

draft-richardson-6tisch-dtsecuritysecure-join-00

Michael Richardson + authors TBD

Status



- Secure join design team rebooted May 2016.
- -00 ID posted this week. Outline created, expect to do motivation/problem statement as Introduction.
 - Kramdown for draft, at: <u>https://github.com/ietf-</u> roll/6tisch-secure-join
- Design team meets every two weeks, on Wednesdays at 1400UTC via JITSI.

Draft outline

Introduction

- Terminology
- Credentials
 - One-Touch Assumptions
 - Factory provided credentials (if any)
- Credentials to be introduced
- Network Assumptions
- Security above and below IP
 - Perfect Forward Secrecy
- Join network assumptions
 - Number and cost of round trips
- Size of packets, number of fragments
- Target end-state for join process
 - Diagram of Join Process
- Description of States in Join Process
- Protocol Overview
- New node announcement
 - use of EARO messages
 - Proxy to JCE
- JCE initiates to new node
- Use of ACE Token for Ownership

- Security Details (Security protocol? Security process?)
- Security options
- EDHOC and OSCOAP
- DTLS/CoAP
- ???-insert-yours
- Forward Secrecy
- Rekeying of networks
- Rekeying of nodes
- Per-link key
- Node decommissioning
 - Voluntary Revocation
 - Emergency Revocation
 - Expulsion of hostile node
 - Certificates and Authorizations
- Assymetric credentials
 - chain of certificates from vendor trust anchor to network operator
 - possession of public key (resurrecting duckling model)
 - Symmetric credentials
 - Use of ACE Token for Ownership

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