
Package Managers and Virtual Environments

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Topics



Package Manager

Environments

DEMO

1. What is a Package?

- Some code providing any kind of functionality
- Reusability

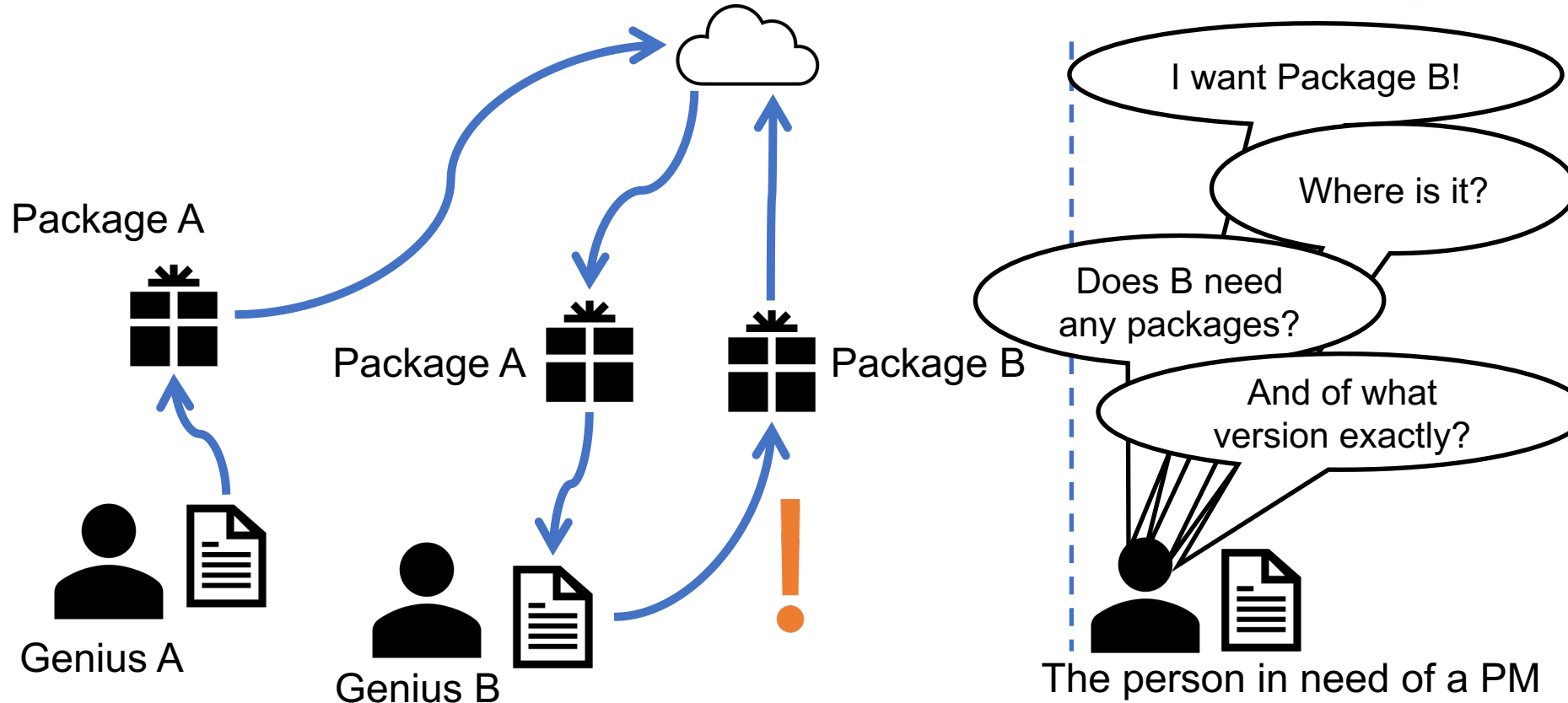


2. Why do Packages need managing?



many others...

Package Manager Example



1. What is a Package?

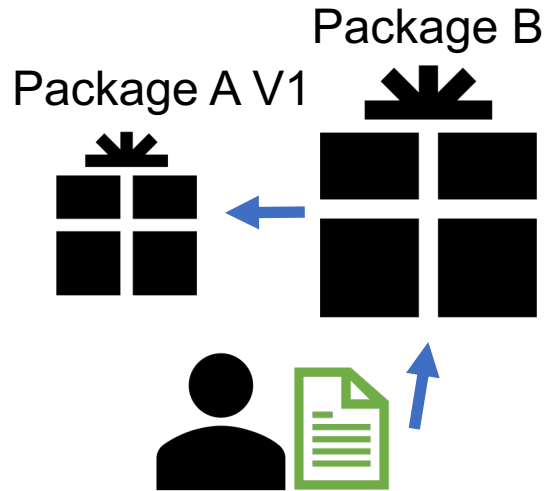
- Some code providing any kind of functionality
- Reusability

2. Why do Packages need managing?

- Downloading packages
- Taking care of dependencies
- Making sure downloaded code is not corrupted
- Environments ...

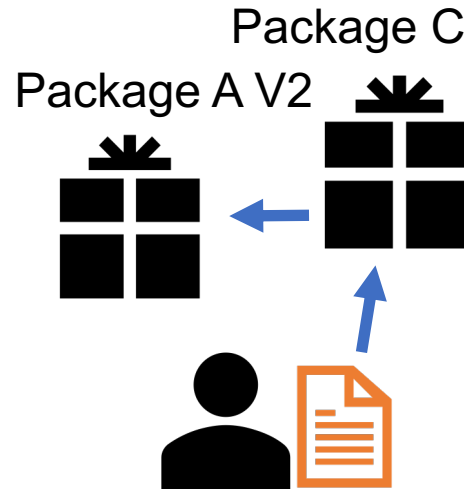
(Virtual) Environments

ENVIRONMENT GREEN



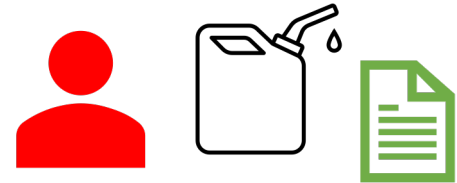
The person in need of a PM

ENVIRONMENT ORANGE



The person in need of a PM
and environments

~~ENVIRONMENT GREEN~~
ENVIRONMENT ORANGE



DEMO

Commands for environment setup

Function	Anaconda (Windows)	Pip / venv (Linux/Mac)
Show existing Environments	<code>conda env list</code>	venv stores environment in the folder where you create it. venv does not know about all environments on your machine
Create Environment	<code>conda create -n <i>myEnvName</i></code>	<code>python3 -m venv <i>myEnvName</i></code>
Enter Environment	<code>conda activate <i>myEnvName</i></code>	<code>source <i>myEnvName</i>/bin/activate</code>
List Packages of Environment	<code>conda list</code> (while environment activated)	<code>pip list</code>
Install Package	<code>conda install <i>packageName</i></code>	<code>pip install <i>packageName</i></code>
Exit Environment	<code>conda deactivate</code>	<code>deactivate</code>