

Overview

Having a long-term supported kernel and middleware layer makes little sense unless you have a software update mechanism in place. The CIP Software Updates workgroup was born to fill that gap. The main goals of the workgroup are:

- To integrate existing open-source software update tools into CIP Core.
- To implement board-dependent settings for CIP reference hardware.
- To contribute bug reports and patches to the used open-source tools .
- To provide software update instructions and deploy scripts.

Roadmap

The first iteration of the workgroup's roadmap is about to finish:

1. Architecture milestone (finished date: 31st Jan 2019)
2. Comparison milestone (finished date: 28th Feb 2019)
3. Prototype milestone (finish date: 15th Jul 2019, OSSJ)
4. Contributions milestone (finish date: 30th Jul 2019)

During OSSJ 2019, the workgroup will decide what to do on the second iteration. There are several possibilities:

- Polish up the current integration
- Integrate other tools (e.g.: casync, rauc, meta-updater, mender..)
- Use a different architecture (e.g.: single partition with Ostree)
- Explore UEFI capsule updates

References

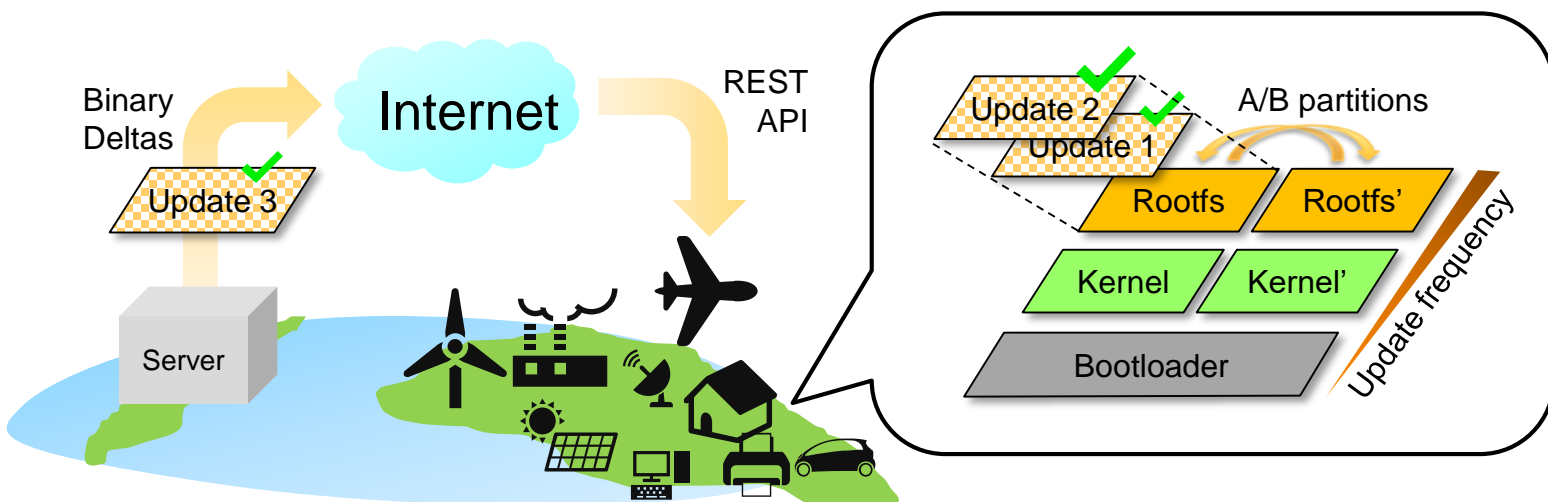
<https://wiki.linuxfoundation.org/civilinfrastructureplatform/cip-sw-updates>

https://wiki.linuxfoundation.org/civilinfrastructureplatform/cip_software_updates_architecture

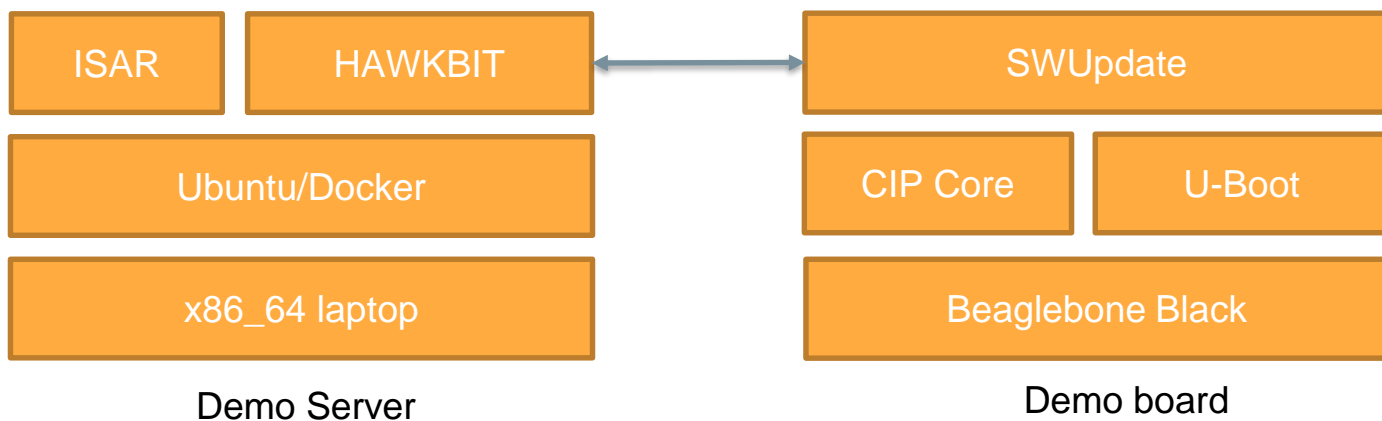
https://wiki.linuxfoundation.org/civilinfrastructureplatform/cip_comparison_report

<https://gitlab.com/cip-project/cip-core/isar-cip-core/tree/stormc/swupdate>

Architecture



Software stack



Functionality

- Binary deltas
- Signatures
- Encryption
- Version control

- A/B partitions
- Watchdog rollback
- Secure boot
- Factory reset

- GUI (hawkbit)
- Update status
- Kernel update
- U-boot update