Jagger as a Service

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Chapter 1. Overview

JaaS in a main artifact in Jagger 2. It is an always listening component.

It provides different information through its REST API.

JaaS artifact packed as an all in jar (with all dependencies inside) with embedded Tomcat.

JaaS based on Spring Boot, so its properties can be configured using one of Spring Boot waysby default JaaS is listening on port 8080. To change it just override property "server.port".

1.1. Version information

Version : 2.0-SNAPSHOT

1.2. License information

License : Apache License, Version 2.0
License URL : https://github.com/griddynamics/jagger/blob/master/license.txt

1.3. URI scheme

Host : localhost
BasePath : /jaas

1.4. Tags

- test-execution-rest-controller : Jagger Test Execution API. It provides endpoints for reading, creating, updating and deleting Test Executions. This API can be used manually or via separate Jenkins plugin, to run particular performance test projects on the selected test environment

- test-environment-rest-controller : Jagger Test Environments API. It provides endpoints for reading, creating and updating Test Environments. Deleting is performed automatically by cleaning job. Expiration time of environments is set by property 'environments.ttl.minutes'. This API is user by Jagger load generation components for communication with JaaS. It allows JaaS to monitor running test environments and send commands to these environments. Test Environments API is not intended for manual usage

- reporting-rest-controller : Reporting Rest Controller

- data-service-rest-controller : Data Service Rest Controller

Chapter 2. Resources

2.1. Data-service-rest-controller

Data Service Rest Controller

2.1.1. getSessions

```
GET /db/sessions
```

Parameters

Type	Name	Description	Schema
Query	**id** *optional*	id	< string > array(multi)

Responses

HTTP Code	Description	Schema
200	OK	< SessionEntity > array
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/db/sessions"
```

Request query

```
{
  "id" : "string"
}
```

Example HTTP response

Response 200

```
"array"
```

Response 500

```
"<<_error>>"
```

2.1.2. getSession

```
GET /db/sessions/{sessionId}
```

Parameters

Type	Name	Description	Schema
Path	**sessionId** *required*	sessionId	string

Responses

HTTP Code	Description	Schema
200	OK	SessionEntity
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/db/sessions/string"
```

Example HTTP response

Response 200

```
{
  "comment" : "string",
  "endDate" : "string",
  "id" : "string",
  "kernels" : 0,
  "startDate" : "string"
}
```

Response 500

```
"<<_error>>"
```

2.1.3. getSessionDecision

```
GET /db/sessions/{sessionId}/decision
```

Parameters

Type	Name	Description	Schema
Path	**sessionId** *required*	sessionId	string

Responses

HTTP Code	Description	Schema
200	OK	DecisionPerSessionDto
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/db/sessions/string/decision"
```

Example HTTP response

Response 200

- application/json

```json
{
  "decision" : "string",
  "id" : 0,
  "sessionId" : "string",
  "testGroupDecisions" : [ {
    "decision" : "string",
    "id" : 0,
    "metricDecisions" : [ {
      "decision" : "string",
      "id" : 0,
      "metricDescription" : {
        "display" : "string",
        "displayName" : "string",
        "id" : 0,
        "metricId" : "string"
      }
    } ],
    "taskData" : {
      "id" : 0,
      "number" : 0,
      "sessionId" : "string",
      "status" : "string",
      "taskId" : "string",
      "taskName" : "string"
    },
    "testDecisions" : [ {
      "decision" : "string",
      "id" : 0,
      "metricDecisions" : [ {
        "decision" : "string",
        "id" : 0,
        "metricDescription" : {
          "display" : "string",
          "displayName" : "string",
          "id" : 0,
          "metricId" : "string"
        }
      } ],
      "taskData" : {
        "id" : 0,
        "number" : 0,
        "sessionId" : "string",
        "status" : "string",
        "taskId" : "string",
        "taskName" : "string"
      }
    } ]
  } ]
}
```

Response 500

```
"<<_error>>"
```

2.1.4. getTests

```
GET /db/sessions/{sessionId}/tests
```

Parameters

Type	Name	Description	Schema
Path	**sessionId** *required*	sessionId	string

Responses

HTTP Code	Description	Schema
200	OK	< TestEntity > array
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/db/sessions/string/tests"
```

Example HTTP response

Response 200

```
"array"
```

Response 500

```
"<<_error>>"
```

2.1.5. getTest

```
GET /db/sessions/{sessionId}/tests/{testName}
```

Parameters

Type	Name	Description	Schema
Path	**sessionId** *required*	sessionId	string
Path	**testName** *required*	testName	string

Responses

HTTP Code	Description	Schema
200	OK	TestEntity
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/db/sessions/string/tests/string"
```

Example HTTP response

Response 200

```
{
  "clockValue" : 0,
  "decision" : "string",
  "description" : "string",
  "id" : 0,
  "load" : "string",
  "name" : "string",
  "startDate" : "string",
  "taskDataDto" : {
    "description" : "string",
    "id" : 0,
    "idToSessionId" : {
      "string" : "string"
    },
    "ids" : [ 0 ],
    "sessionId" : "string",
    "sessionIds" : [ "string" ],
    "taskName" : "string"
  },
  "terminationStrategy" : "string",
  "testExecutionStatus" : "string",
  "testGroupIndex" : 0
}
```

Response 500

```
"<<_error>>"
```

2.1.6. getMetrics

```
GET /db/sessions/{sessionId}/tests/{testName}/metrics
```

Parameters

Type	Name	Description	Schema
Path	**sessionId** *required*	sessionId	string
Path	**testName** *required*	testName	string

Responses

HTTP Code	Description	Schema
200	OK	< MetricEntity > array
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/db/sessions/string/tests/string/metrics"
```

Example HTTP response

Response 200

```
"array"
```

Response 500

```
"<<_error>>"
```

2.1.7. getMetricPlotData

```
GET /db/sessions/{sessionId}/tests/{testName}/metrics/plot-data
```

Parameters

Type	Name	Description	Schema
Path	**sessionId** *required*	sessionId	string

Type	Name	Description	Schema
Path	**testName** *required*	testName	string

Responses

HTTP Code	Description	Schema
200	OK	< string, < [MetricPlotPointEntity](#) > array > map
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	[Error](#)

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
"/db/sessions/string/tests/string/metrics/plot-data"
```

Example HTTP response

Response 200

```
"object"
```

Response 500

```
"<<_error>>"
```

2.1.8. getMetricsSummary

```
GET /db/sessions/{sessionId}/tests/{testName}/metrics/summary
```

Parameters

Type	Name	Description	Schema
Path	**sessionId** *required*	sessionId	string
Path	**testName** *required*	testName	string

Responses

HTTP Code	Description	Schema
200	OK	< string, MetricSummaryVa lueEntity > map
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
"/db/sessions/string/tests/string/metrics/summary"
```

Example HTTP response

Response 200

```
"object"
```

Response 500

```
"<<_error>>"
```

2.1.9. getMetrics

```
GET /db/tests/{testId}/metrics
```

Parameters

Type	Name	Description	Schema
Path	**testId** *required*	testId	integer(int64)

Responses

HTTP Code	Description	Schema
200	OK	< MetricEntity > array
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/db/tests/0/metrics"
```

Example HTTP response

Response 200

```
"array"
```

Response 500

```
"<<_error>>"
```

2.2. Reporting-rest-controller

Reporting Rest Controller

2.2.1. getReport

```
GET /report
```

Parameters

Type	Name	Description	Schema
Query	**baseLineSessionId** *optional*	baseLineSessionId	string
Query	**sessionId** *required*	sessionId	string

Responses

HTTP Code	Description	Schema
200	OK	WebAsyncTask«ResponseEntity«Resource»»
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- /

Example HTTP request

Request path

```
"/report"
```

Request query

```
{
  "baseLineSessionId" : "string",
  "sessionId" : "string"
}
```

Example HTTP response

Response 200

```
{
  "callable" : { },
  "executor" : { },
  "timeout" : 0
}
```

Response 500

```
"<<_error>>"
```

2.3. Test-environment-rest-controller

Jagger Test Environments API. It provides endpoints for reading, creating and updating Test Environments. Deleting is performed automatically by cleaning job. Expiration time of environments is set by property 'environments.ttl.minutes'. This API is user by Jagger load generation components for communication with JaaS. It allows JaaS to monitor running test environments and send commands to these environments. Test Environments API is not intended for manual usage

2.3.1. Creates Test Environment.

```
POST /envs
```

Description

If operation successful, 'Environment-Session' cookie is returned with response, which is required for PUT request. This cookie is valid only for Test Environment with envId which was specified in request body.

Parameters

Type	Name	Description	Schema
Body	**testEnv** *required*	testEnv	TestEnvironmentEntity

Responses

HTTP Code	Description	Schema
200	OK	object
201	Creation is successful.	object
400	envId doesn't match ^[a-zA-Z0-9._-]{1,249}$ OR status is inconsistent with runningLoadScenario.	No Content
409	Test Environment with provided envId already exists.	No Content

Consumes

- application/json

Produces

- /

Example HTTP request

Request path

```
"/envs"
```

Request body

```
{
  "environmentId" : "string",
  "loadScenarios" : [ {
    "loadScenarioId" : "string"
  } ],
  "runningLoadScenario" : {
    "loadScenarioId" : "string"
  },
  "status" : "string"
}
```

Example HTTP response

Response 200

```
"object"
```

Response 201

```
"object"
```

2.3.2. Retrieves all Test Environments.

```
GET /envs
```

Responses

HTTP Code	Description	Schema
200	OK	< TestEnvironmentEntity > array
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/envs"
```

Example HTTP response

Response 200

```
"array"
```

Response 500

```
"<<_error>>"
```

2.3.3. Retrieves Test Environment by envId.

```
GET /envs/{envId}
```

Parameters

Type	Name	Description	Schema
Path	**envId** *required*	envId	string

Responses

HTTP Code	Description	Schema
200	Test Environment is found. **Headers** : `Environment-Expires` (string) : This header stores expiration time of Test Environment.	TestEnvironmentEntity
404	Test Environment with provided envId is not found.	No Content
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
"/envs/string"
```

Example HTTP response

Response 200

```
{
  "environmentId" : "string",
  "loadScenarios" : [ {
    "loadScenarioId" : "string"
  } ],
  "runningLoadScenario" : {
    "loadScenarioId" : "string"
  },
  "status" : "string"
}
```

Response 500

```
"<<_error>>"
```

2.3.4. Updates Test Environment by envId.

```
PUT /envs/{envId}
```

Description

This operation can be performed only if 'Environment-Session' cookie is present and valid. To obtain this cookie POST to /envs must be performed firstly. This cookie is valid only for Test Environment with envId which was specified in POST request body.

Parameters

Type	Name	Description	Schema
Path	**envId** *required*	envId	string
Body	**sessionId** *optional*	sessionId	string
Body	**testEnv** *required*	testEnv	TestEnvironmentEntity

Responses

HTTP Code	Description	Schema
200	OK	object
202	Update is successful.	object
400	Environment-Session cookie is not present.	No Content

HTTP Code	Description	Schema
404	Test Environment with provided envId or sessionId is not found.	No Content

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
"/envs/string"
```

Request body

```
{
  "environmentId" : "string",
  "loadScenarios" : [ {
    "loadScenarioId" : "string"
  } ],
  "runningLoadScenario" : {
    "loadScenarioId" : "string"
  },
  "status" : "string"
}
```

Example HTTP response

Response 200

```
"object"
```

Response 202

```
"object"
```

2.4. Test-execution-rest-controller

Jagger Test Execution API. It provides endpoints for reading, creating, updating and deleting Test Executions. This API can be used manually or via separate Jenkins plugin, to run particular

performance test projects on the selected test environment

2.4.1. createTestExecution

```
POST /executions
```

Parameters

Type	Name	Description	Schema
Body	**testExecution** *required*	testExecution	TestExecutionEntity

Responses

HTTP Code	Description	Schema
200	OK	TestExecutionEntity

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/executions"
```

Request body

```
{
  "auditEntities" : [ {
    "id" : 0,
    "newStatus" : "string",
    "oldStatus" : "string",
    "timestamp" : 0
  } ],
  "envId" : "string",
  "errorMessage" : "string",
  "executionTimeToStartInSeconds" : 0,
  "id" : 0,
  "loadScenarioId" : "string",
  "sessionId" : "string",
  "status" : "string",
  "testProjectURL" : "string"
}
```

Example HTTP response

Response 200

```
{
  "auditEntities" : [ {
    "id" : 0,
    "newStatus" : "string",
    "oldStatus" : "string",
    "timestamp" : 0
  } ],
  "envId" : "string",
  "errorMessage" : "string",
  "executionTimeToStartInSeconds" : 0,
  "id" : 0,
  "loadScenarioId" : "string",
  "sessionId" : "string",
  "status" : "string",
  "testProjectURL" : "string"
}
```

2.4.2. getTestExecutions

```
GET /executions
```

Parameters

Type	Name	Description	Schema
Query	**envId** *optional*	envId	string

Responses

HTTP Code	Description	Schema
200	OK	< TestExecutionEntity > array
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
"/executions"
```

Request query

```
{
  "envId" : "string"
}
```

Example HTTP response

Response 200

```
"array"
```

Response 500

```
"<<_error>>"
```

2.4.3. getTestExecution

```
GET /executions/{testExecutionId}
```

Parameters

Type	Name	Description	Schema
Path	**testExecution Id** *required*	testExecutionId	integer(int64)

Responses

HTTP Code	Description	Schema
200	OK	TestExecutionEntity
500	500 - Internal server error. There is a problem with the resource you are looking for, and it can not be displayed.	Error

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
"/executions/0"
```

Example HTTP response

Response 200

```
{
  "auditEntities" : [ {
    "id" : 0,
    "newStatus" : "string",
    "oldStatus" : "string",
    "timestamp" : 0
  } ],
  "envId" : "string",
  "errorMessage" : "string",
  "executionTimeToStartInSeconds" : 0,
  "id" : 0,
  "loadScenarioId" : "string",
  "sessionId" : "string",
  "status" : "string",
  "testProjectURL" : "string"
}
```

Response 500

```
"<<_error>>"
```

2.4.4. updateTestExecution

```
PUT /executions/{testExecutionId}
```

Parameters

Type	Name	Description	Schema
Path	**testExecution Id** *required*	testExecutionId	integer(int64)
Body	**executionEnti ty** *required*	executionEntity	TestExecutionEntity

Responses

HTTP Code	Description	Schema
200	OK	object

Consumes

- application/json

Produces

- /

Example HTTP request

Request path

```
"/executions/0"
```

Request body

```
{
  "auditEntities" : [ {
    "id" : 0,
    "newStatus" : "string",
    "oldStatus" : "string",
    "timestamp" : 0
  } ],
  "envId" : "string",
  "errorMessage" : "string",
  "executionTimeToStartInSeconds" : 0,
  "id" : 0,
  "loadScenarioId" : "string",
  "sessionId" : "string",
  "status" : "string",
  "testProjectURL" : "string"
}
```

Example HTTP response

Response 200

```
"object"
```

2.4.5. deleteTestExecution

```
DELETE /executions/{testExecutionId}
```

Parameters

Type	Name	Description	Schema
Path	**testExecution Id** *required*	testExecutionId	integer(int64)

Responses

HTTP Code	Description	Schema
200	OK	object

Consumes

- `application/json`

Produces

- `/`

Example HTTP request

Request path

```
"/executions/0"
```

Example HTTP response

Response 200

```
"object"
```