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*PDF Report Writer Lite*  
*Documentation*

*FyTek, Inc.*

Web site: <http://www.fytek.com>

## **FyTek's PDF Report Writer Lite**

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### **Acknowledgments**

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## Introduction

PDF Report Writer Lite has many features to make creating reports in PDF as easy as using HTML. You can focus on your content without worrying about how much text will fit on a page or when to page break. This document describes the commands available and how to go about arranging them to produce a report in PDF (Portable Document Format).

## Reports

A report as defined by this document is a collection of pages in a single PDF file. Each report page may have up to three sections - a header, body and footer. The header and footer are repeated on each page for as many pages that the body of the report takes. The contents of the body will wrap across as many pages as necessary to fit all of it. The software will automatically calculate the number of pages needed and create the minimum number necessary to hold all of the content.

The layout when using headers, footers and a body is to issue the PAGE command followed by the HEADER and/or FOOTER then the BODY. The header and footer must appear before the body in order to determine how much space the body has. Remember to include the BODY tag when using a header or footer or you'll likely end up with body text overlaying your header or footer.

## Using the Windows Executable

The program `rwlite.exe` is used to create a PDF from commands stored in a file. You may create the file using a text editor or use another application to populate it with the desired commands. Using the latter approach you can create reports dynamically from any application that can create a file. Execute the program once the file is created by running:

```
rwlite.exe filein.frw fileout.pdf
```

where "filein.frw" is the name of your input file and "fileout.pdf" is the PDF output. You must make sure your tags are opened and closed appropriately or you probably won't get a valid PDF. For each `<TD>` tag you should have a closing `</TD>`, etc. If you get an error it will most likely be that a tag is misplaced or missing. In that case check your report file carefully and make whatever adjustments are necessary.

# PDF Report Writer Lite

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## Introduction

You may also specify a web page in the form `http://www.mysite.com/page.html` though keep in mind Report Writer Lite is not intended as an HTML to PDF converter. The web page option should only be used on pages with a layout suited for Report Writer Lite (no complex graphical layout, no tables within tables that won't fit on a page, etc). You may also use a file that contains Report Writer Lite commands rather than HTML. A file that begins with the `<PDF>` tag will be assumed to contain Report Writer Lite commands and not HTML. Be sure to specify a page and not just the site. Specify the proxy, if necessary, as a DOS environment variable. The statement would be something like:  
`set http_proxy="http://proxy:8080"`

A file type extension of `.frw` is set up when the product is installed. This will allow you to launch Report Writer Lite on a `.frw` type file from Explorer or by simply typing in the name of the file on the command line. Running `rwlite.exe` with no parameters will bring up a file open dialog box and allow you select an input file.

Other options you can pass to `rwlite` are:

- `-ini infile` Configuration file containing parameters to pass in. The commands may be all on one line or on multiple lines. Any of the options in this section may be used. You can also set an environment variable called `RWCFG` (the name is case sensitive) and have it point to an initialization file.
- `-e logfile` Used to produce an error log file. Use this option during development and debugging. No error checking is done if this is not used. The error file is not created if no errors are found while parsing the commands. If any errors are found, they are placed in this file and the PDF file is not created. See the [error](#) page for a list of errors that are checked for.
- `-statfile statfile` Used to specify a status file to create once the PDF is built. This file will contain the word `OK` followed by a line feed if the PDF finished building. It will contain `CANCEL` followed by a line feed if the PDF build was cancelled. It will contain `ERROR` followed by a line feed if the `-e` option was used and errors were found causing the build of the PDF to stop. Any other error that occurs, like not being able to open the output file for the PDF, will be placed in this file. Use this feature if you need to monitor the progress of the PDF build from another program.
- `-b` Run the program in background mode so no dialog boxes are displayed for errors. Use the `-statfile` option to capture results if necessary.

# PDF Report Writer Lite

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## Introduction

-clean	Automatically deletes the input file when finished building the PDF.
-open	Automatically opens Acrobat and loads the newly created PDF.
-print	Automatically prints the newly created PDF to the default printer. Must have Acrobat or Acrobat Reader installed.
-mail	Opens the user's e-mail program to a composition window with the newly created PDF attached. May not work with all e-mail programs.
-pidfile <i>pidfile</i>	Creates a file which contains the process ID of the application. The file is removed once the PDF is build or is cancelled.
-pidmsg <i>hWnd,msg</i>	Sends a message, using Windows SendMessage function, to the window handle specified. Pass two numbers separated by a comma with no space before or after the comma. The first number is the window handle to send the message to and the second is the message id number to use. See the Windows API for information on SendMessage. The value of wParam will be the process ID.
-copyfile <i>filename.pdf</i>	Copies the PDF to the specified location and file name once it's built.
-movefile <i>filename.pdf</i>	Moves the PDF to the specified location and file name once it's built.
-lowpriority	Sets the priority of the program lower allowing other applications to run faster.
-pause <i>value[,seconds]</i>	Used to prevent the program from taking up 100% of the CPU. Use this option if you're running several instances of the program or other programs at the same time. The value should be set somewhere between 1 and 20 with lower numbers giving better CPU utilization but longer PDF build times. You may optionally set the number of seconds to pause with the default (and minimum value) being .001 seconds. Do not place a space before or after the comma when setting the number of seconds.
-q	Quick build - performs fewer passes through the file but some features, such as total number of pages, will not be available. See the <a href="#">Build Options</a> section for more information.

# PDF Report Writer Lite

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## Introduction

<i>-tempfile filename.tmp</i>	Specify the file to use - DO NOT use this without reading the <a href="#">Build Options</a> section. The file is deleted after the PDF is built. Used to perform fastest build - makes only one pass through the input file, however table column sizes must be specified.
<i>-np</i>	Turn off the box that shows how far along the program is in building the pdf.
<i>-pbt title</i>	Sets the title of the progress box.
<i>-pbm message</i>	Sets the message of the progress box.
<i>-s</i>	Include subdirectories when batch converting. When doing a batch conversion, do not specify an in or out file. Just specify the base directory instead. For example, <code>rwwrite.exe c:\myfiles\ -s -t frw</code> will convert all files with a .frw extension in c:\myfiles and all of its subdirectories.
<i>-t type</i>	File extensions to look for when batch converting. Enter "frw" to convert all files whose extension is .frw.
<i>-delim character</i>	Delimiter if you want to create a txt or csv file instead of PDF. A text file is created (rather than PDF) if your output file ends with txt or csv. This is mostly for debugging or quick retrieval of data without going through the PDF conversion process.
<i>-f width,height,point-size</i>	Used to convert plain text file to PDF. This option treats the input as plain text with no formatting. The height, width and point-size are optional. The default width is 8.5, default height is 11 and default point-size is 10. To specify landscape with a 9.5 point font, use <code>-f 11,8.5,9.5</code> .

## Using the DLL (Dynamic Link Library)

Log into Windows NT/2000/XP with administrator rights when installing. The file `rwlite.dll` is the dynamic link library. This file should reside in your Windows or Winnt directory under the `system32` sub-directory. You first must register the DLL on your system (note this step happens automatically when you run the setup program). Do this by running

```
regsvr32 rwlite.dll
```

You should see a message box that reads:

```
DllRegisterServer in rwlite.dll succeeded.
```

Click OK to continue. You are now ready to use the DLL.

The .NET version contains the same methods as the standard DLL. The .NET DLL is named `rwlightn.dll`.

Note that the account running for the web server must have permission to access the DLL and have write permissions on the temp directory for that user. For ASP this is usually the `IUSR_<machine_name>` and/or `IWAM_<machine_name>` accounts. You can check permissions for the DLL by running the Windows program `dcomcnfg.exe`.

The methods of `build.ReportLite` are:

## Introduction

setInFile(path-file)	<p>Full path and name of the input file. You set the input file only if you want to read the commands from an existing file (as opposed to using setPDFCmd).</p> <p>You may also specify a web page in the form <code>http://www.mysite.com/page.html</code> though keep in mind Report Writer Lite is not intended as an HTML to PDF converter. The web page option should only be used on pages with a layout suited for Report Writer Lite (no complex graphical layout, no tables within tables that won't fit on a page, etc). You may also use a file that contains Report Writer Lite commands rather than HTML. A file that begins with the <code>&lt;PDF&gt;</code> tag will be assumed to contain Report Writer Lite commands and not HTML. Be sure to specify a page and not just the site. Specify the proxy, if necessary, as a DOS environment variable. The statement would be something like:</p> <pre>set http_proxy="http://proxy:8080"</pre>
setOutFile(path-file)	<p>Full path and name of the output file. You can leave the output blank and have the PDF stream returned to a variable in your program. Set a string variable equal to the output of buildReportLite in that case.</p>
setIniFile(path-file)	<p>Configuration file containing parameters to pass in. The format is that of the command line options. Options are set in this file once the call to buildReportLite is made so if you use a method that takes a value and it's in the initialization file, the one from the file takes precedence. You can also set an environment variable called RWCFG (the name is case sensitive) and have it point to an initialization file.</p>
setErrFile(path-file)	<p>Used to produce an error log file. Use this option during development and debugging. Full path and name of the error log file. No error checking is done if this is not used. The error file is not created if no errors are found while parsing the commands. If any errors are found, they are placed in this file and the PDF file is not created. See the <a href="#">error</a> page for a list of errors that are checked for.</p>
setDebugFile(path-file)	<p>Used to produce a flat file of commands being passed to the program for debugging. Full path and name of the output log file. Contains the sequence of commands set via setPDFCmd.</p>

# PDF Report Writer Lite

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## Introduction

setClean	Automatically deletes the input file when finished building the PDF.
setOpen	Automatically opens Acrobat and loads the newly created PDF.
setPrint	Automatically prints the newly created PDF to the default printer. Must have Acrobat or Acrobat Reader installed.
setMail	Opens the user's e-mail program to a composition window with the newly created PDF attached. May not work with all e-mail programs.
setCopyFile(path-file)	Copies the PDF to the specified location and file name once it's built.
setMoveFile(path-file)	Moves the PDF to the specified location and file name once it's built.
setLowPriority	Sets the priority of the program lower allowing other applications to run faster.
setPause value [, seconds]	Used to prevent the program from taking up 100% of the CPU. Use this option if you're running several instances of the program or other programs at the same time. The value should be set somewhere between 1 and 20 with lower numbers giving better CPU utilization but longer PDF build times. You may optionally set the number of seconds to pause with the default (and minimum value) being .001 seconds.
setQuick	Quick build - performs fewer passes through the file but some features, such as total number of pages, will not be available. See the <a href="#">Build Options</a> section for more information.
setTempFile	Specify the file to use - DO NOT use this without reading the <a href="#">Build Options</a> section. The file is deleted after the PDF is built. Used to perform fastest build - makes only one pass through the input file, however table column sizes must be specified.
setPageWidth(number)	Sets the page width for plain text files. Default is 8.5. Use this command to convert a text file with no formatting to PDF.
setPageHeight(number)	Sets the page height for plain text files. Default is 11. Use this command to convert a text file with no formatting to PDF.
setPointSize(number)	Sets the font point-size for plain text files. Default is 10. Use this command to convert a text file with no formatting to PDF.

# PDF Report Writer Lite

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## Introduction

setPDFCmd(text)	Commands to execute (when not using an input file). Call this method for each command you wish to execute. You could store your commands in an array then loop through it calling this method for each element. You may also string a bunch of commands together separated by a carriage-return and line-feed (CHR(13) & CHR(10) for VB users). Leave the input file blank and send commands to setPDFCmd if you are creating them on the fly and just want to pass them to the program.
setDelimiter(text)	Delimiter to use if you want to create a txt or csv file instead of PDF. A text file is created (rather than PDF) if your output file ends with txt or csv. This is mostly for debugging or quick retrieval of data without going through the PDF conversion process.
buildReportLite	Call this method to build the PDF. This returns the name of the output file, if set, otherwise returns the PDF stream. Be sure to remove any default header, if applicable, and send out Content-type: application/pdf followed by two line feeds if you are sending the output to a browser over the web. You don't need to do that if you are building the PDF on disk and then redirecting to that file.
getPageRange(text)	<p>This method returns a string of page numbers from the <a href="#">FROMPG</a> and <a href="#">THRUPG</a> tags. Pass a blank string to return all of the names and page ranges or pass in a name id (as set in the FROMPG/THRUPG tag) to return the page range for that id. For example, if you have &lt;FROMPG NAME="abc"&gt; and &lt;FROMPG NAME="xyz"&gt; in your input (along with cooresponding THRUPG tags) you would get a string back formatted like this:</p> <p>abc,1,5,xyz,6,15</p> <p>Which means section abc starts on page 1 and goes to page 5. Section xyz goes runs from pages 6 to 15. The name ranges are case sensitive. If you passed "xyz" into getPageRange you'd get back just 6,15. This method must be called after buildReportLite.</p>

# PDF Report Writer Lite

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## Introduction

The properties of build.ReportLite are:

stsMsg	<i>(Character - Readonly)</i> Message line for current build status.
stsTitle	<i>(Character - Readonly)</i> Progress box title.
stsBar	<i>(Integer - Readonly)</i> Current percent complete.
numPages	<i>(Integer - Readonly)</i> Total number of pages in the PDF. Cannot be used with the quick build or temp file options.
cancelBuild	<i>(Integer - Read/Write)</i> Set to a 1 to cancel the build process.

## Introduction

### **Example #1**

Here is an example of calling the DLL using Visual Basic.

```
Dim outPdf As String
Set PDF = CreateObject("build.ReportLite")
PDF.setOutFile "c:\temp\hello.pdf"
PDF.setPDFCmd ("<PDF>")
PDF.setPDFCmd ("<PAGE>")
PDF.setPDFCmd ("<TEXT ALIGN=C>")
PDF.setPDFCmd ("Hello, world")
PDF.setPDFCmd ("</TEXT>")
PDF.buildReportLite
set PDF = Nothing
```

### **Example #2**

Here is an example of calling the DLL using PowerBuilder.

```
OLEObject PDF
PDF = CREATE OLEObject
li_rc = PDF.ConnectToNewObject("build.ReportLite")
ls_outfile = "c:\temp\hello.pdf"
PDF.setOutFile(ls_outfile)
PDF.setPDFCmd ("<PDF>")
PDF.setPDFCmd ("<PAGE>")
PDF.setPDFCmd ("<TEXT ALIGN=C>")
PDF.setPDFCmd ("Hello, world")
PDF.setPDFCmd ("</TEXT>")
PDF.buildReportLite
```

### **Example #3**

Here is an example of calling the DLL using Progress.

```
DEFINE VARIABLE RWhandle AS COM-HANDLE.
DEFINE VARIABLE RWres AS CHARACTER.
/* Creates the COM-HANDLE link */
CREATE "build.ReportLite" RWhandle.
/* Defines the name of the PDF */
RWhandle:setOutFile ("c:\temp\text.pdf").
/* set the command for the PDF */
RWhandle:setPDFCmd ("<PDF>").
RWhandle:setPDFCmd ("<PAGE>").
RWhandle:setPDFCmd ("<TEXT ALIGN=C>").
RWhandle:setPDFCmd ("Hello, world").
RWhandle:setPDFCmd ("</TEXT>").
/* Open the PDF once built */
RWhandle:setOpen ().
/* Tells the DLL to build the PDF */
assign RWres = RWhandle:buildReportLite.
RELEASE OBJECT RWhandle.
```

## Introduction

The following two examples show how to use with ASP. You may need to set permissions on the DLL for IUSR\_<machine\_name> and/or IWAM\_<machine\_name>. These are the user ID's that typically run when using ASP. Also make sure these users have write permission to their temp directories. The DLL will need to unpack some internal files and store them in the temp area. If you don't set the proper permissions you'll get errors back such as "unspecified error" or "access denied" on the Server.CreateObject line.

### **Example #4**

Here is an ASP example sending the output directly to the browser. Note the use of the fytek.unicode object. The VBScript will treat the returned PDF stream as Unicode (2-byte characters) which will not work with Response.binaryWrite. The method StrToByte will convert the Unicode string into a single byte string which can be streamed to the browser. This method is in the file fytek.dll included with the installation.

```
<%  
Dim PDF  
Dim binaryData  
Set obj = Server.CreateObject("fytek.unicode")  
Set PDF = Server.CreateObject("build.ReportLite")  
PDF.setPDFCmd("<PDF>")  
PDF.setPDFCmd("<PAGE>")  
PDF.setPDFCmd("<TEXT ALIGN=C>")  
PDF.setPDFCmd("Hello, world")  
PDF.setPDFCmd("</TEXT>")  
pdfOut = PDF.buildReportLite  
binaryData = obj.StrToByte(pdfOut)  
Response.ContentType = "application/pdf"  
Response.binaryWrite binaryData  
set PDF = nothing  
set pdfOut = nothing  
set obj = nothing  
set binaryData = nothing  
%>
```

## Introduction

### *Example #5*

Here is an ASP example creating the output file then redirecting the browser. This method works well with both Netscape and Internet Explorer. Make sure you have the web user set up with permission to write to whatever output directory you're using.

```
<%  
Dim PDF, RndFile  
Set PDF = Server.CreateObject("build.ReportLite")  
Randomize  
RndFile = "output\" & Int(10000000 * Rnd + 1) & ".pdf"  
PDF.setOutFile (RndFile)  
PDF.setPDFCmd ("<PDF>")  
PDF.setPDFCmd ("<PAGE>")  
PDF.setPDFCmd ("<TEXT ALIGN=C>")  
PDF.setPDFCmd ("Hello, world")  
PDF.setPDFCmd ("</TEXT>")  
pdfOut = PDF.buildReportLite  
Response.redirect(RndFile)  
set pdfOut = nothing  
%>
```

## Introduction

### Example #6

Here is an example using C.

```
#include <iostream.h>

// The import directive reads the typelib information from the DLL
// and creates rwrite.tlh and rwrite.tli, which are included.
// These define wrappers for each of the rwrite object methods.

#import <rwrite.dll>

// Using VC++ 5.0 Smart Pointers makes this much easier.
// The parameter string for a method is converted to Unicode, allocated
// and passed as a variant. The wrappers call IDispatch::Invoke
// This is all compatible with MFC (use AfxOleInit instead of CoInitialize, etc.).
int main(int argc, char* argv[])
{
    HRESULT      hr;

using namespace ReportWriterLite_TypeLib;

    hr = CoInitialize (NULL);    // Initialize COM
    if (SUCCEEDED(hr))
    {
        try    // Each of the following lines can throw exceptions
        {
            // Create the instance and get a pointer to the interface
            IReportWriterLitePtr pPDF(__uuidof(PDFReportWriterLite));

            pPDF->setOutFile (_bstr_t(L"c:\\TestPDF\\new.pdf")); // Set the output file
            pPDF->setPDFCmd (_bstr_t(L"<PDF>")); // Could do a setInFile instead
            pPDF->setPDFCmd (_bstr_t(L"<PAGE>"));
            pPDF->setPDFCmd (_bstr_t(L"<TEXT ALIGN=C>"));
            pPDF->setPDFCmd (_bstr_t(L"Hello, world"));
            pPDF->setPDFCmd (_bstr_t(L"</TEXT>"));

            _variant_t outval = pPDF->buildReportLite (); // Build the PDF file
        }
        catch (_com_error e)
        {
            cout << e.ErrorMessage() << endl;
        }
    }
    else
        cout << "CoInitialize Failed" << endl;

    CoUninitialize();    // Uninitialize COM

    return 0;
}
```

## Runtime Version

FyTek sells licenses for Report Writer Lite which allow you to distribute the exe or DLL to an end user at a fraction of the cost of a developer license. The runtime versions require a combination of a key code and key name be passed to the software in order for it to work.

### Exe version

The following command line options are used with the runtime version:

-kn keyname  
-kc keycode

These values will be provided to you by FyTek, Inc.

For example, to create a report you would run something similar to the following:

```
rwriter.exe sample.frw sample.pdf -kn mycompany -kc ABC123ABC123ABC123
```

Note that neither the key name or key code should be made visible to the end user (via a .bat file for instance).

### DLL version

The following methods are used with the runtime version:

setKeyName (keyname)  
setKeyCode (keycode)

These values will be provided to you by FyTek, Inc.

For example, to create a report you would run something similar to the following:

```
Dim outPdf As String  
Set pdfCr = CreateObject("build.ReportLite")  
pdfCr.setOutFile "c:\temp\hello.pdf"  
pdfCr.setKeyName ("mycompany")  
pdfCr.setKeyCode ("ABC123ABC123ABC123")  
pdfCr.setPDFCmd ("<PDF>")  
pdfCr.setPDFCmd ("<PAGE>")  
pdfCr.setPDFCmd ("<TEXT ALIGN=C>")  
pdfCr.setPDFCmd ("Hello, world")  
pdfCr.setPDFCmd ("</TEXT>")  
pdfCr.buildReportLite
```

### *Runtime*

Note that neither the key name or key code should be made visible to the end user.

The DLL for the runtime version is `rwliter.dll`. While it is named different from the developer file (`rwlite.dll`) it still has the same function names internally. For this reason, if you have both installed on the same machine (for development and testing) you'll need to run `regsvr32` on the one you want to work with. For instance, to work with the development version run:

```
regsvr32 rwlite.dll
```

The file should reside in your windows or winnt system32 sub-directory. Passing the extra parameters for key name and key code will simply be ignored by the developer version. To work with the runtime version, run:

```
regsvr32 rwliter.dll
```

This will register the runtime DLL with your system and your application will then reference that program.

## Structure

A document may contain one or more reports. Each report is made up of a header, footer, subheader, subfooter and a body section. You can also create a report without any of the above sections but a typical report will probably have at least a header and body section. A page layout showing all of the possible sections is shown in the following table.

HEADER
SUBHEADER
BODY
SUBFOOTER
FOOTER

You may place as many reports as you wish in each document. Each report may have different layouts, different header/footer, etc. The set of commands below would consist of one report.

<HEADER>...</HEADER>
<FOOTER>...</FOOTER>
<BODY>
<SUBHEADER>..</SUBHEADER>
<SUBFOOTER>..</SUBFOOTER>
...Text and tables for report... (will autobreak across pages)
<PAGE> (only if want to force a page break and/or redefine subheader/subfooter)
<SUBHEADER>..</SUBHEADER> (only if you want to redefine the subheading at this point)
<SUBFOOTER>..</SUBFOOTER> (only if you want to redefine the subfooter at this point)
...Text and tables for report... (will autobreak across pages)
</BODY>

## Commands

All commands must be enclosed in angle brackets. Commands may be entered in upper or lowercase.

Any text between tags (unless part of an opening/closing tag) is ignored.

Tags may not span lines. You may place as many tags as you wish on a single line but the closing ">" for any tag must appear in the same line as the opening "<".

Use single or double quotes when entering a text value with spaces as a parameter. For example, <TAG DESCR="My Test Description">.

Do not leave a space between a parameter name, the = sign and its value.

Correct <PAGE WIDTH=8.5 HEIGHT=11>

Incorrect <PAGE WIDTH = 8.5 HEIGHT= 11>

Any text not inside of a TEXT block or TABLE is treated as a comment. You may also place comments inside of TEXT blocks but they must be enclosed in a tag which starts with <! and ends with >.

Use a slash in front of the " or ' character in the situation where it's part of the string. For example, to use the string 'Mike's "Slightly Used" Cars' as a string parameter to an input statement, write it using one of the following methods:

```
<INPUT NAME="compname" TYPE="text" VALUE="Mike's \"Slightly Used\" Cars">  
<INPUT NAME="compname" TYPE="text" VALUE='Mike\'s "Slightly Used" Cars'>
```

Note that either the " or ' character can be used to enclose a string. You must use the corresponding character to close the string that you used to open it with however.

You may also use quotes around numeric values and use a /> to close a tag. This is for compatibility with an XML syntax approach. Any of the following are acceptable tags for Report Writer Lite and all work the same:

```
<page height=11 width=8.5>  
<page height="11" width="8.5"/>  
<page height="11" width="8.5" />
```

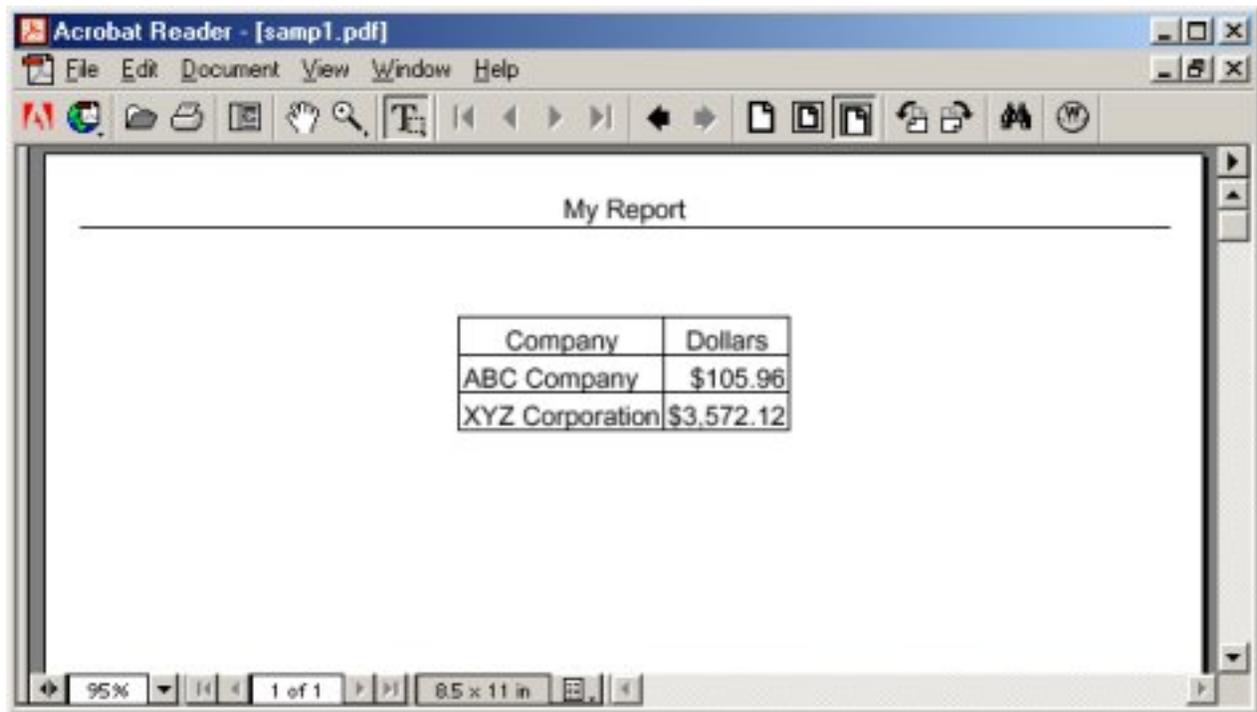
# PDF Report Writer Lite

## Commands

Here is a simple report to give you an idea of how the commands look:

```
<PDF>
<PAGE>
<GRID X=.5 Y=.5 WIDTH=7.5 HEIGHT=10 XUNITS=80 YUNITS=80>
<FONT FACE=15 SIZE=11>
<HEADER MARGIN=5>
<TEXT ALIGN=C SIZE=14>
My Report
</TEXT>
<LINE X1=0 X2=80>
</HEADER>
<BODY>
<TABLE BORDER=1 TBLALIGN=C>
<TH ALIGN=C><TD>Company</TD><TD>Dollars</TD></TH>
<TR><TD>ABC Company</TD><TD ALIGN=R>$105.96</TD></TR>
<TR><TD>XYZ Corporation</TD><TD ALIGN=R>$3,572.12</TD></TR>
</TABLE>
</BODY>
```

Which creates the following output:



## *Document Level Commands*

### **<PDF>**

This is the opening tag to any report. You must issue this command and it must be the first command. You may optionally include a closing </PDF> tag at the end of your report.

The report will be interpreted as HTML if HTML rather than PDF appears as the first tag. Many of the tag options will not work correctly in this case. Report Writer Lite will attempt to convert the HTML into PDF but keep in mind that is not what Report Writer Lite is designed for so you may not get the desired result.

## Document Level Commands

```
<CREATOR  
  LANGUAGE=text  
  COUNTRY=text>  
</CREATOR>
```

Sets the text for creator of the document. Place the text between the opening and closing tags.

<u>Parameter</u>	<u>Description</u>
LANGUAGE=text	Text is assumed to be unicode (2-character format) when this is used. A 2-character ISO 639 language code—for example, EN for English or JA for Japanese. The complete list of codes are available through <a href="http://www.iso.ch">http://www.iso.ch</a> .
COUNTRY=text	Optional, used with the LANGUAGE option above. A 2-character ISO 3166 country code—for example, US for the United States or JP for Japan.

## Document Level Commands

```
<SUBJECT  
  LANGUAGE=text  
  COUNTRY=text>  
</SUBJECT>
```

Sets the text for subject of the document. Place the text between the opening and closing tags.

<u>Parameter</u>	<u>Description</u>
LANGUAGE=text	Text is assumed to be unicode (2-character format) when this is used. A 2-character ISO 639 language code—for example, EN for English or JA for Japanese. The complete list of codes are available through <a href="http://www.iso.ch">http://www.iso.ch</a> .
COUNTRY=text	Optional, used with the LANGUAGE option above. A 2-character ISO 3166 country code—for example, US for the United States or JP for Japan.

## Document Level Commands

```
<AUTHOR  
  LANGUAGE=text  
  COUNTRY=text>  
</AUTHOR>
```

Sets the text for author of the document. Place the text between the opening and closing tags.

<u>Parameter</u>	<u>Description</u>
LANGUAGE=text	Text is assumed to be unicode (2-character format) when this is used. A 2-character ISO 639 language code—for example, EN for English or JA for Japanese. The complete list of codes are available through <a href="http://www.iso.ch">http://www.iso.ch</a> .
COUNTRY=text	Optional, used with the LANGUAGE option above. A 2-character ISO 3166 country code—for example, US for the United States or JP for Japan.

## Document Level Commands

```
<TITLE  
  VIEWERTITLE  
  LANGUAGE=text  
  COUNTRY=text>  
</TITLE>
```

Sets the text for title of the document. Place the text between the opening and closing tags.

<u>Parameter</u>	<u>Description</u>
VIEWERTITLE	Use the document title in the title bar of the viewer. The file name of the PDF is used if this is not set. ( <i>Acrobat 5.0 or above</i> )
LANGUAGE=text	Text is assumed to be unicode (2-character format) when this is used. A 2-character ISO 639 language code—for example, EN for English or JA for Japanese. The complete list of codes are available through <a href="http://www.iso.ch">http://www.iso.ch</a> .
COUNTRY=text	Optional, used with the LANGUAGE option above. A 2-character ISO 3166 country code—for example, US for the United States or JP for Japan.

## Document Level Commands

```
<KEYWORDS  
  LANGUAGE=text  
  COUNTRY=text>  
</KEYWORDS>
```

Sets the text for the document keywords. Place the text between the opening and closing tags.

<u>Parameter</u>	<u>Description</u>
LANGUAGE=text	Text is assumed to be unicode (2-character format) when this is used. A 2-character ISO 639 language code—for example, EN for English or JA for Japanese. The complete list of codes are available through <a href="http://www.iso.ch">http://www.iso.ch</a> .
COUNTRY=text	Optional, used with the LANGUAGE option above. A 2-character ISO 3166 country code—for example, US for the United States or JP for Japan.

# PDF Report Writer Lite

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## Document Level Commands

```
<ADDFONT  
  SRC=text  
  TYPE=text  
  ID=text  
  ENCODING=text  
  NAME=text>
```

Add font command - embeds a TrueType or Type 1 font in the document.

<u>Parameter</u>	<u>Description</u>
SRC=text	Required. For TrueType fonts, the font file (ex. "c:\windows\fonts\myfont.ttf"). For Type 1 fonts, the file name without the extension (ex. "c:\windows\fonts\myfont"). Type 1 fonts have several different files associated with them and the software will handle locating the individual files.
TYPE=text	Required. Enter TRUETYPE for a TrueType font or TYPE1 for a Type 1 font. Type 1 fonts will require both a .pfb and .afm file in order to work properly. The .afm file must be a plain text file.
ID=text	Enter a name for the font to refer to it by in your report. You can use spaces in the name, just be sure to put quotes around it. This is the value you would use for the FACE parameter in the <a href="#">FONT</a> command.
ENCODING=text	The encoding to use. WinAnsiEncoding is used if not specified. This value is inserted directly into the PDF as typed so case is important. If you are not sure what value to use, leave this option out. The default should be fine for most cases. Possible values are WinAnsiEncoding, StandardEncoding, MacRomanEncoding or PDFDocEncoding.
NAME=text	The name of the font. This is the name displayed in Acrobat Reader when Document Info Fonts is selected from the menu.

PDF Report writer Lite has 14 built-in fonts. When you embed a fonts, they are numbered starting at 15. The first ADDFONT command sets that font to number 15. The next ADDFONT command sets that font to number 16 and so on. You then use these numbers, or the ID value described above, as the FACE parameter for the [FONT](#) tag.

## *Document Level Commands*

### Example:

```
<PDF>
<ADDFONT TYPE=truetype FILE="c:\winnt\fonts\myfont.ttf" ID="my font">
<ADDFONT TYPE=type1 FILE="c:\winnt\fonts\myfont">
<PAGE>
<TEXT FACE=15 SIZE=12>
Here is the truetype font embedded in the document.
<FONT FACE=16>
Here is the type 1 font embedded in the document.
<FONT FACE="my font">
Here is the truetype font again using the ID instead of the number.
</TEXT>
```

## Document Level Commands

**<BASEALIGN  
VALUE=L|R|C|J>**

Sets the base alignment for all table cells in the document.

<u>Parameter</u>	<u>Description</u>
VALUE=L R C J	Sets the default alignment to Left, Right, Center or Justify. Table cells default to Left alignment without this command.

## Document Level Commands

### **<BREAKON VALUE="text">**

Used to specify a list of characters in addition to the space character to line break on. For example, set VALUE="-" to include the dash as a valid character to break on. You may string together any combination of characters but don't place any separator in the list (comma or space).

<u>Parameter</u>	<u>Description</u>
VALUE="text"	The set of characters line breaks may occur on in addition to the space character.

## *Document Level Commands*

### **<TEXTABS>**

Sets the ABS parameter throughout the document on all [TEXT](#) commands. This affects where text is placed when centered or right aligned. See the TEXT command for more information.

## Document Level Commands

**<COLOR  
NAME=text  
VALUE=color>**

Used to name a color. You can make up a name for a color then refer to that color by name throughout your document. You just change the color value in one place if you decide to change color schemes later.

<u>Parameter</u>	<u>Description</u>
NAME=text	The name for the color. Place the name in quotes if you use spaces in the name.
VALUE=color	Any valid <a href="#">color</a> code.

## Document Level Commands

### **<INCLUDE SRC=text>**

Used to include commands from an external file. The file should contain Report Writer Lite commands and/or text. The contents of the file will be placed in the position this command appears in the main input file. You may use as many INCLUDE commands as you wish in your input file.

<u>Parameter</u>	<u>Description</u>
SRC=text	The path and name of the input file. You may also specify a file from the web in the form <a href="http://www.mysite.com/include.frw">http://www.mysite.com/include.frw</a> . The file will be downloaded locally then included.

## Document Level Commands

**<OUTLINE**  
**LEVEL=number**  
**DESCR=text**  
**CLOSED**  
**COLOR=color**  
**ITALICS**  
**BOLD**  
**LANGUAGE=text**  
**COUNTRY=text**  
**SUB\_LEVEL=number**  
**SUB\_DESCR=text**  
**SUB\_CLOSED**  
**SUB\_COLOR=color**  
**SUB\_ITALICS**  
**SUB\_BOLD>**

Used to set up an outline (bookmarks) for the document.

<u>Parameter</u>	<u>Description</u>
LEVEL=number	The level of the outline. 1 is the top level, 2 would be a sub-level to 1, etc.
DESCR=text	The description that appears in the bookmarks pane.
CLOSED	Adding this option will cause the initial display of the bookmark to be closed.
COLOR=color	The <a href="#">color</a> to use for the outline entry (must be an RGB color). ( <i>Acrobat 5.0 or above</i> )
ITALICS	Italics outline entry ( <i>Acrobat 5.0 or above</i> )
BOLD	Boldface outline entry ( <i>Acrobat 5.0 or above</i> )
LANGUAGE=text	Text is assumed to be unicode (2-character format) when this is used. A 2-character ISO 639 language code—for example, EN for English or JA for Japanese. The complete list of codes are available through <a href="http://www.iso.ch">http://www.iso.ch</a> .
COUNTRY=text	Optional, used with the LANGUAGE option above. A 2-character ISO 3166 country code—for example, US for the United States or JP for Japan.
SUB_LEVEL=number	If you are creating a sub-level along with this upper-level outline, enter the sub-level number (usually set to LEVEL + 1).
SUB_DESCR=text	The description that appears in the bookmarks pane for the sub-level item.
SUB_CLOSED	Adding this option will cause the initial display of the sub-level bookmark to be closed.

# PDF Report Writer Lite

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## Document Level Commands

<u>Parameter</u>	<u>Description</u>
SUB_COLOR=color	The <a href="#">color</a> to use for the sub-level entry (must be an RGB color). ( <i>Acrobat 5.0 or above</i> )
SUB_ITALICS	Italics outline entry ( <i>Acrobat 5.0 or above</i> )
SUB_BOLD	Boldface outline entry ( <i>Acrobat 5.0 or above</i> )

You should issue the command just after the <PAGE> command. The outline for this document is created as:

```
<PAGE>
<OUTLINE LEVEL=1 DESCR="Commands" CLOSED>
. . .
<PAGE>
<OUTLINE LEVEL=2 DESCR="Document Level" CLOSED SUB_LEVEL=3 SUB_DESCR="PDF">
. . .
<PAGE>
<OUTLINE LEVEL=3 DESCR="OUTLINE">
```

## Document Level Commands

```
<SENDMAIL
SMTP=text
FROM=text
FAKEFROM=text
REPLY=text
TO=text
FAKETO=text
CC=text
FAKECC=text
BCC=text
PRIORITY=text
SUBJECT=text
BODY=text
LOG=text>
```

-- or --

```
<SENDMAIL
SMTP=text
FROM=text
FAKEFROM=text
REPLY=text
TO=text
FAKETO=text
CC=text
FAKECC=text
BCC=text
PRIORITY=text
SUBJECT=text
LOG=text>
...Multi-line Body Text...
</SENDMAIL>
```

Used to e-mail the newly created PDF to the mail recipients listed. Use the -mail exe option or setMail DLL method if you want to bring up a composition window (in which case you probably don't want to use this command). SENDMAIL will send the PDF without user interaction. A connection to the internet will be necessary in order for this function to work. Include this command only once in the report. Only the last one will be used if multiple ones are found.

<u>Parameter</u>	<u>Description</u>
SMTP=text	The SMTP server to use for sending the mail. For example, mail.yourdomain.com.

# PDF Report Writer Lite

---

## Document Level Commands

<u>Parameter</u>	<u>Description</u>
FROM=text	The from address for the e-mail. Must be an address in the form of somename@mycompany.com.
FAKEFROM=text	The from address to show for the e-mail. The default is the FROM address.
REPLY=text	The reply to address for the email. Must be an address in the form of somename@mycompany.com. The default is the FROM address.
TO=text	The address(es) to send the e-mail to. Must be an address in the form of name@somecompany.com. Separate multiple addresses with a comma.
FAKETO=text	The to address to show for the e-mail. The default is the TO address(es).
CC=text	The address(es) to CC (carbon-copy) the e-mail to. Must be an address in the form of name@somecompany.com. Separate multiple addresses with a comma.
FAKECC=text	The CC address to show for the e-mail. The default is the CC address(es).
BCC=text	The address(es) to BCC (blind carbon-copy) the e-mail to. Must an address in the form of name@somecompany.com. Separate multiple addresses with a comma.
PRIORITY=text	The message priority. Set to either HIGH or LOW. Leave this option off for normal priority.
SUBJECT=text	The subject of the e-mail. Enclose in quotes.
BODY=text	The body text of the e-mail. Enclose in quotes. Use a \n for a new line. You may also leave out the BODY option and place the body text after the SENDMAIL tag. Use the closing </SENDMAIL> tag when using this approach. You may also send HTML formatted body text. You must use the method of placing the body text between the <SENDMAIL> and </SENDMAIL> tags. Put the <HTML> tag as the first line of the body text and it will be sent as HTML rather than plain text. Avoid using references to other local files in the HTML body, such as images, as they will not be sent with the message. You may use images with a web location as the source however.
LOG=text	The name of a log file to use for date/time e-mails were sent as well as any errors. This is optional.

## *Document Level Commands*

### **<METRIC>**

Used to enter values in centimeters rather than inches. This affects the WIDTH and HEIGHT parameters of the [PAGE](#) command as well as the X, Y, WIDTH and HEIGHT parameters of the [GRID](#) command.

## Document Level Commands

### **<MONTHS VALUE=text>**

Used to set the values you want to use for names of the months (see the [date](#) variable) Default is January, February, ..., December. For example, to use German you might set this to:

```
<MONTHS VALUE="Januar,Februar,März,April,Mai,Juni,Juli,August,September,Oktober,November,Dezember">
```

<u>Parameter</u>	<u>Description</u>
VALUE=text	A comma separated list of months to use.

## Document Level Commands

### **<CLOCK VALUE=number>**

Used to set the clock to a 24-hour (military) format (see the [time](#) variable)  
Default is a 12-hour clock using am/pm.

<u>Parameter</u>	<u>Description</u>
VALUE=number	Set to 24 for a 24-hour clock format. Any other value sets a 12-hour clock format.

## Document Level Commands

```
<SET  
  NAME=text  
  PAGE=text>  
</SET>
```

Used to create a variable or function that performs some text or color settings. You then refer to the setting by using an & character with the value used for NAME in the SET statement. Place any statements between the opening and closing SET statements you wish to reference later in a table or text block. You can use this option to set the format for some text or store a frequently used text string. You can also, optionally, pass parameters into the function. Parameters are passed by reference and are referred to in the SET block as \$1 for the first variable, \$2 for the second, etc. Use parenthesis ( ) around variables when passing them to the function. For example:

```
&myfunct("Parameter 1","Parameter number 2");
```

<u>Parameter</u>	<u>Description</u>
NAME=text	The variable name to use for the block of code that follows. Names are case sensitive.
PAGE=text	Optional. Used to specify that the SET statement should only apply to the pages in the named range. Use the FROMPG/THRUPG tags to name a range. This allows you to specify different values for the same variable in different areas of the report.

The following is one example of how to use the SET command.

```
<PDF>  
  
<SET NAME=client>  
<FCOLOR VALUE=blue>  
<FONT FACE=16 SIZE=12>Sample Company</FONT>  
<FCOLOR VALUE=black>  
</SET>  
  
<SET NAME=hdr>  
<BR><LINE><BR VALUE=.5> <FCOLOR VALUE=red>  
<FONT FACE=16 SIZE=18>$1</FONT>  
<FCOLOR VALUE=black><BR>  
</SET>  
  
<PAGE>  
<TEXT>  
Client: &client  
&hdr("Section 1");
```

## *Document Level Commands*

```
Here is some text for section 1.  
&hdr("Section 2");  
Here is some text for section 2.  
</TEXT>
```

## Document Level Commands

### **<SETPG VALUE=number>**

Used to set the page number (see the [page](#) variable). If you have a report with multiple sections and you want to set the page number to 1 at the beginning of each section, issue this command before the <PAGE> command.

<u>Parameter</u>	<u>Description</u>
VALUE=number	The new page number to start numbering with.

## Document Level Commands

### **<FROMPG NAME=text>**

Used to mark a range of pages for retrieval with the getPageRange DLL method.

<u>Parameter</u>	<u>Description</u>
NAME=text	The name of this page range. Place this tag where you want to mark the point to start the range. There should exist a corresponding THRUPG tag somewhere in the document with the same value. Or, you may use a closing </FROMPG> tag instead if there is no overlap of page ranges. Name values are case sensitive.

## Document Level Commands

### **<THRUPG NAME=text>**

Used to mark a range of pages for retrieval with the getPageRange DLL method.

<u>Parameter</u>	<u>Description</u>
NAME=text	The name of this page range. Place this tag where you want to mark the point to end the range. There should exist a corresponding FROMPG tag somewhere in the document with the same value. Name values are case sensitive.

## *Document Level Commands*

### **<STARTPG VALUE=number>**

Used to set the page number to open the PDF to. Normally the first page is the initial page but this tag allows you to override.

<u>Parameter</u>	<u>Description</u>
VALUE	The page to open the document at.

## Document Level Commands

### <PAGELAYOUT VALUE=text>

Used to set the initial layout of the document when opened.

<u>Parameter</u>	<u>Description</u>
VALUE	One of following values:
SinglePage	Display one page at a time (default)
OneColumn	Display the pages in one column
TwoColumnLeft	Display the pages in two columns,with odd-numbered pages on the left
TwoColumnRight	Display the pages in two columns,with odd-numbered pages on the right

## Document Level Commands

### **<PAGEMODE VALUE=text>**

Used to set the initial display of the document when opened.

<u>Parameter</u>	<u>Description</u>
VALUE	One of following values:
UseNone	Neither document outline nor thumbnail images visible (default when not using an outline)
UseOutlines	Document outline visible (default when using an outline)
UseThumbs	Thumbnail images visible
FullScreen	Full-screen mode with no menu bar, window controls or any other window visible

## Document Level Commands

**<ZOOM  
VALUE=number|FITPAGE|FITWIDTH>**

Used to set the initial zoom factor. Default is dependant on user settings.

<u>Parameter</u>	<u>Description</u>
VALUE	The zoom factor to open the document at. Enter 100 for 100 percent.
	FITPAGE = open the document sized so the entire page fits in the window.
	FITWIDTH = open the document sized so the width of the page fits in the window.

## *Document Level Commands*

### **<QUICKBUILD>**

Sets the quick build option. This is same as setting the -q option on the exe command line or using the setQuick method of the DLL. See the [Build Options](#) section for more information.

## *Document Level Commands*

### **<IGNOREUNKNOWN>**

Instructs the program to ignore any unknown tags. Place this tag anywhere in your input file. This is for compatibility when you have other HTML tags mixed in with your input that are not Report Writer Lite tags.

## Page Level Commands

**<PAGE**  
**HEIGHT=inches**  
**WIDTH=inches**  
**TYPE=text**  
**ORIENT=landscape|portrait**  
**NEWFORM=number**  
**BGCOLOR=color**  
**TRANS=text**  
**SECS=number**  
**TDIR=H|V**  
**MDIR=I|O**  
**NOBREAK=number**  
**CLEARFORMS**  
**YPOS=number**  
**ENDX|ENDLINE|ENDSTR=text**  
**ENDFACE=number**  
**ENDSIZE=number**  
**ENDFCOLOR=color**  
**ENDSCOLOR=color**  
**ENDPAGE>**

Starts a new page. All of the parameters are optional. If you are doing a page break and you are changing the width or height, be sure to close out any open [BODY](#) tags and reissue new [HEADER](#) and/or [FOOTER](#) commands.

<u>Parameter</u>	<u>Description</u>
WIDTH=inches	Sets width of page in inches. Default is 8.5. If the <a href="#">METRIC</a> command is used, enter the number of centimeters instead.
HEIGHT=inches	Sets height of page in inches. Default is 11.
TYPE=text	The page size to use if not using Width or Height options. See the following table for a list of page types.

# PDF Report Writer Lite

---

## Page Level Commands

<u>Parameter</u>	<u>Description</u>
ORIENT=landscape portrait	Landscape sets page size to 11 by 8.5 if you leave out height and width. Portrait sets page size to 8.5 by 11. If height and width have been set differently by a previous page command, setting ORIENT to landscape will set the width to the larger of width and height while portrait will set the width to the smaller of the two.
NEWFORM=number	To use this page as a background for other pages, enter a value for NEWFORM. This page will not print but may be included on other pages with the <a href="#">USEFORM</a> tag.
BGCOLOR=color	Sets the color of the page background. Default is white. Use BGCOLOR="" to set the background back to white.
TRANS=text	One of the following transition types: Split Blinds Box Wipe Dissolve Glitter The default page transition is to just replace the current page with the new page. The effects listed above can be used for presentation purposes.
SECS=number	The length of time in seconds to spend on the page transition. Default is 1 if a transition type is used.
TDIR=H V	The direction of the transition, horizontal or vertical. Valid only for Split and Blinds transition types.

# PDF Report Writer Lite

---

## Page Level Commands

<u>Parameter</u>	<u>Description</u>
MDIR=I O	The direction of motion for the transition effect, inward or outward from the center of the page. Valid only for Split and Box transition types.
NOBREAK=number	Page breaks will occur by default when a table or block of text hits the bottom of the current page. Set NOBREAK to a value of 1 or 2 to prevent this behavior. A value of 0 means turns off the NOBREAK option (if you're in the BODY of a document and you specified a NOBREAK prior to this page). A value of 1 means continue printing text beyond the page margin or even off the page. A value of 2 means cut the text or table at the margin.
CLEARFORMS	Clear any USEFORM statements that had been issued. The contents of a USEFORM background are used for all subsequent pages which are in the BODY of the document. This option clears out any USEFORM statements so the background no longer prints. This allows you to remove the background or specify a new one.
YPOS=number	Conditionally page break based upon the current Y position. For example, if the current GRID settings are 100 in the Y direction and you set YPOS=70, the PAGE command will be ignored if the current Y position is less than 70. You may also enter the value followed by a % sign (i.e. YPOS=65%) to denote a percentage of the current GRID.

# PDF Report Writer Lite

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## Page Level Commands

<u>Parameter</u>	<u>Description</u>
ENDX ENDLINE ENDSTR=text	These options are to provide some security against changes to a document by filling in white space with characters or lines. Use ENDLINE to draw a line from the upper left to the lower right corner of any remaining white space on the page. Use ENDX to draw another line from the upper right to the lower left corner, forming an X. Use ENDSTR=text to set a character or string to fill in the remaining white space.
ENDFACE=number	A font number to use for ENDSTR=text option.
ENDSIZE=number	The font size to use for the ENDSTR=text option.
ENDFCOLOR=color	The fill color to use to for the text.
ENDSCOLOR=color	The stroke color to use for the line or text.
ENDPAGE	Use the end page width and length rather than the margins.

There is no closing tag for <PAGE>. Simply issue another PAGE tag to start another page. Each report must include at least one page tag.

The following table lists the various built-in page sizes available for the TYPE option.

<u>Type</u>	<u>Description</u>
Standard	Standard, 8 1/2 x 11 in.
Legal	Legal, 8 1/2 x 14 in.
Letter	Letter, 8 1/2 x 11 in.
LetterSmall	Letter Small, 8 1/2 x 11 in.
Tabloid	Tabloid, 11 x 17 in.
Ledger	Ledger, 17 x 11 in.
Statement	Statement, 5 1/2 x 8 1/2 in.
Executive	Executive, 7 1/2 x 10 1/2 in.
A3	A3, 297 x 420 mm
A4	A4, 210 x 297 mm
A4Small	A4 Small, 210 x 297 mm
A5	A5, 148 x 210 mm
B4	B4, 250 x 354 mm

# PDF Report Writer Lite

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## Page Level Commands

<u>Type</u>	<u>Description</u>
B5	B5, 182 x 257 mm
Folio	Folio, 8 1/2 x 13 in.
Quarto	Quarto, 215 x 275 mm
10x14	10 x 14 in.
11x17	11 x 17 in.
Note	Note, 8 1/2 x 11 in.
Env9	Envelope #9, 3 7/8 x 8 7/8 in.
Env10	Envelope #10, 4 1/8 x 9 1/2 in.
Env11	Envelope #11, 4 1/2 x 10 3/8 in.
Env12	Envelope #12, 4 1/2 x 11 in.
Env14	Envelope #14, 5 x 11 1/2 in.
EnvDL	Envelope DL, 110 x 220 mm
EnvC3	Envelope C3, 324 x 458 mm
EnvC4	Envelope C4, 229 x 324 mm
EnvC5	Envelope C5, 162 x 229 mm
EnvC6	Envelope C6, 114 x 162 mm
EnvC65	Envelope C65, 114 x 229 mm
EnvB4	Envelope B4, 250 x 353 mm
EnvB5	Envelope B5, 176 x 250 mm
EnvB6	Envelope B6, 176 x 125 mm
EnvItaly	Envelope, 110 x 230 mm
EnvMonarch	Envelope Monarch, 3 7/8 x 7 1/2 in.
EnvPersonal	Envelope, 3 5/8 x 6 1/2 in.
FanfoldUS	U.S. Standard Fanfold, 14 7/8 x 11 in.
FanfoldStdGerman	German Standard Fanfold, 8 1/2 x 12 in.
FanfoldLglGerman	German Legal Fanfold, 8 1/2 x 13 in.

## Page Level Commands

### **<USEFORM VALUE=number>**

Uses a page defined with the NEWFORM parameter as a background page. You may use multiple USEFORM tags to include more than one background.

See the CLEARFORMS option on the PAGE command for information on clearing out forms in the body of a document.

<u>Parameter</u>	<u>Description</u>
VALUE=number	The number used on the NEWFORM parameter of the page you want to use as the background.

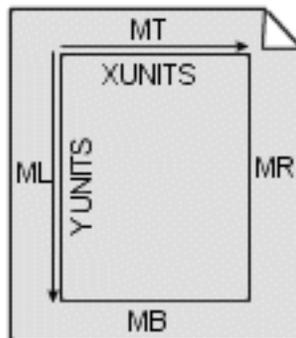
## Page Level Commands

**<GRID**  
**ML=inches**  
**MR=inches**  
**MT=inches**  
**MB=inches**  
**XUNITS=number**  
**YUNITS=number>**

Sets the margins and virtual grid for each page. The default margins are 1/2 inch all around if you do use a grid command. All commands that use X and Y coordinate values are based on the grid values for XUNITS and YUNITS. For instance, with any size page using equal margins left/right and top/bottom and with GRID settings of XUNITS=50 and YUNITS=100, the middle of the page is at X=25 and Y=50.

Note you may not change the grid layout once inside a HEADER, FOOTER or BODY section of the report. You should ideally set the GRID once before issuing your first page command and use that setting throughout the report.

<u>Parameter</u>	<u>Description</u>
ML=inches	Sets the various margins for a page of any size. If the <a href="#">METRIC</a> command is used, enter the number of centimeters instead.
MR=inches	
MT=inches	
MB=inches	
XUNITS=number	User defined - number of columns to divide the printable area (page width - left/right margin) into.
YUNITS=number	User defined - number of rows to divide the printable area (page height - top/bottom margin) into.



### *Page Level Commands*

Do not confuse the rows and columns of XUNITS and YUNITS with table rows and columns. These are simply for convenience when placing information on a page. The YUNITS value is not as important as the XUNITS value since the program will take care of content flow. If you are drawing a rectangle on the page then the YUNITS may be important as the corners of the box will be specified in XUNITS and YUNITS.

The Y coordinate is always 0 for the top line when inside of a TEXT block. This will allow you to move to the top of the text block without having to know where the text block is positioned on the page. For example, the footer of this document contains some text left justified and the page number right justified. This was done by first printing the left portion, then specifying a value of 0 for Y position, setting a right alignment, then printing the page number.

The XUNITS is a little more important as you will use these coordinates to set your left and right margins for text blocks and/or tables. The TEXT and TABLE commands will simply use a value of 0 for the left margin and the value entered for XUNITS for the right margin if none are supplied.

## Page Level Commands

```
<HEADER  
  MARGIN=units  
  PAGE2>  
</HEADER>
```

Encloses the header information.

<u>Parameter</u>	<u>Description</u>
MARGIN=units	Sets the margin of space in user defined units based on the GRID command.
PAGE2	Specifies that this header replaces the current header after the first page. This allows you to specify one header for the first page and a different header for the rest of the pages. In this case you would have two HEADER blocks and have this option set on one of them.

Between the <HEADER> and </HEADER> tags you place content such as text and/or tables. The size needed for the header will be determined by the program. When you place information in the BODY section the program will automatically place that information under the header.

## Page Level Commands

```
<SUBHEADER  
  MARGIN=units  
  CONTINUE=text>  
</SUBHEADER>
```

Encloses the sub header information.

<u>Parameter</u>	<u>Description</u>
MARGIN=units	Sets the margin of space in user defined units based on the GRID command.
CONTINUE=text	Set the text you want to print after the first page break. You reference this with the value &continue somewhere in the text that falls between the opening and closing SUBHEADER tags. Enclose the text in quotes.

Subheadings may be changed throughout the body section of a document. The first subheading should come just after the [BODY](#) tag. The information will repeat across page breaks until a new subheading is issued. Issue subheader tags only after a [PAGE](#) command from then on. The new subheading will replace the previous one without affecting your [HEADER](#) data. Send a <SUBHEADER> followed by </SUBHEADER> to clear out a subheading.

## Page Level Commands

```
<FOOTER  
  MARGIN=units  
  PAGE2>  
</FOOTER>
```

Encloses the footer information.

<u>Parameter</u>	<u>Description</u>
MARGIN=units	Sets the margin of space in user defined units based on the GRID command.
PAGE2	Specifies that this footer replaces the current footer after the first page. This allows you to specify one footer for the first page and a different footer for the rest of the pages. In this case you would have two FOOTER blocks and have this option set on one of them.

Between the <FOOTER> and </FOOTER> tags you place content such as text and/or tables. The size needed for the footer will be determined by the program. When you place information in the BODY section the program will automatically place that information above the footer.

## Page Level Commands

```
<SUBFOOTER  
  MARGIN=units  
  CONTINUE=text>  
</SUBFOOTER>
```

Encloses the subfooter information.

<u>Parameter</u>	<u>Description</u>
MARGIN=units	Sets the margin of space in user defined units based on the GRID command.
CONTINUE=text	Set the text you want to print after the first page break. You reference this with the value &continue somewhere in the text that falls between the opening and closing SUBFOOTER tags. Enclose the text in quotes.

Subfooters may be changed throughout the body section of a document. The first subfooter should come just after the [BODY](#) tag. The information will repeat across page breaks until a new subfooter is issued. Issue subfooter tags only after a [PAGE](#) command from then on. The new subfooter will replace the previous one without affecting your [FOOTER](#) data. Send a <SUBFOOTER> followed by </SUBFOOTER> to clear out a subfooter.

## Page Level Commands

```
<BODY  
  LINK=color>  
</BODY>
```

Encloses the body text and/or tables. Remember to include this tag when placing content on a page if you have headers and/or footers. If you leave it out your text might overlay your header/footer.

While inside of the BODY tag, the amount of space for YUNITS as defined by the GRID is adjusted to be the area within the BODY rather than the page. For instance, say you are using an 8.5 x 11 piece of paper and have it divided into 100 units from top to bottom. You really have 8 inches along the Y axis rather than 11 if the header takes an inch and the footer takes two inches. Since the YUNITS are adjusted, then a value of 0 means 1 inch down and value of 100 is 9 inches from the top (or 8 inches from the bottom of the header).

Let's say you are also drawing a box around the body - from Y position 0 to 100. Now it doesn't matter if you decide to add another line in the header or footer, the box will still encompass the body within the header and footer.

<u>Parameter</u>	<u>Description</u>
LINK=color	Optional - sets the text <a href="#">color</a> for <a href="#">links</a> .

## Page Level Commands

**<REPEAT  
APPEND  
CONTINUE=text>  
</REPEAT>**

Enclose text or tables that you want repeated for a block of text or a table that follows. This is different from a HEADER or SUBHEADER in that the HEADER and SUBHEADER only print at the top of a page. A REPEAT block can start anywhere on the page.

You may have some heading text or formatting that belongs with a table that follows but you don't want to place that text in the table itself. The reason would be that you don't want the table to expand as wide as the heading information is. Or you may have a heading that belongs to a group of tables and/or text. You use the REPEAT and /REPEAT tags to enclose the heading information you want repeated. Issue an empty set of REPEAT and /REPEAT tags to turn off the repeat section. The CONTINUE option is used to optionally specify some text that would print only after the first page break occurred.

<u>Parameter</u>	<u>Description</u>
APPEND	Use this option to append to the previous repeat information. Information in the current repeat block is cleared out if this parameter is missing.
CONTINUE=text	Set the text you want to print after the first page break. You reference this with the value &continue somewhere in the text that falls between the opening and closing REPEAT tags. Enclose the text in quotes.

Here is an example of how you would use a repeat block:

```
<REPEAT CONTINUE="(Continued)">
<LINE>
<TEXT>
Section I &continue - This text flows all the way across the page and will repeat
for each page the following two tables require.
Once the next set of opening/closing REPEAT tags are encountered, this text will stop repeating.
</TEXT>
<LINE>
</REPEAT>
<TABLE CELLPADDING=2 CELLPADDING=2>
<TH><TD>Company</TD><TD>Amount</TD></TH>
<TR><TD>ABC Corp</TD><TD>100.00</TD></TR>
<TR><TD>Any Corp</TD><TD>150.00</TD></TR>
. . . (rest of the table) . . .
<TR><TD>ABC Corp</TD><TD>100.00</TD></TR>
<TR><TD>Any Corp</TD><TD>150.00</TD></TR>
```

## Page Level Commands

```
</TABLE>
<TABLE CELLPADDING=2 CELLXPADDING=2>
<TH><TD>Returns</TD><TD>Amount</TD></TH>
<TR><TD>Product 1</TD><TD>-200.00</TD></TR>
<TR><TD>Product 2</TD><TD>-80.00</TD></TR>
. . . (rest of the table) . . .
<TR><TD>Product 79</TD><TD>-400.00</TD></TR>
<TR><TD>Product 80</TD><TD>-10.00</TD></TR>
</TABLE>
<REPEAT>
</REPEAT>
<TEXT>
Neither this text (nor the prior heading) will repeat for each page of this table.
</TEXT>
<TABLE CELLPADDING=2 CELLXPADDING=2>
<TH><TD>Company</TD><TD>Amount</TD></TH>
<TR><TD>ABC Corp</TD><TD>100.00</TD></TR>
<TR><TD>Any Corp</TD><TD>150.00</TD></TR>
. . . (rest of the table) . . .
<TR><TD>ABC Corp</TD><TD>100.00</TD></TR>
<TR><TD>Any Corp</TD><TD>150.00</TD></TR>
</TABLE>
```

## Text Commands

```
<TEXT
  X=number
  Y=number
  X2=number
  Y2=number
  ALIGN=L|R|C|J
  ABS
  BORDER=number
  BORDERCOLOR=color
  BGCOLOR=color
  3D
  SIDES=text
  COLNUM=number
  COLSPACE=number
  COLBAR=number
  NOBREAK
  FORCE
  FACE=font number
  SIZE=point size
  NO_WIDOW
  LINESPACE=number
  BREAKON="text"
  FCOLOR=color
  SCOLOR=color
  ROTATE=number
  COMP=number
  VALUE=text>
</TEXT>
```

Used to print a block of text. All of the parameters are optional. Place your text to print between the opening and closing text blocks. You may place [TABLE](#) tags inside of the text block. Doing so has the same effect as closing the text block, printing the table, then reopening the text block.

<u>Parameter</u>	<u>Description</u>
X=number	Sets the value of the left margin in units based on the <a href="#">GRID</a> command. Default is 0.

# PDF Report Writer Lite

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## Text Commands

<u>Parameter</u>	<u>Description</u>
Y=number	Sets the value for the top of the text based on the GRID command. Default is the current Y value. Generally you don't need to set the Y value. Only set this value when you're trying to place the text in a given spot, like when trying to match a pre-printed form. Text will simply start at the current position and, upon a page break, will continue on the next page at the top of the report body.
X2=number	Sets the value of the right margin in units based on the GRID command. Default is value of XUNITS from the GRID command.
Y2=number	Sets the value for the bottom of the text based on the GRID command. Generally you don't need to set the Y2 value. Only set this value when you're trying force some text to fit into a box on the page and you don't want the text to run outside of that area. Any text that doesn't fit is not printed.
ABS	Normally, when using center or right alignment, text is centered or right aligned within the left and right edges of a TEXT block. The left and right edges of a TEXT block span from <a href="#">GRID</a> position 0 to the current XUNITS value unless overridden with the X or X2 parameters described above. The ABS (absolute positioning) option will ignore the edges and center or right align text around the point specified by the X parameter. There is no word wrapping when using the ABS option (it sets the FORCE option) since the X and X2 parameters are no longer used for the left and right edges of the TEXT block. For example, using <TEXT ALIGN=C> will center text in the middle of the page. Using <TEXT ALIGN=C X=25 ABS> will center text at GRID position 25. You could achieve the same result without ABS by using <TEXT ALIGN=C X=0 X2=50 FORCE>.

# PDF Report Writer Lite

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## Text Commands

<u>Parameter</u>	<u>Description</u>
ALIGN=L R C J	Sets the initial alignment to Left, Right, Center or Justify. Default is Left.
BORDER=number	Sets the border size. A value of 1 is a line with a width of 1/72 of an inch.
BORDERCOLOR=color	Sets the border color (when the 3D option is not used).
BGCOLOR=color	Sets the background color of the text block.
3D	Sets the border style as 3D which is light gray on top and left and dark gray on bottom and right.
SIDES=text	Sets what sides to draw the border on. Default is all sides. Values are L (Left), R (Right), T (Top) and B (Bottom). For example, use SIDES=T,B to specify the border should be drawn on top and bottom only.
COLNUM=number	Sets the number of columns to divide the text into. Setting to two, for example, will fill up the left half of the page then move to top right half of the page and continue. A new page is started automatically once all columns are filled.
COLSPACE=number	Sets the amount of space in units based on the GRID command between each column.
COLBAR=number	Draws a vertical bar between multiple columns of text. Set this parameter to the line width.
NOBREAK	Set this to prevent the text block from breaking across a page. You should only use this option for a small amount of text that will fit between the header and footer. If the text cannot fit between the header and footer then it will only print the portion that fits.
FORCE	Set this to prevent the text from wrapping or flowing to the next page. You should only use this option to force some text to print where it would normally try to wrap or flow to the next page.
FACE=font number	Sets the font.

## Text Commands

<u>Parameter</u>	<u>Description</u>
SIZE=point size	Sets the point size for the font.
NO_WIDOW	Helps prevent widow lines. A widow is the last line of a paragraph printed by itself at the top of the page.
LINESPACE=number	Sets the text line spacing. Each unit is 1/72 of an inch. Default is 2.
BREAKON="text"	Set of characters a line break may occur on in addition to the space character. This overrides any global setting made with the <a href="#">BREAKON</a> tag.
FCOLOR=color	Sets the fill color. This is also the font color.
SCOLOR=color	Sets the stroke color.
ROTATE=number	The number of degrees to rotate the text. Text is rotated around the lower left point of the first character on the line.
COMP=number	A percentage to compress the text by. A value less than 100 compresses text while a value greater than 100 expands text.
VALUE=text	Shortcut used to place a small amount of text on the page. Normally, you would place text between the opening and closing text tags and not use this option. There is no need to use the closing <code>&lt;/TEXT&gt;</code> command when using this option. You may not use any tags in your text string with this option and no checks will be done for page breaks. This should only be used when you have some small text strings to place at specific X/Y locations on the current page.

The following commands in this section detail the various attributes you may apply to text.

# PDF Report Writer Lite

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## Text Commands

These are the variables you may use in your document.

<u>Variable</u>	<u>Sample</u>	<u>Description</u>
&page	71	The current page number. This may be reset by using the <a href="#">SETPG</a> command.
&runpage	71	The running page number. Always reflects the current physical page in the document.
&totpage	160	The total number of pages in the document.
&getpage("ANCHOR")	75	The page number the anchor is on. Use this feature to refer to a page elsewhere in the document. Set an <a href="#">anchor</a> with the NAME parameter filled in on the page you want to refer to. Use the function &getpage("anchor name") on the page where you want to print the page number of the referenced page. The value used for the getpage function is the same value you used for the NAME parameter in the anchor. Include RUNPAGE as an option on the anchor tag to return the running (&runpage) page number. The default is the page (&page) number which can be changed with the SETPG function.
&date	Jan 21, 2006	The current system date when the document was created. See the <a href="#">DATE</a> tag for formatting options.
&time	10:56 am	The current system time when the document was created.

# PDF Report Writer Lite

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## Text Commands

<u>Variable</u>	<u>Sample</u>	<u>Description</u>
&reg	®	Registered trademark symbol
&trad	™	Trademark symbol
&copy	©	Copyright symbol
&emdash	—	emdash
&lt	<	Less-than symbol
&gt	>	Greater-than symbol
&cent	¢	Cent
&pound	£	Pound
&euro	€	Euro
&yen	¥	Yen
&deg	°	Degree
&gtlt	«	Guillemet (left)
&ggt	»	Guillemet (right)
&oslash	ø	O with slash

## Text Commands

**<BR  
VALUE=number>**

Used to insert a line break. You may optionally specify a value which is the number of inches to drop down from the current position.

<u>Parameter</u>	<u>Description</u>
VALUE=number	Number of inches to drop down. May use a decimal value.

## *Text Commands*

### **<P>**

Used for a new paragraph. This tag is equivalent to using <BR><BR>.

## Text Commands

```
<A  
  NAME=text|HREF=text|POPUP=text  
  LINKLINE=number  
  LINKCOLOR=color  
  ANNOT=text  
  TITLE=text  
  COLOR=color  
  LANGUAGE=text  
  COUNTRY=text>  
</A>
```

Used to add a web link, anchor or annotation. See the [LINKLINE](#) and [LINKCOLOR](#) commands as well. Use the NAME to insert an anchor in the current document to link to. When you use the A tag this way you do not need a closing </A> tag. You may then reference that page by inserting an anchor using HREF and placing a # in front of the name.

<u>Parameter</u>	<u>Description</u>
NAME=text HREF=text POPUP= =text	Use one of the above in the anchor or link. NAME is used to name an anchor or POPUP. HREF is used to specify the location a link points to or for a highlighted popup note. POPUP is used to store the name of the annotation.
LINKLINE=number	The width of the line to draw for the link. Used a value of 0 to turn off the line.
LINKCOLOR=color	The color of the text and line to draw for the link.
ANNOT=text	The text to place in an annotation. This is specified in the link using the NAME option. Display the annotation by using another A tag with POPUP set to the value used in NAME.
TITLE=text	The text to place in an annotation title. This is specified in the link using the NAME option. Display the annotation by using another A tag with POPUP set to the value used in NAME.

# PDF Report Writer Lite

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## Text Commands

<u>Parameter</u>	<u>Description</u>
COLOR=color	An RGB color to use when using the POPUP option. The default is yellow.
LANGUAGE=text	Text is assumed to be unicode (2-character format) when this is used. A 2-character ISO 639 language code—for example, EN for English or JA for Japanese. The complete list of codes are available through <a href="http://www.iso.ch">http://www.iso.ch</a> .
COUNTRY=text	Optional, used with the LANGUAGE option above. A 2-character ISO 3166 country code—for example, US for the United States or JP for Japan.

For example:

```
.  
.   
<TEXT>  
<A NAME="linkhere">Here is some text I want to link back to.  
</TEXT>  
<PAGE>  
.   
.   
Click <A HREF="#linkhere">here</A> to jump to the page with the anchor.
```

To insert a web link or e-mail simply enter the destination and remember to close the tag.

For example:

```
<TEXT>  
Click <A HREF="http://www.mysite.com">right here</A> to visit our site.  
Click <A HREF="mailto:me@mysite.com">here</A> to send me an e-mail.  
</TEXT>
```

## Text Commands

To insert an annotation use the NAME and ANNOT parameters to enter the text of the annotation.

Then link to the annotation by specifying the name in the POPUP parameter like this:

```
<TEXT>  
<A NAME="myannot" ANNOT="Here is some text to pop-up in the document.">  
Click this icon to read annotation ---> <A POPUP="myannot">.  
</TEXT>
```

Click this icon to read annotation ---> .

You may also have an annotation linked to a word or phrase. The user can double-click on the link to display the popup. The link uses the LINKCOLOR for the text but is not underlined. Acrobat 4 and 5 differ slightly on how this is displayed. Acrobat 4 will paint the background (default is yellow) behind the text. Acrobat 5 does not do this. You may want to use the BGCOLOR to provide more of a visual clue to the user to double-click the link and give a consistent look between different versions of Acrobat. For example:

```
<TEXT>  
<A NAME="p5" ANNOT="This could be an explanation of the highlight."  
TITLE="Test Title">  
Double-click on <A COLOR=lime HREF="popup:p5"><BGCOLOR VALUE=lime>this text  
<BGCOLOR VALUE=white></A> to read the pop-up.  
</TEXT>
```

Double-click on  to read the pop-up.



## Text Commands

```
<EXT  
  HREF=text>  
</EXT>
```

Used to add a link to an external file or application. Specify a document (like a Word or Excel file) to be opened when the link is clicked. Works similar to the A tag.

<u>Parameter</u>	<u>Description</u>
HREF=text	Name of an external file or application to launch.

## Text Commands

```
<MOV  
  HREF=text>  
</MOV>
```

Used to add a link to an external movie file. Specify a movie file to be opened when the link is clicked. Works similar to the A tag.

<u>Parameter</u>	<u>Description</u>
HREF	Name of an external movie file to launch.

## Text Commands

### **<LINKLINE VALUE=number>**

Used to set the line width for links. Set to 0 to turn-off underlines in links altogether. Default is 1.

<u>Parameter</u>	<u>Description</u>
VALUE=number	Line width or 0 to turn-off link underlines.

Here is a link with LINKLINE set to 3: [FyTek, Inc.](#)

Here is a link with LINKLINE set to 0: [FyTek, Inc.](#)

## Text Commands

### **<LINKCOLOR VALUE=color>**

Used to set the text and line color for links. Default is an RGB value of .2,.2,1.

<u>Parameter</u>	<u>Description</u>
VALUE=color	Sets the link <a href="#">color</a> .

Here is a link with LINKCOLOR set to red: [FyTek, Inc.](#)

## Text Commands

### **<COMP VALUE=number>**

Used to specify the compression percentage for text. Unlike the other tags in this section, this tag goes outside of the TEXT block. You may override the value on the TEXT command.

<u>Parameter</u>	<u>Description</u>
VALUE=number	A percentage to compress the text by. A value less than 100 compresses text while a value greater than 100 expands text.

This text has been expanded by 150 percent of it's original size. Text will remain at this percentage until another COMP tag is issued.

## Text Commands

### <BULLET VALUE=text>

Used to display a bullet point. You may also use LI (List Item) in place of BULLET.

Parameter

Description

VALUE=text    The type of bullet - Round is the default.

<u>Sample</u>	<u>Type</u>
•	Round
■	Square
●	Large
★	Star
◆	Diamond
☞	Hand1
☜	Hand2
❄	Snow
✿	Flower1
⊕	Flower2
➔	Arrow1
→	Arrow2
➔	Arrow3
➤	Arrow4
☞	Arrow5
➔	Arrow6

## Text Commands

**<CHECK  
VALUE=number>**

Used to display a check mark.

<u>Parameter</u>	<u>Description</u>
VALUE=number	The type of check to print. There are six types numbered from 1 to 6.

<u>Sample</u>	<u>Type</u>
✓	1 (Default)
✓	2
×	3
×	4
×	5
×	6

## Text Commands

### <DATE FORMAT=text>

Use to set the format for the [date](#) variable. This command just specifies how you want the date to be displayed. It does not actually display the date. You must issue it before using the &date variable however.

<u>Parameter</u>	<u>Description</u>
FORMAT=text	A quoted text string formatted how you want the date to appear. Leaving this out defaults to Mon D, YYYY. You can use any of the following as variables:
Month	the full month (i.e. January)
Mon	first 3 characters of the month (i.e. Jan)
MM	the month number with a leading zero when needed
M	the month number without a leading zero
DD	the day with a leading zero when needed
D	the day without a leading zero
YYYY	the full four digit year
YY	the last two digits of the year

Examples:

<u>Format</u>	<u>Result</u>
<DATE FORMAT="MM/DD/YY">	01/21/06
<DATE FORMAT="DD/MM/YY">	21/01/06
<DATE FORMAT="M-D-YYYY">	1-21-2006
<DATE FORMAT="Month, YYYY">	January, 2006
<DATE FORMAT="MM.DD.YY">	01.21.06
<DATE>	Jan 21, 2006

## Text Commands

### **<TAB VALUE=number>**

Used to offset the current X position in a line of text. Affects the current line only. If you want to change the margins use the [X](#) tag instead. Setting the TAB value affects the current line so you should place a BR before a section of text using the TAB tag. You may unintentionally overlap text on the same line otherwise.

<u>Parameter</u>	<u>Description</u>
VALUE	The amount based on the current XUNITS setting from the GRID tag to offset the current X position by. May be positive or negative.

For example:

```
<TEXT X=15 X2=65>  
Here is where a line normally starts.<BR>  
<TAB VALUE=-5>This line is shifted to the left by 5 units.<BR>  
<TAB VALUE=5>This line is shifted to the right by 5 units.<BR>  
This line is back to where text normally starts from.<BR>  
</TEXT>
```

Here is where a line normally starts.

This line is shifted to the left by 5 units.

This line is shifted to the right by 5 units.

This line is back to where text normally starts from.

## Text Commands

**<FONT**  
**FACE=number**  
**SIZE=number**  
**COLOR=color**  
**COMP=number>**

Used to set the current font and/or point size. Both parameters are optional however you must at least enter either FACE or SIZE. You may nest levels of FONT and use </FONT> to return to the previous setting.

<u>Parameter</u>	<u>Description</u>
FACE=number	The font number.
SIZE=number	The point size for the font.
COLOR=color	Enter a valid <a href="#">color</a> .
COMP=number	A percentage to compress the text by. A value less than 100 compresses text while a value greater than 100 expands text.

There are 14 built-in fonts (plus 8 Japanese, 12 Chinese and 8 Korean fonts) and you may embed your own TrueType or Type 1 fonts. Here are the built-in fonts and their values:

<u>Number</u>	<u>Name</u>	<u>Sample</u>
1	Courier	ABCDEFGH abcdefg 12345
2	Helvetica (Arial)	ABCDEFGH abcdefg 12345
3	Times Roman	ABCDEFGH abcdefg 12345
4	Courier Bold	<b>ABCDEFGH abcdefg</b> <b>12345</b>
5	Helvetica Bold	<b>ABCDEFGH abcdefg</b> <b>12345</b>
6	Times Roman Bold	<b>ABCDEFGH abcdefg 12345</b>
7	Courier Italics	<i>ABCDEFGH abcdefg</i> <i>12345</i>
8	Helvetica Italics	<i>ABCDEFGH abcdefg</i> <i>12345</i>
9	Times Roman Italics	<i>ABCDEFGH abcdefg 12345</i>
10	Courier Bold-Italics	<b><i>ABCDEFGH abcdefg</i></b> <b><i>12345</i></b>



## Text Commands

<u>Number</u>	<u>Name</u>	<u>Sample</u>
K1I	HYGoThic-Medium Italics (Korean font)	
K1BI	HYGoThic-Medium Bold-Italics (Korean font)	
K2	HYSMyeongJo-Medium (Korean font) KSC-EUC-H encoding	
K2B	HYSMyeongJo-Medium Bold (Korean font)	
K2I	HYSMyeongJo-Medium Italics (Korean font)	
K2BI	HYSMyeongJo-Medium Bold-Italics (Korean font)	

You'll need to install the Chinese, Japanese or Korean font packs from Adobe in order to view a PDF with these characters. The font packs are available (free of charge) at:

<http://www.adobe.com/products/acrobat/acrrasianfontpack.html>

Note that Chinese/Japanese/Korean characters are two-bytes in length.

You may also embed your own fonts. See the [ADDFONT](#) command for more information.

## Text Commands

### **<ALIGN VALUE=text>**

Used to set the current alignment. Setting the ALIGN value affects the current line so you should place a BR before a long section of text using the ALIGN tag. You may unintentionally overlap text on the same line otherwise. You may not want to use BR tags prior for headings or other circumstances where you want some left and some right aligned text on the same line.

<u>Parameter</u>	<u>Description</u>
ALIGN=L R C J	Sets the alignment to Left, Center, Right or Justified.

For example:

```
<TEXT X=15 X2=65>
```

```
Text on the left
```

```
<ALIGN VALUE=C>
```

```
Centered Text
```

```
<ALIGN VALUE=R>
```

```
Text on the right<BR>
```

```
</TEXT>
```

Text on the left

Centered Text

Text on the right

## *Text Commands*

**<CENTER>**  
**</CENTER>**

Used to set centering on or off. When set to on, text defaults to centered and tables default to center alignment. Just the table itself - not the contents of the table cells.

## Text Commands

### **<LINESPACE VALUE=number>**

Used to specify the line spacing in 1/72 of an inch. You may override the value on the TEXT command.

<u>Parameter</u>	<u>Description</u>
VALUE=number	The amount of space between lines of text specified in units of 1/72 of an inch. Default is 2.

This text has a linespace value set at 12 which is one more than the current point size of 11. Notice how far each line drops down when the text wraps.

This is roughly double spaced text.

## Text Commands

### **<MINLINES VALUE=number>**

Used to force a page break if the minimum number of lines specified cannot fit on the current page. Use this command to prevent orphan headings in text blocks.

<u>Parameter</u>	<u>Description</u>
VALUE	The minimum number of lines (approximate - based on the current font size) that must be able to fit on the current page. If the minimum number doesn't fit, a page break is performed. This feature can be used in TEXT blocks to prevent a heading from appearing at the bottom of a page while the text it goes with starts on the next page. In this case, set MINLINES to a value (somewhere between 3 and 10 perhaps) and place this command just before the heading.

## Text Commands

**<FCOLOR  
VALUE=color>**

Used to change the text color.

<u>Parameter</u>	<u>Description</u>
VALUE	Enter a valid <a href="#">color</a> .

Here is a [text](#) [line](#) [using](#) [several](#) [different](#) colors.

## Text Commands

**<BGCOLOR  
VALUE=color>**

Used to set the background color for highlighting text.

<u>Parameter</u>	<u>Description</u>
VALUE=color	Enter a valid <a href="#">color</a> .

Here is some text that has been highlighted using the BGCOLOR command.

## Text Commands

**<REND  
VALUE=number>**

Used to specify the text rendering mode.

<u>Parameter</u>	<u>Description</u>
VALUE=number	0 = Fill text (default)
	1 = Stroke text (outline)
	2 = Fill then stroke
	3 = No fill or stroke (invisible)

**This text is in mode 0**

**This text is in mode 1**

**This text is in mode 2**

## Text Commands

**<ROTATE  
VALUE=number>**

Used to rotate text.

<u>Parameter</u>	<u>Description</u>
VALUE=number	The number of degrees to rotate the text. Text is rotated around the lower left point of the first character on the line.

**Here is some text that has been rotated  
45 degrees. This text will appear  
slanted on the page. One use for this  
would be for a watermark on the back  
of a page. Use a light color for the text  
in that situation.**

## *Text Commands*

**<SUB>**  
**</SUB>**

Used to turn subscripting on and off.

Here is a line using the subscripting tag.

## Text Commands

**<SUP  
VALUE=number>  
</SUP>**

Used to turn superscripting on and off.

Here is a line using the <sup>superscripting</sup> tag.

<u>Parameter</u>	<u>Description</u>
VALUE	Optional. Use this to control the height of the subscript. The amount in is units of 1/72 of an inch. The default is 5 if this parameter is left out.

## Text Commands

**<IMG**  
**SRC="text"**  
**ALIGN=text**  
**X=number**  
**Y=number**  
**SCALE=number**  
**SCALEX=number**  
**SCALEY=number**  
**PCTX=number**  
**PCTY=number**  
**KEEPRATIO**  
**HMARGIN=number**  
**VMARGIN=number**  
**TRANSPARENCY=number[,number]>**

Used to insert an image. This can be a jpeg (standard only) or gif (256-color non-interlaced) only. You may issue this command from within a text block or outside of it. Images scanned at over 72 dpi should have SCALEX and SCALEY set to scale the size of the image down.

<u>Parameter</u>	<u>Description</u>
SRC="text"	Required. The path and file name of the image you wish to include. The image itself will be embedded in the PDF. Place quotes around this value. You may also use a web address that starts with http:// to pull an image from a web site. Note that the image will be stored locally while the PDF is built. Also, downloading large images over a slow modem will take time.
ALIGN=text	Only applies in a block of text. You may set this value to Bottom (default), Middle or Top. For Bottom, the bottom of the image is aligned with the bottom of the current text line. For Middle, the middle of the image is aligned with the middle of the current text line. For Top, the top of the image is aligned with the top of the current text line.

## Text Commands

<u>Parameter</u>	<u>Description</u>
X=number	The X grid position of the left side to place the image. If you are in a block of text you don't need to specify this. The image will appear in the line of text.
Y=number	The Y grid position for the bottom of the image. If you are in a block of text you don't need to specify this. The image will appear in the line of text.
SCALE=number	The amount to compress or expand the image by in the X and Y direction. Values less than 100 will compress and values greater than 100 will expand. Setting this value overrides any values specified for SCALEX or SCALEY.
SCALEX=number	The amount to compress or expand the image by in the X direction. Values less than 100 will compress and values greater than 100 will expand.
SCALEY=number	The amount to compress or expand the image by in the Y direction. Values less than 100 will compress and values greater than 100 will expand.

# PDF Report Writer Lite

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## Text Commands

<u>Parameter</u>	<u>Description</u>
PCTX=number PCTY=number	Use these options to place an image at a particular X,Y position on the page without regards to the current GRID settings. The X and Y values in this case will represent inches (or centimeters if <a href="#">METRIC</a> is used) from the top left corner of the physical page when using PCTX and/or PCTY rather than grid positions. The PCTX and PCTY values represent a percentage, 0 to 100, of the total width and height respectively from the top left corner of the image. The point determined by PCTX and PCTY is the point on the image which will be placed at position X,Y. The PCTX and PCTY options only work when the IMG tag is outside of any TEXT block or TD cell.



For example, use X=8.5 Y=5.5  
PCTX=100 PCTY=50 To place an image vertically in the middle at the right edge of a page which is 8.5 inches by 11 inches. With the above page size, X=0 Y=0 PCTX=0 PCTY=0 will place an image in the upper left corner. X=8.5 Y=11 PCTX=100 PCTY=100 will place the image in the lower right corner.

KEEPRATIO

Preserves the aspect ratio when shrinking the image to fit on a page.

## Text Commands

<u>Parameter</u>	<u>Description</u>
HMARGIN=number	Used when spacing text around the image. Set a value based on the current GRID setting. Text will remain this distance from the left or right edge of the image. See the <a href="#">example</a> .
VMARGIN=number	Used when spacing text around the image. Set a value based on the current GRID setting. Text will remain this distance from the bottom of the image. See the <a href="#">example</a> .
TRANSPARENCY=number [,number]	Used to specify the transparency for GIF images. The transparency value, if any, is taken from the GIF file if this option is not included. This option overrides the value from the file. Specify the palette entry and, optionally, a thru value to make the entire range transparent.

Here is an image



set in this line of text.

## Text Commands

Here is an example of using an image with a block of text. The text will automatically space over to leave room for the image when the HMARGIN and/or VMARGIN tags are used with the image. The image may only be placed at the left or right when using this option. Set the alignment to the right if you want the image right aligned. Right after the image, use the Y tag along with an ALIGN option for the text that follows.



Here is some text to place next to the image to demonstrate the HMARGIN and VMARGIN options. Note that the text will be moved to the right until it is passed the image. The text will then flow into its normal position after it has moved past

the image. You must place a <Y ALIGN=text> tag after the IMG tag in order for this to work. In addition, the IMG tag must have the HMARGIN and/or VMARGIN set.

Here is some text to place next to the image, this time with the image on the right. Note that the text will be moved to the right until it is passed the image. The text will then flow into its normal position after it has moved past the image. You



must place a <Y ALIGN=text> tag after the IMG tag in order for this to work. In addition, the IMG tag must have the HMARGIN and/or VMARGIN set.

The above is coded as:

```
<TEXT FACE=3 SIZE=11 ALIGN=J X=15 X2=65 COMP=100><BR>  
<IMG SRC="star.jpg" HMARGIN=2 VMARGIN=2><Y ALIGN=J>
```

Here is some text to place next to the image to demonstrate the HMARGIN and VMARGIN options.

Note that the text will be moved to the right until it is passed the image.

The text will then flow into its normal position after it has moved past the image.

You must place a &lt;Y ALIGN=text&gt; tag after the IMG tag in order for this to work.

In addition, the IMG tag must have the HMARGIN and/or VMARGIN set.<BR><BR>

```
<ALIGN VALUE=R><IMG SRC="star.jpg" HMARGIN=2 VMARGIN=2><Y ALIGN=J>
```

Here is some text to place next to the image, this time with the image on the right.

Note that the text will be moved to the right until it is passed the image.

## *Text Commands*

The text will then flow into its normal position after it has moved past the image.  
You must place a `<Y ALIGN=text>` tag after the IMG tag in order for this to work.  
In addition, the IMG tag must have the HMARGIN and/or VMARGIN set.  
</TEXT>

## Text Commands

**<BIG>**  
**</BIG>**

Used to increase the current point size by 2 points. You may nest these tags.  
Use the /BIG tag to bring the current point size down by 2 points.

This text is getting bigger

## Text Commands

**<SMALL>**  
**</SMALL>**

Used to decrease the current point size by 2 points. You may nest these tags.  
Use the /SMALL tag to bring the current point size up by 2 points.

This text is getting smaller

## *Text Commands*

**<B>**  
**</B>**

Used to turn bold face font on and off. You may also use a <STRONG> tag in place of this. Only works with the built-in font faces - Courier, Helvetica and Times Roman and Asian fonts.

Here is some **bold** text.

## Text Commands

**<I>**  
**</I>**

Used to turn italics on and off. You may also use a <EM> tag (emphasis) in place of this. Only works with the built-in font faces - Courier, Helvetica and Times Roman and Asian fonts.

Here is some *italics* text.

## Text Commands

**<U>**  
**</U>**

Used to turn underlining on and off. You can use <U2> and </U2> for a double underline.

Here is a line with an underline and a double underline tag in it.

## Text Commands

**<X  
VALUE=number  
X2=number>**

Used to change the X and/or X2 values in a block of text. Affects all lines until another X tag is issued. You can also use this feature to do some column alignment in a block of text. Both parameters are optional however you must at least enter either VALUE or X2. Setting the X value affects the current line so you should place a BR before a section of text using the X tag. You may unintentionally overlap text on the same line otherwise.

<u>Parameter</u>	<u>Description</u>
VALUE	The left setting based on the current XUNITS setting from the GRID tag. Must be a positive value.
X2	The right setting based on the current XUNITS setting from the GRID tag. Must be a positive value.

For example:

```
<TEXT X=15 X2=65>  
Here is where a line normally prints.<BR>  
<X VALUE=20 X2=30>This text has been squeezed into a smaller area.<BR>  
It will stay this way until another X command is issued.<BR>  
</TEXT>
```

Here is where a line normally prints.

This text has  
been squeezed  
into a smaller  
area.  
It will stay this  
way until  
another X  
command is  
issued.

## Text Commands

### **<Y VALUE=number>**

Used to change the Y position in a block of text. About the only time you'll need to modify the Y position is when you want to move back to the top of the text block for positioning some text (like a report header).

<u>Parameter</u>	<u>Description</u>
VALUE	The setting based on the current YUNITS setting from the GRID tag. Must be a positive value. The top of a block of text is always 0.

For example:

```
<TEXT X=15 X2=65>  
Text on the left<BR>  
Second line of text on the left<BR>  
<Y VALUE=0><ALIGN VALUE=R>  
Text on the right<BR>  
Second line of text on the right<BR>  
</TEXT>
```

Text on the left  
Second line of text on the left

Text on the right  
Second line of text on the right

## *Text Commands*

### **<CAPTUREY>**

Used to capture the current Y value. The RESTOREY command uses the last value captured with this command.

## *Text Commands*

### **<RESTOREY>**

Used to restore the current Y value. The last Y position stored by the CAPTUREY command is used by this command to set the current Y position.

## Tables

**<TABLE**  
**X=number**  
**X2=number**  
**Y=number**  
**Y2=number**  
**WIDTH=number**  
**HEIGHT=number**  
**MINCOLWIDTH=number**  
**MINLINES=number**  
**MAXLINES=number**  
**CELLSPACING=number**  
**CELLPADDING=number**  
**CELLXPADDING=number**  
**CELLYPADDING=number**  
**CELLSPLIT**  
**TBLALIGN=L|R|C**  
**NAME=text**  
**COMPTEXT**  
**DOTTEXT**  
**COMP=number**  
**WHOLETABLE**  
**BACKGROUND=text**  
**BORDER=number**  
**BORDERCOLOR=color**  
**SIDES=text**  
**TABLEBORDER=number**  
**TABLEBORDERCOLOR=color**  
**TABLESIDES=text**  
**BORDERCOLS=list**  
**BGCOLOR=color**  
**3D**  
**COLNUM=number**  
**COLSPACE=number**  
**COLBAR=number**  
**ALIGN=L|R|C|J**  
**VALIGN=T|M|B**  
**FACE=font number**  
**SIZE=point size**  
**LINESPACE=number**  
**FCOLOR=color**  
**SCOLOR=color**  
**FORCEWIDTH**  
**BREAKON="text"**  
**OL\_LEVEL=number**  
**OL\_DESCR=text**  
**OL\_CLOSED**  
**OL\_SUB\_LEVEL=number**

## Tables

```
    OL_SUB_CLOSED
    OL_COL>
</TABLE>
```

Used to define a table. All of the parameters are optional.

<u>Parameter</u>	<u>Description</u>
X=number	Sets the value of the left margin in units based on the <a href="#">GRID</a> value for XUNITS. Default is 0. Setting X and/or X2 does not stretch a table to fit within these values. It simply sets the margins for the maximum width for the table. To stretch the table to fit a certain width, use the WIDTH parameter.
X2=number	Sets the value of the right margin in units based on the GRID value for XUNITS. Default is the value of XUNITS from the GRID command.
Y=number	Sets the value of the top of the table based on the GRID command. Default is the current Y value. Generally you don't set the Y or Y2 values. Only set these values when you're trying to leave some extra space to make the report look more like a pre-printed form you have. A table will simply start at the current position and, upon a page break, will continue on the next page at the top of the report body.
Y2=number	Sets the value of the top of the table based on the GRID command for all subsequent pages for the table. Default is 0.

## Tables

<u>Parameter</u>	<u>Description</u>
WIDTH=number	Sets the minimum width of the table based on the GRID command. Only set this parameter if you want to force the table to be wider than it would normally size itself. You can also specify a percentage of the total page width (minus the current margins). For example, set WIDTH=80% to take up 80% of the available page width.
HEIGHT=number	Sets the maximum height of the table based on the GRID command. You only use this parameter when you have a table you wish to force into a particular area on the page. Tables with this parameter set will not span across pages so you should set the HEIGHT to a value less than the current YUNITS setting (from the GRID command).
MINCOLWIDTH=number	Sets the minimum width in inches (or centimeters if <a href="#">METRIC</a> is used) that a column will be sized to if the table needs to be reduced to fit on the page. The default value is 1 inch. The larger this value is set to the more chance the table text will require compression.
MINLINES=number	Sets the minimum number of lines to print in each table cell. Use this only if you are trying to maintain a minimum size for each row. Setting this value to 3, for example, will force two extra blank lines to be printed in a cell that only has one line of text. No lines are added to a cell where the number of lines of text is equal to or greater than this number.

## Tables

<u>Parameter</u>	<u>Description</u>
MAXLINES=number	Sets the maximum number of lines to print in each table cell. Use this only if you are trying to maintain a maximum size for each row. Setting this value to 3, for example, will truncate text that would normally print on lines 4 or after in the cell.
CELLSPACING=number	Sets the space between cells based on units of 1/72 of an inch. You may use decimal values.
CELLPADDING=number	Sets the padding within cells based on units of 1/72 of an inch. You may use decimal values.
CELLXPADDING=number	Sets extra horizontal padding within cells based on units of 1/72 of an inch. You may use decimal values.
CELLYPADDING=number	Sets extra vertical padding within cells based on units of 1/72 of an inch. You may use decimal values.
CELLSPLIT	Allows cells to split across a page boundry. Typically, all cell data in a given row for the outer most table must fit on the current page. A page break occurs and the entire row is moved to the next page if any one cell goes beyond the bottom page margin. This option prints what will fit of each cell on the current page and wraps the remaining text from each cell onto the next page or pages. You may only use this option on rows in the outer most table in the body of the report. This option is for cells containing text only (no embedded tables). Additionally, row options such as MINROWS and ROWSPAN should not be used with CELLSPLIT.

# PDF Report Writer Lite

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## Tables

<u>Parameter</u>	<u>Description</u>			
TBLALIGN=L R C	Sets the placement of the table between the X and X2 value to the Left (default), Center or Right.			
NAME=text	Use the NAME parameter to keep the column widths of two or more tables sized the same. If you have a report where you are opening and closing a table several times due to page breaking or other circumstances and you want to keep a consistent look among these tables then use this parameter. You should only set the name of two or more tables to the same name when they have the same layout and are at the same nested level.			
COMPTEXT	Compress text (when necessary) to fit in a cell rather than perform word wrapping.			
DOTTEXT	Cuts off the end of any text that doesn't fit the cell and adds three dots (...) to the end of the text portion that does fit. Here is an example of COMPTEXT and DOTTEXT <table border="1"><tr><td>Here is some text to show how it prints standard, compressed and dot-text.</td></tr><tr><td>Here is some text to show how it prints standard, compressed and dot-text.</td></tr><tr><td>Here is some text to show how it...</td></tr></table>	Here is some text to show how it prints standard, compressed and dot-text.	Here is some text to show how it prints standard, compressed and dot-text.	Here is some text to show how it...
Here is some text to show how it prints standard, compressed and dot-text.				
Here is some text to show how it prints standard, compressed and dot-text.				
Here is some text to show how it...				
COMP=number	A percentage to compress the text by. A value less than 100 compresses text while a value greater than 100 expands text. Use this to override the compression setting the software may apply to wide tables.			
WHOLETABLE	Print the table on the current page only if there is enough room. Otherwise, start the table on the top of the next page.			

# PDF Report Writer Lite

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## Tables

<u>Parameter</u>	<u>Description</u>
BACKGROUND=text	Set to an image file on disk. Use quotes around the file name. This option places the specified image on the page with the upper left corner of the image set at the upper left corner of the table. Table cells fall on top of the image so you can place text over the image. There is no other relation between the table and the image so it's possible to have a table that is larger or smaller than the image itself.
BORDER=number	Sets the border size. This option is used for a border around individual cells. A value of 1 is a line with a width of 1/72 of an inch. Default is 0 (no border).
BORDERCOLOR=color	Sets the border color (when the 3D option is not used).
SIDES=text	Sets what sides to draw the border on. Default is all sides. Values are L (Left), R (Right), T (Top) and B (Bottom). For example, use SIDES=T,B to specify the border should be drawn on top and bottom only.
TABLEBORDER=number	Sets the border size. This option is used for a border around the entire table, not each cell. A value of 1 is a line with a width of 1/72 of an inch. Default is 0 (no border).
TABLEBORDERCOLOR=color	Sets the table border color (when the 3D option is not used).
TABLESIDES=text	Sets what sides to draw the table border on. Default is all sides. Values are L (Left), R (Right), T (Top) and B (Bottom). For example, use SIDES=T,B to specify the border should be drawn on top and bottom only.

# PDF Report Writer Lite

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## Tables

<u>Parameter</u>	<u>Description</u>
BORDERCOLS=list	Use this option with the TABLEBORDER option. Set to the list of from and thru column numbers (starting at 1 on the left) to draw the table border around. Using this option will draw boxes around a column or group of columns rather than the whole table. For example, BORDERCOLS=2,3,5,8 will draw two rectangles - one that covers columns 2 and 3 and another that covers columns 5 through 8.
BGCOLOR=color	Sets the background color of the table cells.
3D	Sets the border style as 3D which is light gray on top and left and dark gray on bottom and right. This option works best when CELLPADDING is half of what the BORDER value is.
COLNUM=number	Sets the number of columns on the page to divide the entire table into. Setting to two, for example, will fill up the left half of the page then move to the top right half of the page and continue. A new page is started automatically once all page columns are filled. An example of this would be a phone book which typically has two table columns, name and number, which wrap two or three times on a page before starting a new page. Keep in mind this is the number of columns to divide the page into, not the number of columns in the underlying table.
COLSPACE=number	Sets the amount of space in units based on the GRID command between each page column.
COLBAR=number	Draws a vertical bar between multiple page columns. Set this parameter to the line width.

## Tables

<u>Parameter</u>	<u>Description</u>
ALIGN=L R C J	Sets the default alignment for the table to Left (default unless overridden by <a href="#">BASEALIGN</a> command), Center, Right or Justified.
VALIGN=T M B	Sets the default vertical alignment for the table to Top (default), Middle or Bottom.
FACE=font number	Sets the font.
SIZE=point size	Sets the point size for the font.
LINESPACE=number	Sets the text line spacing. Each unit is 1/72 of an inch. Default is 2.
FCOLOR=color	Sets the fill color. This is also the font color.
SCOLOR=color	Sets the stroke color.
FORCEWIDTH	Forces the program to use the column widths specified on TD tags rather than expand to fit the maximum of the cell contents vs. the width setting.
BREAKON="text"	Set of characters a line break may occur on in addition to the space character. This overrides any global setting made with the <a href="#">BREAKON</a> tag.
OL_LEVEL=number	The outline level.
OL_DESCR=text	The text of the outline (leave blank if you are using the table column without a description).
OL_CLOSED	Set this option to initially close the outline.
OL_SUB_LEVEL=number	The sub outline level.
OL_SUB_CLOSED	Set this option to initially close the sub outline.
OL_COL=number	The column number to use for the index (left most column is 1).

The OL\_ parameters are used to set up bookmark entries based on a column in the table. You may specify a column as the index which, in order for it to

### *Tables*

make sense, should be column that the table is sorted on.

To create a table that will display information on customers sorted by customer name in the second column you might set up the outline as follows:

```
OL_LEVEL=1
OL_DESCR="Customer Name"
OL_CLOSED
OL_SUB_LEVEL=2
OL_COL=2
```

To just create the index without a heading, set up the outline like this:

```
OL_LEVEL=1
OL_COL=2
```

## Tables

```
<TH
  BORDER=number
  BORDERCOLOR=color
  BGCOLOR=color
  3D
  ROWBORDER
  SIDES=text
  LINE_OVER=number
  LINE_UNDER=number
  ALIGN=L|R|C|J
  VALIGN=T|M|B
  FACE=font number
  SIZE=point size
  COMP=number
  COMPTEXT[=OFF]
  DOTTEXT
  LINESPACE=number
  FCOLOR=color
  SCOLOR=color>
</TH>
```

Used to define a table header row. These tags appear inside of the <TABLE> </TABLE> tags. You may have as many header rows as you want. For tables that span pages, these rows are repeated at the top of each new page. Like the table row (<TR> tag) a table header will not split across a page. If a new table is starting at the bottom of a page and there is enough room for the header but no data rows, the header will not print at the bottom of the page. You can also use <THEAD><TR> in place of this tag and close it with </TR></THEAD>. All of the parameters are optional. Any values not set default to the values set in the TABLE tag.

<u>Parameter</u>	<u>Description</u>
BORDER=number	Sets the border size. A value of 1 is a line with a width of 1/72 of an inch.
BORDERCOLOR=color	Sets the border color (when the 3D option is not used).
BGCOLOR=color	Sets the background color of the row.
3D	Sets the border style as 3D which is light gray on top and left and dark gray on bottom and right. This option works best when CELLPADDING is half of what the BORDER value is.

# PDF Report Writer Lite

---

## Tables

<u>Parameter</u>	<u>Description</u>
ROWBORDER	Draws the border around the entire row rather than each cell. Do not use on rows containing cells with the ROWSPAN option.
SIDES=text	Sets what sides to draw the border on. Default is all sides. Values are L (Left), R (Right), T (Top) and B (Bottom). For example, use SIDES=T,B to specify the border should be drawn on top and bottom only.
LINE_OVER=number	Draws a line above each cell in the row. Set number to 1 for a single line or 2 for a double line. In contrast to a border, this line does not extend into the cellpadding around each cell. This option can be used to draw a line for a row of totals for instance.
LINE_UNDER=number	Draws a line below each cell in the row. Set number to 1 for a single line or 2 for a double line. In contrast to a border, this line does not extend into the cellpadding around each cell. This option can be used to underline a heading row for instance.
ALIGN=L R C J	Sets the default alignment for the row to Left (default), Center, Right or Justified.
VALIGN=T M B	Sets the default vertical alignment for the row to Top (default), Middle or Bottom.
FACE=font number	Sets the font.
SIZE=point size	Sets the point size for the font.
COMP=number	A percentage to compress the text by. A value less than 100 compresses text while a value greater than 100 expands text.
COMPTEXT[=OFF]	Compress text (when necessary) to fit in a cell rather than perform word wrapping. Use COMPTEXT=OFF to turn option off for the current row.
DOTTEXT	Cuts off the end of any text that doesn't fit the cell and adds three dots (...) to the end of the text portion that does fit.
LINESPACE=number	Sets the text line spacing. Each unit is 1/72 of an inch. Default is 2.

## Tables

<u>Parameter</u>	<u>Description</u>
FCOLOR=color	Sets the fill color. This is also the font color.
SCOLOR=color	Sets the stroke color.

## Tables

```
<TR
  BORDER=number
  BORDERCOLOR=color
  BGCOLOR=color
  3D
  ROWBORDER
  SIDES=text
  LINE_OVER=number
  LINE_UNDER=number
  CELLSPLIT
  ALIGN=L|R|C|J
  VALIGN=T|M|B
  FACE=font number
  SIZE=point size
  COMP=number
  COMPTEXT[=OFF]
  DOTTEXT
  NOBREAK[=OFF]
  LINESPACE=number
  FCOLOR=color
  SCOLOR=color
  MINROWS=number
  SUBHEADING=number
  HIDE>
</TR>
```

Used to define a table header row. These tags appear inside of the <TABLE> </TABLE> tags. A table row will not split across a page. If there is not enough room for all text in all columns of the row to fit on the current page, a page break will be issued automatically and the table will continue at the top of the next page. All of the parameters are optional. Any values not set default to the values set in the TABLE tag.

<u>Parameter</u>	<u>Description</u>
BORDER=number	Sets the border size. A value of 1 is a line with a width of 1/72 of an inch.
BORDERCOLOR=color	Sets the border color (when the 3D option is not used).
BGCOLOR=color	Sets the background color of the row.
3D	Sets the border style as 3D which is light gray on top and left and dark gray on bottom and right. This option works best when CELLPADDING is half of what the BORDER value is.

# PDF Report Writer Lite

---

## Tables

<u>Parameter</u>	<u>Description</u>
ROWBORDER	Draws the border around the entire row rather than each cell. Do not use on rows containing cells with the ROWSPAN option.
SIDES=text	Sets what sides to draw the border on. Default is all sides. Values are L (Left), R (Right), T (Top) and B (Bottom). For example, use SIDES=T,B to specify the border should be drawn on top and bottom only.
LINE_OVER=number	Draws a line above each cell in the row. Set number to 1 for a single line or 2 for a double line. In contrast to a border, this line does not extend into the cellpadding around each cell. This option can be used to draw a line for a row of totals for instance.
LINE_UNDER=number	Draws a line below each cell in the row. Set number to 1 for a single line or 2 for a double line. In contrast to a border, this line does not extend into the cellpadding around each cell. This option can be used to underline a heading row for instance.
CELLSPLIT	Allows cells to split across a page boundary. Typically, all cell data in a given row for the outer most table must fit on the current page. A page break occurs and the entire row is moved to the next page if any one cell goes beyond the bottom page margin. This option prints what will fit of each cell on the current page and wraps the remaining text from each cell onto the next page or pages. You may only use this option on rows in the outer most table in the body of the report. This option is for cells containing text only (no embedded tables). Additionally, row options such as MINROWS and ROWSPAN should not be used with CELLSPLIT.
ALIGN=L R C J	Sets the alignment for the cell to Left (default), Center, Right or Justified.
VALIGN=T M B	Sets the vertical alignment for the cell to Top (default), Middle or Bottom.

## Tables

<u>Parameter</u>	<u>Description</u>
FACE=font number	Sets the font.
SIZE=point size	Sets the point size for the font.
COMP=number	A percentage to compress the text by. A value less than 100 compresses text while a value greater than 100 expands text.
COMPTEXT[=OFF]	Compress text (when necessary) to fit in a cell rather than perform word wrapping. Use COMPTEXT=OFF to turn option off for the current row.
DOTTEXT	Cuts off the end of any text that doesn't fit the cell and adds three dots (...) to the end of the text portion that does fit.
NOBREAK[=OFF]	Used to prevent page breaks within a set of rows. Add NOBREAK (without the OFF option) on the first row you want to disable page breaks on. On the next row where it doesn't matter where the break occurs, add NOBREAK=OFF to allow a page break on any row. If you have multiple sections all in row where you don't want page breaks, simply issue a NOBREAK on the first row of each section and only put a single NOBREAK=OFF at the end. A NOBREAK section ends at the next NOBREAK or NOBREAK=OFF.
LINESPACE=number	Sets the text line spacing. Each unit is 1/72 of an inch. Default is 2.
FCOLOR=color	Sets the fill color. This is also the font color.
SCOLOR=color	Sets the stroke color.

## Tables

<u>Parameter</u>	<u>Description</u>
MINROWS=number	Sets the minimum number of rows (including the current one) that must be able to print on the page, otherwise this row is moved to the next page. This is useful when you have data in a column that contains subheading information. In order to ensure that not just the subheading information prints you could set this to a value of 2 or 3. Do not set this to a value that is larger than the number of rows that will fit on a page or you will risk losing information. A value somewhere between 2 and 5 would be reasonable.
SUBHEADING=number	Labels the row as a subheading row. Subheading rows will reprint on a page break and, unlike a <a href="#">TH</a> row, can be changed anytime during the course of the table. You set SUBHEADING to a number that represents the order it prints when a page break occurs. For example, you may have a table that shows jobs, employees and dates worked by employee for the job. In that case, your TH row would contain Job#, Employee Name and Date Worked. Then, your first TR row could be the actual job# with SUBHEADING=1. The next row would be the first employee for that job# with SUBHEADING=2. You then list each date worked in separate TR rows. When a page break occurs, the job and employee are reprinted just below the heading automatically. Use a negative number to clear out the subheading when you no longer want it to occur.
HIDE	Prevents the row from printing. This is mostly for the build option using the temporary file. See the <a href="#">Build Options</a> section for more information.

## Tables

```
<TD
  COLSPAN=number
  ROWSPAN=number
  BORDER=number
  BORDERCOLOR=color
  BGCOLOR=color
  3D
  SIDES=text
  HIDE
  LINE_OVER=number
  LINE_UNDER=number
  ALIGN=L|R|C|J
  VALIGN=T|M|B
  FACE=font number
  SIZE=point size
  ROTATE=number
  COMP=number
  COMPTEXT[=OFF]
  DOTTEXT
  FILL=text
  FILLLINE
  FILLIMG=text
  LINESPACE=number
  FCOLOR=color
  SCOLOR=color
  WIDTH=number
  NOWRAP
  REPRINT [CONTINUE=text]>
</TD>
```

Used to define a table data cell. These tags appear inside of the <TH> </TH> and <TR> </TR> tags. All whitespace at the beginning and end of each line of text passed into a TD cell is ignored. Use the &nbsp; command to force spaces when necessary. A table row will not split across a page. If there is not enough room for all text to fit on the current page, a page break will be issued automatically and the table will continue at the top of the next page. You may also embed another TABLE inside of this tag. Be careful when embedding tables that you don't insert so much information that the cell doesn't fit on a page. In order for tables to work correctly there must never be more data in a cell than will fit on a single page. All of the parameters are optional. Any values not set default to the values set in the TH or TR tag.

<u>Parameter</u>	<u>Description</u>
COLSPAN=number	Sets the number of columns to span this cell across. Default is 1.

# PDF Report Writer Lite

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## Tables

<u>Parameter</u>	<u>Description</u>
ROWSPAN=number	Sets the number of rows to span this cell across. Default is 1. Vertical alignment (VALIGN option) is not currently supported with this option. Rowspanned cells are always top aligned.
BORDER=number	Sets the border size. A value of 1 is a line with a width of 1/72 of an inch.
BORDERCOLOR=color	Sets the border color (when the 3D option is not used).
BGCOLOR=color	Sets the background color of the row.
3D	Sets the border style as 3D which is light gray on top and left and dark gray on bottom and right. This option works best when CELLPADDING is half of what the BORDER value is.
SIDES=text	Sets what sides to draw the border on. Default is all sides. Values are L (Left), R (Right), T (Top) and B (Bottom). For example, use SIDES=T,B to specify the border should be drawn on top and bottom only.
HIDE	Used to hide the cell on the report.
LINE_OVER=number	Draws a line above the cell. Set number to 1 for a single line or 2 for a double line. In contrast to a border, this line does not extend into the cellpadding around each cell.
LINE_UNDER=number	Draws a line below the cell. Set number to 1 for a single line or 2 for a double line. In contrast to a border, this line does not extend into the cellpadding around each cell.
ALIGN=L R C J	Sets the default alignment for the row - Left (default), Center, Right or Justified.
VALIGN=T M B	Sets the vertical alignment for the cell to Top (default), Middle or Bottom.
FACE=font number	Sets the font.

# PDF Report Writer Lite

---

## Tables

<u>Parameter</u>	<u>Description</u>
SIZE=point size	Sets the point size for the font.
ROTATE=number	An angle from 0 to 90 or 270 to 360 to rotate the text in the cell. The default is 0. You must supply the line breaks via the   command if you want the text to be broken into more than one line when using an angle greater than 0. Rotated text is always left aligned.
COMP=number	A percentage to compress the text by. A value less than 100 compresses text while a value greater than 100 expands text.
COMPTEXT[=OFF]	Compress text (when necessary) to fit in a cell rather than perform word wrapping. Use COMPTEXT=OFF to turn option off for the current cell.
DOTTEXT	Cuts off the end of any text that doesn't fit the cell and adds three dots (...) to the end of the text portion that does fit.
FILL=text	Fills the remaining space between the end of the text and the end of the cell with the character or string specified. Main purpose is to print dots (...) after text in a table of contents to visually line up the text with page numbers or other information. The value for FILL may be any string that will always be used in its entirety. The value will not be split to fit when using more than one character.
FILLLINE	Draws a line to fill the remaining space between the end of the text and the end of the cell.
FILLIMG=text	Fills the remaining space between the end of the text and the end of the cell with the image specified.
LINESPACE=number	Sets the text line spacing. Each unit is 1/72 of an inch. Default is 2.

## Tables

<u>Parameter</u>	<u>Description</u>
FCOLOR=color	Sets the fill color. This is also the font color.
SCOLOR=color	Sets the stroke color.
WIDTH=number	Forces the cell to be at least as wide in XUNITS as the number specified. You may also specify a percentage. Use the FORCEWIDTH option on the TABLE tag if you want to force this value rather than allow the cell width to grow beyond this value if needed.
NOWRAP	Forces the cell to remain wide enough to fit the requested text without wrapping. For a wide table this is achieved by compressing the text in the table so you should be careful not place too much text in a cell with NOWRAP specified.
REPRINT [CONTINUE=text]	Used to reprint the contents of a cell after a page break. Optionally, you can set a CONTINUE message (enclose the text in quotes) to print. You reference the CONTINUE message with the variable &continue in the text between the opening and closing TD tag. The CONTINUE message only prints when a page break has occurred. For example, you may have a column in your table where the value remains the same over many rows. Rather than print the value every time, you can set REPRINT on the first occurrence of the value and leave the cell blank for all rows following until the value changes. If a page break occurs the REPRINT option forces the value to be printed in the first row after the heading.

## *Tables*

### **<TABLEPAGE>**

Used to force a page break while inside of a table. Only issue this command between rows. That is, after a closing TR and before the TR whose row you want to start on the next page. This command serves as a shortcut to closing the table, issuing a PAGE command then opening another table with the same layout. All table headers will be repeated just like when a standard page break occurs.

## Drawing

**<LINE**  
**X1=number**  
**Y1=number**  
**X2=number**  
**Y2=number**  
**ON=number**  
**OFF=number**  
**DASH=number,number[,number,number...]**  
**WIDTH=number**  
**LINEC=number**  
**FCOLOR=color**  
**SCOLOR=color**  
**FIXED>**

Used to draw a line. You can also use HR in place of LINE. This allows you to draw a horizontal rule like you would in HTML.

<u>Parameter</u>	<u>Description</u>
X1=number	From X point based on the <a href="#">GRID</a> command. For tables, X1 is a percentage of the cell width when used inside of a <a href="#">TD</a> tag. To force the X1/X2 position based on the current GRID inside of TD cells (rather than based on current cell X positioning) include FIXED.
Y1=number	From Y point based on the GRID command. For tables, this value is added to the top of the current cell when used inside of a <a href="#">TD</a> tag.
X2=number	Thru X point based on the GRID command. For tables, X2 is a percentage of the cell width when used inside of a <a href="#">TD</a> tag. To force the X1/X2 position based on the current GRID inside of TD cells (rather than based on current cell X positioning) include FIXED.
Y2=number	Thru Y point based on the GRID command. For tables, this value is added to the top of the current cell when used inside of a <a href="#">TD</a> tag.
ON=number	The length of the line segment to draw with the SCOLOR.

## Drawing

<u>Parameter</u>	<u>Description</u>
OFF=number	The length of the line segment to draw with the FCOLOR.
DASH=number,number[,number ,number,...]	A comma separated list of numbers (in pairs) to specify the ON/OFF length.
WIDTH=number	Sets the line width based on units of 1/72 of an inch.
LINEC=number	Sets the line end style 0 = Butt ends 1 = Round ends 2 = Projecting square caps
FCOLOR=color	Sets the fill color. Only used when drawing dashed lines.
SCOLOR=color	Sets the stroke color. This is the color used for the line.
FIXED	For lines drawn in table cells. To force the X1/X2 position based on the current GRID inside of TD cells (rather than based on current cell X positioning) include FIXED.

You may leave the Y1 and Y2 positions out to simply draw a horizontal rule at your current position. For example, the following line is positioned just below this text by using <LINE X1=10 X2=70 SCOLOR=green WIDTH=2>.

---

## Drawing

**<LINEC  
VALUE=number>**

Used to set the line caps.

<u>Parameter</u>	<u>Description</u>
VALUE=number	Sets the line end style 0 = Butt ends 1 = Round ends 2 = Projecting square caps

Here a an example with 0



Here a an example with 1



Here a an example with 2



## Drawing

**<LINED**  
**ON=number**  
**OFF=number**  
**DASH=number,number[,number,number,...]>**

Used to set the on/off pixels for line drawing. Note that the "on" color is set with the SCOLOR value. The line won't appear dashed if both FCOLOR and SCOLOR are the same.

<u>Parameter</u>	<u>Description</u>
ON=number	The length of the line segment to draw with the SCOLOR.
OFF=number	The length of the line segment to draw with the FCOLOR.
DASH=number,number[,number ,number,...]	A comma separated list of numbers (in pairs) to specify the ON/OFF length. The DASH option and the ON/OFF options are mutually exclusive.

The line below is drawn with ON=8, OFF=4, FCOLOR=white and SCOLOR=green.



## Drawing

**<LINEW  
VALUE=number>**

Sets the line thickness. Default is 1.

<u>Parameter</u>	<u>Description</u>
VALUE=number	The width of the line.

Here a width of .1

---

Here a width of 1

---

Here a width of 5

---

## Drawing

```
<RECT
  X1=number
  Y1=number
  X2=number
  Y2=number
  ON=number
  OFF=number
  DASH=number,number[,number,number...]
  WIDTH=number
  LINEC=number
  FILL
  FCOLOR=color
  SCOLOR=color>
```

Used to draw a rectangle.

<u>Parameter</u>	<u>Description</u>
X1=number	From X point based on the <a href="#">GRID</a> command.
Y1=number	From Y point based on the GRID command.
X2=number	Thru X point based on the GRID command.
Y2=number	Thru Y point based on the GRID command.
ON=number	The length of the line segment to draw with the SCOLOR.
OFF=number	The length of the line segment to leave blank.
DASH=number,number[,number,number,...] ,number,...]	A comma separated list of numbers (in pairs) to specify the ON/OFF length.
WIDTH=number	Sets the line width based on units of 1/72 of an inch.
FILL	If set fills the rectangle with the fill color.
FCOLOR=color	Sets the fill color.
SCOLOR=color	Sets the stroke color.

You may leave the Y1 position out to draw a rectangle at the current position. The value for Y2 will then be added to the current position rather than used as an absolute position. For example, the following rectangle is

*Drawing*

positioned just below this text by using <RECT X1=10 X2=70 Y2=5  
SCOLOR=green FCOLOR=red WIDTH=2 FILL>.



## Drawing

### <CIRCLE

**X=number**

**Y=number**

**ON=number**

**OFF=number**

**DASH=number,number[,number,number...]**

**RADIUS=number|numberI**

**WIDTH=number**

**FILL**

**FCOLOR=color**

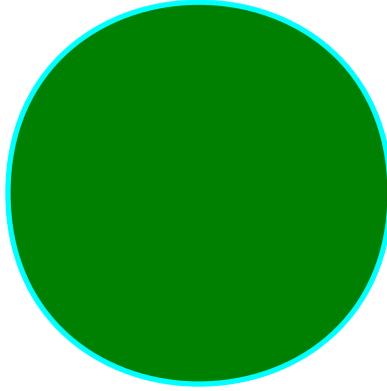
**SCOLOR=color>**

Used to draw a circle.

<u>Parameter</u>	<u>Description</u>
X=number	X point based on the <a href="#">GRID</a> command.
Y=number	Y point based on the GRID command.
RADIUS=number numberI	Radius based on the GRID command. If you put a letter I after the number then radius is expressed in inches.
ON=number	The length of the line segment to draw with the SCOLOR.
OFF=number	The length of the line segment to leave blank.
DASH=number,number[,number ,number,...]	A comma separated list of numbers (in pairs) to specify the ON/OFF length.
WIDTH=number	Sets the line width based on units of 1/72 of an inch.
FILL	If set fills the circle with the fill color.
FCOLOR=color	Sets the fill color.
SCOLOR=color	Sets the stroke color.

## *Drawing*

For example, the following circle is created using <CIRCLE X=40 Y=20  
RADIUS=11 SCOLOR=aqua FCOLOR=green WIDTH=2 FILL>.



## Drawing

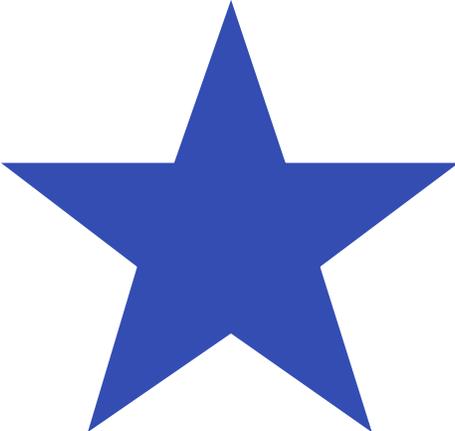
```
<POLY
  POINTS=number,number[,number]
  ON=number
  OFF=number
  DASH=number,number[,number,number...]
  WIDTH=number
  FILL
  FCOLOR=color
  SCOLOR=color>
```

Used to draw a polygon.

<u>Parameter</u>	<u>Description</u>
POINTS=number, number [,number]	Series of points in the form X1,Y1,X2,Y2,... as based on the current GRID settings.
ON=number	The length of the line segment to draw with the SCOLOR.
OFF=number	The length of the line segment to leave blank.
DASH=number,number[,number ,number,...]	A comma separated list of numbers (in pairs) to specify the ON/OFF length.
WIDTH=number	Sets the line width based on units of 1/72 of an inch.
FILL	If set fills the polygon with the fill color.
FCOLOR=color	Sets the fill color.
SCOLOR=color	Sets the stroke color.

*Drawing*

For example, the following polygon is created using <POLY POINTS=100,2,77,68,7,68,62,110,42,177,100,137,157,177,136,110,192,68,122,68 WIDTH=2 FCOLOR=.2,.3,.7 SCOLOR=.2,.3,.7 FILL>.



## Drawing

**<CURVE**  
**X1=number**  
**Y1=number**  
**X2=number**  
**Y2=number**  
**CPX1=number**  
**CPY1=number**  
**CPX2=number**  
**CPY2=number**  
**ON=number**  
**OFF=number**  
**DASH=number,number[,number,number...]**  
**WIDTH=number**  
**FILL**  
**FCOLOR=color**  
**SCOLOR=color>**

Used to draw a closed curve.

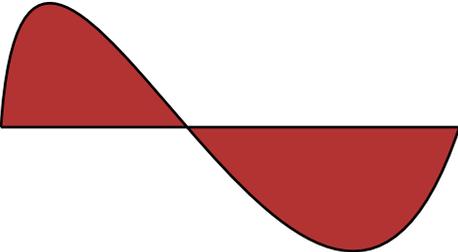
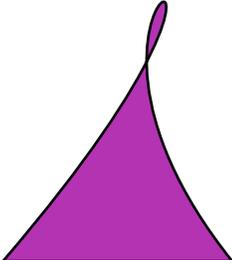
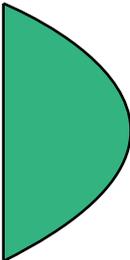
<u>Parameter</u>	<u>Description</u>
X1=number	X <a href="#">GRID</a> position of first point.
Y1=number	Y grid position of first point.
X2=number	X grid position of second point.
Y2=number	Y grid position of second point.
CPX1=number	X grid position of first control point.
CPY1=number	Y grid position of first control point.
CPX2=number	Optional. X grid position of second control point.
CPY2=number	Optional. Y grid position of second control point.
ON=number	The length of the line segment to draw with the SCOLOR.
OFF=number	The length of the line segment to leave blank.
DASH=number,number[,number,number,...]	A comma separated list of numbers (in pairs) to specify the ON/OFF length.
WIDTH=number	Sets the line width based on units of 1/72 of an inch.

## Drawing

<u>Parameter</u>	<u>Description</u>
FILL	If set fills the curve with the fill color.
FCOLOR=color	Sets the fill color.
SCOLOR=color	Sets the stroke color.

Drawing

Here are some examples:



## Drawing

### <ARC

**X=number**

**Y=number**

**RADIUS=number|numberI**

**DEG1=number**

**DEG2=number**

**ON=number**

**OFF=number**

**DASH=number,number[,number,number...]**

**WIDTH=number**

**FCOLOR=color**

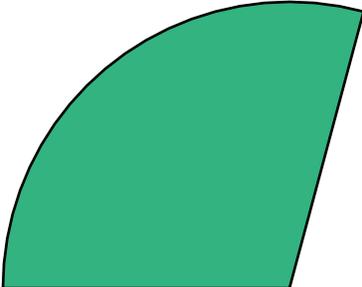
**SCOLOR=color>**

Used to draw an arc.

<u>Parameter</u>	<u>Description</u>
X=number	X point based on the <a href="#">GRID</a> command.
Y=number	Y point based on the GRID command.
RADIUS=number numberI	Radius based on the GRID command. If you put a letter I after the number then radius is expressed in inches.
DEG1=number	Starting degree value (from 0 to 360).
DEG2=number	Ending degree value (from 0 to 360).
ON=number	The length of the line segment to draw with the SCOLOR.
OFF=number	The length of the line segment to leave blank.
DASH=number,number[,number ,number,...]	A comma separated list of numbers (in pairs) to specify the ON/OFF length.
WIDTH=number	Sets the line width based on units of 1/72 of an inch.
FCOLOR=color	Sets the fill color.
SCOLOR=color	Sets the stroke color.

*Drawing*

For example, the following arc is drawn from 0 to 105 degrees.



## Colors

Parameters such as FCOLOR, SCOLOR and BORDERCOLOR take a color value. Colors may be entered in any of the following ways:

- You may specify the red, green and blue components as decimal values from 0 to 1, separated by a comma. In this case 0,0,0 is black and 1,1,1 is white.
- You may specify the red, green and blue components as values from 0 to 255, separated by a comma. In this case 0,0,0 is black and 255,255,255 is white.
- You may specify the red, green and blue components as a hex string preceded by a # sign. In this case #000000 is black and #FFFFFF is white.
- You may specify one of the RGB colors in the table below.

Color	Name
	Black
	Silver
	Gray
	White
	Maroon
	Red
	Purple
	Fuchsia

Color	Name
	Green
	Lime
	Olive
	Yellow
	Navy
	Blue
	Teal
	Aqua

## Suggestions

This section lists some suggestions and methods for setting up your report.

### Headers/Footers

When setting up a header or footer you may use the Y command to position content correctly. For example, if you want to set up a header with the date on the left, the report title in the middle and the page number on the right, you may do the following:

```
<TEXT FACE=16 SIZE=12 BORDER=1>  
<ALIGN VALUE=C><FONT FACE=16 SIZE=12>  
Report Title Line 1<BR>  
Report Title Line 2<FONT FACE=15 SIZE=10>  
<ALIGN VALUE=L>  
<Y VALUE=0>Date &date<ALIGN VALUE=R>  
<Y VALUE=0>Page &page  
</TEXT>
```

Which produces the following:

Date Jan 21, 2006	<b>Report Title Line 1</b> <b>Report Title Line 2</b>	Page 153
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Notice that is not necessary to set the X value during centering or right justification. The program will automatically adjust the X position when the alignment changes. Remember to place content between the <BODY> and </BODY> tags when using headers/footers. If not, your content will overlay the header/footer areas.

### Text/Tables

Remember to close out text blocks with the </TEXT> tag if you are mixing text blocks and tables in your report. Use a FONT and SIZE command in the TABLE or TEXT tag when inside of the report BODY. This will ensure the base font for the table or text block is set properly when a page break happens. You may use the BR tag outside of text blocks and tables to give some separation between items. You may also issue a PAGE tag inside of a block of text to force a page break. You may use the TABLEPAGE tag within a TABLE for a page break.

## Suggestions

### Table Rows

A table row for the outer most table must be able to fit completely on a page. It's important to note that it's the top level table row that must fit. If you have an embedded table inside of a table cell, the entire embedded table is counted as the contents of a cell and must fit on a page. If there isn't enough room for all cells in a given row to print the table will wrap to the next page. Use the CELLSPLIT option on the TABLE or TR tag to specify you want to allow cells to break across pages. Whatever contents will fit at the bottom of a page will print while the rest of the cell contents will start at the top of the following page. Only the text that will fit on a single page is shown if CELLSPLIT is not used on tables with a lot of text in a cell.

Use the CELLXSPACING option for tables that don't have a border. A value of 4 or 5 works good along with CELLSPACING set to 4. This will give some separation to the columns and make it easier to read.

### Backgrounds

Use the [NEWFORM](#) and [USEFORM](#) tags if you find yourself repeating the same information on many pages. This could be text, line drawing commands or images. The advantages are fewer commands passed into the software, the background information is only processed once and the resulting PDF file will be smaller.

## Build Options

PDF Report Writer Lite is a CPU intensive program and may take a couple seconds per page to generate the PDF. Partially due to the complexity involved in the PDF structure but mostly to the work that must be done to determine table column widths, perform pagination, reapply all header/footer information and so on. Other products, such as FyTek's PDF File Creator, are capable of building a PDF much faster but place the burden of pagination and repeating table headers on the developer. Additionally, PDF Report Writer Lite allows for a variety of text layout commands within a block of text. Because of this, a page can take anywhere from a half-second to three seconds on average to generate depending on processor speed and the complexity of the report. Basically, the faster your CPU, the faster the PDF will generate.

The program will take up as much CPU time as it can get by default. This means the CPU will be at or near 100% usage while the PDF is being built. Here are two things you can do to prevent the system from slowing too much:

- Use the `-lowpriority` option or `setLowPriority` method to lower the priority of the program. The program will still use as much of the CPU as it can but other applications will have priority over Report Writer Lite.
- Use the `-pause` option or `setPause` method to allow some idle time for other applications to run. Setting `-pause 5` or `setPause(5)` will free up the processor for .001 seconds after every 5 commands. The PDF will build a little slower but the benefit is better CPU utilization.

Keeping the number of commands to a minimum will help decrease the amount of time it takes for the PDF to build. Small things, like putting `FONT` and `BORDER` commands in the `TABLE` tag rather than on each `TD` tag should be the first thing to look for when trying to decrease build time. Table rows inherit font, border and color characteristics from the `TABLE` tag. Table cells inherit their font, border and color characteristics from the `TH` or `TR` tag. Try to push this information as far up the chain as possible.

The following options may be used if you've optimized your input file and still need a faster build time.

### Quick Build

This option will take fewer passes through the file so some features will not be available. You will probably save anywhere from 30-40% over the standard build time using this option. You may not use tables that have the HEIGHT option in the table tag when building with this method. The &getpage function will not work properly when using quick build.

If you use the &totpage variable, the software will leave room for 3 digits since the number is not known while the file is being built. Therefore, the alignment on the text line containing the total number of pages will be slightly off if you have it right or center aligned.

You specify the quick build option on the command line with the -q parameter or by using the [QUICKBUILD](#) tag in the input file. Or you can use the setQuick method with the DLL.

### Temp File

Another option, faster than quick build, is to use a temporary file. You will probably save anywhere from 40-50% over the standard build time. This option makes only one pass through the input file so, as with quick build, certain options are not available. You may only use text, tables, images and bookmarks. You may not use links or embedded fonts.

If you use the &totpage variable, the software will leave room for 3 digits since the number is not known while the file is being built. Therefore, the alignment on the text line containing the total number of pages will be slightly off if you have it right or center aligned.

Additionally, since there is only one pass of the file, you must provide column width information for each table. The easiest way to do this is to have a hidden TR row just after the table tag. A hidden row is ignored for printing but you can use it to convey the widths of the columns. The widths may be a value based on the current GRID setting or may be a percentage of the grid units in the X direction.

For example, here is how you might set up a table and specify the column widths to use:

```
<TABLE BORDER=1 CELLSPACING=2 CELLPADDING=2>  
<TR HIDE></TD>  
<TD WIDTH=20%></TD>
```

## *Build Options*

```
<TD WIDTH=45%></TD>  
<TD WIDTH=10%></TD>  
<TD WIDTH=25%></TD>  
</TR>  
<TH COLSPAN=2>  
... (rest of table) ...
```

In the above example, the table has 4 columns that will span the entire width specified by the GRID command (since the sum of the sizes add up to 100%). You may use less than 100% of the total space in the X direction but don't use more or the table will go outside of the defined area.

## Error Checking

You can check your PDF commands for errors during your development stage. When you use this option, any errors found are written to the error log file along with the line number from the input file that caused the error. The error log file will not be created if no errors are found. If errors are found, the PDF file will not be created.

You turn on error checking in the executable or Perl version with the `-e` parameter. For example: `"rwrite filein.frw fileout.pdf -e errlog.dat"` will place the error information in the `errlog.dat` file. Use the `setErrFile` method with the DLL version and pass it the file name to use.

The following table lists possible errors and their cause.

<u>Error</u>	<u>Description</u>
FONT xxxx not found	The font file specified in an ADDFONT tag could not be found. Check the path on the FILE parameter and the spelling.
IMAGE xxxx not found	The image file specified in an IMG tag could not be found. Check the path on the SRC parameter and the spelling.
TEXT tag not closed	An opening TEXT tag was found but no closing /TEXT tag was found.
BODY tag not closed	An opening BODY tag was found but no closing /BODY tag was found.
BODY tag encountered while still in HEADER/FOOTER	A BODY tag was found before either the HEADER or FOOTER was closed. You must close out a HEADER or FOOTER before issuing the BODY command.
HEADER/FOOTER tag encountered while in a TABLE	A HEADER or FOOTER tag was found while in a TABLE. Close out the TABLE before issuing the HEADER/FOOTER command.
BODY tag encountered while in a TABLE	A BODY tag was found while in a TABLE. Close out the TABLE before issuing the BODY command.

## Error Checking

<u>Error</u>	<u>Description</u>
HEADER/FOOTER tag encountered while still in BODY	A HEADER or FOOTER tag was issued while inside of the BODY. Close out the BODY tag first. If you are using HEADERS/FOOTERS they should always come after the PAGE command and before the BODY command.
TD tag with no active TABLE	A TD tag was found but no TABLE command had been issued. Open the TABLE first, followed by a TH or TR then the TD command.
TD tag with no TH, TR or /TD tag prior	A TD tag was found but was not preceded by a TH, TR or /TD command. A TD command should only follow a TH, TR or /TD command.
/TH tag with no /TD tag prior	A closing /TH tag was found but was not preceded by a /TD command.
/TR tag with no /TD tag prior	A closing /TR tag was found but was not preceded by a /TD command.

## Index of Commands

[A](#)  
[ADDFONT](#)  
[ALIGN](#)  
[ARC](#)  
[AUTHOR](#)

[B](#)  
[BASEALIGN](#)  
[BGCOLOR](#)  
[BIG](#)  
[BODY](#)  
[BR](#)  
[BREAKON](#)  
[BULLET](#)

[CAPTUREY](#)  
[CENTER](#)  
[CHECK](#)  
[CIRCLE](#)  
[CLOCK](#)  
[COLOR](#)  
[COMP](#)  
[CREATOR](#)  
[CURVE](#)

[DATE](#)  
[date](#)

[EXT](#)

[FCOLOR](#)  
[FONT](#)  
[FOOTER](#)  
[FROMPG](#)

[GRID](#)

[HEADER](#)  
[HR](#)

[I](#)  
[IGNOREUNKNOWN](#)  
[IMG](#)  
[INCLUDE](#)  
[KEYWORDS](#)

[LI](#)  
[LINE](#)  
[LINEC](#)  
[LINED](#)  
[LINESPACE](#)  
[LINEW](#)  
[LINKCOLOR](#)  
[LINKLINE](#)

[METRIC](#)  
[MINLINES](#)  
[MONTHS](#)  
[MOV](#)

[OUTLINE](#)

[P](#)  
[page](#)  
[PAGE](#)  
[PAGELAYOUT](#)  
[PAGEMODE](#)  
[PDF](#)  
[POLY](#)  
[QUICKBUILD](#)

[RECT](#)  
[REND](#)  
[REPEAT](#)  
[RESTOREY](#)  
[ROTATE](#)  
[runpage](#)

[SENDMAIL](#)  
[SET](#)  
[SETPG](#)  
[SMALL](#)  
[STARTPG](#)  
[SUB](#)  
[SUBFOOTER](#)  
[SUBHEADER](#)  
[SUBJECT](#)  
[SUP](#)

[TAB](#)  
[TABLE](#)  
[TABLEPAGE](#)

[TD](#)  
[TEXT](#)  
[TEXTABS](#)  
[TH](#)  
[THRUPG](#)  
[TITLE](#)  
[time](#)  
[totpage](#)  
[TR](#)

[U](#)  
[USEFORM](#)

[X](#)

[Y](#)

[ZOOM](#)