
Subject: Automatically embedding Git version information during compilation in TheIDE

Posted by [nikitha_k](#) on Fri, 03 Jul 2026 11:34:12 GMT

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Hi everyone,

I am developing an application using U++ and building it with TheIDE on Debian.

I would like to automatically embed version information into my executable at compile time, similar to how the compiler provides the predefined macros `__DATE__` and `__TIME__`.

My goal is to include information such as:

- * Git tag (e.g. v1.4.0)
- * Git commit hash
- * Build date and time

so that the application can display it, for example:

App --version

App --git

App --build

or from within the application's About dialog.

I would prefer to embed this information during compilation so that the executable contains the version information even when Git is not available on the target system.

Is there a built-in mechanism in TheIDE to execute a command before compilation or define custom compile-time macros from the output of a command (for example, ``git describe --tags`` or ``git rev-parse --short HEAD``)?

If not, what is the recommended U++ approach for automatically embedding Git version information into an executable?

Thank you.

Subject: Re: Automatically embedding Git version information during compilation in TheIDE

Posted by [Novo](#) on Wed, 15 Jul 2026 22:13:57 GMT

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nikitha_k wrote on Fri, 03 July 2026 07:34

If not, what is the recommended U++ approach for automatically embedding Git version information into an executable?

TheIDE creates a file "build_info.h" in an output directory. Below is an example of such file.

```
#define bmYEAR 2026
```

```
#define bmMONTH 7
#define bmDAY 15
#define bmHOUR 18
#define bmMINUTE 4
#define bmSECOND 44
#define bmTIME Time(2026, 7, 15, 18, 4, 44)
#define bmMACHINE "t530"
#define bmUSER "xxx"
#define bmGIT_REVCOUNT "206"
#define bmGIT_HASH "5b0efecb2b823dcb836afe794754679956c52edb"
#define bmGIT_BRANCH "net.company.upp.app"
```

How to use this file:
reference/build_info_simple
reference/build_info
