



**OPEN** CONNECTIVITY  
FOUNDATION™

**OCF's HYBRID APPROACH TO  
STANDARDS VS. OPEN SOURCE  
MIKE RICHMOND, EXECUTIVE DIRECTOR**

May 25, 2016



# OCF Basics



- Started as Open Interconnect Consortium – July 2014
  - Intel, Broadcom, Samsung, Atmel, Wind River
  - Broadcom withdrew (reportedly over IP policy differences)
- Widely viewed as being a direct competitor to the older AllSeen Alliance
  - Both aiming to standardize IoT middleware protocols.
- Major differences between OIC vs. AllSeen Alliance
  - Which open source license gets used
  - The role of specifications vs. open source code
  - How patents are handled
- OIC > OCF as of March, 2016.

# Observations on AllSeen Alliance Approach



- Code comes first.
- Spec documents the function of the code.
- No licensing of alternative implementations via the spec.
  - Advantage: one implementation makes it easier to ensure interoperability.
  - Disadvantage: one implementation may not meet all product needs.
- Clearly separates copyright license (ISC) from patent policy
  - vs. many open source licenses that state or imply patent grants
- Patent policy covers contributions, not “you were there when we put it in”.
  - But other policies possible.
  - OIC members very critical of specifics of ASA Patent Pledge
- Mike’s opinion: ASA is a new way of doing open source, not really a new way of doing spec + open source

# OIC/OCF Approach (1)



- OCF is a conventional specification-writing group.
  - Contributions covered – no opt outs
  - Everyone else is obligated too, but can opt-out
    - Base policy is royalty-free
    - Four exceptions per company every five years.
    - Opt-out-ers must list their claims.
  - Most likely outcome – royalty-free
- OCF owns certification mark, tools, program
- OCF **sponsors** an open source project (IoTivity)
  - IoTivity is hosted by the Linux Foundation
  - OCF pays the LF bill, pays for IoTivity events.
  - Companies and individuals do not get paid by OCF to code (although they in theory, could)

## OIC/OCF Approach (2)

- IoTivity has meritocratic open source project governance
- No membership requirement to participate
- Very common Apache 2.0 license.
- Not everything in IoTivity has to be in an OCF spec, but nothing can be required in an OCF spec without an implementation in IoTivity
- Sometimes code leads, sometimes spec leads.



# How Does It Work in Practice?



- Open source norms are like the English Constitution – unwritten but revered nonetheless
- Standards People vs. Open Source People
  - You do your thing, we'll do our thing
  - Linkage only at the highest level
- Built in conflict, but it works
  - Philosophical (which approach is better)
    - Usually between people from the same company
  - Power (given that we do both, who leads)
    - Whoever has the best idea
  - The need to certify tends to bring everyone together in the end



# Summary: Why Hybrid?

- Match the widest range of business needs:
  - Open source licenses (especially the traditional ones)
  - Standards and mutual IPR agreements
- Use all available talent:
  - Technical people with great ideas don't all have the same process skill sets
  - Some know how to work in standards groups
  - Some know how to work in open source projects
  - It's unusual to find people who know how to do both



**OPEN** CONNECTIVITY  
FOUNDATION™