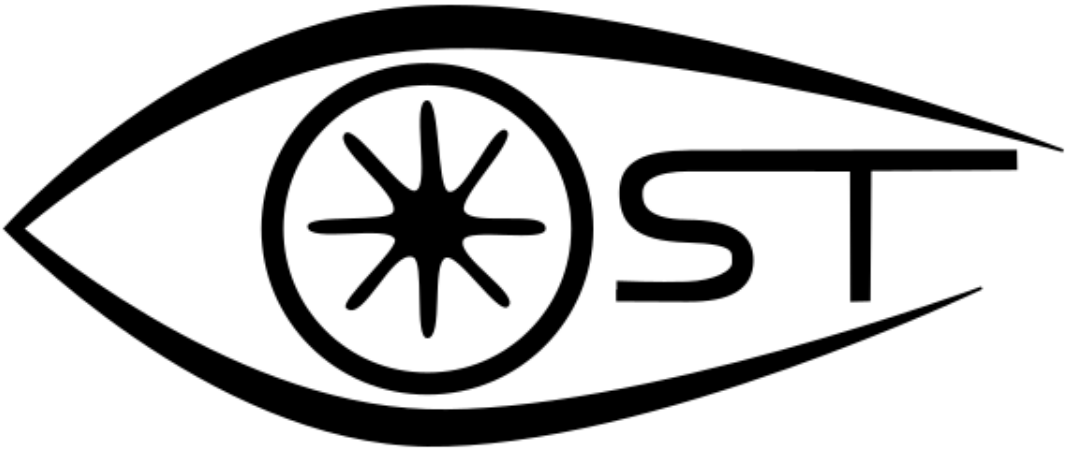
OST documentation



Document Title:	ITTI Orbits- User Manual		
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Document Version:	0.2	**Date:**	2021-12-10
Abstract			
Deliverable: User manual – draft version, backend rest api, database, component diagram			

Action	**Name**	**Function**	**Signature**	**Date**
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	Name	**Contact**	**Description**	**Date**

	Issue	**Date**	**Description**
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1. Component diagram

Backend, frontend and database can be launched by one docker compose. Backend can connect with Testbed (Kafka) and with Keycloak (system to authorization).

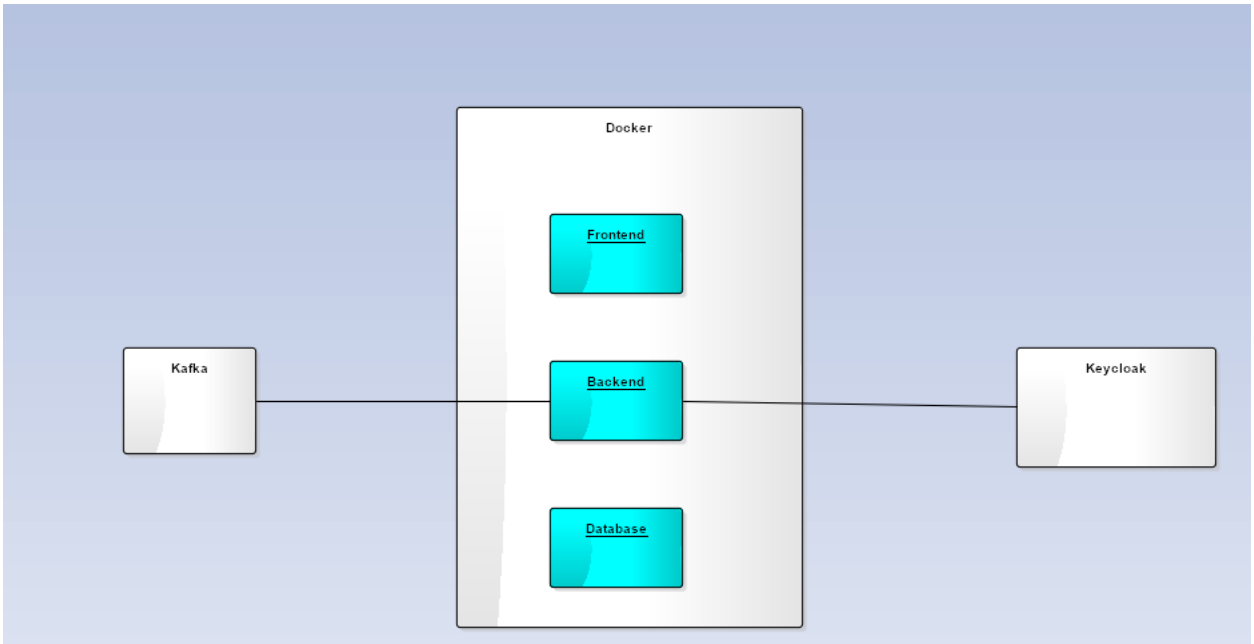

Figure 1. Component diagram of OST.

2. User Manual

User can login to server as admin or observer. Admin can manage trials, session, stages, roles, add question to roles and stages, add and edit users and control active session. Observer can answer on question and comment it.

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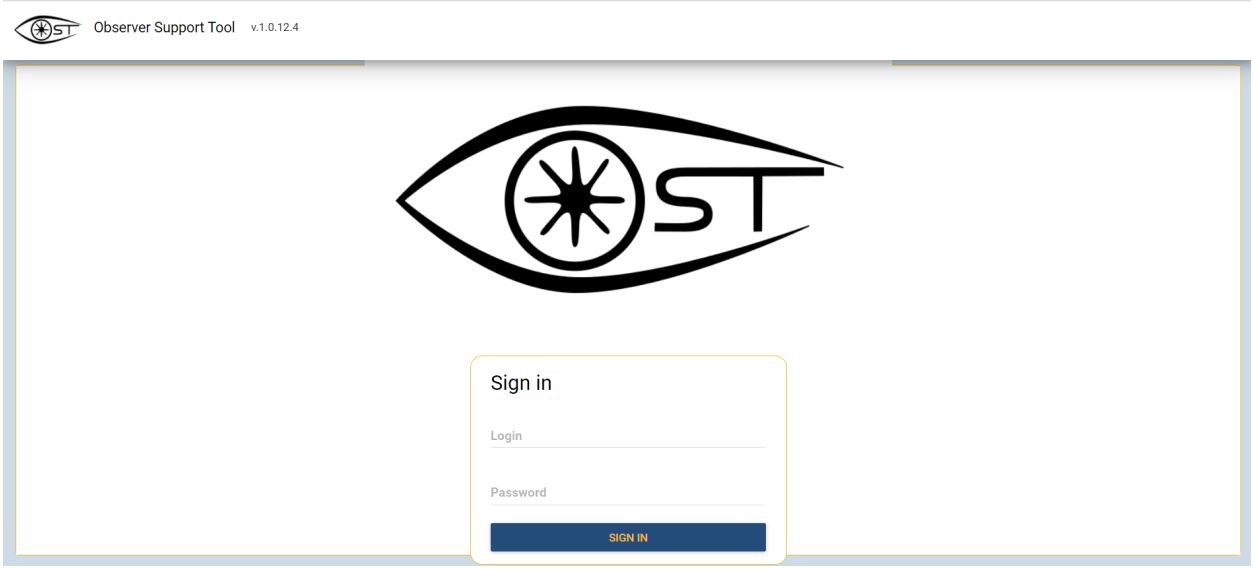

Figure 2. Starting page

After clicking “SIGN IN” user is redirected to main page (depending on users role). If a user log in to admin account, then he will be redirected to main view of admin (look at Figure 3), else user will be redirected to observer view.

Admin

Goal of the admin is creating a working session for observers. This process contains three stages: creating trials with questions, creating roles and assigning them to question sets and preparing sessions with users. To create questions admin should create trial, stages in trial, question sets in stages and question in question sets. Description can be found in the subsection named ,,Creating trial with questions”. Second part is creating roles and assigning them to a question set (which already are assigned to stage). It means that questions, which are available for the observer, depend on the stage and on the role of the logged observer. Last step is creating a session with observers. Observers in other sessions can have other roles, so assign user to role in session. Admin needn’t create new users, if observers have their account in the system. Description of this step can be found in subsection ,,Managing users and sessions”.

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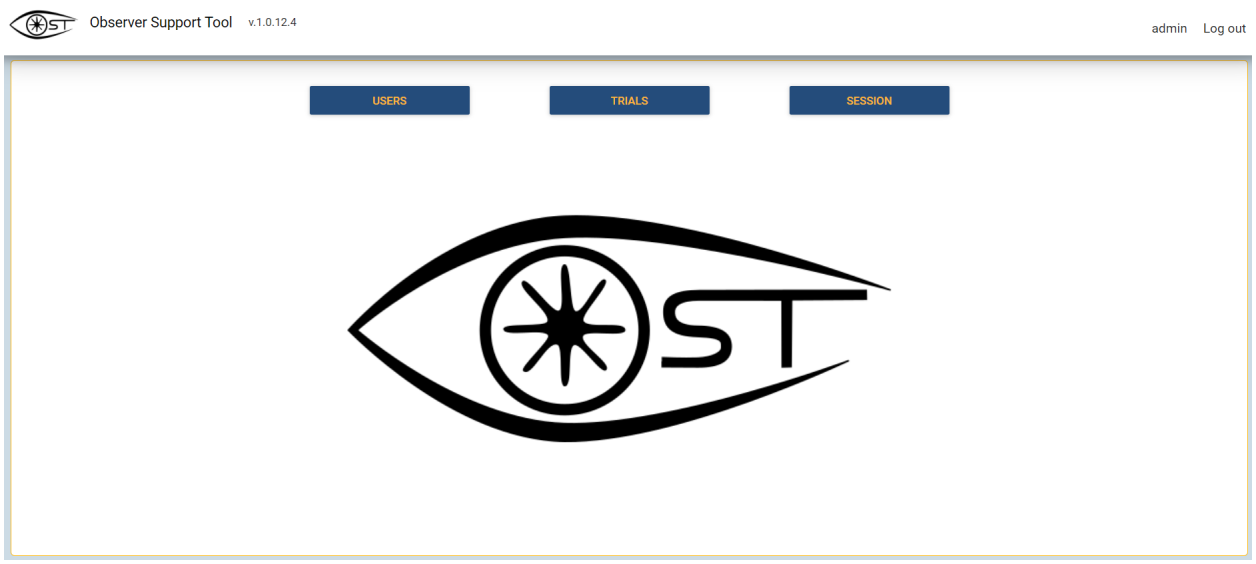

Figure 3. Page after log in as admin

Creating trial with questions

Trial list

If we choose “TRIALS” from the launch window we will be redirected to the Trial List.
There is a list of trials, which can be managed also we can upload after choosing the “Import trial” button.

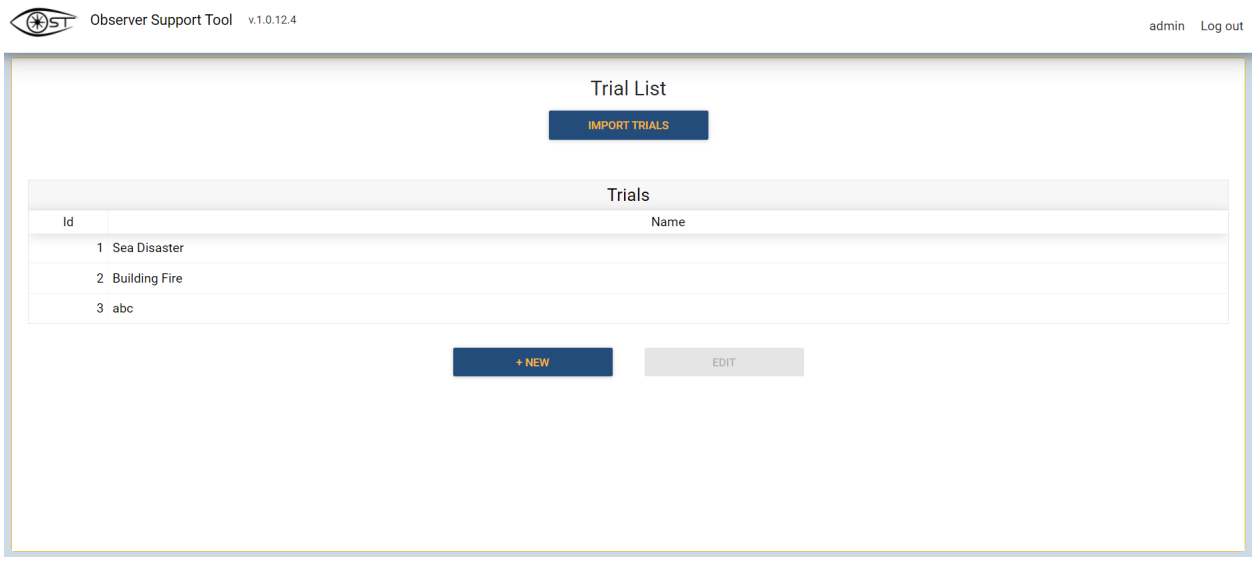

Figure 4. Trial list view

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Trial details

After choosing trial from trial list and clicking edit or double clicking the left mouse button on trial from trial list, the system redirects to trial details. There are basic details about trial and data about sessions, stages and roles in trial.
Also trials can be edited and removed there.

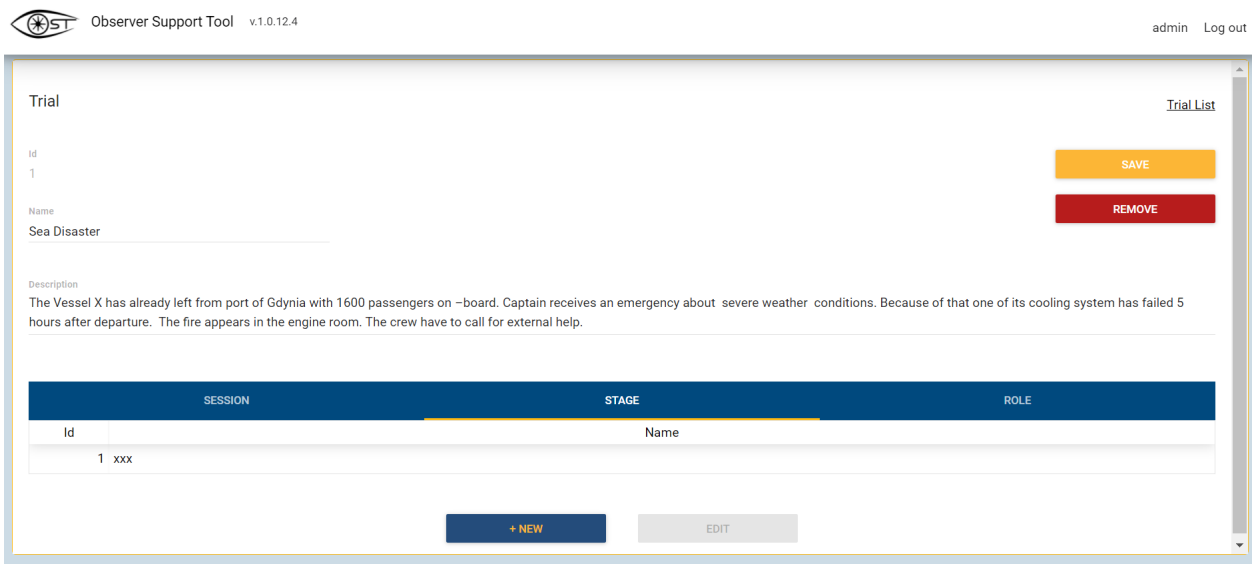

Figure 5. Trial detail view

Stage details

After choosing stage from trial details and clicking edit or after double clicking the left mouse button on stage from trial details, the system redirects to stage details. There are basic details about the stage, which can be edited. Also, the stage can be deleted by the admin. Question set list of chosen stage is below basic stage details. You can redirect to trial by clicking the trial name above save button.

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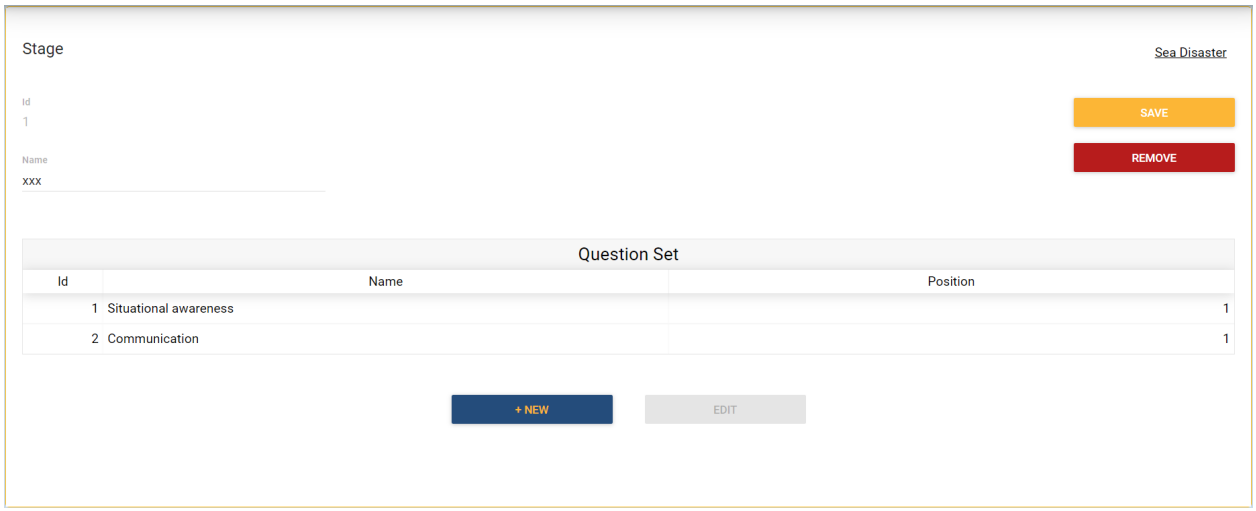

Figure 6. Stage detail view

Question set details

In the question set details windows admin can change name or description also list of questions of this question set is shown. Users can redirect to the chosen question by double clicking on question or clicking question and edit. You can redirect to trial or stage by clicking the trial name or stage name above the save button.

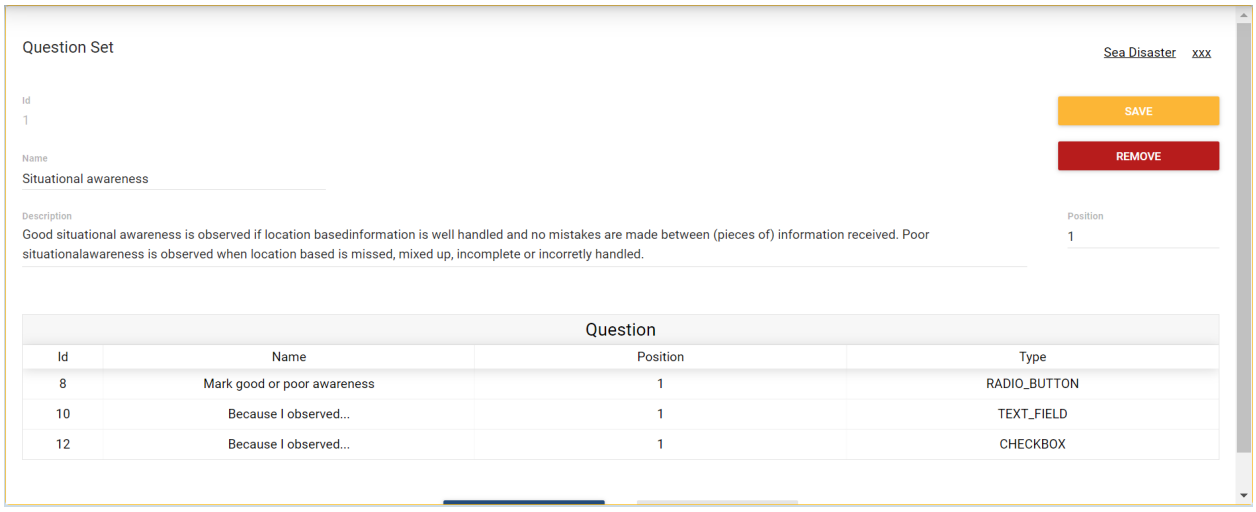

Figure 7. Question set detail view

Question details

In question details, the admin can modify the question, description or type of answer. Also admin can add new options of choice, show them or remove. In question details parameters like commented and required can be set. You can redirect to trial, stage or question set by clicking trial name, stage name or question set name above the save button.

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Question options can be added after saving the question.

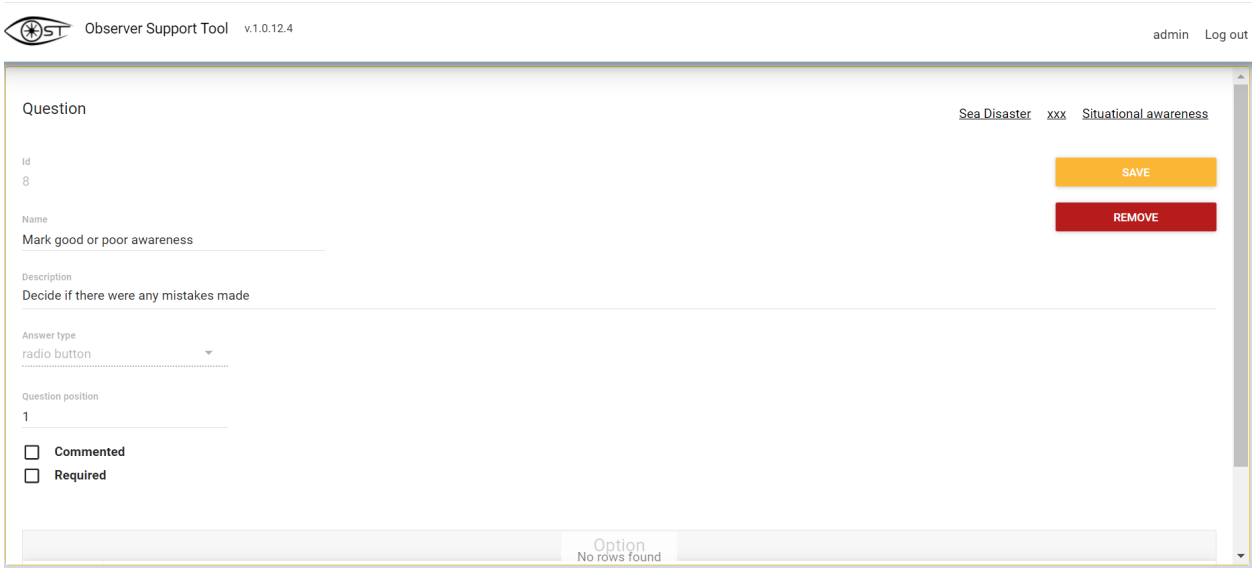
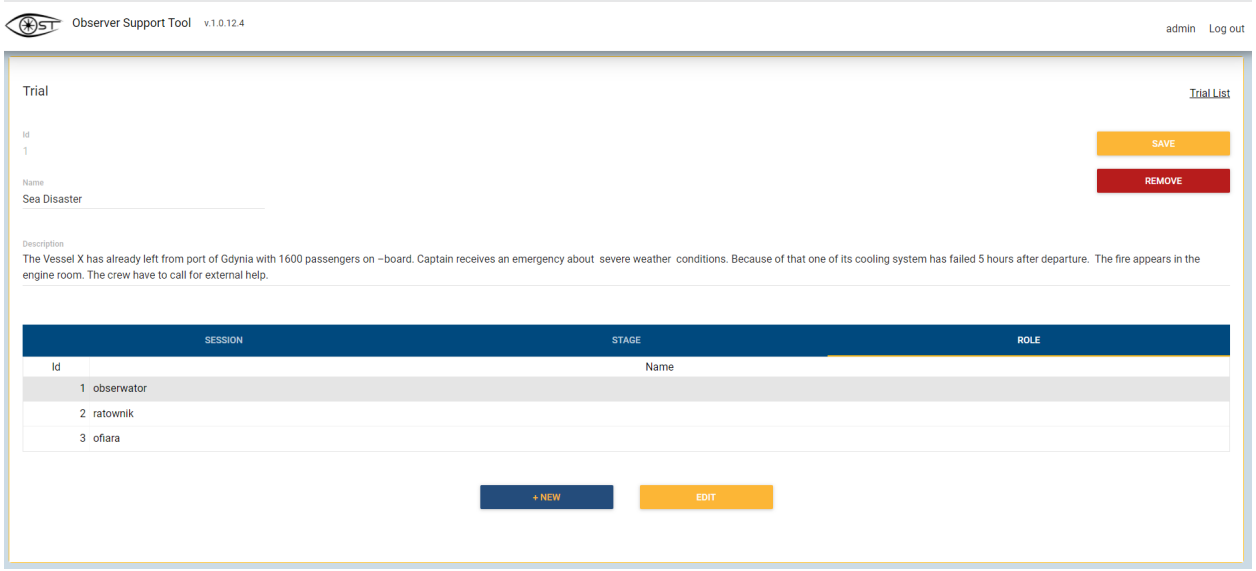


Figure 8. Question detail view

Creating roles and assign it to question set

Role details

After choosing the role from trial details and clicking edit or after double clicking the left mouse button on role from trial details, the system redirects to role details. There are basic details about role, which can be edited. Also in role details we can manage user assignment to role and question set, which should be shown, when the right stage is chosen. You can redirect to trial by clicking the trial name above save button.



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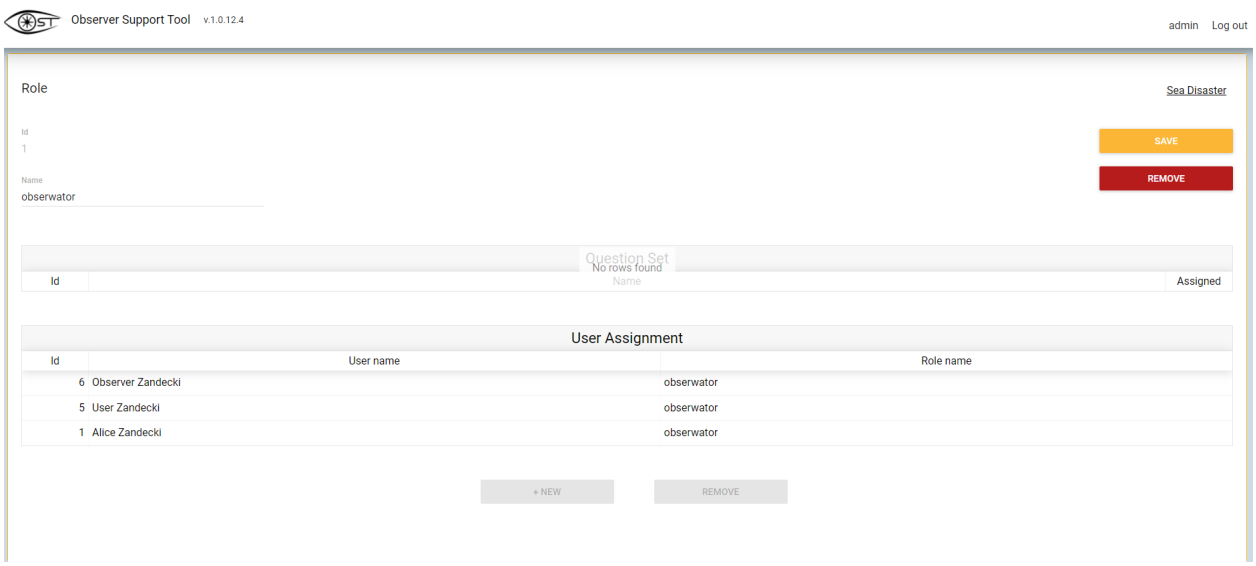

Figure 9. Role detail view

Managing users and sessions

Session details

New session can be created by clicking +New, when the session window in trial detail is active. After choosing a session from trial details and clicking edit or after double clicking the left mouse button on session from trial details, system redirects to session details. There are basic details about the session, which can be edited or deleted, also data (answer of observers, date of trial, date of server etc) from the session can be downloaded. In the user role table admin can assign role to user in this session. User can answer on question only if session is active.

Session tracking details

After clicking the session from the launch window, the system redirects to session tracking detail. In session tracking details admin can control active sessions. There are information, which trial is currently used, if the session is controlled by testbed or manually (manual column) and which stage is active at this moment.

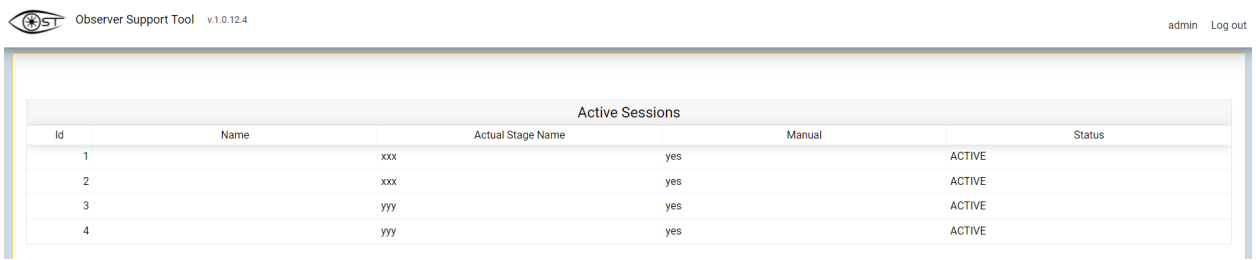

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Figure 10. Session details view

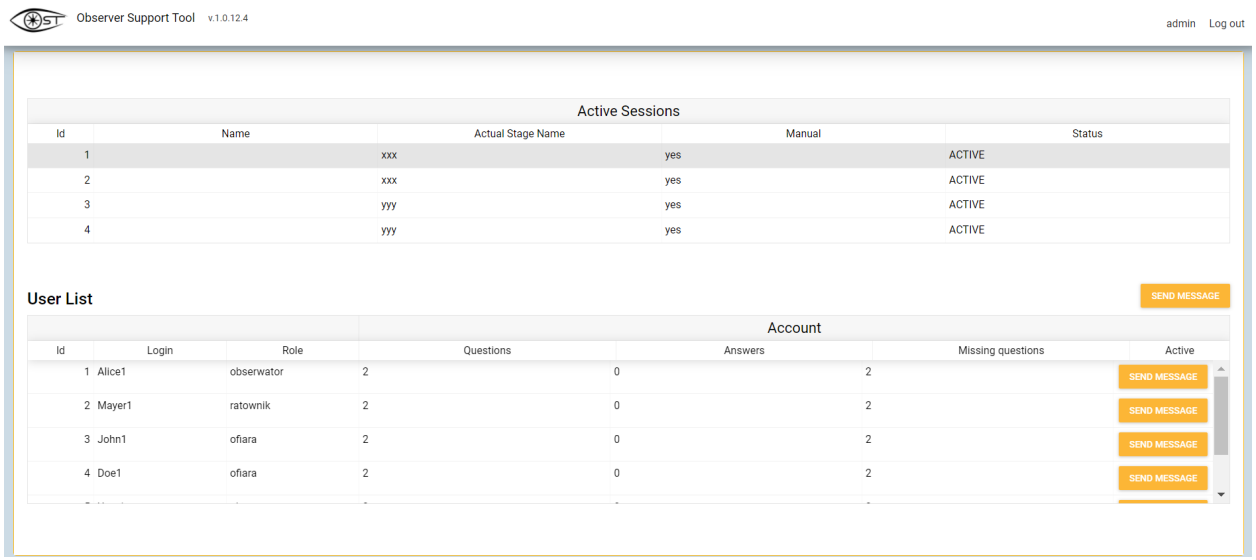

Figure 11. Session tracking details view

User list

If we choose “USERS” in the launch window we will be redirected to the User list. There is some basic data about users there.

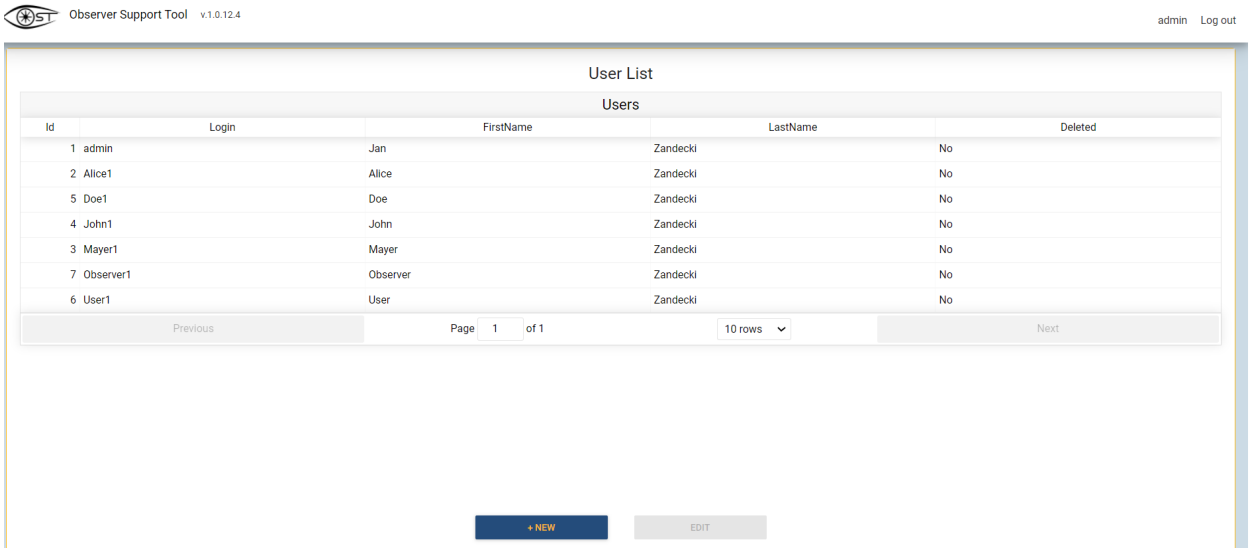

Figure 12. User list view

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User details

After choosing a user from the user list and clicking edit or after double clicking the left mouse button on the user from the user list, the system redirects to user details. There are basic details about users and data about sessions, stages and roles in trial.
Also user can be edited and removed there.
If we want to add a new user, we should click +New on User list. Then the system redirects to user detail and after filling data, the system creates a new user. All fields are required.

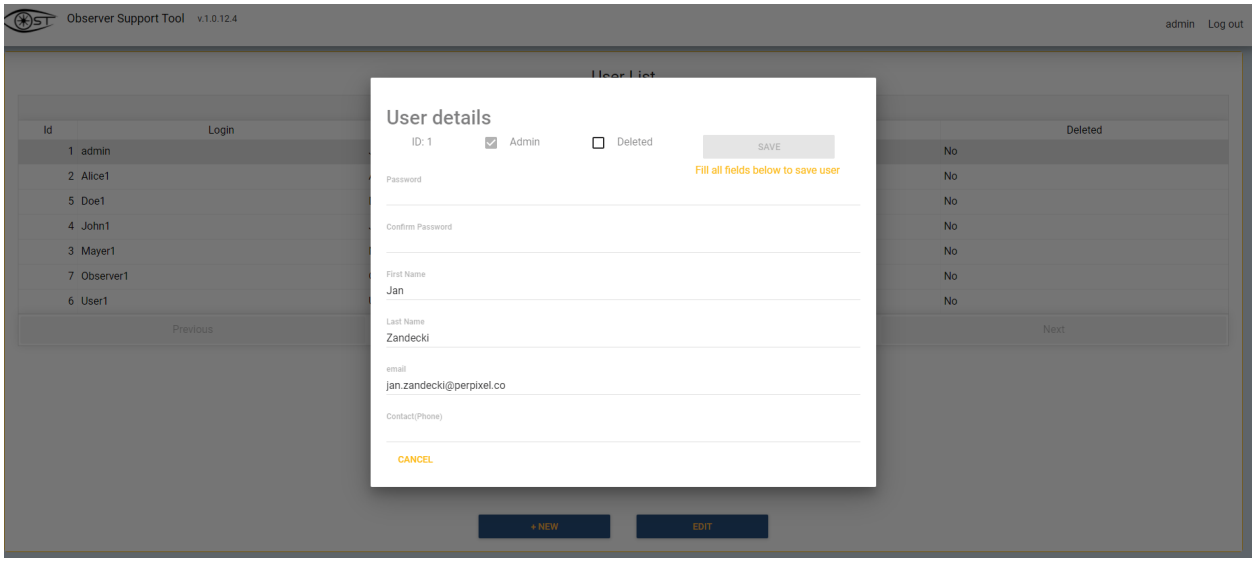

Figure 13. User details view

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Observer

Observer can login to the server, when admin sends him his login and password. After it he can login to the system.

Question Set view

Observers after login to the system can choose question set from the question set list from active sessions (if question sets, during present stage in active session, are available to logged user).

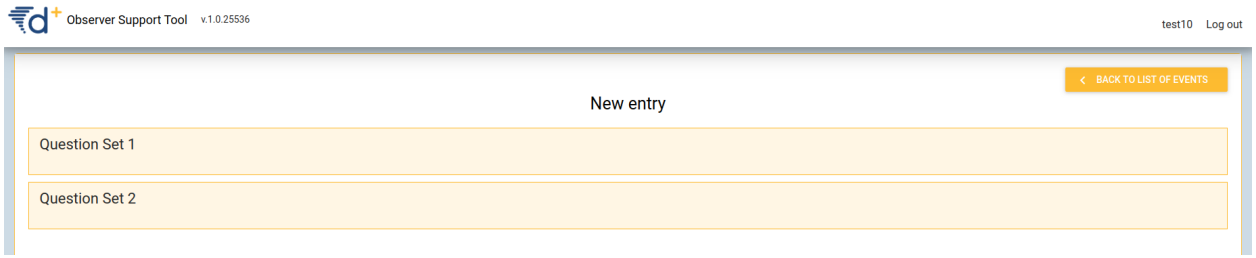

Figure 14. Question set view

Question view

Observer after choosing the question set is redirected to questions from the chosen question set. Observers can answer questions from this question set by writing text (textfield) or choosing options (checkbox, radiobutton, slider).

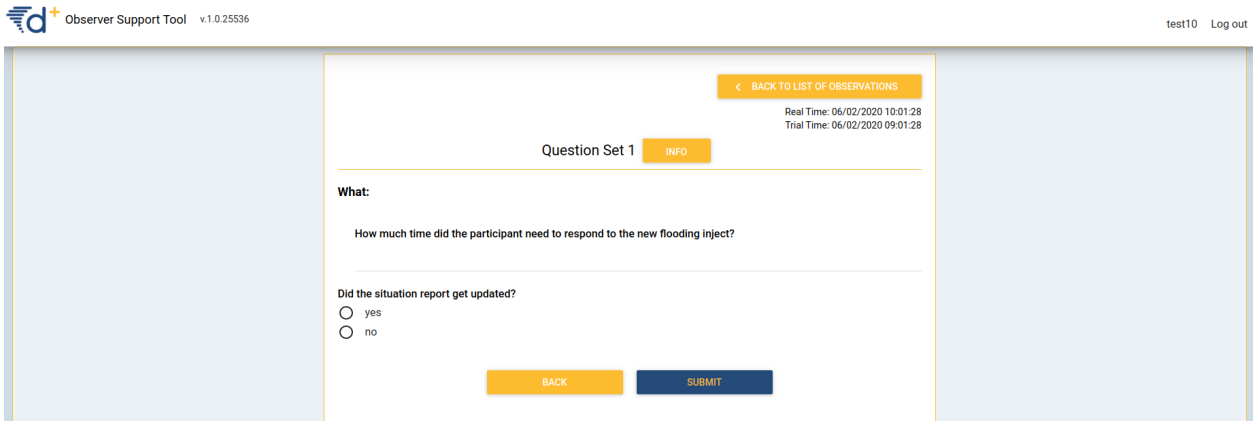

Figure 15. Question view

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Event view

Event view is a page, where an observer can look at a set of his/her comment. After choosing question set observer can comment his answer, view his answer or delete his answer.

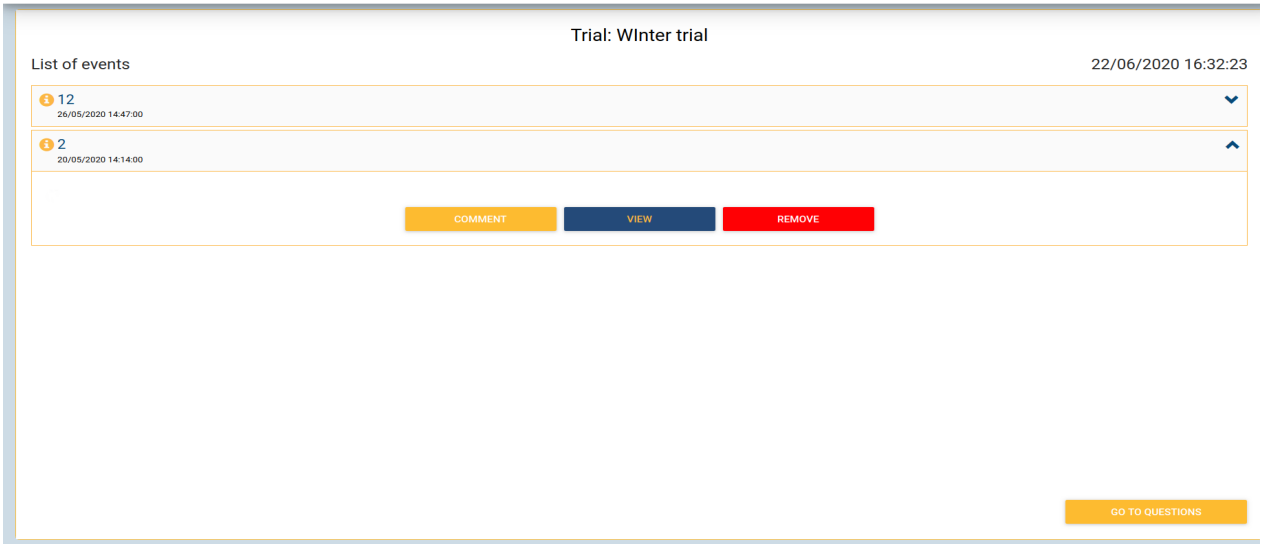

Figure 16. Event view

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Deployment Manual

1. Download docker from https://www.docker.com/.
2. Create file and name it *docker-compose.yml*
3. Open this file and paste to this file text below:

```
version: '3'
services:
 zookeeper:
   image: confluentinc/cp-zookeeper:latest
   hostname: zookeeper
   ports:
     - "3500:3500"
   environment:
     ZOOKEEPER_CLIENT_PORT: 3500
     ZOOKEEPER_TICK_TIME: 2000
 broker:
   image: confluentinc/cp-kafka:latest
   hostname: broker
   depends_on:
     - zookeeper
   ports:
     - "3501:3501"
   environment:
     KAFKA_BROKER_ID: 1
     KAFKA_ZOOKEEPER_CONNECT: 'zookeeper:3500'
     KAFKA_ADVERTISED_LISTENERS: 'EXTERNAL://localhost:3501,PLAINTEXT://broker:9092'
     KAFKA_LISTENER_SECURITY_PROTOCOL_MAP:
'EXTERNAL:PLAINTEXT,PLAINTEXT:PLAINTEXT'
     KAFKA_LISTENERS: 'EXTERNAL://0.0.0.0:3501,PLAINTEXT://0.0.0.0:9092'
     KAFKA_OFFSETS_TOPIC_REPLICATION_FACTOR: 1
     KAFKA_DEFAULT_REPLICATION_FACTOR: 1
     KAFKA_MESSAGE_MAX_BYTES: 100000000
     KAFKA_REPLICA_FETCH_MAX_BYTES: 100000000
 schema_registry:
   image: confluentinc/cp-schema-registry:latest
   hostname: schema_registry
   depends_on:
     - zookeeper
     - broker
   ports:
     - "3502:3502"
   environment:
     SCHEMA_REGISTRY_HOST_NAME: schema_registry
     SCHEMA_REGISTRY_LISTENERS: 'http://0.0.0.0:3502'
     SCHEMA_REGISTRY_KAFKASTORE_CONNECTION_URL: 'zookeeper:3500'
     SCHEMA_REGISTRY_KAFKASTORE_BOOTSTRAP_SERVERS: 'PLAINTEXT://broker:9092'

 kafka_rest:
```

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```
  image: confluentinc/cp-kafka-rest:latest
  hostname: kafka_rest
  depends_on:
    - zookeeper
    - schema_registry
    - broker
  ports:
    - "8082:8082"
  environment:
    KAFKA_REST_HOST_NAME: kafka_rest
    KAFKA_REST_BOOTSTRAP_SERVERS: 'PLAINTEXT://broker:9092'
    KAFKA_REST_ZOOKEEPER_CONNECT: 'zookeeper:3500'
    KAFKA_REST_LISTENERS: 'http://0.0.0.0:8082'
    KAFKA_REST_SCHEMA_REGISTRY_URL: 'http://schema_registry:3502'
    KAFKA_CONSUMER_REQUEST_TIMEOUT_MS: 30000
    KAFKA_REST_ACCESS_CONTROL_ALLOW_METHODS:
'GET,POST,PUT,DELETE,OPTIONS'
    KAFKA_REST_ACCESS_CONTROL_ALLOW_ORIGIN: '*'
kafka_topics_ui:
  image: landoop/kafka-topics-ui:latest
  hostname: kafka_topics_ui
  depends_on:
    - kafka_rest
  ports:
    - "3600:8000"
  environment:
    KAFKA_REST_PROXY_URL: 'http://kafka_rest:8082'
    PROXY: 'true'

 kafka_schema_registry_ui:
  image: landoop/schema-registry-ui:latest
  hostname: kafka_schema_registry_ui
  depends_on:
    - schema_registry
  ports:
    - "3601:8000"
  environment:
    SCHEMAREGISTRY_URL: 'http://schema_registry:3502'
    PROXY: 'true'

 postgres:
  image: postgres:9.6
  hostname: postgres
  environment:
    POSTGRES_USER: postgres
    POSTGRES_PASSWORD: postgres
    POSTGRES_DB: TRIAL_ADMIN
  volumes:
     - postgres-data:/var/lib/postgresql/data
#    restart: unless-stopped
```

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```
admintool:
  image: drivereu/test-bed-admin:latest
  depends_on:
    - postgres
    - broker
    - schema_registry
  ports:
    - "8090:8090"
  volumes:
    - ./admintool-config/gateways.json:/opt/application/config/gateways.json
    - ./admintool-config/solutions.json:/opt/application/config/solutions.json
    - ./admintool-config/topics.json:/opt/application/config/topics.json
    - ./admintool-config/standards.json:/opt/application/config/standards.json
    - ./admintool-config/testbed-solutions.json:/opt/application/config/testbed-solutions.json
    - ./admintool-config/testbed-topics.json:/opt/application/config/testbed-topics.json
    - ./admintool-config/configurations.json:/opt/application/config/configurations.json
  environment:
    KAFKA_BROKER_URL: broker:9092
    SCHEMA_REGISTRY_URL: http://schema_registry:3502
    zookeeper_host: zookeeper
    zookeeper_port: 3500
    schema_registry_url: http://schema_registry:3502
    testbed_secure_mode: 'DEVELOP'
    testbed_init_auto: 'false'
    management_ca_cert_path: http://localhost:9090
    cert_handler_url: https://localhost:8443
    cert_pem_handler_url: https://localhost:8443
    security_rest_path_group: https://localhost:9443
    security_rest_path_topic: https://localhost:9443

afteractionreview:
  image: drivereu/after-action-review:latest
  depends_on:
    - postgres
    - broker
    - schema_registry
  ports:
    - "8095:8095"
  environment:
    KAFKA_BROKER_URL: broker:9092
    SCHEMA_REGISTRY_URL: http://schema_registry:3502
    zookeeper_host: zookeeper
    zookeeper_port: 3500
    schema_registry_url: http://schema_registry:3502

pgadmin:
  image: fenglc/pgadmin4
  depends_on:
    - postgres
```

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```
  ports:
    - "5050:5050"
#   restart: unless-stopped

time_service:
  image: drivereu/test-bed-time-service:latest
  depends_on:
    - broker
    - schema_registry
  ports:
    - "8100:8100"
  environment:
    KAFKA_BROKER_URL: broker:9092
    SCHEMA_REGISTRY_URL: http://schema_registry:3502
    AUTO_REGISTER_SCHEMAS: 'true'

large_file_service:
  image: drivereu/large-file-service:latest
  ports:
    - "9090:9090"
  environment:
    HOST: localhost
    PORT: 9090

# wms_service:
#   image: drivereu/test-bed-wms-service:1.0.10
#   hostname: wmsservice
#   environment:
#     URL: http://localhost/wms/
#     WMS_PORT: 5101
#     WMS_HOST: wmsservice
#     WMS_FOLDER: /server/data
#     WMS_EXTERNAL_PORT: 5101
#     WMS_EXTERNAL_HOST: http://localhost/wms/
#     WMS_EXTERNAL_ADDRESS: http://localhost/wms/
#     WMS_KAFKA_HOST: broker:9092
#     WMS_SCHEMA_REGISTRY: http://schema_registry:3501
#     WMS_CORS_ORIGIN: https://oefen-veiligheidsregio.lcms.nl
#     WMS_CORS_HEADERS: 'authorization, content-type'
#   ports:
#     - 8101:5101
#   depends_on:
#     - broker
#     - schema_registry

trial_management_tool:
  image: drivereu/trial-management-tool:latest
  depends_on:
    - broker
    - schema_registry
```

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```
  ports:
    - '3210:3210'
  environment:
    CLIENT_ID: TB-TrialMgmt
    KAFKA_HOST: broker:9092
    SCHEMA_REGISTRY: http://schema_registry:3502
    TRIAL_MANAGER_SERVER_PORT: 3210
    PRODUCE:
system_request_change_of_trial_stage,system_tm_phase_message,system_tm_role_player,syste
m_tm_session_mgmt
    SSL: 'false'
    SSL_PFX: certs/TB-TrialMgmt.p12
    SSL_PASSPHRASE: changeit
    SSL_CA: certs/test-ca.pem
  volumes:
    - trial-data:/app/trials

 ost_db:
  image:  drivereu/ost_database:1.0.29143
  ports:
   - "5437:5432"
  volumes:- database-OST:/var/lib/postgresql/data
#    restart: always

 ost_web:
  image: drivereu/ost_frontend:1.0.29143
  links:
  - ost_api
  ports:
  - "127.0.0.1:85:80"
  - "127.0.0.1:445:443"
#       restart: always

 ost_api:
  image: drivereu/ost_backend:1.0.29143
  links:
  - ost_db
  ports:
  - "8080:8080"
#    restart: always

 silent-producer:
  image: silent-producer
  depends_on:
    - broker
    - schema_registry
  environment:
    KAFKA_HOST: broker:9092
    SCHEMA_REGISTRY: http://schema_registry:3502
```

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```
    PRODUCE_TOPICS:
simulation_request_unittransport,simulation_request_startinject,simulation_entity_item,sumo_Affec
tedArea,standard_cap,system_timing,system_topic_access_invite
volumes:
 database-OST:
 postgres-data:
 trial-data:
```

4. Go back to the required folder.
5. If you are windows user
   5.1. Press **Shift + right click** mouse button anywhere on the folder window (this folder must have file docker-compose.yml).
   5.2. Choose open powershell
   5.3. Write in terminal **docker-compose up** and press enter
6. If you are linux/ubuntu user
   6.1. Press the right **click** mouse button anywhere on the folder window (this folder must have file docker-compose.yml).
   6.2. Choose open terminal
   6.3. Write there **docker-compose up** and press enter
7. Congratulations, your application has just been turned on.

API description

1. Get /api/answers

Api lets us see the answer of trial session including some text inside.
@RequestParam("trialsession_id") long trialSessionId,
@RequestParam("search") String text
Produces Json
TrialUserDTO.ListItem user
String Name
String observationTypeName
String observationTypeDescription

2. Get /api/answers/csv-file

Api lets us load a CSV file with the answers of the session.
@RequestParam(value = "trialsession_id") long trialSessionId
Return null

3. Delete /api/answers/{answer_id:\\d+}/remove

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Api lets us delete answers.
@PathVariable(value = "answer_id") long answerId,
@RequestParam("comment") String comment

Return null

4. GET /api/answers-events

Api lets us see all answers and events in the session of the current user.
@RequestParam(value = "trialsession_id") long trialSessionId
Produces JSON
long id;
long observationTypeId;
String name;
String description;
ZonedDateTime time;
ZonedDateTime trialTime;
String type;

5. Get /api/event/search

Api returns a list of events in session.
@RequestParam(value = "trialsession_id",) long trialSessionId,Pageable pageable
Produces JSON
public String firstName;
public String lastName;
public String trialRoleName;

6. GET /api/observationtypes

Api returns list of question
sets
@RequestParam("trialsession_id") Long trialSessionId
Long answersId
String name
String description

7. GET /api/observationtypes/form

Api returns roles, which can answer on question set.
@RequestParam("observationtype_id") Long observationTypeId,
@RequestParam("trialsession_id") Long trialSessionId
Return json
List<TrialRoleDTO.ListItem> roles
JsonNode jsonSchema,
where in roles are two variables:

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long id,
String name

8. /api/observationtypes/admin/addNewQuestionSet

@RequestBody

String name
String description
long trailStageId;
long trailId;
boolean multiplicity;
boolean withUsers;
int position;
List<AdminQuestionDTO.ListItem> questions = new ArrayList<>();
Return response with http status and json
long id
String name
String description
long trailStageId;
long trailId;
boolean multiplicity;
boolean withUsers;
int position;
List<AdminQuestionDTO.ListItem> questions = new ArrayList<>();

9. GET /api/observationtypes/admin/getNewQuestionSet

Api lets us get a question set from the chosen stage.
@RequestParam(value = "id") long id
Return response with http status and json
long id
String name
String description
long trailStageId;
long trailId;
boolean multiplicity;
boolean withUsers;
int position;
List<AdminQuestionDTO.ListItem> questions = new ArrayList<>();

10. PUT /api/observationtypes/admin/updateQuestionSet

Api lets the admin update the question set.
@RequestBody
String name

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String description
long trailStageId;
long trailId;
boolean multiplicity;
boolean withUsers;
int position;
List<AdminQuestionDTO.ListItem> questions = new ArrayList<>();
Return response with http status and json
long id
String name
String description
long trailStageId;
long trailId;
boolean multiplicity;
boolean withUsers;
int position;
List<AdminQuestionDTO.ListItem> questions = new ArrayList<>();

11. DELETE /api/observationtypes/admin/deleteQuestionSet

Api lets the admin delete the question set from a stage.
@RequestParam(value = "id") long id
Return response with http status and string

12. GET /api/questions-answers

Api returns data about answers and questions.
@RequestParam(value = "answer_id") long answerId
@Produces JSON
long answerId
String name (of observatory type)
String description (of observatory type)
String time
String trialTime
JsonNode questionSchema
JsonNode formData
JsonNode trialRoles

13. POST /api/questions-answers/{answer_id:\d+}/comment

Api lets the observer add comments to answer.
@PathVariable(value = "answer_id") long answerId,
@RequestParam("comment") String comment
Return null

14. Get /api/trial-time

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Api let us know server time.
Return String with date

15. Get /api/time-elapsed

Api let us know local time.
Return String with date

16. GET /api/role

Api shows all roles in chosen trial.
Return list of roles with:
long id
String name
String roleType

17. GET api/stages

Api shows all stages
@RequestParam(value = "trial_id") long trialId, Pageable pageable
Return list of stages with:
long trialId
String name
LocalDateTime simulationTime

18. POST api/stages/admin/addNewTrialStage

Api let us add a stage to the chosen trial.
@RequestBody(
long id
long trialId
String name)
Return response with http request status and in body are:
Long trialId
Long id
String name

19. GET api/stages/admin/trialStageWithQuestions

Api returns stage with id
@RequestParam(value = "id") long id
Return response with http request status and in body are:
Long trialId
Long id
String name
LocalDateTime simulationTime;
List<AdminObservationTypeDTO.ListItem> questions = new ArrayList<>()

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20. DELETE api/stages/admin/deleteTrialStage

Api deletes a trial's stage.
@RequestParam(value = "id") long id
Return response with a http request status and a String "Trial Stage id =" + id + " is deleted".

21. PUT api/stages/admin/updateTrialStage

Api update a trial's stage.
long id
long trialId
String name
Return
long id
long trialId
String name

22. GET /api/role

Api shows all roles in the chosen trial.
Return list of roles with:
long id
String name
String roleType

23. GET /api/trialsessions/{trialsession_id:\d+}

Api shows data about the chosen trial session.
@PathVariable(value = "trialsession_id") long answerId
Return json with:
long trialId
String trialName
String trialDescription
String lastTrialStage

24. GET /api/trialsessions

Api shows a list of trial sessions.
Api shows all trials, which are available for logged users.
Return list of trials with:
long trialId
String trialName
String trialDescription
String lastTrialStage

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25. GET /api/trialsessions/active

Api shows list of active trial session available from logged user.
Return list of trials:
long trialId
String trialName
String trialDescription
String lastTrialStage
long initId
Boolean initHasAnswer
String name

26. PUT /api/trialsessions/{trialsession_id:\d+}/changeStatus

Api let us change the status of the trial session.
@PathVariable(value = "trialsession_id") long trialSessionId,
@RequestParam(value = "status") String status
Return null

27. GET /api/trialsessions/manual/{trialsession_id}/{is_manual}

Api let us choose if stages of the trial will be changed manually or automatically.
@PathVariable long trialsession_id,
@PathVariable boolean is_manual
Return String
"current stage in session " +trialSession.getId() + " is: "
+trialSession.getLastTrialStage().getId() + "/"+trialSession.getLastTrialStage().getName()
+ " manual mode is " +isManual

28. PUT /api/trialsessions

Api let change stage of trial session
@PathVariable(value = "id") Long trialSessionId,
@RequestBody @Validated TrialStageDTO.MinimalItem minimalItem,
Where minimalItem is json {id:value}
Return json
long trialId;
Long lastTrialStageId;
LocalDateTime startTime;
LocalDateTime pausedTime;

29. POST /api/trialsessionscreateNewSessionFile

Api lets administrators create new session users and create files with their usernames and passwords.
@RequestBody NewSessionForm newSessionForm,
Where newSessionForm is a json

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{long trialId
String initialStage
String prefix
String status
List<UserForm> users}, where
UserForm is a json
{String email
List<String> role}

Return null

30. GET /api/trialsessions/trials

Api shows all trails, whose current user is a session manager.
Return Map(Id : Long, name : String)

31. POST /api/trialsessionsnewSessionValues

Api returns data about the trial.
@RequestParam(value = "trial_id") long trialId
Return trial node, in trial node we can find
trialStages, trialRoles, authUsers

32. POST /api/trialsession/admin/addNewUserRoleSession

Api lets us add a user to the role in the trial's session.
@RequestBody
long trialUserId
long trialRoleId
long trialSessionId

Return adminUserRoleDTO

33. DELETE /admin/deleteUserRoleSession

Api lets us delete users from the trial's session.
@RequestParam(value = "trialRoleId") long trialRoleId,
@RequestParam(value = "trialUserId") long trialUserId,
@RequestParam(value = "trialSessionId") long trialSessionId

Return Response with http status and string “Trial user session is deleted”

34. GET /api/ostAllQuestionsForMobile

Api returns data about questions set.
Return List<ObservationTypeDTO.SchemaItem>

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List<Long> answersId
String name
String description
long id
List<TrialRoleDTO.ListItem> roles
JsonNode jsonSchema, where jsonSchema is a schema of all questions in the question set.

35. GET api/ostTrialId

Api returns id of Trial.
Return Long

36. GET api/ostTrialSessionId

Api returns id of Trial Session.
Return Long

37. GET api/ostTrialStageId

Api returns id of Trial Stage.
Return Long

38. POST api/admin/addNewTrial

Api let user create trial with name and default parameters

private long trialIdString
trialName
String trialDescription
String lastTrialStage
private Boolean archived

Return json

long trialIdString
trialName
String trialDescription
String lastTrialStage
Boolean archived

39. POST api/admin/updateTrial

Api let edit trial.
Request Body AdminTrialDTO.ListItem
long trialId;String trialName
String trialDescription
String lastTrialStage

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Boolean archived

Return json
long trialId
String trialName
String trialDescription
String lastTrialStage
Boolean archived

40. GET api/ostTrail

Api returns active Sessions and their actual stages.
RequestParam(value = "trial_name") String trialName
Return String of actual sessions and stages.

41. GET api/stages

Api returns stages of the chosen session.
@RequestParam(value = "trial_id") long trialId, Pageable pageable)
Return PageDTO<TrialStageDTO.ListItem>.
In the json are:
long trialId
String name
LocalDateTime simulationTime,
long id.

42. GET api/user

Api shows users in the chosen trial session.
RequestParam(value = "trialsession_id") long trialSessionId, Pageable pageable
Return PageDTO<TrialUserDTO.ListItem>
In the json are:
long id
String firstName
String lastName

43. GET api/user/version

Api shows the actual version of the application.
Return String

44. POST api/questions/admin/addNewQuestion

Api let add question to question set.

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@RequestBody
String name
String description
long observationTypeId
AnswerType answerType
int position
String jsonSchema
boolean commented

Return response with http status and json
long id;
String name;
String description;
long observationTypeId;
AnswerType answerType
int position
String jsonSchema
boolean commented

45. GET api/questions/admin/getFullQuestion

Api let us get details about the question.

@RequestParam(value = "id") long id

Return response with http status and json
long id;
String name;
String description;
long observationTypeId;
AnswerType answerType
int position
String jsonSchema
boolean commented

46. DELETE api/questions/admin/deleteQuestion

Api let us delete question from the question set.

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(@RequestParam(value = "id") long id)
Return response with http status and string
"Question id =" + id + " is deleted"

47. PUT api/questions/admin/updateQuestion

Api let us update the question.

@RequestBody
String name
String description
long observationTypeId
AnswerType answerType
int position
String jsonSchema
boolean commented

Return response with http status and json
long id;
String name;
String description;
long observationTypeId;
AnswerType answerType
int position
String jsonSchema
boolean commented

48. /api/user

Api let user see a list of users in trial session.
@RequestParam(value = "trialsession_id") long trialSessionId, Pageable pageable
Return DTO with
long id;
String login;

49. /api/user/version

Api returns version
Return application version

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Database

This database schema is used in OST system.

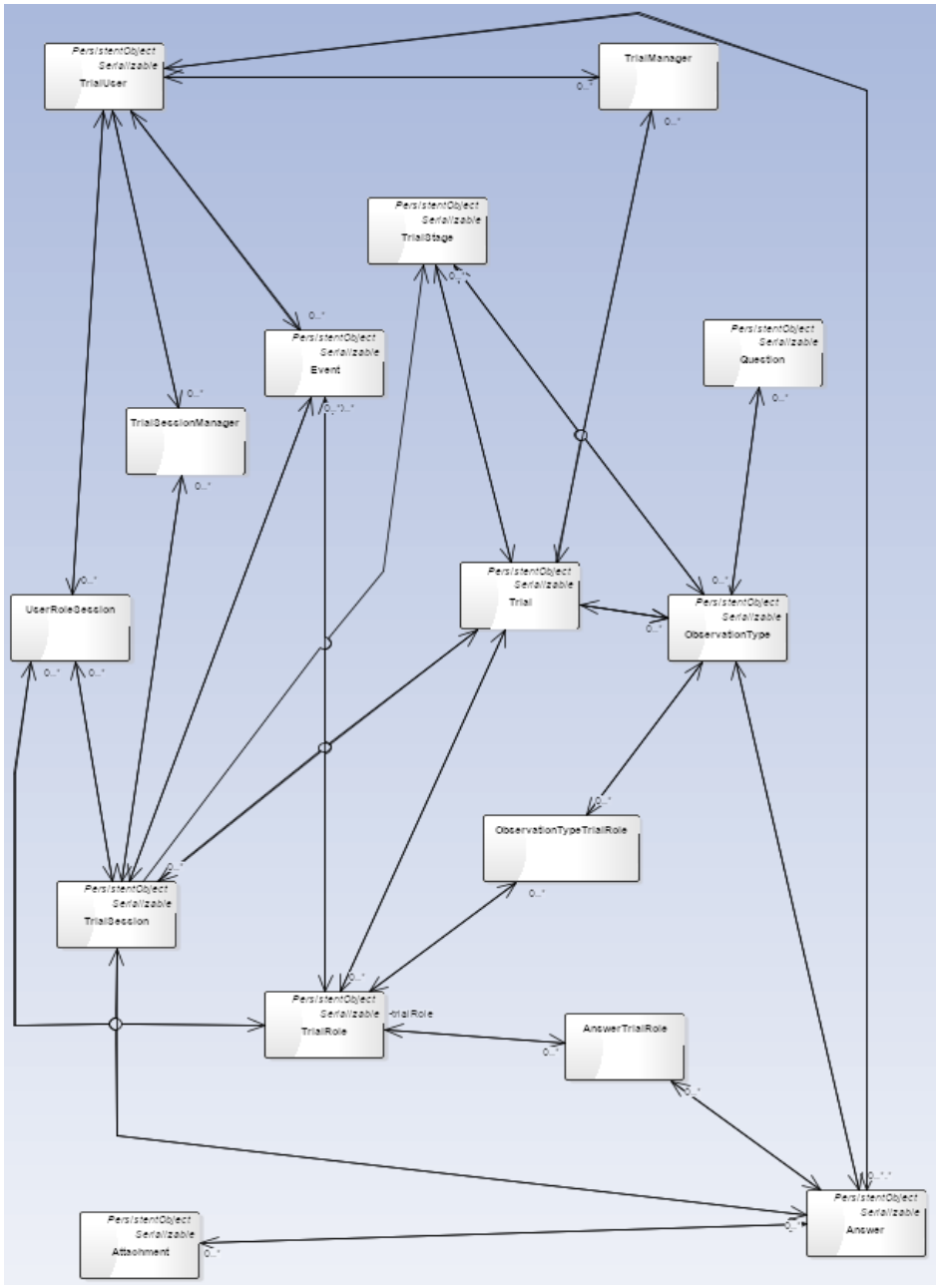

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Figure 17. Schema of database

In this model ObservationType=Question Set.

Environmental variable

Table 1 Table of example environmental variables.

Type of environmental variable	Example Value
KEYCLOAK_HOST	127.0.0.1
KEYCLOAK_PORT	8070
KEYCLOAK_REALM	driver2
KEYCLOAK_RESOURCE	ost_app
DRIVER_KEYCLOAK_ADMIN_CLIENT	ost_admin
DRIVER_KEYCLOAK_ADMIN_SECRET	7b170e34-327d-4e1c-9a64-125456aa4ffe
KEYCLOAK_PROXY_UR	http://192.168.1.21:8070/auth
DRIVER_IS_TESTBED_ON	false
OST_DB_HOST	127.0.0.1
OST_DB_PORT	8080
OST_DB_NAME	ost
OST_DB_USER	ost_user
OST_DB_USER_PASS	ost_user_pass

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