

Arduino Simulator installation instructions

1 Install Java JDK

Install Java JDK from <https://www.oracle.com/java/technologies/javase-downloads.html>. Follow the instruction for your operating system.

2 Install a servlet container

We will be using Apache Tomcat as our servlet container but you can use another one.

Follow the setup guide at <https://tomcat.apache.org/tomcat-8.5-doc/setup.html> to install Apache Tomcat.

3 Deploy the simulator

You can use the Apache Tomcat manager interface at http://server_domain_or_IP:8080/manager/html and use the option Select WAR file to upload.

Tomcat Web Application Manager

Message:	OK		
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Manager			
List Applications	HTML Manager Help	Manager Help	Server Status

Applications					
Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/docs	None specified	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/examples	None specified	Servlet and JSP Examples	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/host-manager	None specified	Tomcat Host Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/manager	None specified	Tomcat Manager Application	true	1	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes

Deploy	
Deploy directory or WAR file located on server	
Context Path (required): <input type="text"/> XML Configuration file URL: <input type="text"/> WAR or Directory URL: <input type="text"/> <input type="button" value="Deploy"/>	
WAR file to deploy	
Select WAR file to upload <input type="button" value="Choose File"/> No file chosen <input type="button" value="Deploy"/>	

Figure 1: Apache Tomcat manager interface

To use the web interface you may need to edit the file `tomcat-users.xml` and add a user with the roles `manager-gui` and `admin-gui`.

You can also copy the WAR simulator file directly to the `webapps` folder in the Apache Tomcat installation base.

Tomcat will detect the file and automatically deploy the application.

3.1 Email settings

To register new users the applications needs to send emails.

With the default setting it is expected that a SMTP server is running on localhost that accepts connections without authentication.

To configure different email settings you should edit the file `webapps/arduino/META-INF/context.xml` and put your email settings in the `mail/Session` resource.

The available options can be consulted at <https://javaee.github.io/javamail/docs/api/overview-summary.html>.

```
<Resource name="mail/Session"
          auth="Container"
          type="javax.mail.Session"

          mail.smtp.host="smtp.example.com"
          mail.smtp.from="sender@example.com"
          mail.smtp.auth="true"
          mail.smtp.starttls.enable="true"
          mail.smtp.user="sender"
          password="password"

/>
```

Figure 2: Email resource example

4 Administer the simulator

The default username is admin and the default password is 123.

There is a page at APP/admin/db.jsp, accessible only to admin user where you can execute SQL to query and update the database if needed.