

8. Table of Contents and Page Layout

TOC, page breaks, and landscape orientation

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A professional report needs more than just content — it needs structure. In this chapter, you will learn how to add a table of contents, insert page breaks, and switch the page layout to landscape for wide tables or graphics.

Table of contents

Enabling a simple TOC

A table of contents is enabled in the YAML header:

```
---
title: "Penguin Report"
format:
  docx:
    toc: true
---
```

Word automatically inserts a table of contents at the beginning of the document, based on the headings.

Setting TOC depth

By default, three heading levels are displayed. This can be adjusted:

```
format:
  docx:
    toc: true
    toc-depth: 2
```

toc-depth	Displayed levels
1	Only <code>#</code>
2	<code>#</code> and <code>##</code>
3	<code>#</code> , <code>##</code> , and <code>###</code> (default)

Changing the TOC title

```
format:
  docx:
    toc: true
    toc-title: "Contents"
```

Page breaks

The pagebreak shortcode

To insert a page break, use the `pagebreak` shortcode:

```
# Introduction
Text of the introduction...

# Methods
Text of the methods...
```

This is useful to ensure that a new chapter starts on a new page.

Automatic page breaks before headings

For automatic page breaks before each main heading, you can adjust the Word template (Chapter 4): In the “Heading 1” style under **Format → Paragraph → Line and Page Breaks**, enable the “Page break before” option.

Landscape orientation

Sometimes tables or graphics are too wide for portrait orientation. With the **officedown** package, you can rotate individual pages to landscape.

Setting up officedown

First, the package must be installed:

```
install.packages("officedown")
```

Then change the format in the YAML header:

```
---
title: "Penguin Report"
format:
  docx: default
output:
  officedown::rdocx_document:
    reference_docx: template.docx
---
```

i Note

Currently, the integration of officedown into Quarto is still somewhat cumbersome. For simple cases, you can alternatively rotate the wide table manually in Word or split the table across multiple pages.

Landscape blocks

With officedown, you can set individual sections to landscape:

```
<!--BLOCK_LANDSCAPE_START-->
````{r}
#| label: wide-table
Very wide table here
```

Everything between `BLOCK\_LANDSCAPE\_START` and `BLOCK\_LANDSCAPE\_STOP` appears in landscape orientation.

```
Page margins
```

```
In the YAML header

Page margins can be defined in the YAML header:

```yaml
format:
  docx:
    reference-doc: template.docx
    geometry:
      - top=2.5cm
      - bottom=2.5cm
      - left=3cm
      - right=2.5cm
```

```

### 💡 Tip

The most reliable method for page margins is to set them in the Word template (Chapter 4): **Layout → Margins → Custom Margins**.

## Headers and footers

Headers and footers are controlled via the Word template:

1. Open the template in Word
2. Double-click on the header or footer
3. Insert desired text/page numbers
4. Save the template

Quarto applies these settings when rendering.

## Page numbers

In the Word template:

1. Open the footer
2. **Insert → Page Number**
3. Choose position and format
4. Save the template

## Sections with different layouts

For more complex documents with different layouts (e.g., title page without page number, main part with page numbers), you need to work with Word section breaks in the template. This goes beyond the scope of this tutorial but is described in the officedown documentation.

## Practical example

Here is a complete YAML setup for a professional report:

```

title: "Analysis of Adelie Penguins"
author: "Research Team"
date: today
lang: en
format:
 docx:
```

```

reference-doc: templates/template.docx
toc: true
toc-depth: 2
toc-title: "Contents"
crossref:
 fig-title: "Figure"
 tbl-title: "Table"
 fig-prefix: "Fig."
 tbl-prefix: "Tab."
execute:
 echo: false
 warning: false
 message: false

```

## The Officeverse ecosystem

For advanced Word documents, there is the “Officeverse” — a collection of R packages:

| Package           | Purpose                                     |
|-------------------|---------------------------------------------|
| <b>flextable</b>  | Tables (already covered)                    |
| <b>officedown</b> | Extended Word features in R Markdown/Quarto |
| <b>officer</b>    | Create Word documents programmatically      |
| <b>mschart</b>    | Native Word charts                          |

### When to use **officer** instead of **Quarto**?

- Very complex layouts that Quarto does not support
- Mass production of documents (e.g., 100 personalized reports)
- Full programmatic control over every element

For most scientific reports, however, Quarto with **flextable** is completely sufficient.

#### 💡 Exercise: Build report structure

1. Create a document with at least three main chapters
2. Enable the table of contents with `toc: true`
3. Insert a page break before the first main chapter
4. Experiment with different `toc-depth` settings
5. Render to Word and check the result

## Further resources

- Quarto Word Options — All YAML options
- **officedown** — Extended features
- **officer** — Programmatic document creation

## What is next

In Chapter 9, we will learn how to add citations and a bibliography to the document — essential for scientific publications.

# Bibliography

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