

Report-IV to PDF™ Installation/Setup/User Guide



Version 8.8.3

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INTRODUCTION

You should have received the following:

- At least one CD (check the version number) or an e-mail if you downloaded product.
- A Software License Agreement
- A Software Registration Card (please take the time to fill this out and return it)

Requirements

OPENworkshop/Report-IV must be installed prior to installing Report-IV to PDF. If you have not already done this do not continue with this installation.

The 3GL wrapper (covered later in this document) requires that the Report-IV to PDF product be installed. The 3GL wrapper is an add-on to the Report-IV to PDF product.

Note: Starting with 8.8.3, Report-IV to PDF is included with Thoroughbred Basic and OPENworkshop. This includes the 3GL wrapper. Install the OPENworkshop/Dictionary environment with the Module Code associated with your order. It will include Report-IV to PDF.

Supported platforms are Windows desktop workstations and Server class machines, Linux, SCO, HP-UX, and AIX.

Overview

Features

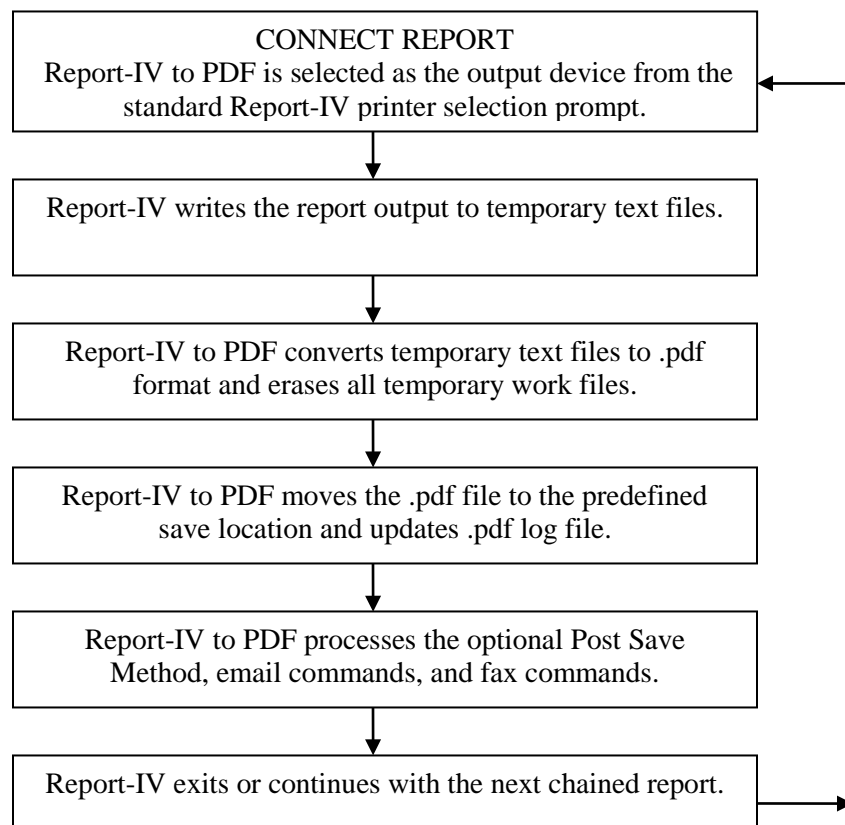
Report-IV to PDF extends the capabilities of Report-IV allowing you to save your reports as .pdf files.

- Convert Report-IV output to PDF by selecting a printer device from the standard Report-IV printer selection prompt. Convert a plain text file to PDF using the 3GL wrapper.
- Easily configured from the Settings and Options screen.
- Supports background images which are merged with the Report-IV data to create forms.
- Email the .pdf file as an attachment using simple email options or by executing an email Method.
- Fax the .pdf file using simple fax options or by executing a Fax Method.
- Print UPC barcodes.
- Execute a custom Post Save Method when custom processing of the .pdf file is required.

- View archived .pdf files with support for deleting, renaming, emailing and faxing a selected file.
- Supports 3GL printing using the PDF 3GL wrapper.
- Used by T-Connect, Thoroughbred’s browser based terminal emulator for all print options including slave printing.

System Architecture

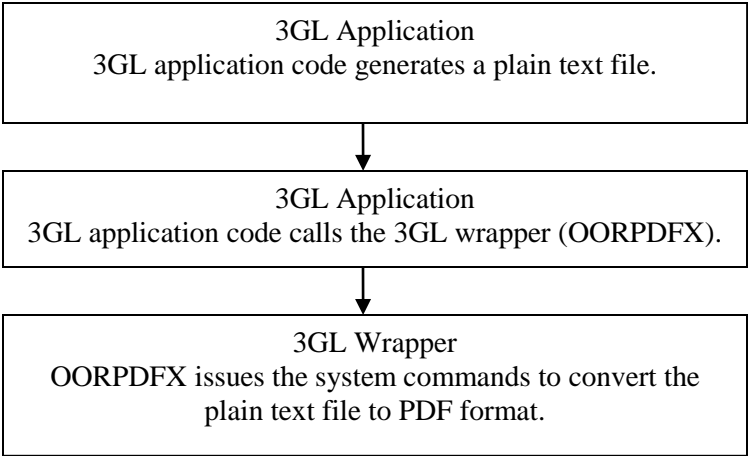
The following diagram outlines the Report-IV to PDF process:



To ensure proper write permissions, all temporary text files are created in the directory defined by Link UTDATFIL (#IDSV.DISK-NBR-DATAFILES). If this directory is defined in the IPL file with the *subdirflg* set, the USR directory must exist. All temporary files will be created in the USR directory. Solution-IV installations typically have the *subdirflg* set for the UTDATFIL directory. For more information on UTDATFIL please refer to the Dictionary-IV Administrator Guide.

When the conversion process is complete, the .pdf file will be moved to the directory defined by the Settings and Options: path to saved .pdf files. Once saved, your applications can perform additional processing on the .pdf file through a custom Post Save Method, email, or fax commands.

The following diagram outlines the 3GL wrapper process:



The various options available in Report-IV to PDF are not available with the 3GL wrapper. Please see the 3GL Wrapper section below for details.

For more information on T-Connect, please see the T-Connect Web Terminal Reference Manual.

Fonts and Formatting

By default all pdf documents are created using the Courier font. The Courier font is strongly recommended, it maintains the integrity of the Report-IV layout. Other supported fonts are:

Font Face	Font Name
Courier	Courier
Helvetica	Helvetica (Arial)
Times	Times Roman
Symbol	Symbol
ZapfDingbats	Zapf Dingbats
C1	STSong-Light (Chinese font) GBK-EUC-H encoding
C2	MSung-Light (Chinese font) ETen-B5-H encoding
C3	MSung-Light (Chinese font) ETen-B5-H encoding
J1	HeiseiMin-W3 (Japanese font)
J2	HeiseiKakuGo-W5 (Japanese font)
K1	HYGoThic-Medium (Korean font) KSC-EUC-H encoding
K2	HYSMyeongJo-Medium (Korean font)

Several conversion parameters are based on the Courier font and the Report-IV width defined in the Report-IV header. The default values are:

Report Width	#OOFPDF1. FONT-SIZE	#OOFPDF1. LINES-PER-PAGE	#OOFPDF1. PAGE-WIDTH	#OOFPDF1. PAGE-HEIGHT	#OOFPDF1. ORIENTATION
1 - 90	10	58	8.5	11	Portrait
91 - 111	8	70	8.5	11	Portrait
112 - 131	7	79	8.5	11	Portrait
132 - 152	8	53	8.5	11	Landscape
153 - 172	7	58	8.5	11	Landscape
173 - 185	10	60	11.7	16.5	Landscape
186 - 230	8	72	11.7	16.5	Landscape
231 - 248	7	92	11.7	16.5	Landscape

Care should be taken when overriding the font and formatting parameters. It may be necessary to set several related parameters to achieve the desired effect. For example when setting the font size it may be necessary to adjust the lines per page.

Overriding the default values must be done prior to executing a CONNECT REPORT or CALLING OOR and can be done using a Pre Convert Method.

For more information on overriding font face and other run time parameters in #OOFPDF1 please refer to the *Using Report-IV to PDF, Runtime Settings and Options* section later in this manual.

INSTALLATION

Windows Desktop and Server Platforms

All installations and activations must be run with Administrator privileges. Once fully installed and activated the products can be run using standard user accounts.

If you are installing on Windows Server running Terminal Services in application mode, switch to Install Mode prior to running setup.exe.

- To set Install Mode, from a command line enter **chgusr /INSTALL**.
- After completing the install, switch back to Execute Mode. From a command line enter **chgusr /EXECUTE**.
- At any time, the current mode can be verified with **chgusr /QUERY**.

The chgusr command is a Terminal Services tool. For more information regarding installing applications with Terminal Services, please refer to Microsoft documentation.

1. **Login** using an **Administrator** account.
2. We **recommend closing all unnecessary applications** before running the install.
3. There is one setup.exe for all the supported window platforms. Starting with 8.8.3, the Report-IV to PDF product is bundled with Basic. The 8.8.3 TS Environment for Windows or the TS Network Basic with DataServer install will copy the Report-IV to PDF setup file to C:\ProgramData\Thoroughbred Software\Tbsec\Rpt2PDF.
4. The **InstallShield Wizard** will start the installation process. You can exit this installation at anytime by selecting the **Cancel** button.

This will install the Report-IV to PDF driver (rpt4pdf.exe). By default this will install rpt4pdf.exe to C:\Program Files\Report4PDF. We strongly recommend installing into the default directory.

The setup will also extract the Report-IV to PDF merge files to your existing OPENworkshop IDL4 directory. The setup will automatically determine the path to your installation on the target system.

If it cannot, an error message is displayed and the setup must be terminated. Please install or re-install OPENworkshop including Report-IV and then install Report-IV to PDF.

NOTE: If the setup does not return the correct or the desired path, it is an indication that the OPENworkshop folder names or their locations have been manually modified. It can also be an indication that there is more than one installation on the target system. If this happens, please contact your Thoroughbred support representative for assistance.

When the setup is complete the Report-IV to PDF files must be merged. Continue with Merge and Configure Report-IV to PDF section documented below.

Linux, SCO, AIX, HP-UX

The CD-ROM contains a set cpio files for the four supported operating system; SCO, AIX, HP and Linux. For each operating system there is a cpio file for the Report-IV to PDF drivers and there are cpio files containing Report-IV to PDF merge files for Report-IV.

Before using cpio with a CD-ROM drive, the drive must be mounted. Sample mount commands are as follows:

```
SCO: mount -r -f HS,lower /dev/device-name /mountpoint
```

```
AIX: mount -r -v cdrfs /dev/device-name /mountpoint
```

```
HP: mount -r -F cdrfs /dev/device-name /mountpoint
```

```
Linux: mount -r -t iso9660 /dev/device-name/mountpoint
```

After mounting the CD-ROM drive, continue with the documented steps below.

1. Extract and Install Report-IV to PDF Drivers

Four different sets of the Report-IV to PDF drivers are provided in cpio format. Supported platforms are: Linux, SCO, AIX, and HP. Each cpio file (rcpdriver) is located on the media in its own platform-specific directory.

```
aix/rcpdriver  
hp/rcpdriver  
linux/rcpdriver  
sco/rcpdriver
```

The cpio file containing the rcpdriver for your platform must be extracted into a directory that can be made accessible to your existing OPENworkshop/Report-IV installation. The conversion process will create temporary text files in this directory. The directory must have read and write permissions.

When defining the path for the PDF converter, please take into consideration that the maximum length for a file name in Basic is 64 bytes. Default file names are a total of 35 or 36 bytes; 31 bytes for the file name and 5 or 4 bytes for the file extension (for example: .txt1 or .pdf). For example Basic must be able to create: /usr/basic/PDFConverter/OERCUST-20070710115524499520tsi.txt1.

Using cpio, extract the contents of rcpdriver into the desired directory. Be careful to extract the correct version of rcpdriver for your operating system.

The following example will extract the SCO drivers from the cpio file rcpdriver located in the sco directory on the media into an existing directory named /usr/public/PDFConverter.

1. `cd /usr/public/PDFConverter`
2. `umask 0`
3. `cpio -icvBmud <cdrom/sco/rcpdriver`

Note: cdrom is the mountpoint name.

NOTE: use `-ivBmud` if you are installing Linux, use `-icvBmud` if you are installing on other platforms.

2 *Extract and Install the Linux email shell script*

Note: This step is only applicable to **Linux** installations.

The shell script sendattach.sh can be used by Report-IV to PDF to send a .pdf file as an email attachment. This shell script uses the sendmail command. *It is assumed that sendmail is installed and functioning properly along with any required encoding.* Typically .pdf files are sent as attachments using uuencode. Encoding options are covered in more detail later in this document.

We strongly recommend extracting the shell script sendattach.sh to /usr/lib/sendmail; however, it is not restricted to that directory. The path of sendattach.sh is maintained in Settings and Options, covered later in this document.

The cpio file sendattch contains the shell script sendattach.sh. This is located in the linux directory on the CD-ROM.

The following example assumes the CD has already been mounted using mountpoint cdrom. It will extract sendattach.sh from linux/sendattch into /usr/lib/sendmail.

1. `cd /usr/lib/sendmail`
2. `cpio -ivBmud </cdrom/linux/sendattch`

The sendattach.sh script expects that sendmail is installed in /usr/lib/sendmail or /usr/lib/basic. If sendmail is not located in one of those directories the sendattach.sh shell script must be modified. Open sendattach.sh with vi or the editor of your choice. Locate the "Initialize main variables" section of the sendattach.sh script (see below). Modify the script to set the SENDMAIL variable to the correct sendmail path.

```
# Initialize main variables ...

if [ -x /usr/sbin/sendmail ] ; then
    SENDMAIL=/usr/sbin/sendmail
elif [ -x /usr/lib/sendmail ] ; then
    SENDMAIL=/usr/lib/basic
else
    exit 0
fi
```

The following example illustrates a modified shell script when sendmail is installed in /usr/mymail. The first if has been modified setting

```
# Initialize main variables ...

if [ -x /usr/sbin/sendmail ] ; then
    SENDMAIL=/usr/sbin/sendmail
elif [ -x /usr/lib/sendmail ] ; then
    SENDMAIL=/usr/lib/basic
else
    SENDMAIL=/usr/mymail/sendmail
fi
```

3 *Extract the merge files*

The Report-IV to PDF merge files must be extracted to your existing OPENworkshop/Report-IV installation. These are provided in cpio format.

```
aix/883
hp/883
linux/883
sco/883
```

The following example assumes the CD has already been mounted using mountpoint cdrom. It will extract the merge files from the sco directory on the media to /usr/basic883/IDL4 on a **SCO** system.

```
1. cd /usr/basic883/IDL4
2. cpio -icvBmud </cdrom/sco/883
```

Note: cdrom is the mountpoint name.

Technical Notes for Linux, SCO, AIX, HP-UX:

On 64 bit servers only:

The PDF converter is compiled using the 32 bit libraries. Typically these exist on 64 bit systems. If they are not installed, when converting a file to PDF you will get a console error similar to “/lib/ld-linux.so.2: bad ELF interpreter: No such file or directory”. To resolve this install the 32 bit libraries. For example on Linux use yum to install glibc.i686.

Foreign Language Servers

Report-IV to PDF uses Perl. If the Perl locale settings are not set you will receive a console error similar to “perl: warning: Please check that your locale settings: LC_ALL = (unset), LANG = “C_C.C” are supported and installed on your system. perl: warning: Falling back to the standard locale (“C”)”. This can be addressed in one of two ways:

1. Add the following to the .profiles to include a command to suppress all Perl warning messages related to LANG allowing Perl to default to the standard locale setting without displaying the LANG warning message. This is the recommended solution.

```
PERL_BADLANG=0
export PERL_BADLANG
```

For more information:

<http://www.openbsd.pl/webs/articles/art25022007.html>
<http://docsrv.sco.com:8457/cgi-bin/pod2html/perllocale#preparing%20to%20use%20locales>

2. Before starting a Basic session or before accessing Report-IV to PDF set the LANG. This is a system wide setting, it is not specific to the .profile being used. From console issue the following command: LANG=C; LC_ALL=C; export LANG; export LC_ALL

For more information:

<http://uw714doc.sco.com/en/man/html.5/environ.5.html>
<http://uw714doc.sco.com/en/man/html.3C/setlocale.3C.html>
http://uw714doc.sco.com/en/SDK_sysprog/_Locales.html

Perl Path Error

With 8.8.0 there is a possible Perl 5 path console error :”PLEASE SEE THE PERL2EXE USER MANUAL UNDER “Can’t locate somemodule.pm in @INC” Can’t locate attributes.pm”. To correct this set the Perl path by either doing a system command or by modifying the profiles:

```
PERL5LIB=/usr/lib/perl5/5.8; export PERL5LIB
```

OpenVMS

1. *Install Report-IV to PDF Driver*

Copy the text2pdf converter TEXT2PDF.EXE into any directory that can be made accessible to your existing OPENworkshop/Report-IV installation. The conversion process will create temporary text files in this directory. The directory must have Read Write Delete permissions.

2 *Copy the merge files*

The Report-IV to PDF merge files must be copied to your existing OPENworkshop/Report-IV installation.

Merge Report-IV to PDF with Dictionary-IV/OPENworkshop/Report-IV

The following applies to all operating systems.

The following is required when printing using T-Connect. This includes slave printing, Report-IV, and TS ReportServer. For more information, please see the T-Connect Web Terminal Reference Manual.

The following is required when using the 3GL wrapper with the exception of adding a DEV line to the IPLINPUT file and assigning it to the PDFCNV printer table. Defining the PDF converter as a printer device is only required to convert Report-IV output to PDF format.

Before starting the merge process make the necessary modifications to your IPLINPUT file.

On Windows Desktop and Servers the IPLINPUT file is located in Thoroughbred common data directory. The default is C:\ProgramData\Thoroughbred Software\Tbsc.

On Linux, SCO, AIX, HP-UX, OpenVMS the IPLINPUT file is located in the Basic directory.

A hierarchical DEV line is required. Verify that the IPLINPUT file contains a DEV line with the *hierflg* set to 1. For example:

```
DEV D9,1,,,,1,,
```

Modify the IPLINPUT file adding a null DEV line for the Report-IV to PDF converter. For example to define RC as the Report-IV to PDF converter device add the following to your IPLINPUT file:

```
DEV RC,4,,,1,,,/dev/null
```

or for window platforms:

```
DEV RC,4,,,,,NULL
```

or for OpenVMS:

```
DEV RC,4,,,1,,,NLA0:
```

For more information see the Basic Customization and Tuning Guide (System Files).

Start Basic using the modified IPLINPUT file. From Basic console mode enter **RUN "INSTALL"**. This will install the Report-IV to PDF programs, Dictionary-IV definitions and the PDFCNV printer table.

When the Installation Complete screen is displayed press **Enter** to continue with the final phase of the install process. The Report-IV to PDF Settings and Options configuration screen is displayed. To skip configuring Report-IV to PDF, press **F4**. However, until Report-IV to PDF is properly configured it will not be able to locate certain directories and files and will report errors if you attempt to run the product. It is strongly recommended that you configure Report-IV to PDF at this point. For more information see Configure the Settings and Options section of this manual.

In order to select Report-IV to PDF as the printer device the PDFCNV printer table must first be assigned to a printer device. It is possible to have multiple printer devices configured for PDF; it is the PDFCNV printer table, not the printer ID that identifies a printer as a PDF output device. From the OPENworkshop **System Administration** menu, select **Printer Assignment**. Assign the printer table **PDFCNV** to the null printer device specified in your IPLINPUT file.

Using printer device RC as an example, when **RC** is selected for output from the Report-IV Select Printer prompt, the report will be converted and saved as a .pdf file.

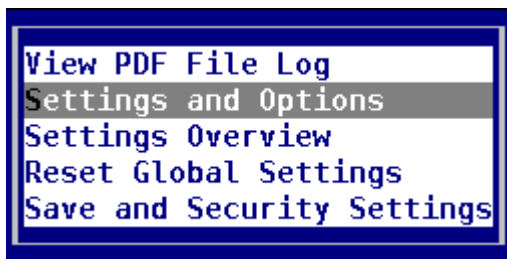
CONFIGURE REPORT-IV TO PDF

Note: The following does not apply to the 3GL wrapper. Please see the 3GL wrapper section in this document.

Note: The following does apply when using T-Connect. For more information please see the T-Connect Web Terminal Reference Manual.

Configuring Report-IV to PDF is done through the Settings and Options and the Save and Security Settings. The settings and Options configuration is required. The Save and Security Settings configuration is optional.

Both are accessed from the Report-IV to PDF Utilities menu:



Settings and Options

The Settings and Options screen is displayed automatically by the installation process or can be accessed at any time from the main OPENworkshop menu. Select **Utilities**, select **Report-IV to PDF Utilities**, then select **Settings and Options**.

Before running Report-IV to PDF you must configure the global Settings and Options. The Settings and Options contain specifications that enable Report-IV to PDF to manage the conversion process.

Select **Settings and Options** and the following screen will display:

```

-> Report to PDF globals <-
Report-IV to PDF Settings and Options

Path to PDF converter: /usr/public/PDFConverter
Path to saved PDF files: /usr/public/PDFOut
Path to PDF background pages:/usr/public/PDFConverter
User supplied PDF name enabled: N
Post save method enabled: N Method name:
Pre convert method enabled: N Method name:
System Wait: 30

Email Enabled: N
  From:                               Reply to:
Subject:
  Body:
Command: /usr/local/bin/sendattach.sh -t $TO -f $FROM -r $REPLY -s $SUBJ -u $

Fax Enabled: N
  From Name:                           Company:
  From Fax Nbr:                         Voice Number:
Subject:
Message:
Command: /usr/local/bin/sendfax -n -h domain.name.com -d $FTFN $FILE

```

Path to PDF converter

Full path name of the directory containing the rpt4pdf driver.

- Defined by global: #OOFPDF1.PDF-PATH
- Required or optional: required
- Maximum size: 80 bytes
- Default value: If not set the default path for Linux, UNIX, SCO and AIX installations is *<basic-install-path>/PDFConverter*. The default path for Windows installations is C:\Program Files\Report4PDF.

REMARKS

The Report-IV to PDF converter requires a DEV PREFIX in the IPLINPUT file: DEV
D9,1,,,,,1,,

EXAMPLE

```
usr/basic/PDFConverter
[TBOS.883.PDFCONVERTER]
C:\Program Files\PDFConverter
```


Path to Saved PDF Files

Full path name of the directory where the .pdf files are to be saved.

- Defined by global: #OOFPDF1.RPT-PATH
- Required or optional: required
- Maximum size: 80 bytes
- Default value: If not set the directory defined by Link UTDATFIL (#IDSV.DISK-NBR-DATAFILES) will be used. For more information on UTDATFIL please refer to the Dictionary-IV Administrator Guide.

REMARKS

This directory must have read and write permissions.

If the selected save directory is defined in the IPL file with the *subdirflg* set, the USR directory must exist. In this case the .pdf files will be saved in the USR directory. Most Solution-IV installations have the *subdirflg* set for the UTDATFIL/#IDSV.DISK-NBR-DATAFILES directory.

EXAMPLES

```
/public/PDFOut  
/usr/basic/SOL4/USR  
[TBOS.PUBLIC.PDFOUT]  
C:\PDFOut  
C:\Program Files\Tbrc\SOL4\USR  
C:\ProgramData\Thoroughbred Software\Tbrc\SOL4\USR
```

Also see the **Save and Security Settings** section of this manual for more advanced save location options.

Path to Background .pdf Files

Full path name of the directory where the .pdf background files are located.

- Defined by global: #OOFPDF1.BACKPG-PATH
- Required or optional: optional
- Maximum size: 80 bytes
- Default value: none

REMARKS

It is recommended that you do not use the same directory as the saved .pdf files. This would result in the background .pdf files appearing the View of archived .pdf files.

The option is not available on OpenVMS.

EXAMPLES

```
/public/PDFBackpgs  
/usr/basic/PDFBackpgs  
C:\PDFBackpgs
```

See Using Report-IV to PDF below for more details and an example.

User Supplied PDF Name Enabled

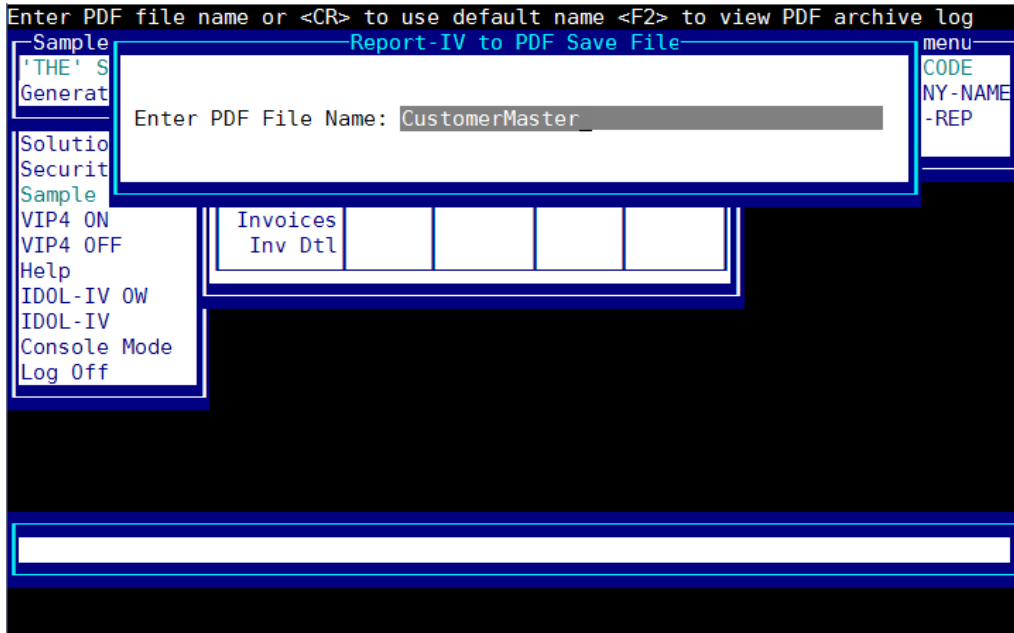
When enabled, the user will be prompted to enter a name for the .pdf file. When disabled the default .pdf file name will be used.

- Defined by global: #OOFPDF1.USR-NAMES-PDF
- Required or optional: optional
- Maximum size: 1 Y/N
- Default value: disabled

REMARKS

The user supplied name will be appended to #OOFPDF1.RPT-PATH.

This prompt is displayed each time a report is converted to .pdf format:



Post Save Method Enabled

When enabled, the Post Save Method will be executed. When disabled the Post Save Method is not executed.

- Defined by global: #OOFPDF1.ENABLE-POST-METHOD
- Required or optional: optional
- Maximum size: 1 Y/N
- Default value: disabled

REMARKS

Use the enable or disable setting to avoid having to clear and reset the Post Save Method name.

Post Save Method Name

The name of the Method to be executed after the .pdf file has been saved and before the email and Fax commands are processed.

- Defined by global: #OOFPDF1.POST-SAVE-METHOD
- Required or optional: optional
- Maximum size: 8
- Default value: none

REMARKS

The Post Save Method provides access to the final .pdf file for any additional processing that might be required by the application. For example, the .pdf file can be renamed, moved or opened with the Adobe PDF viewer.

The Post Save Method CALL/ENTER list is MSG\$[ALL].

The .pdf file path and name is supplied in MSG\$[1].

For example: MSG\$[1]="C:\PDFOut\OERCUST-20090710115524499520tsi.pdf" or
MSG\$[1]="/usr/PDFOut/OERCUST-20090710115524499520tsi.pdf"

No other arguments are supplied in the array. The Report-IV to PDF run time environment can be accessed by including the global format: FORMAT INCLUDE #OOFPDF1, OPT="NONE".

The method is only called when #OOFPDF1.ENABLE-POST-METHOD = "Y".

EXAMPLES

See the Examples section of this document.

Pre Convert Method Enabled

When enabled, the Pre Convert Method will be executed. When disabled the Pre Convert Method is not executed.

- Defined by global: #OOFPDF1.ENABLE-PRE-METHOD
- Required or optional: optional
- Maximum size: 1 Y/N
- Default value: disabled

REMARKS

Use the enable or disable setting to avoid having to clear and reset the Pre Convert Method name.

Pre Convert Method Name

The name of the Method to be executed immediately after the converter has been selected as the output device and before the Report is generated.

- Defined by global: #OOFPDF1.PRE-CONV-METHOD
- Required or optional: optional
- Maximum size: 8
- Default value: none
- Must be Source type “M”, Basic Method

REMARKS

The Pre Convert Method is executed immediately after the printer configured for the Report-IV to PDF converter is selected as the output device and before the Report is generated and converted. This provides a mechanism to customize settings in #OOFPDF1 on a report by report basis without having to modify existing application Scripts or 3GL programs.

When called the following information is passed to the Pre Convert Method:

PDFC\$[0] set by Pre Convert Method to indicate if the Report should continue or if some error condition has been encountered.

PDFC\$[0]="." Indicates no errors, Report-IV should continue processing.

PDFC\$[0]=" " Indicates an error has occurred. The default error message (help module OOER139) will be displayed. The user will be prompted to select another printer.

PDFC\$[0]="h" + help module name. Indicates an error has occurred. Instead of displaying the default help module (OOER139), the supplied help module will be displayed. The user will be prompted to select another printer.

PDFC\$[1] = 8 byte Report-IV definition name

PDFC\$[2] = 40 byte Report-IV definition description

PDFC\$[3] = Terminal date (#IDSV.TERMINAL-DATE)

PDFC\$[4] = System date (DAY)

PDFC\$[5] = File Suffix (#IDSV.FILE-SUFFIX)

The Report-IV to PDF run time environment can be accessed by including the global format: `FORMAT INCLUDE #OOFPDF1, OPT="NONE"`.

The method is only called when `#OOFPDF1.ENABLE-PRE-METHOD = "Y"`.

See Example 4 in the **Examples - Report-IV** section of this manual.

Cleanup Method Enabled

When enabled, the Cleanup Method will be executed. When disabled the Cleanup Method is not executed.

- Defined by global: `#OOFPDF1.ENABLE-CU-METHOD`
- Required or optional: optional
- Maximum size: 1 Y/N
- Default value: disabled

REMARKS

Use the enable or disable setting to avoid having to clear and reset the Cleanup Method name.

Cleanup Method Name

The name of the Cleanup Method to be executed as a final step. Defined by global: #OOFPDF1.CU-EXIT-METHOD

- Required or optional: optional
- Maximum size: 8
- Default value: none

REMARKS

The Cleanup Method is called after all other PDF processing has completed including the Post Save Method, PDF file logging, email, and fax Methods. It is the final step before control is returned to the application.

System Wait

The maximum number of seconds to wait for the conversion process before returning an error message.

- Defined by global: #OOFPDF1.SYS-WAIT
- Required or optional: Optional
- Maximum size: 2.0
- Default value: 30.0

REMARKS

After the report is passed to the .pdf driver, approximately every second the system will attempt to open the .pdf file. If the file exists it will terminate the wait logic. If it does not exist, it will repeat the wait logic until it has reached SYS-WAIT iterations.

The default value is 30.0. The wait value can be changed at run time by changing the value for #OOFPDF1.SYS-WAIT. For example:

```
FORMAT INCLUDE #OOFPDF1,OPT="NONE;
```

```
#OOFPDF1.SYS-WAIT = 99.0
```

Email Enabled

When enabled the email command will be executed. When disabled the email command will not be executed.

- Defined by global: #OOFPDF1.ENABLE-EMAIL
- Required or optional: optional
- Maximum size: 1 Y/N
- Default value: disabled

REMARKS

Use the enable or disable setting to avoid having to clear and then reset the email command line.

For more information, please see Email Command.

From

Email from address

- Defined by global: #OOFPDF1.EMAIL-FROM
- Required or optional: optional
- Maximum size: 50 bytes
- Default value: none

REMARKS

This is used to populate the from email address when using the email command. For more information, please see Email Command.

Reply To

Email reply to address

- Defined by global: #OOFPDF1.EMAIL-REPLY
- Required or optional: optional
- Maximum size: 50 bytes
- Default value: none

REMARKS

This is used to populate the reply to email address when using the email command. For more information, please see Email Command.

Subject

Email subject

- Defined by global: #OOFPDF1.SUBJECT
- Required or optional: optional
- Maximum size: 80 bytes
- Default value: none

REMARKS

This is used to populate the email subject line when using the email command. For more information, please see Email Command.

Body

Email body

- Defined by global: #OOFPDF1.BODY
- Required or optional: optional
- Maximum size: 255 bytes
- Default value: none

REMARKS

This is used to populate the email body when using the email command. For more information, please see Email Command.

Email Command

Email command line used to send the .pdf file as an email attachment.

- Defined by global: #OOFPDF1.EMAIL_CMD
- Required or optional: optional
- Maximum size: 255 bytes
- Default value: none

REMARKS

The contents of #OOFPDF1.EMAIL-CMD will only be executed when #OOFPDF1.ENABLE-EMAIL = "Y".

When Command(1,7)="METHOD " it is assumed that what follows is the name of the method to be called. For example to call a custom method named MYEMETH set Command = "METHOD MYEMETH".

The CALL list for the method is MSG\$[ALL]. MSG\$[1] will contain the full .pdf file name including path.

The Method is executed after the .pdf file is created or after the Post Save Method is executed.

No other email command processing will be done.

When Command(1,7)<>"METHOD" it is assumed that what follows is any valid email command line argument.

The email command line argument supports \$variables. Immediately before the command line argument is executed the \$variables are replaced with the current values from the global format #OORPDF1.

The following is an example of an email command line defined in the Settings and Options screen:

```
/usr/lib/basic/sendattach.sh -t $TO -c $CC -f $FROM -s $SUBJ  
-m $MSG -u $FILE
```

The following is an example of the same email command line after Report-IV to PDF has replaced the \$variables with their corresponding values from #OOFPDF1:

```
/usr/local/bin/sendattach.sh -t cust@company.com -f tbred@tbred.com  
-s "attached pdf file" -m "Please see attached pdf file"  
-u /public/PDFDocs/MYPDFFILE.pdf
```

The Linux version of Report-IV to PDF is shipped with a shell script sendattach, which uses sendmail. It is assumed that the shell script will be installed in /usr/lib/basic. If not the default email command must be modified to include the correct path to sendattach.sh.

The default email command is:

```
/usr/lib/basic/sendattach.sh -t $TO -c $CC -f $FROM -s $SUBJ  
-m $MSG -u $FILE
```

The command includes the required path and **DOES NOT** include ".". Do not enter "." in front of the path.

Supported email switches are:

- t to email address
- f from email address
- c cc email address
- r reply to address
- s subject line
- m body message
- u uuencode
encoding
- b base64 encoding
- n no encode

Supported email \$variables are:

Variable	Substitution value
\$FILE	#OOFPDF1.PDF-RPT-NAME
\$SUBJ	#OOFPDF1.SUBJECT
\$MSG	#OOFPDF1.BODY
\$TO	#OOFPDF1.EMAIL-ADDR
\$FROM	#OOFPDF1.EMAIL-FROM
\$CC	#OOFPDF1.EMAIL-CC
\$REPLY	#OOFPDF1.EMAIL-REPLY

Enable Fax

When enabled, the FAX-CMD will be executed. When disabled the FAX-CMD will not be executed.

- Defined by global: #OOFPDF1.ENABLE-FAX
- Required or optional: optional
- Maximum size: 1 Y/N
- Default value: disabled

REMARKS

Use the enable or disable setting to avoid having to clear and then reset the fax command line. For more information, please see Fax Command.

Fax From Name

Fax from address

- Defined by global: #OOFPDF1.FAX-FROMNAME
- Required or optional: optional
- Maximum size: 30 bytes
- Default value: none

REMARKS

This is used to populate the fax from name when using the fax command line. For more information, please see Fax Command.

Fax From Company Name

Fax from company name

- Defined by global: #OOFPDF1.FAX-FROMCOMPANY
- Required or optional: optional
- Maximum size: 30 bytes
- Default value: none

REMARKS

This is used to populate the fax from company name when using the fax command line. For more information, please see Fax Command.

From Fax Number

Fax from number

- Defined by global: #OOFPDF1.FAX-FROMFAXNUMBER
- Required or optional: optional
- Maximum size: 25 bytes
- Default value: none

REMARKS

This is used to populate the fax from number when using the fax command line. For more information, please see Fax Command.

From Voice Number

Fax from voice number

- Defined by global: #OOFPDF1.FAX-FROMVOICENUMBER
- Required or optional: optional
- Maximum size: 25 bytes
- Default value: none

REMARKS

This is used to populate the fax from voice number when using the fax command line. For more information, please see Fax Command.

Fax Subject

Fax subject

- Defined by global: #OOFPDF1.FAX-SUBJECT
- Required or optional: optional
- Maximum size: 25 bytes
- Default value: none

REMARKS

This is used to populate the fax subject when using the fax command line. For more information, please see Fax Command.

Fax Message

Fax message

- Defined by global: #OOFPDF1.FAX-MESSAGE
- Required or optional: optional
- Maximum size: 255 bytes
- Default value: none

REMARKS

This is used to populate the fax message when using the fax command line. For more information, please see Fax Command.

Fax Command

Fax command line used to fax the .pdf file.

- Defined by global: #OOFPDF1.FAX
- Required or optional: optional
- Maximum size: 255 bytes
- Default value: none

REMARKS

The contents of FAX-CMD will only be executed when #00FPDF1.ENABLE-FAX = "Y".

When Command(1,7)="METHOD " it is assumed that what follows is the name of the method to be called. For example to call a custom method named MYFMETH set Command = "METHOD MYFMETH".

The CALL list for the method is MSG\${ALL}. MSG\${1} and will contain the full .pdf file name including path.

The Method is executed after the .pdf file is created, after the Post Save Method is executed, or after the email command is executed.

No other fax command processing will be done.

When Command(1,7) <> "METHOD" it is assumed that what follows is any valid fax command line argument.

The fax command line argument option supports \$variables. Immediately before the command line is executed the \$variables are replaced with the current values from the global format #00FPDF1.

The following is an example of a fax command line for VSI*FAX defined in the Settings and Options screen:

```
/usr/vsifax/bin/vfx -n $FTFN -U $FFNM $FILE
```

The following is an example of the same fax command line after Report-IV to PDF has replaced the \$variables with their corresponding values from #00FPDF1:

```
/usr/vsifax/bin/vfx -n 7325601594 -U TSI MYFILE.pdf
```

The command includes the required path and DOES NOT include ".". Do not enter "." in front of the path.

Supported fax \$variables are:

Variable	Substitution
\$FILE	PDF-RPT-NAME
\$SUBJ	SUBJECT
\$MSG	BODY
\$FTFN	FAX-TOFAXNUMBER
\$FTNM	FAX-TONAME
\$FTCO	FAX-TOCOMPANY
\$FFNM	FAX-FROMNAME
\$FFCO	FAX-FROMCOMPANY
\$FFFN	FAX-FROMFAXNUMBER
\$FFVN	FAX-FROMVOICENUMBER

Save and Security Settings

Note: At this time, this option is not supported on the Windows or the VMS operating systems.

The Save and Security Settings allows you to configure save directories and optional security settings for PDF files by Report-IV definition name. This is done using a combination of a User Access ID (OPENworkshop security group or IDOL-IV Operator Code), a Report ID and a Save Directory.

When PDF is selected as the output device, a table lookup will be performed attempting to match the user to the full report name. If a match cannot be found, the last character of the report name is removed and the lookup is repeated using LIKE logic. For example the first lookup would test LIKE "OERCUST". If a match was not found, the next lookup would test LIKE "OERCUS*". This is repeated until either a match is found or match cannot be found. If a match cannot be found, the operator will not be allowed to generate the .pdf file and a security error will be displayed.

Example using OPENworkshop security groups:

User Access ID	Report ID	Save Directory
100	OER	/usr/lib/PDFOut
102	OERCUST	/usr/lib/PDFOut/PDF999
2001	AP	/usr/lib/PDFOut/PDFAP
2002	AP	/usr/lib/PDFOut/PDFAP
2002	AR	/usr/lib/PDFOut/PDFAR

In the above example, members of group 100 can generate PDF files for any report that begins with OER except OERCUST. Only members of group 102 can generate a PDF file for report OERCUST. The PDF for report OERCUST will be saved in /usr/lib/PDFOut/PDF999. All other reports beginning with OER will be saved in /usr/lib/PDFOut.

Members of groups 2001 and 2002 can generate any report in the AP library. All AP reports will be saved in /usr/lib/PDFOut/PDFAP.

Only members of group 2002 can generate reports in the AR library. All AR reports will be saved in /usr/lib/PDFOut/PDFAR.

To define save locations without any security settings, simply leave the User Access ID blank.

User Access ID	Report ID	Save Directory
	OE	/usr/lib/PDFOut/PDFOE
	AP	/usr/lib/PDFOut/PDFAP
	AR	/usr/lib/PDFOut/PDFAR

In the above example all OE* reports will be saved in the PDFOE directory, all AP* reports will be saved in the PDFAP directory, and all AR* reports will be saved in the PDFAR directory.

The Save and Security Settings can be accessed at any time from the main OPENworkshop menu. Select **Utilities**, select **Report-IV to PDF Utilities**, then select **Save and Security Settings**. When selected the configuration view will display.

00YPDF4 > Save Directory and Security Settings <			
User Access ID	Report ID	Save Directory	Description
2001	AP	/usr/lib/PDFOut/PDFAP	Restricted to AP
2002	AP	/usr/lib/PDFOut/PDFAP	Restricted to AR
2002	AR	/usr/lib/PDFOut/PDFAR	Restricted to AR
100	OER	/usr/lib/PDFOut	Restricted to gro
102	OERCUST	/usr/lib/PDFOut/PDF999	Restricted to gro

Initially your view will be empty. Use standard OPENworkshop View functions to maintain the Save Directory and Security Settings view: add a row to create a new entry, delete a row to delete an entry, modify column data to change the values.

User Access ID

The User Access ID code is used in combination with the Report ID to control which users can generate the corresponding PDF file. Leave this blank to give all users access.

The User ID can be either a 3 character IDOL-IV operator code or an OPENworkshop security group, from 1-6 characters in length.

OPENworkshop security groups and IDOL-IV operator codes should not be mixed, only one methodology should be used. If OPENworkshop security is active, the security group methodology will be used. If not active, the IDOL-IV operator code methodology will be used.

Report ID

The Report ID is used in combination with the User Access ID to control which users can generate the corresponding PDF file. The Report ID can be from 1 to 8 characters. LIKE logic is applied when matching Report ID to User Access IDs. Entering "OE" for a Report-IV definition name is equivalent to LIKE "OE*".

Save Directory

Enter the full path to the directory where the PDF file is to be saved. If none is supplied, the default path defined in the Settings and Options screen will be used.

All directories must have the same root directory. The root directory must be the default save path defined in the Settings and Options screen (#OOFPDF1.RPT-PATH). Assuming #OOFPDF1.RPT-PATH is set to “/usr/lib/PDFOut”, the following save directories are valid:

```
/usr/lib/PDFOut  
/usr/lib/PDFOut/PDFAP  
/usr/lib/PDFOut/PDFAR
```

Description

Optional description. This is for system administrative purposes only, this is not used when generating PDF files.

Important: To activate this feature set the default value of #OOFPDF1.SAVE-CONFIG to “Y”. If this is not set, all users will be able to generate any PDF file and all PDF files will be saved to the default directory defined on the Settings and Options screen. This can be set at run time or can be set by modifying the data element preset value using Format maintenance.

USING REPORT-IV TO PDF

Note: The following does not apply to the 3GL wrapper. Please see the 3GL wrapper section in this document.

Runtime Settings and Options

If you are running OPENworkshop the system will determine if #OOFPDF1 has been initialized. If #OOFPDF1.INIT-FLAG <> "1", then the global format will be populated using the Settings and Options values.

If you are **not** running OPENworkshop (or IDOL-IV) you must call OORPDF02 to initialize #OOFPDF1 before accessing Report-IV to PDF. This can be done in a start up program by making the following call:

```
DIM PDF$[1];           ! Dim array
CALL "OORPDF02",PDF$[ALL] ! Call method to init globals
```

Some of the values for the data elements in global format #OOFPDF1 can be modified at run time. This is useful if you need to override the default settings.

For example when OPENworkshop is run, #OOFPDF1.POST-SAVE-METHOD is set to the default value for the Post Save Method defined in the Settings and Options screen. If a particular report requires a different Post Save Method you can override the default value for #OOFPDF1.POST-SAVE-METHOD in your application code.

```
LET DFLTMN$ = #OOFPDF1.POST-SAVE-METHOD,           ! save the default
#OOFPDF1.POST-SAVE-METHOD = alternate_method_name ! override the default
CONNECT REPORT report_name                          ! execute the report
LET #OOFPDF1.POST-SAVE-METHOD = DFLTMN$            ! restore the default
```

Once changed, the default values will not be reset until the global format is initialized. Depending upon your application, it may be necessary to restore the default values in your application code by CALLing OORPDF02 to initialize the global format.

```
DIM PDF$[1];           ! Dim array
CALL "OORPDF02",PDF$[ALL] ! Call method to init globals
```

In addition to the values defined on the Settings and Options screens there are several other global settings in #OOFPDF1 that can be manipulated at run time. Only the global data elements documented in this manual should be modified. All others are for internal use only. Changing these could cause the conversion to fail or produce undesired results.

#OOFPDF1.PDF-RPT-NAME

The name of the .pdf file. Before the conversion process has completed, #OOFPDF1.PDF-RPT-NAME will contain the name of the temporary text file with a file extension of .txt1 instead of .pdf.

If this field is not set prior to executing a CONNECT REPORT a default file name will be created using the following convention:

- (1,8) Report-IV definition name padded to 8 bytes using the "-" character.
- (9,20) Create date and time YYYYMMDDHHMISSSSSSSS
- (29,3) Operator code
- (32,4) File extension (.pdf).

#OOFPDF1.FAX-TOFAXNUMBER

The fax to phone number.

#OOFPDF1.FAX-TONAME

The fax to name.

#OOFPDF1.FAX-TOCOMPANY

The fax to company name.

#OOFPDF1.EMAIL-ADDR

One or more send email addresses. The format will vary depending upon the email software being used. For example:

emp1@tbred.com, emp2@tbred.com, emp3@tbred.com

#OOFPDF1.EMAIL-CC

One or more carbon copy (CC) email addresses.

#OOFPDF1.INIT-FLAG

Setting INIT-FLAG = " " (\$20\$) will force #OOFPDF1 to be initialized to all default values the next time Report-IV to PDF is selected as the output device.

#OOFPDF1.BACKPG

Contains the background .pdf file name.

Background .pdf files function as overlays or templates. When a .pdf file is created the contents of a background .pdf is layered with the Report-IV output. Using this technique, Report-IV to PDF can be used to print forms or print logs on reports.

To use this feature, set the name of the background .pdf file prior to executing a CONNECT REPORT report_name.


```

FORMAT INCLUDE #OOFPDF01,OPT="NONE"

LET #OOFPDF01.BACKPG = "BkpgExample.pdf"

CONNECT REPORT "MY_REPORT"
    
```

In the following example a Thoroughbred invoice was scanned and saved as a .pdf file. That .pdf file was used as a .pdf background when printing Invoices to the Report-IV to PDF converter.



(732) 560-1377 FAX: (732) 560-1594

CUSTOMER INVOICE

Customer Code:	100105	Invoice Nbr:	000006
Customer PoNbr:	0000285	Invoice Date:	06/11/07
Order Number:	5600285		
Shipped Via:	FedEx		

Invoice To: Lumber Inc. Walter Snider Big Horn ND 35231 701 632-5400	Remit To: Thoroughbred Software International, Inc. Attn: Accounts Receivable 285 Davidson Avenue, Suite 302 Somerset, NJ 08873-4153
---	---

Inv. Lin Nbr	Product Code	Description	Qty.	Unit Price	Price Extension
01	10-100-000	Little nails	6	2.00	7.20
02	10-100-010	Big nails	6	5.00	18.00
03	10-100-020	Bigger nails	6	6.00	21.60
04	10-100-030	Huge nails	6	8.00	28.80
05	20-100-000	Little hammer	6	8.00	28.80
06	20-100-010	Big hammer	6	18.00	64.80
07	20-100-020	Bigger hammer	6	30.00	108.00
08	20-100-030	Huge hammer	6	50.00	180.00
09	30-100-000	Little saw	6	12.00	43.20
10	30-100-010	Big saw	6	20.00	72.00
11	30-100-020	Bigger saw	6	40.00	144.00
12	30-100-030	Huge saw	6	120.00	432.00
					\$1,914.00

Past due invoices are subject to 1 1/2% monthly finance charge.

Please Pay Last Amount Shown Above

White: Customer Green: Remittance Yellow: File Pink: Accounting Gold: Sales

In addition to setting the background .pdf file name, the full path to the background .pdf file must be set. See Settings and Options, #OOFPDF1.BACKPG-PATH.

This option is not available on OpenVMS.

#OOFPDF1.LEFT-MARGIN

The setting for the left margin in inches. The default value is .50. Defined as numeric, 5.2.

#OOFPDF1.RIGHT-MARGIN

The setting for the right margin in inches. The default value is .50. Defined as numeric, 5.2.

#OOFPDF1.LINE-SPACE

The space between lines. This is always in points 1/72 of an inch. The default value is 2. Defined as numeric, 3.0. Setting this must be done prior to executing a CONNECT REPORT or CALLing OOR and can be done using a Pre Convert Method, it cannot be set in the I section of a Report-IV definition.

#OOFPDF1.FONT-FACE

The font face name. The default value is Courier. Defined as string, 30. This is intended primarily for international customers (Chinese, Japanese, and Korean). Setting this must be done prior to executing a CONNECT REPORT or CALLing OOR and can be done using a Pre Convert Method. For a list of supported fonts see the *Overview, Fonts and Formatting* section of this manual.

#OOFPDF1.FONT-SIZE

The font size. The default font size is based on the Report-IV width (#OOFRPRT.RPRT-WIDTH). Defined as string, 2. Setting this must be done prior to executing a CONNECT REPORT or CALLing OOR and can be done using a Pre Convert Method, it cannot be set in the I section of a Report-IV definition. For a chart of report widths and corresponding font sizes see the *Overview, Fonts and Formatting* section of this manual.

#OOFPDF1.LINES-PER-PAGE

The lines-per-page value. The default lines-per-page is based on the report width and the default font size. Defined as string, 3. Setting this must be done prior to executing a CONNECT REPORT or CALLing OOR and can be done using a Pre Convert Method, it cannot be set in the I section of a Report-IV definition. For a chart of report widths and corresponding lines per page see the *Overview, Fonts and Formatting* section of this manual.

#OOFPDF1.ORIENTATION

The page orientation; portrait or landscape. The default orientation is based on the report width and the default font size. Defined as string, valid values are "P" for portrait or "L" for landscape. When #OOFPDF1.ORIENTATION = "L", #OOFPDF1.PAGE-WIDTH and #OOFPDF1.PAGE-HEIGHT values will be swapped. Setting this must be done prior to executing a CONNECT REPORT or CALLing OOR and can be done using a Pre Convert Method, it cannot be set in the I section of a Report-IV definition. For a chart of report widths and corresponding page orientations see the *Overview, Fonts and Formatting* section of this manual.

#OOFPDF1.PAGE-WIDTH

The page width in inches. The default page width is based on the report width and the default font size. Defined as numeric, 7.3. When #OOFPDF1.ORIENTATION = "L", #OOFPDF1.PAGE-WIDTH and #OOFPDF1.PAGE-HEIGHT values will be swapped. Setting this must be done prior to executing a CONNECT REPORT or CALLing OOR and can be done using a Pre Convert Method, it cannot be set in the I section of a Report-IV definition. For a chart of report widths and corresponding page orientations see the *Overview, Fonts and Formatting* section of this manual.

#OOFPDF1.PAGE-HEIGHT

The page height in inches. The default page height is based on the report width and the default font size. Defined as numeric, 7.3. When #OOFPDF1.ORIENTATION = "L", #OOFPDF1.PAGE-WIDTH and #OOFPDF1.PAGE-HEIGHT values will be swapped. Setting this must be done prior to executing a CONNECT REPORT or CALLing OOR and can be done using a Pre Convert Method, it cannot be set in the I section of a Report-IV definition. For a chart of report widths and corresponding page orientations see the *Overview, Fonts and Formatting* section of this manual.

#OOFPDF1.BARCODE-ENABLED

See the UPC Barcodes section of this manual for details.

#OOFPDF1.PDFSTR

The footer offset. Number of lines + or – to adjust the first footer row. Defined as numeric, 3.0(+or-). When using a background image it may be necessary to adjust the starting line for footers in order to achieve proper alignment with the background. Typically a negative value is required.

#OORPDF1.WEB-URL

Note: When using T-Connect it is not necessary to define a URL, the PDF file will automatically be opened in the browser when printing has completed. For more information please refer to the T-Connect Web Terminal Reference Manual.

Note: This option is only available on Linux with an Apache web server and requires TbredComm.

When set, PDF files can be opened in default browser on the local workstation.

Set this to the URL of the server where the PDF files are saved. This can be done at run time or can be set using Format maintenance by modifying the preset value of this data element.

Example WEB-URL settings:

```
http://www.mysite.com/PDFPublic  
http://999.999.999.99/PDFPublic
```

The option to open a PDF file in a browser is available from the PDF File log view by pressing **F3** on the desired PDF file name.

This can also be done programmatically by calling method OORPDF05. This method can be called at any time; it can be done as a standalone option in your application code, incorporated into a PDF email method, or in a PDF Post Save method.

Example OORPDF05 CALL:

```
CALL "OORPDF05",PDFX$[ALL]
```

```
PDFX$[0]="V"
```

“V” function indicates the PDF file is to be viewed in a browser

```
PDFX$[1]=pdf_file_name
```

Where pdf_file_name is the PDF file name to be viewed in a browser. No path is required, the PDF file must reside in the directory defined by #OORPDF1.WEB-URL.

```
DIM PDFX$[1];  
PDFX$[0]="V";  
PDFX$[1]="OERCUST.pdf";  
CALL "OORPDF05",PDFX$[ALL];
```

#OOFPDF1.SAVE-CONFIG

Enables or disable the save location rule. Defined as a Y/N field. Default value is N. When not “Y”, the standard PDF file save logic is used, saving the PDF file in the location defined by the Settings and Option screen. When “Y”, the PDF save rules defined by the Save and Security Settings configuration are used. See the Save and Security Settings section of this manual for more details.

#OOFPDF1.DEBUGGER

Enables or disable the PDF processing debugger. Defined as a Y/N field. Default value is N. When #OOFPDF1.DEBUGGER = "Y", debug information will be displayed on the screen. At key points in the conversion process, a window will be created and pertinent debug info will be displayed. This must be run attended as you will be prompted to press **Enter** to continue processing. Note: To some degree this has been available in the product but was never documented and was not easily enabled and disabled. This enhancement improves the debugging and makes it more accessible.

#OOFPDF1.TC-AUTO-LOAD

Only valid for T-Connect. Enables the PDF autoloading in the browser. Defined as a Y/N field. Default value is N. When #OOFPDF1.TC-AUTO-LOAD = "Y", PDF files will automatically be opened in the browser (based on browser settings).

UPC Barcodes

The barcode feature in Report-IV to PDF is font based. The Report-IV definition should contain the string characters that are to be converted to a barcode image. By manipulating fonts, the converted PDF file will contain the barcode image of those string characters.

In the I section of the Report-IV definition do `FORMAT INCLUDE #OOFPDF1,OPT="NONE"`.

Prior to executing a `CONNECT REPORT` or within the I section of a Report-IV definition, enable the barcode flag `#OOFPDF1.BARCODE-ENABLED = "Y"`. If this is not set, the barcode feature will not work.

Immediately before the D line containing the barcode value, create a formula field to set the PDF font face value to “3of9”:

```
/FIELD(35) = "<FONT FACE="+QUO+"3of9"+QUO+">"
```

To increase or decrease the size of the barcode image, use the `SIZE=` option:

```
/FIELD(35) = "<FONT FACE="+QUO+"3of9"+QUO+" SIZE=12>"
```

Print the data element containing the barcode string value then restore the normal PDF font. It is critical that you restore the current values for the PDF font and size:

```
/FIELD(35) = "<FONT FACE="+QUO+"courier"+QUO+"SIZE="+#OOFPDF1.FONT-SIZE-USED+">"
```

The above can be combined into a single formula:

```
/FIELD(52) = "<FONT FACE="+QUO+"3of9"+QUO+">" + CUST-CODE+"<FONT FACE="+QUO+"courier"+QUO+ " SIZE="+ #OOFPDF1.FONT-SIZE-USED+">"
```

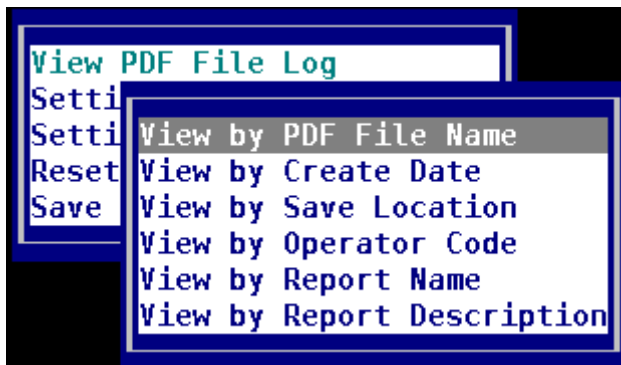
The barcode image will occupy more than 1 line in the PDF, Report-IV can only count the 1 line used for the barcode string value. Print the appropriate number of blank D lines to accommodate the barcode image height. Use /LC to adjust the line count accordingly.

Thoroughbred does not supply the barcode font but does recommend the 3of9 barcode font.

PDF Log View

The PDF file log is updated automatically each time a PDF file is created. If files are moved, renamed or deleted manually the log file will not be in sync with the directory contents. Deleting and renaming PDF files should be done from the PDF file log to keep the log file and the directory contents in sync.

From the **Report-IV to PDF Utilities** menu select the **View PDF files** and the following menu will display:



Select one of the View options and the PDF log will be displayed.

```
<F1> Email PDF File <F2> Fax PDF File <F3> Display PDF in Browser
00VPDF2 > Rpt to PDF Log View <
```

PDF File Name	Report-IV Name	Report-IV Description	PDF Create YYYY/MM/DD	PDF Create HH:
OERINVN-20131120162259000448tsi	OERINVN	Sample System - Inven	2013/11/20	16:
OERCUST-20131120162251000672tsi	OERCUST	Sample System - Custo	2013/11/20	16:
OERINVN-20131120162156000160tsi	OERINVN	Sample System - Inven	2013/11/20	16:
OERCUST-20130923152358000128dmd	OERCUST	Sample System - Custo	2013/09/23	15:
OERCUST-20130703154936000480tsi	OERCUST	Sample System - Custo	2013/07/03	15:

The view contains the following columns:

- PDF file name.
- Report-IV definition name.
- Report-IV definition description.
- Date the PDF file was created in YYYY/MM/DD format.
- Time the PDF file was created
- Save directory for the PDF file.
- Operator code.
- User Access ID.

Delete an archived .pdf file

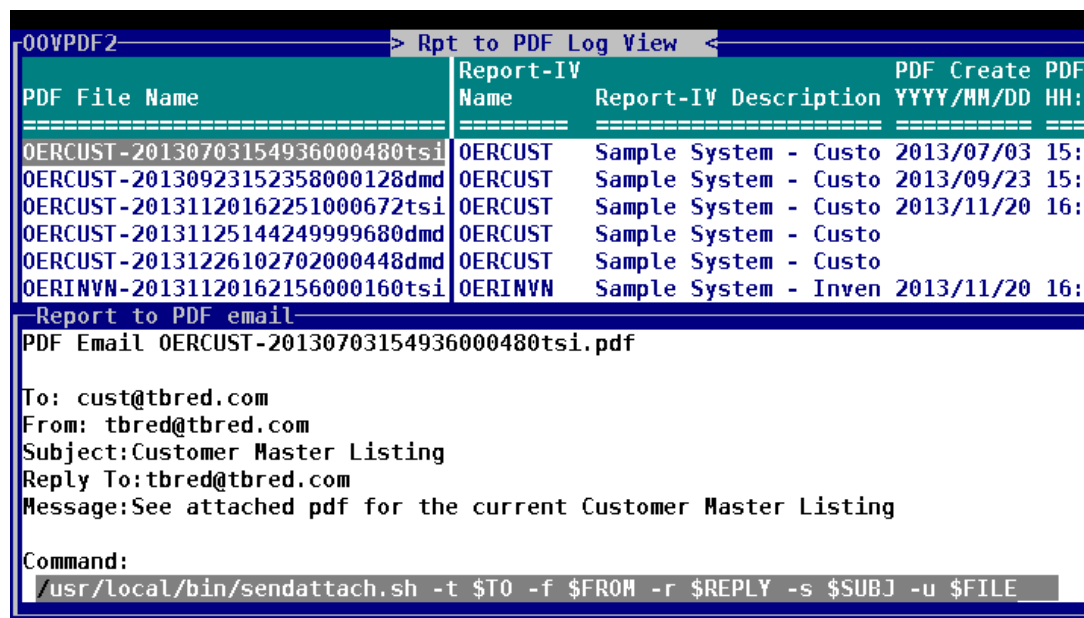
Scroll to the file to be deleted and enter the appropriate keystroke(s) for **Line-Del**. This will delete the entry from the log file and remove the .pdf file from the directory of saved .pdf files (#OOPDF1.RPT-PATH).

Rename an archived .pdf file

Scroll to the file name, press **Enter** and type in the new file name. This will rename the file in the log and rename the file in the directory of saved .pdf files (#OOPDF1.RPT-PATH).

Email a .pdf file

Scroll to the file name, press **F1** and the email command screen will be displayed.



The screenshot shows a terminal window with a title bar that reads "00VPDF2" and a menu bar with "> Rpt to PDF Log View <". Below the menu bar is a table with the following columns: "PDF File Name", "Report-IV Name", "Report-IV Description", and "PDF Create PDF YYYY/MM/DD HH:". The table contains six rows of data:

PDF File Name	Report-IV Name	Report-IV Description	PDF Create PDF YYYY/MM/DD HH:
OERCUST-20130703154936000480tsi	OERCUST	Sample System - Custo	2013/07/03 15:
OERCUST-20130923152358000128dmd	OERCUST	Sample System - Custo	2013/09/23 15:
OERCUST-20131120162251000672tsi	OERCUST	Sample System - Custo	2013/11/20 16:
OERCUST-20131125144249999680dmd	OERCUST	Sample System - Custo	
OERCUST-20131226102702000448dmd	OERCUST	Sample System - Custo	
OERINVN-20131120162156000160tsi	OERINVN	Sample System - Inven	2013/11/20 16:

Below the table, the terminal displays "Report to PDF email" and "PDF Email OERCUST-20130703154936000480tsi.pdf". The email details are as follows:

To: cust@tbred.com
From: tbred@tbred.com
Subject: Customer Master Listing
Reply To: tbred@tbred.com
Message: See attached pdf for the current Customer Master Listing

Command:
usr/local/bin/sendattach.sh -t \$TO -f \$FROM -r \$REPLY -s \$SUBJ -u \$FILE

Enter the required information to send the .pdf file as an email attachment. The current value of #OOFPDF1.EMAIL-CMD will be used as the default command line argument. This can be modified before sending the email. The \$variables will automatically be replaced with the appropriate values from #OOFPDF1 after a response of **Y** to the Send (Y/N) prompt. For more information see Configure Settings and Options, email Command Line section of this manual.

Fax a .pdf file

Scroll to the file name, press **F2** and the fax command screen will be displayed. The fax screen is similar to the email screen. Enter the required fields and respond **Y** to the Send (Y/N) prompt. For more information see Configure Settings and Options, Fax Command Line section of this manual.

Display PDF in Browser

This option is available when using T-Connect or when using TbredComm with Linux and an Apache web server.

Scroll to the file name, press **F3** and the PDF file will be opened in the default browser on the local workstation.

For more information see #OOFPDF1.WEB-URL.

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Sample System - Customer Listing

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Cust Code	Contact	Name	City	St	SR	Sales
100100	Tex Rogers	Toot-Your-Horn	Port Lavaca	TX	AF	15,827.00
100101	David Kelly	Fix-M-Up	Seadrift	TX	HP	16,253.36
100102	Sue Thompson	Computer Inc.	Madison	NJ	JJ	16,628.04
100103	Robert Brock	Today's Company	Bridgewater	NJ	JS	16,951.04
100104	Sarah Smith	ACME Inc.	Dayton	NJ	AF	17,222.36
100105	Walter Snider	Lumber Inc.	Big Horn	ND	HP	17,442.00
100106	Dennis Gohlke	OK Development	Port Lavaca	TX	JJ	17,609.96
100107	John Dworaczyk	Memory Lanes	Victoria	TX	JS	10,310.16
ZZZZZ1	TEMP CUST1	TEMP CUST1	Port Lavaca	TX	Z1	13,759.80
ZZZZZ2	TEMP CUST2	TEMP CUST2	Port Lavaca	TX	Z2	13,226.85
ZZZZZA	TEMP CUSTA	TEMP CUSTA	Port Lavaca	TX	JJ	15,135.78
ZZZZZZ	Deleted custs	Deleted custs			ZZ	.00

						170,366.35

Reset Globals

From the **Report-IV to PDF Utilities** menu, select the **Reset Global** option to reset the #OOFPDF1 based on the default values saved in Settings and Options. This will prompt you to confirm the action before the default values are restored.

Resetting the global #OOFPDF1 can also be achieved using several other techniques:

1. To reset to all default values without any user prompts and with error messages:

```
DIM PDFX$[1];
CALL "OORPDF02", PDFX$[ALL]
```

2. To reset to all defaults values with a confirmation prompt:

```
DIM PDFX$[1];
PDFX$[1]="r";
CALL "OORPDF02", PDFX$[ALL]
```

3. To reset to all defaults values in silent mode; no prompts, no error messages:

```
DIM PDFX$[1];
PDFX$[1]="S";
CALL "OORPDF02", PDFX$[ALL]
```

4. Set #OOFPDF1.INIT-FLAG = ". This will force the #OOFPDF1 to be reset to default values the next time Report-IV to PDF is selected for output.

EXAMPLES – REPORT-IV

Note: The following does not apply to the 3GL wrapper. Please see the 3GL wrapper section in this document.

Example 1

The following Method will set the .pdf file name in the Report-IV to PDF global before performing a CONNECT REPORT to OERCUST.

PROCEDURE

```
FORMAT INCLUDE #OOFPDF1,OPT="NONE";! Include pdf global
#OOFPDF1.PDF-RPT-NAME = "OERCUST"+ ! Override default
                #IDSV.OPERATOR-CODE+ ! pdf file name
                #IDSV.FILE-SUFFIX;
DIM REPORT$(2);                ! Dim array for report
REPORT$(1)="OERCUST";          ! Set Report-IV name
CALL "OOR",REPORT$(ALL);       ! Execute Connect Report
#OOFPDF1.PDF-RPT-NAME="";      ! Clear pdf file name
GOTO CUEXIT                    ! Do standard method exit logic
```

Example 2

The following Script will set email options. After the report is converted to a .pdf file and saved it will be emailed as an attachment.

MAINLINE

```
FORMAT INCLUDE #OOFPDF1,OPT="NONE"      ! Include pdf global
LET PDFGLOBAL$=#OOFPDF1,                ! Save settings
#OOFPDF1.ENABLE-EMAIL="Y",              ! Enable email option
#OOFPDF1.EMAIL-ADDR="cust@tbred.com",    ! Set to address
#OOFPDF1.EMAIL-FROM="tbred@tbred.com",  ! Set from address
#OOFPDF1.SUBJECT="Customer Master list",! Set subject line
#OOFPDF1.BODY="see attached pdf",        ! Set body text
#OOFPDF1.EMAIL-REPLY="tbred@tbred.com"; ! Set reply to
CONNECT REPORT "OERCUST";                ! Connect to report OERCUST
LET #OOFPDF1=PDFGLOBAL$                  ! Restore global clearing email ops
```

TERMINATE

Example 3

The following Post Save Method will rename the default .pdf file then display it using Adobe Reader, the default application for the .pdf file extension. For more information on the 'OB' and 'OE' mnemonics please refer to the TbredComm or the TS Environment for Windows manuals.

PROCEDURE

```
FORMAT INCLUDE #OOFPDF1,OPT="NONE";
OLDPDF$=MSG$[1];
NEWPDF$=#OOFPDF1.RPT-PATH+"\CustomerList.pdf";
CMD$="MOVE "+OLDPDF$+" "+NEWPDF$;
SYSTEM CMD$;
WINDOW CREATE (80,2,1,0);
PRINT 'OB',NEWPDF$,'OE';
WINDOW POP;
GOTO CUEXIT
```

Example 4

The following Pre Convert Method will validate the selection of the converter as an output device, set the pdf path and file name. This method is executed immediately after the user has selected the printer configured for the Report-IV to PDF converter.

A CALL to OORPDF02 is done to initialize the global format #OOFPDF1 to default settings.

If the report about to be converted is in the "XX" library, an error condition will be returned and the user will be prompted to reselect a printer.

If the report is not in the "XX" library, the path for saved pdf files will be set to default output path and a subdirectory matching the file suffix, the pdf file name will be set to the system date + report name.

PROCEDURE


```
FORMAT INCLUDE #OOFPDF1,OPT="NONE";           ! Include global format
DIM MSG1$[1];                                 ! Dim array
CALL "OORPDF02",MSG1$[ALL];                   ! Call OORPDF02 to init global
IF PDFC$[1](1,2)="XX"                         ! If report is in XX library
    PDFC$[0]=" "                               ! Set error condition
ELSE                                           ! Else
    PDFC$[0]=".",                             ! Set no error
    #OOFPDF1.RPT-PATH =                       ! Set pdf output path
        CVT(#OOFPDF1.RPT=PATH,128)+          ! to default plus the
        PDFC$[5],                             ! current file suffix
    #OOFPDF1.PDF-RPT-NAME =                   ! Set pdf file name to
        PDFC$[1] + PDFC$[4]                 ! report name and day
FI;                                           ! Endif
GOTO CUEXIT                                   ! Standard method exit
```


Example 5

The following Method will use a background .pdf file, to overlay a company logo, adjust the left margin to .40, and set the font size to 11.

PROCEDURE

```
FORMAT INCLUDE #OOFPDF1,OPT="NONE";
#OOFPDF1.BACKPG="BackgroundLogo.pdf",
#OOFPDF1.LEFT-MARGIN = .40,
#OOFPDF1.FONT-SIZE = "11";
DIM RPT$(1);
RPT$(1)="OERCUST";
CALL "OOR",RPT$(ALL);
GOTO CUEXIT
```


Thoroughbred Software International

OE-RCUST	Sample System - Customer Listing	Page: 1
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Cust Code	--- Contact ---	----- Name -----	----- City ----	St SR	-- Sales --
100100	Tex Rogers	Toot-Your-Horn	Port Lavaca	TX AP	18,335.10
100101	David Kelly	Fix-M-Up	Seadrift	TX HP	18,829.30
100102	Sue Thompson	Computer Inc.	Madison	NJ JJ	19,263.66
100103	Robert Brock	Today's Company	Bridgewater	NJ JS	19,637.36
100104	Sarah Smith	ACME Inc.	Dayton	NJ AP	19,952.00
100105	Walter Snider	Lumber Inc.	Big Horn	ND HP	20,007.24
100106	Dennis Gohlke	OK Development	Port Lavaca	TX JJ	20,400.82
100107	John Dworaczyk	Memory Lanes	Victoria	TX JS	11,943.78
ZZZZZ1	TEMP CUST1	TEMP CUST1	Port Lavaca	TX Z1	15,940.80
ZZZZZ2	TEMP CUST2	TEMP CUST2	Port Lavaca	TX Z2	15,322.86
ZZZZZA	TEMP CUSTA	TEMP CUSTA	Port Lavaca	TX JJ	17,534.88
ZZZZZZ	Deleted custs	Deleted custs		ZZ	.00
					----- 197,167.80

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Example 6

The following Report-IV definition will print a barcode.

```
ENTRY-SECTION
I101  FORMAT INCLUDE #OOFPDF1,OPT="NONE"
I102  LET #OOFPDF1.BARCODE-ENABLED = "Y"    !enable barcode processing
FILE-SECTION
LN      OELCUST
CONTROL-SECTION
REPORT-SECTION
H
H      LL-RRRRRR      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Page
>      A              B
H      MM/DD/YY
HH:M
>      C                                  D
H      -----      -----
---
D
D      XXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
>      E          F
D      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
>      G
D      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
>      H
D      XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XX XXXXXXXXXXXXXXX
>      I              J  K
D
D
```

D
??

> L

D

DC LET LCOUNTER = /LC; LET LC=LCOUNTER + 4

Formulas:

A - /R

B - /r

C - /D

D - /T

E - CUST-CODE

F - CUST-NAME

G - CUST-CONTACT

H - CUST-ADDRESS

I - CUST-CITY

J - CUST-STATE

K - CUST-ZIP

L - /FIELD(78) = "<FONT FACE="+QUO+"3of9"+QUO+
" SIZE=10">"+
CUST-CODE +
"<FONT FACE="+QUO+"courier"+QUO+
" SIZE="+
#OFPDF1.FONT-SIZE-USED+">"

3GL Wrapper

The 3GL wrapper is a Method (OORPDFX) that serves as an interface between 3GL application code and the PDF converter.

The 3GL application code must generate the plain text file. Each row of the text file should correspond to a row in the PDF output, with data padded appropriately to achieve the desired result.

The file cannot contain any printer escape sequences.

Once the text file has been generated, OORPDFX can be called to convert the text file to PDF format.

Most options are passed to OORPDFX in the form of arguments however font and some formatting options should be embedded in the text file itself. The font face, size and PRE commands must be the first line of the text file.

```
<FONT FACE=font_name SIZE=font_size><PRE PLAIN>
```

Valid font names and sizes are documented in the Overview section of this manual.

PRE Specifies the text is preformatted and existing line breaks (ASCII 10) and form feeds (ASCII 12) should be used. Use the "Plain" option for faster processing when you don't want the program to line break at the right margin.

OORPDFX PDFX\$[ALL]

PDFX\$[0] On CALL

(1,1) " " (blank) – The system command for conversion is done using SYSTEM STMT\$
"S" – Shell. The system command will be done using OPT="SHELL". This is Linux only.

(2,3) WAIT value. Time to wait after system command is issued

(5,3) Shell channel. Optional channel number to use when (1,1)="S"

A supplied shell channel will not be closed. This is useful when calling program wants to READ shell for system error messages or prompts. If not supplied, shell channel will be closed. This is useful when want to hide all system prompts/messages from user. **Note:** This will also hide the prompt "file exists overwrite?".

PDFX\$[0] On EXIT (Set by OORPDFX).

“.” Is returned if the conversion to PDF was successful.

"ERR: "+STR(ERR) in the case of an error.

PDFX\$[1] Set by the calling program.

Contains the full system argument for the converter, spaces are required syntax:

```
path_to_converter+"rpt4pdf"+" "full_text_file_name+" "full_pdf_output_file_name+" "
```

"argument_string

path_to_converter

Supply the full path to the pdf converter (rpt4pdf).

text_file_name

Supply the full path to the text file to be converted.

pdf_output_file_name

Supply the full path for the pdf file to be created.

argument_string

Run time arguments. Supported arguments:

- align : Text alignment, valid values are L R C or J
- bm : Bottom margin value. Default is .5 inches.
- imoff : Required Linux, Unix and SCO.
- lm : Left margin. Default is .5 inches.
- lnspace : Line space value in points (1/72 of an inch). Default is 2.
- pageh : Page height in inches. Default is 11 inches.
- pagetxfont face, number : Font face and point size.

Example: -pagetxfont times,9

Must be one of the supported font name and point sizes. See <PRE PLAIN> documented earlier in this document.

- pagew : Page width in inches. Default is 8.5 inches.
- pdf : PDF image name. The optional name of a background image (saved as a .pdf) that will be layered with the pdf output. This can be used to apply a company logo to the output.
- rm : Right margin. Default is .5 inches.
- tm : Top margin. Default is .5 inches.

Example:

```
TEXT "myfile.txt",3,0;
X=UNT;
OPEN(X,OPT="TEXT")"myfile.txt";
LET R1$="<FONT FACE=courier SIZE=10><PRE PLAIN>";
WRITE (X) R1$;
```

* write report output to text file, when done convert to PDF

```
DIM PDFX$[1];

LET PDFX$[1]="/user/lib/basic/PDFConverter/rpt4pdf"+
" user/lib/basic/WORK/myfile.txt"+
" /shares/PDFOut/myfile.pdf -imoff -pagew 8.5 -pageh 11";

CALL "OORPDFX", PDFX$[ALL];
```