

User & Deployment Manual:

1. Turn on Sota:

- Plug in Sota with a AC adapter.
- Press the circle button at the back and the LED of the button will lights up in green. Wait for a while, then SOTA will say “Good morning” when starting properly.



2. Confirm button and function:

1. Adjust volume:

- The two triangle buttons are to adjust volume. Press the inverted triangle to turn down the volume and Sota will say “Volume down”.



Press the other triangle button to turn up the volume and Sota will say “Volume up”.



- Press the circle button at the back and the LED of the button will lights up in green. Wait for a while, then SOTA will say “Good morning” when starting properly.

2. Button lock function:

- If you press the three buttons at the same time for 3 seconds, you will be locked and Sota will not be able to accept button operations.



3. Enter setting mode:

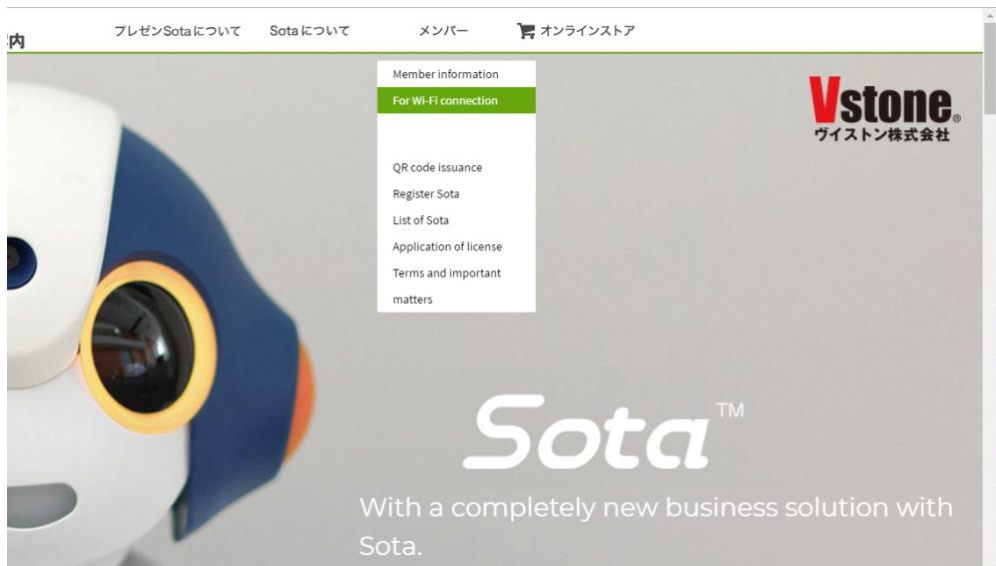
- If you press the two triangle buttons at the same time for 3 seconds, Sota will enter the setting mode. You can select the menu by pressing the up and down buttons (the two triangle buttons), and press the circle button to confirm.



Function List: 1. Run the application
2. IP address
3. Operation test
4. Update
5. Version
6. Serial code
7. Set by QR code
8. WPS connection
9. Exit setting mode

3. Connect to Internet:

- Access to [Sota web page](https://translate.google.com/translate?act=url&depth=2&hl=en&ie=UTF8&prev=t&rurl=translate.google.com&sl=ja&sp=nmt4&tl=en&u=https://sota.vst.one.co.jp/home/&xid=17259,15700021,15700105,15700124,15700149,15700168,15700173,15700201):
<https://translate.google.com/translate?act=url&depth=2&hl=en&ie=UTF8&prev=t&rurl=translate.google.com&sl=ja&sp=nmt4&tl=en&u=https://sota.vst.one.co.jp/home/&xid=17259,15700021,15700105,15700124,15700149,15700168,15700173,15700201>.
- Click on “Member” (the third tag on the top menu) ⑦ “For Wi-Fi connection”



- c. Enter the information of your Wi-Fi into “SSID” (Wi-Fi name), “PASS” (Wi-Fi password) and select the connection type.

Wifi接続用QRコード発行

SotaにWifi設定のID情報が入ったQRコードを認識させ、Sotaをインターネットに接続します。
Sotaの顔に近づけすぎると上手く見えませんので、20cm程度離れた位置でかざしてください。



SSID

PASS

接続タイプ

WPA WEP

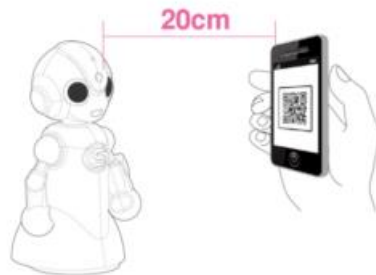
QRコード生成



- d. Enter setting mode by pressing Δ and ∇ buttons for 3 seconds.



- e. Press Δ button 7 times and hear Sota says "Set by QR code".
- f. Press the \circ button, and Sota says, "I will begin setting with the QR code, show me the QR code at about 20 cm away". Please hold the screen on which the above QR code is displayed or the paper on which it is printed at a position about 20 cm away from Sota. When the QR code is correctly recognized, "I saw the QR code, since I connect to the network, wait a moment," Sota says.



- g. When Sota says "I connected to the network," the connection is completed.

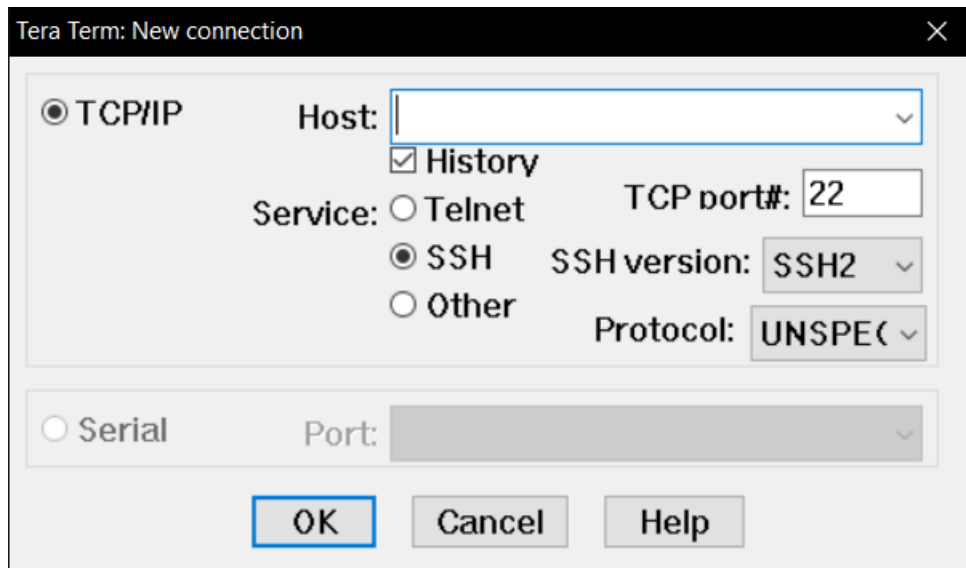
4. Get IP Address:

Enter the setting mode and choose "IP address". Then Sota will say your IP address out. Mark down the IP address for later use.

(Note: The pause between sentences means "dot", e.g. 192.168.X.X)

5. Download Tera Term:

- a. Since Sota is a Linux machine, to run an application in Sota, we need to use SSH to remotely control Sota from your PC. We suggest to user Tera Term for the connection, you can download it [here](https://zh.osdn.net/projects/ttssh2/):
<https://zh.osdn.net/projects/ttssh2/>.
- b. Open Tera Term and you will see a window to set up the connection like this:



Select TCP/IP connection. Enter your IP address into “Host” then leave other settings like the picture above.

- c. Click on “OK”. Then another window will pop up and ask for login username and password. The login credentials for our Sota is:

Username: root

Password: edison00

Once finished, you can see your Tera Term current directory is in Sota now!

6. Set up project and run on Sota:


- a. Download the project source code from our GitHub.
- b. Install and set up Maven for command line, download here:
<https://maven.apache.org/download.cgi>.
- c. Adjust src/java_run.sh by changing the classesFolder variable to be correct for your PC (If you haven't changed the code or libraries since last github pull, no need for steps 4 and 5)
- d. Go to root folder on command line and run: mvn clean install;
- e. mvn compile; mvn dependency:copy-dependencies
- f. Will need Google Cloud free trial subscription, with Google Speech enabled after subscribing, follow this
link: <https://cloud.google.com/docs/authentication/getting-started>
- g. Will need IBM Text to Speech free service, follow this link:
<https://www.ibm.com/watson/services/text-to-speech/> to get your own credentials and replace your own username and password in WatsonTTS.java.

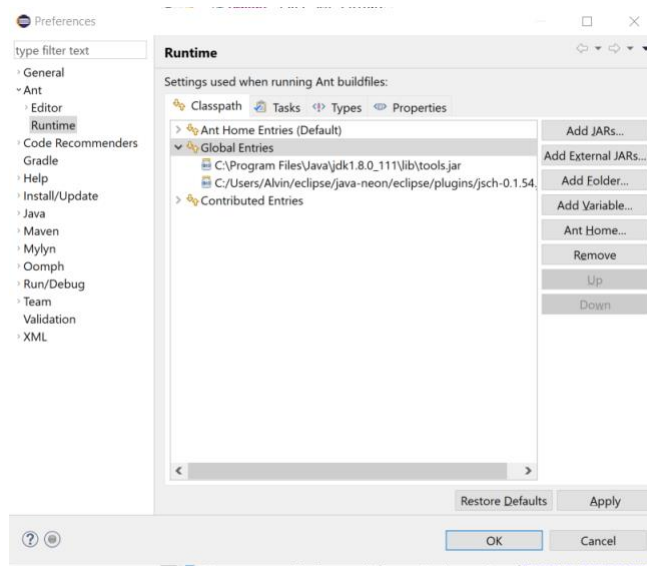
- h. Connect Sota with SSH and set the environment variable by command: export GOOGLE_APPLICATION_CREDENTIALS="/home/user/Downloads/service-account-file.json" //replace json file with your json file
- i. To run the application, go to target/classes folder on Sota and run: chmod +x java_run.sh ./java_run.sh Main

7.Run on Eclipse:

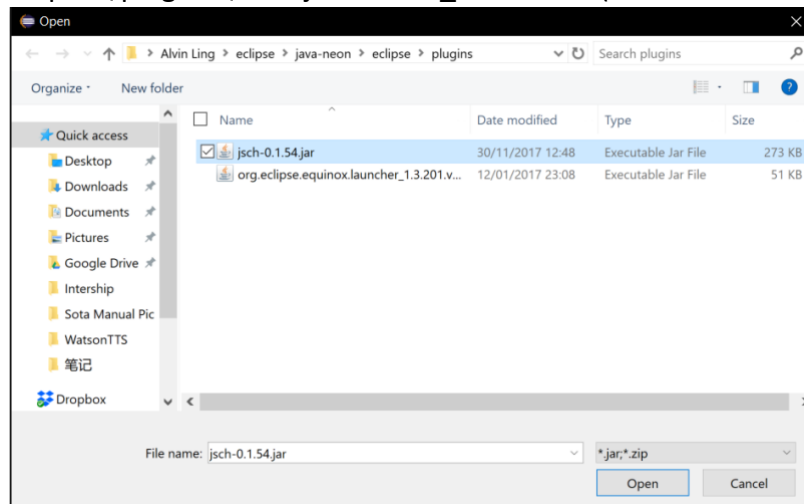
- a. Download the project source code from our GitHub.
- b. Import the project in Eclipse as a Maven project. (may need to download m2e)
- c. Go to root folder and run command: mvn clean install; mvn compile; mvn dependency:copy-dependencies
- d. Copy all jars in the target/dependency folder into the lib folder, and add them as JARs in Properties -> Java Build Path -> Libraries
- e. Will need Google Cloud free trial subscription, with Google Speech enabled after subscribing, follow this link:<https://cloud.google.com/docs/authentication/getting-started>
- f. Will need IBM Text to Speech free service, follow this link: <https://www.ibm.com/watson/services/text-to-speech/> to get your own credentials and replace your own username and password in WatsonTTS.class.
- g. Set GOOGLE_APPLICATION_CREDENTIALS environment variable on eclipse by right clicking on Main class then select Run As -> Run Configurations -> Environment.
- h. Run Main class as a Java Project.

8.Transfer updated code to Sota:

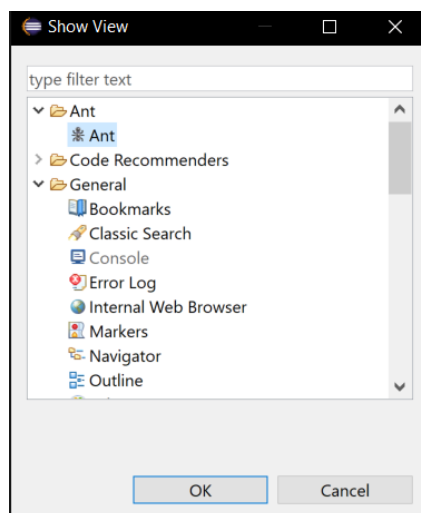
- a. To transfer project to Sota, your build Ant on Eclipse. Open the project on Eclipse, on the top menu bar, click "Window"  "Preference"



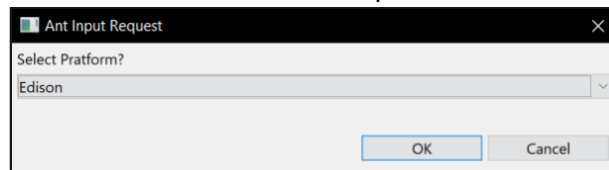
Click on “Ant” ⑦ “Runtime”, then select “Global Entries” ⑦ “Add External JARs”.
 Open "eclipse \ plugins \ com.jcraft.fsch_****. Jar" (**** is the version).



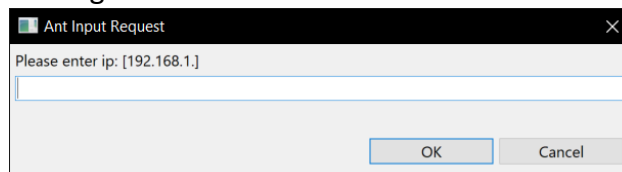
b. On the top menu bar of Eclipse, click on “Window” ⑦ “Show View” ⑦ “Other”



- c. Right click on the “send.xml” file of the project in Eclipse, click on “Run As” ⑦ “Ant build”. Select “Edison” for the platform.



- d. Enter your IP address of Sota. Refer to the user manual above if you don't know how to get Sota's IP address.



- e. Connect Sota with SSH (if you don't know how, refer to the user manual above), go to target/classes under your project folder.
Run command: `chmod +x java_run.sh`
And to run the class of the project: `./java_run.sh YourClass`
(Do NOT include extension .class, e.g. `./java_run.sh Main`)

9. Create new story:

- Access to IBM Watson Assistant and create your own account here: <https://www.ibm.com/watson/services/conversation/>
- You can create your own story by adding new dialogs and intents.

The screenshot displays the Watson Conversation 'Dialog' configuration for the intent '#Story_One'. On the left, a list of intents is shown, each with its name, a sample utterance, and a status of '1 Response / 0 Context set'. The right pane provides details for the selected intent, including its name, description ('Child Chooses Story One'), and a list of user examples. The examples are: 'I would like to choose the first story', 'Number 1!', 'Story one please!', and 'The first one!'.

- c. Update the code in WatsonConveration.java in the project with your own credential and story.
- d. Transfer your program to Sota and run.

Reference:

The official Sota manual website is available here (translated in English):

<https://translate.google.com/translate?act=url&depth=1&hl=en&ie=UTF8&prev=t&rurl=translate.google.com&sl=ja&sp=nmt4&tl=en&u=http://www.vstone.co.jp/sotamanual/index.php%3F%25E3%2583%258D%25E3%2583%2583%25E3%2583%2588%25E3%2583%25AF%25E3%2583%25BC%25E3%2582%25AF%25E7%25B5%258C%25E7%2594%25B1%25E3%2581%25A7%25E3%2583%25AD%25E3%2582%25B0%25E3%2582%25A4%25E3%2583%25B3%25E3%2581%2599%25E3%2582%258B>

