# **Next step of Flow Linter**



- Current status
  - Refactoring
    - almost completed by Nick-san's PR #6-#8.
  - Issues
    - eslint4b doesn't include @eslint/eslintrc as its dependencies.
      - as of 2021-06-28, there is no response from maintainer.
      - extract `function-eslint` rule to an external module to prevent doubling the nrlint's install size?
  - Remaining tasks
    - write more rules
    - write more tests
    - i18n support
- Discussion: We would be happy to discuss how best to extend flow linter in the next step.

# Appendix: Linter rule ideas on the Forum

https://discourse.nodered.org/t/request-for-ideas-linter-rules/45932



#### Node

- · Warn if there are unused node
- Warn if output ports have no textual labels
- · Entering numbers in string box
- Entering JSON in string box
- nodes that have more than one wire from an output
- excessively long node names

## **Specific Node**

- MQTT leading slash
- Multiple MQTT config nodes pointing to same broker
- switch node that doesn't go anywhere
  - the node doesn't have an otherwise rule

#### Flow

- · Warn when no Catch node is used
- Maximum number of chained nodes
- Advise for using subflow the flow contains duplicate sequences
- Warn if a flow has no description
- Unconnected link nodes
- Naming debug nodes unique names
- link node must have unique name
- context that have same name, but different schemes
- nodes with an unconnected input/output

## **Graphical representation of flows**

- nodes that overlap a group box but are not actually part of the group
- minimum space between nodes
- nodes appear to be connected, but are not
- limiting number of crossed connection per flow
- not align with grid

### **Linter function improvement**

- rule exception
  - e.g., "the name of this node has been intentionally left blank."
- automatic fix
- linter hint
  - e.g., "this node type must be paired with a node type X" etc.

#### Runtime information is needed

old version of node / unsupported version of node

# **Appendix 2: Advanced linter-related ideas**



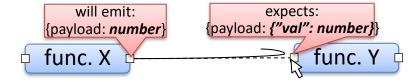
Auto completion / correction

Based on metadata of nodes (e.g., schema of input/output message, node type), editor automatically

places related node, or display suggestions.



As developer drops http-in node to editor, http-response node is automatically placed on the flow



If data schema of output and input are not compatible, a link resist to connect.



As developer connect (empty) function node with http-in node, function node is automatically set up with a template which contains information of msg structure.

