

FuSa SIG July 30th, 2019

Agenda items are added black.

Minutes are added in blue.

Closed ACTIONS in green.

Open ACTIONS in red.

A) Link to recorded sessions

<https://citrix.sharefile.com/d-s365852d256c459ab> (Aug 13th)

B) Attendees (right now based on past attendees - delete/add as appropriate)

- ~~Antonio Priore~~
- **Julien Grall**
- ~~Robin Randhawa~~
- ~~George Dunlap~~
- **Lars Kurth**
- ~~Alex Agizim~~, **Artem Mygaiev**
- **Kate Stewart**
- ~~Hisao Munakata~~
- **Francesco Brancati**
- **Stefano Stabellini**
- ~~Piotr Serwa~~
- ~~Robert Heinen~~
- ~~David Ward~~
- ~~Claudio Gregorio~~
- ~~Christopher Zimmer~~
- ~~Vasco Fachin~~

Above is a list of past regular attendees. UPDATE

C) Actions not yet resolved

High: Francesco Brancati to review and propose modifications to charter entry.

Excerpt from SIG charter for Francesco's convenience - note that Lars wrote this section, but is not attached to it: Define and implement guidelines and examples related to the verification of requirements, architecture, design and APIs as required for safety certification. Develop a strategy to produce missing documentation and work with the Community Interactions and Processes stream to ensure documentation stays up-to-date and is generated where needed.

Francesco looked at it and there are no changes at this stage
This means I will close the action

High: Lars to set up a smaller meeting with Francesco Brancati, Kate, Artem & Vasco to walk through the test infrastructure we have. Will talk to Ian Jackson and/or other stakeholders.

Initial chat with Ian and Andrew. Will follow up with more detail.
Agreed.

Ian requested a set of questions, to make the session more productive **before** the meeting.

There have also been changes to how we approach CI, which will create new opportunities

Open questions on how much testing needs to be done on real Hardware vs. e.g. in a simulated environment via QEMU (e.g. Zephyr is mostly doing simulation, while AGL uses new LAVA versions)

Francesco reviewed the material

Note: Lars cannot set up a call for the next two weeks

Medium: Julien to talk to Lava owner on state and usability

Julien: I spoke with one of the Lava owner last Friday. It looks like they have done some works to use QEMU and KVM in Lava 2 a couple of years ago. We could possibly re-use what has been done for Xen. I haven't had yet the chance to speak with Wookey who did the work.

Medium: Lars to put together a proposal on coding standards and checking tools as a test-case for MISRA

Lars: Have not had time to do this yet and wont be able to do so in the next 2 weeks

D) Proposed Agenda Items

D0: Update from Francesco

Francesco: ResilTech can try and provide some analysis regarding MIRSA C rules.
Using "understand" tool and "LDAP" tool

Lars: this would be appreciated, but may need some help from Stefano and or Julien to set up
Kate: Also mentions SciTools

ACTION: Francesco to send Kate links or
edit https://docs.google.com/document/d/1OPRFHtyX8ASU831Db_YTOB_LYOBURG-3VPv6vjy8ijk/edit#

Francesco: is going to work on some preliminary tailoring of ISO for testing
This is important for bootstrapping of testing related activities

ACTION: Francesco to collate information from relevant ISO documents. Then we can have a follow-up

Had a discussion on whether this needs to wait for the test meeting. Answer: no

D1: Update from George (not on the call)

George started working with TLA+ / PlusCal, and ask what they think, and if they have any other recommendations?

- Software modeling tool that allows you to check certain properties; in particular, look for race conditions
- Are there any alternative good tools: The race-condition thing seems exactly what I want to help with; but the language is so wonky, it's hard to believe there's not a better option out there

Julien: knows people who have been using it (Some part of Linux code on Arm64 has been proven using TLA+)

Artem is also interested (Andrii has been using some OSS tools around RT patches) - see <https://www.litmus-rt.org/>

ACTION (placeholder): Lars to connect people - closed as covered by <https://lists.xenproject.org/archives/html/fusa-sig/2019-08/threads.html#00005>

Kate: Highlights **Open Source for System Critical System Summits**

Submit talks up to Sept 7

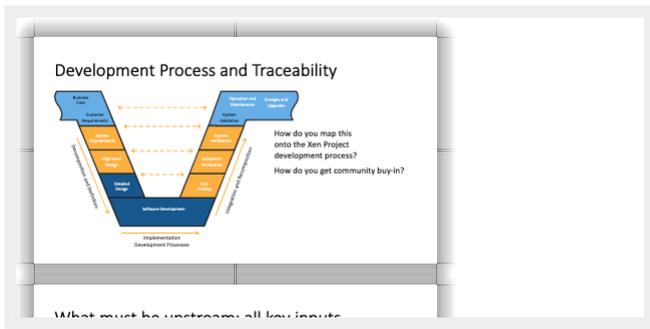
See <https://lists.xenproject.org/archives/html/fusa-sig/2019-08/threads.html#00004>

D2: Update from Stefano

Updates

- XILINX will spend time and resources on documentation project (verified)
- May be able to pull in more people on external IFs - but too early

D3: Doorstop walkthrough (Lars)



Stefano: will look at the tool in more detail. Wait for Lars

D4: Prototype for linking commits to mailing list conversations (Artem)

Hand crafted tools for commit to e-mail conversation tracability

Kate: there are a couple of research projects going on in this area

- <https://cregit.linuxsources.org/> - tracability from the blame level to variable leve
- Other researchers are hooking this up to LORE

ACTION: Kate will send links

E) References

1. See WIP docs
at https://docs.google.com/document/d/1OPRFHtyX8ASU831Db_YTOB_LYOBURC-3VPv6vjy8ijk/edit#

F) AOB

1. None