

## Alignment

A paragraph can be aligned left, right, center, or justified.

In the samples the background of the paragraph is shaded for better illustration.

### Left aligned

This is default.

```
\paragraph [Format.Alignment = Left]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### Right aligned

```
\paragraph [Format.Alignment = Right]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### Centered

```
\paragraph [Format.Alignment = Center]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### Justified

```
\paragraph [Format.Alignment = Justify]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Indent

A paragraph has a left, right, and first line indent.

### Left Indent

```
\paragraph [Format.LeftIndent = "2cm"]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio ododore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### Right Indent

```
\paragraph [Format.RightIndent = "2cm"]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio ododore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### First Line Indent

```
\paragraph [Format.FirstLineIndent = "1.5cm"]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio ododore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### Hanging First Line Indent

```
\paragraph [Format.FirstLineIndent = "-1.5cm" Format.LeftIndent = "1.5cm"]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio ododore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Space before / Space after

The distance between consecutive paragraphs is controlled by their space before and space after attributes.

### Space before

3 mm space before paragraph.

```
\paragraph [Format.SpaceBefore = "3mm"]  
{...}
```

Paragraph before...

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

Paragraph after...

### Space after

6 pt space after paragraph.

```
\paragraph [Format.SpaceAfter = 6]  
{...}
```

Paragraph before...

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

Paragraph after...

### Actual Distance

The actual distance between two paragraphs is the maximum of the space after the first paragraph and the space before of the second one.

```
\paragraph [Format.SpaceAfter = 5]  
{...}  
\paragraph [Format.SpaceBefore = 15]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

The distance in the example is 15pt and not 20pt.

## Borders and Shading

A paragraph has borders and a shading. By default, the borders are invisible and the shading is transparent.

### Solid Border

To get the default border just make is visible.

```
\paragraph [Format.Borders.Visible = true]
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### Border Distance

The border distance can be set separately for each side.

```
\paragraph
[ Format.Borders.Visible = true
  Format.Borders.DistanceFromTop = 12
  Format.Borders.DistanceFromBottom = 2
  Format.Borders.DistanceFromLeft = 10
  Format.Borders.DistanceFromRight = 20
] {...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### Border Styles

The Borders attributes Visible, Width, Style, and Color apply to all borders. In addition each border can be styled individually.

```
\paragraph
[
  Format.Borders.Visible = true
  Format.Borders.DistanceFromTop = 3
  Format.Borders.DistanceFromBottom = 3
  Format.Borders.DistanceFromLeft = 5
  Format.Borders.DistanceFromRight = 5
  Format.Borders.Top.Width = 3
  Format.Borders.Top.Style = Dot
  Format.Borders.Top.Color = Orange
  Format.Borders.Bottom.Width = .5
  Format.Borders.Bottom.Style = DashDot
  Format.Borders.Bottom.Color = SpringGreen
  Format.Borders.Left.Width = 5
  Format.Borders.Left.Style = Single
  Format.Borders.Left.Color = Black
  Format.Borders.Right.Visible = false
]
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Shading

The background of a paragraph can get a color.

```
\paragraph [Format.Shading.Color = Gold]
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Border Distance

The shading area depends on the border distance.

```
\paragraph
[ Format.Shading.Color = Gold
  Format.Borders.DistanceFromTop = 10
  Format.Borders.DistanceFromBottom = 10
  Format.Borders.DistanceFromLeft = 10
  Format.Borders.DistanceFromRight = 10
] {...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Borders and Shading

The left and right indent can compensate the left and right border distance to fit a paragraph exactly into the page margins.

```
\paragraph
[ Format.Shading.Color = Gold
  Format.LeftIndent = 10
  Format.RightIndent = 10
  Format.Borders.Visible = true
  Format.Borders.Width = 1.5
  Format.Borders.DistanceFromTop = 7
  Format.Borders.DistanceFromBottom = 7
  Format.Borders.DistanceFromLeft = 10
  Format.Borders.DistanceFromRight = 10
] {...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Combining Paragraphs

MigraDoc 1.1 does not automatically combine consecutive paragraphs with the same borders and shading. To get one single border around two or more paragraphs, the formatting must be exact. The following sample illustrates that, but in most cases it is easier done using a table.

The distance between the paragraphs must be achieved with the border distance while SpaceBefore and SpaceAfter must be zero. A space after the first or before the second paragraph disrupts the borders and the shading.

```
\paragraph
[ Format.Shading.Color = Gold
  Format.Font.Bold = true
  Format.LeftIndent = 10
  Format.RightIndent = 10
  Format.Borders.Visible = true
  Format.Borders.Width = 1.5
  Format.Borders.DistanceFromTop = 7
  Format.Borders.DistanceFromBottom = 3.5
  Format.Borders.DistanceFromLeft = 10
  Format.Borders.DistanceFromRight = 10
  Format.Borders.Bottom.Visible = false
] {...}
\paragraph
[ Format.Shading.Color = Gold
  Format.LeftIndent = 10
  Format.RightIndent = 10
  Format.Borders.Visible = true
  Format.Borders.Width = 1.5
  Format.Borders.DistanceFromTop = 7
  Format.Borders.DistanceFromBottom = 3.5
  Format.Borders.DistanceFromLeft = 10
  Format.Borders.DistanceFromRight = 10
  Format.Borders.Top.Visible = false
] {...}
```

**Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.**

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

**Remark:** There are two additional borders DiagonalUp and DiagonalDown. These borders apply only to tables. Used with paragraphs they are ignored.

## Line Spacing

The space between the lines of a paragraph is controlled by the attributes `LineSpacing` and `LineSpacingRule`.

### Default

The default `LineSpacingRule` is `Single` and the space between the lines is determined by the paragraph's font and its size.

```
\paragraph [Format.Font.Size = 8]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

```
\paragraph [Format.Font.Size = 12]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

Into detail, it depends on the largest font used in each single line.

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

### AtLeast Line Spacing

With the `LineSpacingRule AtLeast`, the space between the lines can be increased to at least the value of `LineSpacing`.

```
\paragraph  
[ Format.LineSpacingRule = AtLeast  
  Format.LineSpacing = 17  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Exact Line Spacing

With the `LineSpacingRule Exactly`, the space between the lines is fixed. The space never changes, even if a word overwrites other text.

```
\paragraph [Format.LineSpacingRule = Exactly]  
{...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Multiple Line Spacing

With the `LineSpacingRule Multiple`, the space between the lines is a multiple of the default space between lines.

```
\paragraph  
[ Format.LineSpacingRule = Multiple  
  Format.LineSpacing = 2  
] {...}
```

Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.



## ListInfo

The ListInfo attribute can be used to generate either a list with a bullet symbol or a numbered list.

## ListType

There are 6 list types in MigraDoc.

```
\paragraph [Format.ListInfo.ListType = BulletList1]
{
  BulletList1
}
\paragraph [Format.ListInfo.ListType = BulletList2]
{
  BulletList2
}
\paragraph [Format.ListInfo.ListType = BulletList3]
{
  BulletList3
}
\paragraph [Format.ListInfo.ListType = NumberList1]
{
  NumberList1
}
\paragraph [Format.ListInfo.ListType = NumberList2]
{
  NumberList2
}
\paragraph [Format.ListInfo.ListType = NumberList3]
{
  NumberList3
}
```

- BulletList1
- BulletList2
- § BulletList3
- 1. NumberList1
- 1) NumberList2
- a) NumberList3

## ContinuePreviousList

The numbering of a number list will continue to increase until the ContinuePreviousList attribute in the ListInfo is set to false.

```
\paragraph [Format.ListInfo.ListType = NumberList1]
{
  Entry
}
\paragraph [Format.ListInfo.ListType = NumberList1]
{
  Entry
}
\paragraph [Format.ListInfo {ListType = NumberList1 ContinuePreviousList = false}]
{
  Entry
}
\paragraph [Format.ListInfo.ListType = NumberList1]
{
  Entry
}
```

- 2. Entry
- 3. Entry
- 1. Entry
- 2. Entry

## NumberPosition

The position of the bullet or number in the beginning of each entry can be defined with the NumberPosition attribute of the ListInfo. The value defined in the NumberPosition attribute is the distance between the left margin and the bullet or numbering of the list.

```
\paragraph [Format.ListInfo.ListType = BulletList1]
{...}
\paragraph [Format.ListInfo {ListType = BulletList1 NumberPosition = "2cm"}]
{...}
```

- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

## Layout Formatting of a List

The layout of a list can also be defined by setting the indentation of the paragraph. The left indent controls how the paragraph is indented. When NumberPosition is undefined, the paragraph will use the value defined in FirstLineIndent, which has a default value of zero (0). The FirstLineIndent however is relative to the left indent, while NumberPosition is relative to the left margin. A TabStop can be used to control the distance between the list's bullet or numbering and the beginning of the paragraph, because a tab is inserted behind the bullet or numbering, implicitly.

```
\paragraph
[
  Format
  {
    ListInfo.ListType = BulletList1
    LeftIndent = "2cm"
  }
]
{...}
\paragraph
[
  Format
  {
    ListInfo
    {
      ListType = BulletList1
      NumberPosition = "1cm"
    }
    LeftIndent = "2cm"
  }
]
{...}
```

- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.
- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.

```

\paragraph
[
  Format
  {
    ListInfo.ListType = BulletList1
    LeftIndent = "2cm"
    FirstLineIndent = "1cm"
    //or you can write NumberPosition = "3cm"
  }
]
{...}
\paragraph
[
  Format.ListInfo.ListType = BulletList1
]
{...}
\paragraph
[
  Format.ListInfo.ListType = BulletList1
  Format.TabStops +=
  {
    Position = "0.5cm"
  }
]
{...}
\paragraph
[
  Format.ListInfo.ListType = BulletList1
  Format.TabStops +=
  {
    Position = "3cm"
  }
]
{...}

```

- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.
- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.
- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.
- Loreet ad et luptat. Duis niamconsecte digna facilla reros delit utat augait eratie modions quisciduisi euissed magna feugiam quat alit amet alit, quamcon henibh eum veros nullan eugiat. Ut ipsummod esto exer in hent lortio odolore dolorer iustis am vullam, quating eugueraestie etumsan ute modions.