

Internet of Things (IoT)

Configuring Boards & Cards in the new Watson IoT Dashboard

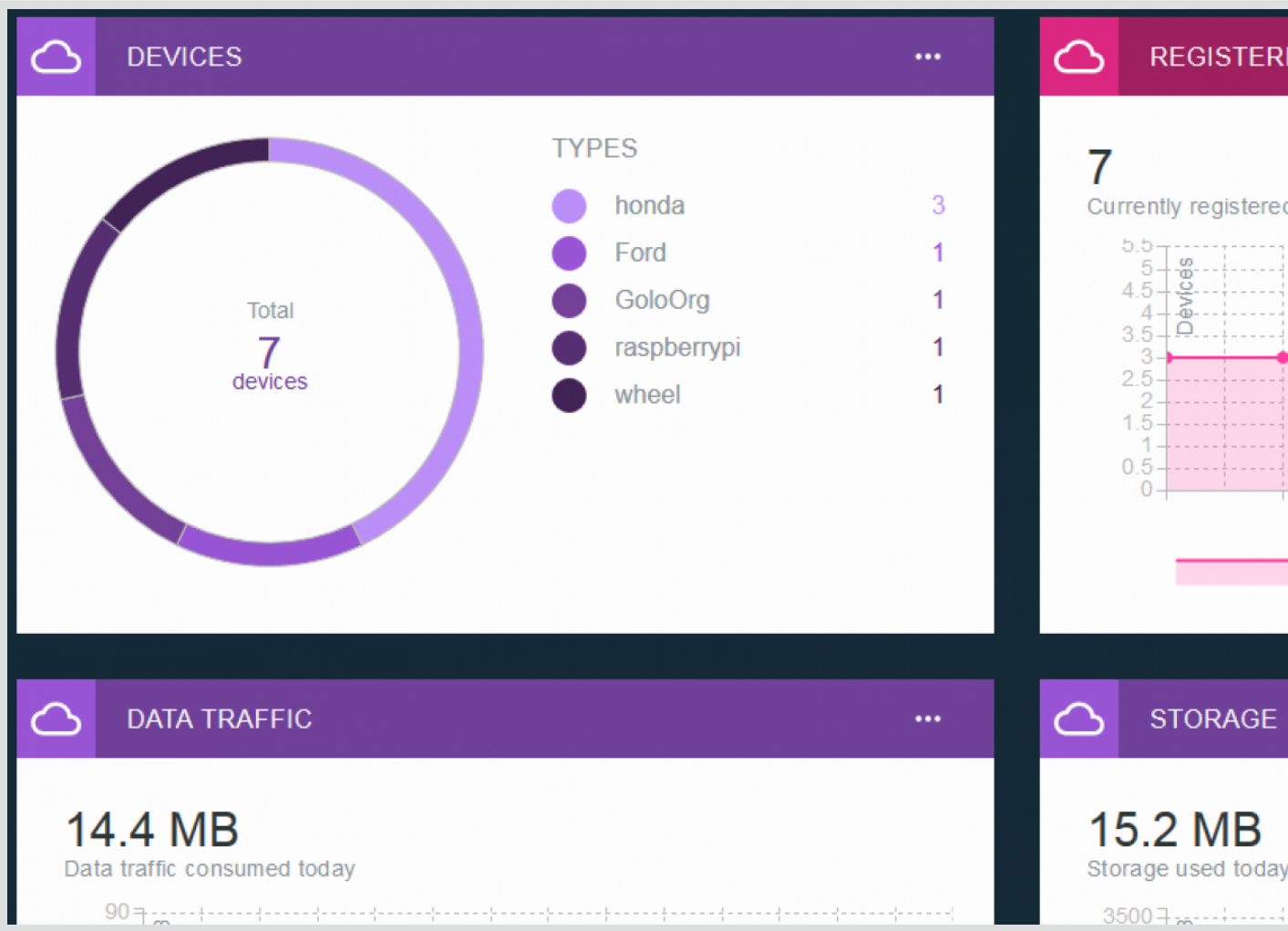
In this tutorial, you will learn how to use the new Cards in the Watson Internet of

Recipes@WatsonIoT
Published on March 18, 2016 / Updated on May 18, 2017

 11692

 2

 13



Contents

[Overview](#)[Ingredients](#)[Introduction](#)[Overview to Boards & Cards](#)[Realtime Data Visualization](#)[Gauges](#)[Usage Statistics Cards](#)[Conclusion](#)

Recipes are community-created content. They are neither monitored nor endorsed by IBM. If you find inappropriate [Abuse](#) to let us know. For more information on community content, please refer to our [Terms of Use](#).

Overview

Skill Level: Beginner

Beginner

With Boards & Cards in the Watson Internet of Things platform, you can now build your own Custom Dashboard to depict and display vital statistics of interest with varied visualization options. Board(s) provide you a page and group

Ingredients

Watson IoT organization

Step-by-step

1 Introduction

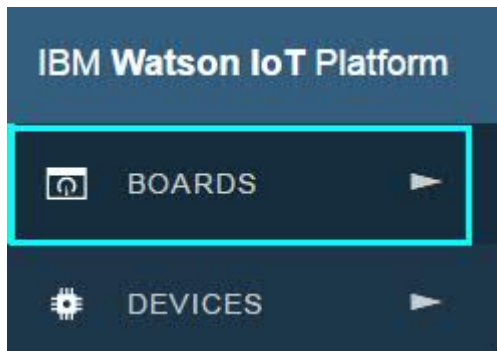
With the new boards and cards in the Watson Internet of Things platform, you can **build your own Custom Dashboard**. You can use the boards as the landing page of interest and then make use of the

1. Create **visualization charts** for the **real time data** from your devices
2. Create **Gauges** for visualizing **physical quantities** like Vehicle Speed, Temperature, pressure
3. Create Donuts charts, bar charts to display the current value of the data points
4. See the **Data and storage consumption** of your devices
5. List of registered devices

2 Overview to Boards & Cards

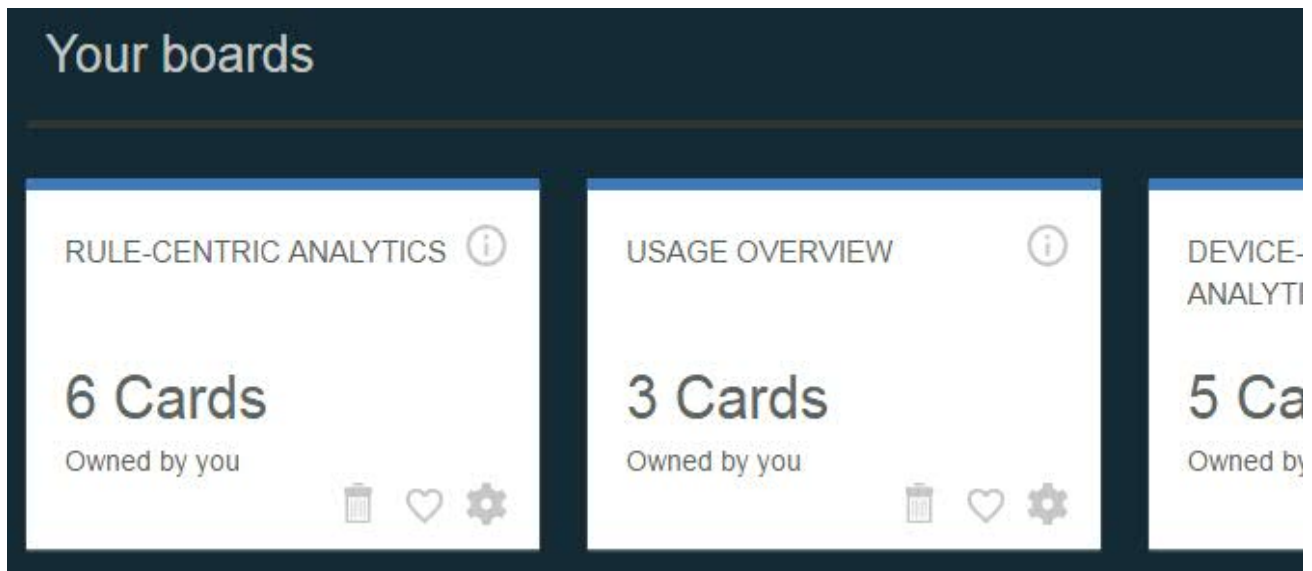
Boards page is the default landing page, when you log into Watson IoT Platform Dashboard number of Cards and each Card has to belong to one or the other Board. Cards depict and cater to your interest with varied visualization options.

Just in case, you have navigated to other tabs of interest and willing to get back to the default Boards page, then, click on the BOARDS, as available on the left hand side menu, as shown



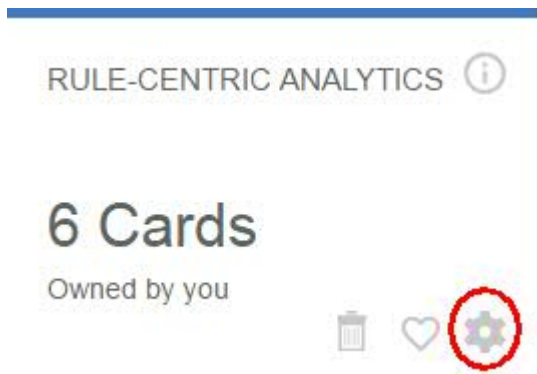
The default landing page BOARDS, displays three default Boards, that are already made available in the following Image:

- **RULE-CENTRIC ANALYTICS** – Rule-centric default board to show analytics information
- **USAGE OVERVIEW** – Default board to show usage statistics
- **DEVICE-CENTRIC ANALYTICS** – Device-centric default board to show analytics information



You can either plan to customize them and use them, as-is or create a whole new Board for

To customize an existing Board, hover the mouse over the Board of choice and click on the



In the Information tab, plan to update the Board Name and it's Description. Choice to make landing page and have this Board as part of your Favorite, are made available here.

Board settings

Change the basic settings for this.

Board name

Rule-Centric Analytics

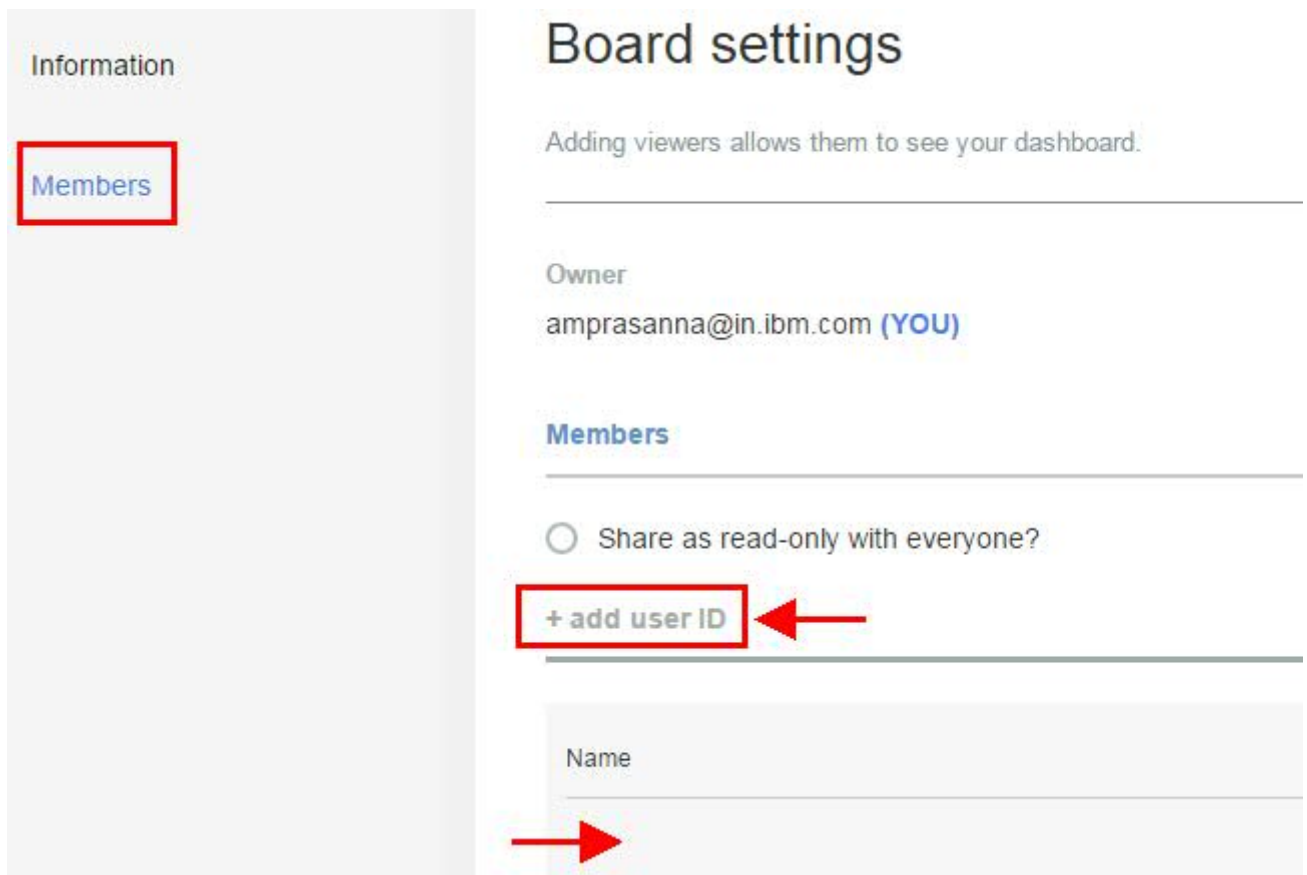
Description

Rule-centric default board to show analytics information.

- ☐ Make this board my landing page. ←
- ☐ Favorite (this also adds this board to your navbar) ←

The **Members** tab allows you to add Users with varied privileges to access the Board. In addition, you can add Users with privileges of Administrator, Analyst, Developer, Operator and Reader, to access the Board.

Note: The Members need to be first added in the Members page, as available on the left hand side. Click on the **Add Members** option.



To create a new Board, in addition to the existing ones, use the **+Create New Board** option, located in the right corner of the BOARDS page:



Update the **Information** and **Members** tab, as depicted in the Images mentioned above and add a new Board to your Watson IoT Platform Dashboard.

3 Realtime Data Visualization

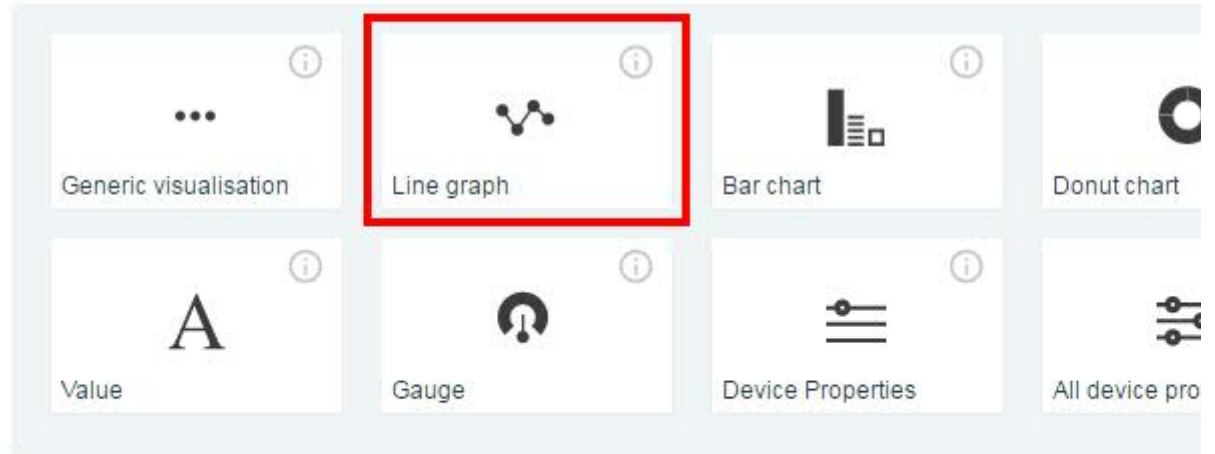
1. Click on any default BOARD to work with the CARDS. In the scope of this section, let us work on the Overview Board and work on the Visualization aspect of data
2. Now, Click on **+ Add New Card**, to add a new Card of choice


3. Under the **Devices** section, select **Line Graph Chart**, to display time series information

Card type

Select card type

Devices



4. Select a **device**.
5. Now, define the data set for the visualization. Click **Connect new data set**.
1. Enter the **name** for your data set.
 2. Select the **event**. (Tip: If the device is publishing events, it will be populated in the dropdown menu.)
 3. Select the **property** of the event. (Tip: If the device is publishing events, it will be populated in the dropdown menu.)
 4. Optionally, you can select the **unit** of the data set as well.
 5. Repeat these steps to add other properties.
 6. You can **reorder** the datapoints by dragging the data points  and dropping them in the desired order of visualization.

Create Line graph Card

Connect data set

☰

Speed

🗑️

Event

VEHICLE

Property

VEHICLE_SPEED

Name

Speed

Type

Text

Unit

km/h

⊕ Connect new data set

Back

Next

6. Click **Next**

7. Preview the card. You can select the size of the card now. By default Small is selected.

8. In the **settings** tab, you can change the settings for the visualization.

1. You can edit the window size of the events
2. Retention time for the data

Create Line graph Card

Select the card size and specify additional information

Settings S ✓ M L XL

Window size 1 minute

Keep data for 5 minutes

Stacked No

Steps No

Enable autoscroll Yes

Show overview Yes

Back Next

9. Click on Next to update Card Information. Provide appropriate Title to the Card, a Desc choose a color of choice for the Card

Enter title and description of the card

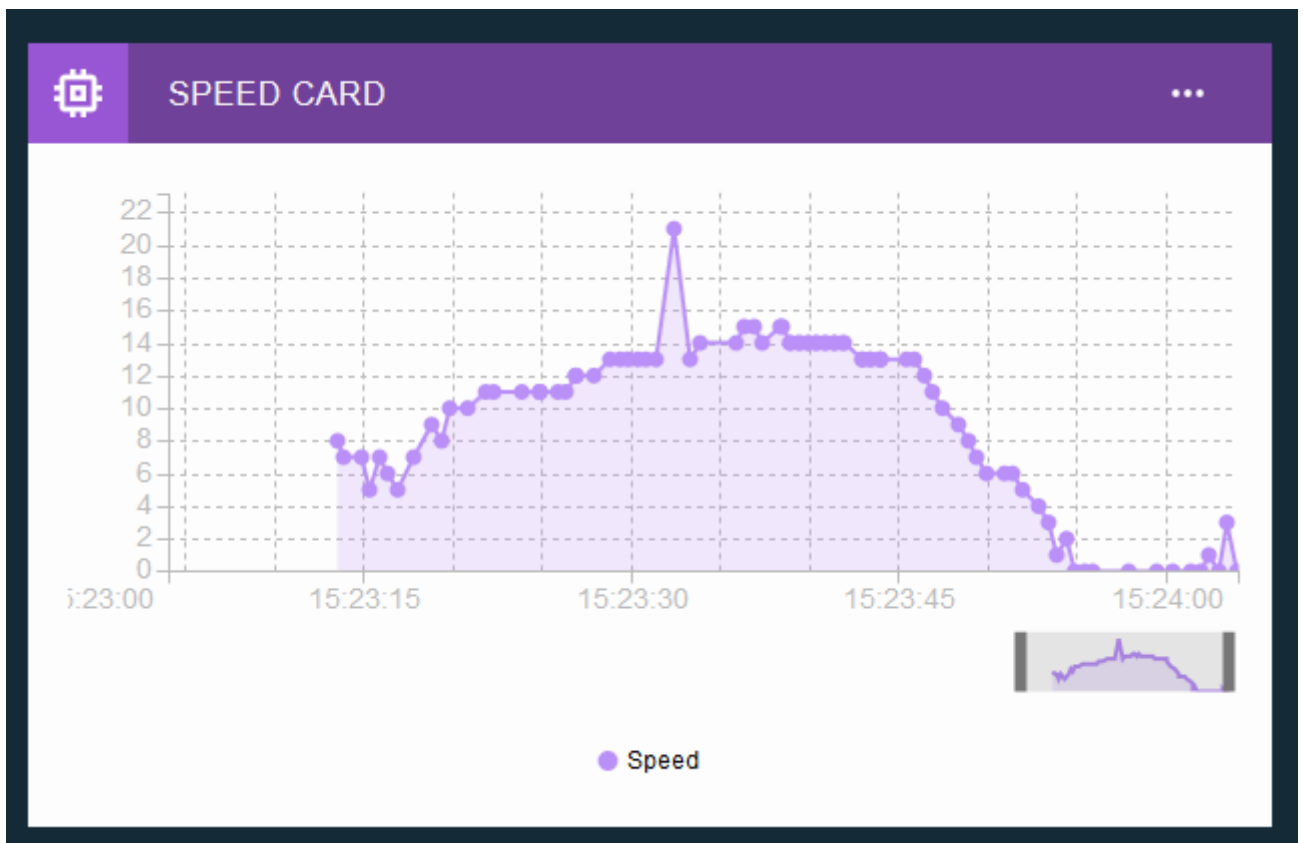
Title

SPEED CARD

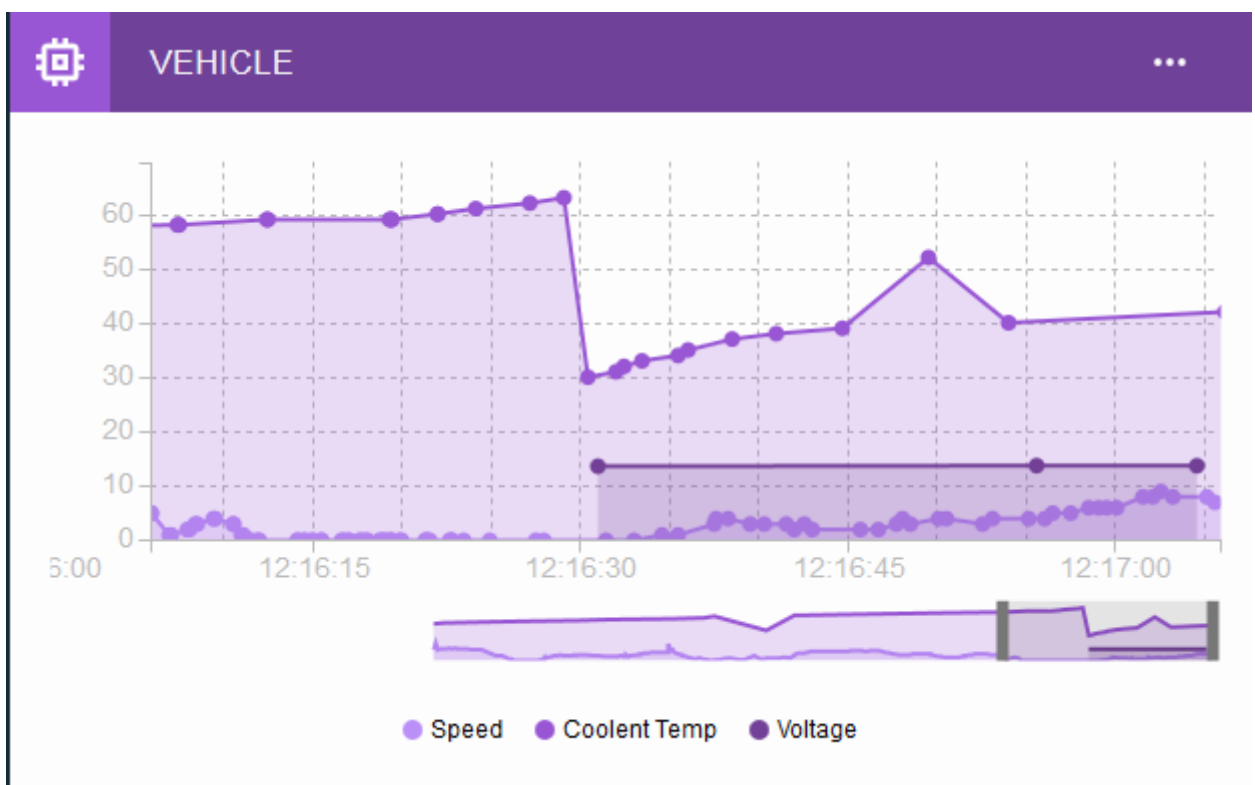
Description

Optional Description about the Card

Color scheme

10. Click **Submit**.

You can configure **multiple data points** to get visualization chart for all the values.



Now you have successfully created the real time visualization for the devices in Watson IoT. In the next step, you will learn how to create Gauges.

4 Gauges

1. In the overview tab in the Dashboard, Click **+ Add New Card**.
2. In the Devices section, select **Gauge**.
3. Select a **device**.
4. Now, define the **data set** for the visualization. Click **Connect new data set**.
 - a. 1. Enter the **name** for your data set.
 - b. 2. Select the **event**. (Tip: If the device is publishing events, it will be populated in the dropdown.)
 - c. 3. Select the **property** of the event. (Tip: If the device is publishing events, it will be populated in the dropdown.)
 - d. 4. Optionally, you can select the **unit** of the data set as well.

5.

Create Gauge Card

FLMSH
Connect data set

Property

POWER

Type

Unit

Float

Watt

Min

Max

0

6000

Precision

2

e.

5. Click **Next**

6. Preview the card. You can select the size of the card now. By default Small is selected.

7. You can also edit the settings of the gauge visualization at the **settings** tab.

1. You can edit the lower, Middle and Upper threshold settings for the Gauge widget.

8.

...

A

Settings

S ✓

M

L

Lower threshold

0 Watt to 2000 Watt

good

Middle

2000 Watt to 4000 Watt

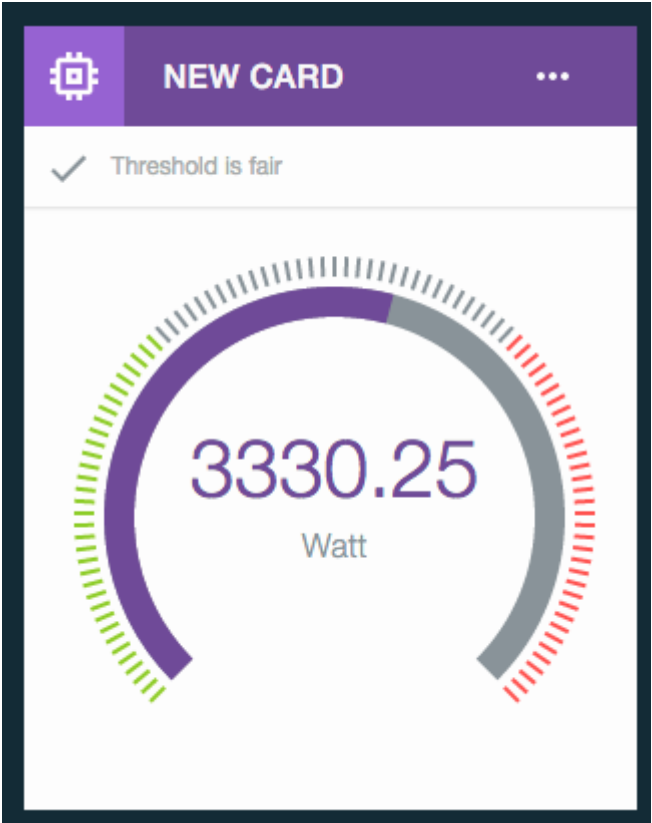
fair

Upper threshold

4000 Watt to 6000 Watt

critical

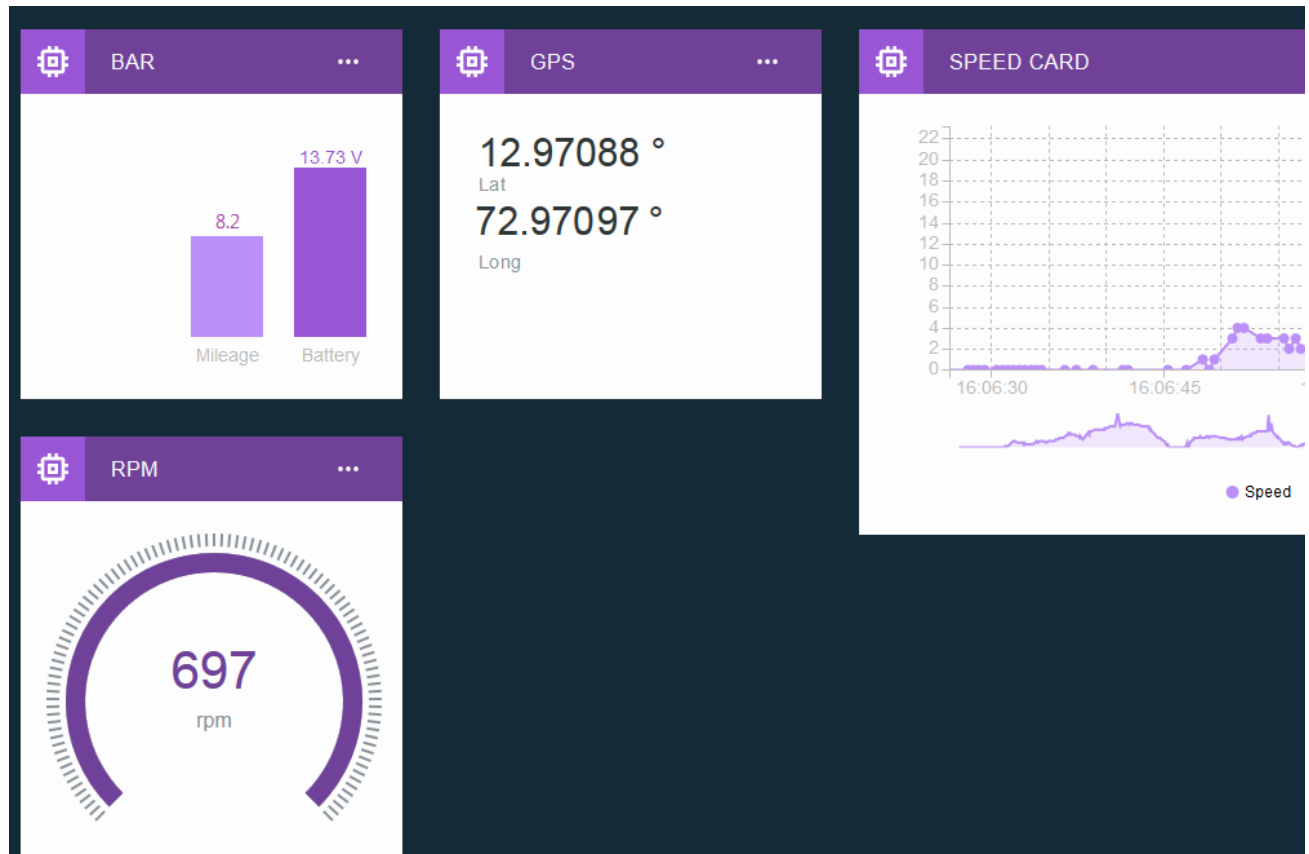
9. Enter the title for the card and click **Submit**.



Now you have successfully created the Gauges for the physical quantities in your devices in Things platform.

Similarly, you can create bar graphs, donut chart for the events published from the devices.

Below is the dashboard created for data published from a car



5 Usage Statistics Cards

This cards can be used to build Dashboards to get the data regarding the devices connected Data.

1. In the Usage Overview Board, **Click + Add New Card**.
2. In the Usage section.
3. Select **Device Types**
 - a. 1. This gives information of all the devices registered in Watson IoT.
 - b. 2. Select the Size of the card
 - c. 3. Give a suitable title to the card.

4. Select **Data Transferred**.

1. This gives information on the amount of data transferred, as of today.
2. Select **XXL** size.
3. Give a suitable title to the card.

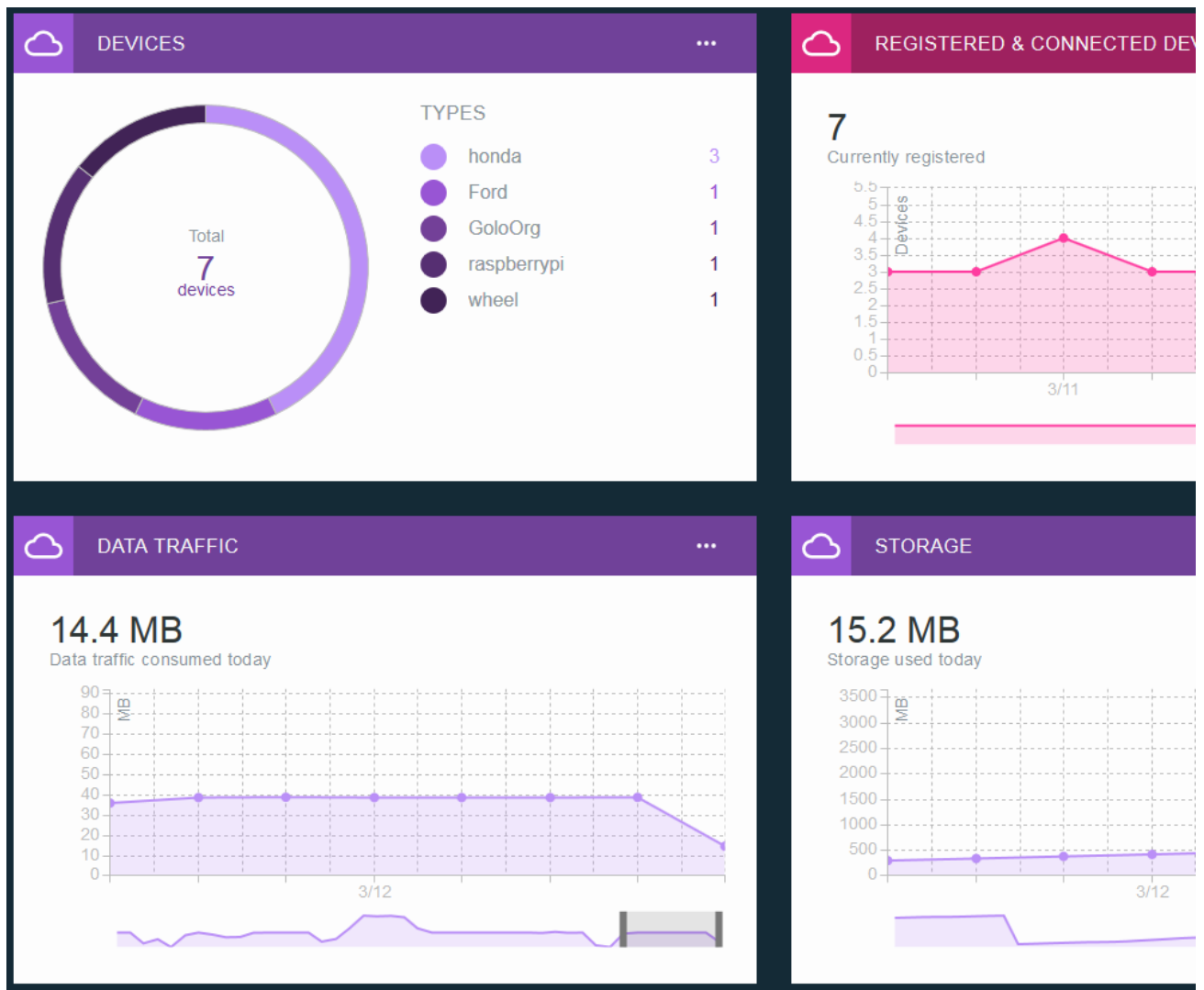
5. Select **Data Consumption**.

1. This gives information about the Data traffic
2. Select **XXL** size

6. Select **Storage Consumption**.

1. This gives information about the Storage consumption in the platform
2. Select **XXL** size

Below is the screenshot with all the 4 usage cards added in the dashboard.



6 Conclusion

So in this tutorial, you have learnt to create the Boards and Cards in the Watson IoT platform dashboards for your IoT solutions. As a next step go through following recipes to help build solution,

- [DeviceList card to monitor data from multiple devices](#) – Helps monitor specific status a from a list of multiple devices, using various visualization options with a click of a button
- [Visualize Historian data in Watson IoT Platform](#) – Helps to visualize the device data stored in Line Chart Card.
- [Real-time data analytics in Watson IoT Platform](#) – Showcases how to create rules and actions in real-time.

For any Feedback/Questions, please feel free to comment below

TAGS CUSTOM, DASHBOARD, GAUGE, GRAPH, IBM WATSON IOT PLATFORM, IOT, IOTF, QUICKSTART, REALTIME, RTI, SENSOR, WATSON IOT

by Recipes@WatsonIoT

13 comments on "Configuring Boards & Cards in the new Watson IoT Dashboard"

DarthNEvadeher • April 06, 2016

Hi, I cannot find the, 'Add A new card' option in my dashboard. Can someone please help?

[Log in to Reply](#)

Amit M Mangalvedkar • April 06, 2016

This functionality is provided as a beta feature, so you need to turn on the experimental features. Click on the menu icon and select the experimental features.

Thanks and Regards

Amit M Mangalvedkar

[Log in to Reply](#)

DarthNEvadeher • April 06, 2016

I am trying to get a visualization of the data from my mbed iot device. I have followed all of the steps mer the card, no data is being passed in. What I mean is that the real time chart displays no data.

[Log in to Reply](#)

Jeffrey Dare • April 07, 2016

Hey @DarthNEvadeher,

Were you able to see the list of properties from the drop down menu when configuring the visualization? property names are populated correctly. So this will also ensure that the system is able to receive the eve

If you manually entered the property name, can please recheck the property name as it is case insensitiv

[Log in to Reply](#)

DarthNEvadeher • April 07, 2016

Hey @JeffreyDare

I have managed to do it. I did not configure it properly and thus it did not work.

Thank you very much, for your advice. I can create a real time card.

[Log in to Reply](#)

rcruicks • June 21, 2016

i like! so much quicker and easier than faffing about with RTI.

once we have a dashboard built, though, how does one embed that in a external application? customer p

[Log in to Reply](#)

Dennis.Lopes • August 15, 2016

Hello,

I tried to use Real Time chart card, but it's not working as expected. Curiously I was able to use the card I properties being transmitted by my TI Sensor Tag, but when I select the same parameters to be shown ir plotted. Sounds like a problem in this card.

[Log in to Reply](#)

AndrewCrisp • March 06, 2017

Hi,

Do you know of a way to display text data in the dashboard, for informational purposes? The cards seem coming in through the platform.

[Log in to Reply](#)

Roriz • May 05, 2017

Hi,

How can I change the decimal places? I only can see my data with 1 decimal place.

Thanks

[Log in to Reply](#)

Recipes@WatsonIoT • May 08, 2017

Hello Roriz,

1. In the Device Card of choice, click on the SETTINGS and choose the Data Source of interest entry.
2. Now, in the 'Type' entry, you would have chosen FLOAT as your data type. Under the TYPE c to see PRECISION option, whose entry is defaulted to 1 (single precision). Modify the value t extend the precision to 2 or 3 decimal places.
3. Click on Next to continue and Save the settings

[Log in to Reply](#)

Rossfe92 • November 22, 2017

Hi,

I follow this receipe end all work fine, but I'm able to add only one card for board. What is the solution for

[Log in to Reply](#)

kris_fbapps • July 04, 2018

Hi,

I have events publishing from a remote node. Events show up on the Devices tab of my dashboard, howe' data using a new Card in the Boards tab, I get to Create Line Chart card and then the drop down does not events are seen coming in at the Device tab. I created an API with token and key, but these don't seem tc key and token need to be sent from the node in stead of existing Device ID and token? Thanks

[Log in to Reply](#)

Kresna D • August 19, 2018

Hi i have try with this card. but it can't work. I have succeed send data with mqtt client and in history raw "status123" and property "adc" with value "10", but when i creating with card with same event property How to solve that ? thankyou

[Log in to Reply](#)

Join The Discussion

You must be [logged in](#) to post a comment.

[Contact](#) [Privacy](#) [Terms of use](#) [Accessibility](#) [Report Abuse](#) [Cookie Preferences](#) [Feedback](#)