

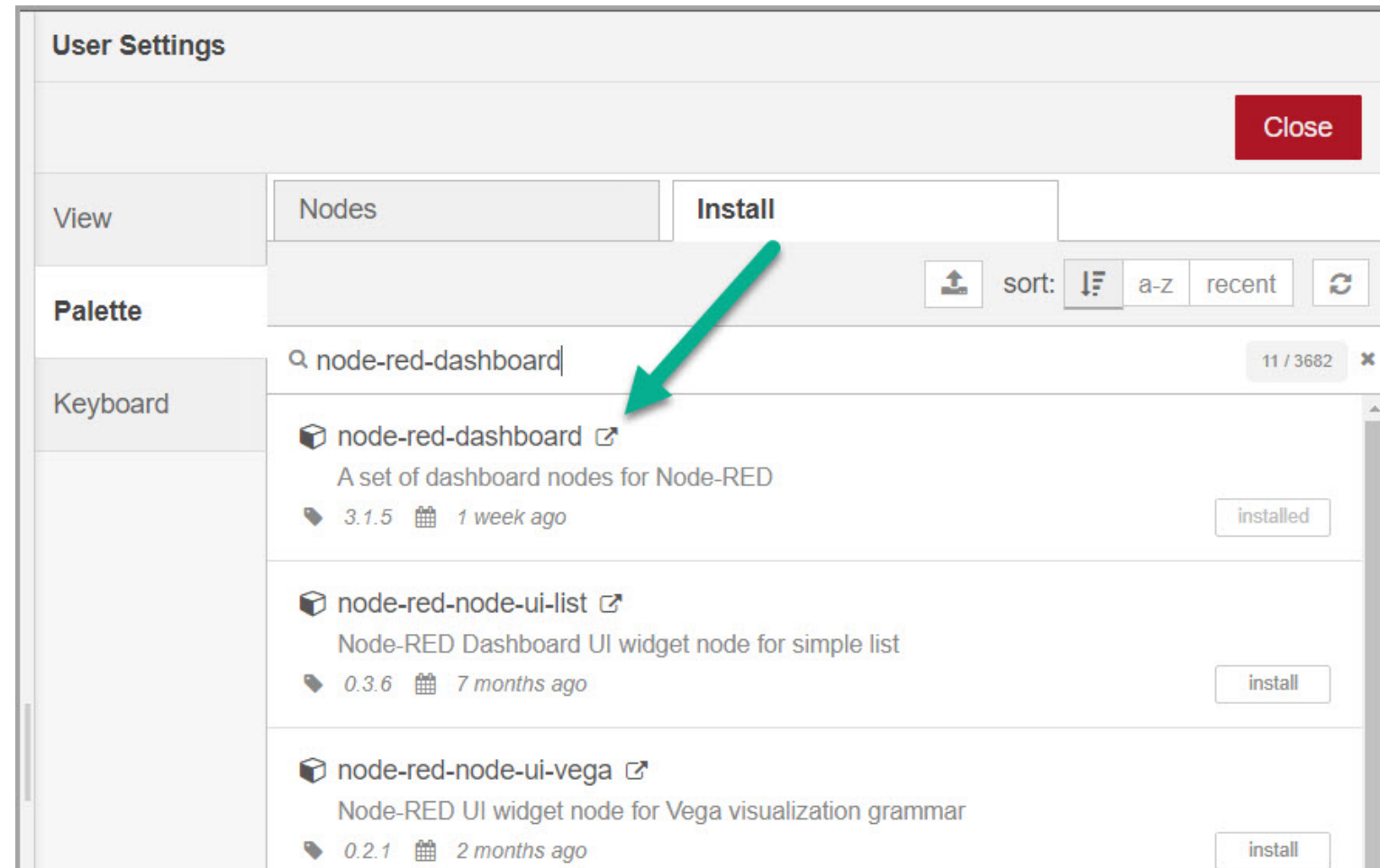
Production Supporting Systems in Factories

ระบบสนับสนุนการผลิตในโรงงานอุตสาหกรรม

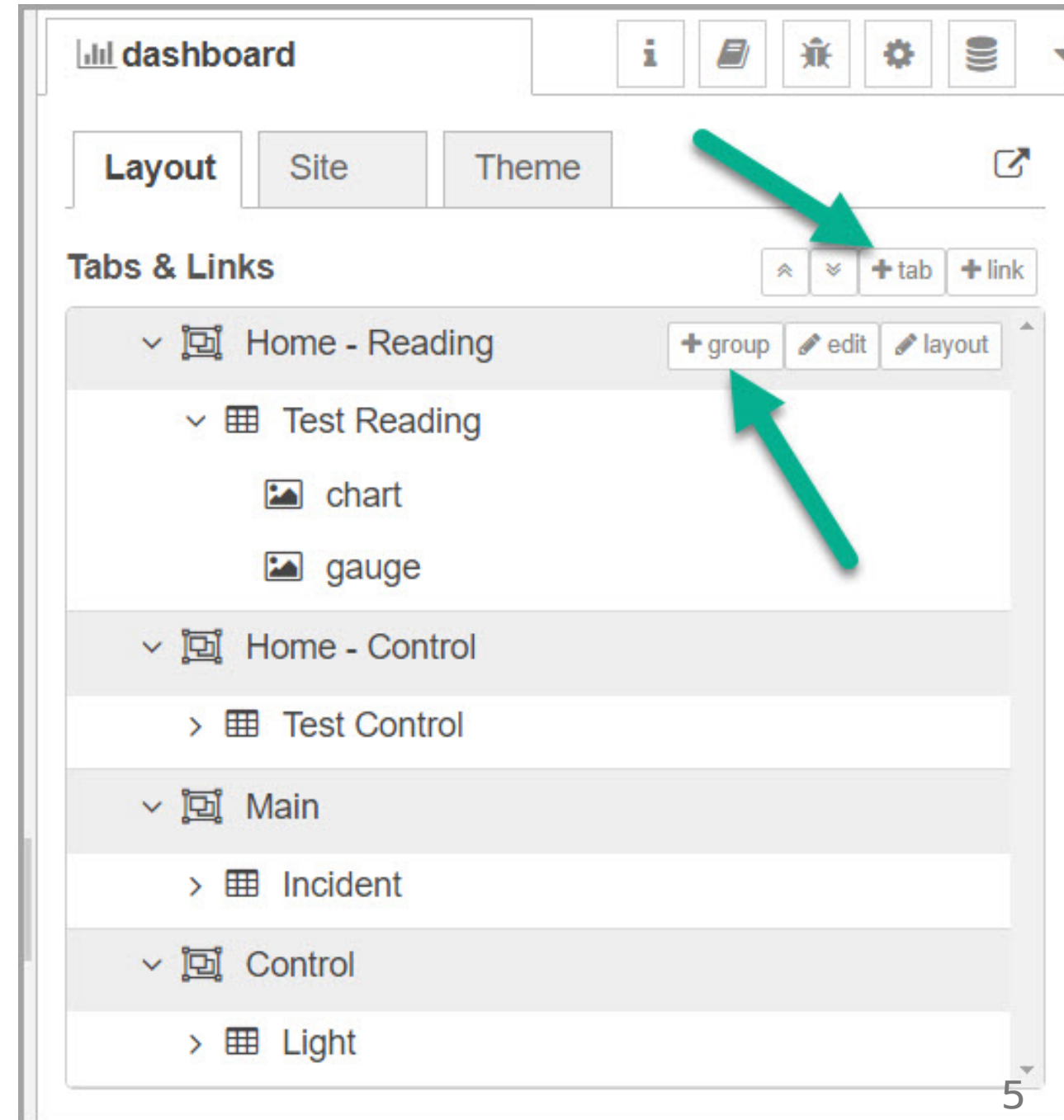
Dashboard

Module 5-1: Dashboard display

- Go to Manage palette
- Install node-red-dashboard

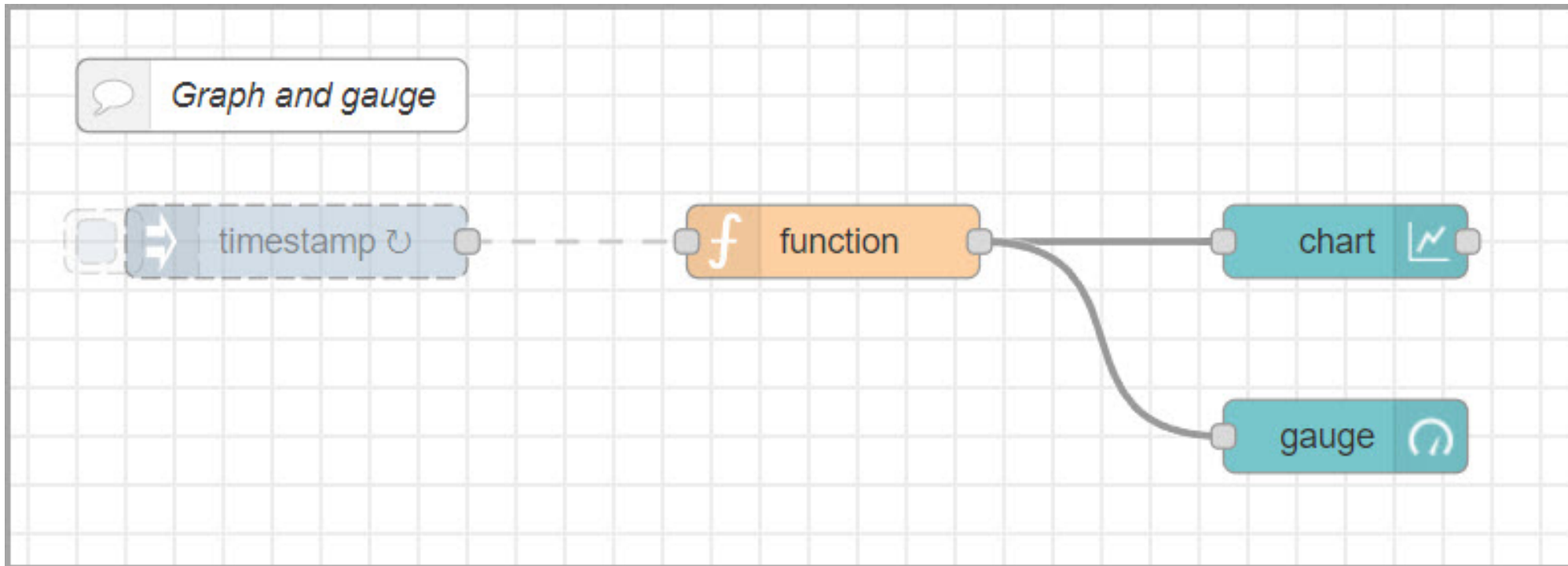


- Go to **Dashboard** tab
- Click **+ tab**
 - Edit tab information
- Click **+ group**
 - Edit group information



- Flow

- inject, function, chart, gauge



- inject node

Edit inject node

Delete Cancel Done

⚙ Properties

🏷 Name

msg. payload = timestamp

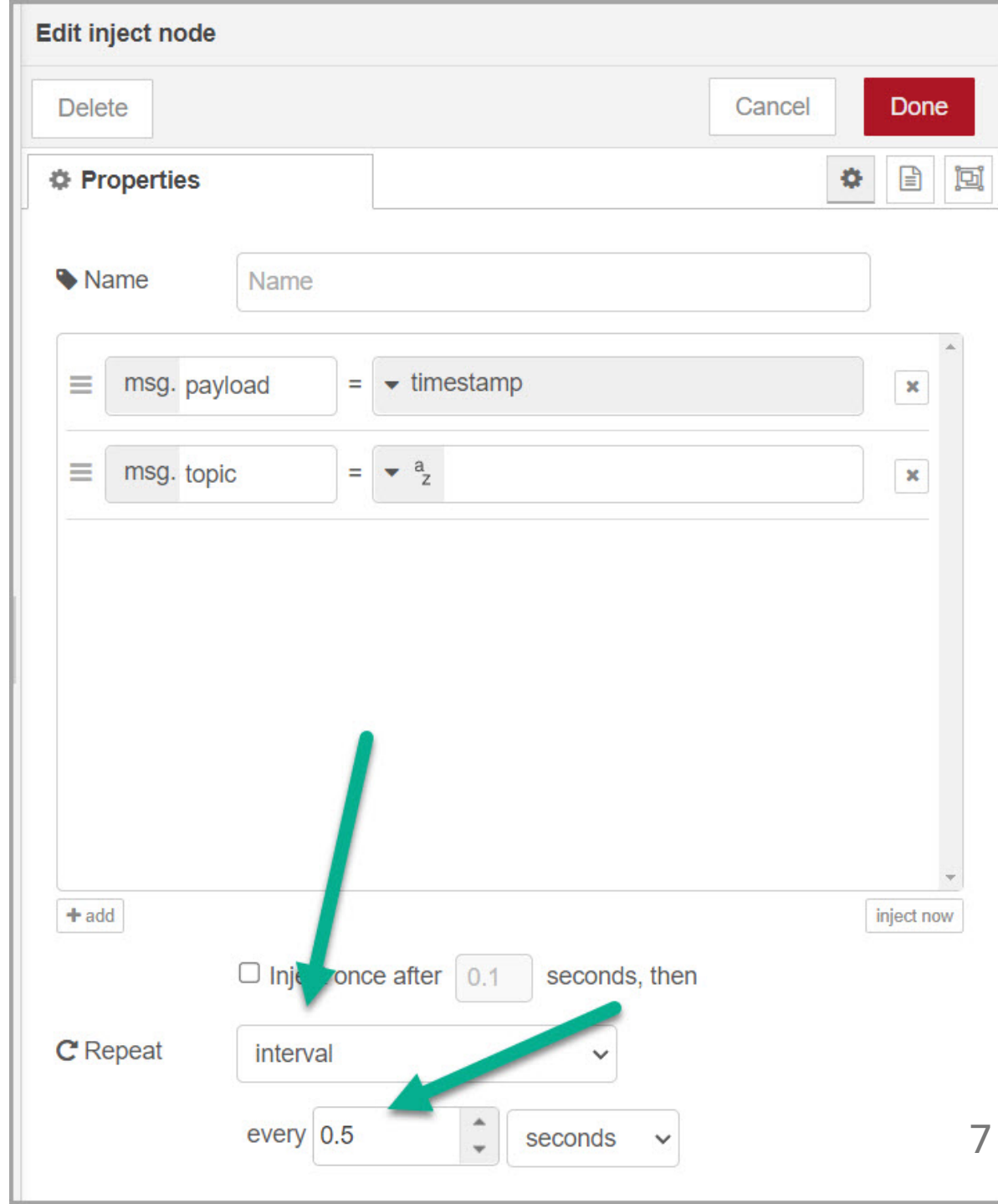
msg. topic = a_z

+ add inject now

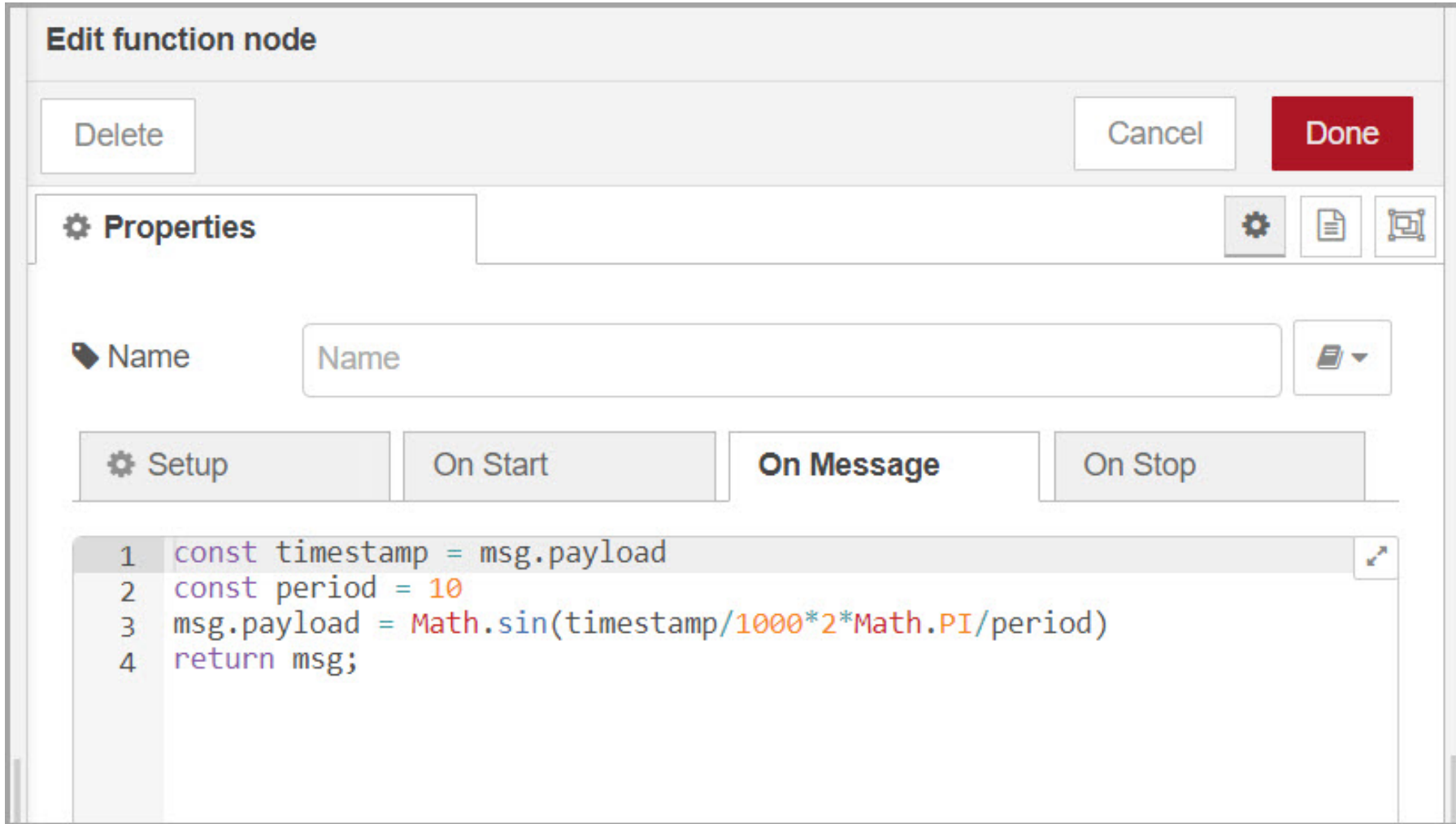
☐ Inject once after 0.1 seconds, then

🔄 Repeat interval

every 0.5 seconds



- `function` node (code on the next page)




```
const timestamp = msg.payload;  
const period = 10;  
msg.payload = Math.sin(((timestamp / 1000) * 2 * Math.PI) / period);  
return msg;
```

- chart node

Edit chart node

Delete Cancel Done

Properties

Group [Home - Reading] Test Reading

Size auto

Label chart

Type Line chart ☐ enlarge points

X-axis last 1 minutes OR 1000 points

X-axis Label HH:mm:ss ☐ as UTC

Y-axis min max

Legend None Interpolate linear

- gauge node

Edit gauge node

Delete Cancel Done

Properties

Group [Home - Reading] Test Reading

Size auto

Type Gauge

Label gauge

Value format {{value}}

Units units

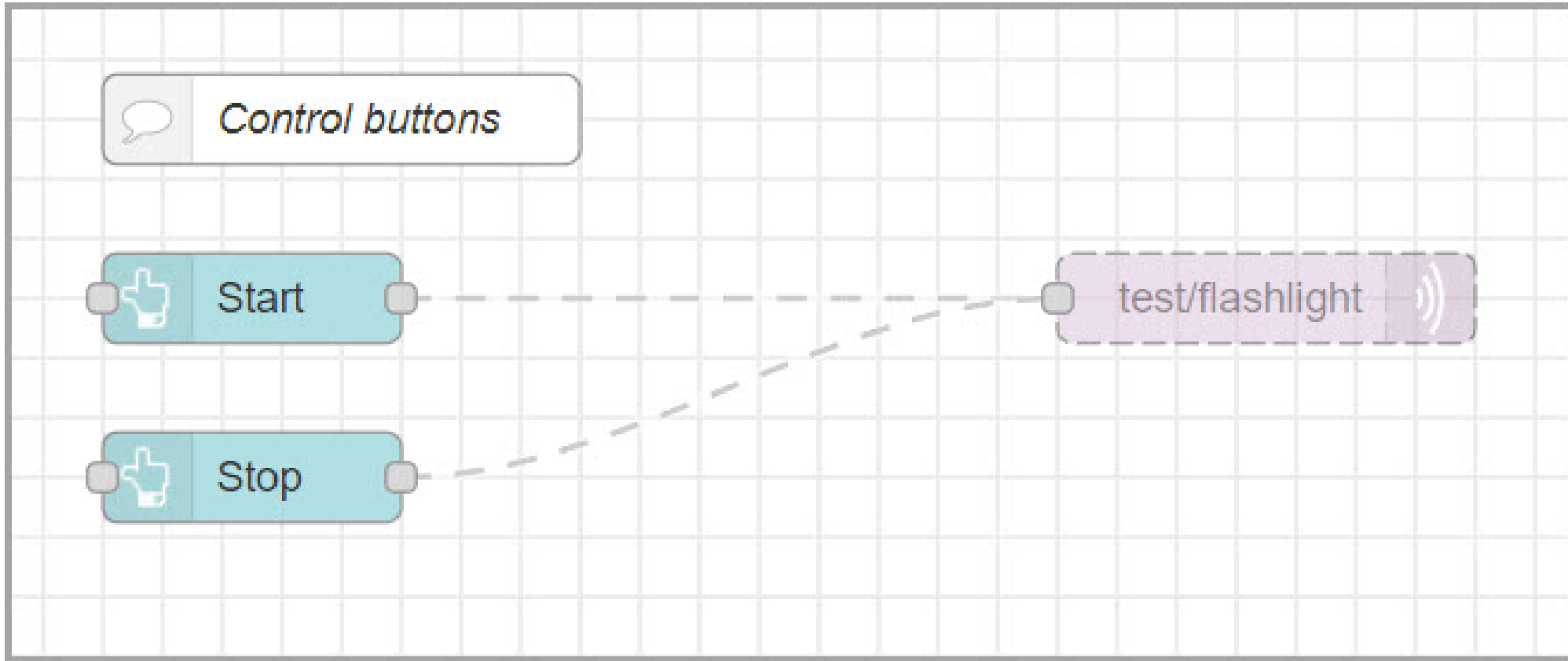
Range min -1 max 1

Colour gradient

Module 5-2: Control

- Flow

- button , mqtt out



- button Start

Edit button node

Delete Cancel Done

Properties

Group [Home - Control] Test Control

Size auto

Icon optional icon

Label Start

Tooltip optional tooltip

Color optional text/icon color

Background green

When clicked, send:

Payload a_z start

Topic msg. topic

→ If msg arrives on input, emulate a button click: ☐

- button Stop

Edit button node

Delete Cancel Done

Properties

Group [Home - Control] Test Control

Size auto

Icon optional icon

Label Stop

Tooltip optional tooltip

Color optional text/icon color

Background red

When clicked, send:

Payload a_z stop

Topic msg. topic

- mqtt out node

Edit mqtt out node

Delete Cancel Done

⚙ Properties

🌐 Server ProdSup

📄 Topic test/flashlight

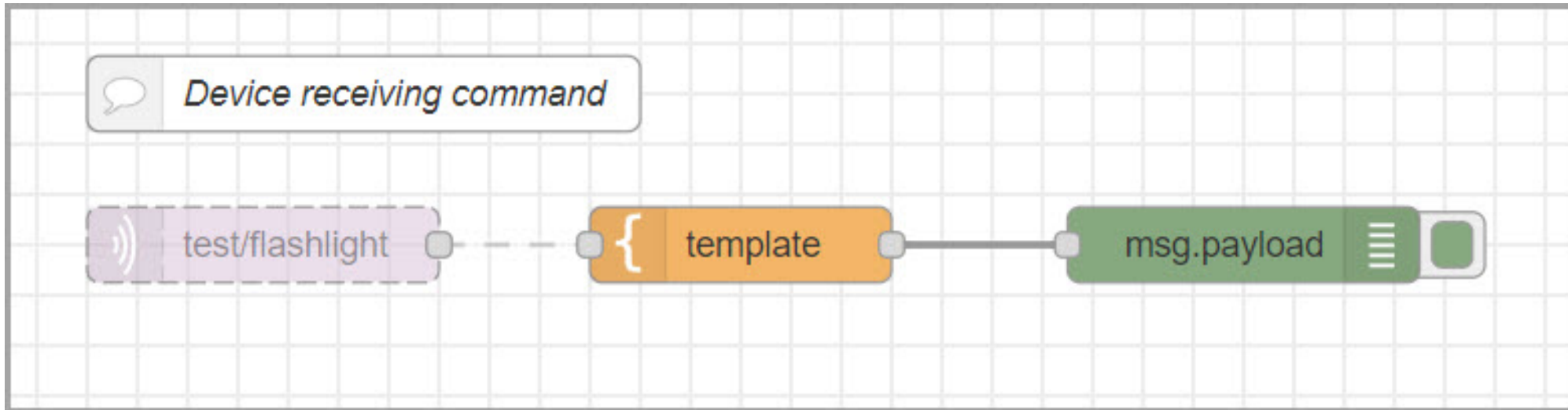
⚙ QoS 1 Retain

🏷 Name Name

Tip: Leave topic, qos or retain blank if you want to set them via msg properties.

- flow

- mqtt in, template, debug



- mqtt in node

Edit mqtt in node

Delete Cancel Done

Properties

Server ProdSup

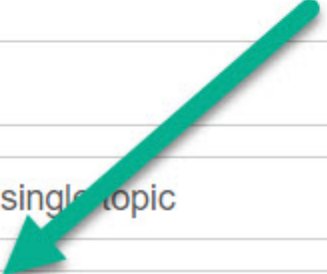
Action Subscribe to single topic

Topic test/flashlight

QoS 1

Output auto-detect (string or buffer)

Name Name



- `template` node

Edit template node

DeleteCancelDone

Properties

Name

Property

msg. payload

Template

Syntax Highlight:

mustache

1

I will {{payload}} now !