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# **aqtinstall Documentation**

***Release 0.5b2***

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**Mar 04, 2020**



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## Command Line Options

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The CLI uses `argparse` to parse the command line options so the short or long versions may be used and the long options may be truncated to the shortest unambiguous abbreviation.

**list**

list available versions (not implemented yet)

**help**

show generic help

**install** <Qt version> <target OS> <target variant> <target environment>

install Qt library specified version and target.

**Qt version**

This is a Qt version such as 5.9, 7, 5.12.1 etc

**target OS**

linux, windows or mac

**target variant**

desktop or android

**target environment**

- `gcc_64` for linux desktop
- `clang_64` for mac desktop
- `win64_msvc2017_64`, `win64_msvc2015_64`, `in32_msvc2015`, `win32_mingw53` for windows desktop
- `android_x86`, `android_armv7` for android

**--version, -v**

Display version

**--help, -h**

Display help text

**--outputdir, -O** <Output Directory>

specify output directory.

**--base, -b** <base url>

specify mirror site base url such as -b '<http://mirrors.ocf.berkeley.edu/qt/>' where 'online' folder exist.

**--modules, -m** <list of modules>

specify extra modules to install as a list.



## CHAPTER 2

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### Internals

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#### **2.1 Archives module**

#### **2.2 Installer module**

#### **2.3 Cli module**

#### **2.4 Helper module**



All notable changes to this project will be documented in this file.

### 3.1 Current changes

#### 3.1.1 Unreleased

Added

Changed

Fixed

Deprecated

Removed

Security

#### 3.1.2 v0.7.7 (4, Mar., 2020)

- Same as v0.7.6

#### 3.1.3 'v0.7.6' \_ (4, Mar., 2020)

Fixed

- Work around for <http://download.qt.io> returns wrong meta4 data.

### **3.1.4 v0.7.5 (27, Feb., 2020)**

#### **Changed**

- Requirements of py7zr is v0.5.3 or later, which include no more os.chdir() patch.

### **3.1.5 v0.7.4 (21, Feb., 2020)**

#### **Changed**

- Limit requirement of py7zr version to 0.5.\*. Try to fix issue #86.

### **3.1.6 v0.7.3 (14, Feb., 2020)**

#### **Added**

- Github Actions workflows for publishing.

#### **Changed**

- Remove run script from source. Now it is automatically generated when build.(#85)
- Update requirement py7zr >=0.5

#### **Fixed**

- README: fix reStructured text syntax.

### **3.1.7 v0.7.2 (11, Feb., 2020)**

#### **Changed**

- **Replace ‘multiprocessing.dummy’ with ‘concurrent.futures’.**
  - download with multi-threading(I/O bound)
  - extract with multi-processing(CPU bound)

#### **Fixed**

- ‘-E | –external’ option handling which cause path is not str error.

### **3.1.8 v0.7.1 (13, Jan., 2020)**

#### **Fixed**

- Fix installation of extra modules for Qt5.9.

### 3.1.9 v0.7 (13, Jan., 2020)

#### Changed

- Move project metadata to setup.cfg from setup.py.

### 3.1.10 v0.7b1 (10, Jan., 2020)

#### Changed

- Bump up dependency py7zr >=v0.5b5.
- Use py7zr in default to extract packages.
- Drop `-internal` command line option.

### 3.1.11 v0.7a2 (7, Jan., 2020)

#### Added

- Add special module name 'all' for extra module option.

#### Fixed

- CI conditions, update target version.

### 3.1.12 v0.7a1 (29, Nov., 2019)

#### Added

- Introduce helper module.
- Introduce 'settings.ini' file which has a configuration for aqt module.

#### Changed

- Version numbering with `setuptools_scm`.
- Now don't install extra modules when installing 'wasm\_32' arch. You should explicitly specify it with '-m' option.

#### Fixed

- Error when mirror site is not http, but https and ftp.

### **3.1.13 v0.6b1 (23, Nov., 2019)**

#### **Changed**

- Just warn when argument combination check is failed.
- CI: Compress sample project for build test with 7zip.
- CI: Place sample script in ci directory.

### **3.1.14 v0.6a2 (19, Nov., 2019)**

#### **Added**

- Test: Unit test against command line.
- Android target variants.

#### **Changed**

- Use logging configuration with logging.ini

#### **Fixed**

- qconfig.pri: fix QT\_LICHECK line.

#### **Removed**

- Logging configuration file logging.yml
- Drop dependency for pyyaml.

### **3.1.15 v0.6a1 (17, Nov., 2019)**

#### **Added**

- More build test with sample project which uses an extra module.(#56)
- Add support for installation of WebAssembly component by specifying 'wasm\_32' as an arch argument.(#53, #55)

#### **Changed**

- Optional modules are installed explicitly. Users need to specify extra modules with -m option.(#52, #56)

#### **Fixed**

- Dependency for py7zr only for python > 3.5. Now it works with python2.7.

### 3.1.16 v0.5 (10, Nov., 2019)

#### Changed

- Introduce combination DB in json form. User and developer now easily add new component for installation checking.

#### Fixed

- requires `py7zr`  $\geq$  0.4.1 because v0.4 can fails to extract file.

### 3.1.17 v0.5b2 (8, Oct., 2019)

#### Changed

- Change install path from `<target>/Qt/Qt<version>/<version>` to `<target>/<version>` (#48). - Also update CI test to specify `-outputdir <target>` that is `$(BinariesDirectory)/Qt`

### 3.1.18 v0.5b1 (8, Oct., 2019)

#### Added

- Add feature to support installation of Qt Tools
- Add CI test for tool installation

#### Changed

- CI test target - add 5.14.0 - remove 5.11.3 - change `patch_levels` to up-to-date

### 3.1.19 v0.4.3 (25, Sep, 2019)

#### Fixed

- Allow multiple redirection to mirror site.(#41)

### 3.1.20 v0.4.2 (28, Jul, 2019)

#### Changed

- README: update badge layout.
- CI: Improve azure-pipelines configurations by Nelson (#20)
- Check parameter combination allowance and add `winrt` variant.
- Support installation of mingw runtime package.
- Add `'-internal'` option to use `py7zr` instead of external `7zip` command for extracting package archives.(WIP)

### **3.1.21 v0.4.1 (01, Jun, 2019)**

#### **Added**

- Option `-b | --base` to specify mirror site.(#24)

#### **Changed**

- CI: add script to generate `auzre-pipelines.yml` (#27, #28, #29)
- CI: use powershell script for linux, mac and windows. (#26)

#### **Fixed**

- Avoid blacklisted mirror site that cause CI fails.(#25)

### **3.1.22 v0.4.0 (29, May, 2019)**

#### **Added**

- cli: output directory option.
- sphinx document.
- test packaging on CI.
- Handler for metalink information and intelligent mirror selection.

#### **Changed**

- Change project directory structure.
- cli command name changed from `'aqtinst'` to `'aqt'` and now you can run `'aqt install'`
- Introduce Cli class
- Massive regression test on azure pipelines(#20)
- blacklist against <http://mirrors.tuna.tsinghua.edu.cn> and <http://mirrors.geekpie.club/> from mirror site.
- Run 7zip command with `'-o{directory}'` option.

#### **Fixed**

- Fix File Not Found Error when making `qt.conf` against `win64_mingw73` and `win32_mingw73`

### **3.1.23 v0.3.1 (15, March, 2019)**

#### **Added**

- Qmake build test code in CI environment.(#14)



### Fixed

- Connect to Qt download server through proxy with authentication.(#17)

### Changed

- Change QtInstaller.install() function signature not to take any parameter.
- Replace standard urllib to requests library.(#18)
- Use 7zr external command instead of 7z in Linux and mac OSX environment.

### Removed

- requirements.txt file.

## 3.1.24 v0.3.0 (8, March, 2019)

### Added

- Allow execute both 'aqtinst' and 'python -m aqt' form.

### Changed

- Project URL is changed.
- Generate universal wheel support both python2.7 and python 3.x.

### Fixed

- Update README wordings.
- Remove dependency for python3 with 'aqtinst' command utility.
- Fix command name in help message.

## 3.1.25 v0.2.0 (7, March, 2019)

### Added

- Released on pypi.org

### Changed

- Install not only basic packages also optional packages.
- Rename project/command to aqt - Another QT installer

### **Fixed**

- Update mkspecs/qconfig.pri to indicate QT\_EDITION is OpenSource
- Support Python2

### **3.1.26 v0.1.0 (5, March, 2019)**

#### **Changed**

- Support multiprocessing concurrent download and installation.

### **3.1.27 v0.0.2 (4, March, 2019)**

#### **3.1.28 Added**

- CI test on Azure-pipelines

#### **3.1.29 Changed**

- Refactoring code
- Install QtSDK into (cwd)/Qt<version>/<version>/gcc\_64/
- Drop dependency for `requests` library
- Use standard `argparse` for command line argument.

#### **3.1.30 Fixed**

- Support windows.
- looking for 7zip in standard directory.

### **3.1.31 v0.0.1 (2, March, 2019)**

- Fork from <https://git.kaidan.im/lnj/qli-installer>

This is contribution guide for aqtnstall project. You are welcome to send a Pull-Request, reporting bugs and ask questions.

### 4.1 Resources

- Project owner: Hiroshi Miura
- Bug Tracker: Github issue [Tracker](#)
- Status: alpha
- Activity: high

### 4.2 Bug triage

Every report to github issue tracker should be in triage. whether it is bug, question or invalid.

### 4.3 Send patch

Here is small amount rule when you want to send patch the project;

1. every proposal for modification should send as 'Pull Request'
1. each pull request can consist of multiple commits.
1. you are encourage to split modifications to individual commits that are logical subpart.

## **4.4 CI tests**

The project configured to use Azure Pipelines, Travis-CI and CoverAlls for regression test. You can see test results on badge and see details in a web page linked from badge.

## CHAPTER 5

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### Authors

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Aqtinstall is written and maintained by Hiroshi Miura <[miurahr@linux.com](mailto:miurahr@linux.com)>

Original qli-installer is written by Linus Jahn

Contributors, listed alphabetically, are:

- Nelson Chen (CI tests)
- Skycoder42 (Explicit extra module installation)



## CHAPTER 6

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### Indices and tables

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





## Symbols

-base, -b <base url>  
    aqt command line option,3  
-help, -h  
    aqt command line option,3  
-modules, -m <list of modules>  
    aqt command line option,4  
-outputdir, -O <Output Directory>  
    aqt command line option,3  
-version, -v  
    aqt command line option,3

## A

aqt command line option  
    -base, -b <base url>,3  
    -help, -h,3  
    -modules, -m <list of modules>,4  
    -outputdir, -O <Output Directory>,3  
    -version, -v,3  
help,3  
install <Qt version> <target  
    OS> <target variant> <target  
    environment>,3  
list,3

## H

help  
    aqt command line option,3

## I

install <Qt version> <target OS>  
    <target variant> <target  
    environment>  
    aqt command line option,3

## L

list  
    aqt command line option,3