



Three Steps in Three Minutes to Publish and Share your Realtime Process Data (Powered by rIoT Technology by Aviasta Realtime Systems)

What is rIoT Technology: rIoT Technology is an advanced cloud interface technology that allows you to collect your real-time process data securely and makes it available anywhere and any time. For more information, please visit www.Interfaceincorp.com

What is AT&T M2X: At its core, M2X is a cloud-based time-series data storage service that facilitates data transfer and analysis of data from connected devices, applications and services (what we call "Devices" in M2X). For more information, please visit <https://m2x.att.com/developer/documentation/v2/overview>

What is Verizon Thingspace: Verizon ThingSpace is your gateway to a simplified IoT workspace. You have 24/7 access through a single, consolidated portal to everything you need to create your IoT applications. With centralized tools and resources readily available, you don't have to waste time and expenses acquiring your own development assets. For more information, please visit <https://thingspace.verizon.com/developer>

In this document, we demonstrate how you can publish and share your process real-time data in three extremely easy steps. The data is generated by a random point and is pushed to both Verizon Thingspace and AT&T M2X simultaneously.

Step 1: Define the source: For this demo, we use rIoT simulator to create a simulation point running in random mode. Here are the point attributes:

- Minimum value: -20
- Maximum value: 100
- Update interval: 2000 milliseconds

Step 2: Define a REST endpoint at Verizon Thingspace:

URL: <https://thingspace.io/dweet/for/dev1> (this defines a device called 'dev1' on Thingspace)

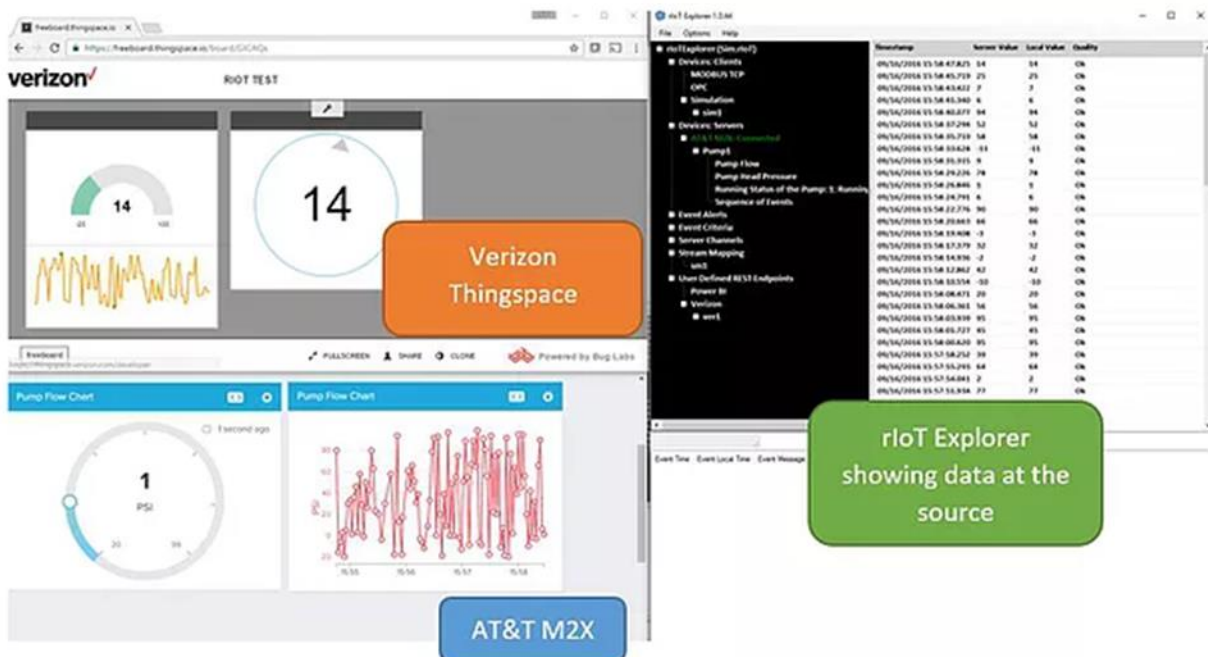
API Key: In this demo, we do not use the locked mode, which means we do not need an API key.

However, after getting a private account, an API key should be added to the configuration. Define an event criteria and link the REST message to the source, which is the random point defined in Step 1. In Thingspace, just simply add three widgets to show data.

Step 3: Define an M2X connection and apply the API security key. If your M2X account has already some devices, you can load them into your rIoT Explorer and choose the target device. Otherwise, just simply create a new device in rIoT Explorer and push it to AT&T M2X. Create a new map and link one of the points in the M2X target device to the source point created in Step 1. In M2X dashboard, simply add a gage and a chart and tie them to the server point.

Save the configuration file and download to the rIoT engine.

Here are the results:



Important Notes and Features:

- Verizon Thingspace is implemented by a rIoT user definable REST API. Using this feature, users can define new endpoints as they wish
- Realtime data is passed to two servers in this example: AT&T M2X simultaneously. More endpoints can be added using rIoT user definable REST endpoints
- Verizon Thingspace and AT&T M2X follow the source random point accurately, however, there seems to be a significant lag in M2X widget to update on the screen
- There is no noticeable lag between the updates on the rIoT Engine and Verizon Thingspace update