iot.schema.org

Community Teleconference

January 17, 2019

Agenda

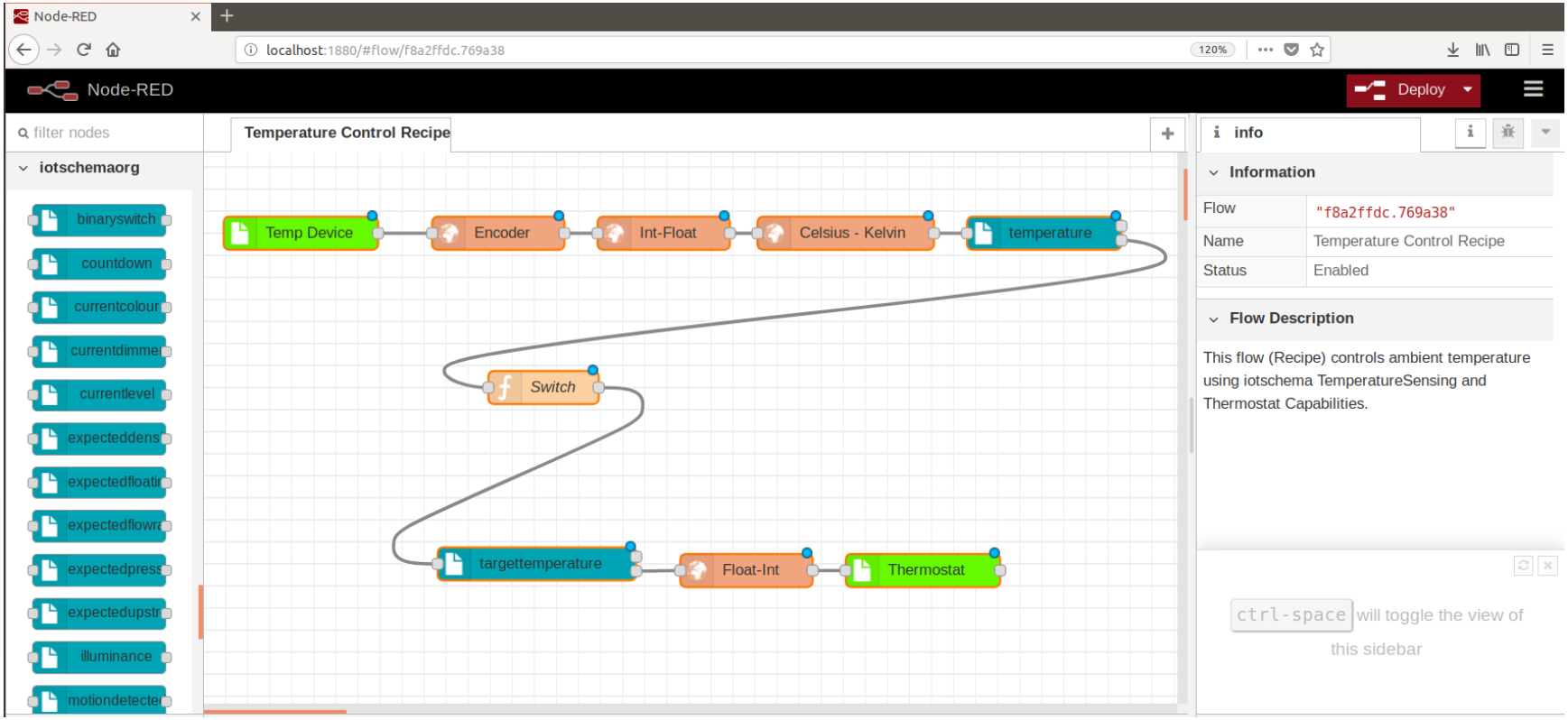
- Agenda and announcements
- Integration of WoT Thing Directory discovery in the iotschema-node-red project
- Updates
  - One Data Model Liaison Group
  - W3C Community Group for iot.schema.org
  - Roadmap for 2019
  - Other updates
- AOB

iot.schema.org in Node-RED

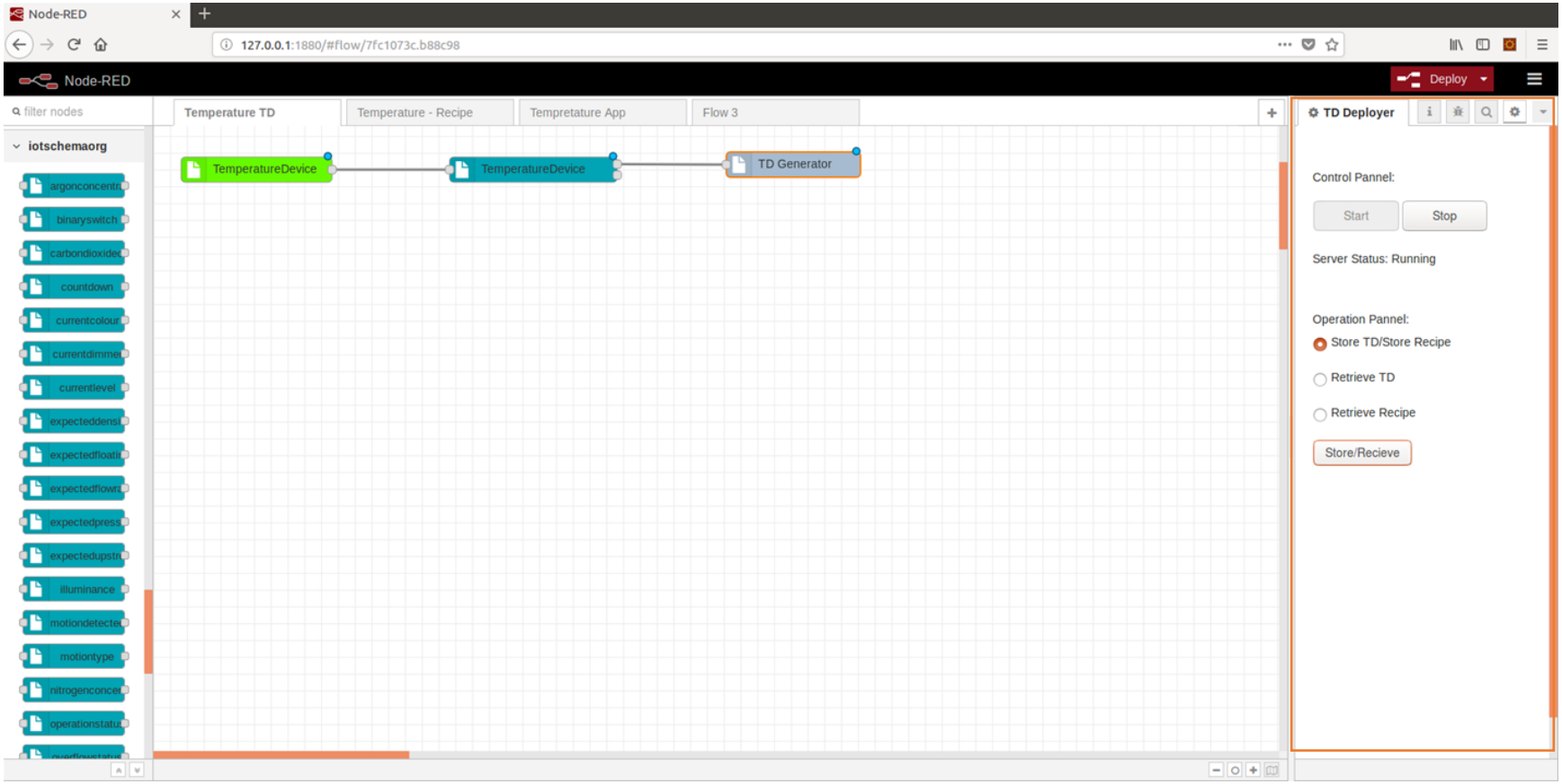
- Is there an easy way for a Web application developer to use iot.schema.org?
- Our goal is to provide a tool that:
  - Does not require a developer to know RDF(S), JSON-LD, RDF Shapes etc.
  - Enables an easy configuration of things when using iot.schema.org
  - Avoids translations of serializations formats, data types, units etc.

Example: Controlling Temperature

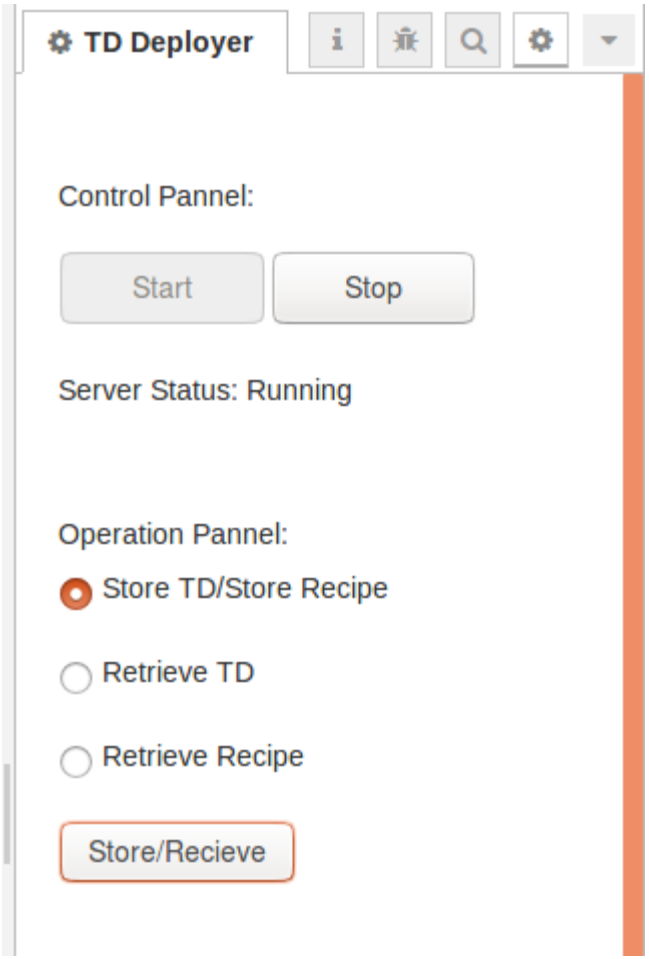
Node-RED Application with iot.schema.org Nodes



Integration of WoT Thing Directory in the iotschema-node-red Project



Integration of WoT Thing Directory in the iotschema-node-red Project



One Data Model Liaison Group

- Outgrowth of "Hive", a well-attended meeting sponsored by the Zigbee Alliance in November
- Address the device interoperability problem across SDOs, Vendors, Service Providers
- Open membership, equal participation by company
- Zigbee, OCF, OneM2M, GSMA, EnOcean
- Google, Comcast, Schneider Electric, Honeywell, Ericsson, Qualcomm, NXP, Orange, Cable Labs, Silicon Labs, Samsung, Huawei, Haier, many others

One Data Model Liaison Group

- Administratively hosted by OCF
- Skip Ashton (SiLabs, Zigbee) is Chair
- Weekly meetings; the third was January 16th 2019
- Scope and Priorities are being discussed
- Presentations are being given on existing models and approaches
  - January 4 – iot.schema.org
  - January 16 – Nest/Weave
- Exploratory phase, gathering input and opinions

W3C Community Group

- We have proposed a new W3C CG for IoT Extensions to schema.org
  - https://www.w3.org/community/blog/2019/01/17/proposed-group-schema-extensions-for-iot-community-group/
- The charter will be our current charter (see the github repository)
- Four additional supporting members are required to start the group
- https://www.w3.org/community/groups/proposed/
  - Schema Extensions for IoT

W3C Community Group

- Keep and extend the current charter
- Provide a better venue for the group to operate
- Mailing list
- Work with related groups in W3C; Automotive, Spatial Data, Sensors, WoT
- Potential transition to higher status in W3C, e.g. "Evergreen standard"
- https://www.w3.org/community/groups/proposed/
  - Schema Extensions for IoT

2019 Roadmap

- Start up the W3C Community Group
- Develop and document pattern, practices, and tools for creating and using definitions
- Web interface to browse definitions
- Schema.org integration
- Publish initial definition sets from contributors
- Identify future enhancements
  - semantic categories and classes
  - behaviors, rules, scenes

2019 Roadmap Cont'd

- Review the current iot.schema.org model
  - Integration of schema.org-like model with RDF Data Shapes
  - Support for extended scenarios based on querying, reasoning, and validation
- Integration of Project Haystack & Brick with iot.schema.org
  - Continuation of the work on model mappings
- Extension of iot.schema.org for industrial domain
  - Currently the focus is on smart home/building

2019 Roadmap Cont'd

- Extension of iot.schema.org with Feature of Interest (FoI)
  - Continuation of the work on FoI model
  - Integration of existing FoI with iot.schema.org, e.g., W3C Linked Building Data
- First proposal for Semantic API with iot.schema.org
- Continuation of iotschema-node-red Project
  - Better integration of discovery, Semantic API…