# draft-ietf-acme-integrations

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### TL;DR

 Describes how ACME RFC 8555 can be integrated with multiple existing client / device certificate enrolment mechanisms without requiring any changes to ACME

## Multiple Client / Device Integration Use Cases

#### 1. EST

• RFC 7030: Enrollment over Secure Transport

#### 2. BRSKI

 draft-ietf-anima-bootstrapping-keyinfra: Bootstrapping Remote Key Infrastructures

### 3. BRSKI Cloud Registrar

 draft-friel-anima-brski-cloud: Specifies BRSKI behaviour with default cloud registrar

### 4. TEAP (with Updates)

 RFC 7170 and draft-lear-eap-teap-brski: Tunnel Extensible Authentication Protocol

### What has changed since IETF 106

- TEAP and TEAP-BRSKI sections collapsed into single section "ACME Integration with TEAP" section
- Baseline TEAP (RFC 7170) is missing some important certificate enrolment capabilities that are introduced in draft-lear-eap-teap-brski
  - CSR Attributes TLV: Allows a server to tell a client what list of attributes to include in the CSR request, similar to EST (RFC 7030)
  - Retry-After TLV: Allows a server to indicate to a client that the CSR request has been accepted for processing but a response is not yet available, similar to EST /simpleenroll 202 response code

### Todo: Security Considerations

- No changes to referenced specification security considerations
  - EST (RFC 7030)
  - BRSKI (draft-ietf-anima-bootstrapping-keyinfra)
  - TEAP (RFC 7170)
- Security considerations still not reviewed and / or complete for
  - draft-lear-eap-teap-brski
  - draft-friel-anima-brski-cloud
- As this document is informational and does not change any of the referenced specifications, we expect the security considerations to be a summary of the referenced documents

# Next Steps

- Reviewers please
- Feedback please