
<td>12</td>
<td>int</td>
<td></td>
<td>false</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_BMK_ALLOW_MULTILINE</td>
<td>280</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_BMK_MATCH_ALL_LEVELS</td>
<td>281</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_BMK_USE_LEVELS</td>
<td>282</td>
<td>int</td>
<td></td>
<td>3</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_BMK_OPEN_TO_LEVEL</td>
<td>283</td>
<td>int</td>
<td></td>
<td>1</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_BMK_ROOT_NAME</td>
<td>284</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_BMK_ROOT_ENABLED</td>
<td>285</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_BMK_ROOT_BOLD</td>
<td>286</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_BMK_ROOT_ITALIC</td>
<td>287</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_BMK_ROOT_COLOR</td>
<td>288</td>
<td>int</td>
<td></td>
<td></td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>

### SAVE

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default value</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_SAVE_PROMPT_TYPE</td>
<td>101</td>
<td>long</td>
<td>0 - standard dialog 1 - no dialog 2 - simple OS dialog</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_SAVE_FOLDER_TYPE</td>
<td>260</td>
<td>long</td>
<td>1 - Printing applications's current folder 2 - last folder 3 - custom folder 4 - User’s My Documents folder</td>
<td>4</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_SAVE_FOLDER</td>
<td>103</td>
<td>string</td>
<td>network user name</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SAVE_USER_NAME</td>
<td>105</td>
<td>string</td>
<td>network user name</td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>NOVAPDF_SAVE_USER_PASSWORD</td>
<td>106</td>
<td>string</td>
<td>network user password</td>
<td></td>
<td>SetOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_SAVE_FILE_NAME</td>
<td>104</td>
<td>string</td>
<td>save file name or a valid macro</td>
<td>[N]</td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SAVE_FILEEXIST_ACTION</td>
<td>108</td>
<td>long</td>
<td>0 - prompt save as dialog; 1 - autonumber new; 2 - append date-time; 3 - overwrite; 4 - auto number existing files; 7 - don't save file</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>LAYOUT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_LEFTANCHOR_USED</td>
<td>320</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_LEFTANCHOR_OFFSET</td>
<td>321</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_LEFTANCHOR_PERCENT</td>
<td>322</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_RIGHTANCHOR_USED</td>
<td>323</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_RIGHTANCHOR_OFFSET</td>
<td>324</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_RIGHTANCHOR_PERCENT</td>
<td>325</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_TOPANCHOR_USED</td>
<td>326</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_TOPANCHOR_OFFSET</td>
<td>327</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_TOPANCHOR_PERCENT</td>
<td>328</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BOTTOMANCHOR_USED</td>
<td>329</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BOTTOMANCHOR_OFFSET</td>
<td>330</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BOTTOMANCHOR_PERCENT</td>
<td>331</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_VERTANCHOR_USED</td>
<td>332</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_VERTANCHOR_OFFSET</td>
<td>333</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>Constant</td>
<td>Type</td>
<td>Value</td>
<td>Default</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------</td>
<td>---------------</td>
<td>---------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_VERTANCHOR_USE_PERCENT</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_HORIZANCHOR_USED</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_HORIZANCHOR_OFFSET</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_HORIZANCHOR_USE_PERCENT</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_USE_ASPECT_RATIO</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_WIDTH</td>
<td>float</td>
<td></td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_HEIGHT</td>
<td>float</td>
<td></td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_ROTATION</td>
<td>float</td>
<td>0</td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_UNITS</td>
<td>long</td>
<td>0 - Millimeters 1 - Centimeters 2 - Inches</td>
<td></td>
<td>SetLayoutOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_PAGERANGE</td>
<td>string</td>
<td>&quot;1-2&quot;</td>
<td></td>
<td>SetLayoutOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_ZINDEX</td>
<td>long</td>
<td>multiple of 5</td>
<td>-1</td>
<td>SetLayoutOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_FORM_WIDTH</td>
<td>float</td>
<td></td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_FORM_HEIGHT</td>
<td>float</td>
<td></td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BOUNDING_WIDTH</td>
<td>float</td>
<td>1</td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BOUNDING_HEIGHT</td>
<td>float</td>
<td>1</td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_ORIGINAL_WIDTH</td>
<td>float</td>
<td></td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_ORIGINAL_HEIGHT</td>
<td>float</td>
<td></td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_SCALE_X</td>
<td>float</td>
<td>1</td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_SCALE_Y</td>
<td>float</td>
<td>1</td>
<td></td>
<td>SetLayoutOptionFloat</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_ALLOW_STRETCH</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_USE_BORDER</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetLayoutOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BORDER_STYLE</td>
<td>long</td>
<td>0 - Solid 1 - Dashed</td>
<td></td>
<td>SetLayoutOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BORDER_WIDTH</td>
<td>long</td>
<td>1000</td>
<td></td>
<td>SetLayoutOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BORDER_COLOR</td>
<td>long</td>
<td>RGB color 0</td>
<td></td>
<td>SetLayoutOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_BORDER_POSITION</td>
<td>long</td>
<td>0 - Neutral 1 - Interior 2 - Exterior</td>
<td></td>
<td>SetLayoutOptionLong</td>
<td></td>
</tr>
</tbody>
</table>

novaPDF SDK 10 User Manual  Copyright © 2020 Softland
<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_LAYOUT_NAME</td>
<td>357</td>
<td>string</td>
<td></td>
<td></td>
<td>SetLayoutOptionString</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_AUTHOR</td>
<td>358</td>
<td>string</td>
<td></td>
<td></td>
<td>SetLayoutOptionString</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_DESCRIPTION</td>
<td>359</td>
<td>string</td>
<td></td>
<td></td>
<td>SetLayoutOptionString</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_ALLOW.Stretch</td>
<td>386</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetLayoutOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_OBJECT_WIDTH</td>
<td>393</td>
<td>float</td>
<td></td>
<td>0</td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_OBJECT_HEIGHT</td>
<td>394</td>
<td>float</td>
<td></td>
<td>0</td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_PAGE_VISIBILITY</td>
<td>397</td>
<td>long</td>
<td>0 - First page</td>
<td>4</td>
<td>SetLayoutOptionLong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 - Last page</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 - Odd pages</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 - Even pages</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 - All pages</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 - Page range</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 - Form</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 - Landscape</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 - Portrait</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_PAGE_FORM_HEIGHT</td>
<td>398</td>
<td>float</td>
<td></td>
<td>210000</td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_PAGE_FORM_WIDTH</td>
<td>399</td>
<td>float</td>
<td></td>
<td>297000</td>
<td>SetLayoutOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_LAYOUT_PAGE_FORM_ID</td>
<td>400</td>
<td>long</td>
<td>DMPAPER sizes</td>
<td>9 (A4)</td>
<td>SetLayoutOptionLong</td>
</tr>
<tr>
<td>ADVANCED OPTIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ADV_OPTIMIZE_TEXT</td>
<td>48</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ADV_SILENT_PRINT</td>
<td>49</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ADV_OPTIMIZE_IMAGE</td>
<td>50</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ADV_CORRECT_LINEWIDTH</td>
<td>51</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ADV_CORRECT_FILLCOLOR</td>
<td>52</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ADV_IGNORE_EMPTY_PAGES</td>
<td>53</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ADV_VERIFY_FILE</td>
<td>621</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ADV_COPIES_ADD_PAGE</td>
<td>622</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
</tbody>
</table>
### ACTIONS - RUN APPLICATION

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_ACTION_RUN_APPLICATION</td>
<td>43</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_RUN_USERNAME</td>
<td>45</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_RUN_USER_PASSWORD</td>
<td>46</td>
<td>string (encrypted)</td>
<td>%1 - pdf file name %2 - process name</td>
<td>%1</td>
<td>SetActionOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_RUN_CMDLINE_PARAMETERS</td>
<td>47</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_RUN_SHOW</td>
<td>640</td>
<td>long</td>
<td>0 - Normal 1 - Minimized 2 - Hidden</td>
<td>0</td>
<td>SetActionOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_RUN_SHELL</td>
<td>641</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
</tbody>
</table>

### ACTIONS - OPEN VIEWER

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_ACTION_OPEN_CUSTOM_SOURCE</td>
<td>460</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_OPEN_ORIGINAL</td>
<td>461</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_OPEN_USERNAME</td>
<td>462</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_OPEN_PASSWORD</td>
<td>463</td>
<td>string (encrypted)</td>
<td></td>
<td></td>
<td>SetActionOptionEncryptedString</td>
</tr>
</tbody>
</table>

### ACTIONS - DELETE

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
</tr>
</thead>
</table>
### ACTIONS - COPY

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_ACTION_COPY_CUSTOMSOURCE</td>
<td>468</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_SOURCECOPYORIINAL</td>
<td>469</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_DESTCOPYORIINAL</td>
<td>470</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_CUSTOMDESFOLDER</td>
<td>471</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_CUSTOMDESTFILE</td>
<td>472</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_SOURCEUSERNAME</td>
<td>473</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_SOURCEPASSWORD</td>
<td>474</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetActionOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_DESTUSERNAME</td>
<td>475</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_DESTPASSWORD</td>
<td>476</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetActionOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_COPY_DESTKEEPFILENAME</td>
<td>477</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
</tbody>
</table>

### ACTIONS - EMAIL MAPI

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_EMAILMAPI_SENDEMAIL</td>
<td>421</td>
<td>long</td>
<td>0 - Send with default email</td>
<td>1</td>
<td>SetActionOptionLong</td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>------------------------------</td>
<td>---------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_FROM</td>
<td>422</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_TO</td>
<td>423</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_CC</td>
<td>424</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_BCC</td>
<td>425</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_COMPRESS</td>
<td>426</td>
<td>bool</td>
<td>0 - Low</td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_PASSWORDPROTECT</td>
<td>670</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_ZIPPASSWORD</td>
<td>671</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetActionOptionEncryptString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_CHANGEEXTENSION</td>
<td>427</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_ATTACHPDF</td>
<td>428</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_LOOKUPADDRESS</td>
<td>430</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_ATTACHOTHERFILES</td>
<td>431</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_OTHERFILES</td>
<td>432</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_SUBJECT</td>
<td>433</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_BODY</td>
<td>434</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_EMAILMAPI_EXTENSION</td>
<td>435</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ACTIONS - EMAIL OUTLOOK

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_OUTLOOK_IMPORTANCE</td>
<td>645</td>
<td>long</td>
<td>0 - Low</td>
<td>1</td>
<td>SetActionOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_READRECEIPT</td>
<td>646</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_NOFORWARD</td>
<td>647</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_NOREPLY</td>
<td>648</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_NOREPLYALL</td>
<td>649</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_SHOWWINDOW</td>
<td>650</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_DELETEAFTERSEND</td>
<td>651</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------</td>
<td>---------</td>
<td>-----------------------------------</td>
<td>---------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_CATEGORY</td>
<td>652</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_PASSWORDPROTECT</td>
<td>653</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_ZIPPASSWORD</td>
<td>654</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetActionOptionEncryptString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_COMPRESS</td>
<td>655</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_CHANGEEXTENSION</td>
<td>656</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_ATTACH_PDF</td>
<td>657</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_LOOKUP_ADDRESS</td>
<td>658</td>
<td>bool</td>
<td></td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_ATTACH_OTHER_FILES</td>
<td>659</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_OTHER_FILES</td>
<td>660</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_SUBJECT</td>
<td>661</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_BODY</td>
<td>662</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_FROM</td>
<td>663</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_TO</td>
<td>664</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_CC</td>
<td>665</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_BCC</td>
<td>666</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OUTLOOK_EXTENSION</td>
<td>667</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>ACTIONS - EMAIL SMTP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_FROM</td>
<td>436</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_TO</td>
<td>437</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_CC</td>
<td>438</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_BCC</td>
<td>439</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_COMPRESS</td>
<td>440</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_PASSWORDPROTECT</td>
<td>668</td>
<td>bool</td>
<td></td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_ZIPPASSWORD</td>
<td>669</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetActionOptionEncryptString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_CHANGEEXTENSION</td>
<td>441</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetActionOptionBool</td>
</tr>
</tbody>
</table>
### NOVAPDF_EMAILSMTP_ATTACH_PDF

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_EMAILSMTP_ATTACH_OTHER_FILES</td>
<td>442</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_ATTACH_OTHER_FILES</td>
<td>445</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_OTHER_FILES</td>
<td>446</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_SUBJECT</td>
<td>447</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_BODY</td>
<td>448</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_EXTENSION</td>
<td>449</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_SERVER</td>
<td>450</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_PORT</td>
<td>451</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_SSL</td>
<td>452</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_AUTHENTICATION</td>
<td>453</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_ACCOUNT</td>
<td>454</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_PASSWORD</td>
<td>455</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionEncrypt edString</td>
</tr>
<tr>
<td>NOVAPDF_EMAILSMTP_TLS</td>
<td>456</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetActionOptionBool</td>
</tr>
</tbody>
</table>

### ACTIONS - FTP

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_ACTION_FTP_SOURCEFILE</td>
<td>480</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_SOURCEUSER</td>
<td>481</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_SOURCEPASSWORD</td>
<td>482</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionEncrypt edString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_DESTFOLDER</td>
<td>483</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_DESTFILE</td>
<td>484</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_SERVER</td>
<td>485</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_PORT</td>
<td>486</td>
<td>string</td>
<td></td>
<td>21</td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_USERNAME</td>
<td>487</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FTP_PASSWORD</td>
<td>488</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionEncrypt edString</td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
<td>---------</td>
<td>-----------------</td>
<td>---------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_SOURCEORIGINAL</td>
<td>510</td>
<td>bool</td>
<td>true</td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_SOURCEFILE</td>
<td>511</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_SOURCEUSER</td>
<td>512</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_SOURCEPASSWORD</td>
<td>513</td>
<td>string</td>
<td></td>
<td></td>
<td>SetActionOptionEncrypte dString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_DESTFOLDER</td>
<td>514</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----</td>
<td>--------</td>
<td>------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_DESTFILE</td>
<td>515</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_SERVER</td>
<td>516</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_PORT</td>
<td>517</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_USERNAME</td>
<td>518</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_PASSWORD</td>
<td>519</td>
<td>string (encrypted)</td>
<td>SetActionOptionEncryptedString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_USEPRIVATEKEY</td>
<td>520</td>
<td>bool</td>
<td>false</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_UPLOADSPEEDCHECK</td>
<td>521</td>
<td>bool</td>
<td>false</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_UPLOADSPEED</td>
<td>522</td>
<td>long</td>
<td>200</td>
<td>SetActionOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_TIMEOUT</td>
<td>528</td>
<td>long</td>
<td>30</td>
<td>SetActionOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_KEYFILENAME</td>
<td>530</td>
<td>string</td>
<td>SetActionOptionString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_KEYFILEPASSWORD</td>
<td>531</td>
<td>string (encrypted)</td>
<td>SetActionOptionEncryptedString</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_KEEPFILENAME</td>
<td>532</td>
<td>string</td>
<td>true</td>
<td>SetActionOptionString</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_RETRY</td>
<td>533</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_RETRYVALUE</td>
<td>534</td>
<td>long</td>
<td>1</td>
<td>SetActionOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_WAIT</td>
<td>535</td>
<td>bool</td>
<td>false</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_WAITVALUE</td>
<td>536</td>
<td>long</td>
<td>60</td>
<td>SetActionOptionLong</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_AUTH_PUBLICKEY</td>
<td>541</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_AUTH_PASSWORD</td>
<td>542</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_AUTH_KEYBOARDINT</td>
<td>543</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_CIPHER_AES256CTR</td>
<td>550</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_CIPHER_AES128CBC</td>
<td>552</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SFTP_CIPHER_AES</td>
<td>553</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
<td></td>
</tr>
<tr>
<td>Cipher Mode</td>
<td>Method</td>
<td>Value</td>
<td>Type</td>
<td>Default</td>
<td>Action Method</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>---------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>192CBC</td>
<td></td>
<td>554</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_AES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>256CBC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_BLO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WFISH CBC</td>
<td>555</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_TW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OFISH CBC</td>
<td>556</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_TW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OFISH 192CBC</td>
<td>557</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_TW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OFISH 128CBC</td>
<td>558</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_TW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OFISH 256CBC</td>
<td>559</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_ARC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FOUR</td>
<td>560</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_ARC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FOUR 128</td>
<td>561</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_ARC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FOUR 256</td>
<td>562</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_CAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T128CBC</td>
<td>563</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_AES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AES 128CTR</td>
<td>564</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_CIPHER_AES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AES 192CTR</td>
<td>565</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_MAC_MD5</td>
<td></td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_MAC_SHA1</td>
<td></td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_MAC_SHA22</td>
<td></td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_MAC_SHA22</td>
<td></td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>2256</td>
<td>569</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_MAC_SHA22</td>
<td></td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>2256OPENSSH</td>
<td>570</td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_MAC_SHA19</td>
<td></td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td></td>
<td>NOVAPDF_ACTION_SFTP_COMPRESS_</td>
<td></td>
<td>bool</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
</tbody>
</table>
### GENERAL ACTION SETTINGS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_ACTION_INDEX</td>
<td>600</td>
<td>long</td>
<td></td>
<td>0</td>
<td>SetActionOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_FAIL</td>
<td>601</td>
<td>long</td>
<td>0 - Continue 1 - Stop</td>
<td>1</td>
<td>SetActionOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_NAME</td>
<td>602</td>
<td>string</td>
<td></td>
<td>0</td>
<td>SetActionOptionString</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_SHOW_DIALOG</td>
<td>603</td>
<td>bool</td>
<td>false</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_ACTION_EXECUTE</td>
<td>604</td>
<td>bool</td>
<td>true</td>
<td>true</td>
<td>SetActionOptionBool</td>
</tr>
</tbody>
</table>

### XMP METADATA

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_DOCINFO_METADATA</td>
<td>618</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_COPYRIGHT_METADATA</td>
<td>17</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_COPYRIGHT_TEXT</td>
<td>611</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_COPYRIGHT_URL</td>
<td>612</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_COPYRIGHT_TYPE</td>
<td>613</td>
<td>long</td>
<td>0 - Unknown 1 - Copyrighted 2 - Public domain</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_CUSTOMPROP_METADATA</td>
<td>20</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetOptionBool</td>
</tr>
</tbody>
</table>

### MERGE

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_MERGE_ENABLE</td>
<td>18</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>Constant name</td>
<td>Value</td>
<td>Type</td>
<td>Possible values</td>
<td>Default</td>
<td>Function</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
<td>---------------</td>
<td>------------------------------------------------------</td>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td>NOVAPDF_SHOW_MERGE_DLG</td>
<td>19</td>
<td>bool</td>
<td>false</td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_APPEND_PASSWORD</td>
<td>107</td>
<td>string</td>
<td>(encrypted)</td>
<td>false</td>
<td>SetOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_INSERT_PAGENO</td>
<td>261</td>
<td>long</td>
<td>1</td>
<td>1</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_IF_FILE_EXISTS</td>
<td>630</td>
<td>bool</td>
<td>true</td>
<td>true</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_TYPE</td>
<td>631</td>
<td>long</td>
<td>0 - Append end 1 - Insert beginning 2 - Insert at page no</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_OTHER_FILE</td>
<td>632</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_LOCATION</td>
<td>633</td>
<td>long</td>
<td>1 - Local 2 - Server</td>
<td>1</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_USER</td>
<td>634</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_MERGE_PASSWORD</td>
<td>635</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetOptionEncryptedString</td>
</tr>
</tbody>
</table>

**GENERAL PROFILE SETTINGS**

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_PROFILE_NAME</td>
<td>22</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_PROFILE_AUTHOR</td>
<td>23</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_PROFILE_DESCRIPTION</td>
<td>24</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_SAVE_LOCATION</td>
<td>14</td>
<td>long</td>
<td>1 - Local 2 - Server</td>
<td>1</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_PDF_VERSION</td>
<td>1</td>
<td>long</td>
<td>3 - PDF 1.3 (Adobe Reader 4) 4 - PDF 1.4 (Adobe Reader 5) 5 - PDF 1.5 (Adobe Reader 6) 6 - PDF 1.6 (Adobe Reader 7) 7 - PDF 1.7 (Adobe Reader 8)</td>
<td>5</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_PDFA</td>
<td>2</td>
<td>bool</td>
<td>false</td>
<td></td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_PDFA_VERSION</td>
<td>3</td>
<td>long</td>
<td>1 - PDFA\1a</td>
<td>2</td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>
### USER TAGS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_ENABLE_USER_TAGS</td>
<td>21</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_REMOVE_POLICY</td>
<td>672</td>
<td>long</td>
<td></td>
<td></td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_DETECT_FONTNAME</td>
<td>673</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_FONTNAME</td>
<td>674</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOptionString</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_FONTTYPE</td>
<td>675</td>
<td>long</td>
<td>0 - TrueType</td>
<td>0</td>
<td>SetOptionLong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 - Type1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 - OpenType</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(TrueType)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 - OpenType</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Type1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_DETECT_SIZE</td>
<td>676</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_SIZE</td>
<td>677</td>
<td>long</td>
<td></td>
<td></td>
<td>SetOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_MARGIN</td>
<td>678</td>
<td>float</td>
<td></td>
<td></td>
<td>SetOptionFloat</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_DETECT_STYLE</td>
<td>679</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_BOLD</td>
<td>680</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_ITALIC</td>
<td>681</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_DETECT_COLOR</td>
<td>682</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_USERTAG_COLOR</td>
<td>683</td>
<td>long</td>
<td>RGB color</td>
<td></td>
<td>SetOptionLong</td>
</tr>
</tbody>
</table>

### PRINTER OPTIONS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_PRINTER_SELECT_PROFILE_DL</td>
<td>802</td>
<td>bool</td>
<td></td>
<td>false</td>
<td>SetPrinterOption</td>
</tr>
</tbody>
</table>
## OVERRIDE OPTIONS

<table>
<thead>
<tr>
<th>Constant name</th>
<th>Value</th>
<th>Type</th>
<th>Possible values</th>
<th>Default</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF_OVERRIDE_OPEN_VIEWER</td>
<td>2001</td>
<td>bool</td>
<td></td>
<td></td>
<td>SetOverrideOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_SEND_EMAIL</td>
<td>2002</td>
<td>bool</td>
<td></td>
<td></td>
<td>SetOverrideOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_MERGE_PDF</td>
<td>2003</td>
<td>bool</td>
<td></td>
<td></td>
<td>SetOverrideOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_MERGE_FILE_TYPE</td>
<td>2004</td>
<td>long</td>
<td>0 - Existing file</td>
<td>1 - Other file</td>
<td>SetOverrideOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_MERGE_TYPE</td>
<td>2005</td>
<td>long</td>
<td>0 - Append</td>
<td>1 - Insert 2 - Insert at page no</td>
<td>SetOverrideOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_MERGE_FILE</td>
<td>2006</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_INSERT_PAGENO</td>
<td>2007</td>
<td>long</td>
<td></td>
<td></td>
<td>SetOverrideOptionLong</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_PASSWORD</td>
<td>2008</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetOverrideOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_DOC_INFO</td>
<td>2009</td>
<td>bool</td>
<td></td>
<td></td>
<td>SetOverrideOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_SECURITY</td>
<td>2010</td>
<td>bool</td>
<td></td>
<td></td>
<td>SetOverrideOptionBool</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_SECURITY_U</td>
<td>2011</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetOverrideOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_SECURITY_O</td>
<td>2012</td>
<td>string</td>
<td>(encrypted)</td>
<td></td>
<td>SetOverrideOptionEncryptedString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_DOC_TITLE</td>
<td>2013</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_DOC_SUBJECT</td>
<td>2014</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_DOC_AUTHOR</td>
<td>2015</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_DOC_KEY</td>
<td>2016</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_DOC_CREATOR</td>
<td>2017</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_REC_TO</td>
<td>2018</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
<tr>
<td>NOVAPDF_OVERRIDE_REC_FROM</td>
<td>2019</td>
<td>string</td>
<td></td>
<td></td>
<td>SetOverrideOptionString</td>
</tr>
</tbody>
</table>
### 1.4.11.2 Windows messages

**novaPDF SDK 10 messages**

<table>
<thead>
<tr>
<th>Message name</th>
<th>Event</th>
<th>WPARAM</th>
<th>LPARAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOVAPDF2_STARTDOC</td>
<td>sent when the printer driver begins processing the print job</td>
<td>0</td>
<td>jobID</td>
</tr>
<tr>
<td>Event Code</td>
<td>Description</td>
<td>Additional Info</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_ENDDOC</td>
<td>sent when the printer driver finished processing the print job</td>
<td>0 jobID</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_STARTPAGE</td>
<td>sent when the printer driver starts processing a new page</td>
<td>0 jobID</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_ENDPAGE</td>
<td>sent when the printer driver finished processing a page</td>
<td>0 jobID</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_FILESENT</td>
<td>sent when the printer driver finished generating the PDF file and sent it to the computer that started the print job</td>
<td>0 jobID</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_FILESAVED</td>
<td>sent when the PDF file is received and saved by the computer that started the print job</td>
<td>0 jobID</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_PRINTERROR</td>
<td>sent when an error occurred during the print job</td>
<td>error no.</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_EMAILSENT</td>
<td>sent when the email option is enabled and a email with the generated PDF file was sent</td>
<td>0 jobID</td>
<td></td>
</tr>
<tr>
<td>NOVAPDF2_EMAILERROR</td>
<td>sent when the email option is enabled and there was an error sending the email with the generated PDF file</td>
<td>0 jobID</td>
<td></td>
</tr>
</tbody>
</table>

The following error numbers are sent by the printer driver, in the NOVAPDF2_PRINTERROR event:

1 - Error saving temporary PDF file on the printer server.
2 - Error reading license information on the printer server.
3 - Error generating the PDF file.
4 - Print job was canceled
5 - Licensing error: too many copies running with the same license
6 - Client computer is not licensed
7 - Error sending email
9 - Could not read printer info
10 - Could not read profile
11 - append pdf file - no or wrong password
12 - insert before pdf file - no or wrong password
13 - append pdf file - could not read file
14 - insert before pdf file - could not read file
15 - overlay pdf file - no or wrong password
16 - overlay pdf file - could not read file
18 - sign PDF - error signing
19 - sign PDF - error creating signature form
20 - sign PDF - image file not found
21 - image watermark - error drawing
22 - overlay - error drawing
25 - license error
26 - wrong parameters for action
27 - error creating folder
28 - error open viewer
29 - error run application
30 - file name error
31 - error copy file
32 - error delete file
33 - MAPI error
34 - SMTP error
35 - profile consistency error
36 - FTP error
37 - SFTP error
38 - error open file
39 - error pdf viewer
40 - access rights error
41 - open pdf error

**How to register windows messages**
You can register windows messages using RegisterWindowMessage function. Here are some samples of how to do it:
MFC Converter
VCL Converter
VB Converter

1.4.11.3 **What is INovaPdfOptions**

The INovaPdfOptions interface represents a COM object that allows the developers to set printing parameters for novaPDF SDK 10. This interface is derived from **IDispatch** interface directly.

This interface resides in the "novapi9.dll" module, that is distributed with the novaPDF SDK and is registered at install time.

INovaPdfOptions has next methods:

**Initialization**
Initialize
Initialize2
InitializeSilent
InitializeSilent2

**Profiles Management**
LoadProfile
LoadProfile2
SaveProfile
AddProfile
AddProfile2
CopyProfile
CopyProfile2
DeleteProfile
DeleteProfile2
GetFirstProfile
GetFirstProfile2
GetNextProfile
GetNextProfile2
GetActiveProfile
GetActiveProfile2
SetActiveProfile
SetActiveProfile2
SetPrinterActivePublicProfile
SetPrinterActivePublicProfile2
DeletePrinterActivePublicProfile
DeletePrinterActivePublicProfile2
SetPrinterPublicProfile
SetPrinterPublicProfile2
SetPrinterServerFlags
SetPrinterServerFlags2

Get / Set Profile Options
GetOptionString
GetOptionString2
SetOptionString
SetOptionString2
GetOptionLong
SetOptionLong
SetOptionBool
GetOptionBool
SetOptionEncryptedString
SetOptionEncryptedString2
GetOptionEncryptedString
GetOptionEncryptedString2

Actions options
AddAction
AddAction2
DeleteAction
DeleteAction2
GetActionCount
GetAction
GetAction2
GetActionOptionBool
GetActionOptionBool2
GetActionOptionEncryptedString
GetActionOptionEncryptedString2
GetActionOptionFloat
GetActionOptionFloat2
GetActionOptionLong
GetActionOptionLong2
GetActionOptionString
GetActionOptionString2
SetActionOptionBool
SetActionOptionBool2
SetActionOptionEncryptedString
SetActionOptionEncryptedString2
SetActionOptionFloat
SetActionOptionFloat2
SetActionOptionLong
SetActionOptionLong2
SetActionOptionString
SetActionOptionString2

Fonts options:
GetFontOption
GetFontOption2
SetFontOption
SetFontOption2
ClearFontOptions

Bookmarks options:
AddBookmarkDefinition
AddBookmarkDefinition2
ModifyBookmarkDefinition
ModifyBookmarkDefinition2
DeleteBookmarkDefinition
GetBookmarkDefinition
GetBookmarkDefinition2
GetBookmarkDefinitionCount
[****]

Image watermarks options:
AddWatermarkImage
AddWatermarkImage2
DeleteWatermarkImage
DeleteWatermarkImage2
GetWatermarkImage
GetWatermarkImage2
GetWatermarkImageCount
SetWatermarkImageOptionString
SetWatermarkImageOptionString2
SetWatermarkImageOptionLong
SetWatermarkImageOptionLong2
SetWatermarkImageOptionBool
SetWatermarkImageOptionBool2
SetWatermarkImageOptionFloat
SetWatermarkImageOptionFloat2
GetWatermarkImageOptionString
GetWatermarkImageOptionString2
GetWatermarkImageOptionLong
GetWatermarkImageOptionLong2
Text watermarks options:
AddWatermarkText
AddWatermarkText2
DeleteWatermarkText
DeleteWatermarkText2
GetWatermarkText
GetWatermarkText2
GetWatermarkTextCount
SetWatermarkTextOptionString
SetWatermarkTextOptionString2
SetWatermarkTextOptionLong
SetWatermarkTextOptionLong2
SetWatermarkTextOptionBool
SetWatermarkTextOptionBool2
SetWatermarkTextOptionFloat
SetWatermarkTextOptionFloat2
GetWatermarkTextOptionString
GetWatermarkTextOptionString2
GetWatermarkTextOptionLong
GetWatermarkTextOptionLong2
GetWatermarkTextOptionBool
GetWatermarkTextOptionBool2
GetWatermarkTextOptionFloat
GetWatermarkTextOptionFloat2

Layout options:
SetLayoutOptionString
SetLayoutOptionString2
SetLayoutOptionLong
SetLayoutOptionLong2
SetLayoutOptionBool
SetLayoutOptionBool2
SetLayoutOptionFloat
SetLayoutOptionFloat2
GetLayoutOptionString
GetLayoutOptionString2
GetLayoutOptionLong
GetLayoutOptionLong2
GetLayoutOptionBool
GetLayoutOptionBool2
GetLayoutOptionFloat
GetLayoutOptionFloat2
GetLayoutCount
GetLayoutCount2
GetLayout
GetLayout2
DeleteLayout
DeleteLayout2

Signature options:
GetSignature
GetSignature2

Overlay options:
AddOverlay
AddOverlay2
GetOverlay
GetOverlay2
DeleteOverlay
DeleteOverlay2
GetOverlayCount
SetOverlayOptionBool
SetOverlayOptionBool2
SetOverlayOptionEncryptedString
SetOverlayOptionEncryptedString2
SetOverlayOptionFloat
SetOverlayOptionFloat2
SetOverlayOptionLong
SetOverlayOptionLong2
SetOverlayOptionString
SetOverlayOptionString2
GetOverlayOptionBool
GetOverlayOptionBool2
GetOverlayOptionFloat
GetOverlayOptionFloat2
GetOverlayOptionLong
GetOverlayOptionLong2
GetOverlayOptionString
GetOverlayOptionString2
GetOverlayOptionEncryptedString
GetOverrideOptionEncryptedString2

Content options:
GetContentLayout
GetContentLayout2

Custom properties:
AddCustomProperty
AddCustomProperty2
SetCustomProperty
SetCustomProperty2
GetCustomProperty
GetCustomProperty2
DeleteCustomProperty
DeleteCustomProperty2
DisableCustomProperty
EnableCustomProperty
GetCustomPropertiesCount

User tags:
AddUserTag
AddUserTag2
SetUserTag
SetUserTag2
GetUserTag
GetUserTag2
DeleteUserTag
DisableUserTag
EnableUserTag
ClearUserTags
GetUserTagsCount

Save rules:
AddSaveRule
AddSaveRule2
GetSaveRule
GetSaveRule2
SetSaveRule
SetSaveRule2
DeleteSaveRule
DisableSaveRule
EnableSaveRule
ClearSaveRules
GetSaveRulesCount

Printers management
AddNovaPrinter
AddNovaPrinter2
AddNovaPrinterExt
AddNovaPrinterExt2
DeleteNovaPrinter
DeleteNovaPrinter2
SetPrinterOption
SetDefaultPrinter
RestoreDefaultPrinter

Register events or messages
RegisterEventWindow
UnRegisterEventWindow
RegisterNovaEvent
RegisterNovaEvent2
WaitForNovaEvent

OLE Licensing
InitializeOLEUsage
LicenseOLEServer

ShellExecute Licensing
LicenseShellExecuteFile

Print from launched applications
LicenseApplication
Convert Office documents
ConvertWordDocument
ConvertWordDocument2
ConvertPowerPointDocument
ConvertPowerPointDocument2
ConvertPublisherDocument
ConvertPublisherDocument2
ConvertVisioDocument
ConvertVisioDocument2
ConvertExcelDocument
ConvertExcelDocument2

Override options
SetOverrideOptionBool
SetOverrideOptionEncryptedString
SetOverrideOptionEncryptedString2
SetOverrideOptionLong
SetOverrideOptionString
SetOverrideOptionString2
GetOverrideOptionBool
GetOverrideOptionEncryptedString
GetOverrideOptionEncryptedString2
GetOverrideOptionLong
GetOverrideOptionString
GetOverrideOptionString2
DeleteOverrideOptions

1.4.11.4 INovaPdfOptions

1.4.11.4.1 AddAction

The AddAction method adds an action

```c
HRESULT AddAction(
    [in] LONG p_nType,
    [in, string] LPCWSTR p_wsActionName,
    [out, string] LPWSTR* p_pwsNewActionId,
    [out] LONG* p_pnIndex
);
```

Parameters:
- `p_nType`
  - [in] action type (1-copy, 2-delete, 3-MAPI email, 4-SMTP email, 6-open,
- `p_wsActionName`
  - [in] action name
- `p_pwsNewActionId`
  - [out] action id
- `p_pnIndex`
  - [out] action index
1.4.11.4.2 AddAction2

The AddAction2 method adds an action

```c
HRESULT AddAction2(
    [in] LONG p_nType,
    [in, string] BSTR p_wsActionName,
    [out, string] BSTR* p_pwsNewActionId,
    [out] LONG* p_pnIndex
);
```

Parameters:
- `p_nType`: action type (1-copy, 2-delete, 3-MAPI email, 4-SMTP email, 6-open, ...
- `p_wsActionName`: action name
- `p_pwsNewActionId`: action id
- `p_pnIndex`: action index

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong action type

Remarks:
This method adds a new action at the end of the list of actions. After adding an action, you can change action position in the list and set specific options for each action type.

1.4.11.4.3 AddBookmarkDefinition

The AddBookmarkDefinition method adds a new bookmark definition in the current loaded profile, having the characteristics specified by the method parameters.

```c
HRESULT AddBookmarkDefinition(
    [in] SHORT p_nHeading,
```
[in] BOOL p_bEnabled,
[in] BOOL p_bDetFont,
[in, string] LPCWSTR p_wsDetFont,
[in] LONG p_nDetFontType,
[in] BOOL p_bDetStyle,
[in] BOOL p_bDetBold,
[in] BOOL p_bDetItalic,
[in] BOOL p_bDetSize,
[in] INT p_nDetSizeVal,
[in] FLOAT p_nDetSizePt,
[in] BOOL p_bDetColor,
[in] LONG p_nDetColor,
[in] BOOL p_bDispAsBold,
[in] BOOL p_bDispAsItalic,
[in] LONG p_nDispColor,
[out] SHORT* p_nDefinition

Parameters:

p_nHeading
  [in] heading index where to add the definition (1-9)
p_bEnabled
  [in] definition is enabled
p_bDetFont
  [in] detect font
p_wsDetFont
  [in] font name
p_nDetFontType
  [in] font type: true type, type1, open type
p_bDetStyle
  [in] detect font style
p_bDetBold
  [in] bold font
p_bDetItalic
  [in] italic font
p_bDetSize
  [in] detect font size
p_nDetSizeVal
  [in] font size
p_nDetSizePt
  [in] font size rounding
p_bDetColor
  [in] detect font color
p_nDetColor
  [in] font color (RGB value)
p_bDispAsBold
  [in] display bookmark font bold
p_bDispAsItalic
  [in] display bookmark font italic
p_nDispColor
  [in] display bookmark font color
p_nDefinition
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
There can be defined maximum 9 bookmark definitions.

1.4.11.4.4 AddBookmarkDefinition2

The AddBookmarkDefinition2 method adds a new bookmark definition in the current loaded profile, having the characteristics specified by the method parameters.

```c
HRESULT AddBookmarkDefinition2(
    [in] SHORT p_nHeading,
    [in] BOOL p_bEnabled,
    [in] BOOL p_bDetFont,
    [in, string] BSTR p_wsDetFont,
    [in] LONG p_nDetFontType,
    [in] BOOL p_bDetStyle,
    [in] BOOL p_bDetBold,
    [in] BOOL p_bDetItalic,
    [in] BOOL p_bDetSize,
    [in] INT p_nDetSizeVal,
    [in] FLOAT p_nDetSizePt,
    [in] BOOL p_bDetColor,
    [in] LONG p_nDetColor,
    [in] BOOL p_bDispAsBold,
    [in] BOOL p_bDispAsItalic,
    [in] LONG p_nDispColor,
    [out] SHORT* p_nDefinition
);
```

Parameters:
- `p_nHeading`:
  - [in] heading index where to add the definition (1-9)
- `p_bEnabled`:
  - [in] definition is enabled
- `p_bDetFont`:
  - [in] detect font
- `p_wsDetFont`:
  - [in] font name
- `p_nDetFontType`:
  - [in] font type: true type, type1, open type
- `p_bDetStyle`:
  - [in] detect font style
- `p_bDetBold`:
  - [in] bold font
- `p_bDetItalic`:
  - [in] italic font
- `p_bDispAsBold`:
  - [in] display as bold
- `p_bDispAsItalic`:
  - [in] display as italic
- `p_nDispColor`:
  - [in] display color
- `p_nDefinition`:
  - [out] definition index, if added. If the definition was not added, -1
p_bDetItalic
  [in] italic font
p_bDetSize
  [in] detect font size
p_nDetSizeVal
  [in] font size
p_nDetSizeFt
  [in] font size rounding
p_bDetColor
  [in] detect font color
p_nDetColor
  [in] font color (RGB value)
p_bDispAsBold
  [in] display bookmark font bold
p_bDispAsItalic
  [in] display bookmark font italic
p_nDispColor
  [in] display bookmark font color
p_nDefinition
  [out] definition index, if added. If the definition was not added, -1

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
There can be defined maximum 9 bookmark definitions.

1.4.11.4.5 AddCustomProperty

The **AddCustomProperty** method adds a custom property

```c
HRESULT AddCustomProperty(
    [in, string] LPCWSTR p_wsPropertyName,
    [in, string] LPCWSTR p_wsDefaultValue,
    [in] BOOL p_bEnabled,
    [out] LONG* p_pnIndex
);
```

Parameters:
  p_wsPropertyName
    [in] property name
  p_wsDefaultValue
    [in] property value
  p_bEnabled
    [in] flag, property is enabled
  p_pnIndex
    [out] custom property index

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - empty property name

Remarks:
This method adds a new custom property at the end of the list.

1.4.11.4.6 AddCustomProperty2

The AddCustomProperty2 method adds a custom property.

```
HRESULT AddCustomProperty2(
    [in, string] BSTR p_wsPropertyName,
    [in, string] BSTR p_wsPropertyValue,
    [in] BOOL p_bEnabled,
    [out] ULONG* p_pnIndex
);
```

Parameters:
- p_wsPropertyName
  - [in] property name
- p_wsDefaultValue
  - [in] property value
- p_bEnabled
  - [in] flag, property is enabled
- p_pnIndex
  - [out] custom property index

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - empty property name

Remarks:
This method adds a new custom property at the end of the list.

1.4.11.4.7 AddNovaPrinter

The AddNovaPrinter method adds a temporary novaPDF printer in the system.

```
HRESULT AddNovaPrinter(
    [in] LPCWSTR p_wsPrinterName,
    [in, string] LPCWSTR p_wsOEMID,
    [in, string] LPCWSTR p_wsServicePort,
    [in, string] LPCWSTR p_wsLicensekey
);
```

Parameters:
p_wsPrinterName
  [in] pointer to a null terminated Unicode string containing the name of the printer.
p_wsOEMID
  [in] custom OEMID; for trial is "nPdfSdk10_Softland"
p_wsServicePort
  [in] novaPDF Server service port number,
p_wsLicenseKey
  [in] license key

Return values:
S_OK on success or COM error code
NV_NOT_A_NOVAPDF_PRINTER - invalid OEMID
NV_INVALID_PRINTER_NAME - a printer with the specified name cannot be added

Remarks:
This method must be called before printing documents and setting novaPDF options. It will add a printer in the system with the specified name. This printer will be available until DeleteNovaPrinter is called with the same printer name. Use this method if you wish to work with temporary printers.

1.4.11.4.8 AddNovaPrinter2

The AddNovaPrinter2 method adds a temporary novaPDF printer in the system

HRESULT AddNovaPrinter2(
    [in] BSTR p_wsPrinterName,
    [in, string] BSTR p_wsOEMID,
    [in, string] BSTR p_wsServicePort,
    [in, string] BSTR p_wsLicenseKey
);

Parameters:

p_wsPrinterName
  [in] pointer to a null terminated Unicode string containing the name of the printer.
p_wsOEMID
  [in] custom OEMID; for trial is "nPdfSdk10_Softland"
p_wsServicePort
  [in] novaPDF Server service port number
p_wsLicenseKey
  [in] license key

Return values:
S_OK on success or COM error code
NV_NOT_A_NOVAPDF_PRINTER - invalid OEMID
NV_INVALID_PRINTER_NAME - a printer with the specified name cannot be added

Remarks:
This method must be called before printing documents and setting novaPDF options. It will add a printer in the system with the specified name. This printer will be available until DeleteNovaPrinter is called with the same printer name. Use this method if you wish to work with temporary printers.
1.4.11.4.9 AddNovaPrinterExt

The AddNovaPrinterExt method adds a temporary novaPDF printer in the system.

```c
HRESULT AddNovaPrinterExt(
    [in, string] LPCWSTR p_wsPrinterName,
    [in, string] LPCWSTR p_wsPortName,
    [in, string] LPCWSTR p_wsOEMID,
    [in, string] LPCWSTR p_wsServicePort,
    [in, string] LPCWSTR p_wsLicensekey,
    [in] SHORT p_nDefaultPaperSize,
    [in, string] LPCWSTR p_wsDefaultPaperName,
    [in] SHORT p_nDefaultPaperLength,
    [in] SHORT p_nDefaultPaperWidth,
    [in] SHORT p_nDefaultResolution,
    [in] SHORT p_nMaxCopies,
    [in] SHORT p_nDefaultCopies,
    [in] SHORT p_nDefaultCollate,
    [in] SHORT p_nDefaultOrientation,
    [in] SHORT p_nDefaultScale,
    [in] BOOL p_bAllowChangePaper,
    [in] BOOL p_bAllowChangeResolution,
    [in] BOOL p_bAllowChangeCopies,
    [in] BOOL p_bAllowChangeCollate,
    [in] BOOL p_bAllowChangeOrientation,
    [in] BOOL p_bAllowChangeScale,
    [in] BOOL p_bSharedPrinter,
    [in, string] LPCWSTR p_wsSharedName
);
```

**Parameters:**

- `p_wsPrinterName` [in] pointer to a null terminated Unicode string containing the name of the printer
- `p_wsPortName` [in] pointer to a null terminated Unicode string containing the name of the printer port
- `p_wsOEMID` [in] pointer to a null terminated Unicode string containing custom OEMID; for trial is “nPdfSdk10_Softland”
- `p_wsServicePort` [in] pointer to a null terminated Unicode string containing novaPDF Server service port number, by default 8501
- `p_wsLicenseKey` [in] pointer to a null terminated Unicode string containing license key
- `p_nDefaultPaperSize` [in] default paper size (for instance 1 for Letter, 9 for A4,..)
- `p_wsDefaultPaperName` [in] pointer to a null terminated Unicode string containing paper name (like Letter, A4,..)
- `p_nDefaultPaperLength` [in] default paper length expressed in tenths of millimeters (for A4, 2970)
- `p_nDefaultPaperWidth` [in] default paper width expressed in tenths of millimeters (for A4, 2100)
- `p_nDefaultResolution` [in] default resolution (300, 600, ..)
p_nMaxCopies
   [in] maximum number of copies allowed (999)
p_nDefaultCopies
   [in] default number of copies (1)
p_nDefaultCollate
   [in] default collate (1 or 0)
p_nDefaultOrientation
   [in] default orientation (1 - portrait, 2 - landscape)
p_nDefaultScale
   [in] default scale (100)
p_bAllowChangePaper
   [in] bool, allow user to change paper size
p_bAllowChangeResolution
   [in] bool, allow user to change resolution
p_bAllowChangeCopies
   [in] bool, allow user to change copies
p_bAllowChangeCollate
   [in] bool, allow user to change collate
p_bAllowChangeOrientation
   [in] bool, allow user to change orientation
p_bAllowChangeScale
   [in] bool, allow user to change scale
p_bSharedPrinter
   [in] share the printer when added
p_wsSharedName
   [in] pointer to a null terminated Unicode string containing shared printer name

Return values:
S_OK on success or COM error code
NV_NOT_A_NOVAPDF_PRINTER - invalid OEMID
NV_INVALID_LICENSE - invalid license
NV_INVALID_PRINTER_NAME - a printer with the specified name or options cannot be added

Remarks:
This method must be called before printing documents and setting novaPDF options. It will add a printer in the system with the specified name and options. This printer will be available until DeleteNovaPrinter is called with the same printer name. Use this method if you wish to work with temporary printers and you wish to configure special printer defaults.

1.4.11.4.10 AddNovaPrinterExt2

The AddNovaPrinterExt2 method adds a temporary novaPDF printer in the system

HRESULT AddNovaPrinterExt2(
   [in, string] BSTR p_wsPrinterName,
   [in, string] BSTR p_wsPortName,
   [in, string] BSTR p_wsOEMID,
   [in, string] BSTR p_wsServicePort,
   [in, string] BSTR p_wsLicensekey,
   [in] SHORT p_nDefaultPaperSize,
   [in, string] BSTR p_wsDefaultPaperName,
[in] SHORT p_nDefaultPaperLength,
[in] SHORT p_nDefaultPaperWidth,
[in] SHORT p_nDefaultResolution,
[in] SHORT p_nMaxCopies,
[in] SHORT p_nDefaultCopies,
[in] SHORT p_nDefaultCollate,
[in] SHORT p_nDefaultOrientation,
[in] SHORT p_nDefaultScale,
[in] BOOL p_bAllowChangePaper,
[in] BOOL p_bAllowChangeResolution,
[in] BOOL p_bAllowChangeCopies,
[in] BOOL p_bAllowChangeCollate,
[in] BOOL p_bAllowChangeOrientation,
[in] BOOL p_bAllowChangeScale,
[in] BOOL p_bSharedPrinter,
[in, string] BSTR p_wsSharedName
);

Parameters:

p_wsPrinterName
    [in] printer name
p_wsPortName
    [in] printer port
p_wsOEMID
    [in] custom OEMID; for trial is "nPdfSdk10_Softland"
p_wsServicePort
    [in] novaPDF Server service port number, by default 8501
p_wsLicenseKey
    [in] license key
p_nDefaultPaperSize
    [in] default paper size (for instance 1 for Letter, 9 for A4, ...)
p_wsDefaultPaperName
    [in] pointer to a null terminated Unicode string containing paper name (like Letter)
p_nDefaultPaperLength
    [in] default paper length expressed in tenths of millimeters (for A4, 2970)
p_nDefaultPaperWidth
    [in] default paper width expressed in tenths of millimeters (for A4, 2100)
p_nDefaultResolution
    [in] default resolution (300, 600, ...)
p_nMaxCopies
    [in] maximum number of copies allowed (999)
p_nDefaultCopies
    [in] default number of copies (1)
p_nDefaultCollate
    [in] default collate (1 or 0)
p_nDefaultOrientation
    [in] default orientation (1 - portrait, 2 - landscape)
p_nDefaultScale
    [in] default scale (100)
p_bAllowChangePaper
    [in] bool, allow user to change paper size
p_bAllowChangeResolution
  [in] bool, allow user to change resolution
p_bAllowChangeCopies
  [in] bool, allow user to change copies
p_bAllowChangeCollate
  [in] bool, allow user to change collate
p_bAllowChangeOrientation
  [in] bool, allow user to change orientation
p_bAllowChangeScale
  [in] bool, allow user to change scale
p_bSharedPrinter
  [in] share the printer when added
p_wsSharedName
  [in] shared printer name

Return values:
S_OK on success or COM error code
NV_NOT_A_NOVAPDF_PRINTER - invalid OEMID
NV_INVALID_LICENSE - invalid license
NV_INVALID_PRINTER_NAME - a printer with the specified name or options cannot be added

Remarks:
This method must be called before printing documents. It will add a printer in the system with the specified name and options. This printer will be available until DeleteNovaPrinter2 is called with the same printer name. Use this method if you wish to work with temporary printers and you wish to configure special printer defaults.

1.4.11.4.11 AddOverlay

The AddOverlay method adds an overlay

HRESULT AddOverlay(
  [out, string] LPWSTR* p_pwsNewOverlayId,
  [out, string] LPWSTR* p_pwsNewLayoutId,
);

Parameters:
  p_pwsNewOverlayId
    [out] new overlay id
  p_pwsNewLayoutId
    [out] new layout id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
This method adds a new action at the end of the list of actions. After adding an action, you can change action position in the list and set specific options for each action type.
1.4.11.4.12 AddOverlay2

The **AddOverlay2** method adds an overlay

```c
HRESULT AddOverlay2(
    [out, string] BSTR* p_pwsNewOverlayId,
    [out, string] BSTR* p_pwsNewLayoutId,
);
```

**Parameters:**
- `p_pwsNewOverlayId`
  - [out] new overlay id
- `p_pwsNewLayoutId`
  - [out] new layout id

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded

**Remarks:**
This method adds a new action at the end of the list of actions. After adding an action, you can change action position in the list and set specific options for each action type.

1.4.11.4.13 AddProfile

The **AddProfile** method adds a new profile

```c
HRESULT AddProfile(
    [in, string] LPCWSTR p_wsProfileName,
    [in] BOOL    p_bPublicProfile,
    [out, string] LPWSTR* p_pwsNewProfileId,
);
```

**Parameters:**
- `p_wsProfileName`
  - [in] name of the profile to add
- `p_bPublicProfile`
  - [in] Flag if the profile is a public or a private profile
- `p_pwsNewProfileId`
  - [out] return profile id

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_SERVICE_ERROR - cannot connect to novaPDF Server service
- NV_PROFILE_ERROR - cannot read default profile
NV_PROFILE_SAVE_ERROR - cannot save new profile

Remarks:
The newly created profile contains default settings.

1.4.11.4.14 AddProfile2

The `AddProfile2` method adds a new profile

```
HRESULT AddProfile2(
    [in, string] BSTR p_wsProfileName,
    [in]  BOOL    p_bPublicProfile
    [out, string] BSTR* p_pwsNewProfileId
);
```

Parameters:

- `p_wsProfileName` [in] name of the profile to add
- `p_bPublicProfile` [in] Flag if the profile is a public or a private profile
- `p_pwsNewProfileId` [out] return profile id

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_SERVICE_ERROR - cannot connect to novaPDF Server service
- NV_PROFILE_ERROR - cannot read default profile
- NV_PROFILE_SAVE_ERROR - cannot save new profile

Remarks:
The newly created profile contains default settings.

1.4.11.4.15 AddSaveRule

The `AddSaveRule` method adds save rule

```
HRESULT AddSaveRule(
    [in] LONG p_nType,
    [in, string] LPCWSTR p_wsName,
    [in, string] LPCWSTR p_wsDescription,
    [in, string] LPCWSTR p_wsText,
    [in, string] LPCWSTR p_wsFormat,
    [in] BOOL p_bEnabled,
    [out] LONG* p_pnIndex
);
```

Parameters:

- `p_nType` [in] save rule type (0- remove from start, 1- remove from end, 2 - remove all, 3 - regular expression)
p_wsName
  [in] rule name
p_wsDescription
  [in] rule description
p_wsText
  [in] text to remove or regular expression
p_wsFormat
  [in] format for regular expression
p_bEnabled
  [in] flag, rule is enabled
p_pnIndex
  [out] rule index

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
This method adds a new save rule at the end of the list.

1.4.11.4.16 AddSaveRule2

The AddSaveRule2 method adds a save rule

HRESULT AddSaveRule2(
  [in]  LONG p_nType,
  [in, string]  BSTR p_wsName,
  [in, string]  BSTR p_wsDescription,
  [in, string]  BSTR p_wsText,
  [in, string]  BSTR p_wsFormat,
  [in]  BOOL p_bEnabled,
  [out]  LONG* p_pnIndex
);

Parameters:
 p_nType
  [in] save rule type (0- remove from start, 1 - remove from end, 2 - remove all, 3 - regular expression)
 p_wsName
  [in] rule name
 p_wsDescription
  [in] rule description
 p_wsText
  [in] text to remove or regular expression
 p_wsFormat
  [in] format for regular expression
 p_bEnabled
  [in] flag, rule is enabled
 p_pnIndex
  [out] rule index
Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
This method adds a new save rule at the end of the list.

1.4.11.4.17 AddUserTag

The AddUserTag method adds an user tag

```c
HRESULT AddUserTag(
    [in, string] LPCWSTR p_wsTag,
    [in, string] LPCWSTR p_wsDefaultValue,
    [in] BOOL p_bEnabled,
    [out] LONG* p_pnIndex
);
```

Parameters:
- p_wsTag: [in] user tag
- p_wsDefaultValue: [in] default tag value
- p_bEnabled: [in] flag, tag is enabled
- p_pnIndex: [out] tag index

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
This method adds a new user tag at the end of the list.

1.4.11.4.18 AddUserTag2

The AddUserTag2 method adds an user tag

```c
HRESULT AddUserTag2(
    [in, string] BSTR p_wsTag,
    [in, string] BSTR p_wsDefaultValue,
    [in] BOOL p_bEnabled,
    [out] LONG* p_pnIndex
);
```

Parameters:
p_wsTag
    [in] user tag
p_wsDefaultValue
    [in] default tag value
p_bEnabled
    [in] flag, tag is enabled
p_pnIndex
    [out] tag index

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
This method adds a new user tag at the end of the list.

1.4.11.4.19 AddWatermarkImage

The AddWatermarkImage method adds a new image watermark.

HRESULT AddWatermarkImage(
    [out, string] LPWSTR* p_pwsNewWatermarkId,
    [out, string] LPWSTR* p_pwsNewLayoutId
);

Parameters:
p_pwsNewWatermarkId,
    [out, string] - return new watermark id
p_pwsNewLayoutId
    [in, string] - return layout id for the new watermark

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
The newly created watermark contains default settings. Use the watermark id and layout id as parameters for set watermark and layout options functions.
For layout options, see Working with Layout objects.

1.4.11.4.20 AddWatermarkImage2

The AddWatermarkImage2 method adds a new image watermark.

HRESULT AddWatermarkImage2(

[out, string] BSTR* p_pwsNewWatermarkId,
[out, string] BSTR* p_pwsNewLayoutId
);

Parameters:
p_pwsNewWatermarkId,
[out, string] - return new watermark id
p_pwsNewLayoutId
[in, string] - return layout id for the new watermark

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
The newly created watermark contains default settings. Use the watermark id and layout id as parameters for set watermark and layout options functions.
For layout options, see Working with Layout objects.

1.4.11.4.21 AddWatermarkText

The AddWatermarkText method adds a new text watermark.

HRESULT AddWatermarkText(
    [out, string] LPWSTR* p_pwsNewWatermarkId,
    [out, string] LPWSTR* p_pwsNewLayoutId
);

Parameters:
p_pwsNewWatermarkId,
[out, string] - return new watermark id
p_pwsNewLayoutId
[in, string] - return layout id for the new watermark

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
The newly created watermark contains default settings. Use the watermark id and layout id as parameters for set watermark and layout options functions.
For layout options, see Working with Layout objects.
1.4.11.4.22 AddWatermarkText2

The `AddWatermarkText2` method adds a new text watermark.

```csharp
HRESULT AddWatermarkText2(
    [out, string] BSTR* p_pwsNewWatermarkId,
    [out, string] BSTR* p_pwsNewLayoutId
);
```

Parameters:
- `p_pwsNewWatermarkId`, [out, string] - return new watermark id
- `p_pwsNewLayoutId`, [in, string] - return layout id for the new watermark

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded

Remarks:
The newly created watermark contains default settings. Use the watermark id and layout id as parameters for set watermark and layout options functions.
For layout options, see Working with Layout objects.

1.4.11.4.23 ClearCustomProperties

The `ClearCustomProperties` method deletes all custom properties.

```csharp
HRESULT ClearCustomProperties();
```

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded

1.4.11.4.24 ClearFontOptions

The `ClearFontOptions` empties the always embed and never embed fonts lists.

```csharp
HRESULT ClearFontOptions(void);
```

Parameters:
- none

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
1.4.11.4.25 ClearSaveRules

The ClearSaveRules method deletes all save rules

HRESULT ClearSaveRules();

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

1.4.11.4.26 ClearUserTags

The ClearUserTags method deletes all user tags

HRESULT ClearUserTags();

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

1.4.11.4.27 ConvertExcelDocument

The ConvertExcelDocument converts an Excel document to PDF. Excel sheet names can be added as bookmarks in the PDF.

HRESULT ConvertExcelDocument(
    [in, string] LPCWSTR p_wsDocName,
    [in] BOOL p_bConvertSheetNamesToPDFBookmarks,
    [in] BOOL p_bWaitPDF
);

Parameters:
p_wsDocName
    [in] Excel document name with full path
p_bConvertSheetNamesToPDFBookmarks
    [in] flag, if set to 1 Excel sheet names will be added as PDF bookmarks
p_bWaitPDF
    [in] flag, if set function returns after pdf is saved and all actions executed

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_OPENFILE_ERROR - failed to open the document
NV_FILEPROCESS_ERROR - failed to read document information
Remarks:
Hidden links from Excel document are not converted to PDF links.

1.4.11.4.28 ConvertExcelDocument2

The ConvertExcelDocument2 converts an Excel document to PDF. Excel sheet names can be added as bookmarks in the PDF.

HRESULT ConvertExcelDocument2(
    [in, string] BSTR p_wsDocName,
    [in] BOOL p_bConvertSheetNamesToPDFBookmarks,
    [in] BOOL p_bWaitPDF
);

Parameters:
p_wsDocName
    [in] Excel document name with full path
p_bConvertSheetNamesToPDFBookmarks
    [in] flag, if set to 1 Excel sheet names will be added as PDF bookmarks
p_bWaitPDF
    [in] flag, if set function returns after pdf is saved and all actions executed

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_OPENFILE_ERROR - failed to open the document
NV_FILEPROCESS_ERROR - failed to read document information

Remarks:
Hidden links from Excel document are not converted to PDF links.

1.4.11.4.29 ConvertPowerPointDocument

The ConvertPowerPointDocument converts a PowerPoint document to PDF. There can be added a PDF bookmark for each PowerPoint slide and Internet and internal document links can be converted to PDF hyperlinks.

HRESULT ConvertPowerPointDocument(
    [in, string] LPCWSTR p_wsDocName,
    [in] BOOL p_bAddPDFBookmarkForEachSlide,
    [in] BOOL p_bConvertCrossReferenceLinks,
    [in] BOOL p_bConvertCrossDocumentLinks,
    [in] BOOL p_bConvertInternetLinks,
    [in] BOOL p_bUseRelativePaths,
    [in] BOOL p_bChangeFileExtensionToPDF,
    [in] BOOL p_bOpenFileInNewTab,
    [in] BOOL p_bWaitPDF
);

Parameters:
p_wsDocName
The **ConvertPowerPointDocument2** converts a PowerPoint document to PDF. There can be added a PDF bookmark for each PowerPoint slide and Internet and internal document links can be converted to PDF hyperlinks.

```csharp
HRESULT ConvertPowerPointDocument2(
    [in, string] BSTR p_wsDocName,
    [in] BOOL p_bAddPDFBookmarkForEachSlide,
    [in] BOOL p_bConvertCrossReferenceLinks,
    [in] BOOL p_bConvertCrossDocumentLinks,
    [in] BOOL p_bConvertInternetLinks,
    [in] BOOL p_bUseRelativePaths,
    [in] BOOL p_bChangeFileExtensionToPDF,
    [in] BOOL p_bOpenFileInNewTab,
    [in] BOOL p_bWaitPDF
);
```

**Parameters:**

- **p_wsDocName**
  - [in] PowerPoint document name with full path
- **p_bAddPDFBookmarkForEachSlide**
  - [in] flag, if set to 1 PowerPoint slides names will be added as PDF bookmarks
- **p_bConvertCrossReferenceLinks**
  - [in] flag, if set to 1 cross reference links (links inside the document) will be
- **p_bConvertCrossDocumentLinks**
  - [in] flag, if set to 1 cross document links (links to other documents) will be
- **p_bConvertInternetLinks**
  - [in] flag, if set to 1 Internet links will be converted to PDF hyperlinks
- **p_bUseRelativePaths**
  - [in] flag, for cross document links, use relative paths for files
- **p_bChangeFileExtensionToPDF**
  - [in] flag, for cross document links, change file extension to .pdf
- **p_bOpenFileInNewTab**
  - [in] flag, for pdf documents links, open them in a new tab in Adobe Reader
- **p_bWaitPDF**
  - [in] flag, if set function returns after pdf is saved and all actions executed

**Return values:**

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_OPENFILE_ERROR - failed to open the document
- NV_FILEPROCESS_ERROR - failed to read document information

1.4.11.4.30 ConvertPowerPointDocument2

The **ConvertPowerPointDocument2** converts a PowerPoint document to PDF. There can be added a PDF bookmark for each PowerPoint slide and Internet and internal document links can be converted to PDF hyperlinks.
1.4.11.4.31 ConvertPublisherDocument

The **ConvertPublisherDocument** converts a Publisher document to PDF. Internet and internal document links can be converted to PDF hyperlinks.

```csharp
HRESULT ConvertPublisherDocument(
    [in, string] LPCWSTR p_wsDocName,
    [in] BOOL p_bConvertCrossReferenceLinks,
    [in] BOOL p_bConvertCrossDocumentLinks,
    [in] BOOL p_bConvertInternetLinks,
    [in] BOOL p_bConvertLinksInHeaderFooter,
    [in] BOOL p_bUseRelativePaths,
    [in] BOOL p_bChangeFileExtensionToPDF,
    [in] BOOL p_bOpenFileInNewTab,
    [in] BOOL p_bWaitPDF
);
```

**Parameters:**

- **p_wsDocName**
  - [in] Publisher document name with full path

- **p_bConvertCrossReferenceLinks**
  - [in] flag, if set to 1 cross reference links (links inside the document) will be converted to PDF hyperlinks

- **p_bConvertCrossDocumentLinks**
  - [in] flag, if set to 1 cross document links (links to other documents) will be converted to PDF hyperlinks

- **p_bConvertInternetLinks**
  - [in] flag, if set to 1 Internet links will be converted to PDF hyperlinks

- **p_bConvertLinksInHeaderFooter**
  - [in] flag, if set to 1 links from header and footer will be converted to PDF hyperlinks

- **p_bUseRelativePaths**
  - [in] flag, for cross document links, use relative paths for files

- **p_bChangeFileExtensionToPDF**
  - [in] flag, for cross document links, change file extension to .pdf

- **p_bOpenFileInNewTab**
  - [in] flag, for pdf documents links, open them in a new tab in Adobe Reader

- **p_bWaitPDF**
  - [in] flag, if set function returns after pdf is saved and all actions executed

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_OPENFILE_ERROR - failed to open the document
- NV_FILEPROCESS_ERROR - failed to read document information
p_bOpenFileInNewTab
[in] flag, for pdf documents links, open them in a new tab in Adobe Reader

p_bWaitPDF
[in] flag, if set function returns after pdf is saved and all actions executed

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_OPENFILE_ERROR - failed to open the document
NV_FILEPROCESS_ERROR - failed to read document information

1.4.11.4.32 ConvertPublisherDocument2

The ConvertPublisherDocument2 converts a Publisher document to PDF. Internet and internal document links can be converted to PDF hyperlinks.

HRESULT ConvertPublisherDocument2(
    [in, string] BSTR p_wsDocName,
    [in] BOOL p_bConvertCrossReferenceLinks,
    [in] BOOL p_bConvertCrossDocumentLinks,
    [in] BOOL p_bConvertInternetLinks,
    [in] BOOL p_bConvertLinksInHeaderFooter,
    [in] BOOL p_bUseRelativePaths,
    [in] BOOL p_bChangeFileExtensionToPDF,
    [in] BOOL p_bOpenFileInNewTab,
    [in] BOOL p_bWaitPDF
);

Parameters:
    p_wsDocName
    [in] Publisher document name with full path

    p_bConvertCrossReferenceLinks
    [in] flag, if set to 1 cross reference links (links inside the document) will be converted to PDF hyperlinks

    p_bConvertCrossDocumentLinks
    [in] flag, if set to 1 cross document links (links to other documents) will be converted to PDF hyperlinks

    p_bConvertInternetLinks
    [in] flag, if set to 1 Internet links will be converted to PDF hyperlinks

    p_bConvertLinksInHeaderFooter
    [in] flag, if set to 1 links from header and footer will be converted to PDF hyperlinks

    p_bUseRelativePaths
    [in] flag, for cross document links, use relative paths for files

    p_bChangeFileExtensionToPDF
    [in] flag, for cross document links, change file extension to .pdf

    p_bOpenFileInNewTab
    [in] flag, for pdf documents links, open them in a new tab in Adobe Reader

    p_bWaitPDF
    [in] flag, if set function returns after pdf is saved and all actions executed

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_OPENFILE_ERROR - failed to open the document
NV_FILEPROCESS_ERROR - failed to read document information

1.4.11.4.33 ConvertVisioDocument

The **ConvertVisioDocument** converts a Visio document to PDF. Internet and internal document links can be converted to PDF hyperlinks.

```c
HRESULT ConvertVisioDocument(
    [in, string] LPCWSTR p_wsDocName,
    [in] BOOL p_bConvertCrossReferenceLinks,
    [in] BOOL p_bConvertCrossDocumentLinks,
    [in] BOOL p_bConvertInternetLinks,
    [in] BOOL p_bUseRelativePaths,
    [in] BOOL p_bChangeFileExtensionToPDF,
    [in] BOOL p_bOpenFileInNewTab,
    [in] BOOL p_bWaitPDF
);
```

**Parameters:**

- **p_wsDocName**
  - [in] Visio document name with full path

- **p_bConvertCrossReferenceLinks**
  - [in] flag, if set to 1 cross reference links (links inside the document) will be converted to PDF hyperlinks

- **p_bConvertCrossDocumentLinks**
  - [in] flag, if set to 1 cross document links (links to other documents) will be converted to PDF hyperlinks

- **p_bConvertInternetLinks**
  - [in] flag, if set to 1 Internet links will be converted to PDF hyperlinks

- **p_bUseRelativePaths**
  - [in] flag, for cross document links, use relative paths for files

- **p_bChangeFileExtensionToPDF**
  - [in] flag, for cross document links, change file extension to .pdf

- **p_bOpenFileInNewTab**
  - [in] flag, for pdf documents links, open them in a new tab in Adobe Reader

- **p_bWaitPDF**
  - [in] flag, if set function returns after pdf is saved and all actions executed

**Return values:**

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_OPENFILE_ERROR - failed to open the document
- NV_FILEPROCESS_ERROR - failed to read document information
1.4.11.4.34 ConvertVisioDocument2

The `ConvertVisioDocument2` converts a Visio document to PDF. Internet and internal document links can be converted to PDF hyperlinks.

```cpp
HRESULT ConvertVisioDocument2(
    [in, string] BSTR p_wsDocName,
    [in] BOOL p_bConvertCrossReferenceLinks,
    [in] BOOL p_bConvertCrossDocumentLinks,
    [in] BOOL p_bConvertInternetLinks,
    [in] BOOL p_bUseRelativePaths,
    [in] BOOL p_bChangeFileExtensionToPDF,
    [in] BOOL p_bOpenFileInNewTab,
    [in] BOOL p_bWaitPDF
);
```

**Parameters:**

- `p_wsDocName` [in] Visio document name with full path
- `p_bConvertCrossReferenceLinks` [in] flag, if set to 1 cross reference links (links inside the document) will be converted to PDF hyperlinks
- `p_bConvertCrossDocumentLinks` [in] flag, if set to 1 cross document links (links to other documents) will be converted to PDF hyperlinks
- `p_bConvertInternetLinks` [in] flag, if set to 1 Internet links will be converted to PDF hyperlinks
- `p_bUseRelativePaths` [in] flag, for cross document links, use relative paths for files
- `p_bChangeFileExtensionToPDF` [in] flag, for cross document links, change file extension to .pdf
- `p_bOpenFileInNewTab` [in] flag, for pdf documents links, open them in a new tab in Adobe Reader
- `p_bWaitPDF` [in] flag, if set function returns after pdf is saved and all actions executed

**Return values:**

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_OPENFILE_ERROR - failed to open the document
- NV_FILEPROCESS_ERROR - failed to read document information

1.4.11.4.35 ConvertWordDocument

The `ConvertWordDocument` converts a Word document to PDF. Internet and internal document links can be converted to PDF hyperlinks. Word Headings and Word bookmarks can be converted to PDF bookmarks.

```cpp
HRESULT ConvertWordDocument(
    [in, string] LPCWSTR p_wsDocName,
    [in] BOOL p_bConvertHeadings,
    [in] BOOL p_bConvertBookmarks,
```

---

**Copyright © 2020 Softland**
[in] BOOL p_bConvertCrossReferenceLinks,
[in] BOOL p_bConvertCrossDocumentLinks,
[in] BOOL p_bConvertInternetLinks,
[in] BOOL p_bConvertLinksInHeaderFooter,
[in] BOOL p_bUseRelativePaths,
[in] BOOL p_bChangeFileExtensionToPDF,
[in] BOOL p_bOpenFileInNewTab,
[in] BOOL p_bConvertFootEndNotesLinks,
[in] UINT p_nStyleCount,
[in, string] LPCWSTR p_pwsStyleView,
[in] BOOL p_bWaitPDF
);

Parameters:

_p_wsDocName
    [in] Word document name with full path
_p_bConvertHeadings
    [in] flag, if set to 1 Word Headings will be added as PDF bookmarks
_p_bConvertBookmarks
    [in] flag, if set to 1 Word bookmarks will be added as PDF bookmarks
_p_bConvertCrossReferenceLinks
    [in] flag, if set to 1 cross reference links (links inside the document) will be
_p_bConvertCrossDocumentLinks
    [in] flag, if set to 1 cross document links (links to other documents) will be
_p_bConvertInternetLinks
    [in] flag, if set to 1 Internet links will be converted to PDF hyperlinks
_p_bConvertLinksInHeaderFooter
    [in] flag, if set to 1 links from header and footer will be converted to PDF hyperlinks
_p_bUseRelativePaths
    [in] flag, for cross document links, use relative paths for files
_p_bChangeFileExtensionToPDF
    [in] flag, for cross document links, change file extension to .pdf
_p_bOpenFileInNewTab
    [in] flag, for pdf documents links, open them in a new tab in Adobe Reader
_p_bConvertFootEndNotesLinks
    [in] flag, if set to 1 footnote and endnote links will be converted to PDF hyperlinks
_p_nStyleCount
    [in] count of styles in p_pwsStyleView parameter
_p_pwsStyleView
    [in] string with a list of Word headings to be converted as bookmarks; Headings are separated by ";", and for each heading there are specified heading name, heading level and heading type (for now use 0 as Standard type). Sample: "Heading 1|1|0;Heading 2|2|0"
_p_bWaitPDF
    [in] flag, if set function returns after pdf is saved and all actions executed

Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED – Initialize was not called
NV_OPENFILE_ERROR – failed to open the document
NV_FILEPROCESS_ERROR – failed to read document information
1.4.11.4.36 ConvertWordDocument2

The **ConvertWordDocument2** converts a Word document to PDF. Internet and internal document links can be converted to PDF hyperlinks. Word Headings and Word bookmarks can be converted to PDF bookmarks.

```c
HRESULT ConvertWordDocument2(
    [in, string] BSTR p_wsDocName,
    [in] BOOL p_bConvertHeadings,
    [in] BOOL p_bConvertBookmarks,
    [in] BOOL p_bConvertCrossReferenceLinks,
    [in] BOOL p_bConvertCrossDocumentLinks,
    [in] BOOL p_bConvertInternetLinks,
    [in] BOOL p_bConvertLinksInHeaderFooter,
    [in] BOOL p_bUseRelativePaths,
    [in] BOOL p_bChangeFileExtensionToPDF,
    [in] BOOL p_bOpenFileInNewTab,
    [in] BOOL p_bConvertFootEndNotesLinks,
    [in] UINT p_nStyleCount,
    [in, string] BSTR p_pwsStyleView,
    [in] BOOL p_bWaitPDF
);
```

**Parameters:**

- **p_wsDocName**
  - [in] Word document name with full path
- **p_bConvertHeadings**
  - [in] flag, if set to 1 Word Headings will be added as PDF bookmarks
- **p_bConvertBookmarks**
  - [in] flag, if set to 1 Word bookmarks will be added as PDF bookmarks
- **p_bConvertCrossReferenceLinks**
  - [in] flag, if set to 1 cross reference links (links inside the document) will be converted to PDF hyperlinks
- **p_bConvertCrossDocumentLinks**
  - [in] flag, if set to 1 cross document links (links to other documents) will be converted to PDF hyperlinks
- **p_bConvertInternetLinks**
  - [in] flag, if set to 1 Internet links will be converted to PDF hyperlinks
- **p_bConvertLinksInHeaderFooter**
  - [in] flag, if set to 1 links from header and footer will be converted to PDF hyperlinks
- **p_bUseRelativePaths**
  - [in] flag, for cross document links, use relative paths for files
- **p_bChangeFileExtensionToPDF**
  - [in] flag, for cross document links, change file extension to .pdf
- **p_bOpenFileInNewTab**
  - [in] flag, for pdf documents links, open them in a new tab in Adobe Reader
- **p_bConvertFootEndNotesLinks**
  - [in] flag, if set to 1 footnote and endnote links will be converted to PDF hyperlinks
- **p_nStyleCount**
  - [in] count of styles in **p_pwsStyleView** parameter
- **p_pwsStyleView**
  - [in] string with a list of Word headings to be converted as bookmarks; Headings are separated by ";" and for each heading there are specified heading name, heading level and heading type (for now use 0 as Standard type). Sample: "Heading1;1;0;Heading2;2;0"
- **p_bWaitPDF**
  - [in] flag, if set function returns after pdf is saved and all actions executed
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_OPENFILE_ERROR - failed to open the document
NV_FILEPROCESS_ERROR - failed to read document information

1.4.11.4.37 CopyProfile

The CopyProfile method copies an existing profile to a new profile.

HRESULT CopyProfile(
    [in, string] LPCWSTR p_wsNewProfileName,
    [in]        BOOL    p_bPublicProfile,
    [in, string] LPCWSTR p_wsOldProfileId,
    [out]       LPWSTR* p_pwsNewProfileId
);

Parameters:
  p_wsNewProfileName
    [in] name of the new profile
  p_bPublicProfile
    [in] Flag if the profile is a public or a private profile
  p_wsOldProfileId
    [in] id for the profile to be copied
  p_pwsNewProfileId
    [out] the new profile id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_SERVICE_ERROR - cannot connect to novaPDF Server service
NV_PROFILE_ERROR - cannot read default profile
NV_PROFILE_SAVE_ERROR - cannot save new profile

1.4.11.4.38 CopyProfile2

The CopyProfile2 method copies an existing profile to a new profile.

HRESULT CopyProfile2(
    [in, string] BSTR p_wsNewProfileName,
    [in]        BOOL p_bPublicProfile,
    [in, string] BSTR p_wsOldProfileId,
    [out]       LPWSTR* p_pwsNewProfileId
);

Parameters:
  p_wsNewProfileName
    [in] name of the new profile
p_bPublicProfile
  [in] Flag if the profile is a public or a private profile
p_wsOldProfileId
  [in] id for the profile to be copied
p_pwsNewProfileId
  [out] the new profile id

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_SERVICE_ERROR - cannot connect to novaPDF Server service
  NV_PROFILE_ERROR - cannot read default profile
  NV_PROFILE_SAVE_ERROR - cannot save new profile

1.4.11.4.39 DeleteAction

The DeleteAction method deletes an existing action

HRESULT DeleteAction(
    [in, string] LPCWSTR p_wsActionId
);

Parameters:
  p_wsActionId
    [in] action id

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_OPTION - id not a valid guid
  NV_INVALID_ACTION - invalid action id

1.4.11.4.40 DeleteAction2

The DeleteAction2 method deletes an existing action

HRESULT DeleteAction(
    [in, string] BSTR p_wsActionId
);

Parameters:
  p_wsActionId
    [in] action id

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
1.4.11.4.41 DeleteBookmarkDefinition

The **DeleteBookmarkDefinition** method deletes an existing bookmark definition.

```cpp
HRESULT DeleteBookmarkDefinition(
    [in] SHORT p_nDefinition
);
```

**Parameters:**

- `p_nDefinition` [in] definition index

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_INVALID_BOOKMARK_DEF` - wrong bookmark definition index
- `NV_UNKNOWN_PROFILE` - no profile loaded

1.4.11.4.42 DeleteCustomProperty

The **DeleteCustomProperty** method deletes the custom property for the given index.

```cpp
HRESULT DeleteCustomProperty(
    [in] LONG p_nIndex
);
```

**Parameters:**

- `p_nIndex` [in] property index

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_CUSTOM_PROPERTY` - invalid custom property index

**Remarks:**

This method deletes the custom property at position given by `p_nIndex`

1.4.11.4.43 DeleteLayout

The **DeleteLayout** method deletes an existing layout for the specified object.

```cpp
HRESULT DeleteLayout(
    [in] LPCWSTR p_wsObjectId
);
```
[in] LPCWSTR p_wsLayoutId
);

Parameters:

p_pwsObjectId
    [in] object id (watermark text, watermark image, overlay, signature or content)

p_pwsLayoutId
    [in] layout id (obtained with GetLayout )

Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_LAYOUT - layout not found for specified object

1.4.11.4.44 DeleteLayout2

The DeleteLayout2 method deletes an existing layout for the specified object

HRESULT DeleteLayout2(
    [in] BSTR p_wsObjectId
    [in] BSTR p_wsLayoutId
);

Parameters:

p_pwsObjectId
    [in] object id (watermark text, watermark image, overlay, signature or content)

p_pwsLayoutId
    [in] layout id (obtained with GetLayout2 )

Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_LAYOUT - layout not found for specified object

1.4.11.4.45 DeleteNovaPrinter

The DeleteNovaPrinter method adds a temporary novaPDF printer in the system

HRESULT DeleteNovaPrinter(
    [in] LPCWSTR p_wsPrinterName
);

Parameters:

p_wsPrinterName
    [in] pointer to a null terminated Unicode string containing the name of the printer

Return values:

S_OK on success or COM error code
NV_INVALID_PRINTER_NAME - not a novaPDF printer
NV_ERROR_DELETE_PRINTER - there was an error when deleting the printer
Remarks:
This method must be called for printers added with AddNovaPrinter method, after finish printing documents. It will delete the temporary printer from the system. Use this method if you wish to work with temporary printers.

1.4.11.4.46 DeleteNovaPrinter2

The `DeleteNovaPrinter2` method adds a temporary novaPDF printer in the system.

```csharp
HRESULT DeleteNovaPrinter2(
    [in] BSTR p_wsPrinterName
);
```

Parameters:
- `p_wsPrinterName` [in] name of the printer to be deleted.

Return values:
- `S_OK` on success or COM error code
- `NV_INVALID_PRINTER_NAME` - not a novaPDF printer
- `NV_ERROR_DELETE_PRINTER` - there was an error when deleting the printer

Remarks:
This method must be called for printers added with AddNovaPrinter method, after finish printing documents. It will delete the temporary printer from the system. Use this method if you wish to work with temporary printers.

1.4.11.4.47 DeleteOverlay

The `DeleteOverlay` method deletes an existing overlay.

```csharp
HRESULT DeleteOverlay(
    [in, string] LPCWSTR p_wsOverlayId
);
```

Parameters:
- `p_wsOverlayId` [in] pointer to a null terminated Unicode string containing the overlay id

Return values:
- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_OVERLAY` - wrong overlay index

1.4.11.4.48 DeleteOverlay2

The `DeleteOverlay2` method deletes an existing overlay.

```csharp
HRESULT DeleteOverlay2(
    [in, string] BSTR p_wsOverlayId
);`
1.4.11.4.49 DeleteOverrideOptions

The **DeleteOverrideOptions** method removes all override options

```c
HRESULT DeleteOverrideOptions();
```

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - error deleting options

1.4.11.4.50 DeletePrinterActivePublicProfile

The **DeletePrinterActivePublicProfile** method removes the active public profile setting for a printer

```c
HRESULT tDeletePrinterActivePublicProfile(
    [in, string] LPCWSTR p_wsPrinterName
);
```

**Parameters:**
- p_wsPrinterName
  - [in, string] printer name

**Return values:**
- S_OK on success or COM error code
- NV_SERVICE_ERROR - error connecting to novaPDF Server service

**Remarks:**
Removes the active profile setting for the printer. The users will be allowed to change the active profile.

1.4.11.4.51 DeletePrinterActivePublicProfile2

The **DeletePrinterActivePublicProfile2** method removes the active public profile setting for a printer

```c
HRESULT tDeletePrinterActivePublicProfile2(
```
Parameters:
  p_wsProfileId
  [in] pointer to a null terminated Unicode string containing the id of the profile to delete.

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_SERVICE_ERROR - error connecting to novaPDF Server service
  NV_PROFILE_DELETE_ERROR - error deleting profile
  NV_PROFILE_ERROR - error reading profiles

1.4.11.4.53 DeleteProfile2

The DeleteProfile2 method deletes an existing profile.

Parameters:
  p_wsProfileId
  [in] the id of the profile to delete.

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_SERVICE_ERROR - error connecting to novaPDF Server service
  NV_PROFILE_DELETE_ERROR - error deleting profile
  NV_PROFILE_ERROR - error reading profiles
1.4.11.4.54 DeleteSaveRule

The **DeleteSaveRule** method deletes the save rule for the given index.

```c
HRESULT DeleteSaveRule(
    [in] LONG p_nIndex
);
```

**Parameters:**
- `p_nIndex` [in] tag index

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_SAVE_RULE - invalid save rule index

**Remarks:**
This method deletes the save rule at position given by p_nIndex.

1.4.11.4.55 DeleteUserTag

The **DeleteUserTag** method deletes the user tag for the given index.

```c
HRESULT DeleteUserTag(
    [in] LONG p_nIndex
);
```

**Parameters:**
- `p_nIndex` [in] tag index

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_USER_TAG - invalid user tag index

**Remarks:**
This method deletes the tag at position given by p_nIndex.

1.4.11.4.56 DeleteWatermarkImage

The **DeleteWatermarkImage** method deletes an existing watermark image.

```c
HRESULT DeleteWatermarkImage(
    [in, string] LPCWSTR p_wsWatermarkId
);
```

**Parameters:**
p_wsWatermarkId
  [in] pointer to a null terminated Unicode string containing the watermark id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong image watermark index

1.4.11.4.57 DeleteWatermarkImage2

The DeleteWatermarkImage2 method deletes an existing watermark image.
HRESULT DeleteWatermarkImage2(
    [in, string] BSTR p_wsWatermarkId
);

Parameters:
p_wsWatermarkId
  [in] the watermark id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong image watermark index

1.4.11.4.58 DeleteWatermarkText

The DeleteWatermarkText method deletes an existing watermark text.
HRESULT DeleteWatermarkText(
    [in, string] LPCWSTR p_wsWatermarkId
);

Parameters:
p_wsWatermarkId
  [in] pointer to a null terminated Unicode string containing the watermark id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong text watermark index

1.4.11.4.59 DeleteWatermarkText2

The DeleteWatermarkText2 method deletes an existing watermark text.
HRESULT DeleteWatermarkText2(
[in, string] BSTR p_wsWatermarkId
);

Parameters:
  p_wsWatermarkId
      [in] the watermark id

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_WATERMARK_IMG - wrong text watermark index

1.4.11.4.60 DisableAction

The **DisableAction** method disables an existing action

HRESULT DisableAction(
    [in, string] LPCWSTR p_wsActionId
);

Parameters:
  p_wsActionId
      [in] action id

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_INVALID_PROFILE - no profile loaded
  NV_INVALID_ACTION - invalid action id

1.4.11.4.61 DisableAction2

The **DisableAction2** method disables an existing action

HRESULT DisableAction2(
    [in, string] BSTR p_wsActionId
);

Parameters:
  p_wsActionId
      [in] action id

Return values:
  S_OK on success or COM error code
1.4.11.4.62 DisableActionType

The DisableActionType method disables an existing action.

```c
HRESULT DisableActionType(
    [in] LONG p_nActionType
);
```

**Parameters:**
- `p_nActionType` [in] action type

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - id not a valid guid
- NV_INVALID_ACTION - invalid action id

1.4.11.4.63 DisableCustomProperty

The DisableCustomProperty method disables the custom property for the given index.

```c
HRESULT DisableCustomProperty(
    [in] LONG p_nIndex
);
```

**Parameters:**
- `p_nIndex` [in] tag index

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_CUSTOM_PROPERTY - invalid custom property index

**Remarks:**
This method disables the custom property at position given by p_nIndex.

1.4.11.4.64 DisableSaveRule

The DisableSaveRule method disables the save rule for the given index.
HRESULT DisableSaveRule(
    [in] LONG p_nIndex
);

Parameters:
p_nIndex
    [in] tag index

Return values:
    S_OK on success or COM error code
    NV_NOT_INITIALIZED - Initialize was not called
    NV_UNKNOWN_PROFILE - no profile loaded
    NV_INVALID_SAVE_RULE - invalid save rule index

Remarks:
This method disables the save rule at position given by p_nIndex

1.4.11.4.65 DisableUserTag

The DisableUserTag method disables the user tag for the given index

HRESULT DisableUserTag(
    [in] LONG p_nIndex
);

Parameters:
p_nIndex
    [in] property index

Return values:
    S_OK on success or COM error code
    NV_NOT_INITIALIZED - Initialize was not called
    NV_UNKNOWN_PROFILE - no profile loaded
    NV_INVALID_USER_TAG - invalid user tag index

Remarks:
This method disables the tag at position given by p_nIndex

1.4.11.4.66 EnableAction

The EnableAction method enables an existing action

HRESULT EnableAction(
    [in, string] LPCWSTR p_wsActionId
);

Parameters:
p_wsActionId
    [in] action id
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - id not a valid guid
NV_INVALID_ACTION - invalid action id

1.4.11.4.67 EnableAction2
The EnableAction2 method enables an existing action

HRESULT EnableAction2(
    [in, string] BSTR p_wsActionId
);

Parameters:
p_wsActionId
    [in] action id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - id not a valid guid
NV_INVALID_ACTION - invalid action id

1.4.11.4.68 EnableActionType
The EnableActionType method enables an existing action

HRESULT EnableActionType(
    [in] LONG p_nActionType
);

Parameters:
p_nActionType
    [in] action type

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - id not a valid guid
NV_INVALID_ACTION - invalid action id

1.4.11.4.69 EnableCustomProperty
The EnableCustomProperty method enables the custom property for the given index
HRESULT EnableCustomProperty(
    [in] LONG p_nIndex
);

Parameters:
    p_nIndex
        [in] property index

Return values:
    S_OK on success or COM error code
    NV_NOT_INITIALIZED - Initialize was not called
    NV_UNKNOWN_PROFILE - no profile loaded
    NV_INVALID_CUSTOM_PROPERTY - invalid custom property index

Remarks:
This method enables the custom property at position given by p_nIndex

1.4.11.4.70 EnableSaveRule

The EnableSaveRule method enables the save rule for the given index

HRESULT EnableSaveRule(
    [in] LONG p_nIndex
);

Parameters:
    p_nIndex
        [in] tag index

Return values:
    S_OK on success or COM error code
    NV_NOT_INITIALIZED - Initialize was not called
    NV_UNKNOWN_PROFILE - no profile loaded
    NV_INVALID_SAVE_RULE - invalid save rule index

Remarks:
This method enables the save rule at position given by p_nIndex

1.4.11.4.71 EnableUserTag

The EnableUserTag method enables the user tag for the given index

HRESULT EnableUserTag(
    [in] LONG p_nIndex
);

Parameters:
    p_nIndex
        [in] tag index
1.4.11.4.72 GetAction

The GetAction method retrieves the action id and action type for the specified index in the action list.

```c
HRESULT GetAction(
    [in]  LONG  p_nIndex,
    [out, string] LPWSTR* p_pwsActionId,
    [out] LONG* p_pnType
);
```

Parameters:
- `p_nIndex` [in] action index
- `p_pwsActionId` [out] action id
- `p_pnType` [out] action type

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_USER_TAG - invalid user tag index

Remarks:
This method enables the tag at position given by `p_nIndex`

1.4.11.4.73 GetAction2

The GetAction2 method retrieves the action id and action type for the specified index in the action list.

```c
HRESULT GetAction2(
    [in]  LONG  p_nIndex,
    [out, string] BSTR* p_pwsActionId,
    [out] LONG* p_pnType
);
```

Parameters:
p_nIndex
   [in] action index
p_pwsActionId
   [out] action id
p_pnType
   [out] action type

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED – Initialize was not called
  NV_UNKNOWN_PROFILE – no profile loaded
  NV_INVALID_OPTION – wrong index

1.4.11.4.74 GetActionCount

The GetActionCount method retrieves the number of actions in the profile

HRESULT GetActionCount(
    [out] LONG* p_pnCount
);

Parameters:
  p_pnCount
     [out] actions count

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED – Initialize was not called
  NV_UNKNOWN_PROFILE – no profile loaded

1.4.11.4.75 GetActionOptionBool

The GetActionOptionBool method retrieves an option of boolean type for an action

HRESULT GetActionOptionBool(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [out] BOOL*  p_pbValue
);

Parameters:
  p_pwsActionId
     [in] Action id
  p_wsOption
     [in] option constant
  p_pbValue
[out] the value of the option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.76 GetActionOptionBool2
The GetActionOptionBool2 method retrieves an option of boolean type for an action

HRESULT GetActionOptionBool2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG p_nOption,
    [out] BOOL* p_pbValue
);

Parameters:
p_pwsActionId
    [in] Action id
p_wsOption
    [in] option constant
p_pbValue
    [out] the value of the option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.77 GetActionOptionEncryptedString

The `GetActionOptionEncryptedString` method retrieves an option of encrypted string type for an
action

```c
HRESULT GetActionOptionEncryptedString(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG p_nOption,
    [out, string] LPWSTR* p_pwsValue
);
```

Parameters:
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_pwsValue` [out] the value of the option

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.78 GetActionOptionEncryptedString2

The `GetActionOptionEncryptedString2` method retrieves an option of encrypted string type for an
action

```c
HRESULT GetActionOptionEncryptedString2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG p_nOption,
    [out, string] BSTR* p_pwsValue
);
```

Parameters:
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_pwsValue`
The `GetActionOptionFloat` method retrieves an option of float type for an action.

```c
HRESULT GetActionOptionFloat(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [out] FLOAT*  p_pfValue
);
```

**Parameters:**
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_pfValue` [out] the value of the option

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.80 GetActionOptionFloat2

The GetActionOptionFloat2 method retrieves an option of float type for an action.

```c
HRESULT GetActionOptionFloat2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [out] FLOAT*  p_pfValue
);
```

**Parameters:**
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_pfValue` [out] the value of the option

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.81 GetActionOptionLong

The GetActionOptionLong method retrieves an option of long type for an action.

```c
HRESULT GetActionOptionLong(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [out] LONG*  p_pnValue
);
```

**Parameters:**
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_pnValue` [out] the value of the option
**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

### 1.4.11.4.82 GetActionOptionLong2

The `GetActionOptionLong2` method retrieves an option of long type for an action.

```c
HRESULT GetActionOptionLong2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [out] LONG*  p_pnValue
);
```

**Parameters:**
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_pnValue` [out] the value of the option

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.83 GetActionOptionString

The **GetActionOptionString** method retrieves an option of string type for an action

```c
HRESULT GetActionOptionString(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [out, string] LPWSTR* p_pwsValue
);
```

**Parameters:**

- `p_pwsActionId`
  - [in] Action id
- `p_wsOption`
  - [in] option constant
- `p_pwsValue`
  - [out] the value of the option

**Return values:**

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.84 GetActionOptionString2

The **GetActionOptionString2** method retrieves an option of string type for an action

```c
HRESULT GetActionOptionString2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [out, string] BSTR* p_pwsValue
);
```

**Parameters:**

- `p_pwsActionId`
  - [in] Action id
- `p_wsOption`
  - [in] option constant
- `p_pwsValue`
  - [out] the value of the option
Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV UNKNOWN_PROFILE - no profile loaded
NV INVALID_ACTION - wrong action id
NV INVALID_OPTION - wrong option constant
NV PROFILE_ERROR - cannot find option in profile
NV WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.85 GetActiveProfile

The GetActiveProfile retrieves the id of the active profile (i.e. the profile that is used for printing).

HRESULT GetActiveProfile(
    [out] LPWSTR* p_wsProfileId
);

Parameters:
p_wsProfileId
    [out] pointer to a pointer to a null terminated Unicode string that will contain
    the id of the active profile. On success the caller is responsible for freeing the allocated memory with CoTaskMemFree.

Return values:

S_OK on success or COM error code
NV NOT_INITIALIZED - Initialize was not called
NV NO_ACTIVE_PROFILE - there is no active profile selected for the printer

1.4.11.4.86 GetActiveProfile2

The GetActiveProfile2 retrieves the id of the active profile (i.e. the profile that is used for printing).

HRESULT GetActiveProfile2(
    [out] BSTR* p_wsProfileId
);

Parameters:
p_wsProfileId
    [out] pointer to a pointer to a null terminated Unicode string that will contain
    the id of the active profile.

Return values:

S_OK on success or COM error code
NV NOT_INITIALIZED - Initialize was not called
NV NO_ACTIVE_PROFILE - there is no active profile selected for the printer
1.4.11.4.87 GetBookmarkDefinition

The GetBookmarkDefinition method retrieves an existing bookmark definition properties.

```c
HRESULT GetBookmarkDefinition(
    [in] SHORT p_nDefinition,
    [out] SHORT* p_pnHeading,
    [out] BOOL* p_pbEnabled,
    [out] BOOL* p_pbDetFont,
    [out, string] LPWSTR* p_pwsDetFont,
    [out] LONG* p_pnDetFontType,
    [out] BOOL* p_pbDetStyle,
    [out] BOOL* p_pbDetBold,
    [out] BOOL* p_pbDetItalic,
    [out] BOOL* p_pbDetSize,
    [out] INT* p_pnDetSizeVal,
    [out] FLOAT* p_pnDetSizePt,
    [out] BOOL* p_pbDispAsBold,
    [out] BOOL* p_pbDispAsItalic,
    [out] LONG* p_pnDispColor
);
```

Parameters:

- `p_nDefinition`: definition index
- `p_pnHeading`: heading index
- `p_pbEnabled`: definition is enabled
- `p_pbDetFont`: detect font flag
- `p_pwsDetFont`: font name
- `p_pbDetStyle`: detect font style
- `p_pbDetBold`: bold font
- `p_pbDetItalic`: italic font
- `p_pbDetSize`: detect font size
- `p_pnDetSizeVal`: font size
- `p_pnDetSizePt`: font size rounding
- `p_pbDispAsBold`: display as bold
- `p_pbDispAsItalic`: display as italic
- `p_pnDispColor`: font color (RGB value)
p_pbDispAsBold
  [out] display bookmark font bold
p_pbDispAsItalic
  [out] display bookmark font italic
p_pnDispColor
  [out] display bookmark font color

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_BOOKMARK_DEF - wrong bookmark definition index

1.4.11.4.88 GetBookmarkDefinition2

The GetBookmarkDefinition2 method retrieves an existing bookmark definition properties.

HRESULT GetBookmarkDefinition2(
  [in] SHORT p_nDefinition,
  [out] SHORT* p_pnHeading,
  [out] BOOL* p_pbEnabled,
  [out] BOOL* p_pbDetFont,
  [out, string] BSTR* p_pwsDetFont,
  [out] LONG* p_pnDetFontType,
  [out] BOOL* p_pbDetStyle,
  [out] BOOL* p_pbDetBold,
  [out] BOOL* p_pbDetItalic,
  [out] BOOL* p_pbDetSize,
  [out] INT* p_pnDetSizeVal,
  [out] FLOAT* p_pnDetSizePt,
  [out] BOOL* p_pbDetColor,
  [out] LONG* p_pnDetColor,
  [out] BOOL* p_pbDispAsBold,
  [out] BOOL* p_pbDispAsItalic,
  [out] LONG* p_pnDispColor
);

Parameters:
  p_nDefinition
    [in] definition index
  pnHeading
    [out] heading index
  pbEnabled
    [out] definition is enabled
  pbDetFont
    [out] detect font flag
  pwsDetFont
    [out] font name
  pbDetStyle
    [out] detect font style
  pnDispColor
    [out] display bookmark font color

1.4.11.489 GetBookmarkDefinitionCount

The `GetBookmarkDefinitionCount` method retrieves the number of bookmark definitions in a bookmark heading.

```c
HRESULT GetBookmarkDefinitionCount(
    [out] SHORT* p_pnCount
);
```

**Parameters:**

- `p_pnCount`  
  [out] count of bookmark headings

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_BOOKMARK_DEF` - wrong bookmark definition index
1.4.11.4.90 GetContentLayout

The GetContentLayout method retrieves the content object and its layout object

```c
HRESULT GetContentLayout(
    [out, string] LPWSTR* p_pwsContentId
    [out, string] LPWSTR* p_pwsLayoutId
);
```

**Parameters:**
- `p_pwsContentId` [out, string] - content id
- `p_pwsLayoutId` [out, string] - layout id

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_PROFILE_ERROR - error reading profile

**Remarks:**
The content layout defines how the printed content will be positioned on the PDF page. There is only one content object in the profile.
For layout options, see Working with Layout objects.

1.4.11.4.91 GetContentLayout2

The GetContentLayout2 method retrieves the content object and its layout object

```c
HRESULT GetContentLayout2(
    [out, string] BSTR* p_pwsContentId
    [out, string] BSTR* p_pwsLayoutId
);
```

**Parameters:**
- `p_pwsContentId` [out, string] - content id
- `p_pwsLayoutId` [out, string] - layout id

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_PROFILE_ERROR - error reading profile

**Remarks:**
The content layout defines how the printed content will be positioned on the PDF page. There is only one content object in the profile.
For layout options, see Working with Layout objects.

### 1.4.11.4.92 GetCustomProperty

The `GetCustomProperty` method returns the custom property for the given index

```c
HRESULT GetCustomProperty(
    [in] LONG p_nIndex,
    [out, string] LPWSTR* p_pwsPropertyName,
    [out, string] LPWSTR* p_pwsPropertyValue,
    [out] BOOL* p_pbEnabled
);
```

**Parameters:**
- `p_nIndex` [in] custom property index
- `p_pwsPropertyName` [out] custom property name
- `p_pwsPropertyValue` [out] custom property value
- `p_bEnabled` [out] flag, tag is enabled

**Return values:**
- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_CUSTOM_PROPERTY` - invalid custom property index

**Remarks:**
This method returns information about the custom property at position given by `p_nIndex`

### 1.4.11.4.93 GetCustomProperty2

The `GetCustomProperty2` method returns the custom property for the given index

```c
HRESULT GetCustomProperty2(
    [in] LONG p_nIndex,
    [out, string] BSTR* p_pwsPropertyName,
    [out, string] BSTR* p_pwsPropertyValue,
    [out] BOOL* p_pbEnabled
);
```

**Parameters:**
- `p_nIndex` [in] custom property index
- `p_pwsPropertyName` [out] custom property name
- `p_pwsPropertyValue` [out] custom property value
- `p_bEnabled` [out] flag, tag is enabled
[out] custom property value
p_bEnabled
[out] flag, tag is enabled

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_CUSTOM_PROPERTY - invalid custom property index

Remarks:
This method returns information about the custom property at position given by p_nIndex

1.4.11.4.94 GetCustomPropertiesCount
The GetCustomPropertiesCount method returns custom properties count

HRESULT GetCustomPropertiesCount(
    [out] LONG* p_pnCount
);

Parameters:
p_pnCount
    [in] custom properties count

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

1.4.11.4.95 GetFirstProfile
The GetFirstProfile starts an enumeration of profiles, retrieving the id of the first profile in the enumeration.

HRESULT GetFirstProfile(
    [out] LPWSTR* p_pwsProfileId
);

Parameters:
p_pwsProfileId
    [out] pointer to a pointer to a null terminated Unicode string containing the id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_SERVICE_ERROR - cannot connect to novaPDF Server service
NV_PROFILE_ERROR - cannot load profiles
Remarks:
GetFirstProfile is used with GetNextProfile to retrieve profile names.
Sample usage:
```c
hr = GetFirstProfile(&pId);
while (SUCCEEDED(hr) && hr != NV_NO_MORE_PROFILES) {
    // do something with pName
    // ...
    CoTaskMemFree(pId);
    // get next profile if it exists
    hr = GetNextProfile(&pId);
}
```

1.4.11.4.96 GetFirstProfile2

The GetFirstProfile2 starts an enumeration of profiles, retrieving the id of the first profile in the enumeration.
```c
HRESULT GetFirstProfile2(
    [out] BSTR* p_pwsProfileId
);
```

Parameters:
p_pwsProfileId
   [out] pointer to a pointer to a null terminated Unicode string containing the id of the first existing profile

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_SERVICE_ERROR - cannot connect to novaPDF Server service
NV_PROFILE_ERROR - cannot load profiles

1.4.11.4.97 GetFontOption

The GetFontOption method retrieves embed options for a given font
```c
HRESULT GetFontOption(
    [in, string] LPCWSTR p_wsFontName,
    [out] BOOL* p_pbAlwaysEmbed,
    [out] BOOL* p_pbNeverEmbed
);
```

Parameters:
p_wsFontName
   [in] font name
p_pbAlwaysEmbed
   [out] pointer to a boolean that will contain the always embed flag for the font
p_pbNeverEmbed
   [out] pointer to a boolean that will contain the never embed flag for the font

Return values:
S_OK on success or COM error code
1.4.11.4.98 GetFontOption2

The GetFontOption2 method retrieves embed options for a given font

```c
HRESULT GetFontOption2(
    [in, string] BSTR p_wsFontName,
    [out] BOOL* p_pbAlwaysEmbed,
    [out] BOOL* p_pbNeverEmbed
);
```

**Parameters:**
- `p_wsFontName` [in] font name
- `p_pbAlwaysEmbed` [out] pointer to a boolean that will contain the always embed flag for the font
- `p_pbNeverEmbed` [out] pointer to a boolean that will contain the never embed flag for the font

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong font name

1.4.11.4.99 GetLayout

The GetLayout method retrieves the layout id for the specified object in the loaded profile

```c
HRESULT GetLayout(
    [in, string] LPCWSTR p_wsObjectId,
    [in]  LONG  p_nIndex,
    [out, string] LPWSTR* p_pwsLayoutId
);
```

**Parameters:**
- `p_wsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_nIndex` [in] layout index
- `p_pwsLayoutId` [out] layout id
Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong object id
- NV_INVALID_LAYOUT - layout not found for specified object

Remarks:
For layout options, see Working with Layout objects.

1.4.11.4.100 GetLayout2

The GetLayout2 method retrieves the layout id for the specified object in the loaded profile

```c
HRESULT GetLayout2(
    [in, string] BSTR p_wsObjectId,
    [in]  LONG  p_nIndex,
    [out, string] BSTR* p_pwsLayoutId
);
```

Parameters:
- p_wsObjectId
  - [in] object id (watermark text, watermark image, overlay, signature or content)
- p_nIndex
  - [out] layout index
- p_pwsLayoutId
  - [out] layout id

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong object id
- NV_INVALID_LAYOUT - layout not found for specified object

Remarks:
For layout options, see Working with Layout objects.

1.4.11.4.101 GetLayoutCount

The GetLayoutCount method retrieves the count of layout for the specified object in the loaded profile

```c
HRESULT GetLayoutCount(
    [in, string] LPCWSTR p_pwsObjectId,
    [out] LONG* p_pnCount
);
```
1.4.11.4.102 GetLayoutCount2

The GetLayoutCount2 method retrieves the count of layout objects for the specified object in the loaded profile.

```c
HRESULT GetLayoutCount2(
    [in, string] BSTR p_pwsObjectId,
    [out] LONG* p_pnCount
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pnCount` [out] layouts count

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong object id

1.4.11.4.103 GetLayoutOptionBool

The GetLayoutOptionBool method retrieves an option of boolean type for a layout object.

```c
HRESULT GetLayoutOptionBool(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in]  LONG  p_nOption,
    [out] BOOL* p_pbValue
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pnCount` [out] layouts count

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong object id
Parameters:
P_pwsObjectId
    [in] object id (watermark text, watermark image, overlay, signature or content)
P_pwsLayoutId
    [in] layout id (obtained with GetLayout)
P_nOption
    [in] option constant
P_pbValue
    [out] will contain the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.104 GetLayoutOptionBool2

The GetLayoutOptionBool2 method retrieves an option of string type for a layout object

HRESULT GetLayoutOptionBool2(
    [in, string] BSTR p_pwsObjectId,
    [in, string] BSTR p_pwsLayoutId,
    [in]  LONG  p_nOption,
    [out] BOOL* p_pbValue
);

Parameters:
P_pwsObjectId
    [in] object id (watermark text, watermark image, overlay, signature or content)
P_pwsLayoutId
    [in] layout id (obtained with GetLayout2)
P_nOption
    [in] option constant
P_pbValue
    [out] will contain the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.105 GetLayoutOptionFloat

The GetLayoutOptionFloat method retrieves an option of float type for a layout object

```c
HRESULT GetLayoutOptionFloat(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in]  LONG   p_nOption,
    [out] FLOAT* p_pfValue
);
```

Parameters:
- p_pwsObjectId
  - [in] object id (watermark text, watermark image, overlay, signature or content)
- p_pwsLayoutId
  - [in] layout id (obtained with GetLayout)
- p_nOption
  - [in] option constant
- p_pfValue
  - [out] will contain the value of the retrieved option

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.106 GetLayoutOptionFloat2

The GetLayoutOptionFloat2 method retrieves an option of float type for a layout object

```c
HRESULT GetLayoutOptionFloat2(
```
[in, string] BSTR p_pwsObjectId,
[in, string] BSTR p_pwsLayoutId,
[in] LONG   p_nOption,
[out] FLOAT* p_pfValue
);

Parameters:

p_pwsObjectId
[in] object id (watermark text, watermark image, overlay, signature or content)
p_pwsLayoutId
[in] layout id (obtained with GetLayout2 )
p_nOption
[in] option constant
p_pfValue
[out] will contain the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.107 GetLayoutOptionLong

The GetLayoutOptionLong method retrieves an option of long type for a layout object

HRESULT GetLayoutOptionString(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in]  LONG  p_nOption,
    [out] LONG* p_plValue
);

Parameters:

p_pwsObjectId
[in] object id (watermark text, watermark image, overlay, signature or content)
p_pwsLayoutId
[in] layout id (obtained with GetLayout )
p_nOption
[in] option constant
p_plValue
[out] will contain the value of the retrieved option
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.108 GetLayoutOptionLong2

The GetLayoutOptionLong2 method retrieves an option of long type for a layout object

HRESULT GetLayoutOptionLong2(
    [in, string] BSTR p_pwsObjectId,
    [in, string] BSTR p_pwsLayoutId,
    [in]  LONG  p_nOption,
    [out] LONG* p_plValue
    );

Parameters:

    p_pwsObjectId
          [in] object id (watermark text, watermark image, overlay, signature or content)

    p_pwsLayoutId
          [in] layout id (obtained with GetLayout2 )

    p_nOption
          [in] option constant

    p_plValue
          [out] will contain the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.
1.4.11.4.109 GetLayoutOptionString

The `GetLayoutOptionString` method retrieves an option of string type for a layout object

```c
HRESULT GetLayoutOptionString(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in]    LONG   p_nOption,
    [out]   LPWSTR* p_pwsValue
);
```

Parameters:
- `p_pwsObjectId`: [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId`: [in] layout id (obtained with GetLayout)
- `p_nOption`: [in] option constant
- `p_pwsValue`: [out] pointer to a pointer to a null terminated Unicode string that will contain the value of the retrieved option. On success this value must be freed by the caller with CoTaskMemFree.

Return values:
- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.110 GetLayoutOptionString2

The `GetLayoutOptionString2` method retrieves an option of string type for a layout object

```c
HRESULT GetLayoutOptionString2(
    [in, string] BSTR p_pwsObjectId,
    [in, string] BSTR p_pwsLayoutId,
    [in]    LONG   p_nOption,
    [out]   BSTR* p_pwsValue
);
```

Parameters:
- `p_pwsObjectId`: [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId`: [in] layout id (obtained with GetLayout2)
p_nOption
    [in] option constant
p_pwsValue
    [out] pointer to a pointer to a null terminated Unicode string that will contain

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.111 GetNextProfile

The GetNextProfile continues an enumeration of profiles started with GetFirstProfile, retrieving
the id of the next profile in the enumeration.

HRESULT GetNextProfile(
    [out] LPWSTR* p_pwsProfileId
);

Parameters:
    p_pwsProfileId
    [out] pointer to a pointer to a null terminated Unicode string containing the name

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_ENUM_NOT_INIT - enumerate was not started, GetFirstProfile was not
called before
NV_NO_MORE_PROFILES - there are no more profiles to enumerate

Remarks:
GetNextProfile is used with GetFirstProfile to retrieve profile names.
Sample usage:
hr = GetFirstProfile(&pName);
while (SUCCEEDED(hr) && hr != NV_NO_MORE_PROFILES) {
    // do something with pName
    // ...
    CoTaskMemFree(pName);
    // get next profile if it exists
    hr = GetNextProfile(&pName);}
1.4.11.4.112 GetNextProfile2

The `GetNextProfile2` continues an enumeration of profiles started with `GetFirstProfile`, retrieving the id of the next profile in the enumeration.

```
HRESULT GetNextProfile2(
    [out] BSTR* p_pwsProfileId
);
```

**Parameters:**

- `p_pwsProfileId`  
  [out] pointer to a pointer to a null terminated Unicode string containing the name of the next existing profile.

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_ENUM_NOT_INIT` - enumerate was not started, `GetFirstProfile` was not called before
- `NV_NO_MORE_PROFILES` - there are no more profiles to enumerate

1.4.11.4.113 GetOptionBool

The `GetOptionBool` method retrieves a printing option of boolean type

```
HRESULT GetOptionBool(
    [in]  LONG  p_nOption,
    [out] BOOL* p_pbValue
);
```

**Parameters:**

- `p_nOption`  
  [in] option constant
- `p_pbValue`  
  [out] pointer to a boolean that will contain the value of the retrieved option.

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

**Remarks:**

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
### 1.4.11.4.114 GetOptionEncryptedString

The `GetOptionEncryptedString` method retrieves an option of type encrypted string.

```c
HRESULT GetOptionEncryptedString(
    [in]  LONG    p_nOption,
    [out] LPWSTR* p_pwsValue
);
```

**Parameters:**
- `p_nOption` [in] option constant
- `p_pwsValue` [out] pointer to a pointer to a null terminated Unicode string that will contain the value of the retrieved option. On success this value must be freed by the caller with CoTaskMemFree.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

### 1.4.11.4.115 GetOptionEncryptedString2

The `GetOptionEncryptedString` method retrieves an option of type encrypted string.

```c
HRESULT GetOptionEncryptedString2(
    [in]  LONG    p_nOption,
    [out] BSTR* p_pwsValue
);
```

**Parameters:**
- `p_nOption` [in] option constant
- `p_pwsValue` [out] pointer to a pointer to a BSTR string that will contain the value of the retrieved option. On success this value must be freed by the caller with CoTaskMemFree.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.116 GetOptionLong

The GetOptionLong method retrieves a printing option of long int type

```c
HRESULT GetOptionLong(
    [in]  LONG  p_nOption,
    [out] LONG* p_plValue
);
```

Parameters:
- p_nOption
  [in] option constant
- p_plValue
  [out] pointer to a long integer that will contain the value of the retrieved option

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.117 GetOptionString

The GetOptionString method retrieves a printing option of string type for a given profile

```c
HRESULT GetOptionString(
    [in]  LONG    p_nOption,
    [out] LPWSTR* p_pwsValue
);
```

Parameters:
- p_nOption
  [in] option constant
- p_pwsValue
  [out] pointer to a string that will contain the value of the retrieved option
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.118 GetOptionString2

The GetOptionString2 method retrieves a printing option of string type for a given profile

    HRESULT GetOptionString2(
        [in]  LONG  p_nOption,
        [out] BSTR*  p_pwsValue
    );

Parameters:

    p_nOption
        [in] option constant

    p_pwsValue
        [out] return the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.119 GetOverlay

The GetOverlay method retrieves the overlay

    HRESULT GetOverlay(
        [in]  LONG  p_nIndex,
        [out, string] LPWSTR*  p_pwsOverlayId
    );
Parameters:

\begin{verbatim}
p_nIndex,
    [in] - overlay index
p_pwsOverlayId
    [out, string] - overlay id
\end{verbatim}

Return values:

\begin{verbatim}
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_PROFILE_ERROR - error reading profile
\end{verbatim}

Remarks:
There can be multiple overlays in a profile.
For layout options, see Working with Layout objects.

1.4.11.4.120 GetOverlay2

The GetOverlay2 method retrieves the overlay

\begin{verbatim}
HRESULT GetOverlay2(
    [in] LONG p_nIndex,
    [out, string] BSTR* p_pwsOverlayId
);
\end{verbatim}

Parameters:

\begin{verbatim}
p_nIndex,
    [in] - overlay index
p_pwsOverlayId
    [out, string] - overlay id
\end{verbatim}

Return values:

\begin{verbatim}
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_PROFILE_ERROR - error reading profile
\end{verbatim}

Remarks:
There can be multiple overlays in a profile.
For layout options, see Working with Layout objects.

1.4.11.4.121 GetOverlayCount

The GetOverlayCount method retrieves the number of overlays.

\begin{verbatim}
HRESULT GetOverlayCount(
    [out] LONG* p_pnCount
);
\end{verbatim}
Parameters:

- `p_pnCount` [out] count of overlays in profile

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded

1.4.11.4.122 GetOverlayOptionBool

The **GetOverlayOptionBool** method retrieves an overlay option of boolean type

```c
HRESULT GetOverlayOptionBool(
    [in, string] LPCWSTR p_wsOverlayId,
    [in]  LONG  p_nOption,
    [out] BOOL* p_pbValue
);
```

Parameters:

- `p_wsOverlayId` [in] overlay id (obtained with AddOverlay)
- `p_nOption` [in] option constant
- `p_pbValue` [out] pointer to a boolean that will contain the value of the retrieved option

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.123 GetOverlayOptionBool2

The **GetOverlayOptionBool2** method retrieves an overlay option of boolean type

```c
HRESULT GetOverlayOptionBool2(
    [in, string] BSTR p_wsOverlayId,
    [in]  LONG  p_nOption,
    [out] BOOL* p_pbValue
);
```
BOOL* p_pbValue

Parameters:
p_wsOverlayId
    [in] overlay id (obtained with AddOverlay2 )
p_nOption
    [in] option constant
p_pbValue
    [out] pointer to a boolean that will contain the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OVERLAY - wrong overlay id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.124 GetOverlayOptionEncryptedString

The GetOverlayOptionEncryptedString method retrieves an overlay option of encrypted string type

HRESULT GetOverlayOptionEncryptedString(
    [in, string] LPCWSTR p_wsOverlayId,
    [in]  LONG  p_nOption,
    [out, string] LPWSTR* p_pwsValue
);

Parameters:
p_wsOverlayId
    [in] overlay id (obtained with AddOverlay )
p_nOption
    [in] option constant
p_pwsValue
    [out] pointer to a string that will contain the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OVERLAY - wrong overlay id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.125 GetOverlayOptionEncryptedString

The `GetOverlayOptionEncryptedString` method retrieves an overlay option of encrypted string type

```cpp
HRESULT GetOverlayOptionEncryptedString2(  
    [in, string]  BSTR p_wsOverlayId,  
    [in]  LONG  p_nOption,  
    [out, string]  BSTR* p_pwsValue
);
```

Parameters:
- p_wsOverlayId  
  [in] overlay id (obtained with AddOverlay )
- p_nOption  
  [in] option constant
- p_pwsValue  
  [out] pointer to a string that will contain the value of the retrieved option

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.126 GetOverlayOptionFloat

The `GetOverlayOptionFloat` method retrieves an overlay option of float type

```cpp
HRESULT GetOverlayOptionFloat(  
    [in, string]  LPCWSTR p_wsOverlayId,  
    [in]  LONG  p_nOption,  
    [out]  FLOAT* p_pfValue
);
```
Parameters:

- *p_wsOverlayId*
  - [in] overlay id (obtained with AddOverlay)
- *p_nOption*
  - [in] option constant
- *p_pfValue*
  - [out] pointer to a float that will contain the value of the retrieved option

Return values:

- S_OK on success or COM error code
- **NV_NOT_INITIALIZED** - Initialize was not called
- **NV_UNKNOWN_PROFILE** - no profile loaded
- **NV_INVALID_OVERLAY** - wrong overlay id
- **NV_INVALID_OPTION** - wrong option constant
- **NV_PROFILE_ERROR** - cannot find option in profile
- **NV_WRONG_OPTION_TYPE** - option is not of type long

Remarks:

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.127 GetOverlayOptionFloat2

The **GetOverlayOptionFloat2** method retrieves an overlay option of float type

```c
HRESULT GetOverlayOptionFloat2(
    [in, string] BSTR p_wsOverlayId,  
    [in]  LONG  p_nOption,           
    [out] FLOAT* p_pfValue
);
```

Parameters:

- *p_wsOverlayId*
  - [in] overlay id (obtained with AddOverlay2)
- *p_nOption*
  - [in] option constant
- *p_pfValue*
  - [out] pointer to a float that will contain the value of the retrieved option

Return values:

- S_OK on success or COM error code
- **NV_NOT_INITIALIZED** - Initialize was not called
- **NV_UNKNOWN_PROFILE** - no profile loaded
- **NV_INVALID_OVERLAY** - wrong overlay id
- **NV_INVALID_OPTION** - wrong option constant
- **NV_PROFILE_ERROR** - cannot find option in profile
- **NV_WRONG_OPTION_TYPE** - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.128 GetOverlayOptionLong

The `GetOverlayOptionLong` method retrieves an overlay option of boolean type

```c
HRESULT GetOverlayOptionLong(
    [in, string] LPCWSTR p_wsOverlayId,
    [in] LONG  p_nOption,
    [out] LONG* p_plValue
);
```

**Parameters:**
- `p_wsOverlayId` [in] overlay id (obtained with AddOverlay)
- `p_nOption` [in] option constant
- `p_plValue` [out] pointer to a long that will contain the value of the retrieved option

**Return values:**
- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_OVERLAY` - wrong overlay id
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.129 GetOverlayOptionLong2

The `GetOverlayOptionLong2` method retrieves an overlay option of long type

```c
HRESULT GetOverlayOptionLong2(
    [in, string] BSTR p_wsOverlayId,
    [in]  LONG  p_nOption,
    [out]  LONG* p_plValue
);
```

**Parameters:**
- `p_wsOverlayId` [in] overlay id (obtained with AddOverlay2)
- `p_nOption` [in] option constant
- `p_plValue` [out] pointer to a long that will contain the value of the retrieved option
p_plValue
   [out] pointer to a long that will contain the value of the retrieved option

Return values:
   S_OK on success or COM error code
   NV_NOT_INITIALIZED - Initialize was not called
   NV_UNKNOWN_PROFILE - no profile loaded
   NV_INVALID_OVERLAY - wrong overlay id
   NV_INVALID_OPTION - wrong option constant
   NV_PROFILE_ERROR - cannot find option in profile
   NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.130 GetOverlayOptionString

The GetOverlayOptionString method retrieves an overlay option of string type

```
HRESULT GetOverlayOptionString(
   [in, string] LPCWSTR p_wsOverlayId,
   [in]  LONG  p_nOption,
   [out, string] LPWSTR* p_pwsValue
);
```

Parameters:
   p_wsOverlayId
      [in] overlay id (obtained with AddOverlay )
   p_nOption
      [in] option constant
   p_pwsValue
      [out] pointer to a string that will contain the value of the retrieved option

Return values:
   S_OK on success or COM error code
   NV_NOT_INITIALIZED - Initialize was not called
   NV_UNKNOWN_PROFILE - no profile loaded
   NV_INVALID_OVERLAY - wrong overlay id
   NV_INVALID_OPTION - wrong option constant
   NV_PROFILE_ERROR - cannot find option in profile
   NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.131 GetOverlayOptionString2

The GetOverlayOptionString2 method retrieves an overlay option of string type.

```c
HRESULT GetOverlayOptionString2(
    [in, string] BSTR p_wsOverlayId,
    [in]  LONG  p_nOption,
    [out, string] BSTR* p_pwsValue
);
```

**Parameters:**
- p_wsOverlayId
  - [in] overlay id (obtained with AddOverlay2)
- p_nOption
  - [in] option constant
- p_pwsValue
  - [out] pointer to a string that will contain the value of the retrieved option

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.132 GetOverrideOptionBool

The GetOverrideOptionBool method gets an override printing option of boolean type.

```c
HRESULT GetOverrideOptionBool(
    [in] LONG    p_nOption,
    [out] BOOL*  p_pbValue
);
```

**Parameters:**
- p_nOption
  - [in] option constant
- p pbValue
  - [out] bool value

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant
Remarks:
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas. Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.133 GetOverrideOptionEncryptedString

The **GetOverrideOptionEncryptedString** method gets an override printing option of encrypted string type

```c
HRESULT GetOverrideOptionEncryptedString(
    [in] LONG    p_nOption,
    [out, string] LPWSTR*  p_pwsValue
);
```

Parameters:
- `p_nOption` [in] option constant
- `p_pwsValue` [out] string value

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

Remarks:
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas. Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.134 GetOverrideOptionEncryptedString2

The **GetOverrideOptionEncryptedString2** method gets an override printing option of encrypted string type

```c
HRESULT GetOverrideOptionEncryptedString2(
    [in] LONG    p_nOption,
    [out, string] BSTR*  p_pwsValue
);
```

Parameters:
- `p_nOption` [in] option constant
- `p_pwsValue` [out] string value

Return values:
- S_OK on success or COM error code
Remarks:
You can find the complete list of override options Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
Override options are not part of the profile. These options override the options from the active
profile.

1.4.11.4.135 GetOverrideOptionLong

The **GetOverrideOptionLong** method gets an override printing option of long type

```c
HRESULT GetOverrideOptionLong(
    [in] LONG    p_nOption,
    [out] LONG*  p_pValue
);
```

Parameters:
- p_nOption [in] option constant
- p_pValue [out] long integer value

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

Remarks:
You can find the complete list of override options Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
Override options are not part of the profile. These options override the options from the active
profile.

1.4.11.4.136 GetOverrideOptionString

The **GetOverrideOptionString** method gets an override printing option of string type

```c
HRESULT GetOverrideOptionString(
    [in] LONG    p_nOption,
    [out, string] LPWSTR*  p_pwsValue
);
```

Parameters:
- p_nOption [in] option constant
- p_pwsValue [out] string value

Return values:
- S_OK on success or COM error code
Remarks:
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas. Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.137 GetOverrideOptionString2

The GetOverrideOptionString2 method gets an override printing option of string type

```c
HRESULT GetOverrideOptionString2(
    [in] LONG    p_nOption,
    [out, string] BSTR*  p_pwsValue
);
```

Parameters:
- p_nOption
  - [in] option constant
- p_pwsValue
  - [out] string value

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

Remarks:
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas. Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.138 GetPDFFileName

The GetPDFFileName method retrieves the name of the last generated PDF file.

```c
HRESULT GetPDFFileName(
    [in] BOOL p_bPrintStarted,
    [out, string] LPWSTR* p_pwsFileName
);
```

Parameters:
- p_bPrintStarted
  - [in] flag, what file name to retrieve. See Remarks.
- p_pwsFileName
  - [out] pointer to a pointer to a null terminated Unicode string that will contain the name of the last generated PDF file. On success this value must be freed by the caller with CoTaskMemFree.

Return values:
Remarks:
Because the novaPDF SDK 10 works with the printer spooler queue, the documents sent to the printer are added to the queue. If there are already some other documents in the queue, the current document is not processed until the previous ones are finished.

There are two PDF file names you can find out, depending on the value of the p_bPrintStarted flag:
- the name of the PDF file that was just sent to the printer
- the name of the PDF file that is currently processed by the printer

This information is available only on the computer that starts the print job, if the PDF file is saved local and not on the network.

1.4.11.4.139 GetPDFFileName2

The GetPDFFileName2 method retrieves the name of the last generated PDF file.

```c
HRESULT GetPDFFileName2(
    [in] BOOL p_bPrintStarted,
    [out, string] BSTR* p_pwsFileName
);
```

Parameters:
- p_bPrintStarted
  [in] flag, what file name to retrieve. See Remarks.
- p_pwsFileName
  [out] will contain the file name.

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called

Remarks:
Because the novaPDF SDK 10 works with the printer spooler queue, the documents sent to the printer are added to the queue. If there are already some other documents in the queue, the current document is not processed until the previous ones are finished.

There are two PDF file names you can find out, depending on the value of the p_bPrintStarted flag:
- the name of the PDF file that was just sent to the printer
- the name of the PDF file that is currently processed by the printer

This information is available only on the computer that starts the print job, if the PDF file is saved local and not on the network.
1.4.11.4.140 GetSaveRule

The *GetSaveRule* method returns the save rule for the given index

```c
HRESULT GetSaveRule(
    [in] LONG p_nIndex,
    [out] LONG* p_pnType,
    [out, string] LPWSTR* p_pwsName,
    [out, string] LPWSTR* p_pwsDescription,
    [out, string] LPWSTR* p_pwsText,
    [out, string] LPWSTR* p_pwsFormat,
    [out] BOOL* p_pbEnabled
);
```

**Parameters:**
- `p_nIndex` [in] save rule index
- `p_pnType` [out] save rule type (0-remove from start, 1- remove from end, 2 - remove all,
- `p_pwsName` [out] rule name
- `p_pwsDescription` [out] rule description
- `p_pwsText` [out] text to remove or regular expression
- `p_pwsFormat` [out] format for regular expression
- `p_pbEnabled` [out] flag, tag is enabled

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_SAVE_RULE - invalid save rule index

**Remarks:**
This method retrieves information about the save rule at given index

1.4.11.4.141 GetSaveRule2

The *GetSaveRule2* method returns the save rule for the given index

```c
HRESULT GetSaveRule2(
    [in] LONG p_nIndex,
    [out] LONG* p_pnType,
    [out, string] BSTR* p_pwsName,
    [out, string] BSTR* p_pwsDescription,
    [out, string] BSTR* p_pwsText,
```
[out, string] BSTR* p_pwsFormat,
[out] BOOL* p_pbEnabled
);

Parameters:
  p_nIndex
    [in] save rule index
  p pnType
    [out] save rule type (0-remove from start, 1- remove from end, 2 - remove all,
  p_pwsName
    [out] rule name
  p_pwsDescription
    [out] rule description
  p_pwsText
    [out] text to remove or regular expression
  p_pwsFormat
    [out] format for regular expression
  p_pbEnabled
    [out] flag, tag is enabled

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_SAVE_RULE - invalid save rule index

Remarks:
This method retrieves information about the save rule at given index

1.4.11.4.142 GetSaveRulesCount

The GetSaveRulesCount method returns save rules count

HRESULT GetSaveRulesCount(
    [out] LONG* p pnCount
);

Parameters:
  p pnCount
    [in] tags count

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
1.4.11.4.143 GetSignature

The GetSignature method retrieves the signature and its layout object

```cpp
HRESULT GetSignature(
    [out, string] LPWSTR* p_pwsSignatureId
    [out, string] LPWSTR* p_pwsLayoutId
);
```

**Parameters:**
- `p_pwsSignatureId` [out, string] - signature id
- `p_pwsLayoutId` [out, string] - layout id

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_PROFILE_ERROR - error reading profile

**Remarks:**
There can be only one signature in a profile.
For layout options, see Working with Layout objects.

1.4.11.4.144 GetSignature2

The GetSignature2 method retrieves the signature and its layout object

```cpp
HRESULT GetSignature2(
    [out, string] BSTR* p_pwsSignatureId
    [out, string] BSTR* p_pwsLayoutId
);
```

**Parameters:**
- `p_pwsSignatureId` [out, string] - signature id
- `p_pwsLayoutId` [out, string] - layout id

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_PROFILE_ERROR - error reading profile

**Remarks:**
There can be only one signature in a profile.
For layout options, see Working with Layout objects.

### 1.4.11.4.145 GetUserTag

The **GetUserTag** method returns the user tag for the given index.

```c
HRESULT GetUserTag(
    [in] LONG p_nIndex,
    [out, string] LPWSTR* p_pwsTag,  
    [out, string] LPWSTR* p_pwsDefaultValue, 
    [out] BOOL* p_pbEnabled
);
```

**Parameters:**

- `p_nIndex` - [in] tag index
- `p_wsTag` - [out] user tag
- `p_wsDefaultValue` - [out] default tag value
- `p_bEnabled` - [out] flag, tag is enabled

**Return values:**

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_USER_TAG - invalid user tag index

**Remarks:**

This method returns information about the tag at position given by `p_nIndex`.

### 1.4.11.4.146 GetUserTag2

The **GetUserTag2** method returns the user tag for the given index.

```c
HRESULT GetUserTag2(
    [in] LONG p_nIndex,
    [out, string] BSTR* p_pwsTag,  
    [out, string] BSTR* p_pwsDefaultValue, 
    [out] BOOL* p_pbEnabled
);
```

**Parameters:**

- `p_nIndex` - [in] tag index
- `p_wsTag` - [out] user tag
- `p_wsDefaultValue` - [out] default tag value
- `p_bEnabled` - [out] flag, tag is enabled
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_USER_TAG - invalid user tag index

Remarks:
This method returns information about the tag at position given by p_nIndex

1.4.11.4.147 GetUserTagsCount

The GetUserTagsCount method returns user tags count

HRESULT GetUserTagsCount(
    [out] LONG* p_pnCount
);

Parameters:
p_pnCount
    [in] - tags count

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded

1.4.11.4.148 GetWatermarkImage

The GetWatermarkImage method retrieves an existing image watermark properties.

HRESULT GetWatermarkImage(
    [in] LONG p_nIndex,
    [out, string] LPWSTR* p_pwsWatermarkId
);

Parameters:
p_nIndex,
    [in] - watermark index
p_pwsWatermarkId
    [out, string] - watermark id

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong image watermark index
1.4.11.4.149 GetWatermarkImage2

The `GetWatermarkImage2` method retrieves an existing image watermark properties.

```c
HRESULT GetWatermarkImage2(
    [in]  LONG  p_nIndex,
    [out, string]  BSTR*  p_pwsWatermarkId
);
```

**Parameters:**
- `p_nIndex`, [in] - watermark index
- `p_pwsWatermarkId`, [out, string] - watermark id

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong image watermark index

1.4.11.4.150 GetWatermarkImageCount

The `GetWatermarkImageCount` method retrieves the number of image watermarks.

```c
HRESULT GetWatermarkImageCount(
    [out]  SHORT*  p_pnCount
);
```

**Parameters:**
- `p_pnCount`, [out] count of image watermarks

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded

1.4.11.4.151 GetWatermarkImageOptionBool

The `GetWatermarkImageOptionBool` method retrieves a watermark image option of boolean type.

```c
HRESULT GetWatermarkImageOptionBool(
    [in, string]  LPCWSTR  p_pwsWatermarkId,
    [in]  LONG  p_nOption,
    [out]  BOOL*  p_pbValue
);
```
Parameters:

\[
P_{\text{pwsWatermarkId}} \\
\quad \text{[in]} \quad \text{watermark id (obtained with GetWatermarkImage )} \\
P_{\text{nOption}} \\
\quad \text{[in]} \quad \text{option constant} \\
P_{\text{pbValue}} \\
\quad \text{[out]} \quad \text{pointer to a boolean that will contain the value of the retrieved option}
\]

Return values:

\[
\text{S_OK on success or COM error code} \\
\text{NV_NOT_INITIALIZED} - \text{Initialize was not called} \\
\text{NV_UNKNOWN_PROFILE} - \text{no profile loaded} \\
\text{NV_INVALID_WATERMARK_IMG} - \text{wrong watermark id} \\
\text{NV_INVALID_OPTION} - \text{wrong option constant} \\
\text{NV_PROFILE_ERROR} - \text{cannot find option in profile} \\
\text{NV_WRONG_OPTION_TYPE} - \text{option is not of type long}
\]

Remarks:

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.152 GetWatermarkImageOptionBool2

The GetWatermarkImageOptionBool2 method retrieves a watermark image option of boolean type

\[
\text{HRESULT GetWatermarkImageOptionBool2(} \\
\quad \text{[in, string]} \quad \text{BSTR p_pwsWatermarkId,} \\
\quad \text{[in]} \quad \text{LONG p_nOption,} \\
\quad \text{[out]} \quad \text{BOOL* p_pbValue} \\
\); \\
\]

Parameters:

\[
P_{\text{pwsWatermarkId}} \\
\quad \text{[in]} \quad \text{watermark id (obtained with GetWatermarkImage2 )} \\
P_{\text{nOption}} \\
\quad \text{[in]} \quad \text{option constant} \\
P_{\text{pbValue}} \\
\quad \text{[out]} \quad \text{pointer to a boolean that will contain the value of the retrieved option}
\]

Return values:

\[
\text{S_OK on success or COM error code} \\
\text{NV_NOT_INITIALIZED} - \text{Initialize was not called} \\
\text{NV_UNKNOWN_PROFILE} - \text{no profile loaded} \\
\text{NV_INVALID_WATERMARK_IMG} - \text{wrong watermark id} \\
\text{NV_INVALID_OPTION} - \text{wrong option constant} \\
\text{NV_PROFILE_ERROR} - \text{cannot find option in profile} \\
\text{NV_WRONG_OPTION_TYPE} - \text{option is not of type long}
\]
Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.153 GetWatermarkImageOptionEncryptedString

The **GetWatermarkImageOptionEncryptedString** method retrieves a watermark image option of encrypted string type

```c
HRESULT GetWatermarkImageOptionEncryptedString(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]  LONG    p_nOption,
    [out, string] LPWSTR* p_pwsValue
);
```

**Parameters:**
- `p_pwsWatermarkId`
  - [in] watermark id (obtained with GetWatermarkImage)
- `p_nOption`
  - [in] option constant
- `p_pwsValue`
  - [out] pointer to a pointer to a null terminated Unicode string that will contain the value of the retrieved option. On success this value must be freed by the caller with CoTaskMemFree.

**Return values:**
- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_WATERMARK_IMG` - wrong watermark id
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.154 GetWatermarkImageOptionEncryptedString2

The **GetWatermarkImageOptionEncryptedString2** method retrieves a watermark image option of encrypted string type

```c
HRESULT GetWatermarkImageOptionEncryptedString2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]  LONG    p_nOption,
    [out, string] BSTR* p_pwsValue
);
```

**Parameters:**
The `GetWatermarkImageOptionFloat` method retrieves a watermark image option of float type.

```c
HRESULT GetWatermarkImageOptionFloat(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG   p_nOption,
    [out] FLOAT* p_pfValue
);
```

**Parameters:**
- `p_pwsWatermarkId`  
  [in] watermark id (obtained with `GetWatermarkImage`)
- `p_nOption`  
  [in] option constant
- `p_pfValue`  
  [out] pointer to a pointer to a null terminated Unicode string that will contain

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.155 **GetWatermarkImageOptionFloat**

The `GetWatermarkImageOptionFloat` method retrieves a watermark image option of float type.
folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.156 GetWatermarkImageOptionFloat2

The `GetWatermarkImageOptionFloat2` method retrieves a watermark image option of boolean type

```c
HRESULT GetWatermarkImageOptionFloat2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]    LONG  p_nOption,
    [out]   FLOAT* p_pfValue
);
```

**Parameters:**
- `p_pwsWatermarkId` [in] watermark id (obtained with GetWatermarkImage2 )
- `p_nOption` [in] option constant
- `p_pfValue` [out] the value of the retrieved option

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.157 GetWatermarkImageOptionLong

The `GetWatermarkImageOptionLong` method retrieves a watermark image option of long int type

```c
HRESULT GetWatermarkImageOptionLong(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]    LONG  p_nOption,
    [out]   LONG* p_plValue
);
```

**Parameters:**
- `p_pwsWatermarkId` [in] watermark id (obtained with GetWatermarkImage )
- `p_nOption` [in] option constant
p_plValue
   [out] pointer to a pointer to a null terminated Unicode string that will contain

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.158 GetWatermarkImageOptionLong2

The GetWatermarkImageOptionLong2 method retrieves a watermark image option of long type

HRESULT GetWatermarkImageOptionLong2(
   [in, string] BSTR p_pwsWatermarkId,
   [in]  LONG  p_nOption,
   [out] LONG* p_plValue
);

Parameters:
p_pwsWatermarkId
   [in] watermark id (obtained with GetWatermarkImage2 )
p_nOption
   [in] option constant
p_plValue
   [out] the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.159 GetWatermarkImageOptionString

The GetWatermarkImageOptionString method retrieves a watermark image option of string type

```c
HRESULT GetWatermarkImageOptionString(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]    LONG    p_nOption,
    [out, string] LPWSTR* p_pwsValue
);
```

**Parameters:**
- p_pwsWatermarkId
  - [in] watermark id (obtained with GetWatermarkImage)
- p_nOption
  - [in] option constant
- p_pwsValue
  - [out] pointer to a pointer to a null terminated Unicode string that will contain the value of the retrieved option. On success this value must be freed by the caller with CoTaskMemFree.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.160 GetWatermarkImageOptionString2

The GetWatermarkImageOptionString2 method retrieves a watermark image option of string type

```c
HRESULT GetWatermarkImageOptionString2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]    LONG    p_nOption,
    [out, string] BSTR* p_pwsValue
);
```

**Parameters:**
- p_pwsWatermarkId
  - [in] watermark id (obtained with GetWatermarkImage2)
- p_nOption
  - [in] option constant
- p_pwsValue
  - [out] the value of the retrieved option
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.161 GetWatermarkTextOptionBool

The GetWatermarkTextOptionBool method retrieves a watermark text option of boolean type

```cpp
HRESULT GetWatermarkTextOptionBool(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]    LONG  p_nOption,
    [out]   BOOL* p_pbValue
);
```

Parameters:
- `p_pwsWatermarkId` [in] watermark id (obtained with GetWatermarkText)
- `p_nOption` [in] option constant
- `p_pValue` [out] pointer to a pointer to a null terminated Unicode string that will contain

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.162 GetWatermarkTextOptionBool2

The GetWatermarkTextOptionBool2 method retrieves a watermark text option of boolean type
HRESULT GetWatermarkTextOptionBool2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]  LONG  p_nOption,
    [out] BOOL* p_pbValue
);

Parameters:

p_pwsWatermarkId
    [in] watermark id (obtained with GetWatermarkText2 )
p_nOption
    [in] option constant
p_pbValue
    [out] the value of the retrieved option

Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_TXT - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.163 GetWatermarkTextOptionFloat

The GetWatermarkTextOptionFloat method retrieves a watermark text option of float type

HRESULT GetWatermarkTextOptionFloat(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]  LONG   p_nOption,
    [out] FLOAT* p_pfValue
);

Parameters:

p_pwsWatermarkId
    [in] watermark id (obtained with GetWatermarkText )
p_nOption
    [in] option constant
p_pfValue
    [out] pointer to a pointer to a null terminated Unicode string that will contain

Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_TXT - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.164 GetWatermarkTextOptionFloat2

The GetWatermarkTextOptionFloat2 method retrieves a watermark text option of boolean type

```c
HRESULT GetWatermarkTextOptionFloat2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]  LONG  p_nOption,
    [out] FLOAT* p_pfValue
);
```

Parameters:
- `p_pwsWatermarkId`
  - [in] watermark id (obtained with GetWatermarkText2)
- `p_nOption`
  - [in] option constant
- `p_pfValue`
  - [out] the value of the retrieved option

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_TXT - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.165 GetWatermarkTextOptionLong

The GetWatermarkTextOptionLong method retrieves a watermark text option of long int type

```c
HRESULT GetWatermarkTextOptionLong(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]  LONG  p_nOption,
    [out] LONG* p_plValue
);
```
Parameters:

- `p_pwsWatermarkId`  
  [in] watermark id (obtained with GetWatermarkText2)
- `p_nOption`  
  [in] option constant
- `p_plValue`  
  [out] pointer to a pointer to a null terminated Unicode string that will contain the value of the retrieved option. On success this value must be freed by the caller with CoTaskMemFree.

Return values:

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_WATERMARK_TXT` - wrong watermark id
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

Remarks:

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

### 1.4.11.4.166 GetWatermarkTextOptionLong2

The `GetWatermarkTextOptionLong2` method retrieves a watermark text option of long type

```
HRESULT GetWatermarkTextOptionLong2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]  LONG  p_nOption,
    [out]  LONG* p_plValue
);
```

Parameters:

- `p_pwsWatermarkId`  
  [in] watermark id (obtained with GetWatermarkText2)
- `p_nOption`  
  [in] option constant
- `p_plValue`  
  [out] the value of the retrieved option

Return values:

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_WATERMARK_TXT` - wrong watermark id
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long
Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.167 GetWatermarkTextOptionString

The GetWatermarkTextOptionString method retrieves a watermark text option of string type

```c
HRESULT GetWatermarkTextOptionString(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]    LONG    p_nOption,
    [out, string] LPWSTR* p_pwsValue
);
```

Parameters:
- `p_pwsWatermarkId` [in] watermark id (obtained with GetWatermarkText)
- `p_nOption` [in] option constant
- `p_pwsValue` [out] pointer to a pointer to a null terminated Unicode string that will contain

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_TXT - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.168 GetWatermarkTextOptionString2

The GetWatermarkTextOptionString2 method retrieves a watermark text option of string type

```c
HRESULT GetWatermarkTextOptionString2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]    LONG    p_nOption,
    [out, string] BSTR* p_pwsValue
);
```

Parameters:
- `p_pwsWatermarkId` [in] watermark id (obtained with GetWatermarkText2)
- `p_nOption`
[in] option constant
p_pwsValue
  [out] the value of the retrieved option

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_TXT - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

### 1.4.11.4.169 GetWatermarkText

The **GetWatermarkText** method retrieves an existing image watermark properties.

```
HRESULT GetWatermarkText(
    [in] LONG p_nIndex,
    [out, string] LPWSTR* p_pwsWatermarkId
);
```

**Parameters:**

- p_nIndex,
  - [in] - watermark index
- p_pwsWatermarkId
  - [out, string] - watermark id

**Return values:**

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong image watermark index

### 1.4.11.4.170 GetWatermarkText2

The **GetWatermarkText2** method retrieves an existing image watermark properties.

```
HRESULT GetWatermarkText2(
    [in] LONG p_nIndex,
    [out, string] BSTR* p_pwsWatermarkId
);
```

**Parameters:**

- p_nIndex,
  - [in] - watermark index
- p_pwsWatermarkId
1.4.11.4.171 GetWatermarkTextCount

The GetWatermarkTextCount method retrieves the number of image watermarks.

```c
HRESULT GetWatermarkTextCount(
    [out] SHORT* p_pnCount
);
```

Parameters:
- `p_pnCount` [out] count of image watermarks

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong image watermark index

1.4.11.4.172 Initialize

The Initialize method initializes the INovaPdfOptions interface

```c
HRESULT Initialize(
    [in] LPCWSTR p_wsPrinterName,
    [in] LPCWSTR p_wsLicenseKey
);
```

Parameters:
- `p_wsPrinterName` [in] pointer to a null terminated Unicode string containing the name of the printer
- `p_wsLicenseKey` [in] pointer to a null terminated Unicode string containing the license key

Return values:
- S_OK on success or COM error code
- NV_INVALID_PRINTER_NAME - cannot find printer with given printer name
- NV_NOT_A_NOVAPDF_PRINTER - printer is not a novaPDF SDK 10
- NV_INVALID_LICENSE - cannot read license or not a SDK license
- NV_SERVICE_ERROR - cannot connect to novaPDF Server service

Remarks:
This method must be called prior to calling any method from the INovaPdfOptions interface.
1.4.11.4.173 Initialize2

The Initialize2 method initializes the INovaPdfOptions interface

```csharp
HRESULT Initialize2(
    [in] BSTR p_wsPrinterName,
    [in] BSTR p_wsLicenseKey
);
```

**Parameters:**
- `p_wsPrinterName` [in] printer name
- `p_wsLicenseKey` [in] license key

**Return values:**
- `S_OK` on success or COM error code
- `NV_INVALID_PRINTER_NAME` - cannot find printer with given printer name
- `NV_NOT_A_NOVAPDF_PRINTER` - printer is not a novaPDF SDK 10
- `NV_INVALID_LICENSE` - cannot read license or not a SDK license
- `NV_SERVICE_ERROR` - cannot connect to novaPDF Server service

**Remarks:**
This method must be called prior to calling any method from the INovaPdfOptions interface.

1.4.11.4.174 InitializeOLEUsage

The InitializeOLEUsage method initializes the OLE server licensing

```csharp
HRESULT InitializeOLEUsage(
    [in] BSTR p_pwstrOLEProgID,
);
```

**Parameters:**
- `p_pwstrOLEProgID` [in] pointer to a Unicode string containing the ProgID for the OLE server that will perform the print to the novaPDF SDK 10.

**Return values:**
- `S_OK` on success or COM error code

**Remarks:**
This method must be called prior to initializing the OLE object that will perform the print to the novaPDF SDK 10.

1.4.11.4.175 InitializeSilent

The InitializeSilent method initializes the INovaPdfOptions interface silently

```csharp
HRESULT InitializeSilent(
    [in] LPCWSTR p_wsPrinterName,
    [in] LPCWSTR p_wsLicenseKey
);
```

**Parameters:**
- `p_wsPrinterName` [in] printer name
- `p_wsLicenseKey` [in] license key

**Return values:**
- `S_OK` on success or COM error code
p_wsPrinterName
  [in] pointer to a null terminated Unicode string containing the name of the printer to configure
p_wsLicenseKey
  [in] pointer to a null terminated Unicode string containing the license key

Return values:
S_OK on success or COM error code
NV_INVALID_PRINTER_NAME - cannot find printer with given printer name
NV_NOT_A_NOVAPDF_PRINTER - printer is not a novaPDF SDK 10
NV_INVALID_LICENSE - cannot read license or not a SDK license
NV_SERVICE_ERROR - cannot connect to novaPDF Server service

Remarks:
This method can be used instead of the Initialize method, when you don't want to have message boxes shown with error messages. Use it when your application runs as a windows service or on a server computer.

1.4.11.4.176 InitializeSilent2

The InitializeSilent2 method initializes the INovaPdfOptions interface silently

HRESULT InitializeSilent2(
  [in] BSTR p_wsPrinterName,
  [in] BSTR p_wsLicenseKey
);

Parameters:

p_wsPrinterName
  [in] pointer to a BSTR containing the name of the printer to configure
p_wsLicenseKey
  [in] pointer to a BSTR containing the license key

Return values:
S_OK on success or COM error code
NV_INVALID_PRINTER_NAME - cannot find printer with given printer name
NV_NOT_A_NOVAPDF_PRINTER - printer is not a novaPDF SDK 10
NV_INVALID_LICENSE - cannot read license or not a SDK license
NV_SERVICE_ERROR - cannot connect to novaPDF Server service

Remarks:
This method can be used instead of the Initialize method, when you don't want to have message boxes shown with error messages. Use it when your application runs as a windows service or on a server computer.

1.4.11.4.177 LicenseApplication

The LicenseApplication method licences an application to print to novaPDF

HRESULT LicenseApplication(
  [in] BSTR p_pwstrAppName,
);
Parameters:

p_pwstrAppName
[in] pointer to a Unicode string containing the name of the application that will be executed

Return values:
S_OK on success or COM error code

Remarks:
This method must be called prior to launching the application with the specified name. This call assures that the application will print without the notice on bottom of pages.

1.4.11.4.178 LicenseOLEServer

The LicenseOLEServer method licenses the OLE server prior initialized with InitializeOLEServer

HRESULT LicenseOLEServer(void);

Return values:
S_OK on success or COM error code

Remarks:
This method must be called after initializing the OLE object that will perform the print to the novaPDF SDK 10

1.4.11.4.179 LicenseShellExecuteFile

The LicenseShellExecuteFile method licences a document to be printed with ShellExecute

HRESULT LicenseShellExecuteFile(
[in] BSTR p_pwstrFileName,
);

Parameters:

p_pwstrFileName
[in] pointer to a Unicode string containing the name of the file that will be licensed

Return values:
S_OK on success or COM error code

Remarks:
This method must be called prior to calling the ShellExecute function for the given parameter. This call assures that the document will be printed without the notice on bottom of pages, even if the application that prints the document is already opened.

1.4.11.4.180 LoadProfile

The LoadProfile method loads an existing profile.

HRESULT LoadProfile(
[in] LPCWSTR p_wsProfileId
);

Parameters:
p_wsProfileId
    [in] pointer to a null terminated Unicode string containing the id of the profile

Return values:
    S_OK on success or COM error code
    NV_NOT_INITIALIZED - Initialize was not called
    NV_SERVICE_ERROR - error connecting to novaPDF Server service
    NV_PROFILE_ERROR - error reading profiles

1.4.11.4.181 LoadProfile2

The LoadProfile2 method loads an existing profile.

HRESULT LoadProfile2(
    [in] BSTR p_wsProfileId
);

Parameters:
    p_wsProfileId
        [in] id of the profile to load

Return values:
    S_OK on success or COM error code
    NV_NOT_INITIALIZED - Initialize was not called
    NV_SERVICE_ERROR - error connecting to novaPDF Server service
    NV_PROFILE_ERROR - error reading profiles

1.4.11.4.182 ModifyBookmarkDefinition

The ModifyBookmarkDefinition method modifies an existing bookmark definition, having the characteristics specified by the method parameters.

HRESULT ModifyBookmarkDefinition(
    [in] SHORT p_nDefinition,
    [in] SHORT p_nHeading,
    [in] BOOL p_bEnabled,
    [in] BOOL p_bDetFont,
    [in, string] LPCWSTR p_wsDetFont,
    [in] BOOL p_bDetStyle,
    [in] BOOL p_bDetBold,
    [in] BOOL p_bDetItalic,
    [in] BOOL p_bDetSize,
    [in] FLOAT p_nDetSizeVal,
    [in] FLOAT p_nDetSizePt,
    [in] BOOL p_bDetColor,
    [in] LONG p_nDetColor,
    [in] BOOL p_bDispAsBold,
    [in] BOOL p_bDispAsItalic,
    [in] LONG p_nDispColor
);

Parameters:
    p_nDefinition
1.4.11.4.183 ModifyBookmarkDefinition2

The ModifyBookmarkDefinition2 method modifies an existing bookmark definition, having the characteristics specified by the method parameters.

```c
HRESULT ModifyBookmarkDefinition2(
    [in] SHORT p_nDefinition,
    [in] SHORT p_nHeading,
    [in] BOOL p_bEnabled,
    [in] BOOL p_bDetFont,
    [in] _in definition index
    p_nHeading
    [in] heading index
    p_bEnabled
    [in] definition is enabled
    p_bDetFont
    [in] detect font flag
    p_wsDetFont
    [in] font name
    p_bDetStyle
    [in] detect font style
    p_bDetBold
    [in] bold font
    p_bDetItalic
    [in] italic font
    p_bDetSize
    [in] detect font size
    p_nDetSizeVal
    [in] font size
    p_nDetSizePt
    [in] font size rounding
    p_bDetColor
    [in] detect font color
    p_nDetColor
    [in] font color (RGB value)
    p_bDispAsBold
    [in] display bookmark font bold
    p_bDispAsItalic
    [in] display bookmark font italic
    p_nDispColor
    [in] display bookmark font color
    p_wsProfileName
    [in] pointer to a null terminated Unicode string containing the profile to modify
    p_bPublicProfile
    [in] Flag if the profile is a public or a private profile.
)

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_BOOKMARK_DEF - wrong bookmark definition index
```
Parameters:

- `p_nDefinition`: [in] definition index
- `p_nHeading`: [in] heading index
- `p_bEnabled`: [in] definition is enabled
- `p_bDetFont`: [in] detect font flag
- `p_wsDetFont`: [in] font name
- `p_bDetStyle`: [in] detect font style
- `p_bDetBold`: [in] bold font
- `p_bDetItalic`: [in] italic font
- `p_bDetSize`: [in] detect font size
- `p_nDetSizeVal`: [in] font size
- `p_nDetSizePt`: [in] font size rounding
- `p_bDetColor`: [in] detect font color
- `p_nDetColor`: [in] font color (RGB value)
- `p_bDispAsBold`: [in] display bookmark font bold
- `p_bDispAsItalic`: [in] display bookmark font italic
- `p_nDispColor`: [in] display bookmark font color
- `p_wsProfileName`: [in] pointer to a BSTR containing the profile to modify. If this parameter is an empty string, the current active profile is used.
- `p_bPublicProfile`: [in] Flag if the profile is a public or a private profile.
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_BOOKMARK_DEF - wrong bookmark definition index

1.4.11.4.184 RegisterEventWindow

The RegisterEventWindow registers a window with the printer in order to receive printing messages.

```c
HRESULT RegisterEventWindow(
    [in] LONG p_hWnd
);
```

Parameters:
- p_hWnd
  - [in] handle to the window (cast to a LONG value), that will receive the printer messages

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called

1.4.11.4.185 RegisterNovaEvent

The RegisterNovaEvent registers a Windows event that will be signaled by the printer

```c
HRESULT RegisterNovaEvent(
    [in] LPCWSTR p_wsEventName
);
```

Parameters:
- p_wsEventName
  - [in] Name of the event. See How to use events topic for a list of possible event names.

Return values:
S_OK - on success
S_FALSE - event cannot be created

1.4.11.4.186 RegisterNovaEvent2

The RegisterNovaEvent2 registers a Windows event that will be signaled by the printer

```c
HRESULT RegisterNovaEvent2(
    [in] BSTR p_wsEventName
);
```

Parameters:
- p_wsEventName
  - [in] Name of the event. See How to use events topic for a list of possible event names.

Return values:
S_OK - on success
S_FALSE - event cannot be created

1.4.11.4.187 RestoreDefaultPrinter

The RestoreDefaultPrinter method restores the default printer to the printer that was default before calling SetDefaultPrinter.

HRESULT RestoreDefaultPrinter(void);

Parameters:
none

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_NODEFAULT_PRINTER - SetDefaultPrinter was not called

Remarks:
After calling SetDefaultPrinter with an INovaPdfOptions object, call RestoreDefaultPrinter with the same object to restore the original default printer.

1.4.11.4.188 SaveProfile

The SaveProfile method loads an existing profile.

HRESULT SaveProfile(void);

Parameters:
none

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_SERVICE_ERROR - error connecting to novaPDF Server service
NV_NO_PROFILE - no profile loaded
NV_PROFILE_ERROR - error reading profiles
NV_PROFILE_SAVE_ERROR - error saving profile

1.4.11.4.189 SetActionOptionBool

The SetActionOptionBool method sets an option of boolean type for an action

HRESULT SetActionOptionBool(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG p_nOption,
    [in] BOOL p_bValue
);

Parameters:
p_pwsActionId
    [in] Action id
p_wsOption
[in] option constant
p_bValue
[in] the value of the option to set.

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.190 SetActionOptionBool2

The SetActionOptionBool2 method sets an option of boolean type for an action

HRESULT SetActionOptionBool2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [in] BOOL    p_bValue
);

Parameters:
p_pwsActionId
    [in] Action id
p_wsOption
    [in] option constant
p_bValue
    [in] the value of the option to set.

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.191 SetActionOptionEncryptedString

The **SetActionOptionEncryptedString** method sets an option of encrypted string type for an action.

```c
HRESULT SetActionOptionEncryptedString(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

**Parameters:**
- p_pwsActionId
  - [in] Action id
- p_wsOption
  - [in] option constant
- p_wsValue
  - [in] the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.192 SetActionOptionEncryptedString2

The **SetActionOptionEncryptedString2** method sets an option of encrypted string type for an action.

```c
HRESULT SetActionOptionEncryptedString2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG p_nOption,
    [in, string] BSTR p_wsValue
);
```

**Parameters:**
- p_pwsActionId
  - [in] Action id
- p_wsOption
  - [in] option constant
- p_wsValue
  - [in] the value of the option to set.
p_wsValue
    [in] the value of the option to set.

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.193 SetActionOptionFloat

The SetActionOptionFloat method sets an option of float type for an action

HRESULT SetActionOptionFloat(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [in] FLOAT   p_fValue
);

Parameters:
p_pwsActionId
    [in] Action id
p_wsOption
    [in] option constant
p_fValue
    [in] the value of the option to set.

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.194 SetActionOptionFloat2

The `SetActionOptionFloat2` method sets an option of float type for an action

```c
HRESULT SetActionOptionFloat2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG p_nOption,
    [in] FLOAT p_fValue
);
```

**Parameters:**
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_fValue` [in] the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_ACTION - wrong action id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.195 SetActionOptionLong

The `SetActionOptionLong` method sets an option of float type for an action

```c
HRESULT SetActionOptionLong(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG p_nOption,
    [in] LONG p_nValue
);
```

**Parameters:**
- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] option constant
- `p_nValue` [in] the value of the option to set.
Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.196 SetActionOptionLong2

The `SetActionOptionLong2` method sets an option of float type for an action

```c
HRESULT SetActionOptionLong2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG    p_nOption,
    [in] LONG    p_nValue
);
```

Parameters:
- `p_pwsActionId`
  - [in] Action id
- `p_wsOption`
  - [in] option constant
- `p_nValue`
  - [in] the value of the option to set.

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.197 SetActionOptionString

The **SetActionOptionString** method sets an option of string type for an action

```
HRESULT SetActionOptionString(
    [in, string] LPCWSTR p_pwsActionId,
    [in] LONG p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

Parameters:

- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] Option constant

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - No profile loaded
- NV_INVALID_ACTION - Wrong action id
- NV_INVALID_OPTION - Wrong option constant
- NV_PROFILE_ERROR - Cannot find option in profile
- NV_WRONG_OPTION_TYPE - Option is not of type long

Remarks:

You can find the complete list of option names in the Profile option strings chapter. In the include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.198 SetActionOptionString2

The **SetActionOptionString2** method sets an option of string type for an action

```
HRESULT SetActionOptionString2(
    [in, string] BSTR p_pwsActionId,
    [in] LONG p_nOption,
    [in, string] BSTR p_wsValue
);
```

Parameters:

- `p_pwsActionId` [in] Action id
- `p_wsOption` [in] Option constant

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_ACTION - wrong action id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.199 SetActiveProfile

The **SetActiveProfile** sets the active profile (i.e. the profile that will be used for printing).

```cpp
HRESULT SetActiveProfile(
    [in] LPCWSTR p_wsProfileId
);
```

Parameters:

- p_wsProfileId
  - [in] pointer to a null terminated Unicode string that contains the id of the profile that is to be set as active

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - the profile specified by p_wsProfileId does not exist
- NV_PUBLIC_PROFILE - active profile cannot be change due to propagate active profile flag
- NV_PROFILE_ERROR - private active profile cannot be set because private profiles are not allowed

1.4.11.4.200 SetActiveProfile2

The **SetActiveProfile2** sets the active profile (i.e. the profile that will be used for printing).

```cpp
HRESULT SetActiveProfile2(
    [in] BSTR* p_wstrProfileId
);
```

Parameters:

- p_wstrProfileName
  - [in] pointer to a BSTR that contains the id of the profile that is to be set as active

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - the profile specified by p_wstrProfileId does not exist
- NV_PUBLIC_PROFILE - active profile cannot be change due to propagate active profile flag
active profile flag
NV_PROFILE_ERROR - private active profile cannot be set because private profiles are not allowed

1.4.11.4.201 SetCustomProperty

The SetCustomProperty method changes the custom property for the given index

```c
HRESULT SetCustomProperty(
    [in] LONG p_nIndex,
    [in, string] LPCWSTR p_wsPropertyName,
    [in, string] LPCWSTR p_wsPropertyValue,
    [in] BOOL p_bEnabled
);
```

Parameters:
- `p_nIndex` [in] custom property index
- `p_wsPropertyName` [in] custom property name
- `p_wsPropertyValue` [in] custom property value
- `p_bEnabled` [in] flag, custom property is enabled

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_CUSTOM_PROPERTY - invalid custom property index

Remarks:
This method changes information for the custom property at position given by `p_nIndex`

1.4.11.4.202 SetCustomProperty2

Enter topic text here.

1.4.11.4.203 SetDefaultPrinter

The SetDefaultPrinter method sets the current printer (the one specified in Initialize) as default printer.

```c
HRESULT SetDefaultPrinter(void);
```

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called

Remarks:
After calling SetDefaultPrinter with an INovaPdfOptions object, call RestoreDefaultPrinter with the same object to restore the original default printer. Do not call SetDefaultPrinter twice,
without calling RestoreDefaultPrinter between the calls or else the original default printer will not be restored.

1.4.11.4.204 SetFontOption

The `SetFontOption` method sets embed options for a given font

```csharp
HRESULT SetFontOption(
    [in, string] LPCWSTR p_wsFontName,
    [in] BOOL p_bAlwaysEmbed,
    [in] BOOL p_bNeverEmbed
);
```

Parameters:
- `p_wsFontName` [in] font name
- `p_bAlwaysEmbed` [out] always embed flag for the font
- `p_bNeverEmbed` [out] never embed flag for the font

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong font name

1.4.11.4.205 SetFontOption2

The `SetFontOption2` method sets embed options for a given font

```csharp
HRESULT SetFontOption2(
    [in, string] BSTR p_wsFontName,
    [in] BOOL p_bAlwaysEmbed,
    [in] BOOL p_bNeverEmbed
);
```

Parameters:
- `p_wsFontName` [in] font name
- `p_bAlwaysEmbed` [out] always embed flag for the font
- `p_bNeverEmbed` [out] never embed flag for the font

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong font name

1.4.11.4.206 SetLayoutOptionBool

The SetLayoutOptionBool method sets an option of boolean type for a layout object

```csharp
HRESULT SetLayoutOptionBool(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in] LONG p_nOption,
    [in] BOOL p_bValue
);
```

Parameters:
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId` [in] layout id (obtained with GetLayout)
- `p_nOption` [in] option constant
- `p_bValue` [in] the value of the option to set.

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.207 SetLayoutOptionBool2

The SetLayoutOptionBool2 method sets an option of boolean type for a layout object

```csharp
HRESULT SetLayoutOptionBool2(
    [in, string] BSTR p_pwsObjectId,
    [in, string] BSTR p_pwsLayoutId,
    [in] LONG p_nOption,
    [in] BOOL p_bValue
);
```

Parameters:
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
The `SetLayoutOptionFloat` method sets an option of float type for a layout object:

```c
HRESULT SetLayoutOptionFloat(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in] LONG p_wsOption,
    [in] FLOAT p_fValue
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId` [in] layout id (obtained with GetLayout2 )
- `p_wsOption` [in] option constant
- `p_fValue` [in] the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NVUNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

### 1.4.11.4.208 SetLayoutOptionFloat

The `SetLayoutOptionFloat` method sets an option of float type for a layout object.

```c
HRESULT SetLayoutOptionFloat(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in] LONG p_wsOption,
    [in] FLOAT p_fValue
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId` [in] layout id (obtained with GetLayout )
- `p_wsOption` [in] option constant
- `p_fValue` [in] the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NVUNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

### 1.4.11.4.209 SetLayoutOptionFloat2

The **SetLayoutOptionFloat2** method sets an option of boolean type for a layout object

```c
HRESULT SetLayoutOptionFloat2(
    [in, string] BSTR p_pwsObjectId,
    [in, string] BSTR p_pwsLayoutId,
    [in] LONG p_nOption,
    [in] FLOAT p_fValue
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId` [in] layout id (obtained with GetLayout2)
- `p_wsOption` [in] option constant
- `p_fValue` [in] the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

### 1.4.11.4.210 SetLayoutOptionLong

The **SetLayoutOptionLong** method sets an option of long type for a layout object

```c
HRESULT SetLayoutOptionLong(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in] LONG p_nOption,
    [in] LONG p_lValue
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId` [in] layout id (obtained with GetLayout2)
[in] layout id (obtained with GetLayout)

\textbf{p wsOption}

[in] option constant

\textbf{p lValue}

[in] the value of the option to set.

\textbf{Return values:}

S_OK on success or COM error code

NV_NOT_INITIALIZED - Initialize was not called

NV_UNKNOWN_PROFILE - no profile loaded

NV_INVALID_OPTION - wrong option constant

NV_PROFILE_ERROR - cannot find option in profile

NV_WRONG_OPTION_TYPE - option is not of type long

\textbf{Remarks:}

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

For layout options, see Working with Layout objects.

\textbf{1.4.11.4.211 SetLayoutOptionLong2}

The \texttt{SetLayoutOptionLong2} method sets an option of long type for a layout object

\begin{verbatim}
HRESULT SetLayoutOptionLong2(
    [in, string] BSTR p_pwsObjectId,
    [in, string] BSTR p_pwsLayoutId,
    [in] LONG p_nOption,
    [in] LONG p_lValue
);
\end{verbatim}

\textbf{Parameters:}

\textbf{p_pwsObjectId}

[in] object id (watermark text, watermark image, overlay, signature or content)

\textbf{p_pwsLayoutId}

[in] layout id (obtained with GetLayout2)

\textbf{p_wsOption}

[in] option constant

\textbf{p_lValue}

[in] the value of the option to set.

\textbf{Return values:}

S_OK on success or COM error code

NV_NOT_INITIALIZED - Initialize was not called

NV_UNKNOWN_PROFILE - no profile loaded

NV_INVALID_OPTION - wrong option constant

NV_PROFILE_ERROR - cannot find option in profile

NV_WRONG_OPTION_TYPE - option is not of type long

\textbf{Remarks:}

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
For layout options, see Working with Layout objects.

1.4.11.4.212 SetLayoutOptionString

The `SetLayoutOptionString` method sets an option of string type for a layout object

```c
HRESULT SetLayoutOptionString(
    [in, string] LPCWSTR p_pwsObjectId,
    [in, string] LPCWSTR p_pwsLayoutId,
    [in] LONG    p_nOption,
    [in] LPCWSTR p_wsValue
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId` [in] layout id (obtained with GetLayout)
- `p_wsOption` [in] option constant
- `p_wsValue` [in] the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

For layout options, see Working with Layout objects.

1.4.11.4.213 SetLayoutOptionString2

The `SetLayoutOptionString2` method sets an option of string type for a layout object

```c
HRESULT SetLayoutOptionString2(
    [in, string] BSTR p_pwsObjectId,
    [in, string] BSTR p_pwsLayoutId,
    [in] LONG    p_nOption,
    [in] BSTR p_wsValue
);
```

**Parameters:**
- `p_pwsObjectId` [in] object id (watermark text, watermark image, overlay, signature or content)
- `p_pwsLayoutId` [in] layout id (obtained with GetLayout2)
- `p_wsOption` [in] option constant
- `p_wsValue` [in] the value of the option to set.
p_wsValue
   [in] the value of the option to set.

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas. For layout options, see Working with Layout objects.

1.4.11.4.214 SetOptionBool
The SetOptionBool method sets a printing option of boolean type

HRSet Ret SetOptionBool(
   [in] LONG p_nOption,
   [in] BOOL p_bValue
);

Parameters:
p_nOption
   [in] option constant
p_bValue
   [in] long integer value to set

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.215 SetOptionEncryptedString
The SetOptionEncryptedString method sets an encrypted string option

HRSet Ret SetOptionEncryptedString(
   [in] LONG p_nOption,
   [in] LPCWSTR p_wsValue
);
Parameters:

- `p_wsOption`  
  [in] option constant
- `p_wsValue`  
  [in] the value of the option to set

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.216  SetOptionEncryptedString2

The `SetOptionEncryptedString2` method sets an encrypted string option

```c
HRESULT SetOptionEncryptedString2(
  [in] LONG p_nOption,
  [in] BSTR p_wsValue
);
```

Parameters:

- `p_wsOption`  
  [in] option constant
- `p_wsValue`  
  [in] the value of the option to set.

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.217  SetOptionLong

The `SetOptionLong` method sets a printing option of long int type

```c
HRESULT SetOptionLong(
```


[in] LONG    p_nOption,
[in] LONG    p_lValue
);

Parameters:
   p_nOption
    [in] option constant
   p_lValue
    [in] long integer value to set

Return values:
   S_OK on success or COM error code
   NV_NOT_INITIALIZED - Initialize was not called
   NV_UNKNOWN_PROFILE - no profile loaded
   NV_INVALID_OPTION - wrong option constant
   NV_PROFILE_ERROR - cannot find option in profile
   NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.218 SetOptionString

The SetOptionString method sets a printing option of string type
   HRESULT SetOptionString(
     [in] LONG    p_nOption,
     [in] LPCWSTR p_wsValue
   );

Parameters:
   p_wsOption
    [in] option constant
   p_wsValue
    [in] pointer to a null terminated Unicode string containing the value of the option to set

Return values:
   S_OK on success or COM error code
   NV_NOT_INITIALIZED - Initialize was not called
   NV_UNKNOWN_PROFILE - no profile loaded
   NV_INVALID_OPTION - wrong option constant
   NV_PROFILE_ERROR - cannot find option in profile
   NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.219 SetOptionString2

The SetOptionString2 method sets a printing option of string type

```c
HRESULT SetOptionString2(
    [in] LONG p_nOption,
    [in] BSTR p_wsValue
);
```

**Parameters:**
- `p_wsOption` [in] option constant
- `p_wsValue` [in] pointer to a null terminated Unicode string containing the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.220 SetOverlayOptionBool

The SetOverlayOptionBool method sets an overlay option of boolean type

```c
HRESULT SetOverlayOptionBool(
    [in, string] LPCWSTR p_pwsOverlayId,
    [in] LONG p_nOption,
    [in] BOOL p_bValue
);
```

**Parameters:**
- `p_pwsOverlayId` [in] overlay id (obtained with AddOverlay )
- `p_nOption` [in] option constant
- `p_bValue` [in] boolean value to set

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long
Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.221 SetOverlayOptionBool2

The SetOverlayOptionBool2 method sets an overlay option of boolean type

```c
HRESULT SetOverlayOptionBool2(
    [in, string] BSTR p_pwsOverlayId,
    [in] LONG p_nOption,
    [in] BOOL p_bValue
);
```

Parameters:
- `p_pwsOverlayId` [in] overlay id (obtained with AddOverlay2)
- `p_nOption` [in] option constant
- `p_bValue` [in] boolean value to set

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.222 SetOverlayOptionEncryptedString

The SetOverlayOptionEncryptedString method sets an overlay option of encrypted string type

```c
HRESULT SetOverlayOptionEncryptedString(
    [in, string] LPCWSTR p_pwsOverlayId,
    [in] LONG p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

Parameters:
- `p_pwsOverlayId` [in] overlay id (obtained with AddOverlay)
- `p_nOption` [in] option constant
p_wsValue
  [in] string value to set (will be encrypted)

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_OVERLAY - wrong overlay id
  NV_INVALID_OPTION - wrong option constant
  NV_PROFILE_ERROR - cannot find option in profile
  NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.223 SetOverlayOptionEncryptedString2

The SetOverlayOptionEncryptedString2 method sets an overlay option of encrypted string type

HRESULT SetOverlayOptionEncryptedString2(
  [in, string] LPWSTR  p_pwsOverlayId,
  [in]         LONG    p_nOption,
  [in, string] LPCWSTR p_wsValue
);

Parameters:
  p_pwsOverlayId
    [in] overlay id (obtained with AddOverlay )
  p_nOption
    [in] option constant
  p_wsValue
    [in] string value to set (will be encrypted)

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_OVERLAY - wrong overlay id
  NV_INVALID_OPTION - wrong option constant
  NV_PROFILE_ERROR - cannot find option in profile
  NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.224 SetOverlayOptionFloat

The SetOverlayOptionFloat method sets an overlay option of float type

HRESULT SetOverlayOptionFloat(
[in, string] LPCWSTR p_pwsOverlayId,
[in] LONG p_nOption,
[in] FLOAT p_fValue
);

Parameters:

p_pwsOverlayId
   [in] overlay id (obtained with AddOverlay )
p_nOption
   [in] option constant
p_fValue
   [in] float value to set

Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OVERLAY - wrong overlay id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.225 SetOverlayOptionFloat2

The SetOverlayOptionFloat2 method sets an overlay option of float type
HRESULT SetOverlayOptionFloat2(
    [in, string] BSTR p_pwsOverlayId,
    [in] LONG p_nOption,
    [in] FLOAT p_fValue
);

Parameters:

p_pwsOverlayId
   [in] overlay id (obtained with AddOverlay2 )
p_nOption
   [in] option constant
p_fValue
   [in] float value to set

Return values:

S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_OVERLAY - wrong overlay id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long
Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.226 SetOverlayOptionLong

The `SetOverlayOptionLong` method sets an overlay option of long type

```c
HRESULT SetOverlayOptionLong(
    [in, string] LPCWSTR p_pwsOverlayId,
    [in] LONG    p_nOption,
    [in] LONG    p_lValue
);
```

Parameters:
- `p_pwsOverlayId` [in] overlay id (obtained with AddOverlay)
- `p_nOption` [in] option constant
- `p_lValue` [in] long value to set

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.227 SetOverlayOptionLong2

The `SetOverlayOptionLong2` method sets an overlay option of long type

```c
HRESULT SetOverlayOptionLong2(
    [in, string] BSTR p_pwsOverlayId,
    [in] LONG    p_nOption,
    [in] LONG    p_lValue
);
```

Parameters:
- `p_pwsOverlayId` [in] overlay id (obtained with AddOverlay)
- `p_nOption` [in] option constant
- `p_lValue`
[in] long value to set

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.228 SetOverlayOptionString

The `SetOverlayOptionString` method sets an overlay option of string type

```c
HRESULT SetOverlayOptionString(
    [in, string] LPCWSTR  p_pwsOverlayId,
    [in]         LONG    p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

Parameters:
- `p_pwsOverlayId` [in] overlay id (obtained with AddOverlay)
- `p_nOption` [in] option constant
- `p_wsValue` [in] string value to set

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.229 SetOverlayOptionString2

The `SetOverlayOptionString2` method sets an overlay option of string type

```c
HRESULT SetOverlayOptionString2(
    [in, string] BSTR p_pwsOverlayId,
    [in]         long    p_nOption,
    [in, string] BSTR p_wsValue
);
```

Parameters:
- `p_pwsOverlayId` [in] overlay id (obtained with AddOverlay)
- `p_nOption` [in] option constant
- `p_wsValue` [in] string value to set

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_OVERLAY - wrong overlay id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
[in]   LONG   p_nOption,
[in, string] BSTR   p_wsValue
);

Parameters:
   p_pwsOverlayId
   [in] overlay id (obtained with AddOverlay2 )
   p_nOption
   [in] option constant
   p_wsValue
   [in] string value to set

Return values:
   S_OK on success or COM error code
   NV_NOT_INITIALIZED - Initialize was not called
   NV_UNKNOWN_PROFILE - no profile loaded
   NV_INVALID_OVERLAY - wrong overlay id
   NV_INVALID_OPTION - wrong option constant
   NV_PROFILE_ERROR - cannot find option in profile
   NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.230  SetOverrideOptionBool

The SetOverrideOptionBool method sets an override printing option of boolean type

HRESULT SetOverrideOptionBool(
    [in]   LONG   p_nOption,
    [in]   BOOL   p_bValue
);

Parameters:
   p_nOption
   [in] option constant
   p_bValue
   [in] bool value to set

Return values:
   S_OK on success or COM error code
   NV_NOT_INITIALIZED - Initialize was not called
   NV_INVALID_OPTION - wrong option constant

Remarks:
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
Override options are not part of the profile. These options override the options from the active profile.
1.4.11.4.231 SetOverrideOptionEncryptedString

The **SetOverrideOptionEncryptedString** method sets an override printing option of encrypted string type.

```c
HRESULT SetOverrideOptionEncryptedString(
    [in] LONG p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

**Parameters:**
- `p_nOption` [in] option constant
- `p_wsValue` [in] string value to set

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

**Remarks:**
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.232 SetOverrideOptionEncryptedString2

The **SetOverrideOptionEncryptedString2** method sets an override printing option of encrypted string type.

```c
HRESULT SetOverrideOptionEncryptedString2(
    [in] LONG p_nOption,
    [in, string] BSTR p_wsValue
);
```

**Parameters:**
- `p_nOption` [in] option constant
- `p_wsValue` [in] string value to set

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

**Remarks:**
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.233 SetOverrideOptionLong

The `SetOverrideOptionLong` method sets an override printing option of long type

```c
HRESULT SetOverrideOptionLong(
    [in] LONG    p_nOption,
    [in] BOOL    p_bValue
);
```

**Parameters:**
- `p_nOption` [in] option constant
- `p_bValue` [in] long integer value to set

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

**Remarks:**
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.234 SetOverrideOptionString

The `SetOverrideOptionString` method sets an override printing option of string type

```c
HRESULT SetOverrideOptionString(
    [in] LONG    p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

**Parameters:**
- `p_nOption` [in] option constant
- `p_wsValue` [in] string value to set

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

**Remarks:**
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.
Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.235 SetOverrideOptionString2

The **SetOverrideOptionString2** method sets an override printing option of string type

```c
HRESULT SetOverrideOptionString2(
    [in] LONG    p_nOption,
    [in, string] BSTR p_wsValue
);
```

**Parameters:**
- `p_nOption` [in] option constant
- `p_wsValue` [in] string value to set

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_INVALID_OPTION - wrong option constant

**Remarks:**
You can find the complete list of override options Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
Override options are not part of the profile. These options override the options from the active profile.

1.4.11.4.236 SetPrinterActivePublicProfile

The **SetPrinterActivePublicProfile** method sets an active public profile for a printer

```c
HRESULT SetPrinterActivePublicProfile(
    [in, string] LPCWSTR p_wsPrinterName,
    [in, string] LPCWSTR p_wsProfileId
);
```

**Parameters:**
- `p_wsPrinterName` [in, string] printer name
- `p_wsProfileId` [in, string] public profile id

**Return values:**
- S_OK on success or COM error code
- NV_SERVICE_ERROR - error connecting to novaPDF Server service

**Remarks:**
Sets an public profile as the active profile for the printer. All users will be forced to use this public profile, the cannot change the active profile.
1.4.11.4.237 SetPrinterActivePublicProfile2

The `SetPrinterActivePublicProfile2` method sets an active public profile for a printer

```c
HRESULT SetPrinterActivePublicProfile2(
    [in, string] BSTR p_wsPrinterName,
    [in, string] BSTR p_wsProfileId
);
```

**Parameters:**
- `p_wsPrinterName`: [in, string] printer name
- `p_wsProfileId`: [in, string] public profile id

**Return values:**
- `S_OK` on success or COM error code
- `NV_SERVICE_ERROR` - error connecting to novaPDF Server service

**Remarks:**
Sets an public profile as the active profile for the printer. All users will be forced to use this public profile, the cannot change the active profile.

1.4.11.4.238 SetPrinterOption

The `SetPrinterOption` method sets a general printer option of long int type

```c
HRESULT SetPrinterOption(
    [in] LONG p_nOption,
    [in] LONG p_lValue
);
```

**Parameters:**
- `p_nOption`: [in] option constant
- `p_lValue`: [in] long integer value to set

**Return values:**
- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called, printer name unknown
- `NV_INVALID_OPTION` - cannot set a general (all users) option on client computers

**Remarks:**
Sets general options that are not part of a profile (like show or not the select profile dialog. You can find the complete list of option names in the Profile option strings chapter, general settings tables. In the include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.239 SetPrinterPublicProfile

The `SetPrinterPublicProfile` method sets the visibility of a public profile for a printer

```c
HRESULT SetPrinterPublicProfile(
```
[in, string] LPCWSTR p_wsPrinterName,
[in, string] LPCWSTR p_wsProfileId,
[in] BOOL p_bVisible
);

Parameters:

p_wsPrinterName
[in, string] printer name
p_wsProfileId
[in, string] public profile id
p_bVisible
[in] flag, if visible

Return values:
S_OK on success or COM error code
NV_SERVICE_ERROR - error connecting to novaPDF Server service

Remarks:
Sets the visibility option for a public profile and a printer. By default, all public profiles are visible	on all printers. They can be hidden for some printers using this method.

1.4.11.4.240 SetPrinterPublicProfile2

The SetPrinterPublicProfile2 method sets the visibility of a public profile for a printer

HRESULT SetPrinterPublicProfile2(
[in, string] BSTR p_wsPrinterName,
[in, string] BSTR p_wsProfileId,
[in] BOOL p_bVisible
);

Parameters:

p_wsPrinterName
[in, string] printer name
p_wsProfileId
[in, string] public profile id
p_bVisible
[in] flag, if visible

Return values:
S_OK on success or COM error code
NV_SERVICE_ERROR - error connecting to novaPDF Server service

Remarks:
Sets the visibility option for a public profile and a printer. By default, all public profiles are visible	on all printers. They can be hidden for some printers using this method.

1.4.11.4.241 SetPrinterServerFlags

The SetPrinterServerFlags method sets the profiles usage options for a printer

HRESULT SetPrinterServerFlags(
[in, string] LPCWSTR p_wsPrinterName,
[in] BOOL p_bAllowPrivateProfiles,
[in] BOOL p_bShowSelectProfile,
[in] BOOL p_bAllowHideDialog
);

Parameters:

p_wsPrinterName
[in, string] printer name
p_bAllowPrivateProfiles
[in] allow private profiles
p_bShowSelectProfile
[in] show select profiles dialog for all users
p_bAllowHideDialog
[in] allow users to hide select profiles dialog

Return values:

S_OK on success or COM error code
NV_SERVICE_ERROR - error connecting to novaPDF Server service

1.4.11.4.242 SetPrinterServerFlags2

The SetPrinterServerFlags2 method sets the profiles usage options for a printer

HRESULT SetPrinterServerFlags2(
    [in, string] BSTR p_wsPrinterName,
    [in] BOOL p_bAllowPrivateProfiles,
    [in] BOOL p_bShowSelectProfile,
    [in] BOOL p_bAllowHideDialog
);

Parameters:

p_wsPrinterName
[in, string] printer name
p_bAllowPrivateProfiles
[in] allow private profiles
p_bShowSelectProfile
[in] show select profiles dialog for all users
p_bAllowHideDialog
[in] allow users to hide select profiles dialog

Return values:

S_OK on success or COM error code
NV_SERVICE_ERROR - error connecting to novaPDF Server service
1.4.11.4.243 SetSaveRule

The SetSaveRule method sets values for the save rule at the given index

```c
HRESULT SetSaveRule(
    [in] LONG p_nIndex,
    [in] LONG p_nType,
    [in, string] LPCWSTR p_wsName,
    [in, string] LPCWSTR p_wsDescription,
    [in, string] LPCWSTR p_wsText,
    [in, string] LPCWSTR p_wsFormat,
    [in] BOOL p_bEnabled
);
```

Parameters:
- p_nIndex: [in] save rule index
- p_nType: [in] save rule type (0-remove from start, 1- remove from end, 2 - remove all, 3 - regular expression)
- p_wsName: [in] rule name
- p_wsDescription: [in] rule description
- p_wsText: [in] text to remove or regular expression
- p_wsFormat: [in] format for regular expression
- p_bEnabled: [in] flag, tag is enabled

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_SAVE_RULE - invalid save rule index

Remarks:
This method sets information for the save rule at given index

1.4.11.4.244 SetSaveRule2

The SetSaveRule2 method sets values for the save rule at the given index

```c
HRESULT SetSaveRule2(
    [in] LONG p_nIndex,
    [in] LONG p_nType,
    [in, string] BSTR p_wsName,
    [in, string] BSTR p_wsDescription,
    [in, string] BSTR p_wsText,
    [in, string] BSTR p_wsFormat,
    [in] BOOL p_bEnabled
);
```
Parameters:

- `p_nIndex` [in] save rule index
- `p_nType` [in] save rule type (0-removes from start, 1- remove from end, 2 - remove all, 3 - regular expression)
- `p_wsName` [in] rule name
- `p_wsDescription` [in] rule description
- `p_wsText` [in] text to remove or regular expression
- `p_wsFormat` [in] format for regular expression
- `p_bEnabled` [in] flag, tag is enabled

Return values:

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_SAVE_RULE` - invalid save rule index

Remarks:

This method sets information for the save rule at given index.

1.4.11.4.245 SetUserTag

The `SetUserTag` method changes the user tag for the given index.

```c
HRESULT SetUserTag(
    [in] LONG p_nIndex,
    [in, string] LPCWSTR p_wsTag,
    [in, string] LPCWSTR p_wsDefaultValue,
    [in] BOOL p_bEnabled
);
```

Parameters:

- `p_nIndex` [in] tag index
- `p_wsTag` [in] user tag
- `p_wsDefaultValue` [in] default tag value
- `p_bEnabled` [in] flag, tag is enabled

Return values:

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
Remarks:
This method changes information for the tag at position given by p_nIndex

1.4.11.4.246 SetUserTag2

The SetUserTag2 method changes the user tag for the given index

```c
HRESULT SetUserTag2(
    [in] LONG p_nIndex,
    [in, string] BSTR p_wsTag,
    [in, string] BSTR p_wsDefaultValue,
    [in] BOOL p_bEnabled
);
```

Parameters:
- p_nIndex: [in] tag index
- p_wsTag: [in] user tag
- p_wsDefaultValue: [in] default tag value
- p_bEnabled: [in] flag, tag is enabled

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_USER_TAG - invalid user tag index

Remarks:
This method changes information for the tag at position given by p_nIndex

1.4.11.4.247 SetWatermarkImageOptionBool

The SetWatermarkImageOptionBool method sets a watermark image option of boolean type

```c
HRESULT SetWatermarkImageOptionBool(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] BOOL    p_bValue
);
```

Parameters:
- p_pwsWatermarkId: [in] watermark id (obtained with AddWatermarkImage)
- p_nOption: [in] option constant
p_bValue
  [in] boolean value to set

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_WATERMARK_IMG - wrong watermark id
  NV_INVALID_OPTION - wrong option constant
  NV_PROFILE_ERROR - cannot find option in profile
  NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas,Globals.bas.

1.4.11.4.248 SetWatermarkImageOptionBool2

The SetWatermarkImageOptionBool2 method sets a watermark image option of boolean type

HRESULT SetWatermarkImageOptionBool2(
  [in, string] BSTR p_pwsWatermarkId,
  [in] LONG p_nOption,
  [in] BOOL p_bValue
);

Parameters:
  p_pwsWatermarkId
    [in] watermark id (obtained with AddWatermarkImage2 )
  p_nOption
    [in] option constant
  p_bValue
    [in] boolean value to set

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_WATERMARK_IMG - wrong watermark id
  NV_INVALID_OPTION - wrong option constant
  NV_PROFILE_ERROR - cannot find option in profile
  NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas,Globals.bas.

1.4.11.4.249 SetWatermarkImageOptionEncryptedString

The SetWatermarkImageOptionEncryptedString method sets a watermark image option of
encrypted string type
HRESULT SetWatermarkImageOptionEncryptedString(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG p_nOption,
    [in, string] LPCWSTR p_wsValue
);

Parameters:
  p_pwsWatermarkId
    [in] watermark id (obtained with AddWatermarkImage )
  p_wsOption
    [in] option constant
  p_wsValue
    [in] the value of the option to set.

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
  NV_INVALID_WATERMARK_IMG - wrong watermark id
  NV_INVALID_OPTION - wrong option constant
  NV_PROFILE_ERROR - cannot find option in profile
  NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.250 SetWatermarkImageOptionEncryptedString2

The SetWatermarkImageOptionEncryptedString2 method sets a watermark image option of
encrypted string type

HRESULT SetWatermarkImageOptionEncryptedString2(
    [in, string] BSTR p_pwsWatermarkId,
    [in] LONG p_nOption,
    [in, string] BSTR p_wsValue
);

Parameters:
  p_pwsWatermarkId
    [in] watermark id (obtained with AddWatermarkImage2 )
  p_wsOption
    [in] option constant
  p_wsValue
    [in] the value of the option to set.

Return values:
  S_OK on success or COM error code
  NV_NOT_INITIALIZED - Initialize was not called
  NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.251 SetWatermarkImageOptionFloat

The **SetWatermarkImageOptionFloat** method sets a watermark image option of float type

```c
HRESULT SetWatermarkImageOptionFloat(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] FLOAT   p_fValue
);
```

Parameters:
- p_pwsWatermarkId
  - [in] watermark id (obtained with AddWatermarkImage)
- p_nOption
  - [in] option constant
- p_fValue
  - [in] float value to set

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.252 SetWatermarkImageOptionFloat2

The **SetWatermarkImageOptionFloat2** method sets a watermark image option of float type

```c
HRESULT SetWatermarkImageOptionFloat2(
    [in, string] BSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] FLOAT   p_fValue
);
```

Parameters:
- p_pwsWatermarkId
The `SetWatermarkImageOptionLong` method sets a watermark image option of long int type

```c
HRESULT SetWatermarkImageOptionLong(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] LONG    p_lValue
);
```

**Parameters:**
- `p_pwsWatermarkId`  
  [in] watermark id (obtained with AddWatermarkImage )  
- `p_nOption`  
  [in] option constant  
- `p_lValue`  
  [in] long integer value to set

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.254 SetWatermarkImageOptionLong2

The **SetWatermarkImageOptionLong2** method sets a watermark image option of long int type

```c
HRESULT SetWatermarkImageOptionLong2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]    LONG    p_nOption,
    [in]    LONG    p_lValue
);
```

**Parameters:**

- `p_pwsWatermarkId`
  - [in] watermark id (obtained with AddWatermarkImage2)
- `p_nOption`
  - [in] option constant
- `p_lValue`
  - [in] long integer value to set

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_WATERMARK_IMG` - wrong watermark id
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

**Remarks:**

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.255 SetWatermarkImageOptionString

The **SetWatermarkImageOptionString** method sets a watermark image option of string type

```c
HRESULT SetWatermarkImageOptionString(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in]    LONG    p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

**Parameters:**

- `p_pwsWatermarkId`
  - [in] watermark id (obtained with AddWatermarkImage)
- `p_wsOption`
  - [in] option constant
- `p_wsValue`
  - [in] the value of the option to set.

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
NV_INVALID_WATERMARK_IMG - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.256 SetWatermarkImageOptionString2

The SetWatermarkImageOptionString2 method sets a watermark image option of string type

```c
HRESULT SetWatermarkImageOptionString2(
    [in, string] BSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in, string] BSTR    p_wsValue
);
```

Parameters:
- `p_pwsWatermarkId`: watermark id (obtained with AddWatermarkImage2 )
- `p_wsOption`: option constant
- `p_wsValue`: the value of the option to set.

Return values:
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_IMG - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.257 SetWatermarkTextOptionBool

The SetWatermarkTextOptionBool method sets a watermark text option of boolean type

```c
HRESULT SetWatermarkTextOptionBool(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] BOOL    p_bValue
);
```

Parameters:
- `p_pwsWatermarkId`: watermark id (obtained with AddWatermarkImage2 )

The `SetWatermarkTextOptionBool2` method sets a watermark text option of boolean type.

```c
HRESULT SetWatermarkTextOptionBool2(
    [in, string] BSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] BOOL    p_bValue
);
```

**Parameters:**

- `p_pwsWatermarkId`:
  - [in] watermark id (obtained with `AddWatermarkText2`)
- `p_nOption`:
  - [in] option constant
- `p_bValue`:
  - [in] boolean value to set

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_WATERMARK_TXT` - wrong watermark id
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

**Remarks:**

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: `novaOptions.h`, `novaOptions.pas`, `Globals.bas`. 

1.4.11.4.258 SetWatermarkTextOptionBool2

The `SetWatermarkTextOptionBool2` method sets a watermark text option of boolean type.

```c
HRESULT SetWatermarkTextOptionBool2(
    [in, string] BSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] BOOL    p_bValue
);
```

**Parameters:**

- `p_pwsWatermarkId`:
  - [in] watermark id (obtained with `AddWatermarkText2`)
- `p_nOption`:
  - [in] option constant
- `p_bValue`:
  - [in] boolean value to set

**Return values:**

- `S_OK` on success or COM error code
- `NV_NOT_INITIALIZED` - Initialize was not called
- `NV_UNKNOWN_PROFILE` - no profile loaded
- `NV_INVALID_WATERMARK_TXT` - wrong watermark id
- `NV_INVALID_OPTION` - wrong option constant
- `NV_PROFILE_ERROR` - cannot find option in profile
- `NV_WRONG_OPTION_TYPE` - option is not of type long

**Remarks:**

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: `novaOptions.h`, `novaOptions.pas`, `Globals.bas`. 

1.4.11.4.259 SetWatermarkTextOptionFloat

The `SetWatermarkTextOptionFloat` method sets a watermark text option of float type

```c
HRESULT SetWatermarkTextOptionFloat(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] FLOAT   p_fValue
);
```

**Parameters:**

- `p_pwsWatermarkId`  
  - [in] watermark id (obtained with AddWatermarkText)
- `p_nOption`  
  - [in] option constant
- `p_fValue`  
  - [in] float value to set

**Return values:**

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARKTxt - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**

You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.260 SetWatermarkTextOptionFloat2

The `SetWatermarkTextOptionFloat2` method sets a watermark text option of float type

```c
HRESULT SetWatermarkTextOptionFloat2(
    [in, string] BSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in] FLOAT   p_fValue
);
```

**Parameters:**

- `p_pwsWatermarkId`  
  - [in] watermark id (obtained with AddWatermarkText2)
- `p_nOption`  
  - [in] option constant
- `p_fValue`  
  - [in] float value to set

**Return values:**

- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_TXT – wrong watermark id
NV_INVALID_OPTION – wrong option constant
NV_PROFILE_ERROR – cannot find option in profile
NV_WRONG_OPTION_TYPE – option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.261 SetWatermarkTextOptionLong

The **SetWatermarkTextOptionLong** method sets a watermark text option of long int type

```c
HRESULT SetWatermarkTextOptionLong(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG p_nOption,
    [in] LONG p_lValue
);
```

Parameters:

- **p_pwsWatermarkId**
  - [in] watermark id (obtained with AddWatermarkText )
- **p_nOption**
  - [in] option constant
- **p_lValue**
  - [in] long integer value to set

Return values:

- S_OK on success or COM error code
- NV_NOT_INITIALIZED – Initialize was not called
- NV_UNKNOWN_PROFILE – no profile loaded
- NV_INVALID_WATERMARK_TXT – wrong watermark id
- NV_INVALID_OPTION – wrong option constant
- NV_PROFILE_ERROR – cannot find option in profile
- NV_WRONG_OPTION_TYPE – option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include
folder of novaPDF SDK installation folder you can find the definitions for all options in the next
files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.262 SetWatermarkTextOptionLong2

The **SetWatermarkTextOptionLong2** method sets a watermark text option of long int type

```c
HRESULT SetWatermarkTextOptionLong2(
    [in, string] BSTR p_pwsWatermarkId,
    [in] LONG p_nOption,
    [in] LONG p_lValue
);
```

Parameters:

- **p_pwsWatermarkId**
[in] watermark id (obtained with AddWatermarkText2)
p_nOption
  [in] option constant
p_lValue
  [in] long integer value to set

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_TXT - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.263 SetWatermarkTextOptionString

The `SetWatermarkTextOptionString` method sets a watermark text option of string type

```c
HRESULT SetWatermarkTextOptionString(
    [in, string] LPCWSTR p_pwsWatermarkId,
    [in] LONG    p_nOption,
    [in, string] LPCWSTR p_wsValue
);
```

Parameters:

p_pwsWatermarkId
  [in] watermark id (obtained with AddWatermarkText)
p_wsOption
  [in] option constant
p_wsValue
  [in] the value of the option to set.

Return values:
S_OK on success or COM error code
NV_NOT_INITIALIZED - Initialize was not called
NV_UNKNOWN_PROFILE - no profile loaded
NV_INVALID_WATERMARK_TXT - wrong watermark id
NV_INVALID_OPTION - wrong option constant
NV_PROFILE_ERROR - cannot find option in profile
NV_WRONG_OPTION_TYPE - option is not of type long

Remarks:
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.
1.4.11.4.264 SetWatermarkTextOptionString2

The `SetWatermarkTextOptionString2` method sets a watermark text option of string type

```c
HRESULT SetWatermarkTextOptionString2(
    [in, string] BSTR p_pwsWatermarkId,
    [in]    LONG    p_nOption,
    [in, string] BSTR    p_wsValue
);
```

**Parameters:**
- `p_pwsWatermarkId` [in] watermark id (obtained with AddWatermarkText2)
- `p_wsOption` [in] option constant
- `p_wsValue` [in] the value of the option to set.

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called
- NV_UNKNOWN_PROFILE - no profile loaded
- NV_INVALID_WATERMARK_TXT - wrong watermark id
- NV_INVALID_OPTION - wrong option constant
- NV_PROFILE_ERROR - cannot find option in profile
- NV_WRONG_OPTION_TYPE - option is not of type long

**Remarks:**
You can find the complete list of option names in the Profile option strings chapter. In the Include folder of novaPDF SDK installation folder you can find the definitions for all options in the next files: novaOptions.h, novaOptions.pas, Globals.bas.

1.4.11.4.265 UnRegisterEventWindow

The `UnRegisterEventWindow` unregisters the window registered with RegisterEventWindow so it will no longer receive printing messages.

```c
HRESULT UnRegisterEventWindow(void);
```

**Return values:**
- S_OK on success or COM error code
- NV_NOT_INITIALIZED - Initialize was not called

1.4.11.4.266 WaitForNovaEvent

The `WaitForNovaEvent` waits for a Windows event that will be signaled by the printer

```c
HRESULT WaitForNovaEvent(
    [in]    LONG    p_nMilliseconds
    [out]    BOOL*    p_bTimeout
);
```

**Parameters:**
- `p_nMilliseconds` [in] Number of milliseconds to wait for the event. See How to use events for more details.
- `p_bTimeout`
[out] returns TRUE if a the wait function return with a timeout, and FALSE otherwise.

Return values:
- S_OK - on success
- S_FALSE - event was not found

1.5 Samples

1.5.1 What sample to choose

There are several modes to start a print job to novaPDF SDK 10, and depending on your application, you should choose a different sample:

1. If you a C++ application and you create a printer job using Windows API calls like OpenPrinter, StartDoc,... you should check the Hello World sample.

2. If you have a Delphi application and you print using the Printer object provided by Delphi, check the Hello World Delphi sample.

3. If you have a C# application that prints using the package "System.Drawing.Printing", check the Hello World CSharp sample.

4. If you have a VBNet application that prints using the package "System.Drawing.Printing", check the Hello World VBNet sample.

5. If you have an ASP.NET application that prints using the package "System.Drawing.Printing", check the Hello World ASPNET sample.

6. If you have a VB application and you print using the Printer object provided by VB, check the Hello World VB sample.

7. If you have an Java application that prints using the package "System.Drawing.Printing", check the Hello World Java sample.

8. If you have an Access database and you want to generate PDF files, check the PDF Reports Access sample.

9. If you perform a print job by calling other controls "Print()" method, or if you print an existing document using "ShellExecute()" function, you should check one of these samples: C++ MFC Converter, Delphi VCLConverter, CSharp Converter, VBNet Converter, VB Converter.

10. If your application runs on a network check the C++ Hello World (network) sample.

11. If you have a C++ document/view MFC architecture check the MFC Scribble sample.

12. If you want to convert MS Word documents or if you use other OLE controls to print your documents, choose one of the next samples: Word OLE CSharp, Word OLE Delphi, Word OLE VB, Word OLE VBNet or Word OLE (Java).
13. If you wish to convert Microsoft Office documents (Word, Excel, PowerPoint, Publisher or Visio), choose one of the next samples: Convert Office Docs C++, Convert Office Docs C#, Convert Office Docs VBNet, Convert Office Docs Delphi.

14. If you wish to work with temporary printers check the C++ Temporary printer sample.

15. If you wish to use novaPDF SDK in a multithreading application check the C++ Multiple printers sample.

16. If you do not wish to work with option profiles but only change a few options like pdf file name check one of next samples: Override Options C++, Override Options CSharp, Override Options Delphi, Override Options VBNet, Override Options VB

All "Hello World" samples include a separate tool file with sample functions for setting all kind of options (save options, watermarks, bookmarks, overlay, graphics, document info, security, email, links, fonts).

1.5.2 Access

1.5.2.1 PDF Reports

PDF Reports Sample is an Access database with one table and one form. On the form you can set several options for the novaPDF SDK 10 and then press a button to generate a PDF file. A report is made on the table and it is sent to novaPDF SDK 10.

It demonstrates the basic use of the INovaPDFOptions interface. The printing job is made using the object "Application.Printer"

Basically the sample creates a new profile called "Access Profile", sets the new profile as active, sets the user options from form controls, opens and prints a report, and restores original printer settings.

Source code

```vbnet
Option Compare Database
Option Explicit

Private objPDF As Object

Const strIAProfile As String = "Access Profile"
Const strPDFDriver As String = "novaPDF SDK 10"
Const bIAPublicProfile As Long = 0

Private Sub cmdCreatePDF_Click()
    On Error GoTo Error_cmdCreatePDF_Click

    Dim strActiveProfileId As String
    Dim strNewProfileId As String
    Dim strDefaultPrinter As String
' create the NovaPdfOptions object
Dim objPDF As New NovaPdfOptions90

' initialize the NovaPdfOptions object to use with a printer licensed for SDK
objPDF.Initialize2 strPDFDriver ""

' Store the Default Printer. * Note - Access cannot use the objPDF.SetDefaultPrinter command to update Access internally fast enough. You must use the Application.Printer command instead.
strDefaultPrinter = Application.Printer.DeviceName

' Get the Active Profile
objPDF.GetActiveProfile2 strActiveProfileId

' Add new profile
objPDF.AddProfile2 strProfileName, bIAPublicProfile, strNewProfileId

' Load the profile
objPDF.LoadProfile2 strNewProfileId

With Me

' Set save options
If !optSaveOptions Then
    objPDF.SetOptionLong NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_EXTENDED
Else
    objPDF.SetOptionLong NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_NONE
End If

objPDF.SetOptionLong NOVAPDF_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM
objPDF.SetOptionString2 NOVAPDF_SAVE_FOLDER, !txtSaveFolder
objPDF.SetOptionString2 NOVAPDF_SAVE_FILE_NAME, !txtFilename
objPDF.SetOptionLong NOVAPDF_SAVE_FILEEXIST_ACTION, !cboWhenFileExists

' After Save Action
objPDF.SetOptionBool NOVAPDF_ACTION_DEFAULT_VIEWER, !chkOpenViewer

' .... other options

'save options
objPDF.SaveProfile

' Set the PDF print driver.
objPDF.SetActiveProfile2 strNewProfileId

' Set the Default printer.
Set Application.Printer = Application.Printers(strPDFDriver)

' Run the selected report and create a PDF file.
DoCmd.OpenReport "rptSMZipCode"

' Return to previous settings
objPDF.SetActiveProfile2 strActiveProfileId
objPDF.DeleteProfile2 strNewProfileId

' Restore the Default Printer.
Set Application.Printer = Application.Printers(strDefaultPrinter)
End With

Exit_cmdCreatePDF_Click:
Set objPDF = Nothing
Exit Sub
Error_cmdCreatePDF_Click:
Debug.Print Err.Number & ":" & Err.Description
Resume Next
End Sub

1.5.3  ASP.NET

1.5.3.1  Hello World

Hello World (ASP.NET) sample is a simple ASP application that generates one PDF file containing
the text "novaPDF says Hello World from ASP.NET". The PDF is created using the novaPDF SDK 10
printer driver and is saved in the “upload” folder. It demonstrates the basic use of the
INovaPDFOptions interface. The printing job is done using the package System.Drawing.Printing

What this sample does:
• determines the active profile, makes a copy of it and names it "Test ASP.NET"
• sets the new profile (Test ASP.NET) as active as well as some mandatory settings
• generates a test PDF file and saves it in the “upload” folder
• restores the original settings of the novaPDF SDK 10 printer driver.

Note
To test this sample on IIS, you should set the Application Pool to run under the “Local System”
Account. Here’s how you can do this:
1. In IIS Manager, expand Local computer, the Application Pools folder, right-click the application
   pool you would like to configure (the one selected for this application/ virtual directory) and
   click Properties.
2. Go to the Identity tab.
3. Click on Predefined and in the list box beside it click Local System.
   Click OK.

SOURCE CODE FOR THE ASP SAMPLE OUTPUT DISPLAY PAGE (DEFAULT.ASPX):
<%@ Page Language=˝C#˝ AutoEventWireup=˝true˝ CodeFile=˝Default.aspx.cs˝
Inherits=˝_Default˝ %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns=˝http://www.w3.org/1999/xhtml˝>
<head id=˝Head1˝ runat=˝server˝>
  <title>Hello World ASP.NET</title>
Hello World ASP.NET and novaPDF SDK

<form id="form2" runat="server">
<p>
<asp:Label ID="Label1" runat="server" Text="Press the button"></asp:Label>
</p>
<br />
<asp:LinkButton ID="Link1" Visible="false" runat="server">View folder.</asp:LinkButton>
<br />
<asp:Button ID="Button1" runat="server" onclick="Button1_Click" Text="Print to novaPDF" /><br />
<br />
1. In IIS Manager, expand the local computer, expand the Application Pools folder, right-click the application pool you would like to configure (the one selected for this application/ virtual directory), and click Properties.
<br />
2. Click the Identity tab.
<br />
3. Click Predefined, and in the list box beside it, click Local System.
<br />
4. Click OK.
</form>

SOURCE CODE FOR THE ASP SAMPLE (DEFAULT.ASPX.CS):

```csharp
using System;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Drawing;
using System.Drawing.Printing;
// the novapiLib package must be added as a COM reference
using novapiLib;
using System.Diagnostics;

public partial class _Default : System.Web.UI.Page
{
    protected void Button1_Click(object sender, EventArgs e)
    {
        try
        {
            // create the NovaPdfOptions object
            NovaPdfOptions90 pNova = new NovaPdfOptions90();
            // initialize the NovaPdfOptions object
            pNova.InitializeSilent(PRINTER_NAME, "");
        }
    }
```
// get the active profile ...
string activeProfile = null;
string newProfileId = null;
pNova.GetActiveProfile(out activeProfile);

// create new profile
newProfileId = pNova.AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, out newProfileId);

pNova.LoadProfile(newProfileId);

// and set some options
pNova.SetOptionString2(NovaOptions.NOVAPDF_DOCINFO_SUBJECT, "ASP.NET Hello document");
pNova.SetOptionString(NovaOptions.NOVAPDF_SAVE_FILE_NAME, "novaPDFDocument");
pNova.SetOptionLong(NovaOptions.NOVAPDF_SAVE_FOLDER_TYPE, (int)SaveFolder.SAVEFOLDER_CUSTOM);
pNova.SetOptionString(NovaOptions.NOVAPDF_SAVE_FOLDER, Server.MapPath("upload/"));
pNova.SetOptionLong(NovaOptions.NOVAPDF_SAVE_FILEEXIST_ACTION, (int)SaveFileConflictType.FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW);
pNova.SetOptionBool(NovaOptions.NOVAPDF_INFO_VIEWER_ENABLE, 1);
pNova.SetOptionLong(NovaOptions.NOVAPDF_SAVE_PROMPT_TYPE, (int)SaveDlgType.PROMPT_SAVE_SIMPLE);

// save the new added profile
pNova.SaveProfile();

// set the new profile as the active profile
pNova.SetActiveProfile(newProfileId);

// print a test page, using the previously set active profile settings
using (PrintDocument pd = new PrintDocument())
{
    pd.PrintController = new StandardPrintController();
    pd.PrinterSettings.PrinterName = PRINTER_NAME;
    pd.PrintPage += new PrintPageEventHandler(PrintPageFunction);
    pd.Print();
}

if ((activeProfile.Length > 0) && (activeProfile.CompareTo(PROFILE_NAME) != 0))
{
    pNova.SetActiveProfile(activeProfile);
}
pNova.DeleteProfile(newProfileId);

// mark finish changing options so they are saved for the printer
Label1.Text = "Success.<br />
You will find the new printed file in "/upload" folder.
";
Button1.Visible = false;

Link1.Visible = true;
Link1.Attributes.Add("href", "upload/");
Link1.Attributes.Add("target", "_blank");

} catch (System.Runtime.InteropServices.COMException come)
{ 
    Label1.Style.Add("color", "red");
    Label1.Text = "COM Exception:" + come.Message;
}

catch (Exception ee)
{
    Label1.Style.Add("color", "red");
    Label1.Text = "Exception: " + ee.Message;
    return;
}

// and finally the function that actually prints the page
private static void PrintPageFunction(object sender,
PrintPageEventArgs ev)
{
    string str = "novaPDF says Hello World from ASP.NET";
    Font font = new Font("Arial", 16);
    Brush brush = new SolidBrush(Color.Black);
    ev.Graphics.DrawString(str, font, brush, 20.0f, 20.0f);
    ev.HasMorePages = false;
}

1.5.4 Delphi

1.5.4.1 VCL Converter

The VCL Converter sample demonstrates how to convert an existing file by printing it to novaPDF SDK 10 using the ShellExecute function. It also demonstrates how to set different options and manage profiles.

The same approach should be taken if you print using a "Print()" method from another object (like an internet browser or a report control). Just replace the ShellExecute call with the call of your Print method.

When the application starts, it creates a few profiles and makes different settings in the profiles. Then it shows a dialog from where the user can select the active profile and change its settings using the controls from the dialog.

After that a document can be selected from the harddisk and printed to novaPDF SDK 10 using the ShellExecute function call.

When using this technique to convert a file to PDF, you have to take care of the fact that ShellExecute prints to the default printer. This function returns immediately and does not wait until the print is finished (it may return before the printing is actually started). Therefore you have to set the default printer to novaPDF SDK 10 before calling ShellExecute (using the SetDefaultPrinter method), register FileSaved message (or any other novaPDF SDK 10 message) to be sure that the print job was started. In this message handler restore the default printer (with the RestoreDefaultPrinter method). This way you made sure that the default printer was restored and your document is printed to novaPDF SDK 10.
Source code snippets

1. DECLARE INovaPdfOptions variable
   // declare an INovaPdfOptions member variable
   PRIVATE
       m_novaOptions : INovaPdfOptions;

2. Register novaPDF SDK 10 messages
   // register event messages
   WM_NOVAPDF2_FILESAVED := RegisterWindowMessage(MSG_NOVAPDF2_FILESAVED);
   WM_NOVAPDF2_PRINTERERROR := RegisterWindowMessage(MSG_NOVAPDF2_PRINTERERROR);

   // handle event messages
   PUBLIC
       PROCEDURE WndProc(var Message: TMessage); override;
       PROCEDURE TForm1.WndProc(var Message: TMessage);
       BEGIN
         IF Message.Msg = WM_NOVAPDF2_FILESAVED then BEGIN
           // ...
         END ELSE IF Message.Msg = WM_NOVAPDF2_PRINTERERROR then BEGIN
           // ...
         END ELSE BEGIN
           inherited WndProc(Message);
         END;
       END;

3. Initialize INovaPdfOptions

   PROCEDURE TForm1.FormCreate(Sender: TObject);
   BEGIN
     // ...
     // initialize COM libraries
     hr := ActiveX.CoInitialize(nil);
     if FAILED(hr) then begin
       MessageDlg('Failed to initialize COM' + #13 + SysErrorMessage(hr) + #13 +
                  SysErrorMessage(GetLastError()), mtWarning, [mbOK], 0);
     end;

     // create an instance of INovaPdfOptions
     m_novaOptions := nil;
     hr := ActiveX.CoCreateInstance(CLASS_NovaPdfOptions9,
                                 // CLSID_CNovaPdfSource,
                                 nil,
                                 CLSCTX_INPROC_SERVER,
                                 IID_INovaPdfOptions9,
                                 m_novaOptions);
     if (FAILED(hr)) then begin
       MessageDlg('Failed to create novaPDF COM object', mtWarning, [mbOK], 0);
     exit;
     end;
// initialize the NovaPdfOptions object to use with a printer licensed
for SDK
m_novaOptions.Initialize( PRINTER_NAME, '' );
if (FAILED(hr)) then begin
    MessageDlg('Failed to initialize NovaPdfOptions', mtWarning, [mbOK], 0);
    exit;
end;

// add 2 profiles
CreateProfiles();

// load profiles in list
LoadProfiles();
END;

4. Release INovaPDFOptions
PROCEDURE TForm1.FormClose(Sender: TObject; var Action: TCloseAction);
BEGIN
    //...
    //delete profiles
    m_novaOptions.DeleteProfile2(m_strSmallSizeProfileID);
    m_novaOptions.DeleteProfile2(m_strFullOptProfileID);

    // destroy m_novaOptions object
    // - no need for this as the Delphi takes care of it automatically
    // uninitialize COM libraries
    ActiveX.CoUninitialize();
    //...
END;

5. Set novaPDF SDK 10 Options
PROCEDURE TForm1.CreateProfiles();
BEGIN
    // Add a profile called "Small size"
    m_novaOptions.AddProfile2(SMALL_SIZE_PROFILE, PROFILE_IS_PUBLIC,
    m_strSmallSizeProfileID);
    m_novaOptions.LoadProfile2(m_strSmallSizeProfileID);

    // Set some options to this profile

    // disable the "Save PDF file as" prompt
    m_novaOptions.SetOptionLong(NOVAPdf_SAVE_PROMPT_TYPE, PROMPT_SAVE_NONE);
    // set generated Pdf files destination folder to the application path
    m_novaOptions.SetOptionLong(NOVAPdf_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM);
    m_novaOptions.SetOptionString2(NOVAPdf_SAVE_FOLDER,
    ExtractFilePath(Application.ExeName));

    // set output file name

m_novaOptions.SetOptionString2(NOVAFILE_NAME, 'PDF Converter small size.pdf');

//Set other options and profiles
//...

END;

6. Start a print job
PROCEDURE TForm1.btnStartPrintClick(Sender: TObject);
var
  hExec: HINST;
BEGIN

  // set the active profile to be used for printing
  m_novaOptions.SetActiveProfile2(strProfileId);

  // register our window to receive messages from the printer
  m_novaOptions.RegisterEventWindow(self.Handle);

  // set novaPDF as default printer, so it will be used by ShellExecute
  m_novaOptions.SetDefaultPrinter();

  // license the file to be converted with ShellExecute
  m_novaOptions.LicenseShellExecuteFile(efFileToConvert.Text);

  // print the document
  m_bPrintJobPending := TRUE;

  hExec := ShellAPI.ShellExecute(self.handle, 'print', PChar(efFileToConvert.Text),
                              PChar(' '), PChar(' '), SW_HIDE);

  if (hExec <= 32) then begin // failed to execute program
    m_bPrintJobPending := FALSE;
    m_novaOptions.UnRegisterEventWindow();
    m_novaOptions.RestoreDefaultPrinter();
  end;
END;

7. Restore default printer when printing finished
PROCEDURE TForm1.WndProc(var Message: TMessage);
BEGIN
  if Message.Msg = WM_NOVAPDF2_FILESAVED then begin

    // restore original default printer
    m_novaOptions.UnRegisterEventWindow();
    m_novaOptions.RestoreDefaultPrinter();
    m_bPrintJobPending := FALSE;
  end;
END;
end else if Message.Msg = WM_NOVAPDF2_PRINTERROR then begin
  case (Message.WParam) of
  ERROR_MSG_TEMP_FILE : begin
    MessageDlg('Error saving temporary file on printer server',
               mtWarning, [mbOK], 0);
end;
  ERROR_MSG_LIC_INFO : begin
    MessageDlg('Error reading license information', mtWarning, [mbOK], 0);
end;
  ERROR_MSG_SAVE_PDF : begin
    MessageDlg('Error saving PDF file', mtWarning, [mbOK], 0);
end;
  ERROR_MSG_JOB_CANCELED : begin
    MessageDlg('Print job was canceled', mtWarning, [mbOK], 0);
end;
end;
// restore original default printer
m_novaOptions.UnRegisterEventWindow();
m_novaOptions.RestoreDefaultPrinter();
m_bPrintJobPending := FALSE;
end else begin
  inherited WndProc(Message);
end;
END;

1.5.4.2 Hello World Delphi

Hello World Delphi sample is a simple Windows console application that prints one page with the "Hello World from Delphi!" text to the novaPDF SDK 10.

It demonstrates the basic use of the INovaPDFOptions interface. The printing job is made with calls to the global Printer object defined by Delphi. Text is printed using Canvas.TextOut method.

It generates a "Hello World.pdf" file in the working folder.

Notice
If you print an existing document using "ShellExecute()" function or you want to handle printing events, you should check the VCL Converter sample instead.

Source code

program HelloWorld;

{$APPTYPE CONSOLE}

uses
  ActiveX,
Printers,
Windows,
novaOptions in '..\..\..\include\novaOptions.pas',
novapiLIB80_TLB in '..\..\..\include\novapiLIB9_TLB.pas',
Nova in 'Nova.pas';

const

// name of novaPDF Printer
PRINTER_NAME = 'novaPDF SDK 9';

// text to be written in the PDF file
PDF_TEXT = 'Hello world from Delphi!';

// PDF file name
PDF_FILE_NAME = 'HelloWorld_Delphi';

// Print profile name
PROFILE_NAME = 'HelloWorld Delphi Profile';
PROFILE_IS_PUBLIC = 0;

var
hr : HRESULT;
pNova : INovaPdfOptions9;
strOldActiveProfileID : WideString;
strNewProfileID : WideString;
// decomment next code if you use workaround for printer index (see below)
// Device, Driver, Port: array[0..80] of Char;
// DevMode: THandle;

begin

// initialize COM
hr := ActiveX.CoInitialize(nil);
if (FAILED(hr)) then begin
  System.Writeln('Failed to initialize COM');
  exit;
end;

// create one NovaPdfOptions instance
pNova := nil;
hr := ActiveX.CoCreateInstance(CLASS_NovaPdfOptions9,
  // CLSID_CNovaPdfSource,
  nil,
  CLSCTX_INPROC_SERVER,
  IID_INovaPdfOptions9,
  pNova);
if (FAILED(hr)) then begin
  System.Writeln('Failed to create novaPDF COM object');
  exit;
end;

// initialize the NovaPdfOptions object to use with a printer
licensed for SDK
pNova.Initialize2(PRINTER_NAME, '');

pNova.SetDefaultPrinter();

// now the default printer is novaPDF printer but the Printer object is not updated
// here is a workaround to update the Printer object with the default printer
// you only need this code if you check later on the Printer.PrinterIndex to find out the default printer
//Printer.GetPrinter(Device, Driver, Port, DevMode);
//Printer.SetPrinter(PRINTER_NAME, Driver, Port, 0);

// create a new profile with default settings
pNova.AddProfile2(PROFILE_NAME, PROFILE_IS_PUBLIC, strNewProfileID);

// load the newly created profile
if SUCCEEDED(hr) and (Length(strNewProfileID) > 0) then begin
  pNova.LoadProfile2(strNewProfileID);
end else begin
  System.Writeln('Failed to create profile');
  exit;
end;

// set novaPDF options
// uncomment the function calls for the options you wish to set and change the options in nova.cpp unit
//AddProfileOptions(pNova);
//AddDocumentInformation(pNova);
//AddViewerOptions(pNova);
//AddLinksOptions(pNova);
//AddAdvancedOptions(pNova);
//AddGraphicsOptions(pNova);
//AddEmbedFontsOptions(pNova);
//AddBookmarksDefinitions(pNova);
//AddSecurity(pNova);
//AddSaveOptions(pNova);
//AddAfterSaveActions(pNova);
//AddEmailOptions(pNova);
//AddWatermarkImage(pNova);
//AddWatermarkText(pNova);
//AddPageContentOptions(pNova);
//AddOverlayOptions(pNova);
//AddSignatureOptions(pNova);

// save profile changes
pNova.SaveProfile();

// get current default profile id
pNova.GetActiveProfile2(strOldActiveProfileID);
// set as active profile for printer
pNova.SetActiveProfile2(strNewProfileID);
1.5.4.3 Convert Office Docs

The Convert Office Docs sample is a simple Windows console application that converts some Microsoft Office documents (Word, Excel, Publisher, PowerPoint and Visio) using Convert... functions. It uses Office OLE automation so Microsoft Office has to be installed.

The sample documents converted are located in the "OfficeDocuments" folder in novaPDF SDK installation folder. The pdf files are saved in the same folder.

Hidden links and internal document links are converted in pdf hyperlinks (except for Excel documents).

Source code

program ConvertOfficeDocs;

{$APPTYPE CONSOLE}

uses
    ActiveX,
    Printers,
    Windows,
    sysutils,
    novaOptions in '..\..\..\include\novaOptions.pas',
    novaEvents in '..\..\..\include\novaEvents.pas',
    novapiLIB10_TLB in '..\..\..\include\novapiLIB9_TLB.pas',
    program ConvertOfficeDocs;

const

    //name of novaPDF Printer
    PRINTER_NAME = 'novaPDF SDK 9';
//PDF file name
PDF_FILE_NAME   = 'ConvertOffice_Delphi';

//Print profile name
PROFILE_NAME    = 'Convert Office Delphi';
PROFILE_IS_PUBLIC = 0;

var
hr : HRESULT;
pNova : INovaPdfOptions10;
strOldActiveProfileID : WideString;
strNewProfileID : WideString;
bTimeout : Integer;
strDocumentsPath : WideString;
strDocPath : WideString;
strHeadings : WideString;

begin

//initialize COM
hr := ActiveX.CoInitialize(nil);
if (FAILED (hr)) then begin
    System.Writeln('Failed to initialize COM');
    exit;
end;

//create one NovaPdfOptions instance
pNova := nil;
hr := ActiveX.CoCreateInstance(CLASS_NovaPdfOptions9, nil,
                                   CLSCTX_INPROC_SERVER, IID_INovaPdfOptions9,
                                   pNova);
if (FAILED(hr)) then begin
    System.Writeln('Failed to create novaPDF COM object');
    exit;
end;

// initialize the NovaPdfOptions object to use with a printer licensed for SDK
// if you have an application license for novaPDF SDK,
// pass the license key to the Initialize() function
pNova.Initialize2(PRINTER_NAME, '');

//create a new profile with default settings
pNova.AddProfile2(PROFILE_NAME, PROFILE_IS_PUBLIC, strNewProfileID);

//load the newly created profile
if SUCCEEDED(hr) and (Length(strNewProfileID) > 0) then begin
    pNova.LoadProfile2(strNewProfileID);
end else begin
    System.Writeln('Failed to create profile');
end;
exit;
end;

// DO NOT OPEN PDF
// an Open action is added by default in the profile - delete or disable this open action
// pNova.DisableActionType(NOVA_ACTION_OPEN);

// set novaPDF save options
AddSaveOptions(pNova);

//save profile changes
pNova.SaveProfile();

try
    //get current default profile id
    pNova.GetActiveProfile2(strOldActiveProfileID);
except
    strOldActiveProfileID := '');
end;

//set as active profile for printer
pNova.SetActiveProfile2(strNewProfileID);

//Path for novaPDF 10 SDK sample documents
strDocumentsPath := GetEnvironmentVariable('ALLUSERSPROFILE');
strDocumentsPath := strDocumentsPath + '\Documents\novaPDF 10\SDK\OfficeDocuments\';

// --------------------------------------------------
// Convert Word document
// Microsoft Office Word has to be installed
// --------------------------------------------------
//Document file path
strDocPath := strDocumentsPath;
strDocPath := strDocPath + 'Word.docx';
//style name | level | type
strHeadings := 'Heading 1|1|0;Heading 2|2|0;Heading 3|3|0';
pNova.LicenseApplication('WINWORD.EXE');
pNova.LicenseApplication('SPLWOW64.EXE');
pNova.ConvertWordDocument2(strDocPath, 1, 0, 1, 1, 1, 1, 1, 1, 1, 3, strHeadings);

// --------------------------------------------------
// Convert PowerPoint document
// Microsoft Office PowerPoint has to be installed
// --------------------------------------------------
//Document file path
strDocPath := strDocumentsPath;
strDocPath := strDocPath + 'PowerPoint.pptx';
pNova.LicenseApplication('POWERPNT.EXE');
pNova.LicenseApplication('SPLWOW64.EXE');
pNova.ConvertPowerPointDocument2(strDocPath, 1, 1, 1, 1, 1, 1);

// --------------------------------------------------
// Convert Publisher document
// Microsoft Office Publisher has to be installed
// --------------------------------------------------
//Document file path
strDocPath := strDocumentsPath;
strDocPath := strDocPath +'Publisher.pub';
pNova.LicenseApplication('MSPUB.EXE');
pNova.LicenseApplication('SPLWOW64.EXE');
pNova.ConvertPublisherDocument2(strDocPath, 1, 1, 1, 1, 1, 1);

// Convert Excel document
// Microsoft Office Excel has to be installed
// hidden links in Excel documents will not be converted to pdf links
// --------------------------------------------------
//Document file path
strDocPath := strDocumentsPath;
strDocPath := strDocPath +'Excel.xlsx';
pNova.LicenseApplication('EXCEL.EXE');
pNova.LicenseApplication('SPLWOW64.EXE');
pNova.ConvertExcelDocument2(strDocPath, 1);

// Convert Visio document
// Microsoft Office Visio has to be installed
// --------------------------------------------------
//Document file path
strDocPath := strDocumentsPath;
strDocPath := strDocPath +'Visio.vsd';
pNova.LicenseApplication('VISIO.EXE');
pNova.LicenseApplication('SPLWOW64.EXE');
pNova.ConvertVisioDocument2(strDocPath, 1, 1, 1, 1, 1);

if Length(strOldActiveProfileID) > 0 then begin
  //restore default profile
  pNova.SetActiveProfile2(strOldActiveProfileID);
end;

pNova.DeleteProfile2(strNewProfileID);
ActiveX.CoUninitialize();
end.

1.5.4.4 Word OLE Delphi

The Word OLE Delphi sample is a simple Windows console application that converts a MS Word document (C:\Test.doc) to PDF using Word OLE automation.

Source code

program WordOLEDelphi;

{$APPTYPE CONSOLE}
uses
  ActiveX,
  Printers,
  ComObj,
  SysUtils,
  Dialogs,
  novaOptions in '..\..\..\include\novaOptions.pas',
  novapiLIB80_TLB in '..\..\..\include\novapiLIB9_TLB.pas';

const

  //name of novaPDF Printer
  PRINTER_NAME = 'novaPDF SDK 9';

  //Print profile name
  PROFILE_NAME = 'Test OLE Delphi Profile';
  PROFILE_IS_PUBLIC = 0;

var
  hr : HRESULT;
  pNova : INovaPdfOptions9;
  strOldActiveProfileID : WideString;
  strNewProfileID : WideString;
  Word : VARIANT;
  NewDoc : VARIANT;

begin

  //initialize COM
  hr := ActiveX.CoInitialize(nil);
  if (FAILED(hr)) then begin
    System.Writeln('Failed to initialize COM');
    exit;
  end;

  //create one NovaPdfOptions instance
  pNova := nil;
  hr := ActiveX.CoCreateInstance(CLASS_NovaPdfOptions9,
  //CLSID_CNovaPdfSource,
    nil,
    CLSCTX_INPROC_SERVER,
    IID_INovaPdfOptions9,
    pNova);

  if (FAILED(hr)) then begin
    System.Writeln('Failed to create novaPDF COM object');
    exit;
  end;

  //initialize NovaPdfOptions and pass printer name
  pNova.Initialize2( PRINTER_NAME, '' );

  pNova.SetDefaultPrinter();
// now the default printer is novaPDF printer but the Printer object is not updated
// here is a workaround to update the Printer object with the default printer
// you only need this code if you check later on the Printer.PrinterIndex to find out the default printer
//Printer.GetPrinter(Device, Driver, Port, DevMode);
//Printer.SetPrinter(PRINTER_NAME, Driver, Port, 0);

//create a new profile with default settings
pNova.AddProfile2(PROFILE_NAME, PROFILE_IS_PUBLIC, strNewProfileID);

//load the newly created profile
if (Length(strNewProfileID) > 0) then begin
  pNova.LoadProfile2(strNewProfileID);
end else begin
  System.Writeln('Failed to create profile');
end;

// set PDF document Title
pNova.SetOptionString2(NOVAPDF_DOCINFO_TITLE, 'Hello World Delphi Sample');

// set resulting file name
pNova.SetOptionString2(NOVAPDF_SAVE_FOLDER, 'C:\');
// do not show prompt dialog
pNova.SetOptionLong(NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_NONE);
// if file exists, override
pNova.SetOptionLong(NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_OVERWRITE);
// do not open document in PDF viewer
pNova.SetOptionBool(NOVAPDF_ACTION_DEFAULT_VIEWER, 1);

// save profile changes
pNova.SaveProfile();

//get current default profile id
pNova.GetActiveProfile2(strOldActiveProfileID);
//set as active profile for printer
pNova.SetActiveProfile2(strNewProfileID);

//Print Word Document
try
  pNova.InitializeOLEUsage('Word.Application');
  Word := CreateOleObject('Word.Application');
  Word.DisplayAlerts := 0;
  pNova.LicenseOLEServer();
  NewDoc := Word.Documents.Open('C:\temp\Test.doc', False, True);
  NewDoc.PrintOut(False);
  NewDoc.Close(False);
  Word.Quit(False);
except
  on E: Exception do
ShowMessage(E.Message);
end;

//restore default profile
pNova.SetActiveProfile2(strOldActiveProfileID);
pNova.DeleteProfile2(strNewProfileID);
//restore default printer
pNova.RestoreDefaultPrinter();

//release NovaPdfOptions
//pNova._Release();

ActiveX.CoUninitialize();

end.

1.5.4.5 Override Options

Override Options sample is a simple Windows console application that demonstrates the basic use of the INovaPDDFOptions interface, without using profiles options. Instead of creating a profile and setting options in the profile, the sample uses SetOverrideOptions... functions to quickly set some options that will overwrite active profile settings. This is useful if you have a simple application where you just wish to change the pdf file name, email address or other simple options for each printed document.

There is a limited set of options that can be set with SetOverrideOptions... functions, usually settings that users can also change from the Save As dialog or the other prompt dialogs that can be shown before printing a document. If you need more complex settings, like adding a watermark, overlay or signature you have to configure them in a profile.

You can combine usage of profiles and override options functions. For instance you can create a profile with a watermark that is set as active and then use the override function just to change the file name for each document.

Once set, override options are taken in account for all printed documents until they are removed with DeleteOverrideOptions function.

The sample prints one page with a simple text to the novaPDF SDK 10 and generates a "OverrideOptions.pdf" file in the C:\temp folder.

Source code

program OverrideOptions;

{$APPTYPE CONSOLE}

uses
  ActiveX,
  Printers,
  Windows,
  novaOptions in '..\..\..\..\include\novaOptions.pas',
const

// name of novaPDF Printer
PRINTER_NAME = 'novaPDF SDK 9';

// text to be written in the PDF file
PDF_TEXT = 'Hello world from Delphi!';

// PDF file name
PDF_FILE_NAME = 'HelloWorld_Delphi';

var
hr : HRESULT;
pNova : INovaPdfOptions9;
bTimeout : Integer;
// decomment next code if you use workaround for printer index (see below)
// Device, Driver, Port: array[0..80] of Char;
// DevMode: THandle;
begin

// initialize COM
hr := ActiveX.CoInitialize(nil);
if FAILED(hr) then begin
  System.Writeln('Failed to initialize COM');
  exit;
end;

// create one NovaPdfOptions instance
pNova := nil;
hr := ActiveX.CoCreateInstance(CLASS_NovaPdfOptions9, // CLSID_CNovaPdfSource,
                                nil,
                                CLSCTX_INPROC_SERVER,
                                IID_INovaPdfOptions9,
                                pNova);
if FAILED(hr) then begin
  System.Writeln('Failed to create novaPDF COM object');
  exit;
end;

// initialize the NovaPdfOptions object to use with a printer licensed for SDK
// if you have an application license for novaPDF SDK,
// pass the license key to the Initialize() function
pNova.Initialize2(PRINTER_NAME, '');

pNova.SetDefaultPrinter();

// now the default printer is novaPDF printer but the Printer object is not updated
// here is a workaround to update the Printer object with the default printer
// you only need this code if you check later on the Printer.PrinterIndex to find
// out the default printer
// Printer.GetPrinter(Device, Driver, Port, DevMode);
// Printer.SetPrinter(PRINTER_NAME, Driver, Port, 0);
// Override options from active profile

// Save options
// do not show prompt save dialog
pNova.SetOverrideOptionLong(NOVAPDF_OVERRIDE_SAVE_TYPE, PROMPT_SAVE_NONE);
// save the pdf in next folder
pNova.SetOverrideOptionLong(NOVAPDF_OVERRIDE_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM);
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_SAVE_FOLDER, 'C:\temp');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_SAVE_FILE, PDF_FILE_NAME);
// access folder, if restricted
pNova.SetOverrideOptionEncryptedString2(NOVAPDF_OVERRIDE_SAVE_USER, 'user');
pNova.SetOverrideOptionEncryptedString2(NOVAPDF_OVERRIDE_SAVE_PASSWORD, 'password');
// if a file with the same name already exists
pNova.SetOverrideOptionLong(NOVAPDF_OVERRIDE_SAVE_CONFLICT, FILE_CONFLICT_STRATEGY_OVERWRITE);
// disable open PDF in viewer
pNova.SetOverrideOptionBool(NOVAPDF_OVERRIDE_OPEN_VIEWER, 0);

// Embed fonts
pNova.SetOverrideOptionBool(NOVAPDF_OVERRIDE_EMBEDFONTS, 1);

// Set compression level
pNova.SetOverrideOptionLong(NOVAPDF_OVERRIDE_COMPRESSION, COMPRESSION_HIGHQUALITY);

// Merge PDF
// Enable merge
{
    pNova.SetOverrideOptionBool(NOVAPDF_OVERRIDE_MERGE_PDF, 1);
    // Merge with the same file, if the file exists in destination OR merge with another file
    pNova.SetOverrideOptionLong(NOVAPDF_OVERRIDE_MERGE_FILE_TYPE, MERGE_FILE_OTHER);
    // Append to existing PDF, insert at the beginning or insert at a page number
    pNova.SetOverrideOptionLong(NOVAPDF_OVERRIDE_MERGE_TYPE, MERGE_TYPE_APPEND);
    // if merge with other file, specify file name (and path)
    pNova.SetOverrideOptionString(NOVAPDF_OVERRIDE_MERGE_FILE, 'invoice-text.pdf');
    // if merge type is set to insert at page number
    pNova.SetOverrideOptionLong(NOVAPDF_OVERRIDE_INSERT_PAGENO, 1);
    // if the existing PDF is encrypted
    pNova.SetOverrideOptionEncryptedString2(NOVAPDF_OVERRIDE_MERGE_PDF_PASSWORD, 'password');
}
// Document info
pNova.SetOverrideOptionBool(NOVAPDF_OVERRIDE_DOC_INFO, 1);
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_DOC_TITLE, 'sdk title');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_DOC_SUBJECT, 'sdk subject');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_DOC_AUTHOR, 'sdk author');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_DOC_KEY, 'sdk key');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_DOC_CREATOR, 'sdk creator');

// Encrypt PDF
{
pNova.SetOverrideOptionBool(NOVAPDF_OVERRIDE_SECURITY, 1);
pNova.SetOverrideOptionEncryptedString2(NOVAPDF_OVERRIDE_SECURITY_U, 'user');
pNova.SetOverrideOptionEncryptedString2(NOVAPDF_OVERRIDE_SECURITY_O, 'owner');
}

// Email
pNova.SetOverrideOptionBool(NOVAPDF_OVERRIDE_SEND_EMAIL, 1);
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_REC_TO, 'to');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_REC_FROM, 'from');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_REC_CC, 'cc');
pNova.SetOverrideOptionString2(NOVAPDF_OVERRIDE_REC_BCC, 'bcc');

pNova.RegisterNovaEvent2(NOVAPDF_EVENT_ACTIONS);
// Start print job
Printer.Title := PDF_FILE_NAME;
Printer.BeginDoc();
Printer.Canvas.Font.Size := 24;
Printer.Canvas.TextOut(100, 80, PDF_TEXT);
Printer.endDoc();
System.Writeln('Print job finished');

pNova.WaitForNovaEvent(120000, bTimeout);

// Restore default printer
pNova.RestoreDefaultPrinter();

// Release NovaPdfOptions
// pNova._Release();
ActiveX.CoUninitialize();

end.

1.5.5  C#

1.5.5.1  Hello World CSharp

Hello World CSharp sample is a simple Windows console application that prints one page with the "novaPDF says Hello World from C#" text to the novaPDF SDK 10.

It demonstrates the basic use of the INovaPDFOptions interface. The printing job is made using the package "System.Drawing.Printing"

Basically the sample determines the active profile, makes a copy of it into a profile called "Test C#", sets the new profile as active, sets the subject of the generated PDF document, prints a page, and restores original printer settings. The location of the generated document depends on whatever the settings are for the current active profile.

Notice
Because of the specific exception based error handling in .NET, all calls to methods in the INovaPDFOptions interface must be nested within a try-catch block. Consider for example that we want to add a profile called "test", but the profile "test" already exists. Then the call pNova.AddProfile("test") will throw an "System.Runtime.InteropServices.COMException" with the
ErrorCode property set to NV_PROFILE_EXISTS (0xD5DA0006).

**Source code**

```csharp
using System;
using System.Drawing;
using System.Drawing.Printing;
using System.Windows.Forms;

// the novapiLib package must be added as a COM reference
using novapiLib9;
using Globals;

namespace Hello_World_CSharp
{
    /// <summary>
    /// Summary description for Class1.
    /// </summary>
    class Class1
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        public static string PRINTER_NAME = "novaPDF SDK 9";
        public static string PROFILE_NAME = "HelloWorld";
        public static int PROFILE_IS_PUBLIC = 0;

        public static string PDF_TEXT = "Hello World";
        public static string PDF_FILE_NAME = "HelloWorld.pdf";

        [STAThread]
        static void Main(string[] args)
        {
            try
            {
                // create the NovaPdfOptions object
                NovaPdfOptions9 pNova = new NovaPdfOptions9();
                // initialize the NovaPdfOptions object
                pNova.Initialize(PRINTER_NAME, "");

                // get the active profile ...
                string activeProfile = null;
                bool isActiveProfile = true;
                // pNova.SetActiveProfile(out activeProfile, out nActivePublic);
                try
                {
                    pNova.SetActiveProfile(out activeProfile);
                }
                catch (System.Runtime.InteropServices.COMException e)
                {
                    isActiveProfile = false;
                    // ignore profile exists error
                }
            }
        }
    }
}
```
if (NovaErrors.NV_NO_ACTIVE_PROFILE == (uint e.ErrorCode))
{
    System.Console.WriteLine("The printer does not have an active profile");
} else
{
    // more serious error, propagate it
    throw e;
}

string _newProfileID = String.Empty;
//add a new profile
pNova.AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, out _newProfileID);

//load the new profile
pNova.LoadProfile(_newProfileID);
//nova.NovaTools.AddProfileOptions(pNova);

// and set some options
// uncomment the function calls for the options you wish to set
// change the options in the nova.cs unit
//nova.NovaTools.AddProfileOptions(pNova);
//nova.NovaTools.AddDocumentInformation(pNova);
//nova.NovaTools.AddViewerOptions(pNova);
//nova.NovaTools.AddLinksOptions(pNova);
//nova.NovaTools.AddAdvancedOptions(pNova);
//nova.NovaTools.AddGraphicsOptions(pNova);
//nova.NovaTools.AddSecurityOptions(pNova);
//nova.NovaTools.AddSaveOptions(pNova);
//nova.NovaTools.AddAfterSaveActions(pNova);
//nova.NovaTools.AddEmailOptions(pNova);
//nova.NovaTools.AddWatermarkImage(pNova);
//nova.NovaTools.AddWatermarkText(pNova);
//nova.NovaTools.AddPageContentOptions(pNova);
//nova.NovaTools.AddOverlayOptions(pNova);
//nova.NovaTools.AddSignatureOptions(pNova);
//nova.NovaTools.AddEmbedFontsOptions(pNova);
//nova.NovaTools.AddBookmarksDefinitions(pNova);

//save the new added profile
pNova.SaveProfile();
//set the new profile as the active profile
pNova.SetActiveProfile(_newProfileID);

// print a test page, using the previously set active profile settings
using (PrintDocument pd = new PrintDocument())
{
pd.PrinterSettings.PrinterName = PRINTER_NAME;
pd.PrintPage += new PrintPageEventHandler
(PrintPageFunction);
pd.DefaultPageSettings.PaperSize = new
System.Drawing.Printing.PaperSize("PaperA4", 826, 1169);
pd.Print();

if (isActiveProfile)
{
    pNova.SetActiveProfile(activeProfile);
}
pNova.DeleteProfile(_newProfileID);
}
catch (System.Runtime.InteropServices.COMException e)
{
    MessageBox.Show(e.Message);
}
catch (Exception e)
{
    MessageBox.Show(e.Message);
}
}
// and finally the function that actually prints the page
private static void PrintPageFunction(object sender,
PrintPageEventArgs ev)
{
    string str = "novaPDF says Hello World from C#";
    Font font = new Font("Arial", 16);
    Brush brush = new SolidBrush(Color.Black);
    ev.Graphics.DrawString(str, font, brush, 20.0f, 20.0f);
    ev.HasMorePages = false;
}

1.5.5.2 CSharp Converter

The CSharp Converter sample demonstrates how to convert an existing file by printing it to
novaPDF SDK 10 using the ShellExecute function. It also demonstrates how to set different
options and manage profiles.

The same approach should be taken if you print using a "Print()" method from another object (like
an internet browser or a report control). Just replace the ShellExecute call with the call of your
Print method.

When the application starts, it creates a few profiles and makes different settings in the profiles.
Then it shows a dialog from where the user can select the active profile and change its settings
using the controls from the dialog.

After that a document can be selected from the harddisk and printed to novaPDF SDK 10 using the
ShellExecute function call.
When using this technique to convert a file to PDF, you have to take care of the fact that ShellExecute prints to the default printer. This function returns immediately and does not wait until the print is finished (it may return before the printing is actually started). Therefore you have to set the default printer to novaPDF SDK 10 before calling ShellExecute (using the SetDefaultPrinter method), wait the process to be started (using WaitForExit()), restore the default printer (with the RestoreDefaultPrinter method). This way you made sure that the default printer was restored and your document is printed to novaPDF SDK 10.

Source code snippets

1. DECLARE INovaPdfOptions variable

```csharp
private NovaPdfOptions9Class mobjNovaOptios;
```

2. Initialize INovaPdfOptions

```csharp
mobjNovaOptios = new NovaPdfOptions9Class();

// initialize the NovaPdfOptions object
mobjNovaOptios.Initialize(PRINTER_NAME, "");

//create option profiles
AddSmallProfile();
AddFullProfile();
```

3. Set novaPDF SDK 10 Options

```csharp
try
{
    String newSmallSizeProfileId = String.Empty;
    // Set some options to this profile
    mobjNovaOptios.AddProfile(SMALL_SIZE_PROFILE,
    PROFILE_IS_PUBLIC, out newSmallSizeProfileId);

    //load the new profile
    mobjNovaOptios.LoadProfile(newSmallSizeProfileId);

    // disable the "Save PDF file as" prompt
    mobjNovaOptios.SetOptionLong(NovaOptions.NOVAPDF_SAVE_PROMPT_TYPE, 0);
    // set generated Pdf files destination folder  "c:\"
    mobjNovaOptios.SetOptionString(NovaOptions.NOVAPDF_SAVE_FOLDER,
    "c:\");

    // ..... 
}

catch (System.Runtime.InteropServices.COMException ComException)
{
    MessageBox.Show("Error creating Small Size Profile:
    + ComException.Message);
}
4. Start a print job

```csharp
private void btnStartPrinting_Click(object sender, EventArgs e)
{
    UpdateProfileFromDialog();

    if (txtFileToConvert.Text.Trim() == "")
    {
        MessageBox.Show("No file to convert!");
        return;
    }

    mobjNovaOptios.SetActiveProfile((string)(cmbProfiles.SelectedItem.ToString()));
    mobjNovaOptios.setDefaultPrinter();

    mobjNovaOptios.LicenseShellExecuteFile(txtFileToConvert.Text);

    Process myProcess = new Process();
    try
    {
        myProcess.StartInfo.FileName = txtFileToConvert.Text;
        myProcess.StartInfo.Verb = "Print";
        myProcess.StartInfo.CreateNoWindow = true;

        myProcess.Start();
    }
    catch (Win32Exception ex)
    {
        if (ex.NativeErrorCode == ERROR_FILE_NOT_FOUND)
        {
            Console.WriteLine(ex.Message + " . Check the path and filename");
        }
        else if (ex.NativeErrorCode == ERROR_ACCESS_DENIED)
        {
            // Note that if your word processor might generate exceptions
            // such as this, which are handled first.
            Console.WriteLine(ex.Message + " . You do not have permission to print this file.");
        }
    }

    myProcess.WaitForExit(10000);
    myProcess.Close();
    mobjNovaOptios.RestoreDefaultPrinter();
}
```
1.5.5.3 Word OLE CSharp

The Word OLE CSharp sample is a simple Windows console application that converts a MS Word document (C:\Test.doc) to PDF using Word OLE automation.

Source code

```csharp
using System;
using System.Drawing;
using System.Drawing.Printing;
using System.Windows.Forms;
using novapiLib;

namespace Hello_World_CSharp
{
    /// <summary>
    /// Summary description for Class1.
    /// </summary>
    class Class1
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        public static string PRINTER_NAME = "novaPDF SDK 9";
        public static int NOVAPDF_INFO_SUBJECT = 68;
        public static string PROFILE_NAME = "Test C# OLE";
        public static int PROFILE_IS_PUBLIC = 0;
        public static uint NV_PROFILE_EXISTS = 0xD5DA0006;
        public static uint NV_NO_ACTIVE_PROFILE = 0xD5DA0028;
        
        [STAThread]
        static void Main(string[] args)
        {
            // create the NovaPdfOptions9 object
            NovaPdfOptions9 pNova = new NovaPdfOptions9();
            // get the active profile ...
            string activeProfile = "";
            string _newProfileID = String.Empty;
            try
            {
                // initialize the NovaPdfOptions9 object
                // if you have an application license for novaPDF SDK,
                pNova.Initialize(PRINTER_NAME, "");
                try
                {
                    pNova.GetActiveProfile(out activeProfile);
                }
                
            }
        }
    }
}
```
catch (System.Runtime.InteropServices.COMException e)
{
    // ignore profile exists error
    if (NV_NO_ACTIVE_PROFILE == (uint)
            e.ErrorCode)
    {
        System.Console.WriteLine("The printer
does not have an active profile");
    } else
    {
        // more serious error,
        propagate it
        throw e;
    }
}

//add a new profile
pNova.AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC,
out _newProfileID);

//load the new profile
pNova.LoadProfile(_newProfileID);
// and set some options
pNova.SetOptionString(NOVAINFO_INFO_SUBJECT, "C#
Hello document");
// save profile
pNova.SaveProfile();
// set the copy profile as active profile ...
pNova.SetActiveProfile(_newProfileID);
// set nova default printer
pNova.SetDefaultPrinter();
// initialize OLE usage in novaPDF
pNova.InitializeOLEUsage("Word.Application");
// create Word application object
Microsoft.Office.Interop.Word._Application();
// license OLE server in novaPDF
pNova.LicenseOLEServer();
// initializations
object objMissing = System.Reflection.Missing
.Value;
object objTrue = true; object objFalse = false;
object strFile = @"C:\temp\test.docx";
// create Word document object
WordApp.Documents.Open(ref strFile, ref objFalse, ref objTrue,
objMissing, ref objMissing, ref objMissing, ref
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
objMissing, ref objMissing, ref objMissing,
1.5.5.4 Convert Office Docs

The Convert Office Docs sample is a simple Windows console application that converts some Microsoft Office documents (Word, Excel, Publisher, PowerPoint and Visio) using Convert... functions. It uses Office OLE automation so Microsoft Office has to be installed.

The sample documents converted are located in the "OfficeDocuments" folder in novaPDF SDK installation folder. The pdf files are saved in the same folder.

Hidden links and internal document links are converted in pdf hyperlinks (except for Excel documents).

Source code
using System;
using System.Windows.Forms;
// the novapiLib package must be added as a COM reference
using novapiLib9;
using Globals;

namespace Hello_World_CSharp
{
    class Class1
    {
        public static string PRINTER_NAME = "novaPDF SDK 9";
        public static string PROFILE_NAME = "ConvertOffice";
        public static int PROFILE_IS_PUBLIC = 0;

        [STAThread]
        static void Main(string[] args)
        {
            try
            {
                // create the NovaPdfOptions object
                NovaPdfOptions9 pNova = new NovaPdfOptions9();
                // initialize the NovaPdfOptions object
                // if you have an application license for novaPDF SDK,
                // pass the license key to the Initialize() function
                pNova.Initialize(PRINTER_NAME, "");

                // get the active profile ...
                string activeProfile = null;
                try
                {
                    pNova.GetActiveProfile(out activeProfile);
                }
                catch (System.Runtime.InteropServices.COMException e)
                {
                    // ignore profile exists error
                    if (NovaErrors.NV_NO_ACTIVE_PROFILE == (uint)e.ErrorCode)
                    {
                        System.Console.WriteLine("The printer does not have an active profile");
                    }
                    else
                    {
                        // more serious error, propagate it
                        throw e;
                    }
                }

                string _newProfileID = String.Empty;
                // add a new profile
                pNova.AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, out _newProfileID);
//load the new profile
pNova.LoadProfile(_newProfileID);

//DO NOT OPEN PDF
//an Open action is added by default in the profile - delete or disable this open action

//pNova.DisableActionType((int)ActionType.NOVA_ACTION_OPEN);

// set save options
nova.NovaTools.AddSaveOptions(pNova);

//save the new added profile
pNova.SaveProfile();

//set the new profile as the active profile
pNova.SetActiveProfile(_newProfileID);

//Path for novaPDF 9 SDK sample documents
string strDocumentsPath = "C:\\Users\\Public\\Documents\\novaPDF 9\\SDK\\OfficeDocuments\\";
string strDocPath;

// --------------------------------------------------
// Convert Word document
// Microsoft Office Word has to be installed
// --------------------------------------------------
//Document file path
strDocPath = strDocumentsPath + "Word.docx";
//style name | level | type
string strHeadings = "Heading 1|1|0;Heading 2|2|0;Heading 3|3|0";
pNova.LicenseApplication("WINWORD.EXE");
pNova.LicenseApplication("SPLWOW64.EXE");
pNova.ConvertWordDocument(strDocPath, 1, 0, 1, 1, 1, 1, 1, 1, 1, 1, 3, strHeadings);

// --------------------------------------------------
// Convert PowerPoint document
// Microsoft Office PowerPoint has to be installed
// --------------------------------------------------
//Document file path
strDocPath = strDocumentsPath + "PowerPoint.pptx";
pNova.LicenseApplication("POWERPNT.EXE");
pNova.LicenseApplication("SPLWOW64.EXE");
pNova.ConvertPowerPointDocument(strDocPath, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1);
strDocPath = strDocumentsPath + "Publisher.pub";
pNova.LicenseApplication("MSPUB.EXE");
pNova.LicenseApplication("SPLWOW64.EXE");
pNova.ConvertPublisherDocument(strDocPath, 1, 1, 1, 1, 1, 1);

// Convert Excel document
// Microsoft Office Excel has to be installed
// hidden links in Excel documents will not be converted to pdf links
strDocPath = strDocumentsPath + "Excel.xlsx";
pNova.LicenseApplication("EXCEL.EXE");
pNova.LicenseApplication("SPLWOW64.EXE");
pNova.ConvertExcelDocument(strDocPath, 1);

// Convert Visio document
// Microsoft Office Visio has to be installed
strDocPath = strDocumentsPath + "Visio.vsd";
pNova.LicenseApplication("VISIO.EXE");
pNova.LicenseApplication("SPLWOW64.EXE");
pNova.ConvertVisioDocument(strDocPath, 1, 1, 1, 1, 1);

catch (System.Runtime.InteropServices.COMException e)
{
    MessageBox.Show(e.Message);
}
catch (Exception e)
{
    MessageBox.Show(e.Message);
}

1.5.5.5 Override Options

Override Options sample is a simple Windows console application that demonstrates the basic use of the INovaPDFOptions interface, without using profiles options. Instead of creating a profile and setting options in the profile, the sample uses SetOverrideOptions... functions to quickly set some options that will overwrite active profile settings. This is useful if you have a simple application where you just wish to change the pdf file name, email address or other simple options for each printed document.

There is a limited set of options that can be set with SetOverrideOptions... functions, usually
settings that users can also change from the Save As dialog or the other prompt dialogs that can be shown before printing a document. If you need more complex settings, like adding a watermark, overlay or signature you have to configure them in a profile.

You can combine usage of profiles and override options functions. For instance you can create a profile with a watermark that is set as active and then use the override function just to change the file name for each document.

Once set, override options are taken in account for all printed documents until they are removed with DeleteOverrideOptions function.

The sample prints one page with a simple text to the novaPDF SDK 10 and generates a "OverrideOptions.pdf" file in the C:\temp folder.

**Source code**

```csharp
using System;
using System.Drawing;
using System.Drawing.Printing;
using System.Windows.Forms;
// the novapiLib package must be added as a COM reference
using novapiLib9;
using Globals;

namespace Override_Options
{
    /// <summary>
    /// Summary description for Class1.
    /// </summary>
    class Class1
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        public static string PRINTER_NAME = "novaPDF_SDK 9";
        public static string PDF_TEXT = "Override Options";
        public static string PDF_FILE_NAME = "OverrideOptions.pdf";

        [STAThread]
        static void Main(string[] args)
        {
            try
            {
                // create the NovaPdfOptions object
                NovaPdfOptions9 pNova = new NovaPdfOptions9();
                // initialize the NovaPdfOptions object
                // if you have an application license for novaPDF SDK,
                // pass the license key to the Initialize() function
                pNova.Initialize(PRINTER_NAME, "");

                //Override options from active profile
            }
        }
    }
}
```
//Save options
pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_SAVE_TYPE, (int)SaveDlgType.PROMPT_SAVE_NONE);

//do not show prompt save dialog
pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_SAVE_FOLDER_TYPE, (int)SaveFolder.SAVEFOLDER_CUSTOM);

//save the pdf in next folder
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_SAVE_FOLDER, "C:\temp");

//access folder, if restricted
pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_SAVE_USER, "user");

//if a file with the same name already exists
pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_SAVE_CONFLICT, (int)SaveFileConflictType.FILE_CONFLICT_STRATEGY_OVERWRITE);

//disable open PDF in viewer
pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_OPEN_VIEWER, 0);

//Embed fonts
pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_EMBEDFONTS, 1);

//Set compression level
pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_COMPRESSION, (int)CompressionOverride.COMPRESSION_HIGHQUALITY);

//Merge PDF
pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_MERGE_PDF, 1);

//Merge with the same file, if the file exists in destination OR merge with another file
pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_MERGE_FILE_TYPE, (int)MergeFile.MERGE_FILE_OTHER);

//Append to existing PDF, insert at the beginning or insert at a page number
pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_MERGE_TYPE, (int)MergeType.MERGE_TYPE_APPEND);

//if merge with other file, specify file name (and path)
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_MERGE_FILE, PDF_FILE_NAME);
"invoice-text.pdf";
    // if merge type is set to insert at page number

    //pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_INSERT_PAGENO, 1);
    // if the existing PDF is encrypted

    //pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_PDF_PASSWORD, "password");
    */

    //Document info
    pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_DOC_INFO, 1);
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_TITLE, "sdk title");
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_SUBJECT, "sdk subject");
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_AUTHOR, "sdk author");
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_KEY, "sdk key");
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_CREATOR, "sdk creator");

    //Encrypt PDF
    /*
    pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_SECURITY, 1);
    pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_SECURITY_USER, "user");
    pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_SECURITY_OWNER, "owner");
    */

    //Email
    pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_SEND_EMAIL, 1);
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_TO, "to");
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_FROM, "from");
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_CC, "cc");
    pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_BCC, "bcc");

    pNova.RegisterNovaEvent(NovaEvents.NOVAPDF_EVENT_ACTIONS);

    // print a test page, using the previously set active
profile settings
{
    using (PrintDocument pd = new PrintDocument())
    {
        pd.PrinterSettings.PrinterName = PRINTER_NAME;
        pd.PrintPage += new PrintPageEventHandler(PrintPageFunction);
        pd.Print();
    }

    int bTimeout;
    pNova.WaitForNovaEvent(120000, out bTimeout);
}

private static PaperSize GetPaperSize(string Name)
{
    PaperSize sizel = null;
    Name = Name.ToUpper();
    PrinterSettings settings = new PrinterSettings();
    foreach (PaperSize size in settings.PaperSizes)
    {
        if (size.Kind.ToString().ToUpper() == Name)
        {
            sizel = size;
            break;
        }
    }
    return sizel;
}

private static void PrintPageFunction(object sender, PrintPageEventArgs ev)
{
    string str = "novaPDF says Hello World from C#";
    Font font = new Font("Arial", 16);
    Brush brush = new SolidBrush(Color.Black);
    ev.Graphics.DrawString(str, font, brush, 20.0f, 20.0f);
    ev.HasMorePages = false;
}
}
1.5.6  C++

1.5.6.1  Hello World

Hello World sample is a simple Windows console application that prints one page with the "Hello World" text to the novaPDF SDK 10.
It demonstrates the basic use of the INovaPDFOptions interface. The printing job is made with Windows API calls OpenPrinter, StartDoc,...
It generates a "Hello World.pdf" file in the working folder.

Notice
If you do not use Windows API calls to print to novaPDF SDK 10, but you perform a print job by calling other controls "Print()" method, or if you print an existing document using "ShellExecute ()" function, you should check the MFC Converter sample instead.

Source code

```c++
// HelloWorld.cpp
#include "stdafx.h"

#include "../include\novaOptions.h"
#include "../include\novapi.h"

#define PRINTER_NAME L"novaPDF SDK 10"
#define PDF_TEXT L"Hello world!"
#define PDF_FILE_NAME L"HelloWorld.pdf"
#define PROFILE_NAME L"HelloWorld Profile"
#define PROFILE_IS_PUBLIC 0

int _tmain(int argc, _TCHAR* argv[])
{
    HRESULT hr = S_OK;

    //initialize COM
    hr = CoInitialize(NULL);
    if (FAILED (hr))
    {
        MessageBox(NULL, L"Failed to initialize COM", L"novaPDF", MB_OK);
        return hr;
    }

    //create one NovaPdfOptions instance
```
INovaPdfOptions *pNova = 0;
hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL, CLSCTX_INPROC_SERVER, __uuidof(INovaPdfOptions9), (LPVOID*) &pNova);
if (FAILED(hr))
{
    MessageBox(NULL, L"Failed to create novaPDF COM object", L"novaPDF", MB_OK);
    return hr;
}

// initialize the NovaPdfOptions object to use with a printer licensed for SDK
hr = pNova->Initialize(PRINTER_NAME, L"");
if (SUCCEEDED(hr))
{
    LPWSTR pwsOldActiveProfileID = NULL;
    LPWSTR pwsNewProfileID = NULL;
    hr = pNova->GetActiveProfile(&pwsOldActiveProfileID);

    // create a new profile with default settings
    hr = pNova->AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, &pwsNewProfileID);
    // load the newly created profile
    if (SUCCEEDED(hr) && pwsNewProfileID)
    {
        hr = pNova->LoadProfile(pwsNewProfileID);
    }
    else
    {
        MessageBox(NULL, L"Failed to create profile", L"novaPDF",
        MB_OK);
        return hr;
    }

    // set PDF document Title
    pNova->SetOptionString(NOVAPDF_DOCINFO_TITLE, L"My Doc Title");

    // what type of save dialog to be shown (none, simple or extended)
    pNova->SetOptionLong(NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_SIMPLE);

    // you may choose a predefined folder like "My Documents"
    pNova->SetOptionLong(NOVAPDF_SAVE_FOLDER_TYPE, SAVEFOLDER_MYDOCUMENTS);

    // set a macro for the file name
    pNova->SetOptionString(NOVAPDF_SAVE_FILE_NAME, L"test_[N]");

    // in case a file with the same name exists in the selected folder,
    choose what to do
    pNova->SetOptionLong(NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW);

    // save profile changes
    hr = pNova->SaveProfile();

    // set as active profile for printer
    pNova->SetActiveProfile(pwsNewProfileID);
HANDLE hPrinter;
PDEVMODE pDevmode = NULL;
PRINTER_DEFAULTS pd = { NULL, NULL, PRINTER_ACCESS_USE };

//start print job
if (OpenPrinter(PRINTER_NAME, &hPrinter, &pd)) {
  //get default printer DEVMODE
  int nSize = DocumentProperties(NULL, hPrinter, PRINTER_NAME, NULL, NULL, 0);
pDevmode = (PDEVMODEW)LocalAlloc(LPTR, nSize);
DocumentProperties(NULL, hPrinter, PRINTER_NAME, pDevmode, NULL, DM_OUT_BUFFER);

  //set page size in DEVMODE
  pDevmode->dmPaperSize = DMPAPER_USER;
pDevmode->dmPaperLength = 2970;//5940;
pDevmode->dmPaperWidth = 2100;//4200;
pDevmode->dmFields = DM_PAPERSIZE | DM_PAPERLENGTH | DM_PAPERWIDTH;
DocumentProperties(NULL, hPrinter, PRINTER_NAME, pDevmode, pDevmode, DM_IN_BUFFER | DM_OUT_BUFFER);

  //Print a page
  HDC hDC = CreateDC(L"", PRINTER_NAME, NULL, pDevmode);
  DOCINFO docInfo = {sizeof(DOCINFO)};
  //document name
docInfo.lpszDocName = PDF_FILE_NAME;
StartDoc(hDC, &docInfo);
StartPage(hDC);
  // Draw text on page
TextOut(hDC, 100, 80, PDF_TEXT, (int) wcslen(PDF_TEXT));
EndPage(hDC);
EndDoc(hDC);
DeleteDC(hDC);

  //print job sent to printer
MessageBox(NULL, L"Print job finished", L"novaPDF", MB_OK);

  LocalFree(pDevmode);
  ClosePrinter(hPrinter);
} else {
  WCHAR wsMessage[255];
  wsprintf(wsMessage, L"OpenPrinter failed, error = %ld", GetLastError());
  MessageBox(NULL, wsMessage, L"novaPDF", MB_OK);
}

//restore default profile
if (pwsOldActiveProfileID) {
  pNova->SetActiveProfile(pwsOldActiveProfileID);
}
```c
//delete newly created profile
pNova->DeleteProfile(pwsNewProfileID);
//free memory
CoTaskMemFree(pwsNewProfileID);
CoTaskMemFree(pwsOldActiveProfileID);
}
else
{
    MessageBox(NULL, L"Failed to initialize novaPDF Printer", L"novaPDF",
MB_OK);
}

//release NovaPdfOptions
pNova->Release();
CoUninitialize();
return 0;
}

1.5.6.2 Hello World (network)

Hello World (network) sample is similar with Hello World sample but it can be used from network
and print to novaPDF installed on a different computer. The sample requests the shared printer
name in a dialog as "\\computer name\printer name" (for example if novaPDF SDK 10 is installed
on WS1, then you should enter "\\WS1\novaPDF SDK 10"). See Network use topic for more
details on how to use novaPDF on network.

Source Code snippets (in addition to Hello World source code)

{
    //...
    //initialize COM
    hr = CoInitialize(NULL);
    if (FAILED (hr))
    {
        MessageBoxW(NULL, L"Failed to initialize COM", L"novaPDF", MB_OK);
        return hr;
    }

    //create one NovaPdfOptions instance
    INovaPdfOptions *pNova = 0;
    hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL, CLSCTX_INPROC_SERVER, __uuidof(INovaPdfOptions9), (LPVOID*) &pNova);
    if (FAILED(hr))
    {
        MessageBoxW(NULL, L"Failed to create novaPDF COM object", L"novaPDF", MB_OK);
        return hr;
    }

    DWORD dwSize = 256;
    WCHAR strWorkStation[256];

    //find out computer name
    GetComputerNameW(strWorkStation, &dwSize);
```
PrinterNameDlg dlg;
//construct printer name as "\\computer name\\printer name"
dlg.m_strPrinterName.Format(L"\\%s\\%s", strWorkStation, PRINTER_NAME);

//get printer name from user
if (IDCANCEL == dlg.DoModal())
{
    pNova->Release();
    CoUninitialize();
    return hr;
}
CString strPrinterName = dlg.m_strPrinterName;

// initialize the NovaPdfOptions object to use with a printer licensed for SDK
hr = pNova->Initialize((LPCWSTR)strPrinterName, L"");

//...

1.5.6.3 Convert Office Docs

The Convert Office Docs sample is a simple Windows console application that converts some
Microsoft Office documents (Word, Excel, Publisher, PowerPoint and Visio) using Convert...
functions. It uses Office OLE automation so Microsoft Office has to be installed.

The sample documents converted are located in the "OfficeDocuments" folder in novaPDF SDK
installation folder. The pdf files are saved in the same folder.

Hidden links and internal document links are converted in pdf hyperlinks (except for Excel
documents).

Source code
#include "stdafx.h"
//Include novaPDF headers
#include "..\..\..\include\novaOptions.h"
#include "..\..\..\include\novaEvents.h"
#include "..\..\..\include\novapi.h"
#include "nova.h"

#define PRINTER_NAME    L"novaPDF SDK 9"
#define PROFILE_NAME    L"ConvertOfficeDocs Profile"
#define PROFILE_IS_PUBLIC  0

int _tmain(int argc, _TCHAR* argv[])
{
    HRESULT hr = S_OK;

    //initialize COM
hr = CoInitialize(NULL);
if (FAILED (hr))
{
    MessageBox(NULL, L"Failed to initialize COM", L"novaPDF", MB_OK);
    return hr;
}

//create one NovaPdfOptions instance
INovaPdfOptions9 *pNova = 0;
hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL, CLSCTX_INPROC_SERVER,
__uuidof(INovaPdfOptions9), (LPVOID*) &pNova);
if (FAILED(hr))
{
    MessageBox(NULL, L"Failed to create novaPDF COM object", L"novaPDF", MB_OK);
    return hr;
}

// initialize the NovaPdfOptions object to use with a printer licensed for SDK
// if you have an application license for novaPDF SDK,
// pass the license key to the Initialize() function
hr = pNova->Initialize(PRINTER_NAME, L"");
if (SUCCEEDED(hr))
{
    LPWSTR pwsOldActiveProfileID = NULL;
    LPWSTR pwsNewProfileID = NULL;
    hr = pNova->GetActiveProfile(&pwsOldActiveProfileID);
    //create a new profile with default settings
    hr = pNova->AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, &pwsNewProfileID);
    //load the newly created profile
    if (SUCCEEDED(hr) && pwsNewProfileID)
    {
        hr = pNova->LoadProfile(pwsNewProfileID);
    }
    else
    {
        MessageBox(NULL, L"Failed to create profile", L" novaPDF", MB_OK);
        return hr;
    }
    // set novaPDF options
    // uncomment the function calls for the options you wish to set and
    change the options in nova.cpp unit
    //DO NOT OPEN PDF
    //an Open action is added by default in the profile - delete or disable this open action
    //pNova->DisableActionType(NOVA_ACTION_OPEN);
// Save pdf files to OfficeDocuments folder
AddSaveOptions(pNova);

// save profile changes
hr = pNova->SaveProfile();

// set as active profile for printer
pNova->SetActiveProfile(pwsNewProfileID);

// Path for novaPDF 9 SDK sample documents

WCHAR wsDocumentsPath[MAX_PATH];
WCHAR wsDocPath[MAX_PATH];
SHGetFolderPath(NULL, CSIDL_COMMON_DOCUMENTS, NULL, 0, wsDocumentsPath);
wcsstr(wsDocumentsPath, L"\novaPDF 9\SDK\OfficeDocuments\")

// Convert Word document
// Microsoft Office Word has to be installed
// ----------------------------------
// Document file path
wcscpy(wsDocPath, wsDocumentsPath);
wcsstr(wsDocPath, L"Word.docx");
// style name | level | type
WCHAR wsHeadings[200] = L"Heading 1|1|0;Heading 2|2|0;Heading 3|3|0";
pNova->LicenseApplication(L"WINWORD.EXE");
pNova->LicenseApplication(L"SPLWOW64.EXE");
hr = pNova->ConvertWordDocument(wsDocPath, TRUE, FALSE, TRUE, TRUE, TRUE, TRUE, TRUE, TRUE, 3, wsHeadings);

// Convert PowerPoint document
// Microsoft Office PowerPoint has to be installed
// ----------------------------------
// Document file path
wcscpy(wsDocPath, wsDocumentsPath);
wcsstr(wsDocPath, L"PowerPoint.pptx");
pNova->LicenseApplication(L"POWERPNT.EXE");
pNova->LicenseApplication(L"SPLWOW64.EXE");
hr = pNova->ConvertPowerPointDocument(wsDocPath, TRUE, TRUE, TRUE, TRUE, TRUE, TRUE, TRUE, TRUE); 

// Convert Publisher document
// Microsoft Office Publisher has to be installed
// ----------------------------------
// Document file path
wcscpy(wsDocPath, wsDocumentsPath);
wcsstr(wsDocPath, L"Publisher.pub");
pNova->LicenseApplication(L"MSPUB.EXE");
pNova->LicenseApplication(L"SPLWOW64.EXE");
hr = pNova->ConvertPublisherDocument(wsDocPath, TRUE, TRUE, TRUE, TRUE, TRUE, TRUE);

// Convert Excel document
// Microsoft Office Excel has to be installed
// hidden links in Excel documents will not be converted to pdf links
1.5.6.4 MFC Converter

The **MFC Converter** sample demonstrates how to convert an existing file by printing it to novaPDF SDK 10 using the `ShellExecute` function. It also demonstrates how to set different options and manage profiles.

The same approach should be taken if you print using a "Print()" method from another object (like an internet browser or a report control). Just replace the `ShellExecute` call with the call of your Print method.
When the application starts, it creates a few profiles and makes different settings in the profiles. Then it shows a dialog from where the user can select the active profile and change its settings using the controls from the dialog.

After that a document can be selected from the harddisk and printed to novaPDF SDK 10 using the ShellExecute function call.

When using this technique to convert a file to PDF, you have to take care of the fact that ShellExecute prints to the default printer. This function returns immediately and does not wait until the print is finished (it may return before the printing is actually started). Therefore you have to set the default printer to novaPDF SDK 10 before calling ShellExecute (using the SetDefaultPrinter method), register FileSaved message (or any other novaPDF SDK 10 message) to be sure that the print job was started. In this message handler restore the default printer (with the RestoreDefaultPrinter method). This way you made sure that the default printer was restored and your document is printed to novaPDF SDK 10.

Source code snippets

1. Declare INovaPdfOptions variable
   ```c++
   //declare an INovaPdfOptions member variable
   private:
   INovaPdfOptions *m_novaOptions;
   ```

2. Register novaPDF SDK 10 messages
   ```c++
   const UINT  wm_Nova_FileSaved = RegisterWindowMessageW( MSG_NOVAPDF2_FILESAVED );
   const UINT  wm_Nova_PrintError = RegisterWindowMessageW( MSG_NOVAPDF2_PRINTERROR );
   ```

   BEGIN_MESSAGE_MAP(CnovaPrintDlg, CDialog)
   //...
   ON_REGISTERED_MESSAGE(wm_Nova_FileSaved, OnNovaPDFFileSaved)
   ON_REGISTERED_MESSAGE(wm_Nova_PrintError, OnNovaPDFPrintError)
   //...
   END_MESSAGE_MAP()

3. Initialize INovaPdfOptions
   ```c++
   BOOL CnovaPrintDlg::OnInitDialog()
   {
   //...
   HRESULT hr = S_OK;
   m_novaOptions = 0;
   //create an instance of INovaPdfOptions
   ```
hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL, CLSCTX_INPROC_SERVER, __uuidof(INovaPdfOptions9), (LPVOID*) &m_novaOptions);
if (SUCCEEDED(hr)) {
    // initialize the NovaPdfOptions object to use with a printer licensed for SDK
    hr = m_novaOptions->Initialize(PRINTER_NAME, L"");
}
else {
    ::MessageBoxW(NULL, L"Failed to create novaPDF COM object", L"novaPDF", MB_OK);
}
//...

4. Release INovaPDFOptions

CnovaPrintDlg::~CnovaPrintDlg()
{
    //...

    //delete profiles
    if (m_wsProfileSmall)
    {
        hr = m_novaOptions->DeleteProfile(m_wsProfileSmall);
        CoTaskMemFree(m_wsProfileSmall);
    }
    if (m_wsProfileFull)
    {
        hr = m_novaOptions->DeleteProfile(m_wsProfileFull);
        CoTaskMemFree(m_wsProfileFull);
    }
    // destroy our nova options object
    if (m_novaOptions) {
        m_novaOptions->Release();
    }
    // uninitialize COM libraries
    CoUninitialize();
    //...
}

5. Set novaPDF SDK 10 Options

BOOL CnovaPrintDlg::OnInitDialog()
{
    // Add a profile called "Small size". If profile L"Small size" exists
    // this will fail
    hr = m_novaOptions->AddProfile(SMALL_SIZE_PROFILE, PROFILE_IS_PUBLIC, &m_wsProfileSmall);

    //load the newly created profile
    if (SUCCEEDED(hr) && m_wsProfileSmall)
    {
        //load profile
        m_novaOptions->LoadProfile(m_wsProfileSmall);
// disable the "Save PDF file as" prompt
m_novaOptions->SetOptionLong(NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_NONE);
// set generated Pdf files destination folder ("c:\")
m_novaOptions->SetOptionLong(NOVAPDF_SAVE_LOCATION, LOCATION_TYPE_LOCAL);
   m_novaOptions->SetOptionLong(NOVAPDF_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM);
   m_novaOptions->SetOptionString(NOVAPDF_SAVE_FOLDER, szExeDirectory);
   // set output file name
   m_novaOptions->SetOptionString(NOVAPDF_SAVE_FILE_NAME, L"PDF Converter small size.pdf");
   // if file exists in the destination folder, append a counter to the end of the file name
   m_novaOptions->SetOptionLong(NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW);
   // Set other options
   //...

   // save profile changes
   m_novaOptions->SaveProfile();

6. Start a print job
   void CnovaPrintDlg::OnBnClickedOk()
   {
      //...
      HRESULT hr = S_OK;

      // set the active profile to be used for printing
      hr = m_novaOptions->SetActiveProfile(m_strProfileId);

      // register our window to receive messages from the printer
      hr = m_novaOptions->RegisterEventWindow((LONG) GetSafeHwnd());

      // set novaPDF as default printer, so it will be used by ShellExecute
      hr = m_novaOptions->SetDefaultPrinter();

      // license file for ShellExecute
      hr = m_novaOptions->LicenseShellExecuteFile(m_strFileToConvert.AllocSysString());

      // print the document
      m_bPrintJobPending = TRUE;
      HINSTANCE hExec = ShellExecute(GetSafeHwnd(), L"print",
         m_strFileToConvert, NULL, NULL, SW_HIDE);
7. Restore default printer when printing finished

LRESULT CnovaPrintDlg::OnNovaPDFFileSaved(WPARAM wParam, LPARAM lParam)
{
    // restore original default printer
    m_novaOptions->UnRegisterEventWindow();
    m_novaOptions->RestoreDefaultPrinter();
    m_bPrintJobPending = FALSE;
    return 0;
}

LRESULT CnovaPrintDlg::OnNovaPDFPrintError(WPARAM wParam, LPARAM lParam)
{
    switch(wParam){
    case ERROR_MSG_TEMP_FILE:
        MessageBox(L"Error saving temporary file on printer server", L"novaPDF", MB_OK);
        break;
    case ERROR_MSG_LIC_INFO:
        MessageBox(L"Error reading license information", L"novaPDF", MB_OK);
        break;
    case ERROR_MSG_SAVE_PDF:
        MessageBox(L"Error saving PDF file", L"novaPDF", MB_OK);
        break;
    case ERROR_MSG_JOB_CANCELED:
        MessageBox(L"Print job was canceled", L"novaPDF", MB_OK);
        break;
    }
    // restore original default printer
    m_novaOptions->UnRegisterEventWindow();
    m_novaOptions->RestoreDefaultPrinter();
    m_bPrintJobPending = FALSE;
    return 0;
}

1.5.6.5 MFC Scribble

The MFC Scribble sample extends the standard MFC Scribble sample with the generation of PDF files using novaPDF SDK 10. It demonstrates how to integrate novaPDF SDK in a document/view MFC architecture:

Source code snippets

1. Register novaPDF SDK 10 event

#define PROFILE_NAME      L"MFCScribble Profile"
#define PDF_FILE_NAME     L"MFCScribble.pdf"
#define PROFILE_IS_PUBLIC 0

    // This message is sent when the PDF file is finished and saved on the harddisk
const UINT wm_Nova_FileSaved = RegisterWindowMessageW(MSG_NOVAPDF2_FILESAVED);
BEGIN_MESSAGE_MAP(CScribbleView, CScrollView)
   //((AFX_MSG_MAP(CScribbleView)
   //...
   //))AFX_MSG_MAP
   //...
   ON_REGISTERED_MESSAGE(wm_Nova_FileSaved, OnNovaPDFFileSaved)
END_MESSAGE_MAP()

2. Initialize INovaPDFOptions

CScribbleView::CScribbleView()
{
   //...
   HRESULT hr = CoInitialize(NULL);
   //...
   //create novaPDFOptions object
   hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL, CLSCTX_INPROC_SERVER, __uuidof(INovaPdfOptions9), (LPVOID*) &m_pNova);
   // initialize the NovaPdfOptions object to use with a printer licensed for SDK
   hr = m_pNova->Initialize(PRINTER_NAME, L"");
   //...

3. Release INovaPDFOptions

CScribbleView::~CScribbleView()
{
   //release novaPDFOptions object
   if (m_pNova){
      m_pNova->Release();
   }
   CoUninitialize();
}

4. Set novaPDF SDK 10 Options

BOOL CScribbleView::OnPreparePrinting(CPrintInfo* pInfo)
{
   //set novaPDF default printer
   if (m_pNova){
      m_pNova->setDefaultPrinter();
      HRESULT hr;
      hr = m_pNova->GetActiveProfile(&m_wsDefaultProfile);
      //create a new profile with default settings
      hr = m_pNova->AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, &m_wsNewProfile);
      //load the newly created profile
      if (SUCCEEDED(hr) && m_wsNewProfile)
      {
         hr = m_pNova->LoadProfile(m_wsNewProfile);
      }
      else
{ 
    MessageBox(L"Failed to create profile", L"novaPDF", 
    MB_OK);
    return hr;
}

// set PDF document Title  
m_pNova->SetOptionString(NOVAPDF_DOCINFO_TITLE, L"MFC Scribble Sample");

// set resulting file name
m_pNova->SetOptionLong(NOVAPDF_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM);
    m_pNova->SetOptionLong(NOVAPDF_SAVE_LOCATION, LOCATION_TYPE_LOCAL);
    m_pNova->SetOptionLong(NOVAPDF_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM);
    m_pNova->SetOptionString(NOVAPDF_SAVE_FOLDER, L"C:\\temp");  
    m_pNova->SetOptionString(NOVAPDF_SAVE_FILE_NAME, PDF_FILE_NAME);
// do not show prompt dialog
m_pNova->SetOptionLong(NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_NONE);
//if file exists, override
m_pNova->SetOptionLong(NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_OVERWRITE);

//save profile changes
hr = m_pNova->SaveProfile();
//set as active profile for printer
m_pNova->SetActiveProfile(m_wsNewProfile);

//register window to receive messages from novaPDF printer
m_pNova->RegisterEventWindow((LONG)m_hWnd);
///...

5. Restore options when printing finished
void CScribbleView::OnEndPrinting(CDC* /*pDC*/, CPrintInfo* /*pInfo*/)
{
    if (m_pNova)
    {
        //unregister events
        m_pNova->UnRegisterEventWindow();
        //restore default profile
        if (m_wsDefaultProfile)
        {
            m_pNova->SetActiveProfile(m_wsDefaultProfile);
        }

        //delete newly created profile
        m_pNova->DeleteProfile(m_wsNewProfile);
        //free memory
        CoTaskMemFree(m_wsNewProfile);
    }
CoTaskMemFree(m_wsDefaultProfile);
m_wsDefaultProfile = NULL;
m_wsNewProfile = NULL;
//restore default printer
m_pNova->RestoreDefaultPrinter();
}
}

6. novaPDF SDK10 message handler
LRESULT CScribbleView::OnNovaPDFFileSaved(WPARAM, LPARAM)
{
    //PDF is saved, so just show a message that the conversion to PDF was successful
    MessageBox(L"PDF file was saved successfully", L"novaPrint");
    return 0;
}

1.5.6.6   Temporary printer
Temporary printer sample is similar with Hello World sample but it uses temporary printers.
It demonstrates the use of AddNovaPrinter and DeleteNovaPrinter.

Source code

#include "stdafx.h"

//Include novaPDF headers
#include "..\..\..\include\novaOptions.h"

//NovaPdfOptions
#include "..\..\..\include\novapi.h"

#include "nova.h"

//name of novaPDF Printer Demo
#define PRINTER_NAME    L"novaPDF temporary printer"
#define PORT_NAME    L"novaPDF9temp"

//text to be written in the PDF file
#define PDF_TEXT        L"Hello world!"

//PDF file name
#define PDF_FILE_NAME   L"HelloWorld.pdf"

//Print profile name
#define PROFILE_NAME       L"HelloWorld Profile"
#define PROFILE_IS_PUBLIC  0

//entry point for the console application
int _tmain(int argc, _TCHAR* argv[])
{
    HRESULT hr = S_OK;

    //initialize COM
    hr = CoInitialize(NULL);
    if (FAILED (hr))
{  
    MessageBox(NULL, L"Failed to initialize COM", L"novaPDF", MB_OK);
    return hr;
}

//create one NovaPdfOptions instance
INovaPdfOptions *pNova = 0;
hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL, CLSCTX_INPROC_SERVER, __uuidof(INovaPdfOptions9), (LPVOID*) &pNova);

if (SUCCEEDED(hr))
{
    //add temporary printer
    pNova->AddNovaPrinter(PRINTER_NAME, PORT_NAME, L"nPdfSdk9_Softland", L"8501", L"");
    // set optional PDF settings
    LPWSTR pwsNewProfileID = NULL;
    // create a new profile with default settings
    hr = pNova->AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, pwsNewProfileID);
    //load the newly created profile
    if (SUCCEEDED(hr) && pwsNewProfileID)
    {
        hr = pNova->LoadProfile(pwsNewProfileID);
    }
    else
    {
        MessageBox(NULL, L"Failed to create profile", L"novaPDF", MB_OK);
        return hr;
    }

    // set novaPDF options
    // set PDF document Title
    pNova->SetOptionString(NOVAPDF_DOCINFO_TITLE, L"My Doc Title");

    // what type of save dialog to be shown (none, simple or extended)
    pNova->SetOptionLong(NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_SIMPLE);

    // you may choose a predefined folder like "My Documents"
    pNova->SetOptionLong(NOVAPDF_SAVE_FOLDER_TYPE, SAVEFOLDER_MYDOCUMENTS);

    // set a macro for the file name
    pNova->SetOptionString(NOVAPDF_SAVE_FILE_NAME, L"test_[N]");

    // in case a file with the same name exists in the selected folder,
    choose what to do
    pNova->SetOptionLong(NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW);

    // save profile changes
    hr = pNova->SaveProfile();

    // set as active profile for printer
}
pNova->SetActiveProfile(pwsNewProfileID);

HANDLE hPrinter;
PDEVMODE pDevmode = NULL;
PRINTER_DEFAULTS pd = { NULL, NULL, PRINTER_ACCESS_USE };

//start print job
if (OpenPrinter(PRINTER_NAME, &hPrinter, &pd))
{
    //get default printer DEVMODE
    int nSize = DocumentProperties(NULL, hPrinter, PRINTER_NAME, NULL, NULL, 0);
    pDevmode = (PDEVMODE)LocalAlloc(LPTR, nSize);
    DocumentProperties(NULL, hPrinter, PRINTER_NAME, pDevmode, NULL, DM_OUT_BUFFER);

    //set page size in DEVMODE
    pDevmode->dmPageSize = DMPAPER_USER;
    pDevmode->dmPaperLength = 2970;
    pDevmode->dmPaperWidth = 2100;
    pDevmode->dmFields = DM_PAPERSIZE | DM_PAPERLENGTH | DM_PAPERWIDTH;
    DocumentProperties(NULL, hPrinter, PRINTER_NAME, pDevmode, pDevmode, DM_IN_BUFFER | DM_OUT_BUFFER);

    //Print a page
    HDC hDC = CreateDC(L"", PRINTER_NAME, NULL, pDevmode);
    DOCINFO docInfo = {sizeof(DOCINFO)};
    // PDF document name and path
    docInfo.lpszDocName = PDF_FILE_NAME;
    StartDoc(hDC,&docInfo);
    StartPage(hDC);
    // Draw text on page
    TextOut(hDC, 100, 80, PDF_TEXT, (int) wcslen(PDF_TEXT));
    EndPage(hDC);
    EndDoc(hDC);
    DeleteDC(hDC);
    //print job sent to printer
    MessageBox(NULL, L"Print job finished", L"novaPDF", MB_OK);

    LocalFree(pDevmode);
    ClosePrinter(hPrinter);
}
else
{
    WCHAR wsMessage[255];
    wsprintf(wsMessage, L"OpenPrinter failed, error = %d",
    GetLastError());
    MessageBox(NULL, wsMessage, L"novaPDF", MB_OK);
}
276

novaPDF SDK 10

//delete newly created profile
pNova->DeleteProfile(pwsNewProfileID);
//free memory
CoTaskMemFree(pwsNewProfileID);
//delete temporarry printer
pNova->DeleteNovaPrinter(PRINTER_NAME);

}

//release NovaPdfOptions
pNova->Release();
CoUninitialize();
return 0;
}

1.5.6.7 Multiple printers
Multiple printers sample is similar with the Temporary printer sample but it uses several threads.
Source code
// HelloWorld.cpp
#include "stdafx.h"
//Include novaPDF headers
#include "..\..\..\include\novaOptions.h"
//NovaPdfOptions
#include "..\..\..\include\novapi.h"
#include "nova.h"
//name of novaPDF Printer Demo
#define PRINTER_NAME1
L"novaPDF temporary printer1"
#define PRINTER_NAME2
L"novaPDF temporary printer2"
#define PRINTER_NAME3
L"novaPDF temporary printer3"
#define PORT_NAME1
#define PORT_NAME2
#define PORT_NAME3
#define FILE_NAME1
#define FILE_NAME2
#define FILE_NAME3

L"novaPDF9temp1"
L"novaPDF9temp2"
L"novaPDF9temp3"
L"first.pdf"
L"second.pdf"
L"third.pdf"

//text to be written in the PDF file
#define PDF_TEXT
L"Hello world!"
//PDF file name
#define PDF_FILE_NAME

L"HelloWorld.pdf"

//Print profile name
#define PROFILE_NAME
L"HelloWorld Profile"
#define PROFILE_IS_PUBLIC 0
typedef struct _PRT_THREAD_PARAM {
novaPDF SDK 10 User Manual

Copyright © 2020 Softland


WCHAR wsPrinterName[255];
WCHAR wsPortName[255];
WCHAR wsFileName[255];
} PRT_THREAD_PARAM;

DWORD WINAPI PrtThreadProc(LPVOID lpParameter);
HANDLE CreatePrtThread(LPWSTR p_strPrinterName, LPWSTR p_wsFileName);

//entry point for the console application
int _tmain(int argc, _TCHAR* argv[])
{
    HANDLE hThread1 = CreatePrtThread(PRINTER_NAME1, PORT_NAME1, FILE_NAME1);
    HANDLE hThread2 = CreatePrtThread(PRINTER_NAME2, PORT_NAME2, FILE_NAME2);
    HANDLE hThread3 = CreatePrtThread(PRINTER_NAME3, PORT_NAME3, FILE_NAME3);

    if (hThread1 > 0){
        //wait to stop processing events
        WaitForSingleObject(hThread1, INFINITE);
        CloseHandle(hThread1);
    }

    if (hThread2 > 0){
        //wait to stop processing events
        WaitForSingleObject(hThread2, INFINITE);
        CloseHandle(hThread2);
    }

    if (hThread3 > 0){
        //wait to stop processing events
        WaitForSingleObject(hThread3, INFINITE);
        CloseHandle(hThread3);
    }

    return 0;
}

HANDLE CreatePrtThread(LPWSTR p_strPrinterName, LPWSTR p_wsPortName, LPWSTR p_wsFileName)
{
    PRT_THREAD_PARAM* pParams;
    DWORD dwThreadId;

    // Transmit parameters for thread: pipe handle and PDF temp file name
    pParams = (PRT_THREAD_PARAM*)GlobalAlloc(LPTR, sizeof(PRT_THREAD_PARAM));
    wcsncpy(pParams->wsPrinterName, p_strPrinterName);
    wcsncpy(pParams->wsPortName, p_wsPortName);
    wcsncpy(pParams->wsFileName, p_wsFileName);
    // Create the thread
    HANDLE hThread =CreateThread(
        NULL,  // no security attribute
        0,     // default stack size
        (LPTHREAD_START_ROUTINE) PrtThreadProc,
        (LPVOID) pParams,  // thread parameter
        0,     // not suspended
        &dwThreadId);     // returns thread ID
return hThread;
}

DWORD WINAPI PrtThreadProc(LPVOID lpParameter)
{
    HRESULT hr = S_OK;
    //initialize COM
    hr = CoInitialize(NULL);
    if (FAILED (hr))
    {
        MessageBox(NULL, L"Failed to initialize COM", L"novaPDF", MB_OK);
        return hr;
    }
    // Read thread's parameter: a handle to a pipe instance and the name of the
temporary PDF file
    PRT_THREAD_PARAM* pParams = ((PRT_THREAD_PARAM*)lpParameter);
    INovaPdfOptions *pNova = 0;
    hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL, CLSCTX_INPROC_SERVER,
                            __uuidof(INovaPdfOptions9), (LPVOID*) &pNova);
    //if you have an application license for novaPDF SDK, call the
    RegisterLicenseKey() function
    //hr = pNova->RegisterLicenseKey"<registration name>"", "<license key>",
    "<application name>";
    if (SUCCEEDED(hr))
    {
        //add temporary printer
        pNova->AddNovaPrinter(pParams->wsPrinterName, pParams->wsPortName, L"nPdfSdk9_Softland", L"8501", L""");
        // set optional PDF settings
        LPWSTR pwsNewProfileID = NULL;
        //create a new profile with default settings
        hr = pNova->AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, &pwsNewProfileID); 
        //load the newly created profile
        if (SUCCEEDED(hr) && pwsNewProfileID)
        {
            hr = pNova->LoadProfile(pwsNewProfileID);
        }
        else
        {
            pNova->Release();
            return hr;
        }
        if (SUCCEEDED(hr) && pwsNewProfileID)
        {
            // set novaPDF options
// set resulting file name
pNova->SetOptionLong(NOVAPDF_SAVE_FOLDER_TYPE,
SAVEFOLDER_CUSTOM);
pNova->SetOptionLong(NOVAPDF_SAVE_LOCATION,
LOCATION_TYPE_LOCAL);
pNova->SetOptionLong(NOVAPDF_SAVE_FOLDER_TYPE,
SAVEFOLDER_CUSTOM);
pNova->SetOptionString(NOVAPDF_SAVE_FOLDER, L"C:\temp\novaPDF");
pNova->SetOptionString(NOVAPDF_SAVE_FILE_NAME,
pParams->wsFileName);
//do not show prompt dialog
pNova->SetOptionLong(NOVAPDF_SAVE_PROMPT_TYPE,
PROMPT_SAVE_NONE);
//if file exists, override
pNova->SetOptionLong(NOVAPDF_SAVE_FILEEXIST_ACTION,
FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW);
//do not open
pNova->SetOptionBool(NOVAPDF_ACTION_DEFAULT_VIEWER,
FALSE);

//save profile changes
hr = pNova->SaveProfile();
//set as active profile for printer
pNova->SetActiveProfile(pwsNewProfileID);

HANDLE hPrinter;
BOOL bTimeout;
PDEVMODEW pDevmode = NULL;
PRINTER_DEFAULTS pd = { NULL, NULL, PRINTER_ACCESS_USE };

for (int i = 1; i <= 10; i++)
{
    //start print job
    if (OpenPrinter(pParams->wsPrinterName, &hPrinter,
        &pd))
    {
        //register to wait for a nova event - wait
        pNova->RegisterNovaEvent(L"NOVAPDF_EVENT_START_DOC");
        //get default printer DEVMODE
        int nSize = DocumentProperties(NULL, hPrinter, pParams->wsPrinterName, NULL, NULL, 0);
        pDevmode = (PDEVMODEW)LocalAlloc(LPTR, nSize);
        DocumentProperties(NULL, hPrinter, pParams->wsPrinterName, pDevmode, NULL, DM_OUT_BUFFER);

        //set page size in DEVMODE
        pDevmode->dmPaperSize = DMPAPER_USER;
        pDevmode->dmPaperLength = 2970;//5940;
pDevmode->dmPaperWidth = 2100;//4200;
pDevmode->dmFields = DM_PAPERSIZE | DM_PAPERLENGTH;
DocumentProperties(NULL, hPrinter, pParams->wsPrinterName, pDevmode, pDevmode, DM_IN_BUFFER | DM_OUT_BUFFER);

DM_PAPERLENGTH | DM_PAPERWIDTH;
//Print a page
HDC hDC = CreateDC(L"", pParams->wsPrinterName, NULL, pDevmode);
DOCINFO docInfo = {sizeof(DOCINFO)};
// PDF document name and path
docInfo.lpszDocName = PDF_FILE_NAME;
StartDoc(hDC,&docInfo);
StartPage(hDC);
// Draw text on page
TextOut(hDC, 100, 80, PDF_TEXT, (int)wcslen(PDF_TEXT));
EndPage(hDC);
EndDoc(hDC);
DeleteDC(hDC);
LocalFree(pDevmode);
ClosePrinter(hPrinter);
pNova->WaitForNovaEvent(-1, &bTimeout);
}
}

//delete profile
pNova->DeleteProfile(pwsNewProfileID);
CoTaskMemFree(pwsNewProfileID);
}
//delete temporary printer
pNova->DeleteNovaPrinter(pParams->wsPrinterName);
}

//release NovaPdfOptions
pNova->Release();
return 0;
}

1.5.6.8 Override Options

Override Options sample is a simple Windows console application that demonstrates the basic use of the INovaPDFOptions interface, without using profiles options. Instead of creating a profile and setting options in the profile, the sample uses SetOverrideOptions... functions to quickly set some options that will overwrite active profile settings. This is useful if you have a simple application where you just wish to change the pdf file name, email address or other simple options for each printed document.

There is a limited set of options that can be set with SetOverrideOptions... functions, usually settings that users can also change from the Save As dialog or the other prompt dialogs that can be shown before printing a document. If you need more complex settings, like adding a watermark, overlay or signature you have to configure them in a profile.
You can combine usage of profiles and override options functions. For instance you can create a profile with a watermark that is set as active and then use the override function just to change the file name for each document.

Once set, override options are taken in account for all printed documents until they are removed with DeleteOverrideOptions function.

The sample prints one page with a simple text to the novaPDF SDK 10 and generates a "OverrideOptions.pdf" file in the C:\temp folder.

**Source code**

```c
#include "stdafx.h"

#include "\\include\novaOptions.h"
#include "\\include\novaEvents.h"

#include "\\include\novapi.h"

#define PRINTER_NAME L"novaPDF SDK 9"
#define PDF_TEXT L"Override options sample"
#define PDF_FILE_NAME L"OverrideOptions.pdf"

int _tmain(int argc, _TCHAR* argv[])
{
    HRESULT hr = S_OK;

    //initialize COM
    hr = CoInitialize(NULL);
    if (FAILED (hr))
    {
        MessageBox(NULL, L"Failed to initialize COM", L"novaPDF", MB_OK);
        return hr;
    }

    //create one NovaPdfOptions instance
    INovaPdfOptions9 *pNova = 0;
    hr = CoCreateInstance(__uuidof(NovaPdfOptions9), NULL,
                           CLSCTX_INPROC_SERVER, __uuidof(INovaPdfOptions9), (LPVOID*) &pNova);
    if (FAILED(hr))
    {
```
MessageBox(NULL, L"Failed to create novaPDF COM object", L"novaPDF", MB_OK);
    return hr;
}

// initialize the NovaPdfOptions object to use with a printer licensed for SDK
// if you have an application license for novaPDF SDK,
// pass the license key to the Initialize() function
hr = pNova->Initialize(PRINTER_NAME, L"");

if (SUCCEEDED(hr))
{
    // Override options from active profile
    // Save options
    // do not show prompt save dialog
    pNova->SetOverrideOptionLong(NOVAPDF_OVERRIDE_SAVE_TYPE, PROMPT_SAVE_NONE);
    // save the pdf in next folder
    pNova->SetOverrideOptionLong(NOVAPDF_OVERRIDE_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM);
    pNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_SAVE_FOLDER, L"C:\\temp");
    pNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_SAVE_FILE, PDF_FILE_NAME);
    // access folder, if restricted
    pNova->SetOverrideOptionEncryptedString(NOVAPDF_OVERRIDESAVE_USER, L"user");
    pNova->SetOverrideOptionEncryptedString(NOVAPDF_OVERRIDE_SAVE_PASSWORD, L"password");
    // if a file with the same name already exists
    pNova->SetOverrideOptionLong(NOVAPDF OVERRIDE_SAVE_CONFLICT, FILE_CONFLICT_STRATEGY_OVERWRITE);
    // disable open PDF in viewer
    // pNova->SetOverrideOptionBool(NOVAPDF OVERRIDE_OPEN_VIEWER, FALSE);
    // Embed fonts
    pNova->SetOverrideOptionBool(NOVAPDF_OVERRIDE_EMBEDFONTS, TRUE);
    // Set compression level
    // pNova->SetOverrideOptionLong(NOVAPDF_OVERRIDE_COMPRESSION, COMPRESSION_HIGHQUALITY);
    // Merge PDF
    // Enable merge
    // pNova->SetOverrideOptionBool(NOVAPDF OVERRIDE_MERGE_PDF, TRUE);
//Merge with the same file, if the file exists in destination
OR merge with another file
pNova->SetOverrideOptionLong(NOVAPDF_OVERRIDE_MERGE_FILE_TYPE,
MERGE_FILE_OTHER);
//Append to existing PDF, insert at the beginning or insert at a page number
pNova->SetOverrideOptionLong(NOVAPDF_OVERRIDE_MERGE_TYPE,
MERGE_TYPE_APPEND);
//if merge with other file, specify file name (and path)
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_MERGE_FILE,
"invoice-text.pdf");
//if merge type is set to insert at page number
//pNova->SetOverrideOptionLong(NOVAPDF_OVERRIDE_INSERT_PAGENO,
1);
//if the existing PDF is encrypted

//Document info
pNova->SetOverrideOptionBool(NOVAPDF_OVERRIDE_DOC_INFO, TRUE);
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_DOC_TITLE, L
"sdk title");
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_DOC_SUBJECT, L
"sdk subject");
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_DOC_AUTHOR, L
"sdk author");
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_DOC_KEY, L
"sdk key");
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_DOC_CREATOR, L
"sdk creator");

//Encrypt PDF
/*
PNova->SetOverrideOptionBool(NOVAPDF_OVERRIDE_SECURITY, TRUE);
PNova->SetOverrideOptionEncryptedString(NOVAPDF_OVERRIDE_SECURITY_U,
L"user");
PNova->SetOverrideOptionEncryptedString(NOVAPDF_OVERRIDE_SECURITY_O,
L"owner");
*/

//Email
pNova->SetOverrideOptionBool(NOVAPDF_OVERRIDE_SEND_EMAIL,
TRUE);
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_REC_TO, L"to");
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_REC_FROM, L
"from");
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_REC_CC, L"cc");
PNova->SetOverrideOptionString(NOVAPDF_OVERRIDE_REC_BCC, L"bcc"
// register for events from novaPDF so we can wait until the
document is printed
pNova->RegisterNovaEvent(NOVAPDF_EVENT_ACTIONS);

HANDLE hPrinter;
PDEVMODE pDevmode = NULL;
PRINTER_DEFAULTS pd = { NULL, NULL, PRINTER_ACCESS_USE };

// start print job
if (OpenPrinter(PRINTER_NAME, &hPrinter, &pd)) {
    // get default printer DEVMODE
    int nSize = DocumentProperties(NULL, hPrinter,
    PRINTER_NAME, NULL, NULL, 0);
    pDevmode = (PDEVMODE)LocalAlloc(LPTR, nSize);
    DocumentProperties(NULL, hPrinter, PRINTER_NAME,
    pDevmode, NULL, DM_OUT_BUFFER);

    // set page size in DEVMODE
    pDevmode->dmPaperSize = DMPAPER_USER;
    pDevmode->dmPaperLength = 2970;
    pDevmode->dmPaperWidth = 2100;
    pDevmode->dmFields = DM_PAPERSIZE | DM_PAPERLENGTH |
    DM_PAPERWIDTH;
    DocumentProperties(NULL, hPrinter, PRINTER_NAME,
    pDevmode, pDevmode, DM_IN_BUFFER | DM_OUT_BUFFER);

    // Print a page
    HDC hDC = CreateDC(L"", PRINTER_NAME, NULL, pDevmode);
    DOCINFO docInfo = {sizeof(DOCINFO)};
    // document name
docInfo.lpszDocName = PDF_FILE_NAME;
    StartDoc(hDC, &docInfo);
    StartPage(hDC);
    // Draw text on page
    TextOut(hDC, 100, 80, PDF_TEXT, (int) wcslen(PDF_TEXT));
    EndPage(hDC);
    EndDoc(hDC);
    DeleteDC(hDC);

    // print job sent to printer
    MessageBox(NULL, L"Print job finished", L"novaPDF",
    MB_OK);

    LocalFree(pDevmode);
    ClosePrinter(hPrinter);
} else {
    WCHAR wsMessage[255];
wsprintf(wsMessage, L"OpenPrinter failed, error = %d",
GetLastError());
MessageBox(NULL, wsMessage, L"novaPDF", MB_OK);
}

//wait for the document to be finished before printing other documents
BOOL bTimeout;
pNova->WaitForNovaEvent(120000, &bTimeout);

//remove override options
pNova->DeleteOverrideOptions();

//release NovaPdfOptions
pNova->Release();
CoUninitialize();
return 0;

1.5.7 Java

1.5.7.1 Hello World

Hello World (Java) sample is a basic Java console application that generates (using the novaPDF SDK 10 printer) one PDF file containing the text "Hello World from Java2!". It demonstrates the basic use of the INovaPDFOptions interface with j-Interop.

What this sample does:
- determines the active profile, makes a copy of it and names it "Test Java"
- sets the new profile (Test Java) as active as well as some mandatory settings (e.g. the subject of the PDF)
- generates a test PDF file
- restores the original settings of the novaPDF SDK 10 printer driver.

"j-Interop is a Java Open Source library (under LGPL) that implements the DCOM wire protocol (MSRPC) to enable development of Pure, Bi-Directional, Non-Native Java applications which can interoperate with any COM component." j-Interop can be found at http://www.j-interop.org/

Note
If you encounter problems or have questions on using j-Interop, visit their FAQ page at http://www.j-interop.org/faq.html
Also, to avoid the “Logon failure: unknown user name or bad password” error, configure DCOM for remote access (detailed here - http://j-integra.intrinsyc.com/support/com/doc/remoteaccess.html#winxp) and make sure your firewall is not turned on.

SOURCE CODE OF THE HELLO WORLD JAVA SAMPLE (MAIN.JAVA):
package helloworld;

import java.awt.*;
import java.awt.print.*;
import java.net.UnknownHostException;
import java.util.logging.Level;
import javax.print.PrintService;
import org.jinterop.dcom.common.JIException;
import org.jinterop.dcom.common.JISystem;
import org.jinterop.dcom.core.IJIComObject;
import org.jinterop.dcom.core.JIComServer;
import org.jinterop.dcom.core.JIProgId;
import org.jinterop.dcom.core.JIString;
import org.jinterop.dcom.core.JIVariant;
import org.jinterop.dcom.impls.JIObjectFactory;
import org.jinterop.dcom.impls.automation.IJIDispatch;

public class Main implements Printable {

    private static String PRINTER_NAME = "novaPDF SDK 9";
    private static String MESSAGE = "Hello world from Java2!";
    public static String PROFILE_NAME = "Test Java";
    public static int PROFILE_IS_PUBLIC = 0;

    public static long NOVAPDF_DOCINFO_SUBJECT = 68;
    public static String NOVAPDF_INFO_SUBJECT = "Java Hello World Document Subject";

    public static long NOVAPDF_SAVE_FILE_NAME = 104;
    public static long NOVAPDF_SAVE_FILEEXIST_ACTION = 108;
    public static long FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW = 1;
    public static long NOVAPDF_INFO_VIEWER_ENABLE = 8;
    public static long NOVAPDF_SAVE_PROMPT_TYPE = 101;
    public static long PROMPT_SAVE_SIMPLE = 2;

    JIComServer comStub = null;
    IJIDispatch pNovaDispatch = null;
    IJIComObject pNova = null;

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) throws JIException, UnknownHostException {
        if (args.length < 4) {
            System.out.println("Please provide address domain username password");
            return;
        }
        new Main().doPrint(args);
    }
}
public void doPrint(String[] args) throws JIException, UnknownHostException {

    //disable J-Interop Log
    try {
        JISystem.getLogger().setLevel(Level.INFO);
        JISystem.setInBuiltLogHandler(false);
    } catch (Exception e) {
        //System.out.println(e.getMessage());
    }

    //connecting to COM/DCOM server
    JISession session = JISession.createSession(args[1], args[2], args[3]);
    session.useSessionSecurity(true);

    JIProgId pid = JIProgId.valueOf("novapi9.NovaPdfOptions9");
    pid.setAutoRegistration(true);

    comStub = new JIComServer(pid, args[0], session);
    pNova = comStub.CreateInstance();

    pNovaDispatch = (IJIDispatch) JIObjectFactory.narrowObject(pNova.queryInterface(IJIDispatch.IID));
    JIString PRINTER = new JIString(PRINTER_NAME);

    try {
        pNovaDispatch.callMethodA("Initialize2", new Object[]{PRINTER},
                new JIString(""));
        pNovaDispatch.callMethodA("LicenseShellExecuteFile", new Object []{new JIString("java")});
    } catch (JIException except) {
        System.out.println("Initialize/LicenseShellExecuteFile");
        except.printStackTrace();
    }

    String oldActiveProfile = "";

    try {
        JIVariant ap[] = pNovaDispatch.callMethodA("GetActiveProfile2",
                new Object[] {new JIVariant("", true)});
        oldActiveProfile = ap[1].getObjectAsString().getString();
    } catch (JIException except) {
        System.out.println("GetActiveProfile2");
        except.printStackTrace();
    }

    //ADD A NEW PROFILE

    String activeProfile = "";
try {
    JIVariant ap[] = pNovaDispatch.callMethodA("AddProfile2", new Object[]{new JIString(PROFILE_NAME), PROFILE_IS_PUBLIC, new JIVariant("", true)});
    activeProfile = ap[1].getObjectAsString().getString();
} catch (JIException except) {
    System.out.println("AddProfile2");
    except.printStackTrace();
}

//LOAD PROFILE
try {
    pNovaDispatch.callMethod("LoadProfile2", new Object[]{new JIString(activeProfile)});
} catch (JIException except) {
    System.out.println("LoadProfile2");
    except.printStackTrace();
}

//CHANGE SOME OPTIONS
try {
    // and set some options
    pNovaDispatch.callMethod("SetOptionString2", new Object[]{
        NOVAPDF_DOCINFO_SUBJECT, new JIString(NOVAPDF_INFO_SUBJECT)
    });
    pNovaDispatch.callMethod("SetOptionString2", new Object[]{
        NOVAPDF_SAVE_FILE_NAME, new JIString("novaPDFJavaDocument")
    });
    pNovaDispatch.callMethod("SetOptionLong", new Object[]{
        NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW
    });
    pNovaDispatch.callMethod("SetOptionBool", new Object[]{
        NOVAPDF_INFO_VIEWER_ENABLE, 1
    });
    pNovaDispatch.callMethod("SetOptionLong", new Object[]{
        NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_SIMPLE
    });
} catch (JIException except) {
    System.out.println("Set options");
    except.printStackTrace();
}

//SAVE PROFILE
try {
    pNovaDispatch.callMethod("SaveProfile2");
} catch (JIException except) {
    System.out.println("SaveProfile2");
    except.printStackTrace();
}

//SET IT AS ACTIVE PROFILE
try {
    // set the copy profile as active profile ...
    pNovaDispatch.callMethod("SetActiveProfile2", new Object[]{new JIString(activeProfile)});
} catch (JIException except) {
    System.out.println("SetActiveProfile2");
    except.printStackTrace();
}
//PRINT SOMETHING WITH NEW PROFILE
PrinterJob job = PrinterJob.getPrinterJob();
PrintService[] services = PrinterJob.lookupPrintServices();

Boolean flag = Boolean.FALSE;
for (int i = 0; i < services.length; i++) {
    if (services[i].getName().equalsIgnoreCase(PRINTER_NAME)) {
        flag = Boolean.TRUE;
        try {
            job.setPrintService(services[i]);
            job.setPrintable(this);
            job.print();
        } catch (Throwable throwable) {
            System.out.println("Printing Exception");
            throwable.printStackTrace();
        }
        break;
    }
}

if(flag == Boolean.FALSE){
    System.out.println("Printer not found...");
} else{
    System.out.println("PDF Printed");
}

//RESTORE PREVIOUS ACTIVE PROFILE
try {
    if(oldActiveProfile.length() > 0) {
        pNovaDispatch.callMethod("SetActiveProfile2", new Object[]{
            new JIString(oldActiveProfile)
        });
    }
} catch (JIException except) {
    System.out.println("SetActiveProfile2 Old");
    except.printStackTrace();
}

//DELETE THE NEW PROFILE
try {
    pNovaDispatch.callMethod("DeleteProfile2", new Object[]{
        new JIString(activeProfile)
    });
} catch (JIException except) {
    System.out.println("DeleteProfile2");
    except.printStackTrace();
}

JISession.destroySession(session);

public int print(Graphics g, PageFormat pf, int page) throws
PrinterException {  
    if (page > 0) { /* We have only one page, and 'page' is zero-based */
        return NO_SUCH_PAGE;
    }
    /* User (0,0) is typically outside the imageable area, so we must */
    /* translate by the X and Y values in the PageFormat to avoid */
    /* clipping */
    Graphics2D g2d = (Graphics2D) g;
    g2d.translate(pf.getImageableX(), pf.getImageableY());

    /* Now we perform our rendering */
    g.drawString(MESSAGE, 100, 100);

    /* tell the caller that this page is part of the printed document */

    return PAGE_EXISTS;
 }
}

1.5.7.2 Word OLE

The Word OLE (Java) SDK sample is a basic Java console application that converts a MS Word document (in this sample the default location for the source document is C:\temp\test.doc) to PDF using Word OLE automation and j-Interop.

“j-Interop is a Java Open Source library (under LGPL) that implements the DCOM wire protocol (MSRPC) to enable development of Pure, Bi-Directional, Non-Native Java applications which can interoperate with any COM component.” j-Interop can be found at http://www.j-interop.org/

Note
If you encounter problems or have questions on using j-Interop, visit their FAQ page at http://www.j-interop.org/faq.html
Also, to avoid the “Logon failure: unknown user name or bad password” error, configure DCOM for remote access (detailed here - http://j-integra.intrinsyc.com/support/com/doc/remoteaccess.html#winxp) and make sure your firewall is not turned on.

SOURCE CODE FOR WORD OLE SAMPLE (MAIN.JAVA):

```java
package wordole;

import java.io.File;
import java.util.logging.Level;
import org.jinterop.dcom.common.JIException;
import org.jinterop.dcom.common.JISystem;
import org.jinterop.dcom.core.IJIComObject;
import org.jinterop.dcom.core.IJIComServer;
import org.jinterop.dcom.core.JIProgId;
```
import org.jinterop.dcom.core.JISession;
import org.jinterop.dcom.core.JIString;
import org.jinterop.dcom.core.JIVariant;
import org.jinterop.dcom.impls.JIObjectFactory;
import org.jinterop.dcom.impls.automation.IJIDispatch;

public class Main {

    public static String PROFILE_NAME = "Test Java and Word OLE";
    public static int PROFILE_IS_PUBLIC = 0;

    public static long NOVAPDF_DOCINFO_SUBJECT = 68;
    public static String NOVAPDF_INFO_SUBJECT = "Java OLE Word Document Subject";

    public static long NOVAPDF_SAVE_FILE_NAME = 104;
    public static long NOVAPDF_SAVE_FILEEXIST_ACTION = 108;
    public static long FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW = 1;
    public static long NOVAPDF_INFO_VIEWER_ENABLE = 8;
    public static long NOVAPDF_SAVE_PROMPT_TYPE = 101;
    public static long PROMPT_SAVE_SIMPLE = 2;

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        if (args.length < 4) {
            System.out.println("Please provide address domain username password");
            return;
        }
        File docFile = new File("c:\temp\test.doc");
        if (!docFile.exists()) {
            System.out.println("c:\temp\test.doc file does not exist");
            return;
        }

        //disable J-Interop Log
        try {
            JISystem.getLogger().setLevel(Level.INFO);
            JISystem.setInBuiltLogHandler(false);
        } catch (Exception e) {
            //System.out.println(e.getMessage());
        }

        JIComServer comStub = null;
        IJIDispatch pNovaDispatch = null;
        IJIComObject unknown = null;

        try {
            JISession session = JISession.createSession(args[1], args[2], args[3]);
            session.useSessionSecurity(true);
        }
    }
}
JIProgId pid = JIProgId.valueOf("novapi9.NovaPdfOptions9");
pid.setAutoRegistration(true);

comStub = new JIComServer(pid, args[0], session);
unknown = comStub.CreateInstance();

pNovaDispatch = (IJIDispatch) JIObjFactory.narrowObject(
unknown queryInterface(IJIDispatch.IID));

//INITIALIZE

JIString PRINTER = new JIString("novaPDF SDK 9");
JIString APPNID = new JIString("Word.Application");
pNovaDispatch.callMethod("Initialize2", new Object[] {PRINTER},
new JIString(""));

//GET ACTIVE PROFILE

String oldActiveProfile = "";
try {
    JIVariant ap[] = pNovaDispatch.callMethodA(
"GetActiveProfile2", new Object[] {new JIVariant("", true)});
    oldActiveProfile = ap[1].getObjectAsString().getString();
} catch (JIException except) {
    System.out.println("GetActiveProfile2");
    except.printStackTrace();
}

String activeProfile = "";
//ADD A NEW PROFILE
try {
    JIVariant ap[] = pNovaDispatch.callMethodA("AddProfile2",
new Object[] {new JIString(PROFILE_NAME), PROFILE_IS_PUBLIC, new JIVariant("", true)});
    activeProfile = ap[1].getObjectAsString().getString();
} catch (JIException except) {
    System.out.println("AddProfile2");
    except.printStackTrace();
}

//LOAD PROFILE
try {
pNovaDispatch.callMethod("LoadProfile2", new Object[] {new JIString(activeProfile)});
} catch (JIException except) {
    System.out.println("LoadProfile2");
    except.printStackTrace();
}

//CHANGE SOME OPTIONS
try {
    // and set some options
    pNovaDispatch.callMethod("SetOptionString2", new Object[]{
        NOVAPDF_DOCINFO_SUBJECT, new JIString(NOVAPDF_INFO_SUBJECT)
    });
    pNovaDispatch.callMethod("SetOptionString2", new Object[]{
        NOVAPDF_SAVE_FILE_NAME, new JIString("novaPDFJavaDocument")
    });
    pNovaDispatch.callMethod("SetOptionString2", new Object[]{
        NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW
    });
    pNovaDispatch.callMethod("SetOptionBool", new Object[]{
        NOVAPDF_INFO_VIEWER_ENABLE, 1
    });
    pNovaDispatch.callMethod("SetOptionString2", new Object[]{
        NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_SIMPLE
    });
    catch (JIException except) {
        System.out.println("Set options");
        except.printStackTrace();
    }

    //SAVE PROFILE
    try {
        pNovaDispatch.callMethod("SaveProfile2");
    } catch (JIException except) {
        System.out.println("SaveProfile2");
        except.printStackTrace();
    }

    //SET IT AS ACTIVE PROFILE
    try {
        // set the copy profile as active profile ...
        pNovaDispatch.callMethod("SetActiveProfile2", new Object[]{
            new JIString(activeProfile)
        });
        catch (JIException except) {
            System.out.println("SetActiveProfile2");
            except.printStackTrace();
        }
        //InitializeOLEUsage("Word.Application");
        pNovaDispatch.callMethod("InitializeOLEUsage", new Object[]{
            APPNID
        });
        pNovaDispatch.callMethod("LicenseOLEServer");
        MSWord word = new MSWord(args[0], args, pNovaDispatch, PRINTER);
        word.startWord();
        word.showWord();
        word.performOp();
        word.quitAndDestroy();
    } catch (Exception except) {
        System.out.println("Exception");
        except.printStackTrace();
    }
}

    //RESTORE PREVIOUS ACTIVE PROFILE
    try {
        if (oldActiveProfile.length() > 0) {
            pNovaDispatch.callMethod("SetActiveProfile2", new Object[]{
                new JIString(oldActiveProfile)
            });
        }
    } catch (Exception except) {
        System.out.println("Exception");
        except.printStackTrace();
    }
) catch (JIException except) {
    System.out.println("SetActiveProfile2 Old");
    except.printStackTrace();
}

//DELETE THE NEW PROFILE

try {
    pNovaDispatch.callMethod("DeleteProfile2", new Object[]{new JIString(activeProfile)});
    ) catch (JIException except) {
        System.out.println("DeleteProfile2");
        except.printStackTrace();
    }
    System.out.println("Done!");
    ) catch (Exception e) {
        System.out.println("---UPS---");
        e.printStackTrace();
    }
}

SOURCE CODE FOR WORD OLE SAMPLE (MSWORD.JAVA):

package wordole;
/*
 * j-interop can be found at http://www.j-interop.org/
 * and it is an open source project
 *
*/
import java.net.UnknownHostException;
import org.jinterop.dcom.common.JIException;
import org.jinterop.dcom.common.JISystem;
import org.jinterop.dcom.core.IJIComObject;
import org.jinterop.dcom.core.IJIComServer;
import org.jinterop.dcom.core.JIFrogId;
import org.jinterop.dcom.core.JISession;
import org.jinterop.dcom.core.JIString;
import org.jinterop.dcom.core.JIVariant;
import org.jinterop.dcom.impls.JIObjectFactory;
import org.jinterop.dcom.impls.automation.IJIDispatch;

public class MSWord {
    private JIComServer comStub = null;
    private IJIDispatch dispatch = null;
    private IJIComObject unknown = null;
    private IJIDispatch PDF = null;
private JIString PRINTER = null;

public MSWord(String address, String[] args, IJIDispatch PDF, JIString PRINTER) throws JIException, UnknownHostException {
    this.PDF = PDF;
    this.PRINTER = PRINTER;

    JISession session = JISession.createSession(args[1], args[2], args[3]);
    session.useSessionSecurity(true);
    comStub = new JIComServer(JIProgId.valueOf("Word.Application"), address, session);
}

public void startWord() throws JIException {
    unknown = comStub.CreateInstance();
    dispatch = (IJIDispatch) JIObjectFactory.narrowObject(unknown.
    queryInterface(IJIDispatch.IID));
}

public void showWord() throws JIException {
    int dispId = dispatch.getIDsOfNames("Visible");
    JIVariant variant = new JIVariant(Boolean.FALSE);
    dispatch.put(dispId, variant);
    PDF.callMethod("LicenseOLEServer");
}

public void performOp() throws JIException, InterruptedException {
    /* JISystem config */
    * *
    * JISystem.setJavaCoClassAutoCollection(true);

    System.out.println(((JIVariant) dispatch.getObjectAsComObject()).
    getString());
    System.out.println(((JIVariant) dispatch.getObjectAsComObject()).
    getString());
    JIVariant variant = dispatch.getString("Documents");

    System.out.println("Open document...");
    IJIDispatch documents = (IJIDispatch) JIObjectFactory.
    narrowObject(variant.getObjectAsComObject());
    JIString filePath = new JIString("c:\temp\test.doc");
    JIVariant variant2[] = documents.callMethodA("open", new Object []
    { filePath, JIVariant.OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM(),
    JIVariant.OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM(), JIVariant.
    OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM(),
    JIVariant.OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM(), JIVariant.
    OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM()});
JIVariant.OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM());

System.out.println("doc opened");
//ActivePrinter
dispatch.put("ActivePrinter", new Object[]{PRINTER});
sleep(5);
System.out.println("Get content...");
IJIDispatch document = (IJIDispatch) JIObjectFactory.
narrowObject(variant2[0].getObjectAsComObject());
sleep(5);
System.out.println("Printing...");
document.callMethod("PrintOut", new Object[] {1});
System.out.println("Closing document...");
document.callMethod("Close");
}

private void sleep(int sec) throws InterruptedException {
    System.out.println("Sleeping " + sec + " second(s)...");
    Thread.sleep((int)(sec * 1000));
}

/**
 * @throws JIException
 */
public void quitAndDestroy() throws JIException {
    System.out.println("Quit...");
dispatch.callMethod("Quit", new Object[] {new JIVariant(-1,
true), JIVariant.OPTIONAL_PARAM(), JIVariant.OPTIONAL_PARAM() });
    JISession.destroySession(dispatch.getAssociatedSession());
}

1.5.8 VB
1.5.8.1 Hello World VB

Hello World VB sample is a simple Windows console application that prints one page with the "novaPDF says Hello World from VB" text to the novaPDF SDK 10. It demonstrates the basic use of the INovaPDFOptions interface. The printing job is made with calls to the global Printer object defined by VB. It generates a "HelloWorld.pdf" file and opens it in the default PDF viewer.

Notice
If you print an existing document using "ShellExecute()" function or you want to handle printing events, you should check the VB Converter sample instead.

Source code
' the novapilb and novapilibDemo packages must be added as a COM reference
Const PRINTER_NAME As String = "novaPDF SDK 9"
Const PROFILE_NAME As String = "Test VB"
Const PROFILE_IS_PUBLIC As Long = 0

' The main entry point for the application.
Public Sub Main()
    On Error GoTo ErrorHandler:

    ' create the NovaPdfOptions object
    Dim pNova As New NovaPdfOptions9
    Dim sOldActiveProfileID As String
    Dim sNewProfileID As String

    ' initialize the NovaPdfOptions object to use with a printer licensed for SDK
    pNova.Initialize2 (PRINTER_NAME) ""
    pNova.SetActiveProfile (sOldActiveProfileID)
    On Error Resume Next

    ' make new profile
    pNova.AddProfile2 PROFILE_NAME, PROFILE_IS_PUBLIC, sNewProfileID
    pNova.SetActiveProfile (sNewProfileID)
    ' and set some options
    ' uncomment the function calls for the options you wish to set and change the options in the Nova.vb unit
    '-----------------
    AddProfileOptions (pNova)
    AddDocumentInformation (pNova)
    AddViewerOptions (pNova)
    AddAdvancedOptions (pNova)
    AddGraphicsOptions (pNova)
    AddEmbedFontsOptions (pNova)
    AddBookmarksDefinitions (pNova)
    AddSecurity (pNova)
    AddSaveOptions (pNova)
    AddAfterSaveActions (pNova)
    AddEmailOptions (pNova)
    AddWatermarkImage (pNova)
    AddWatermarkText (pNova)
    AddPageContentOptions (pNova)
    AddOverlayOptions (pNova)
    AddSignatureOptions (pNova)
    '-----------------
    'set as active profile for printer
    pNova.SetActiveProfile (sNewProfileID)

    ' Print a test page
Dim myPrinter As Printer

For Each myPrinter In Printers
    If myPrinter.DeviceName = PRINTER_NAME Then
        Set Printer = myPrinter
        Exit For
    End If
Next

Printer.FontName = "Arial"
Printer.FontSize = 16
Printer.CurrentX = 20
Printer.CurrentY = 20

Printer.Print "novaPDF says Hello World from VB"
Printer.EndDoc

'restore default profile
If Len(sOldActiveProfileID) > 0 Then
    pNova.SetActiveProfile2 (sOldActiveProfileID)
End If

'delete newly created profile
pNova.DeleteProfile2 (sNewProfileID)

Exit Sub
ErrorHandler:
    Debug.Print (Err.Number & ":" & Err.Description)
End Sub

1.5.8.2 VB Converter

The VB Converter sample demonstrates how to convert an existing file by printing it to novaPDF SDK 10 using the ShellExecute function. It also demonstrates how to set different options and manage profiles.

The same approach should be taken if you print using a "Print()" method from another object (like an internet browser or a report control). Just replace the ShellExecute call with the call of your Print method.

When the application starts, it creates a few profiles and makes different settings in the profiles. Then it shows a dialog from where the user can select the active profile and change its settings using the controls from the dialog.

After that a document can be selected from the harddisk and printed to novaPDF SDK 10 using the ShellExecute function call.

When using this technique to convert a file to PDF, you have to take care of the fact that ShellExecute prints to the default printer. This function returns immediately and does not wait until the print is finished (it may return before the printing is actually started). Therefore you have to set the default printer to novaPDF SDK 10 before calling ShellExecute (using the
SetDefaultPrinter method), register FileSaved message (or any other novaPDF SDK 10 message) to be sure that the print job was started. In this message handler restore the default printer (with the RestoreDefaultPrinter method). This way you made sure that the default printer was restored and your document is printed to novaPDF SDK 10.

Source code snippets

1. Declare INovaPdfOptions variable

   'create the NovaPdfOptions object
   Public m_NovaOptions As New NovaPdfOptions9

2. Register novaPDF SDK 10 messages

   Public wm_Nova_FileSaved As Long
   Public wm_Nova_PrintError As Long

   Sub Main()
      ' Registering the messages send by the print in order to listen for them
      wm_Nova_FileSaved = RegisterWindowMessage(MSG_NOVAPDF2_FILESAVED)
      wm_Nova_PrintError = RegisterWindowMessage(MSG_NOVAPDF2_PRINTERERROR)
      Form1.Show
   End Sub

   ' Sub that will handle the windows messages
   Public Function VB_WindowProc(ByVal hwnd As Long, ByVal wMsg As Long, ByVal wParam As Long, ByVal lParam As Long) As Long
      ' For the registered messages perform specific tasks
      If wMsg = wm_Nova_FileSaved Then
         OnNovaPDFFileSaved wParam, lParam
         Exit Function
      End If
      If wMsg = wm_Nova_PrintError Then
         OnNovaPDFPrintError wParam, lParam
         Exit Function
      End If

      ' For other messages just send them via normal (old) handling process
      VB_WindowProc = CallWindowProc(oldHandler, hwnd, wMsg, wParam, lParam)
   End Function

3. Initialize INovaPdfOptions

   Private Sub Form_Load()
      On Error GoTo ErrorHandler:
      Dim strProfileID As String
      Dim strProfileName As String
      Dim strActiveProfileID As String
      Dim nPublicProfile As Long
      Dim nActivePublicProfile As Long

      ' initialize the NovaPdfOptions object to use with a printer licensed for SDK
m_NovaOptions.Initialize (PRINTER_NAME, ")

' sets the value of the windows messages handler to VB_WindowProc and
sets the old handler address of function in oldHandler
oldHandler = SetWindowLongApi(Me.hwnd, GWL_WNDPROC, AddressOf
VB_WindowProc)

cmbProfiles.Clear
Call AddSmallSize
Call AddFullOptions

' get the active profile ...
m_NovaOptions.GetActiveProfile2 strActiveProfileID

m_NovaOptions.GetFirstProfile2 strProfileID
m_NovaOptions.LoadProfile2 strProfileID
m_NovaOptions.GetOptionString2 NOVAPDF_PROFILE_NAME, strProfileName
cmbProfiles.AddItem (strProfileName)

On Error Resume Next
Do
    m_NovaOptions.GetNextProfile2 (strProfileID)
    If err.Number = NV_NO_MORE_PROFILES Then
        Exit Do
    End If
    m_NovaOptions.LoadProfile2 strProfileID
    m_NovaOptions.GetOptionString2 NOVAPDF_PROFILE_NAME, strProfileName
    cmbProfiles.AddItem (strProfileName)
Loop While True

On Error GoTo ErrorHandler:

cmbProfiles.ListIndex = 0

UpdateDialogFromProfile
Exit Sub
ErrorHandler:
    Debug.Print err.Number & ":" & err.Description
End Sub

4. Set novaPDF SDK 10 Options
Private Sub AddSmallSize()
    Dim strProfileID As String
    On Error GoTo ErrHandler

    m_NovaOptions.AddProfile2 SMALL_SIZE_PROFILE, PROFILE_IS_PUBLIC,
strProfileID
    m_NovaOptions.LoadProfile2 (strProfileID)

    ' Set some options to this profile

    ' disable the "Save PDF file as" prompt
m_NovaOptions.SetOptionLong2 NOVAPDF_SAVE_PROMPT_TYPE, PROMPT_SAVE_NONE
' set generated Pdf files destination folder "c:"

m_NovaOptions.SetOptionString2 NOVAPDF_SAVE_FOLDER, "c:"
' set output file name

m_NovaOptions.SetOptionString2 NOVAPDF_SAVE_FILE_NAME, "PDF Converter small size.pdf"
' if file exists in the destination folder, append a counter to the end of the file name

m_NovaOptions.SetOptionLong2 NOVAPDF_SAVE_FILEEXIST_ACTION, FILE_CONFLICT_STRATEGY_AUTONUMBER_NEW
' don't detect URLs
m_NovaOptions.SetOptionLong2 NOVAPDF_URL_ANALIZE, False

' Set image compression method to JPEG and quality to 75, possible values are from 10 to 100
m_NovaOptions.SetOptionLong2 NOVAPDF_COMPRESS_ENABLE, True
m_NovaOptions.SetOptionLong2 NOVAPDF_COMPRESS_HIGH_COLOR, True
m_NovaOptions.SetOptionLong2 NOVAPDF_COMPRESS_HIGH_COLOR_TYPE, COMPRESS_METHOD_JPEG
m_NovaOptions.SetOptionLong2 NOVAPDF_COMPRESS_HIGH_COLOR_LEVEL, 75

' make sure text compression is enabled, and set compression level to 9 maximum possible values are 1-9
m_NovaOptions.SetOptionLong2 NOVAPDF_COMPRESS_TEXT_GRAPHICS, True
m_NovaOptions.SetOptionLong2 NOVAPDF_COMPRESS_TEXT_GRAPHICS_LEVEL, 9

' disable unused font embedding
m_NovaOptions.SetOptionLong2 NOVAPDF_FONTS_EMBED_ALL_USED_FONTS, False

'save profile changes
m_NovaOptions.SaveProfile

Exit Sub
ErrHandler:
   If err.Number <> NV_PROFILE_EXISTS Then Debug.Print err.Number & ":" & err.Description

End Sub

5. Start a Print job
Private Sub btnStartPrinting_Click()
   ....
   m_NovaOptions.SetActiveProfile2 (strProfileID)
   m_NovaOptions.SetDefaultPrinter
Dim strToExecute As String
Dim r As Long
m_NovaOptions.RegisterEventWindow Me.hwnd
m_NovaOptions.LicenseShellExecuteFile txtFileToConvert
r = ShellExecute(Me.hwnd, "print", txtFileToConvert, "", ",", SW_HIDE)
btnStartPrinting.Enabled = True
   ....
End Sub
6. Restore default printer when printing finished

Private Sub OnNovaPDFFileSaved(wParam As Long, lParam As Long)
    m_NovaOptions.UnRegisterEventWindow
    m_NovaOptions.RestoreDefaultPrinter
End Sub

Private Sub OnNovaPDFPrintError(wParam As Long, lParam As Long)
    Select Case wParam
    Case ERROR_MSG_TEMP_FILE:
        MsgBox "Error saving temporary file on printer server", vbOKOnly, "novaPDF"
    Case ERROR_MSG_LIC_INFO:
        MsgBox "Error reading license information", vbOKOnly, "novaPDF"
    Case ERROR_MSG_SAVE_PDF:
        MsgBox "Error saving PDF file", vbOKOnly, "novaPDF"
    Case ERROR_MSG_JOB_CANCELED:
        MsgBox "Print job was canceled", vbOKOnly, "novaPDF"
    End Select
    m_NovaOptions.UnRegisterEventWindow
    m_NovaOptions.RestoreDefaultPrinter
End Sub

1.5.8.3 Word OLE VB

The **Word OLE VB** sample is a simple Windows console application that converts a MS Word document (C:\Test.doc) to PDF using Word OLE automation.

Source code

```
Attribute VB_Name = "Module1"
Private Declare Sub Sleep Lib "kernel32" (ByVal dwMilliseconds As Long)

' the novapiLib and novapiLibDemo packages must be added as a COM reference
Const PRINTER_NAME As String = "novaPDF SDK 9.0.906"
Const PROFILE_NAME As String = "VB Word OLE"
Const PROFILE_IS_PUBLIC As Long = 0

' The main entry point for the application.
Public Sub Main()
    On Error GoTo Error_Handler:

    ' create the NovaPdfOptions object
    Dim pNova As New NovaPdfOptions9
    Dim sOldActiveProfileID As String
    Dim sNewProfileID As String

    ' initialize the NovaPdfOptions object to use with a printer licensed for SDK
    pNova.Initialize2 (PRINTER_NAME, "")

    pNova.SetActiveProfile2 sOldActiveProfileID
```
' create new profile
On Error Resume Next
pNova.AddProfile2 PROFILE_NAME, PROFILE_IS_PUBLIC, sNewProfileID
pNova.LoadProfile2 (sNewProfileID)
' and set some options
pNova.SetOptionString2 NOVAPDF_DOCINFO_SUBJECT, "Test OLE document"
' save profile changes
pNova.SaveProfile
' set as active profile for printer
pNova.SetActiveProfile (sNewProfileID)

' set nova default printer
pNova.SetDefaultPrinter
' print word document
Dim objWord As Object
Dim objDoc As Object
pNova.InitializeOLEUsage "Word.Application"
Set objWord = CreateObject("Word.Application")
pNova.LicenseOLEServer
objDoc.PrintOut False
objDoc.Close False
objWord.Quit False
' restore default printer
pNova.RestoreDefaultPrinter
' restore default profile
If Len(sOldActiveProfileID) > 0 Then
    pNova.SetActiveProfile2 (sOldActiveProfileID)
End If
'delete newly created profile
pNova.DeleteProfile2 (sNewProfileID)

Exit Sub
ErrorHandler:
    Debug.Print Err.Number & ":" & Err.Description
End Sub

1.5.8.4 Override Options

Override Options sample is a simple Windows console application that demonstrates the basic use of the INovaPDFOptions interface, without using profiles options. Instead of creating a profile and setting options in the profile, the sample uses SetOverrideOptions... functions to quickly set some options that will overwrite active profile settings. This is useful if you have a simple application where you just wish to change the pdf file name, email address or other simple options for each printed document.

There is a limited set of options that can be set with SetOverrideOptions... functions, usually settings that users can also change from the Save As dialog or the other prompt dialogs that can be shown before printing a document. If you need more complex settings, like adding a watermark, overlay or signature you have to configure them in a profile.

You can combine usage of profiles and override options functions. For instance you can create a
profile with a watermark that is set as active and then use the override function just to change the file name for each document.

Once set, override options are taken in account for all printed documents until they are removed with `DeleteOverrideOptions` function.

The sample prints one page with a simple text to the novaPDF SDK 10 and generates a "OverrideOptions.pdf" file in the C:\temp folder.

### Source code

```vbnet
Attribute VB_Name = "Module1"
' the novapilib and novapilibDemo packages must be added as a COM reference
Const PRINTER_NAME As String = "novaPDF SDK 9"
Const PDF_FILE_NAME As String = "OverrideOptions.pdf"

' The main entry point for the application.
Public Sub Main()
    On Error GoTo ErrorHandler:

    ' create the NovaPdfOptions object
    Dim pNova As New NovaPdfOptions

    ' initialize the NovaPdfOptions object to use with a printer licensed for SDK
    pNova.Initialize2 PRINTER_NAME,"

    On Error GoTo ErrorHandler:

    'Override options from active profile

    'Save options
    'do not show prompt save dialog
    pNova.SetOverrideOptionLong NOVAPDF_OVERRIDE_SAVE_TYPE, PROMPT_SAVE_NONE

    'save the pdf in next folder
    pNova.SetOverrideOptionLong NOVAPDF_OVERRIDE_SAVE_FOLDER_TYPE, SAVEFOLDER_CUSTOM
    pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_SAVE_FOLDER, "C:\temp"
    pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_SAVE_FILE, PDF_FILE_NAME

    'access folder, if restricted
    pNova.SetOverrideOptionEncryptedString2 NOVAPDF_OVERRIDE_SAVE_USER, "user"
    pNova.SetOverrideOptionEncryptedString2 NOVAPDF_OVERRIDE_SAVE_PASSWORD, "password"

    'if a file with the same name already exists
    pNova.SetOverrideOptionLong NOVAPDF_OVERRIDE_SAVE_CONFLICT, FILE_CONFLICT_STRATEGY_OVERWRITE

    'disable open PDF in viewer
    'pNova.SetOverrideOptionBool NOVAPDF_OVERRIDE_OPEN_VIEWER, 0

    'Embed fonts
    pNova.SetOverrideOptionBool NOVAPDF_OVERRIDE_EMBEDFONTS, 1

    'Set compression level
    pNova.SetOverrideOptionLong NOVAPDF_OVERRIDE_COMPRESSION, COMPRESSION_HIGHQUALITY

    'Merge PDF
```
'Enable merge

'pNova.SetOverrideOptionBool NOVAPDF_OVERRIDE_MERGE_PDF, 1
'Merge with the same file, if the file exists in destination OR merge with another file
'pNova.SetOverrideOptionLong NOVAPDF_OVERRIDE_MERGE_FILE_TYPE, MERGE_FILE_OTHER
'Append to existing PDF, insert at the beginning or insert at a page number
'pNova.SetOverrideOptionLong NOVAPDF_OVERRIDE_MERGE_TYPE, MERGE_TYPE_APPEND
'if merge with other file, specify file name (and path)
'pNova.SetOverrideOptionString NOVAPDF_OVERRIDE_MERGE_FILE, "invoice-text.pdf"
'if merge type is set to insert at page number
'pNova.SetOverrideOptionLong NOVAPDF_OVERRIDE_INSERT_PAGENO, 1
'if the existing PDF is encrypted
'pNova.SetOverrideOptionEncryptedString2 NOVAPDF_OVERRIDE_PDF_PASSWORD, "password"

'Document info
pNova.SetOverrideOptionBool NOVAPDF_OVERRIDE_DOC_INFO, 1
pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_DOC_TITLE, "sdk title"
'pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_DOC_SUBJECT, "sdk subject"
'pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_DOC_AUTHOR, "sdk author"
'pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_DOC_KEY, "sdk key"
'pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_DOC_CREATOR, "sdk creator"

'Encrypt PDF

'pNova.SetOverrideOptionBool NOVAPDF_OVERRIDE_SECURITY, 1
'pNova.SetOverrideOptionEncryptedString2 NOVAPDF_OVERRIDE_SECURITY_U, "user"
'pNova.SetOverrideOptionEncryptedString2 NOVAPDF_OVERRIDE_SECURITY_O, "owner"

'Email
pNova.SetOverrideOptionBool NOVAPDF_OVERRIDE_SEND_EMAIL, 1
pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_REC_TO, "to"
'pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_REC_FROM, "from"
'pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_REC_CC, "cc"
'pNova.SetOverrideOptionString2 NOVAPDF_OVERRIDE_REC_BCC, "bcc"

' Print a test page
Dim myPrinter As Printer

For Each myPrinter In Printers
    If myPrinter.DeviceName = PRINTER_NAME Then
        Set Printer = myPrinter
        Exit For
    End If
Next

Printer.FontName = "Arial"
Printer.FontSize = 16
Printer.CurrentX = 20
Printer.CurrentY = 20

Printer.Print "novaPDF says Hello World from VB"
Printer.EndDoc

Exit Sub
ErrorHandler:
Debug.Print (Err.Number & ":" & Err.Description)
End Sub

1.5.9 VBNNet

1.5.9.1 Hello World VBNNet

Hello World VBNNet sample is a simple Windows console application that prints one page with the "novaPDF says Hello World from VB.Net" text to the novaPDF SDK 10.

It demonstrates the basic use of the INovaPDFOptions interface. The printing job is made using the package "System.Drawing.Printing"

Basically the sample determines the active profile, makes a copy of it into a profile called "Test VBNNet", sets the new profile as active, sets the subject of the generated PDF document, prints a page, and restores original printer settings. The location of the generated document depends on whatever the settings are for the current active profile.

Notice

Because of the specific exception based error handling in .NET, all calls to methods in the INovaPDFOptions interface must be nested within a try-catch block. Consider for example that we want to add a profile called "test", but the profile "test" already exists. Then the call pNova.AddProfile("test") will throw an "System.Runtime.InteropServices.COMException". with the ErrorCode property set to NV_PROFILE_EXISTS (0xD5DA0006).

Source code

Imports System
Imports System.Drawing
Imports System.Drawing.Printing
Imports System.Windows.Forms
' the novapiLib package must be added as a COM reference
Imports novapiLib80

Module Module1
' <summary>
' The main entry point for the application.
' </summary>
Const PRINTER_NAME As String = "novaPDF SDK 9"
Const PROFILE_NAME As String = "Test VBNNet"
Const PROFILE_IS_PUBLIC As Integer = 0
Const NOVAPDF_INFO_SUBJECT As String = "Document Subject"
Const NV_PROFILE_EXISTS As Long = -707133434

Sub Main()
    Try
' create the NovaPdfOptions object
Dim pNova As NovaPdfOptions9
pNova = New NovaPdfOptions9
' initialize the NovaPdfOptions object
' if you have an application license for novaPDF SDK,
pNova.Initialize(PRINTER_NAME)
' mark start changing options
' get the active profile ...
Dim activeProfile As String = ""
Dim nActivePublic As Integer = 0
Try
  pNova.GetActiveProfile(activeProfile)
  Catch ex As System.Runtime.InteropServices.COMException
    ' ignore profile exists error
    If (NovaErrors.NV_NO_ACTIVE_PROFILE = ex.ErrorCode) Then
      System.Console.WriteLine("The printer does not have an
active profile")
    Else
      ' more serious error, propagate it
      Throw ex
    End If
  End Try

Dim newProfileID As String = ""
Try
  ' and make a copy of it
  pNova.AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC,
  newProfileID)
  Catch e As System.Runtime.InteropServices.COMException
    ' ignore profile exists error
    If (NV_PROFILE_EXISTS = e.ErrorCode) Then
      System.Console.WriteLine("Profile already
exists")
    Else
      ' more serious error, propagate it
      Throw e
    End If
  End Try

' load the new profile
pNova.LoadProfile(newProfileID)
' nova.NovaTools.AddProfileOptions(pNova);
  ' and set some options
  ' uncomment the function calls for the options you wish to set
  ' change the options in the nova.cs unit
  ' nova.NovaTools.AddProfileOptions(pNova);
  ' nova.NovaTools.AddDocumentInformation(pNova);
  ' nova.NovaTools.AddViewerOptions(pNova);
  ' nova.NovaTools.AddLinksOptions(pNova);
  ' nova.NovaTools.AddAdvancedOptions(pNova);
  ' nova.NovaTools.AddGraphicsOptions(pNova);
  ' nova.NovaTools.AddSecurityOptions(pNova);
'nova.NovaTools.AddSaveOptions(pNova);
'nova.NovaTools.AddAfterSaveActions(pNova);
'nova.NovaTools.AddEmailOptions(pNova);
'nova.NovaTools.AddWatermarkImage(pNova);
'nova.NovaTools.AddWatermarkText(pNova);
'nova.NovaTools.AddPageContentOptions(pNova);
'nova.NovaTools.AddOverlayOptions(pNova);
'nova.NovaTools.AddSignatureOptions(pNova);
'nova.NovaTools.AddEmbedFontsOptions(pNova);
'nova.NovaTools.AddBookmarksDefinitions(pNova);

'save the new added profile
pNova.SaveProfile()

'set the copy profile as active profile ...
pNova.SetActiveProfile(newProfileID)

'print a test page, using the previously set active profile settings
Dim pd As PrintDocument = New PrintDocument
pd.PrinterSettings.PrinterName = PRINTER_NAME
AddHandler pd.PrintPage, AddressOf PrintPageFunction
pd.Print()
If ((activeProfile.Length > 0) And
(activeProfile.CompareTo(PROFILE_NAME) <> 0)) Then
pNova.SetActiveProfile(activeProfile)
pNova.DeleteProfile(newProfileID)
End If
Catch e As System.Runtime.InteropServices.COMException
MessageBox.Show(e.Message)
Catch e As Exception
MessageBox.Show(e.Message)
End Try
End Sub

'and finally the function that actually prints the page
Private Sub PrintPageFunction(ByVal sender As Object, ByVal ev As PrintPageEventArgs)
Dim str As String = "NovaPDF says Hello World from VB.Net"
Dim font As Font = New Font("Arial", 16)
Dim brush As Brush = New SolidBrush(Color.Black)
ev.Graphics.DrawString(str, font, brush, 20.0!, 20.0!)
ev.HasMorePages = False
End Sub
End Module

1.5.9.2 VBNet Converter

The VBNet Converter sample demonstrates how to convert an existing file by printing it to novaPDF SDK 10 using the ShellExecute function. It also demonstrates how to set different options and manage profiles.

The same approach should be taken if you print using a "Print()" method from another object (like
an internet browser or a report control). Just replace the ShellExecute call with the call of your Print method.

When the application starts, it creates a few profiles and makes different settings in the profiles. Then it shows a dialog from where the user can select the active profile and change its settings using the controls from the dialog.

After that a document can be selected from the harddisk and printed to novaPDF SDK 10 using the ShellExecute function call.

When using this technique to convert a file to PDF, you have to take care of the fact that ShellExecute prints to the default printer. This function returns immediately and does not wait until the print is finished (it may return before the printing is actually started). Therefore you have to set the default printer to novaPDF SDK 10 before calling ShellExecute (using the SetDefaultPrinter method), wait the process to be started (using WaitForExit()), restore the default printer (with the RestoreDefaultPrinter method). This way you made sure that the default printer was restored and your document is printed to novaPDF SDK 10.

Source code snippets

1. Declare INovaPdfOptions variable
   ```vbnet
   Private mobjNovaOptions As NovaPdfOptions80Class
   ```

2. Initialize INovaPdfOptions
   ```vbnet
   mobjNovaOptions = New NovaPdfOptions80Class
   ' initialize the NovaPdfOptions object
   mobjNovaOptions.Initialize(PRINTER_NAME)
   AddSmallProfile()
   AddFullProfile()
   ```

3. Set novaPDF SDK 10 Options
   ```vbnet
   Try
       Dim newSmallSizeProfileId As String = ""
       ' add new profile
       mobjNovaOptions.AddProfile(SMALL_SIZE_PROFILE, PROFILE_IS_PUBLIC, newSmallSizeProfileId)
       'load the new profile
       mobjNovaOptions.LoadProfile(newSmallSizeProfileId)
       ' Set some options to this profile
       ' disable the "Save PDF file as" prompt
       mobjNovaOptions.SetOptionLong(NovaOptions.NOVAPDF_SAVE_PROMPT_TYPE, 0)
       ' set generated Pdf files destination folder "c:\"
       mobjNovaOptions.SetOptionString(NovaOptions.NOVAPDF_SAVE_FOLDER, "c:\")
   ```
Catch ComException As System.Runtime.InteropServices.COMException
  MessageBox.Show("Error creating Small Size Profile:" &
  Microsoft.VisualBasic.Chr(13) & ":" & Microsoft.VisualBasic.Chr(10) & "" +
  ComException.Message)
End Try

4. Start a Print job

Private Sub btnStartPrinting_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnStartPrinting.Click
  mobjNovaOptios.SetActiveProfile(CType((cmbProfiles.SelectedItem), String))
  mobjNovaOptios.SetDefaultPrinter()
  mobjNovaOptios.LicenseShellExecuteFile(txtFileToConvert.Text)
  Dim myProcess As Process = New Process
  Try
    myProcess.StartInfo.FileName = txtFileToConvert.Text
    myProcess.StartInfo.Verb = "Print"
    myProcess.StartInfo.CreateNoWindow = True
    myProcess.Start()
  Catch ex As Win32Exception
    If ex.NativeErrorCode = ERROR_FILE_NOT_FOUND Then
      Console.WriteLine(ex.Message + ". Check the path and filename")
    Else
      ' Note that if your word processor might generate exceptions such as this, which are handled first.
      If ex.NativeErrorCode = ERROR_ACCESS_DENIED Then
        Console.WriteLine(ex.Message + ". You do not have permission to print this file.")
      End If
    End If
  End Try
  myProcess.WaitForExit(10000)
  myProcess.Close()
  mobjNovaOptios.RestoreDefaultPrinter()
End Sub

1.5.9.3 Word OLE VBNet

The **Word OLE VBNet** sample is a simple Windows console application that converts a MS Word document (C:\Test.doc) to PDF using Word OLE automation.

**Source code**

```csharp
Imports System
Imports System.Drawing
```
Imports System.Drawing.Printing
Imports System.Windows.Forms
Imports novapiLib80

Module Module1
  ' <summary>
  ' The main entry point for the application.
  ' </summary>
Const PRINTER_NAME As String = "novaPDF SDK 9"
Const PROFILE_NAME As String = "Word OLE VBNet"
Const PROFILE_IS_PUBLIC As Integer = 0
Const NOVAPDF_INFO_SUBJECT As Integer = 68
Sub Main()

  ' create the NovaPdfOptions80 object
  Dim pNova As NovaPdfOptions9
  pNova = New NovaPdfOptions9
  Dim activeProfile As String = ""
  Dim newProfileID As String = String.Empty

  ' initialize the NovaPdfOptions90 object
  ' if you have an application license for novaPDF SDK,
  pNova.Initialize(PRINTER_NAME, "")
  ' save old active profile id
  pNova.GetActiveProfile(activeProfile)
  ' create new profile
  pNova.AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, newProfileID)
  ' load the new profile
  pNova.LoadProfile(newProfileID)
  ' and set some options
  pNova.SetOptionString(NOVAPDF_INFO_SUBJECT, "C# Word OLE document")
  pNova.SaveProfile()
  ' set the copy profile as active profile ...
  pNova.SetActiveProfile(newProfileID)
  ' set nova default printer
  pNova.SetDefaultPrinter()
  ' print word document
  Dim objWord As Object
  Dim objDoc As Object
  pNova.InitializeOLEUsage("Word.Application")
  objWord = CreateObject("Word.Application")
  pNova.LicenseOLEServer()
  objDoc = objWord.Documents.Open("C:\temp\test.docx", False, True)
  objDoc.PrintOut(False)
  objDoc.Close(False)
  objWord.Quit(False)

  ' restore active profile
  If activeProfile.Length > 0 AndAlso
activeProfile.CompareTo(PROFILE_NAME) <> 0 Then
    pNova.SetActiveProfile(activeProfile)
    pNova.DeleteProfile(newProfileID)
End If

' restore default printer
pNova.RestoreDefaultPrinter()
End Sub
End Module

## 1.5.9.4 Convert Office Docs

The **Convert Office Docs** sample is a simple Windows console application that converts some Microsoft Office documents (Word, Excel, Publisher, PowerPoint and Visio) using Convert... functions. It uses Office OLE automation so Microsoft Office has to be installed.

The sample documents converted are located in the "OfficeDocuments" folder in novaPDF SDK installation folder. The pdf files are saved in the same folder.

Hidden links and internal document links are converted in pdf hyperlinks (except for Excel documents).

### Source code

```vbnet
Imports System
Imports System.Windows.Forms
' the novapiLib package must be added as a COM reference
Imports novapiLib9

Module Module1
    '<summary>
    ' The main entry point for the application.
    '</summary>
    Const PRINTER_NAME As String = "novaPDF SDK 9"
    Const PROFILE_NAME As String = "ConvertOffice"
    Const PROFILE_IS_PUBLIC As Integer = 0
    Const NV_PROFILE_EXISTS As Long = -707133434

    Sub Main()
        Try
            ' create the NovaPdfOptions object
            Dim pNova As NovaPdfOptions9
            pNova = New NovaPdfOptions9
            ' initialize the NovaPdfOptions object
            ' if you have an application license for novaPDF SDK,
            ' pass the license key to the Initialize() function
            pNova.Initialize(PRINTER_NAME, "")
            ' mark start changing options
            ' get the active profile ...
            Dim activeProfile As String = ""
            Dim nActivePublic As Integer = 0
            Try
```
pNova.GetActiveProfile(activeProfile)

Catch ex As System.Runtime.InteropServices.COMException
  ' ignore profile exists error
  If (NovaErrors.NV_NO_ACTIVE_PROFILE = ex.ErrorCode) Then
    System.Console.WriteLine("The printer does not have an active profile")
  Else
    ' more serious error, propagate it
    Throw ex
  End If
End Try

Dim newProfileID As String = ""
Try
  ' and make a copy of it
  pNova.AddProfile(PROFILE_NAME, PROFILE_IS_PUBLIC, newProfileID)
Catch e As System.Runtime.InteropServices.COMException
  ' ignore profile exists error
  If (NV_PROFILE_EXISTS = e.ErrorCode) Then
    System.Console.WriteLine("Profile already exists")
  Else
    ' more serious error, propagate it
    Throw e
  End If
End Try

' load the new profile
pNova.LoadProfile(newProfileID)
' nova.NovaTools.AddProfileOptions(pNova);

' and set some options
' uncomment the function calls for the options you wish to set

' DO NOT OPEN PDF
' an Open action is added by default in the profile - delete or disable this open action
'  pNova.DisableActionType(ActionType.NOVA_ACTION_OPEN)

' change the sav options
NovaTools.AddSaveOptions(pNova)

'save the new added profile
pNova.SaveProfile()
' set the copy profile as active profile ...
pNova.SetActiveProfile(newProfileID)

' Path for novaPDF 9 SDK sample documents
Dim strDocumentsPath As String = "C:\Users\Public\Documents\novaPDF 9\SDK\OfficeDocuments\"
Dim strDocPath As String
' Convert Word document
'Microsoft Office Word has to be installed
'--------------------------------------------------
'Document file path
strDocPath = strDocumentsPath + "Word.docx"
'style name | level | type
Dim strHeadings As String = "Heading 1|1|0;Heading 2|2|0;Heading 3|3|0"
pNova.LicenseApplication("WINWORD.EXE")
pNova.LicenseApplication("SPLWOW64.EXE")
pNova.ConvertWordDocument(strDocPath, 1, 0, 1, 1, 1, 1, 1, 1, 1, 3, strHeadings)

' Convert PowerPoint document
'Microsoft Office PowerPoint has to be installed
'--------------------------------------------------
'Document file path
strDocPath = strDocumentsPath + "PowerPoint.pptx"
pNova.LicenseApplication("POWERPNT.EXE")
pNova.LicenseApplication("SPLWOW64.EXE")
pNova.ConvertPowerPointDocument(strDocPath, 1, 1, 1, 1, 1, 1)

' Convert Publisher document
'Microsoft Office Publisher has to be installed
'--------------------------------------------------
'Document file path
strDocPath = strDocumentsPath + "Publisher.pub"
pNova.LicenseApplication("MSPUB.EXE")
pNova.LicenseApplication("SPLWOW64.EXE")
pNova.ConvertPublisherDocument(strDocPath, 1, 1, 1, 1, 1, 1)

' Convert Excel document
'Microsoft Office Excel has to be installed
'hidden links in Excel documents will not be converted to pdf links
'--------------------------------------------------
'Document file path
strDocPath = strDocumentsPath + "Excel.xlsx"
pNova.LicenseApplication("EXCEL.EXE")
pNova.LicenseApplication("SPLWOW64.EXE")

' Convert Visio document
'Microsoft Office Visio has to be installed
'--------------------------------------------------
'Document file path
strDocPath = strDocumentsPath + "Visio.vsd"
pNova.LicenseApplication("VISIO.EXE")
1.5.9.5 Override Options

Override Options sample is a simple Windows console application that demonstrates the basic use of the INovaPDFOptions interface, without using profiles options. Instead of creating a profile and setting options in the profile, the sample uses SetOverrideOptions... functions to quickly set some options that will overwrite active profile settings. This is useful if you have a simple application where you just wish to change the pdf file name, email address or other simple options for each printed document.

There is a limited set of options that can be set with SetOverrideOptions... functions, usually settings that users can also change from the Save As dialog or the other prompt dialogs that can be shown before printing a document. If you need more complex settings, like adding a watermark, overlay or signature you have to configure them in a profile.

You can combine usage of profiles and override options functions. For instance you can create a profile with a watermark that is set as active and then use the override function just to change the file name for each document.

Once set, override options are taken in account for all printed documents until they are removed with DeleteOverrideOptions function.

The sample prints one page with a simple text to the novaPDF SDK 10 and generates a "OverrideOptions.pdf" file in the C:\temp folder.

Source code

```csharp
Imports System
Imports System.Drawing
Imports System.Drawing.Printing
Imports System.Windows.Forms
' the novapiLib package must be added as a COM reference
Imports novapiLib

Module Module1
    ' <summary>
    ' The main entry point for the application.
    ' </summary>
```
Const PRINTER_NAME As String = "novaPDF SDK 9"
Const PDF_FILE_NAME As String = "OverrideOptions.pdf"

Sub Main()
    Try
        ' create the NovaPdfOptions object
        Dim pNova As NovaPdfOptions9
        pNova = New NovaPdfOptions9

        ' initialize the NovaPdfOptions object
        ' if you have an application license for novaPDF SDK,
        ' pass the license key to the Initialize() function
        pNova.Initialize(PRINTER_NAME, "")

        'Override options from active profile

        'Save options
        'do not show prompt save dialog
        pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_SAVE_TYPE, SaveDlgType.PROMPT_SAVE_NONE)
        'save the pdf in next folder

        pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_SAVE_FOLDER_TYPE, SaveFolder.SAVEFOLDER_CUSTOM)

        pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_SAVE_FOLDER, "C:\\temp")

        pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_SAVE_FILE, PDF_FILE_NAME)
        'access folder, if restricted

        pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_SAVE_USER, "user")

        pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_SAVE_PASSWORD, "password")
        'if a file with the same name already exists

        pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_SAVE_CONFLICT, SaveFileConflictType.FILE_CONFLICT_STRATEGY_OVERWRITE)
        'disable open PDF in viewer

        'pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_OPEN VIEWER, 0)
        'Embed fonts

        pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_EMBEDFONTS, 1)
        'Set compression level
'pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_COMPRESSION, CompressionOverride.COMPRESSION_HIGHQUALITY)

'dMerge PDF
'dEnable merge

'pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_MERGE_PDF, 1)
'dMerge with the same file, if the file exists in destination OR merge with another file

'pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_MERGE_FILE_TYPE, MergeFile.MERGE_FILE_OTHER)
'dAppend to existing PDF, insert at the beginning or insert at a page number

'pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_MERGE_TYPE, MergeType.MERGE_TYPE_APPEND)
'd'if merge with other file, specify file name (and path)

'pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_MERGE_FILE, "invoice-text.pdf")
'd'if merge type is set to insert at page number

'pNova.SetOverrideOptionLong(NovaOptions.NOVAPDF_OVERRIDE_INSERT_PAGENO, 1)
'd'if the existing PDF is encrypted

'pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_PDF_PASSWORD, "password")

document info

pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_DOC_INFO, 1)
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_TITLE, "sdk title")
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_SUBJECT, "sdk subject")
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_AUTHOR, "sdk author")
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_DOC_CREATOR, "sdk creator")

'dEncrypt PDF

'pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_SECURITY, 1)
'pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_SECURITY_U, "user")

'pNova.SetOverrideOptionEncryptedString(NovaOptions.NOVAPDF_OVERRIDE_SECURITY_O, "owner")

'Email

pNova.SetOverrideOptionBool(NovaOptions.NOVAPDF_OVERRIDE_SEND_EMAIL, 1)
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_TO, "to")
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_FROM, "from")
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_CC, "cc")
pNova.SetOverrideOptionString(NovaOptions.NOVAPDF_OVERRIDE_REC_BCC, "bcc")

    pNova.RegisterNovaEvent(NovaEvents.NOVAPDF_EVENT_ACTIONS)

    ' print a test page
    Dim pd As PrintDocument = New PrintDocument
    pd.PrinterSettings.PrinterName = PRINTER_NAME
    AddHandler pd.PrintPage, AddressOf PrintPageFunction
    pd.Print()

    Dim bTimeout As Integer
    pNova.WaitForNovaEvent(120000, bTimeout)

    Catch e As System.Runtime.InteropServices.COMException
        MessageBox.Show(e.Message)
    Catch e As Exception
        MessageBox.Show(e.Message)
    End Try
End Sub

' and finally the function that actually prints the page
Private Sub PrintPageFunction(ByVal sender As Object, ByVal ev As PrintPageEventArgs)
    Dim str As String = "novaPDF says Hello World from VB.Net"
    Dim font As Font = New Font("Arial", 16)
    Dim brush As Brush = New SolidBrush(Color.Black)
    ev.Graphics.DrawString(str, font, brush, 20.0!, 20.0!)
    ev.HasMorePages = False
End Sub

End Module
1.5.10 Install

1.5.10.1 Installation package bundle

This is a sample on how to compress the msi installations packages in a bundle and generate an setup executable to install novaPDF 10 SDK Developer.

If you haven't already done so, you will need to install the Wix Toolset to build this project.

The project contains two files:
1. Variables.wxi - contains variables for application name, company name, version,...; it's important to change the UpgradeCode to an unique new GUID for your application
2. Bundle.wxs - contains the msi files that need to be included and the execution order; .Net Framework 4 is required by novaPDF 10 SDK Developer and is set as prerequisite

Variables.wxi

```xml
<?xml version="1.0" encoding="utf-8"?>
<Include>

<!--change the UpgradeCode to an unique new GUID for your application-->
<?define UpgradeCode="C08317E3-A50E-4D51-802A-92EE332821AD"?>

<?define AboutUrl='http://www.novapdf.com'?>
<?define SplashImage=" "?>
<?define IconFile=" "?>

<?define MyLicenseFileName="C:\ProgramData\Softland\novaPDF9\PdfSdk9_Softland\PdfSdk9_SoftlandEulaExt.rtf" ?>

<!--version-->
<?define MajorVersion="9"?>
<?define MinorVersion="0"?>
<?define BuildNumber="36"?>

<!--manufacturing-->
<?define Manufacturer="<My SDK Company Name>" ?>

<!--product name-->
<?define ProductName="<My SDK Application Name>"?>

<!--full product name-->
<?define FullProductName="$(var.ProductName) $(var.MajorVersion)" ?>

<!--bundle specific-->
<?define DriverKit86="C:\Users\Public\Documents\novaPDF9\SDK\Branding\novaPDF9PrinterDriver(x86).msi"?>
<?define DriverKit64="C:\Users\Public\Documents\novaPDF9\SDK\Branding\novaPDF9PrinterDriver(x64).msi"?>

<?define COMPathx64="C:\Users\Public\Documents\novaPDF9\SDK\Branding\novaPDF9COM(x64).msi"?>
<?define COMPathx86="C:\Users\Public\Documents\novaPDF9\SDK\Branding\novaPDF9COM(x86).msi"?>
```
<?define OemKit86="C:\Users\Public\Documents\novaPDF9\SDK\Branding\novaPDF9SDK(x86).msi"?>
<?define OemKit64="C:\Users\Public\Documents\novaPDF9\SDK\Branding\novaPDF9SDK(x64).msi"?>
</Include>

Bundle.wxs

<?xml version="1.0" encoding="UTF-8"?>
<Wix xmlns="http://schemas.microsoft.com/wix/2006/wi"
xmlns:util="http://schemas.microsoft.com/wix/UtilExtension"
xmlns:bal='http://schemas.microsoft.com/wix/BalExtension'
xmlns:swid="http://schemas.microsoft.com/wix/TagExtension"
xmlns:dotNet="http://schemas.microsoft.com/wix/NetFxExtension">
<?include "Variables.wxi"?>
<Bundle Name="$(var.BundleName)"
Manufacturer="$(var.Manufacturer)"
UpgradeCode="$(var.UpgradeCode)"
AboutUrl='$(var.AboutUrl)'
SplashScreenSourceFile='$(var.SplashImage)'
Compressed='yes'
IconSourceFile="$(var.IconFile)" >
<swid:Tag Regid="regid.2008-09.org.wixtoolset" />
<!--change the UpgradeCode to an unique new GUID for your application-->
<RelatedBundle Id="$(var.UpgradeCode)" Action="Upgrade"/>

<!--application license-->
<BootstrapperApplicationRef Id="WixStandardBootstrapperApplication.RtfLicense" >
<bal:WixStandardBootstrapperApplication LicenseFile="$(var.MyLicenseFileName)"
SuppressOptionsUI="yes"/>
</BootstrapperApplicationRef>

<Chain>
<!--prereqs-->
<PackageGroupRef Id="NetFx40Web"/>

<!--COM-->
Cache="yes"
DisplayInternalUI="no"
EnableFeatureSelection="no" ForcePerMachine="yes"
Compressed="yes" SourceFile="$(var.COMPathx86)" Visible="yes" Vital="yes"></MsiPackage>

Cache="yes"/>
<Fragment>
<!--UI-->
<UI Id="MyWixUI_Mondo">
  <UIRef Id="WixUI_Mondo"/>
  <UIRef Id="WixUI_ErrorProgressText"/>
</UI>
</Fragment>
Index

- A -
  Addbookmarkdefinition 69
  Addbookmarkdefinition2 71
  Addprofile 79
  Addprofile2 80
  AddWatermarkImage 83
  AddWatermarkImage2 83
  AddWatermarkText 84
  AddWatermarkText2 85
  asp 224
  asp.net 224

- C -
  Choose sample 221
  Components 12
  Copyprofile 95
  Copyprofile2 95
  CSharp converter 246

- D -
  Deletebookmarkdefinition 97
  Deleteprofile 101
  Deleteprofile2 101
  DeleteWatermarkImage 102
  DeleteWatermarkImage2 103
  DeleteWatermarkText 103
  DeleteWatermarkText2 103

- G -
  Getactiveprofile 117
  Getactiveprofile2 117
  Getbookmarkdefinition 118
  Getbookmarkdefinition2 119
  Getbookmarkdefinitioncount 120
  Getfirstprofile 123
  Getfirstprofile2 124
  Getnextprofile 133
  Getnextprofile2 134
  Getoptionlong 136
  Getoptionstring 136
  Getoptionstring2 137
  Getpdffilename 148
  GetWatermarkImage 154
  GetWatermarkImage2 155
  GetWatermarkImageCount 155
  GetWatermarkText 167
  GetWatermarkText2 167
  GetWatermarkTextCount 168

- H -
  hello world 224, 259, 285
  Hello World CSharp 243
  Hello World Delphi 231
  Hello World VB 296
  Hellow World network 262
  Hellow World VBNNet 306

- I -
  Initialize 168
  Initialize2 169
  Initializeoleusage 169
  InitializeSilent 169
  InitializeSilent2 170
  INovaPdfOptions 62
  Install
    Command line 11
    Network 11
  Integrate 16

- J -
  java 285, 290
  java sample 285, 290

- L -
  LicenseApplication 170
  Licenseoleserver 171
  Licensexlabellexecutefile 171
- M -
Make the release build 16
MFC Converter 266
MFC Scribble 270
Modifybookmarkdefinition 172
Modifybookmarkdefinition2 173

- N -
Network auto-install 14

- O -
ole 290

- P -
PDF reports 222
Private/Public Profiles 29

- R -
Register COM 27
Register messages 29
Registereventwindow 175
RegisterNovaEvent 175
RegisterNovaEvent2 175
Registry Keys 33
Restoredefaultprinter 176

- S -
Set printer options 28
Setactiveprofile 183
Setactiveprofile2 183
Setdefaultprinter 184
Setoptionlong 192
Setoptionstring 193
Setoptionstring2 194
SetPrinterOption 204
System requirements 12

- T -
Terminal services 11

- U -
Uninstall 11
Unregistereventwindow 220
Use COM 28
Use Events 30

- V -
VB converter 298
VCL converter 227

- W -
WaitForNovaEvent 220
Windows messages 60
word ole 290
Word OLE CSharp 249
Word OLE Delphi 237
Word OLE VB 302