SAV Open Playground
IETF Hackathon

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Hackathon Plan

- Implementation of Signed SAVNET-Peering Information (SiSPI) object for deploying inter-domain SAVNET. For detailed information about the SiSPI object, please refer to the draft **draft-chen-sidrops-sispi** available at https://datatracker.ietf.org/doc/draft-chen-sidrops-sispi/.
- Implementation of an operation module: The operation module is designed to facilitate emulations of SAV mechanisms through configurations.
- Implementation of a SAV information base (SIB): SIB consolidates SAV-related information from various SAV information sources, such as SAV-specific information, RIB, FIB, and RPKI ROA objects and ASPA objects.

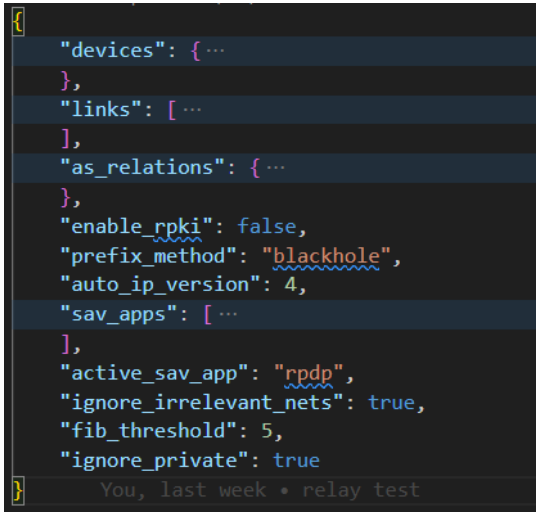
What got done

- Designing a unified configuration template and emulating SAV mechanisms through configurations

Before: Each component needs a configuration file

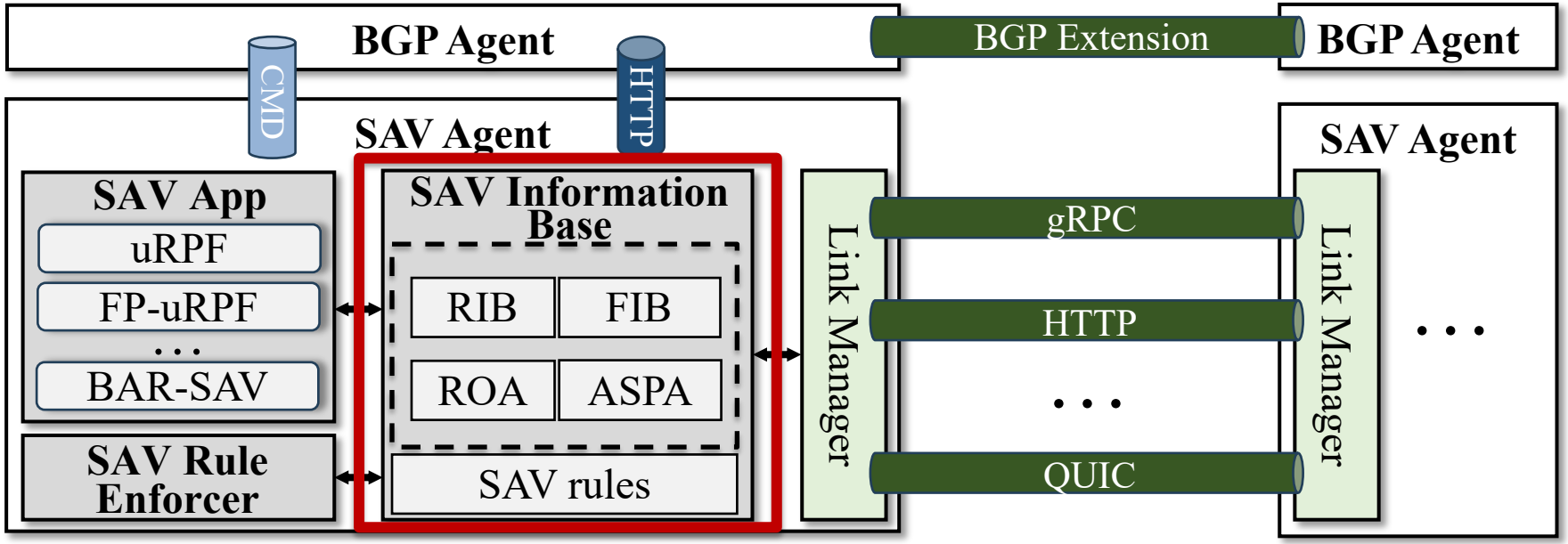
- SAV-Agent Config
- BIRD Config
- RPKI Config
- Crypt. Key Config

Current: one configuration for all the components



What got done

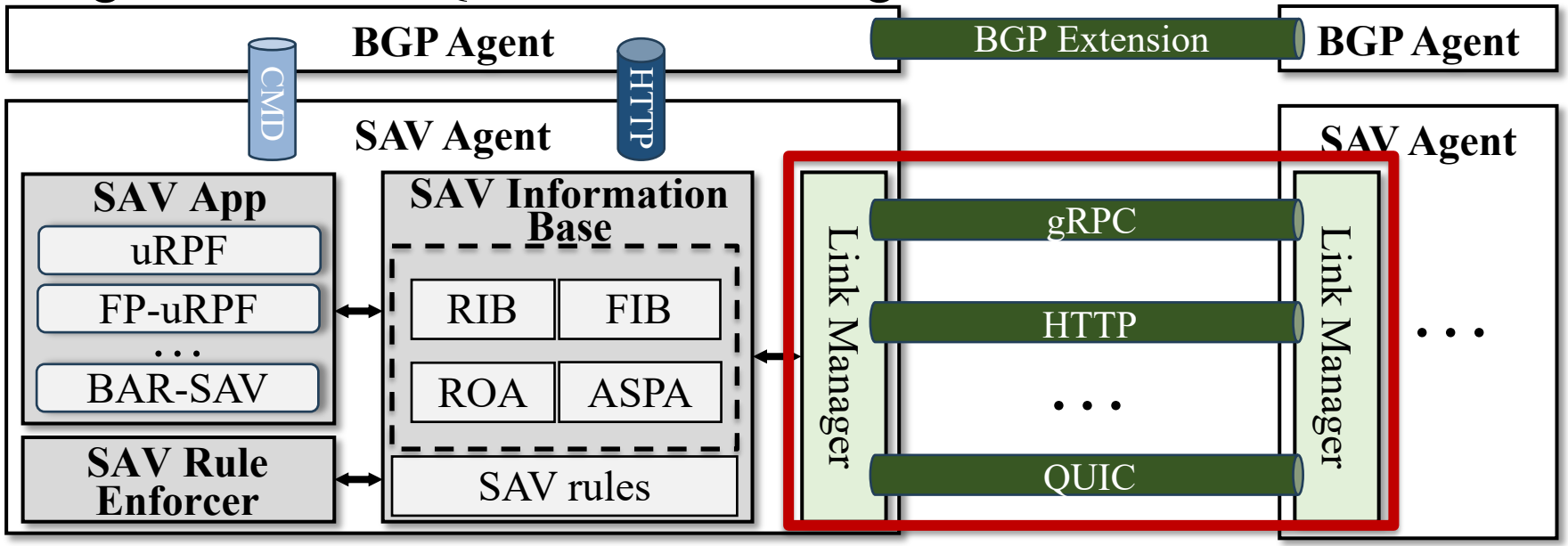
- Using SAV information base to store all the SAV-related information[1] from various sources



[1]draft-wu-savnet-inter-domain-architecture, https://datatracker.ietf.org/doc/draft-wu-savnet-inter-domain-architecture/

What got done

- Implementing different communication methods including gRPC, HTTP, QUIC in link manager



[1]draft-wu-savnet-inter-domain-architecture, https://datatracker.ietf.org/doc/draft-wu-savnet-inter-domain-architecture/

What we learned

- A unified configuration template improves the emulation efficiency of SAV mechanisms and helps simplify the emulation operations.
- With the optimized data structure of SIB and its interfaces for communicating and storing SAV-related information, the SAV app and web interface can retrieve all required SAV-related information with SAV agent, which improves the system emulation performance.
- SAV agent in SAVOP can make the implementation and emulation of new SAV mechanisms easy and has good scalability. Do not wait, we suggest you try it now!

Wrap Up

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Feel free to share any ideas at https://github.com/SAV-Open-Playground/sav-ops/discussions