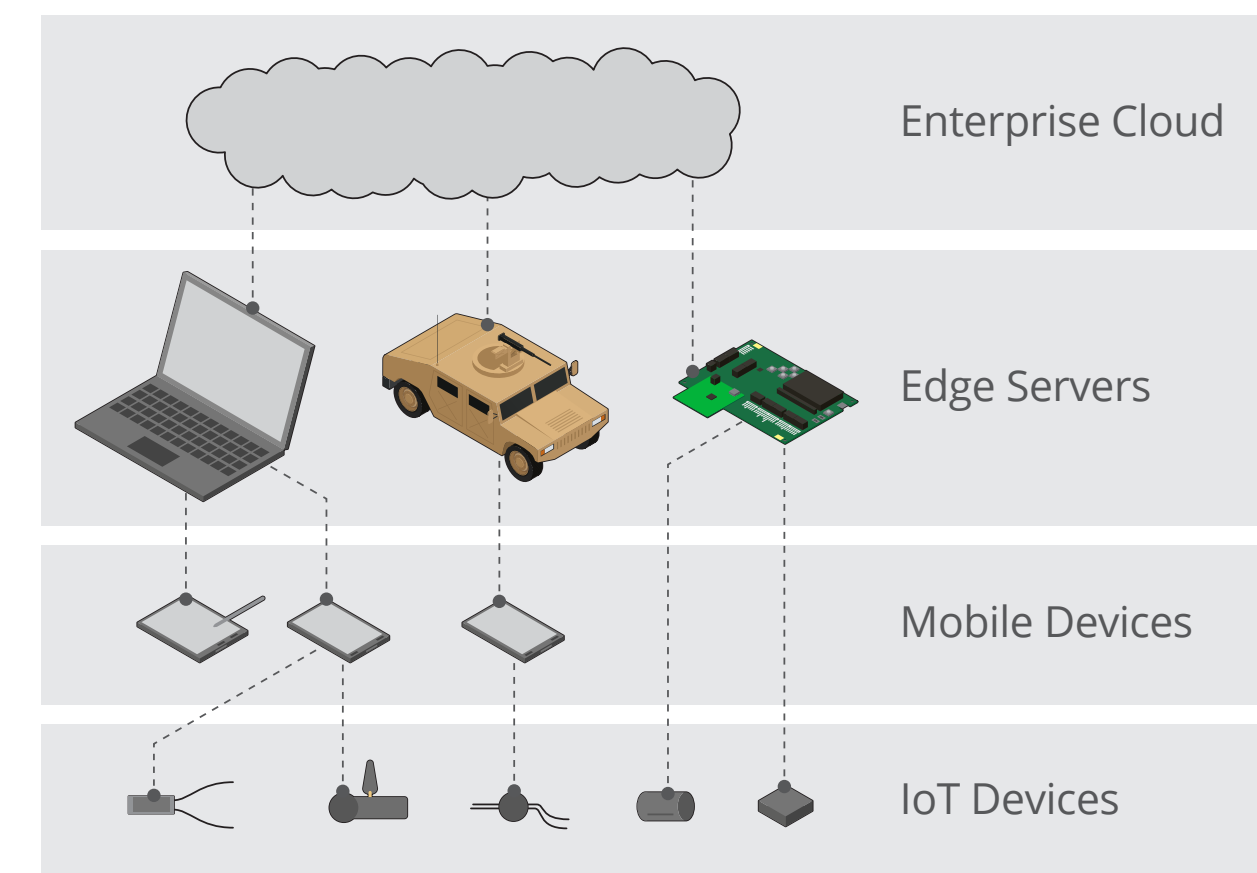


Two Perspectives on IoT Security

“IoT Security Standards” and “Software-Defined Networking for IoT Security”

FY17: Authentication and Authorization for IoT Devices in Edge Environments

Evaluation, adaptation, and implementation of an IETF proposal for authentication and authorization in constrained environments (ACE) to enable future integration of ACE-compliant IoT devices into DoD systems



Tactical Edge System

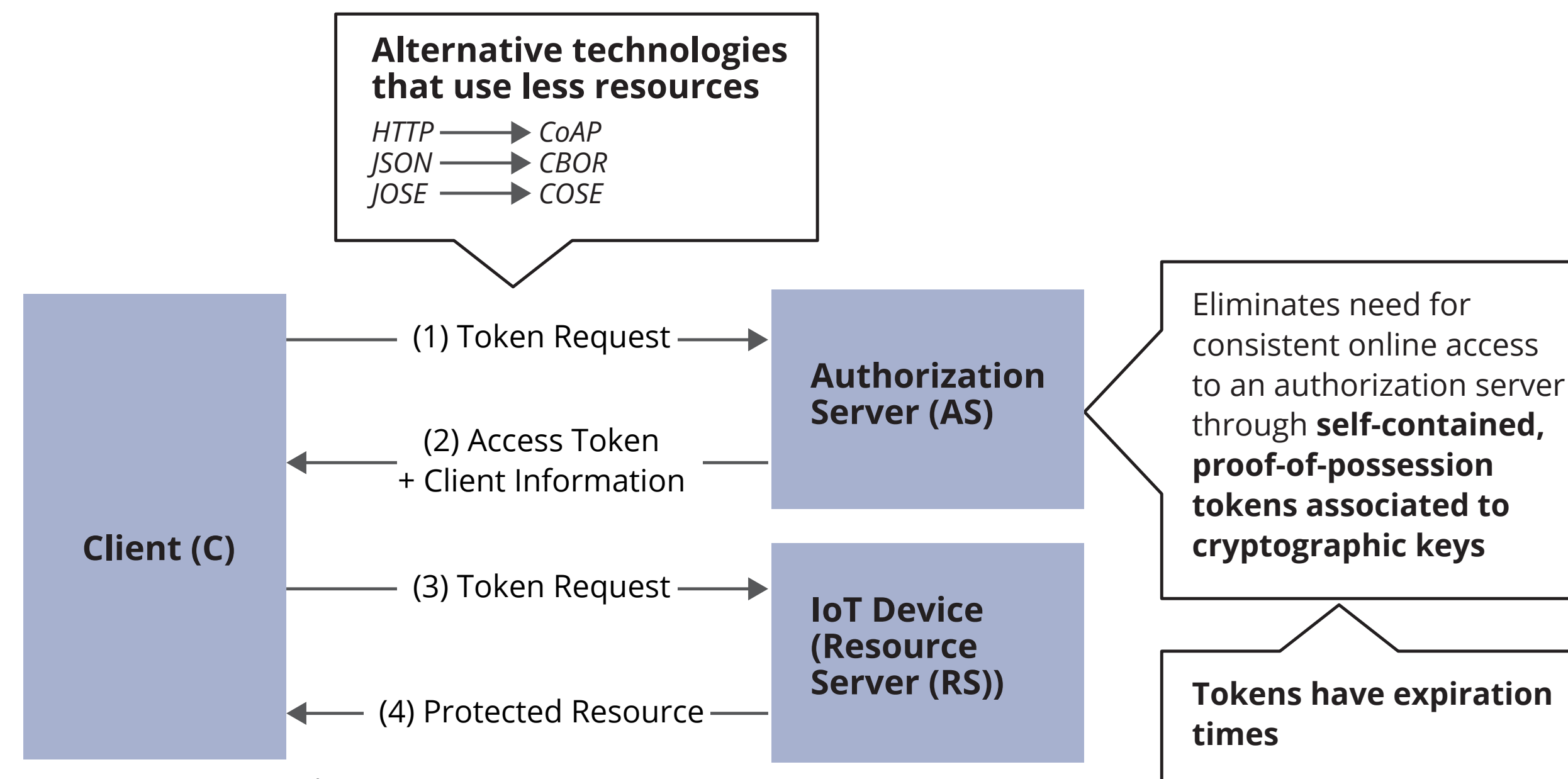
Goal:

Develop a solution for authorization and authentication of IoT devices that

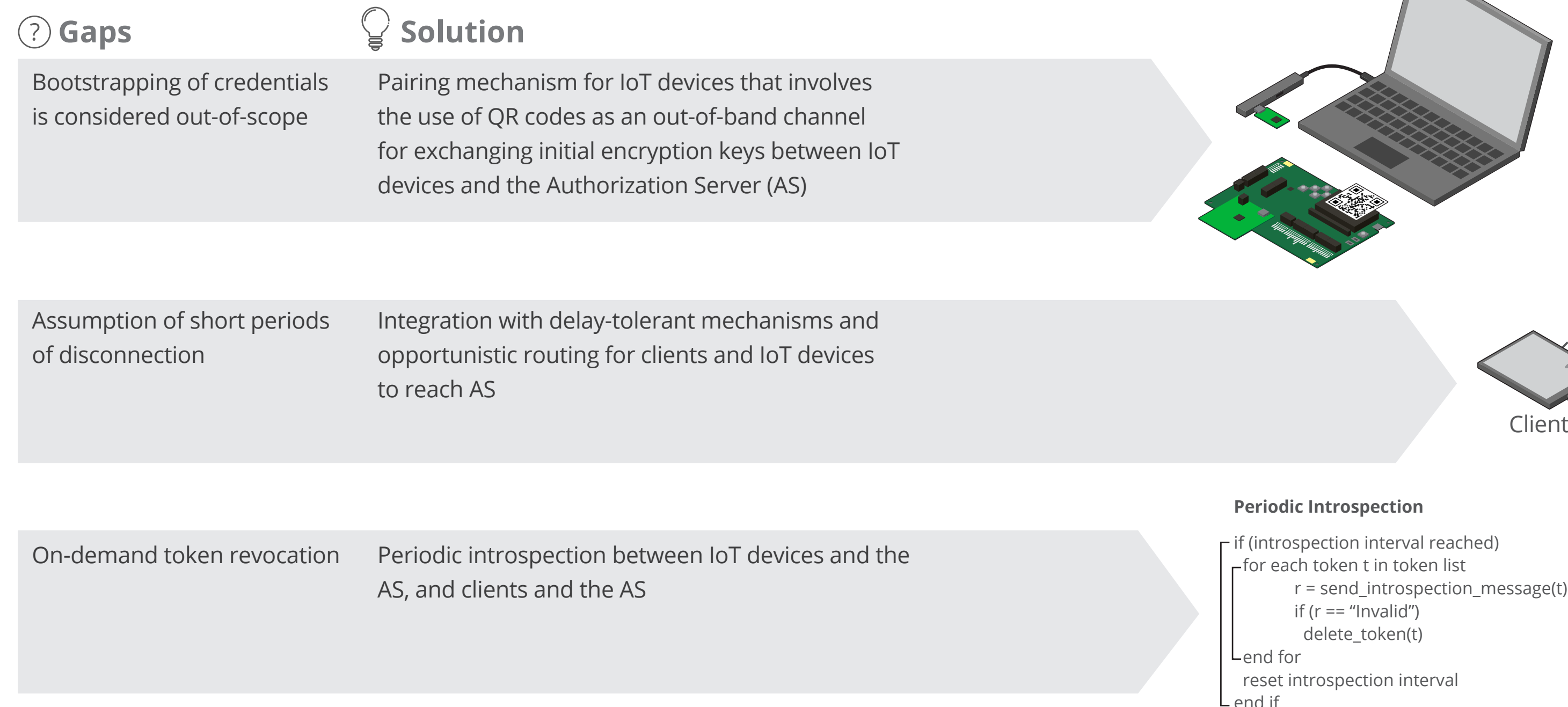
- addresses high-priority threats of tactical edge environments,
- operates in DIL environments, and
- considers resource constraints of IoT devices

ACE (Authentication and Authorization in Constrained Environments)

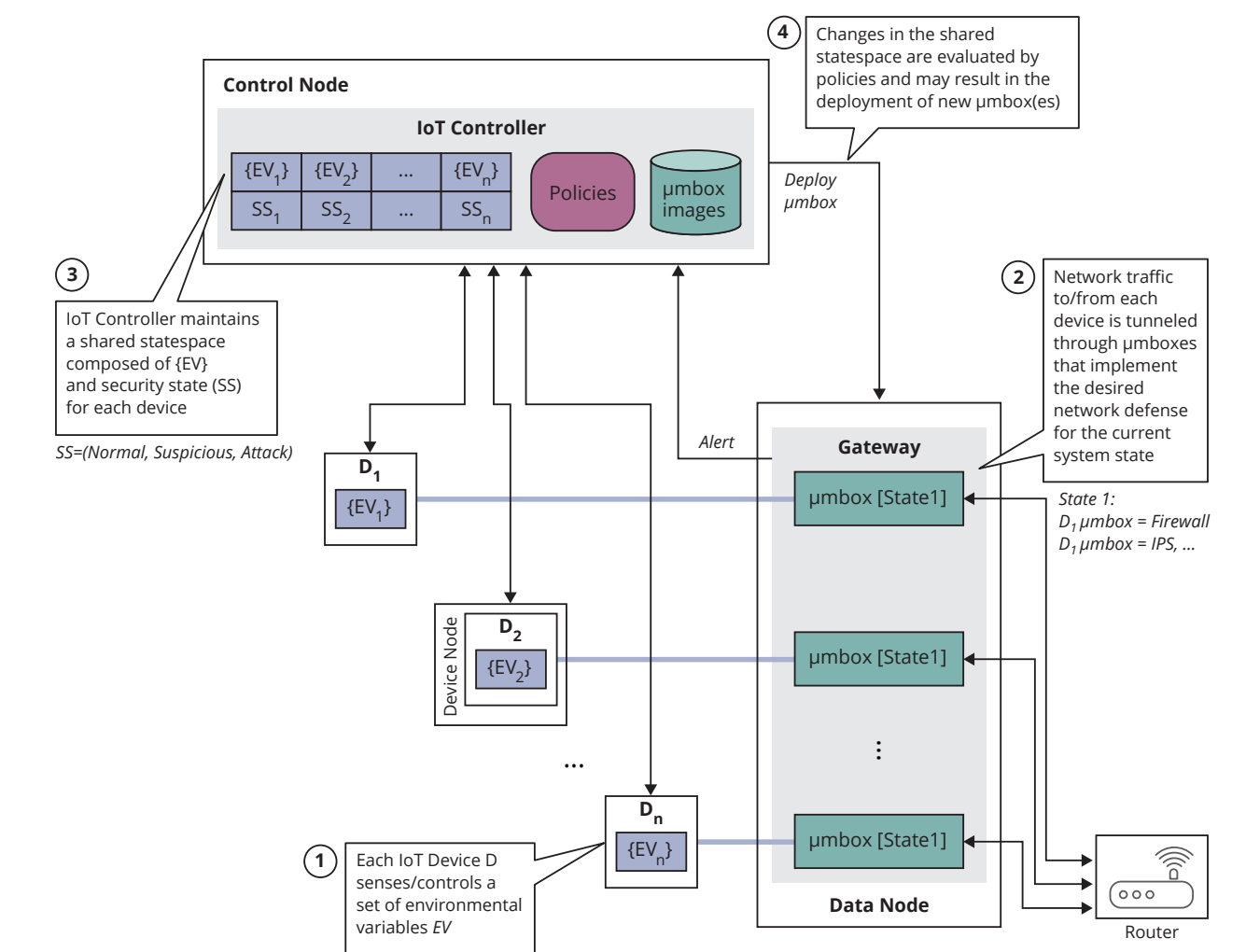
- IETF proposal in Working Group Status—next step is Proposed Standard
- Extends OAuth 2.0 to IoT devices
- Addresses some of the challenges of tactical environments



Threat modeling identified the following gaps in ACE.



FY18: High-Assurance Software-Defined IoT Security



Dynamic deployment of network defenses based on composite state analysis of all controlled IoT devices

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Two Perspectives on IoT Security