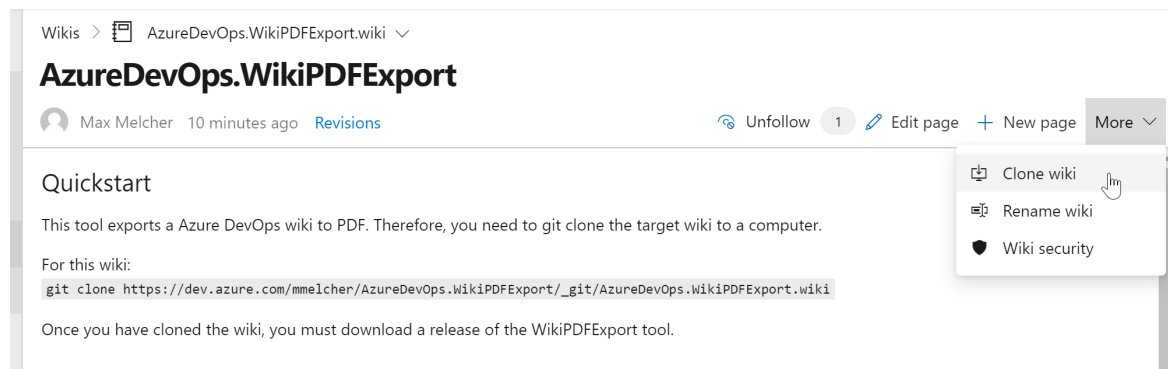


# AzureDevOps.WikiPDFExport

## Quickstart

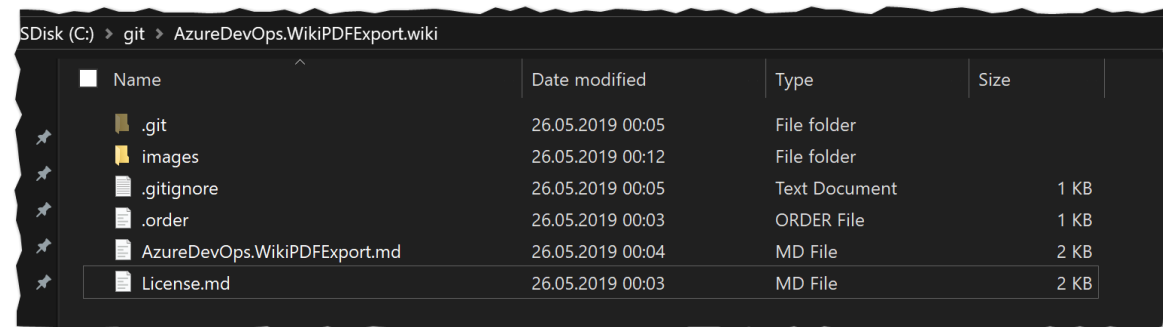
This tool exports a Azure DevOps wiki as PDF. Therefore, you need to git clone the target wiki to a computer. You can get the clone link of the wiki in the top right of the wiki homepage:



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

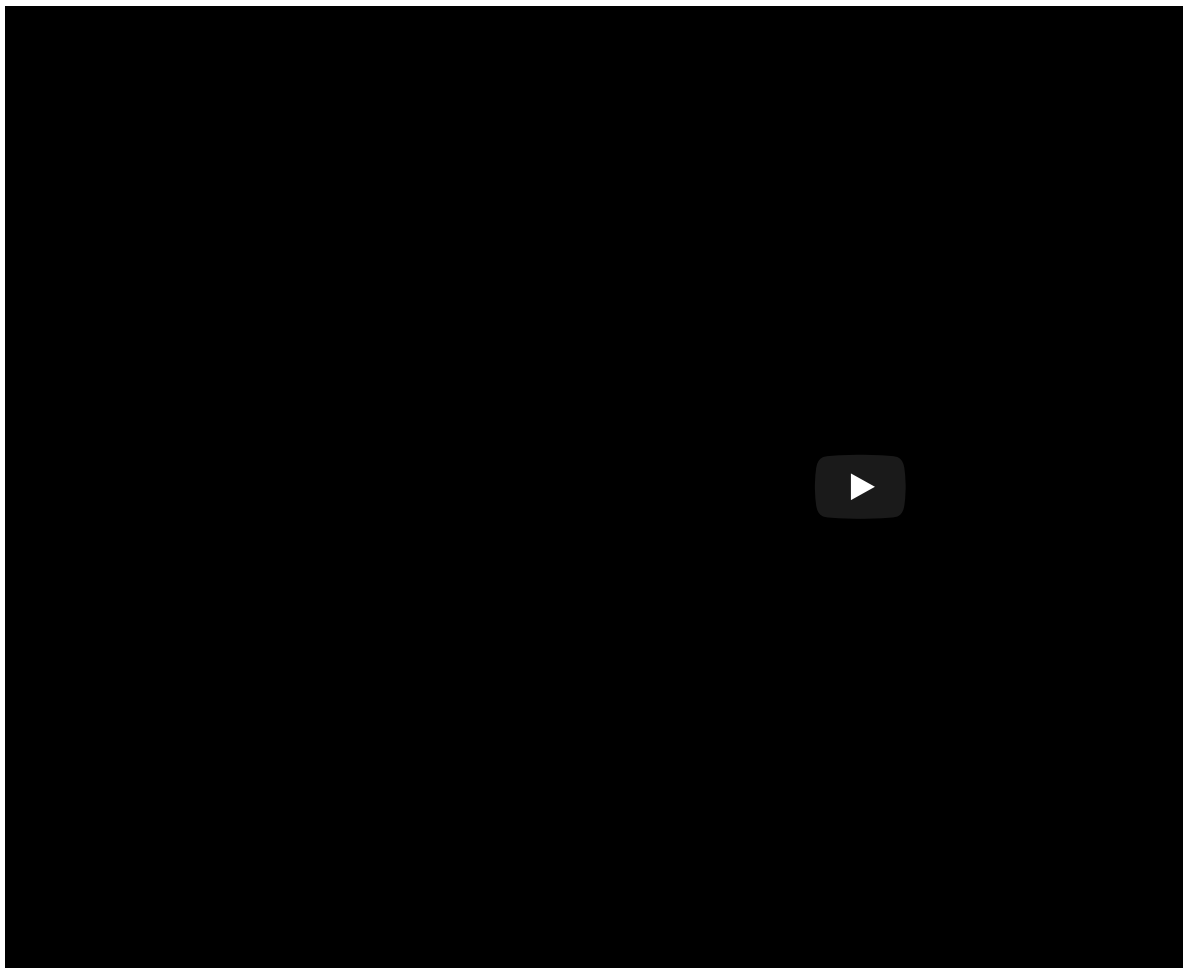
### Copy & Paste Picture



### Table of Contents

- [Copy & Paste Picture](#)
- [Table of Contents](#)
- [Video](#)
- [Table Test](#)
- [Formular](#)
- [Mention](#)
- [Lists](#)
- [Formats](#)
- [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](#)

### 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



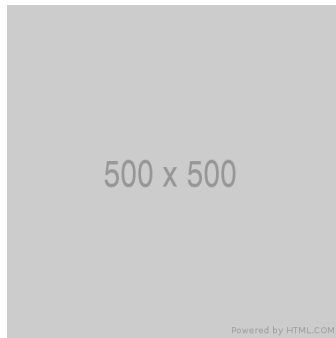
#### Large Pictures



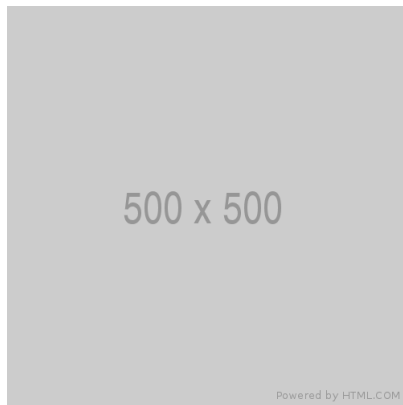
Pictures with Space in Filename



Pictures with Width/Height



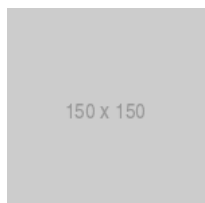
Pictures with Width only



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

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

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

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' (selected), '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' (selected), and 'Publish Artifact: drop'. The right pane shows the configuration for 'PowerShell Script', including 'Task version' (2.\*), 'Display name' (PowerShell Script), 'Type' (Inline), 'Script' (containing the PowerShell code), and 'ErrorActionPreference' (Stop).

## 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

Copyright (c) 2019 Max Melcher

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.