

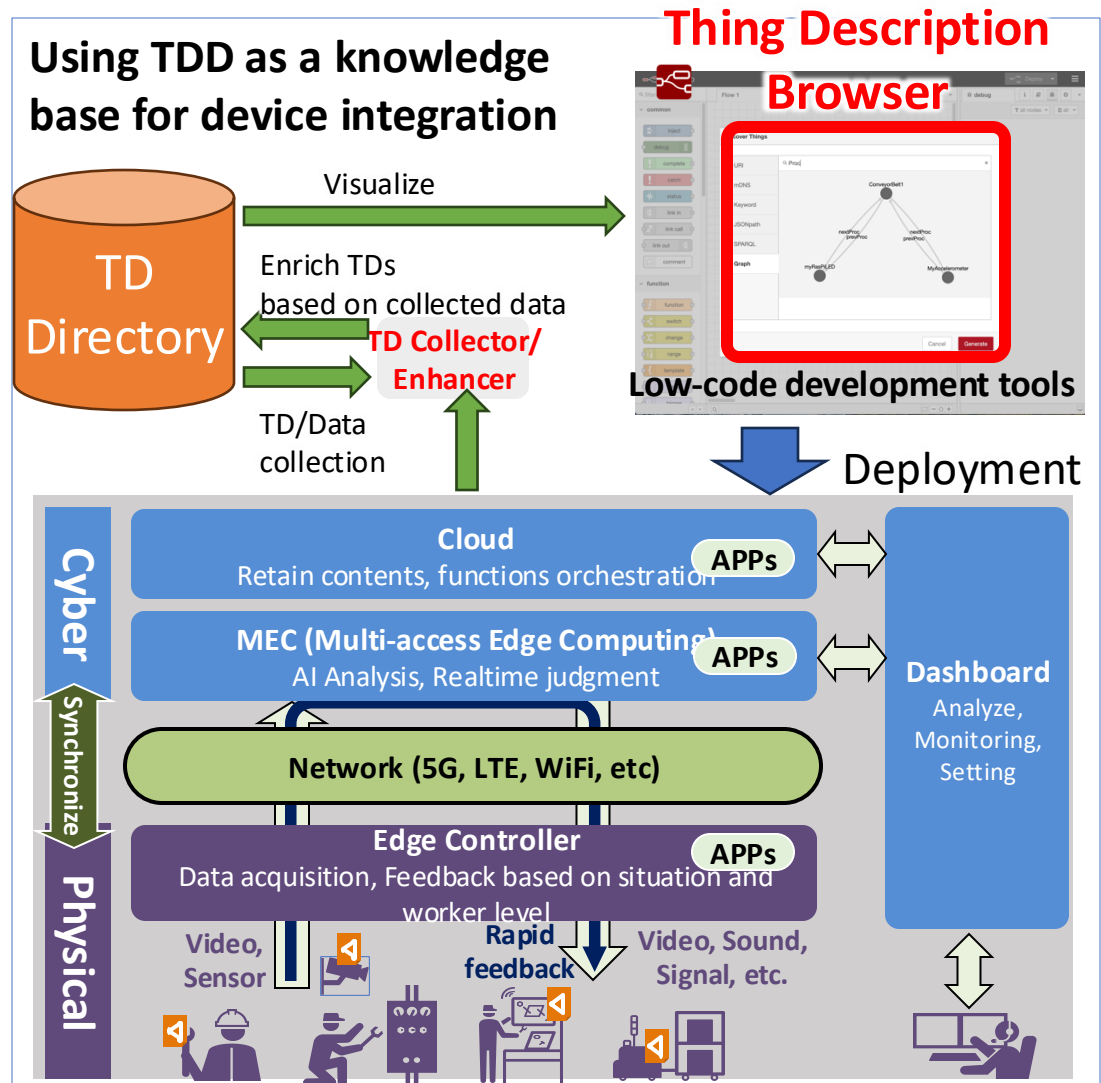
Thing Description Browser / Enhancer for rapid application development

Background/Motivation:

- We are researching to improve productivity in the factory by attaching various sensors and display devices to provide rapid feedback to frontline workers.
- For rapid system development, we collect necessary information in the form of Thing description, and use with low-code programming tools.

What can be seen:

- Thing Description Browser / Enhancer: Collects and displays information on Things at the site using the WoT Discovery mechanism.
- Node Generator: Integrating WoT with Node-RED, low-code programming environment.



Vite + React + TS

localhost:5173

IMPORT

NEW

Style: Table

Title	Description	Properties	Actions	Events
Line 1	# Factory Line(1) ## Description This...	telemetry1, telemet...	getLine1Token, su...	detect_object, dete...
Touchpanel	(No Description)	(No Properties)	(No Actions)	touchscreen
Virtual Color Control	(No Description)	color	(No Actions)	(No Events)
electricLock	Electric lock	id, mainElectricLoc...	(No Actions)	(No Events)
Virtual Humidity Sensor	(No Description)	humidity	(No Actions)	(No Events)
Team Sudokus for NeoBoard	(No Description)	(No Properties)	get-sudoku	(No Events)
Virtual Multi-level Switch	(No Description)	level, on	(No Actions)	(No Events)
humanDetectionSensor	Human detection sensor	detection, id, manu...	(No Actions)	(No Events)
Virtual Energy Monitor	(No Description)	current, frequency, ...	(No Actions)	(No Events)
Virtual Temperature Sensor	(No Description)	temperature	(No Actions)	(No Events)

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Detail

Ollama LLM Service

REST API for Ollama service providing LLM interfacing. Can also support multimodal LLMs and LLMs with tool support. TD describes generate and chat endpoints only.

Properties

Actions

chat (Generate a chat completion)
Generate the next message in a chat with a provided model. This is a streaming endpoint, so there will be a series of responses. Streaming can be disabled using "stream": false. The final response object will include statistics and additional data from the request.

generate (Generate a completion)
Generate a response for a given prompt with a provided model. This is a streaming endpoint, so there will be a series of responses. Streaming can be disabled using "stream": false. The final response object will include statistics and additional data from the request.

Events

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Detail

Mini Touch Panel 1

Mini Touchpanel and temperature/humidity sensor

This Thing is mainly intended for testing. From this Thing, you can subscribe to touch panel events using WebSocket and ZeroMQ. You can also retrieve temperature and humidity as properties via HTTP.

Properties

last_event (Last emitted event)
(no description)

temperature (undefined)
(no description)

Actions

Events

touchpanel (undefined)
(no description)

CLOSE

Lessons Learned

- Thing Description (and Directory) are good for consolidate onboarding knowledge in human/machine readable format.
 - If the title/description of the Thing Description have a description for humans, it will be easier to do Plugfest itself.
- Using Web browser as a Consumer, we need some working arounds to access properties on Things (CORS setting, server certificate, etc...).
- There are various difficulties in connecting the Remote Softether VPN (at AWS cloud) and the local plugfest network...