

Python type annotations

- In Python 3

```
def get_transfertools(rse_id: str) -> "Set[str]":  
    https://mypy.readthedocs.io/en/stable/cheat\_sheet\_py3.html
```

- In Python 2 (for clients/common code)

```
def get_transfertools(rse_id):  
    # type: (str) -> Set[str]  
    https://mypy.readthedocs.io/en/stable/cheat\_sheet.html
```

Mypy static type checker

- Can be run on Python 3 to check Python 2 code
- Needs as many type hints as possible
- IDEs run similar type checking
 - PyCharm and mypy use official type hints <https://github.com/python/typedhed>
- Is a project under the official python organisation on GitHub:
<https://github.com/python/mypy>
- Should be integrated in the CI and can be run locally
 - Would just need a pip install or your distro's mypy package
 - Create a tools/check_mypy.sh

<http://mypy-lang.org/>