

# TestRail integrated with Newman

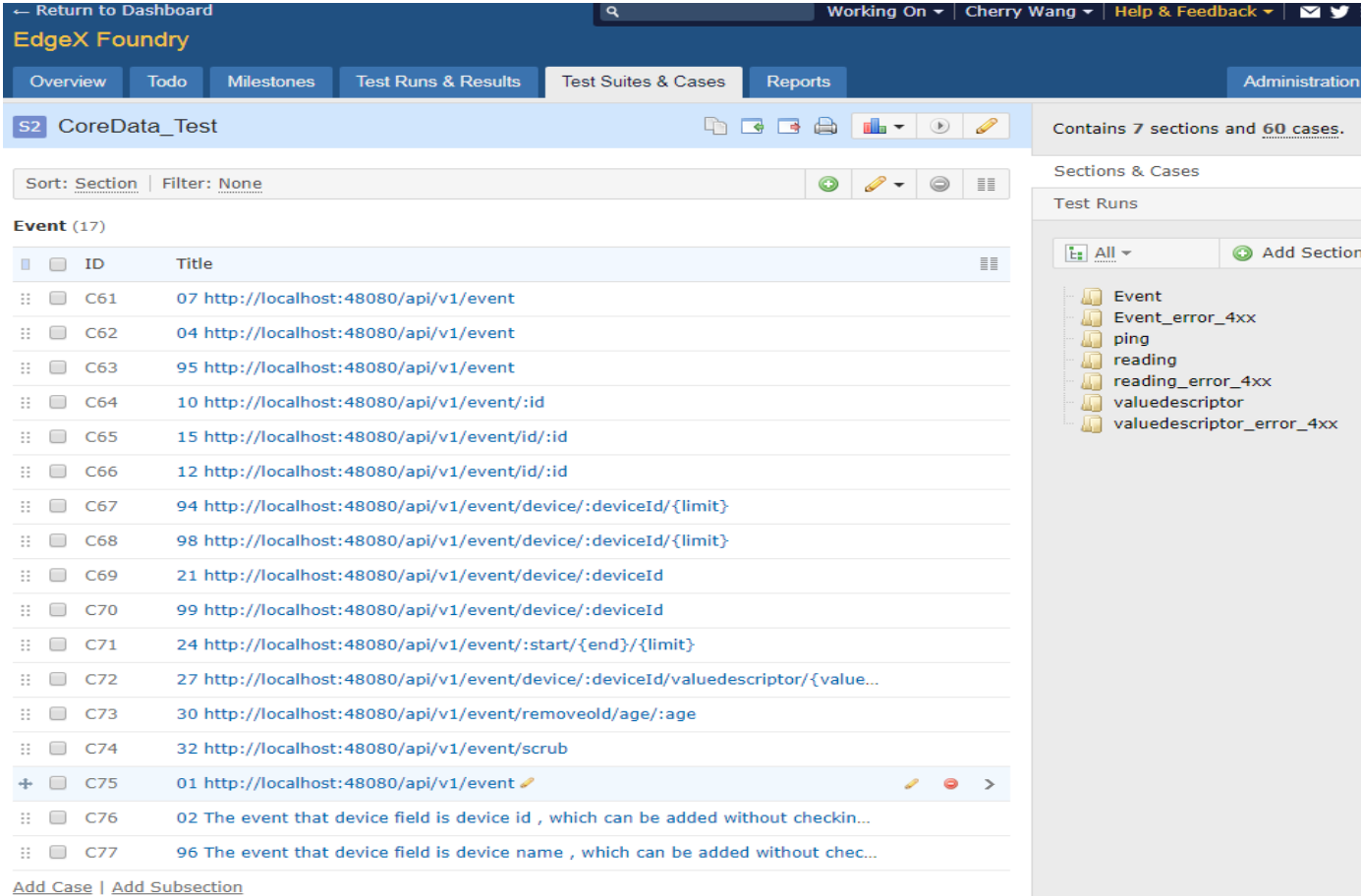
No Jenkins

# Agenda

- Create testcases on TestRail
- Configure TestRail related setting on Postman container
- Modify Blackbox Test testcases are matched with TestRail
- TestRail Advantages and disadvantages
- [TestRail Server](#)

# Create testcases on TestRail

- Import BlackboxTest testcases to TestRail



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EdgeX Foundry

Working On | Cherry Wang | Help & Feedback

Overview | Todo | Milestones | Test Runs & Results | **Test Suites & Cases** | Reports | Administration

S2 CoreData\_Test

Contains 7 sections and 60 cases.

Sort: Section | Filter: None

Event (17)

ID	Title
C61	07 http://localhost:48080/api/v1/event
C62	04 http://localhost:48080/api/v1/event
C63	95 http://localhost:48080/api/v1/event
C64	10 http://localhost:48080/api/v1/event/:id
C65	15 http://localhost:48080/api/v1/event/id/:id
C66	12 http://localhost:48080/api/v1/event/id/:id
C67	94 http://localhost:48080/api/v1/event/device/:deviceId/{limit}
C68	98 http://localhost:48080/api/v1/event/device/:deviceId/{limit}
C69	21 http://localhost:48080/api/v1/event/device/:deviceId
C70	99 http://localhost:48080/api/v1/event/device/:deviceId
C71	24 http://localhost:48080/api/v1/event/:start/{end}/{limit}
C72	27 http://localhost:48080/api/v1/event/device/:deviceId/valuedescriptor/{value...
C73	30 http://localhost:48080/api/v1/event/removeold/age/:age
C74	32 http://localhost:48080/api/v1/event/scrub
C75	01 http://localhost:48080/api/v1/event
C76	02 The event that device field is device id , which can be added without checkin...
C77	96 The event that device field is device name , which can be added without chec...

Sections & Cases

Test Runs

All | Add Section

- Event
- Event\_error\_4xx
- ping
- reading
- reading\_error\_4xx
- valuedescriptor
- valuedescriptor\_error\_4xx

Add Case | Add Subsection

# Postman container configuration

- Modify [docker-compose file](#)
  - Add environment variable for TestRail
- Modify docker-compose command in [collection file](#)
  - Add command to install newman-reporter-testrail

# Modify Blackbox Test Script

- Add Prefix on all test assertions

```
"item": [
  {
    "name": "07 http://localhost:48080/api/v1/event",
    "event": [
      {
        "listen": "test",
        "script": {
          "type": "text/javascript",
          "exec": [
            "/*",
            " * Test Case: /event - GET",
            " * Version: Alpha",
            " * @Author: Tata Elxsi",
            " *",
            " */",
            "",
            "//Test Case for status : 200",
            "tests["C61 Status code is 200"] = responseCode.code === 200;",
            "//Test response time",
            "tests[\"C61 Response time is less than \"+data.responseTime+\"ms\"] = responseTime < data.responseTime;",
            "",
            "if(responseCode.code === 200) {",
            "  //Test content type should present in header",
            "  var contentTypeHeaderExists = responseHeaders.hasOwnProperty(\"Content-Type\");",
            "  tests[\"Has Content-Type\"] = contentTypeHeaderExists;",
            "  ",
            "  if (contentTypeHeaderExists) {",
            "    tests[\"Content-Type is \"+data.ApplicationJsonContentType] = responseHeaders[\"Content-Type\"].has(data.App",
            "  }",
            "  ",
            "  //Test body parameters",
            "  var actualEventData;",
            "  try{",
            "    //Parse json response",
            "    actualEventData = JSON.parse(responseBody);",
            "  }catch(e) {",
```

# TestRail Advantages and disadvantages

- Advantages
  - Easy to monitor milestone and progress
  - JIRA Integration (easy to link issues)
  - Test case management
- Disadvantages
  - Not support Jenkins natively (Need passby [Pangolin](#))

# docker-compose file

```
postman:  
  image: postman/newman:4.2.2-alpine  
  networks:  
  - edgex-network  
  volumes:  
  - newman:/etc/newman  
  entrypoint: /bin/sh -c  
  environment:  
  - TESTRAIL_DOMAIN=edgexblockbox.testrail.io  
  - TESTRAIL_USERNAME=cherry@iotechsys.com  
  - TESTRAIL_APIKEY=PUY2Uxkdcr2yNDxXsu4-4HILXjza1AsJuySrRqa  
  - TESTRAIL_PROJECTID=1  
  - TESTRAIL_SUITEID=2
```

# Collection file

```
COLLECTION_PATH="collections/core-data.postman_collection.json"
ENV_PATH="environment/CoredataEnv.postman_environment.json"

if [ -f $NAMESFILE ]; then
    . $NAMESFILE
else
    echo "Error: Names file does not exist."
    exit $?
fi

echo "Info: Initiating Coredata Test."

echo "[info] ----- use docker-compose run newman -----"

docker-compose run --rm postman "npm i -g newman-reporter-testrail && newman run ${COLLECTION_PATH} --folder"

#docker-compose run postman run ${COLLECTION_PATH} \
#   --folder="event_error_4xx" --iteration-data="data/eventData.json" --environment=${ENV_PATH} \
#   --reporters="junit,cli"

#docker-compose run postman run ${COLLECTION_PATH} \
#   --folder="reading" --iteration-data="data/readingData.json" --environment=${ENV_PATH} \
#   --reporters="junit,cli"

#docker-compose run postman run ${COLLECTION_PATH} \
#   --folder="reading_error_4xx" --iteration-data="data/readingData.json" --environment=${ENV_PATH} \
#   --reporters="junit,cli"
```