**Installation guide for dmyplant2 applications Validation dashboard and Engine comparison**

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# Get access to files via GitHub

All the necessary files are stored in GitHub. (GitHub is a provider of Internet hosting for software development and version control.)

### Using the program without GitHub:

If you do not plan to contribute to the program you do not necessarily need access to GitHub to install the program. You can use the shared files as well.

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### Add GitHub to your applications:

Go to [https://myapplications.microsoft.com/](https://myapplications.microsoft.com/%20)

Click on three dots and select “Add new apps”

Computergenerierter Alternativtext:
Erstellen Bearbeiten 
@ Alle verwalten 
-+- Neue Apps anfordern 

Search for GitHub -> Add this application

Raise additional ticket on <https://innio.service-now.com/sp/> to speed up handling time (otherwise process can take weeks based on experience)

### 

### Get access to the Innio mechanical development Team on GitHub

Once GitHub is approved (you will receive a mail) text Giovanni Brighenti to get access to the *INNIO Mechanical Development and Simulations (innio-mech-dev-sim)* organization on GitHub

# Setup the python environment

## Initial installation

### Download Python environment (optional)

(This is an optional step in case you didn´t use python before on your Computer. Any other Python interpreter works fine as well.)

Download Anaconda Navigator: <https://www.anaconda.com/products/individual#windows>

Installation Guide for help with the installation: <https://docs.anaconda.com/anaconda/install/windows/>

### Download dMyPlant2 Package

Download all files from <https://github.com/innio-mech-dev-sim/dmyplant2> and save them in a folder on your computer. (Advanced users: Clone the repository to your computer)

### Installation of the additional package ‘Arrow’

Open Anaconda Navigator

In Anaconda Navigator launch program CMD.exe Prompt

Insert and run with enter: *conda config --set ssl\_verify false*

Insert and run with enter: *conda install arrow*

(Alternative with pip: *pip install --trusted-host pypi.org --trusted-host files.pythonhosted.org arrow*)

### Installation of dMyPlant2

Copy path of folder that contains dMyPlant2 Package

In console (CMD.exe Prompt) write “cd” and insert the copied folder path

Next run: *python setup.py develop*

## Update of the package

Open the CMD.exe Prompt

cd to the folder of dMyPlant2

Run *python setup.py develop –uninstall*

Download the new version of the package into the same folder

Run *python setup.py develop*

If you only update the program files check if there was also an update of the package!

# Using the program

### Running the program

Open repository: <https://github.com/innio-mech-dev-sim/dmyplant2_applications>

Download files with ending .ipynb and Input Excel (.py files have the same code)

Create subfolder for each field validation analysis and dashboard/ comparison

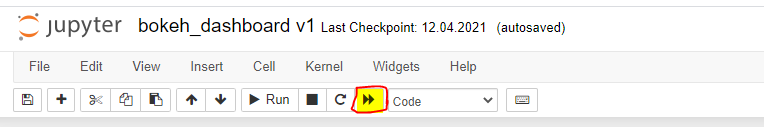
Modify the Excel input to your liking: (Excel file has to be closed while running the code)

* Pass the validation engines in 'Engines'
* Define the desired plots in 'Pltcfg'
* Adjust other settings in 'Variables'

Open Jupyter Notebook in Anaconda Navigator

In Jupyter Notebook open the files of the applications

Run the whole notebook by clicking on the button with the two arrows: (VPN might need to be disabled)



Click “Restart and Run all cells”:



You will be asked to give your myPlant credentials (one time; stored encrypted) in input boxes  
(second input box is prompt for password)

Observe the progress on the bottom of the page.

HTML file(s) will be created and optionally Excel files with downloaded data

Note: Sometimes columns at the top of the table are not displayed. Click somewhere on the table to make them appear.

### Adding custom values

To add calculated values, search for "Add custom value" in the code and add code according the instructions at the two places.

Then these values can be accessed like any other value from the Excel sheet.

In either one of the files search for “Add custom value” and follow the instructions in the code.

Feel free to share your calculated values with the developer ([johannes.fischer1@innio.com](mailto:johannes.fischer1@innio.com)) then they can be included in the public code.

### Overview progress validations

To run the overview progress validations fill in the input excel with how many engines you like and then run the Jupyther Notebook. An Output Excel file will be created in the same folder.

# Contact

For questions contact Johannes Fischer ([Johannes.fischer1@innio.com](mailto:Johannes.fischer1@innio.com))