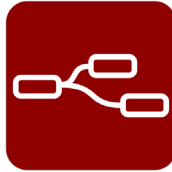


# enabling the internet of things

## Build your IoT applications faster with FRED

FRED is a cloud hosted Node-RED service, designed to streamline the development and integration of IoT applications. From prototype to production deployment, FRED makes each step as easy as possible, allowing you to focus on your IoT solution, not the tools and platforms.

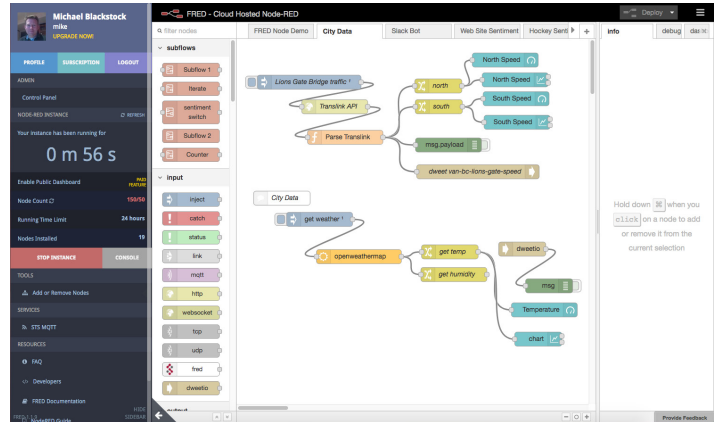
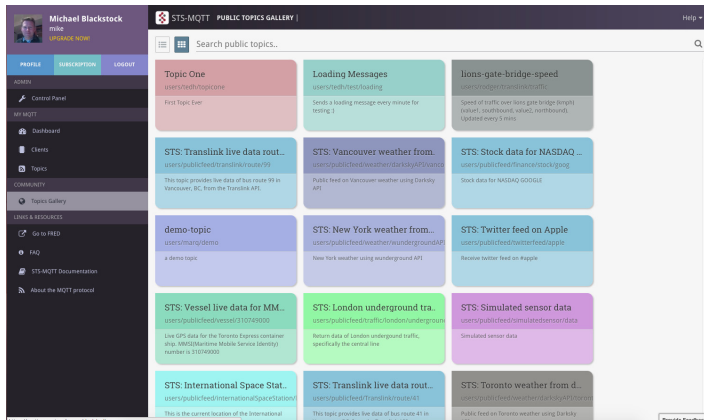


Building on the Node-RED visual data flow-based programming tool from the IBM Emerging Technologies group, FRED makes your development as smooth as possible. IoT developers can create applications using a huge variety of device protocols, services, databases and IoT platforms -- all using a simple and intuitive 'drag-and-drop' programming environment.

Nodes included with FRED include:

- **Protocols:** HTTP, WebSockets, MQTT
- **Databases:** InfluxDb, MongoDB, Redis, MySQL, Postgres and other RDMS
- **Services:** Social networks - Facebook, Twitter; Notification Services - Pushbullet, Pusher; Messaging Systems - Twillio; Real Time - PubNub; IoT - AWS IoT, Dweet.io, and more.

*STS MQTT management interface for creating and managing MQTT clients, topics and messages*



*The FRED UI for managing your Node-RED instance, installed nodes and Node-RED editor canvas for creating your IoT application flows.*

## STS MQTT Service

The FRED platform includes the Sense Tecnic MQTT service to provide standards based connectivity to IoT devices and services.



MQTT is an extremely lightweight publish/subscribe messaging protocol. Using MQTT, connect edge devices or integrate with different IoT platforms.

With STS-MQTT developers can create client credentials, monitor topics and connect IoT devices in minutes.

## Register Now!

FRED is free to try. Once you've settled on your flows, you can subscribe to one of our paid plans.

<https://fred.sensetecnic.com>



# enabling the internet of things

## Telco Service Providers

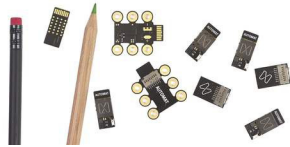
Sense Tecnic has partnered with the largest Australian Telecom provider to explore the use of Node-RED as part of their advanced IoT platform. Leveraging FRED, our cloud based Node-RED service, they are exploring how Node-RED can act as a integration point for IoT devices and a set of diverse IoT platforms and other micro-services.



For telco providers, FRED provides a perfect tool for telco customers who use a diverse set of IoT platforms and services in their applications.

## Hardware Manufacturers

Traditionally, hardware manufacturers shipped an SDK with their product, but with cloud technologies, that's no longer the only option. Using FRED, manufacturers can bundle their hardware with access to a cloud based rapid development environment – like FRED. Some of the key benefits are:



- No need to maintain and update SDKs, a single cloud service is accessed by all your customers
- Maintain a relationship with your customers – understand their usage as they work with the platform
- Develop and dynamically update new features and fixes all in one place

## Professional Services

Sense Tecnic offers comprehensive professional services from application design to deployment. Leveraging our own in-house technologies such as FRED and MQTT, as well as a host of industry standard technologies such as InfluxDb, the CKAN Open Data portal and others, we can help you get your IoT application to market quickly and cost effectively.

## Smart Cities

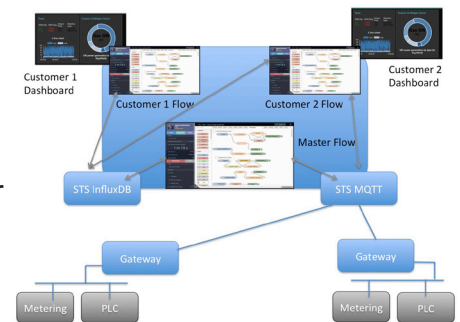
Sense Tecnic has been involved in Smart Cities research as well as building and deploying IoT applications providing solutions in the Smart Cities space since 2010.



Effective smart city applications involve connecting a variety of systems – from infrastructure such as roads and bridges, utilities, citizen engagement applications and enterprise work-order systems. A key requirement is rapid systems integration. FRED offers a number of integration components to take your integrated Smart City application from prototype to production.

## Industrial IoT

A number of customers use FRED as a cloud service to monitor and manage factory and other industrial machinery.



An OPC server, or similar gateway gathers machine data and delivers it, via MQTT to FRED for data cleanup and analysis. Leveraging the built in dashboard nodes allows rapid real-time visualization, or data can be saved to any of the popular time series database storage services for offline retrieval and visualization.

## Contact Us!

Address: 308 E 5th Ave,  
 Vancouver, BC  
 Email: [info@sensetecnic.com](mailto:info@sensetecnic.com)  
 Twitter: [@sensetecnic](https://twitter.com/sensetecnic)

