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