

Setting up EiffelStudio (with AutoProof)

Prerequisite: academic license from Eiffel Software

1. Set up access to the EiffelStudio subversion repository

1) Create a password using the following instruction:

```
htpasswd -B -C 12 -c passfile.txt YOUR_SVN_USERNAME
```

For example: `htpasswd -B -C 12 -c passfile.txt li_huang`

`htpasswd` is usually available on Linux machine, or with apache. For Windows users, a distribution of apache can be downloaded via: _

<https://www.apachehaus.com/cgi-bin/download.plx>

Eiffel Software team will tell you if the user name can be used.

2) Share the content of `passfile.txt` using the service:

https://www.eiffel.org/_private/ZeroBin/

The service will be protected by login "eiffel" and password "user". To share the content, use "Burn after reading", press "Send" button and send the ZeroBin URL to [Alexander Kogtenkov](#) who will relay the URL to Eiffel Software team.

Note: 1) This process ensures the confidentiality of the password (please keep it private); 2) The same procedure will be used for changing the password; 3) The repository is read-write to the whole directory structure, be careful not to commit any changes outside AutoProof.

2. Install the developer version of EiffelStudio--version 21.06

Download the installation package via: http://ise.deliv.s3-website-eu-west-1.amazonaws.com/nightly/105596/standard/Eiffel_21.06_rev_105596-win64.msi

3. Get AutoProof source code

Use the latest version of Subversion command-line tools, which can be get from (Windows version):

<https://subversion.apache.org/packages.html#windows>

a) Open a command-line window and make sure the Subversion client (`svn`) is properly installed and in the PATH, so that you can run with plain `svn` command;

b) Put **es_ap** folder to the place you want;

c) `cd` to the **es_ap** folder;

d) Open the **es_ap** folder and run `checkout.bat` to initiate checkout. (name/password will be required);

e) On successful completion, run `update.bat` (it may take hours to complete).

Note: 1) Any subsequent invocations of `update.bat` will retrieve only modified files from the server and should run much faster than the first time;
2) during the process, you may want to redirect standard output and error to a file for further inspection if something goes wrong.

f) Open EiffelStudio command prompt and check if C code can be compiled in this window. (Assuming that you are using Microsoft Visual Studio, just run `cl` to see if it is available. If not, you need to setup the C compiler environment as described at

https://dev.eiffel.com/Installing_Microsoft_C_compiler#Configuring_C_Compiler_to_Compile_From_the_Command_Line)

g) In the same window, `cd` to the **es_ap** folder and run `compile_c.bat` to compile C code.

h) Run `compile_ec.bat`. It should launch EiffelStudio with the project that includes AutoProof. Select the directory where you want to keep the project (the default is OK), and compile it.

Note: Make sure that the environment variables EIFFEL_SRC, ISE_EIFFEL and ISE_PLATFORM are set correctly.

1.Name: ISE_EIFFEL

Value: The location of the extracted Eiffel your version folder

(e.g., C:\Program Files\Eiffel Software\EiffelStudio 21.06 Standard)

2. Name: ISE_PLATFORM

Value: win64 or windows

3. Name: EIFFEL_SRC

Value: ..\trunk\Src\ (e.g., C:\Documents\es_ap\trunk\Src)

4. Replace the EiffelStudio binary file ec.exe in the directory

[..\Eiffel Software\EiffelStudio 21.06 Standard\studio\spec\win64\bin](#)

5. Copy two folders `boogie` and `autoproof` to the directory

[..\Eiffel Software\EiffelStudio 21.06 Standard\studio\tools](#)

6. Install AutoProof extension to EiffelStudio

Open and compile:

`Trunk\research\extension\autoproof\library\base\base.ecf`

If it succeeds, AutoProof panel can be launched from the menu

[View](#) | [Tool](#)

7. Change project configuration to run proof/testing

To use AutoProof for an Eiffel project:

- 1) Create an environment variable

Name: `AP`

Value: `..\trunk\research\extension\autoproof`

- 2) In the project configuration file (.ecf file), remove the precompiled library (if any), and set the location of the base library as:

```
<library name="base" location="$AP\library\base\base-safe-scoop.ecf"/>
```

To use AutoTest for an Eiffel project:

- 1) Replace the files in the **library** directory with the files in corresponding directories under

`..\Eiffel Software\EiffelStudio 21.06 Standard\library`

- 2) Set the location of the testing library as:

```
<library name="testing"
```

```
location="$ISE_LIBRARY\library\testing\testing_ap.ecf"/>
```