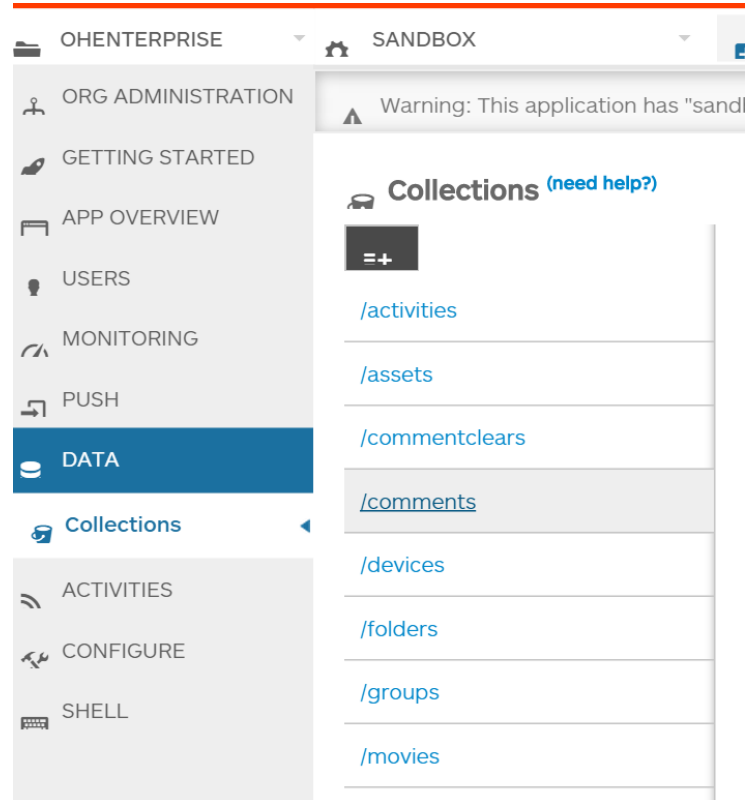


## REQUIREMENTS

- Create a collection in Apigee's BaaS to hold reviews about existing movies.
  - A review contains the name of the reviewers, a small quote about what they thought about the movie, and their rating out of five stars.

Collection called, "comments" was created in SANDBOX of my OHENTERPRISE Baas.



These were the reviews I populated:

UUID	
c0c06e7a-f064-11e4-8056-2fd91b45e268	<a href="#">View Details</a>
be08053a-f064-11e4-b919-ada16cf1ddab	<a href="#">View Details</a>
b55a996a-f024-11e4-826d-3bcea9d97e59	<a href="#">View Details</a>
f00cc7aa-efa1-11e4-a2fb-4fd482ece490	<a href="#">View Details</a>
edc4373a-efa1-11e4-a134-a769ea0e03d7	<a href="#">View Details</a>
e890bbda-efa1-11e4-a8c3-81e55917fa76	<a href="#">View Details</a>
e437e90a-efa1-11e4-8cc9-9f14b460fc6f	<a href="#">View Details</a>
df735c1a-efa1-11e4-933f-81bf3a6d9a9d	<a href="#">View Details</a>

Within each of the reviews has these fields:

UUID

c0c06e7a-f064-11e4-8056-2fd91b45e268

Hide Details

Entity Detail

Movie : Fast and Furious

Rating : 5

Review : This rocks

Reviewer : Jay

created : 1430527624919

metadata :

path : /comments/c0c06e7a-f064-11e4-8056-2fd91b45e268

modified : 1430527624919

type : comments

uuid : c0c06e7a-f064-11e4-8056-2fd91b45e268

Edit Entity

"uuid": "c0c06e7a-f064-11e4-8056-2fd91b45e268",  
"type": "comments",  
"created": 1430527624919,  
"modified": 1430527624919,  
"metadata": {  
 "path": "/comments/c0c06e7a-f064-11e4-8056-2fd91b45e268"  
},  
"Movie": "Fast and Furious",  
"Rating": "5",  
"Review": "This rocks",  
"Reviewer": "Jay"  
}  
}

Validate JSON

Save

- The read view collection should have at least one review for each movie.

These are the movies from my /movies collection:

```
{
  "action" : "get",
  "application" : "c580b2c0-bbb8-11e4-ac67-bbfdc9e6e985",
  "params" : { },
  "path" : "/movies",
  "uri" : "https://api.usergrid.com/ohenterprise/sandbox/movies",
  "entities" : [ {
    "uuid" : "a5705dfa-df2b-11e4-ae78-2dc8b342ad7c",
    "type" : "movie",
    "created" : 1428633928015,
    "modified" : 1428633928015,
    "Director" : "JJ Abrrham",
    "ID" : "2",
    "metadata" : {
      "path" : "/movies/a5705dfa-df2b-11e4-ae78-2dc8b342ad7c",
      "connections" : {
        "comments" : "/movies/a5705dfa-df2b-11e4-ae78-2dc8b342ad7c/comments"
      }
    }
  },
  {
    "Name" : "Star Trek Into the Darkness",
    "Starring" : "John Cho",
    "Year" : "2013"
  },
  {
    "uuid" : "e245cada-df2b-11e4-a71a-fb42936c46a0",
    "type" : "movie",
    "created" : 1428634030077,
    "modified" : 1428634030077,
    "Director" : "Andrzej Bartkowiak",
    "ID" : "3",
    "metadata" : {
```

```

    "path" : "/movies/e245cada-df2b-11e4-a71a-fb42936c46a0",
    "connections" : {
      "comments" : "/movies/e245cada-df2b-11e4-a71a-fb42936c46a0/comments"
    }
  },
  "Name" : "Romeo Must Die",
  "Starring" : "Jet Li",
  "Year" : "2000"
}, {
  "uuid" : "12a9000a-dfce-11e4-a10e-e13709a8abbc",
  "type" : "movie",
  "created" : 1428703689728,
  "modified" : 1430502321053,
  "Director" : "Rob Cohen",
  "ID" : "4",
  "metadata" : {
    "path" : "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc",
    "connections" : {
      "comments" : "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc/comments"
    }
  },
  "Name" : "Fast and Furious",
  "Starring" : "Vin Diesel",
  "Year" : "2001"
}, {
  "uuid" : "832d4afa-f024-11e4-98eb-954ccec38b90",
  "type" : "movie",
  "name" : "newmovie",
  "created" : 1430500033823,
  "modified" : 1430500033823,
  "metadata" : {
    "path" : "/movies/832d4afa-f024-11e4-98eb-954ccec38b90",
    "connections" : {
      "comments" : "/movies/832d4afa-f024-11e4-98eb-954ccec38b90/comments"
    }
  }
}, {
  "uuid" : "c503f01a-f05a-11e4-8edb-af1430252018",
  "type" : "movie",
  "created" : 1430523337105,
  "modified" : 1430523337105,
  "ID" : "7",
  "metadata" : {
    "path" : "/movies/c503f01a-f05a-11e4-8edb-af1430252018"
  },
  "Name" : "NextCoolMovie",
  "Starring" : "Jay",
  "Year" : "2015"
} ],
"timestamp" : 1430569784366,
"duration" : 51,
"organization" : "ohenterprise",
"applicationName" : "sandbox",
"count" : 5
}

```

These are the comments from my /comments collection:

```

{
  "action" : "get",
  "application" : "c580b2c0-bbb8-11e4-ac67-bbfdc9e6e985",
  "params" : { },
  "path" : "/comments",
  "uri" : "https://api.usergrid.com/ohenterprise/sandbox/comments",
  "entities" : [ {
    "uuid" : "df735c1a-efaf-11e4-933f-81bf3a6d9a9d",
    "type" : "comment",
    "created" : 1430443924561,

```

```
"modified" : 1430443924561,
"metadata" : {
  "connecting" : {
    "comments" : "/comments/df735c1a-efal-11e4-933f-81bf3a6d9a9d/connecting/comments"
  },
  "path" : "/comments/df735c1a-efal-11e4-933f-81bf3a6d9a9d"
},
"Movie" : "Romeo Must Die",
"Rating" : "4",
"Review" : "The greatest movie of all times!!!!",
"Reviewer" : "Bart Simpson"
}, {
  "uuid" : "e437e90a-efal-11e4-8cc9-9f14b460fc6f",
  "type" : "comment",
  "created" : 1430443932560,
  "modified" : 1430443932560,
  "metadata" : {
    "connecting" : {
      "comments" : "/comments/e437e90a-efal-11e4-8cc9-9f14b460fc6f/connecting/comments"
    },
    "path" : "/comments/e437e90a-efal-11e4-8cc9-9f14b460fc6f"
  },
  "Movie" : "Romeo Must Die",
  "Rating" : "4",
  "Review" : "The greatest movie of all times!!!!",
  "Reviewer" : "Bart Simpson"
}, {
  "uuid" : "e890bbda-efal-11e4-a8c3-81e55917fa76",
  "type" : "comment",
  "created" : 1430443939853,
  "modified" : 1430443939853,
  "metadata" : {
    "path" : "/comments/e890bbda-efal-11e4-a8c3-81e55917fa76"
  },
  "Movie" : "Star Trek Into the Darkness",
  "Rating" : "5",
  "Review" : "The greatest movie of all times!!!!",
  "Reviewer" : "Bart Simpson"
}, {
  "uuid" : "edc4373a-efal-11e4-a134-a769ea0e03d7",
  "type" : "comment",
  "created" : 1430443948579,
  "modified" : 1430443948579,
  "metadata" : {
    "connecting" : {
      "comments" : "/comments/edc4373a-efal-11e4-a134-a769ea0e03d7/connecting/comments"
    },
    "path" : "/comments/edc4373a-efal-11e4-a134-a769ea0e03d7"
  },
  "Movie" : "Fast and Furious",
  "Rating" : "3",
  "Review" : "The greatest movie of all times!!!!",
  "Reviewer" : "Bart Simpson"
}, {
  "uuid" : "f00cc7aa-efal-11e4-a2fb-4fd482ece490",
  "type" : "comment",
  "created" : 1430443952410,
  "modified" : 1430443952410,
  "metadata" : {
    "path" : "/comments/f00cc7aa-efal-11e4-a2fb-4fd482ece490"
  },
  "Movie" : "Romeo Must Die",
  "Rating" : "2",
  "Review" : "The greatest movie of all times!!!!",
  "Reviewer" : "You Me"
}, {
  "uuid" : "b55a996a-f024-11e4-826d-3bcea9d97e59",
  "type" : "comment",
  "created" : 1430500118006,
```

```

"modified" : 1430500118006,
"metadata" : {
  "connecting" : {
    "comments" : "/comments/b55a996a-f024-11e4-826d-3bcea9d97e59/connecting/comments"
  },
  "path" : "/comments/b55a996a-f024-11e4-826d-3bcea9d97e59"
},
"Movie" : "newmovie",
"Rating" : "5",
"Review" : "Awesome!!!!",
"Reviewer" : "Me"
}, {
  "uuid" : "be08053a-f064-11e4-b919-ada16cf1ddab",
  "type" : "comment",
  "created" : 1430527620355,
  "modified" : 1430527620355,
  "metadata" : {
    "path" : "/comments/be08053a-f064-11e4-b919-ada16cf1ddab"
  },
  "Movie" : "Fast and Furious",
  "Rating" : "5",
  "Review" : "This rocks",
  "Reviewer" : "Jay"
}, {
  "uuid" : "c0c06e7a-f064-11e4-8056-2fd91b45e268",
  "type" : "comment",
  "created" : 1430527624919,
  "modified" : 1430527624919,
  "metadata" : {
    "path" : "/comments/c0c06e7a-f064-11e4-8056-2fd91b45e268"
  },
  "Movie" : "Fast and Furious",
  "Rating" : "5",
  "Review" : "This rocks",
  "Reviewer" : "Jay"
} ],
"timestamp" : 1430569875933,
"duration" : 74,
"organization" : "ohenterprise",
"applicationName" : "sandbox",
"count" : 8
}

```

- The review can be a simple, fictitious review that you create.
- This proxy should build upon the previous proxy in assignment four.
  - If the user sends a response with the query parameter reviews=true, then the response should include the movie information as well as all the reviews for the movie. If they do not pass this in, the response should not show the reviews.

Results without reviews=true:

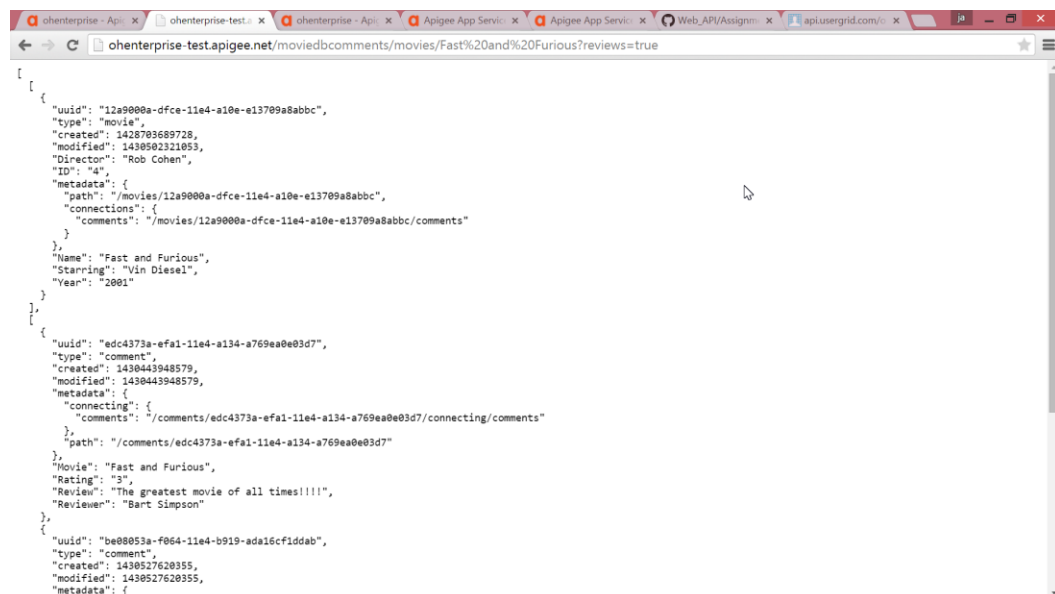


```

{
  {
    "uid": "12a9000a-dfce-11e4-a10e-e13709a8abbc",
    "type": "movie",
    "created": 1428703689728,
    "modified": 1430502321053,
    "Director": "Rob Cohen",
    "ID": "4",
    "metadata": {
      "path": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc",
      "connections": {
        "comments": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc/comments"
      }
    },
    "Name": "Fast and Furious",
    "Starring": "Vin Diesel",
    "Year": "2001"
  }
}

```

### Results with reviews=true:



```

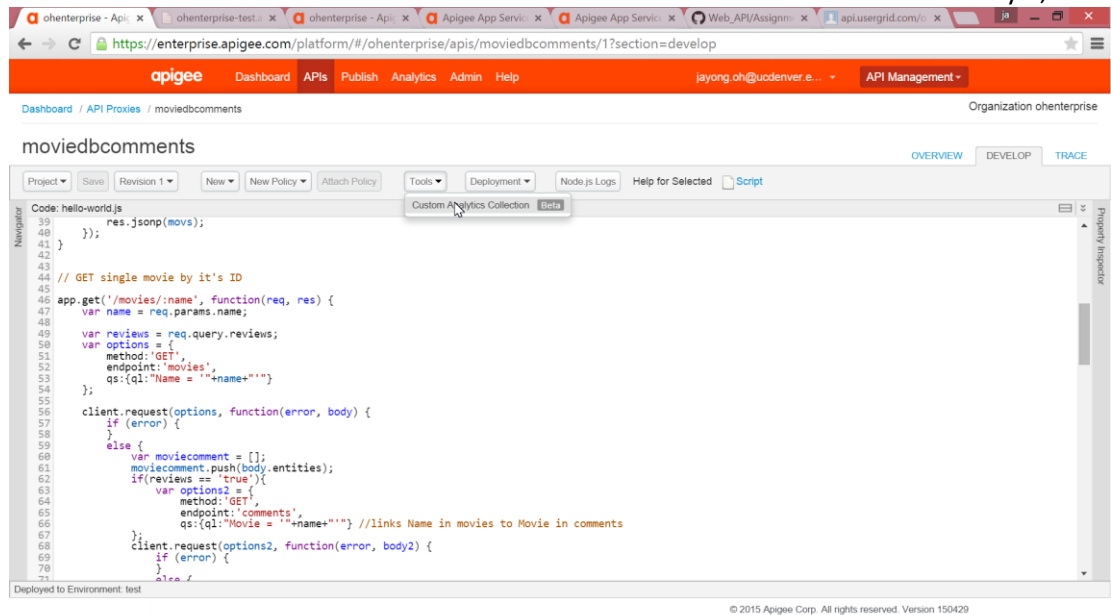
[
  {
    "uid": "12a9000a-dfce-11e4-a10e-e13709a8abbc",
    "type": "movie",
    "created": 1428703689728,
    "modified": 1430502321053,
    "Director": "Rob Cohen",
    "ID": "4",
    "metadata": {
      "path": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc",
      "connections": {
        "comments": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc/comments"
      }
    },
    "Name": "Fast and Furious",
    "Starring": "Vin Diesel",
    "Year": "2001"
  },
  {
    "uid": "edc4373a-efal-11e4-a134-a769ea0e03d7",
    "type": "comment",
    "created": 1430443948579,
    "modified": 1430443948579,
    "metadata": {
      "connecting": {
        "comments": "/comments/edc4373a-efal-11e4-a134-a769ea0e03d7/connecting/comments"
      },
      "path": "/comments/edc4373a-efal-11e4-a134-a769ea0e03d7"
    },
    "Movie": "Fast and Furious",
    "Rating": "3",
    "Review": "The greatest movie of all times!!!!",
    "Reviewer": "Bart Simpson"
  },
  {
    "uid": "be0053a-f064-11e4-b919-ada16cf1ddab",
    "type": "comment",
    "created": 1430527620355,
    "modified": 1430527620355,
    "metadata": {

```

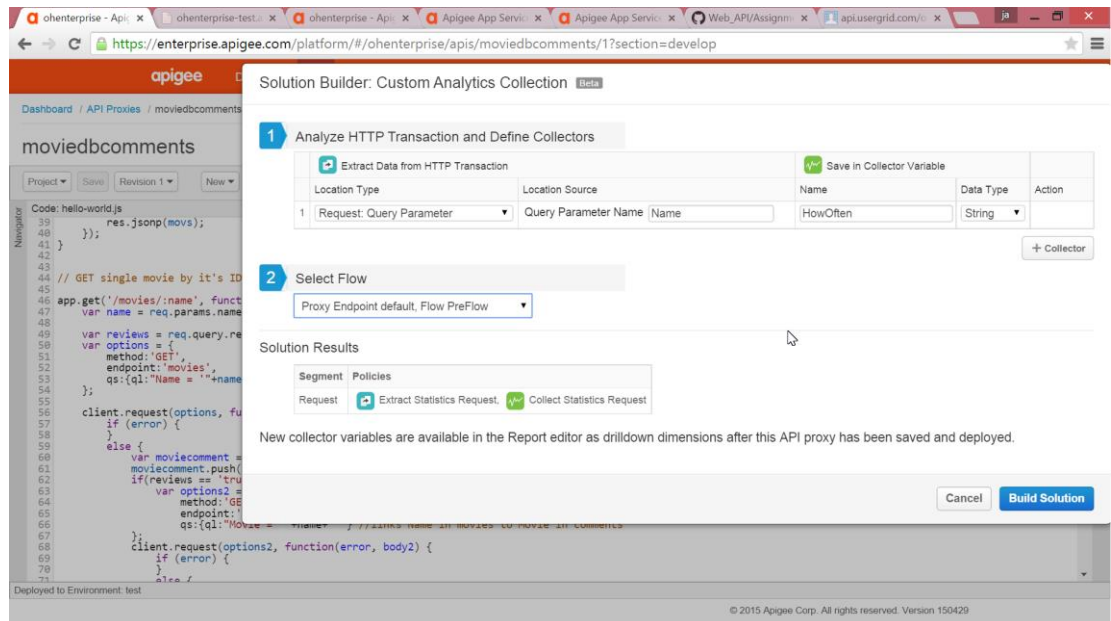
- Add custom analytics to return information about which movies users are querying.
  - Create a custom analytics policy that describes the number of times each movie has been queried. To do this, you will have to send a number of requests for each movie.

I created custom analytics in the following steps:

1. Select "Custom Analytics Collection" under the tools



## 2. Select the field “Name” to evaluate and I named it “HowOften”



## 3. To view the analytics, you must first create a report under the “Analytics” tab

The screenshot shows the Apigee API Management console for the 'moviedbcomments' API. The left sidebar contains a menu with the following items: Proxy Performance, Target Performance, Cache Performance, Error Analysis, DEVELOPER (Developer Engagement, Traffic Composition, Business Transactions), END USER (GeoMap, Devices), and EXPLORATION (Reports, Reports Dashboard). The 'Reports' item is highlighted with a red box. The main content area shows the API endpoint configuration and a code editor with a JavaScript snippet for a GET request to '/movies/:name'.

#### 4. Create a custom report:

The screenshot shows the 'Custom Reports' page in the Apigee API Management console. A search bar is at the top left, and a '+ Custom Report' button is at the top right. Below is a table with the following data:

Report Name	Environment	Metric	Report Description	Last Modified	Actions
movi	test	Sum of Traffic		May 1, 2015 7:14:23 PM	<a href="#">Delete</a> <a href="#">Roles</a>
movies	test			May 1, 2015 7:11:52 PM	<a href="#">Delete</a> <a href="#">Roles</a>

#### 5. Name your custom report (I named it "ViewHits"):



apigee Dashboard APIs Publish Analytics Admin Help jayong.oh@ucdenver.e... API Management

Dashboard / Custom Reports / New Custom Report Organization ohenterprise

### New Custom Report

**Basics**

Report Name: ViewHits

Report Description:

Chart Type: ☒ Column ☐ Line  
For Column charts, the x-axis represents groups designated by dimensions. For Line charts, the x-axis represents time.

**Data**

Aggregation Interval: ☐ Daily ☒ Hourly ☐ Per-Minute

Environment: test

**Metrics**

The y-axis represents metric values.

	Metric	Aggregate Function	Actions
1	Traffic	<input checked="" type="radio"/> Sum <input type="radio"/> Average <input type="radio"/> Min <input type="radio"/> Max	

+ Metric

Dimensions

6. Choose from options:

apigee Dashboard APIs Publish Analytics Admin Help jayong.oh@ucdenver.e... API Management

Dashboard / Custom Reports / New Custom Report Organization ohenterprise

### New Custom Report

**Basics**

Report Name: ViewHits

Report Description:

Chart Type: ☒ Column ☐ Line  
The x-axis represents groups designated by dimensions. For Line charts, the x-axis represents time.

**Data**

Aggregation Interval: ☐ Daily ☒ Hourly ☐ Per-Minute

Environment: test

**Metrics**

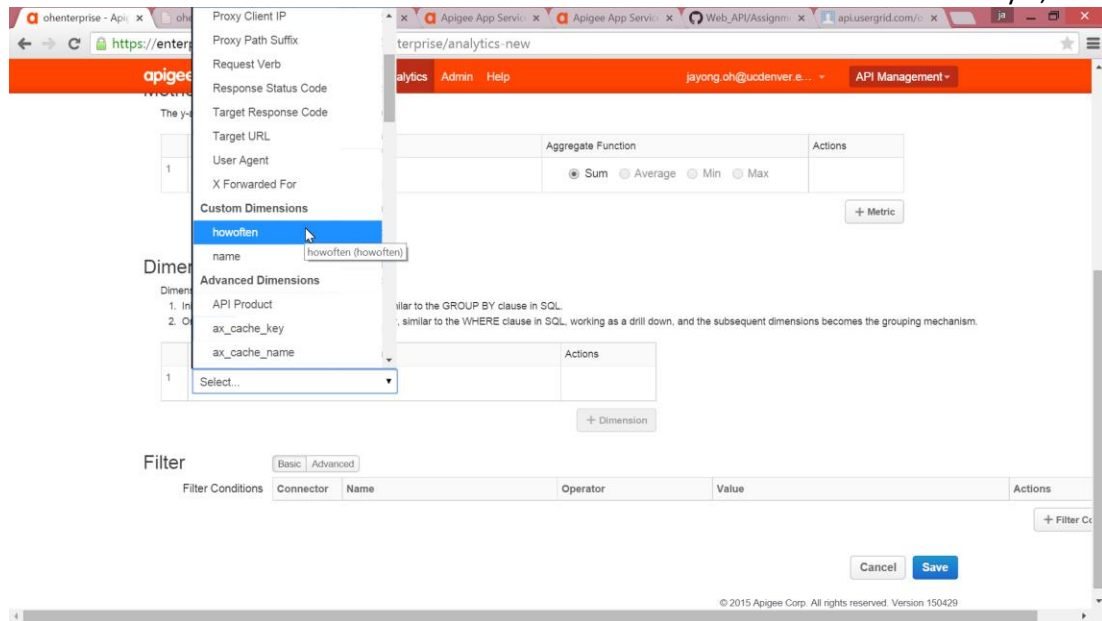
The y-axis represents metric values.

	Metric	Aggregate Function	Actions
1	Traffic	<input checked="" type="radio"/> Sum <input type="radio"/> Average <input type="radio"/> Min <input type="radio"/> Max	

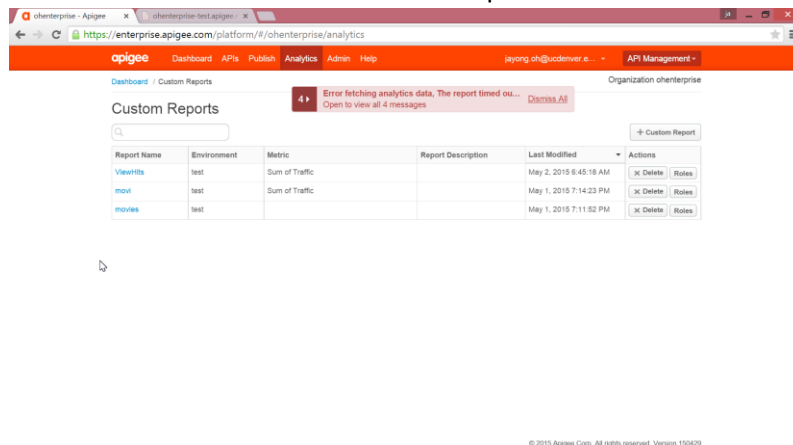
+ Metric

Dimensions

7. Select the name of the custom analytics collection from step 2:



8. Save and your report is ready
9. UNFORTUNATELY, the Apigee server was going through weird things at the time of the report view and gave me errors. However, at the time of this grading, hopefully it functions as it should. I tested this with "movi" report and it tested fine with the number of traffic



## ACCEPTANCE CRITERIA

- In previous assignments, not including a small test suite has had a minimal negative impact on grading. For this assignment, it is required. If a test suite is not included in your email or uploaded to GitHub, the assignment will not be graded.
  - Create a SoapUI/Postman/collection of curl commands to test your proxy. You should include the following requests.
 

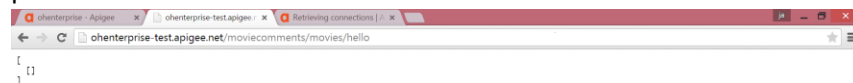
Since these are all 'GET' request, I thought I would just use the window from the browser (let me know if this is inadequate)

    - Valid request without the review query parameter.



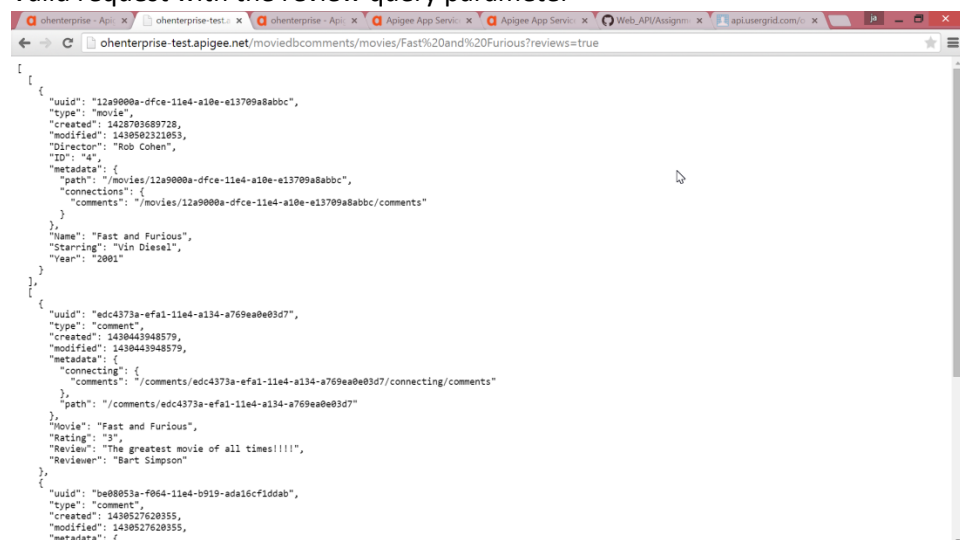
```
[
  {
    "uuid": "12a9000a-dfce-11e4-a10e-e13709a8abbc",
    "type": "movie",
    "created": 1428703689728,
    "modified": 1430502321053,
    "Director": "Rob Cohen",
    "ID": "4",
    "metadata": {
      "path": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc",
      "connections": {
        "comments": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc/comments"
      }
    },
    "Name": "Fast and Furious",
    "Starring": "Vin Diesel",
    "Year": "2001"
  }
]
```

- Invalid request (for a movie not in the Baas) without the review query parameter.



```
[
  []
]
```

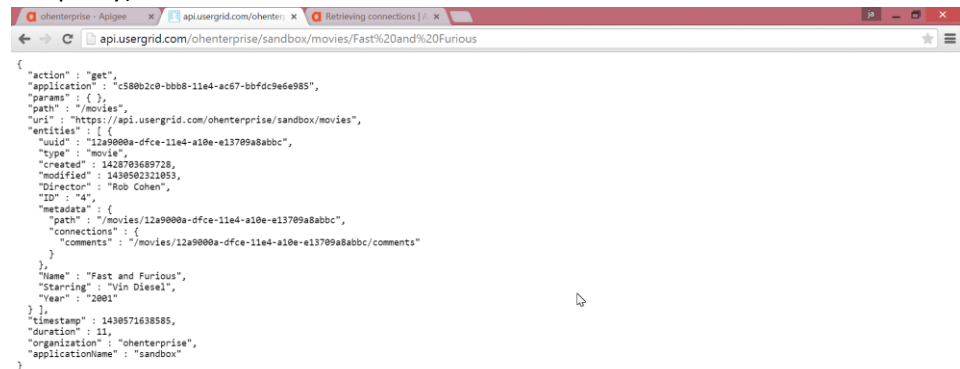
- Valid request with the review query parameter



```
[
  {
    "uuid": "12a9000a-dfce-11e4-a10e-e13709a8abbc",
    "type": "movie",
    "created": 1428703689728,
    "modified": 1430502321053,
    "Director": "Rob Cohen",
    "ID": "4",
    "metadata": {
      "path": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc",
      "connections": {
        "comments": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abbc/comments"
      }
    },
    "Name": "Fast and Furious",
    "Starring": "Vin Diesel",
    "Year": "2001"
  },
  {
    "uuid": "edc4373a-efal-11e4-a134-a769ea0e03d7",
    "type": "comment",
    "created": 1430443948579,
    "modified": 1430443948579,
    "metadata": {
      "connecting": {
        "comments": "/comments/edc4373a-efal-11e4-a134-a769ea0e03d7/connecting/comments"
      },
      "path": "/comments/edc4373a-efal-11e4-a134-a769ea0e03d7"
    },
    "Movie": "Fast and Furious",
    "Rating": "3",
    "Review": "The greatest movie of all times!!!!",
    "Reviewer": "Bart Simpson"
  },
  {
    "uuid": "ba08053a-f064-11e4-b919-ada16cf1ddab",
    "type": "comment",
    "created": 1430527620355,
    "modified": 1430527620355,
    "metadata": {

```

- A request to the BaaS which returns a movie (this request does not go through the proxy).



```

{
  "action": "get",
  "application": "c580b2c0-bbb8-11e4-ac67-bbdc9e6e985",
  "params": {},
  "path": "/movies",
  "uri": "https://api.usergrid.com/ohenterprise/sandbox/movies",
  "entities": [
    {
      "uid": "12a9000a-dfce-11e4-a10e-e13709a8abb",
      "type": "movie",
      "created": 1428703689728,
      "modified": 1430502321053,
      "Director": "Rob Cohen",
      "ID": "4",
      "metadata": {
        "path": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abb",
        "connections": {
          "comments": "/movies/12a9000a-dfce-11e4-a10e-e13709a8abb/comments"
        }
      },
      "Name": "Fast and Furious",
      "Starring": "Vin Diesel",
      "Year": "2001"
    }
  ],
  "timestamp": 1430571638585,
  "duration": 11,
  "organization": "ohenterprise",
  "applicationName": "sandbox"
}

```

- A request to the BaaS which returns a review (this request does not go through the proxy).



```

{
  "action": "get",
  "application": "c580b2c0-bbb8-11e4-ac67-bbdc9e6e985",
  "params": {},
  "path": "/comments",
  "uri": "https://api.usergrid.com/ohenterprise/sandbox/comments",
  "entities": [
    {
      "uid": "be08053a-f064-11e4-b919-ada16cf1ddab",
      "type": "comment",
      "created": 1430527628355,
      "modified": 1430527628355,
      "metadata": {
        "path": "/comments/be08053a-f064-11e4-b919-ada16cf1ddab"
      },
      "Movie": "Fast and Furious",
      "Rating": "5",
      "Reviewer": "This rocks",
      "Reviewer": "Jay"
    }
  ],
  "timestamp": 1430571771843,
  "duration": 18,
  "organization": "ohenterprise",
  "applicationName": "sandbox"
}

```

- Include the CSV results from your custom report generated by Apigee.
- When viewing the custom report, you can export as a CSV.

Soon as Apigee Analytics is up, I will upload the CSV file onto my Github.

You can test out everything from the preceding at:

<http://ohenterprise-test.apigee.net/moviedbcomments/movies/{name}ofmovie}{?reviews=true}>

and

<http://api.usergrid.com/ohenterprise/sandbox/{movies}orcomments}>