**Travis CI**

**What is Travis CI?**

* **Travis CI** (Continuous Integration) is a hosted service for building, testing, and deploying code automatically.
* It integrates with GitHub and Bitbucket repositories.
* Every time you push code or open a pull request, Travis can:
  + Install dependencies
  + Run tests
  + Build your project
  + Deploy to services (Heroku, AWS, Docker, etc.)

**How It Works**

1. **Add .travis.yml**  
   A config file at the root of your repo that defines language, versions, install steps, and scripts.

Example for Python:

language: python

python:

- "3.10"

install:

- pip install -r requirements.txt

script:

- pytest

1. **Connect repo to Travis**
   * Go to Travis CI, sign in with GitHub.
   * Enable the repository.
2. **Push code**  
   Travis picks up the .travis.yml, creates a VM or container, installs dependencies, runs tests.
3. **See results**  
   Build results appear in the Travis dashboard and as GitHub status checks.

**🔹 Key Features**

* Supports many languages: Python, Java, C++, Node.js, Ruby, Go, etc.
* Build matrix: run tests across multiple OS/Python versions.
* Easy GitHub integration.
* Can deploy automatically after tests pass.
* CI/CD for **open source** (was free, but now limited).