



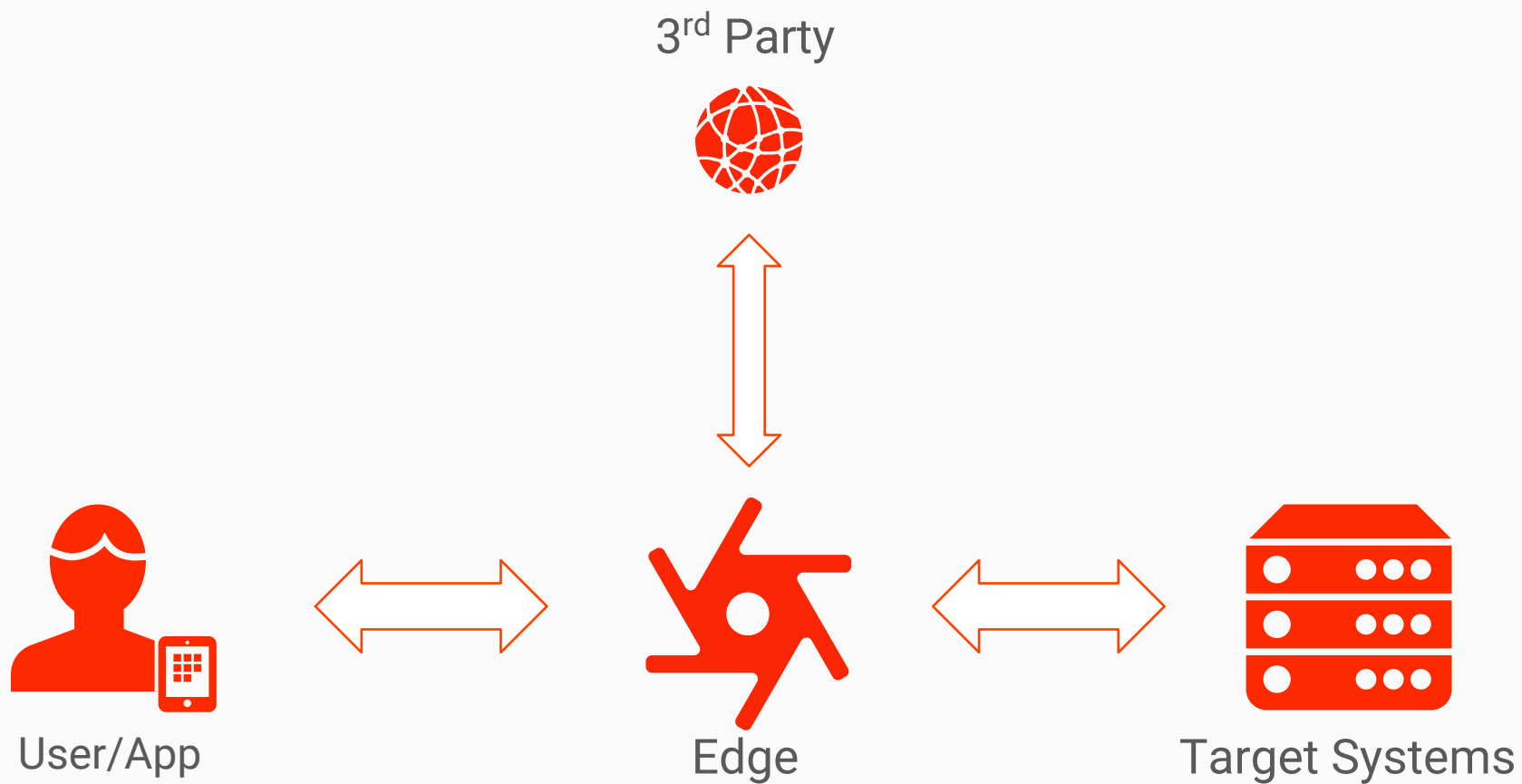
Edge

Integration Testing

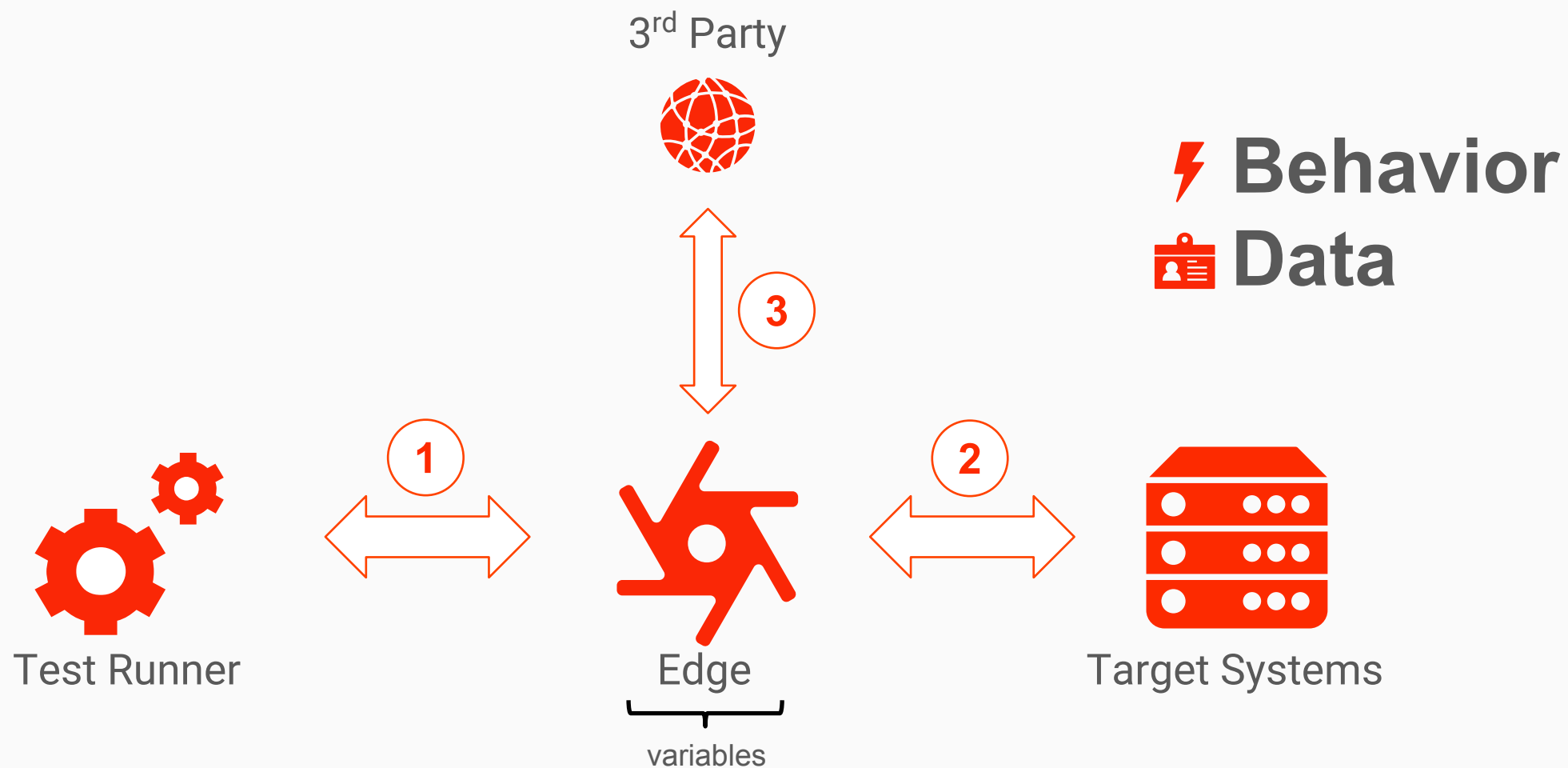
Integration Testing



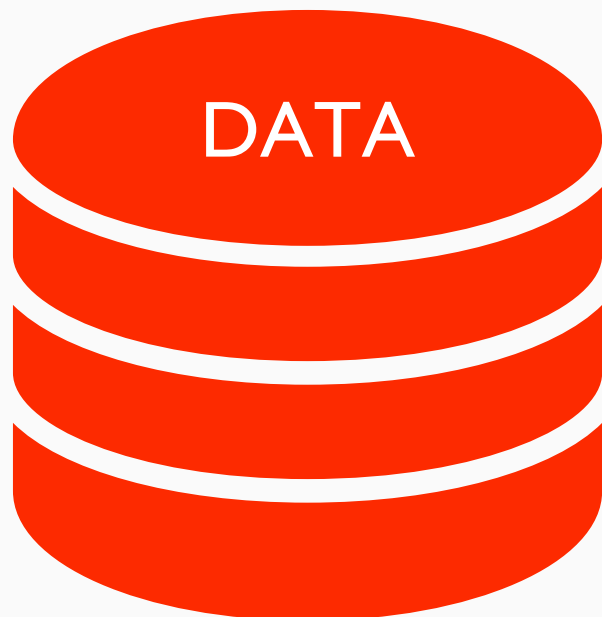
What to Test



What to Test



Consistent Data



- Can we mock responses at specific points?
- Can we do string matching or regex in tests?
- Can we recreate data in target systems?



Consistent Data

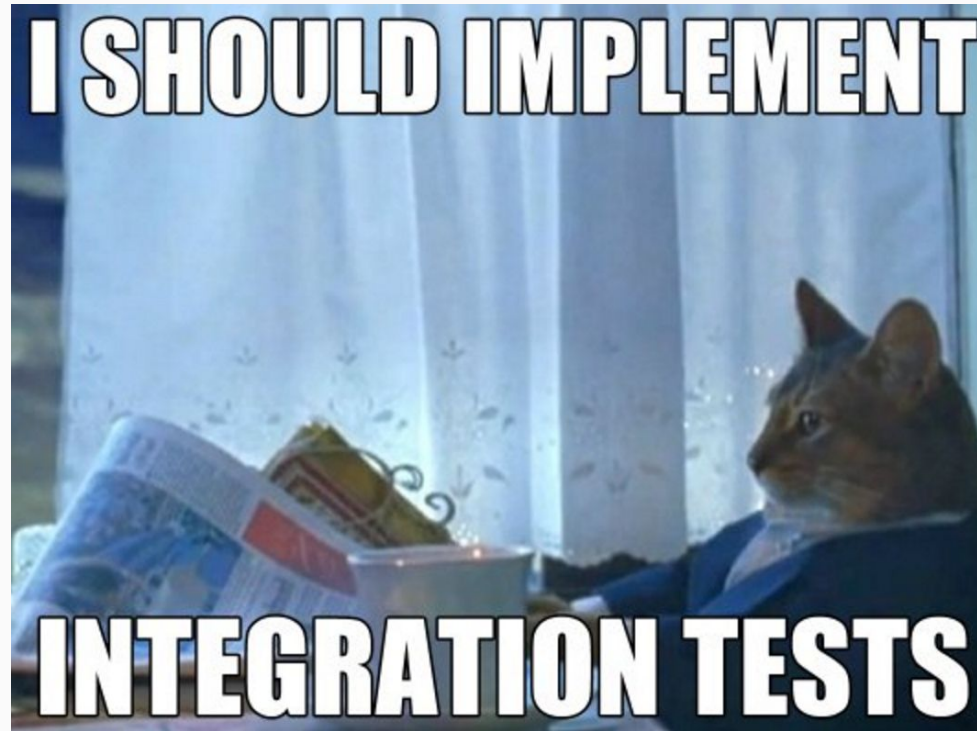


- Asserting functional is *easier* than consistent data!
 - normal API operations
 - OAuth handshake (esp. authorization code grant type)
- What about unexpected error conditions?
 - timeouts
 - 500 server unavailable
- What about non-functional tests?
 - caching
 - traffic management (quota, spike)
 - security (JSON/XML threat protection)

API Testing from UI

- This is highly not recommended.
- This tests the application – not the APIs.
- Cannot sufficiently verify all functional paths for the entire API resource space.
- Test needs to change when UI changes which is much more frequent than API changes.
- The API team needs to be responsible for API testing.
- There can be a lot of API clients.

Integration Testing Disadvantages



- Deployment to Edge is required. Another option is OPDK if you have access to it, but need to keep configurations in sync.
- It will be SLOW – especially compared to unit testing. Consider deployment time, network time, data size variations, and other variables.

Tooling

cucumber

JUnit



APACHE
JMeterTM

APICKLI

