Updates on the SATP Implementation Guide

draft-song-satp-implementation-guide-03

SATP Working Group
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Purpose of this draft

draft-song-satp-implementation-guide
First (00) published in March 2025; now at revision 03

1. Implementation guidance for SATP gateways and related components (informational, non-normative)
2. An independent open-source implementation
3. A practical guide for running real interoperability tests

RFC 2026 (The Internet Standards Process) 4.1.2 describes:

A specification from which **at least two independent and interoperable implementations** from different code bases have been developed, and for which sufficient successful operational experience has been obtained, may be elevated to the "Draft Standard" level.

SATP Core is now ready to implement

- Gateway message types and their contents in SATP Core are nearly complete.
- gRPC transport discussion has reached agreement. (previous presentation)
- Various consideration: message decoding, profiles, state, error paths, etc.
- An independent gateway implementation is feasible today.

Now

Core messages nearly compl ete; gRPC direction agreed

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Early or Middle 2027

Open-source release of the independent implementati on (e.g., Golang w/ JWS vs. Node.js w/ Protobuf in Hermes)

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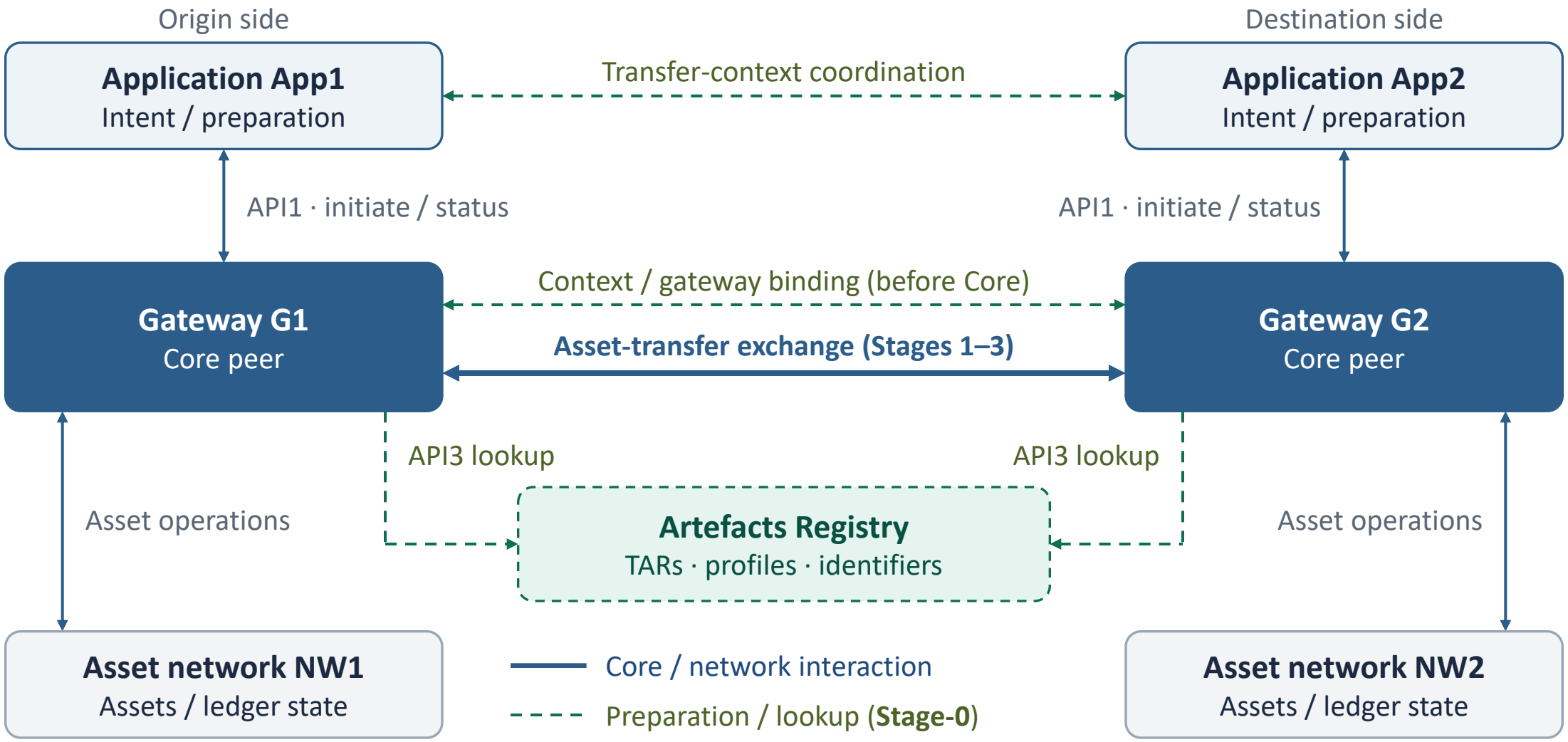
Then

Interoperability testing with H yperledger Cacti SATP Hermes

Major update on v03 draft

- Setup Stage and Artefacts Registry integration
- Interoperability profiles and test method
- Open-source implementation and test tooling
- Updated security and privacy considerations

What the guide covers (Figure 1)



System-wide view: Setup and Artefacts Registry

Setup stage (Stage-0)

Transfer context
Asset and gateway binding
Entry checks before Core

Artefacts Registry

API3 lookups
Record versions and snapshots
Signature checks

- Both need to be reflected in the end-to-end flow, not only the Core exchange.
- The guide provides them as implementation-level guidelines and test cases.

Future Plan

- Goal: a practical foundation for real interoperability of the SATP protocol
- From the next revision (04), we hope to receive feedback from the authors of each SATP draft
- IETF Hackathon can be considered for the SATP interoperability testing work between two independent implementations.

Thank You and Q&A