

Certificate Format from STI-CR

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Certificate Format - concatenated PEM

- Turns out we haven't formally specified the specific format of the x5u pointed certificates, hosted by the STI-CR
- This might be sort of implied based on ACME specs but not explicit.
- We think the easiest, most conventional way of doing this is concatenated PEM certificates
- Conveniently, ACME has defined a MIME type and format for the certificate response when getting the newly created certificate.

Certificate Format - concatenated PEM

- From Section 9.1 of draft-ietf-acme-acme-13
 - File contains one or more certificates encoded with the PEM textual encoding, according to RFC 7468 [RFC7468]. In order to provide easy interoperability with TLS, the first certificate **MUST** be an end-entity certificate. Each following certificate **SHOULD** directly certify the one preceding it. Because certificate validation requires that trust anchors be distributed independently, a certificate that specifies a trust anchor **MAY** be omitted from the chain, provided that supported peers are known to possess any omitted certificates.

Certificate Format - concatenated PEM

- From draft-ietf-acme-acme-13

```
GET /acme/cert/asdf HTTP/1.1
Host: example.com
Accept: application/pkix-cert

HTTP/1.1 200 OK
Content-Type: application/pem-certificate-chain
Link: <https://example.com/acme/some-directory>;rel="index"

-----BEGIN CERTIFICATE-----
[End-entity certificate contents]
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
[Issuer certificate contents]
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
[Other certificate contents]
-----END CERTIFICATE-----
```

- Follow same format for STI-CR response

Plan

- If agreed, integrate new text in an errata to ATIS-1000080