

Blog

Written words that are often helpful

[Getting Started with GT.M](#)

Posted by chathaway on Jan. 24, 2018, 11:01 p.m.

GT.M is a high performance, NoSQL database coupled with a MUMPS runtime. In this guide, we will install it on a fresh Ubuntu system, verify that it works, and build a sample database.

Installing GT.M through the package manager

The easiest way to install GT.M is using the Ubuntu package manager; apt.

```
chathaway@blaze:~$ sudo apt install fis-gtmReading package lists... DoneBuilding dependency treeReading state information... D
```

[Read more...](#)

[arXiv, Arch Linux, biblatex, biber](#)

Posted by chathaway on Nov. 24, 2017, 5:30 p.m.

For the first time in years, an update was published to the biblatex package. This is quite exciting, but presents a problem for those of us who use "bleeding edge" software, like Arch Linux, and need to submit our papers to sites like arXiv, which use more stable packages. This is a quick work around.

The Problem

At the time of writing, there is a new version of biber and a new version of biblatex on my Arch system, which produces a .bbl file a version of "2.9". arXiv emits an error message, informing me that the bbl was ...

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[When Visiting India](#)

Posted by chathaway on Oct. 1, 2017, 6:04 a.m.

1. Do NOT plug an American power strip into the wall using an adapter; they power strip is made for 120 VAC, the wall outputs 240VAC, and cheap adapters just change the shape of the plug. It will go PZZT and the magic smoke will escape.
2. DO bring toilet paper
3. DO expect spicy food; it's delicious, but not what we eat in the US
4. Dress well; button down shirts and blue jeans. When I was visiting, relatively few people wore t-shirts or other such garments

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[Compiler Development 101](#)

Posted by chathaway on Sept. 2, 2017, 9:33 p.m.

Many sites offer tutorials on how to use things like flex, bison, and LLVM. However, these sites give code examples, with no links to the source documentation. Below I explain what each of these tools does, and explain how to access the documentation (which, with the exception of LLVM, is fairly well written).

flex

Documentation can be accessed via "info flex" on a system with the flex-doc package installed. On ubuntu, run:

```
sudo apt install flex-docinfo flex
```

To get this documentation

A fast lexer, flex (<https://github.com/westes/flex>) reads an input stream and breaks into tokens. Tokens ...

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[Using Git to files outside the repo](#)

Posted by chathaway on Sept. 1, 2017, 1:29 a.m.

I decided that I wanted to keep a few files in my home directory in version control (.vimrc, .bashrc, .config/awesome), but don't like making that directory a git repo because then the shell prompts always say I'm in a branch. To fix this, I init'd a repo in my normal place then ran:

```
git config --local --add core.worktree $HOME
```

And now I can add things like "git add ~/.bashrc" without having to keep that repo in my home directory.

Huzzah!

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[Forcing Diablo II to be "big" when running in window mode on KDE](#)

Posted by chathaway on Aug. 19, 2017, 11:58 p.m.

As we all know, you can get Diablo II to run in Windows mode by passing it the "-w" option, for example:

```
charles@Bender:~/Games/Diablo II$ wine Diablo\ II.exe -w
```

On windows, you can then get it to go "big" by maximizing you. It's not possible to do this in Linux, since it's told that it doesn't support this feature. You can override this in KDE by:

1. Right clicking on the window bar, More Options > Special Window Settings
2. Checkmark "Size", Force, and enter a resolution that's an aspect ratio on 4:3
3. Obey ...

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[A quick note about Phoenix Framework Channels](#)

Posted by chathaway on Aug. 19, 2017, 11:54 p.m.

Just a quick note which frustrated me quite a bit on Thursday; intercepting messages (which should call handle_out) in Phoenix Framework's channels does not cause the handler to get called if you are using "send" instead of broadcast.

I suppose this actually makes sense, since you wouldn't want to stuck in an infinite loop (filtering a send, which sends something), but it wasn't obvious why Phoenix was ignoring my handle_out function. Almost like it wasn't detecting the intercept() parameters.

A solution may be to add documentation about handle_out to the callbacks section of the Channels module ...

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[Research progress, week of 2017-05-03](#)

Posted by chathaway on May 10, 2017, 6:23 p.m.

This past week:

- Grading. Final exam grading Monday-Wednesday morning
- Setup server to store list of projects to be indexed
- Continued work on code; considering investigating Luigi

Next week:

- If internet is setup, provide link to list of projects
- Continue working on fetching data (long overdue)

Other:

- Last Friday was "first" day at FIS; starting this Friday, my schedule is: M, W, F = FIS, T, Th = RPI
- Internet troubles; I can't host things until they get resolved
- Working on migrating from RPI email to personal email (not sure how long I will continue to have RPI email)

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[Research progress, week of 2017-04-26](#)

Posted by chathaway on May 3, 2017, 5:46 p.m.

This past week:

- Continued working on code; encountered issues getting project versions (API didn't respond how I expected, internet suggests pulling all issues (which we need anyway) and scanning them for unique tags)
- Worked on making the list of projects easy to access
 - Still need to put it somewhere public with all current projects
- Tried to talk with Barb on Slack; some response, then nothing

Next week:

- Work on code
- Put project list in public place

Other:

- Next week I will be grading finals Monday-Wednesday
- This past week moved some stuff down to PA; arranged for "office space" to ...

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[Docker Compose Hint](#)

Posted by chathaway on May 2, 2017, 2:04 p.m.

If you are having trouble installing the correct version of docker-compose on Ubuntu, here's my hint: do not run "apt install docker-compose". Instead, follow the directions on their site (<https://docs.docker.com/compose/install/>).

Yes, I know it's super lame and stops you from getting automatic updates. But I mean, at least it works.

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