

# OPC UA C++ Toolkit for Linux Getting Started

## Instructions to install and build sample applications

- 1) Execute the shell script `InstallOpcUaCppToolkitLinux5.57.0.sh` on the machine you plan to use OPC UA C++ Toolkit. The directory where the OPC UA C++ Toolkit shall be installed is further on referenced as

`${TOOLKIT_INSTALL_DIR}`.

The install script supports following options:

<code>-d installdir</code>	Directory where the toolkit will be installed. If not provided, directory has to be specified interactive.
<code>-f</code>	Force overwriting existing installation directory without asking
<code>-p productkey</code>	Product key to install source code (use <code>\\"demo\\"</code> for binaries only).
<code>-m [i386   x86_64]</code>	Machine type of system running the script (Intel 32 bit or 64 bit). Used for installer executable only, installed files are identical. If not specified, the script tries to identify the system by itself. This option should be used only, if installer script cannot detect machine type by its own.

- 2) Now create a demo store for the certificates used by the samples and test applications:

```
cd linux/Source/PKI
bash create_demo_store.sh
```

- 3) To build the samples or test applications change to directory and build the desired sample (e.g. Tutorial). The builds are available in build targets `debug`, `debug-shared`, `release` and `release-shared`.

```
cd ${TOOLKIT_INSTALL_DIR}/linux/Source/Apps/Samples/Cpp/Tutorial
make -f linux_gcc.mak BUILD_TARGET=release
```

**Note:** The binaries using shared objects need installed versions of `libxml2` and `openssl`.

- 4) Using these makefiles the respective binaries will be built in directory:

```
<install_dir>/linux/Source/bin/linux/<machine type>/gcc<gcc version>/${BUILD_TARGET}
<machine type>: i386, x64_64 or armv-6
<gcc version>: Major gcc version: 4, 5 or 6
```

- 5) If source code product key was provided, please have a look at help in "Introduction to the Toolkit" – "Source Code License" and sub-folder "Linux" how to compile toolkit sources: