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IDP - Interdisciplinary Project

Presentation - WoT-CI: Web of Things System Continuous Integration

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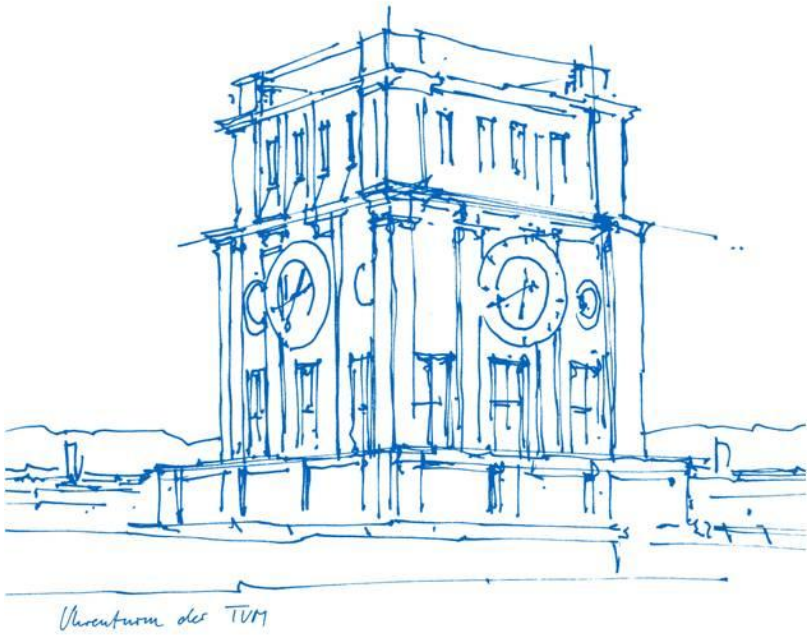
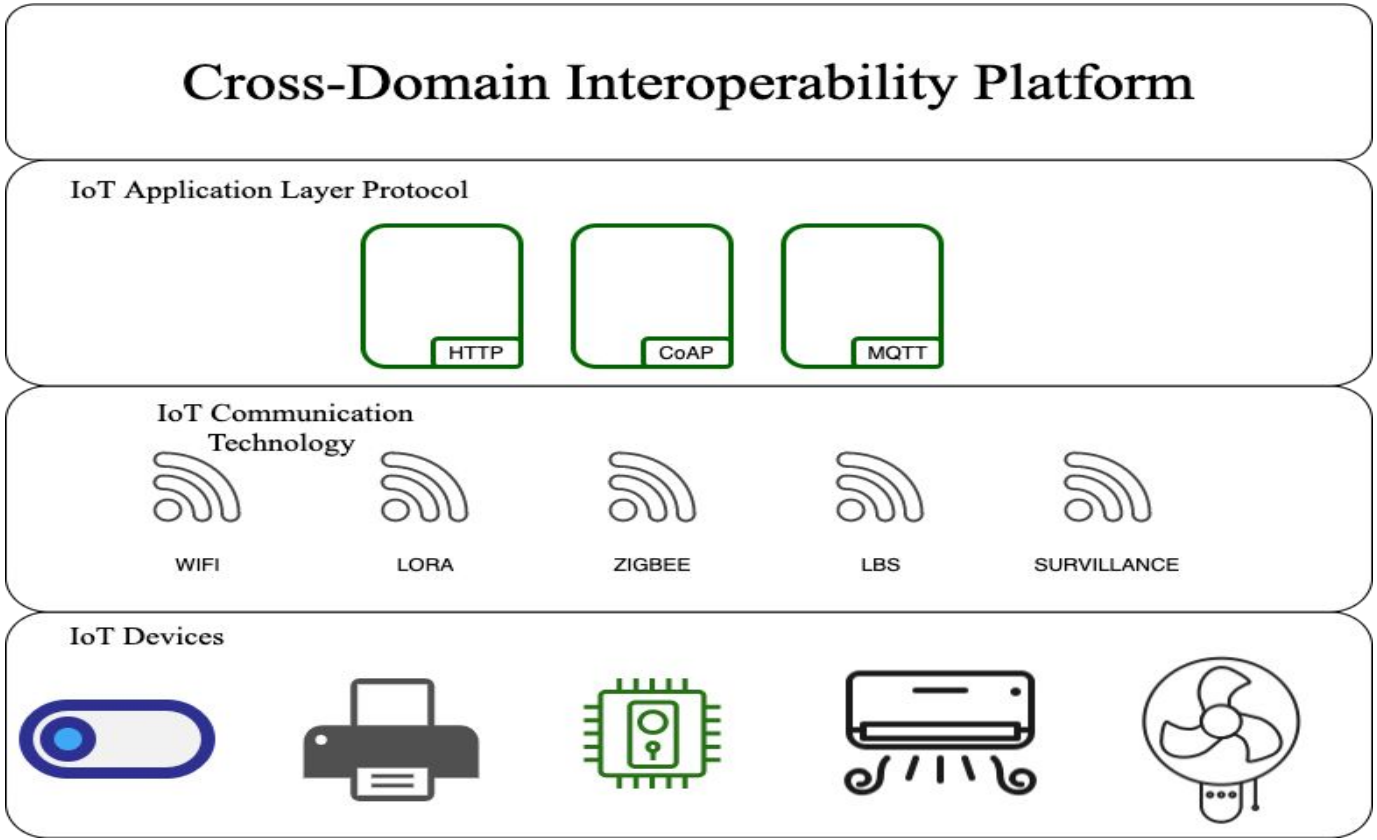


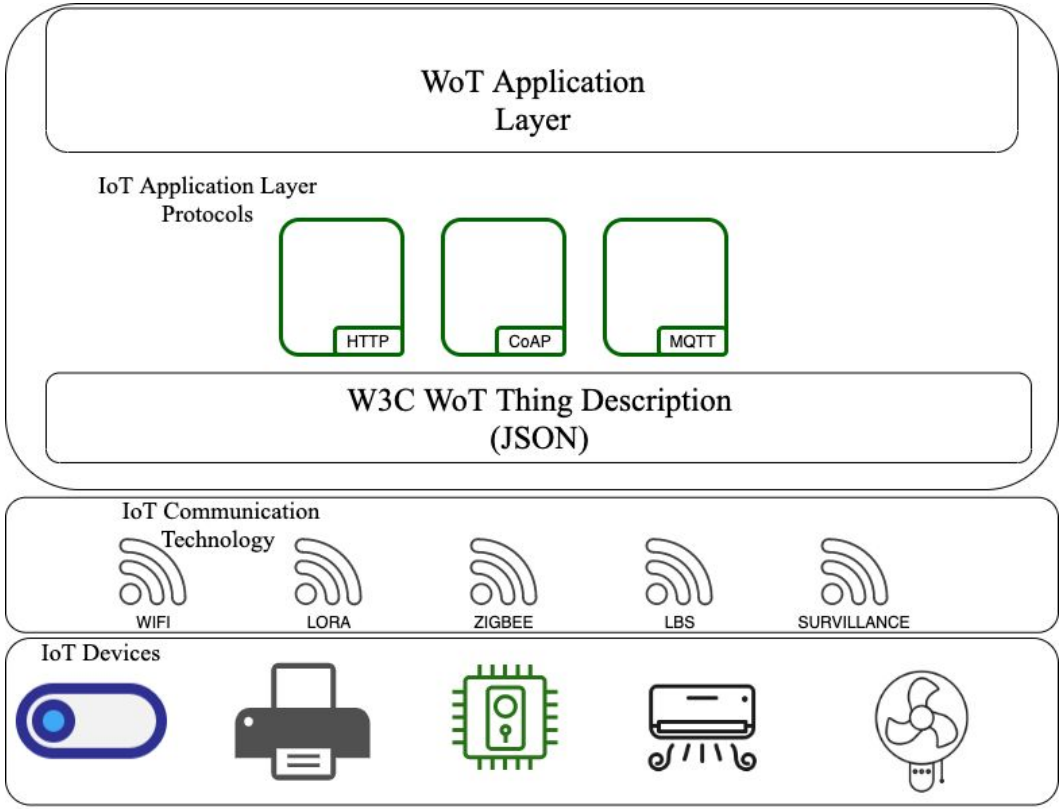
Agenda

- IoT Interoperability
- WoT Interoperability
- Continuous Integration (CI)
- CI ⇒ WoT-CI
- Architecture & Approach
- Conclusion
- Learnings
- History
- Thanks

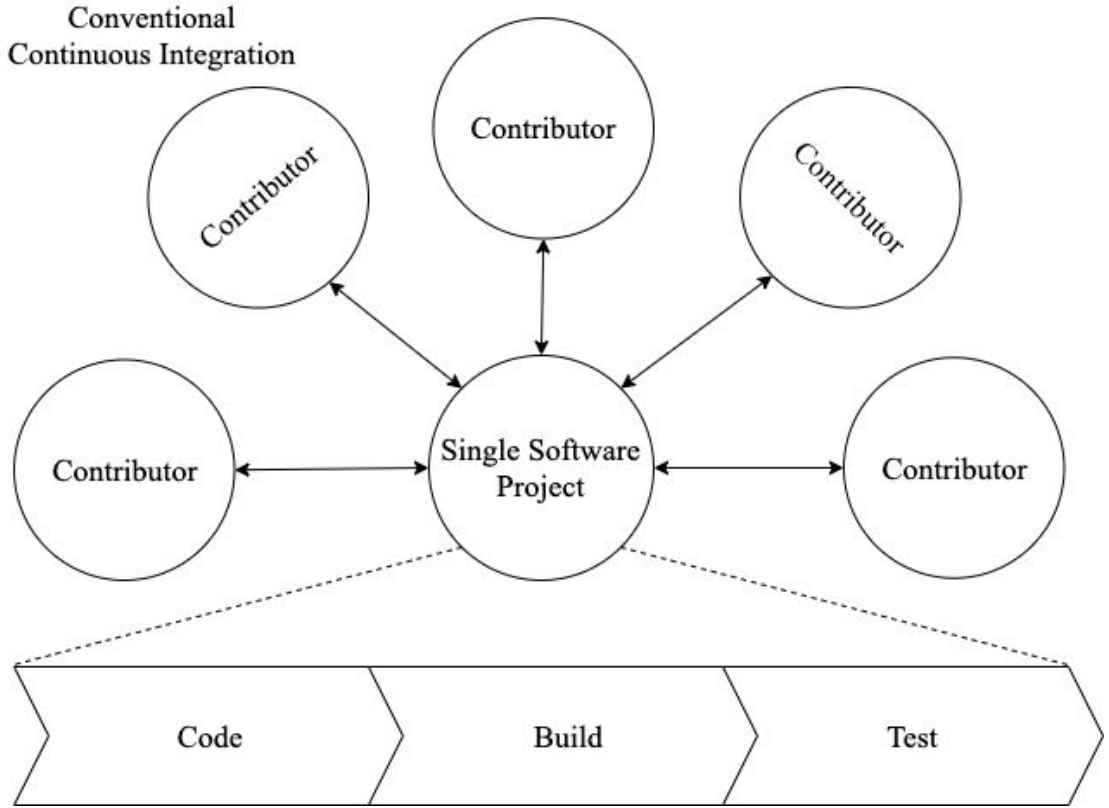
IoT Interoperability



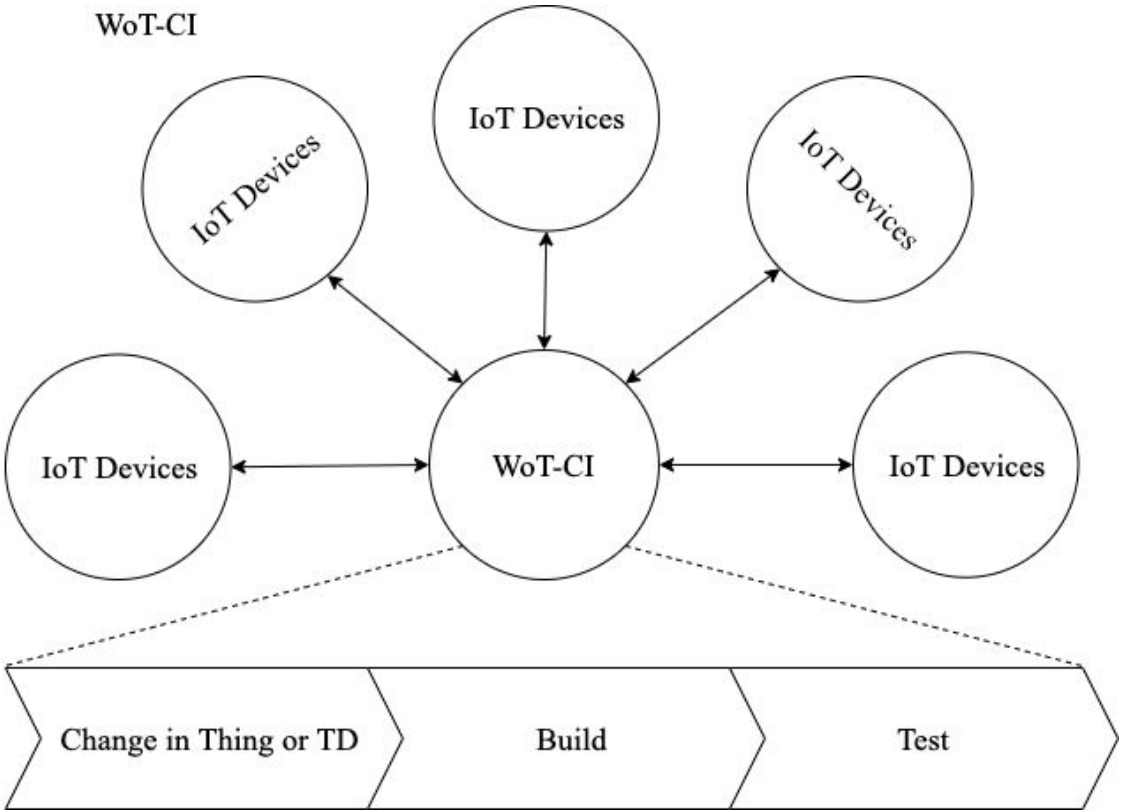
WoT Interoperability



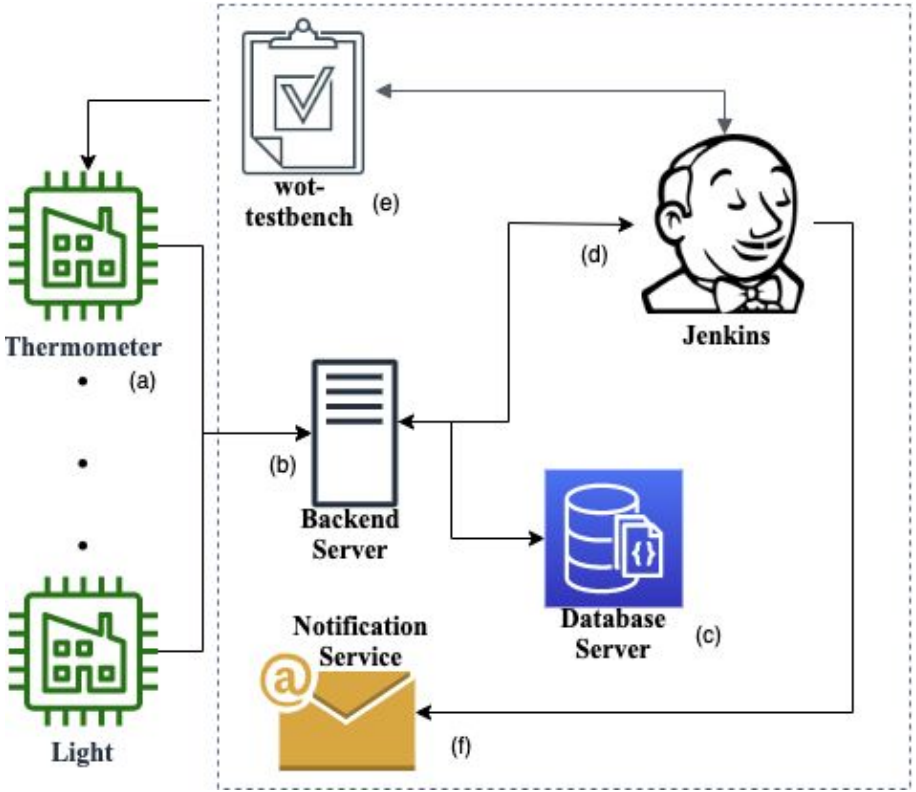
Continuous Integration(CI):



CI ⇒ WoT-CI


WoT-CI
IoT Devices
IoT Devices
IoT Devices
IoT Devices
WoT-CI
IoT Devices
Change in Thing or TD
Build
Test

Architecture & Approach



Conclusion

- The presented architecture is supposed to be used for blackbox system testing for W3C WoT ecosystem.
- WoT-CI - a method that uses the principles of Continuous Integration (CI) in the context of WoT, by considering the WoT devices as contributors and WoT system as a single software project.
- This system can reduce system integration effort while requiring
    - no manual input from the developer
    - Also makes sure that the WoT devices are functioning as per the requirement after any change to the hardware, software or network.

Questions

Learnings

- Learnt to contribute to an existing git project to which I don’t have a push access
- Node.js & JSON schema
- W3C Web of Things: Thing Description standard
- Postman API development environment
- Continuous Integration: Tools like Travis CI and Jenkins
- When & How to write a paper? (Yet to learn a lot, would be happy to do peer review)
- How to create images for paper?
- LaTeX
- Consider deployment constraint while developing a software

Thank you !!!