



ELISA
Enabling **Linux** in
Safety Applications

WORKSHOP

ELISA Workshop Munich, Germany

November 18-20, 2025
Co-hosted with Red Hat



Research questions and publication directions of Aerospace WG

Introduction

Talk given by:

- Martin Halle, Hamburg University of Technology, Germany, Aero-WG Co-Chair
- In cooperation with Matthew Weber, Boeing and Aero-WG Chair.

Topic about findings in Aero-WG that could lead to insights through White-Papers.

→ Seeking for **serious experts and contributors** across ELISA to support!

- See: <https://github.com/elisa-tech/wg-aerospace>

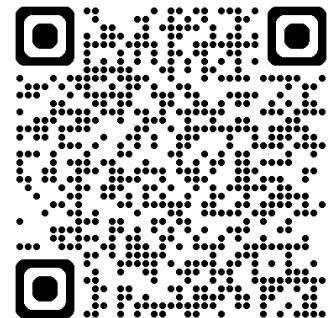
Paper Idea #1: Survey paper on Linux for Aerospace

Content:

- Literature review, *limited to Aerospace (Civil/Military)* and...
- ...its specific needs.
- Usually more “restricted nature”.
- Survey papers tends to have *a lot of literature references* usually.

Vote on:

<https://github.com/elisa-tech/wg-aerospace/discussions/94>



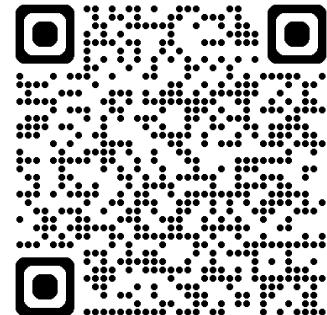
Paper Idea #2: Survey paper on Linux in Space

Content:

- Literature review, *limited to Space (Manned/Unmanned)* and...
- ...its specific needs, esp. defined through missions.
- More “Open Source nature”
- Survey papers tends to have *a lot of literature references* usually.

Vote on:

<https://github.com/elisa-tech/wg-aerospace/discussions/100>



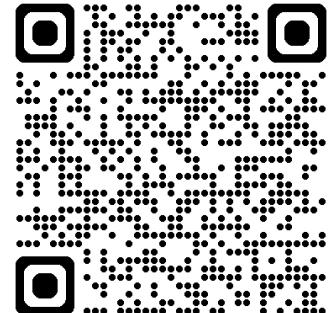
Paper Idea #3: Comparison between Space and Aerospace

Content:

- Follow-up of Idea #1 and Idea #2 towards:
- Needs, regulations, certification for the use of Linux and compare these!
- This may or may not include Idea #4 and/or Idea #5

Vote on:

<https://github.com/elisa-tech/wg-aerospace/discussions/101>



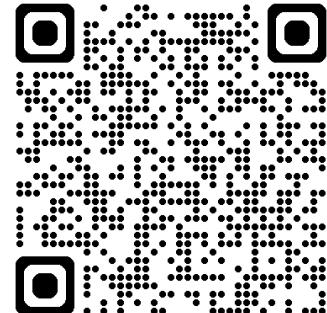
Paper Idea #4: Regulation needs and desires

Content:

- Regulation needs and desires and its effect on Linux in Space/Aerospace:
- Compare between the two domains and regulation standards,
- Explain the effect it would have on using Linux
- Answer: Can we achieve a common platform for both domains?

Vote on:

<https://github.com/elisa-tech/wg-aerospace/discussions/102>



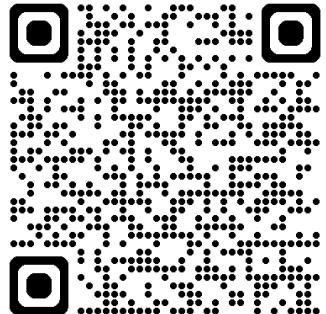
Paper Idea #5: Building a platform / use-case

Content:

- First steps in building a platform / use-case to show:
- The capabilities of Linux in Space/Aerospace towards:
- S/W and H/W concepts
- Tools and methods, development platform, V&V, add-on-tooling

Vote on:

<https://github.com/elisa-tech/wg-aerospace/discussions/103>



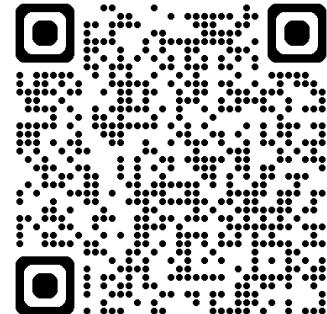
Paper Idea #6: Defining and setting up the use-case

Content are the experiences towards:

- Software-Stack (e.g. using Co-Pilot, OGMA and alike)
- Integration Stack (native, container-based (QEMU) ...)
- Development stack, CI/CD, automation
- Shared development / demo-environment for (international) collaboration

Vote on:

<https://github.com/elisa-tech/wg-aerospace/discussions/105>



Way forward

- Vote on the respective topics on ELISA Github if...
 - You seriously want to contribute
 - Are an expert in that topic
 - Can spend time to contribute continuously
- This will...
 - Priorise the topics and
 - Form expert teams
- Paper contribution meetings will take place at least once a month
- Distributed environment to write papers is available (Overleaf or Github)

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