

# **Create Dynatrace Dashboard for REST API**

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## Overview

This document outlines the steps of creating the dashboard on the Dynatrace/APM Web Start client so that we can run REST request against it to download the monitoring metrics.

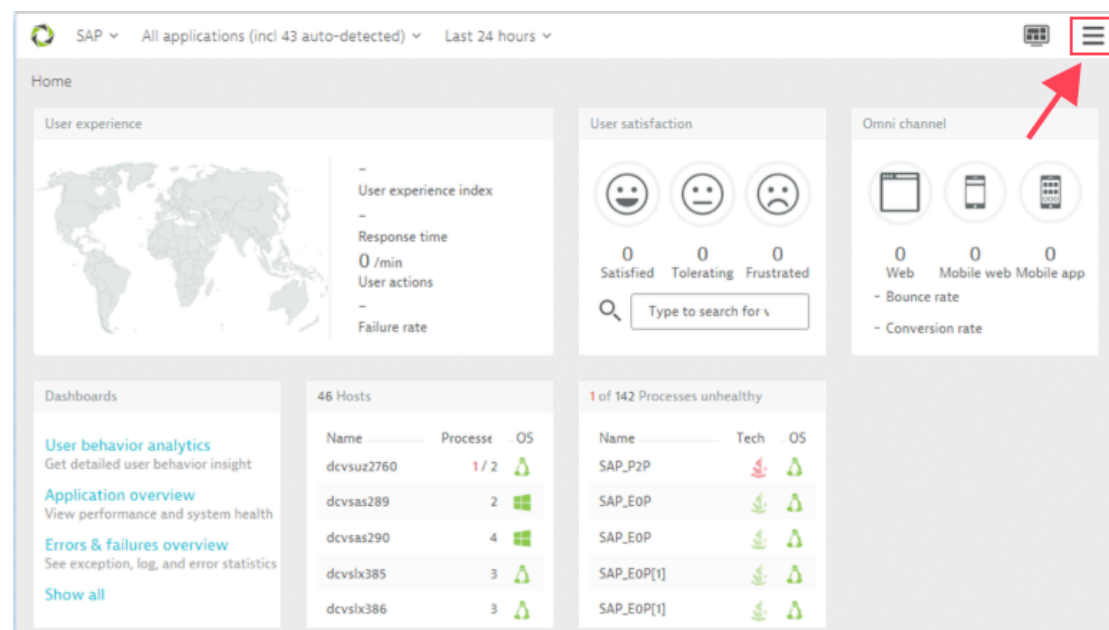
For more details of the Dynatrace/APM REST API, please refer to its online documents:

<https://community.dynatrace.com/community/pages/viewpage.action?pageId=196642651#DashboardsandReporting%28REST%29-GenerateaDashboardReport>

This document is based on Dynatrace/APM 6.2 and Internet Explorer 11.

## Steps

Once you have logged into Dynatrace/APM from the browser, you will see the default page below:



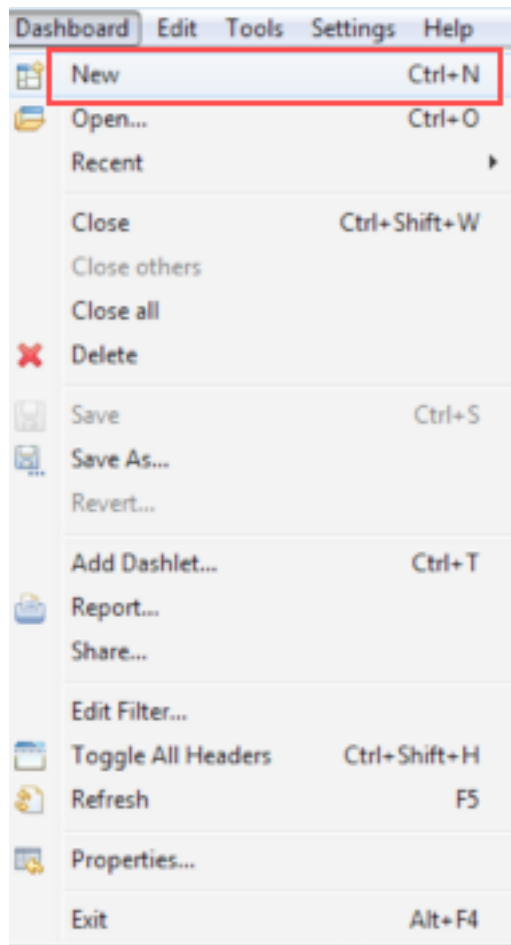
Click the button pointed by the arrow from above, you will get:

The screenshot shows the Dynatrace Web interface. The top navigation bar includes 'SAP', 'All applications (incl 43 auto-detected)', and 'Last 24 hours'. The main content area is divided into sections: 'User experience' with a world map and metrics like 'User experience index', 'Response time', 'User actions', and 'Failure rate'; 'User satisfaction' with a smiley face icon and 'Satisfied'/'Tolerant' counts; 'Dashboards' with links for 'User behavior analytics', 'Application overview', and 'Errors & failures overview'; and a table of '46 Hosts' and '1 of 142 Processes'. A right-hand sidebar contains 'Help', 'Answers', and 'More resources' (highlighted with a red box), which includes the text 'Access the Webstart client, download plugins & set up automation tasks via REST services'. At the bottom of the sidebar are 'Sign out' and a version number '6.2.4.1057'.

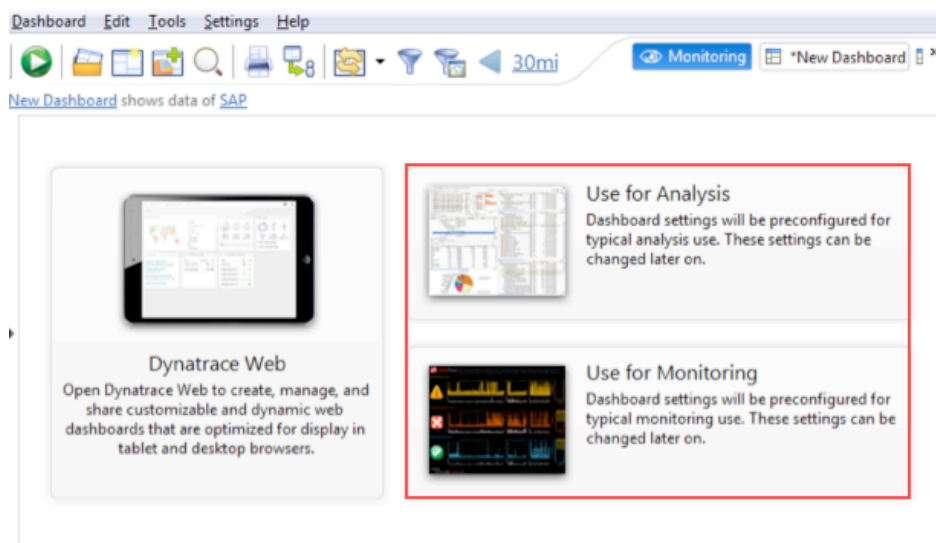
Click the “*More resources*” from above and then click “*Webstart Client*” from below.

The screenshot shows the Dynatrace Web homepage. The top header features the 'dynatrace' logo. Below the header, the 'Home' section contains several tiles: 'Dynatrace Web' (describing built-in and custom dashboards), 'Webstart Client' (highlighted with a red box, describing a maintenance-free way to start the Dynatrace Client), 'Component Installers' (linking to a download center), 'Administration' (linking to REST services for server management), and 'Extend Dynatrace' (linking to plugin downloads and collaboration).

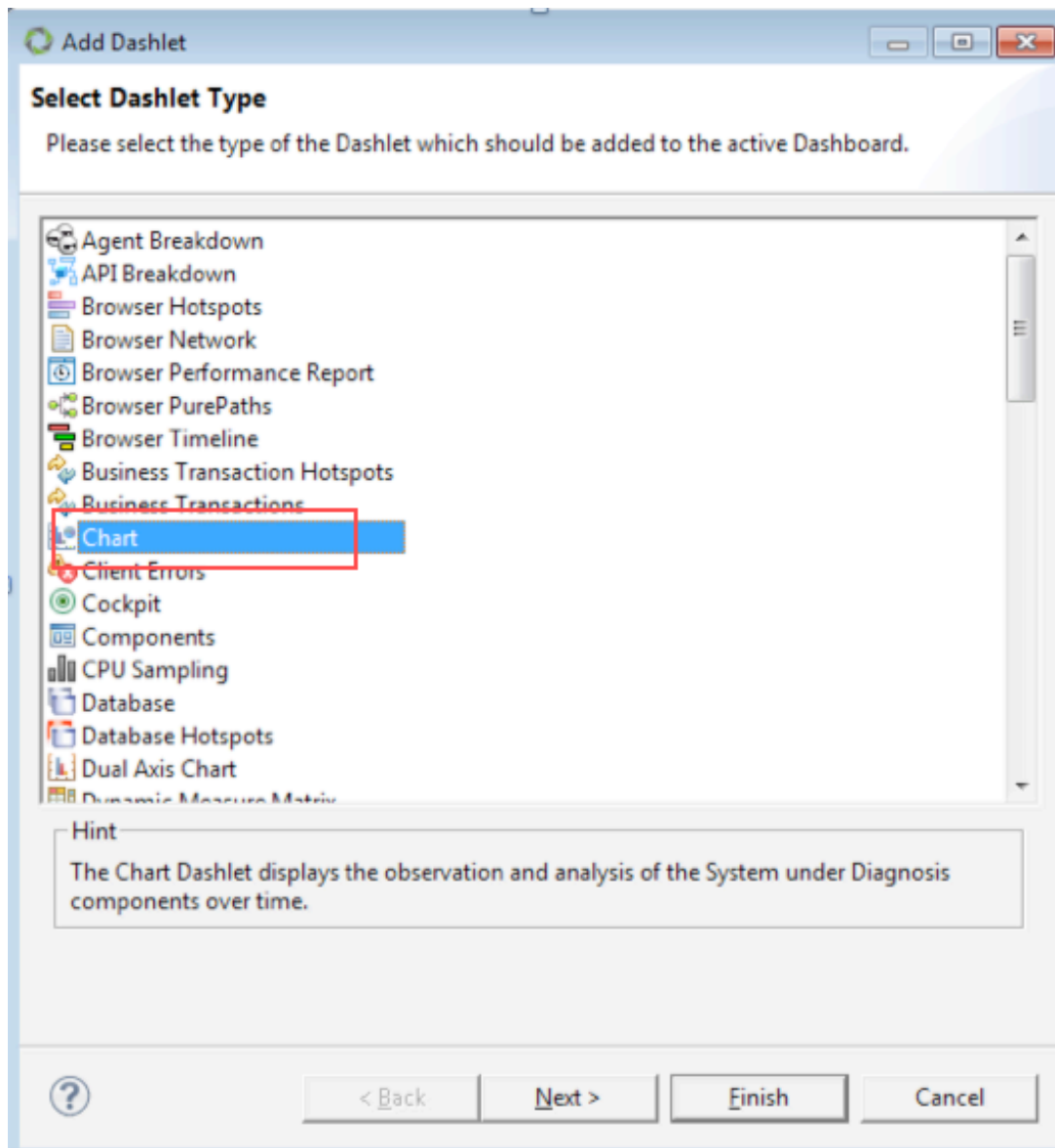
The loading of the Web Start client will take a while and eventually you will get a screen that shows the default page. Click *Dashboard->New* menu as below:



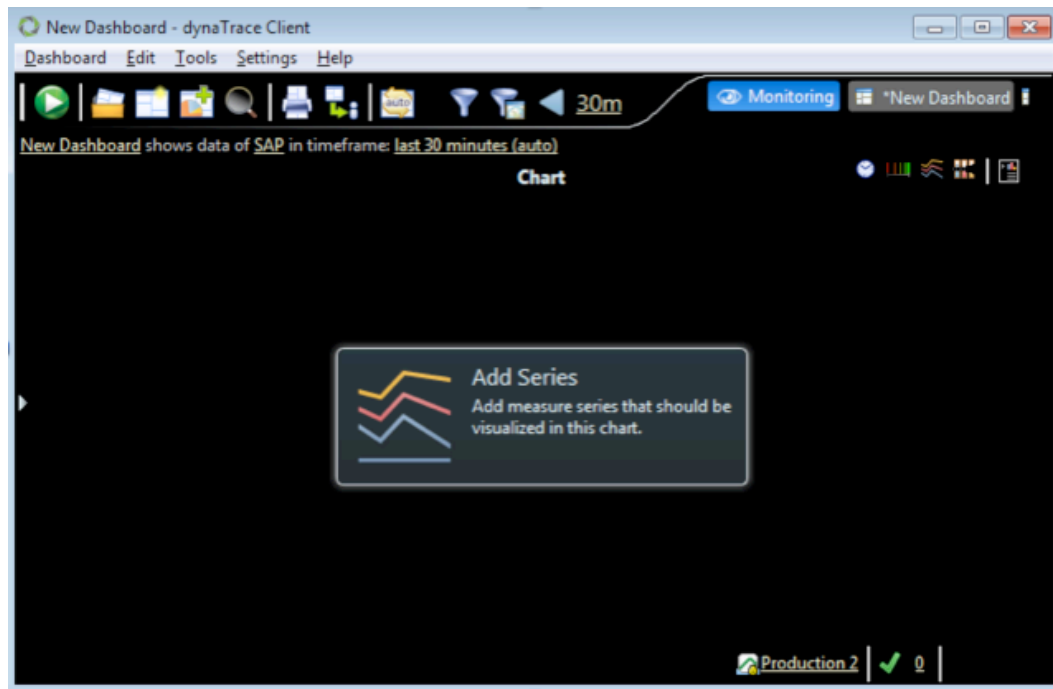
You will be prompted with choices below. Pick either “*Use for Analysis*” or “*Use for Monitoring*” --- I was told they are the same except with different background colors.



You will then be prompted with a choice of *Dashlets*. Pick up the “*Chart*” as we don’t care how metrics are presented on the dashboard since this dashboard will only be consumed by the REST clients.

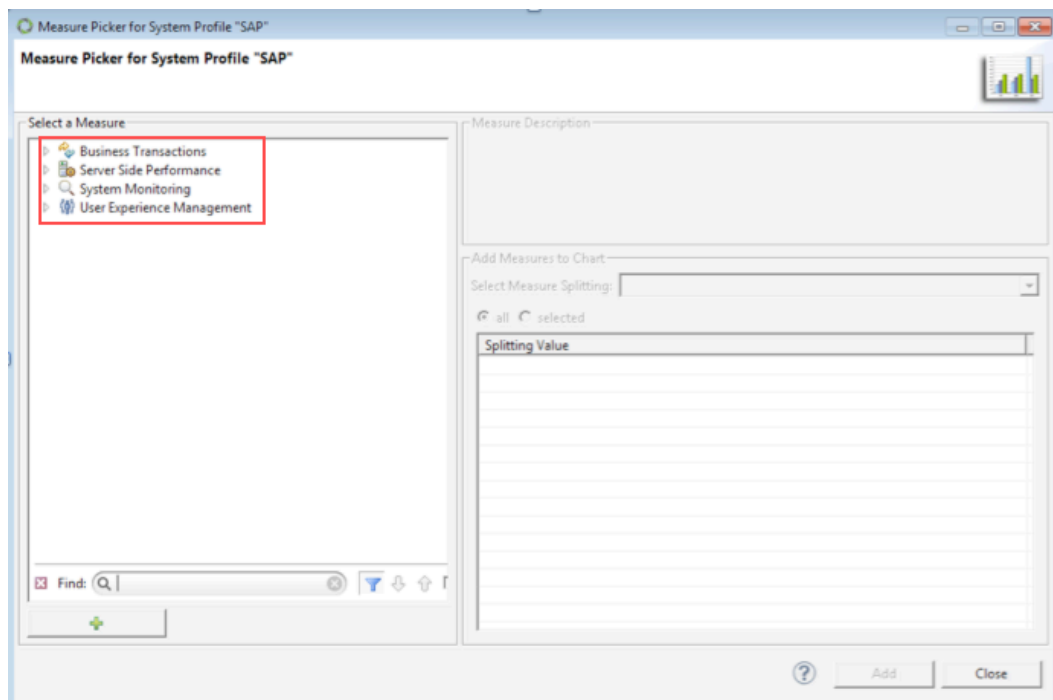


Once you have picked up the “*Chart*” you will have the button “*Add Series*” as below ---

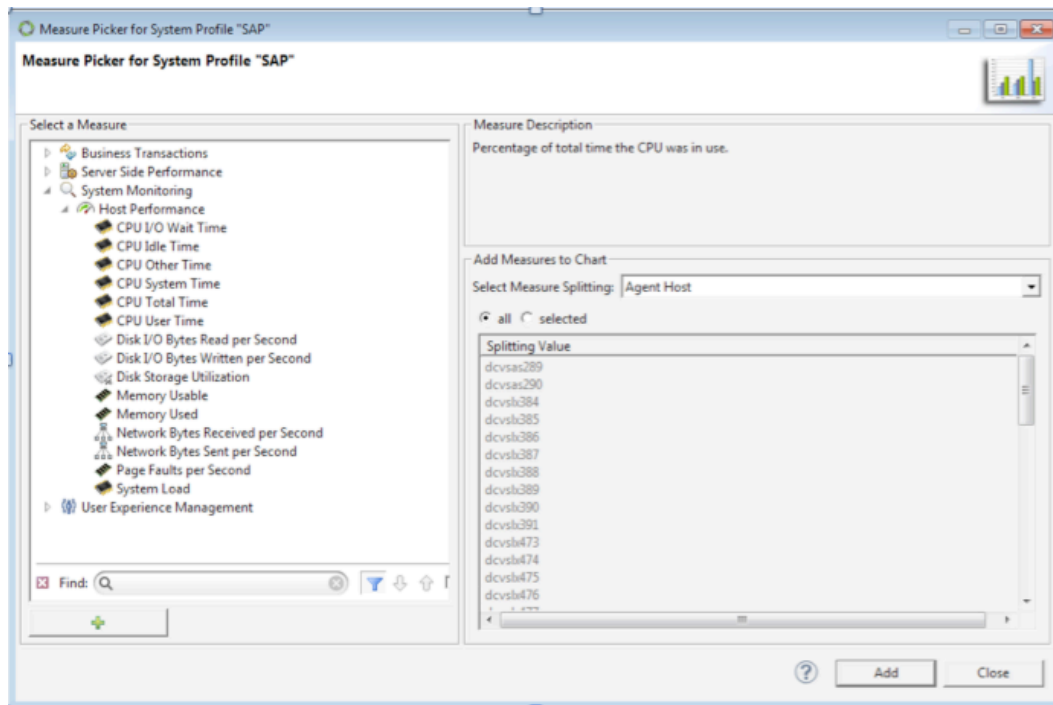


You will then be given the list of “*measures*” to pickup. In this case, we have measures for the SAP monitoring.

**Tip:** press **Ctrl-f** for a search box as showed below:



Find and select the metrics you need:

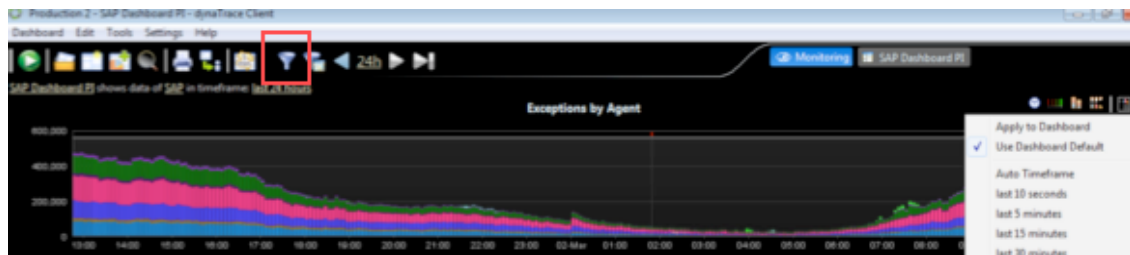


Click “Add” from above and you will get your first chart. Rename it as you wish by right-click on the “Chart” name area.

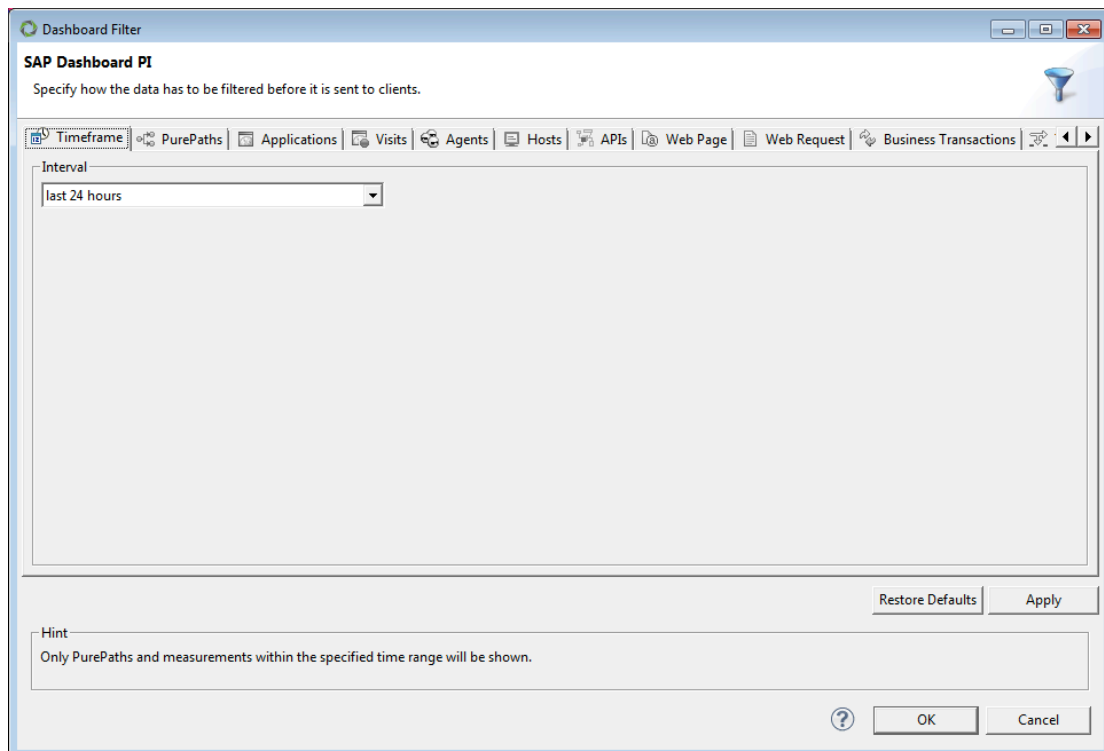




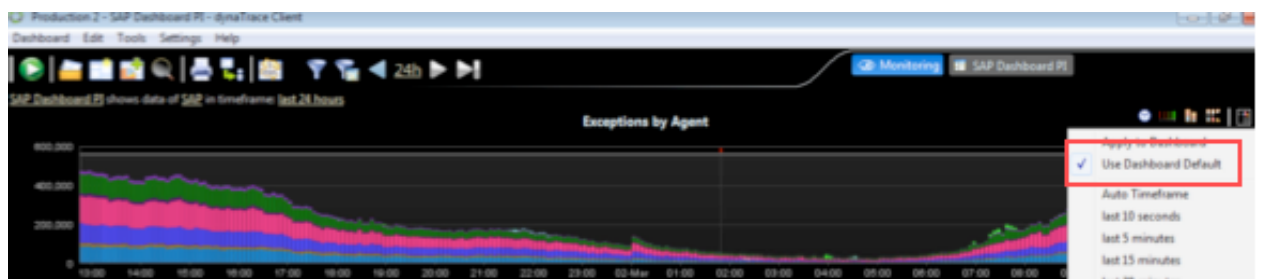
Check the dashboard-wide filter as highlighted in the square below:



Here is the setting works for me. You can also select “auto”:



For any individual chart, make sure double check the filter is “*Use Dashboard Default*”. **It can cause trouble with the REST call if it’s set to other values.**



Next is to define the granularity of the metrics. This is controlled by the chart resolution, as below:



In this case we have set the resolution to 5 mins. Check with your Dynatrace admin for the retention period of any resolution you would select.

## Test

Now it's time to test whether you can get the query result back in the XML format. I use the following cURL command (in one line):

```
curl -k -u my-username:the-password https://dynatrace-host:8021/rest/management/reports/create/Predictive_Insights-BusinessTranx?type=XML\&filter=tf:CustomTimeframe?1456552800000:1456556400000
```

Remember to append three zeros (**000**) at the end of the epoch timestamps you use to specify the range.

## Logstash

A Logstash input plugin has been created to retrieve the metrics using the dashboard we have created in the previous section. Please find the source file from github:

[https://github.com/IBM-ITOAdev/logstash-input-dynatrace\\_apm](https://github.com/IBM-ITOAdev/logstash-input-dynatrace_apm)