Meeting Notes 2020

Jul 22, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Scott Murray - Konsulko
- Tadao Tanikawa - Panasonic
- Takashi Tsubone - Panasonic
- Mikhail Golubev - Open Synergy
- Alex Bennée - Linaro
- Francois Ozog - Linaro
- Victor Duan - Linaro
- Vincent Guittot - Linaro
- Kenji Hosokawa - ADIT
- Yuki Tsunashima - ADIT
- Jakub Luzny - GSoC student
- Parth Dode - GSoC student

Agenda:

- Topic 1: Messages & Information from AMM Meeting (Jerry, Jiancong Zhao, Walt Miner)
  - VirtIO is officially declared as a new feature in AGL KK in the roadmap sharing by Walt.
  - VirtIO related discussion was carried out in the advisory board, and following agreement achieved.
    - agl-dev-community@lists.automotivelinux.orgIntegration of VirtIO into AGL has been accepted by Advisory Board.
    - Study VirtIO as a candidate of the standard reference HAL interface for eco-system enhancement (including non-hypervisor environment)
  - Keynote Session about VirtIO and a proposal of unified virtualized display by Panasonic
    - Presentation Slide: https://static.sched.com/hosted_files/aglammsummer2020/3e/Device%20Virtualization%20Architecture%20in%20Automotive_Mashaige%20Mizuyama.pdf
    - Video: https://aglamm.automotivelinux.org/session-virtual/100/
  - Breakout Session about VirtIO technical sharing by OpenSynergy
    - Presentation Slide: https://static.sched.com/hosted_files/aglammsummer2020/10/OpenSynergy_virtio_AGL_AMM_15_07_20.pdf
    - Video: https://aglamm.automotivelinux.org/session-virtual/95/
- Topic 2: Presentation & Demo from Panasonic (Tsubone-san)
  - Unified Virtual Display
  - Details can be found in the keynote: https://static.sched.com/hosted_files/aglammsummer2020/3e/Device%20Virtualization%20Architecture%20in%20Automotive_Mashaige%20Mizuyama.pdf
- Topic 3: Linaro VirtIO Roadmap follow-up discussion- Technical Q&A (Alex, Vincent)
  - Presentation slide : https://drive.google.com/file/d/12qcg5TNQhPYpptK3B0DAMJz-VQ0S0hZp/view?usp=sharing

Aug 5, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Scott Murray - Konsulko
- Tadao Tanikawa - Panasonic
- Takashi Tsubone - Panasonic
- Mikhail Golubev - Open Synergy
- Laurent Cremmer -Carmeq
- Mark Silberberger - Carmeq
- Nicolas Blazevic - Carmeq
- Alex Bennée - Linaro
- Mike Holmes - Linaro
- Victor Duan - Linaro
- Kenji Hosokawa - ADIT

- Jakub Luzny - GSoC student
- Rich Persaud

Agenda:

- Topic 1: Yocto Architecture for VirtIO FEDD integration Mikhail Golubev
    - some SoC vendor's BSP kernel doesn't support Yocto Linux so that the virtio.scc may be not included.
    - it's better to maintain the front end driver or the kernel configuration in AGL.
    - Release candidate branch for AGL will be in January.
    - general idea is on master, but for recipe (patch and yocto layer only) sandbox, source code code repository Jerry, Jiancong Zhao need to check with Walt Miner on application of a new repository (JIRA ticket)
- Topic 2: VirtIO Backend Related Sharing Laurent Cremmer
    - Presentation slide: AGL EG-Virt.pdf
- Topic 3: GSoC Project Progress Sharing Month #2 Parth Dode Jakub Luzny move to next EG

Aug 19, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Scott Murray - Konsulko
- Tadao Tanikawa - Panasonic
- Mikhail Golubev - Open Synergy
- Laurent Cremmer -Carmeq
- Mark Silberberger - Carmeq
- Francois Ozog - Linaro
- Victor Duan - Linaro
- Kenji Hosokawa - ADIT
- Yuki Tsunashima - ADIT
- Eva Rio - Tuxera
- Joel Catala - Tuxera
- Christoph Mutz - Western Digital
- Matteo Zammattio - Western Digital
- Jakub Luzny - GSoC student
- Parth Dode - GSoC student
- Rich Persaud

Agenda:

- Topic 1: GSoC Project Progress Sharing Month #2 Parth Dode Jakub Luzny
- Topic 2: Follow-up Proposal for VirtIO Front-end Integration Mikhail Golubev
- ? Unknown Attachment
- Topic 3: Guest Speech on Xen Argo with VirtIO by Edgeform Chritopher Clark & Rich Persaud

? Unknown Attachment

Remaining Action Items:

☑ Jerry, Jiancong Zhao need to check with Walt Miner on application of a new repository (JIRA ticket)

☑ Walt Miner to find the editable doc for original AGL white paper.

Sep 2, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Jan-Simon Moeller - Linux Foundation
- Scott Murray - Konsulko
- Mikhail Golubev - Open Synergy
- Laurent Cremmer -Carmeq
- Mark Silberberger - Carmeq
- Francois Ozog - Linaro
- Victor Duan - Linaro
- Kenji Hosokawa - ADIT
- Yuki Tsunashima - ADIT
- Eva Rio - Tuxera
- Joel Catala - Tuxera
- Christoph Mutz - Western Digital
- Marius Vlad - Collabora

- Jakub Luzny - GSoC student
- Parth Dode - GSoC student
- Rich Persaud

Agenda:

- Topic 1: Final Presentation of GSOC Jailhouse Project Jakub Luzny Parth Dode
- Topic 2: Follow-up Q&A about virtio-argo (Chritopher Clark & Rich Persaud)
- Topic 3: Conclusion & Future Plan of AGL KK VirtIO Integration Mikhail Golubev
  Mikhail Golubev please upload the slide you presented in last EG

Sep 16, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Jan-Simon Moeller - Linux Foundation
- Scott Murray - Konsulko
- Mikhail Golubev - Open Synergy
- Laurent Cremmer -Carmeq
- Mike Holmes - Linaro
- Francois Ozog - Linaro
- Victor Duan - Linaro
- Kenji Hosokawa - ADIT
- Yuki Tsunashima - ADIT
- Tadao Tanikawa - Panasonic
- Eva Rio - Tuxera
- Joel Catala - Tuxera
- Christoph Mutz - Western Digital
- Marius Vlad - Collabora

Agenda:

- Topic 1: Future Plan of VirtIO Device in AGL
    - virtio-can not virtio-vehicle (virtio-can also include LIN)
    - virtio-camera: what is up with DRM?
    - virtio-tuner not virtio-radio (Linux v4l2 interface)
    - ACRN has smth for USB needs to be checked
    - GNSS via virito-scmi? needs to be checked
    - Mikhail Golubev to upload the slide.
    -

Sep 30, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Jan-Simon Moeller - Linux Foundation
- Scott Murray - Konsulko
- Mikhail Golubev - Open Synergy
- Nicolas Blazevic - Carmeq
- Victor Duan - Linaro
- Francois Ozog - Linaro
- Tadao Tanikawa - Panasonic
- Christoph Mutz - Western Digital
- Matteo Zammattio - Western Digital
- Marius Vlad - Collabora

Agenda:

- Topic 1: Future Plan of VirtIO Device in AGL
    - How we can brainstorm what kind of virtio devices are necessary to AGL
        - method 1: invite IVI, IC experts from other EG to join the discussion
            - Email in the mailing list is okay
            - Inter-EG activities are handled in the SAT
            - Announce & Invite in Dev Call is also possible (most people)
        - method 2: invite GENIVI AVPS member to share their progress on the automotive virtio discussion
    - What is our policy to decide which device should be integrated into AGL
        - Option 1 (most strict): Only if the device has been upstreamed and official published in the OASIS specification
            - Publish of OASIS specification will be the trigger for AGL virtio porting activities
        - Option 2 (moderate): If the device has been upstreamed and has a certain plan to be included in the OASIS specification in near future

- Option 3 (most loose): Any devices that Virtualization EG members have consensus

    Discussion:
  - Upstreamed drivers are mandatory
  - Depending on AGL kernel version, some new devices may not be included. Backporting from the newer kernel is needed (in some circumstances, trouble may happen) discuss whether it can be integrated in the form inside kernel trees or out of the kernel trees
  - New device drivers (not upstreamed) has the similar situation with the above

    Conclusion:
    Depending on the maturity of the virtio device drivers, we can put into different places all virtio drivers can be integrated in this way
  - Recipe: Put the new drivers to the meta-agl-devel for developing and testing, integrate the stable drivers in the meta-agl.
  - Source Code: Staging (new drivers) & Src (stable drivers)
- Topic 2: OpenSynergy Plans for ALS VirtIO PoC & AGL KK Contribution Mikhail Golubev
  OpenSynergy will distribute the PoC after KK contribution as a reference implementation of VirtIO. Jan Simon has suggested distributing methods such as "accepting terms" which already used by some AGL mebmer.

  - ? Unknown Attachment

Oct 14, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Jan-Simon Moeller - Linux Foundation
- Scott Murray - Konsulko
- Mikhail Golubev - Open Synergy
- Laurent Cremmer -Carmeq
- Mark Silberberger - Carmeq
- Nicolas Blazevic - Carmeq
- Mike Holmes - Linaro
- Alex Bennée - Linaro
- Victor Duan - Linaro
- Misami Hiramatsu - Linaro
- Kenji Hosokawa - ADIT
- Tadao Tanikawa - Panasonic

Agenda:

- Topic 1: Linaro Sharing for ALS PoC VICTOR DUAN
  - AGL is working as a guest (front end)
  - Hypervisor: KVM & Xen
  - Hardware: different ARM boards (Socionext Developer Box, Armas 8040 MacchiatoBin)
  - portability across different platform (independent from SoC & Hypervisor)
  - virtio devices: virtio-net, virtio-blk, virtio-gpu. future: virtio-video, virtio-rpmb and etc.
  - no special preference on whether virtio-pci or virtio-mmio
  - the memory access limit will be not in the scope of the demo
  - Xen hypervisor: similar approach to crosvm
  - Original Target: End of this month (but it is postponed)
  - for the ALS: blk, network and framebuffer (audio will be difficult for the current schedule)
  - Work will be open.
  - Progress can be traced in the following path: https://collaborate.linaro.org/pages/viewpage.action?pageId=147423498

    - ? Unknown Attachment

- Topic 2: ALS Presentation

  https://ossalsjp20.sched.com/

  Video Submit Deadline: ? Walt Miner

Walt Miner to update the attendee of today's meeting

fix the link issue on the Wiki

Nov 11, 2020

Attendees:

- Jerry Zhao - Panasonic
- Walt Miner - Linux Foundation
- Jan-Simon Moeller - Linux Foundation

- Scott Murray - Konsulko
- Mikhail Golubev - Open Synergy
- Mark Silberberger - Carmeq
- Alex Bennée - Linaro
- Victor Duan - Linaro
- Tadao Tanikawa - Panasonic
- Christoph Mutz - Western Digital
- Joel Catala - Tuxera

Agenda:

- Topic 1: Virtualization Webinar
  Webinar: Device Virtualization Architecture, Panasonic

  When:
  Thursday, 12 November 2020
  10:00pm to 11:00pm
  (UTC+00:00) UTC

  Where:
  Registration Required - See link below

  Organizer: Emily Olin eolin@linuxfoundation.org

  Description:

  AGL Community:

  We are very excited to kick-off a new webinar series that will feature presentations from AGL members on open source technologies, trends, product/project updates, tutorials, and more.

  Please register to join us for our first webinar on November 12th at 2:00 pm PT:

  Device Virtualization Architecture in Automotive

  Mizuyama Masashige, Automotive CTO, Panasonic

  Thursday, November 12 at 2:00 PM Pacific

  (Friday, November 13 at 7:00 am Japan)

  Registration link

- Topic 2: ALS Presentation & AGL KK VirtIO Porting Progress Checking
  - Linaro: Jellyfish
   a) KVM works fine. working fine on the real board
   b) Xen Dom0 works fine. has some trouble with DomU (on QEMU is okay, but on hardware still some ongoing issues)?
    Xen virtio implementation only supported virtio blk device

  - OpenSynergy:

  Mikhail Golubev please upload the slides you presented here.
  on-schedule for the KK virtio porting

-
  ? Unknown Attachment

  Suggestion: Upload the demo video of EG PoC after ALS demo onto the AGL official Youtube channel
  Pending Mikhail Golubev VICTOR DUAN to check internally if this is okay
  (https://www.youtube.com/channel/UC1axavgir413w00rwBHPAtQ)

Nov 25, 2020

Attendees:

Agenda:

- Topic 1: VirtIO KK Porting Progress Mikhail Golubev
  - AGL KK progress is fine.
  - only virtio-input multi-touch patch is still not available because not upstreamed in the Linux kernel main line (waiting for the LKML to accept)
  - Yocto machine: merged in the AGL and additionally
  - Question: demo image (set-up)
    hypervisor distribution: Mikhail Golubevcheck internally
    QEMU can also be also considered.
    VICTOR DUAN tell us where we can find the implementation of Linaro's ALS QEMU demo
    - ALS image is the qemuarm64 JJ image from the website

- - - QEMU is lightly patched: https://patchew.org/QEMU/20201105175153.30489-1-alex.bennee@linaro.org/
  - - Question: Passthrough for GPU-3d?
    - - yes, for ALS
    - - for KK porting and reference implementation. VirtIO-gpu3d will be used insead
- - Topic 2: ALS Presentation from Demo Jerry, Jiancong Zhao
  - - General arrangement for ALS Jerry, Jiancong Zhao
    - - Jerry, Jiancong Zhao will ask for the registration code for
  - - ALS Demo sharing with Q&A - Linaro VICTOR DUAN Alex
    - - backend for real hardware: put it into the Dom0
    - - Dom0 can be directly
  - - ALS Demo sharing with Q&A - OpenSynergy Mikhail Golubev

Dec 9, 2020

Attendees:

Agenda:

- - Virtual F2F Session in SAT

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  - - ALS 2020 video:
    - - Linaro:
    - - OpenSynergy: