

KYPO2 Trainings - API Reference

Table of Contents

1. Overview	1
1.1. Version information	1
1.2. Contact information	1
1.3. URI scheme	1
1.4. Tags	1
2. Resources	1
2.1. Training Definitions.....	1
2.2. Training Instances	22
2.3. Training Runs	32
3. Definitions	46
3.1. AbstractLevelDTO	46
3.2. AccessTrainingRunDTO	47
3.3. AccessedTrainingRunDTO	47
3.4. AccessedTrainingRunRestResource.....	48
3.5. AssessmentLevelDTO	48
3.6. AssessmentLevelUpdatedDTO.....	49
3.7. AuthorRefDTO.....	49
3.8. BasicLevelInfoDTO	49
3.9. GameLevelDTO	50
3.10. GameLevelUpdatedDTO	51
3.11. HintDTO	52
3.12. InfoLevelDTO	52
3.13. InfoLevelUpdatedDTO.....	53
3.14. IsCorrectFlagDTO	53
3.15. Pageable	53
3.16. Pagination	54
3.17. ParticipantRefDTO	54
3.18. PostHookDTO	54
3.19. PreHookDTO	55
3.20. SandboxDefinitionRefDTO.....	55
3.21. SandboxInstanceRefDTO	55
3.22. Sort	55
3.23. TrainingDefinitionCreateDTO.....	55
3.24. TrainingDefinitionDTO.....	56
3.25. TrainingDefinitionRestResource	57
3.26. TrainingDefinitionUpdatedDTO	57
3.27. TrainingInstanceCreateDTO	58
3.28. TrainingInstanceDTO	59

3.29. TrainingInstanceRestResource	59
3.30. TrainingInstanceUpdatedDTO	60
3.31. TrainingRunDTO	60
3.32. TrainingRunRestResource	61
3.33. UserRefDTO	61

1. Overview

Kypo Training API Reference Description.

1.1. Version information

Version : Version: 1.0.0

1.2. Contact information

Contact : Pavel Seda

Contact Email : pavelseda@email.cz

1.3. URI scheme

Host : localhost:8080

BasePath : /kypo2-rest-training

Schemes : HTTP, HTTPS

1.4. Tags

- Training definitions
- Training instances
- Training runs

2. Resources

2.1. Training Definitions

2.1.1. Create Training Definition

POST /kypo2-rest-training/training-definitions

Parameters

Type	Name	Description	Schema
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string
Body	body <i>optional</i>	Training Definition to be created	TrainingDefinitionCreateDTO

Responses

HTTP Code	Description	Schema
200	The requested resource has been created.	TrainingDefinition CreateDTO
400	Given training definition is not valid	No Content
500	Unexpected condition was encountered.	No Content

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions
```

Request query

```
{
  "fields" : "string"
}
```

Request body

```
{
  "title" : "Photo Hunter",
  "description" : "Description of Photo Hunter",
  "prerequisites" : [ "string" ],
  "outcomes" : [ "string" ],
  "state" : "UNRELEASED",
  "autIds" : [ 0 ],
  "showStepperBar" : true,
  "sandboxDefinitionRef" : 1
}
```

Example HTTP response

Response 200

```
{
  "title" : "Photo Hunter",
  "description" : "Description of Photo Hunter",
  "prerequisites" : [ "string" ],
  "outcomes" : [ "string" ],
  "state" : "UNRELEASED",
  "autIds" : [ 0 ],
  "showStepperBar" : true,
  "sandboxDefinitionRef" : 1
}
```

2.1.2. Get all Training Definitions.

GET /kypo2-rest-training/training-definitions

Parameters

Type	Name	Description	Schema
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string
Query	page <i>optional</i>	Results page you want to retrieve (0..N)	integer
Query	size <i>optional</i>	Number of records per page.	integer
Query	sort <i>optional</i>	Sorting criteria in the format: property(asc desc). Default sort order is ascending. Multiple sort criteria are supported.	< string > array(multi)
Body	body <i>optional</i>	Parameters for filtering the objects.	< string, < string > array > map

Responses

HTTP Code	Description	Schema
200	All training definitions found.	< TrainingDefinition DTO > array
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions
```

Request query

```
{
  "fields" : "string",
  "page" : 0,
  "size" : 0,
  "sort" : "asc"
}
```

Request body

```
{ }
```

Example HTTP response

Response 200

```
"array"
```

2.1.3. Update Training Definition

```
PUT /kypo2-rest-training/training-definitions
```

Description

Only unreleased training definition can be updated

Parameters

Type	Name	Description	Schema
Body	body <i>optional</i>	Training definition to be updated	TrainingDefinitionUpdateDTO

Responses

HTTP Code	Description	Schema
200	The requested resource has been updated.	TrainingDefinition DTO
400	Given training definition is not valid	No Content
404	Training definition with given id not found.	No Content
409	Cannot edit released or archived training definition.	No Content
500	Unexpected condition was encountered.	No Content

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions
```

Request body

```
{
  "id" : 1,
  "title" : "TrainingDefinition2",
  "description" : "Unreleased training definition",
  "prerequisites" : [ "string" ],
  "outcomes" : [ "string" ],
  "state" : "UNRELEASED",
  "autIds" : [ 0 ],
  "sandboxDefinitionRef" : 1,
  "showStepperBar" : false
}
```

Example HTTP response

Response 200


```

{
  "id" : 1,
  "title" : "TrainingDefinition2",
  "description" : "Unreleased training definition",
  "prerequisites" : [ "string" ],
  "outcomes" : [ "string" ],
  "state" : "UNRELEASED",
  "authorRef" : [ {
    "id" : 1,
    "authorRefLogin" : "Designer1"
  } ],
  "sandboxDefinitionRef" : {
    "id" : 1,
    "sandboxDefinitionRef" : 1
  },
  "startingLevel" : 4,
  "levels" : [ {
    "id" : 1,
    "title" : "Game Level1",
    "maxScore" : 20,
    "nextLevel" : 2,
    "preHook" : {
      "id" : 4
    },
    "postHook" : {
      "id" : 8
    },
    "levelType" : "GAME"
  } ],
  "showStepperBar" : false,
  "canBeArchived" : true
}

```

2.1.4. Find level by ID

GET /kypo2-rest-training/training-definitions/levels/{levelId}

Parameters

Type	Name	Description	Schema
Path	levelId <i>required</i>	Id of wanted level	integer(int64)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string

Responses

HTTP Code	Description	Schema
200	Game level has been found.	AbstractLevelDTO
404	Level with given id not found.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/levels/0
```

Request query

```
{
  "fields" : "string"
}
```

Example HTTP response

Response 200

```
{
  "id" : 1,
  "title" : "Game Level1",
  "maxScore" : 20,
  "nextLevel" : 2,
  "preHook" : {
    "id" : 4
  },
  "postHook" : {
    "id" : 8
  },
  "levelType" : "GAME"
}
```

2.1.5. Get all training definition by sandbox definition id

```
GET /kypo2-rest-training/training-definitions/sandbox-definitions/{sandboxDefinitionId}
```

Parameters

Type	Name	Description	Schema
Path	sandboxDefinitionId <i>required</i>	Id of sandbox definition	integer(int64)
Query	page <i>optional</i>	Results page you want to retrieve (0..N)	integer
Query	size <i>optional</i>	Number of records per page.	integer
Query	sort <i>optional</i>	Sorting criteria in the format: property(asc desc). Default sort order is ascending. Multiple sort criteria are supported.	< string > array(multi)

Responses

HTTP Code	Description	Schema
200	All training definitions by sandbox definition found.	< TrainingDefinition DTO > array
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/sandbox-definitions/0
```

Request query

```
{
  "page" : 0,
  "size" : 0,
  "sort" : "asc"
}
```

Example HTTP response

Response 200

```
"array"
```

2.1.6. Update specific assessment level in given training definition

```
PUT /kypo2-rest-training/training-definitions/{definitionId}/assessment-levels
```

Description

Level can be deleted only in unreleased training definition

Parameters

Type	Name	Description	Schema
Path	definitionId <i>required</i>	Id of definition to which level is assigned	integer(int64)
Body	body <i>optional</i>	Assessment level to be updated	AssessmentLevelUpdateDTO

Responses

HTTP Code	Description	Schema
200	Assessment level updated.	No Content
400	Given assessment level is not valid.	No Content
404	Level not found in definition.	No Content
409	Cannot edit released or archived training definition.	No Content
500	Unexpected condition was encountered.	No Content

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0/assessment-levels
```

Request body

```
{
  "id" : 3,
  "title" : "Assessment Level1",
  "maxScore" : 40,
  "questions" : "What is my fathers name?",
  "instructions" : "Fill me up fast",
  "type" : "TEST"
}
```

2.1.7. Update specific game level in given training definition

```
PUT /kypo2-rest-training/training-definitions/{definitionId}/game-levels
```

Description

Level can be updated only in unreleased training definition

Parameters

Type	Name	Description	Schema
Path	definitionId <i>required</i>	Id of definition to which level is assigned	integer(int64)
Body	body <i>optional</i>	Game level to be updated	GameLevelUpdateDTO

Responses

HTTP Code	Description	Schema
200	Game level updated.	No Content
400	Given game level is not valid.	No Content
404	Level not found in definition.	No Content
409	Cannot edit released or archived training definition.	No Content
500	Unexpected condition was encountered.	No Content

Consumes

- application/json

Produces

- application/json

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0/game-levels
```

Request body

```
{
  "id" : 1,
  "title" : "Game Level1",
  "maxScore" : 20,
  "flag" : "secretFlag",
  "content" : "Play me",
  "solution" : "This is how you do it",
  "solutionPenalized" : false,
  "estimatedDuration" : 20,
  "attachments" : [ "string" ],
  "incorrectFlagLimit" : 5,
  "hints" : [ {
    "id" : 1,
    "title" : "Hint1",
    "content" : "Very good advice",
    "hintPenalty" : 10
  } ]
}
```

2.1.8. Update specific info level in given training definition

```
PUT /kypo2-rest-training/training-definitions/{definitionId}/info-levels
```

Description

Level can be deleted only in unreleased training definition

Parameters

Type	Name	Description	Schema
Path	definitionId <i>required</i>	Id of definition to which level is assigned	integer(int64)
Body	body <i>optional</i>	Info level to be updated	InfoLevelUpdateDTO

Responses

HTTP Code	Description	Schema
200	Info level updated.	No Content
400	Given info level is not valid.	No Content
404	Level not found in definition.	No Content
409	Cannot edit released or archived training definition.	No Content
500	Unexpected condition was encountered.	No Content

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0/info-levels
```

Request body

```
{
  "id" : 2,
  "title" : "Info Level1",
  "content" : "Informational stuff"
}
```

2.1.9. Delete specific level from definition

```
DELETE /kypo2-rest-training/training-definitions/{definitionId}/levels/{levelId}
```

Description

Level can be deleted only in unreleased training definition

Parameters

Type	Name	Description	Schema
Path	definitionId <i>required</i>	Id of training definition from which level is deleted	integer(int64)
Path	levelId <i>required</i>	Id of level to be deleted	integer(int64)

Responses

HTTP Code	Description	Schema
200	The level deleted.	BasicLevelInfoDTO
404	Level with given id not found.	No Content
409	Cannot edit released or archived training definition.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0/levels/0
```

Example HTTP response

Response 200

```
{
  "id" : 1,
  "title" : "Game Level1",
  "order" : 1,
  "levelType" : "GAME"
}
```


2.1.10. Swap level to the left

```
PUT /kypo2-rest-training/training-definitions/{definitionId}/levels/{levelId}/swap-left
```

Description

The first one level cannot be swapped to the left

Parameters

Type	Name	Description	Schema
Path	definitionId <i>required</i>	Id of training definition	integer(int64)
Path	levelId <i>required</i>	Id of level to be swapped	integer(int64)

Responses

HTTP Code	Description	Schema
200	The level has been swapped to the left.	BasicLevelInfoDTO
404	Training definition with given id not found.	No Content
409	Cannot edit released or archived training definition or cannot swap first level to the left.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0/levels/0/swap-left
```

Example HTTP response

Response 200

```
{
  "id" : 1,
  "title" : "Game Level1",
  "order" : 1,
  "levelType" : "GAME"
}
```

2.1.11. Swap level to the right

```
PUT /kypo2-rest-training/training-definitions/{definitionId}/levels/{levelId}/swap-right
```

Description

The last one level cannot be swapped to the right

Parameters

Type	Name	Description	Schema
Path	definitionId <i>required</i>	Id of training definition	integer(int64)
Path	levelId <i>required</i>	Id of level to be swapped	integer(int64)

Responses

HTTP Code	Description	Schema
200	The level has been swapped to the right.	BasicLevelInfoDTO
404	Training definition with given id not found.	No Content
409	Cannot edit released or archived training definition or cannot swap last level to the right.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0/levels/0/swap-right
```

Example HTTP response

Response 200

```
{
  "id" : 1,
  "title" : "Game Level1",
  "order" : 1,
  "levelType" : "GAME"
}
```

2.1.12. Create level

```
POST /kypo2-rest-training/training-definitions/{definitionId}/levels/{levelType}
```

Description

Creates only default level for given training definition

Parameters

Type	Name	Description	Schema
Path	definitionId <i>required</i>	Id of definition for which is level created	integer(int64)
Path	levelType <i>required</i>	Level type	enum (GAME, ASSESSMENT, INFO)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string

Responses

HTTP Code	Description	Schema
200	successful operation	BasicLevelInfoDTO
201	Level created.	AbstractLevelDTO
404	Training definition with given id not found.	No Content
409	Cannot create level in released or archived training definition.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0/levels/string
```

Request query

```
{  
  "fields" : "string"  
}
```

Example HTTP response

Response 200

```
{  
  "id" : 1,  
  "title" : "Game Level1",  
  "order" : 1,  
  "levelType" : "GAME"  
}
```

Response 201

```
{  
  "id" : 1,  
  "title" : "Game Level1",  
  "maxScore" : 20,  
  "nextLevel" : 2,  
  "preHook" : {  
    "id" : 4  
  },  
  "postHook" : {  
    "id" : 8  
  },  
  "levelType" : "GAME"  
}
```

2.1.13. Clone training definition

POST /kypo2-rest-training/training-definitions/{id}

Description

Only released and archived training definitions can be cloned

Parameters

Type	Name	Description	Schema
Path	id <i>required</i>	Id of training definition to be cloned	integer(int64)

Responses

HTTP Code	Description	Schema
200	Training definition cloned.	TrainingDefinition DTO
404	Training definition with given id not found.	No Content
409	Cannot copy unreleased training definition.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

/kypo2-rest-training/training-definitions/0

Example HTTP response

Response 200

```

{
  "id" : 1,
  "title" : "TrainingDefinition2",
  "description" : "Unreleased training definition",
  "prerequisites" : [ "string" ],
  "outcomes" : [ "string" ],
  "state" : "UNRELEASED",
  "authorRef" : [ {
    "id" : 1,
    "authorRefLogin" : "Designer1"
  } ],
  "sandboxDefinitionRef" : {
    "id" : 1,
    "sandboxDefinitionRef" : 1
  },
  "startingLevel" : 4,
  "levels" : [ {
    "id" : 1,
    "title" : "Game Level1",
    "maxScore" : 20,
    "nextLevel" : 2,
    "preHook" : {
      "id" : 4
    },
    "postHook" : {
      "id" : 8
    },
    "levelType" : "GAME"
  } ],
  "showStepperBar" : false,
  "canBeArchived" : true
}

```

2.1.14. Get Training Definition by Id.

GET /kypo2-rest-training/training-definitions/{id}

Parameters

Type	Name	Description	Schema
Path	id <i>required</i>	ID of training definition to be retrieved.	integer(int64)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string

Responses

HTTP Code	Description	Schema
200	Training definition found.	TrainingDefinition DTO
404	Training definition with given id not found.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0
```

Request query

```
{  
  "fields" : "string"  
}
```

Example HTTP response

Response 200

```

{
  "id" : 1,
  "title" : "TrainingDefinition2",
  "description" : "Unreleased training definition",
  "prerequisites" : [ "string" ],
  "outcomes" : [ "string" ],
  "state" : "UNRELEASED",
  "authorRef" : [ {
    "id" : 1,
    "authorRefLogin" : "Designer1"
  } ],
  "sandboxDefinitionRef" : {
    "id" : 1,
    "sandboxDefinitionRef" : 1
  },
  "startingLevel" : 4,
  "levels" : [ {
    "id" : 1,
    "title" : "Game Level1",
    "maxScore" : 20,
    "nextLevel" : 2,
    "preHook" : {
      "id" : 4
    },
    "postHook" : {
      "id" : 8
    },
    "levelType" : "GAME"
  } ],
  "showStepperBar" : false,
  "canBeArchived" : true
}

```

2.1.15. Delete training definition

```
DELETE /kypo2-rest-training/training-definitions/{id}
```

Description

Released training definition cannot be deleted

Parameters

Type	Name	Description	Schema
Path	id <i>required</i>	Id of training definition to be deleted	integer(int64)

Responses

HTTP Code	Description	Schema
200	Training definition deleted.	No Content
404	Training definition or one of levels cannot be found.	No Content
409	Cannot delete released training definition.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-definitions/0
```

2.2. Training Instances

2.2.1. Create training instance

```
POST /kypo2-rest-training/training-instances
```

Description

This can only be done by the organizer or administrator

Parameters

Type	Name	Description	Schema
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string
Body	body <i>optional</i>	Training instance to be created	TrainingInstanceCreateDTO

Responses

HTTP Code	Description	Schema
200	successful operation	TrainingInstanceDTO

HTTP Code	Description	Schema
201	Training instance created.	TrainingInstanceCreatedDTO
400	Given training instance is not valid.	No Content
500	Unexpected condition was encountered.	No Content

Consumes

- `application/json`

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-instances
```

Request query

```
{
  "fields" : "string"
}
```

Request body

```
{
  "startTime" : "2020-11-20T10:28:02.727Z",
  "endTime" : "2020-11-25T10:26:02.727Z",
  "title" : "December instance",
  "poolSize" : 20,
  "password" : "hunter",
  "trainingDefinitionId" : 1,
  "orgIds" : [ 0 ]
}
```

Example HTTP response

Response 200

```

{
  "id" : 1,
  "startTime" : "2016-10-19 10:23:54+02",
  "endTime" : "2017-10-19 10:23:54+02",
  "title" : "Concluded Instance",
  "poolSize" : 5,
  "trainingDefinition" : {
    "id" : 1,
    "title" : "TrainingDefinition2",
    "description" : "Unreleased training definition",
    "prerequisites" : [ "string" ],
    "outcomes" : [ "string" ],
    "state" : "UNRELEASED",
    "authorRef" : [ {
      "id" : 1,
      "authorRefLogin" : "Designer1"
    } ],
    "sandboxDefinitionRef" : {
      "id" : 1,
      "sandboxDefinitionRef" : 1
    },
    "startingLevel" : 4,
    "levels" : [ {
      "id" : 1,
      "title" : "Game Level1",
      "maxScore" : 20,
      "nextLevel" : 2,
      "preHook" : {
        "id" : 4
      },
      "postHook" : {
        "id" : 8
      },
      "levelType" : "GAME"
    } ],
    "showStepperBar" : false,
    "canBeArchived" : true
  },
  "organizers" : [ {
    "id" : 1,
    "userRefLogin" : "Organizer1"
  } ],
  "password" : "string"
}

```

Response 201

```
{
  "startTime" : "2020-11-20T10:28:02.727Z",
  "endTime" : "2020-11-25T10:26:02.727Z",
  "title" : "December instance",
  "poolSize" : 20,
  "password" : "hunter",
  "trainingDefinitionId" : 1,
  "orgIds" : [ 0 ]
}
```

2.2.2. Get all training instances.

GET /kypo2-rest-training/training-instances

Parameters

Type	Name	Description	Schema
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string
Body	body <i>optional</i>	Pagination support.	Pageable
Body	body <i>optional</i>	Parameters for filtering the objects.	< string, < string > array > map

Responses

HTTP Code	Description	Schema
200	All training instances found.	< TrainingInstanceDTO > array
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

/kypo2-rest-training/training-instances

Request query

```
{
  "fields" : "string"
}
```

Request body

```
{ }
```

Example HTTP response

Response 200

```
"array"
```

2.2.3. Update training instance

```
PUT /kypo2-rest-training/training-instances
```

Description

This can only be done by organizer of training instance or administrator

Parameters

Type	Name	Description	Schema
Body	body <i>optional</i>	Training instance to be updated	TrainingInstanceUpdateDTO

Responses

HTTP Code	Description	Schema
200	successful operation	string
404	The requested resource was not found	No Content
409	The requested resource was not deleted because of its finish time	No Content

Consumes

- `application/json`

Produces

- application/json

Example HTTP request

Request path

```
/kypo2-rest-training/training-instances
```

Request body

```
{
  "id" : 1,
  "startTime" : "2019-10-19T10:28:02.727Z",
  "endTime" : "2019-10-25T10:28:02.727Z",
  "title" : "Concluded Instance",
  "poolSize" : 10,
  "password" : "hunter",
  "trainingDefinitionId" : 1,
  "orgIds" : [ 0 ]
}
```

Example HTTP response

Response 200

```
"string"
```

2.2.4. Get training instance by Id.

```
GET /kypo2-rest-training/training-instances/{id}
```

Description

Returns training instance by id and also contains particular training definition in it.

Parameters

Type	Name	Description	Schema
Path	id <i>required</i>	Training instance ID	integer(int64)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string

Responses

HTTP Code	Description	Schema
200	Training instance found	TrainingInstanceDTO
404	Training instance with given id not found.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-instances/0
```

Request query

```
{  
  "fields" : "string"  
}
```

Example HTTP response

Response 200

```

{
  "id" : 1,
  "startTime" : "2016-10-19 10:23:54+02",
  "endTime" : "2017-10-19 10:23:54+02",
  "title" : "Concluded Instance",
  "poolSize" : 5,
  "trainingDefinition" : {
    "id" : 1,
    "title" : "TrainingDefinition2",
    "description" : "Unreleased training definition",
    "prerequisites" : [ "string" ],
    "outcomes" : [ "string" ],
    "state" : "UNRELEASED",
    "authorRef" : [ {
      "id" : 1,
      "authorRefLogin" : "Designer1"
    } ],
    "sandboxDefinitionRef" : {
      "id" : 1,
      "sandboxDefinitionRef" : 1
    },
    "startingLevel" : 4,
    "levels" : [ {
      "id" : 1,
      "title" : "Game Level1",
      "maxScore" : 20,
      "nextLevel" : 2,
      "preHook" : {
        "id" : 4
      },
      "postHook" : {
        "id" : 8
      },
      "levelType" : "GAME"
    } ],
    "showStepperBar" : false,
    "canBeArchived" : true
  },
  "organizers" : [ {
    "id" : 1,
    "userRefLogin" : "Organizer1"
  } ],
  "password" : "string"
}

```

2.2.5. Delete training instance

```
DELETE /kypo2-rest-training/training-instances/{id}
```


Description

This can only be done by organizer of training instance or administrator

Parameters

Type	Name	Description	Schema
Path	id <i>required</i>	Id of training instance to be deleted	integer(int64)

Responses

HTTP Code	Description	Schema
200	Training instance updated.	No Content
400	Given training instance is not valid.	No Content
404	Training instance with given id not found.	No Content
409	Starting time of instance must be in future.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-instances/0
```

2.2.6. Allocate sandboxes

```
POST /kypo2-rest-training/training-instances/{instanceId}/sandbox-instances
```

Parameters

Type	Name	Description	Schema
Path	instanceId <i>required</i>	Id of training instance for which sandboxes are allocated	integer(int64)

Responses

HTTP Code	Description	Schema
200	Sandboxes have been allocated.	No Content
404	Training instance with given id not found.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-instances/0/sandbox-instances
```

2.2.7. Get all training runs of specific training instance

```
GET /kypo2-rest-training/training-instances/{instanceId}/training-runs
```

Description

This can only be done by organizer of training instance or administrator

Parameters

Type	Name	Description	Schema
Path	instanceId <i>required</i>	Training Instance Id	integer(int64)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string
Body	body <i>optional</i>	Pagination support.	Pageable
Body	body <i>optional</i>	Parameters for filtering the objects.	< string, < string > array > map

Responses

HTTP Code	Description	Schema
200	All training runs in given training instance found.	< TrainingRunDTO > array

HTTP Code	Description	Schema
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-instances/0/training-runs
```

Request query

```
{
  "fields" : "string"
}
```

Request body

```
{ }
```

Example HTTP response

Response 200

```
"array"
```

2.3. Training Runs

2.3.1. Access training run.

```
POST /kypo2-rest-training/training-runs
```

Parameters

Type	Name	Description	Schema
Query	password <i>required</i>	password	string

Responses

HTTP Code	Description	Schema
200	Training run accessed.	AccessTrainingRunDTO
404	There is no training instance with given password or first level not found in database.	No Content
500	Some error occurred during getting info about sandboxes.	No Content
503	There is no available sandbox, wait a minute and try again.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs
```

Request query

```
{  
  "password" : "string"  
}
```

Example HTTP response

Response 200

```

{
  "abstractLevelDTO" : {
    "id" : 1,
    "title" : "Game Level1",
    "maxScore" : 20,
    "nextLevel" : 2,
    "preHook" : {
      "id" : 4
    },
    "postHook" : {
      "id" : 8
    },
    "levelType" : "GAME"
  },
  "infoAboutLevels" : [ {
    "id" : 1,
    "title" : "Game Level1",
    "order" : 1,
    "levelType" : "GAME"
  } ]
}

```

2.3.2. Get all training Runs.

GET /kypo2-rest-training/training-runs

Parameters

Type	Name	Description	Schema
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string
Query	page <i>optional</i>	Results page you want to retrieve (0..N)	integer
Query	size <i>optional</i>	Number of records per page.	integer
Query	sort <i>optional</i>	Sorting criteria in the format: property(asc desc). Default sort order is ascending. Multiple sort criteria are supported.	< string > array(multi)
Body	body <i>optional</i>	Pagination support.	Pageable
Body	body <i>optional</i>	Parameters for filtering the objects.	< string, < string > array > map

Responses

HTTP Code	Description	Schema
200	All training runs found.	< TrainingRunDTO > array
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs
```

Request query

```
{
  "fields" : "string",
  "page" : 0,
  "size" : 0,
  "sort" : "asc"
}
```

Request body

```
{ }
```

Example HTTP response

Response 200

```
"array"
```

2.3.3. Get all accessed training runs.

```
GET /kypo2-rest-training/training-runs/accessible
```

Description

Returns training run which was accessed by logged in user

Parameters

Type	Name	Description	Schema
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string
Query	page <i>optional</i>	Results page you want to retrieve (0..N)	integer
Query	size <i>optional</i>	Number of records per page.	integer
Query	sort <i>optional</i>	Sorting criteria in the format: property(asc desc). Default sort order is ascending. Multiple sort criteria are supported.	< string > array(multi)

Responses

HTTP Code	Description	Schema
200	All accessed training runs found.	< AccessedTrainingRunDTO > array
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/accessible
```

Request query

```
{
  "fields" : "string",
  "page" : 0,
  "size" : 0,
  "sort" : "asc"
}
```

Example HTTP response

Response 200

```
"array"
```

2.3.4. Get training run by Id.

```
GET /kypo2-rest-training/training-runs/{runId}
```

Parameters

Type	Name	Description	Schema
Path	runId <i>required</i>	Training run Id	integer(int64)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string

Responses

HTTP Code	Description	Schema
200	Training run with given id found.	TrainingRunDTO
404	Training run with given id not found.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/0
```

Request query

```
{  
  "fields" : "string"  
}
```


Example HTTP response

Response 200

```
{
  "id" : 1,
  "startTime" : "2016-10-19 10:23:54+02",
  "endTime" : "2022-10-19 10:23:54+02",
  "eventLogReference" : "string",
  "state" : "ALLOCATED",
  "sandboxInstanceRef" : {
    "id" : 1,
    "sandboxInstanceRef" : 1
  },
  "participantRef" : {
    "id" : 1,
    "participantRefLogin" : "Participant1"
  }
}
```

2.3.5. Finish given training run

```
PUT /kypo2-rest-training/training-runs/{runId}
```

Parameters

Type	Name	Description	Schema
Path	runId <i>required</i>	Training run ID	integer(int64)

Responses

HTTP Code	Description	Schema
200	Training run resumed.	AccessTrainingRunDTO
404	Training run with given id not found.	No Content
409	Cannot resume archived training run.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/0
```

Example HTTP response

Response 200

```
{
  "abstractLevelDTO" : {
    "id" : 1,
    "title" : "Game Level1",
    "maxScore" : 20,
    "nextLevel" : 2,
    "preHook" : {
      "id" : 4
    },
    "postHook" : {
      "id" : 8
    },
    "levelType" : "GAME"
  },
  "infoAboutLevels" : [ {
    "id" : 1,
    "title" : "Game Level1",
    "order" : 1,
    "levelType" : "GAME"
  } ]
}
```

2.3.6. Evaluate responses to assessment

```
PUT /kypo2-rest-training/training-runs/{runId}/assessment-evaluations
```

Parameters

Type	Name	Description	Schema
Path	runId <i>required</i>	Training run ID	integer(int64)
Body	body <i>required</i>	Responses to assessment	string

Responses

HTTP Code	Description	Schema
204	Responses to assessment evaluated and stored .	No Content
404	Training run with given id not found.	No Content
409	Current level of training is not assessment level or level has been already answered.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/0/assessment-evaluations
```

Request body

```
{ }
```

2.3.7. Get hint of game level.

```
GET /kypo2-rest-training/training-runs/{runId}/hints/{hintId}
```

Description

Returns hint if given training runs exists and current level is game level

Parameters

Type	Name	Description	Schema
Path	hintId <i>required</i>	Hint ID	integer(int64)
Path	runId <i>required</i>	Training run ID	integer(int64)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string

Responses

HTTP Code	Description	Schema
200	Hint found.	HintDTO
400	Current level is not game level and does not have hints.	No Content
404	Hint with given id not found.	No Content
409	Hint with given id is not in current level of training run.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/0/hints/0
```

Request query

```
{
  "fields" : "string"
}
```

Example HTTP response

Response 200

```
{
  "id" : 1,
  "title" : "Hint1",
  "content" : "Very good advice",
  "hintPenalty" : 10
}
```

2.3.8. Get boolean about flag correctness

```
GET /kypo2-rest-training/training-runs/{runId}/is-correct-flag
```

Description

Current level of given training run must be game level

Parameters

Type	Name	Description	Schema
Path	runId <i>required</i>	Training run ID	integer(int64)
Query	flag <i>required</i>	Submitted flag	string

Responses

HTTP Code	Description	Schema
200	Flag checked.	IsCorrectFlagDTO
400	Current level is not game level and does not have flag.	No Content
404	Training run with given id not found.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/0/is-correct-flag
```

Request query

```
{
  "flag" : "string"
}
```

Example HTTP response

Response 200

```
{
  "remainingAttempts" : 3,
  "correct" : false
}
```

2.3.9. Get level of given training run.

GET /kypo2-rest-training/training-runs/{runId}/next-levels

Description

Returns (assessment, game, info) level if any next level exists and training run as well

Parameters

Type	Name	Description	Schema
Path	runId <i>required</i>	Training run ID	integer(int64)
Query	fields <i>optional</i>	Fields which should be returned in REST API response	string

Responses

HTTP Code	Description	Schema
200	Next level found.	AbstractLevelDTO
404	There is no next level or could not be found in database.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

/kypo2-rest-training/training-runs/0/next-levels

Request query

```
{
  "fields" : "string"
}
```

Example HTTP response

Response 200

```
{
  "id" : 1,
  "title" : "Game Level1",
  "maxScore" : 20,
  "nextLevel" : 2,
  "preHook" : {
    "id" : 4
  },
  "postHook" : {
    "id" : 8
  },
  "levelType" : "GAME"
}
```

2.3.10. Get current level of resumed training run

```
GET /kypo2-rest-training/training-runs/{runId}/resumption
```

Parameters

Type	Name	Description	Schema
Path	runId <i>required</i>	Training run ID	integer(int64)

Responses

HTTP Code	Description	Schema
200	Training run resumed.	AccessTrainingRunDTO
404	Training run with given id not found.	No Content
409	Cannot resume archived training run.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/0/resumption
```

Example HTTP response

Response 200

```
{
  "abstractLevelDTO" : {
    "id" : 1,
    "title" : "Game Level1",
    "maxScore" : 20,
    "nextLevel" : 2,
    "preHook" : {
      "id" : 4
    },
    "postHook" : {
      "id" : 8
    },
    "levelType" : "GAME"
  },
  "infoAboutLevels" : [ {
    "id" : 1,
    "title" : "Game Level1",
    "order" : 1,
    "levelType" : "GAME"
  } ]
}
```

2.3.11. Get solution of game level.

```
GET /kypo2-rest-training/training-runs/{runId}/solutions
```

Description

Returns solution if given training runs exists and current level is game level

Parameters

Type	Name	Description	Schema
Path	runId <i>required</i>	Training run ID	integer(int64)

Responses

HTTP Code	Description	Schema
200	Solution found.	string
400	Current level is not game level and does not have solution.	No Content
404	Training run with given id cannot be found.	No Content
500	Unexpected condition was encountered.	No Content

Produces

- `application/json`

Example HTTP request

Request path

```
/kypo2-rest-training/training-runs/0/solutions
```

Example HTTP response

Response 200

```
"string"
```

3. Definitions

3.1. AbstractLevelDTO

Superclass for classes GameLevelDTO, AssessmentLevelDTO and InfoLevelDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of level. Example : <code>1</code>	integer(int64)
levelType <i>optional</i>	Type of the level. Example : <code>"GAME"</code>	enum (ASSESSMENT, INFO, GAME)

Name	Description	Schema
maxScore <i>optional</i>	The maximum score a participant can achieve during a level. Example : 20	integer(int32)
nextLevel <i>optional</i>	Reference to the next abstract level (if it is null, then it is the last level) Example : 2	integer(int64)
postHook <i>optional</i>	Example : "PostHookDTO"	PostHookDTO
preHook <i>optional</i>	Example : "PreHookDTO"	PreHookDTO
title <i>optional</i>	Short textual description of the level. Example : "Game Level1"	string

3.2. AccessTrainingRunDTO

.

Name	Description	Schema
abstractLevel DTO <i>optional</i>	First level in the current training run. Example : "AbstractLevelDTO"	AbstractLevelDTO
infoAboutLevels <i>optional</i>	Information about all levels in training instance. Example : ["BasicLevelInfoDTO"]	< BasicLevelInfoDTO > array

3.3. AccessedTrainingRunDTO

Already accessed training run by some participant.

Name	Description	Schema
currentLevelOrder <i>optional</i>	Current level order of training run. Example : 1	integer(int32)
id <i>optional</i>	Main identifier of training run. Example : 1	integer(int64)
numberOfLevels <i>optional</i>	The number of levels in the training instance. Example : 3	integer(int32)
possibleAction <i>optional</i>	Possible action which can be executed with training Run. Example : "RESULTS"	enum (TRY_AGAIN, RESULTS)

Name	Description	Schema
title <i>optional</i>	Short textual description of the training instance. Example : "Concluded Instance"	string
trainingInstanceEndDate <i>optional</i>	End date of training instance for which the training run was created. Example : "2017-10-19T10:23:54"	string(date-time)
trainingInstanceStartDate <i>optional</i>	Start date of training instance for which the training run was created. Example : "2016-10-19T10:23:54"	string(date-time)

3.4. AccessedTrainingRunRestResource

Name	Description	Schema
content <i>optional</i>	Retrieved Accessed Training Runs from databases. Example : ["AccessedTrainingRunDTO"]	< AccessedTrainingRunDTO > array
pagination <i>optional</i>	Pagination including: page number, number of elements in page, size, total elements and total pages. Example : "Pagination"	Pagination

3.5. AssessmentLevelDTO

Polymorphism : Composition

Name	Description	Schema
assessmentType <i>optional</i>	Type of assessment. Example : "TEST"	enum (TEST, QUESTIONNAIRE)
id <i>optional</i>	Main identifier of level. Example : 1	integer(int64)
instructions <i>optional</i>	Assessment instructions for participant. Example : "Fill me up"	string
levelType <i>optional</i>	Type of the level. Example : "GAME"	enum (ASSESSMENT, INFO, GAME)
maxScore <i>optional</i>	The maximum score a participant can achieve during a level. Example : 20	integer(int32)
nextLevel <i>optional</i>	Reference to the next abstract level (if it is null, then it is the last level) Example : 2	integer(int64)
postHook <i>optional</i>	Example : "PostHookDTO"	PostHookDTO

Name	Description	Schema
preHook <i>optional</i>	Example : "PreHookDTO"	PreHookDTO
questions <i>optional</i>	List of questions in this assessment as JSON. Example : "What is my mothers name?"	string
title <i>optional</i>	Short textual description of the level. Example : "Game Level1"	string

3.6. AssessmentLevelUpdateDTO

Assessment level to update.

Name	Description	Schema
id <i>required</i>	Main identifier of level. Example : 3	integer(int64)
instructions <i>optional</i>	Instructions of assessment level to update. Example : "Fill me up fast"	string
maxScore <i>required</i>	Maximum score of assessment level to update. Have to be filled in range from 0 to 100. Minimum value : 0 Maximum value : 100 Example : 40	integer(int32)
questions <i>optional</i>	Questions of assessment level to update. Example : "What is my fathers name?"	string
title <i>required</i>	Short textual description of the level. Example : "Assessment Level1"	string
type <i>required</i>	Type of assessment level to update. Example : "TEST"	enum (TEST, QUESTIONNAIRE)

3.7. AuthorRefDTO

Name	Description	Schema
authorRefLogi n <i>optional</i>	Reference to user in another microservice. Example : "Designer1"	string
id <i>optional</i>	Main identifier of author. Example : 1	integer(int64)

3.8. BasicLevelInfoDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of level. Example : 1	integer(int64)
levelType <i>optional</i>	Type of the level. Example : "GAME"	enum (ASSESSMENT, INFO, GAME)
order <i>optional</i>	Order of level among levels in training definition. Example : 1	integer(int32)
title <i>optional</i>	Short textual description of the level. Example : "Game Level1"	string

3.9. GameLevelDTO

Polymorphism : Composition

Name	Description	Schema
attachments <i>optional</i>	Downloadable files for level (pictures, source code...) Example : ["string"]	< string > array
content <i>optional</i>	The information and experiences that are directed towards a participant. Example : "Play me"	string
estimatedDuration <i>optional</i>	Estimated time taken by the player to resolve the level. Example : 25	integer(int32)
flag <i>optional</i>	Keyword found in game, used for access next level. Example : "secretFlag"	string
hints <i>optional</i>	Information which helps player resolve the level. Example : ["HintDTO"]	< HintDTO > array
id <i>optional</i>	Main identifier of level. Example : 1	integer(int64)
incorrectFlagLimit <i>optional</i>	How many times player can submit incorrect flag before displaying solution. Example : 5	integer(int32)
levelType <i>optional</i>	Type of the level. Example : "GAME"	enum (ASSESSMENT, INFO, GAME)
maxScore <i>optional</i>	The maximum score a participant can achieve during a level. Example : 20	integer(int32)
nextLevel <i>optional</i>	Reference to the next abstract level (if it is null, then it is the last level) Example : 2	integer(int64)

Name	Description	Schema
postHook <i>optional</i>	Example : "PostHookDTO"	PostHookDTO
preHook <i>optional</i>	Example : "PreHookDTO"	PreHookDTO
solution <i>optional</i>	Instruction how to get flag in game. Example : "This is how you do it"	string
solutionPenalized <i>optional</i>	Sign if displaying of solution is penalized. Example : true	boolean
title <i>optional</i>	Short textual description of the level. Example : "Game Level1"	string

3.10. GameLevelUpdatedTO

Game level to update.

Name	Description	Schema
attachments <i>optional</i>	Downloadable files for level (pictures, source code...) Example : ["string"]	< string > array
content <i>optional</i>	The information and experiences that are directed towards an player. Example : "Play me"	string
estimatedDuration <i>optional</i>	Estimated time taken by the player to resolve the level. Example : 20	integer(int32)
flag <i>required</i>	Keyword found in game, used for access next level. Length : 0 - 50 Example : "secretFlag"	string
hints <i>optional</i>	Information which helps participant resolve the level. Example : ["HintDTO"]	< HintDTO > array
id <i>required</i>	Main identifier of level. Example : 1	integer(int64)
incorrectFlagLimit <i>required</i>	How many times participant can submit incorrect flag before displaying solution. Minimum value : 0 Example : 5	integer(int32)
maxScore <i>required</i>	The maximum score a participant can achieve during a level. Minimum value : 0 Maximum value : 100 Example : 20	integer(int32)

Name	Description	Schema
solution <i>optional</i>	Instruction how to get flag in game. Example : "This is how you do it"	string
solutionPenalized <i>required</i>	Sign if displaying of solution is penalized. Example : false	boolean
title <i>required</i>	Short textual description of the level. Example : "Game Level1"	string

3.11. HintDTO

A brief textual description to aid the participant.

Name	Description	Schema
content <i>optional</i>	The information and experiences that are directed towards a participant. Example : "Very good advice"	string
hintPenalty <i>optional</i>	The number of points the participant loses after receiving the hint. Example : 10	integer(int32)
id <i>optional</i>	Main identifier of hint. Example : 1	integer(int64)
title <i>optional</i>	Short textual description of the hint. Example : "Hint1"	string

3.12. InfoLevelDTO

Polymorphism : Composition

Name	Description	Schema
content <i>optional</i>	The information and experiences that are directed towards a participant. Example : "Informational stuff"	string
id <i>optional</i>	Main identifier of level. Example : 1	integer(int64)
levelType <i>optional</i>	Type of the level. Example : "GAME"	enum (ASSESSMENT, INFO, GAME)
maxScore <i>optional</i>	The maximum score a participant can achieve during a level. Example : 20	integer(int32)

Name	Description	Schema
nextLevel <i>optional</i>	Reference to the next abstract level (if it is null, then it is the last level) Example : 2	integer(int64)
postHook <i>optional</i>	Example : "PostHookDTO"	PostHookDTO
preHook <i>optional</i>	Example : "PreHookDTO"	PreHookDTO
title <i>optional</i>	Short textual description of the level. Example : "Game Level1"	string

3.13. InfoLevelUpdatedTO

Info level to update.

Name	Description	Schema
content <i>optional</i>	The information and experiences that are directed towards a participant. Example : "Informational stuff"	string
id <i>required</i>	Main identifier of level. Example : 2	integer(int64)
title <i>required</i>	Short textual description of the level. Example : "Info Level1"	string

3.14. IsCorrectFlagDTO

Name	Description	Schema
correct <i>optional</i>	True/false if flag has been correct/incorrect. Example : false	boolean
remainingAttempts <i>optional</i>	Number of attempts to submit a bad flag. Example : 3	integer(int32)

3.15. Pageable

Name	Description	Schema
offset <i>optional</i>	Example : 0	integer(int64)
pageNumber <i>optional</i>	Example : 0	integer(int32)

Name	Description	Schema
pageSize <i>optional</i>	Example : 0	integer(int32)
paged <i>optional</i>	Example : true	boolean
sort <i>optional</i>	Example : "Sort"	Sort
unpaged <i>optional</i>	Example : true	boolean

3.16. Pagination

Name	Description	Schema
number <i>optional</i>	Page number. Example : 1	integer(int32)
numberOfElements <i>optional</i>	Number of elements in page. Example : 20	integer(int32)
size <i>optional</i>	Page size. Example : 20	integer(int32)
totalElements <i>optional</i>	Total number of elements in this resource (in all Pages). Example : 100	integer(int64)
totalPages <i>optional</i>	Total number of pages. Example : 5	integer(int32)

3.17. ParticipantRefDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of participant ref. Example : 1	integer(int64)
participantRefLogin <i>optional</i>	Reference to participant in another microservice. Example : "Participant1"	string

3.18. PostHookDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of postHook. Example : 8	integer(int64)

3.19. PreHookDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of preHook. Example : 4	integer(int64)

3.20. SandboxDefinitionRefDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of sandbox instance ref. Example : 1	integer(int64)
sandboxDefinitionRef <i>optional</i>	Reference to sandbox definition in another microservice. Example : 1	integer(int64)

3.21. SandboxInstanceRefDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of sandbox instance ref. Example : 1	integer(int64)
sandboxInstanceRef <i>optional</i>	Reference to sandbox instance in another microservice. Example : 1	integer(int64)

3.22. Sort

Name	Description	Schema
sorted <i>optional</i>	Example : true	boolean
unsorted <i>optional</i>	Example : true	boolean

3.23. TrainingDefinitionCreatedDTO

Training definition to create.

Name	Description	Schema
autIds <i>required</i>	References to the authors of the training definition. Example : [0]	< integer(int64) > array

Name	Description	Schema
description <i>optional</i>	Description of training definition that is visible to the participant. Example : "Description of Photo Hunter"	string
outcomes <i>optional</i>	A list of knowledge and skills that the participant should learn by attending the training (if it is used for educational purposes) Example : ["string"]	< string > array
prerequisites <i>optional</i>	List of knowledge and skills necessary to complete the training. Example : ["string"]	< string > array
sandboxDefinitionRef <i>required</i>	Reference to the sandbox definition. Example : 1	integer(int64)
showStepperBar <i>required</i>	Sign if stepper bar should be displayed. Example : true	boolean
state <i>required</i>	Current state of training definition. Example : "UNRELEASED"	enum (PRIVATE, RELEASED, ARCHIVED, UNRELEASED)
title <i>required</i>	A name of the training/game (e.g., Photo Hunter) . Example : "Photo Hunter"	string

3.24. TrainingDefinitionDTO

A blueprint of abstract levels.

Name	Description	Schema
authorRef <i>optional</i>	References to the authors of the training definition. Example : ["AuthorRefDTO"]	< AuthorRefDTO > array
canBeArchived <i>optional</i>	Example : true	boolean
description <i>optional</i>	Description of training definition that is visible to the participant. Example : "Unreleased training definition"	string
id <i>optional</i>	Main identifier of training definition. Example : 1	integer(int64)
levels <i>optional</i>	Information about all levels in training definition. Example : ["AbstractLevelDTO"]	< AbstractLevelDTO > array

Name	Description	Schema
outcomes <i>optional</i>	A list of knowledge and skills that the participant should learn by attending the training (if it is used for educational purposes) Example : ["string"]	< string > array
prerequisites <i>optional</i>	List of knowledge and skills necessary to complete the training. Example : ["string"]	< string > array
sandboxDefinitionRef <i>optional</i>	Reference to the sandbox definition. Example : "SandboxDefinitionRefDTO"	SandboxDefinitionRefDTO
showStepperBar <i>optional</i>	Sign if stepper bar should be displayed. Example : false	boolean
startingLevel <i>optional</i>	Identifier of first level of training definition. Example : 4	integer(int64)
state <i>optional</i>	Current state of training definition. Example : "UNRELEASED"	enum (PRIVATE, RELEASED, ARCHIVED, UNRELEASED)
title <i>optional</i>	A name of the training/game (e.g., Photo Hunter) . Example : "TrainingDefinition2"	string

3.25. TrainingDefinitionRestResource

Name	Description	Schema
content <i>optional</i>	Retrieved Training Definitions from databases. Example : ["TrainingDefinitionDTO"]	< TrainingDefinitionDTO > array
pagination <i>optional</i>	Pagination including: page number, number of elements in page, size, total elements and total pages. Example : "Pagination"	Pagination

3.26. TrainingDefinitionUpdatedTO

Training definition to update.

Name	Description	Schema
autIds <i>required</i>	References to the authors of the training definition. Example : [0]	< integer(int64) > array

Name	Description	Schema
description <i>optional</i>	Description of training definition that is visible to the participant. Example : "Unreleased training definition"	string
id <i>required</i>	Main identifier of training definition. Example : 1	integer(int64)
outcomes <i>optional</i>	A list of knowledge and skills that the participant should learn by attending the training (if it is used for educational purposes) Example : ["string"]	< string > array
prerequisites <i>optional</i>	List of knowledge and skills necessary to complete the training. Example : ["string"]	< string > array
sandboxDefinitionRef <i>required</i>	Reference to the sandbox definition. Example : 1	integer(int64)
showStepperBar <i>required</i>	Sign if stepper bar should be displayed. Example : false	boolean
state <i>required</i>	Current state of training definition. Example : "UNRELEASED"	enum (PRIVATE, RELEASED, ARCHIVED, UNRELEASED)
title <i>required</i>	A name of the training/game (e.g., Photo Hunter) . Example : "TrainingDefinition2"	string

3.27. TrainingInstanceCreateDTO

Training Instance to create.

Name	Description	Schema
endTime <i>required</i>	Date when training instance ends. Example : "2020-11-25T10:26:02.727Z"	string(date-time)
orgIds <i>required</i>	Reference to users which organize training instance. Example : [0]	< integer(int64) > array
password <i>required</i>	Keyword which will be modified and then used for accessing training run. Example : "hunter"	string
poolSize <i>required</i>	Number of sandboxes that can be allocated. Minimum value : 1 Maximum value : 100 Example : 20	integer(int32)

Name	Description	Schema
startTime <i>required</i>	Date when training instance starts. Example : "2020-11-20T10:28:02.727Z"	string(date-time)
title <i>required</i>	Short textual description of the training instance. Example : "December instance"	string
trainingDefinitionId <i>required</i>	Reference to training definition from which is training instance created. Example : 1	integer(int64)

3.28. TrainingInstanceDTO

A session of attending a concrete training, which involves a deployment of the training definition in one or more sandbox instances that are then assigned to participants. The instance comprises one or more game runs.

Name	Description	Schema
endTime <i>optional</i>	Date when training instance ends. Example : "2017-10-19 10:23:54+02"	string(date-time)
id <i>optional</i>	Main identifier of training instance. Example : 1	integer(int64)
organizers <i>optional</i>	Reference to users which organize training instance. Example : ["UserRefDTO"]	< UserRefDTO > array
password <i>optional</i>	Example : "string"	string
poolSize <i>optional</i>	Number of sandboxes that can be allocated. Example : 5	integer(int32)
startTime <i>optional</i>	Date when training instance starts. Example : "2016-10-19 10:23:54+02"	string(date-time)
title <i>optional</i>	Short textual description of the training instance. Example : "Concluded Instance"	string
trainingDefinition <i>optional</i>	Reference to training definition from which is training instance created. Example : "TrainingDefinitionDTO"	TrainingDefinitionDTO

3.29. TrainingInstanceRestResource

Name	Description	Schema
content <i>optional</i>	Retrieved Training Instances from databases. Example : ["TrainingInstanceDTO"]	< TrainingInstanceDTO > array

Name	Description	Schema
pagination <i>optional</i>	Pagination including: page number, number of elements in page, size, total elements and total pages. Example : "Pagination"	Pagination

3.30. TrainingInstanceUpdateDTO

Training Instance to update.

Name	Description	Schema
endTime <i>required</i>	Date when training instance ends. Example : "2019-10-25T10:28:02.727Z"	string(date-time)
id <i>required</i>	Main identifier of training instance. Example : 1	integer(int64)
orgIds <i>required</i>	Reference to users which organize training instance. Example : [0]	< integer(int64) > array
password <i>required</i>	Keyword which will be modified and then used for accessing training run. Example : "hunter"	string
poolSize <i>required</i>	Number of sandboxes that can be allocated. Minimum value : 1 Maximum value : 100 Example : 10	integer(int32)
startTime <i>required</i>	Date when training instance starts. Example : "2019-10-19T10:28:02.727Z"	string(date-time)
title <i>required</i>	Short textual description of the training instance. Example : "Concluded Instance"	string
trainingDefinitionId <i>required</i>	Reference to training definition from which is training instance created. Example : 1	integer(int64)

3.31. TrainingRunDTO

The act, or a recording, of performing actions during training from a perspective of one concrete participant.

Name	Description	Schema
endTime <i>optional</i>	Date when training run ends. Example : "2022-10-19 10:23:54+02"	string(date-time)
eventLogReference <i>optional</i>	Example : "string"	string

Name	Description	Schema
id <i>optional</i>	Main identifier of training run. Example : 1	integer(int64)
participantRef <i>optional</i>	Reference to participant of training run. Example : "ParticipantRefDTO"	ParticipantRefDTO
sandboxInstanceRef <i>optional</i>	Reference to the received sandbox. Example : "SandboxInstanceRefDTO"	SandboxInstanceRefDTO
startTime <i>optional</i>	Date when training run started. Example : "2016-10-19 10:23:54+02"	string(date-time)
state <i>optional</i>	Current state of training run. Example : "ALLOCATED"	enum (NEW, ALLOCATED, READY, ARCHIVED)

3.32. TrainingRunRestResource

Name	Description	Schema
content <i>optional</i>	Retrieved Training Runs from databases. Example : ["TrainingRunDTO"]	< TrainingRunDTO > array
pagination <i>optional</i>	Pagination including: page number, number of elements in page, size, total elements and total pages. Example : "Pagination"	Pagination

3.33. UserRefDTO

Name	Description	Schema
id <i>optional</i>	Main identifier of user ref. Example : 1	integer(int64)
userRefLogin <i>optional</i>	Reference to user in another microservice. Example : "Organizer1"	string