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SUMMIT

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OPENBMC: STATE OF DEVELOPMENT

Brad Bishop

Senior Software Engineer

IBM

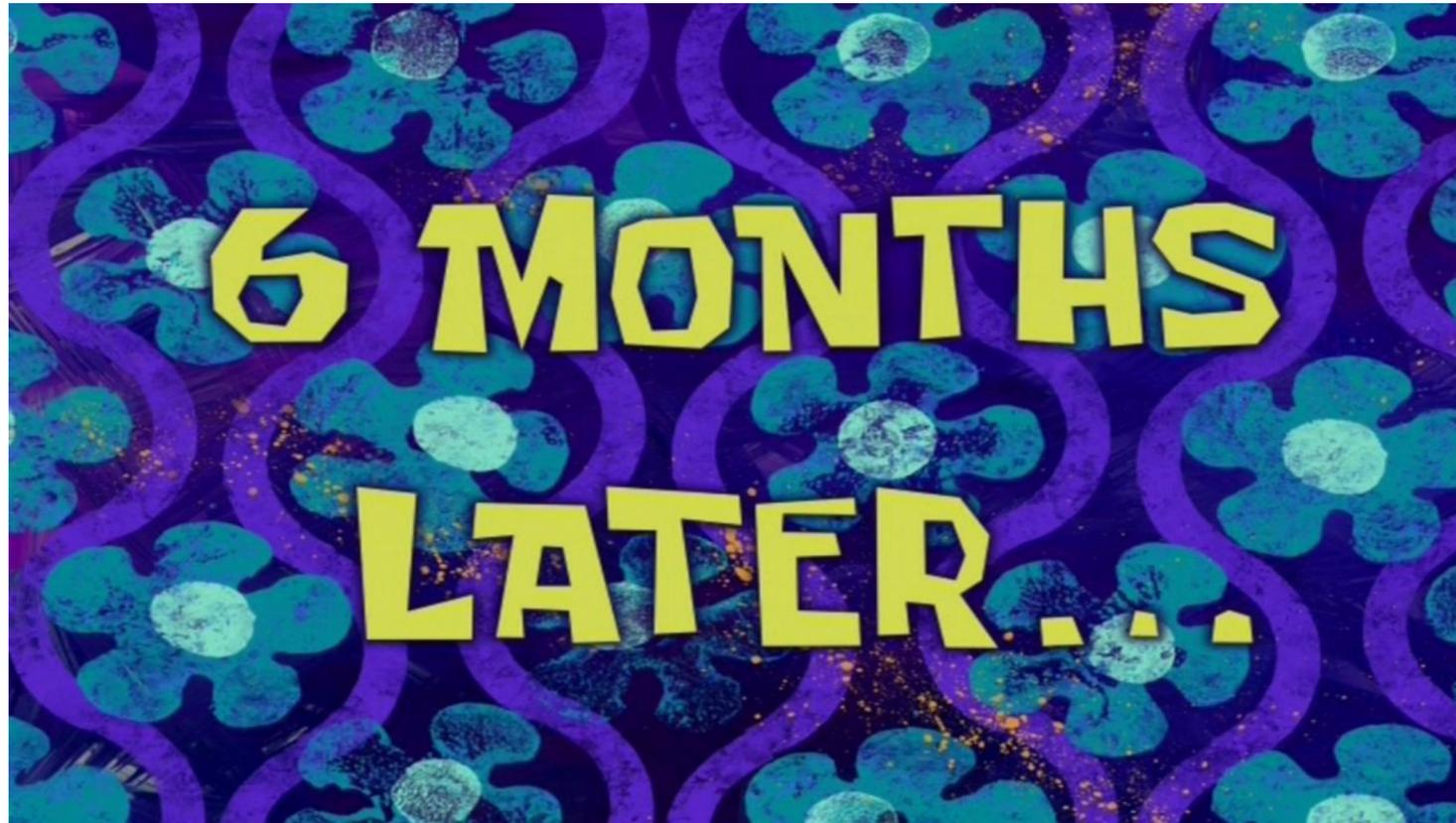
OPEN. FOR BUSINESS.



Five Companies and the OCP Walk Into a Bar...



- Facebook
- Google
- IBM
- Intel
- Microsoft



OpenBMC Structural Update

- There is an agreed upon path to a unified OpenBMC community (it will take time to get there)
- <https://github.com/openbmc>
- OpenBMC has a project charter
- OpenBMC is now a Linux Foundation project
- OpenBMC has a Technical Steering Committee
- Working groups
- Code maintainers
- Project contributors



Project Charter

- Lightweight, flexible and non-prescriptive (five pages)
- Technical steering committee voting mechanics outlined
- Apache 2.0 license for code contributions (with clause for exceptions)
- CC BY 4.0 license for documentation
- Requires execution of a typical corporate or individual contributor license agreement to contribute
- https://www.openbmc.org/wp-content/uploads/sites/62/2018/03/charter_openbmc_02142018.pdf



The Linux Foundation

- OpenBMC is now a Linux Foundation project
- Selected as a respected and neutral steward of the project for all involved
- Owns any project trademarks
- DNS registrant for project domains
- Github organization owner



Technical Steering Committee



- Members
 - Brad Bishop (IBM)
 - Sai Dasari (Facebook)
 - Ali Larijani (Microsoft)
 - James Mihm (Intel)
 - Nancy Yuenn (Google)
- Community contributions drive project direction
- Provide resolution as last resort
- Working to further define the role
- Working to identify new member criteria
- Let TSC members know how they are doing
- <https://github.com/openbmc/docs/blob/master/README.md#technical-steering-committee>



Working Groups

- One or more individuals leading a team towards an OpenBMC implementation of a technology (e.g. Redfish)
- Organically forming based on contributor interest
- Formation proposed and announced on the project mailing list
- <https://lists.ozlabs.org/pipermail/openbmc>
- Per-workgroup discretionary forums for communication after that
- Only requirement is dissemination of workgroup output to the project mailing list



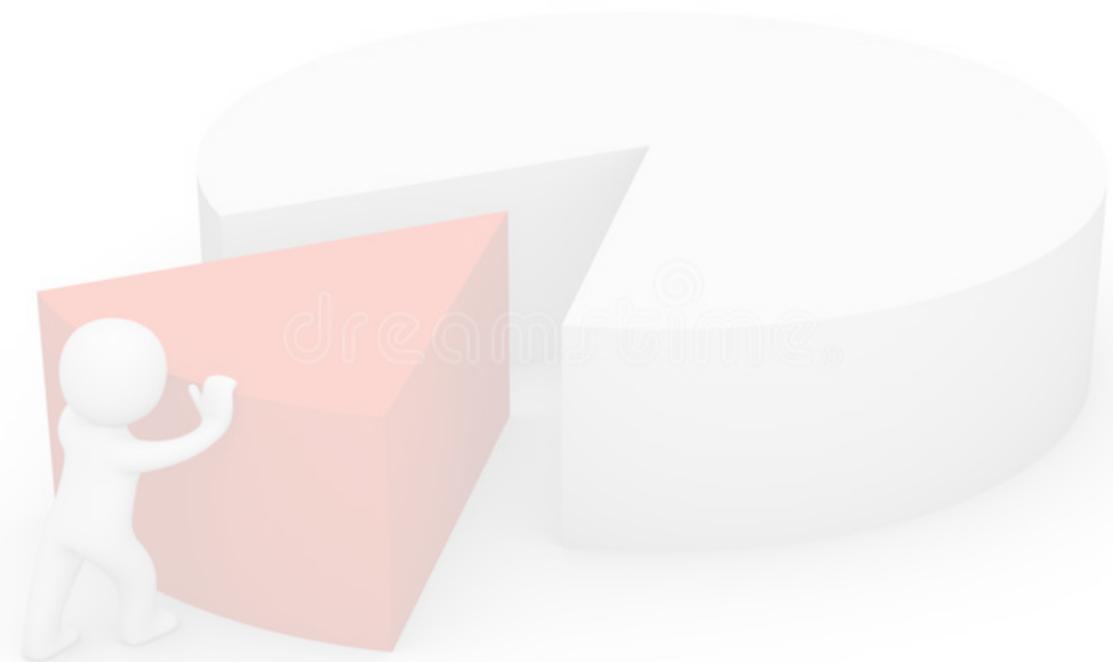
Code Maintainers

- Responsible for day to day code maintenance
 - Guides contributors and their contributions towards project quality standards and best practices
 - Ensures the project process is followed
 - Approves submissions for inclusion in the project
- 20 maintainers at last count
- Maintainer role beginning to be shared across company boundaries
- Assignment based on prior contribution merit – working to further refine the process
- Case study: IPMI stack maintenance



Project Contributors

- The most important role
 - Code submissions
 - Peer review
 - Testing
 - Documentation
 - Outreach
 - Project management
 - Project process and infrastructure
- Code submissions from 90 individuals at last count



Getting Involved



- Monitoring of the email list is *critical* to staying informed
 - Workgroup formation
 - Design discussion
 - Statements of intent
- Condensed, birds-eye view to come later with more project management contributions
- Bring your discussions to the email list:
<https://lists.ozlabs.org/listinfo/openbmc>
- Monday community call:
<https://github.com/openbmc/openbmc/wiki/Weekly-Community-Telecon#access-information>
- IRC: [freenode.net#openbmc](https://freenode.net/#openbmc)
- Review the code: <https://gerrit.openbmc-project.xyz>
- Bring your ideas, questions and feedback to these forums



Submitting a Patch: Step by Step



- Learn to use Git
- Open a Github account for Gerrit authentication
- Clone a project from Gerrit (not Github!)
- Make changes, test and commit
- Read and apply the rules outlined at <https://github.com/openbmc/docs/blob/master/contributing.md>
- Submit your patch following the directions at <https://github.com/openbmc/docs/blob/master/contributing.md#submitting-changes-via-gerrit-server>
- Add your peers to the list of reviewers for your patch in the Gerrit GUI
- Don't be afraid. The community will help along the way. Ask for help on IRC.

Submitting a Linux Patch: Step by Step



- Understand the long term goal is to eliminate OpenBMC U-Boot and Linux forks
- Learn how to use Git
- Subscribe to the mailing list
- Clone the OpenBMC Linux kernel fork from <https://github.com/openbmc/linux>
- Make changes, test and commit
- Read and apply the rules outlined at <https://github.com/openbmc/docs/blob/master/kernel-development.md>
- Refer to previously submitted patches on the OpenBMC mailing list or LKML for examples
- Submit your patch following the directions at <https://github.com/openbmc/docs/blob/master/kernel-development.md>





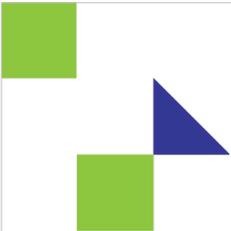
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- chris, brad - fsp
- title - not tech, community people structure

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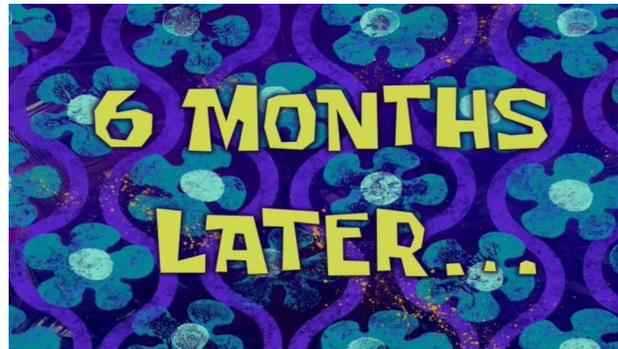
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Hype – move to participant
Newcomers – who do ignore/talk to?
How to fix – single project



OpenBMC



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Output should be a minimum that we all can work in.

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This is what that looks like.

Top down structure.

Understand if logistical factors affect you via tsc/list

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Lightweight – low complexity until needed

Lightweight – let the community form roles and processes

Protections of CLA are valuable to people building products with OpenBMC

People available to explain the benefit of CLA

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Competitors in this space – natural to have a neutral entity.

Yocto, kernel already TLF projects.

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Get to know one of the people on this list.
They can help onboard and connect you with subject
matter leads – technical, PM or PR.

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So much yet to do in terms of PM, process, etc.
Please don't wait for those things to get involved.
Start building merit now.



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