

SATP Implementation Guide

A brief thought and plan of the document



SATP WG Meeting

IETF 122

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Hyojin Song (Seoul National University)

Motivation

- Path to mass adoption
 - There are several experiments (proof of concept) using SATP over the world.
 - Standard protocols (SATP)  vs. Proprietary protocols (Others)
 - How to make them to consider the SATP adoption?
- Need to facilitate more open sources
 - Hyperledger Cacti is a preferred option as an open source now. (satp-hermes¹⁾)
 - Open source (Cacti)  vs. Closed source (integrated with specific ledgers only)
 - How to evolve the SATP ecosystem as desired in this group?

=> SATP Implementation Guide

1) <https://github.com/hyperledger-cacti/cacti/tree/main/packages/cactus-plugin-satp-hermes>

Current Status (<https://datatracker.ietf.org/group/satp/documents/>)

- The following I-Ds will be under IESG review and IETF-wide last call soon.
 - Secure Asset Transfer Protocol (SATP) Core
 - Secure Asset Transfer (SAT) Interoperability Architecture
 - Secure Asset Transfer (SAT) Use Cases
- The following I-Ds are under work-in-progress.
 - Secure Asset Transfer Protocol (SATP) Gateway Crash Recovery Mechanism
 - Views and View Addresses for Secure Asset Transfer
 - Protocol for Requesting and Sharing Views across Networks
 - SATP Setup Stage
 - Asset Schema Architecture for Asset Exchange
 - Asset Profiles for Asset Exchange

Since May 2022

Industries require the I-Ds for the actual deployment.

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- Target
 - Asset networks (ledgers) developers
 - Asset transfer service providers
 - Researcher and system (security) verifiers
- (Expected) Content
 - Integrated SATP workflows (up to use cases)
 - Major considerations (e.g. potential security risk)
 - Test scenario for the compliance evaluation
 - A link of the light-weight open source as baseline

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Secure Asset Transfer Protocol
Internet-Draft
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H. Song
Seoul National Univ.
Y.-G. Hong
Daejeon Univ.
T. Hardjono
MIT
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Secure Asset Transfer Protocol (SATP) Implementation Guide
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Abstract

This memo provides guidelines to developers of gateway systems, digital asset networks and client applications for the Secure Asset Transfer Protocol (SATP). Multiple gateways can represent the same digital asset network following the SATP standards, which necessitate basic implementation guidelines as outlined in this document. It also serves as an introduction to the SATP processing workflow for those new to the SATP standards.

(Note. the initial draft (00) is submitted for a brief review regarding the document's direction by SATP WG members during IETF 12 in Bangkok, Mar 2025)

About This Document

This note is to be removed before publishing as an RFC.

The latest revision of this draft can be found at <https://anahj.github.io/draft-song-satp-implementation-guide/draft-song-satp-implementation-guide.html>. Status information for this document may be found at <https://datatracker.ietf.org/doc/draft-song-satp-implementation-guide/>.

<https://datatracker.ietf.org/doc/draft-song-satp-implementation-guide>

Discussion

- Is there an open source supporting SATP other than Cacti?
- Is a new light-weight SATP open source useful in addition to satp-hermes (Cacti)?
- What would be major considerations for the light-weight SATP open source?
(e.g. decentralization, extensibility, and usability for connecting asset ledgers)
- How to consider the security and privacy challenges in this group? (out of scope?)
(I wonder if there is an RFC draft describing security or privacy considerations as a dedicated draft.)

Thank You and Q&A

Contact: Hyojin Song (fun@snu.ac.kr)