

Production Supporting Systems in Factories

ระบบสนับสนุนการผลิตในโรงงานอุตสาหกรรม

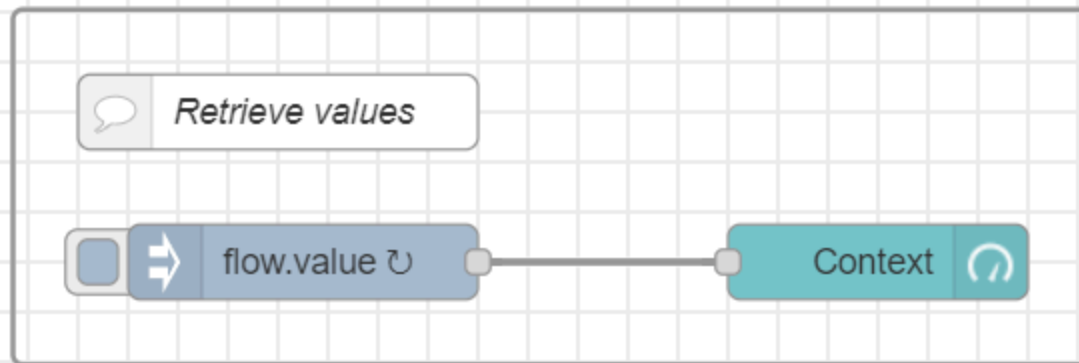
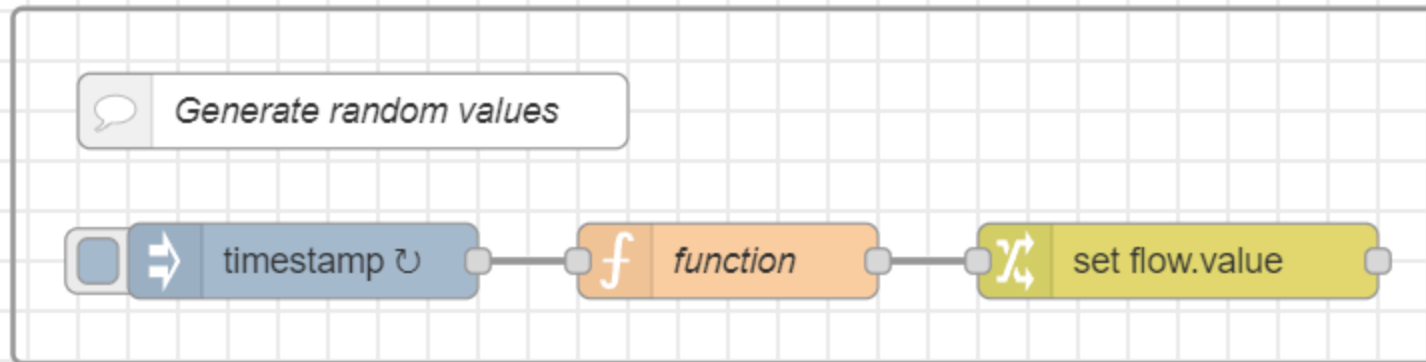
Context

Scope

The `scope` of a particular context value.

- `Node` - only visible to the node that set the value
- `Flow` - visible to all nodes on the same flow (or tab in the editor)
- `Global` - visible to all nodes

Use `flow` context to pass values



Upper inject node

Edit inject node

Delete Cancel Done

⚙ Properties

Name Name

msg. payload = timestamp

msg. topic = a_z

+ add inject now

☐ Inject once after 0.1 seconds, then

⌂ Repeat interval

every 1 seconds

Enabled

function node

```
msg.payload = Math.random();  
return msg;
```

change node

Edit change node

Delete

Cancel

Done

Properties

Name

Name

Rules

Set

▼ flow. value

to the value

▼ msg. payload

☐ Deep copy value

+ add

☐ Enabled

Lower inject node

Edit inject node

Delete Cancel Done

Properties

Name

☐ msg. payload =

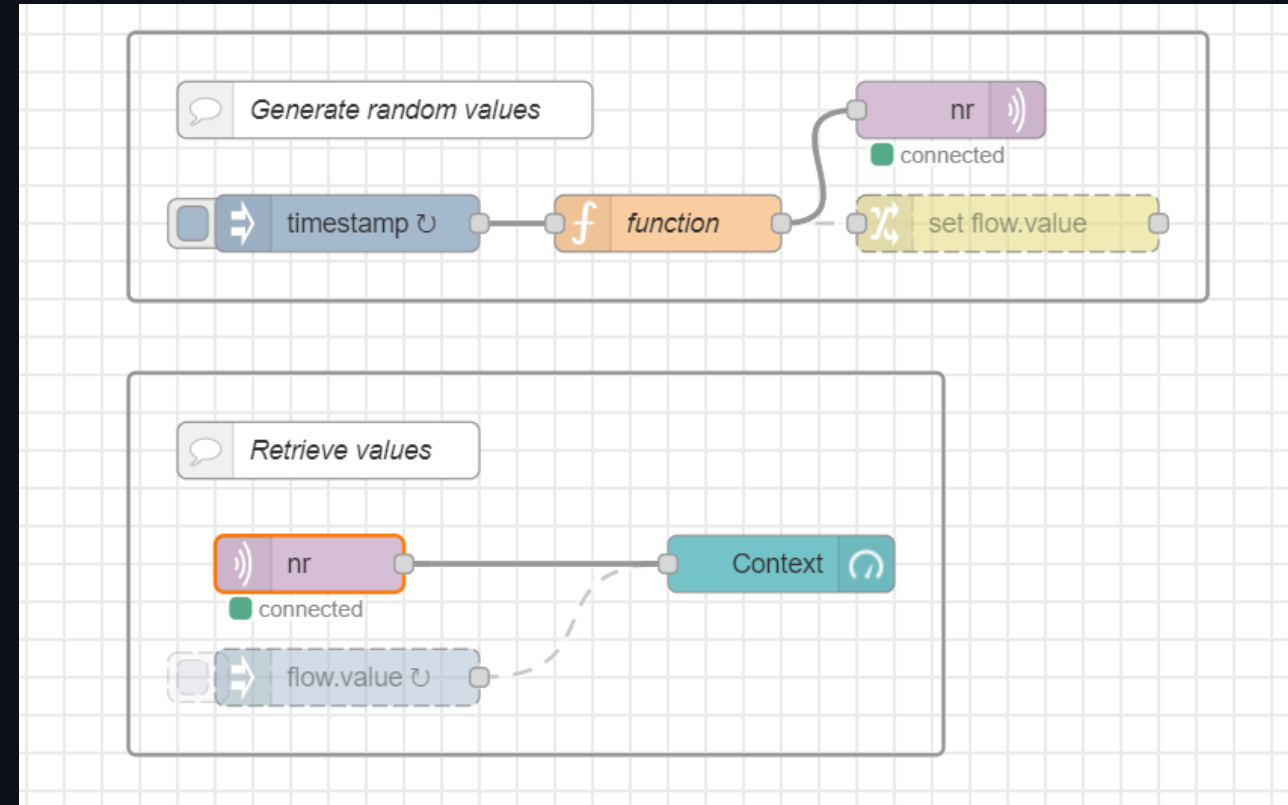
☐ msg. topic =

☐ Inject once after seconds, then

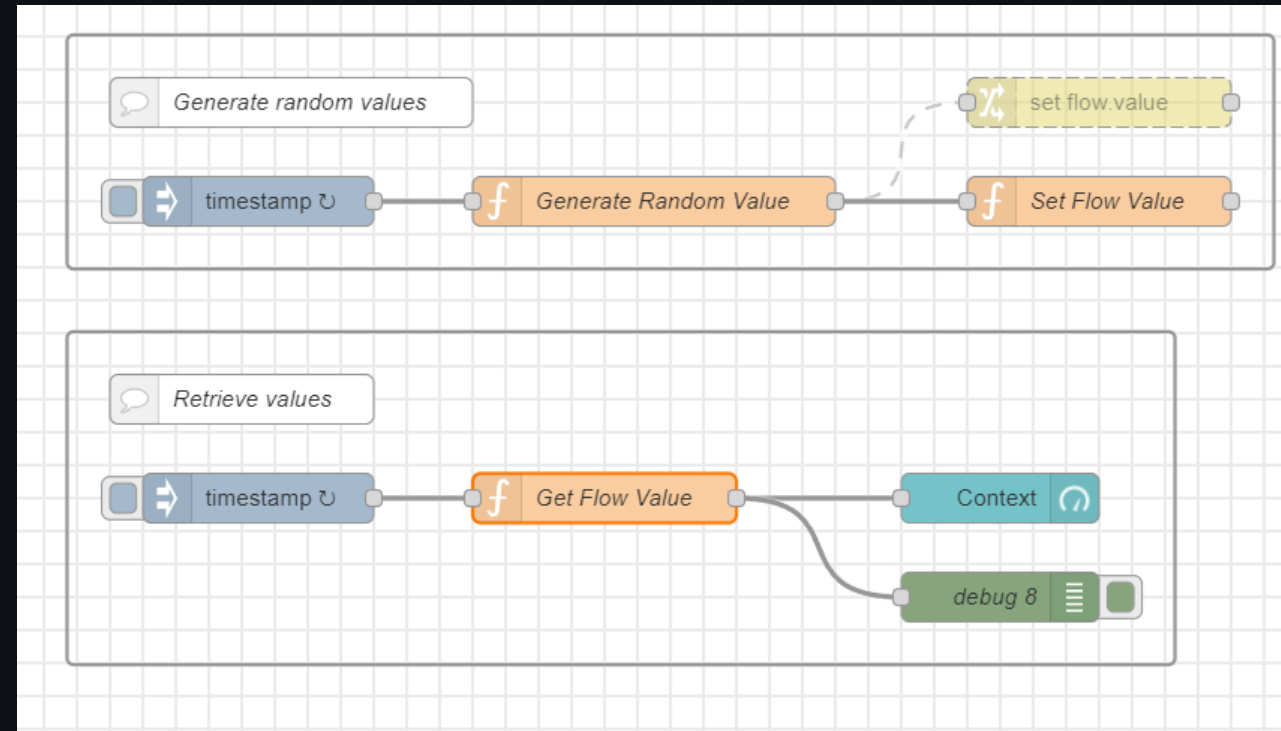
every

Side note

- You can use MQTT protocol to pass "context" information.
 - This is actually a better way.



Using code



Set Flow Value node

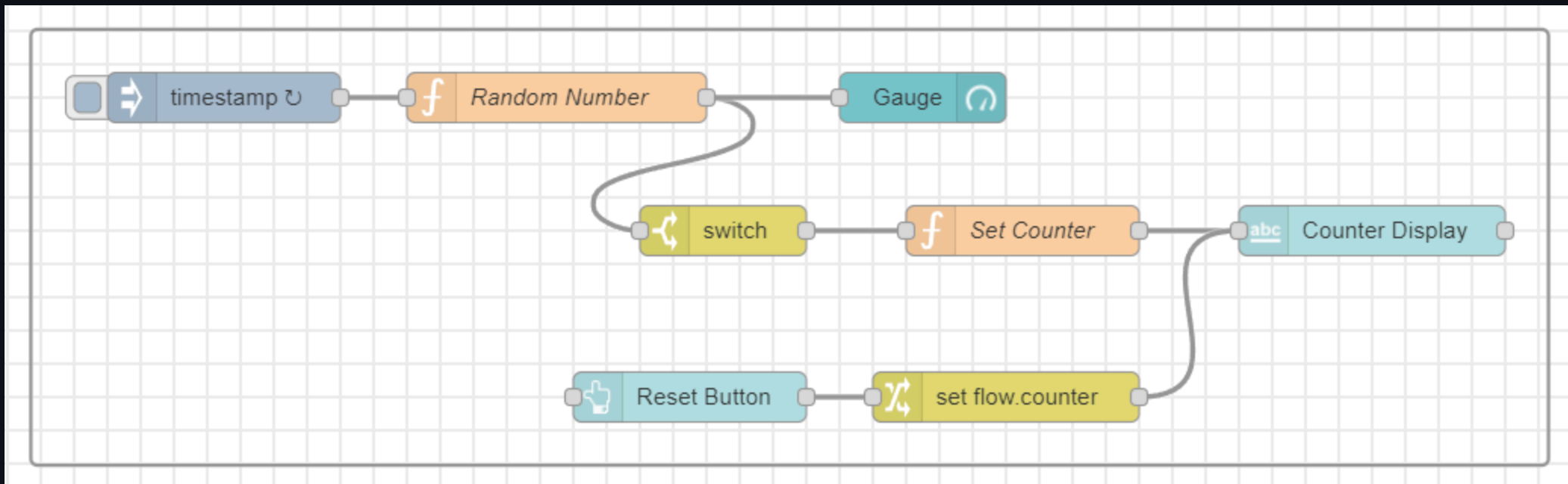
```
flow.set("value", msg.payload);
```

Get Flow Value node

```
const value = flow.get("value") ?? 0;  
msg.payload = value;  
return msg;
```

Counter with reset button

Flow



Random Number (function) node

```
msg.payload = Math.random();  
return msg;
```

Switch node

Edit switch node

Delete

Cancel

Done

⚙ Properties

⚙ 📄 🖨

📌 Name

Name

⋮ Property

▼ msg. payload

☰ >= ▼ ▼ 0.5 0.5 → 1 ✕

+ add

checking all rules ▼

☐ recreate message sequences

📄 ☐ Enabled

Set Counter (Function) node

```
const curCounter = flow.get("counter") ?? 0;  
flow.set("counter", curCounter + 1);  
msg.payload = curCounter + 1;  
return msg;
```

button node

Edit button node

Delete Cancel Done

⚙ Properties

Group [Context] Group 1

Size auto

Icon optional icon

Label Reset Button

Tooltip optional tooltip

Color optional text/icon color

Background optional background color

☒ When clicked, send:

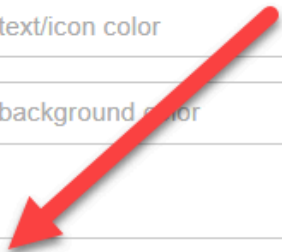
Payload ▾ 0

Topic ▾ msg. topic

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

</> Class Optional CSS class name(s) for widget

Name Name



change node

Edit change node

Delete Cancel Done

⚙ Properties

Name Name

☰ Rules

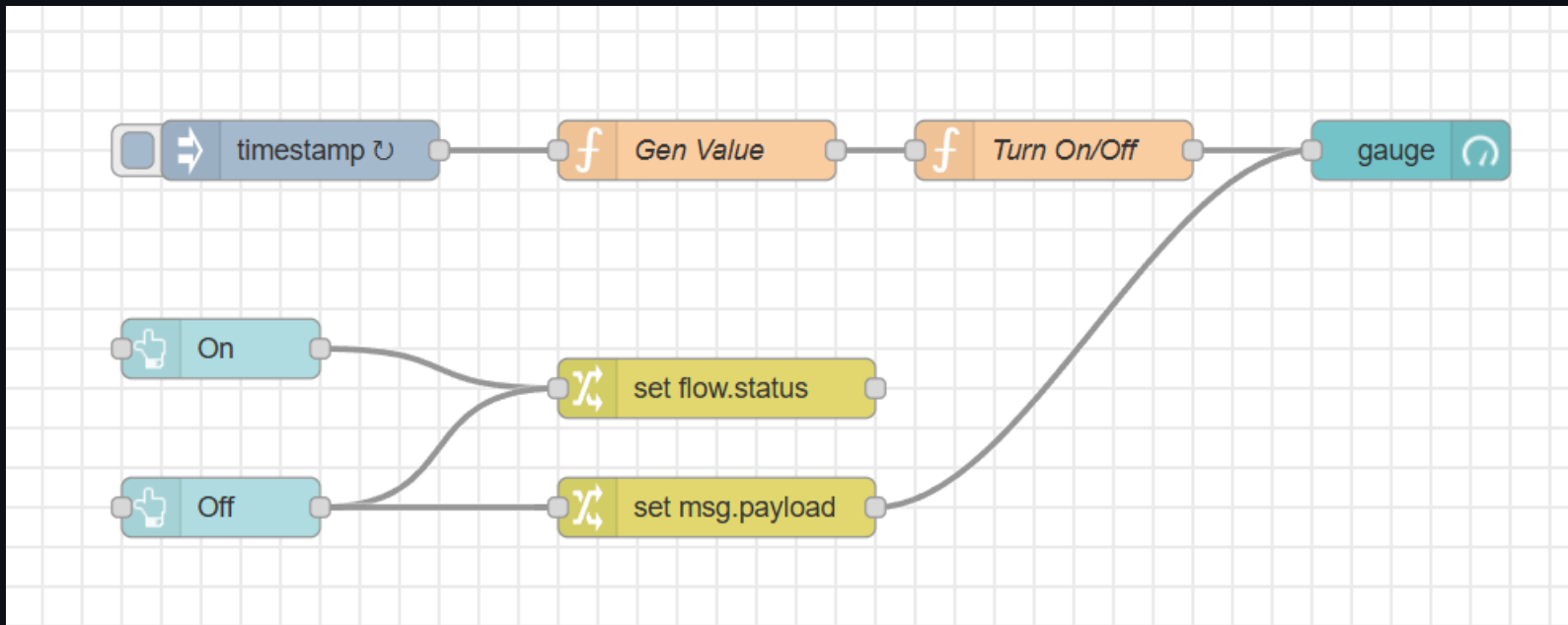
Set ▼ ▼ flow. counter

☰ to the value ▼ msg. payload ✕

☐ Deep copy value

Turning sensor display on and off

Flow

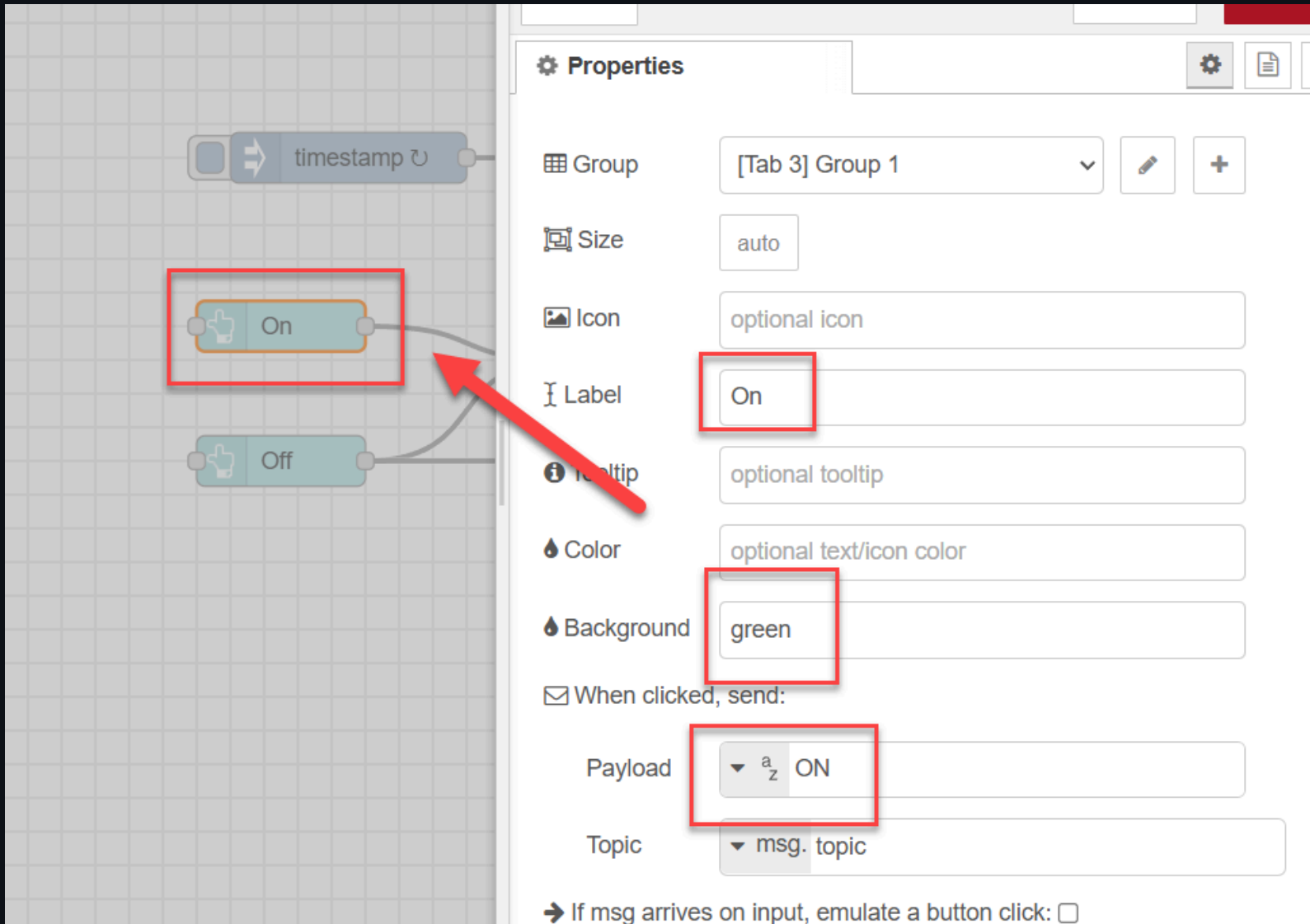


function node (Gen Value)

```
msg.payload = Math.random();  
return msg;
```

function node (Turn On/Off)

```
const status = flow.get("status") ?? "OFF";  
if (status === "ON") {  
    return msg;  
} else {  
    // Do nothing  
}
```



The screenshot displays a software interface with a grid-based workspace on the left and a 'Properties' panel on the right. In the workspace, there is a 'timestamp' block and two 'On/Off' blocks. The 'On' block is highlighted with a red box, and a red arrow points from it to the 'Properties' panel. The 'Properties' panel contains the following settings:

- Group:** [Tab 3] Group 1
- Size:** auto
- Icon:** optional icon
- Label:** On
- Tooltip:** optional tooltip
- Color:** optional text/icon color
- Background:** green
- When clicked, send:**
 - Payload:** a_z ON
 - Topic:** msg. topic
- Options:** If msg arrives on input, emulate a button click: ☐

timestamp ↻

On

Off

Properties

Group [Tab 3] Group 1

Size auto

Icon optional icon

Label Off

Tooltip optional tooltip

Color optional text/icon color

Background red

When clicked, send:

Payload a_z OFF

Topic msg. topic

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

The image shows a workflow editor interface. On the left, a canvas displays three nodes: 'Gen Value' (orange), 'set flow.status' (yellow), and 'set msg.payload' (yellow). The 'set flow.status' node is highlighted with a red rectangle. A red arrow points from this node to the 'Properties' panel on the right. The 'Properties' panel has a 'Name' field and a 'Rules' section. In the 'Rules' section, a dropdown menu is set to 'Set', and the text 'to the value' is visible. A red rectangle highlights the 'flow. status' and 'msg. payload' options under the dropdown, along with an unchecked 'Deep copy value' checkbox.

Properties

Name Name

Rules

Set ▼

to the value

▼ flow. status

▼ msg. payload

☐ Deep copy value

