CDNI Capacity Capability Advertisement Extensions

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Capacity Extensions Refresher Summary

Enhance delegation decisions by allowing communication of:

• Traffic delegation limits, implemented via FCI.CapacityLimits
  • egress bits per second
  • requests per second
  • storage-size total bytes
  • storage-object count
  • sessions count
  • cache-size total bytes

• Telemetry sources providing near real time metrics, as measured by the dCDN, corresponding to each defined limit, implemented via FCI.Telemetry
FCI.CapacityLimits Example

"capabilities": [  
  {  
    "capability-type": "FCI.CapacityLimits",  
    "capability-value": {  
      "limits": [  
        {  
          "id": "capacity_limit_region1",  
          "limit-type": "egress",  
          "maximum-hard": 50000000000,  
          "maximum-soft": 25000000000,  
          "telemetry-source": {  
            "id": "capacity_metrics_region1",  
            "metric": "egress_5m"  
          }  
        }  
      ]  
    }  
  },  
  "footprints": [  
    "<footprint objects>"  
  ]  
]
Elimination of CapacityLimitsScope

• Was used to narrow the scope of FCI.CapacityLimits beyond the footprint
  • CDN Domain (published host), Service ID, or Property ID

• Feedback was that this was the wrong place to implement granular scoping of this kind

• A more generic mechanism could apply across other Capabilities

• An extension to MI.Footprint is one propose method of solving the problem
How is the draft affected?

• Remove section 2.2.1.3. Capacity Limit Scope Object

• Example usages are modified to remove the "scope" property

• Functionality is otherwise unaffected. Limits may not be scoped by published host, service ID, or property ID, but may still apply on a footprint basis

• This is sufficient for many use cases and is already being implemented by several companies

• Because of this, let's not allow "scope" to block progress of the draft