The Developer Certificate of Origin (DCO) checks

As per section 13.a of the Hyperledger Charter all code submitted to the Hyperledger Foundation needs to have a Developer Certificate of Origin (DCO) sign-off.

This certifies that you are able to submit your contribution to our repository under the license of the repository, and for the contribution to be redistributed under that same license.

You can "sign" this certificate by including a line in the git commit of "Signed-off-by: Legal Name <email-address>".

How to work with DCO

When Committing

You need to ensure that every commit message has a line "Signed-off-by: Your Legal Name <your-email@address>", and while you could add that manually every time, here are the steps to follow so the computer can add it for you:

1. Set your legal name in the git configuration:
   ```
   git config user.name "Legal Name"
   ```
2. Set your email in the git configuration:
   ```
   git config user.email "email@address"
   ```
3. Add the -s or --signoff to all git commit invocations.
   a. Add a git alias:
      ```
      git config --global alias.c 'commit --signoff'
      ```
      and then run "git c" instead of "git commit"
   b. In IntelliJ

When Merging

The merge or a PR must also have a DCO so we can know the entire repository is under the associated license.

1. When Merging a Pull Request through "squash and merge", include the Signed-off-by lines from every contributor, and add one for you as the person merging.
When you have a DCO failure on your PR from DCO Bot

Click on that "Details" link and follow the instructions.

When you have a DCO failure on your PR from CI

On Circle CI you will see:

On Jenkins in the full Console Output you will see:

```
[DCOCheck] Checking commits in branch origin/PR-14 for commits missing DCO...
  a166514ef0f1c0dce7b2ce764299cc4582edbe36 is missing Signed-off-by line.
Checking commits in branch origin/master for commits missing DCO...
```

If this is only from CI and not from DCO Bot, then please contact a Maintainer, as it probably means that the master branch has a commit that does not follow DCO which will necessitate a master rebase.

Feel free to check out this tutorial for more help.

As per section 13.a of the Hyperledger Charter all code submitted to the Hyperledger Foundation needs to have a Developer Certificate of Origin (DCO) sign-off.

The sign off needs to be using your legal name, not a pseudonym. Git has a built-in mechanism to allow this with the --signoff argument to git commit command, providing your user.name and user.email have been setup correctly.

If you have any questions, you can reach us on Besu chat.