

WGLC

July 29, 2022 Sanjay Mishra & Nir B. Sopher v1.2



# **CDNI Additional Footprint Type**

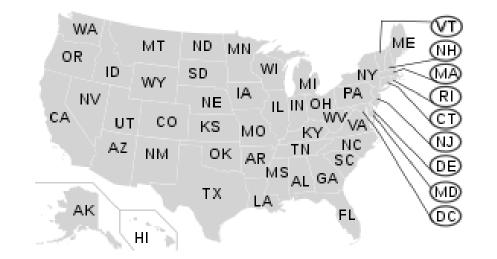
- Based on [ISO3166-1], RFC8006 (section 4.3.8) specified the "Country Code" footprint type
- This I-D adds [ISO3166-2], a per country set of subdivision codes



# New Footprint Type: ISO3166-2 Code

#### ISO3166-2 Subdivision code

- Name of a principal subdivision (e.g province or state)
- Format:
  - uses a two-letter code from ISO3166-1
  - Followed by a separator and up to three alphanumeric characters
    - e.g. us-ny



```
"footprint-type": "subdivisioncode",
"footprint-value": ["us-ny", "us-nj"]
```



## WGLC raised two issues

- 1. There is a standard for earth based coordinates [1] and an implementation[2]. This may give further granularity (local areas within a subdivision)
- To leverage Sec 6 of RFC 9241[3], new footprint type should be added to the ALTO Entity Domain Types registry



### Issue #1

- This I-D had a limited/specific purpose for a use case where an ISP-hosted caches (dCDN) wants the delegating entity, ie, an upstream uCDN to only delegate content for a give country + subdivision code
- No requirements yet to add granularity such as earth based coordinates. If in future, this becomes a requirement, a straightforward draft can be created.



# Issue #2 (two options)

- Add a new section/subsection in draft-ietf-cdniadditional-footprint-types to register the new footprint type "subdivisioncode" to the ALTO Entity Domain Types registry
- 2. Submit a new document to ALTO WG later to update the ALTO Entity Domain Types registry

