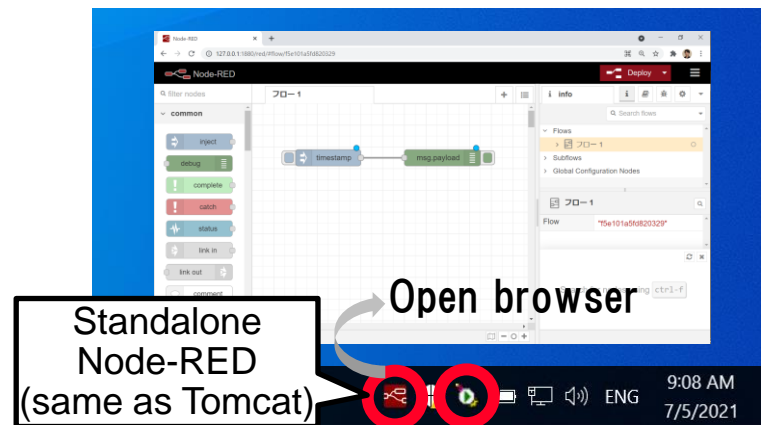
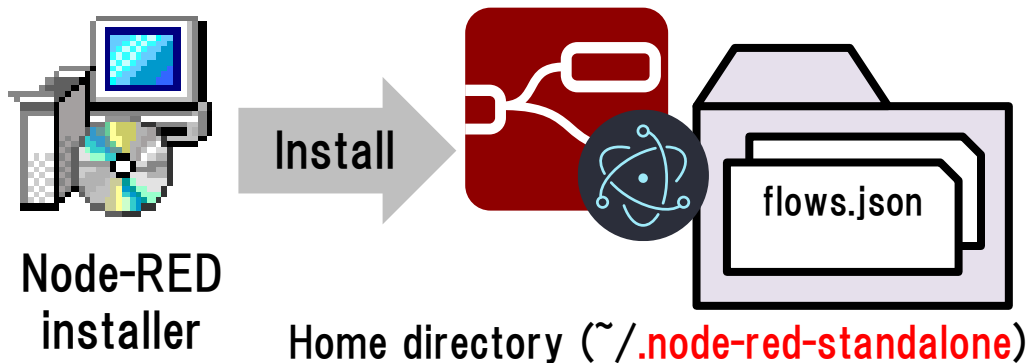


Behaviors of Standalone Node-RED

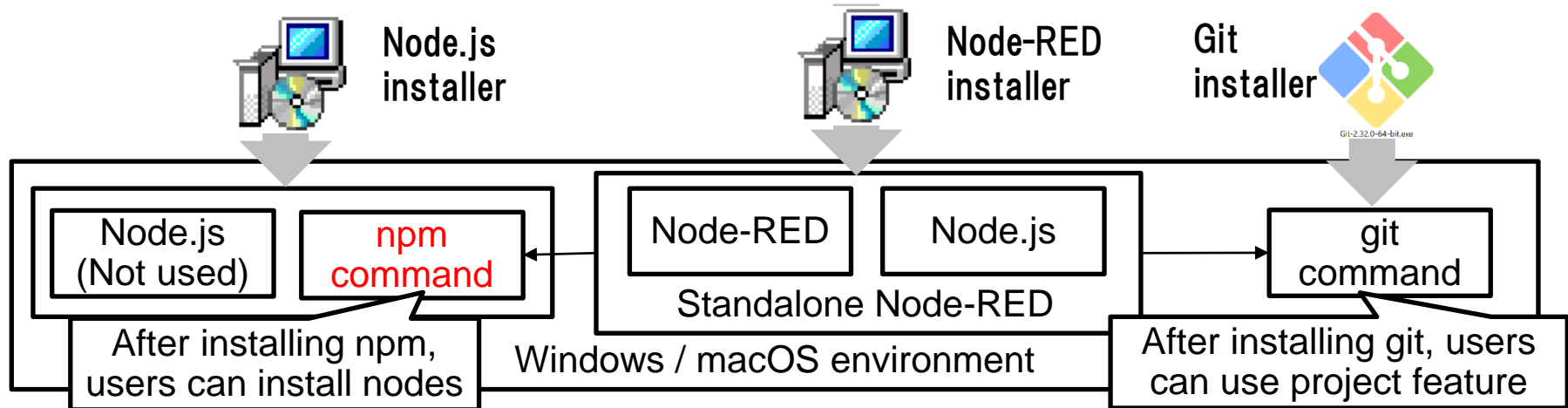
The node-RED installer sets up the Node-RED server environment to PC.

- Home directory: `~/node-red-standalone`
 - To avoid conflict with the existing directory (`~/node-red`), another directory is used.
- How to start: Execute Node-RED from the start menu on Windows
 - After starting the standalone Node-RED, the tray icon will be emerged to identify the server process (same as the tray icon of Apache Tomcat).
 - Users can open the Node-RED flow editor using their browser from the tray icon or localhost URL directly.



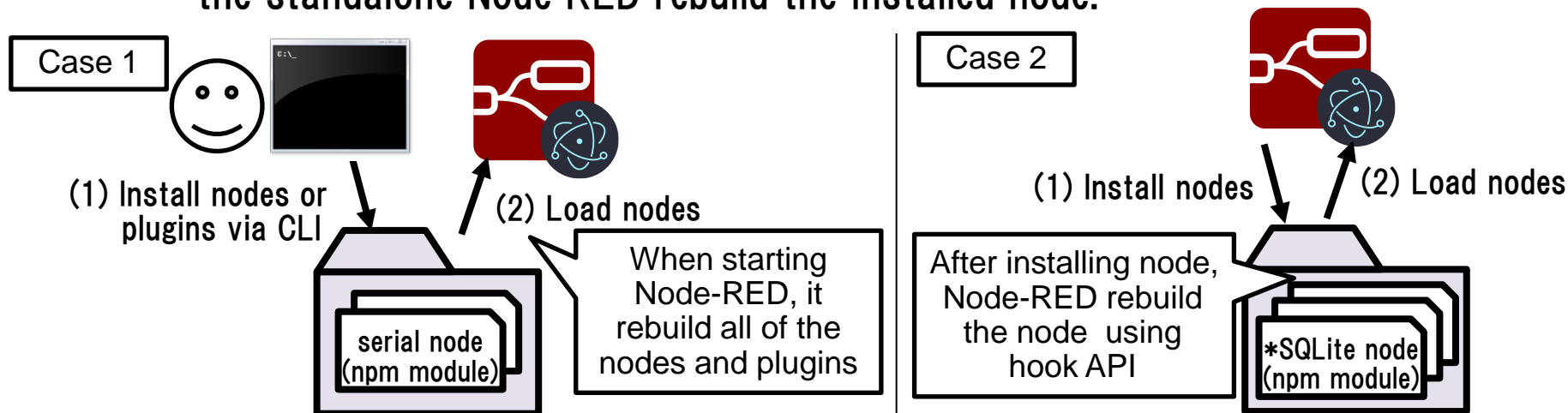
Node (connector) installation

- The Node.js in electron is used in the standalone Node-RED.
 - The electron uses the higher version LTS Node.js (Electron v13 uses Node.js v14.6).
 - Original building process is required if there is binary (like SQLite and serial nodes)
- npm command to install nodes
 - npm modules can be added as a dependency in package.json but it seems to be difficult to use API due to no documentation about the API.
 - To solve the situation, it uses the npm command installed by the Node.js installer.



There are two cases that need to rebuild nodes using the electron-rebuild module.

- Case 1: After manual installation on the home directory using CLI
When starting standalone Node-RED, it rebuilds all of the nodes.
- Case 2: After installing node on Node-RED flow editor
When hook API hooked the installation process,
the standalone Node-RED rebuild the installed node.



- Updating design note and implementation
- Replacement of Travis CI with GitHub Actions for building environment