
cmake_converter Documentation

Release 2.0

Estrada Matthieu

Dec 03, 2019

1	Introduction	3
1.1	About CMake Converter	3
1.2	Features	3
1.3	Release cycle	3
1.4	About CMake	3
2	Install CMake Converter	5
2.1	Requirements	5
2.2	Installation (from Pip)	5
2.3	Installation (from Sources)	5
2.3.1	Clone and install	5
2.3.2	External Libraries	6
3	Use CMake Converter	7
3.1	Quick Use	7
3.2	Advance Usage	7
3.2.1	Main	7
3.3	Solution Conversion	7
3.4	Hints	8
4	Generated CMakeLists.txt	9
4.1	Root of CMake tree	9
4.2	Top of file (project)	9
4.3	Files & Targets	9
4.3.1	Files (source groups)	9
4.3.2	Library & Executable (target)	10
4.4	Include directories	10
4.5	Compile definitions	10
4.6	Compile and link options	10
4.6.1	Linux	10
4.6.2	Windows	10
4.7	Dependencies	10
5	Use CMake	11
6	API Documentation	13
6.1	DataConverter	13

6.2	Context object descriptor	13
6.3	Data Files	14
6.4	Dependencies	15
6.5	Flags	16
6.6	ProjectFiles	17
6.7	ProjectVariables	18
6.8	Utils	18
7	Indices and tables	23
	Python Module Index	25
	Index	27

Documentation Content:

1.1 About CMake Converter

CMake Converter is an open source software written in Python under the terms of the [GNU Affero General Public License](#) .

This application is for developers and integrators who want to automate the creation of `CMakeLists.txt` for their build systems from Visual Studio solution files.

1.2 Features

CMake Converter converts your `*.sln` file (`vcxproj` and `vfproj` are supported only) into corresponding tree of `CMakeLists.txt`. It tries to translate data such as compile and link flags, project files, project dependencies, outputs of the produced binaries and more into CMake language.

1.3 Release cycle

CMake Converter has no strict schedule for releasing.

Other features will come in the next versions and you can propose new features through [project issues](#). Each feature is discussed in a separate issue.

1.4 About CMake

In this documentation, you'll find some reminders about CMake and how the script handles your project's data inside. For example, how the generated `CMakeLists.txt` manage dependencies.

But a minimum of knowledge on [CMake](#) is **recommended** !

Install CMake Converter

2.1 Requirements

You must have **Python 3** installed to make this library work.

Note: CMake Converter is **not compatible** with Python 2 !

2.2 Installation (from Pip)

You can install cmake-converter as a standard python library, with pip:

```
pip install cmake_converter
```

Install last pre-release or development version of cmake-converter:

```
pip install --pre cmake_converter
```

2.3 Installation (from Sources)

2.3.1 Clone and install

To install from sources, you've to clone this repository and make a pip install:

```
git clone https://github.com/algorys/cmakeconverter.git
cd cmakeconverter
pip install .
```

2.3.2 External Libraries

You need to install Python modules that are listed in `requirements.txt` file with pip:

```
colorama
lxml==4.3.5 # for python 3.4
```

3.1 Quick Use

To use `cmake-converter`, simply give your `*.sln` file to `cmake-converter` command:

```
cmake-converter -s <path/to/file.sln>
```

3.2 Advance Usage

The `cmake-converter` command accepts a lot of parameters to try to suit the majority of situations.

3.2.1 Main

Manage script arguments and launch

3.3 Solution Conversion

With `cmake-converter`, you can convert full Visual Studio solutions.

The script will extract data from all supported `*proj` files and create the corresponding **CMakeLists.txt**.

With the following project structure:

```
project/  
├── msvc  
│   ├── libone  
│   │   └── libone.vcxproj  
│   ├── libtwo  
│   │   └── libtwo.vcxproj
```

(continues on next page)

(continued from previous page)

```
└─ myexec
   └─ myexec.sln
   └─ myexec.vcxproj
```

Then you'll run cmake-converter as follow:

```
cmake-converter \
--solution=project/msvc/myexec/myexec.sln \
--verbose-mode \
--private-include-directories \
--warning-level=3
```

And you'll have the following CMakeLists.txt generated:

```
project/
└─ msvc
   └─ libone
   │   └─ CMakeLists.txt      *
   │   └─ libone.vcxproj
   └─ libtwo
   │   └─ CMakeLists.txt      *
   │   └─ libtwo.vcxproj
   └─ myexec
       └─ CMake                *
           └─ Default*.cmake  *
           └─ Utils.cmake     *
       └─ CMakeLists.txt      *
       └─ myexec.sln
       └─ myexec.vcxproj
```

3.4 Hints

You can add CMake/GlobalSettingsInclude.cmake file for global custom CMake settings.

Pay attention on warnings and do proposed fixes.

Run cmake-converter --help for more info.

Generated CMakeLists.txt

All **CMakeLists.txt** generated by cmake-converter follow the same hierarchy. If you converted a solution, each converted directory with *.proj file will have its own file.

In order to facilitate their understanding, the generated files are organized by “section”. Here is a description for each of them. Actually each section at generated scripts is separated with comment and can be read well.

4.1 Root of CMake tree

After conversion the root of CMake tree appears beside *.sln file. So, give the path of the root CMakeLists.txt to cmake to parse all converted tree. Root CMakeLists.txt contains info about:

- ```
1. Architectures used in solution.
2. Solution configuration names.
3. Windows SDK version used.
4. Sets cmake minimum required version.
5. Includes optional GlobalSettingsInclude.cmake
6. Adds all converted subdirectories with projects.
```

### 4.2 Top of file (project)

Creating of corresponding Visual Studio project with used languages.

### 4.3 Files & Targets

#### 4.3.1 Files (source groups)

Converter will collect all your source files and add them to the corresponding target. The files will be added according source groups and sorted alphabetically.

**IMPORTANT:** names of source groups must be without special symbols (only CMake like variable). Spaces are accepted.

### 4.3.2 Library & Executable (target)

After script get all information, he create your library (*STATIC* or *SHARED*) or your executable. Also here may be used `add_precompiled_header` if `PCH` is turned on.

## 4.4 Include directories

Adds include directories from corresponding visual studio project. Includes are `PUBLIC` by default. But you may use `-private-include-directories` to make them private and make your solution smarter.

## 4.5 Compile definitions

Adds compile definitions from corresponding visual studio project.

## 4.6 Compile and link options

The biggest part of the work done by CMake Converter. CMake-converter will add flags for each `$<CONFIG>`. Only `MSVC` and `ifort` compilers are supported. Flags applied with `target_compile_options` and `target_link_options`.

### 4.6.1 Linux

On Linux only translation of `ifort` options is supported.

### 4.6.2 Windows

`MSVC` and `ifort` options are supported.

## 4.7 Dependencies

Dependencies are binaries you have set in “Additional Dependencies” of your **\*proj** project, like shared or static libraries or references to other solution projects. `add_dependencies` command contains corresponding references. `target_link_libraries` command contains references that need to link and other external dependencies. `target_link_directories` may be used here as well.

Also cmake converter tries to read info about used NuGet packages and makes stubs for using it with `use_package` function.

CMake Converter try to take as much information as possible from your **\*proj** file. However, it's recommended to read and test the generated **CMakeLists.txt** before using it in production !

Once CMake Converter has generated a **CMakeLists.txt** file, to compile with CMake, type the following commands:

```
Go to CMake tree root (not necessary, may be relative):
cd path/to/Root/of/CMake/tree
Generate the "Makefile"
cmake -S . -B build
Launch compilation
cmake --build build
```

You can also provide a specific **Generator** with `-G "<GENERATOR_NAME>"`. Please refer to [CMake Generator Documentation](#).

You can provide the build type by add `-DCMAKE_BUILD_TYPE=<BUILD_TYPE>`.

CMake provides a lot of other options that you can discover in their official documentation.





## 6.1 DataConverter

Manage conversion of data into CMake

**class** `cmake_converter.data_converter.DataConverter`

Bases: `object`

Base class for converters

**static** `collect_data` (*context*)

Collect data for converter.

**convert\_project** (*context*, *xml\_project\_path*, *cmake\_lists\_destination\_path*)

Method template for data collecting and writing

**merge\_data\_settings** (*context*)

Merge common settings found among configuration settings (reduce copy-paste)

**Parameters** `context` –

**Returns**

**static** `write_data` (*context*, *cmake\_file*)

Write data defined in converter.

**Parameters**

- `context` (`Context`) – converter context
- `cmake_file` (`_io.TextIOWrapper`) – CMakeLists IO wrapper

## 6.2 Context object descriptor

**class** `cmake_converter.context.Context`

Bases: `object`

Converter context

**clone** ()

Deep clone of Context

**Returns**

**init** (*xml\_project\_path*, *cmake\_lists\_destination\_path*)

Initialize instance of Context with Initializer

**Parameters**

- **xml\_project\_path** –
- **cmake\_lists\_destination\_path** –

**Returns**

## 6.3 Data Files

Manage the **VS Project** data and creation of **CMakeLists.txt** file

`cmake_converter.data_files.get_cmake_lists` (*context*, *cmake\_path=None*, *open\_type='w'*)

Create CMakeLists.txt file in wanted “cmake\_path”

**Parameters**

- **context** (*Context*) – the context of converter
- **cmake\_path** (*str*) – path where CMakeLists.txt should be open
- **open\_type** (*str*) – type that CMakeLists.txt should be opened

**Returns** cmake file wrapper opened

**Return type** `_io.TextIOWrapper`

`cmake_converter.data_files.get_definitiongroup` (*target\_platform*)

Return ItemDefinitionGroup namespace depends on platform and target

**Parameters** **target\_platform** (*tuple[str, str]*) – wanted target: debug | release

**Returns** wanted ItemDefinitionGroup namespace

**Return type** `str`

`cmake_converter.data_files.get_propertygroup` (*target\_platform*, *attributes=""*)

Return “property\_groups” value for wanted platform and target

**Parameters**

- **target\_platform** (*tuple[str, str]*) – wanted target: debug | release
- **attributes** (*str*) – attributes to add to namespace

**Returns** “property\_groups” value

**Return type** `str`

`cmake_converter.data_files.get_vcxproj_data` (*context*, *vs\_project*)

Return xml data from “vcxproj” file

**Parameters**

- **context** (*Context*) – the context of converter

- **vs\_project** (*str*) – the vcxproj file

**Returns** dict with VS Project data

**Return type** dict

`cmake_converter.data_files.get_xml_data(context, xml_file)`

Return xml data from “xml” file

**Parameters**

- **context** (*Context*) – the context of converter
- **xml\_file** (*str*) – the xml file

**Returns** dict with VS Project data

**Return type** dict

## 6.4 Dependencies

Manage directories and libraries of project dependencies

**class** `cmake_converter.dependencies.Dependencies`

Bases: `object`

Class who find and write dependencies of project, additionnal directories...

**static** `get_dependency_target_name(context, vs_project)`

Return dependency target name

**Parameters**

- **context** (*Context*) – the context of converter
- **vs\_project** (*str*) – path to “.vcxproj” file

**Returns** target name

**Return type** `str`

**static** `set_additional_include_directories(aid_text, setting, context)`

Return additional include directories of given context

**Parameters**

- **aid\_text** (*str*) – path to sources
- **setting** (*str*) – current setting (Debug|x64, Release|Win32,...)
- **context** (*Context*) – current context

**Returns** include directories of context, separated by semicolons

**Return type** `str`

`write_custom_build_events_of_files(context, cmake_file)`

**static** `write_file_build_event_of_setting(cmake_file, property_indent, config_condition_expr, property_value, width, **kwargs)`

**static** `write_include_directories(context, cmake_file)`

Write include directories of given context to given CMakeLists.txt file

**Parameters**

- **context** (*Context*) – current context data
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

**static write\_link\_dependencies** (*context, cmake\_file*)

Write link dependencies of project to given cmake file

#### Parameters

- **context** (*Context*) – current context
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

**static write\_property\_sheets** (*cmake\_file, property\_indent, config\_condition\_expr, property\_value, width, \*\*kwargs*)

**static write\_target\_build\_event\_of\_setting** (*cmake\_file, property\_indent, config\_condition\_expr, property\_value, width, \*\*kwargs*)

**static write\_target\_dependency\_packages** (*context, cmake\_file*)

Write target dependency packages of current context

#### Parameters

- **context** (*Context*) – current context
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

**write\_target\_post\_build\_events** (*context, cmake\_file*)

**write\_target\_pre\_build\_events** (*context, cmake\_file*)

**write\_target\_pre\_link\_events** (*context, cmake\_file*)

**static write\_target\_property\_sheets** (*context, cmake\_file*)

Write target property sheets of current context

#### Parameters

- **context** (*Context*) – current context
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

**static write\_target\_references** (*context, cmake\_file*)

Write target references on given CMakeLists.txt file

#### Parameters

- **context** (*Context*) – current context
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

## 6.5 Flags

Manage compilation flags of project

**class** `cmake_converter.flags.Flags`

Bases: `object`

Class who manage flags of projects

**static write\_compile\_and\_link\_flags** (*context, cmake\_file, \*\*kwargs*)

#### Parameters

- **context** –
- **cmake\_file** –
- **kwargs** –

#### Returns

**write\_defines** (*context, cmake\_file*)

**write\_flags** (*context, cmake\_file*)

Get and write Preprocessor Macros definitions

#### Parameters

- **context** (*Context*) – converter Context
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

**static write\_target\_artifact** (*context, cmake\_file*)

Add Library or Executable target

#### Parameters

- **context** (*Context*) – converter Context
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

**static write\_target\_headers\_only\_artifact** (*context, cmake\_file*)

Add a dummy target to given CMake file

#### Parameters

- **context** (*Context*) – the context of converter
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

**write\_use\_pch\_function** (*context, cmake\_file*)

## 6.6 ProjectFiles

Manages the recovery of project files

**class** `cmake_converter.project_files.ProjectFiles`

Bases: `object`

Class who collect and store project files

**static add\_additional\_code** (*context, file\_to\_add, cmake\_file*)

Add additional file with CMake code inside

#### Parameters

- **context** (*Context*) – the context of converter
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper
- **file\_to\_add** (*str*) – the file who contains CMake code

**add\_file\_from\_node** (*context, \*\*kwargs*)

**apply\_files\_to\_context** (*context*)

**find\_cmake\_project\_languages** (*context*)

Add CMake Project

```
static get_source_group_var (context, source_group_name)
include_directive_case_check (context, file_path_name, file_lists_for_include_paths)
init_file_lists_for_include_paths (context)
 For include directive case ad path checking. Works only with vfpj. :param context: :return:
static write_cmake_project (context, cmake_file)
 Write cmake project for given CMake file
```

**Parameters**

- **context** (*Context*) – Converter context
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

```
write_source_groups (context, cmake_file)
```

## 6.7 ProjectVariables

Manage creation of CMake variables that will be used during compilation

```
class cmake_converter.project_variables.ProjectVariables
 Bases: object
 Class who manage project variables
 static set_output_dir_impl (context, output_node_text)
 Parameters
 • context –
 • output_node_text –
 Returns
 static set_output_file_impl (context, output_file_node_text)
 static set_path_and_name_from_node (context, node_name, value, path_property,
 name_property)
 static set_target_name (context, target_name_value)
 static write_target_outputs (context, cmake_file)
 Add outputs for each artefacts CMake target
 Parameters
 • context (Context) – related full context
 • cmake_file (_io.TextIOWrapper) – CMakeLists.txt IO wrapper
 static write_target_property (cmake_file, property_indent, config_condition_expr, prop-
 erty_value, width, **kwargs)
```

## 6.8 Utils

Utils manage function needed by converter

```
class cmake_converter.utils.Utils
 Bases: object
```

`init_context_current_setting` (*context*)

Define settings of converter.

**Parameters** `context` (*Context*) – converter context

`static lists_of_settings_to_merge` ()

`cmake_converter.utils.check_for_relative_in_path` (*context, path, remove\_relative=True*)

Return path by adding CMake variable or current path prefix, to remove relative

**Parameters**

- `context` (*Context*) – the context of converter
- `path` (*str*) – original path
- `remove_relative` (*bool*) – flag

**Returns** formatted path without relative

**Return type** *str*

`cmake_converter.utils.cleaning_output` (*context, output*)

Clean Output string by remove VS Project Variables

**Parameters**

- `context` (*Context*) – the context of converter
- `output` (*str*) – Output to clean

**Returns** clean output

**Return type** *str*

`cmake_converter.utils.get_actual_filename` (*context, name*)

Return actual filename from given name if file is found, else return None

**Parameters**

- `context` (*Context*) – the context of converter
- `name` (*str*) – name of file

**Returns** None | *str*

**Return type** None | *str*

`cmake_converter.utils.get_comment` (*text*)

`cmake_converter.utils.get_dir_name_with_vars` (*context, path*)

`cmake_converter.utils.get_global_project_name_from_vcproj_file` (*vcxproj*)

Return global project name from “.vcxproj” file

**Parameters** `vcxproj` (*dict*) – vcxproj data

**Returns** project name

**Return type** *str*

`cmake_converter.utils.get_mapped_architectures` (*sln\_setting\_2\_project\_setting, arch*)

`cmake_converter.utils.get_mount_point` (*path*)

`cmake_converter.utils.get_str_value_from_property_value` (*property\_value, separator*)

`cmake_converter.utils.init_colorama` ()

`cmake_converter.utils.insensitive_glob` (*path*)

`cmake_converter.utils.is_settings_has_data` (*sln\_configurations\_map*, *settings*, *settings\_key*, *sln\_arch=None*, *conf=None*)

`cmake_converter.utils.make_cmake_literal` (*context*, *input\_str*)

`cmake_converter.utils.make_os_specific_shell_path` (*output*)

`cmake_converter.utils.message` (*context*, *text*, *status*)

Displays a message while the script is running

**Parameters**

- **context** (*Context*) – the context of converter
- **text** (*str*) – content of the message
- **status** (*str*) – level of the message (change color)

`cmake_converter.utils.normalize_path` (*context*, *working\_path*, *path\_to\_normalize*, *remove\_relative=True*)

Normalize path from working path

**Parameters**

- **context** (*Context*) – the context of converter
- **working\_path** (*str*) – current working path
- **path\_to\_normalize** (*str*) – path to be normalized
- **remove\_relative** (*bool*) – remove relative from path flag

**Returns** normalized path

**Return type** *str*

`cmake_converter.utils.prepare_build_event_cmd_line_for_cmake` (*context*, *build\_event*)

`cmake_converter.utils.replace_vs_var_with_cmake_var` (*context*, *var*)

`cmake_converter.utils.replace_vs_vars_with_cmake_vars` (*context*, *output*)

`cmake_converter.utils.resolve_path_variables_of_vs` (*context*, *path\_with\_vars*)

`cmake_converter.utils.set_native_slash` (*raw\_path*)

Set native slash

**Parameters** **raw\_path** (*str*) – any style path

**Returns** unix style path

**Return type** *str*

`cmake_converter.utils.set_unix_slash` (*win\_path*)

Set windows path to unix style path

**Parameters** **win\_path** (*str*) – windows style path

**Returns** unix style path

**Return type** *str*

`cmake_converter.utils.take_name_from_list_case_ignore` (*context*, *search\_list*, *name\_to\_search*)

Return real name of name to search

**Parameters**



- **context** (*Context*) – the context of converter
- **search\_list** (*list*) – list to make research
- **name\_to\_search** (*str*) – name to search in list

**Returns** real name

**Return type** *str*

`cmake_converter.utils.write_arch_types` (*cmake*)

`cmake_converter.utils.write_comment` (*cmake\_file, text*)

Write formatted comment in given file wrapper

**Parameters**

- **text** (*str*) – text in middle of title
- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper

`cmake_converter.utils.write_footer_of_settings` (*cmake\_file, command\_indent, config\_expressions, has\_property\_value, \*\*kwargs*)

`cmake_converter.utils.write_property_of_setting_f` (*cmake\_file, property\_indent, config\_condition\_expr, property\_value, width, \*\*kwargs*)

`cmake_converter.utils.write_property_of_settings` (*cmake\_file, settings, sln\_setting\_2\_project\_setting, \*\*kwargs*)

Write property of given settings.

**Parameters**

- **cmake\_file** (*\_io.TextIOWrapper*) – CMakeLists.txt IO wrapper
- **settings** (*dict*) – global settings
- **sln\_setting\_2\_project\_setting** (*dict*) – solution settings attached to project
- **kwargs** – begin of text

kwargs: indent: indent to use when writing indent: str default: default text to add default: None | str separator: separator for property list separator: ; | str in\_quotes: Enclose configuration settings in quotes in\_quotes: False | bool write\_setting\_property\_func: function for writing property for setting write\_setting\_property\_func: write\_property\_of\_setting | lambda

`cmake_converter.utils.write_selected_sln_setting` (*cmake\_file, settings, sln\_setting\_2\_project\_setting, sln\_setting, has\_property\_value, command\_indent, sln\_conf, config\_expressions, max\_config\_condition\_width, \*\*kwargs*)

`cmake_converter.utils.write_use_package_stub` (*cmake*)



## CHAPTER 7

---

### Indices and tables

---

- `genindex`
- `modindex`
- `search`



### C

- `cmake_converter.context`, 13
- `cmake_converter.data_converter`, 13
- `cmake_converter.data_files`, 14
- `cmake_converter.dependencies`, 15
- `cmake_converter.flags`, 16
- `cmake_converter.main`, 7
- `cmake_converter.project_files`, 17
- `cmake_converter.project_variables`, 18
- `cmake_converter.utils`, 18



## A

`add_additional_code()`  
*(cmake\_converter.project\_files.ProjectFiles static method), 17*

`add_file_from_node()`  
*(cmake\_converter.project\_files.ProjectFiles method), 17*

`apply_files_to_context()`  
*(cmake\_converter.project\_files.ProjectFiles method), 17*

## C

`check_for_relative_in_path()` *(in module cmake\_converter.utils), 19*

`cleaning_output()` *(in module cmake\_converter.utils), 19*

`clone()` *(cmake\_converter.context.Context method), 14*

`cmake_converter.context` *(module), 13*

`cmake_converter.data_converter` *(module), 13*

`cmake_converter.data_files` *(module), 14*

`cmake_converter.dependencies` *(module), 15*

`cmake_converter.flags` *(module), 16*

`cmake_converter.main` *(module), 7*

`cmake_converter.project_files` *(module), 17*

`cmake_converter.project_variables` *(module), 18*

`cmake_converter.utils` *(module), 18*

`collect_data()` *(cmake\_converter.data\_converter.DataConverter static method), 13*

`Context` *(class in cmake\_converter.context), 13*

`convert_project()`  
*(cmake\_converter.data\_converter.DataConverter method), 13*

## D

`DataConverter` *(class in cmake\_converter.data\_converter), 13*

`Dependencies` *(class in cmake\_converter.dependencies), 15*

## F

`find_cmake_project_languages()`  
*(cmake\_converter.project\_files.ProjectFiles method), 17*

`Flags` *(class in cmake\_converter.flags), 16*

## G

`get_actual_filename()` *(in module cmake\_converter.utils), 19*

`get_cmake_lists()` *(in module cmake\_converter.data\_files), 14*

`get_comment()` *(in module cmake\_converter.utils), 19*

`get_definitiongroup()` *(in module cmake\_converter.data\_files), 14*

`get_dependency_target_name()`  
*(cmake\_converter.dependencies.Dependencies static method), 15*

`get_dir_name_with_vars()` *(in module cmake\_converter.utils), 19*

`get_global_project_name_from_vcproj_file()`  
*(in module cmake\_converter.utils), 19*

`get_mapped_architectures()` *(in module cmake\_converter.utils), 19*

`get_mount_point()` *(in module cmake\_converter.utils), 19*

`get_propertygroup()` *(in module cmake\_converter.data\_files), 14*

`get_source_group_var()`  
*(cmake\_converter.project\_files.ProjectFiles static method), 17*

`get_str_value_from_property_value()` *(in module cmake\_converter.utils), 19*

`get_vcproj_data()` *(in module cmake\_converter.data\_files), 14*

`get_xml_data()` *(in module cmake\_converter.data\_files), 15*

**I**

include\_directive\_case\_check() (cmake\_converter.project\_files.ProjectFiles method), 18

init() (cmake\_converter.context.Context method), 14

init\_colorama() (in module cmake\_converter.utils), 19

init\_context\_current\_setting() (cmake\_converter.utils.Utils method), 18

init\_file\_lists\_for\_include\_paths() (cmake\_converter.project\_files.ProjectFiles method), 18

insensitive\_glob() (in module cmake\_converter.utils), 19

is\_settings\_has\_data() (in module cmake\_converter.utils), 20

**L**

lists\_of\_settings\_to\_merge() (cmake\_converter.utils.Utils static method), 19

**M**

make\_cmake\_literal() (in module cmake\_converter.utils), 20

make\_os\_specific\_shell\_path() (in module cmake\_converter.utils), 20

merge\_data\_settings() (cmake\_converter.data\_converter.DataConverter method), 13

message() (in module cmake\_converter.utils), 20

**N**

normalize\_path() (in module cmake\_converter.utils), 20

**P**

prepare\_build\_event\_cmd\_line\_for\_cmake() (in module cmake\_converter.utils), 20

ProjectFiles (class in cmake\_converter.project\_files), 17

ProjectVariables (class in cmake\_converter.project\_variables), 18

**R**

replace\_vs\_var\_with\_cmake\_var() (in module cmake\_converter.utils), 20

replace\_vs\_vars\_with\_cmake\_vars() (in module cmake\_converter.utils), 20

resolve\_path\_variables\_of\_vs() (in module cmake\_converter.utils), 20

**S**

set\_additional\_include\_directories()

(cmake\_converter.dependencies.Dependencies static method), 15

set\_native\_slash() (in module cmake\_converter.utils), 20

set\_output\_dir\_impl() (cmake\_converter.project\_variables.ProjectVariables static method), 18

set\_output\_file\_impl() (cmake\_converter.project\_variables.ProjectVariables static method), 18

set\_path\_and\_name\_from\_node() (cmake\_converter.project\_variables.ProjectVariables static method), 18

set\_target\_name() (cmake\_converter.project\_variables.ProjectVariables static method), 18

set\_unix\_slash() (in module cmake\_converter.utils), 20

**T**

take\_name\_from\_list\_case\_ignore() (in module cmake\_converter.utils), 20

**U**

Utils (class in cmake\_converter.utils), 18

**W**

write\_arch\_types() (in module cmake\_converter.utils), 21

write\_cmake\_project() (cmake\_converter.project\_files.ProjectFiles static method), 18

write\_comment() (in module cmake\_converter.utils), 21

write\_compile\_and\_link\_flags() (cmake\_converter.flags.Flags static method), 16

write\_custom\_build\_events\_of\_files() (cmake\_converter.dependencies.Dependencies method), 15

write\_data() (cmake\_converter.data\_converter.DataConverter static method), 13

write\_defines() (cmake\_converter.flags.Flags method), 17

write\_file\_build\_event\_of\_setting() (cmake\_converter.dependencies.Dependencies static method), 15

write\_flags() (cmake\_converter.flags.Flags method), 17

write\_footer\_of\_settings() (in module cmake\_converter.utils), 21

write\_include\_directories() (cmake\_converter.dependencies.Dependencies static method), 15



---

```
write_link_dependencies()
 (cmake_converter.dependencies.Dependencies
 static method), 16
write_property_of_setting_f() (in module
 cmake_converter.utils), 21
write_property_of_settings() (in module
 cmake_converter.utils), 21
write_property_sheets()
 (cmake_converter.dependencies.Dependencies
 static method), 16
write_selected_sln_setting() (in module
 cmake_converter.utils), 21
write_source_groups()
 (cmake_converter.project_files.ProjectFiles
 method), 18
write_target_artifact()
 (cmake_converter.flags.Flags static method),
 17
write_target_build_event_of_setting()
 (cmake_converter.dependencies.Dependencies
 static method), 16
write_target_dependency_packages()
 (cmake_converter.dependencies.Dependencies
 static method), 16
write_target_headers_only_artifact()
 (cmake_converter.flags.Flags static method),
 17
write_target_outputs()
 (cmake_converter.project_variables.ProjectVariables
 static method), 18
write_target_post_build_events()
 (cmake_converter.dependencies.Dependencies
 method), 16
write_target_pre_build_events()
 (cmake_converter.dependencies.Dependencies
 method), 16
write_target_pre_link_events()
 (cmake_converter.dependencies.Dependencies
 method), 16
write_target_property()
 (cmake_converter.project_variables.ProjectVariables
 static method), 18
write_target_property_sheets()
 (cmake_converter.dependencies.Dependencies
 static method), 16
write_target_references()
 (cmake_converter.dependencies.Dependencies
 static method), 16
write_use_package_stub() (in module
 cmake_converter.utils), 21
write_use_pch_function()
 (cmake_converter.flags.Flags method), 17
```