This document contains categories of contributions and behaviors relevant to becoming an Apache Mesos Project Committer. As a committer candidate you can use this list to collect and aggregate data on what you have achieved so far. Neither is this an exhaustive list nor do all categories need to be addressed, since there can be reasonably diverse committer profiles. But some categories are always crucial to have covered, as for instance writing high quality source code and performing meaningful code reviews. Eventually, your nominator can hand in your filled-out list to the PMC to facilitate their reviewing your case.

Nomination date: <u>22-Jan-2017</u>	
Candidate name: <u>Kevin Klues_</u>	
JIRA user name: <u>klueska</u>	
Github user name: <u>klueska</u>	
Nominator:	
Name of the committer who nominates the candidate:	Ben Mahler

# Understanding of the Apache philosophy (The <u>Apache Way</u>) and Mesos project's goals: Demonstrated by:

- I am committed to open source and truly believe in community driven development and
  consensus. I've been a contributor to open source software for over 15 years. In that time I've
  been a lead developer on 2 major projects <u>TinyOS</u> and <u>Akaros</u>, and have contributed to many
  more as an individual contributor.
- I've been working on Mesos for over a year now and in that time I have gained a good understanding of how Mesos operates (both functionally and how the community around Mesos works). I thoroughly enjoy working on Mesos and I feel I get along well with its existing PMC member as well as its community members. I look forward to working with everyone further.

## **Commitment to the Mesos project**

Demonstrated by:

- 206 commits / 16,902 ++ / 4,354 -- in just over a year (as of 16-Dec-2016)
   \$ git shortlog -s -n
   206 Kevin Klues
- Talks given to the community:
  - o GPU Support in Apache Mesos
  - Supporting GPUs in Docker Containers on Apache Mesos
  - Debugging Support in Mesos
- Being helpful on mailing lists and Slack.
  - http://www.mail-archive.com/search?l=user%40mesos.apache.org&q=Kevin+Klues&x=0 &y=0
  - <a href="https://mesos.slack.com/unreads/search/from:@klueska/">https://mesos.slack.com/unreads/search/from:@klueska/</a>

Knowledge and activity breadth and depth in the Mesos project as well as areas where the candidate could be a maintainer:

- Worked with @bmahler to design / implement GPU support in Mesos
- Took lead on designing / implementing many parts of the new Mesos CLI
- Took lead on designing / implementing many part of the Attach/Exec support in Mesos

# Can the candidate be trusted to act the right way outside of known areas where he/she has already demonstrated committer-level expertise and behavior:

If I don't know an area of the code base very well, I always make sure to consult with someone who does before making any changes to it. I'd much prefer to make the change the right way, than introduce some change that was sub-par and have to change it again later. As a committer, I would always make sure that any code I committed was checked off by the proper maintainer.

## High quality source code

A committer vouches that the candidate writes high-quality, "readable" code, adhering to Mesos style and best practices standards, both formal and informal.

Name of the committer: Ben Mahler

## **Community participation**

- [x] IRC
- [x] dev mailing list
- [x] user mailing list
- [x] JIRA comments
- [] Stack Overflow
- [] Quora
- [x] Developer Community Sync Meetings
- [] release votes
- [x] documentation added
- [x] other: \_\_Multiple talks at Mesos Meetups and MesosCons\_\_

# **Comments on Community Engagement**

- I always try and comment as quickly as possible when issues related to things I have built come
  up on the mailing list or Slack. I have a strong sense of ownership over the things I work on, so I
  try and resolve any issues that come up as soon as they are reported.
- I have given a number of talks in the Mesos community meetings to try and help developers gain exposure and learn how to use the various features I've built.

# Presentations at meetups, conferences, etc.

- GPU Support in Apache Mesos
- Supporting GPUs in Docker Containers on Apache Mesos
- Debugging Support in Mesos

#### Reviews catching functionality issues:

List reviews and a committer for each as witness:

- <a href="https://reviews.apache.org/r/50523/">https://reviews.apache.org/r/50523/</a> (BenM)
- <a href="https://reviews.apache.org/r/54720/">https://reviews.apache.org/r/54720/</a> (Vinod)

- <a href="https://reviews.apache.org/r/54496/">https://reviews.apache.org/r/54496/</a> (Anand)
- https://reviews.apache.org/r/54099/ (Jie)
- <a href="https://reviews.apache.org/r/50127/">https://reviews.apache.org/r/50127/</a> (BenM / Guangya)
- <a href="https://reviews.apache.org/r/50125/">https://reviews.apache.org/r/50125/</a> (BenM / Guangya)
- <a href="https://reviews.apache.org/r/50599/">https://reviews.apache.org/r/50599/</a> (BenM / Guangya)
- <a href="https://reviews.apache.org/r/52787/">https://reviews.apache.org/r/52787/</a> (haosdent)
- <a href="https://reviews.apache.org/r/50841/">https://reviews.apache.org/r/50841/</a> (BenM / Guangya)
- https://reviews.apache.org/r/51715/ (Till)
- <a href="https://reviews.apache.org/r/50910/">https://reviews.apache.org/r/50910/</a> (Joseph)
- https://reviews.apache.org/r/51963/ (Jie)
- <a href="https://reviews.apache.org/r/46370/">https://reviews.apache.org/r/46370/</a> (Jie)
- <a href="https://reviews.apache.org/r/49673/">https://reviews.apache.org/r/49673/</a> (BenM)
- <a href="https://reviews.apache.org/r/49546/">https://reviews.apache.org/r/49546/</a> (BenM)
- https://reviews.apache.org/r/47719/ (haosdent)
- https://reviews.apache.org/r/47198/ (Jie)
- https://reviews.apache.org/r/47199/ (Jie)
- <a href="https://reviews.apache.org/r/45806/">https://reviews.apache.org/r/45806/</a> (Vinod)
- https://reviews.apache.org/r/44979/ (BenM)
- https://reviews.apache.org/r/44974/ (BenM)
- https://reviews.apache.org/r/44975/ (BenM)
- https://reviews.apache.org/r/44439/ (BenM)
- https://reviews.apache.org/r/44796/ (BenM)
- https://reviews.apache.org/r/43716/ (Neil / Adam)
- https://reviews.apache.org/r/43715/ (Adam)
- <a href="https://reviews.apache.org/r/43328/">https://reviews.apache.org/r/43328/</a> (Neil / Adam)

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#### Reviews catching style issues:

List reviews and a committer for each as witness:

- <a href="https://reviews.apache.org/r/55355/">https://reviews.apache.org/r/55355/</a> (Jie)
- <a href="https://reviews.apache.org/r/54838/">https://reviews.apache.org/r/54838/</a> (BenH)
- <a href="https://reviews.apache.org/r/54839/">https://reviews.apache.org/r/54839/</a> (BenH)
- https://reviews.apache.org/r/54682/ (Jie)
- https://reviews.apache.org/r/54686/ (Vinod)
- <a href="https://reviews.apache.org/r/54620/">https://reviews.apache.org/r/54620/</a> (Vinod)
- https://reviews.apache.org/r/54281/ (Anand)
- <a href="https://reviews.apache.org/r/54506/">https://reviews.apache.org/r/54506/</a> (Jie)
- <a href="https://reviews.apache.org/r/54472/">https://reviews.apache.org/r/54472/</a> (Jie / BenM)
- https://reviews.apache.org/r/54293/ (Jie)
- https://reviews.apache.org/r/54351/ (Jie)
- <a href="https://reviews.apache.org/r/54097/">https://reviews.apache.org/r/54097/</a> (Jie)
- <a href="https://reviews.apache.org/r/50947/">https://reviews.apache.org/r/50947/</a> (BenM / Guangya)
- https://reviews.apache.org/r/50128/ (BenM / Guangya)
- https://reviews.apache.org/r/53463/ (Vinod)
- https://reviews.apache.org/r/53466/ (Jie)
- <a href="https://reviews.apache.org/r/53451/">https://reviews.apache.org/r/53451/</a> (Vinod)
- <a href="https://reviews.apache.org/r/50123/">https://reviews.apache.org/r/50123/</a> (BenM / Guangya)
- <a href="https://reviews.apache.org/r/52415/">https://reviews.apache.org/r/52415/</a> (Jie)

- <a href="https://reviews.apache.org/r/51277/">https://reviews.apache.org/r/51277/</a> (Jie / BenH)
- https://reviews.apache.org/r/51274/ (Jie / BenH)
- https://reviews.apache.org/r/51975/ (Jie)
- <a href="https://reviews.apache.org/r/49544/">https://reviews.apache.org/r/49544/</a> (BenM)
- <a href="https://reviews.apache.org/r/48671/">https://reviews.apache.org/r/48671/</a> (BenM)
- https://reviews.apache.org/r/48010/ (Vinod)
- <a href="https://reviews.apache.org/r/47646/">https://reviews.apache.org/r/47646/</a> (haosdent)
- <a href="https://reviews.apache.org/r/45839/">https://reviews.apache.org/r/45839/</a> (mpark)
- <a href="https://reviews.apache.org/r/45033/">https://reviews.apache.org/r/45033/</a> (haosdent / Vinod)
- https://reviews.apache.org/r/45660/ (Vinod)
- <a href="https://reviews.apache.org/r/43552/">https://reviews.apache.org/r/43552/</a> (Vinod)
- <a href="https://reviews.apache.org/r/43747/">https://reviews.apache.org/r/43747/</a> (Vinod)

For reference, I was able to get the list of the reviews above with:

```
$ rbt api-get review-requests --start=0 --status=all --max-results=200
--repository=122 --to-users=klueska | jq '.review_requests[].absolute_url' >
output

$ rbt api-get review-requests --start=200 --status=all --max-results=200
--repository=122 --to-users=klueska | jq '.review_requests[].absolute_url' >>
output
```

I had to go through them manually though, to see where / how I commented on them.

#### Major source code contribution

Description of the contribution:

- Primary developer for GPU support in the Unified Containerizer.
- Major contributor to the new python-based CLI.
- Contributed to pods by adding the code necessary to spawn a "nanny-process" for all executors.
- Primary developer for the IOSwitchboard, which enables Attach/Exec functionality in Mesos.

#### JIRA tickets created

126+

#### JIRA tickets completed

• <u>121+</u>

#### Tests to ticket ratio: 7/8

Write down <#tests written> / <#tickets that need new tests>, e.g. like this: "14 / 10". Also write down a list of all tickets that did not need new tests and why.

# Initiated design documents:

- HTTP Operator Api v1
- A full redesign of the Mesos CLI
- Mesos Support for Container Attach and Container Exec

### Reviewed design documents:

- GPUs as a Resource in Mesos
- Designing Highly Available Frameworks
- Support for pods in Mesos
- Resources topology support

## Helping new contributors:

- When Abhishek Dasgupta first started working on Mesos, I did some late night sessions via gchat with him to help get him ramped up contributing to Mesos
- I've also worked with Rob Todd and Rajat Phull from Nvidia to help get them ramped up as contributors by reviewing their code and helping familiarize them with the contribution process. I did the same with Yubo Li, who has built the GPU support for the docker containerizer for us.
- I regularly give an "Intro to Mesos" talk to newcomers interested in contributing to Mesos.

#### **Contributions to Documentation:**

- GPU Documentation
  - https://github.com/apache/mesos/blob/master/docs/gpu-support.md
- I wrote a tool to automate the generation of the '/help' endpoint on masters/agents
  - o <a href="https://issues.apache.org/jira/browse/MESOS-3831">https://issues.apache.org/jira/browse/MESOS-3831</a>
- Various other documentation related tickets I've worked on:
  - https://issues.apache.org/jira/browse/MESOS-3844
  - https://issues.apache.org/iira/browse/MESOS-4118
  - https://issues.apache.org/jira/browse/MESOS-3954
  - https://issues.apache.org/jira/browse/MESOS-3305
  - https://issues.apache.org/jira/browse/MESOS-4134
  - o https://issues.apache.org/jira/browse/MESOS-3844
  - https://issues.apache.org/jira/browse/MESOS-3842
  - https://issues.apache.org/jira/browse/MESOS-3568

#### Dependability:

Issues quickly / immediately solved that arose out of own contributions:

- https://issues.apache.org/jira/browse/MESOS-4518
- https://issues.apache.org/jira/browse/MESOS-5582
- https://issues.apache.org/jira/browse/MESOS-5414
- https://reviews.apache.org/r/54700/
- https://issues.apache.org/jira/browse/MESOS-6948
- https://reviews.apache.org/r/54348/
- https://issues.apache.org/jira/browse/MESOS-5969
- https://issues.apache.org/jira/browse/MESOS-5982
- https://issues.apache.org/jira/browse/MESOS-5923
- https://issues.apache.org/jira/browse/MESOS-6050
- https://issues.apache.org/jira/browse/MESOS-6050
- https://issues.apache.org/jira/browse/MESOS-6775