

IDS Meeting Minutes April 29, 2021

This IDS Meeting was started at approximately 3:00 pm ET on April 29, 2021.

Attendees

Graydon Dodson	Lexmark
Matt Glockner	Lexmark
Alan Sukert	
Brian Volkoff	Ricoh
Paul Tykodi	Tykodi Consulting Services
Bill Wagner	TIC
Steve Young	Canon

Agenda Items

- The topics to be covered during this meeting were:
 - Review of the discussions at 4/19/21 and 4/26/21 HCD iTC Meetings
 - Paul Tykodi's Monthly 3D Printing Report
 - Preparation for next week's IDS Face-to-Face Meeting
 - Round Table Discussion
- Meeting began by stating the PWG Anti-Trust Policy which can be found at https://www.pwg.org/chair/membership_docs/pwg-antitrust-policy.pdf and the PWG Intellectual Property Policy which can be found at https://www.pwg.org/chair/membership_docs/pwg-ip-policy.pdf.
- AI reviewed what was discussed at the 4/19/21 and 4/26/21 Hardcopy Device international Technical Community (HCD iTC) Meetings. Both meetings basically were review of comments against the Security Problem Definition (SPD) and GitHub Issues generated to implement the Network Subgroup's recommendations to includes SFRs and Assurance Activities from the Network Device cPP/SD for the four secure protocols, the SFRs that are dependencies for the four secure protocols, NTP and X.509 certificate verification.

The main topics covered during this part of the meeting were:

- AI updated the status of the JBMIA proposal to modify SFR FPT_KYP_EXT.1, Protection of Key and Key Material that all discussed at the last IDS Meeting on 4/15/21. Right now, the HCD iTC is still getting comments from iTC members to the JBMIA proposal; comments are due by the next HCD iTC meeting on May 3rd.
- AI updated the current status of the HCD iTC subgroup looking into hardware-anchored integrity verification requirements for HCDs. The subgroup had previously determined what elements should be included in the SPD to address hardware-anchored integrity verification as was explained at the last IDS Meeting on 4/15/21. Currently the subgroup is determining what Security Functional Requirements should go into the HCD collaborative Protection Profile (cPP) and Supporting Document (SD).

The subgroup started with the Root of Trust SFR (FPT_PRO_EXT) from the Dedicated Security Component cPP and tried to adapt it to HCDs. In the process of doing that Anantha Kandia, a member of the subgroup, suggested we also look at the Secure Boot SFR (FPT_SBT_EXT) being developed by the Network Device iTC. Looking at the two SFRs together, the subgroup decided to combine them together into one SFR, and after some word-smithing ended up with the following SFR:

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FPT_PRO_EXT.1 Root of Trust

FPT_PRO_EXT.1.1 The TSF shall contain a Root of Trust (RoT) that is implemented in immutable memory.

FPT_PRO_EXT.1.2 The TSF shall use the RoT to confirm integrity of its firmware/software at boot time using a [selection: digital signature, message authentication] verification method.

FPT_PRO_EXT.1.3 The TSF shall [selection: enter maintenance mode, boot into single user mode, halt boot process, reboot the device] in the event of a boot time verification failure.

FPT_PRO_EXT.1.4 Following failure of verification, the TSF shall provide a mechanism to: [selection: revert to previous TOE image, reinstall TOE image, perform a factory reset, contact vendor support].

The subgroup will recommend to the HCD iTC that this is the only SFR needed to address hardware-anchored integrity verification once it finishes work on the accompanying Assurance Activities.

- Lastly, Al went through a couple of the comments against the SPD that were reviewed at the two HCD iTC meetings. He focused on one comment against the Image Overwrite Organizational Security Policy (OSP) in the SPD that wanted to add cryptographic erase to overwriting data for this OSP. He used this comment to make the point that what appeared to be a simple comment can open up a large discussion because including crypto erase can have ripple effects in terms of having to add additional wording to the SPD and possible additional one or more SFRs to allow for cryptographic erase depending on how this comment is addressed.
 - Paul Tykodi then provided his monthly 3D Printing report with the following items:
 - The American Association of Testing and Materials (ASTM) CoE publishes a monthly newsletter. This month's newsletter contained a link ([Cybersecurity in Digital Manufacturing: Role of Professional Societies](#)) to a YouTube video entitled "Cybersecurity in Digital Manufacturing: Role of Professional Societies". In the video it mentions the IEEE Technical Committee on Cyber-Physical Systems (<http://www.ieee-cps.org/>). Paul and I are going to look into this IEEE TC and see if it is something IDS should establish a liaison with.
 - ASTM is establishing projects for the Digital Thread in Additive Manufacturing (essentially the digital path for 3D printing). The goal of these projects is to reduce the information gaps by normalizing the information received during the various steps during the Digital Thread. The two efforts Paul is involved with are:
 - Define data information to be shared for data dictionaries
 - Define data packages for Computer-Aided Manufacturing and develop a Digital Thread Map that included a placeholder for security
- Paul is helping to get the PWG involved via IPP prototyping to help improve cybersecurity with common data exchange formats.
- ASTM is sponsoring a Cybersecurity Training class for industry at Auburn University on May 10th
 - There will be the AMSec 2021: International Workshop on Additive Manufacturing (3D Printing) Security on Nov 19th in Soule, South Korea. Paul and Al plan to submit a paper to this workshop based on the presentation they made last October 2020 to the INCITS on "Common Criteria Certification and How It May Be Applied to 3D Printing."

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- AI went through the planned agenda for the upcoming IDS Face-to-Face (F2F) meeting on May 6th from 10AM – 12 N EDT. The planned agenda is:

Introductions, Agenda review (AI) – 5 Minutes

Discuss results of latest HCD iTC Meetings and HCD cPP/SD v1.0 status (AI) – 55 Minutes

MASS DOT Discussion with IDS WG (AI) – 10 Minutes

HCD Security Guidelines v1.0 Status (Ira) – 20 Minutes

TCG/IETF Liaison Reports (Ira) – 20 Minutes

Wrap Up / Next Steps (AI) – 5 Minutes

- Round Table:
 - CCUF Virtual Workshop May 11 & 12, 2021. Sessions will be 9 – 12 ET each day. Agenda has not been released yet
 - 2021 Additive Manufacturing Workshop, June 14-21, 2021. For information see <https://ammo.ncms.org/events/2021-additive-manufacturing-workshop/>
- **Actions:** None

Next Steps

- The May PWG Virtual F2F Meetings will be May 4-7, 2021. The IDS F2F Session will be on May 6, 2021 from 10A – 12N ET.
- Since May 13th, which is two weeks from April 29th, is only a week after the IDS F2F Meeting it does not make sense to have an IDS Meeting that week. Therefore, the next IDS Meeting will be May 27, 2021 at 3:00P ET / 12:00N PT. Main topics will be review of the 5/10, 5/17 and 5/24 HCD iTC Meetings and Paul Tykodi's monthly 3D Printing report.