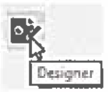
- Confirm a preview containing the data you selected appears:

- Go back to designer mode by clicking the Designer button:



- We will now configure the report title. Click in the grey area below the report anywhere (eg inside the red circle):

- In the bar on the right, open up the DESIGN block, and set the name to whatever you want the report name to be. Do not use anything but letters in the latin alphabet. Do not use spaces.

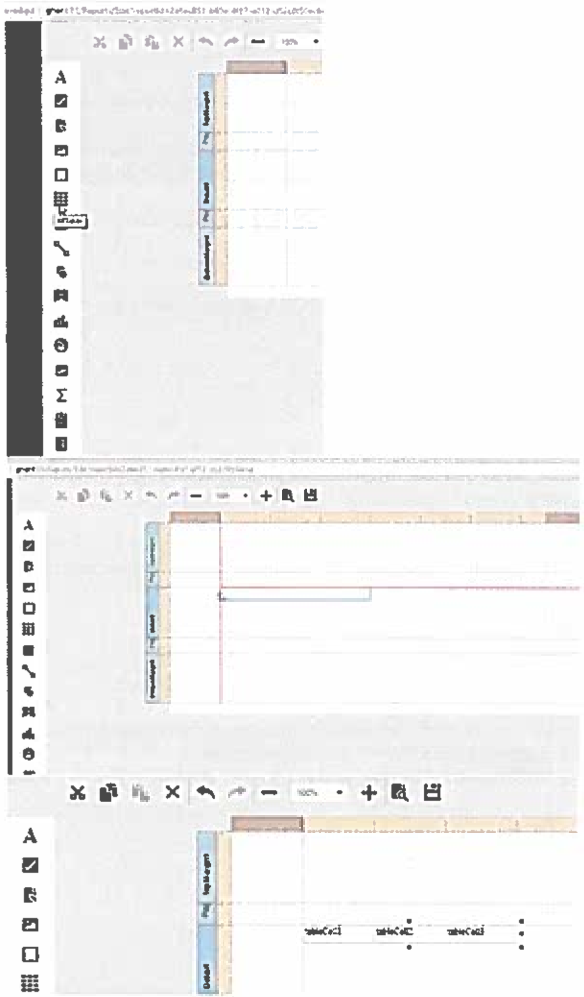
- Click the save button once more and wait for the "saved" message to appear.
- Click the "reports" link in the leftmost menu bar.
- Confirm the report you created is visible.
- Confirm the filter listed under the report is the one you selected.
- Confirm the transfer of ownership, share, view, edit, delete buttons are visible.

4.7.2 Edit a report

- Click the edit button under the report you created in the previous step.
- Confirm the table grid you added is still present, and the data binding is still visible.
- We will change the title now. Click the grey area under the page once more.
- Open the DESIGN block on the right.
- Change the title. Once more, use only letters and digits, no spaces.
- Click the save button near the top.
- Click the reports link on the left.
- Verify the name of the report has changed to the one you chose.

4.7.3 Viewing a report

- Click the "view" button under the report you created & edited in the previous steps.
- Confirm the data from the filter you selected is visible.



- Click the field list button on the right:

- o Find <user2>
- o Click <sends web notification>
- o Enter any data
- Read notification
  - o Use user2
  - o Top of screen: bell icon should indicate that a notification is available
  - o Notification message should contain the data that was entered by user1

4.10 User security

- Navigate to the users summary in the administrator section.
- Pick a user that isn't used in the environment you're on.
- Revoke all of his permissions.
- Impersonate the user
- Check that the menu items for Dashboards, Reports, Data Analysis, Scheduled Tasks and Administrator are not visible. Only home & assets should be visible in the left menu.
- Log off & log in with your usual (administrator) account
- Go back to the users screen in the administrators area

4.10.1 View permissions

- Give the user you've been modifying view_filters, view_dashboards, view_reports and view_data_analysis_definition permissions.
- Impersonate him again.
- Confirm you have the following menu items: Home, Assets, Filters, Dashboards, Reports, Data Analysis.
- Under filters, confirm that the create filter button is not visible, and that any filters visible have only an export button.
- Under dashboards, confirm that the create dashboards button is not visible, and that any dashboards visible have only their unlink & view buttons. They should also have clickable titles.
- Under reports, confirm that the create reports button is not visible, and that any reports visible have only their unlink & view buttons. They should also have clickable titles.
- Under data analysis, confirm that the create data analysis definition button is not visible, and that any dad's visible only have their unlink buttons.

4.10.2 Edit permissions

- Give the user you've been modifying edit_filters, edit_dashboards, edit_reports, edit_scheduled_tasks and edit_data_analysis_definition permissions.
- Impersonate him
- Confirm the scheduled task menu option exists and a create scheduled task button is present.
- Confirm filters, dashboards, reports and data analysis all have create buttons, as well as edit buttons.

bij nog 2 filters → niet allemaal (voor 3 niet verwijderd)
↳ gebruikt door Bob in het verleden

? gelinkte filter ⇔ link weg
kan niet deleten
dashboard report wordt wel verwijderd
↳ delete

- Tab 2: check correct properties are listed
- Tab 3: check 'data filters'
- Tab 4: check 'timestamp filters' √
- Tab 5: check preview

4.5.3 Edit an existing filter

- Clicking 'edit' should bring user to the same wizard as for the create √
- Functionality is the same as create

4.5.4 Delete a created filter

- Cannot delete filter that is in use by dashboard √
- If the user tries to delete a filter that is shared by the user with other users, a warning message should be displayed after the user clicks 'delete'
- If the user has deleted a filter that is shared by the user with other users, then this filter should not be in the list of filters anymore for those other users. √
- A filter that is not shared, nor in use by a dashboard can be deleted without any warning other than the one that's always shown when deleting filters. √

4.5.5 Export filter data

- User can export the filter data to CSV after clicking 'export'.
- After clicking 'export', a message is shown.
- Data export should not take longer than 5 minutes
- When export is complete: √
  - email should be sent to user
  - web notification should be shown
  - both messages contain a link to the same csv export file √
- exported file is correct √

4.5.6 Filter sharing – bdedelulo@nedrian.info

- Share filter √
- Unlink filter √
- Accept share invitation √
- Try to accept share invitation twice √
- Refuse share invitation

4.6 Dashboards

4.6.1 List of dashboards

- The screen should show the list of all the dashboards that are available for the user. This includes: dashboards that are created by the user and dashboards that are shared with the user.
- Dashboards that are created by the user:
  - have view, edit, duplicate and delete button
  - have a share icon showing the number of shares
  - have a transfer of ownership icon
  - have a clickable title that takes the user to the dashboard detail screen
- Dashboards that are not created by the user (i.e. shared with the user):
  - have view and unlink button

- Log back into the account you originally logged in with, and ensure the filter is no longer present in this account. √

Repeat this entire procedure, only refusing instead of accepting the transfer. Ensure the filter remains visible for the original user, and is not visible for the new user. √

4.12.2 Dashboard

Repeat the procedure mentioned in 4.12.1, but instead of only creating a new filter, create a new filter and a new dashboard based on that filter. Furthermore, create a second dashboard based on the same filter. Then transfer the dashboard instead of the filter. Verify the diagram when transferring shows both the dashboard and the underlying filter.

Once the transfer is complete, verify that the recipient has received both the filter and the dashboard. Also verify that the original owner's second dashboard, the one which was based on the filter that was transferred as part of the dashboard transfer, still functions correctly. Check that the filter which was transferred is now shared with the original owner. √

4.13 Data Analysis Engine

We will test the proper function of the Data Analysis Engine by manually uploading multiple files, creating DADs and checking they have the results that were expected. √

These test input files can be found on the same confluence page where this document could be found.

4.13.1 Preparation

Create a new asset type and a new asset you will use in the tests. Remember the asset id that was assigned to this asset. Also note down the GUID assigned to this asset.

4.13.2 First data

Place file 1.log in the unprocessed directory for the newly created asset. Verify the file disappears from the directory after a few seconds, and verify that a new datachunk is created with the expected contents (see content of file for expected contents). √

4.13.3 Create DAD

Create a new DAD with the following text: 67

```
with asset(63) as w
define every(w.TEMPERATURE) as temp
when 1 then writevalue(w.DAE_TEMP_KELVIN, temp+273, timestamp)
```

Substitute the asset id with the asset id of the asset you created. Save and enable the DAD. Wait a few seconds and verify that

- A new property DAE_TEMP_KELVIN was created

- Logfiles can be downloaded by clicking the download icon in the last column (360 6000)
- Logfiles can be viewed online by clicking the ID in the first column

4.3 Assets screen

4.3.1 List of assets

- The screen should show the list of all the assets that are available for the company (that the user belongs to), and only these assets.
- The screen should not show any asset that is not linked to the company the user belongs to.
- Images should be shown for every asset that has an avatar in the list.
- Clicking a card (box in UI showing details of single asset), should bring up the asset detail screen

4.3.2 Single asset detail

Test when logged in with a user with administrator privileges:

- The screen should show the following tabs: general information, device properties, custom properties, log, control center, filters, dashboards, reports, log files

Property Meta data → !

Test when logged in with a user without administrator privileges:

- The screen should show the following tabs: (all of the previously mentioned tabs other than Logfiles, which should not be visible).

reports, logfiles niet → wel statistics

4.4 User Registration

4.4.1 Step 1: Token Creation

- Log in using an account with administrator privileges.
- Navigate to the administrator user listing page
- Click the "Create Registration Token" button
- Pick the company you'd like associate the new user(s) with.
- Choose some set of permissions and remember which ones you picked.
- Pick a number of tokens. →
- Click the submit button.

4.4.2 Step 2: Token sharing

In this step, we'll share the creation link with the user who will create the new account.

Fill in the target email address, check the subject and content and send the email to an address you control. Check to see if the email arrives.

4.4.3 Step 3: Account creation

Log out if you are still logged in, or use an anonymous browsing window. Click the link that was received by email in the previous step. new TEST 3

You're shown a registration screen. Fill in all fields. Note that the email address you specify will be used to send a confirmation email.

- Try using a password that's short (should not be allowed).
- Try mismatching the first and second password (should not be allowed)

other TEST 3

eerst delet en dan pas edit ?

4.13.8 Delete a DAD

- click on the 'delete' button on the Data Analysis screen
- answer 'yes, delete this definition' when prompted
- DAD should be removed

4.13.9 Help pages

- edit a DAD
- click on help-hyperlink (upper right)
- help information should be available

4.14 Most recently used items (MRU items)

4.14.1 Dashboard

Open a dashboard & wait for it to load completely. Then open the Home page by clicking the Home link in the menu bar on the left and confirm that this dashboard is the first item listed.

4.14.2 Filter

Edit a filter by changing its name. Open the Home page in the menu bar. Confirm that the Filter, visible by its new name, is the first item listed. Also confirm that the second item is the dashboard you opened in 4.13.1.

4.14.3 Scheduled Task

Pick a scheduled task that already exists, and Run it. Open the home page and confirm the scheduled task you just executed is the first listed, followed by a filter and with a dashboard in third place.

4.14.4 Report

View an existing report. Open the home page and confirm the report you just viewed is listed at the first position. Confirm it is followed by a scheduled task, a filter and a dashboard.

4.14.5 Text Max Number of Items

Open/edit at least 9 different dashboards/filters/scheduled tasks & reports. Ensure that no more than 9 items are visible on the home screen.

5 Test results

If during functional testing tests from this suite above are found to be failing, the failure should be registered in a ticketing system using a reference to the failed test and the tested RAS application:

- Reference to failed test
  - Test ID (e.g. 4.1.5)
  - Test document version ID (e.g. 0.6)
- Reference to the tested RAS application
  - Build reference (commit tag?)

Functional testing should produce a test report that contains:

- Time-stamp of when the test was performed (begin, end)
- Details of person(s) who performed the test

- It is possible that some tests require additional credentials but these should be specified in these specific tests.

4 Test suite

This section contains all the tests that need to be executed to verify the functionalities contained in the RAS application.

The tests are grouped around the following domains:

- Access to the application
- Administration
- Assets
- Filters
- Dashboards
- Data Analysis Engine
- Reports
- Events
- Scheduled tasks
- Web notifications
- User security

Ideally, each test should contain the following elements:

- Pre-conditions for the test
    - e.g. a dashboard must already be shared with another user
- Execution steps
    - e.g. 'click on the 'submit' button'
- Expected result
    - e.g. the preview data should only contain values between 5 and 10

4.1 Access to the application

ID	Preconditions	Steps	Expected result
2	User is not logged in	login with wrong username	should fail
3	User is not logged in	login with wrong password	should fail
4	User is not logged in	login with username that is not a valid e-mail address	should fail
5	User is not logged in	login with correct username and correct pwd	should work logged in user is printed at top
6	User is logged in	logoff, and try to use RAS after pressing browser <back> button	using RAS should not be possible (selecting an item in the menu on the left)
7	User is logged in	click 'hello <username>' in home screen	profile page should be shown

* change Avatar -> werkt niet
* MP4 -> error 500