Find <user2>

Click <sends web notification>

Enter any data

o Logoff

Login as user2 Read notification

o Top of screen: bell icon should indicate that a notification is available

Notification message should contain the data that was entered by user1

### 4.10 User security

Check permission:

Login with a user that does not have permission to

**TODO** 

4.11 Web browser support

Testing web browser support can be done in many ways. The following is a basic set of tests

|                                | Google<br>Chrome | Firefox | Microsoft<br>Internet<br>Explorer | Microsoft<br>Edge |
|--------------------------------|------------------|---------|-----------------------------------|-------------------|
| Enter URL, access application  | >                | >       | 7                                 | >                 |
| Edit a filter                  | 7                | >       | X                                 | 2                 |
| View a dashboard               | >                | ۷       | >                                 | >                 |
| View an asset's details screen | >                | >       | >                                 | >                 |

the tests in this paragraph assume that the latest major version of each browser test document: this list should be specified elsewhere. In absence of such a list, Note: The list of supported browsers (and their versions) is not specified in this

### 4.12 Data Analysis

4.12.1 Create DAD

 Enter a valid RASQL statement that will generate a few notifications and emails

Soc\_value]) in the content or title somewhere.

Save the DAD

Verify no errors are displayed

### Run a DAD

- Enable the newly created DAD
- Check to see that it is running and creating the messages

(email+notification) properly

Ensure the background color of the dad turns green while it is running

# quotum on mails fuel notifiet. Error handling DAD

Add an error to the DAD RASQL-statement

See that the error is displayed immediately

Navigate to the Data Analysis list overview page

See that the definition in error is blinking red and an error message is

displayed in the tooltip of the error icon  $\, \gamma \,$ 

Try to enable the definition 6

See that it is immediately disabled Edit the DAD again

See that the error is still there, displayed in an alert

Correct the error

See that the error has disappeared 🗸

### 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

o 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:

Lubing buy RAS 807 - Time-stamp of when the test was performed (begin, end)

RAS information that can identify the specific version of RAS (e.g. build

Reference to screenshots that may be available. Reference to log files that may be available.

A short summary table describing the test results, for example.

Number of test(s) successful: 125

Number of test(s) failed: 14

Number of test(s) not performed: 3

An overview of the number of bugs (tickets) that have been created, for

Number of CRITICAL bugs logged:

Number of MAJOR bugs logged: 4

Number of OTHER tickets logged: 11

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

4.4.6 Filter sharing

Share filter レ

Unlink filter

Accept share invitation 1

Try to accept share invitation twice N

Refuse share invitation

### 4.5 Dashboards

4.5.1 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.

o have adity export and delete button New and languages Dashboards that are created by the user:

vo have a clickable title that takes the user to the dashboard detail v have a share icon showing the number of shares

Dashboards that are not created by the user (i.e. shared with the user):

have view and unlink button

have no share icon 0 4.5,2 Create a new dashboard

Drop-down list of filters should contain filters that are created by the users (1) The cedits hutton and filters that are shared with the user

enabled for filters that are created by the user, not for those that are shared with the user

After the dashboard is created, the card in the dashboard list should include an image preview of the dashboard.

4.5.3 Edit an existing dashboard

Clicking <edit> should bring user to the same UI as for the create

4.5.4 Duplicate an existing dashboard

Clicking <duplicate> should bring user to the same screen as for editing a dashboard.

4.5.5 Delete an existing dashboard

Click <Delete>.

Should not be possible with a dashboard that is shared with the user.

If the user tries to delete a dashboard that is shared by the user with other users, then this dashboard should not be in the list of dashboards anymore users, a warning message should be displayed after the user clicks 'delete' If the user has deleted a dashboard that is shared by the user with other

for those other users.

/4.5.6 DevExpress dashboards

Create a dashboard

[Move this to dedicated location?]

Create a simple dashboard using a limited dataset.

Create a complex dashboard using a large dataset.

<TODO> 0

Edit dashboard

Possible to edit and save dashboard

#### 4.6 Reports

#### 4.7 Event

## 4.8 Scheduled tasks

4.8.1 Create a new scheduled task

Select 'based on a fixed schedule'

A SA

Set schedule to trigger every minute

V= Tab 2

Select any dashboard.

Tab 3 3

Check box 'send any mail'

Check box 'send a website notification'

V. After 1 minute of waiting, the website notification and e-mail should be received.

V 4.8.2 Instantly run a schedule task

On an existing scheduled task, click 'run now'

The website notification and e-mail should be received

V4.8.3 Edit a schedule task

Click <edit> for an existing scheduled task.

User should be taken to the same UI as for the creation of a scheduled

4.8.4 Delete run a schedule task

Click <delete> for an existing scheduled task.

User is asked to confirm deletion

After confirmation, the task should be deleted.

## 4.9 Web notifications

4.9.1 Send notification to user

Pre:

need 2 separate accounts, user1 and user2

user1 needs permission to send web notifications

send notification

o login as user1

go to administrator/manage users

| _ |    |                   | new pwd                                | work                   |
|---|----|-------------------|--|------------------------|
| - | 12 | User is logged in | click 'hello <username>' in</username> | profile page should be |
| > |    |                   | home screen                            | shown                  |
|   |    |                   |  |                        |

### 4.2 Administration

4.2.1 Manage users

7

- create user (+ test login using newly created user)
  - / impersonate (+ test permissions)

Testing of permissions and web notifications happens in section 4.

Ask a developer to delete the newly created user (w/ permissions)

- V 4.2.2 Manage companies
- screen should show all companies
  - V create new company

Ask a developer to delete the newly created company.

- 4.2.3 Manage assets
- create new asset
- change ftp password (and test FTP) set associated companies
- change asset image

Note: on GHENT it is not be possible to test FTP.

- v 4.2.4 Manage asset type
- $\sqrt{\phantom{a}}$  create new asset type
- base asset type is required (cannot be null/none)
  - asset types cannot be deleted from UI

Ask a developer to delete the newly created asset type.

- V 4.2.5 Manage Data Chunks
- ✓ only x records are loaded initially, but by scrolling down additional records are added to the table
- Records are sorted: most recent at the top

### 4.3 Assets screen

- 4.3.1 List of assets
- V 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. لالا
- 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, notification, control center, filters, dashboards, reports, log files

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), 2

#### 4.4 Filters

- 4.4.1 List of filters
- user. This includes: filters that are created by the user and filters that are The screen should show the list of all the filters that are available for the shared with the user
- Filters that are created by the user; کٰ
- o have edit, export and delete button
- have a clickable title that takes the user to the edit filter screen have a share icon showing the number of shares
- V- Filters that are not created by the user (i.e. shared with the user):
  - have export and unlink button
- have no share icon
- do not have a clickable title

## 4.4.2 Create a new filter

- Each tab: check all UI-controls/elements (!)
  - Tab 1: check correct list of assets is shown
    - Tab 2: check correct properties are listed
      - Tab 3: check 'data filters'
- Tab 4: check 'timestamp filters'
  - Tab 5: check preview
- 4.4.3 Edit an existing filter

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

## 4.4.4 Delete a created filter

- Cannot delete filter that is in use by dashboard
  - Cannot delete a shared filter
- Can delete filter that is not in use by any dashboard

## 4.4.5 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:

## RAS test book

## 1 Revision history

| Version | Date       | Author              | Description of revision |
|---------|------------|---------------------|-------------------------|
| 0.1     | 2017-11-27 | 1                   | First draft             |
| 0.2     | 2017-11-30 | B. Dijck            | Minor update            |
|         | 2017-12-13 | Ives vd Flaas       |                         |
| 0.4     | 2018-01-24 | 2018-01-24 B. Dijck | Minor update            |
|         | 2018-01-24 | B. Dijck            |                         |
| 9.0     | 2018-03-06 | P. Meir             | Ad                      |
| 0.7     | 2018-03-06 | P. Meir             | Expand                  |

## 2 Table of contents

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|------------------|-------------------|-----------------------|-----------------------------|---------------------------------|-------------|-----------------------------|-------------------|-----------------|------------|----------------|------------|----------|-------------------|---------------------|--------------|
| Н                | 7                 | ო                     | 3.1                         | 3.2                             | 4           | 4.1                         | 4.2               | 4.3             | 4.4        | 4.5            | 4.6        | 4.7      | 4.8               | 4.9                 | Ŋ            |

# 3 Software to be tested

# 3.1 Access to the application

- URL: http://ghent:80
  - Login credentials:
- User: test@test.com
- Password: ask RAS development team
- 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
  - Reports
- Events

- Scheduled tasks
- User security

Web notifications

- Ideally, each test should contain the following elements:
- a e.g. a dashboard must already be shared with another user Pre-conditions for the test
  - 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

| • |    |                          |   |  |
|---|----|--------------------------|---|--|
|   | Π  | Preconditions            | Steps   | Expected result  |
| 3 | 2  | User in not              | login with wrong username   | should fail  |
| > | 6  | User is not              | login with wrong password   | should fail  |
| 7 | 4  | User is not              | login with username that is not a valid e-mail address  | should fail  |
| > | 2  | User is not<br>logged in | login with correct username   | should work<br>logged in user is                                       |
| > | 9  | User is logged in        | logoff, and try to use RAS after<br>pressing browser <back><br/>button</back>                       | using RAS should not<br>be possible                                    |
| _ | 7  | User is logged in        | change password, provide invalid old password but valid (and equal) new and new confirmed passwords | error "incorrect<br>password" should be<br>shown                       |
| 7 | ∞  | User is logged in        | change password, valid old<br>password but new & confirm<br>password "testtest"                     | error about minimum<br>password<br>requirements should<br>be shown     |
| 7 | 0  | User is logged in        | change password, provide valid old password but differing new & confirm passwords                   | error about differing<br>new & confirm<br>passwords should be<br>shown |
| 5 | 10 | User is logged in        | change password, login with old pwd   | login with old should<br>fail  |
| 7 | 11 | User is logged in        | change password, login with   | login with new should  |

