

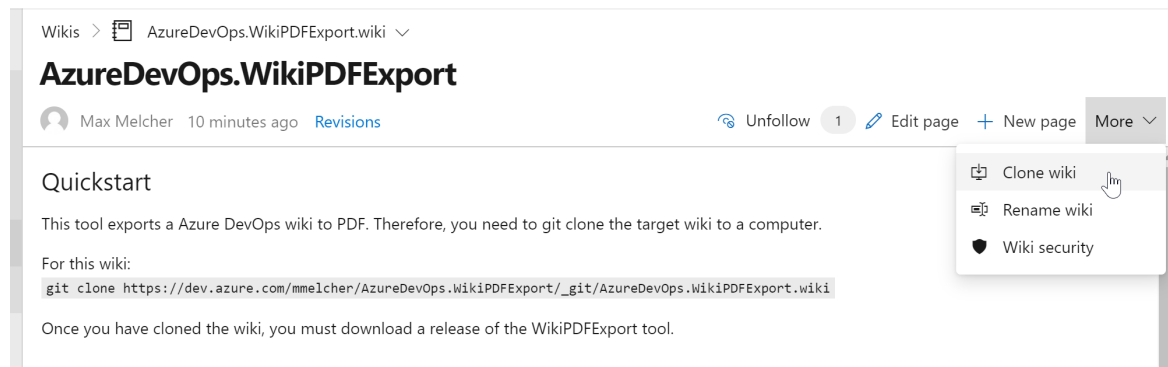
# AzureDevOps.WikiPDFExport

## Quickstart

This tool exports a Azure DevOps wiki as DF.

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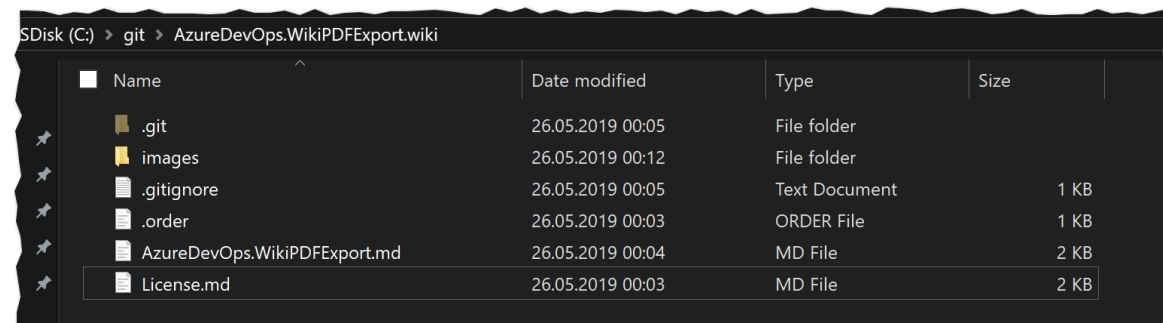
Therefore, you need to git clone the target wiki to a computer. You can get the clone link of the wiki in the top right of the wiki homepage:



To clone this wiki, use the following command: `git clone`

`https://dev.azure.com/mmelcher/AzureDevOps.WikiPDFExport/_git/AzureDevOps.WikiPDFExport.wiki`

The result should look like this:



Once you have cloned the wiki, you must download the Azure DevOps WikiPDFExport tool. [azuredevops-export-wiki.exe](#) (~40MB)

You can drop it right into the cloned folder and execute it there. Launched without parameters, the tool will detect all wiki files next to it and convert it to a PDF called export.pdf right next to it. Similar to this [pdf](#).

If you need more control over the output, please see the Configuration Options below or by launching the tool with `--help` parameter.

## Features

The tool currently supports the following:

- Export all wiki pages (and sub pages) in the correct order including styles and formatting.
- Includes pictures (remote and relative urls)
- Creates PDF bookmarks to all pages for easier navigation within the PDF
- If you link to other wiki pages, the link in the PDF will work, too. Anchor tags supported, see [#license](#) or [./TEST%2DPAGE.md#Mermaid](#))
- Everything self-contained. Download the .exe file, run it, done.
- Tool can be used as part of a build, see [Build Task](#)
- It is fast. A PDF with 160 pages is created in less than a second.
- Emoticons and Smileys are supported ☺ ⚠
- Mermaid supported
- Workitems can be referenced and will be included in the pdf as link with the current status, e.g. #7.
- Math/Latex formulas are rendered

## Requirements

The tool is developed as .NET Core 2.2 application, therefore you need to have the runtime installed. Download is available [here](#).

## Download

The download is available [here](#)

## Configuration Options

-h / --help

Help - outputs the parameters that can be used

-o / --output

The path to the export file including the filename, e.g. c:\export.pdf

-d / --date

The current date will be added to the footer

-b / --breakPage

For every wiki page a new page in the PDF will be created

-h / --heading

For every wiki page create a heading in the PDF. If the file is called Home.md a new #Home-heading is added to PDF.

-s / --single

Path to a single markdown file to convert to PDF. If you want to write your changelog in the wiki, this is your parameter to only convert a single page. -p parameter is required, too.

-p / --path

Path to the wiki folder. If not provided, the current folder of the executable is used.

-v / --verbose

Verbose mode. Logging will added to the console window

-d / --debug

Debug mode. Logs tons of stuff and even exports the intermediate html file

--pathToHeading

Add path of the file to the header

--footer-left, --footer-center, --footer-right, --header-left, --header-center, --header-right,

Headers and footers can be added to the document by the --header-\* and --footer\* arguments respectfully. In header and footer text string supplied to e.g. --header-left, the following variables will be substituted.

- [page] Replaced by the number of the pages currently being printed
- [frompage] Replaced by the number of the first page to be printed
- [topage] Replaced by the number of the last page to be printed
- [webpage] Replaced by the URL of the page being printed
- [section] Replaced by the name of the current section

- [subsection] Replaced by the name of the current subsection
- [date] Replaced by the current date in system local format
- [isodate] Replaced by the current date in ISO 8601 extended format
- [time] Replaced by the current time in system local format
- [title] Replaced by the title of the of the current page object
- [doctitle] Replaced by the title of the output document
- [sitepage] Replaced by the number of the page in the current site being converted
- [sitepages] Replaced by the number of pages in the current site being converted

#### ⚠ Limitations

So far the following limitations are known:

- TOC (Table of Contents) tag is not supported and will exported as tag
- The tool, sometimes shows an error "Qt: Could not initialize OLE (error 80010106)" - this can be ignored.
- If headers are not formatted properly (#Header instead of # Header), they are rendered incorrectly. I might fix that in the future.
- The tool lacks proper testing because I only have two wikis available

#### 📄 License

See [license](#)

#### 📊 Telemetry

The tool uses Application Insights for basic telemetry:

- The duration of the export and the count of wiki pages is tracked and submitted to Azure.
- In the case of an error, the exception is submitted.
- No wiki data/content is submitted.

#### Thanks

In this tool uses open source libraries that do the actual work - I just combined them to get the export as PDF:

1. [CommandLineParser](#) to parse the command line
2. [MarkDig](#) to parse markdown files to HTML.
3. [DinkToPdf](#) to export HTML to PDF
4. [dotnet-warp](#) to release a self-contained exe file

## TESTPAGE

The following are tests for the export page

### Copy & Paste Picture



### Table of Contents

- [Copy & Paste Picture](#)
- [Table of Contents](#)
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- [Formular](#)
- [Mention](#)
- [Lists](#)
- [Formats](#)
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- [Pictures with Space in Filename](#)
- [Pictures with Width/Height](#)
- [Pictures with Width only](#)
- [Pictures with Height only](#)
- [Picture as html](#)
- [Mathematical notation and characters](#)
  - [Supported in: Pull Requests | Wikis](#)

### Video



Table Test

a	b
0	1

Formular

$$e = mc^2$$

Mention

@<7C0C20F7-3AB6-6232-8E80-E35152712AF5>

##Malformed header (no space!)

Lists

- 1 Entry
- 2 Entry
- 3 Entry

Formats

bold *italic* [link](#) `code`

Mermaid



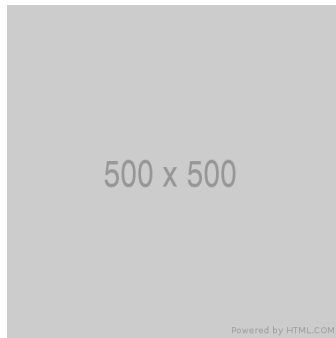
Large Pictures



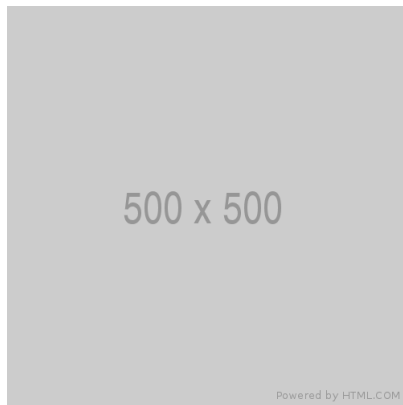
Pictures with Space in Filename



Pictures with Width/Height



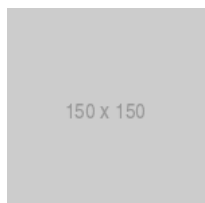
Pictures with Width only



Pictures with Height only



Picture as html



## Mathematical notation and characters

Supported in: Pull Requests | Wikis

Both inline and block [KaTeX](#) notation is supported in wiki pages and pull requests. The following supported elements are included:

- Symbols
- Greek letters

- Mathematical operators
- Powers and indices
- Fractions and binomials
- Other KaTeX supported elements

To include mathematical notation, surround the mathematical notation with a `$` sign, for inline, and `$$` for block, as shown in the following examples:

Example: Greek characters

$$\alpha, \beta, \gamma, \delta, \epsilon, \zeta, \eta, \theta, \kappa, \lambda, \mu, \nu, \rho, \sigma, \tau, \upsilon, \phi, \dots$$

$$\Gamma, \Delta, \Theta, \Lambda, \Xi, \Pi, \Sigma, \Upsilon, \Phi, \Psi, \Omega$$

Greek letters

Example: Algebraic notation

Area of a circle is

$$\pi r^2$$

And, the area of a triangle is:

$$A = \frac{1}{2}(\cdot h)$$

Algebraic notation

Example: Sums and Integrals

$$\sum_{i=1}^{10} t_i$$

$$\int_0^{\infty} e^{-x}, dx$$



## Build Task

Using Azure DevOps WikiPDFExport as build task is straightforward.

1. Create a new build definition
2. Git Source is "Other Git"
3. 1. Add the clone url to the wiki to the details and username / password if required
4. Ensure that the agent is a windows agent
5. Add a powershell task with the following code:

```
#Download url to the export tool
$url = "https://dev.azure.com/mmelcher/8036eca1-fd9e-4c0f-8bef-646b32fdba0b/_apis/git/repositories/e08d1ada-7794-4b89-a3ea-cb64a26683c3/Items?path=%2Fazuredevops-export-wiki.exe&versionDescriptor%5BversionOptions%5D=0&versionDescriptor%5BversionType%5D=0&versionDescriptor%5Bversion%5D=master&download=true&version=5.0-preview.1"

#filename of the tool
$output = "azuredevops-export-wiki.exe"

#download the file
Invoke-WebRequest -Uri $url -OutFile $output

#launch the tool - adjust the parameters if required
./azuredevops-export-wiki.exe
```

5. Add a second task to publish the PDF as build artifact.

Once the build succeeds, you can download the PDF file from the build page or use it in a release.

## Pictures

### Windows Agent

The screenshot shows the Azure DevOps build system interface. The left pane displays the pipeline tasks: 'Get sources', 'Agent job 1', 'PowerShell Script', and 'Publish Artifact: drop'. The right pane shows the configuration for 'Agent job 1', including 'Display name' (Agent job 1), 'Agent selection' (Hosted VS2017), and 'Demands'.

### PowerShell Task

The screenshot shows the Azure DevOps build system interface. The left pane displays the pipeline tasks: 'Get sources', 'Agent job 1', 'PowerShell Script', and 'Publish Artifact: drop'. The right pane shows the configuration for 'PowerShell Script', including 'Task version' (2.0), 'Display name' (PowerShell Script), 'Type' (Inline), and the 'Script' content.

## Publish Task

Tasks

Variables

Triggers

Options

Retention

History

Save & queue

Discard

Summary

Queue

Pipeline

Build pipeline

Get sources

repository wikiMaster

Agent job 1

Run on agent

PowerShell Script

PowerShell

Publish Artifact: drop

Publish Build Artifacts

Publish Build Artifacts

Task version

1.\*

Display name \*

Publish Artifact: drop

Path to publish \*

\$(Build.ArtifactStagingDirectory)\export.pdf

Artifact name \*

drop

Artifact publish location \*

Azure Pipelines/TFS

Control Options

Output Variables

## License

### MIT License

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