Investintech.com Inc.
ImageToPDF Command Line Tool
User's Guide

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Preface

- Welcome to Investintech.com Inc. ImagetoPDF Command Line. This tool provides technologies for converting image files into the de facto standard known as PDF document format. This user's guide provides the basic information needed to use the command line tool.

About This Documentation

This documentation describes the purpose, installation and usage of the ImagetoPDF command-line program that allows users to convert a variety of image formats (BMP, GIF, JPEG, PNG< and TIFF) into PDF files.

Typographical Conventions Used in This Document

The following table describes typographical and naming conventions used in this document:

Font	*Used for*	*Examples*
`monospaced`	Expected input from the user	`ImagetoPDF –help`
	Paths and filenames	`c:\Program Files\ImagetoPDF\ImagetoPDF.exe`
	Source code	`MessageBox("ABC");`
`monospaced blue`	Source code keywords	`If`
`monospaced green`	Source code comments	`//this is a comment`
`monospaced bold`	Method name	The **`AboutBox()`** method
'**Single quoted bold**'	Elements of the user interface like buttons, icons etc.	click on '**Start**' button, press '**Enter**'
blue underlined	Internet links	http://www.investintech.com

Getting More Information

Investintech.com Inc. conducts research in data conversion technology and develops data conversion products utilizing results of the research. More information about our company is available at the company's website http://www.investintech.com.

Customer Service and Technical Support

Investintech.com Inc. strives to provide the best possible technical support to its customers and prospective customers. If you would like personal assistance, please feel free to call us or send e-mail to Customer Service or Technical Support. We are available by phone during regular business hours and in the vast majority of cases, we will return our e-mail with an answer the same day it is received.

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Investintech.com Inc. Software Development Kit User's Guide

ImagetoPDF Command Line

What is Command Line?

Microsoft Windows operating system is graphical user interface (GUI) operating system – commands are usually given by using mouse to interact with graphical elements on screen and results are visible through changes on graphics drawn on computer screen. Microsoft DOS is command line interface operating system – commands are typed on keyboard, executed when '**Enter**' key on keyboard is pressed and results are visible in text mode on screen.

While GUI is generally better way of using computers, there are few cases where command line is much better solution for particular need – like when we want to repeat same command over and over again.

In order to get command line interface window in any version of Windows, click on '**Start**' (usually at lower left side of screen), point to '**All Programs**', then point to '**Accessories**' and click on '**Command Prompt**' (or '**MS DOS Prompt**' in older versions of Windows).

What is ImagetoPDF Command Line?

ImagetoPDF Command Line is command line, shell or batch version providing a subset of features found in Able2Doc. It may be used to automate the conversion of multiple documents.

The demo version of ImagetoPDF is available, free of charge, for download from our company website, http://www.investintech.com

Image Basics

The following image related terms are defined as follows:

Term	Description
BMP	Bitmap - the standard Windows® raster image format (a raw device-independent bitmap).
Color Depth	The number of bits used to represent the color of a pixel.
JPEG	Joint Photographic Experts Group – a compressed raster image format widely used for images with a large color depth.
GIF	Graphics Interchange Format – proprietary compressed bitmap [copyright property of CompuServe Incorporated]. Color depth is limited to 8 bits (resulting in a palette of 256 colors). This format supports animated images.
Path	A vector element that essentially consists of 2 end points and a description of the curve between the end points.
Pixel	Unit of resolution of an image.
PNG	Portable Network Graphics – a compressed bitmap format that does not support image animation.
Raster	The representation of an image via an array of pixels. Its characteristics include no loss of image quality when image scale is reduced and a blocky pixilation effect when

	image scale is increased.
TIFF	Tagged Image File Format – a compressed bitmap format that supports up to 24 bit color depth. Multiple potentially incompatible specifications exist rendering the format less portable than other compressed bitmap formats.
Vector	The representation of an image via paths. It characteristically maintains a consistent image quality as the image is scaled up.

Installation Instructions for ImagetoPDF

Below you will find step-by-step instructions to install ImagetoPDF Command Line on your system. You may want to print this instruction sheet for reference before beginning to install ImagetoPDF.

System Requirements

The minimum computer system resources required to install and run ImagetoPDF are:

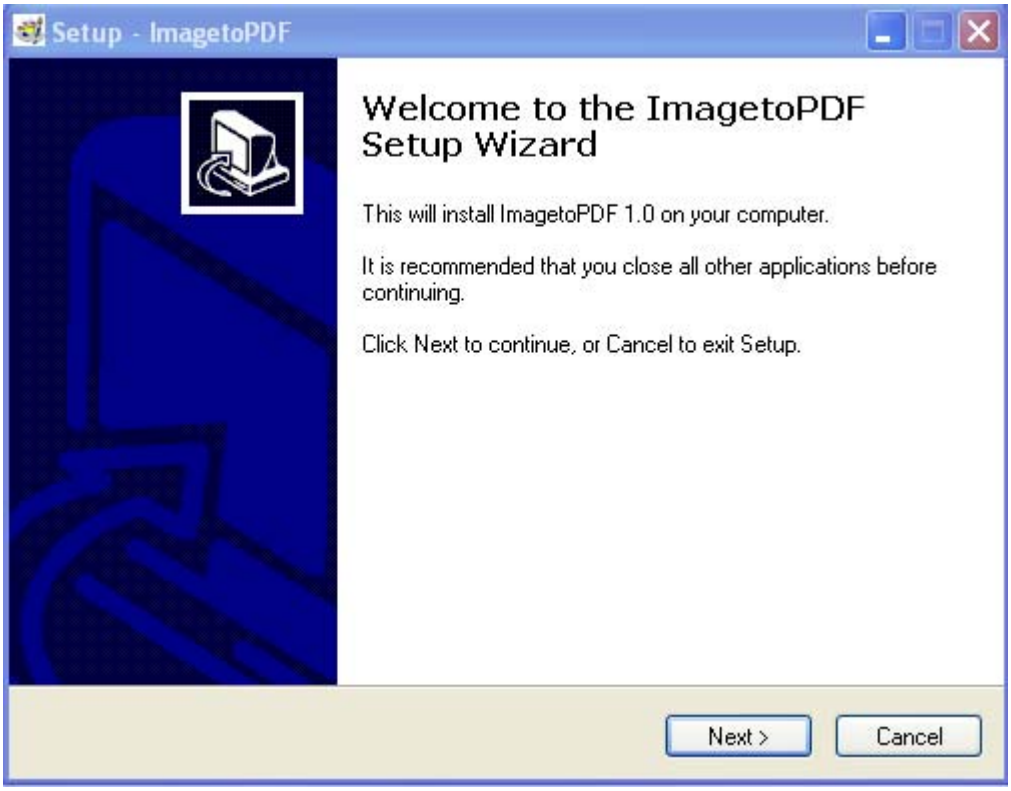
- Microsoft Windows 98/Me/2000/XP/2003
- 64 MB of RAM
- 6 MB of available hard disk space

In order to use ImagetoPDF comfortably, it is recommended that your computer system meet the following requirements:

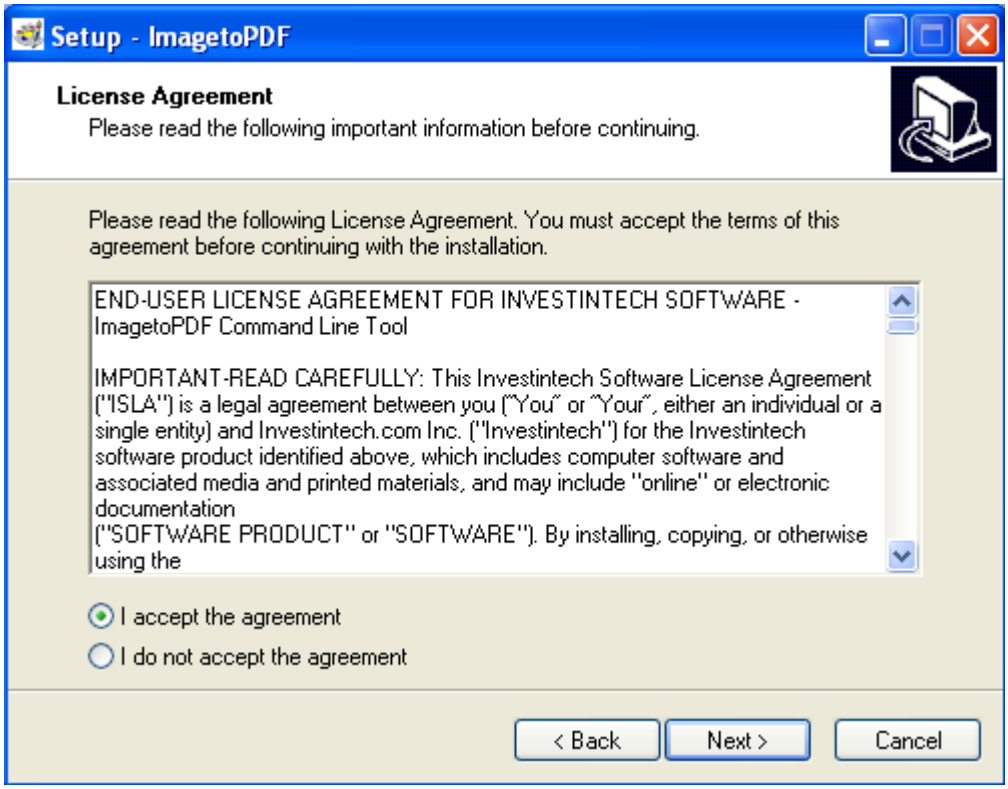
- Microsoft Windows 98/Me/2000/XP/2003
- 512 MB of RAM
- 100 MB of available hard disk space

Starting the Installation

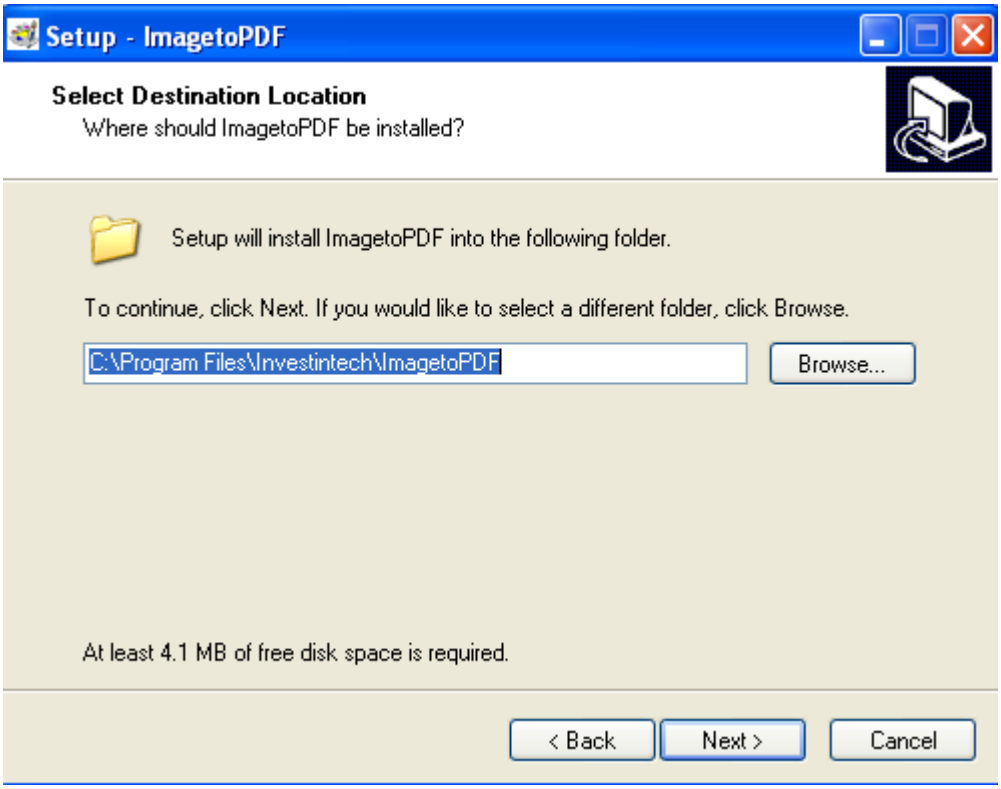
Start the installation by launching the `InstallImagetoPDF.exe` file, e.g. by double clicking it in the Windows Explorer. After that you should see a window that looks like this:



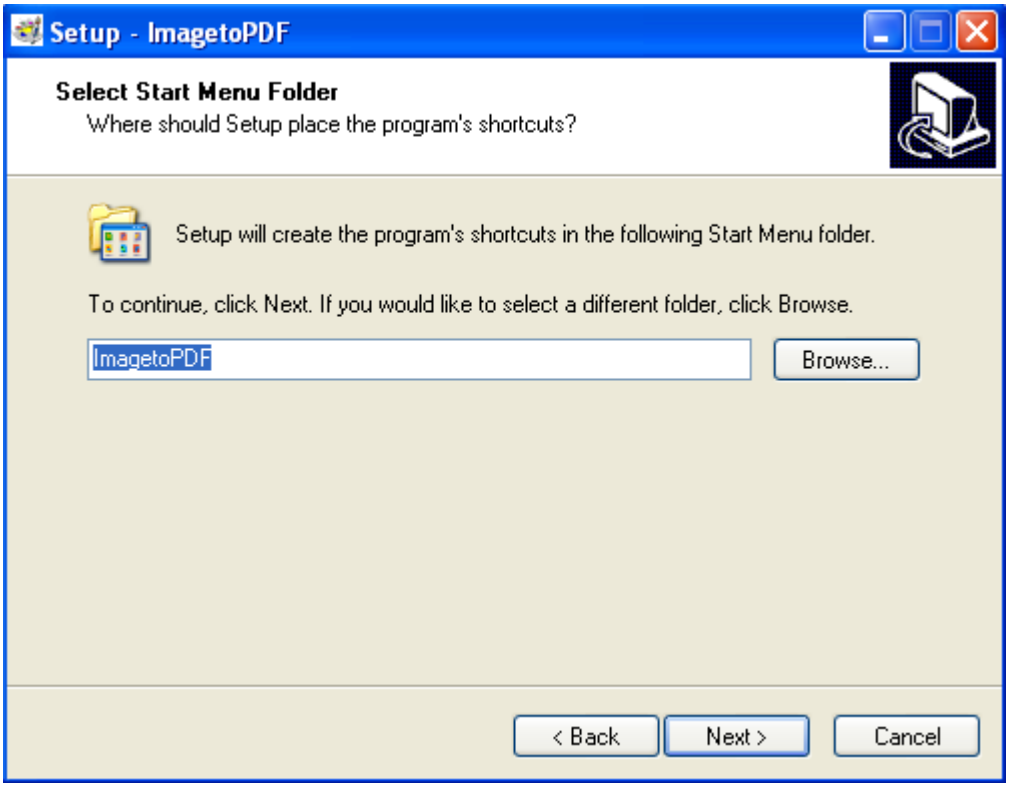
Click the '**Next**' button to continue installation. You should see the next window:



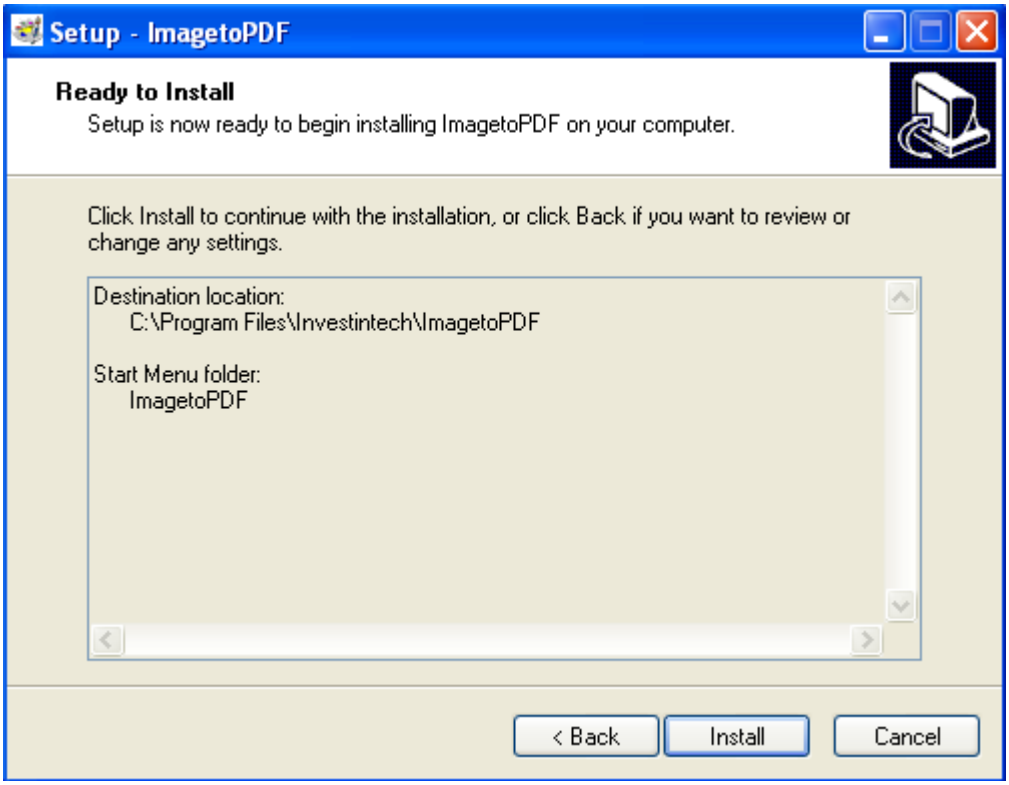
Please read the Investintech Software License Agreement carefully and thoroughly. If you wish to continue with installation, choose '**I agree with the above terms and conditions**' and click '**Next**'. Otherwise, click '**Exit**' and installation will terminate. If you clicked '**Next**' you should see the next window:



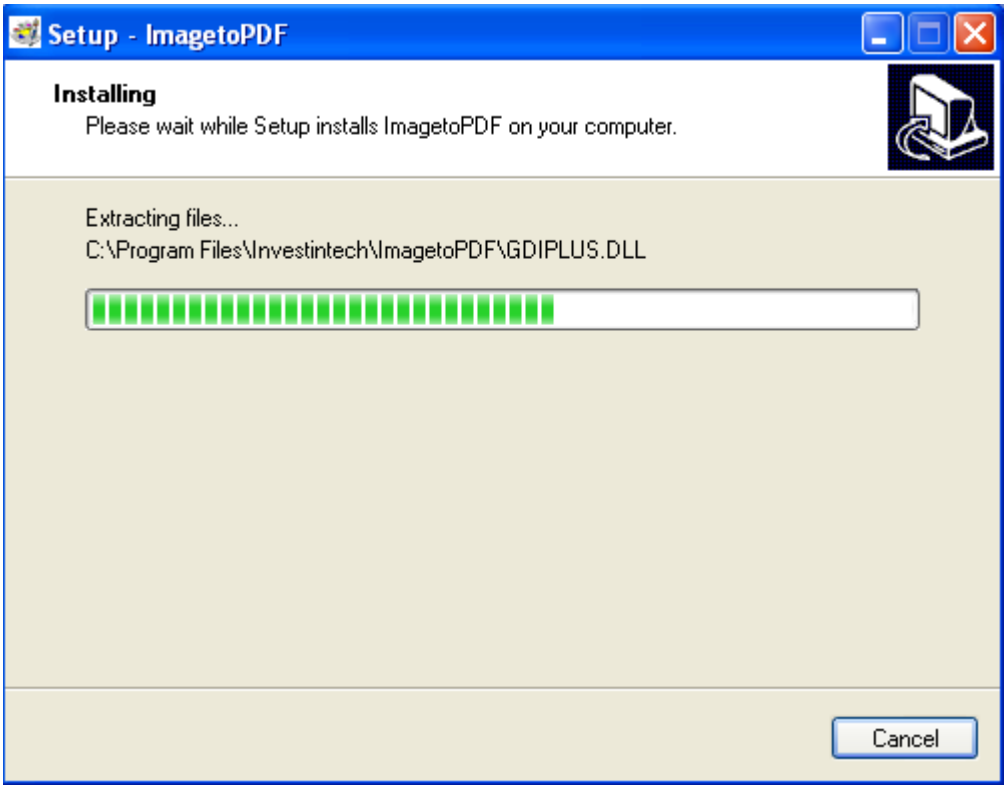
On this screen you can choose the installation directory for the ImagetoPDF software. The default installation folder will be contained in the `Program Files` folder on your system disk. It is possible to change the location of installation folder either by typing its path directly or by clicking the 'Browse**...**' button. If the destination folder (directory) you have chosen does not exist, the installation program will create it. Click the '**Next**' button to continue the installation.



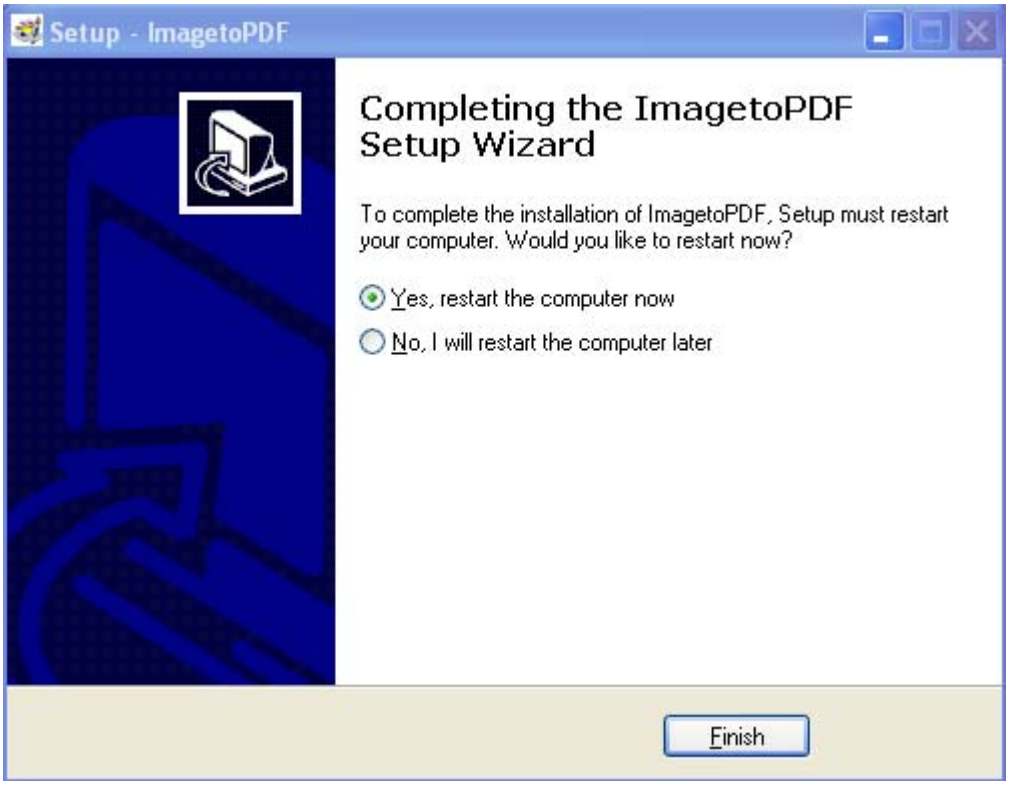
This screen prompts you for the for the start menu folder containing shortcuts to ImagetoPDF You may accept the default folder name, type a new folder name, or browse existing folders by clicking the “Browse…” button. Click the ‘**Next**’ button to continue the installation.



Clicking the '**Install**' button will start the installation.



Setup will install the ImagetoPDF Command Line product on your computer. After a very short period of time, usually about 30 seconds, you should see the next window:



The installation is now finished. Click '**Finish**' to finish the installation.

Using ImagetoPDF

This section provides detailed information about using ImagetoPDF software. The following topics are covered:

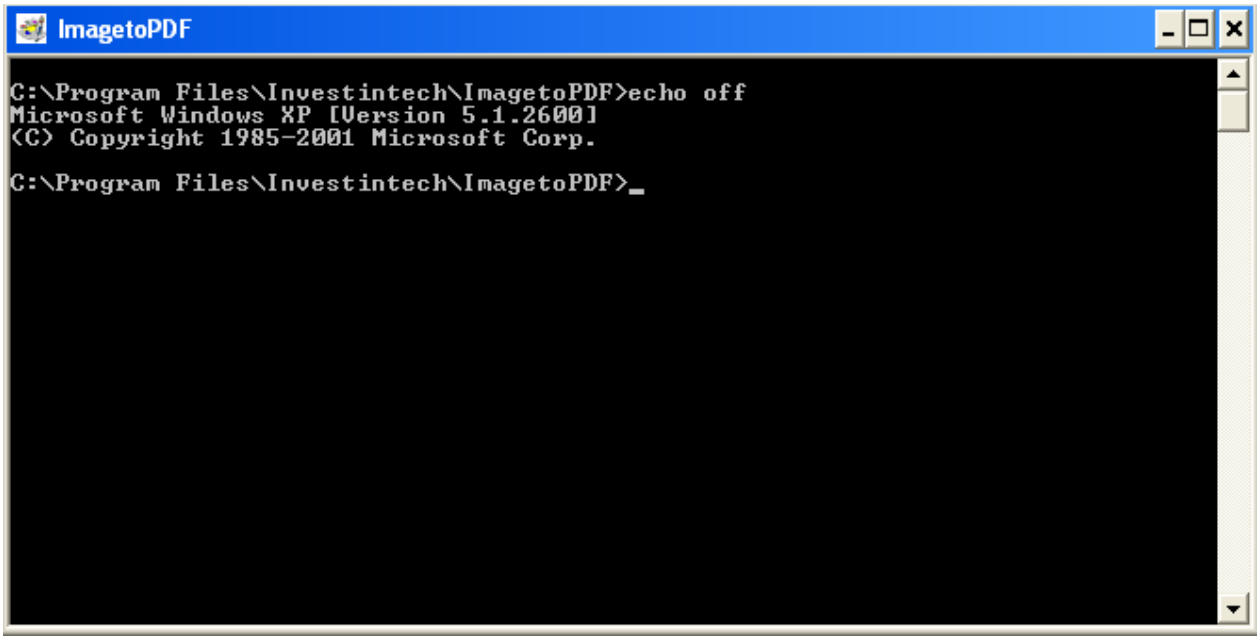
- using ImagetoPDF from command prompt
- using ImagetoPDF for batch conversion

Using ImagetoPDF from Command Prompt

Prior to using ImagetoPDF, you must open a command prompt window. To open the command prompt window:

- Click the '**Start**' button, then point to '**All Programs**', then point to '**ImagetoPDF**' and finally point and click on the '**ImagetoPDF**' menu item.

The window titled "ImagetoPDF" should open, as shown.



To display the ImagetoPDF help message, simply type `ImagetoPDF` and press '**Enter**'.

```
ImagetoPDF

C:\Program Files\Investintech\ImagetoPDF>echo off
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Program Files\Investintech\ImagetoPDF>imagetopdf
Investintech.com Inc. ImagetoPDF - Command Line Interface
Copyright 2007 Investintech.com Inc. All rights reserved

Unlimited edition


Usage:
        ImagetoPDF  [-s<schedule>]
        -i<input> -o<output>

        where:
        <convert>   specifies type of conversion operation
        <schedule>  is time at which conversion will occur
        <range>     indicates page range
        <input>     specifies input pdf document (may include wildcards)
        <output>    specifies target output file path and extension

        Note: input and output files must contain full type extension
        Wild cards:
         ?              Matches any single character in document name
         *              Matches 0 or more characters in document name

Example:
        ImagetoPDF  -Ic:\documents\graphics1.bmp
                        -Od:\images\graphics.pdf
        ImagetoPDF  -Ic:\documents\graphics2.jpg
                        -Od:\images\graphics.pdf
        ImagetoPDF  -Ic:\documents\graphics3.gif
                        -Od:\images\graphics.pdf
        ImagetoPDF  -Ic:\documents\graphics3.png
                        -Od:\images\graphics.pdf
        ImagetoPDF  -Ic:\documents\graphics3.tif
                        -Od:\images\graphics.pdf

        -h or -help             This help


C:\Program Files\Investintech\ImagetoPDF>
```

The help message describes command usage, some examples and possible conversion types. The command line format is of the form:

ImagetoPDF [-s<schedule>] -i<input_file(s)> -o<output_file(s)>

Conversion Types

ImagetoPDF implicitly converts from any of the supported image formats (BMP, GIF, JPEG, PNG, or TIFF) to PDF format. It is not necessary or possible to explicitly specify a conversion type.

Schedule

This optional argument allows you to automate a one-off or recurring conversion operation at some time in the future.

A valid ImagetoPDF schedule parameter excludes whitespace and is of the form:

time[/EVERY:date[,...]|/NEXT:date[,...]]

where time is a colon delimited 24 hour time specified to the nearest second e.g. hh:mm:ss

hour: 00 - 23

minute: 00 - 59

second 00 - 59

date either a day of the week e.g. M,T,W,Th,F,S,Su

or a day of the month e.g. 1,2,3,...31

/EVERY clause, /NEXT clause are optional but only one optional clause is permitted

ImagetoPDF will construct a valid AT command format e.g.

AT [\\computername] time [/INTERACTIVE] [/EVERY:date[,...] | /NEXT:date[,...]] "command"

Input file(s)

This argument determines the source file, i.e. the file you want to convert data from. Please note the following:

- You must include both file name and extension separated with the dot character ('.'). For example, file `business.bmp` consists of file name '`business`' and extension '`bmp`'.
- You must provide full path to the input file unless it is in the same folder as `ImagetoPDF.exe`. For example, if input file `business.bmp` is in `MyFiles` folder on C drive, you should type `c:\MyFiles\business.bmp` as an input file argument. If any folder name or file name in the path

is longer than 8 characters or contains spaces you must surround its path with double quotation marks, e.g. `"c:\very long path\business.bmp"`

Output file(s)

This argument is a string expression determining the destination file, i.e. the file containing the results of the conversion. The naming rules used by ImagetoPDF are as follows. ImagetoPDF will use the specified directory or the current working directory if none is specified. It will use the name corresponding to the name of the source file. It will use the extension. Finally, the same path and file name rules apply for output file as well as for input file.

Examples of Using ImagetoPDF

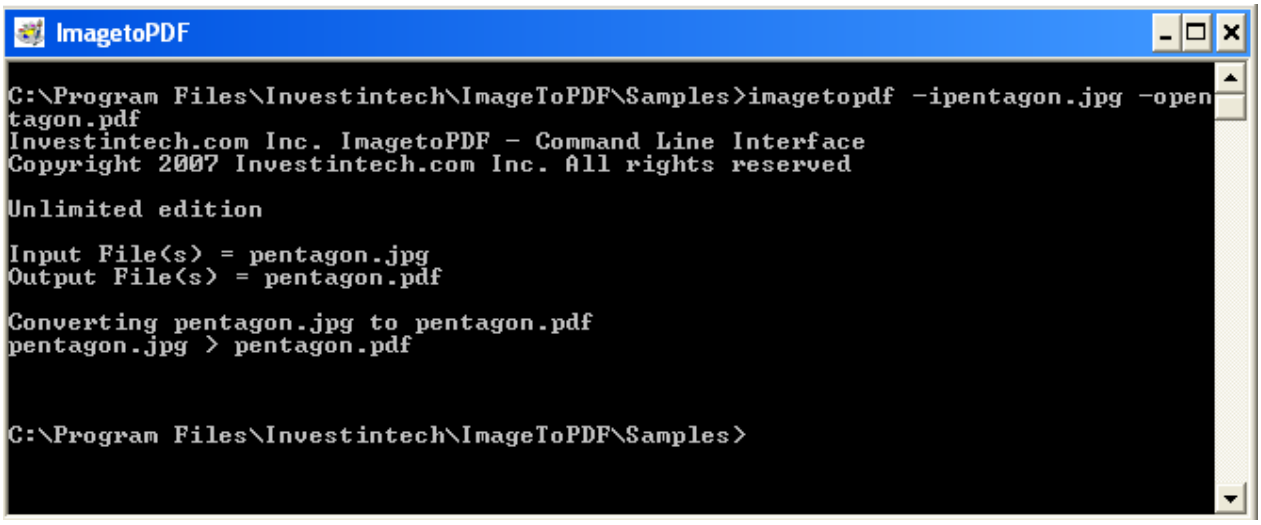
Here are some cases illustrating the use of ImagetoPDF.

Example #1

In this example we will assume that both input and output files are in the same folder as ImagetoPDF. If you type

```
imagetopdf -ipentagon.jpg -opentagon.pdf
```

and press '**Enter**', you will convert from JPEG format to PDF format. The resulting PDF file can be opened by Adobe Reader. The screen below shows a successful conversion.

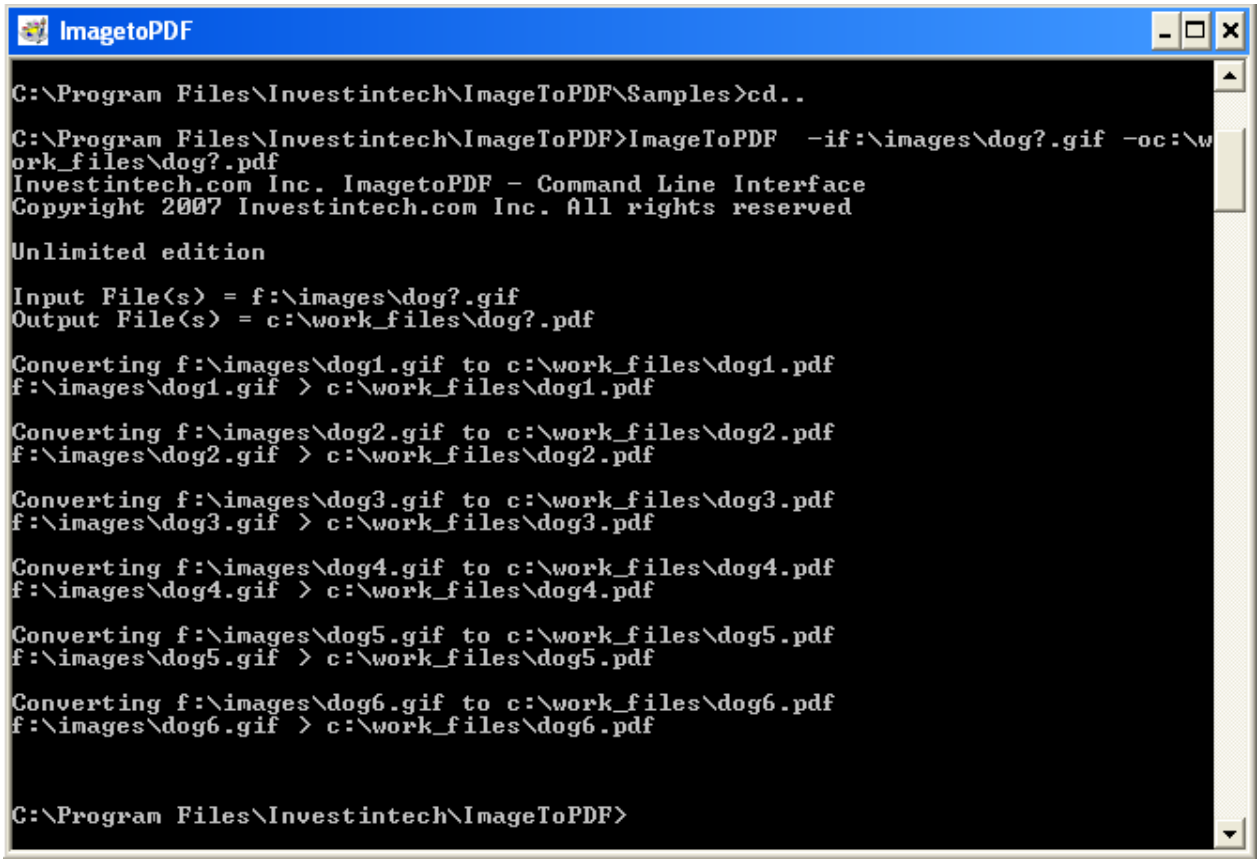


Example #2

In this example we will assume that directory pdf_reports on the G drive contains a series of PDF documents. Further, we assume input file is in the same folder as ImagetoPDF, but we want output file to be created in the different folder, e.g. `c:\work_files.` If you type:

```
ImagetoPDF -if:\images\dog?.gif -oc:\work_files\dog?.pdf
```

and press '**Enter**', you will convert the matching documents from GIF to PDF. The screen below shows a successful conversion.

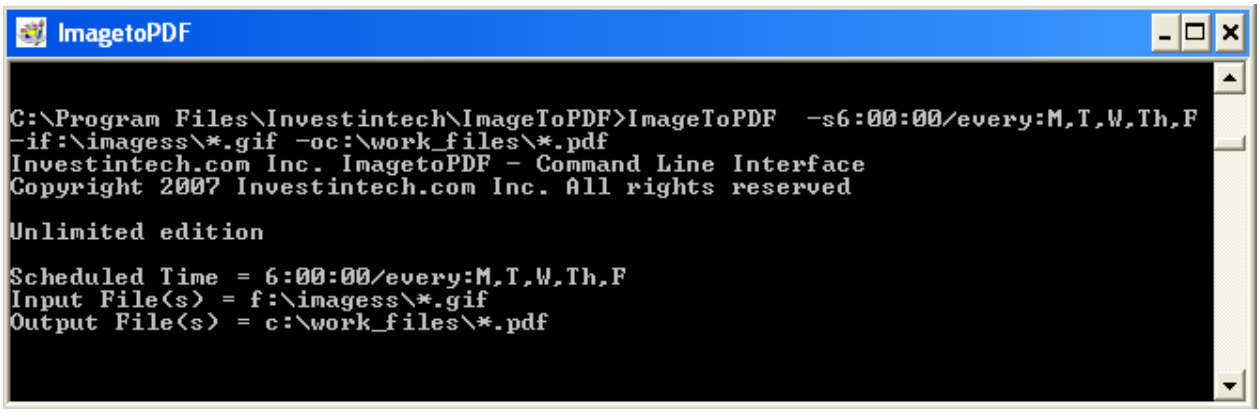


Example #3

In this example we wish to schedule a reoccurring conversion operation. If you type

```
ImagetoPDF -s6:00AM/every:M,T,W,Th,F -if:\images\*.gif -oc:\work_files\*.rtf
```

and press '**Enter**', you will schedule the conversion operation. The screen below shows the operation has been scheduled.

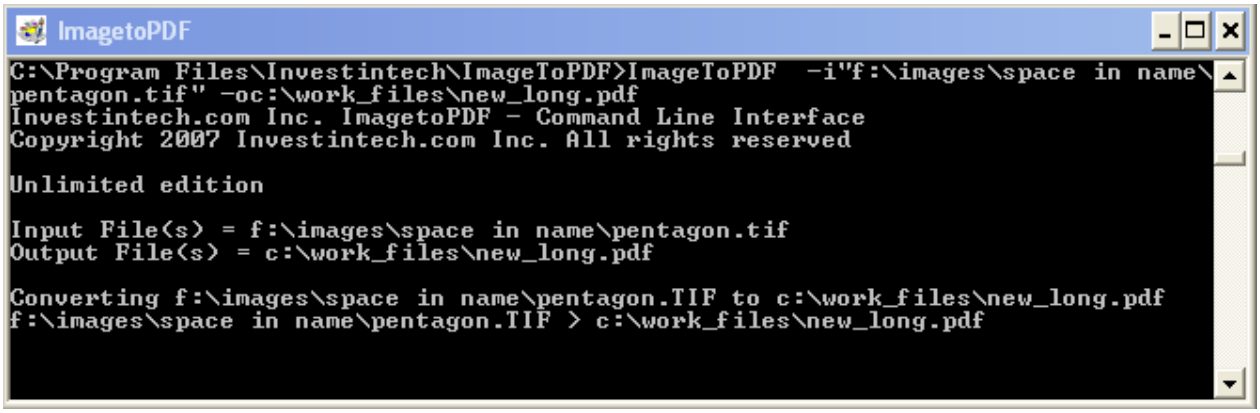


Example #4

In this example we will convert a document in a directory name containing white space. If you type:

```
ImagetoPDF -i"f:\images\space in name\pentagon.tif"
-oc:\work_files\new.pdf
```

and press '**Enter**', you will convert from TIFF to PDF. The screen below shows a successful conversion.



Troubleshooting

There are a few cases in which ImagetoPDF is unable to perform the requested file conversion. Please consult the following table if you experience any of errors while working with ImagetoPDF.

Error	*Cause*	*Solution*
Unable to find source document <file name>.	Misspelled or omitted input document file parameter. It is also possible you do not have permissions to access input file	use -i<filename.pdf> expression to specify PDF document file(s) to be converted or contact your system administrator to give you permissions to read input file.
Task not scheduled when using schedule parameter	Schedule time specified incorrectly.	Use a formatted 24 hour time with valid optional recurring sub parameters e.g. -s:30:00 -s06:30:00:/next:1 -23:59:59:/every:M,T,W,Th,F
Unable to convert image to PDF!	Input file was found but it either is not a supported image file or it is damaged or corrupted	If Microsoft Paint can open the file without any error message please send the file to our technical support e-mail and we will look further into the problem.

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