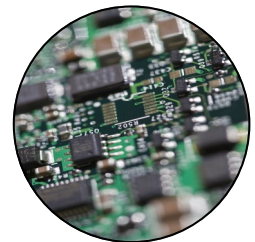




Custom PDF Generator for LabVIEW Version 3 Quick Start User Guide


Start Creating High Quality Reports Today



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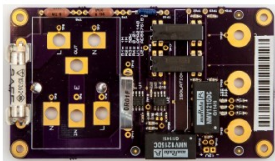
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Figure 1: Output from the test report example

Product Test Report


Test Result Sheet

Manufacturer: Simplicity AI
 Serial Number: TZ-2329424
 Operator: T Jones
 Firmware: A0242
 WO Number: SO34024



Test Failed

Req ID	Test Name	Limits	Result	Unit	Status
2.1	PSU Voltage	>10.5 <13.5	12.2	Volts	Passed
2.2	V2	+4.5 -5.5	5.001	Volts	Passed
2.3	V3	>3.2 <3.4	3.4001	Volts	Failed
3.2	R2	>0.95 < 1.05	1.001	kOhm	Passed
3.3	R4	>0.95 < 1.05	0.999	kOhm	Passed
3.4	R5	>0.95 < 1.05	1.12	kOhm	Failed
3.5	R12	>9.9 < 10.1	1.42	kOhm	Failed
3.7	R16	>9.9 < 10.1	10.01	kOhm	Passed
3.8	R17	>9.9 < 10.1	9.991	kOhm	Passed
4.1	P5	True	True		Passed
4.2	P6	False	True		Failed
4.3	P7	True	False		Failed
5.3	Ch1 Pulse Width	>4.8 <5.2	5.13	ms	Passed
5.4	Ch2 Pulse Width	>4.8 <5.2	5.42	ms	Failed
5.6	Ch1a Pulse Width	>9.8 <10.2	10.31	ms	Failed
5.8	Ch2a Pulse Width	>9.8 <10.2	9.92	ms	Passed

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Important Notes on Upgrading

Major feature improvements have been implemented in version 3 of the custom PDF generator, so there is a compelling reason to upgrade from earlier versions. More details on the improvements can be found in the feature list at the end of this guide and on the [Simplicity AI website](#).

New License Required

Version 3 requires a new license to be issued by Simplicity AI. If you currently have a license for version 2 please [contact us](#) for more information on how to upgrade.

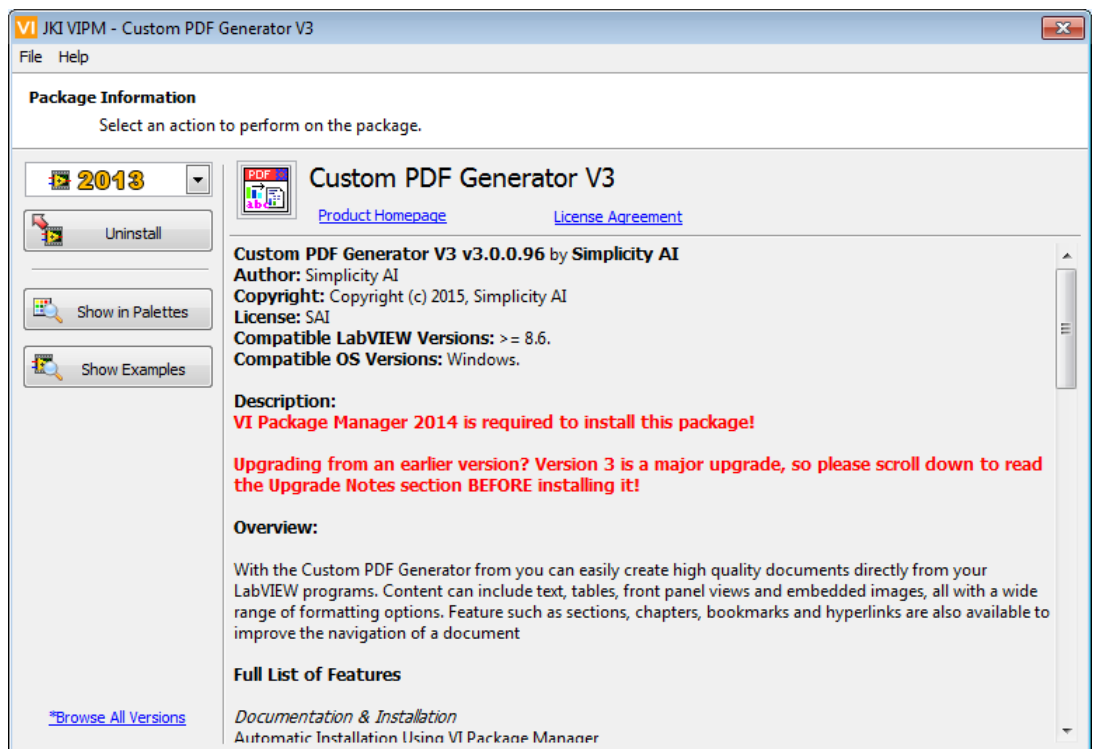
Relinking of VIs

Many of the VIs are now members of a LabVIEW class and although they mostly retain the same names, LabVIEW considers them to be completely new VIs. Because of this, you will need to perform some manual relinking of VIs after upgrading to version 3.

For assistance on relinking of VIs please open up the Custom PDF Generator help file and from the contents tag browse to:

About the Custom PDF Generator for LabVIEW >> Upgrade notes from V2 to V3

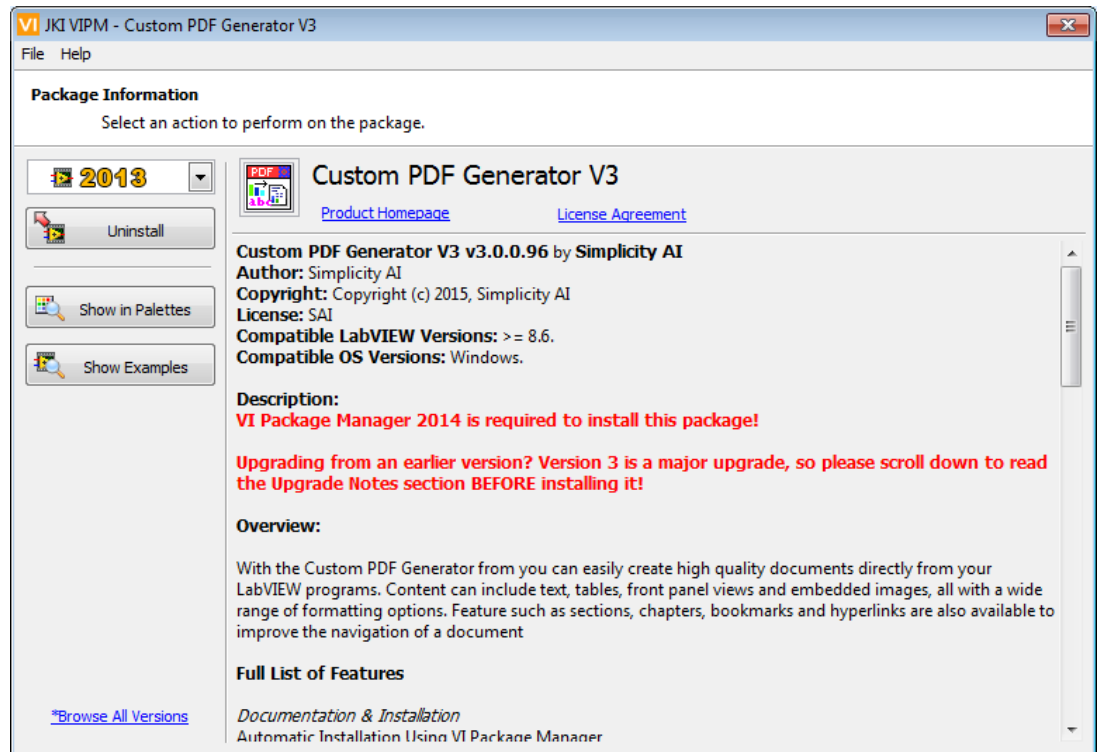
Figure 2: A message warns upgrading users that version 3 is a major update



Installation

The Custom PDF Generator for LabVIEW version 3 uses VI Package Manager for easy automated installation and removal. You will need to install this software onto your computer before the Custom PDF Generator installation can be completed.

Figure 3: VI Package Manager



VI Package Manager

If you attempt to open the Custom PDF Generator .VIP file without VI Package Manager installed, LabVIEW may attempt to automatically download it. If this does not work, you will need to manually download it from the [JKI website](#).

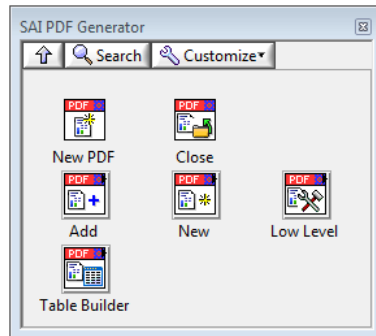
Install Process

Once VI Package Manager is installed you should be able to use it to open the Custom PDF Generator .VIP file. A wizard will guide you through the steps of the installation process. You will need to select the version of LabVIEW that you want to install on to and agree to the licensing terms.

Finding the Functions

When installation is complete, the Custom PDF Generator palette is accessible in LabVIEW under the 'Addons' section of the Functions Palette. VI Package Manager will refresh the LabVIEW Block Diagram palettes so the Custom PDF Generator VIs will be available. However for LabVIEW to display additional information under the LabVIEW Help menu, a restart of LabVIEW is required.

Figure 4: Custom PDF Generator Palette Screen



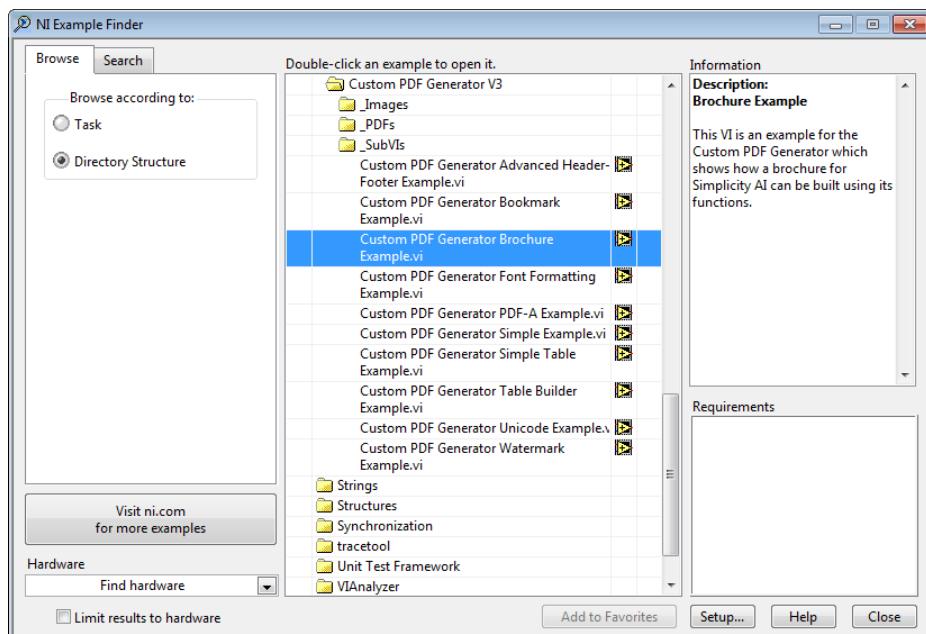
Example Programs

A comprehensive set of example VIs has been provided to enable you to rapidly get up and running with the Custom PDF Generator. These can be found using the NI Example Finder.

After opening the Example Finder, go to the Browse tab and select Directory Structure. Scroll through the folder list and locate the following directory.

Simplicity AI>>Custom PDF Generator V3>>_SubVIs

Figure 5: NI Example Finder



Help Features

LabVIEW context help is provided for every function within the Custom PDF Generator for LabVIEW. There is also a detailed help file that is available from the help menu and linked-to from the context help views.

Figure 6: Context Help

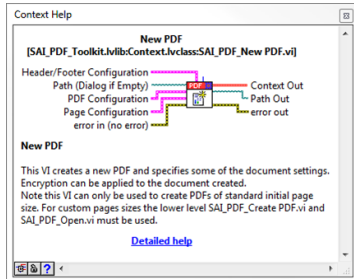
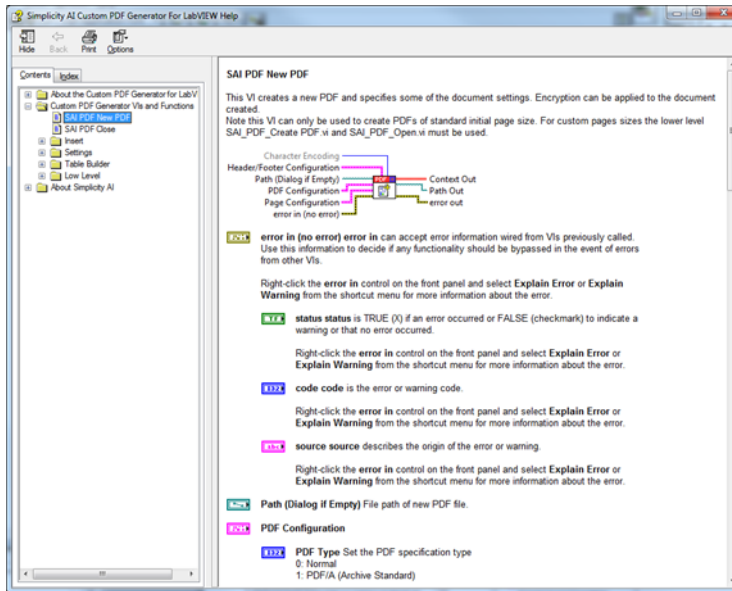


Figure 7: Help File

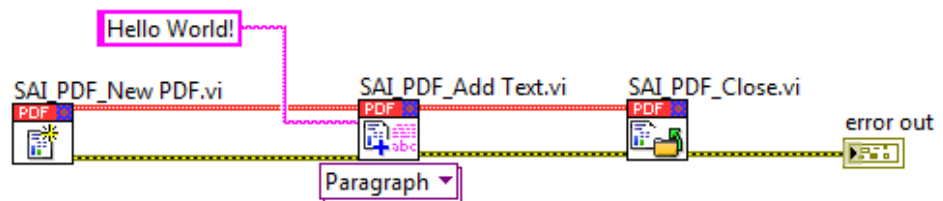


Simple Tutorial: Hello World

Instructions on creating a simple 'hello world' VI.

- 1) From the block diagram window of a new VI, open the functions palette.
- 2) Browse to **Addons>>SAI PDF Generator**
- 3) Drop a **SAI_PDF_New PDF.vi** and **SAI_PDF_Close.vi** onto the block diagram.
- 4) In the functions palette browse to **Addons>>SAI PDF Generator>>Add**
- 5) Drop a **SAI_PDF_Add_Text.vi** onto the block diagram.
- 6) Connect up the error cluster and PDF context wires as shown in the diagram below.
- 7) On the **SAI_PDF_Add_Text.vi** right click the **Text** input and create a constant. Enter 'hello world!' into this constant.
- 8) Run the VI and select a PDF file to create/over-write.
- 9) Open the PDF file to view the hello world message.

Figure 8: Hello world VI—block diagram



Evaluation Version

The Custom PDF Generator V3 for LabVIEW can be downloaded and installed free of charge for evaluation purposes. A limitation is imposed where all documents created will have a non-optional watermark printed across them. To remove this watermark, a license for the full version must be purchased.

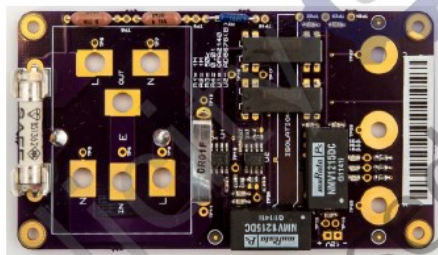
The PDF/A and custom watermark features are only available in the fully licensed PDF generator. PDF/A files will generate, but the watermark will be placed over the document and is not transparent so content below the watermark cannot be seen. In the licensed version watermarks can't be added to PDF/A documents.

Product Test Report



Test Result Sheet

Manufacturer: Simplicity AI
 Serial Number : TZ-2329424
 Operator : T Jones
 Firmware : A0242
 WO Number : SO34024



Test Failed

Req ID	Test Name	Limits	Result	Unit	Status
2.1	PSU Voltage	>10.5 <13.5	12.2	Volts	Passed
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2.3	V3	>3.2 <3.4	3.4001	Volts	Failed
3.2	R2	>0.95 < 1.05	1.001	kOhm	Passed
3.3	R4	>0.95 < 1.05	0.998	kOhm	Passed
3.4	R5	>0.95 < 1.05	1.12	kOhm	Failed
3.5	R12	>9.9 < 10.1	1.42	kOhm	Failed
3.7	R16	>9.9 < 10.1	10.01	kOhm	Passed
3.8	R17	>9.9 < 10.1	9.991	kOhm	Passed
4.1	P5	True	True		Passed
4.2	P6	False	True		Failed
4.3	P7	True	False		Failed
5.3	Ch1 Pulse Width	>4.8 <5.2	5.13	ms	Passed
5.4	Ch2 Pulse Width	>4.8 <5.2	5.42	ms	Failed
5.6	Ch1a Pulse Width	>9.8 <10.2	10.31	ms	Failed
5.8	Ch2a Pulse Width	>9.8 <10.2	9.92	ms	Passed

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Created with Custom PDF Generator

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Figure 9: PDF Output from Evaluation Version Showing Non-Optional Watermark

Full Version

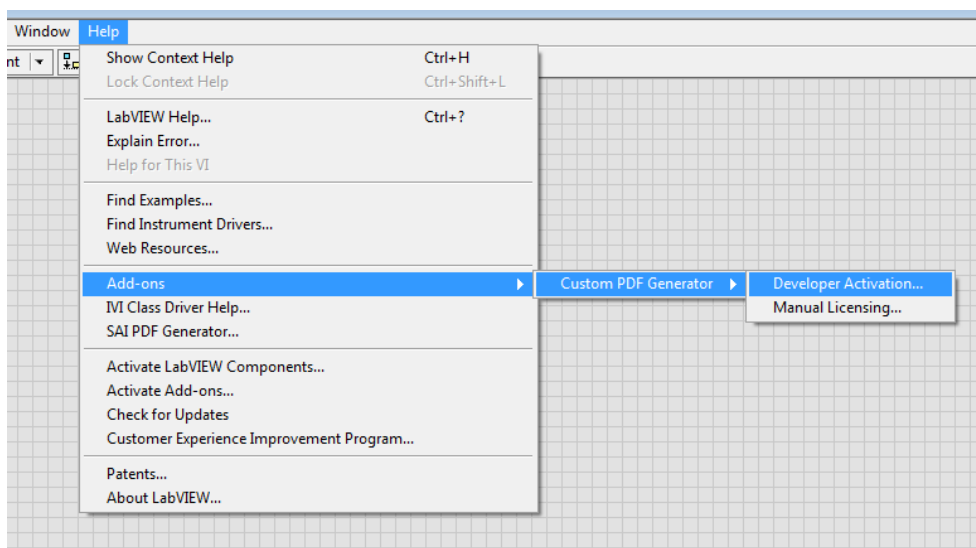
A paid license must be purchased from Simplicity AI in order to benefit from the features of the full version. Visit the [Custom PDF Generator Webpage](#) to purchase a license on-line.

After a license is purchased, certificates containing login information will be issued to you. These will enable you to use the Custom PDF Generator for software development and executable deployment purposes.

Development Activation - With Internet Connection

If you have an internet connection you can activate the Custom PDF Generator development license using a simple automatic process.

Figure 10: Menu Location of Developer Activation Option



From the help menu select the following.

Help>Add-ons>Custom PDF Generator>Developer Activation...

Fill in the fields presented with details from the Custom PDF Generator V3 license certificate as in the image below.

Figure 11: Developer Activation Dialog

 A screenshot of the 'Developer Activation' dialog box. The title bar reads 'Developer Activation'. The window contains the Simplicity AI logo and the text 'Custom PDF Generator Developer Activation'. There are four input fields: 'Username' (with a masked value ending in '.com'), 'Password' (with asterisks), 'Company Name' (with 'Simplicity AI' entered), and 'License Number' (with '200' followed by a masked value). An 'Activate' button is located at the bottom right.


Development Activation - Without Internet Connection

If you do not have an internet connection on your development computer you cannot activate the Custom PDF Generator development license using the automatic method. Instead you will need to collect the Machine ID of your development computer and use the web browser on another computer, which is connected to the internet.

The Machine ID can be obtained through the Manual Licensing dialog, found on the LabVIEW Help menu under the following location.

Help>Add-ons>Custom PDF Generator>Manual Licensing...

Figure 12: Menu Location of Manual Licensing Option

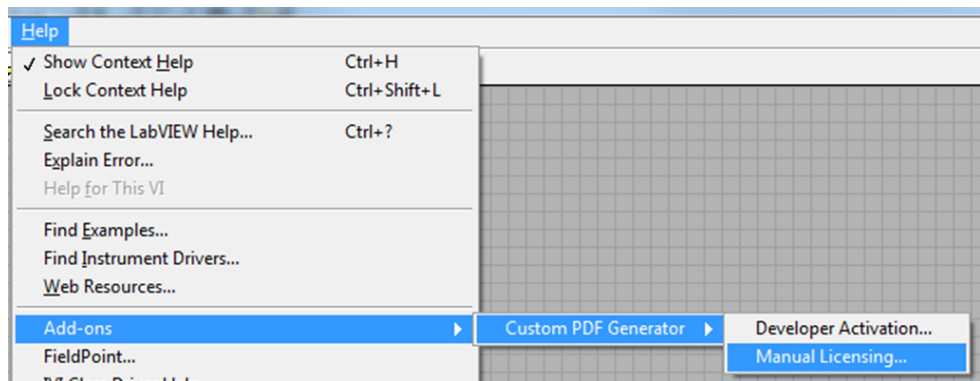
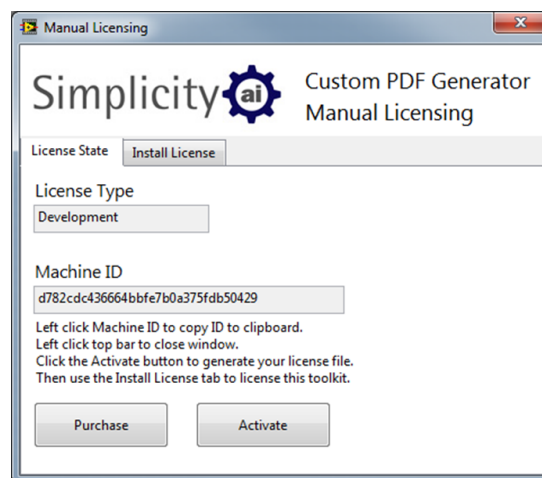
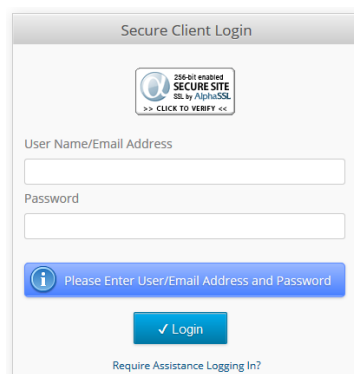


Figure 13: Manual Licensing Dialog



Using a web browser on an internet connected computer access the [Simplicity AI client area](#). Use the login information provided on your Custom PDF Generator license certificate.

Figure 14: Client Area Login



Development Activation—Without an Internet Connection—Cont

To generate a license file, select the 'Activate Products' icon from the client area and a table will appear listing all licenses available for activation. Use the checkbox on the right to select the correct development license version and then click on the 'Activate Selected Products' button.

Figure 15: Client Area Activate Products Option Operation

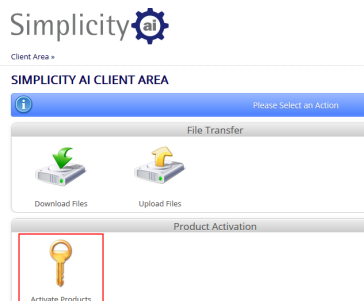
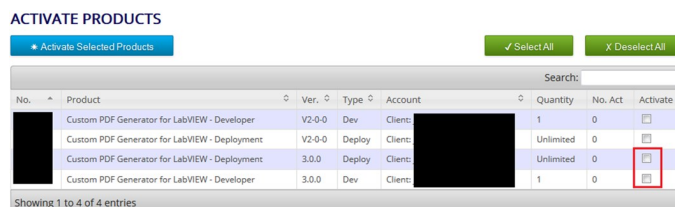


Figure 16: Activate Products Selection



A dialog will appear requesting your name, company, computer name and machine ID. To avoid mistakes it is recommended that you copy and paste the machine ID into the relevant field. After completing all the fields, click the submit button.

The license file download dialog will appear which will let you download a zip file containing your license. Click on the file name to begin downloading.

The *.lic file inside the license zip needs to be copied into the correct location on the development computer to activate the development version. Browse to the following location and copy the file into it.

Windows XP

C:\Documents and settings\All Users\Shared Documents\Simplicity AI\Licenses

Windows 7 or later

C:\Users\Public\Public Documents\Simplicity AI\Licenses

Deployment Activation

The full version of the Custom PDF Generator enables you to build an unlimited number of executables from a development system. You need to include a deployment license file inside your LabVIEW project to enable this function.

Using a web browser on an internet connected computer, access the Simplicity AI client area. Use the login information provided on your Custom PDF Generator license certificate.

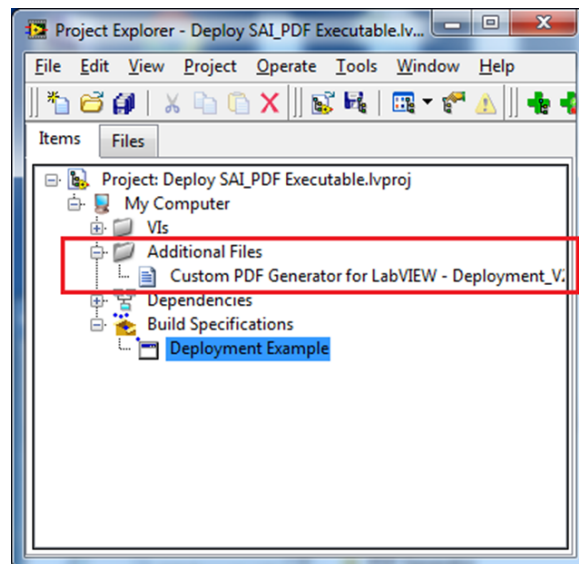
To generate a license file, select the 'Activate Products' icon from the client area and a table will appear listing all licenses available for activation. Use the checkbox on the right to select the correct deployment license version and then click on the 'Activate Selected Products' button.

A dialog will appear requesting your name and company. After completing all the fields, click the submit button.

The license file download dialog will appear which will let you download a zip file containing your license. Click on the file name to begin downloading.

Once downloaded, extract the .lic license file from the zip file and save into a suitable location inside the directories of your LabVIEW project. Next add the file into your LabVIEW project items list as shown in the example below.

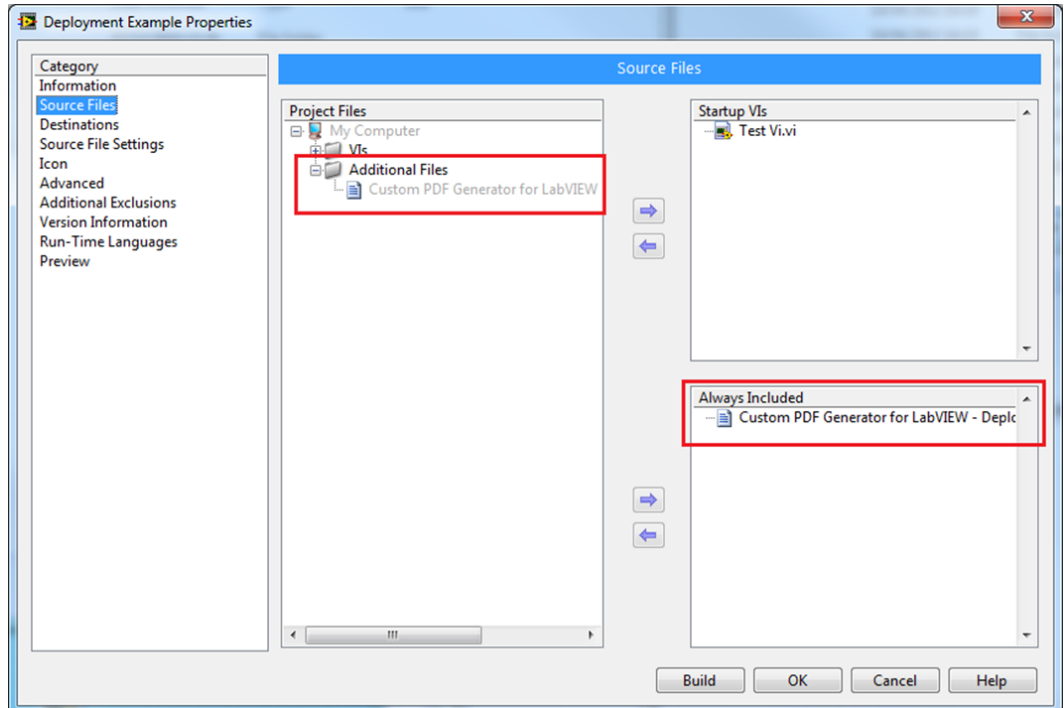
Figure 17: LabVIEW Project.
Adding .lic File



Deployment Activation—Cont

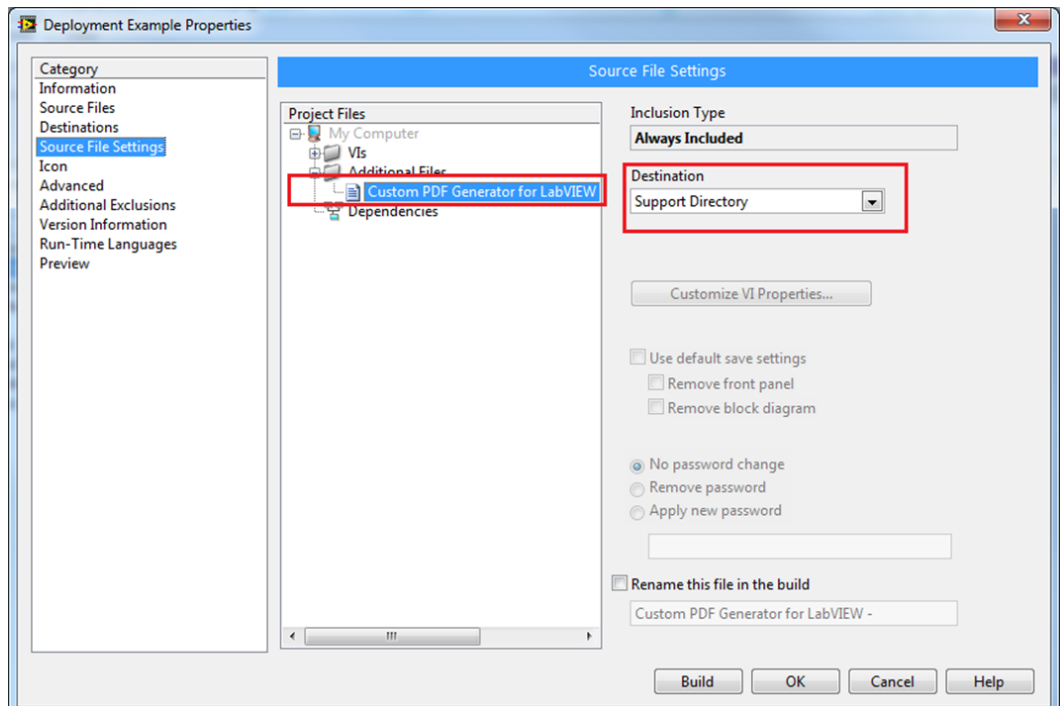
Create a build specification in the usual way as recommended by National Instruments. When you select the source files, ensure the deployment license file is selected as an “Always Included” item.

**Figure 18: Build Specification:
Source Files**



Once you have selected your destinations go to the Source File Settings page and make sure the deployment license file destination is the Support Directory.

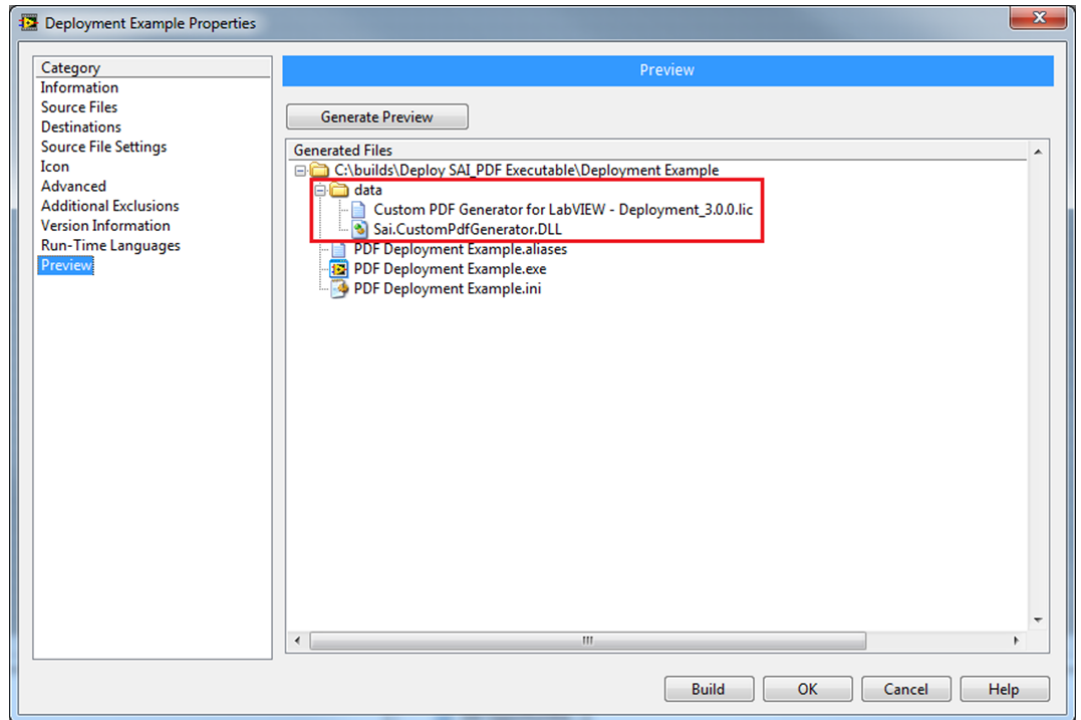
**Figure 19: Build Specification:
Source File Settings**



Deployment Activation—Cont

Complete the rest of the build specification as you require. Before you exit the Build Specifications Properties dialog, generate a preview. The output should be very similar to the following.

**Figure 20: Build Specification:
Preview**



Complete Feature Listing

Figure 21: Complete Feature Listing

* A feature which has been newly added or revised in version 3.

Feature	Evaluation	Full
Documentation & Installation		
Automatic Installation Using VI Package Manager	✓	✓
Detailed Help File with Hyperlinks	✓	✓
Example Programs Covering All Major Features	✓	✓
Getting Started Guide *	✓	✓
LabVIEW Context help for all VIs	✓	✓
Graphics		
Embed LabVIEW Front Panel and Control Images	✓	✓
Embed Graphics Images (BMP, JPEG, PNG)	✓	✓
Free of Simplicity AI Watermarking	✗	✓
Watermarking of Pages	✗	✓
Layout		
Automatic Creation Date in Footer	✓	✓
Automatic Page Numbering in Footer	✓	✓
Define Header and Footer Information	✓	✓
Customize Headers Using Images, Tables and Shortcuts *	✓	✓
Embed Existing PDF Pages and Documents into a PDF	✓	✓
Licensing		
Each License enables use on 1 development PC	✗	✓
Each License enables use in unlimited deployed executables	✗	✓
Navigation		
Define Chapters, Sections and Custom Bookmarks	✓	✓
Internal and External Document Links *	✓	✓
Protection		
PDF/A-1b for Standardised Long Term Archiving	✗	✓
Add Password Encryption to PDFs	✓	✓
Table		
Embed Tables in Documents	✓	✓
Alternate Row Highlighting *	✓	✓
Column Spanning for Table Cells *	✓	✓
Header Rows *	✓	✓
Set Formatting of Individual Cells *	✓	✓
Text		
Multiple Font Support with Corresponding Style Formatting	✓	✓
Unicode Character Support *	✓	✓
Write LabVIEW Strings Directly into PDF	✓	✓

Further Information

Product Web Page

www.simplicityai.com/custom-pdf-generator/

Contact Us

Telephone: +44 (0)845 468 2886 or +1 877-717-1190

Email: info@simplicityai.com

Support

Basic support for installation and activation is included in the purchase price. This is intended to get users to the point where they can execute the included example VIs and build them into executables.

Extended support for your own custom development is available from Simplicity AI, by contacting us, or purchasing through our web store.