**SOURCE™**

Software Outreach and Redefinition to Collect E-data Through MOTUS

**User Guide of MOTUS**

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Note: this manual will be updated soon with more information and screenshots. The next version will be made available online.
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(hbits.3) User Guide of MOTUS

| Deliverable | To accommodate the use of MOTUS a respondent guide, and a researcher guide will be developed. |

For the respondent guide we have set up a generic guideline. For the researcher guide the guideline is based upon the different MOTUS-builders in the back-office.

1 Respondent guide of MOTUS (front-office)

Click here to go to the guidelines for the app for smartphone and tablet.

1.1 Start of the time diary

The first time you open the web app, you will see an empty page with the options to change the language, to sign out, and to start registering a new (first) activity.

Click on ENGLISH to change the language. Click on LOGOUT to sign out.

Click on NEW to start your time diary and/or to add a new activity to your time diary.

For every new activity, you register when it took place, what you did, if you did anything else at the same time, where it took place or what mode of transport you used, with whom you were, and how you experienced the activity.
1.2 When to start the time diary

Every new activity is registered by clicking on NEW. The very first activity starts at 4 am. It is not possible to change the start time of your first activity. You can change the end time in function of the duration of your first activity.

Overview of start time and end time when you start the time diary.

You cannot change the start time of the first activity.
You can change the end time of the first activity by clicking on the time display.

For every next activity that you register, you can adjust the start time and end time in a similar way. Your time diary always suggest the end time of the previous activity as the start time of the next activity. You can change the start time. If this causes any time gaps in your registration, you will receive a notification (see further).

Experienced users can use the time tracker. The moment you activate the time tracker serves as the start time of your activity. The moment you turn off the time tracker serves as the end time of your activity.

Use the time tracker to register activities that are ongoing.
1.3 **Primary activity**

Click on next when you have set the start time and end time and/or activated the time tracker. You will enter the screen that allows you to select what you did. There are two ways to do this. You can use the tree structure to select your activity. First, choose a main category (e.g. *Paid work*). Next, choose a subcategory (e.g. *Paid work (all paid work)*). Finally, choose the detailed activity.

Choose your activity using the tree structure.

You can also use the search function to find your activity by typing in a keyword in the search field *Search category*. Based on your keyword, you will get suggestions from which you can select your activity. Once selected, you can check the box Add to favorites below the list. This saves the activity in your favorites and makes it easier to use again. More experienced users can also search on the activity codes. For example, if you search on "400" you will find the activity 400. *Sleep at night/daytime rest*.

Type a keyword to search for your activity.
Select your activity from the suggestions and add to your favourites.
Switch from List to Favourites to see select from your favourite activities.
1.4 Secondary activity

After selecting your main activity, you will be asked to select a secondary activity. A secondary activity is an activity that took place at the same time as your main activity. For example, eating (main activity) while watching television (secondary activity). Select your secondary activity in a similar way as your main activity.

If you did not do anything else, select *I did not do anything else*.

Select your secondary activity. If you did not do anything else, select *I did not do anything else*.
1.5 **Where and with whom**

After every activity, you will be asked to register where and with whom you were. The only exception is when you travelled. In that case you will be asked to register your mode of transport and with whom you were. You can only choose one option for location and mode of transport. You can choose multiple options when registering the presence of others (unless you were alone at the moment of the activity).

If the context changes (e.g. where, with whom, or mode of transport), we ask you to register this as a new activity.

### ADDITIONAL QUESTIONS

**Where were you?**

- At home
- At workplace or school
- At a restaurant, cafe, bar, pub
- In a hotel, guesthouse, camping site, hostel...
- Unknown location (not travelling)
- At second home, weekend home, holiday apartment
- At other people's home
- In a shop, shopping centre, market, city centre...
- Other known location (beach, pool, street...)

The additional questions ask you to register where the activity took place (see image), with whom you were, or which mode of transport you used when registering travel.
1.6 Other context

For some activities you will be asked to answer how much you enjoyed the activity or how stressful the activity was because of the corona crisis.

Example of additional question gauging your enjoyment of the activity.

1.7 Your timeline

After registering start time and end time, main and secondary activity, and activity context, click on SUBMIT. Your activity will appear in your timeline.

After clicking on SUBMIT, your activity will appear in your timeline.
You can see the details of your activity when clicking on the arrow >. This overview also allows you to change any of the details by clicking on the respective elements. You can delete your activity by clicking on the trash icon.

**SELECT A START & END TIME**

<table>
<thead>
<tr>
<th>BEGIN</th>
<th>Wednesday, 18 March 2020</th>
<th>04:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>END</td>
<td>Wednesday, 18 March 2020</td>
<td>07:05</td>
</tr>
</tbody>
</table>

**Duration:** 3 Hours 5 Minutes

**ACTIVITIES**

- **Primary activity**
  400. Sleep at night/daytime rest

- **Secondary activity**
  9999. I did not do anything else

**ADDITIONAL QUESTIONS**

- **Where were you?**
  At home

Overview of your activity.

You can register a new activity by clicking on NEW.
1.8  Your final activity

The app will automatically close your time diary when you completed the final day of your registration period. You can return to your time log by clicking on RETURN TO TIMELINE. Finalise your time diary by clicking on SEND.

The final screen of your time diary. Click on SEND to finalize.
1.9 **The app helps you**

When registering your activities, notifications may appear on your screen. These notifications help you by recording your time diary. Notifications might point out to overlapping start times and/or end times, registering activities in the future, time gaps in your timeline, or missing answers on the activity context questions. These notifications will disappear when you edit your activity.

![SELECT A START & END TIME]

- **BEGIN**
  - Thursday, 19 March 2020
  - 07:20

- **END**
  - Thursday, 19 March 2020
  - 07:15

**Duration:** -5 Minute

- **End time should be after begin time**

Pop up message notifying you that your end time falls before your start time.

![SELECT A START & END TIME]

- **BEGIN**
  - Thursday, 19 March 2020
  - 07:05

- **END**
  - Thursday, 19 March 2020
  - 23:15

**Duration:** 16 Hours 10 Minutes

- **A timelog in the future is not allowed**

Pop up message notifying you that your activity takes place in the future.
Note: this manual will be updated soon with more information and screenshots. The next version will be made available online.

2 Researchers guide of MOTUS (back-office)

2.1 What is MOTUS?

MOTUS is a highly configurable software platform for survey and time-diary collections. The main focus of the platform is to gather information about human behavior and the context in which this behavior occurs. The tool can be used for projects of any scale – from case studies to big population studies – and for any given fieldwork period.

The platform assures comparability, reliability and quality of the data. Its true strength lies within the modularity of the back-office. This means that every research component can be (re)defined within the MOTUS-platform itself. Once configured, the research flow runs automatically, including the communication towards the respondents. The fieldwork can be followed via a dashboard and the collected data can be downloaded in a user-friendly way.

2.2 Who is behind MOTUS?

MOTUS stands for Modular Online Time Use Survey and is the original name for a research project executed in 2011 by the Research Group TOR of the Vrije Universiteit Brussel, Belgium. The primary aim of this project was to translate time-use research that is traditionally executed by a pen-and-paper method to an online research method. A first version went live in January 2013, for a project that ran over the course of an entire year and where 3260 respondents kept a 7-day time diary. Since then, dozens of studies were conducted through MOTUS and many new features were added. As MOTUS is a project that is in constant evolution, the most recent version of MOTUS is discussed in this guide. The coming months the content of this guide will be published online so that the most recent information is always available.

The principal researchers are Joeri Minnen, Ignace Glorieux, Theun Pieter van Tienoven and Sven Rymenants.

2.3 Philosophy of the MOTUSbuilder

The whole process of a research, from the sampling to the reporting of the results, can be built in the back-office of MOTUS. MOTUS takes the researcher by the hand through a step-by-step procedure for creating a research. MOTUS is based on the idea of modularity, and this modularity can be found in the way the back-office works. The back-office of MOTUS is called the MOTUSbuilder.

MOTUS incorporates the four phases of statistical production (see figure 1). For each phase, several builders are available that can be defined according to the set-up of each specific research.
Table 1: how the MOTUS builders can help in the DCAA model

<table>
<thead>
<tr>
<th>Design phase</th>
<th>Collection phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this phase, all the preparations of the fieldwork can be programmed. Several builders help the researcher to set up the research.</td>
<td>During this phase, the fieldwork is executed.</td>
</tr>
<tr>
<td><strong>Device builder</strong></td>
<td>Enables the research to choose to make the research available on a mobile app, a web app and/or an API.</td>
</tr>
<tr>
<td><strong>Survey builder</strong></td>
<td>Designing of a survey.</td>
</tr>
<tr>
<td><strong>Diary builder</strong></td>
<td>Designing of a diary</td>
</tr>
<tr>
<td><strong>Event builder</strong></td>
<td>This builder enables you to create events.</td>
</tr>
<tr>
<td><strong>Communication builder</strong></td>
<td>Here, all the communication for your research can be set up.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advise phase</th>
<th>Analyzing phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last phase of the research, the research output is made tangible.</td>
<td>The data output becomes available.</td>
</tr>
<tr>
<td><strong>Visualization builder</strong></td>
<td>This builder creates graphs of the collected data.</td>
</tr>
<tr>
<td><strong>Quality builder</strong></td>
<td>Here, the quality checks to be performed on the data files can be defined.</td>
</tr>
</tbody>
</table>
Over time the different builders will be more developed, and new builders will be created to even enforce the chain of statistical production. Also for this reason the Quality and Visualization builder are not yet part of this guideline.

2.4 My profile

2.4.1 Edit my profile

To edit your profile, click on your name in the right upper corner of the screen. Next click on profile.

- In the tab personal, you can edit the basic information about yourself and add a picture. Moreover, you can see to what researches you have access.
- Under the tab security you can change your password and set up the two-step verification. Click here for more information about this feature.
- Under the tab preferences you can set up the time preferences (time and date format) and change the preferred language.

2.4.2 Two-step verification

Depending on the settings of the MOTUS-administrator, the account is secured with a two-step verification login. This means that two steps are to be taken in order to successfully login to the MOTUSbuilder.

During the first login, after a username and password were provided, you will be asked to scan a QR-code that can be read by an Authenticator app. Such an Authenticator app can be downloaded from the Apple and Android stores. A good example is the Google Authenticator, which can be downloaded from the Google Play and the App Store.

Once this procedure is finalized, the Authenticator application will refresh a 6-number code every 30 seconds. When entering this code as a second step access is gained to the central dashboard of the MOTUSbuilder.

2.4.3 Backup codes

A backup code replaces the 6-number code generated by the Authenticator app. Back-up codes can be made by every user and kept safe on a certain place. In total 12 codes are generated and numbered. MOTUS asks for one code in particular.

The back-up codes can be found under profile > security > generate new backup codes.
2.5 Getting started

2.5.1 Login to MOTUS

To log into the MOTUS-builder, go to www.motusbuilder.io and click on login. Next, enter your username and password. If you forgot your password, you can request a new one by clicking on ‘Can’t login?’. Here, you can fill in your username and e-mail address. You will receive an e-mail with the steps to follow to choose a new password. After entering your username and password, you may be asked to enter the code generated by your authenticator. Go to the app and enter the displayed code. The two-step verification needs to be set up before it can be used. To learn more about the two-step verification, click here.

2.5.2 The logic of the MOTUS builder website

As mentioned in the philosophy of the MOTUS builder, the main focus of the MOTUS back-office is its modularity. This means that every element of the research can be modified. The back-office is structured in a way that makes it easy for the researcher to have an overview over the several parts of a research and to easily customize these parts.

2.5.2.1 The dashboard

Upon logging in, the researcher is directed to the dashboard of the back-office. Here, they get an overview of all the researches they have access to. Each block represents a study. The number indicates how many respondents are loaded into the research.

Note this includes the respondents that participated to the research, as well as the respondents that did not (yet) take part in the study.

The colors of the blocks each represent a different state:

- Green studies are active. Respondents are able to participate in the study.
- Yellow studies are under development and are not ready yet
- Blue studies are finished
- Purple studies are paused.

When a study is paused, changes can be made without the respondents being affected by it. This feature can come in handy when you want to run a test without the risk of affecting the entire study.

From the dashboard, you can do two things:

- Work directly in a specific study. To modify aspects of a certain study, click on details. You will be directed to the research overview.
- Edit aspects of studies without working directly in a research. To modify templates, click on group. You will get an overview of all the several parts of a research.

2.5.2.2 Research overview

After selecting a study in the dashboard by clicking on details, you are directed to the research overview of that study. Here, you get an overview of all the different components of a research.

Please note that when you click on any section in the overview, you can go back to the overview by clicking on the tab in the sidebar.
In the research overview, the basic elements of the research can be modified. For more information on this, click here. Moreover, all aspects of the study can be set up.

- Creating and editing surveys
- Creating and editing diaries
- Creating and editing communication
- Creating and editing geofences
- Setting up the flow
- Editing the script
- Managing respondents
- Looking into results

2.5.2.3 Group

After clicking on group, you get a menu of several research-aspects you can modify. In group you can:

- Create and edit surveys
- Create and edit diaries
- Create and edit scale questions
- Create and edit pages
- Create and edit e-mail templates
- Create and edit message-templates
- Manage respondents
- Go to the username-generator

By clicking on one of these, you can browse through all the items that are used in all the researches you have access to in MOTUS. You can also add items without connecting them to a specific research. When working in group, you don’t work in a specific research but can immediately navigate to the separate aspects of a research.

Warning: when you edit an item in groups that is used in a certain research, the changes you make will be applied to the linked research.

2.5.3 Start a new research

To start a new research, login to MOTUS

- Click on + New research in the banner on the left of your screen

You will see a screen where you can configure the basic elements of your research

- Give your research a name: this is the name that will be used internally in MOTUS.
  - Note: It is advised to keep this name short and recognizable for the researcher
- You can opt to make the research private
- You can set a starting date and ending date for the research. This is not mandatory
- Click on save

Now, the research has been created. To specify the information of the research further, click on configure details in the next screen you see. Here you can configure several aspects:

- Name: you can change the internal name of the research
- Public name: you can choose the public name of the research. This is the name the respondents will see
• Note: it is advised to choose a recognizable and informative name so that the respondent knows immediately what the research is about. This name can be longer than the internal name
• You can define a start date and end date
• Respondent website: here you can define the website on which the research will be available. The default is www.motusresearch.io
• You can choose the state of the research.
  o Active researches are open and ongoing. Respondents are able to participate in the study.
  o Researches under development are not ready yet. Respondents cannot yet participate to the study, unless you give them specific permission.
  o Finished studies are closed. No one can participate in them anymore.
  o Paused studies enable the researcher to make changes to the study without affecting the respondents. This feature can come in handy when you want to run a test without the risk of affecting the entire study.
• Description: here you can add a short description of the research. This is the text the respondents will see upon logging in on the research-website.

After setting up the details, you land on the research overview where the different aspects of the study can be set up.

• Creating and editing surveys
• Creating and editing diaries
• Creating and editing communication
• Creating and editing geofences
• Setting up the flow
• Editing the script
• Managing respondents
• Looking into results

2.5.4 Role management

In MOTUS, you can control who has access to which research. Several parameters were implemented to control this.

2.5.4.1 Groups

The MOTUS-builder runs on the motusresearch.io domain. Within the same domain multiple groups can be designed. The users that belong to the same group have an overview over the researches running within that group. Within the same group Roles can be defined. Groups that share the same domain use the same database. When MOTUS is installed on a different (sub)domain the databases are separated.

2.5.4.2 Roles

For every group and person a role can be defined. The roles or tasks can further defined/developed.

• Create questionnaires
• Logic for questions
• Create diaries
• Translations
• Geolocation
• Linear flow
• Event based flow
• Scripting
• Mobile devices
2.5.4.3 Rights

You can decide who has access to your research in the MOTUS back-office:

- Click on the desired research in the dashboard
- Click on rights in the left sidebar
- Enter the names of the researchers with full access and click on save.

2.5.4.4 Lock

You can decide to lock your research with a password, so that only the people with the password can access the research in the MOTUS back-office. To set this up, follow these steps:

- Click on the desired research in the dashboard
- Click on rights in the left sidebar
- Enter the password for the research and repeat it. Next, click on save.
2.6  **Design phase**

2.6.1  **Device builder**

With the Device builder, the researcher can choose which (combination of) devices are to be used within the research. MOTUS is accessible through a mobile app and a web-based app. The web app can be used on all (updated) browsers. The mobile app is available for iOS and Android. Study designs can also include external data input via APIs.

2.6.1.1  **How to include the web and/or mobile app?**

A researcher can choose to restrict a task to be completed either on one of the applications. For example, a long and quite difficult survey can be made available only in the web-app, which would be the most suitable tool for this, whereas the mobile app can be used when the tracking of (outdoor) movements is necessary.

- To set this up, follow these steps:
  - Select the desired research in the dashboard
  - Go to **flow** and click on **linear**
    Note: the flow enables the research to structure the research. [Click here](#) for more information on the flow.
  - Click on the burger next to a survey or diary state and select **edit**
  - Under **devices** you can select the desired options
    - **MOTUS-app**: the survey or diary will be available through the mobile app
    - **MOTUS-web**: the survey or dairy will be available through the MOTUS website

2.6.1.2  **Responsiveness**

The web app needs an internet connection to function, while the mobile app can work offline. However, the web app can also be used on smaller screens thanks to the responsive behaviour of the web app. This could be handy for example for studies in hospitals or on an airport where Wi-Fi is all around, or when respondents have an infinite data bundle. It is also an important issue when devices are the property of an organisation and have to be shared between colleagues. No data remains on the device.

2.6.1.3  **How to include APIs?**

There are 3 kinds of APIs: (a) internal APIs that are part of the MOTUS-platform (between back- and front office; or between back-office and mail handler), (b) external APIs who transmit administrative data (employee database or the active registration via a portal website), and (c) external APIs that handle the inflow of sensor data. (internal sensors from smartphones and wearables).

The APIs under (b) are specifically developed for an organization or a study. An example is the inflow of respondents via a recruiting website. We mostly make use of WordPress sites for which we have developed a dedicated plugin to communicate data between e.g. a registration website and the Invitation builder of MOTUS (an Example is www.dailylife.eu). The APIs under (c) become available for all researchers via Plugins.
2.6.2 Survey builder

2.6.2.1 Create a new survey

There are two ways to create a new survey.

1. Create a survey through group: you will create a new survey and add this to MOTUS, but it will not be connected to any research.
   - Click on group, then choose surveys
   - Click on the add-button
2. Create a survey directly linked to a research:
   - Open the desired research in the dashboard
   - Go to surveys
   - Click add new. Here, you get the option to either create a new survey or add an existing one.

To create a new survey, please fill in the desired name and public name of the survey and select create survey.

   • The name of the survey is internal. It is advised to use a short name that is recognizable to the researchers
   • The public name will be seen by the respondents. This name can be longer than the internal name and should contain as much relevant information as possible, in order for the respondents to immediately recognize the survey.
   • Next, click on create survey
   • Select the desired default language of the survey. In a later stage, it is possible to add translations.

After creating the survey, learn here how to edit it.

2.6.2.2 Add an existing survey to a research

   • Open the desired research in the dashboard
   • Go to surveys
   • Click add new
   • You get an overview of all the surveys in MOTUS you have access to
   • Click on the + sign of the desired survey
   • You have the option to link or copy the survey

When you copy a survey, any changes made in the copied version will not have any repercussions on the original survey. Conversely, when you link a survey to your research and make changes to it, the survey will also be modified in all potential other studies in which it is used.

Now that you added a survey to your research, learn here how to edit it.

2.6.2.3 Edit a survey

There are two ways to edit a survey.

1. Edit a survey through group
   Remark: the changes you make will be reflected in all the researches in which this survey was used
   - Click on group, then choose surveys
   - Click on the pencil-icon next to the desired survey
2. Edit a survey directly linked to a research:
• Open the desired research in the dashboard
• Go to surveys
• Click on used
• Click on the pencil-icon next to the desired survey

<table>
<thead>
<tr>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the overview, you can edit several parameters of your survey:</td>
</tr>
<tr>
<td>▪ Name: The name of the survey is internal. It is advised to use a short name that is recognizable to the researchers</td>
</tr>
<tr>
<td>▪ Public name: The public name will be seen by the respondents. This name can be longer than the internal name and should contain as much relevant information as possible, in order for the respondents to immediately recognize the survey.</td>
</tr>
<tr>
<td>▪ Default language: Select the desired default language of the survey. It is possible to add translations.</td>
</tr>
<tr>
<td>▪ Note: this option is only available through group. When working directly in a research, the default language of the survey is the same as the default language of the research.</td>
</tr>
<tr>
<td>▪ Translations: this option will appear when indicated that a translation for your research will be available. By clicking on the language, you can provide a translation of the name of your survey as it will be seen by the respondents. For more information on how to edit the translation settings of your study, please click here.</td>
</tr>
<tr>
<td>▪ Copy: make a copy of the survey. This copy is automatically added to your research.</td>
</tr>
<tr>
<td>▪ Download: download all the survey questions. The answering categories will not be included here. For more information on how to download a more detailed overview of the survey, please click here.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Here, you can find all the questions that make part of the survey. Several actions are possible:</td>
</tr>
<tr>
<td>▪ Adding a question by clicking add at the bottom of the screen. Please beware that adding a question this way, the question will appear at the bottom of the questionnaire. If you want to add a question at a specific place, please use the + symbol next to the question after which you want to insert a new question.</td>
</tr>
<tr>
<td>▪ Search for questions using the search bar</td>
</tr>
<tr>
<td>▪ Edit a question</td>
</tr>
<tr>
<td>▪ Add a question. The new question will appear right before or after the selected question.</td>
</tr>
<tr>
<td>▪ Edit the logic of a question. Click here to learn more about this.</td>
</tr>
<tr>
<td>▪ Move a question up or down</td>
</tr>
<tr>
<td>▪ Delete a question</td>
</tr>
</tbody>
</table>
Adding and editing a question

When adding a question, you can edit several parameters:

- **Question**: here, you can define the question
- **Private question info**: this enable you to provide extra information for the respondent. In the survey, this will appear as an orange question mark on which the respondent can click
- **Translations**: here, you can provide the translation for the question. Please not that this option is only available if you configured translations for your research. Click here to learn more about this.
- **Variable name**: this enables you to choose the name of the variable
- **Question type**: this enables you to choose the way the respondents can answer the question. Click here to learn more about the different options.
- **Settings**:
  - Required: You can opt to make a question mandatory to fill in
  - Hide label: hide the number of the questions
  - Hide title: hide the question (only the answer option will be shown)

The logic of the questionnaire

Some questions of the survey will need to be hidden for certain respondents, depending on the answers they gave on previous questions. For example: respondents who indicated not to have children do not need to answer questions that are related to children. To set up this logic, follow these steps:

- Click on the track sign next the question of which the answer will determine the path. In this example, this would be the question “Do you have children?”
- Next, click on **add**
- Give the action a name, so that you can easily recognize it. For example: “if question 2=no, hide question 3”
- Choose which answer will trigger a certain action. Depending on the question type, the options will vary. (Eg. “Do you have children” equal “No”)
- Click on the burger and select **add** to add more answering-options. You can also make a combination between several questions
- Click on the burger and select **add action**. Here, you can choose the action you want to be executed. (Eg. Hide “How many children do you have?”)
- Click on save
2.6.2.4 Types of questions

- **Static text:** this is question type allows the researcher to welcome the respondent into the research, to give more information, to prelude an upcoming part of the research etc. Respondents can't give an answer here. This question type comes in handy to give a structure to the research and to communicate with the respondent.

- **Checkbox:** this question type allows for two answers: yes or no. In case you want to include more options, the select question is a better alternative.

- **Date:** this question type allows the respondent to answer with a date. You can specify the range between which the answer has to be. Furthermore, you can edit the layout of the answer opting between dd/mm/yyyy or mm/yyyy

- **Numeric:** here, the respondent can answer with a number. You are able to indicate lower and upper boundaries. Moreover, it is possible to validate the inserted answer online. A default answer can be defined, which will be the answer in case the respondent leaves the question open.

- **Decimal:** this question is the same as numeric, but enables the respondent to answer with a number with a comma

- **Ranking:** this question type enables the researcher to present the respondent with several options and ask them to rank them.

- **Short text:** this is used for open ended question. The respondent is able to freely type in any answer. You are enabled to indicate a maximum number of words. Furthermore, it is possible to validate the inserted answer online. A default answer can be defined, which will be the answer in case the respondent leaves the question open. The short text question type is used for questions that require a relatively short answer. For longer answers, you can opt for the long text question type, providing more space to the respondent to define an answer.

- **Long text:** this is used for open ended question. The respondent is able to freely type in any answer. You are enabled to indicate a maximum number of words. Furthermore, it is possible to validate the inserted answer online. A default answer can be defined, which will be the answer in case the respondent leaves the question open. The long text question type is used for questions that require a relatively long answer. For shorter answers, you can opt for the short text question type, providing less space to the respondent to define an answer.

- **Range:** for this type of question, the respondent can answer with a number. The difference with the numeric question type is that the respondent is not free to type in a number but has to choose from a set range. It is required for the researcher to define a minimum and maximum value. This type of question can be used for the same kind of questions as you would use the numeric type for (e.g. How many kids do you have?) but is also excellent to use when the respondent is asked to score a certain item (e.g. On a scale from one to ten, how satisfied are you with your supervisor?). For the layout of this question type, you can choose between a numeric range/native dropdown or for a rating.

- **Select:** this type of question can be used when you work with pre-defined answers. The respondents are able to choose one answer. If you would like the respondents to be able to select more than one answer, the multiple-choice question type is a better option.

  Under option you can define the answer as the respondent will see it in the questionnaire. Furthermore, you can assign a code to the answer, which will be used when analyzing the data.

  You can change this information later by selecting the answer, making your changes and clicking update to save the changes. You can also select an answer and set it as default or delete it. The layout enables you to choose the order in which you want the answers to appear.

- **Multiple choice:** this question type enables the respondent to select more than one answer. Under option you can define the answer as the respondent will see it in the questionnaire. Furthermore, you can assign a code to the answer, which will be used when analyzing the data.

  You can change this information later by selecting the answer, making your changes and clicking update to save the changes. You can also select an answer and set it as default or delete it. The layout enables you to choose the order in which you want the answers to appear.
• **Time/duration**: this question type is optimal to use when you want to learn more about the time-use of the respondent. They can fill in hours and minutes. You can indicate a minimum and maximum value. Furthermore, you can define a default answer, which will appear in case the respondent leaves the question open.

• **Scale**: a scale question allows the respondent to give an answer on a pre-defined scale. An example of this can be when you ask the respondent to what extend they agree with a certain statement. The response categories can be selected under *scale question*. Here you can find all the scale questions that are defined in *groups*. In case you want to create a new scale question, you need to do this first in *groups* before you can add this to your question. For more information on how to create scale questions, please click here. Furthermore, you can define a default answer, which will appear in case the respondent leaves the question open.

• **Multiple scale**: this option allows the respondent to select multiple answers and rank them. The response categories can be selected under *scale question*. Here you can find all the scale questions that are defined in *groups*. In case you want to create a new scale question, you need to do this first in *groups* before you can add this to your question. For more information on how to create scale questions, please click here. Furthermore, you can define a default answer, which will appear in case the respondent leaves the question open. Lastly, you can indicate a minimum and maximum amount of answers that can be selected by the respondent.

• **Page separator**: a page separator is not a question but is used to add a new page on which the survey will be continued. This is an important feature to structure the questionnaire and keep the overview.

• **Merge field**: this question type is a special case, because it is a question you already know the answer to. As a result, this question won’t be seen by the respondent. The values of these variable are read into MOTUS together with the other information of the respondent. Merge fields usually are background variables. Under *merge field* you can indicate which field you want to use. Merge fields can be interesting if you want to hide certain questions for certain respondents (e.g. respondents who already participated to a previous research, respondent of a certain age-category etc.). Learn more about merge fields here.

• **Location**: for this question type, the respondent can answer with location they will have to indicate on the map.
2.6.3  Diary builder

2.6.3.1 Create a new diary

There are two ways to create a new diary.

1. Create a diary through group: you will create a new diary and add this to MOTUS, but it will not be connected to any research.
   - Click on group, then choose diaries
   - Click on the add-button
   - Now, you can edit the diary. Learn here how to do this.
2. Create a survey directly linked to a research:
   - Open the desired research in the dashboard
   - Go to diaries
   - Click add new. Here, you get the option to either create a new diary or add an existing one.

To create a new diary, please fill in the desired name of the diary and select create diary.

- The name of the diary is internal. It is advised to use a short name that is recognizable to the researchers
- Next, click on create diary
- Now, you can edit the diary. Learn here how to do this.

2.6.3.2 Add an existing diary to a research

- Open the desired research in the dashboard
- Go to diaries
- Click add new
- You get an overview of all the surveys in MOTUS you have access to
- Click on the + sign
- You have the option to link or copy the survey

When you copy a diary, any changes made in the copied version will not have any repercussions on the original diary. Conversely, when you link a diary to your research and make changes to it, the diary will also be modified in all potential other studies in which it is used.

Now that you added a diary to your research, learn here how to edit it.

2.6.3.3 Edit a diary

There are two ways to edit a diary.

1. Edit a diary through group
   - Remark: the changes you make will be reflected in all the researches in which this diary is used
   - Click on group, then choose diaries
   - Click on the pencil-icon
2. Edit a diary directly linked to a research:
   - Open the desired research in the dashboard
   - Go to diaries
   - Click on used
   - Click on the pencil-icon of the desired diary
## Overview

In the overview, you can edit several parameters of your diary:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The name of the diary is internal. It is advised to use a short name that is recognizable to the researchers.</td>
</tr>
<tr>
<td>Public name</td>
<td>The public name will be seen by the respondents. This name can be longer than the internal name and should contain as much relevant information as possible, in order for the respondents to immediately recognize the survey.</td>
</tr>
<tr>
<td>Undefined code</td>
<td>Check this box to not export undefined time blocks.</td>
</tr>
<tr>
<td>Default language</td>
<td>Select the desired default language of the diary. It is possible to add translations.</td>
</tr>
<tr>
<td>Note</td>
<td>This option is only available through group. When working directly in a research, the default language of the diary is the same as the default language of the research.</td>
</tr>
<tr>
<td>Translations</td>
<td>This option will appear when indicated that a translation for your research will be available. By clicking on the language, you can provide a translation of the name of your diary as it will be seen by the respondents. For more information on how to edit the translation settings of your study, please click here.</td>
</tr>
<tr>
<td>Copy</td>
<td>Make a copy of the diary. This copy is automatically added to your research.</td>
</tr>
</tbody>
</table>

## Design

By clicking on edit you arrive in the screen where you can choose the design of the diary.

<table>
<thead>
<tr>
<th>Design Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diary view</td>
<td>Here you can decide how you want the respondents to see the diary. This can be either a calendar view or a twitter layout.</td>
</tr>
<tr>
<td>Field order</td>
<td>This determines the order in which the start time, end time and duration are displayed.</td>
</tr>
<tr>
<td>Method</td>
<td>Here you can configure how you want the respondent to browse through activities.</td>
</tr>
</tbody>
</table>

## Main and parallel activity list

By clicking on edit you arrive in the screen where you can define the main and parallel activities of your diary. Parallel activities are activities performed at the same time of the main activity. An example of this can be when a respondent is listening to music (parallel activity) while working (main activity).

By clicking on the burger, you can:
- Edit an activity
- Delete an activity
- Add an activity before or after the selected activity
- Add a child, meaning that you add an activity that is a sub-activity of the selected one

By clicking edit you can define the name of the activity. Additionally, you can add the code and assign a color (optional). Furthermore, you can specify detailed info about the activity to give more information to the respondent. You can define the type of the activity and link a survey to it. Surveys linked to a time diary are mainly used to gather more context-information on the performed activity (e.g. How pleasant the activity was, who the respondent was with during the activity, what kind of transport they used etc.). These surveys need to be created before you can link them to a time diary. Find out here how to create a survey.

After saving the activity list, the option to provide a translation for the activity list will appear. You can do this by clicking on the language. Note that this option will only appear if you indicated that a translation for your research will be available. For more information on how to edit the translation settings of your study, please click here.

## Duration

By clicking on edit you arrive in the screen where you can define the details concerning the duration of the activities.

<table>
<thead>
<tr>
<th>Duration Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granularity</td>
<td>Here, you can opt for a continuous duration (meaning that the respondent can choose any time as a start or end time, up to the minute) or to work with fixed intervals (e.g. 10 minutes).</td>
</tr>
<tr>
<td>Length</td>
<td>Here you can choose the length of the diary and determine the beginning and ending of the registration period.</td>
</tr>
</tbody>
</table>
Focus | this option lets you decide whether the registration is retrospective or immediate and when the cycle starts.
---|---
Learning period | This is the number of hours that do not count before the actual start of the diary.
Surveys | By clicking on edit you arrive in the screen where you can add surveys to the diary. These surveys need to be created before you can link them to a time diary. Find out here how to create a survey.
Closing criteria | By clicking on edit you arrive in the screen where you can edit the closing criteria.
Closure | Decide whether or not the respondents are allowed to manually end the diary.
Undefined time | here you can manage your preferences in order to control the amount of undefined time in your diary.
Quality | here you can manage your preferences in order to guarantee qualitative data.

### 2.6.4 Event builder

An event is something that happens or that the respondent does which triggers a reaction from MOTUS. This reaction can be two things: either MOTUS will send the respondent to the next stage of the research, or MOTUS will send a survey to the respondent. An example of an event could be that the respondent enters a certain area. The reaction of MOTUS could be to send out a survey with questions about this specific area.

To set up events, follow these steps:

- Click on the desired research in the dashboard
- Go to flow, next click on events
- Click on add

Several parameters can be edited:

- **Name:** this is the internal name of the message and will not be seen by the respondents. This name should be recognizable.
- **Pause between firing the next event:** this is the minimum time between 2 events
- **Event action:** this is the reaction that will be triggered in MOTUS when the event happens. The action can either be to send the respondent to the next state in the research, or to send them a survey.
- **Event type:** here, you can determine what will trigger the action. This can either be something that happens in the app, or the respondent entering a geofence. To learn more about geofences, click here.
2.6.5  Communication builder

The communication of a research can exist in different forms: e-mails, pages or messages.

2.6.5.1  Create a new e-mail, page or message

There are two ways to create new communication:

1. Create communication through group: you will create new communication and add this to MOTUS, but it will not be connected to any research.
   - Click on group, then choose pages/message templates/email templates (depending on which one you want to create)
   - Click on the add-button
2. Create communication directly linked to a research:
   - Open the desired research in the dashboard
   - Go to communication
   - Click add new. Here, you get the option to either create new communication or add existing communication.

To create a new communication:

- Choose a name for the communication. This name is internal. It is advised to use a short name that is recognizable to the researchers
- Choose the type of communication you want to create
- Click on save

After creating new communication, learn here how to edit an e-mail, a page or a message.

2.6.5.2  Add existing communication to a research

- Open the desired research in the dashboard
- Go to communication
- Click add new
- You get an overview of all the communication in MOTUS you have access to. Under ‘type’ you can see which kind of communication it is
- Click on the + sign
- You have the option to link or copy the communication

When you copy communication, any changes made in the copied version will not have any repercussions on the original communication. Conversely, when you link existing communication to your research and make changes to it, the communication will also be modified in all potential other studies in which it is used.

Now that you added communication to your research, learn here how to edit an e-mail, a page or a message.

2.6.5.3  Edit a page

There are two ways to edit a page:

1. Edit a page through group
   - Remark: the changes you make will be reflected in all the researches in which this page is used
   - Click on group, then choose Pages
   - Click on the pencil-icon
2. Edit an e-mail directly linked to a research:
   - Open the desired research in the dashboard
   - Go to communication
   - Click on used
   - Click on the pencil-icon of the desired page

Several parameters can be edited:

- **Name**: this is the internal name of the research and is not seen by the public. This name should be short and recognizable.
- **Public name**: this is the external name of the research and will be seen by the respondents. This name should be as informative as possible. Respondents should immediately know what the page will be about and should be able to recognize it easily.
- **Introduction**: here, you can write a short introduction on what the page will be about
- **Content**: here you can add the actual message of the page. The header provides you with several options to edit the layout. An interesting feature here
  1) **Insert a link**: by clicking on this icon you can add an external link to your email. You can define the word on which the respondent has to click (e.g. "click here" or simply the link itself). Next, you have to indicate the web address where the respondent will be directed. Lastly, you can decide whether or not the link will open in a new window.
  2) **Word cleaner**: use this to clear the text box. Be careful! By clicking this, everything you wrote will be deleted
  3) **Full screen
  4) Code view**: by clicking this, you get to see the email in HTML-code. This can come in handy to detect potential problems.
- **Default language**: this can only be configured in groups. When you are working directly in a research, the default language of the page is automatically the default language of the research.
- **Translation**: If you indicated that a translation for your research will be available, the option to provide a translation for the page will appear. You can do this by clicking on the language. For more information on how to edit the translation settings of your study, please click here.
- **Devices**: here you can indicate on what devices the page will be read.

2.6.5.4 Edit an e-mail

There are two ways to edit an e-mail.

1. Edit an e-mail through group
   - Remark: the changes you make will be reflected in all the researches in which this e-mail is used
     - Click on group, then choose *Email templates*
     - Click on the *pencil*-icon
2. Edit an e-mail directly linked to a research:
   - Open the desired research in the dashboard
   - Go to communication
   - Click on used
   - Click on the pencil-icon of the desired e-mail

Several parameters can be edited:

- **Name**: This name is internal. It is advised to use a short name that is recognizable to the researchers
- **Subject**: this is the subject line the respondents will see when they receive the e-mail. Make sure the subject is recognizable and trustworthy for the respondent.
- **Pre-header**: this the text that can be shown on a small screen in the home screen
• **Content:** here you can write the actual message of the e-mail. The header provides you with several options to edit the layout.
  
  o **Inset a link:** by clicking on this icon you can add an external link to your email. You can define the word on which the respondent has to click (e.g. "click here" or simply the link itself). Next, you have to indicate the web address where the respondent will be directed. Lastly, you can decide whether or not the link will open in a new window.
  
  o **Variable fields:** this feature comes in handy to personalize the email. You can choose from a variety of variables that you would like to add in the email, such as the name of the respondent, the username, the password etc. Furthermore, you can add merge fields that were read into MOTUS together with the respondents information.
  
  o **Word cleaner:** use this to clear the text box. Be careful! By clicking this, everything you wrote will be deleted
  
  o **Full screen**
  
  o **Code view:** by clicking this, you get to see the email in HTML-code. This can come in handy to detect potential problems.

• **Default language:** this can only be configured in groups. When you are working directly in a research, the default language of the page is automatically the default language of the research.

• **Translation:** If you indicated that a translation for your research will be available, the option to provide a translation for the email will appear. You can do this by clicking on the language. For more information on how to edit the translation settings of your study, please click here.

To see what your e-mail will look like to the recipient, save the e-mail and click on the eye-icon next it.

### 2.6.5.5 Edit a message

There are two ways to edit a message.

1. **Edit a message through group**
   
   Remark: the changes you make will be reflected in all the researches in which this message is used
   
   - Click on *group*, then choose *Message templates*
   - Click on the *pencil-icon*

2. **Edit a message directly linked to a research:**
   
   - Open the desired research in the dashboard
   - Go to *communication*
   - Click on *used*
   - Click on the *pencil-icon* of the desired message

Several parameters can be edited:

- **Name:** this is the internal name of the message and will not be seen by the respondents. This name should be recognizable.
- **Subject:** this is the subject line the respondents will see when the message arrives. It is advised to make sure that the subject line arouses the interest of the respondents and that they immediately know what the message is about
- **Content:** here you can add the actual message.
- **Default language:** this can only be configured in groups. When you are working directly in a research, the default language of the page is automatically the default language of the research.
- **Translation:** If you indicated that a translation for your research will be available, the option to provide a translation for the message will appear. You can do this by clicking on the language. For more information on how to edit the translation settings of your study, please click here.
2.6.5.6  Set up preferences for communication

To set up the preferences of your communication, follow these steps:

- Open the desired research in the dashboard
- Go to communication
- Click on preferences

On this screen, you can edit the details of your communication. You can define the name of the sender, as well as the email address, phone number and postal address of the sender. Furthermore, you can define the email template respondents will receive when they want to reset their password, as well as the reset password contact page. Moreover, this page enables you to register email addresses to which a copy of the communication will be sent. This can be handy if you want to receive a copy of the communication yourself. Lastly, you can choose a design template for your communication.

2.6.6  Geofences

The feature geofences is used in studies where the researcher wants to gather location-specific information. In this tab, you can define a radius on the map. When the respondent enters the specified area, his or her location will be tracked within the area.

2.6.6.1  Add a geofence

To add a new geofence, follow these steps:

- Click on the desired research in the dashboard
- Go to geofences, next click on add new

Here, you can name the geofence and add an address or location description. Furthermore, you can indicate the center of the desired area on the map and adjust the radius of the area, either by using your mouse or by entering the radius in text box. By ticking the box tracking, your respondents will be tracked whenever they are situated in the area. To save your settings, click on save.

2.6.6.2  Edit a geofence

To edit a geofence, follow these steps:

- Click on the desired research in the dashboard
- Go to geofences, next click on used
- Click on the pencil-icon of the desired geofence

Here, you can edit the name and address or location description of the geofence. Furthermore, you can edit the center of the desired area on the map and adjust the radius of the area, either by using your mouse or by entering the radius in text box. By ticking the box tracking, your respondents will be tracked whenever they are situated in the area. To save your settings, click on save.
2.6.7 Scale questions

A scale question allows the respondent to give an answer on a pre-defined scale (e.g. totally agree, agree, undecided, disagree, strongly disagree). To go to the scale questions:

- Click on group, next select scale questions

Here you can find all the scale questions that are created in MOTUS for all researches, ordered alphabetically.

- To add a new scale question, click on add.
- To edit a scale question, click on the pencil-icon next to the desired scale question.
- To copy a scale question, click on the copy-icon next to the desired scale question.
- By copying a scale question, you can make adjustments in the copied version of the scale question without affecting the original version.

When creating a scale question, the first step is to define a name and a default language for the scale. Next, click on create. In the next screen, you can edit several parameters:

- Define the answer categories and their respective code and click on add.
- To edit a category, you can select the value and make the desired changes. Next, click update. To delete a category, select the value and click on delete.
- Check the box the add a colored background to a certain answering category. This can for example come in handy to make a visual distinction between the answering categories and the option 'not applicable'.

Note that you can add a translation for a scale question. After defining the values, you can click on the desired language and provide a translation for each category.

Click on save to save your settings.
2.7 Collect phase

2.7.1 Language builder

In MOTUS, it is possible to provide a research in multiple languages. For now, the available languages are English, Dutch, French and German. The first step of making a research available in several languages is to configure the languages in which you want to make the research available. You can do this through the following steps:

- Select the desired research in the dashboard
- Go to translations and click on configure
- Next, select the default language of your research and the additional languages in which you want to make the research available
- Click on save

Please note that it is necessary to provide a translation of surveys, diaries and communication in the MOTUS back-office before the respondent can complete the research in the desired language.

After setting up the desired languages, you will be able to provide a translation for all the different parts of your research (survey questions, activities, communication...). You can do this by editing the desired aspect of the research.

- Click here to learn how to edit a survey question
- Click here to learn how to edit an activity list of a diary
- Click here to learn how to edit a page
- Click here to learn how to edit an e-mail
- Click here to learn how to edit a message

2.7.2 Research builder – flow

The research builder of MOTUS enables the researcher to structure the research. This can be done using the flow tool. Here, all the previously defined parts of the research come together in a specific structure. In the flow, you can decide what has to happen when. In other words: in what order will the different parts of the research (survey, diary, emails, pages...) be presented to the respondent? A research won’t work unless a flow is defined. It is the spine of a research that determines the order in which respondents are led through your study.

Please note! All elements that make part of the flow (surveys, diaries, communication, respondents...) must be defined before they can be added to the flow.

2.7.2.1 Create and edit a flow

To edit the flow of a research:

- Select the desired research in the dashboard
- Go to flow and click on linear

A flow exists out of two elements:

- States: these are different phases in the research.
- Actions or events: a state exists out of one or more action(s) and/or event(s). An action is something that MOTUS does, for example sending a respondent to the next state. An event is something that happens outside of MOTUS, for example a respondent that enters a certain geolocation.
### Add states

A new research always has one element to start with: the first state. To add a new state:
- Click on the burger next to the state
- Click on *add after* (to add a state after the selected one) or *add before* (to add a state before the selected one).

### Edit states

To edit a state, click on the burger next to the state and select edit. Here, you can give the state a name and enter a short description of what is happening in the state. Furthermore, you have to define what type of state it is. There are several options:

| Communication | In this state, communication is sent to the respondent. For more information on how to add or edit communication in a research, please click here. Add an action to the state to define what communication you want to send to the respondent. |
| Profile | In this state personal information is asked from the respondent to improve his/her profile in MOTUS. |
| Survey | In this state, action is required. The respondent is asked to fill in a survey. For more information on how to add or edit a survey in a research, please click here. You can select the survey you want to use and choose on what devices you want to make it available (web-app and/or mobile-app). |
| Pause | In this state, the research is paused. You can add a page that is shown to the respondents upon logging in. A pause can be used at the end of a research, where a thank you page is shown to the respondent, or between two elements of a research, for example between two questionnaires or between a pre-questionnaire and a diary. For more information on how to add or edit pages in a research, please click here. |
| Diary | In this state, action is required. The respondent is asked to fill in a diary. For more information on how to add or edit a diary in a research, please click here. |

### Add and edit actions

A state consists out of one or more actions and/or events. To add an action, click on the burger next to the state and select add action. You can give the action a name and define what type of action it is. Several options are possible:

| Event | By choosing this option, you have to decide what will trigger the event. This can either be the logging in of the respondent or the completion of the previous state. |
| Timed event | When choosing a timed event, you are enabled to define when exactly you want the action to take place. This can be at an exact date, a fixed number of days after entering the state or according to a spread algorithm. |
| Repeating event | Here, the action will take place repeatedly. You have to define the interval and timing upon which you want the action to take place. |
| Immediately | The action will take place immediately upon entering the state. |

Lastly, you have to define what exactly you want the action to be. An action can be sending out an email, sending out a message, going to the next state or ending the research.

### 2.7.2.2 Statistics

Here, you can see how many respondents participate in your research and you get an overview of how they are divided over the different states of the research. This tool enables you to follow-up your research in real time. To see the statistics, follow these steps:

- Select the desired research in the dashboard
- Go to *flow* and click on *statistics*
2.7.3 Invitation builder

The invitation builder allows you to manage your respondents. Moreover, you can set up your preferences for the usernames and passwords.

2.7.3.1 Respondents

Add respondents one by one

There are two ways to add respondents.

1. Add respondents through group
   - Remark: the changes you make will be reflected in all the researches in which this respondent takes part
     - Click on group, then choose Respondents
     - Click on add

2. Add respondents directly in a research
   - Open the desired research in the dashboard
   - Go to invitations
   - Click on respondents
   - Click on add new

Here, you can fill in the information of the respondent

- First name
- Last name
- E-mail address
- Username and password: you can either choose a username and a password yourself, or you can generate one through by clicking on generate user info. MOTUS will automatically generate a username and a password. By default, the username is the first and last name of the respondent and a random password.
  - Learn here how you can configure the settings for the username generator.
- Development mode: by checking this box, the respondents can participate in the research when it is still in the development mode
- Add an existing respondent: you can choose to add a respondent that already exists in MOTUS. To do this, click on the plus-sign.

Import respondents in bulk

To import a lot of respondents at once, follow these steps:

- Open the desired research in the dashboard
- Go to invitations
- Click on respondents
- Click on import

Here you have two options:

- Upload a csv file that contains all the variables of your respondents
- Copy and paste information from Excel: you can create a file in Excel in which each row represents a respondent and each column is a variable. Copy and paste this information in MOTUS.

Next, click on submit. Here, you can set up the preferences for the data you just imported. For each column, you can define which variable it is (e.g. name, e-mail address...). There are some options available by default, but you can also add variables. Click here to learn how to.

Click on import to import the respondents. You get an overview of how many new respondents you have imported.
**Edit respondents**

There are two ways to edit respondents.

1. **Edit respondents through group**
   - Remark: the changes you make will be reflected in all the researches in which this respondent takes part.
   - Click on *group*, then choose *Respondents*
   - You can use the search bar to look for a respondent
   - Click on the *pencil-icon* next to the desired respondent

2. **Edit respondents directly in a research**
   - Open the desired research in the dashboard
   - Go to *invitations*
   - Click on *respondents*
   - You can use the search bar to look for a respondent
   - Click on the *pencil-icon* next to the desired respondent

You are able to edit several parameters of a respondent

- **Start date**
- **Private info**
- **Merge field values**: here you can change the values of the merge fields of the respondents. For more information on how to add or edit merge fields in a research, please click here.
- **Account settings**:
  - Username and password: When importing respondents into MOTUS, a username and password can be generated automatically. You are able to edit this at any time. Be careful! When a research is active and you change the credentials of a respondent, you might lock them out of the research.
  - Unique code
  - Under development mode: When you check the box under *development mode*, this respondent will be able to sign into the research when it is still under development. Please note that if this box is not checked, the respondent can only sign into the research when it is active.
  - To learn more about how to change the state of a research, please click here.

**More actions concerning respondents**

- **Download the list of respondents** by clicking on *download* at the bottom of the screen
- **Delete respondents**

- **Get an overview of all communication that was sent to a respondent**. You can keep track of what communication was sent when, when it was delivered and when it was opened.

- **Get an overview of all notifications that were sent to a respondent**

- **Get an overview of all studies the respondent was invited to**. Here you can also see in what state of the research they are.

- **Get an overview of potential push tokens** and the ability to delete them
2.7.3.2 Preferences

You can edit your respondent preferences by following these steps:

- Open the desired research in the dashboard
- Go to invitations
- Click on preferences

In this section you can set up your preferences concerning general respondent settings. In the first section, you can define the requirements for the automatically generated passwords and usernames. For the username generation, you can opt for the default (firstnamelastname) or you can choose any other generator defined in the Username Generation tab under group. Please click here for more information about this.

2.7.3.3 Merge fields

This feature allows you to indicate the (background) variables that you read into MOTUS. Examples of this could be an ID-number, gender, nationality or any other variable. This information is loaded into MOTUS when you read in the respondents. When you download the results, this information is merged into the file. Please note that when you import respondents with certain background variables, these variables should be specified here prior to importing the respondents.

To add a merge field, click on add. You can choose a name for the variable, the type and a default value (optional).

2.7.3.4 Username generator

When creating or importing respondents, you can either choose a username and a password yourself, or you can generate the automatically. By default, the automatically generated username is the first and last name of the respondent and a random password existing out of 4 letters. To change the preferences for the automatically generated credentials, you can use the username generator. To access this, follow these steps:

- Click on group, then choose username generators
- To edit: click on the pencil-icon next to the desired username generator
- To add a new one: click on add

Here you can edit several parameters:

- **Name**: this name is internal. It is advised to keep the name short and recognizable. E.g. "cities"
- **Names**: here, you can enter a list of usernames you want to use, please make sure they are separated by a comma. E.g. Amsterdam, Ankara, Boedapest, Dublin, Madrid, Riga, Roma, Tallinn, Tokyo, Wellington, Wien...
- **Append an index**: check this option if you want the username to be followed by a number. You can indicate the maximum number to be used. This option is interesting to generate a wide variety of usernames without having to enter a separate name for each of them. Examples of usernames that will be generated with this option are: Amsterdam564, Amsterdam876, Dublin241, Riga987...
- **Adjectives**: here you can enter several adjectives that can be paired with the names. The adjectives follow the same logic as the index: the combination between a name and an adjective generate more options for usernames.
2.8 Analyse phase

2.8.1 Data builder

In this section, you can download the results of your study. This can be done at any point during your research. To do this:

- Select the desired research in the dashboard
- Go to results and click on go to results

Here, you can download reports or find quick downloads. Under request report you have several options:

- **Report type**: you can select what data you want to download: the research data (surveys and diaries), the data on the geolocations or the data on the events.
- **Format**: here you can opt for a human readable version or an SPSS-version
- Click on save and your request will appear under the section reports

Please note that it can take a while before the report is ready to download. Click on the refresh-button regularly to check if your download is ready. If the report is ready to download, a download-icon will appear next to it. You can click on it to download your report.

Under downloads you can quickly download:

- a human-readable or SPSS-version of the data.
- the structure. This is an Excel-file with the surveys used in the research.