

# ACME STAR

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# Document Status

**draft-ietf-acme-star already went through WGLC, but no request for publication yet**  
**Numerous recent changes, but mostly to synchronize with base ACME**

Also comments from Sean – thanks!

# Changes in -04

## **Base doc moved to POST-as-GET, this doc makes “GET” great again**

Details below

## **A few terminology changes**

Identity Owner to Identifier Owner

## **Clarification about certificate validity time**

Mandatory certificate predating to ensure client can always use fetched cert

## **Removed support for the revokeCert endpoint**

Server must return 403 Forbidden

# Using GET in ACME-STAR

**Server advertises support in the directory object  
Identifier Owner requests support with a new  
attribute in the Order object**

The Order object includes this attribute when successful

**Now, the Client can use a GET to fetch the  
certificate**

Virtually unchanged from the previous version

# Next Steps?

# ACME Delegation

**Doc was assigned to ACME by SecDispatch**

**ACME participants proposed to redo as an ACME profile**

**This profile now published as draft-sheffer-acme-star-delegation-00**

# Message Sequence

```
NDC                                IdO                                CA
Client                            Server Client                            Server

Order
Signature ----->
[ No identity validation ]
CSR
Signature ----->

                                Order'
                                Signature ----->
                                <----- Required
                                Authorizations

                                Responses
                                Signature ----->
                                <~~~~~Validation~~~~~>
                                CSR
                                Signature ----->
<~~~~~Await issuance~~~~~> <~~~~~Await issuance~~~~~>
                                <----- Certificate
```

# Some Protocol Details

**IdO has its own account management**

**The NDC-to-IdO protocol is somewhat restricted**

No authorizations, hence a simpler state machine

**Added CNAME identity management**

Next slide



# CNAME Management

**New *delegated* attribute to the *identifier* object of type DNS  
NDC indicates to IdO what name it will use locally for the  
delegated name**

To close the delegation loop by including automated DNS provisioning

```
"identifiers": [  
  {  
    "type": "dns",  
    "value": "abc.ndc.dno.example.",  
    "delegated": true,  
    "cname": "abc.ndc.example."  
  }  
]
```

# Open Issue: Restrict to STAR

**We can envision cases where long term (normal) certs are delegated**

Do we want to support them here?

# Next Steps

**We request adoption as a WG document**