

KAPITA SELEKTA



Disusun Oleh

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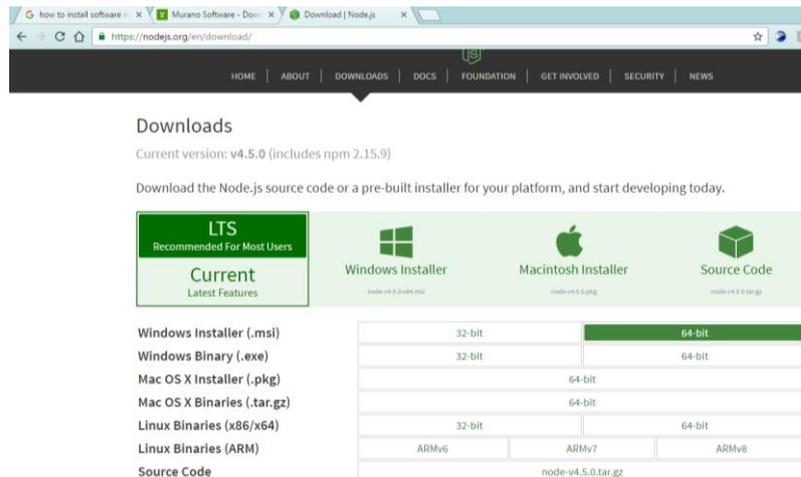
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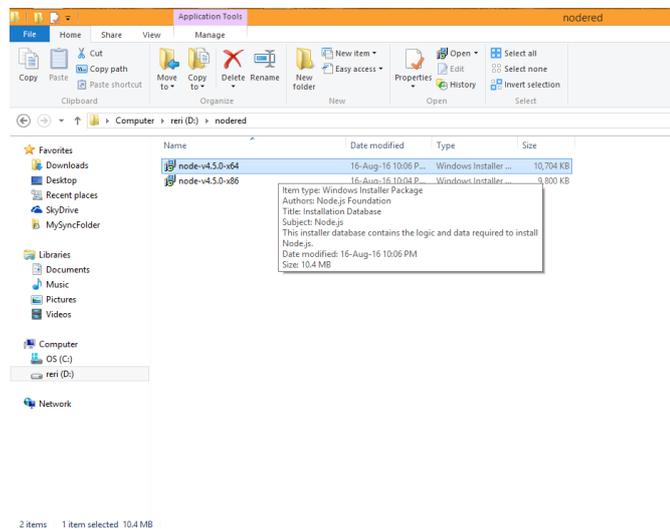
**JURUSAN SISTEM KOMPUTER
FAKULTAS ILMU KOMPUTER
UNIVERSITAS SRIWIJAYA**

2016

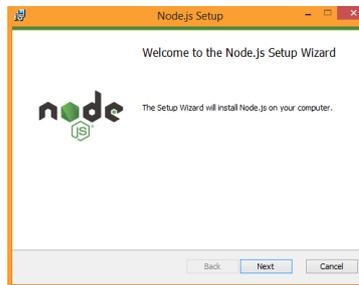
- Node-RED adalah sebuah tool berbasis browser untuk membuat aplikasi Internet of Things (IoT) yang mana lingkungan pemrograman visualnya mempermudah penggunaannya untuk membuat aplikasi sebagai “flow”.
- Adapun tahapan instalasi platform adalah sebagai berikut :
 1. Buka web browser kemudian download platform Node-RED pada link <https://nodejs.org>. Pilih sesuai dengan bit yang diperlukan



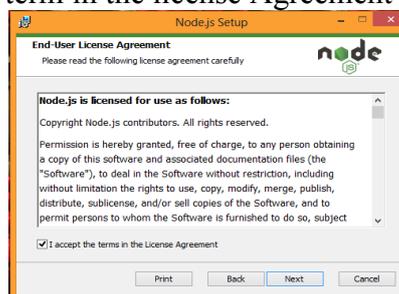
2. Setelah platform terdownload langkah selanjutnya adalah tahapan instalasi platform. Klik node setup untuk melakukan proses instalasi



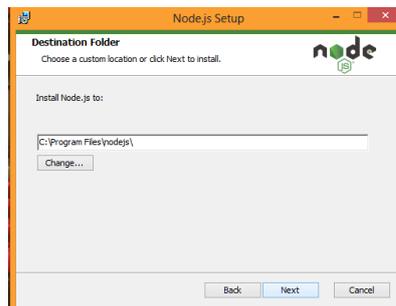
3. Kemudian klik next saat Nodejs.Setup telah tampil



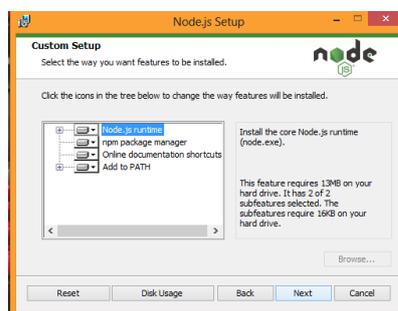
4. Ceklis "I accept the term in the license Agreement", kemudian klik next



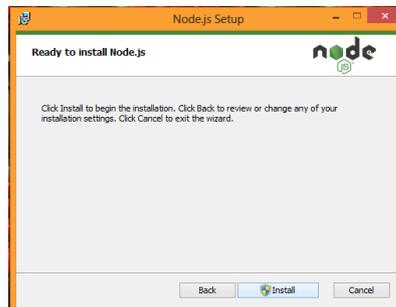
5. Pilih lokasi folder dimana akan diletakkan



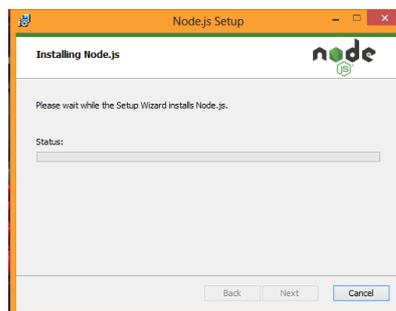
6. Pilih icon mana yang akan di install, selanjutnya klik next



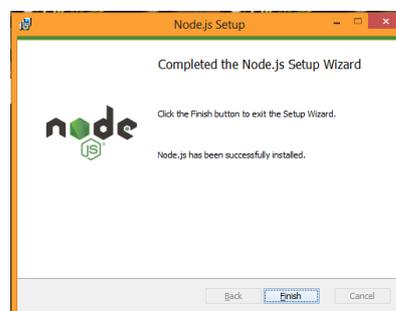
- Setelah muncul tampilan ready to install Node.js maka proses instalasi akan dimulai ketika tombol install di klik



- Peroses instalasi Node.js akan berjalan



- Setelah menunggu beberapa saat proses instalasi Node.js akan selesai. Lalu klik finish.

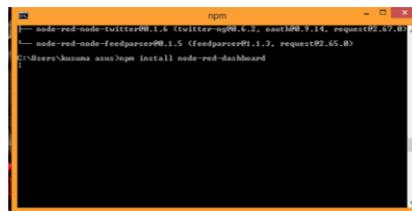


10. Tahapan instalasi Node-RED belum selesai. Langkah selanjutnya ialah melanjutkan di Node.js command prompt. Ketik `npm install -g --unsafe-perm node-red`. Pada proses ini dibutuhkan koneksi ke internet agar proses bisa berjalan. Tunggu beberapa saat hingga proses selesai.



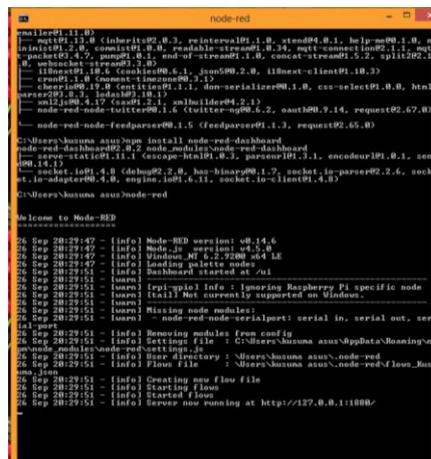
```
node-pre-gyp
Your environment has been set up for using Node.js 4.5.0 (64) and npm.
C:\Users\husuma asus>npm install -g --unsafe-perm node-red
npm WARN deprecated lodash.assign@4.0.1: This package is deprecated. Use Object.
npm WARN deprecated tough-cookie@2.2.1: ReDoS vulnerability parsing Set-Cookie h
https://nodesecurity.io/advisories/130
> bcrypt@0.8.7 install C:\Users\husuma asus\AppData\Roaming\npm\node_modules\nod
e-red\node_modules\bcrypt
node-pre-gyp rebuild
C:\Users\husuma asus\AppData\Roaming\npm\node_modules\node-red\node_modules\bcry
pt>if not defined npm_config_node_bin || not defined npm_config_node_gyp { C:\Program
Files\nodejs\node-bin\node_modules\node-gyp\node_modules\node-pre-gyp\node-pre-gyp.js" rebuild }
else { node --rebuild }
node-pre-gyp ERR! Error: Can't find Python executable "python", you can set the PYTH
ON env variable.
node-pre-gyp ERR! stack at failNoPython (C:\Program Files\nodejs\node_modules\npm\nd
e_modules\node-pre-gyp\node_modules\node-gyp\bin\node-gyp.js:449:14)
node-pre-gyp ERR! stack at C:\Program Files\nodejs\node_modules\node_modules\node
-pre-gyp\node-pre-gyp.js:484:14
node-pre-gyp ERR! stack at EIOWrap.oncomplete (fs.js:102:15)
node-pre-gyp ERR! System Windows_NT 6.2.9200
node-pre-gyp ERR! command "C:\Program Files\nodejs\node.exe" "C:\Program Files\nodej
s\node_modules\npm\node_modules\node-gyp\node-gyp.js" "rebuild"
node-pre-gyp ERR! cwd C:\Users\husuma asus\AppData\Roaming\npm\node_modules\node-red\node
_modules\bcrypt
node-pre-gyp ERR! node -v v4.5.0
node-pre-gyp ERR! node-gyp -v v0.3.4
node-pre-gyp ERR! optional dep failed, continuing bcrypt@0.8.7
npm WARN deprecated iifnext-client@1.10.3: you can use npm install iifnext from
version 2.0.0
> utf-8-validate@1.2.1 install C:\Users\husuma asus\AppData\Roaming\npm\node_mod
ules\node-red\node_modules\utf-8-validate
node-pre-gyp rebuild
C:\Users\husuma asus\AppData\Roaming\npm\node_modules\node-red\node_modules\utf-8
-validate\node_modules\utf-8-validate>if not defined npm_config_node_bin || not defined npm_config_node_gyp { C:\Program
Files\nodejs\node-bin\node_modules\node-gyp\node_modules\node-pre-gyp\node_modules\node-pre-gyp.js" rebuild }
else { node --rebuild }
node-pre-gyp ERR! Error: Can't find Python executable "python", you can set the PYTH
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node-pre-gyp ERR! stack at failNoPython (C:\Program Files\nodejs\node_modules\npm\nd
e_modules\node-pre-gyp\node_modules\node-gyp\bin\node-gyp.js:449:14)
node-pre-gyp ERR! stack at C:\Program Files\nodejs\node_modules\node_modules\node
-pre-gyp\node-pre-gyp.js:484:14
node-pre-gyp ERR! stack at EIOWrap.oncomplete (fs.js:102:15)
node-pre-gyp ERR! System Windows_NT 6.2.9200
node-pre-gyp ERR! command "C:\Program Files\nodejs\node.exe" "C:\Program Files\nodej
s\node_modules\npm\node_modules\node-gyp\node-gyp.js" "rebuild"
```

11. Saat proses diatas telah selesai maka ketik `npm install node-red-dashboard`. Proses ini pun membutuhkan waktu yang tidak sebentar, tergantung dengan koneksi yang digunakan



```
npm
node-red-node-twitter@0.1.6 (twitter-ng@0.1.6, oauth@0.9.14, request@2.47.0)
node-red-node-feedparser@0.1.5 (feedparser@1.1.3, request@2.65.0)
C:\Users\husuma asus>npm install node-red-dashboard
node-pre-gyp ERR! Error: Can't find Python executable "python", you can set the PYTH
ON env variable.
node-pre-gyp ERR! stack at failNoPython (C:\Program Files\nodejs\node_modules\npm\nd
e_modules\node-pre-gyp\node_modules\node-gyp\bin\node-gyp.js:449:14)
node-pre-gyp ERR! stack at C:\Program Files\nodejs\node_modules\node_modules\node
-pre-gyp\node-pre-gyp.js:484:14
node-pre-gyp ERR! stack at EIOWrap.oncomplete (fs.js:102:15)
node-pre-gyp ERR! System Windows_NT 6.2.9200
node-pre-gyp ERR! command "C:\Program Files\nodejs\node.exe" "C:\Program Files\nodej
s\node_modules\npm\node_modules\node-gyp\node-gyp.js" "rebuild"
```

12. Langkah terakhir ketik `node-red` pada Node.js command prompt. Proses akan berjalan dan selesai ketika muncul “server now running at <http://127.0.0.1:1880/>”

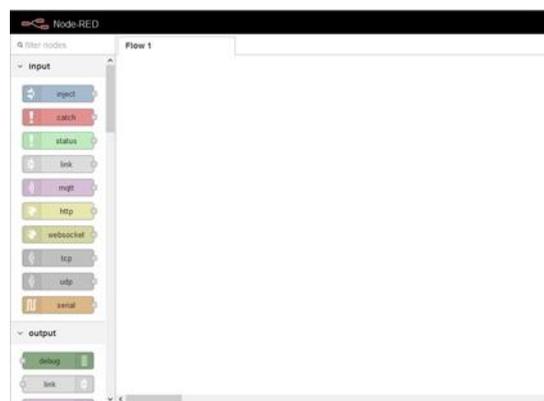


```
node-red
mail@red:~$ node-red
Welcome to Node-RED
-----
26 Sep 20:29:47 - [Info] Node-RED version v0.14.6
26 Sep 20:29:47 - [Info] Node.js version v4.5.0
26 Sep 20:29:47 - [Info] Windows_NT 6.2.9200 x64 LE
26 Sep 20:29:47 - [Info] Loading palette done
26 Sep 20:29:51 - [Info] Dashboard started at /ui
26 Sep 20:29:51 - [Warn]
26 Sep 20:29:51 - [Warn] [rpi-serial] Info: Ignoring Raspberry Pi specific node
modules that currently supported on Windows.
26 Sep 20:29:51 - [Warn] Mixing node modules:
node-red-node-serialport: serial in, serial out, ser
26 Sep 20:29:51 - [Info] Loading modules from config
26 Sep 20:29:51 - [Info] Settings file: C:\Users\husuma asus\AppData\Roaming\node
-red\node-red.settings.json
26 Sep 20:29:51 - [Info] Base directory: \Users\husuma asus\AppData\Roaming\node
-red\node-red.flows
26 Sep 20:29:51 - [Info] Creating new flow file
26 Sep 20:29:51 - [Info] Starting flow
26 Sep 20:29:51 - [Info] Server now running at http://127.0.0.1:1880/
```

13. Buka webbrowser kemudian ketikan lokal host yang sedang berjalan saat proses diatas `http://127.0.0.1: 1880`



14. Kemudian akan muncul tampilan seperti dibawah ini dimana tampilan dibawah merupakan bentuk dari platform Node-RED. Dapat dilihat dari tampilannya Node-RED memiliki bentuk dan tampilan yang enak dilihat sehingga merupakan nilai tambah tersendiri saat memilih menggunakan Node-RED



15. Untuk cara pemakaian Node-RED dapat disesuaikan dengan node-node yang diperlukan dalam pemanfaatannya. Gambar dibawah merupakan contoh dari pengaplikasian di dalam sebuah Node-RED.

