

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:

Wikis > AzureDevOps.WikiPDFExport.wiki

# AzureDevOps.WikiPDFExport

Max Melcher 10 minutes ago [Revisions](#)

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## Quickstart

This tool exports a Azure DevOps wiki to PDF. Therefore, you need to git clone the target wiki to a computer.

For this wiki:

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

Once you have cloned the wiki, you must download a release of the WikiPDFExport tool.

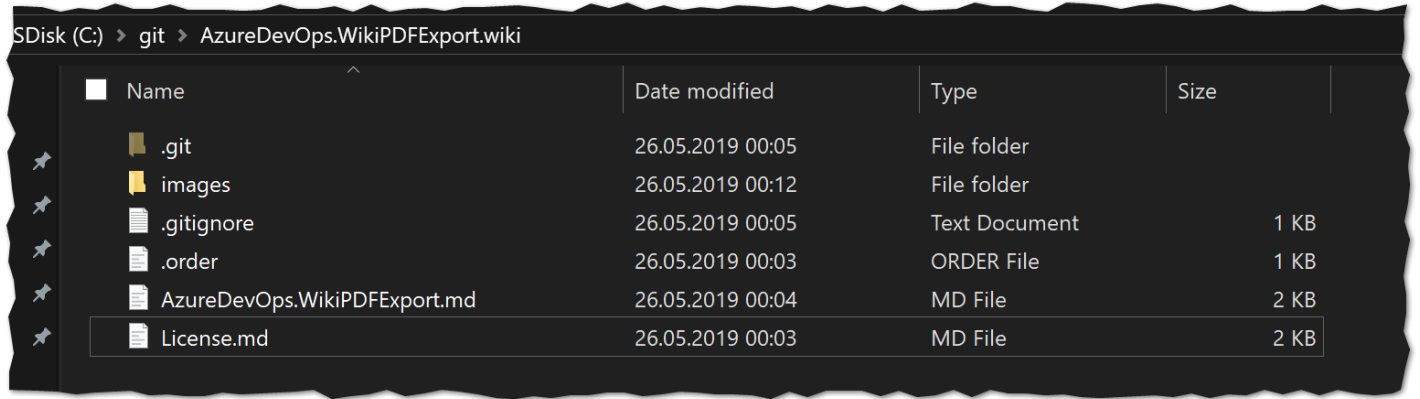
Clone wiki

Rename wiki

Wiki security

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.

i 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-warmp](#) to release a self-contained exe file

**TESTPAGE**

The following are tests for the export page

**Copy & Paste Picture****Table of Contents****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**

graph LR; A[Wiki supports Mermaid] --> B[Visit <https://mermaidjs.github.io/> for Mermaid syntax];

**Large Pictures**

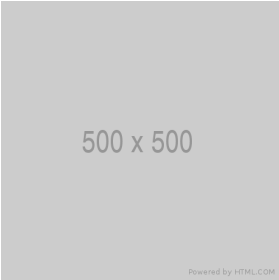




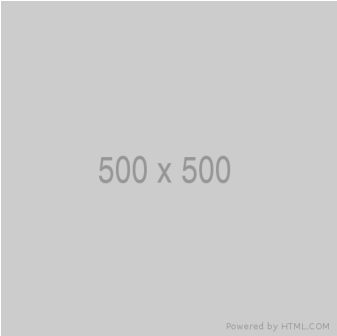
Pictures with Space in Filename



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:

`\[ A_{\triangle}=\frac{1}{2}({b}\cdot{h}) \]`  
Algebraic notation

Example: Sums and Integrals

`\[\sum_{i=1}^{10} t_i \]`

$$\int_{-\infty}^{\infty} e^{-x} dx$$

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
$uri = "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&resolveLfs=true&%24format=octetStream&api-version=5.0-preview.1"

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

#download the file
Invoke-WebRequest -Uri $uri -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

TasksVariablesTriggersOptionsRetentionHistorySave & queueDiscardSummaryQueue

PipelineBuild pipeline

Get sourcesrepository wikiMaster

Agent job 1Run on agent

PowerShell ScriptPowerShell

Publish Artifact: dropPublish Build Artifacts

Agent job ⓘ

Display name \*Agent job 1

Agent selection ^

Agent pool ⓘPool informationManage

Hosted VS2017

Demands ⓘ

PowerShell Task

TasksVariablesTriggersOptionsRetentionHistorySave & queueDiscardSummaryQueue

PipelineBuild pipeline

Get sourcesrepository wikiMaster

Agent job 1Run on agent

PowerShell ScriptPowerShell

Publish Artifact: dropPublish Build Artifacts

PowerShell ⓘLink settingsView YAMLRemove

Task version2.\*

Display name \*PowerShell Script

Type ⓘFile PathInline

Script \* ⓘ\$uri = "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&resolveLfs=true&%24format=octetStream&api-version=5.0-preview.1"

\$output = "azuredevops-export-wiki.exe"

Invoke-WebRequest -Uri \$uri -OutFile \$output

./azuredevops-export-wiki.exe

ErrorActionPreference ⓘStop

Publish Task

TasksVariablesTriggersOptionsRetentionHistory

Save & queueDiscardSummaryQueue

PipelineBuild pipeline

Get sourcesrepositorywikiMaster

Agent job 1Run on agent

PowerShell ScriptPowerShell

Publish Artifact: dropPublish Build Artifacts

Publish Build Artifacts

Task version1.\*

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**

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