

ObjXp

Object Express

What is ObjXp?

Unified Object Exchange Framework

- Within a process
- Between processes
- Within a system
- Between systems
- Between different programming languages: C/C++ and Python
- (Java support with Protocol Buffers will be coming ...)

All in the
same
Framework

Components

Obex Tree
(Object Express Tree)

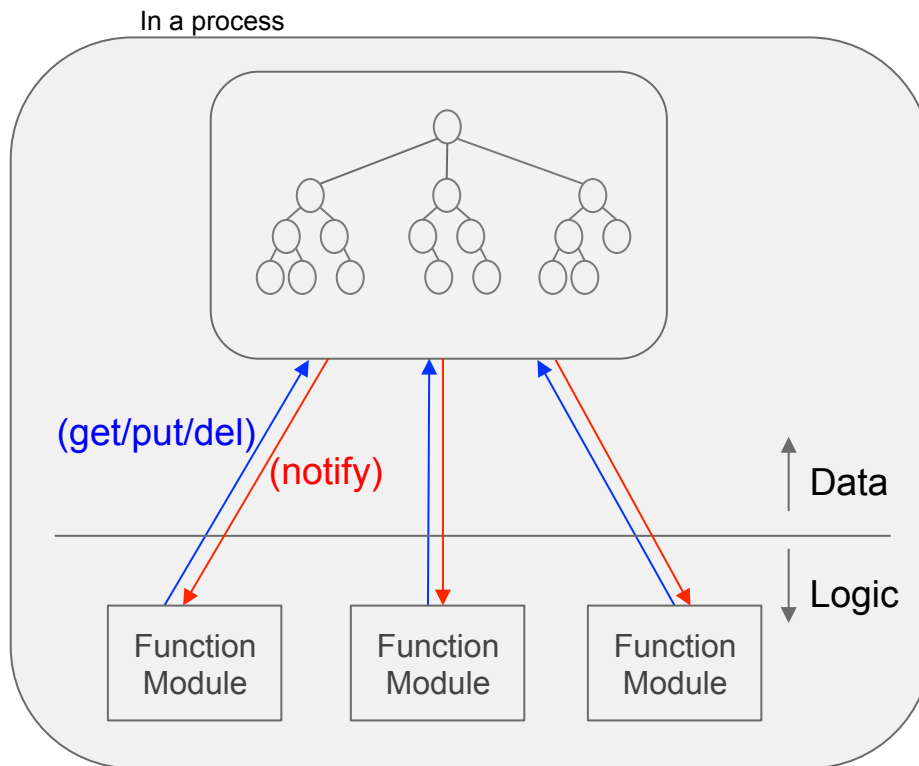
YAIL
(Yet Another IPC/IO Library)

* See separate documentation for each.

REST-like

- Resource can be accessed by object location and path
- REST style API
 - putObject
 - getObject
 - delObject
 - + few more API functions to get notification

Within a Process



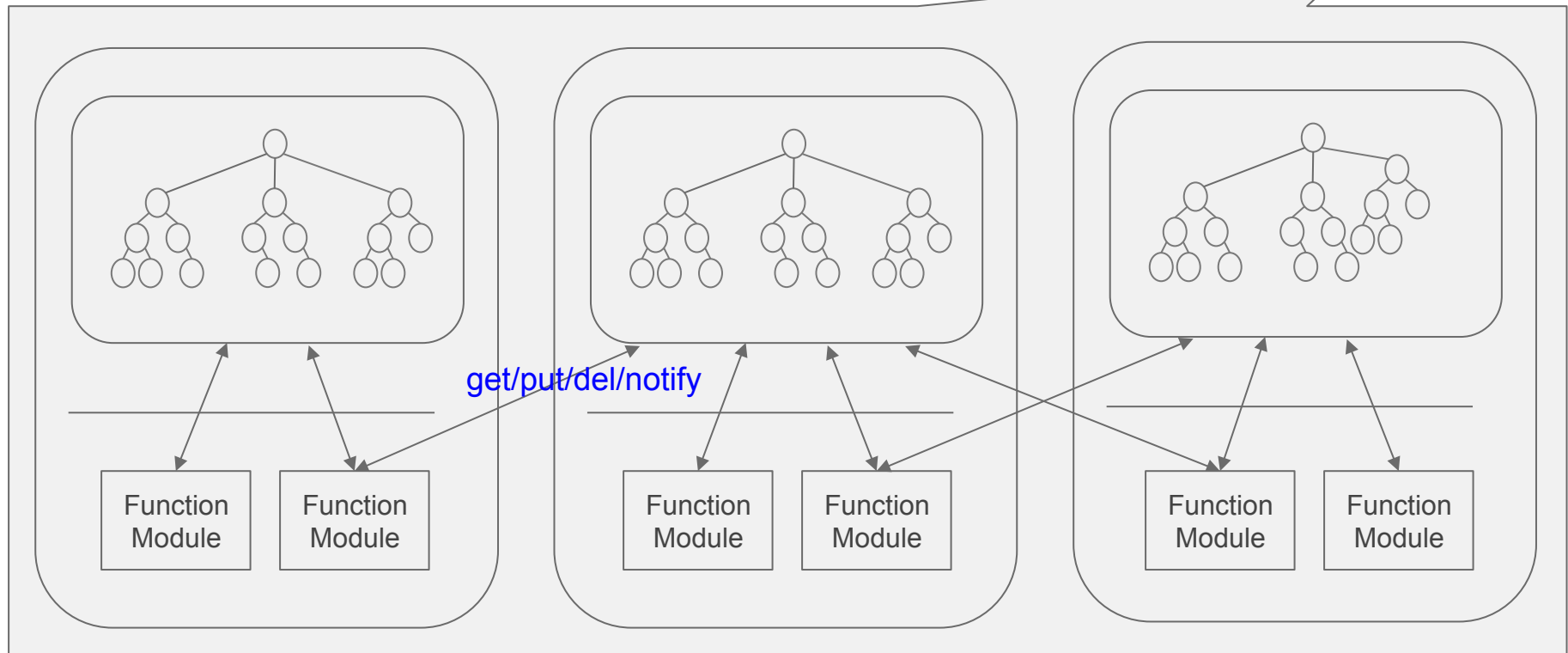
Easy Development,
Debugging and
Testing by

- Separating Data and Logic
- Common API for internal and external data access

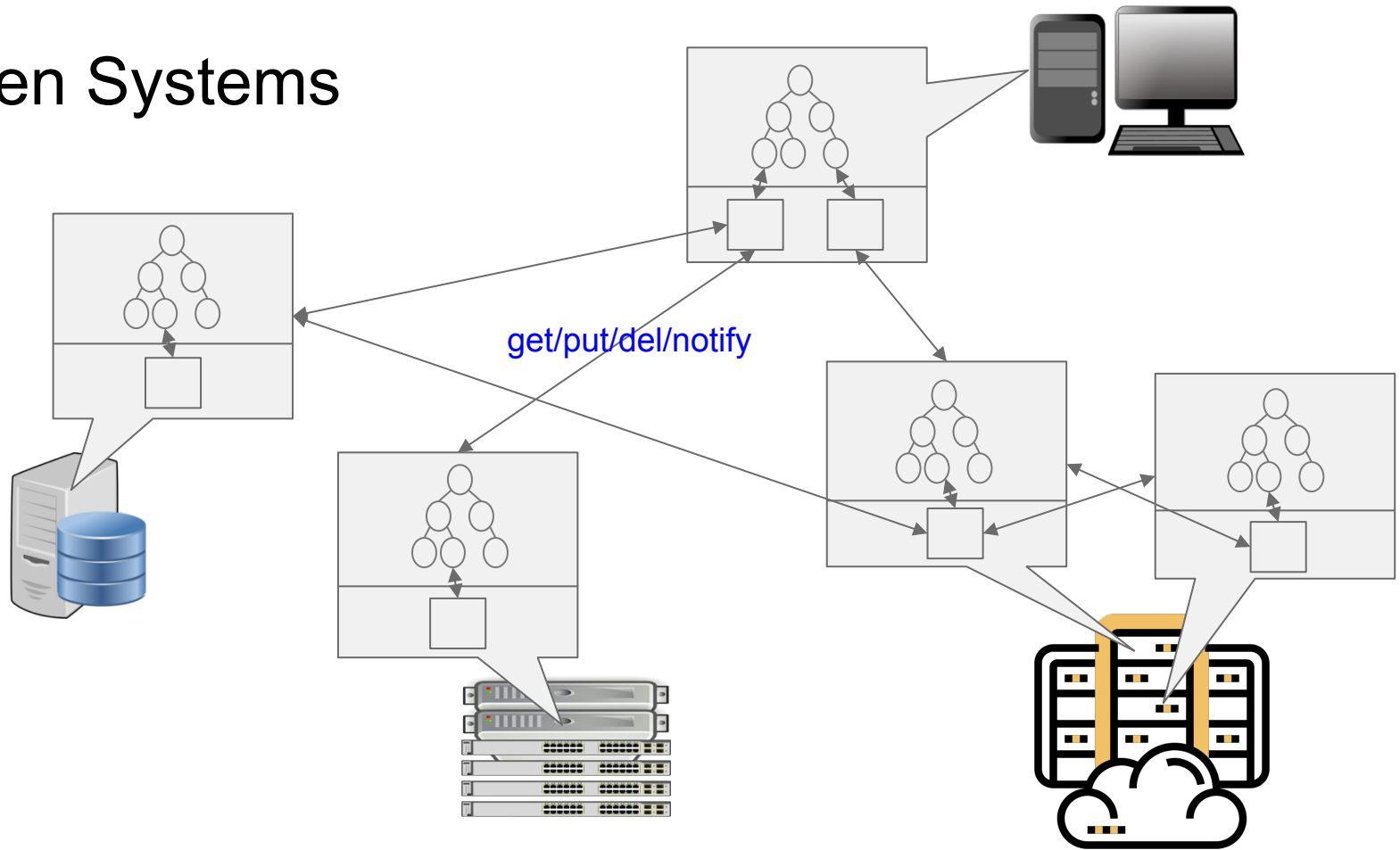
Between Processes



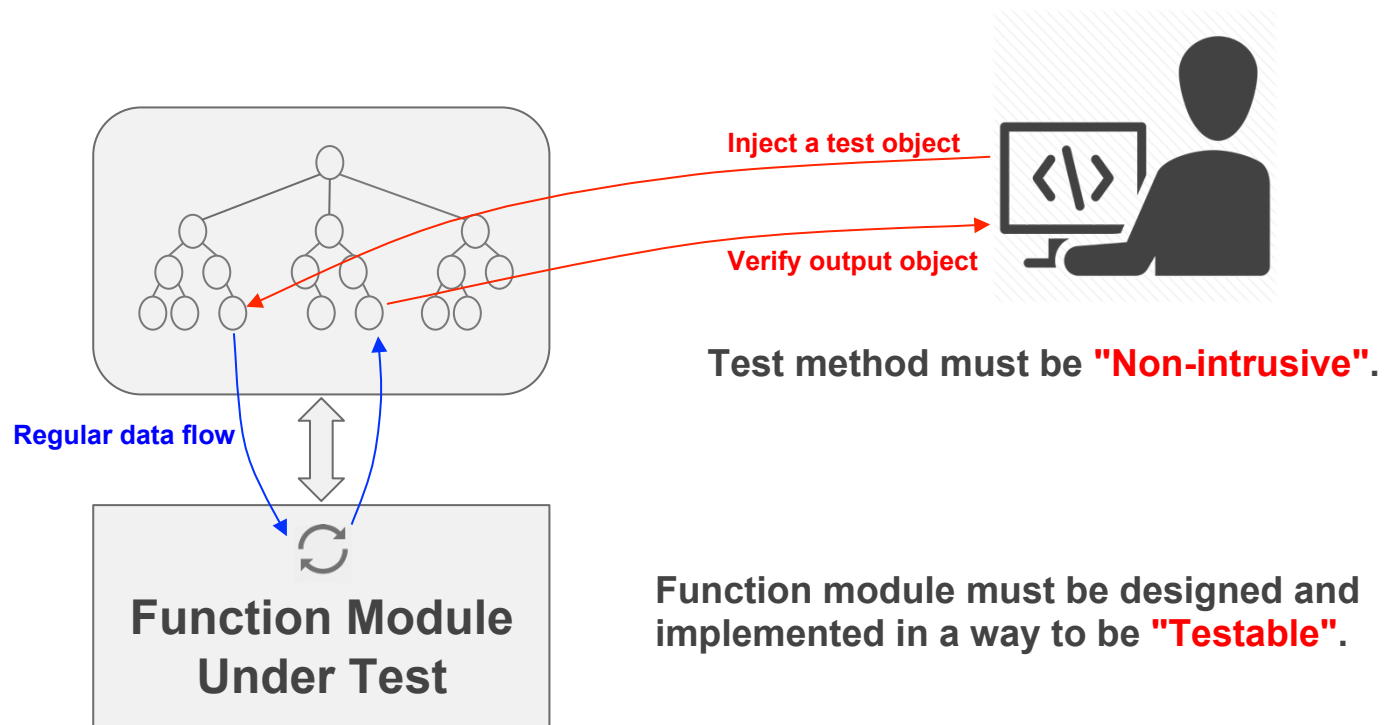
In a system



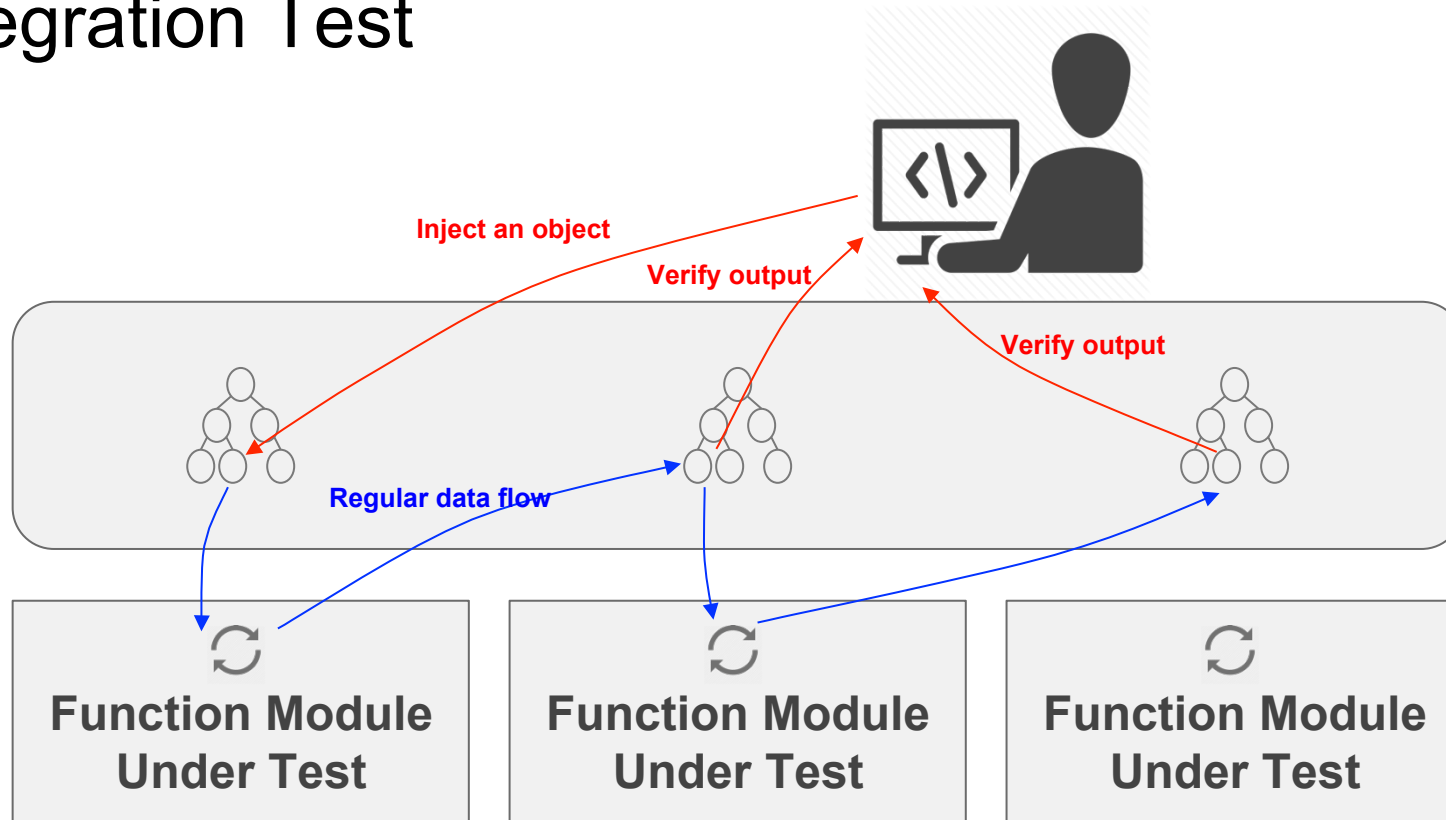
Between Systems



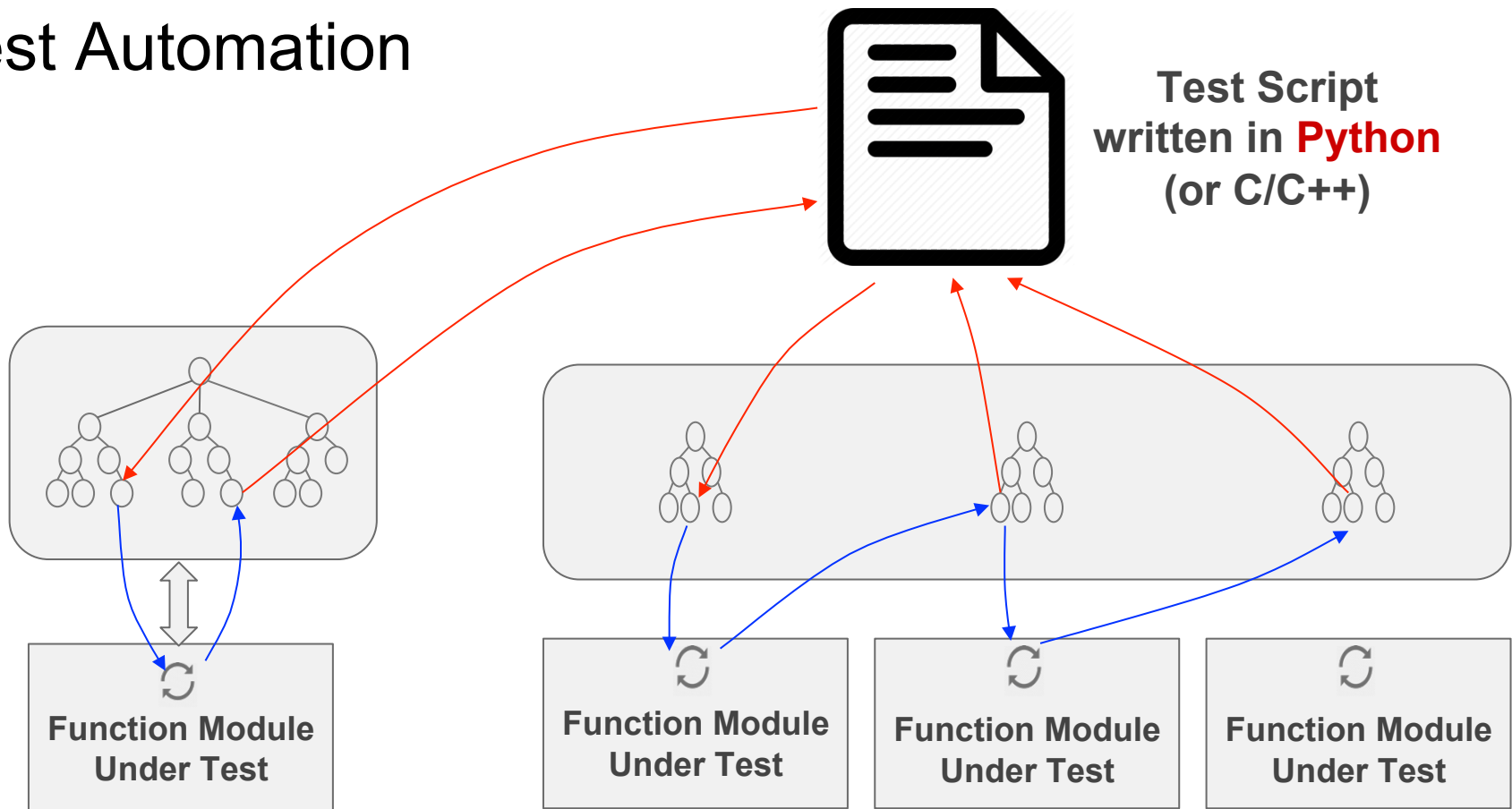
Unit Test



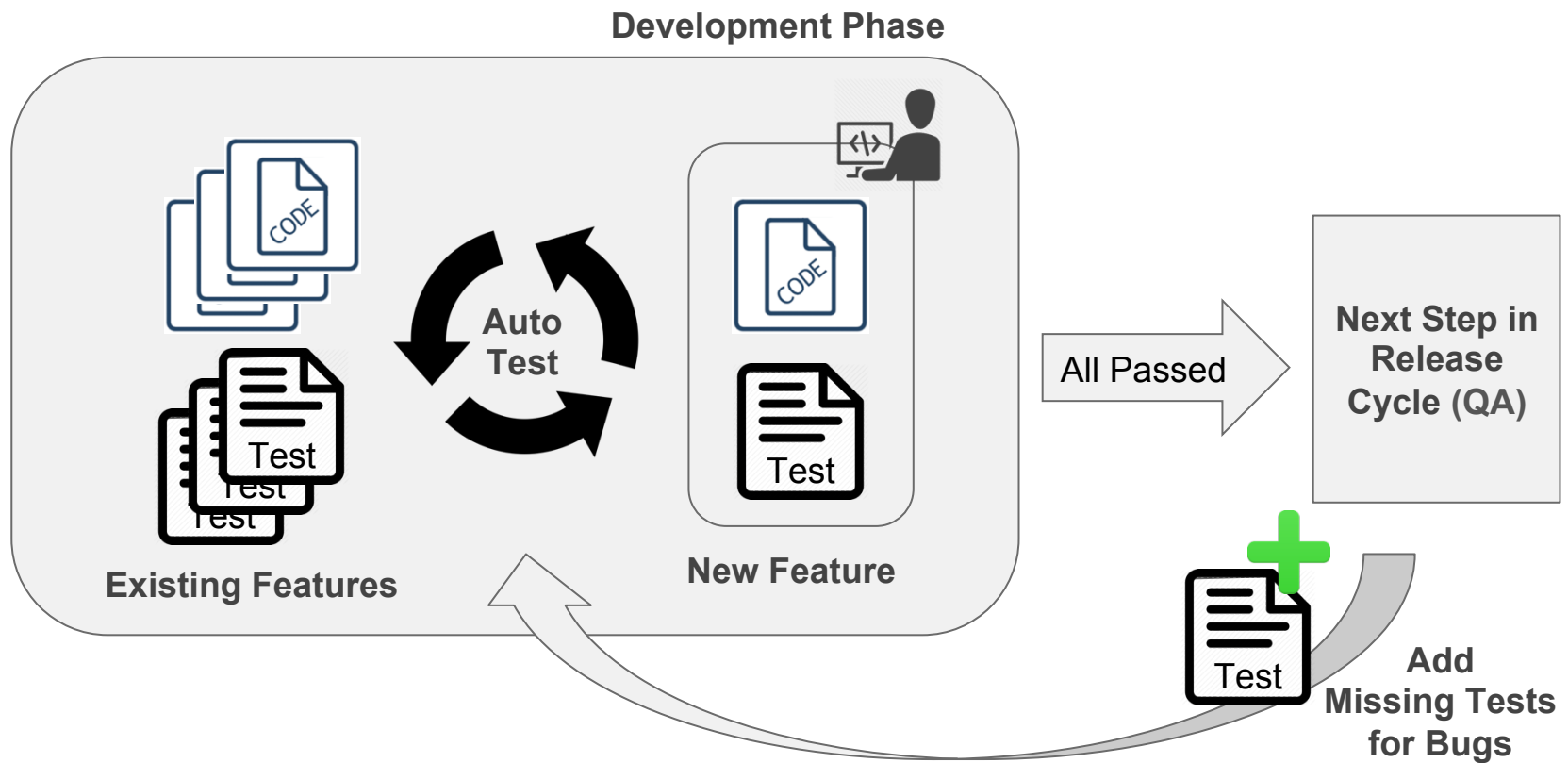
Integration Test



Test Automation



Regression Test



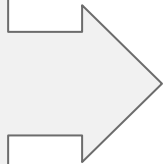
Goal

- **Improve Software Development Process**

- Data-driven modular architecture
- Unified IPC mechanism
- Better inside visibility
- Corner case simulation via versatile data manipulation

- **Consolidate Test Infrastructure**

- Testable software design in non-intrusive way
- C/C++ and Python integration
- Test automation
- Regression test



**Software
Quality**