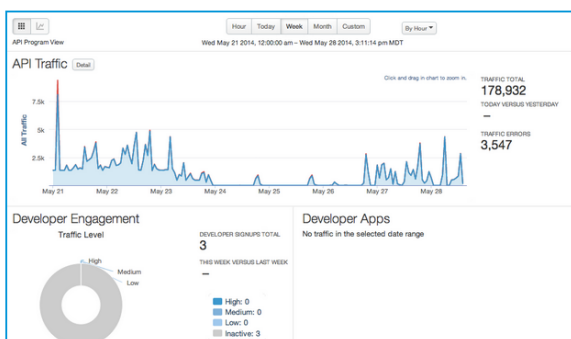




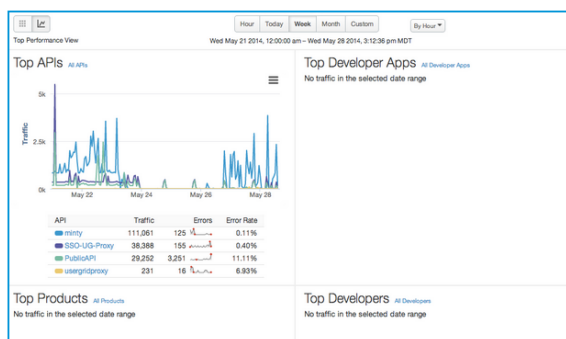
Lab 3: Analytics Services - Creating Custom Reports

Overview

Edge Analytics Services delivers the analytics tools and infrastructure that provides end-to-end visibility across your entire digital value chain. With Edge Analytics, enterprises can make data-driven decisions to grow the reach and revenue of your digital program, increase customer engagement, and accelerate your digital transformation. In addition, Edge Analytics provides unmatched flexibility to meet changing business and analytics needs.



API Program View



Top Performance View

In this lab you will get a first-hand exposure of creating a custom report and configuring your custom dashboard. You will leverage the custom dimension (city) you created in the statistics collector policy of the Open Weather API proxy that you built in Lab 1 to create reports and dashboards.

Objective

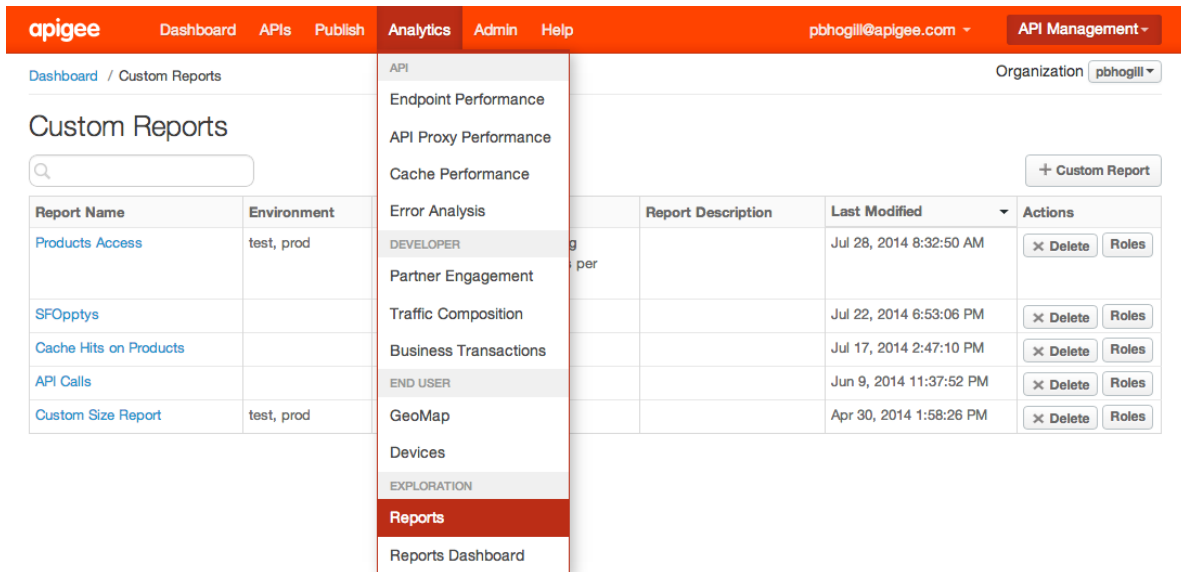
After this In this lab you should be able to leverage custom dimensions and create custom reports and dashboards to satisfy your business analytics needs.

Estimated Time: 20 - 30 mins

1. [Custom Reports](#) - There are several OOTB (Out of the box) reports that are automatically provided for every org, they track several critical operational metrics. You can also create custom reports to capture custom metrics. By adding custom reports, you can create a set of charts that provide insight into every aspect of your API program.



2. Login to the Apigee Edge Management User Interface (Management UI). On the top menu, click on the Analytics item and then click on “Reports”. When on that page click on the '+ Custom Report' button on the top right.



The screenshot shows the Apigee Edge Management UI. The top navigation bar includes 'Dashboard', 'APIs', 'Publish', 'Analytics', 'Admin', and 'Help'. The 'Analytics' menu is open, showing options like 'Endpoint Performance', 'API Proxy Performance', 'Cache Performance', 'Error Analysis', 'Partner Engagement', 'Traffic Composition', 'Business Transactions', 'GeoMap', 'Devices', 'EXPLORATION', 'Reports' (highlighted in red), and 'Reports Dashboard'. The main content area is titled 'Custom Reports' and contains a table with the following data:

Report Name	Environment	Report Description	Last Modified	Actions
Products Access	test, prod		Jul 28, 2014 8:32:50 AM	X Delete Roles
SFOpptys			Jul 22, 2014 6:53:06 PM	X Delete Roles
Cache Hits on Products			Jul 17, 2014 2:47:10 PM	X Delete Roles
API Calls			Jun 9, 2014 11:37:52 PM	X Delete Roles
Custom Size Report	test, prod		Apr 30, 2014 1:58:26 PM	X Delete Roles

3. Define the custom report - Enter the values as indicated below and click on the blue “Save” button.



New Custom Report

Basics

Report Name

Report Description

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

Data

Aggregation Interval ☐ Daily ☐ Hourly ☒ Per-Minute

Environment

Measures

The y-axis represents measurement values.

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

[+ Measure](#)

Drilldowns

Drilldowns have two purposes:

- Initially, the drilldown is used to group data, similar to the GROUP BY clause in SQL.
- Once a drilldown is selected, it becomes a filter, similar to the WHERE clause in SQL, and the subsequent drilldown becomes the grouping mechanism.

	Drilldown	Actions
1	<input type="text" value="devjam_cityname"/>	

[+ Drilldown](#)

Filter

Basic

Advanced

Filter Conditions

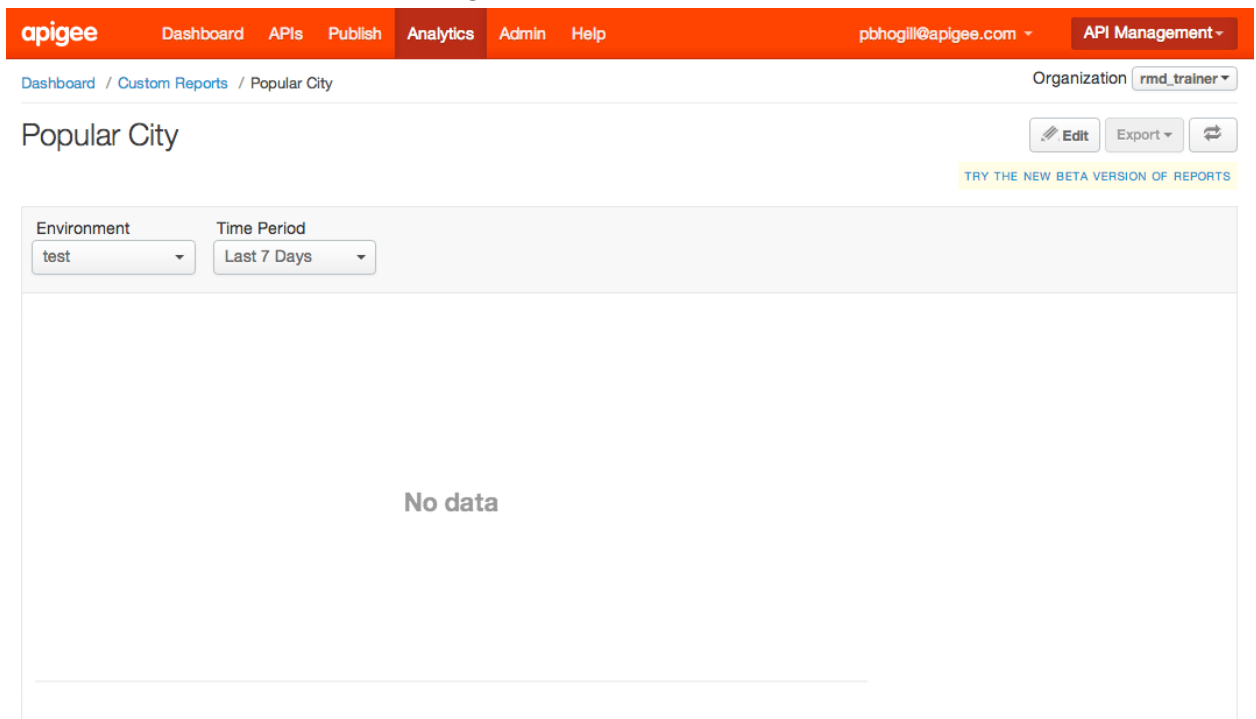
Connector	Name	Operator	Value
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[Cancel](#) [Save](#)

- Report Name: Popular City
- Report Description: This report shows the most popular city queried for its weather.



- c. Chart Type: Column
- d. Aggregation Interval: Per-Minute
- e. Environment: {your env} test or prod
- f. Metrics: Traffic - Sum of traffic
Target Response Time - Average
This will create a multi dimensional report.
- g. Dimensions: devjam_{your initials}_cityname (This is the name of the variable which we created in Lab 1 to capture the city name from the response payload. You can create different variables from either the request or response header/body/attributes and have the analytics engine start harvesting these values for you. Generally these variables will show up under the “custom dimensions” category in the Drilldown drop-down)
- h. You should see the following:



- 4. There probably is not too much data that we have queried so you may not see anything meaningful quite yet:



- a. Lets go ahead and generate some sample query data
- b. Switch to the browser window tab where you have your POSTMAN client
- c. From the POSTMAN client invoke these URLs a few times each

```
http://{org_name}-{env_name}.apigee.net/v1/{your  
initials}_open_weather?q=Cleveland, US
```

```
http://{org_name}-{env_name}.apigee.net/v1/{your  
initials}_open_weather?q=Los Angeles, US
```

```
http://{org_name}-{env_name}.apigee.net/v1/{your  
initials}_open_weather?q=San Francisco, US
```

5. Go back to the Management UI and navigate to Analytics / Reports from the top menu.
 - a. Click on the “Popular City” report.
 - b. And, you will see:



Popular City

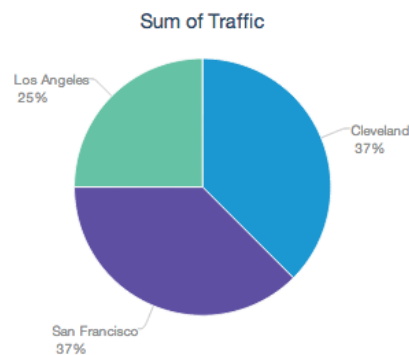
Edit Export

TRY THE NEW BETA VERSION OF REPORTS



Metric by devjam_cityname

devjam_cityname	Sum of Traffic
Cleveland	3.00
San Francisco	3.00
Los Angeles	2.00



- Add a filter (devjam_cityname ne 'na') in your custom report. This will remove any unknown cities from the report .

The final configuration of the custom report will look like the following :



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	✕ Delete
2	Target Response Time	<input type="radio"/> Sum <input checked="" type="radio"/> Average <input type="radio"/> Min <input type="radio"/> Max	✕ Delete

+ Metric

Dimensions

Dimensions have two purposes:

- Initially, the dimension is used to group data, similar to the GROUP BY clause in SQL.
- Once a dimension is selected, it becomes a filter, similar to the WHERE clause in SQL, working as a drill down, and the subsequent dimensions becomes the grouping mechanism.

	Dimension	Actions
1	devjam_cityname	

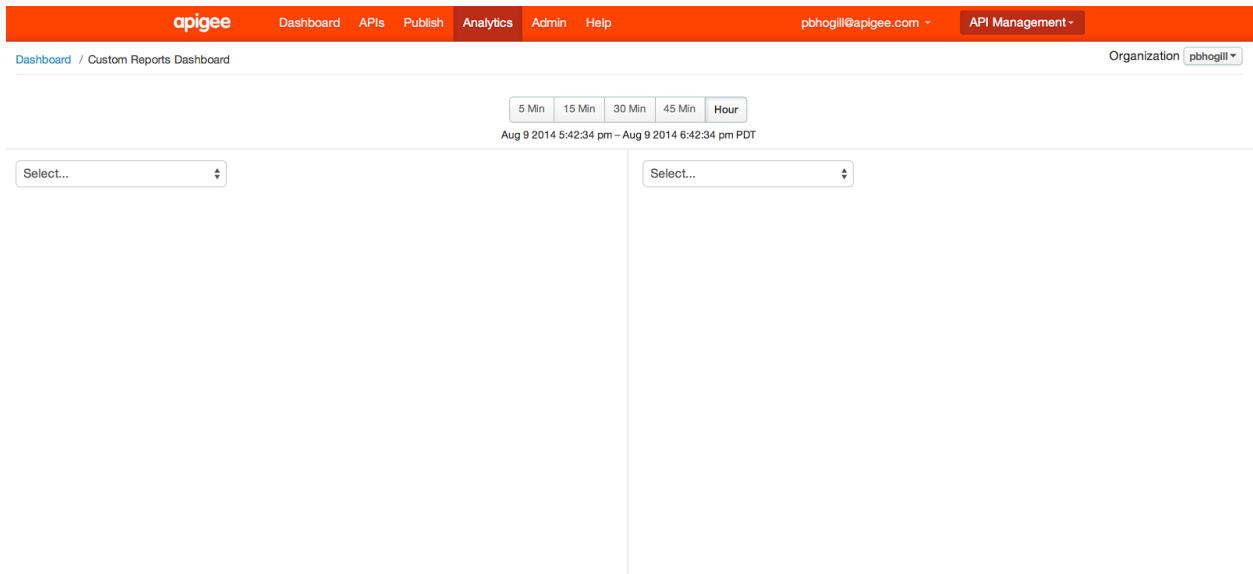
+ Dimension

Filter

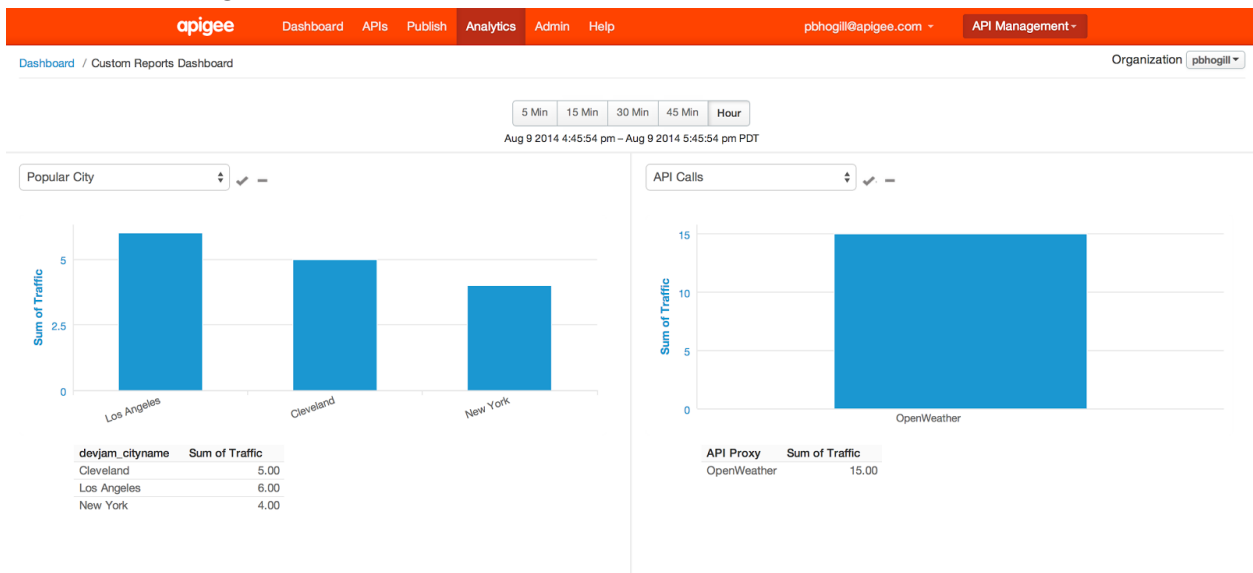
Basic Advanced

Filter String (devjam_cityname ne 'na')

- [Custom Dashboards](#) - A custom report dashboard is a dashboard that lets you visualize API analytics data from a previously created custom report. A custom report is a way to specify precisely what you want to measure across your API program. For instance, you can measure all API traffic generated from a specific client IP address.
- Click on Analytics / Reports Dashboard from the main menu. You will most likely see an empty dashboard because you haven't configured anything yet. A custom dashboard lets you select upto 4 different pre-built reports (OOTB or Custom Reports) that you can monitor across 5 different time domains



- On the first Select drop-down select the Popular City report that you just built. You can pick any report for the second drop-down or other drop-downs. You should see something like this:



Summary

In this lab you created a simple custom report to capture the most popular city being queried for weather. You also added the custom report along with other reports to a custom dashboard.



Please visit the [documentation](#) to see the different kinds of operational reports and dashboards that are available to you.