

# Hypervisor Project F2F meeting 20190924-25

Date: September 24-25, 2019

Location: Open Synergy, **Rotherstr 20, 10245** Berlin, Germany. S+U station "Warschauer Straße"

## Participants:

- Kai Lampka ✓
- Gunnar Andersson ✓
- Matti Möll ✓
- Dmitry Morozov ✓
- Adam Lackorzynski ✓
- Artem - TBD ⚠
- Bernhard / colleagues ?

## Logistics

- Adam is driving (or train) Tuesday morning, will try to make the time approximately

**Hotel proposals** (feel free to add your booking or proposal for syncing up)

- **ibis Styles Berlin City Ost** - [Gunnar Andersson](#)

## Backlog topics

- Reschedule weekly phone conference meeting time

## Resources

- Virtual Platform [Introduction and Table](#), [Draft spec text](#)

| Day 1 - 24 September   |            | All durations are TBC |          |                                       |         |
|--|------------|-----------------------|----------|---------------------------------------|---------|
| Agenda item  | Start time | Duration              | End time | Owner(s)                              | Comment |
| Welcome & Logistics <b>DONE</b>                                      | 9:00       | 15mn                  | 9:15     | Matti                                 |         |
| Agenda review <b>DONE</b>  | 9:15       | 15mn                  | 9:30     | Gunnar                                |         |
| <b>Automotive Virtual Platform Specification</b>                     |            |                       |          |                                       |         |
| <b>1. Introduction</b> <b>DONE</b>                                   | 9:30       | 10mn                  | 9:40     | Gunnar                                |         |
| <b>2. Architecture</b>   | 9:40       | 30mn                  | 10:10    | Gunnar                                |         |
| 3. General requirements <a href="#">Partially done</a>               |            | TBD                   |          |                                       |         |
| <b>2.5 Booting Guests</b> <b>DONE</b>                                | 10:10      | 30mn                  | 10:40    | Matti<br>with support from ARM? EBBR. |         |
| <b>3. Common Virtual Device categories</b>                           |            |                       |          |                                       |         |
| <b>3.1 Storage (Block Device)</b> <b>DONE</b>                        | 10:40      | 30mn                  | 11:10    | TBD Kai, or OpenSynergy               |         |
| <b>3.1.x Meeting automotive persistence requirements</b> <b>DONE</b> | 11:10      | 30mn                  | 11:40    | TBD                                   |         |
| <b>3.2 Network Device</b> <b>DONE</b>                                |            | (more...)             |          | <i>OpenSynergy?</i>                   |         |
| <b>Standard networks</b> <b>DONE</b>                                 | 11:40      | 30mn                  | 12:10    | ...                                   |         |
| <b>Automotive networks</b> <b>TODO!</b>                              | 12:10      | 30mn                  | 12:40    | TBD                                   |         |

|   |            |                      |          |  |         |
|---|------------|----------------------|----------|--|---------|
| Time-sensitive Networking standards <b>TODO!</b>  | 12:40      | 20mn                 | 13:00    | Matti  |         |
| Lunch <b>DONE</b>   | 13:00      | 1:00                 | 14:00    | Le Petit Royal   |         |
| <b>3.3 GPU Device</b>   |            |                      |          |  |         |
| 3.3.1 GPU Device in 2D Mode <b>DONE</b>   | 14:00      | 1h (less?)<br>20 min | 15:00    | Dmitry   |         |
| 3.3.2 GPU Device in 3D Mode <b>DONE</b>   | 15:00      | 1h (less?)<br>20 min | 16:00    | Dmitry   |         |
| <b>3.4 IOMMU Device TODO</b>  | 16:00      | 45mn                 | 16:45    | Dmitry   |         |
| <b>3.5 USB Device</b> exchange for cryptography <b>DONE</b>   | 16:45      | 45mn                 | 17:30    | TBD  |         |
| End Day 1   | 17:30      |                      |          |  |         |
| Dinner - @ Ssam in Kreuzberg  | 19:00      |                      |          |  |         |
|   |            |                      |          |  |         |
| <b>Day 2 - 25 September</b>   |            |                      |          |  |         |
| Agenda item   | Start time | Duration             | End time | Owner(s)   | Comment |
| Agenda review   | 9:00       | 10mn                 | 9:10     | Gunnar   |         |
| <b>4. Special Virtual Device categories</b>   |            |                      |          |  |         |
| change to afternoon instead   |            |                      |          |  |         |
| <b>4.x Automotive Sensors SCMI, can we reach consensus?</b>   | 9:10       | 45mn                 | 9:55     | ARM?   |         |
| <b>4.x Audio DONE</b>   | 9:55       | 45mn                 | 10:40    | Anton from OpenSynergy supporting ( <b>confirmed</b> ) |         |
| <b>4.x Media codec DONE - TODO</b> clarify spec text  | 10:40      | 45mn                 | 11:25    | Dmitry   |         |
| <b>4.x Cryptography DONE</b><br>Replay Protected Memory Blocks RPMB?<br>+ Intel proposal?<br>Shift to Tuesday <b>DONE</b>                                   | 11:25      | 20mn<br>(longer)     | 11:45    | Matti finds a colleague or Artem ARM supporting.       |         |
| <b>4.x.x Random Number Generation DONE</b>  |            |                      |          |  |         |
| 5. Supplemental Virtual Device categories <b>DONE</b>   |            |                      |          |  |         |
| <b>5.x Text Console DONE</b><br>+ add on discussion of logging in general (standards)<br>and also need for earlier mechanism than text console (early boot) | 11:45      | 30mn (less?)         | 12:15    | Gunnar   |         |
| <b>6.x Logging</b><br><b>MORE TODO</b>  |            |                      |          |  |         |
| <b>5.1 Host-to-vm filesystem sharing DONE</b><br>+ Note some new ideas virtio-fs added, etc.  | 12:15      | 30mn (less?)         | 12:45    | Gunnar   |         |
| Lunch   | 12:45      | 1h                   | 13:45    |  |         |
|   |            |                      |          |  |         |

|   |       |       |       |                     |                 |
|---|-------|-------|-------|---------------------|-----------------|
| <b>Next Generation Multi-OS System Design Whitepaper</b>  |       |       |       |                     |                 |
| Shift to morning instead <b>DONE</b>  |       |       |       |                     |                 |
| section 1: introduction 09.30 ? <b>DONE</b>   | 13:45 | 15mn  | 14:00 | Kai                 |                 |
| section 2: What does the HW need to fulfill to support unmodified execution of complete SW stacks,<br>what are the problems ? what is in the pipe ?     | 14:00 | 30mn  | 14:30 | Bernhard            |                 |
| section 3: isolation & partitioning : high levels definition ("academic view", which will have to cross-checked with reality later), isolation & timing | 14:30 | 45:00 | 15:15 | Bernhard, Adam, Kai |                 |
| section 4: Inter-core communication   | 15:15 | 30mn  | 15:45 | Dmitry, Matti       |                 |
| section 5: summary  | 15:45 | 15mn  | 16:00 | Kai, Gunnar         |                 |
|   |       |       |       |                     |                 |
| <b>Backlog &amp; Sprint Review</b>  | TBD   | 45mn  |       | Gunnar              | to be scheduled |
| <b>Meeting Wrapup</b>   | 16:30 | 30mn  | 16:30 |                     |                 |
| End Day 2   | 16:30 |       |       |                     |                 |