

New Contributor Tutorial Best practices

Vicențiu Ciorbaru

Software Developer Team Lead

@ MariaDB Foundation

MariaDB Developer Unconference Shanghai, China 2019

whoami

- Vicenţiu Ciorbaru
- MariaDB Foundation,
 Software Developer Team Lead
- MariaDB developer since 2013-...



Implemented Roles, Window Functions and others



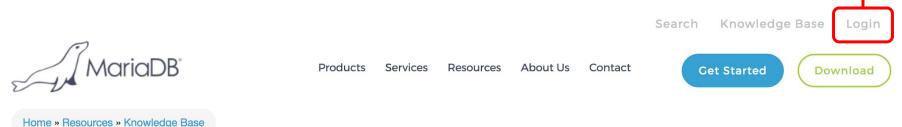
How to contribute?

- Similar to many open source projects
- We have our code on github.com
- We accept contributions in many forms
- Simplest are Knowledge Base edits, bug reports and pull requests (code)



How to contribute to documentation?

- Go to https://mariadb.com/kb/en/
- Create a new user or login

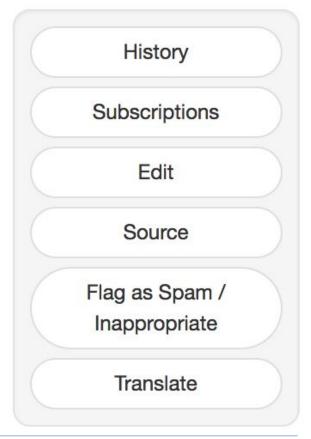


Knowledge Base



How to contribute to documentation?

- Go to https://mariadb.com/kb/en/
- Create a new user or login
- Then open any Knowledge Base article
- Use Edit or Translate Menus on the left
- All contributions are reviewed and / or curated





How to contribute to documentation?

Translate: 谁在给MariaDB做贡献?

The parent for this article (Friends of MariaDB) has not been translated to Traditional Chinese so this translation will be placed under the closest translated ancestor MariaDB - 繁體中文.

Parent Category: MariaDB - 繁體中文

谁在给MariaDB做贡献?

Questions and answers use Wiki Creole syntax for markup. Code and program output should go between <<code>> and <</code>> tags. Please see editing help for more information.

Content

[[mariadb-versus-mysql|MariaDB]]是Michael

"Monty" Widenius (MySQL的开发人员) , [[http://montyprogram.com|Monty Program Ab]]以及[[http://mariadb.org|MariaDB 基金会]]的成员共同努力的成果。

MariaDB的核心开发人员是由MariaDB基金会支持的,而这个基金会主要由企业和基金会的个人以及 [[community|MariaDB 社区]]中的开发人员组成。通过对我们核心开发人员的了解,你可以发现我们是想将 MariaDB打造成一个专家团队。在基金会成立之前,Monty

Program Ab一直承担着这个管理者的角色,直到基金会成立。

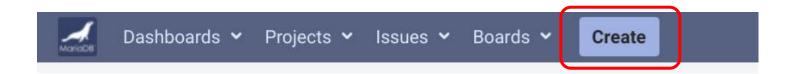
你可以在[[https://launchpad.net/~maria-captains|Launchpad]]找到当前活跃的核心贡献者([[whatare-the-criteria-for-becoming-a-maria-captain|maria-captains]])。每个有足够技术经验的活跃分子都可以加入这个team,而且并不意味着你一定要为MariaDB基金会,Monty Program Ab,或者是其他基金会旗下的公司工作才有可能参与进来或者是才能提交代码。

这是一个有关MariaDB的,你也参与进来的,非常活跃的[[where-are-other-users-and-developers-of-mariadb|社区]],开发者的贡献都可以在[[log-of-mariadb-contributions|log of MariaDB contributors]]查到。



How to contribute bug reports?

- Go to https://jira.mariadb.org
- Create a new user or login
- To create a new bug report or feature request:





 The code is public at: <u>https://github.com/MariaDB/server</u>

First create a fork of the repo.
 https://help.github.com/articles/fork-a-repo/



We use a git repository. Download and install git.

```
$ sudo apt install git
```

Clone the server fork you have created

```
$ git clone https://github.com/newcontributor/server.git
```

\$ cd server



Install all required build dependencies:

\$ sudo apt-get build-dep mariadb-server

Simplest is to run a BUILD script to compile the server

\$ BUILD/compile-pentium64-debug



 We have finished building the server. We can run tests to see if it works properly.

```
$ cd mysql-test && ./mtr --parallel=4 --mem
```

- --parallel=n starts n tests in parallel
- --mem will use a memory filesystem instead of disk



We do not have a traditional "master" branch

 Instead we use the major version number as the branch name

5.5, 10.0, 10.1, 10.2, 10.3, 10.4, **10.5**

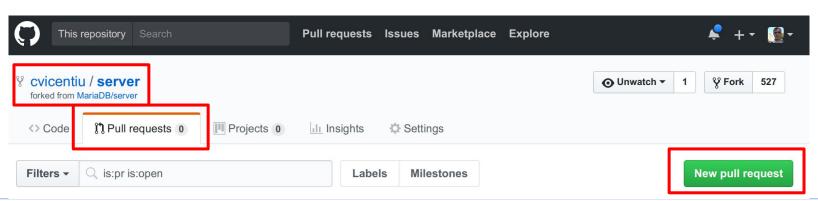
- Largest one is the main development branch.
- Others are for bug-fixing only.



- Make sure you are using latest branch as a base:
 ~/server/\$ git checkout 10.3 && git pull
- Create a new branch based on newest 10.3
 ~/server/\$ git checkout -b 10.3-patch
- Write your patch, then add all changes and commit.
 Write an informative commit message.
 ~/server/\$ git add . && git commit



- Push your patch to your local github repository
 \$ git push
- Go to your github fork page, pull-requests tab and start a new pull request.





- Chose MariaDB/server as base fork and 10.5 branch
- Chose your fork and branch as head fork
- Click Create pull request!

Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also compare across forks.





Tips and Tricks

- Reviews will come as comments on github.
- Address any concerns and update your branch.

 It's strongly recommended to include test cases as part of your patch.

```
10 sql/sys_vars.ic

✓ Show comments

            00 -2493.7 +2493.14 00 public:
                class Sys_var_vers_asof: public sys_var
        2496 +// XXX now I'm really starting to dislike your ... QUERY FOR SYSTEM_TIME
             +// extension. A *third* way to do the same thing? It's SQL, not Perl.
                    SELECT * FROM (SELECT ....) FOR SYSTEM_TIME AS OF xxx
              +// SET STATEMENT vers_current_time=xxx SELECT ...
        2501 +// SELECT ... QUERY FOR SYSTEM_TIME AS OF xxx
        2503 +// that's a bit too many alternatives
         midenok on Jul 20 • edited
         You don't like it because you didn't type versioned queries much. When you have to type queries form (2) is
         almost unusable because impossible to memorize. Form (1) is weird and not evident. Do you really think 3 ways
         is much? I would say diversity is versatility. If I love it, why someone else wouldn't love it? Do we want our
         product to be maximum popular? What harm (3) can do?
         vuvova on Jul 22 Owner
         I didn't type versioned queries so far. But I've typed many SQL queries. And often I wanted for SQL to be less
         verbose. But SQL is a very verbose language. And new syntax should be consistent with existent language style
         and logic. Harm is 1, added confusion (many different inconsistent ways of doing the same thing, one needs to
         remember them, because feature C is not a logical combination of features A and B, but must be remembered
         separately), and 2, we have to maintain new syntax for many years,
         But ok, if you strongly prefer to keep it, let's keep it for now, I'll see what others think about it,
         midenok on Jul 28
         I agree about 2.. but not about 1. I will explain more if you will ask me to. But for now, thanks for giving time out!
         midenok on Sep 4
                  Sys_var_vers_asof(
                    const char *name_arg
```



Licensing

MariaDB Contributor Agreement

https://mariadb.org/get-involved/getting-started-for-developers/mca/
https://mariadb.org/get-involved/getting-started-for-developers/mca-faq/

BSD-new

https://en.wikipedia.org/wiki/BSD_licenses



Licensing

 The CLA Assistant makes it much easier to sign the MCA. Just click on the button and sign.



CLAassistant commented 14 days ago





CLA not signed yet

Thank you for your submission, we really appreciate it. Like many open source projects, we ask that you sign our Contributor License Agreement before we can accept your contribution.

You have signed the CLA already but the status is still pending? Let us recheck it.



Creating a test case

Inside mysql-test/t/ directory create a test case file.

```
~/server/$ cd mysql-test && touch t/hello.test
```

Add statement within test file

```
$ echo 'SELECT "Hello World!";' > t/hello.test
```

Run mysql-test-run on the new test.

```
$./mtr hello
```



Creating a test case

```
vicentiu@vicentiu-desktop: ~/Workspace
                                             vicentiu@vicentiu-desktop: ~/Workspace/MariaDB/mv
vicentiu@vicentiu-desktop:~/Workspace/MariaDB/mysql-test$ ./mtr hello
Logging: ./mtr hello
vardir: /home/vicentiu/Workspace/MariaDB/mysql-test/var
Checking leftover processes...
Removing old var directory...
Creating var directory '/home/vicentiu/Workspace/MariaDB/mysql-test/var'...
Checking supported features...
MariaDB Version 10.2.10-MariaDB-debug
- SSL connections supported
 - binaries are debug compiled
Collecting tests...
Installing system database...
TEST
                                           RESULT TIME (ms) or COMMENT
worker[1] Using MTR BUILD THREAD 300, with reserved ports 16000..16019
SELECT "Hello World!";
Hello World!
Hello World!
main.hello
                                          [ pass ]
The servers were restarted 0 times
Spent 0.000 of 7 seconds executing testcases
Completed: All 1 tests were successful.
```



Creating a test case

If the results of the test are ok, you need to record it.

\$./mtr --record hello

 This will create the file mysql-test/r/hello.result

 When submitting a patch, include both .test and .result files.



Buildbot

- MariaDB is built continuously using our buildbot infrastructure.
 http://buildbot.askmonty.org/buildbot/grid?category=m
 ain&branch=10.5
- All main branches (5.5, 10.0, 10.1, 10.2, 10.3, 10.4, 10.5) are built fully on many builders.
- All dev branches starting with bb-* as a name are built on a subset of builders.



Buildbot for community

 We are working on updating our old buildbot to a new one. The new project is at:

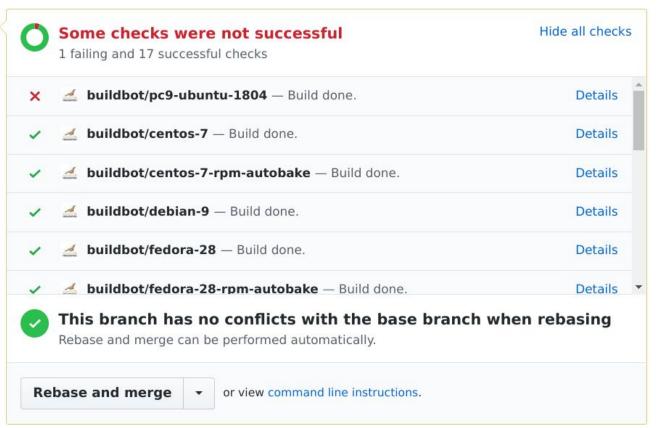
https://buildbot.mariadb.org

 All pull requests are tested by our new buildbot infrastructure.



Buildbot for community







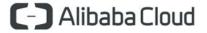
How to reach out to us

- Mailing Lists:
 - Maria Developers
 https://lists.launchpad.net/maria-developers/
 - Maria Discuss
 https://lists.launchpad.net/maria-discuss/
 - Maria Documenation
 https://lists.launchpad.net/maria-docs/
- ZulipChat
 - https://mariadb.zulipchat.com
- Find us on IRC #maria and #maria-dev on FreeNode



Sponsors of MariaDB Foundation

This talk would not have been possible if it not for the MariaDB Foundation's sponsors.



















Acronis







Tencent Game DBA







Thank you!

Contact details: vicentiu@mariadb.org

About:

https://mariadb.org/vicentiu

