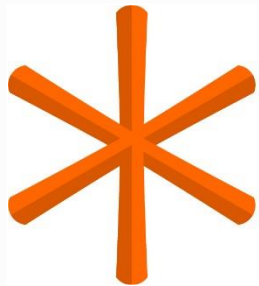


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UEFI Open Source Community: tianocore.org update

UEFI US Fall Plugfest – September 20-22, 2016
Presented by Brian Richardson (Intel) and
Leif Lindholm (Linaro)

Agenda



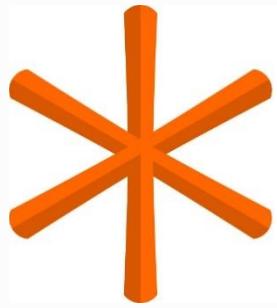
- Introduction
- Recent changes
- Plans for the future
- Summary / Q&A



UEFI Open Source Community: tianocore.org update

Introduction





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Community supporting EDK II, an open source implementation of UEFI

Mission

- Improve contribution
- Increase code quality
- Provide regular updates and more end-to-end solutions

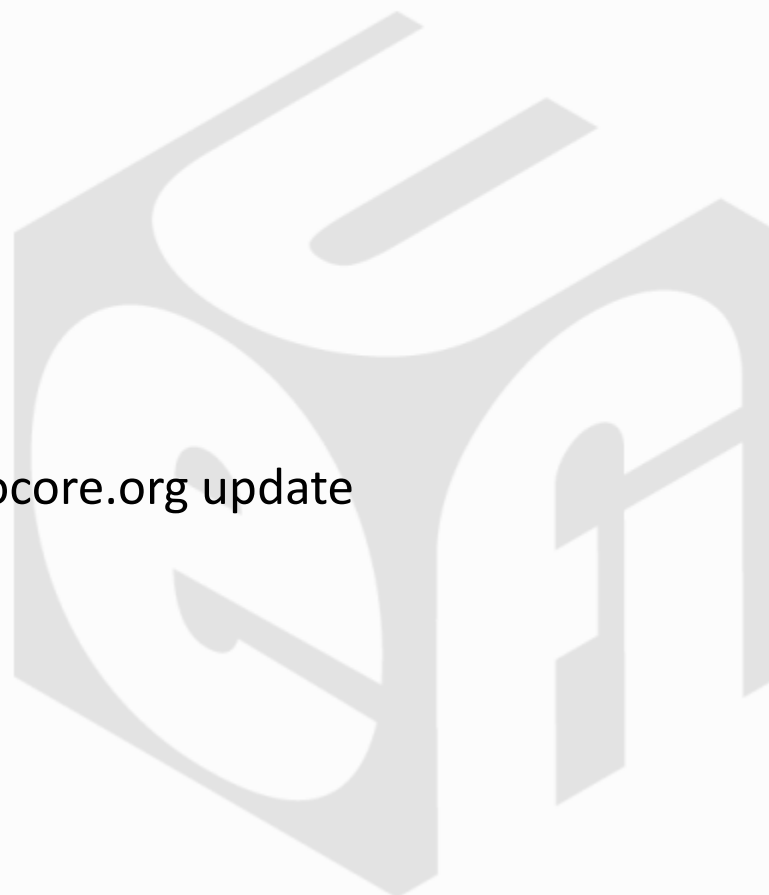
Vision

- A more active EDK II developer community
- A transparent decision making process based on community feedback



UEFI Open Source Community: tianocore.org update

Recent changes



Recent changes



- Governance
- Transition to github
- Staging branch workflow
- UEFI FAT license
- LLVM/Clang & GCC
- Bugzilla

Governance



- Tianocore Stewards
 - Andrew Fish – Apple
 - Leif Lindholm – Linaro
 - Michael Kinney – Intel
- Tianocore governance updated, licensing and distribution remains unchanged
- Broader input to grow the community

Transition to github



- Moved from SVN to github in Jan 2016
 - <https://github.com/tianocore/>
- Multiple repositories in use for EDK II, tools, non-OSI code, and new features
- Documentation will also transition to github (wiki & gitbooks)

Staging branch workflow



- Staging branches help keep the main edk2 branch focused on quality code
- Process details ...
 - <https://github.com/tianocore/edk2-staging>
 - Announce new branch via e-mail
 - Create an edk2-staging branch
 - Branch maintainers sync to edk2/master
 - Use edk2 review process to submit edk2-staging branch to edk2/master

UEFI FAT license



- As of March 2016, Microsoft removed the use clause from UEFI FAT sources
 - Very big deal for Linux distros & Ovmf/Aavmf
 - Increases UEFI adoption in virtual machines, which primarily shipped SeaBIOS
- Now covered under 2-clause BSD with no field of use restriction

<https://github.com/tianocore/edk2/tree/master/FatPkg>

<https://github.com/tianocore/edk2/tree/master/FatBinPkg>

LLVM/Clang & GCC



- EDK II now enables link time optimization (LTO) for LLVM Clang 3.8 & GCC 5.3
 - Good example of community collaboration
- Enables a platform for code analysis tools
 - Example: <http://clang-analyzer.llvm.org/>
- Validated on Linux

Binary Sizes vs VS2015



	Release Mode	GCC5	CLANG38
EDK II OVMF x64	PEIFV	26%	-15%
	DXEFV	4%	-4%
	FvMainCompact	2%	0%
	Release Mode	GCC5	CLANG38
Intel® Galileo IA32	FVRECOVERY	5%	6%
	FVMAIN	5%	16%
	FvMainCompact	9%	15%

Bugzilla



- bugzilla.tianocore.org
 - EDK II/platform issues & feature requests
- Security issues follow a special process
 - <https://github.com/tianocore/tianocore.github.io/wiki/Reporting-Security-Issues>
 - Never use e-mail to discuss a security issue
 - Report issues under the “Tianocore Security Issues” product in Bugzilla
 - *Never use e-mail to discuss a security issue*



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Plans for the future

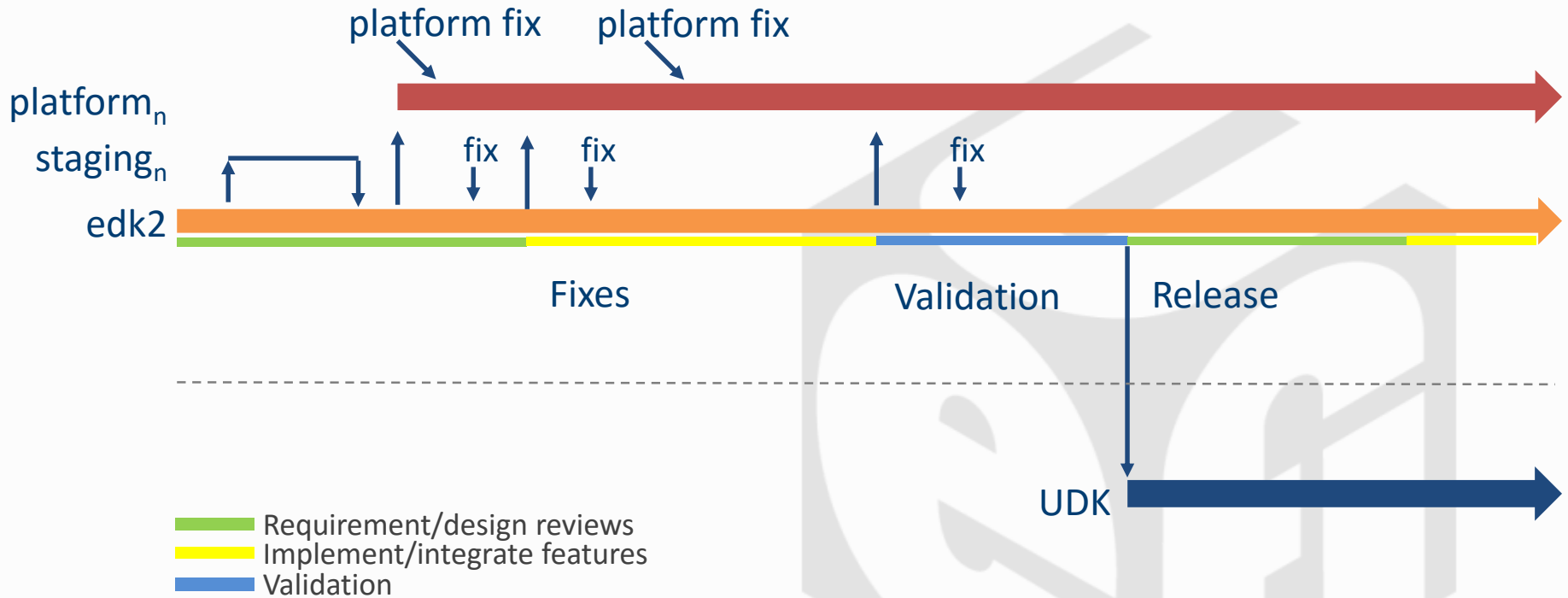


Plans for the future



- Improve website content & organization
- Add test framework & test cases for edk2
- Release management
 - Goal is to have labeled releases on a regular cadence (2-4 per year)
 - Features and cadence planned using community input

Release management



UDK2017 Feature Highlights



UEFI 2.6 Features

- eMMC/SD Stack
- MemoryAttributesTable
- IPv6 Http Boot
- RamDisk
- URI Configuration

UEFI PI 1.4a Errata

Coming in Q1 2017

EDK II Implementation

- OpenSSL 1.0.2h
- Transition to NASM
- CPU MP initialization library
- Drivers
 - PiSmmCpuDxeSmm
 - SataController (generic)
 - PciHostBridgeDxe (generic)
 - LoadFileOnFv2
 - PciSioSerialDxe/SerialDxe

Plans for the future (cont.)



- Open platforms
 - More example code for new developers
 - Implemented similarities as core libraries
 - Enable centralized validation
 - Provide greater visibility for impact of changes to core code
 - Details being discussed on edk2-devel (or grab the EDK II stewards for a focus session)

Summary



- TianoCore supports open source UEFI development using EDK II
- Recent improvements include a move to github and compiler optimizations
- Future improvements will improve code quality and open platform availability

Thanks for attending the
UEFI US Fall Plugfest 2016



For more information on
the Unified EFI Forum and
UEFI Specifications, visit
<http://www.uefi.org>

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