

CDNI Rate Pacing

draft-caulfield-cdni-rate-pacing-01

CDNI Working Group

IETF 89 London

March 2014

presented by

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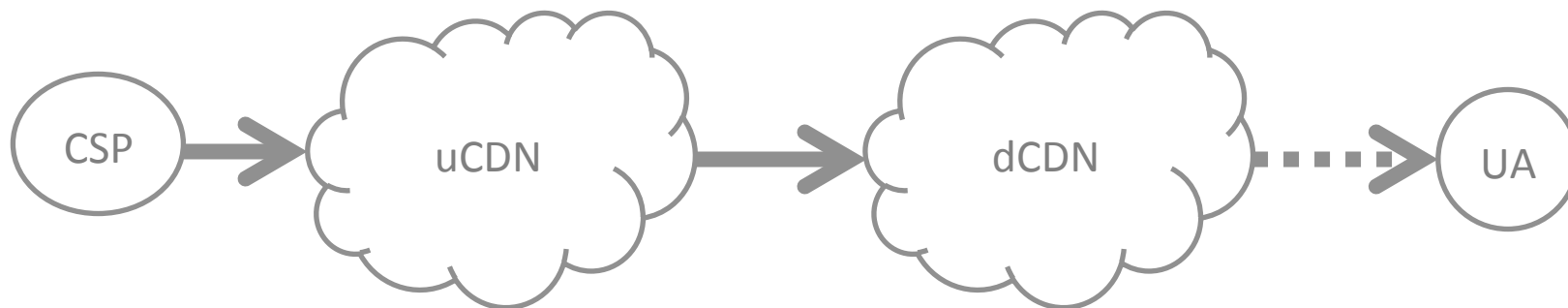
on behalf of

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Rate Pacing Concept

uCDN may wish to control the rate at which a dCDN delivers content on its behalf

(just like CSP may wish to control the rate at which a single CDN delivers content on its behalf today)



dCDN may be compensated per byte delivered,

UA may not be interested in the whole content item

→ dCDN may send content faster than necessary

→ dCDN may deliver content that is not consumed by UA

→ dCDN may charge uCDN for useless delivery

Changes in Revision -01

Generalized to allow for multiple rate pacing algorithms aside from token bucket

- Modified FCI and MI sections to reflect above
- Defined an IANA registry for rate pacing algos

Rate Pacing Capabilities

Value of RatePacing capability is list of algorithm names which are supported by dCDN

Example:

```
RatePacing: [ "token-bucket/v1", "my-algo/v3" ]
```

(Note that FCI syntax is TBD.)

Rate Pacing Metadata

Rate Pacing Metadata includes two properties

- 1) algo – rate pacing algorithm name from registry
- 2) params – algorithm-specific properties and values

Example:

```
{ "metadata": [{  
  "type": "application/cdni.RatePacing.v1",  
  "value": {  
    "algo": "token-bucket/v1",  
    "params": { "rate": 100000, "size": 25000 }  
  }  
}]}
```

IANA Considerations

CDNI Rate Pacing Algorithms Registry defined

Initial value of “token-bucket” version 1.

Algorithm Name	Specification	Version
token-bucket	RFCthis	1

Next Steps

- Address review comments (17 Feb and 3 March) from Francois Le Faucheur.
- Continue to solicit comments.
- Await definition of FCI syntax and registries.