

# **CIP Technical Steering Committee Meeting**

Date: 29st August 2023.

# **Roll Call**

TSC members (Alphabetical order by company name)

Attendees (Please change to **Bold**, if you attend this meeting) (Key shortcut: Ctrl+b)

Company	Members
Bosch	Philipp Ahmann [at the airport, may not be able to join] Sietze van Buuren
Cybertrust	Hirotaka Motai (Representative) Hiraku Toyooka
Hitachi	Hidehiro Kawai (Representative) Takuo Koguchi
Linutronix	
Moxa	Jimmy Chen (Representative)
Plat'Home	Masato Minda (Representative)
Renesas	Chris Paterson (CIP Testing WG Chair) Kento Yoshida Kazuhiro Fujita (Representative) (Voting) Takehisa Katayama (Representative) (Voting)
Siemens	Jan Kiszka (Representative) (Kernel Team Chair) Wolfgang Mauerer (Representative) (Voting) Urs Gleim Stefan Schroeder
Toshiba	Dinesh Kumar Kazuhiro Hayashi (Voting Representative) (CIP Core / Software Update Chair) Venkata Pyla Nobuhiro Iwamatsu (Kernel Maintainer) Shivanand Kunijadar

	Yoshi Kobayashi (TSC Chair)
Denx	Pavel Machek (Kernel Maintainer)
	Ulrich Hecht (Kernel Developer)
Linux Foundation	Neal Caidin

# **Discussions**

# **Security Working Group**

#### Items need to be approved by TSC voting members

None

#### **Status updates**

- BV & CIP member meeting held on 24th Aug to review CIP documents and make clarifications
  - a. Clarified about current CVE handling in CIP where CIP Kernel WG members keep sharing CVE details, similar work is in progress for CIP Core
    - SWG to prepare summary document for overall CVE handling and share it for all CIP member's review
  - b. SWG members to document release details for CIP Kernel and CIP Core
  - c. Next BV meeting is planned by E/Sep
  - d. BV suggested to accelerate the update of CIP documents to finish IEC-62443-4-1 compliance
    - **Risk-1**: As in SWG we don't have dedicated resources so it's unpredictable when some action items can finish
    - **Risk-2**: Delay in getting final confirmation by when M-COM device will be ready and can be made available for testing
- SWG members and Kernel WG members clarified about CVE handling, there are few pending clarifications
  - a. Is the process of selecting which CVE fixes to be incorporated in CIP kernel documented? If not can we?
  - b. Can we document analysis of CVEs while deciding which CVEs to choose for applying fixes in the CIP kernel?
- Experiment with readthedocs format for CIP IEC documents in progress
  - a. We are facing issue while generating pdf from markdown documents and investigating about available plugins, please let us know if anyone has any experience and can help
  - b. https://gitlab.com/cip-project/cip-documents/-/issues/2
  - c. https://cip-documents.readthedocs.io/en/latest/
- Supporting isar-cip-core images based on Debian 12 from IEC-62443 standpoint

- a. This topic was discussed in last TSC meeting also and most of the SWG members prefer to use isar-cip-core bookworm image for final assessment
- b. Now renesas members have confirmed RZ/G2M device is not planned to support Debian12 and SWG should select some other device for IEC assessment
- c. So SWG would like to consider Debian 12 for final assessment, SWG will continue to investigate if there are any limitations in using Debian 12
- About CIP reference hardware selection for CIP IEC certification (WIP)
  - a. About RZ/G2M
    - As per Renesas RZ/G2M device is not planned to support Debian12 and other security features, so SWG should consider other device which can meet all required security features
  - b. About M-COM RT X86 V1
    - The device can support required features for IEC assessment by using open source tools.
    - Recently Benjamin updated tentatively by B/Sep M-COM devices would be available for BV evaluation and for SWG members evaluation
- Action(SWG): Initiate a voting process to decide the following items

a.

- b. Reference hardware for this assessment
- c. Reference cip core image for IEC assessment with the reference hardware

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# **Kernel Team Working Group**

### Items need to be approved by TSC voting members

None

### **Status updates**

- CIP IRC weekly meeting
  - Logs
    - Jul 20
    - Iul 27
    - Aug 3
    - Aug 10
    - Aug 17
    - Aug 24
- CIP kernel releases
  - 0 4.4
    - v4.4.302-cip78 on August 7 by Ulrich
    - v4.4.302-cip78-rt45 on August 16 by Pavel
    - => all on schedule
  - 0 4.19
    - v4.19.292-cip102 on August 27 by Iwamatsu-san

- v4.19.288-cip101-rt32 on August 14 by Pavel
- => all on schedule
- o 5.10
  - v5.10.191-cip38 on August 27 by Iwamatsu-san
  - => all on schedule
- 0 6.1
  - v6.1.42-cip2 on July 30 by Iwamatsu-san
  - v6.1.45-cip3 on August 14 by Iwamatsu-san
  - v6.1.46-cip4 on August 27 by Iwamatsu-san
  - v6.1.46-cip4-rt2 on August 28 by Pavel
  - => all on schedule

#### • LTS discussion

- Had follow-up with Linaro on August 7
- Linaro wants to provide more information on what they could offer
- Still open towards collaboration via CIP kernel, but concret model TBD

#### Discussion with Security WG on kernel processes

- Request on Kernel team to document backport acceptance criteria correct?
- Proposal by Pavel to submit CVE handling requests from Security WG to kernel maintainer, rather than tracking CVEs in Kernel WG - submitted to Security WG already?
  - Background (based on Pavel's remarks, please correct me): many kernel fixes do not get CVEs, kernel team needs to handle the rest via stable anyway, CVEs generally do not contribute to that process
- Any other open points (question to both WGs)?

#### Tarball fetching issues

- There are no pre-packaged tarballs for CIP kernel
- o Isar-cip-core is currently using git.kernel.org via snapshot but fails regularly
- Should/can we host CIP kernel tarballs otherwise?
- Or should we enable download caching in CI (not sure if it will help, though)?

### **CIP Core Working Group**

#### Items need to be approved by TSC voting members

None

#### **Past minutes**

past meetings

### **Status updates**

- CIP Core package
  - (WIP) Check future plan in ELTS for security packages (e.g. openssl)
  - (WIP) <del>Self</del> estimation of ELTS funding cost

- Asking Freexian to provide <u>cost estimation</u> for several package lists (e.g. minimum, +openssl, +security packages, Debian 10, 11+)
- CIP Reproducible Builds support
  - #58 Diffoscope tool could not verify disk images with partitions (Open)
    - The maintainer (Chris Lamb) <u>started working on the issue we reported</u>
  - #70 armhf target with swupdate is not reproducible (Temporally resolved)
    - The <u>issue</u> we reported to Debian qemu package is <del>solved and the patches are applied to Debian trixie package (testing)</del> is still under discussion
    - isar(-cip-core) temporally solve the issue by removing the core dump until the fix will be applied to Debian package
  - #73 fat file system images created in CIP image are not reproducible
  - Other issues caused by non reproducibility of filesystems
    - FAT
    - ext4
- IEC 62443-4
  - o (WIP) Providing a single feature for isar-cip-core to generate security image
- isar-cip-core updates
  - SWUpdate: Enable signed update
  - Version updated: kernel, cip-kernel-config, kas, EFI Boot Guard, LTP
  - o Fixes for reproducibility issues, update reproducibility check by CI
- Reference H/W support: OpenBlocks IoT
  - The kernel configs for the device updated (MR, 6.1.y) to work with LAVA environment
  - o <u>A patch</u> for isar-cip-core to support the device is under review

## **CIP Testing Working Group**

### Items need to be approved by TSC voting members

None

### **Status updates**

- The usual LAVA maintenance
- The usual stable rc testing results feedback to Greg KH

#### **Discussions**

## **Software Update Working Group**

### Items need to be approved by TSC voting members

None

### **Status updates**

- Support data encryption (secure storage)
  - MCOM is the primary target (WIP?)
  - Prototyping with BBB (WIP)
    - Still need to clarify basics: An extra TPM is required, SPL needs to be adjusted to secure boot, ...

### **Other topics**

- Extended meeting schedule
  - We plan to have a F2F meeting at OSS Japan in December.
    - Date: 4th of December (Monday)
    - GB members not available on 7th of Dec, because of the other LF members meeting with their executives.
  - Q(Yoshi): Do we have a longer meeting in early October or at the end of September?
- AWS budget
  - o Original estimate was 750/month.

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## **Upcoming TSC meetings**

- Regular TSC meeting
  - o Date: 12th of September, 2023
  - Start time: 13h UTC. <u>Local time in your timezone</u>
  - NOTE: DST information
    - US DST start: The second Sunday of March
    - US DST end: the first Sunday of November
    - EU DST start: The last Sunday of March
    - EU DST end: The last Sunday of October
- F2F meeting schedule
  - o Date: 4th of December 2023
  - Place: Tokyo, JAPAN (details TBD)