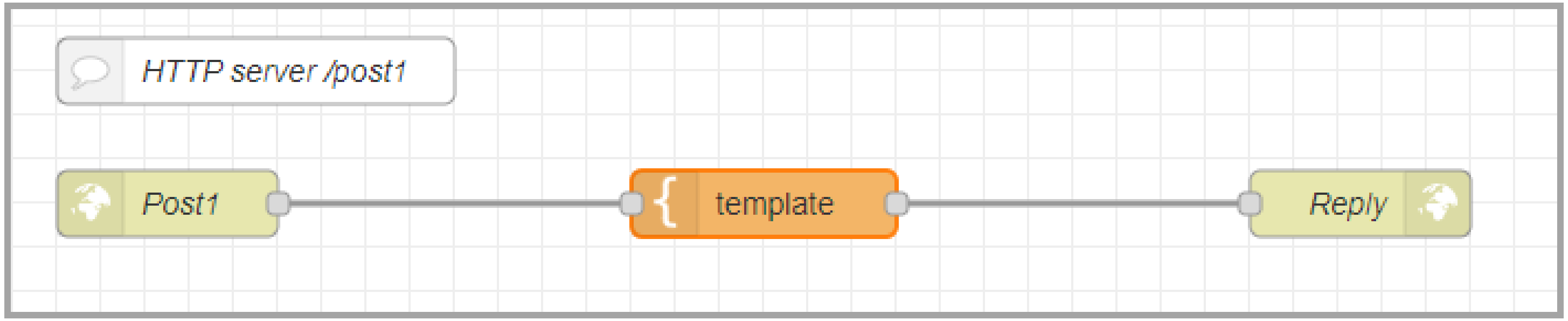
Production Supporting Systems in Factories

ระบบสนับสนุนการผลิตในโรงงานอุตสาหกรรม

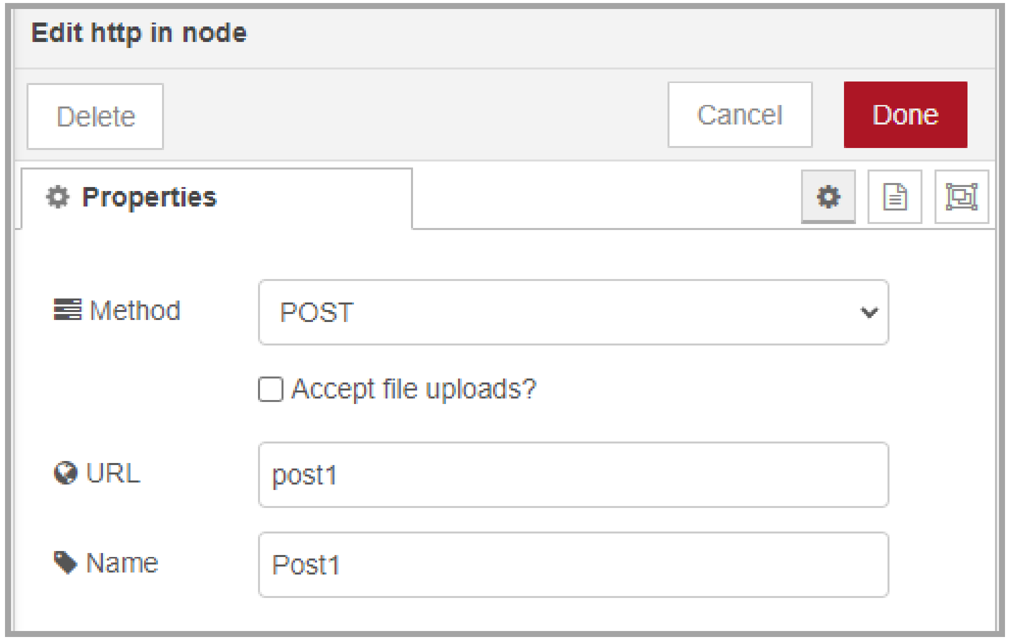
Module 2-1: HTTP POST Server

Server listening to `POST` requests

- Create a server that receives `POST` requests.
  - Flow



- `http in` node



Edit http in node

Method: POST

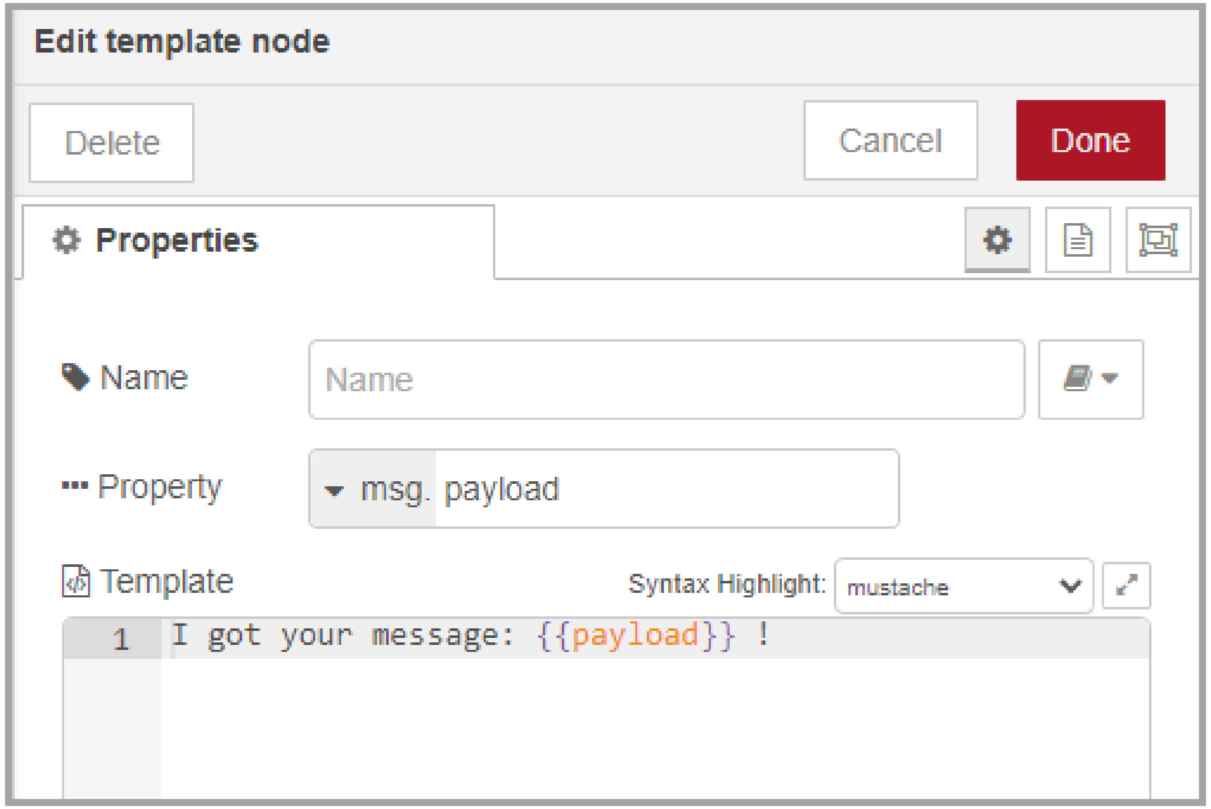
☐ Accept file uploads?

URL: post1

Name: Post1

- Send the transformed message back.
- Try sending the post requests to your friends public address.

- `template` node



Name: Name

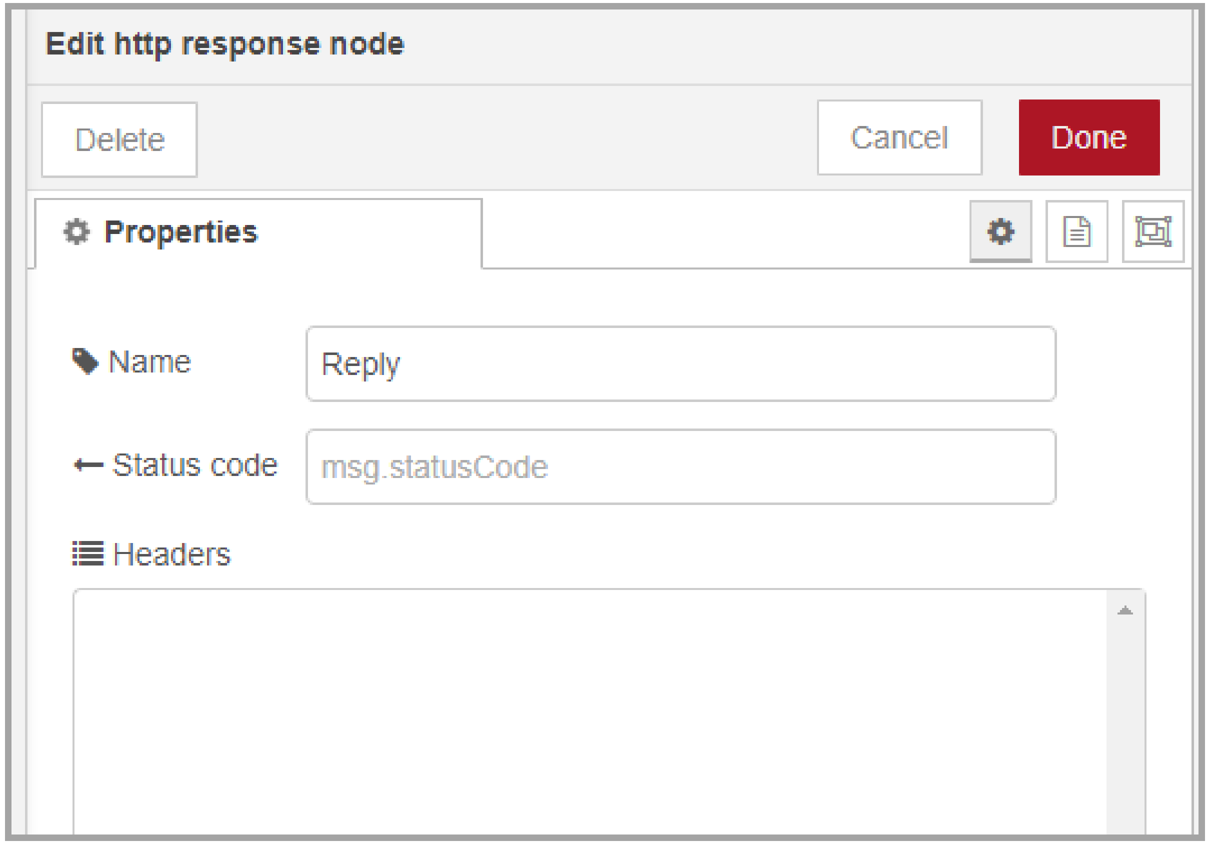
Property: msg. payload

Template

Syntax Highlight: mustache

```
I got your message: {{payload}} !
```

- `http response` node



Edit http response node

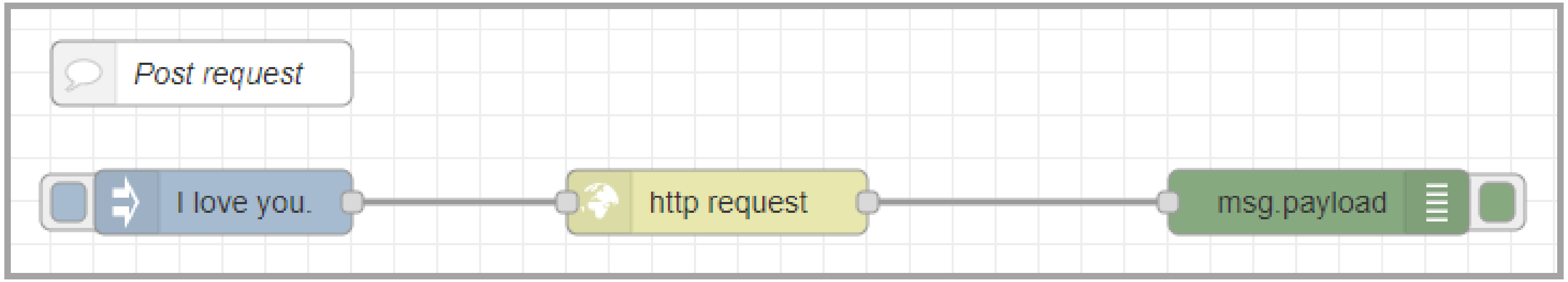
Name: Reply

Status code: msg.statusCode

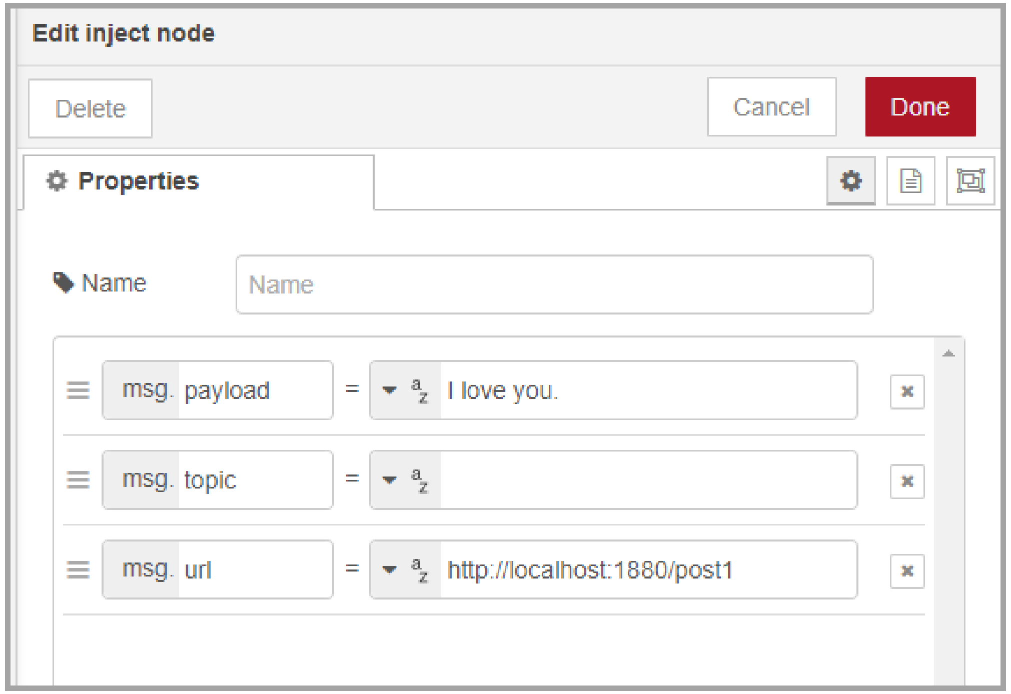
Headers

Send `POST` request from `node-red`

- Create a `post` request
  - Flow



- `inject` node



Name: Name

msg. payload = I love you.

msg. topic =

msg. url = http://localhost:1880/post1

- Note: you can use `http://127.0.0.1:1880/post1`

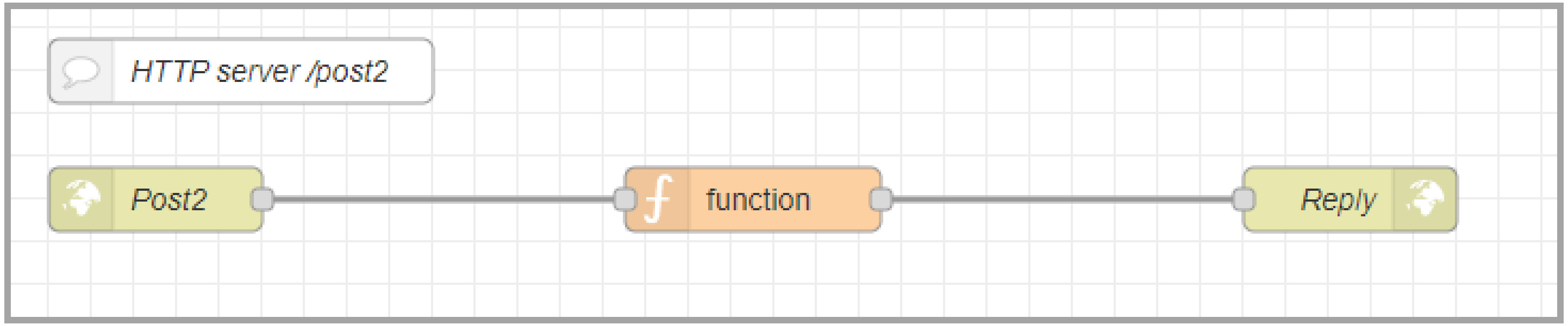
Send `POST` request from another program

Software

- Postman Desktop
- Chrome
  - Advancd REST Client
- Firefox
  - RESTClient

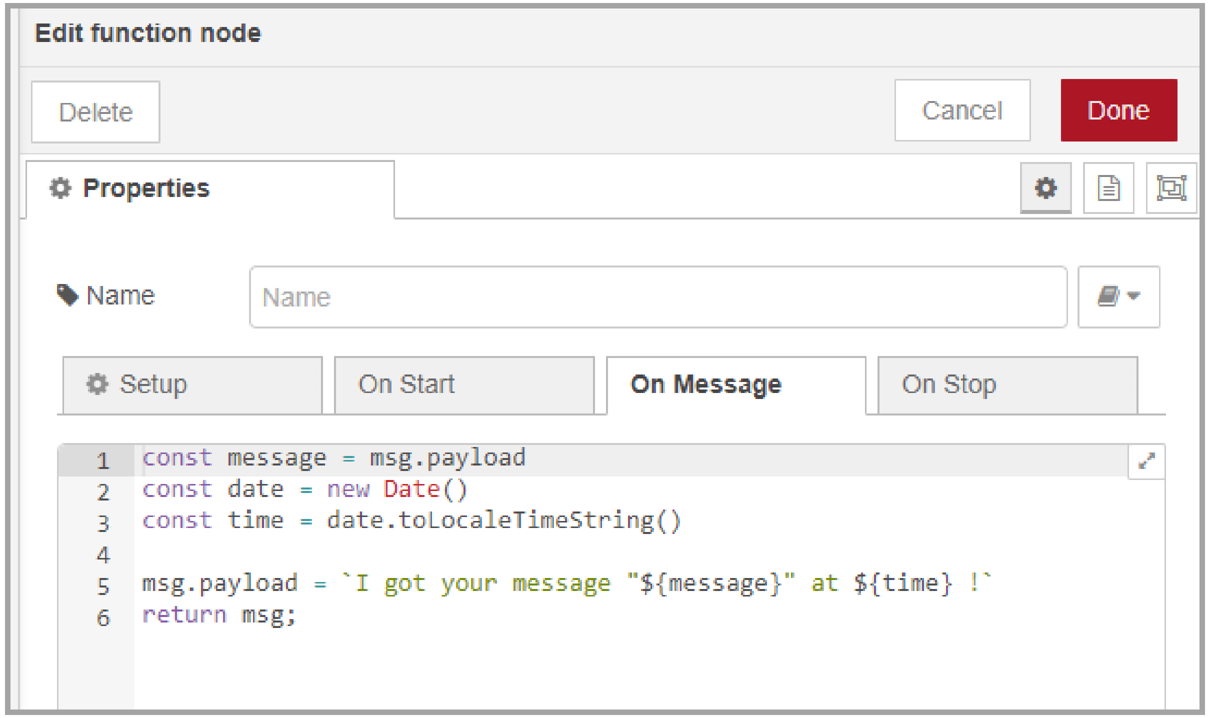
Serving dynamic content

- Create another url that response with dynamic content.
  - Flow



- `http in` node
  - `url` = `post2`

- `function` node



```
const message = msg.payload
const date = new Date()
const time = date.toLocaleTimeString()

msg.payload = `I got your message "${message}" at ${time} !`
return msg;
```

(code on the next page)

```
const message = msg.payload;
const date = new Date();
const time = date.toLocaleTimeString();

msg.payload = `I got your message "${message}" at ${time} !`;
return msg;
```

- Try send in a post message to `.../post2`.
- Also try sending a post message to your friend's public address.

Class Attendance

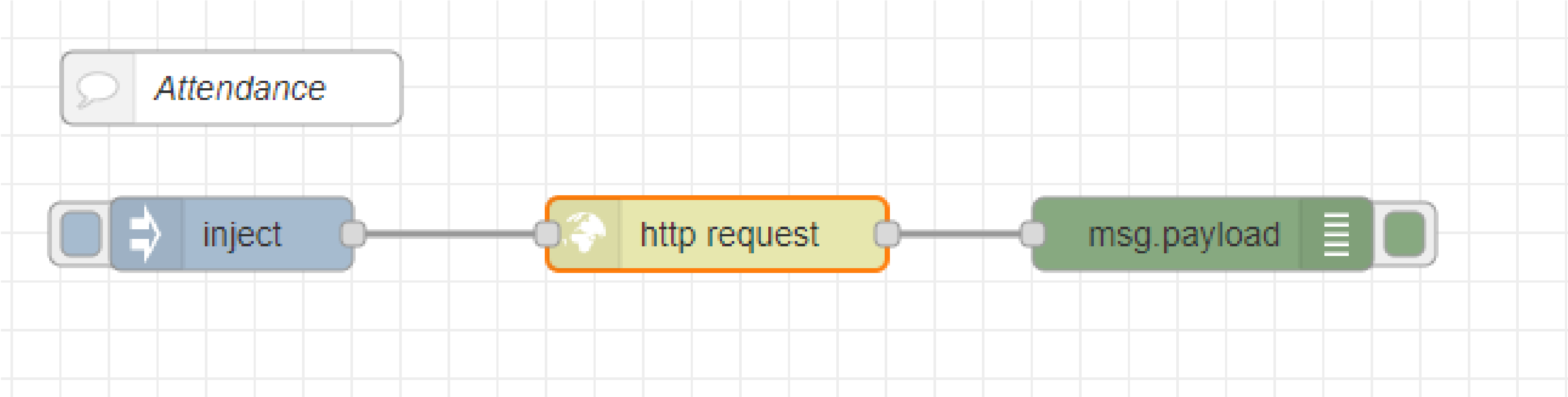
การทำเรื่องง่ายๆให้มันยาก

วิธีการเช็คชื่อ

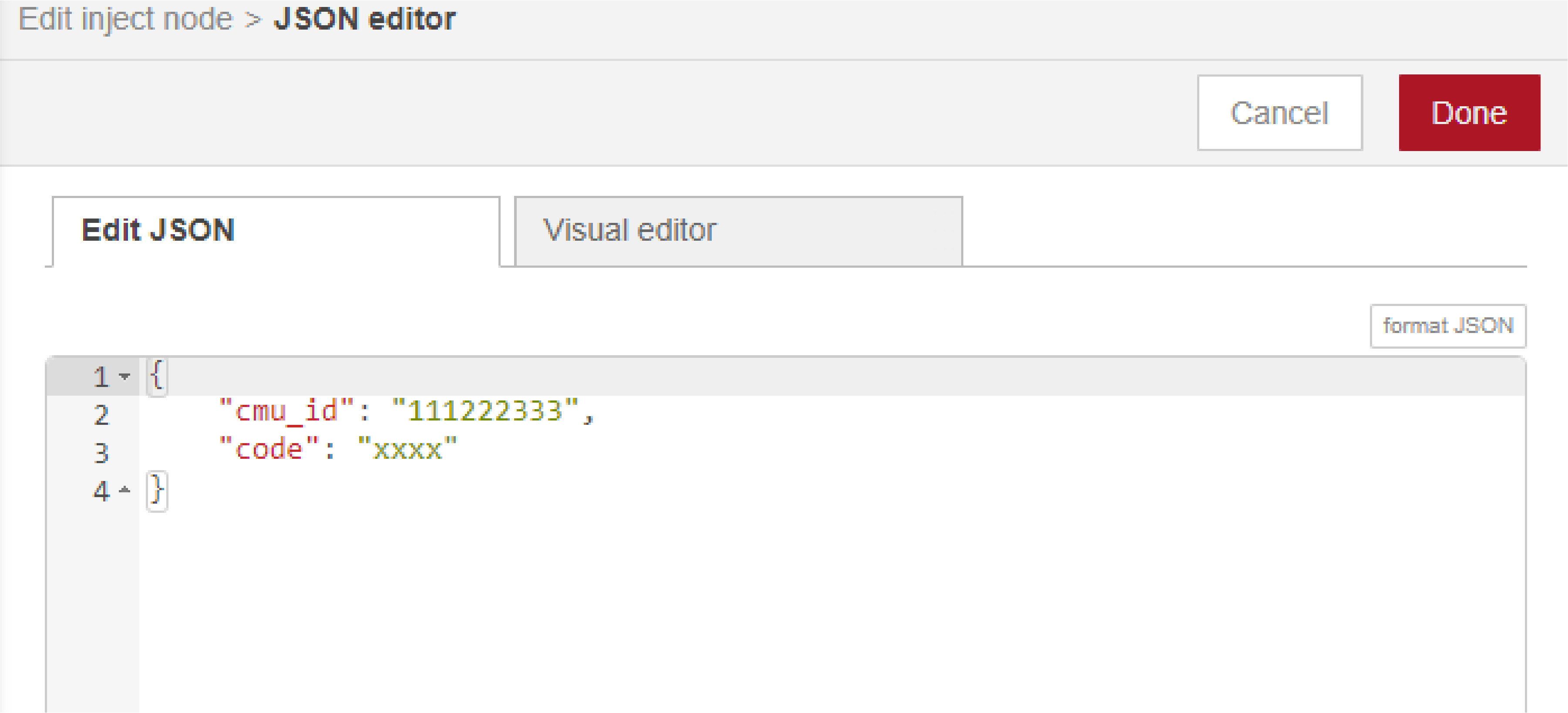
- Send `Post` request to `https://materials-line-oa-production.up.railway.app/prodsup`
- Payload
  - `cmu_id` : your 9-digit student id
  - `code` : 4-character code from the screen (ไม่เอา `CODE:`)

```json
{
  "cmu_id": "111222333",
  "code": "xxxx"
}
```

- Flow

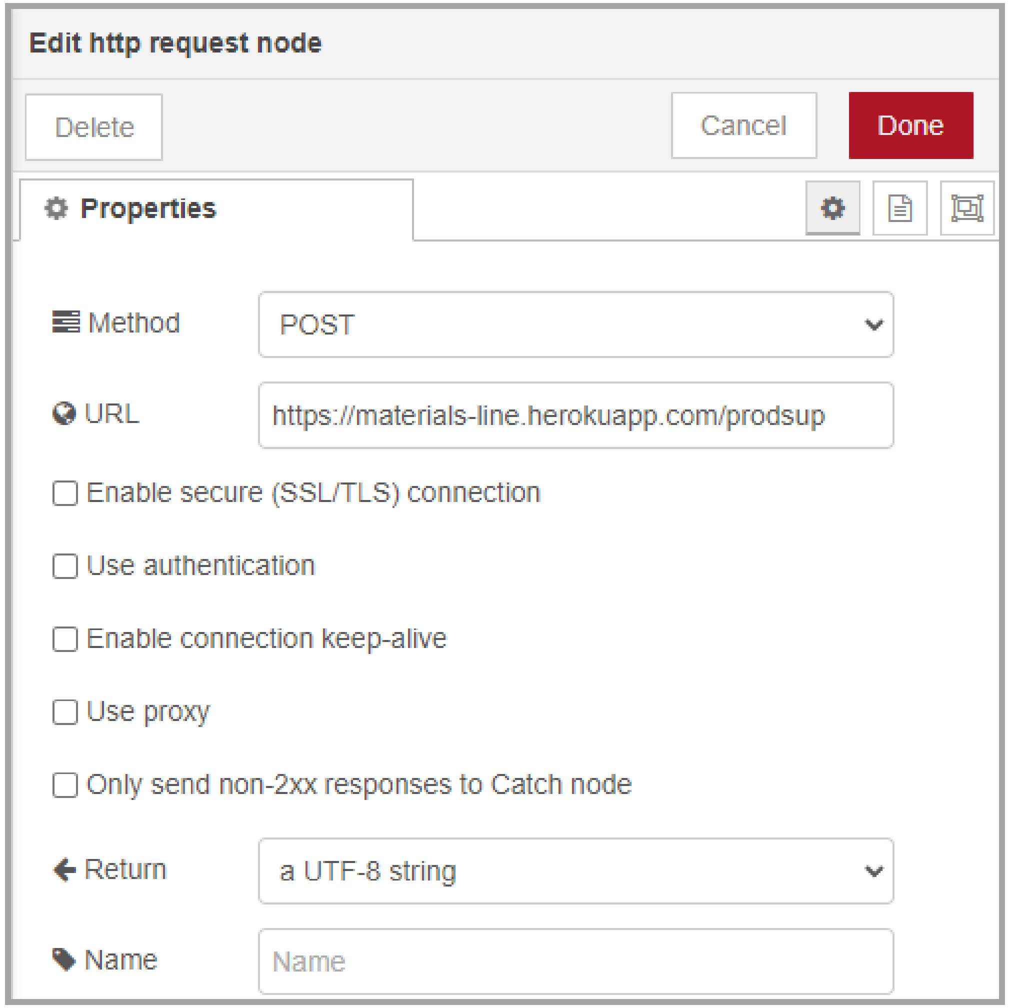


- `inject` node
    - `msg.payload`



```
{
    "cmu_id": "111222333",
    "code": "xxxx"
}
```

- `http request` node



Method: POST

URL: https://materials-line.herokuapp.com/prodsup

☐ Enable secure (SSL/TLS) connection

☐ Use authentication

☐ Enable connection keep-alive

☐ Use proxy

☐ Only send non-2xx responses to Catch node

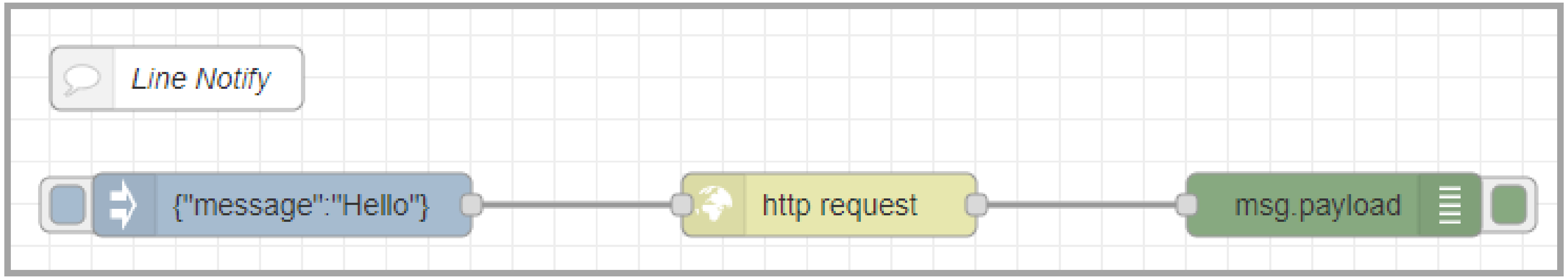
Return: a UTF-8 string

Name: Name

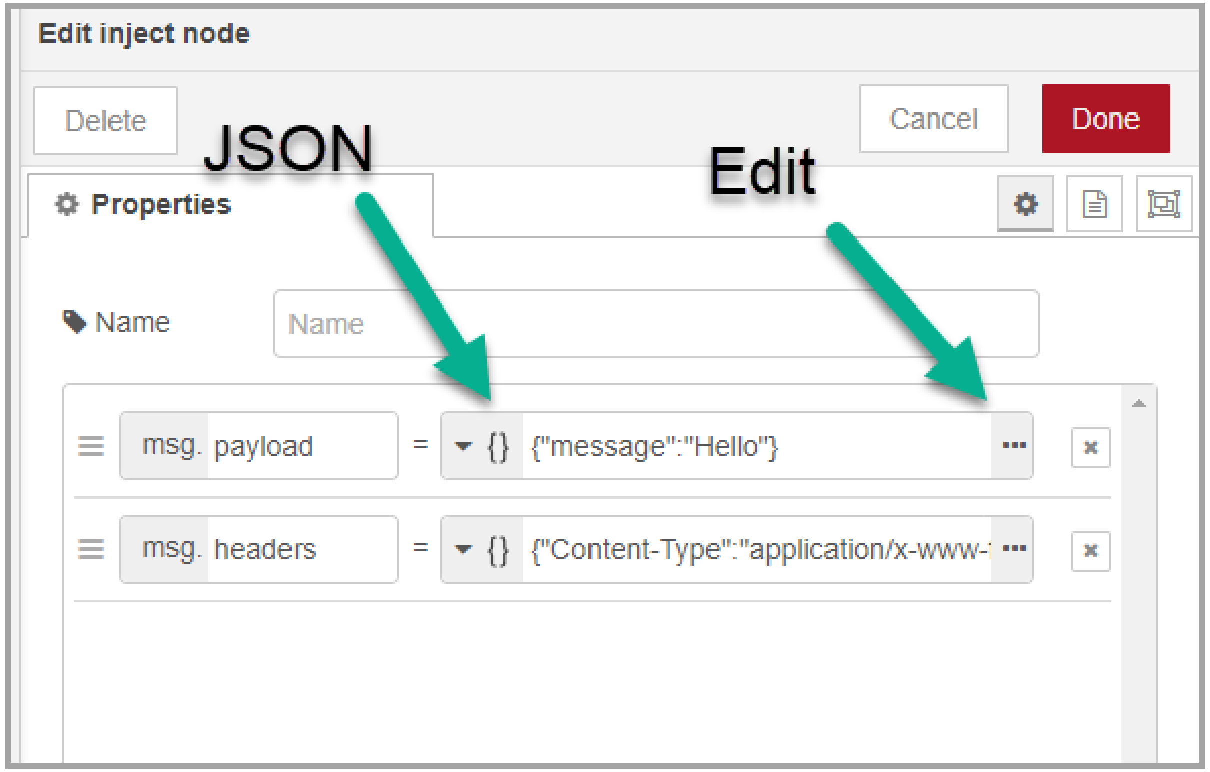
Module 2-2: Line Notify

- สร้างกลุ่ม LINE ภายใน Group
- ไปที่ https://notify-bot.line.me/en/
  - Login (need to verify number on smart phone)
  - Go to `My page`
  - Click `Generate token`
  - Enter `Token Name` and select a chat room.
  - Copy the token and store it somewhere.

- Let send a line notification through `Node-Red`
  - Flow



- `inject` node

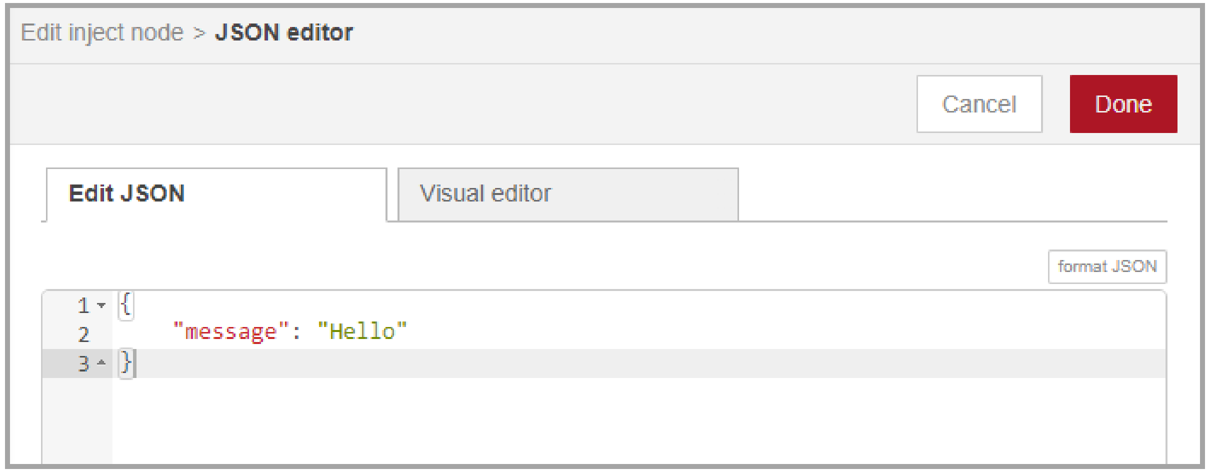


msg. payload = {} {"message":"Hello"}

msg. headers = {} {"Content-Type":"application/x-www-

- Set `msg.payload` to (JSON)

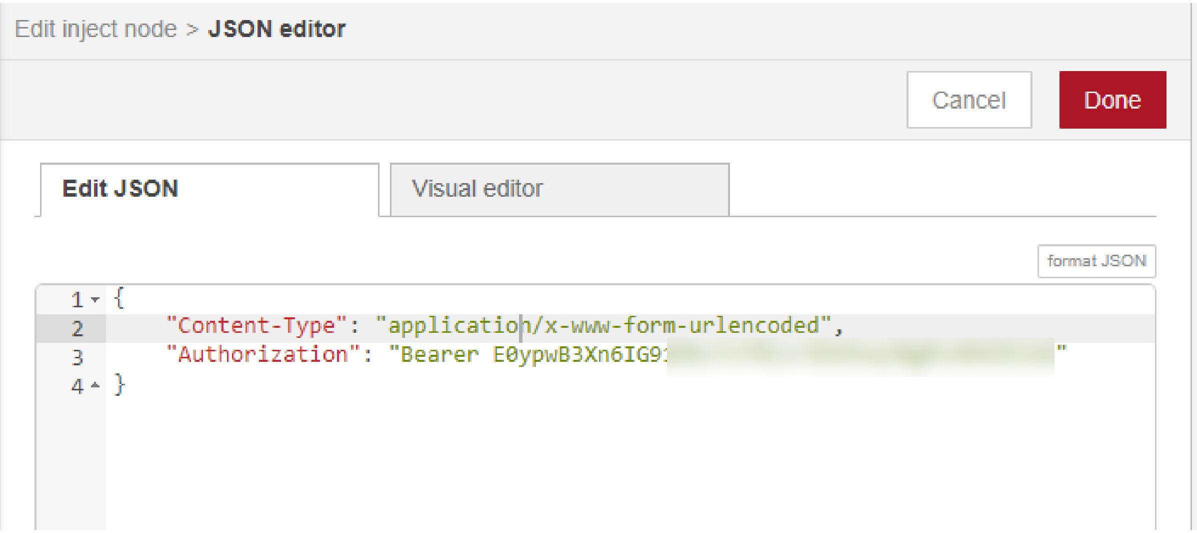
```
{
  "message":"Hello"
}
```



```
{
    "message": "Hello"
}
```

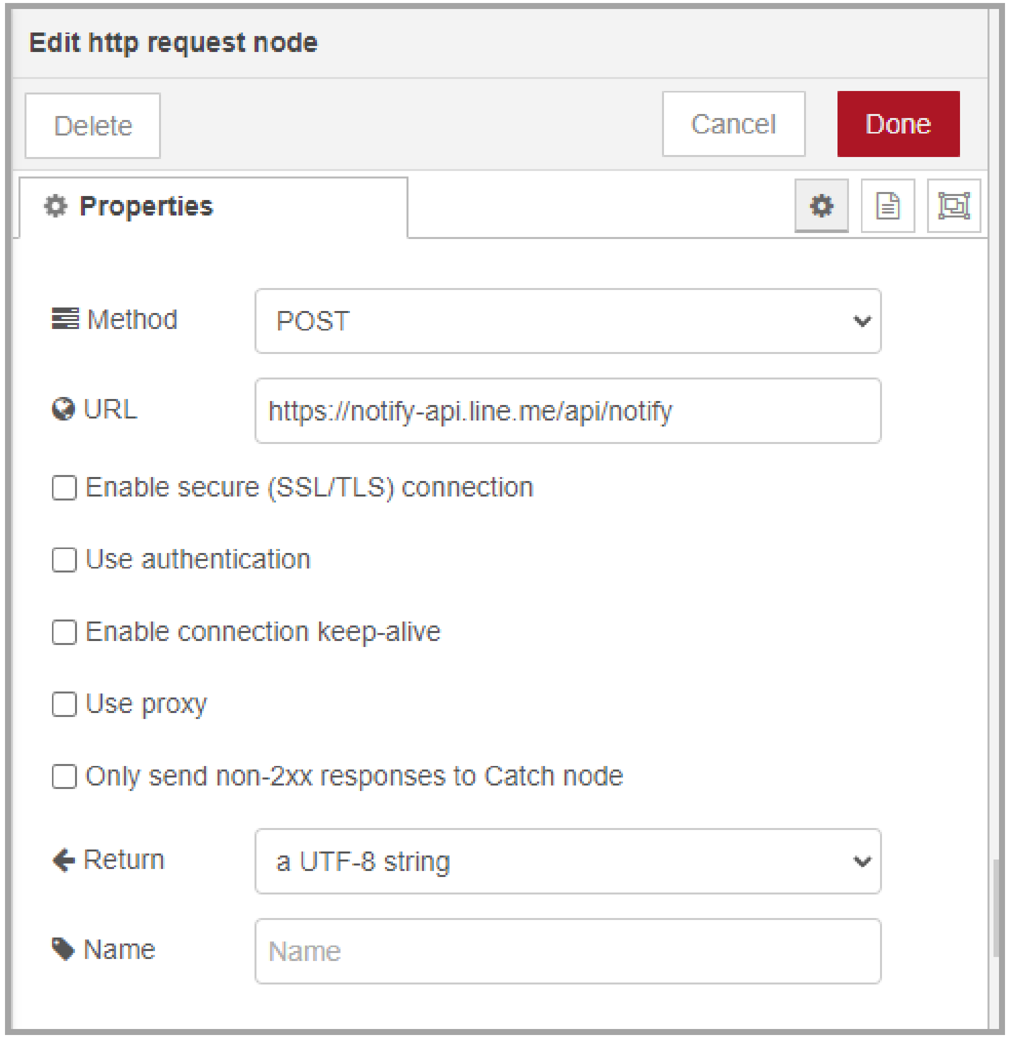
- Set `msg.headers` to (JSON)

```
{
  "Content-Type": "application/x-www-form-urlencoded",
  "Authorization": "Bearer <<YOUR LINE TOKEN>>"
}
```



```
{
    "Content-Type": "application/x-www-form-urlencoded",
    "Authorization": "Bearer E0ypwB3Xn6IG9[redacted]"
}
```

- `http request` node
  - Method: `POST`
  - URL: `https://notify-api.line.me/api/notify`



Edit http request node

Method: POST

URL: https://notify-api.line.me/api/notify

☐ Enable secure (SSL/TLS) connection

☐ Use authentication

☐ Enable connection keep-alive

☐ Use proxy

☐ Only send non-2xx responses to Catch node

Return: a UTF-8 string

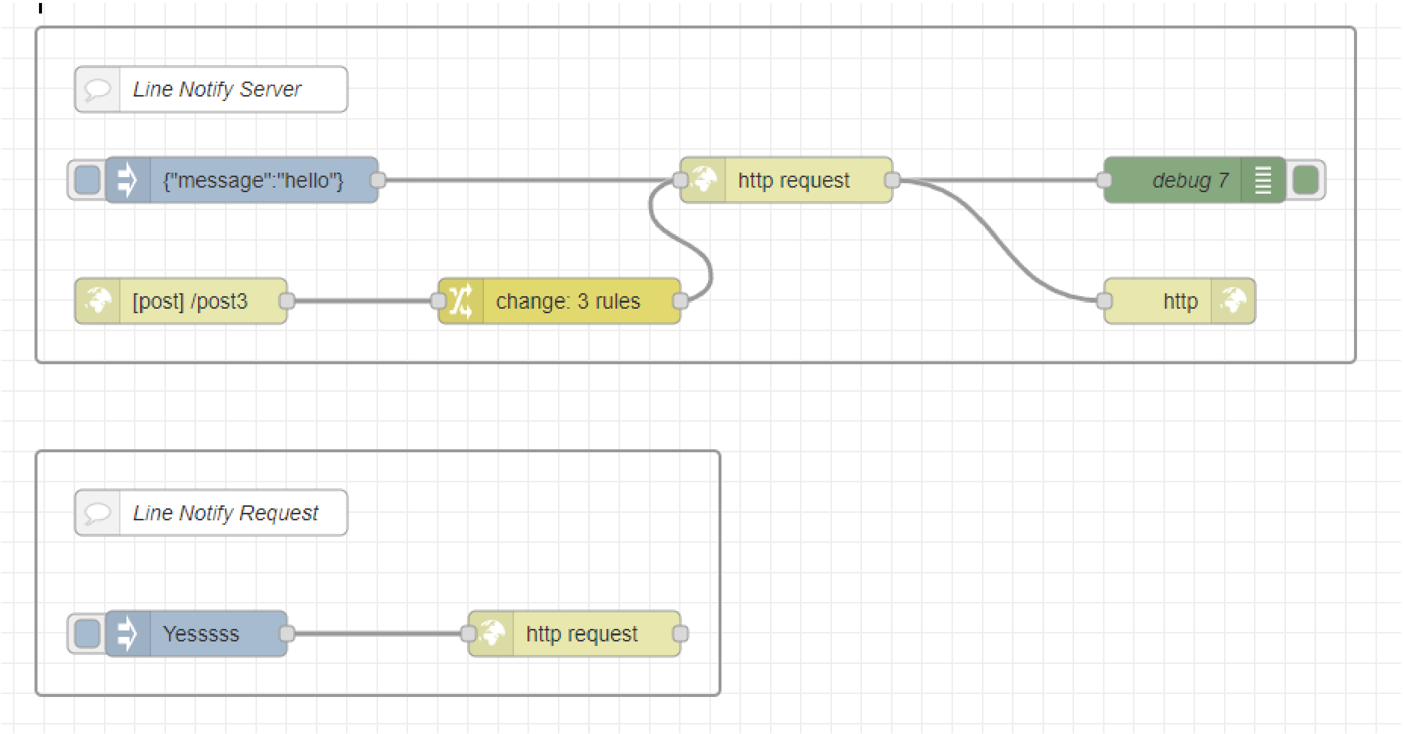
Name: Name

- Add `debug` node to see the output.
  - You can inspect the error.
- Try injecting to see if the notification.

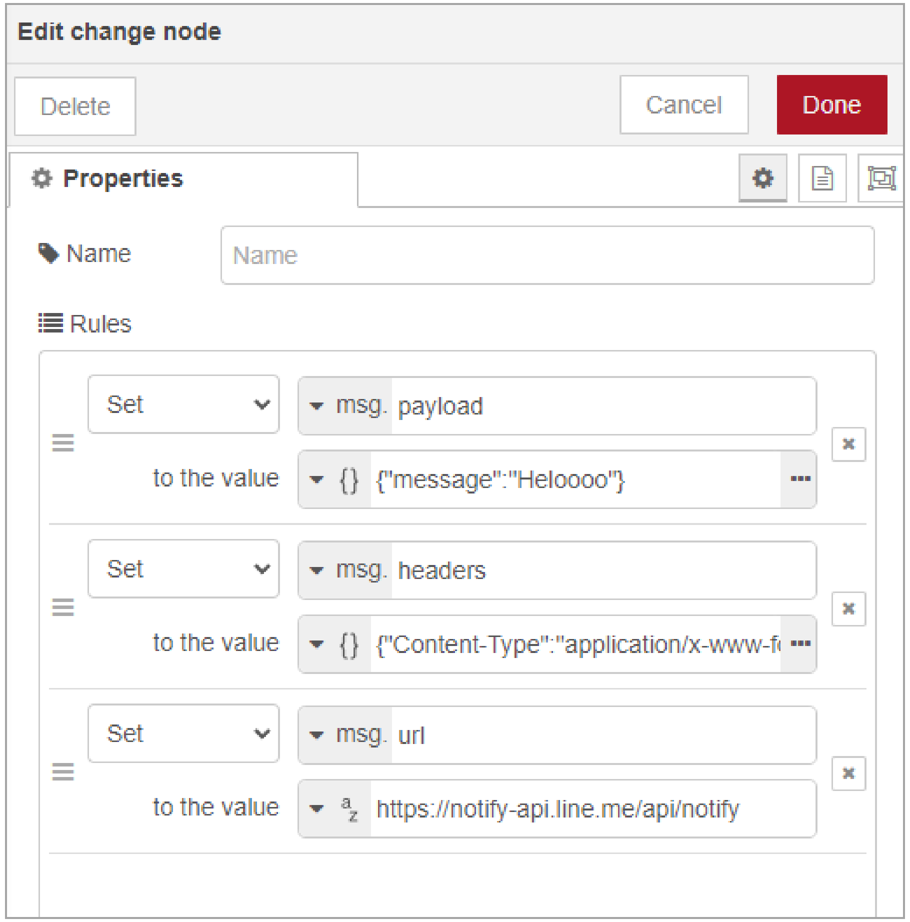
Extra

- Make a server that send the message to `Line`.
  - The message comes from the `POST` request.

Extra


Line Notify Server
{"message":"hello"}
http request
debug 7
[post] /post3
change: 3 rules
http
Line Notify Request
Yesssss
http request

Extra



Name: Name

Rules

Set msg. payload
to the value {} {"message":"Heloooo"}

Set msg. headers
to the value {} {"Content-Type":"application/x-www-f

Set msg. url
to the value az https://notify-api.line.me/api/notify