Python Tools

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Test Coverage

SonarQube is used for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs, code smells and security vulnerabilities

SonarPython capability is available in Eclipse and IntelliJ for developers (SonarLint) as well as throughout the development chain for automated code review with self-hosted SonarQube or on-line SonarCloud

- import Unit Tests Execution Reports

- import Coverage Results

- import a Pylint Report

- create your own Custom Rules

https://docs.sonarqube.org/display/PLUG/SonarPython

20+ Programming Languages

With SonarQube comes a code analyzer for each major programming language. Each analyzer provides numerous rules to spot general and language-specific quality issues.

C/C++	PL/SQL	Python v3.x
JavaScript	PL/I	RPG
C#	PHP	Flex
Java v8	ABAP	Objective-C
COBOL	T-SQL	Swift
TypeScript	VB.NET	Web
	VB6	XML

Python Package Index

Python Package Index (PyPi) is a repository of software for the Python programming language.

https://pypi.python.org/pypi

Package	Description
mypy 0.560	Optional static typing for Python
pyflakes 1.6.0	Passive checker for Python programs
Pep8 1.7.1	Python style guide checker

PTL's Requests:
- PyPi server for hosting python packages
- The release procedure for ONAP developed Pypi packages

Load Testing Framework

Locust is an open source Python-based user load testing tool.

This lightweight, distributed and scalable framework helps to find out how many concurrent users a system can handle by writing test scenarios in Python code. It can be used for web applications, websites and web-based services.

Locust is completely event based and uses the async approach, so it can support running thousands load tests on a single machine or distributed over multiple machines to simulate millions of concurrent users. Each locust runs inside it's own process (greenlet). Any number of test users will act independently with their own session data. When the tasks are defined, each Locust node can handle thousands of users in a single process. This framework even allows running in a distributed master/worker fashion with only a few configuration adjustment.

https://locust.io/