RML Example 12: Tables

RML (Report Markup Language) is ReportLab's own language for specifying the appearance of a printed page, which is converted into PDF by the utility rml2pdf.

These RML samples showcase techniques and features for generating various types of ouput and are distributed within our commercial package as test cases. Each should be self explanatory and stand alone.

The email address should be a clickable mailto link built by creating a plugin within the cell. And Robin's job title should be on a separate line to his name. In the third row, we use the newer and easier table cell properties "href" and "destination".

Name	Email
Robin Becker (chief propellerhead)	mailto:robin@reportlab.com
Internal link to back page	Hyperlink to www.reportlab.com

This should be a 5x5 table where some ranges span. Note that the grid and background commands still work on the "underlying" grid; if you grid the whole table, it will show through your 'spanned cells'

This should span the first 3 cells in the top row. It's ordinary left aligned text but could be centred if you want.			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B	C	DB	
A	B	C	DB	
A	B	C	DB	
A	B	C	DB	some more text

This should be a 5x5 table where some ranges span. Note that the grid and background commands still work on the "underlying" grid; if you grid the whole table, it will show through your 'spanned cells'. Here the span stuff is in the <td> attributes.

This should span the first 3 cells in the top row. It's ordinary left aligned text but could be centred if you want.			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B	C	DB	
A	B	C	DB	
A	B	C	DB	
A	B	C	DB	some more text

This should be a 5x5 table where some ranges span. The column widths have been set as 3cm,10%,10%,10%,30%. The percentage refers to unallocated width only. This also demonstrates the use of <hr> within a <blocktable>.

This should span the first 3 cells in the top row. It's ordinary left aligned text but could be centred if you want.			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B	C	DB	
A	B	C	DB	some more text
A	B	C	DB	
A	B	C	DB	

The same table again, but with a <frameBackground color="palegreen" start="1"/> set.

This should span the first 3 cells in the top row. It's ordinary left aligned text but could be centred if you want.			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B	C	DB	
A	B	C	DB	some more text
A	B	C	DB	
A	B	C	DB	

Same again, but with a <frameBackground color="lightblue" start="1" left="72" right="36"/> set.

This should span the first 3 cells in the top row. Also cell B spans two rows and two columns			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B		DB	
A			DB	some more text
A	B	C	DB	
A	B	C	DB	

RML Example 12: Tables

This should span the first 3 cells in the top row. It's ordinary left aligned text but could be centred if you want.			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B	C	DB	some more text

This should span the first 3 cells in the top row. It's ordinary left aligned text but could be centred if you want. It's rounded!			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B	C	DB	some more text

This should span the first 3 cells in the top row. It's ordinary left aligned text but could be centred if you want. It's rounded!			D	This should span all five cells in the right column. We vertically centred the text to make it look sensible using a separate stylesheet command.
A	B	C	DB	some more text

RML Example 12: Tables

This shows some pointers on doing financial tables. It demonstrates the decimal alignment and multiple lines. We also used a local <td color="red"> attribute for the negative cell; ideally one wants to make the data drive the colour, so that generator apps don't need to make para tags in every cell if they want red negatives. If we move to dynamic RML, then a number-and-cell-formatting function is possible, but static RML sees everything as text. Note that when the value does not contain the decimal character but there are non-digit characters at the end, it tries to align the rightmost digits with other rows.

Corporate Assets	Amount
Fixed Assets	1,234,567.89
Legal Offense Fund	86,000,000
Company Vehicle	1,234.8901
Petty Cash	42
Intellectual Property	Questionable
Bank Overdraft	(13,029)
Goodwill	(742,078,231.56)
Flat Screen TV	27 inches
Net Position	**Doomed. Really!**

The same table again this time in a <topPadder> tag (it pushes the entity to the bottom of the page).

Corporate Assets	Amount
Fixed Assets	1,234,567.89
Legal Offense Fund	86,000,000
Company Vehicle	1,234.8901
Petty Cash	42
Intellectual Property	Questionable
Bank Overdraft	(13,029)
Goodwill	(742,078,231.56)
Flat Screen TV	27 inches
Net Position	**Doomed. Really!**

RML Example 12: Tables

Individual <td> tags that contain pure strings can override the following attributes: `fontName`, `fontSize`, `fontColor`, `leading`, `leftPadding`, `rightPadding`, `topPadding`, `bottomPadding`, `background`, `align`, `vAlign`, `lineBelowThickness`, `lineBelowColor`, `lineBelowCap`, `lineBelowCount`, `lineBelowSpace`, `lineAboveThickness`, `lineAboveColor`, `lineAboveCap`, `lineAboveCount`, `lineAboveSpace`, `lineLeftThickness`, `lineLeftColor`, `lineLeftCap`, `lineLeftCount`, `lineLeftSpace`, `lineRightThickness`, `lineRightColor`, `lineRightCap`, `lineRightCount`, `lineRightSpace` .

fontName	`Courier`
fontName	Helvetica
fontSize	*8*
fontSize	*14*
fontColor	*red*
fontColor	*blue*
leading	*leading is 16*
leading	*leading is 12*
leftPadding	10
leftPadding	16
rightPadding	10
rightPadding	24
topPadding	10
topPadding	24
bottomPadding	10
bottomPadding	24
background	*pink*
background	*lightblue*
align	*left*
align	*center*
align	*center leftPadding 00*
align	*center leftPadding 10*
align	*right*
- vAlign -	*top*

- vAlign -	middle
- vAlign -	bottom
lineRight	green 1.5pt thickness dash 5 2
lineLeft	magenta 2pt thickness dash 5 7
lineAbove	blue 0.5pt thickness dash 2 3
lineBelow	red 1pt thickness dash 3 5

RML Example 12: Tables

This is the previous table again, but this time in a <ytopPadder> tag (which begins immediately after the green <hr>) so the the first chunk is pushed to the bottom of the frame.

---

fontName	Courier
fontName	Helvetica
fontSize	8
fontSize	14
fontColor	red
fontColor	blue
leading	leading is 16
leading	leading is 12
leftPadding	10
leftPadding	16
rightPadding	10
rightPadding	24
topPadding	10
topPadding	24
bottomPadding	10
bottomPadding	24
background	pink
background	lightblue
align	left
align	center
align	center leftPadding 00
align	center leftPadding 10
align	right
- vAlign -	top
- vAlign -	middle

-	
vAlign	
-	bottom
lineBelow	red 1pt thickness

RML Example 12: Tables

This table is using **<xpre>** tags around the contents of the right hand column.

fontName	Courier
fontName	Helvetica
fontSize	8
fontSize	14
fontColor	red
fontColor	blue
leading	leading is 16
leading	leading is 12
leftPadding	10
leftPadding	16
rightPadding	10
rightPadding	24
topPadding	10
topPadding	24
bottomPadding	10
bottomPadding	24
background	pink
background	lightblue
align	left
align	center
align	right
- *vAlign* -	top
- *vAlign* -	middle
- *vAlign* -	bottom

Bulk Data Support

Very often one wants to get quite a lot of text or numeric data into a table - for example from a database query or imported data file. Quoting all of this correctly as XML and wrapping in in td and tr tags is time and memory consumuing, unquoting and parsing it all back even more so. Therefore, instead of explicitly creating row and cell tags, you can now use a new **bulkData** tag. This lets you specify a delimiter for fields (default is comma) and for records (default is newline), and rml2pdf will break this up.

If you want to avoid having to quote ampersands, wrap this in a CDATA escape sequence.

Of course if you want per-cell formatting or to put arbitrary flowables in a cell, you must use the other tags.

Product	Profit
Sprockets	26
Widgets	34
Thingummies	217
Bits & Bobs	23
Total	**277**

You can specify a tab with **fieldDelim="\t"**, but we generally advise against using any whitespace character as a delimiter if you have a choice. You can also specify fine-grained "stripping" control; the default behaviour is to strip whitespace off the top and bottom of the overall data block, so blank lines are excluded, and off the ends of each row so line endings and indentation don't matter, but not off each cell. Note that the strings in the cells may contain spaces and these spaces will be respected in formatting. You are also advised to use a CDATA escape sequence around your data so that "&","<" and ">", characters don't need special handling.

Excel Bulk Data Support

The **excelData** tag is very similar to the bulk data support, but reads the bulk data from an Excel file instead of from delimited textual data. The **range** attribute is optional.

Product	Profit
Sprockets	26.4
Widgets	35.0
Thingummies	217.0
Date	2005-10-05
Bits & Bobs	23.0
Total	**277.0**

Colour cycles by rows and columns

It's sometimes nice to alternate colours by row (e.g. a pale color then white) to visually break up a long table. The style lets you specify **cycles** as well as single colours. Here we have created a style command which cycles through pale green and white, like old stacks of fanfold paper...

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Bottom row should be greem	110	-

Try again by column, with three colors this time. Also ensure some row heights vary to check accuracy of drawing.

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients plus magnum of champagne	400	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	100	-

And now by column (although this may be used less...)

Date	Item	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Expenses	Entertainment	100	100	100	100	100	100	100	100	100	100	100	100	1200
Expenses	Entertainment	100	100	100	100	100	100	100	100	100	100	100	100	1200
Expenses	Entertainment	100	100	100	100	100	100	100	100	100	100	100	100	1200
Expenses	Entertainment	100	100	100	100	100	100	100	100	100	100	100	100	1200
Expenses	Entertainment	100	100	100	100	100	100	100	100	100	100	100	100	1200

Splitting over pages - top and bottom rows

Sometimes a table splits over a page and you don't have a grid, so the bottom part (and top of the new page) have no line boxing them in. The splitfirst and splilast magic coordinates can be used to insert a line drawing routine into the style for this. I used an ugly thick purple line!

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	101	-
28-09-2004	Expensive lunch with clients	102	-
28-09-2004	Expensive lunch with clients	103	-
28-09-2004	Expensive lunch with clients	104	-
28-09-2004	Expensive lunch with clients	105	-
28-09-2004	Expensive lunch with clients	106	-
28-09-2004	Expensive lunch with clients	107	-
28-09-2004	Expensive lunch with clients	108	-
28-09-2004	Expensive lunch with clients	109	-
28-09-2004	Expensive lunch with clients	110	-
28-09-2004	Expensive lunch with clients	111	-
28-09-2004	Expensive lunch with clients	112	-
28-09-2004	Expensive lunch with clients	113	-
28-09-2004	Expensive lunch with clients	114	-
28-09-2004	Expensive lunch with clients	115	-
28-09-2004	Expensive lunch with clients	116	-
28-09-2004	Expensive lunch with clients	117	-
28-09-2004	Expensive lunch with clients	118	-
28-09-2004	Expensive lunch with clients	119	-
28-09-2004	Expensive lunch with clients	120	-
28-09-2004	Expensive lunch with clients	121	-
28-09-2004	Expensive lunch with clients	122	-
28-09-2004	Expensive lunch with clients	123	-
28-09-2004	Expensive lunch with clients	124	-
28-09-2004	Expensive lunch with clients	125	-
28-09-2004	Expensive lunch with clients	126	-
28-09-2004	Expensive lunch with clients	127	-
28-09-2004	Expensive lunch with clients	128	-
28-09-2004	Expensive lunch with clients	129	-
28-09-2004	Expensive lunch with clients	130	-
28-09-2004	Expensive lunch with clients	131	-
28-09-2004	Expensive lunch with clients	132	-
28-09-2004	Expensive lunch with clients	133	-
28-09-2004	Expensive lunch with clients	134	-
28-09-2004	Expensive lunch with clients	135	-
28-09-2004	Expensive lunch with clients	136	-
28-09-2004	Expensive lunch with clients	137	-
28-09-2004	Expensive lunch with clients	138	-
28-09-2004	Expensive lunch with clients	139	-
28-09-2004	Expensive lunch with clients	140	-
28-09-2004	Expensive lunch with clients	141	-
28-09-2004	Expensive lunch with clients	142	-
28-09-2004	Expensive lunch with clients	143	-

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	144	-
28-09-2004	Expensive lunch with clients	145	-
28-09-2004	Expensive lunch with clients	146	-
28-09-2004	Expensive lunch with clients	147	-
28-09-2004	Expensive lunch with clients	148	-
28-09-2004	Expensive lunch with clients	149	-
28-09-2004	Expensive lunch with clients	150	-
28-09-2004	Expensive lunch with clients	151	-
28-09-2004	Expensive lunch with clients	152	-
28-09-2004	Expensive lunch with clients	153	-

No Split Rows

Sometimes a table splits over a page or frame and the split occurs at an inopportune point say after a sub heading. You can use the **noSplitRowCount** attribute of the **>tr<** tag to inhibit splitting at certain rows. First see the table without any special treatment.

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	101	-
28-09-2004	Expensive lunch with clients	102	-
28-09-2004	Expensive lunch with clients	103	-
28-09-2004	Expensive lunch with clients	104	-
28-09-2004	Expensive lunch with clients	105	-
28-09-2004	Expensive lunch with clients	106	-
28-09-2004	Expensive lunch with clients	107	-
28-09-2004	Expensive lunch with clients	108	-
28-09-2004	Expensive lunch with clients	109	-
28-09-2004	Expensive lunch with clients	110	-
28-09-2004	Expensive lunch with clients	111	-
28-09-2004	Expensive lunch with clients	112	-
28-09-2004	Expensive lunch with clients	113	-
28-09-2004	Expensive lunch with clients	114	-
28-09-2004	Expensive lunch with clients	115	-
28-09-2004	Expensive lunch with clients	116	-
28-09-2004	Expensive lunch with clients	117	-
28-09-2004	Expensive lunch with clients	118	-
28-09-2004	Expensive lunch with clients	119	-
28-09-2004	Expensive lunch with clients	120	-
28-09-2004	Expensive lunch with clients	121	-
28-09-2004	Expensive lunch with clients	122	-
28-09-2004	Expensive lunch with clients	123	-
28-09-2004	Expensive lunch with clients	124	-
28-09-2004	Expensive lunch with clients	125	-
28-09-2004	Expensive lunch with clients	126	-
28-09-2004	Expensive lunch with clients	127	-
28-09-2004	Expensive lunch with clients	128	-
28-09-2004	Expensive lunch with clients	129	-
28-09-2004	Expensive lunch with clients	130	-
28-09-2004	Expensive lunch with clients	131	-
28-09-2004	Expensive lunch with clients	132	-
28-09-2004	Expensive lunch with clients	133	-
28-09-2004	Expensive lunch with clients	134	-
28-09-2004	Expensive lunch with clients	135	-
28-09-2004	Expensive lunch with clients	136	-
	This is a subheader		

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	137	-
28-09-2004	Expensive lunch with clients	138	-
28-09-2004	Expensive lunch with clients	139	-
28-09-2004	Expensive lunch with clients	140	-
28-09-2004	Expensive lunch with clients	141	-
28-09-2004	Expensive lunch with clients	142	-
28-09-2004	Expensive lunch with clients	143	-
28-09-2004	Expensive lunch with clients	144	-
28-09-2004	Expensive lunch with clients	145	-
28-09-2004	Expensive lunch with clients	146	-
28-09-2004	Expensive lunch with clients	147	-
28-09-2004	Expensive lunch with clients	148	-
28-09-2004	Expensive lunch with clients	149	-
28-09-2004	Expensive lunch with clients	150	-
28-09-2004	Expensive lunch with clients	151	-
28-09-2004	Expensive lunch with clients	152	-
28-09-2004	Expensive lunch with clients	153	-

Now we change the subheader row **\<tr\>** tag to be **\<tr noSplitRowCount="2"\>** so the subheader row and the following one are bound together ie we won't split the two.

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	101	-
28-09-2004	Expensive lunch with clients	102	-
28-09-2004	Expensive lunch with clients	103	-
28-09-2004	Expensive lunch with clients	104	-
28-09-2004	Expensive lunch with clients	105	-
28-09-2004	Expensive lunch with clients	106	-
28-09-2004	Expensive lunch with clients	107	-
28-09-2004	Expensive lunch with clients	108	-
28-09-2004	Expensive lunch with clients	109	-
28-09-2004	Expensive lunch with clients	110	-
28-09-2004	Expensive lunch with clients	111	-
28-09-2004	Expensive lunch with clients	112	-
28-09-2004	Expensive lunch with clients	113	-
28-09-2004	Expensive lunch with clients	114	-
28-09-2004	Expensive lunch with clients	115	-
28-09-2004	Expensive lunch with clients	116	-
28-09-2004	Expensive lunch with clients	117	-
28-09-2004	Expensive lunch with clients	118	-
28-09-2004	Expensive lunch with clients	119	-
28-09-2004	Expensive lunch with clients	120	-
28-09-2004	Expensive lunch with clients	121	-
28-09-2004	Expensive lunch with clients	122	-
28-09-2004	Expensive lunch with clients	123	-
28-09-2004	Expensive lunch with clients	124	-
28-09-2004	Expensive lunch with clients	125	-
28-09-2004	Expensive lunch with clients	126	-
28-09-2004	Expensive lunch with clients	127	-
28-09-2004	Expensive lunch with clients	128	-
28-09-2004	Expensive lunch with clients	129	-
28-09-2004	Expensive lunch with clients	130	-
28-09-2004	Expensive lunch with clients	131	-
28-09-2004	Expensive lunch with clients	132	-
28-09-2004	Expensive lunch with clients	133	-
28-09-2004	Expensive lunch with clients	134	-
28-09-2004	Expensive lunch with clients	135	-
28-09-2004	Expensive lunch with clients	136	-

Date	Item	Debit	Credit
	This is a subheader		
28-09-2004	Expensive lunch with clients	137	-
28-09-2004	Expensive lunch with clients	138	-
28-09-2004	Expensive lunch with clients	139	-
28-09-2004	Expensive lunch with clients	140	-
28-09-2004	Expensive lunch with clients	141	-
28-09-2004	Expensive lunch with clients	142	-
28-09-2004	Expensive lunch with clients	143	-
28-09-2004	Expensive lunch with clients	144	-
28-09-2004	Expensive lunch with clients	145	-
28-09-2004	Expensive lunch with clients	146	-
28-09-2004	Expensive lunch with clients	147	-
28-09-2004	Expensive lunch with clients	148	-
28-09-2004	Expensive lunch with clients	149	-
28-09-2004	Expensive lunch with clients	150	-
28-09-2004	Expensive lunch with clients	151	-
28-09-2004	Expensive lunch with clients	152	-
28-09-2004	Expensive lunch with clients	153	-

Now we move the subheader up one and change its tag to **<tr noSplitRowCount="3">** so the sub-header row and the following two are bound together ie we won't split the three.

Date	Item	Debit	Credit
28-09-2004	Expensive lunch with clients	100	-
28-09-2004	Expensive lunch with clients	101	-
28-09-2004	Expensive lunch with clients	102	-
28-09-2004	Expensive lunch with clients	103	-
28-09-2004	Expensive lunch with clients	104	-
28-09-2004	Expensive lunch with clients	105	-
28-09-2004	Expensive lunch with clients	106	-
28-09-2004	Expensive lunch with clients	107	-
28-09-2004	Expensive lunch with clients	108	-
28-09-2004	Expensive lunch with clients	109	-
28-09-2004	Expensive lunch with clients	110	-
28-09-2004	Expensive lunch with clients	111	-
28-09-2004	Expensive lunch with clients	112	-
28-09-2004	Expensive lunch with clients	113	-
28-09-2004	Expensive lunch with clients	114	-
28-09-2004	Expensive lunch with clients	115	-
28-09-2004	Expensive lunch with clients	116	-
28-09-2004	Expensive lunch with clients	117	-
28-09-2004	Expensive lunch with clients	118	-
28-09-2004	Expensive lunch with clients	119	-
28-09-2004	Expensive lunch with clients	120	-
28-09-2004	Expensive lunch with clients	121	-
28-09-2004	Expensive lunch with clients	122	-
28-09-2004	Expensive lunch with clients	123	-
28-09-2004	Expensive lunch with clients	124	-
28-09-2004	Expensive lunch with clients	125	-
28-09-2004	Expensive lunch with clients	126	-
28-09-2004	Expensive lunch with clients	127	-
28-09-2004	Expensive lunch with clients	128	-
28-09-2004	Expensive lunch with clients	129	-
28-09-2004	Expensive lunch with clients	130	-
28-09-2004	Expensive lunch with clients	131	-
28-09-2004	Expensive lunch with clients	132	-
28-09-2004	Expensive lunch with clients	133	-
28-09-2004	Expensive lunch with clients	134	-
28-09-2004	Expensive lunch with clients	135	-

Date	Item	Debit	Credit
	This is a subheader		
28-09-2004	Expensive lunch with clients	136	-
28-09-2004	Expensive lunch with clients	137	-
28-09-2004	Expensive lunch with clients	138	-
28-09-2004	Expensive lunch with clients	139	-
28-09-2004	Expensive lunch with clients	140	-
28-09-2004	Expensive lunch with clients	141	-
28-09-2004	Expensive lunch with clients	142	-
28-09-2004	Expensive lunch with clients	143	-
28-09-2004	Expensive lunch with clients	144	-
28-09-2004	Expensive lunch with clients	145	-
28-09-2004	Expensive lunch with clients	146	-
28-09-2004	Expensive lunch with clients	147	-
28-09-2004	Expensive lunch with clients	148	-
28-09-2004	Expensive lunch with clients	149	-
28-09-2004	Expensive lunch with clients	150	-
28-09-2004	Expensive lunch with clients	151	-
28-09-2004	Expensive lunch with clients	152	-
28-09-2004	Expensive lunch with clients	153	-

This is a table with some vertical text.

	Horizontal orientation	Horizontal orientation
Vertical orientation		

RML Example 12: Tables

HTML style row spans & use of ident(helps when errors happen).

Scenario	User device OS	Browser required	Web Interface site	Client	Client install
A	Windows XP, Windows XP Embedded	Yes	Desktop Appliance	Desktop Appliance Lock in Citrix online plug-in 12.1	Preinstalled by administrator
	Linux			Citrix Receiver for Linux 11.100	
B	Windows XP, Windows XP Embedded	No	XenDesktop Services	See manufacturer's documentation for the relevant thin client	Preinstalled by administrator
C	Windows 7, Windows Vista, Windows XP	Yes	XenDesktop Web	Desktop Viewer in Citrix online plug-in 12.1	Preinstalled by administrator or through auto client detection or user prompt
	Windows CE			Client for Windows CE 10.	
	Macintosh OS X			Citrix online plug-in for Macintosh 11.2	

Component	Specifications	
pServerOne pServerTwo	**CPU**	Up to 32 64-bit Intel VT or AMD-V x86 CPUs or equivalent. 1.5 GHz minimum recommended clock speed, 2.0 GHz or faster multicore CPUs recommended. Both of the above CPU types support hardware virtualization, which is a requirement. In addition, the BIOS setting for hardware visualization must be enabled. For more information, see the documentation for your BIOS. Important: If your CPUs do not support hardware virtualization, you cannot complete the installation.
	Memory	Minimum 8 GB RAM.
	Hard Disk	100 GB locally attached storage (for example, PATA, SATA, or SCSI).
	NIC	100 Mbps (megabits per second) or faster network interface card (NIC).
pXenCenterComputer	A computer running: For more information about the specifications for this device, see the *XenServer Installation Guide*.	
User devices	Computers running: For more information about user device requirements, see XenDesktop 4 System Requirements.	

Text Hg My

THE EMPIRE STATE BUILDING

Example table with no rowHeights	
Name	*Email*
Robin Becker	*mailto:robin@reportlab.com*
AAAAAAA	*BBBBBBBBBB*

Example table with rowHeights="15,15,20"

Name	*Email*
Robin Becker	*mailto:robin@reportlab.com*
AAAAAAA	*BBBBBBBBBB*

Example table with rowHeights="12,15,20"

Name	*Email*
Robin Becker	*mailto:robin@reportlab.com*
AAAAAAA	*BBBBBBBBBB*

Example table with heights specified in the <tr> tags

Name	*Email*
Robin Becker	*mailto:robin@reportlab.com*
AAAAAAA	*BBBBBBBBBB*

ReportLab

This is tab text

This is just a rather boring example of a table

Example table with splitInRow 0

Name	Email
Robin Becker	mailto:robin@reportlab.com
AAAAAAA	BBBBBBBBBB

Example table with splitInRow 5

Name	Email
Robin Becker	mailto:robin@reportlab.com
AAAAAAA	BBBBBBBBBB

Example table with lineargradient backgrounds

00	01	02
10	11 this is a long string	12
20 this is the end my friend	21 the bells of hell go ting-aling-aling	22 despair all who enter here
30 this is the end my friend	31 the bells of hell go ting-aling-aling	32 despair all who enter here
40	41 this is a long string	42
50	51	52
60 this is the end my friend	61 the bells of hell go ting-aling-aling	62 despair all who enter here
70 this is the end my friend	71 the bells of hell go ting-aling-aling	72 despair all who enter here
80 this is the end my friend	81 the bells of hell go ting-aling-aling	82 despair all who enter here

Example table: each row is \<pre> tagged
```
     I # 1      1   XYZ123M
                          GST                 0.00
```
Using \<pre> tag directly
```
     I # 1      1   XYZ123M
                   GST            0.00
```