These are the steps from the cloud.gov Developer’s Point of view to create a new CDN using a cloud.gov External Domain Service. This example is for “mobilefire.airnow.gov”. Red items need to be updated for your new domain.

More info here:

<https://cloud.gov/docs/management/custom-domains/>

<https://cloud.gov/docs/services/external-domain-service/>

[here](https://usepa.sharepoint.com/:w:/r/sites/oei_Community/cloud/cloudgov/_layouts/15/Doc.aspx?sourcedoc=%7B8B10C9C9-B3E9-42B6-BC51-4764E563BA4C%7D&file=create-subdomain-external-domain-service.docx&action=default&mobileredirect=true&CID=095BCA09-8FF5-439F-9E52-1A153E5BCFBC&wdLOR=c09AE1C3C-AFC9-4BC3-8DD2-00EAAAA1AECB) (EPA VPN)

To see the current CDN services:

cf services

1. Send a request to DDI and others using the format [here](https://usepa.sharepoint.com/:w:/r/sites/oei_Community/cloud/cloudgov/_layouts/15/Doc.aspx?sourcedoc=%7B8B10C9C9-B3E9-42B6-BC51-4764E563BA4C%7D&file=create-subdomain-external-domain-service.docx&action=default&mobileredirect=true&CID=095BCA09-8FF5-439F-9E52-1A153E5BCFBC&wdLOR=c09AE1C3C-AFC9-4BC3-8DD2-00EAAAA1AECB) to request a CNAME record. This requires a “approved subdomain request” for \*.epa.gov” domains. **All three lines of CNAME records are required. The ending periods are critical and MUST be included.**
   1. [Gilfillian.Basil@epa.gov](mailto:Gilfillian.Basil@epa.gov) and Anderson.Jeffrey@epa.gov are the Helpers.

\_acme-challenge.mobilefire.airnow.gov should point to \_acme-challenge.mobilefire.airnow.gov.external-domains-production.cloud.gov.

\_acme-challenge.www.mobilefire.airnow.gov should point to \_acme-challenge.mobilefire.airnow.gov.external-domains-production.cloud.gov.

mobilefire.airnow.gov should point to mobilefire.airnow.gov.external-domains-production.cloud.gov.

1. Send the response to the EPA cloud.gov team.
   1. cloudgovadmins <cloudgovadmins@epa.gov>
   2. [Muhammad.Shavkat@epa.gov](mailto:Muhammad.Shavkat@epa.gov) and [Griffin.Connor@epa.gov](mailto:Griffin.Connor@epa.gov) are the Helpers.
2. An EPA cloud.gov administrator will create the domain in an organization. ONLY they have permissions to create domain names.

cf create-domain epa-airnow mobilefire.airnow.gov

*Now the cloud.gov Developer can take over…*

1. Provision a production CDN Service called “mobilefire-cdn-prod” in “airnow-prod” space on cloud.gov using the domain called mobilefire.airnow.gov

cf target -o epa-airnow -s airnow-prod

cf create-service external-domain domain-with-cdndocument-cdn-prod -c '{\"domains\": \"document.airnow.gov\"}’

*with escape characters for Windows PowerShell*

*Using the “new” external domain service*

*Wait for CDN service to provision … 1 to 2 hours.*

1. Verify the CDN service is ready. **Looking for “status: create succeeded”** Keep waiting if you get any of these statuses: “create in process”, “answering Let’s Encrypt challenges”, “Waiting for CloudFront distribution”,

cf service mobilefire-cdn-prod

1. Map the route mobilefire.airaow.gov to current production deployment of the app in either blue or green in cloud.gov. If your routes quota is exceeded, then you may need to ask for more or clean up old routes.

cf map-route mobilefire-[blue/green] [mobilefire.airnow.gov](http://www.airnow.gov)

1. Test the new domain with this tool:

https://dnssec-analyzer.verisignlabs.com/mobilefire.airnow.gov