# Social and Political Infrastructure

How does FOSS really work?

## Questions you Ask

- How does it work?
- Who keeps it running?
- Who makes decisions?

- Meritocracy
- Cooperation
- Running Code

These are just the general words of HOW it works, but the is more to it.

#### What is Successful?

- Operational Health
  - Ongoing ability to incorporate new code control and new developers.
  - Responsiveness to Bugs
- Survivability Can the project exist independently of any one person or sponsor. Can it exist on its own?
- Technical Quality
  - Robust Developers
  - Strong Social Foundation with Maintainers
    - W/O this it may not be able to handle the growth of its success or departure of charismatic individuals.

#### How Do You Achieve This?

- Formal Governance Structure
  - Debates are resolved
  - New Devs are invited in (or out)
  - New Features Planned
  - The list goes on.
- Less Formal Structure
  - Need more self restraint to produce an atmosphere of fairness that people can rely on as a de facto form of governance.

Either one, they both lead to habits and procedures that are understood and everyone can participate. Self Organizing Systems are best b/c everyone is conscious that a few bad apples can spoil the whole barrel.

## Beware of Forkability

- Forking is when someone makes a copy of your project
- Forking isn't necessarily a bad thing but if you want your project to be successful you would like people to continue on the path of assisting and making your project great, you are willing to COMPROMISE!
- The potential of Forking is always there...
- If a leader that everyone defers to starts making bad decisions -> restlessness follows by a revolt and then a fork will happen

## Compromise and BD

- To avoid this from happening, you will compromise.
- Because people should be willing to compromise there aren't dictators for a project but rather Benevolent Dictators.
- How do you Define a BD?
  - Imaging you are a king whose subjects could copy the entire kingdom at any time and move to the copy to rule as they see fit. Would such a king govern differently from one whose subjects were bound to stay under his/ her run no matter what s/he did?

### Deferred Leader

- They may not be formal democracies but in practice, they act as if they are when it comes to important decisions.
  - The "dictator" has no magical hold over a project.
  - Sometime a person who everyone defers to is b/c they choose to do so. Think Linus or Stallman.
  - Compromise first!
  - Usually is one of the founding members (correlation than cause)



### BD is a Deferred Leader

- Benevolent Dictator Model Final decision-making authority rests with one person, who, by virtue of personality and experience is expected to use it wisely.
- They can also be called "judge" or "community approved arbitrator"
- They actually do not make all or most decisions, they are more like a last resort when people can't agree. They guide!
- They make directional decision more so than coding ones.
- They let things work themselves out through discussion and experimentation whenever possible.

## Who can be a BD?

- Well honed sensitivity to one's own influence (self-restraint)
- Don't express opinions and conclusions that others feel pointless to disagree.
- Be open to others ideas, even if stupid.
  - BDs may do this as well, but acknowledge it!
  - BDs can afford to slip not devs with less seniority.



- BD doesn't have to be sharpest tech skills, but skilled enough to code themselves, understand and comment on changes that are presented.
- Experience in overall design sense (recognize and endorse good design from whoever)

## Forking goes both ways

- BDs can for a project if they wan to take it on a different route than what the majority of developers want to go.
- If for some reason that happens and you have more centralized run projects, it may be obvious who will be next BD.
- If decentralized, might have to have a Consensus-based Democracy

## Consensus-Based Democracy

- Eventually become democratic systems.
  - Evolutionarily Stable
- If BD steps down or wants to spread work out, a non dictorial systems get created
- Common Elements:
  - 1. Group works by consensus most of the time
  - 2. There is a formal voting mechanism to fall back on when consensus cannot be reached
- · Consensus agreement that everyone is willing to live with.
  - Basically you discuss how to fix something for example, have a general agreement. However one should reiterate what was the conclusion of the consensus.

## If decisions need to be undone..

- Thank your lucky stars for Version Control!
  - Decision can me unmade
    - If you think everyone was happy with it, but with objections later, due to missing discussion, you can revert.
    - Helps with bad or hasty judgement
- VC makes consensus need not to be formal
- Minor changes go in w/o discussion or min nods of agreement.
- Big changes should wait and have a discussion, check email and chat groups for such changes for talking.
- This apple to not only code, but website updates, documentations and anything else like that.

## Can't Agree then lastly Vote

- 1. Need Clear choices on the ballot.
- 2. Need a honest broker someone who post periodic summaries of the various arguments and keeping trac of where the core points of disagreement ( & agreement) lie.
  - Honest brokers do job well, credibly call for a vote when the time comes and the group will have a ballot sheet based on the summary.
  - Brokers can participation the debate.
  - They shouldn't let partisan sentiments prevent the from summarizing accurately

## Voting Cont...

- 3. Adjust Ballot if Necessary When ballot presented, someone might object due to misinformation or needing more, make sure to address appropriately.
- 4, Also What Voting system should you use?
  - https://en.wikipedia.org/wiki/Voting\_system
  - There are many ways but for FOSS usually APPROVAL VOTING.
  - Approval Voting each voter can vote for as many choices as possible.
  - 5. Conduct vote in public as much as possible.
    - Each voter post on mailing list or online. So it can be kept on record
    - FOOS voting system <a href="https://vote.heliosvoting.org/">https://vote.heliosvoting.org/</a>

### When to Vote

- Should be a last resort
- Not a great way to resolve debates b/c it ends discussion and creativity to solve problem; try to compromise as much as possible.
- Better to broker compromise than to vote.
- Vote has many people or a group unhappy, compromise everyone is a little bit unhappy.

## Prevent PreMature Voting

- 1. Most obvious: "I don't think we're ready for a vote yet."
- 2. You can ask for an informal (non binding) show of hands
  - It may make others more willing to compromise if the response is more towards one side over another.
- 3. Most effective way is simply offer a new solution or a new viewpoint on an old suggestion to show engagement with the issue.

#### Who can Vote?

Kinda low key points out who is more involved or has better judgement than others.

- You can look at who commits the most and attach voting privileges to it.
  - There is full and partial commit access
  - Question is: do partial committer can they vote? It should be spelled out that PC is about committing not voting, if you choose to not have them vote.
  - If a person show disruptive or obstructionist tendencies on mailing list, should be very cautious making him a committer, even if technically skilled.'

#### Who can Vote cont..

- Coders are not the only ones that should vote, maintainers should have a right as well.
- There are people who are maintainers (sometimes called member) - Responsible of handling other parts of project besides code, like the website, documentation, donations, legal help, organize events, manage bug tracker, etc etc.
  - Maintainers may have a level of influence in the community or familiar with dynamics that exceeds the code committers.

## Speaking of Maintainers

- Adding new Maintainers
  - When choosing new people, this is **secrecy is appropriate.** You need to take that persons feeling in consideration.
  - Should be done in a private mail ing list for example and propose in to group. In order to have others speak their mind freely knowing its private.
  - Make sure everyone making the decisions has had an opportunity to respond.
    Discussions will happen and may result in voting.
  - Be open and frank, the mere fact this discussion is happening should be secret.
    - If someone asked to be considered, make sure to be as polite as possible with a clear explanation of why they were not picked. Also say that there will be other opportunities in the future if there is any.
- Make sure to have a voting system I'm. place, like majority vote or you may have to have at least N votes, or whatever you prefer. But make sure the process is in place. This may be also used to remove a maintainer, hopefully you will never have to do that.

### Polls vs Votes

- Sometimes you poll because:
  - It is useful to expand the electorate. For example, can't figure out whether a given interface choice matches the way people actually use the software.
    - 1. Make sure to is clear to participants that theres' a write in options
    - 2. Make sure it is clear what are the options

#### Vetoes

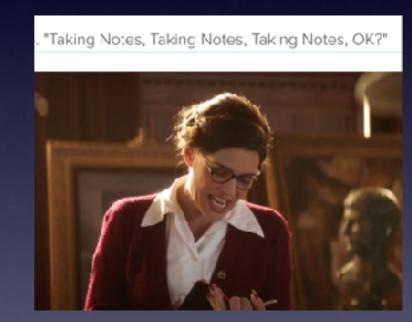
- Veto-is a way for a developer to put a halt to a hasty or ill considered change @ least long enough for everyone to discuss it more.
  - Strong object and a filibuster
- Some projects make it difficult to override others let it be overridden by majority vote.
- Veto should come with a thorough explanation; a veto without such an explanation should be considered invalid on arrival.

### Vetoes cont..

- Veto abuse can occur and be problematic.
  - Don't be hasty to veto, continue to have discussion.
- You can prevent abuse by being reluctant to veto yourself.
- Call out gently when someone else uses their veto too often.
- Remind vetoes are binding for only as long as the group agrees they are.
- To express a veto people may write "-1". Comes from Apache software foundation
   —> <a href="https://www.apache.org/foundation/voting.html">https://www.apache.org/foundation/voting.html</a>
  - -1 can also be a very strong objects
- Vetoes apply retroactively... don't object a veto on ground that the question has already been committed or action taken. Unless it was weeks or months later.

## Writing it Down "Taking Notes"

- You need to record things somewhere, in order to give decisions legitimacy and make it clear that is it based on discussions and agreements.
- Link to relevant threads, mailing list archives, and make sure to ask again if you can't find a point that was discussion.
- Its the description of the agreements that people made, no surprises should come of it.
- Don't be comprehensive, no doc cant capture everything.
  - Don't mention obvious things
  - Don't need to re-write guidelines
  - Good way to determine what to include on docs think of newcomers ask most often.'
  - Don't make it a FAQ sheet, just a narrative structure of what is asked.
- Rules and documentation should have conventions and living reflections of the projects/groups intentions.
  - It should not be a source of frustration or blockage.
  - If many people disagree with rules, then something needs to change and reevaluated.



## Good Examples of Guidelines

- https://wiki.documentfoundation.org/
  Development
- https://subversion.apache.org/docs/communityguide/
- https://www.apache.org/foundation/how-itworks.html
- https://www.apache.org/foundation/voting.html.