5

Formatting Text

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This chapter describes how to format paragraphs using local format effects. These are applied directly to an individual paragraph or selection of paragraphs and take effect immediately.

Local effects are normally used when you wish to make a simple change to a document, such as justifying a paragraph. If you are producing a short or simple document then it is practical to use combinations of local effects, since if you want to change them, it is reasonably quick to do so in a short document. In long or complex documents you should use defined styles described in Chapter 6. These allow style and format effects to be combined together in a named style and applied in a single operation. Defined styles may easily be modified at a later stage, automatically updating all occurrences in the document.

5.1 Applying Format Effects

Menu⇨Text⇨Format

Local format effects are used to change the format of paragraphs of text. **Alignment** and **Leading** on the **Text** menu *(fig.5.1)* provide the basic format effects. The Format dialogue box provides the complete range of text formatting effects.

Tabs opens the tab ruler and allows tab stops and indents to be set.

Format effects can only be applied to whole paragraphs. A paragraph is defined as being the text between two Return characters, so it may be a single line heading or a multiple line paragraph.

If you want to start a new line within the same paragraph choose **Misc⇨Insert⇨New Line** or press Shift Return.

Changing a Single Paragraph

To change the format of a single paragraph, position the caret in the paragraph and choose the required effect from the appropriate menu or dialogue box.

Changing Multiple Paragraphs

If you select a number of paragraphs, formatting will affect all paragraphs wholly or partially selected.

Copying Format Effects

You can copy the format attributes from one paragraph to another. To do this, place the caret in the destination paragraph (or select a range of paragraphs), then hold down Shift and right click in the source paragraph. This facility does not copy text effects such as bold and italic.

Clearing Effects

You can clear all local format effects from the caret or from a selected region by choosing **Style⇨Remove⇨Local effect** *(fig. 5.2)*.

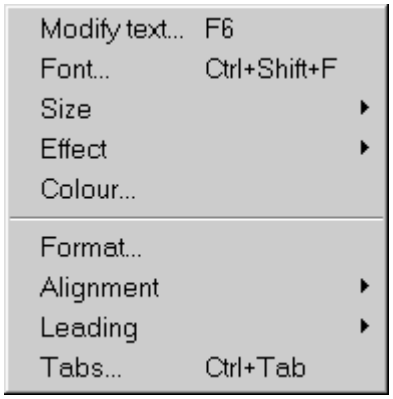


*Fig. 5.1 - The **Text** menu.*

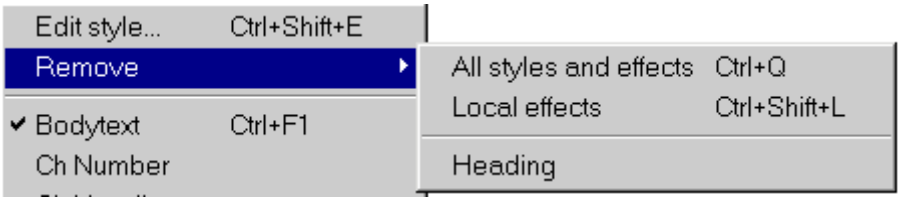


*Fig. 5.2 - Use **Local effects** to remove effects.*

5.2 Alignment

Menu➪Text➪Alignment➪

To align selected paragraphs choose the alignment you require from the **Alignment** menu *(fig. 5.3)* or from the info palette *(fig. 5.4)*.

Left

Left aligns paragraphs to the left margin, leaving the right edge ragged. This is the default state. It is also referred to as 'flush left', 'ranged left' or 'ragged right'.

> Left aligns paragraphs to the left margin, leaving the right edge ragged. It is also referred to as 'flush left', 'ranged left' or 'ragged right'.

Centre

Centre aligns paragraphs centrally between the left and right indents, leaving both left and right margins ragged.

> Centre aligns paragraphs between the left and right margins, leaving both margins ragged.

Right

Right aligns paragraphs to the right indent, leaving the left edge ragged, It is also referred to as 'flush right', 'ranged right' or 'ragged left'.

> Right aligns paragraphs to the right indent, leaving the left edge ragged, It is also referred to as 'flush right', 'ranged right' or 'ragged left'.

Justify

Justify aligns paragraphs so that both left and right edges are aligned to the margins. It does this by inserting extra space between the words on each line.

> Justify aligns paragraphs so that both left and right edges are aligned to the margins. It does this by inserting extra space between the words on each line.

By default ***Ovation Pro*** uses the Windows font manager to justify text by inserting extra space between the words only. However it is possible to achieve greater control over justification by inserting extra space between letters. This feature is called letter spacing *(see 5.7)*.

Current Alignment

The alignment that is current at the caret or throughout a selection is ticked on the **Alignment** menu and indicated in orange on the info palette.

If there is more than one alignment setting in a selection, there will be no tick on the menu and no alignment indicated on the info palette.

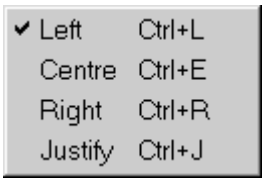


*Fig. 5.3 - The **Alignment** menu.*

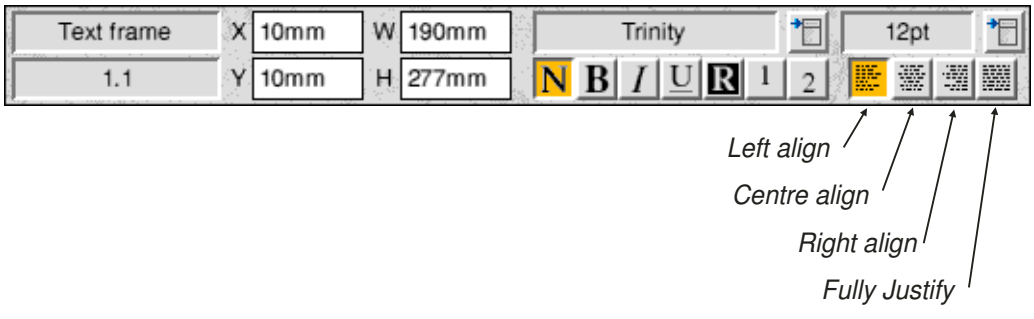


Fig. 5.4 - The info palette allows you to align or justify paragraphs.

5.3 Leading

Menu➪Text➪Leading➪

The **Leading** menu *(fig. 5.5)* allows you to set the vertical spacing between lines of text.

Single space is the default leading and should be suitable for most purposes. It is equivalent to 20% relative leading *(see overleaf)*.

> Single space is the default leading and should be suitable for most purposes. It is equivalent to 20% relative leading (see overleaf).

Double space gives increased line spacing and is equivalent to 120% relative leading.

> Double space gives increased line spacing and is equivalent to 120% relative leading.

Other leading values can be entered in the Modify Format window *(see the next section)*, using one of the three methods described below: *absolute* (value entered as such), *relative* (value followed by a %) or *incremental* leading (value preceded by a + or by a -).

Please note that the default units for absolute and incremental leading are points, but you may specify another unit after the value e.g. 5mm.

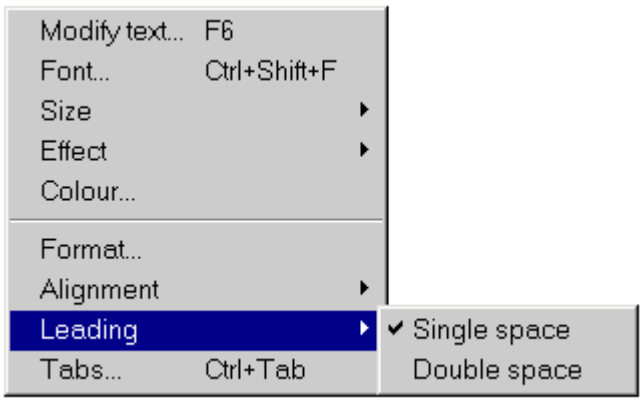


*Fig. 5.5 - The **Leading** menu.*

Absolute Leading

This is the distance between the base lines of each line of type *(fig. 5.6)*.

The example below uses 17pt absolute leading. Notice that the line spacing is equal throughout the paragraph, regardless of the type sizes present. It is important that the value specified is large enough to accommodate the biggest type size otherwise lines will overlap.

> This example uses 17pt absolute leading. Notice that the line spacing is equal throughout the paragraph, regardless of the type sizes present.

Absolute leading is useful if you wish to align text with other objects, such as lines. In the example below, the lines have been duplicated at 6mm vertical offsets and the text is set to 6mm absolute leading.

> Absolute leading is useful if you wish to align text with other objects, such as lines. In this example the lines have been duplicated at 6mm vertical offsets and the text is set to 6mm absolute leading.

You may see type described as ‘10 set on 17’ or 10/17. This means 10pt text with 17pt absolute leading.

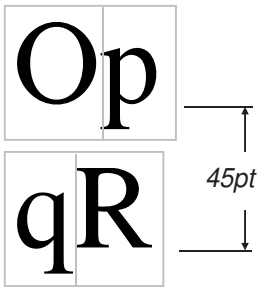


Fig. 5.6 - Absolute leading.

Relative Leading

This is specified as a percentage of the current type size. For example, if the type size is 45pt and the leading is 20%, the line spacing is 45pt + 20% of 54pt *(fig. 5.7)*.

To use relative leading you must add a `%` to the value e.g. `15%`.

Relative leading is the default type of leading because it produces line spacing that is proportional to the type size being used. In the example below, the line spacing is increased to accommodate the larger type on the third line.

> This example paragraph uses 20% relative leading. Relative leading is popular because it produces well proportioned line spacing that is relative to the type size being used.

Incremental Leading

This is specified as a value to be added to, or subtracted from, the current type size. For example, if the type size is 45pt and the leading is +5pt, the line spacing is 45pt + 5pt *(fig. 5.8)*.

To use incremental leading you must prefix the value with a + or - e.g. `+5pt` or `−2pt`.

The example below uses +5pt incremental leading. Notice that the gap between the lines is equal throughout the paragraph, irrespective of the type size.

> A positive value specifies the gap between the lines. This example uses +5pt incremental leading. Notice that the gap between the lines is equal throughout the paragraph, regardless of the type size.

Negative incremental leading closes the gap between lines and can cause them to overlap. The example below uses 12pt and 24pt text with -12pt incremental leading.

Special effects

Current Leading

The leading that is current at the caret or throughout a selection is ticked on the **Leading** menu.

If there is more than one leading value in a selection, there will be no tick on the menu.

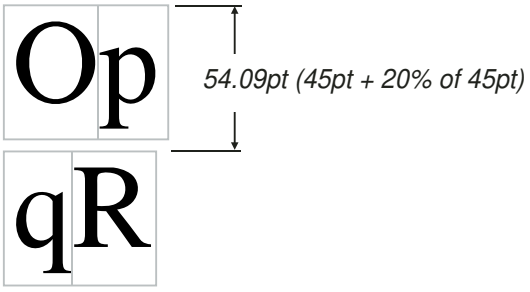


Fig. 5.7 - Relative leading.

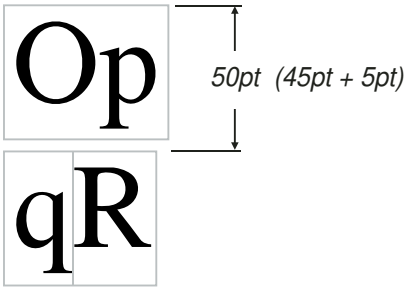


Fig. 5.8 - Incremental leading.

5.4 The Format Dialogue Box

Menu➪Text➪Format

The **Format** dialogue box *(fig. 5.9)* provides all the formatting options that may be applied to the current paragraph or a selection of paragraphs.

Please note that the indent options on this dialogue box may also be specified on the tab ruler *(see 5.5)*.

Current Format Options

The **Format** dialogue box reflects all the settings that are current at the caret or throughout a selection.

If any effects are not present throughout a selection of paragraphs, they are indicated on the **Format** dialogue box as follows:

1. If the effect is set by a value in an icon, that icon will be blanked out.
2. If the effect is set by a button, the button will be indicated with a cross.

For example, the **Format** dialogue box shown in *fig 5.9* shows the formatting effects present in a selection. Since **Space before** and **Alignment** are blank, it means that they are not consistent throughout the selection.

The same is true for **Auto hyphenation** which is indicated with a 'crossed' button. Blank buttons such as that for **Drop capital**, indicate that the effect is switched off throughout the selection. Ticked buttons such as **Auto kerning**, indicate that the effect is switched on throughout the selection.

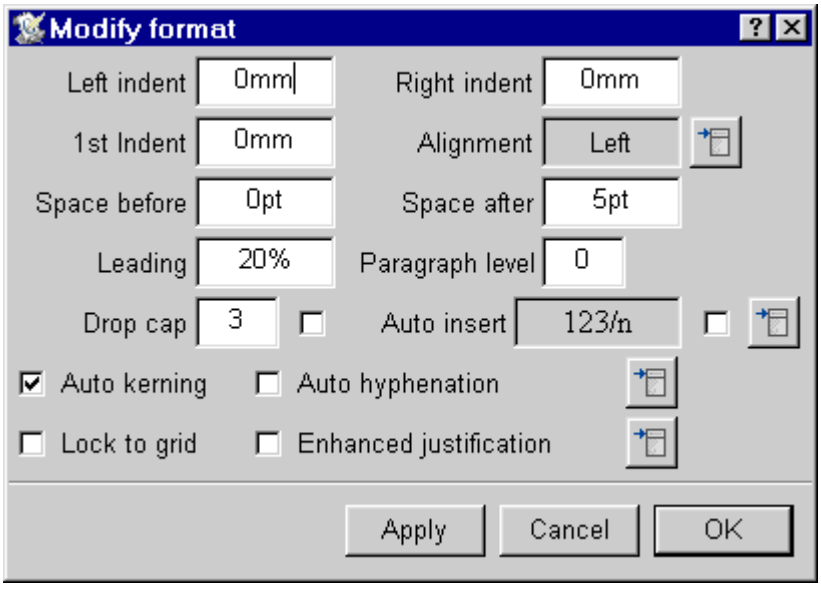


*Fig. 5.9 - The **Format** dialogue box.*

Left Indent

Left indent defines the left margin of the current paragraph or selected paragraphs. It may be used to distinguish paragraphs from surrounding text.

The left indent is measured from the left-hand frame inset *(fig. 5.10)*, or from the standoff of any obstructing frames *(fig. 5.11)*.

If the left indent value is preceded by the + symbol, the indent is measured from the left edge of the frame bounding box *(fig. 5.12)*, ignoring any obstructing frames *(fig. 5.13)*.

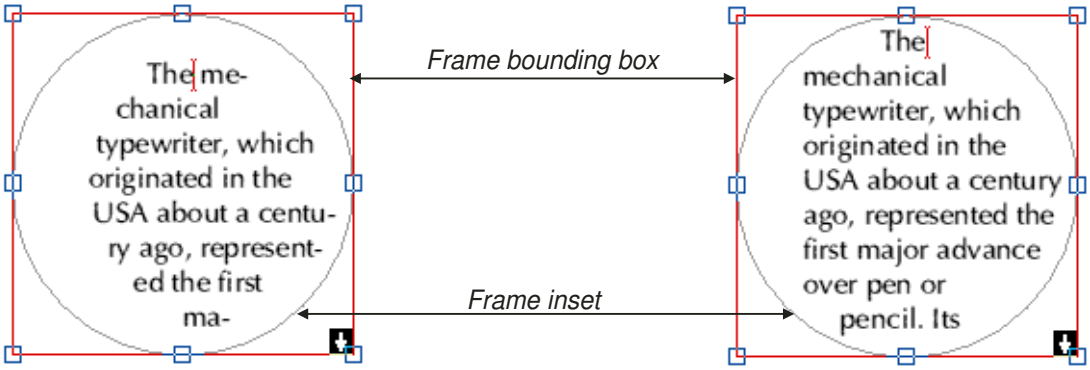


Fig. 5.10 - The left indent is measured from the left-hand frame inset.

Fig. 5.12 - If the left indent has a + prefix, the indent is measured from the left edge of the frame bounding box.

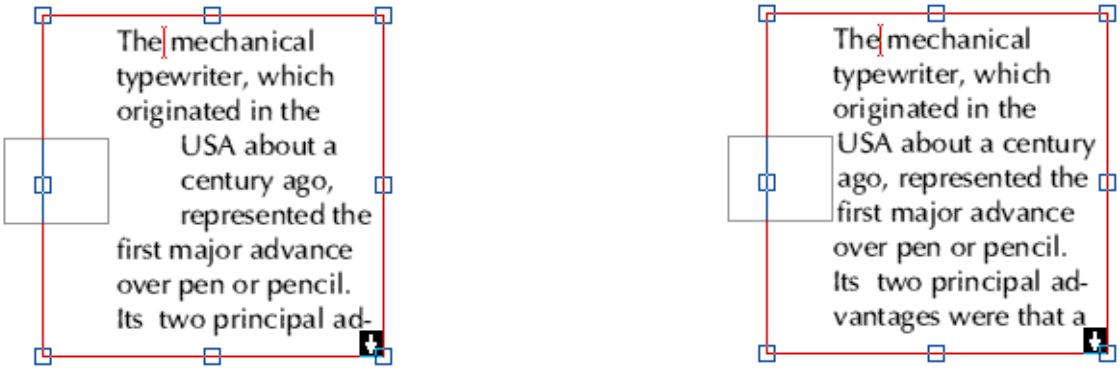


Fig. 5.11 - The left indent is measured from the left-hand frame inset or from the standoff of any obstructing frames.

Fig. 5.13 - If the left indent has a + prefix, the indent is measured from the left edge of the frame bounding box ignoring obstructing frames.

Right Indent

Right indent defines the right margin of the current paragraph or selected paragraphs. It may be used to distinguish paragraphs from surrounding text.

The right indent is measured from the right-hand frame inset *(fig. 5.14)*, or from the standoff of any obstructing frames *(fig. 5.15)*.

If the right indent value is preceded by the + symbol, the indent is measured from the right edge of the frame bounding box *(fig. 5.16)*, ignoring any obstructing frames *(fig. 5.17)*.

If the right indent value is preceded by the − symbol, the indent is measured from the left-hand inset or edge instead.

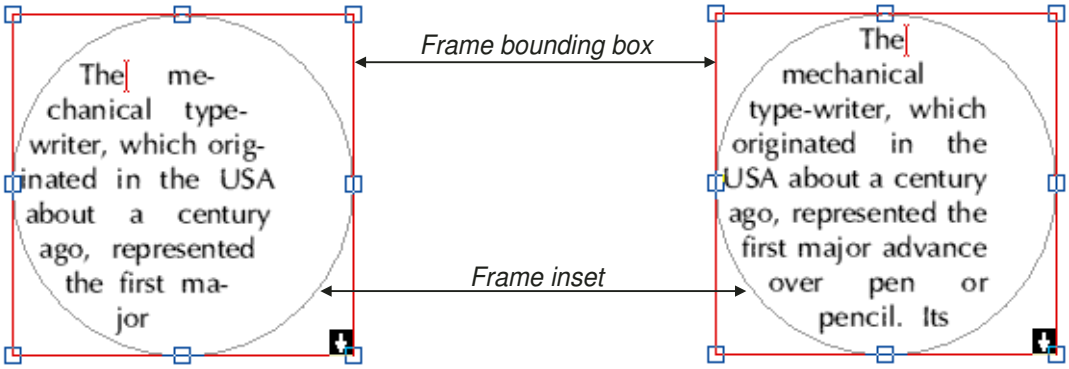


Fig. 5.14 - The right indent is measured from the right-hand frame inset.

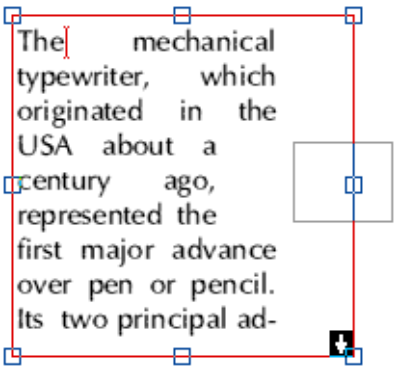


Fig. 5.15 - The right indent is measured from the right-hand frame inset or from the standoff of any obstructing frames.

Fig. 5.16 - If the right indent has a + prefix, the indent is measured from the right edge of the frame bounding box.

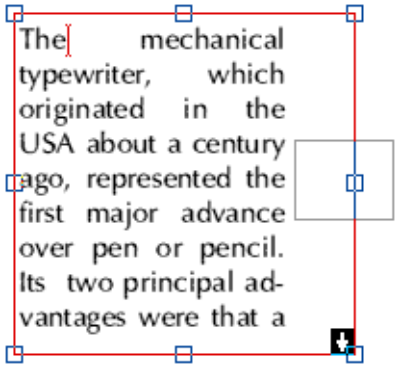


Fig. 5.17 - If the right indent has a + prefix, the indent is measured from the right edge of the frame bounding box ignoring obstructing frames.

1st Indent

This is the first line indent and defines the left margin for the first line of the paragraph only. First line indent is specified as an offset from the normal left indent.

If the 1st indent is given a positive value, then the first line of the paragraph will be indented from the left indent by that amount *(fig. 5.18)*. When used in this way, the first line indent is often called the *paragraph indent.*

Another use of the first line indent is to create a hanging indent. This is where the first line indent is positioned to the left of the left indent *(fig. 5.19 and fig. 5.29)*. The example shown has a left indent of 10mm and first line indent of -10mm. The number on the first line of each paragraph starts at the first line indent. A tab after the bullet forces subsequent text on the first line to start at the left indent. All subsequent lines start at the left indent.

When using hanging indents, if you want to start a new line at the left indent, you should use

Menu⇨Misc⇨Insert⇨New line Shift+Return.

If you use Return, a new paragraph will be inserted and typing will commence at the 1st indent.

Alignment

This option opens a menu allowing you to specify paragraph alignment *(see 5.2)*.

Space Before

This sets the amount of extra space inserted above a paragraph.

Default units for **Space before** are points.

Space After

This sets the amount of extra space inserted below a paragraph.

Instead of pressing Return to insert a blank line between paragraphs, it is better to set **Space after** to the same value as the type size. If at a later stage you want smaller gaps between paragraphs, you can reduce the **Space after** value.

Default units for **Space after** are points.

Leading

This sets the amount of space between lines. The default value is 20%. See section *5.3* for more information.

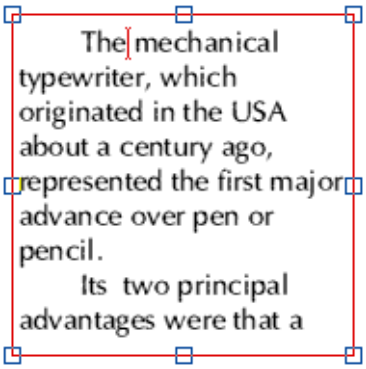
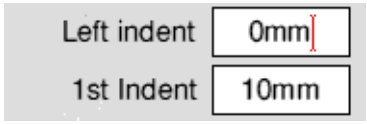


Fig. 5.18 - The text in this frame has a 0mm left indent, and a 10mm 1st indent.



*As seen in the **Modify Format** window; see Fig. 5.9*

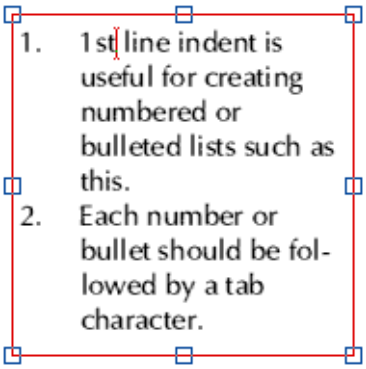
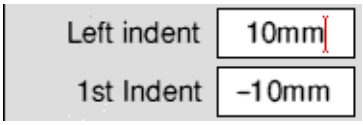


Fig. 5.19 - The text in this frame has a 10mm left indent, and a -10mm 1st indent.



*As seen in the **Modify Format** window; see Fig. 5.9*

Drop Cap

Menu➪Text➪Format....

Drop cap changes the first character in the selected paragraphs to a *drop cap (fig. 5.20)*. The depth of the drop should be entered in the writable icon provided.

The drop cap depth is specified in lines, based on the depth of the first line.

Auto Kerning

Auto kerning uses the kerning data provided with fonts to improve the appearance of certain character pairs by adjusting the white space between them.

Please note that this facility only works with fonts that contain kerning data.

Lock to Grid

In a multi-column or multi-frame layout, text in one column or frame may not align horizontally with text in the others *(fig. 5.21)*. **Lock to grid** aligns text in the selected paragraphs to a *baseline grid*. If **Lock to grid** is enabled, the baselines of affected text are shifted to align to the grid *(fig. 5.22)*.

The baseline grid origin and grid spacing are set on **Misc➪Preferences** *(see 15.14)*.

Auto Hyphenation

Auto hyphenation automatically hyphenates words that run over the ends of lines *(see 5.6)*.

Enhanced Justification

Enhanced justification allows you to control word and letter spacing in justified text *(see 5.7)*.

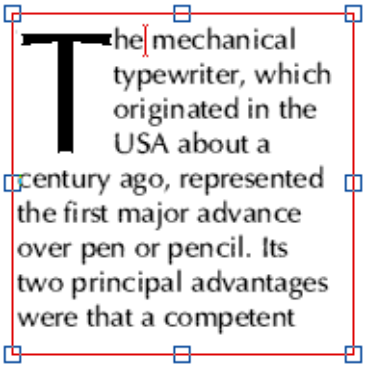


Fig. 5.20 - Drop cap, 4 lines deep.

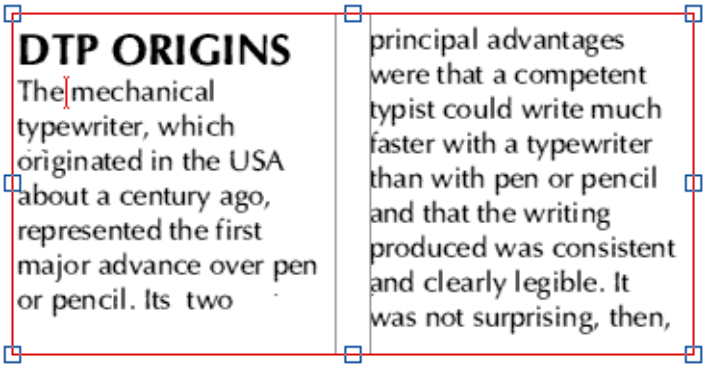


Fig. 5.21 - The baselines of text in columns do not align.

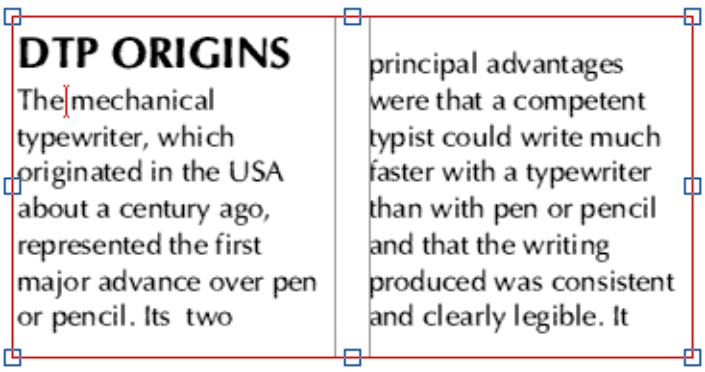


*Fig. 5.22 - Use **Lock to grid**, to align the baselines of text.*

5.5 The Tab Ruler

Tab stops are inserted into the document by pressing the Tab key.

The tab ruler allows you to specify the exact tab and indent positions for the current paragraph or selection of paragraphs.

Menu⇨Text⇨Tabs… **Ctrl+Tab**

After choosing **Tabs**, the tab ruler is placed over the top of the current paragraph or selection of paragraphs *(fig. 5.23)*. The ruler is the width of the frame less the insets. The markings on the ruler are in the current units.

Setting Tabs

To set a tab, choose the type of tab you require from the **Tabs** dialogue box, then click on the white area of the tab ruler at the required position. Further clicks on the tab ruler will set more tabs of the chosen type.

If you want to set tabs at precise positions, select the type of tab you require, then enter the exact position in the icon labelled **Position**. Press Return to set the tab.

When you have finished setting tabs, click on **OK** to update the document.

Beyond the position of the last tab stop explicitly set ***Ovation Pr***o will generate virtual stops every 10mm.

Moving Tabs

To move a tab, click over it and drag it to the required position. Alternatively, click on it to highlight it in red, then enter the required position in the **Position** icon on **Tabs** dialogue box. Press Return to set the tab to the new position.

You can select a number of tabs by left clicking over the first one, then holding down Control and left clicking over any other tabs you wish to add to the selection. A selection of tabs can be moved in one operation by dragging any of the tabs in the selection.

Left click over the ruler markings to deselect all tabs.

Deleting Tabs

To delete a tab or selection of tabs, drag them down onto the tab ruler.

Clear

Alternatively all tabs can be removed by clicking on the Clear button.

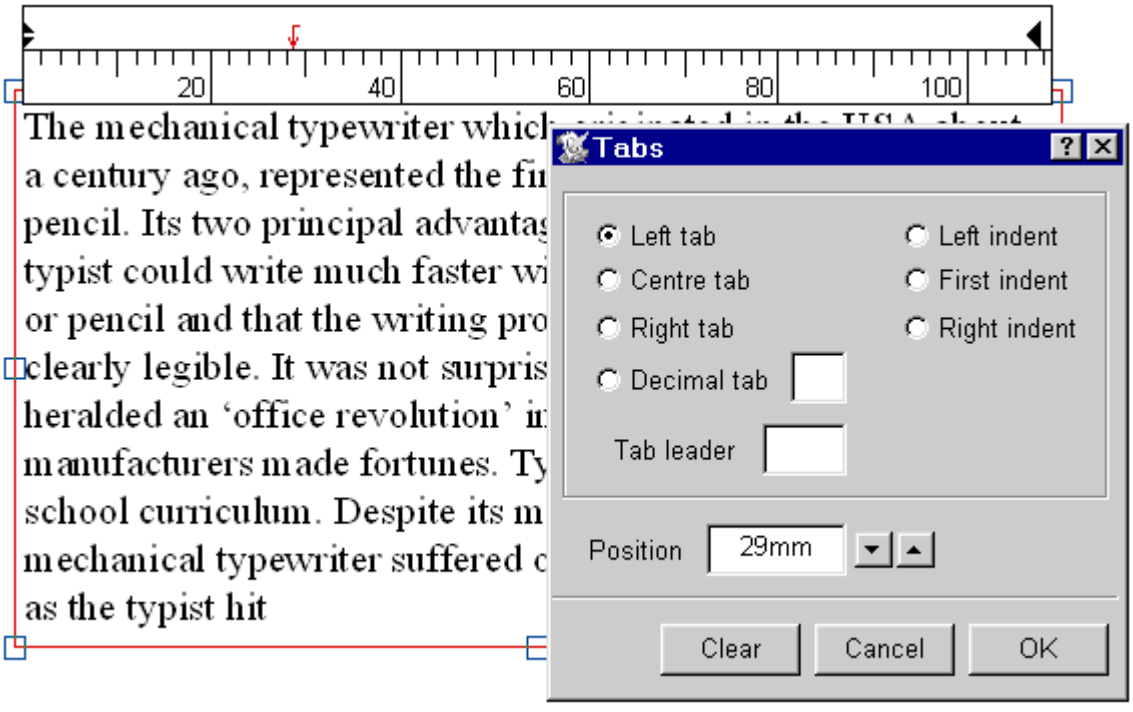


Fig. 5.23 - The tab ruler is displayed above the current paragraph.

Left Tab

The left tab causes text to be left aligned to the tab stop *(fig. 5.24)*.

Centre Tab

The centre tab causes text to be centred on the tab stop *(fig. 5.25)*.

Right Tab

The right tab causes text to be right aligned to the tab stop *(fig. 5.26)*.

Decimal Tab

The decimal tab causes decimal points to be aligned to the tab stop *(fig. 5.27)*. The decimal point character is usually a full stop, but may be defined in **Misc➪Preferences** *(see 15.14)*. In addition the writable icon can be used to set an individual decimal tab character for the currently selected tab. If this is left blank the setting from document Preferences will be used.

Text that doesn't contain a decimal point character is right aligned to the tab stop.

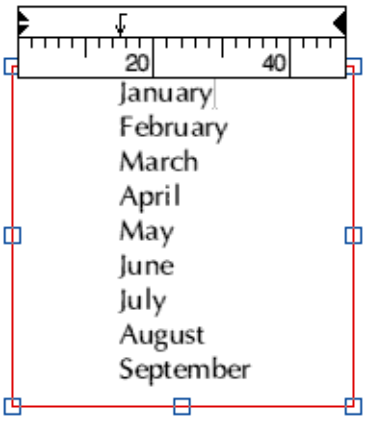


*Fig. 5.24 - **Left** tab.*

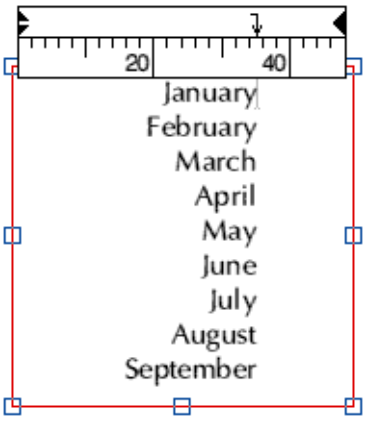


*Fig. 5.26 - **Right** tab.*

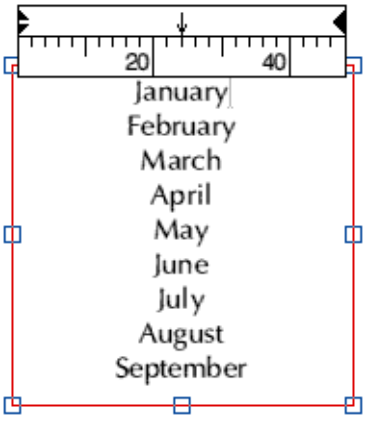


*Fig. 5.25 - **Centre** tab.*

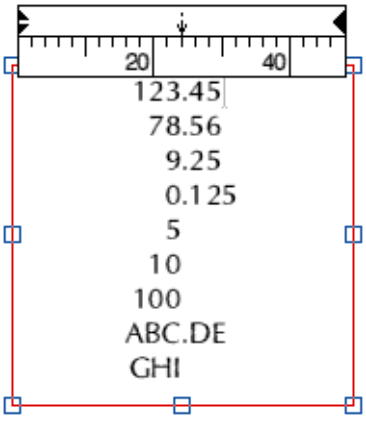


*Fig. 5.27 - **Decimal** tab.*

Tab Leader

The **Tab leader** is a string of one to four characters that are automatically printed in the tab space.

Typically the **Tab leader** string is set to a full stop (or a full stop and a space character), and is often used in the contents pages of books and magazines *(fig. 5.28)*.

Different **Tab leader** strings can be set for each tab. The string shown in the icon will be for the currently selected tab.

Setting Indents

The tab ruler may also be used to set the positions of the indents. Indents may also be set on the **Format** dialogue box, so please refer to that section of this user guide for full details on the operation of indents *(see 5.4)*.

The **Left indent** and **1st indent** are displayed together at the left end of the tab ruler, and the **Right indent** is displayed at the right end of the tab ruler *(fig. 5.29)*.

You may drag the indents to re-position them. Alternatively, click on an indent to highlight it, then enter the required position in the **Position** field of the **Tabs** dialogue box.

You can move the **Left indent** and **1st indent** together by selecting them both and dragging in one operation.

Unlike tabs, you cannot delete indents.

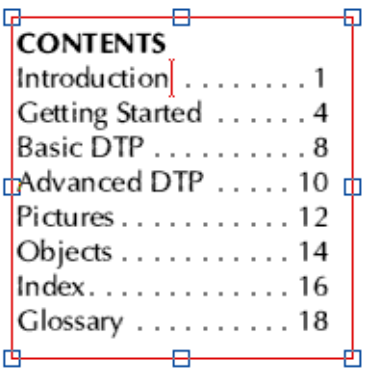


Fig. 5.28 - Page numbers tabbed right with 'dot-space' tab

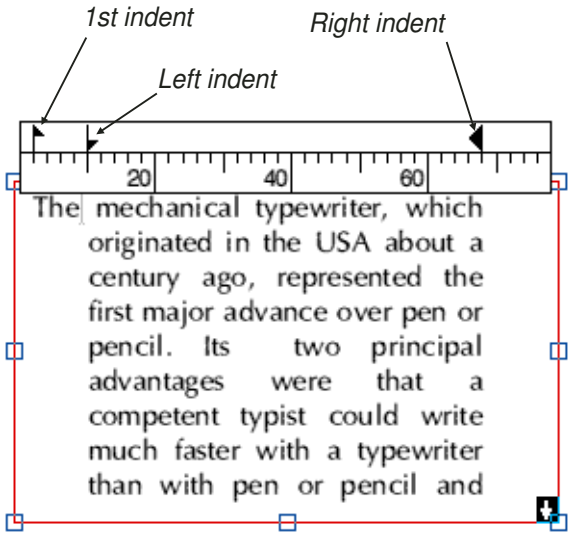


Fig. 5.29 - Indents may be set on the tab ruler.

5.6 Automatic Hyphenation

Normally when a word runs over the end of a line, the entire word is transferred to the start of the next line. This process is called *word wrap*. Alternatively, you may hyphenate words so that they are split at the end of lines. This enables text to be fitted better into frames; especially in narrow columns. In justified text, it also reduces the size of the gaps between words.

You may manually hyphenate a word by typing a hyphen − at the required place. If that word runs over the end of a line, it is split at the hyphen.

Soft Hyphen

Alternatively you may insert a *soft* hyphen by typing Ctrl -. A soft hyphen does not appear until it is needed i.e. if editing the text causes the word to run over the end of a line. In this situation, the soft hyphen becomes visible and the word is split at the hyphen. If editing causes the word to move away from the end of a line, the soft hyphen will disappear.

You may delete a soft hyphen when it is visible using Delete or Copy in the usual way. You may also delete an invisible soft hyphen. To do this, step through the word containing the soft hyphen until the caret steps over the invisible hyphen, then press Delete.

Hard Hyphen

If you want a hyphen in a word, but do not wish to split the word at that hyphen, you may insert a *hard* hyphen using Ctrl Shift -.

Auto Hyphenation

If **Auto hyphenation** is enabled, words that run over the end of lines are automatically hyphenated.

Ovation Pro uses a hyphenation algorithm and an exceptions dictionary to determine the best place in a word for a hyphen. The exceptions dictionary contains words that should not be hyphenated or should only be hyphenated in a specific way. You may edit or add words to the exceptions dictionary if required *(see 14.8)*.

Please note that hyphenation exceptions do not take effect until the text is re-flowed.

The hyphenator ignores words that already contain a normal, soft or hard hyphen, or words containing non-alphabetic characters. In some cases it may decide there is no suitable place for a hyphen, in which case the word is not hyphenated and word wrap occurs.

If the automatic hyphenator splits a word incorrectly, you may do one of two things:

1. Add the word to the exceptions dictionary specifying the correct hyphen position or specifying that the word should not be hyphenated at all.
2. Type a soft hyphen using Ctrl - at the start of the word. This will stop the word from being hyphenated.

Auto Hyphenation Options

Menu➪Text➪Format…

The **Auto hyphenation** dialogue box *(fig. 5.30)* allows you to control certain aspects of the automatic hyphenator. This box is displayed by moving the pointer of the icon to the right of **Auto hyphenation**.

It is not good practice to hyphenate very short words, so **Minimum characters in word** specifies the smallest size word that will be hyphenated.

Minimum before hyphen specifies the minimum number of characters in the word that must precede the hyphen. This prevents the hyphenator splitting a word too close to its start.

Minimum after hyphen specifies the minimum number of characters that must follow the hyphen. This prevents the hyphenator splitting a word too close to its end.

It is not good practice for too many consecutive lines to end with a hyphen. **Maximum consecutive hyphens** prevents this by specifying the maximum number of consecutive lines that may end with a hyphenated word. If this limit is reached, the word at the end of the line will not be hyphenated. A value of 0 means that there is no maximum limit.

Hyphenation zone specifies a zone measured from the right margin. The start of the last word in the line must be outside this zone, for it to be considered for auto hyphenation. The hyphenation zone only has an effect on text that is left aligned.

If **Break last word of paragraph** is selected, the hyphenator will attempt to break the last word in the paragraph should it run over the end of the line. Generally this is not regarded as good practice, so this option is normally not selected.

The hyphenator does not normally split capitalised words, but you may select **Capitalised words** if you wish it to do so.

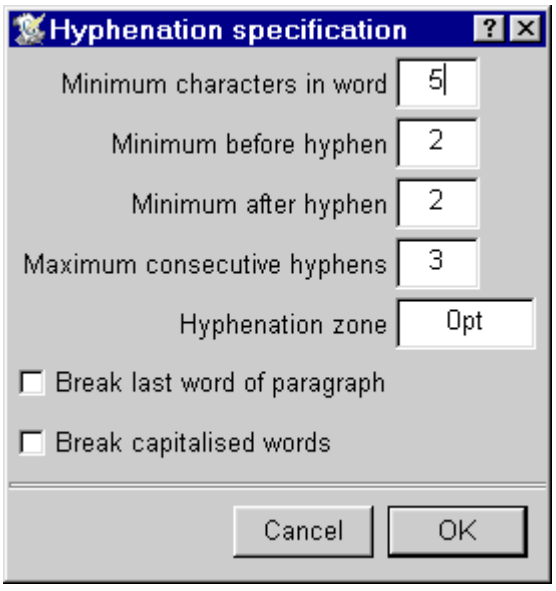


*Fig. 5.30 - The **Auto hyphenation** dialogue box.*

5.7 Enhanced Justification

Menu➪Text➪Format…

When a paragraph is justified, both left and right edges are aligned to the margins. Normally this is done by increasing the gaps between words until the line fits; this is called *word spacing*. In some circumstances, especially in narrow columns, this can result in large gaps appearing in lines of text. If these gaps join up over a number of consecutive lines, an undesirable effect called 'rivers of white' may be produced.

Auto hyphenation can help reduce these problems, but for best results you should use **Enhanced justification**. This gives control over word spacing, and allows you to introduce letter spacing, should word spacing become excessive.

Enhanced justification is controlled from the dialogue box which is displayed by moving the pointer over the icon to right of **Enhanced justification** *(fig 5.31)*.

Word Spacing

Minimum and **Maximum** are the expansion limits for word spacing. The values are specified as percentages, where 100% represents the width of a standard space character. If text cannot be justified within these limits, letter spacing is introduced (if it is enabled).

Reducing the **Minimum** value should enable you to fit more text into lines, although some clarity will be lost as words get closer together.

Increasing the **Maximum** value allows word spacing to become much greater before any attempt is made to use letter spacing. This value has no effect if letter spacing is not enabled.

Letter Spacing

Minimum and **Maximum** are the expansion limits for letter spacing. The values are specified as percentages, where 100% represents the width of a standard space character. A normal letter space is 0%.

To disable letter spacing, set **Minimum** and **Maximum** to 0%.

A negative **Minimum** value may cause letters to overlap.

A large **Maximum** value will give excessive letter spacing which is regarded as bad practice.

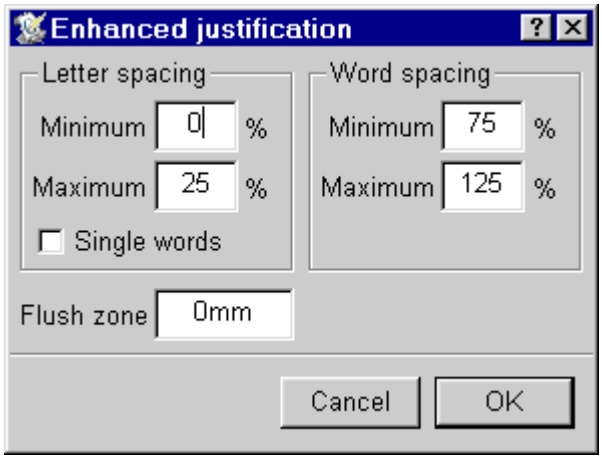


*Fig. 5.31 - The **Enhanced justification** dialogue box.*

Enhanced Justification Rules

Ovation Pro tries each of the following steps, until the text becomes justified.

1. Increase word spacing from 100% up to **Maximum**.
2. Decrease word spacing from 100% down to **Minimum**.
3. Set word spacing to **Maximum** and increase letter spacing from 0% to **Maximum**.
4. Set word spacing to **Minimum** and decrease letter spacing from 0% to **Minimum**.
5. Increase word spacing from **Maximum** until the line fits.

Notice that ***Ovation Pro*** attempts to justify the text using word spacing before trying letter spacing, and increases spacing before decreasing.

Justification Examples

The examples below show how the same paragraph may be justified in two different ways.

The first example *(fig. 5.32)*, uses standard justification. Word spacing is increased until text fits on a line, and there is no letter spacing.

The second example *(fig. 5.33)*, uses enhanced word and letter spacing:

Word spacing **Minimum**	75%
Word spacing **Maximum**	125%
Letter spacing **Minimum**	0%
Word spacing **Maximum**	+25%

Notice that there are fewer large gaps between words and more text fits into the frame.

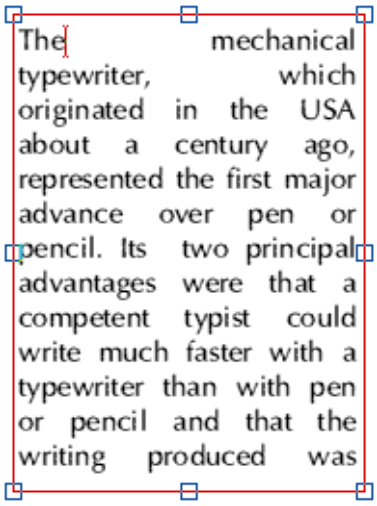


Fig. 5.32 - Standard justification.

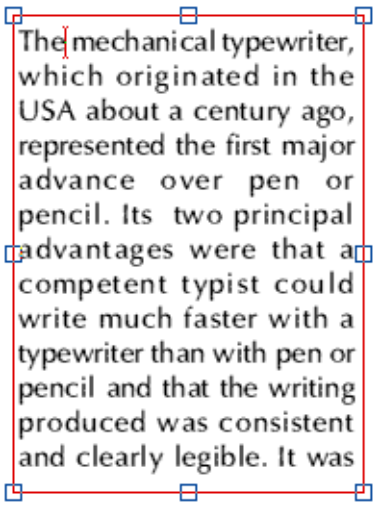


Fig. 5.33 - Enhanced justification with letter spacing.

Other Justification Options

Normally when text is justified, if there is only a single word on a line, it becomes left justified *(fig. 5.34)*. If Single words is selected, a single word on a line is justified by adding sufficient letter spacing *(fig. 5.35)*.

Flush zone allows you to control justification of the last line in a paragraph Normally the last line of a justified paragraph is not justified. However, if the end of the line is near to the right margin, it may look better justified.

Flush zone defines a zone measured from the right indent. If the end of the last line of the paragraph falls within the flush zone, then that line is justified.

By default **Flush zone** is set to 0, which means that the last line of a paragraph will never be justified.

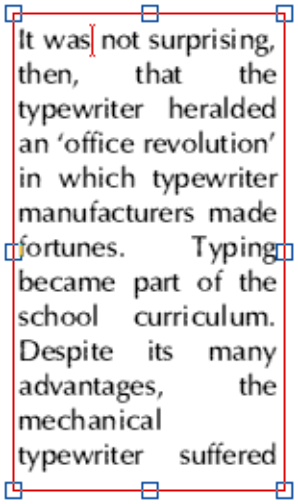


Fig. 5.34 - The single word is not justified.

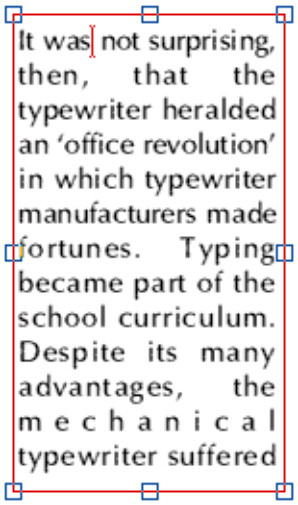


Fig. 5.35 - The single word is justified.

5.8 Automatic Paragraph Numbering

It is possible to automatically insert bullet points or number paragraphs. These facilities are controlled from the Format dialogue box.

Menu⇨Text⇨Format…

Paragraph Level

This lets you set a level for each paragraph. Levels can be in the range 0 to 7. In older versions of ***Ovation Pro*** which do not support this feature, the paragraph level defaults to 0.

Uses of the paragraph level are structured documents with automatic numbering of paragraphs and automatic contents generation.

Auto Insert

Auto insertion controls the automatic insertion of paragraph numbers or bullet points at the start of each paragraph

Bullet points are symbols inserted before each entry in a list for emphasis.

If you are going to climb Mount Everest ensure you have;
❍*Warm pullover*
❍*Boots and socks*
❍*Woolly Hat*
❍*Map and compass*
❍*Sandwiches*
❍*Money for bus fare home*

Note that the bullet symbol is in a different font to the text which follows it. In fact ***Ovation Pro*** allows you to use a defined style *(see Chapter 6)* for these, which means they can not only be in a different font, but a different point size, colour etc. You could of course produce the above list by inserting each bullet by hand, the point of this feature is that by merely applying an effect or style the bullets can be generated.

In paragraph numbering, instead of the bullet point, numbers are used for each member of the list.

If you are going to climb Mount Everest six essential items are
(1) Warm pullover
(2) Boots and socks
(3) Woolly Hat
(4) Map and compass
(5) Sandwiches
(6) Money for bus fare home

Ovation Pro lets you automatically insert a character before the bullet and a character after it - in this example the brackets around the numbers. In addition you can arrange for the bullet to be followed by a tab character. Finally it is possible to choose a different style for the numbering. For example Roman numbers or a letter.

If you are going to climb Mount Everest you need to take;
a) *Warm pullover*
b) *Boots and socks*
c) *Woolly Hat*
d) *Map and compass*
e) *Sandwiches*
f) *Money for bus fare home*

Another aspect of paragraph numbering is in structured documents. At the simplest level, each paragraph in the document may be given a number, allowing easy reference. More often the document will be split into chapters, the chapters into sections, and the sections into sub sections. This process can continue through sub sub sections and so on. ***Ovation Pro*** supports up to 8 levels of paragraph numbering. This is an example.

Chapter 1 - Getting ready for the expedition
1.1 *Raising funds*
1.1.1 *Visiting the bank manager*
1.1.2 *Arranging a jumble sale*
1.2 *Gathering supplies*
1.2.1 *Army and Navy stores*
1.2.2 *Knitwear world*
1.2.3 *The big butty sandwich bar*

Only headings are shown. Normally the above sub headings would be followed by the text of the document. Notice that in this example ***Ovation Pro*** has been told to include the chapter number as part of the paragraph number *(fig. 5.36)*.

Most people will have encountered documents like this and used them successfully, yet the structure is quite subtle. The numbering of sub sections is reset when there is a new section at a higher level. So section 1.2 is followed by 2.1 - as the first number changes from 1 to 2, the second number is reset to 1, its starting value. The general rule is that when a section number changes all more subordinate section numbers are reset.

This is made to work in ***Ovation Pro*** by allowing paragraphs to be given a level value. Level one has the highest priority, and level 7 the next to lowest. So level 1 is what section headings are written in, and level 7 would be used for sub-sub-sub-sub-sub-sub-sub sections. In the example above *'1.1 Raising funds'* is a paragraph in level 1. *'1.1.1 Visiting the bank manager'* is a paragraph in level 2. You can confirm this by positioning the caret in the text and pressing Control F to look at the 'Format' window.

Level zero has the lowest priority, but it is special because its number can always appear after the lowest priority other level in use in a paragraph number. So if your document only needs two levels of sections (like the example above) you can have the paragraph numbers shown in a sensible way e.g. 2.2.1.1 rather than 2.2.1.1.1.1.1.1 (showing all 7 levels).

To repeat this, in a paragraph number like 1.2.3 the number '1' is the level 1 number, the '2' is from level 2 and the '3' from level 3. However it is possible to arrange things so that the '1' is the chapter number and the '3' is the level 0 paragraph number. Supposing though that 1.2.3 represents the level 1, 2 and 3 numbers. Then 1.2.3 will only appear at the start of a level 3 paragraph. The next level 3 paragraph will display 1.2.4. If the paragraph is in level 2 then the number would appear as 1.2 and the next level 2 paragraph will have number 1.3.

Its necessary to be clear that one style and either another style or an effect are involved when talking about bulleting. The first style is actually used to render the bullet (red, 15pt, Dingbats). The other style or effect is what tells ***Ovation Pr***o that bullets should be inserted. The problem is that one would like to call both these styles "the bullet style". The first instinct is to define a new style called 'BulletStyle' and immediately the meaning is lost. Which of the two styles is 'BulletStyle'? So in this document the style used for rendering the bullet is called 'BulletPoint' and the one that is used to insert bullets is called 'BulletList'.

The icon to the right of **Auto insert** in the Format window shows the bullet format, the option icon to the right of that controls if bulleting is on or off. Finally the menu icon on the far right opens the bullet window.

The bullet window *(fig 5.36)* allows the format of the bullet to be set.

Bullet and **Number** select if bullet points or paragraph numbers will be displayed. This choice controls which of the following two sections in the window is relevant.

For bullet points **Bullet symbol** shows the symbol used and the menu icon to the right will open the usual ***Ovation Pro*** chars window allowing you to change the symbol.

For numbers **Number format** shows the number format and the menu icon to the right opens a menu to set the format. **Start number** lets you enter the starting number.

The final group of icons is common to bullet points and numbers. **Style** lets you optionally set a style for rendering the bullet. **Character before** and **Character after** allow you to enter characters to be displayed before and after the bullet. **Tab after** controls if a tab will be inserted after the bullet point. This is often useful in combination with hanging indents and so on.

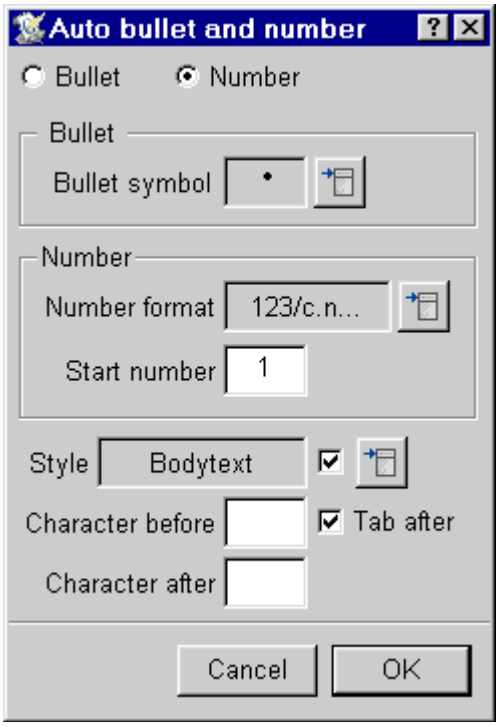


*Fig. 5.36 - The **Bullet** dialogue box also showing that the chapter number is included as part of the number format.*

The format menu *(figure 5.37)* sets the format used for paragraph numbers.

The top part shows the way the numbers are displayed.

123 normal Arabic numbers.

iii lower case Roman.

III upper case Roman.

abc lower case letters a to z

ABC upper case letters.

123a numbers for all levels except the last for which a lower case letter is used.

123A the same but with an upper case letter.

The bottom part controls what numbers are displayed.

n current level number.

n.n... all levels from level 1 to the lowest one.

c.n... the same but preceded by the chapter number.

In the format windows the icon to the right of **Auto insert** displays the text from the two parts of the bullet format menu e.g. 123/n is Arabic style numbering for the lowest level.

A subtle point is that a given point in the text can only have one paragraph level value and it must have such value. So wherever you position the caret in a document, it is possible to ask what the level is and get a unique answer.

Note that it is possible to assign a level to some text without automatic paragraph numbering being active. This is intended to support contents generation. As far as bulleting is concerned such text is ignored when it comes to calculating paragraph numbers.

If a section contains some numbered paragraphs, then some paragraphs of the same level with bullets (as opposed to numbers), followed by more numbered paragraphs, then the effect will be that numbering is reset to the start value after the bulleted area. This may be a useful trick to reset numbering for special effects.

Level 0 has another special feature, this is that a level 0 paragraph which does not have bulleting or numbering active will reset the level 0 number. This means that level 0 can be used for producing a number of lists within a text story which does not have any higher level text. For an example see the first page of this section, where the after the list numberered (1), (2)... the next list a,b,... follows starting with the letter a, and with no intervening higher level paragraphs to reset the level 0 number.

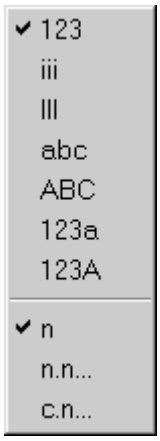


*Fig. 5.37 - The **Bullet Format** menu.*

Notes: