



ERP Consulting  
Web Development  
Custom Programming Solutions  
Desktop & Web Applications for Manfact

# NorthClark Computing, Inc.

## Word Doc to PDF Administrator Guide

### Web and Desktop Applications for Manfact by Epicor

March 15, 2010

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## **Introduction**

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The Word Document to PDF application (NCC\_DOC2PDF) was created to allow for centralized production of PDFs from Word Documents, simplifying setup and support requirements, and possibly reducing licensing costs. NCC\_DOC2PDF does not process the conversions directly, but instead automates Word and commercially available applications such as Adobe Acrobat and PDF995.

## **Approach**

### Message File

Applications (e.g., NCC\_BWB) “post” a message file to a specific folder (“Watch Folder”) with information on the Word Document to convert from, and the PDF file to generate.

- Details:
  - Message Files are created with a single comma-delimited line containing the complete path and file names for both the “Convert From” and “Convert To” documents on the first line of the file, in the format:

`convert-from-path-file,convert-to-path-file`

Either local (drive-letter:\path\file) or UNC (\\machine\drive-letter\path\file) styles can be used.

- “Convert To” PDF file names do not have to be the same as the “Convert From” Word document.
- “Convert From” folders must be “reachable” by NCC\_DOC2PDF. Only Read permission is required.
- “Convert To” folders must be “reachable” by NCC\_DOC2PDF. Modify permission is required.
- When detectable errors occur, the error information is added to the Message file after the first line, and the file extension is changed to “.ERR”.
- Message Files should be generated with unique names. Posting applications have this responsibility and should check that a file with the chosen name does not already exist in the Watch Folder. Posting applications also have the responsibility of deleting finalized files (see the section on file extensions below).

### Watch Folder

Once started, NCC\_DOC2PDF “Watches” a specific folder for posted Message Files with a File Extension of “.RDY”.

- Details:
  - The Watch Folder is defined by a configuration file setting (see the “Configuration” section below).
  - Both the posting application and NCC\_DOC2PDF must be able to “reach” the Watch Folder and must have Modify permissions.

### File Extensions

Message File file-extensions are used to signal processing steps and final results between the posting application and NCC\_DOC2PDF.

- Details:
  - “.RDY”:

Set by the posting application. Indicates a new Message File ready to be processed.
  - “.WRK”:

Set by NCC\_DOC2PDF. Indicates that a Message File has been detected and is queued for processing.
  - “.ERR”:

Set by NCC\_DOC2PDF. Indicates that an error was detected while parsing the Message File or while processing it. Error information is appended to the Message File to allow the posting application to report the condition. The posting application should delete this file from the Watch Folder when it has finished retrieving the error information.
  - “.FIN”:

Set by NCC\_DOC2PDF. Indicates that the conversion process has completed successfully (no errors detected). The posting application should verify that the “Convert To” file actually exists, and then delete the Message File from the Watch Folder.

## Requirements

### Installed Application Prerequisites

- PDF “Method”:

An application that can be used to produce a PDF from a Word document must be installed, and must be accessible by the logged-in user session under which NCC\_DOC2PDF is to be run. Currently supported “Methods” are:

- Adobe Acrobat, versions 4.0 and up.

NCC\_DOC2PDF was developed using version 6.0.

- PDF995, Driver version 9.2 and up, with Converter version 1.3 and up.

NCC\_DOC2PDF was developed using Driver 9.2 and Converter 1.3.

- Word:

Currently, NCC\_DOC2PDF automates Word to produce PDFs, partially or completely printing via one of the PDF “Method” applications. A future version may use a PDF “Method” application that does not rely on Word, but until that version is available Word must be installed on the same computer as NCC\_DOC2PDF, and also must be accessible by the logged-in user session under which NCC\_DOC2PDF is to be run.

NCC\_DOC2PDF was developed using Office 2003.

### Active User Login Session

Because NCC\_DOC2PDF automates Word, and Word is a User application, NCC\_DOC2PDF must be run in an active User Login Session. NCC\_DOC2PDF will not function when the User session within which it was launched and started is logged off, even if the machine is still running. NCC\_DOC2PDF *will* function when the computer is locked (either directly or when “Switch User” is used to display the Login screen).

Setting up a specific User Account from which to run NCC\_DOC2PDF that has Administrator privileges and a strong password is recommend.

Folder Permissions

NCC\_DOC2PDF, when running under a particular Active User Login Session, needs access to and permissions on specific folders, as follows:

- Watch Folder:
  - NCC\_DOC2PDF requires Modify permission to rename and append to Message Files.
  - This folder is specified by the “WatchFolder” setting of the configuration file (see the “Configuration” section below).
  - Applications that post Message Files to the Watch Folder will require Modify permissions to generate and delete Message Files.
- “Convert From” folders:
  - NCC\_DOC2PDF requires Read permission to access the Word Documents that are to be converted to PDFs.
  - These folders are defined by information in each Message File and may vary from one Message File to the next.
  - Applications that post Message Files to the Watch Folder will most likely need Modify permissions to be able to create the original Word Documents, but this is dependant on how use of NCC\_DOC2PDF is implemented by the posting application.
- “Convert To” folders:
  - NCC\_DOC2PDF requires Modify permission to create PDF files and delete work files.
  - These folders are defined by information in each Message File and may vary from one Message File to the next.
  - Applications that post Message Files to the Watch Folder may or may not need access to these folders, and may need either Read, Write, or Modify permissions, depending on what, if anything, the posting applications need to do with the generated PDFs.
- Log folder:
  - NCC\_DOC2PDF requires Modify permission to this folder to create monthly process log files and write to them.
  - This folder is specified by the “LogFolder” setting of the configuration file (see the “Configuration” section below).
  - Administrators may want Read access to this folder from other computers to be able to monitor NCC\_DOC2PDF processing.

- PDF995 INI folder:
  - If the “PDF Method” PDF995 is used, NCC\_DOC2PDF requires Write permission to the folder that contains the pdf995.ini file.

## **Setup and Configuration**

---

### **Word Document to PDF (NCC\_DOC2PDF)**

The NorthClark Word Document to PDF application (NCC\_DOC2PDF) is designed to be run from a single server on the network to act as a central processor for conversion of Word Documents to PDFs. It automates both Word itself and one or more commercially available applications that handle the generation of PDFs (referred to as PDF “Method”s). This utility was created to simplify the setup and support of PDF creation, and, depending on the PDF generating application selected, may lower licensing costs (see the sections below on each of the PDF generating applications currently supported).

Please note that NorthClark Computing, Inc., does not sell or supply the PDF generation applications and assumes that the using customer will adhere to any licensing requirements of the selected application.

#### Setup

NCC\_DOC2PDF should be installed using the normal NorthClark Master Setup (select installation item “SYS - Word DOC to PDF”). Refer to the NorthClark “Administrator’s Guide” for more information on using the Master Setup.

Please see the “**Requirements**” section above for important considerations on running NCC\_DOC2PDF and setting appropriate Folder access and permissions.

#### Configuration

NCC\_DOC2PDF is configured by changing key/value settings in a .NET XML configuration file. The configuration file “*NCC\_DOC2PDF.exe.config*” is installed in the same folder as NCC\_DOC2PDF.exe during the setup process and must remain there for NCC\_DOC2PDF to access them.

*Note:* Changes made to the configuration file do not take affect until the next time NCC\_DOC2PDF is executed.

Key/Value Settings:

- “WatchFolder” (required):
  - Specifies the network or local folder that NCC\_DOC2PDF “watches” for Message Files posted by using applications to request a Word Document to PDF conversion. Please see the “**Approach**” section above for a discussion of “Message Files” and “Watch Folder”.
  - Either local (drive-letter:\path\file) or UNC (\\machine\drive-letter\path\file) styles can be used.
  - NCC\_DOC2PDF and applications that post Message files will need access to and Modify permissions against this folder.
  - NCC\_DOC2PDF cannot be “Started” if this value is omitted or invalid.
- “LogFolder” (optional):
  - Specifies the folder that NCC\_DOC2PDF will write processing information to in a text document “log” file.
  - A new log file is created every month and is named in the format:  
  
NCC\_DOC2PDF\_Log\_YYYYMM.txt  
  
where “YYYY” is the Year and “MM” is the Month number.
  - If omitted, NCC\_DOC2PDF will write to the folder containing *NCC\_DOC2PDF.exe*.
  - NCC\_DOC2PDF will need access to and Modify permissions against this folder.



- “PDF\_Method” (required):
  - Specifies the PDF “Method” that NCC\_DOC2PDF will use to convert Word Documents to PDF.
  - Explanation: A PDF “Method” is a commercially available application that does the actual conversion work. NCC\_DOC2PDF automates defined PDF “Method”s and must be modified to support any specific PDF “Method”. The actual application that supports the PDF “Method” must be purchased, installed, and configured separately.
  - Current Values coded for:
    - “1”: Adobe Acrobat (see the “PDF “Method” – Adobe Acrobat” section below for more details).
    - “2”: PDF995 (see the “PDF “Method” – PDF995” section below for more details).
  - NCC\_DOC2PDF cannot be “Started” if this value is omitted or invalid.
- “PDF\_Method\_Name\_<n>” (optional):
  - Provides a descriptive name for each “PDF\_Method” value, where the “<n>” represents the corresponding “PDF\_Method” value. Currently only used in the start-up block of the log file.
  - If omitted, the value “Unknown” is used.
- “PDF\_Printers\_<n>” (required):
  - Specifies one or more Printers for each “PDF\_Method” value, where the “<n>” represents the corresponding “PDF\_Method” value.
  - Must match the name(s) of the Printer as found in the Windows Settings Printers list.
  - Multiple Printer Explanation: Because Printer names can vary from version to version of some PDF “Method” applications, multiple printer names can be entered as a comma-delimited list. The first Printer name in the list that matches a Printer installed on the machine (for the active user) will be used for the corresponding “PDF Method”. This allows customers who have multiple versions of the PDF “Method” application installed to specify a preference (e.g., Printer “Acrobat Distiller” is installed with Adobe Acrobat versions 4 and 5, while “Adobe PDF” is installed on versions 6 and up).
  - NCC\_DOC2PDF cannot be “Started” if the value used for a PDF “Method” does not match any Windows Printer name.

- “PDF\_Instructions\_<n>” (optional):
  - Specifies special “Instructions” or settings unique to each “PDF\_Method” value, where the “<n>” represents the corresponding “PDF\_Method” value.
  - Values are entered as a comma-delimited list, with each item in the list formatted as a type of key/value pair, separated by a colon: <Instruction-key>:<Instruction-value>.
  - Currently the only special instruction coded for is for the PDF995 method, and is used to specify the location of the PDF995.ini file that NCC\_DOC2PDF needs to write to in order to control the name and location of the generated PDF. Details:
    - Format: I:path-file
    - Example: "I:C:\Program Files\pdf995\res\pdf995.ini"
- “WaitForFile\_<x>” (optional):
  - Specifies factors that control how long NCC\_DOC2PDF waits for a PDF to be generated before timing out, where “<x>” represents the key name of each factor.
  - Explanation: Generated PDFs usually appear in the “ConvertTo” folder as files before they can actually be used. Processing needs to "Wait" until the file is closed by the generator. Two factors are used to control the "Wait" process, and may need to be increased on slow systems, or when large Word Documents are being turned into PDFs.
  - Currently defined factors are:
    - “WaitForFile\_Pause”:

Milliseconds that the process waits ("sleeps") before checking to see if the PDF file is closed. Defaults to 500.
    - “WaitForFile\_Timeout”:

Total seconds that the Wait process continues "sleeping" and checking for the File (PDF) to be closed before giving up (some kind of problem is assumed and the PDF generation is reported as having an error). Defaults to 60.

- “AutoStart” (optional):
  - Specifies whether or not “Watching” is started automatically when the application first loads, as well as whether it appears as a Minimized or Normal Window.
  - Currently defined values are:
    - “OFF”: Do not start “Watching” on initial application load (default).
    - “MIN or MINIMIZED”: Start “Watching” on load, with the application window minimized (shows in the Windows Taskbar).
    - “NORM” or “NORMAL”: Start “Watching” on load, with the application presented in a normal window (user interface displayed).
  - This setting is ignored if a command-line argument is passed formatted as:  
  
    /S:<mode>  
  
    where <mode> is:  
  
        MIN, MIMIZED, NORM, or NORMAL (case insensitive)
- “Trace\_Step” (optional):
  - Specifies whether or not to include detailed processing information (where coded for) in the Log file. Provided to assist in trouble-shooting problems. Use “True” to enable and “False” to disable (default it disabled).

## Starting

NCC\_DOC2PDF can be started in several modes:

- Manual (default):
  - Started in “normal” mode, with a window displayed. Message Files are not “Watched” for until the “Start” button is pressed.
- Auto Start:
  - Started in either “normal” mode, with a window displayed, or “minimized” with a Taskbar item displayed.
  - There are two ways of launching in Auto Start mode:

- Configuration setting (see above for details):

Set the “AutoStart” key/value setting in the configuration file to “NORM” or “NORMAL” for a full window, or “MIN” or “MINIMIZED” for a minimized Taskbar item.

This setting is ignored if a command-line parameter of /S:<mode> is used (see below).

- Command-line parameter:

/S:<mode> where <mode> is NORM or NORMAL for a full window, or MIN or MINIMIZED for a minimized Taskbar item.

Example: “C:\Program Files\NCC\_DOC2PDF\NCC\_DOC2PDF.exe” /S:MIN

Can be used when launching NCC\_DOC2PDF from “Run”, a shortcut, or a batch file.

When NCC\_DOC2PDF is launched with this command-line parameter, the “AutoStart” setting of the configuration file is ignored.

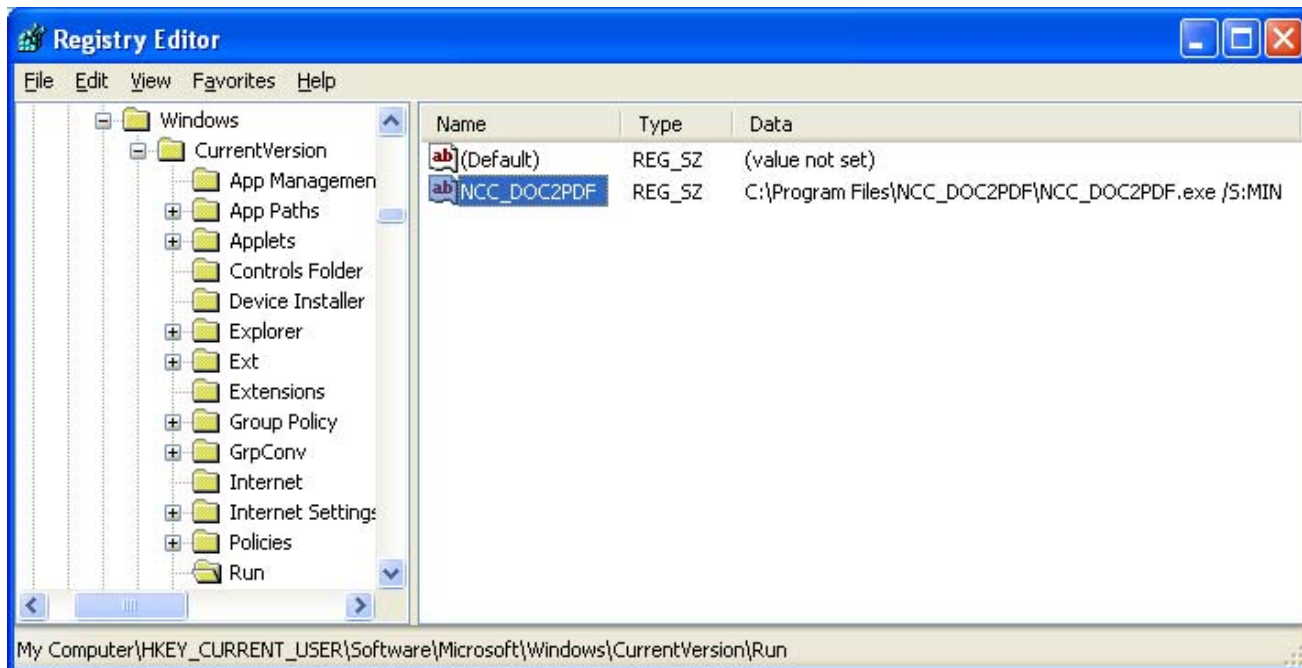
- Launching on boot or login:
  - Option 1 - place a batch file in the users Startup folder.

Example:

```
@ECHO OFF
CD " C:\Program Files\NCC_DOC2PDF\NCC_DOC2PDF.exe "
START NCC_DOC2PDF.exe
```

Note that the /S:<mode> command-line is not used in this example. This is because it interferes with the START DOS command, but if the START command is not used a DOS window remains open. This means that the “AutoStart” configuration setting must be set to “NORMAL” or “MINIMIZED” to launch NCC\_DOC2PDF automatically in “Watch” mode.

- Option 2 - add an entry in the Current User Run section of the Registry:



- Note (Start on boot):

NorthClark has developed a batch-file based method for XPSP2 Professional that, on machine boot-up, locks the computer, runs the Upgrade utility, and then launches NCC\_DOC2PDF in Watch mode. This method is designed to provide the maximum “up time” for NCC\_DOC2PDF, and can most likely be modified to work on other Windows operating systems. Please contact NorthClark for sample files and instructions.

## PDF “Method” – Adobe Acrobat

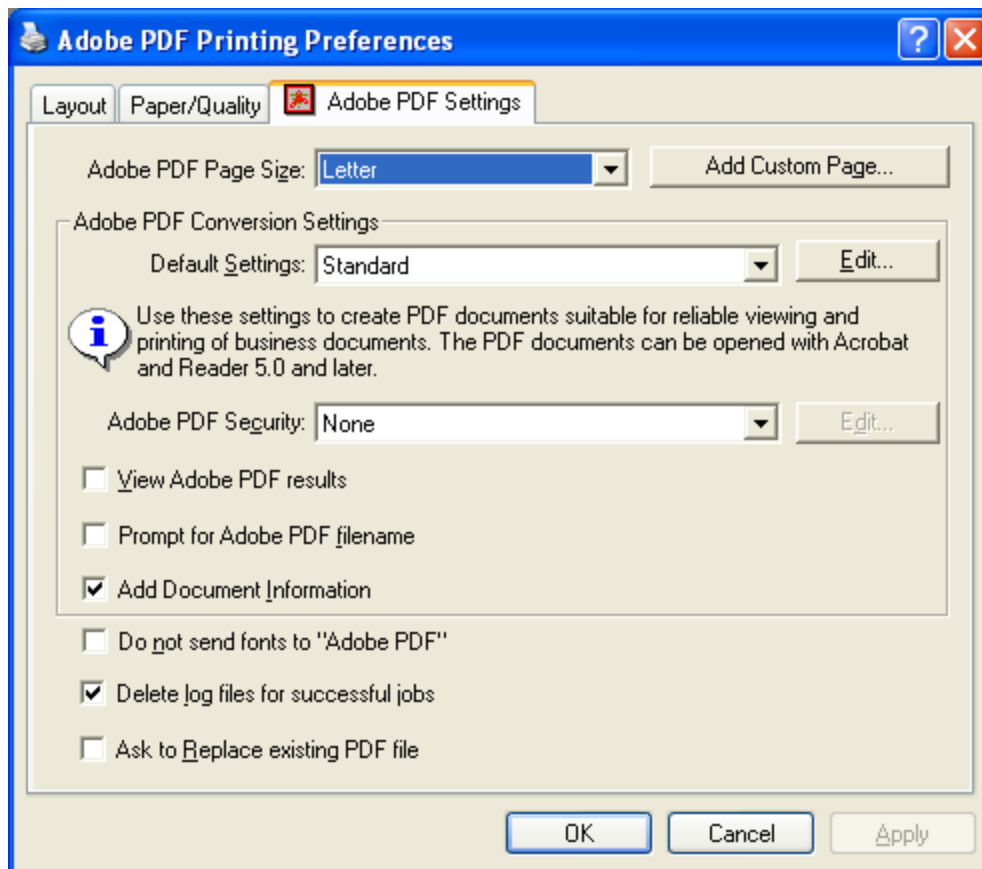
This method uses Adobe Acrobat, versions 4.0 and up (NCC\_DOC2PDF developed and tested with version 6.0).

### Installation

To use this method, purchase and install the full Adobe Acrobat application (not just the Reader). A printer named “AcrobatDistiller”, “Adobe PDFMaker”, or “Adobe PDF” should be present in the list of installed Windows Printers for the User Account under which NCC\_DOC2PDF is to be run.

### Configuration

“Do not send fonts...” and all prompts must be disabled for NCC\_DOC2PDF to successfully automate Adobe Acrobat. From the list of Windows Printers (usually Start-Settings-Printers), right-click on the installed Adobe Acrobat printer and select “Printing Preferences”. Clear the “Do not send fonts..” and all prompt checkboxes. The final results should look something like:



### Licenses

Although NCC\_DOC2PDF makes it possible to install a single copy of Adobe Acrobat to produce PDFs for multiple users, it is required that a license be purchased for every user who will be using NCC\_DOC2PDF when it is configured to automate Adobe Acrobat.

### Using with NCC\_DOC2PDF

Set the PDF\_Method value in the NCC\_DOC2PDF configuration file to “1” (see the section above on configuring NCC\_DOC2PDF for details).

Notes:

- Word Document Table of Contents are *not* converted to Bookmarks with this method.

### **PDF “Method” – PDF995**

This method uses PDF995, a free print-driver based conversion utility. The free version runs in “sponsored” mode, which *will not work* when automated from NCC\_DOC2PDF. License key(s) must be purchased to run PDF995 in non-sponsored mode to be used with NCC\_DOC2PDF (see details below). NCC\_DOC2PDF was developed using PDF995’s Print Driver 9.2 and Free Converter 1.3.

### Installation

Using an Internet Browser, navigate to:

<http://www.pdf995.com/download.html>

Download:

- “Pdf995 Print Driver”
- “Free Converter”
- Optional: “PdfEdit995” (not required for NCC\_DOC2PDF – allows for the pdf995.ini to be edited via an application)

Install all the downloaded items by clicking on the EXEs. Notes:

- The installation order is most likely not important (download order listed above used at NorthClark).
- It is recommended that the PDF995 printer *Not* be installed as a shared printer when it is intended to be used with NCC\_DOC2PDF. This will allow for the use of a single Server License Key and will not require multiple User License Keys.

Obtain and apply a Server License Key. This key allows NCC\_DOC2PDF to perform PDF Conversions for any requesting User without requiring a separate User License Key for each User. Information on obtaining a Server License Key (as of December 2009):

- Go To <https://www.software995.com/custom.htm>
- Select ServerLicense
- Enter Qty of 1 and Amount of \$200
- Press "Purchase"
- Follow through with providing Credit Card information on next page

***OR:***

- Contact Software995 by e-mail at [orders@software995.com](mailto:orders@software995.com) to request a quote or make other billing arrangements.

#### Licenses

As stated above, the least expensive way to use PDF995 with NCC\_DOC2PDF is most likely through the purchase of a single Server Key License, with PDF995 installed on only the machine where NCC\_DOC2PDF will be run.

Statement from the manufacturer (Software995):

*“If Pdf995 is installed locally, shared as a network printer or run on Citrix/Terminal Server, you should also purchase a key for each user.”*



Using with NCC\_DOC2PDF

Set the PDF\_Method value in the NCC\_DOC2PDF configuration file to “2” (see the section above on configuring NCC\_DOC2PDF for details).

Configure the PDF995 INI file to work with NCC\_DOC2PDF:

- Locate the file “pdf995.ini” that should have been created during the PDF995 installation process (usually in the folder “C:\Program Files\pdf995\res”). Either delete it, or rename it to something other than “pdf995.ini”
- Find the file “pdf995\_NCC\_DOC2PDF.ini” in the NCC\_DOC2PDF application folder (this file should have been downloaded by the NorthClark Upgrade Utility).
- Copy the file “pdf995\_NCC\_DOC2PDF.ini” to the PDF995 “res” folder (usually “C:\Program Files\pdf995\res”), then rename it to “pdf995.ini”. This version of the INI file has been pre-configured to allow PDF995 to work correctly with NCC\_DOC2PDF.

*Note:* NCC\_DOC2PDF will require Write permissions on the folder that contains pdf995.ini.

Notes:

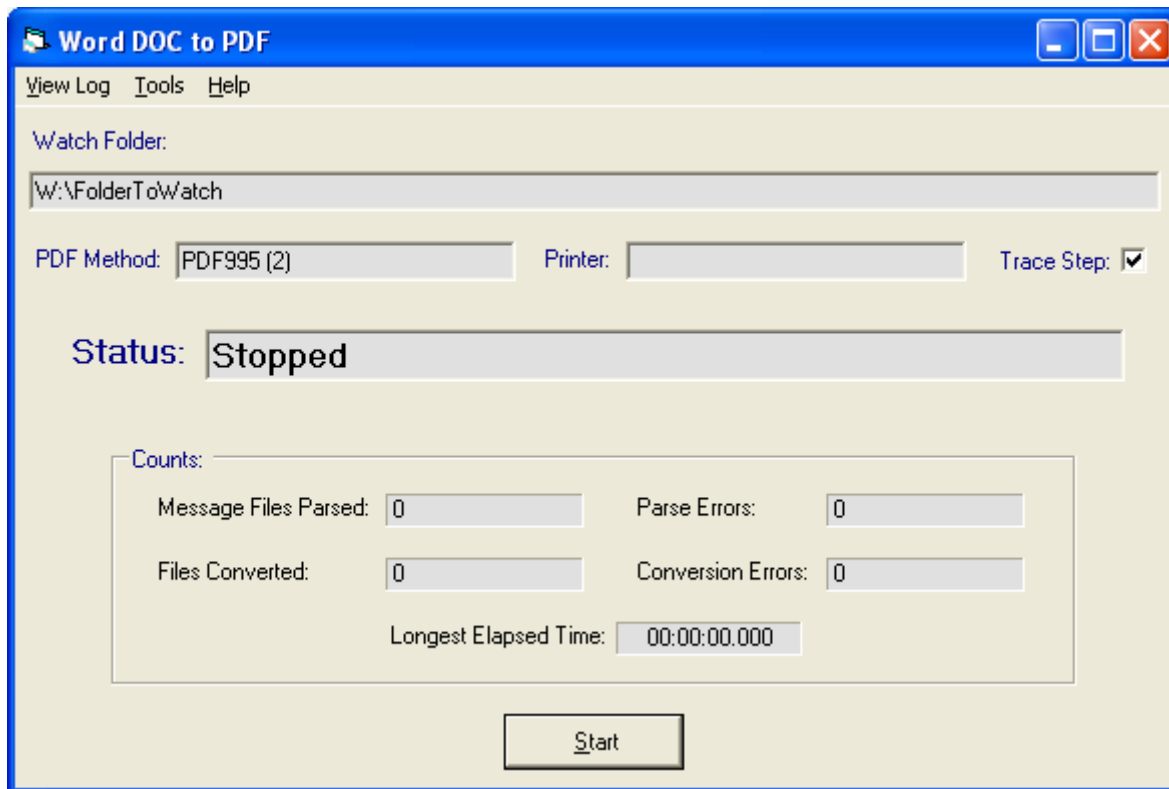
- Word Document Table of Contents are *not* converted to Bookmarks with this method.
- Running NCC\_DOC2PDF without a valid PDF995 license key may cause Word to wait for a prompt, causing NCC\_DOC2PDF to apparently “hang”. When this happens it may be necessary to End Word (Winword) and possibly NCC\_DOC2PDF via Task Manager.

## Operation

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### Running

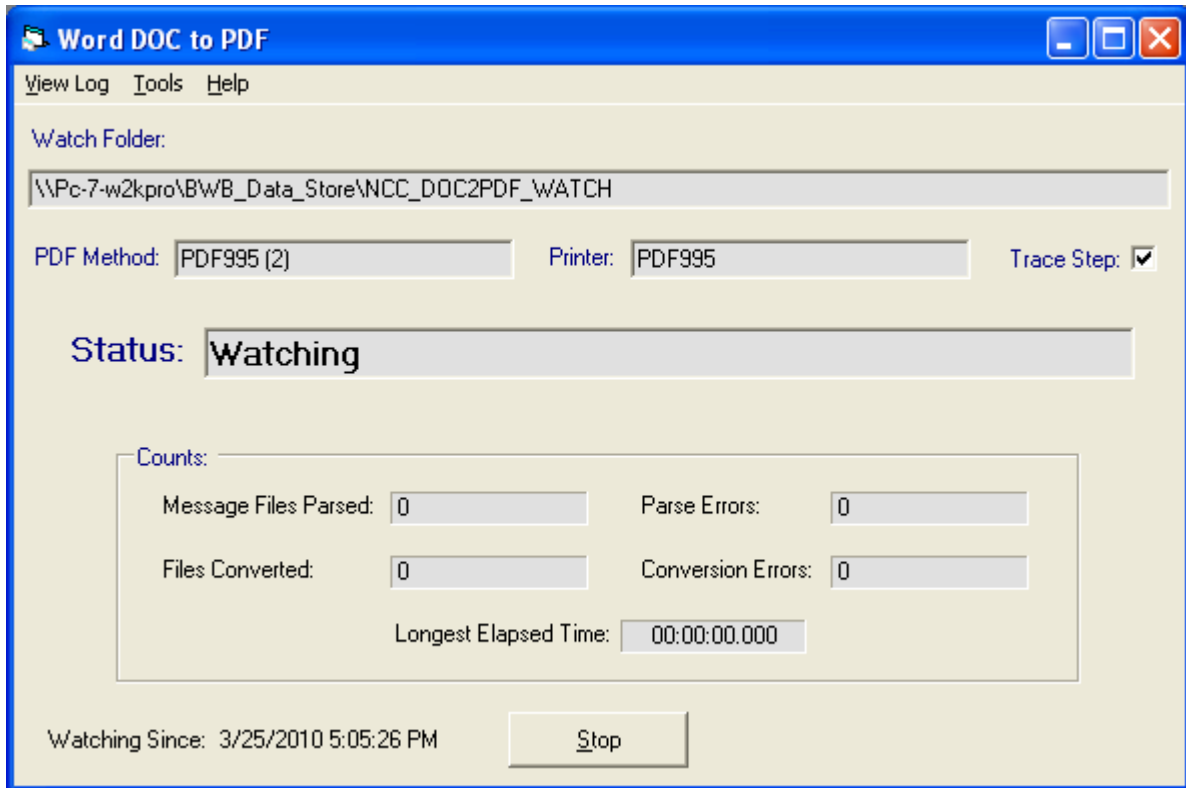
When NCC\_DOC2PDF is launched manually without an Auto Start setting or command-line (see “[Starting](#)” section above for details), it is initially in “Stopped” mode:



The “Watch Folder”, “PDF Method”, and “Trace Step” settings from the configuration file are displayed. The “Printer” value will not be shown until NCC\_DOC2PDF is successfully started in “Watch” mode.

“Trace Step” is the only setting that can be directly changed from the NCC\_DOC2PDF interface. All other settings must be modified in the configuration file and do not take affect until NCC\_DOC2PDF is closed and re-launched (see the “[Configuration](#)” section above for details).

When the “Start” button is pressed NCC\_DOC2PDF attempts to initiate “Watch” mode by verifying configuration file settings, including access to the “Watch Folder” and the existence of Printers. If successful, NCC\_DOC2PDF will appear as follows (whether Started manually or launched in “Watch” mode by one of the Auto Start methods):



NCC\_DOC2PDF is now “Watching” for Message Files to be processed, triggered by either the appearance (creation) of a Message File or the change of a Message File file extension to “.rdy” or “.wrk”. Note that the “Printer” value is displayed, indicating the Windows Printer to be used for PDF generation. A message to the left of the Start/Stop button is displayed indicating when “Watching” was last started.

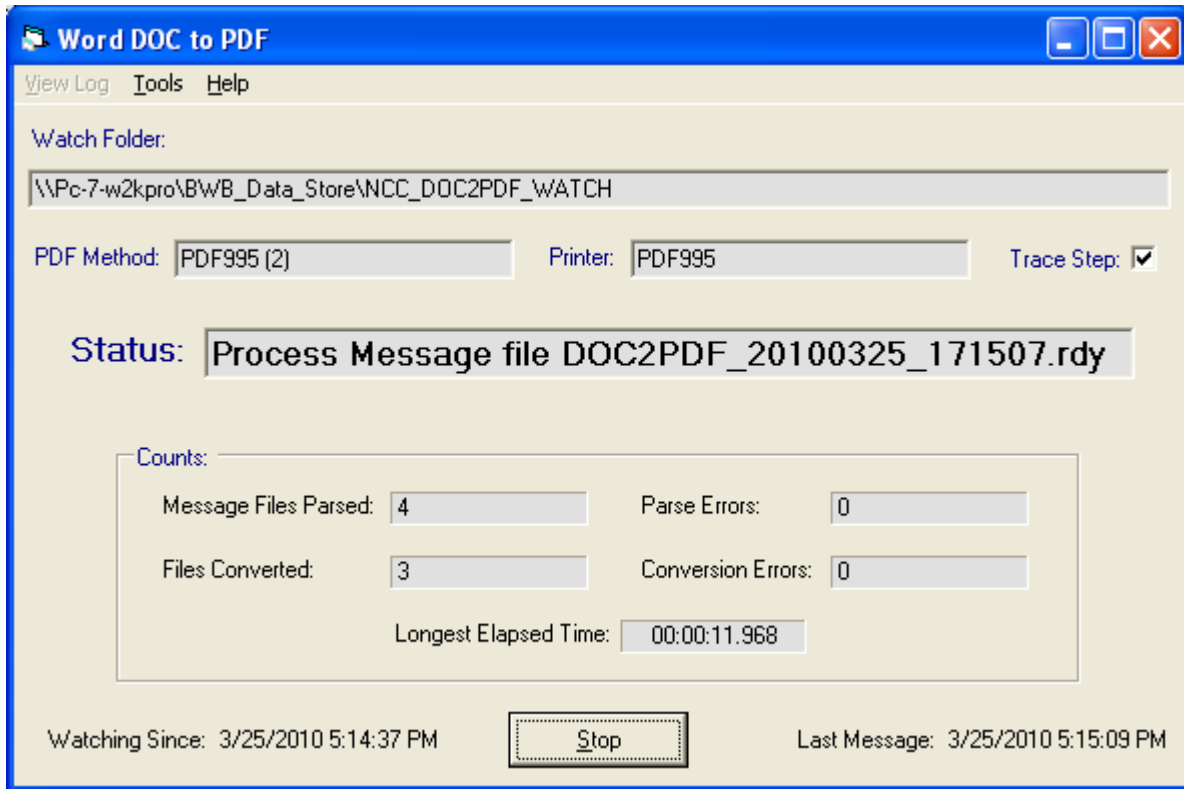
When “Watch” mode is first Started the Watch Folder is checked for any Message Files with an extension of “.rdy” or “.wrk”. This serves to process any Message Files that may not have been processed during a previous “Watch” cycle (machine shutdown, user “Stop”, etc.)

Pressing “Stop” will end “Watch” mode and return NCC\_DOC2PDF to “Stopped” mode.

When minimized, either manually or by Auto Start in “Minimized” mode, an item is displayed in the Taskbar that indicates the “Status” and should look something like:



When NCC\_DOC2PDF “sees” one or more Message Files it will indicate the Message File currently being processed:



The file extension of Message Files that are queued for processing will be changed from “.RDY” to “.WRK”. This can be used by posting applications to detect that a posted Message File has been “seen” by NCC\_DOC2PDF.

When processing of a Message File is complete it’s file extension will be changed to either “.FIN” (indicating successful processing), or “.ERR” (indicating a detected error during Message File parsing or PDF generation). Posting applications should verify the existence of the expected PDF file when the Message File extension is “.FIN”, and should report the error condition when it is “.ERR” (condition text is on the second line and up of the file). In both cases the posting application should delete the Message File from the Watch folder.

A message is displayed to the right of the Start/Stop button indicating the last time a Message File was “Parsed” (opened and queued for processing) or Processed.

Pressing “Stop” will cancel the processing of any remaining Message Files and return NCC\_DOC2PDF to “Stopped” mode, but only *after* processing of the current Message File has completed.

## Menu and Counts

### Menu



- View Log:

Opens the current or most recent NCC\_DOC2PDF Process Log file in Notepad. A new log file is created every month in either the NCC\_DOC2PDF application folder or in the folder specified in the configuration file. Log files are only created or written to when NCC\_DOC2PDF has been “Started” (not on launch).

When NCC\_DOC2PDF is first launched and has not been placed in “Watch” mode, no log file has been identified or created, so when “View Log” is selected an attempt is made to find the most recent log file, if any exists.

- Tools – Open Config File:

Opens NCC\_DOC2PDF configuration file in Notepad. The configuration file is named *NCC\_DOC2PDF.exe.config* and is found in the NCC\_DOC2PDF application folder.

Changes to configuration file settings do not take affect until NCC\_DOC2PDF has been closed and re-launched.

- Help – User Guide:

Opens the PDF document *NCC\_DOC2PDF.pdf* (this document), if it can be located (in the NCC\_DOC2PDF application folder).

- Help – About:

Displays information about this application, including the version number.

Counts

The screenshot shows a window titled "Counts:" with the following data:

Message Files Parsed:	3	Parse Errors:	1
Files Converted:	1	Conversion Errors:	1
Longest Elapsed Time:		00:00:09.281	

Note: All “Counts” are calculated from the first time NCC\_DOC2PDF was Started in “Watch” mode and are not reset until NCC\_DOC2PDF is closed and re-launched.

- Message Files Parsed:

Count of all Message Files that have been “seen” by NCC\_DOC2PDF.

- Parse Errors:

Count of all Message Files that either could not be successfully read (“Parsed”) or had errors detected that would prevent the Message File from being processed (“Convert From” file not found, “Convert To” folder not found, etc.).

- Files Converted:

Count of all Message Files that were processed without error. This generally indicates that a Word Document was successfully converted to a PDF, but in rare circumstances configuration problems could result in a no-error “success” without generating a PDF. Applications that “post” Message Files should verify the existence of a PDF before reporting success.

- Conversion Errors:

Count of all attempts to process a Message File that resulted in a detectable error. Errors could be either run-time errors raised by the system, or errors explicitly looked for by NCC\_DOC2PDF. Most of these errors will occur because of changes in the environment that have taken place after “Watch” mode was initiated (loss of network connections, change of folder or file permissions, etc.), but may also occur because of conflicts (file already open, file deleted or moved during output, etc.). The log file should be reviewed for more detailed information.

- Longest Elapsed Time:

Indicates the longest time that it has taken for a Word Document to be converted to a PDF, down to one thousandth of a second. This information is provided to help in configuring NCC\_DOC2PDF’s “Wait” settings (see “[Configuration](#)” section above for details). If conversion errors are occurring because of “Wait” failures then the “Wait” factors should be increased. If “Longest Elapsed Time” is close to the current maximum “Wait” settings, then increasing the maximum is recommended.

## Log File

Detailed information about the run environment, start and stop times, detection of Message Files, and Conversion Processing are maintained in a monthly text file.

The location of the text file can be specified as a setting in the configuration file (see the “[Configuration](#)” section above). When a location is not specified, the log file will be maintained in the folder from which NCC\_DOC2PDF is launched (folder containing *NCC\_DOC2PDF.exe*).

A new file is created each month in the format:

NCC\_DOC2PDF\_Log\_YYYYMM.txt

where “YYYY” is the Year and “MM” is the Month number.

To aid in trouble-shooting problems, “Step Tracing” can be used to have greater Conversion Processing detail recorded in the Log File (where coded for). “Step Tracing” can be enabled or disabled through either the configuration file (see the “[Configuration](#)” section above) or by clicking on the “Trace Step:” checkbox on the interface (see the “[Running](#)” section above). Note that the checkbox will initially be loaded with the configuration file value and acts as an override while NCC\_DOC2PDF is running.

## Considerations

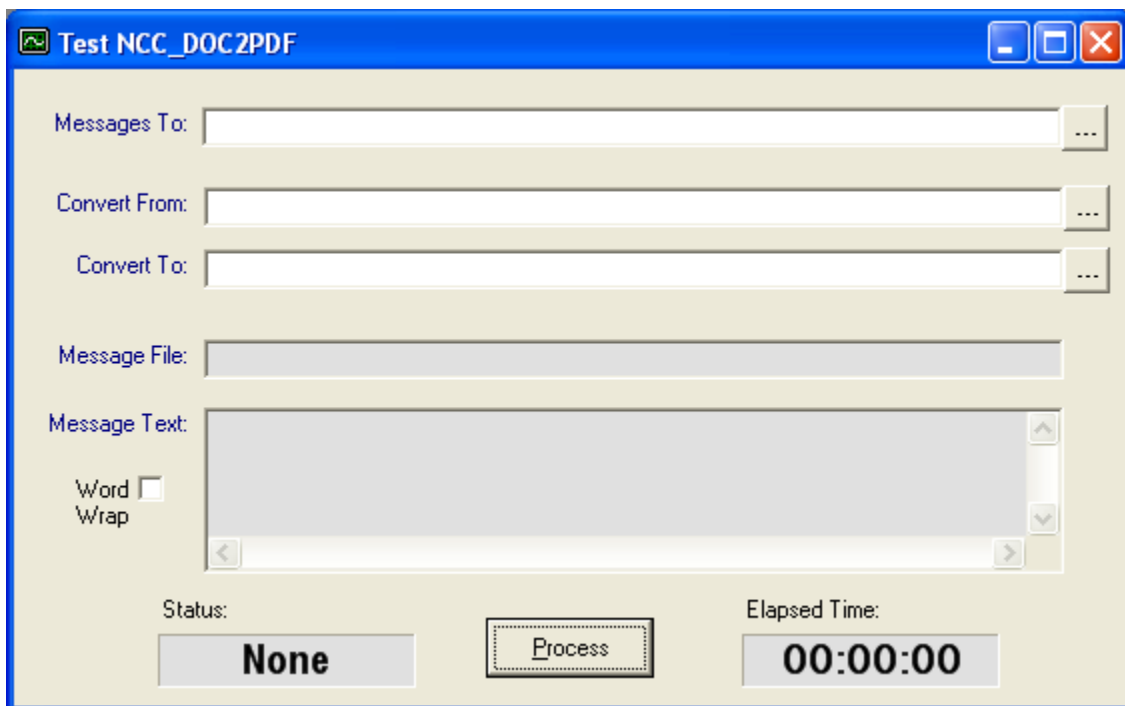
- Word:
  - Word should not be open or running on the same machine under the same User Session as NCC\_DOC2PDF while it is in “Watch” or “Processing” mode.
  - Depending on the version of Word being used, it may be necessary to Activate Word or disable any Prompts or Assistants. Any attempt by Word to interact with the User may cause NCC\_DOC2PDF to “hang”.
- Concurrence:
  - Two separate instances of NCC\_DOC2PDF running at the same time and “pointing” to the same folders (Watch, Log, etc.) may cause unpredictable results.
  - It should be possible to run multiple instances on multiple machines as long as they point to distinct Watch and Log folders, and they should be able to target the same “Convert From” and “Convert To” folders as long as unique Message File names are used and no attempt is made to convert the same Word Document at the same time.

## Testing

A simple test application and a sample Word Document are provided to help administrators test the installation and configuration of NCC\_DOC2PDF. They should have been downloaded to the NCC\_DOC2PDF application folder by the NorthClark Upgrade Utility. Note that the test application *NCC\_DOC2PDF\_Tester.exe* will not appear as a shortcut or on the Start menu.

The tester application creates and tracks the processing of a single Message File by NCC\_DOC2PDF. In order to use it, NCC\_DOC2PDF should be fully configured and running in Watch mode (see section(s) above for details).

Locate *NCC\_DOC2PDF\_Tester.exe* and double-click to launch it. If this is the first time it has been run on this machine for this user, it will appear something like:

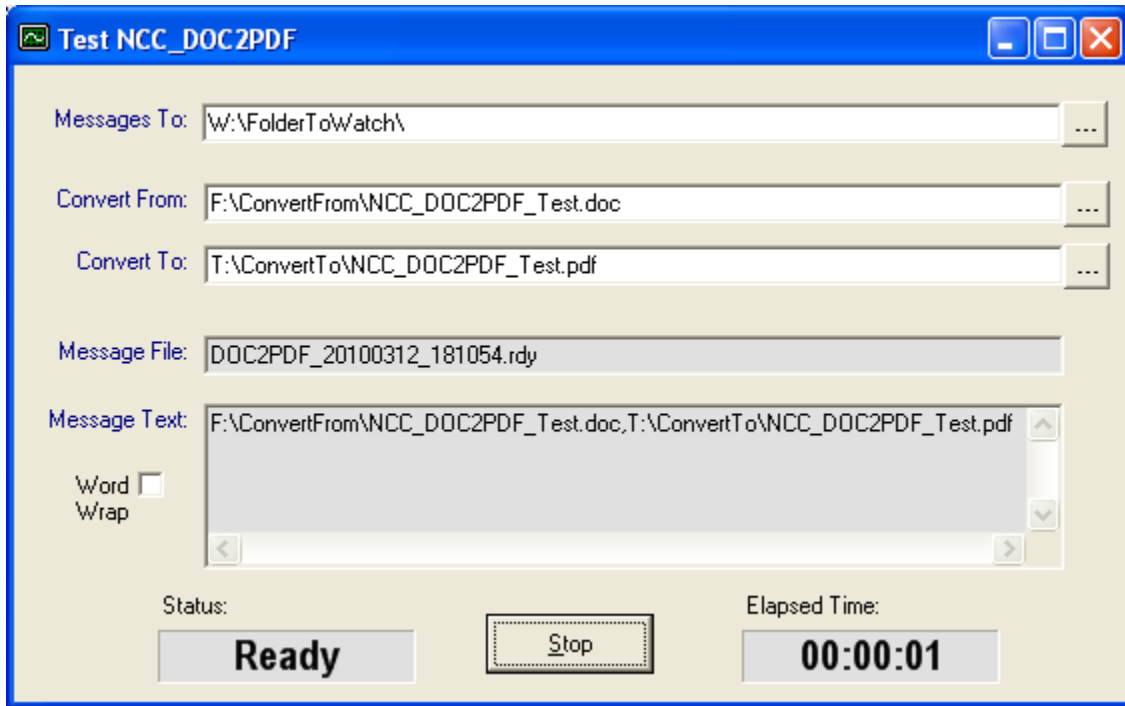


Either type in, copy/paste in, or use the “...” browse buttons on the right to specify the Watch Folder (“Messages To:”), the Word Document to Convert From, and the folder and file name of the PDF to generate (“Convert To:”). Notes:

- Either local (drive-letter:\path\file) or UNC (\\machine\drive-letter\path\file) styles can be used.
- Both this tester application and NCC\_DOC2PDF will need access to the specified folders.
- The sample Word Document can be used, but it should be copied to a folder that NCC\_DOC2PDF has access to.



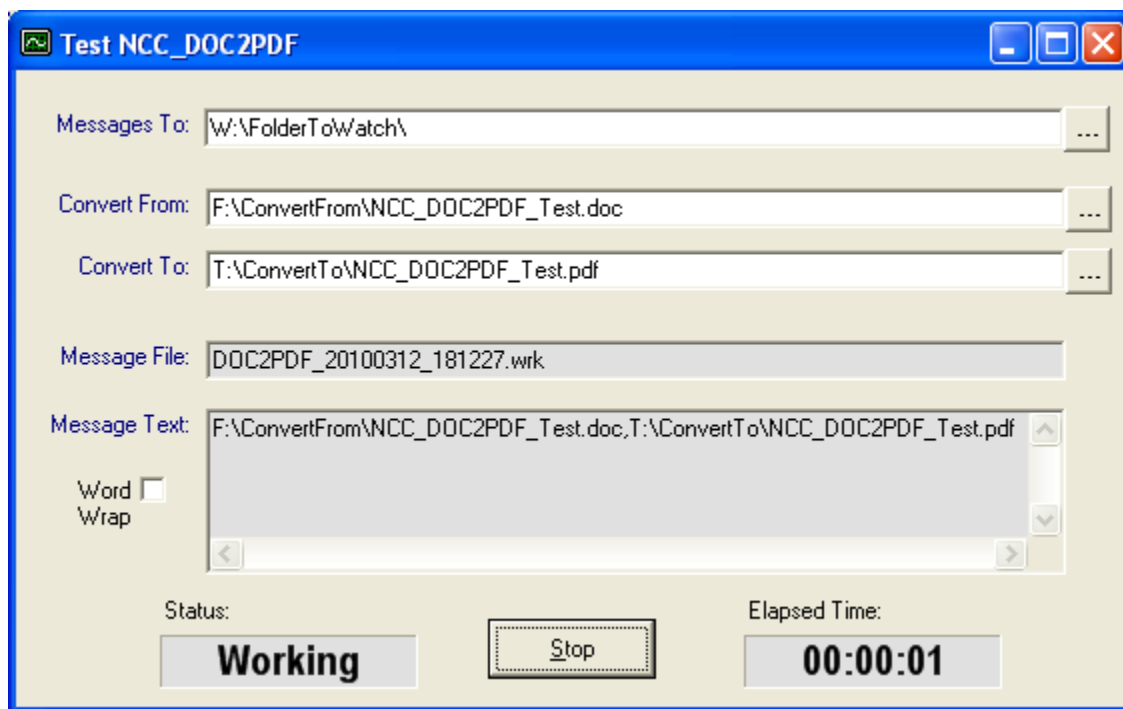
Press the “Process” button. A Message File will be created directly in the Watch Folder. The screen will now look similar to:



The tester application will now wait for the file to be processed by NCC\_DOC2PDF by continually examining the Message File file’s extension, and will update the “Message File:” display with the current Message File file name, as well as the “Message Text:”. Notes:

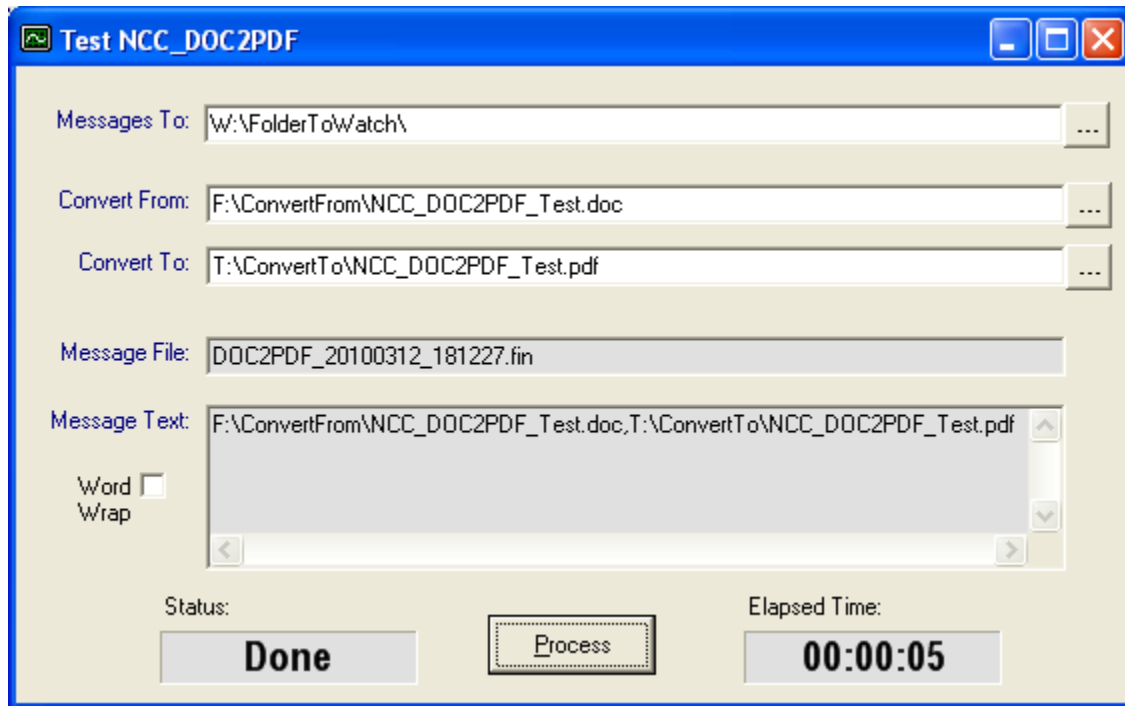
- If a long period of time elapses without seeing the “Status” change to “Working” or “Done”, then something may be wrong with the communication with NCC\_DOC2PDF (it may not be in “Watch” mode, or it may not be Watching the specified “Messages To:” folder).
- Note that the “Process” button now reads “Stop”. Pressing “Stop” during processing does not stop NCC\_DOC2PDF. It just stops the tester application from examining Message File file extensions and causes it to wait for another a new “Process” request.

When NCC\_DOC2PDF “sees” the Message File, the file extension is changed to “.wrk” and the tester application will look like:

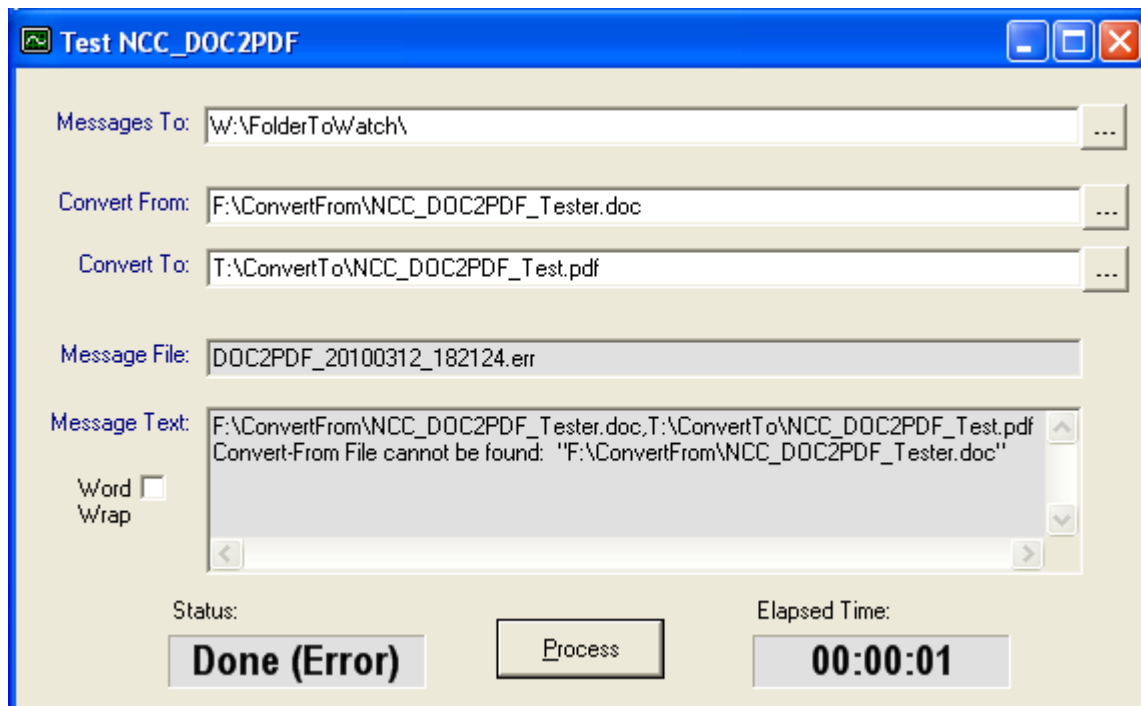


When the conversion has been completed the Message File file extension will be changed to either “.fin” (no errors encountered) or “.err” (errors encountered).

Screen image on completion without errors:



Screen image when errors are encountered:





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