

Installing Apache Ant

Apache Ant is a software, thus it requires installation wherever you want to use it. We will install the 1.10.13 version.

Pre-requisite

It is assumed that you have already downloaded and installed Java Development Kit (JDK) on your computer.

Download

For Mac users who use brew to install packages (highly recommended in general), you can simply install ant using `brew install ant` and move to Verify Installation.

For Windows and Linux, proceed as follows:

- Download [Apache-Ant-1.10.13 binaries](https://dlcdn.apache.org/ant/binaries/apache-ant-1.10.13-bin.zip) (<https://dlcdn.apache.org/ant/binaries/apache-ant-1.10.13-bin.zip>). It is a zip file.
- Unzip the zip file to a convenient location (e.g. `C:\Users\User`). To unzip on Windows, you can use [7-zip](https://www.7-zip.org/) (<https://www.7-zip.org/>) or similar programs.

Set environment variables (Windows and Linux)

- Create a new environment variable called `ANT_HOME` that points to the Ant installation folder, in our example, the `C:\User\User\apache-ant-1.10.13-bin` folder.
- Append the path to the Apache Ant batch file to the `PATH` environment variable. In our example this would be the `C:\User\User\apache-ant-1.10.13-bin\bin` folder. You can now run `ant` commands from anywhere on your system.

If you are not sure how to create or modify an environment variable, here are simple guides for [Windows](https://www.architectryan.com/2018/08/31/how-to-change-environment-variables-on-windows-10/) (<https://www.architectryan.com/2018/08/31/how-to-change-environment-variables-on-windows-10/>), [Linux](https://www.serverlab.ca/tutorials/linux/administration-linux/how-to-set-environment-variables-in-linux/) (<https://www.serverlab.ca/tutorials/linux/administration-linux/how-to-set-environment-variables-in-linux/>), and [Mac](https://medium.com/@youngstone89/setting-up-environment-variables-in-mac-os-28e5941c771c) (<https://medium.com/@youngstone89/setting-up-environment-variables-in-mac-os-28e5941c771c>) (note you should make it a persistent setting).

Verify Installation

To verify the successful installation of Apache Ant on your computer, type `ant -version` on your command prompt.

You should see an output similar to –

```
Apache Ant(TM) version 1.10.13 compiled on January 4 2023
```

Integration with IDEs

Common Java IDEs, such as IntelliJ and Eclipse, support the usage of Ant. You can copy the `build.xml` (that we will provide you for each assignment) into your project directory and then edit your build configuration so that it uses Ant targets specified there.

For integration with IntelliJ, see Ayal Klein's [video \(https://www.youtube.com/watch?v=WNHGXAygwZw&feature=youtu.be\)](https://www.youtube.com/watch?v=WNHGXAygwZw&feature=youtu.be) in hebrew.