

# ALTO Cost Calendar

draft-randriamasy-alto-cost-calendar-02

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# Document Status

- Updated and clarified calendar attributes (Section 4.2)
- Updated the examples according to new attribute names (Section 4.3)
- Target WG work item cost extensions (May 2015)

# Recall: Provide Path Cost Metrics in Time

- Prediction is based on many factors such as past history/planned future events/policy



# Basic Calendar Items

Start time :  
**HTTP Date**



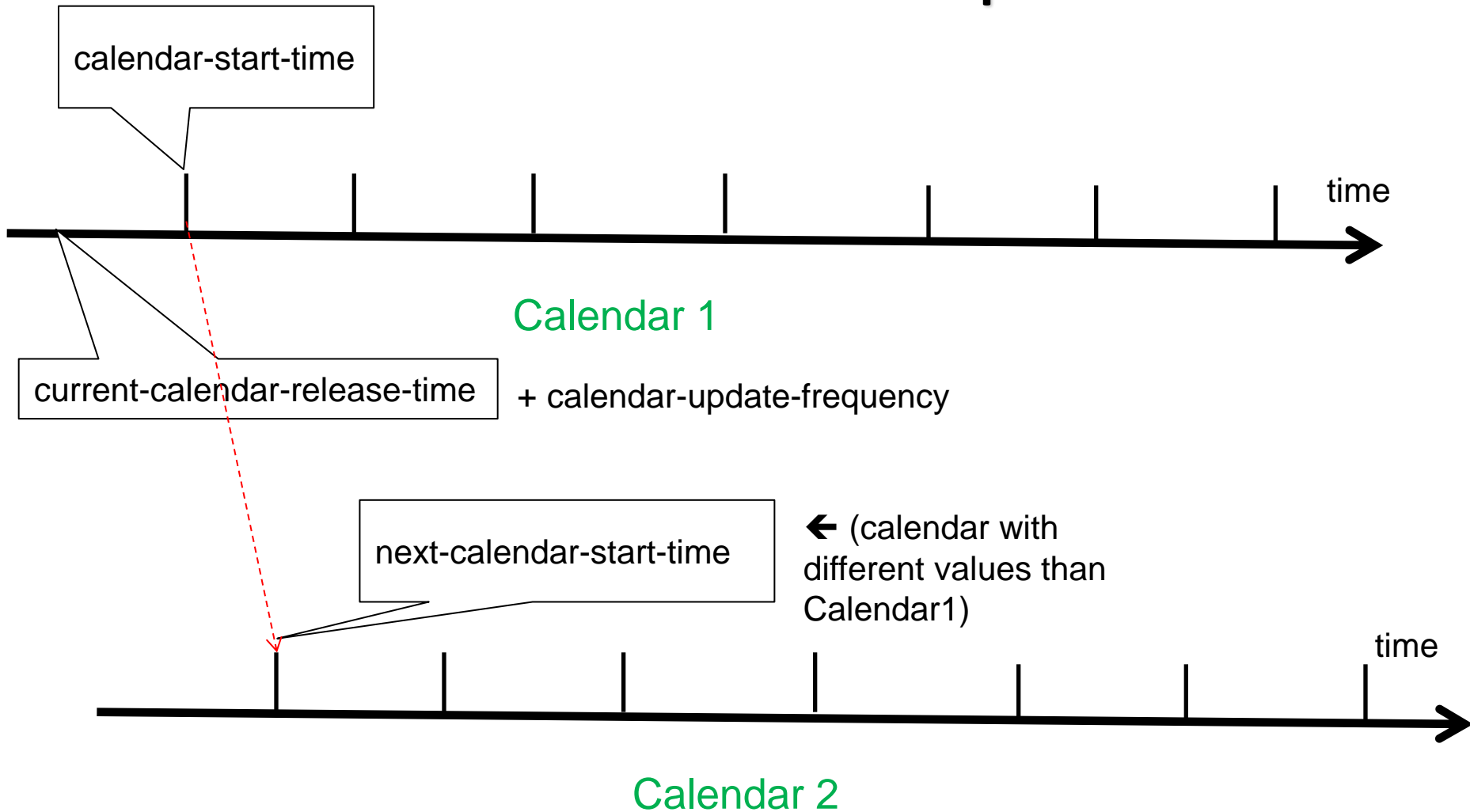
Current calendar  
release time:  
**HTTP Date**

Time interval size:  
<n> <time\_unit>

<time\_unit>:  
sec | min | hour |  
day | mon

Number of time intervals

# Inform Calendar Update



# Example: Query

```
POST /endpointcalendarcost/calendar/lookup HTTP/1.1
Host: alto.example.com
Content-Length: [TODO]
Content-Type: application/alto-endpointcostparams+json
Accept: application/alto-endpointcalendarcost+json,application/alto-error+json

{
  "cost-type" : {"cost-mode" : "calendar", "cost-metric" : "Availbandwidth"},
  "endpoints" : {
    "srcs": [ "ipv4:192.0.2.2" ],
    "dsts": [
      "ipv4:192.0.2.89",
      "ipv4:198.51.100.34",
      "ipv4:203.0.113.45"
    ]
  }
}
```

# Example: Response

```
HTTP/1.1 200 OK
Content-Length: [TODO]
Content-Type: application/alto-endpointcalendarcost+json
{
  "meta" : {
    "cost-type" : {"cost-mode" : "calendar", "cost-metric" : "Availbandwidth"},
    "calendar-start-time" : "Tue, 1 Jul 2014 00:00:00 GMT",
    "next-start-time" : "Fri, 4 Jul 2014 00:00:00 GMT",
    "current-calendar-release-time" : "Sun, 29 Jun 2014, 23:59:00 GMT",
    "time-interval-size" : "1 hour",
    "numb-intervals" : 24
  }

  "endpoint-cost-calendar-map" : {
    "ipv4:192.0.2.2": {
      "ipv4:192.0.2.89"      : [... Array of 24 values],
      "ipv4:198.51.100.34" : [... Array of 24 values],
      "ipv4:203.0.113.45"  : [... Array of 24 values]
    }
  }
}
```

**Example: 7 daily calendars**  
having 24 time-intervals of 1hour

- calendar-update-frequency in IRD = 1week
- 3 different calendar patterns
- Client request done on Tuesday July 1<sup>st</sup>
- next-start-time indicates that the calendar values will change Friday 4<sup>th</sup>

**THANK YOU**



# Inform Calendar Update (No )

