# Spring 2019 UEFI Plugfest

April 8-12, 2019

Bellevue, Washington

*presented by*

The UEFI Forum

# State of UEFI

Presented by Dong Wei

Spring 2019 UEFI Plugfest

# Introduction

- Dong Wei
  - Vice President, UEFI Forum
  - Arm Fellow

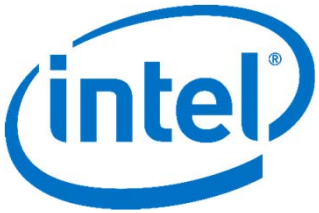
# Agenda

- Event Overview
- The UEFI Forum
- Specification Update
- UEFI Security & Open Source
- Fall 2019 UEFI Plugfest
- Questions

# Event Overview

# Made Possible by...







# Tuesday, April 9

Spring 2019 Session Highlights

| Time | Session Title | Presenters |
|---|---|---|
| **9:30 – 10:00 am** | UEFI Self Certification Tests (UEFI-SCT) and Firmware Test Suite (FWTS) | Supreeth Venkatesh, Arm<br>Harry Hsiung, Intel<br>Alex Hung, Canonical |
| **10:00 – 10:30 am** | UEFI Updates and Open Source Firmware evolutions on Arm | Matteo Carlini and Dong Wei, Arm |
| **10:30 – 11:00 am** | Risks to UEFI firmware due to growing attack surfaces | Dick Wilkins, Phoenix |
| **11:00 – 11:30 am** | From Runtime to Compile Time: Improving ASL Through Enhanced Namespace Resolution | Erik Schmauss, Intel |
| **11:30 am – 12:00 pm** | Microsoft UEFI Update | Jeremiah Cox, Microsoft |
| **12:30 – 1:00 pm** | Hardening Firmware Components with Host-based Analysis | Brian Richardson, Intel |

Testing from 1:00 – 6:00 pm

# Welcome Reception

- **Tuesday, April 8 from 6:00-7:30pm**
- *Embassy Suites by Hilton Seattle Atrium*

- Popcorn, Fresh Vegetable Platter, Cheese & Fruit Board and Spring Rolls

- Three drink tickets per person (deluxe brands, domestic beers, house wines, soft drinks)

# Wednesday, April 10

Spring 2019 Session Highlights

Testing from 9:00 – 11:00 am

| Time | Session Title | Presenters |
|---|---|---|
| **11:00 – 11:30 am** | Half Duplex controller support and Multi IO support in SPI framework | Pankaj Bansal, NXP |
| **11:30 am – 12:00 pm** | Improving UEFI Network Stack Performance | Maciej Rabeda, Intel |
| **12:30 - 1:00 pm** | Case Study: Removing SMM from Intel Platforms / second half of the lunch hour | Sarathy Jayakumar, Intel |
| **1:00 – 1:30 pm** | Support Secure UEFI and OPTEE OS together on Arm | Meenakshi Aggarwal, Udit Kumar, NXP |
| **1:30 – 2:00 pm** | Role Modeling Open Source Best Practices in Firmware | Mark Doran, Stephano Cetola, Intel |
| **2:00 – 2:30 pm** | Using Capsules for Firmware Configuration Update | Zachary Bobroff, American Megatrends Inc |

Testing from 2:30 – 5:30 pm

# The Evening Event: The Parlor Bellevue

**Wednesday, April 11 from 6:00 - 9:00 pm**

The Parlor Bellevue
Lincoln Square (third floor)
700 Bellevue Way NE Suite 300
Bellevue, WA 98004

**Food**: Mexican Grill Buffet

**Beverages**: Bottomless sodas, coffee, tea. Beer and wind (alcohol available for purchase)

**Activities**: Reserved lounge with Billiards, Foosball, Giant Jenga, Shuffleboard ad Ping-Pong.

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# Thursday, April 11

Spring 2019 Session Highlights

Testing from 9:00 – 11:00 am

| Time | Session Title | Presenters |
|---|---|---|
| **12:30 – 1:00 pm** | UEFI topics for the manufacturing efficiency/second half hour of lunch | Rafael Machado, Flex Institute of Technology |
| **1:00 – 1:30 pm** | How Writing Portable UEFI Drivers Improves Reliability (and Helps Me) | Ard Biesheuvel and Leif Lindholm, Linaro |
| **1:30 – 2:00 pm** | Redfish Implementation for UEFI | Jason Spottswood, HPE |
| **2:00 – 2:30 pm** | Redfish Host Interface: UEFI and OS implications | Samer El Haj Mahmoud, Lenovo<br>John Leung, Intel<br>Mike Rothman, Intel |

Testing from 2:30 – 5:30 pm

# Afternoon Break
## Speaker's Office Hours

- Afternoon Break Time
- Meet with the presenters after their sessions
  - Where: The Ballroom
  - When: 3:00 – 4:00 pm

- Soft drinks, coffee and sweets sponsored by

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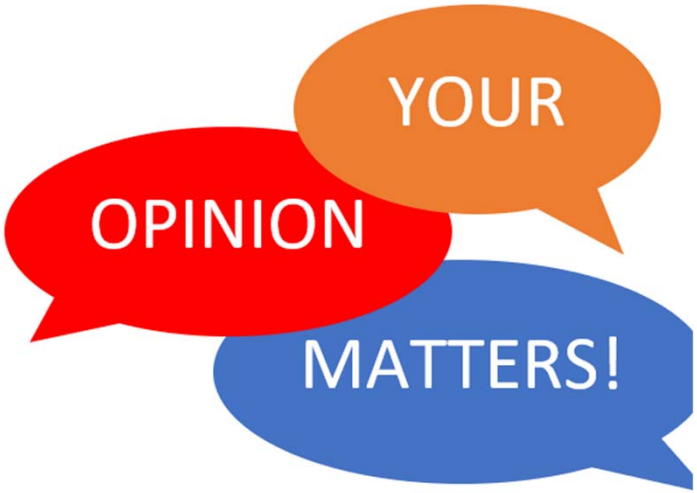
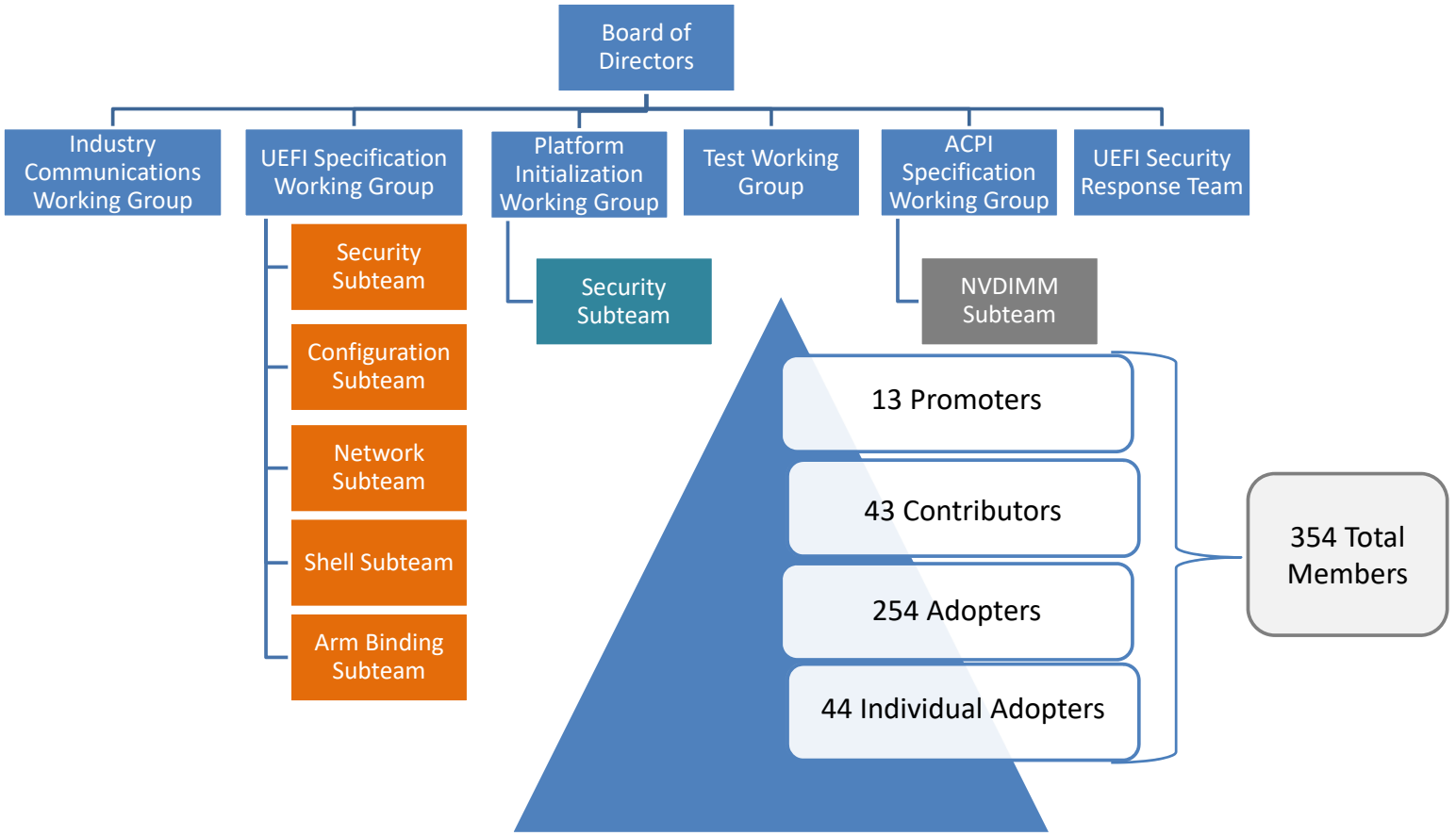



# Event Survey: Your Feedback Please!

https://www.surveymonkey.com/r/2019SpringUEFIPlugfest

# The UEFI Forum

# UEFI Forum Overview



# Specification Update

# Latest Specifications


v2.8 v2.2 v1.7 v2.6A v1.1 v6.3 < Current Versions

- **Updates Represent**:
  - ACPI 6.3 – PCC Operation Region, I3C Host Controller, Generic Initiator, Peripheral-attached Memory, HMAT Enhancement, NVDIMM Health Error Injection and ARS Update, ARS Error Injection, GTDT Extension, Load Extension and Unload Deprecation, Arm SPE Support, etc.
  - PI 1.7 - PEI Core PEIM Migration Support Change, SecCore/PeiCore BFV Requirement Change, MM MP Protocol issues, EFI_SW_DXE_BS_EC_BOOT_OPTION_LOAD_ERROR Extended Data, New Status Codes, PEI Delayed Dispatch, New Architectural PPI for PI PEI Core FV Location, etc.
  - UEFI 2.8 – Redfish Support (Discover Protocol, REST EX Protocol, JSON Structure Protocol, JSON Capsule Support, REST Style Formset, etc.), Peripheral-attached Memory, EBC Requirement Removal, CCIX PER Log Error Structure, Runtime Calls May Return Unsupported, etc.

# UEFI SCT Status

- Latest stable binary version - UEFI SCT 2.6 A is published at https://uefi.org/testtools
  - Source code was only available to Contributors
- UEFI SCT 2.7 A coming soon
  - Now open source development at https://github.com/tianocore/edk2-test
  - Tag edk2-test-stable201904 is intended as 2.7A beta quality for plugfest
  - UEFI Forum to recommend afterwards

# FWTS Updates

- FWTS 19.02.00 updates tests for ACPI 6.3
  - http://fwts.ubuntu.com/
  - FWTS 19.03.00 intended as beta quality for plugfest
  - UEFI Forum to recommend afterwards

# UEFI Security and Open Source Focus

# UEFI Security

- Security will continue to be a concentrated effort for the Forum and the community.
- We will continue to maintain with errata and new content updates that reflect implementation experience with existing specification content.
- Broad architecture support continues.
- New UEFI webinar: Secure Coding: https://www.youtube.com/watch?v=fkZPVEhQUmc&feature=youtu.be

# Open Source

- Enable “Code-First” approach
- Encourage open source contributions
  - Increase in open source contributions in reference implementations, SCT and FWTS
  - Improve open source process

# Fall 2019 UEFI Plugfest

- Details of the Fall Plugfest will be out soon
  - Location: Asia
  - Timeframe: Late October or early November

- Additional details will be available on the UEFI Forum website at www.uefi.org/events/upcoming

# Questions?

Thanks for attending the Spring 2019 UEFI Plugfest

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

*presented by*