



VILT Minium Manager

User Guide

Version 2.7.15



Contents

1. Introduction	1
2. Projects	2
2.1. Monitoring	2
2.1.1. Check if the website is ok	3
2.1.2. Do a search on the website with refresh and check how long it took to load.	4
2.1.3. Click on a link and get the performance of the page	4
2.2. Cookie	4
2.3. Setup a project	5
2.3.1. General	5
2.3.2. Browsers	8
2.3.3. Reports and Scheduling	10
2.3.4. Advanced	13
2.3.5. Runtime	14
2.3.6. API	15
2.4. Project permissions	16
2.5. Organise projects by Labels or Groups	18
2.5.1. Manage Labels	19
2.5.2. Assign labels to the projects	20
2.5.3. Manage groups	21
Manage groups using LDAP authentication	21
Manage groups without LDAP authentication	22
2.5.4. Organise Projects	24
Clean project filters	26
Project Type	26
Auto Refresh	27
Filter by Results	27
2.6. Configuration profiles	28
2.7. Secret configuration properties	29
2.8. Add test information to Minium Manager Report (output)	30
2.9. Delete a project	31
2.10. Edit projects in batch	32
2.11. View Queue	33
2.12. Edit project code (Projects in filesystem only)	35
2.13. Check the available browsers	38
2.14. Project Statistics	38
3. Test executions	40
3.1. Launch test executions	40
3.1.1. Launch a test execution manually	40
3.1.2. Schedule test executions	42
3.1.3. REST API	43
3.2. Follow the progress of a test execution	46
4. Monitor test results	47

4.1. Feature overview	56
4.2. Reports	57
4.3. Daily Reports	58
4.4. Data Extraction Reports	59
4.4.1. Crawler Aggregator	61
4.5. Regressions	61
5. Roles	65
5.1. Assign roles	65
6. License information	66
7. Minium Recorder User Guide	67
7.1. Configure Minium Developer	67
7.2. Launch Minium Recorder	67
7.3. Start recording	69
7.4. Record interactions	69
7.5. Stop recording	71
7.6. Import the recorded script in Minium Developer	72

1. Introduction

This document describes the user interface of the VILT - Minium Manager, version 2.7.15.

Minium Manager is a web testing automation platform designed to assure your platforms and applications perform as intended across several combination of browsers and OS's on a continuous integration fashion. If something is not working as expected, Minium Manager can send you notifications and can also record videos so you can easily identify problems, and also provides access to detailed reports on test executions and its results. With Minium Manager it is easy to write and manage tests: writing new tests gets almost as easy as writing English and test management is very straightforward.

With the purpose of giving you a way of assuring the quality of your platforms and applications, it provides you with different types of projects that can focus on different components of an application, such as usability, availability and performance. By allowing you to design more focused tests you can guarantee the robustness of you platforms and applications with Minium Manager

2. Projects

Configure projects in Minium Manager, in order to run and analyze end-to-end tests. All projects need to have a repository (`Git` or `SVN`) associated, where the code is stored, except the Cookie Crawler.

There are three type of projects: Web application testing, Monitoring and Cookie.

The Web application testing project is a Minium project that navigates a website in the same way a human would.

The Monitoring project is a Minium project that are executed with high frequency (every 5, 10, 20 minutes), and can give us a report about the availability of a certain page and performance metrics, with the objective to check that the page are working as expected.

The development workflow for a Monitoring project in Minium Developer will be similar to the web application testing project, providing an easy and quick way to write test. The configuration in Minium Manager is similar to other projects. The monitoring project does not have the browser configuration.

The Cookie project generates a report of cookies found during the navigation or crawl of a website. The Cookie is divided in two projects: Cookie Report project and Cookie Crawler project. The Cookie Report project is a Minium project (based on the monitoring project) that extracts the all browser cookies at the end of a scenario. The Cookie Crawler project is a crawler that given one or more URLs, it crawls the websites and, for each URL, extracts the all browser cookies.

2.1. Monitoring

To start the development of a monitoring project, you need to check the checkbox `Is a Monitoring Project?` to generate the monitoring project:

New project **cucumber**

Project type

Cucumber Project

Automator Project

Parent Directory

Parent Directory

Project Name

Project Name

☐ **Is a Monitoring Project?** This configuration will generate a different Cucumber Project, focused to retrieve information about the availability of a certain page and performance metrics.

Advanced

Create

Cancel

Here are some examples of the development workflow in Minium Developer of the monitoring project:

2.1.1. Check if the website is ok

Use case: You want to test if the URL is ok and get the performance in the reports

Scenario:

```
Scenario: Check Blog La caixa
  When Check if website responds: &quot;https://blog.caixabank.es/&quot;
```

Step:

```
When(/^Check if website responds: &quot;([^&quot;]*)&quot;$/,
function(url) {
  browser.get(url);
});
```

For a monitoring project, the expression `browser.get(url)`; retrieves the data related to page load performance, the URL status, the number of requests, the page size and javascript errors. This information will be presented at the Minium Manager report.

2.1.2. Do a search on the website with refresh and check how long it took to load.

Use case: You want to perform a search on the website (where's there's a refresh after the search) and check if the results appear and get the performance of the page.

Scenario:

```
Scenario: Search
  Given I'm at
  &quot;https://www.caixabank.es/particular/home/particulares_es.html&quot;
  When Search for &quot;CaixaBank&quot; and check the results
```

Steps:

```
When(/^I'm at &quot;([^\&quot;]*)&quot;$/, function(url) {
  browser.get(url);
});

When(/^(Search for &quot;([^\&quot;]*)&quot; and check the results$/,
function(search) {
  $('&quot;#cookies-accept-full a&quot;').click();
  $('&quot;#search-field&quot;').fill(search);
  $('&quot;#prebuscadorCabecera input[type='submit']&quot;').click();
  expect($('&quot;.search-result-block&quot;')).to.exist();
  scenario.write(browser.getPerformance());
});
```

The expression `scenario.write(browser.getPerformance())`; retrieves and store the data related to the last page load performance, the URL status, the number of requests, the page size and javascript errors. This information will be presented at the Minium Manager report.

2.1.3. Click on a link and get the performance of the page

```
When(/^(I click on link with text &quot;([^\&quot;]*)&quot;$/,
function(text) {
  $('&quot;a&quot;').withText(text).click();
  expect($('&quot;.page-title&quot;')).to.exist();
  scenario.write(browser.getPerformance());
});
```

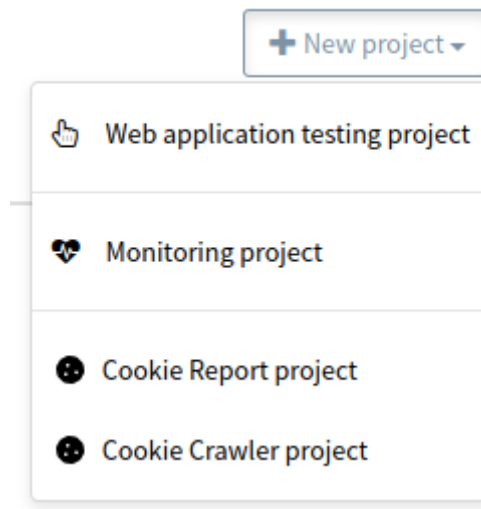
2.2. Cookie

Since the Cookie Report project is a Minium project (based on the monitoring project), to create a Cookie Report project, simply generate a Monitoring project in Minium Developer. It is not necessary to add extra instructions to the minium code, since all browser cookies will be automatically extracted at the end of each scenario.

For the Cookie Crawler project, development is not necessary, you only need to provide one or more URLs to crawl.

2.3. Setup a project

To set up a project, click on the button `New Project`:



There are 4 project types we can select:

- Web application testing project
- Monitoring project
- Cookie Report project
- Cookie Crawler project

Then, fill the form:

2.3.1. General

Project Configurations for **Enterprise Email end-to-end testing**
×

Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly

General
Browsers
Reports and Scheduling
Advanced
Runtime
API

Name*
Enterprise Email end-to-end testing

Description
Small project description

Labels
Associate labels to a project to organize projects.
+ Add

Repository

Type*
git Git
Subversion
File System

URL*
https://github.com/viltgroup/minium-mail-e2e-tests.git

Username
mario.lameiras

Password
Unchanged

Branch
master

Delete Project
Update
Cancel

On the `General` tab, fill the following fields:

Name	Display name of the project (e.g gmail-e2e-tests)
Description	Optionally provide a project description
Labels	Associated labels to a project in order to organize and filter projects.
Type	Type of SCM repository
Url	URL of the repository where the project with the features is stored (GIT and Subversion only). The following are examples of valid git URL's (or a local file path): https://github.com/github/git.git //path-to-repo/repos/gmail-e2e-tests
Username/Password	Credentials for authentication on the repository (GIT and Subversion only).

Branch	The name of the branch you want to execute (GIT only). The default value is <code>master</code>
Code	Upload one archive zip with the minium project (File system only). If no archive zip is uploaded, Minium Manager will use the template projects.
Download Zip	Downloads the current minium project (File system only).
Edit	Opens the editor to edit the minium project (File system only).

Cookie Crawler

For the Cookie Crawler project the General tab is different:

Project Configurations for **test cookie crawler project**

General
Reports and Scheduling
Advanced
Runtime
API

Name*
test cookie crawler project

Description
Small project description

Labels
Associate labels to a project to organize projects.
+ Add

Cookie Crawler Settings

Urls crawler*
https://www.caixabank.es/index_es.html

Domains to Filter*
www.caixabank.es
www.caixabank.com

Max Depth*
3

Accept Cookies
Active

Cookies Validations

Configuration*
Manual
JSON URL
Match Type*
Partial
Full

Configurations
Set the cookie name and/or value and/or URL of the cookies you want to validate.

abcde
Cookie Value
Url

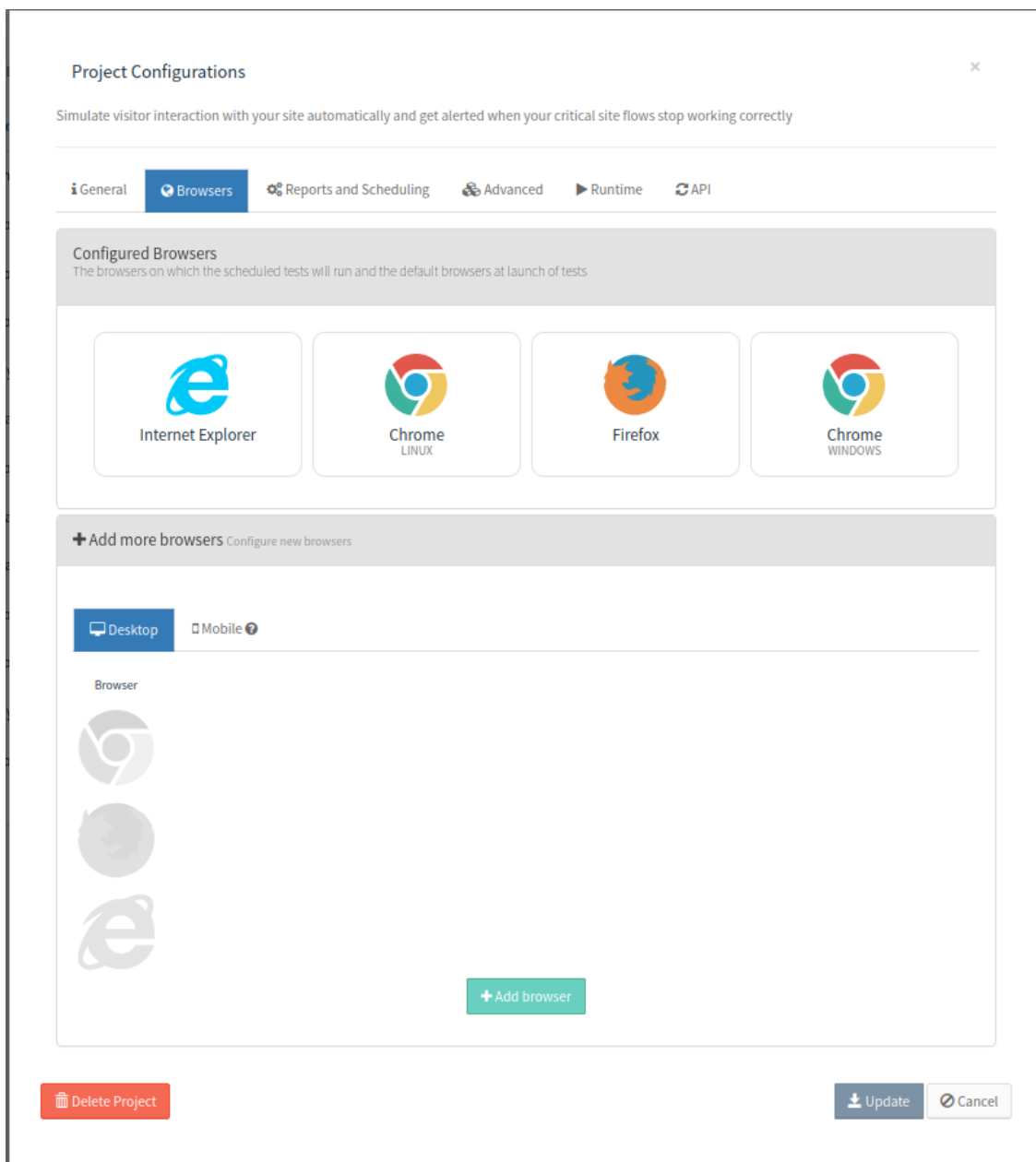
demdex
Cookie Value
Url

Cookie Name
Cookie Value
Url
+

Delete Project
Update
Cancel

Urls crawler	The URLs you want to crawl (e.g. https://www.caixabank.es/index_es.html)
Domains to Filter	The domains you want to filter at the crawl (e.g. www.caixabank.es)
Max Depth	Maximum depth for the crawler to follow links automatically
Accept Cookies	Accept the cookie warning during the crawl (is related to the field <code>Script to accept cookies</code> at the Runtime tab of the Cookie Crawler project).
Configuration	The type of configuration to validate the cookies. The <code>Manual</code> validation, the user will add the cookies to validate manually. The <code>JSON URL</code> validation will retrieve the cookies to validate in a rest api call.
Match Type	The type of match that will be used to validate the cookies. The <code>Partial</code> will only validate if the cookies configured are present in the list of cookies retrieved. The <code>Full</code> will validate if the list of cookies retrieved, and the cookies configured to validate are identical. If not, the result will present the difference.
Configurations	the cookie name and/or value and/or URL of the cookies you want to validate. After you configure one validation, click at the button <code>+</code> to add the validation.
JSON URL	Add the url to the json that contains the cookies to validate.

2.3.2. Browsers



On the `Browsers` tab, choose the browsers on which the scheduled tests will run, and the default browsers at launch of tests.

To configure the browsers, click `Add more browsers` to expand the available browsers and select a browser (and the properties) and/or the mobile devices (emulated via chrome). After, click `Add browser` or `Add device` (for mobile devices).

If you want to remove a configured browser, move the mouse over the browser configuration (below the configured browsers) and click on the trash icon.



Note:

The `Browsers` tab is not available for the monitoring and cookie projects.

2.3.3. Reports and Scheduling

Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly

General Browsers **Reports and Scheduling** Advanced Runtime API

Emails

Recipients

Report formats ☒ PDF with screenshots

Notifications (Advanced)

☒ Send only when there are test failures

Number of fails to notify the error

Scheduling

Scheduler ☒ Never run ☐ Every Day ☐ Every Week ☐ Every Month ☐ Every Day at midnight ☐ Custom ☐ Cron Expression

On the **Reports and Scheduling** tab, fill the following fields:

Recipients	Set email addresses to receive a report of execution for the project. You can search by the username or email in the list of users registered in the system (or present in ldap). You can also add emails that are not on the list. If you want to receive the pdf report with screenshots, check the option "PDF with screenshots".
Send only when there are test failures	If you only want to receive the report of the executions that contains failed tests, check this option. Also, if the credentials of the SCM repository fails, the email addresses will receive a notification warn the users that the SCM credentials are invalid ou incorrect.
Number of fails to notify the error	Set the number of failed tests in a row to notify the user (via email and sms).

Scheduler	Set the schedule you want to execute the project and send the report of the execution. If you choose the option <i>Custom</i> , you can set a custom schedule.
Scheduler Custom Configurations	Set the schedule you want to execute the project and send the report of the execution with different levels of granularity.
Cron Expression	Set the schedule you want to execute the project and send the report of the execution via a cron expression.

Monitoring

For the monitoring project the **Reports** and **Scheduling** tab contains more configurations:

Project Configurations for **Blog LaCaixa**

Monitor page load performance. Make informed optimization armed with the size and load time of your applications.

General
Reports and Scheduling
Advanced
Runtime
API

Emails

Reports ☒ Active

Recipients

☐ Send only when there are test failures

Report formats

☒ PDF
☐ XLSX

☒ PDF with screenshots

☐ Send email when a webpage is not responding or is recovered

SMS

Alert ☒ Active

Recipients

☒ Edit SMS messages

Scheduling

Scheduler ☐ Inactive

Delete Project
Update
Cancel

On the **Reports** and **Scheduling** tab for the monitoring projects, you can also need to fill the

following fields:

Send email when a webpage is not responding or is recovered	Send the email notification to the emails configured at the Recipients (Emails) configured to warn the user when the website is not responding, or the website recovers (from a failure).
Recipients (SMS)	Set mobile phone numbers to receive an SMS when the project. You can search by the username or phone number in the list of users registered in the system (or present in ldap). You can also add phone numbers that are not on the list.
Edit SMS Messages	Set the messages that the users will receive on failure and on recovery.

Cookie Crawler

For the monitoring project the **Reports and Scheduling** tab contains more configurations:

Create or edit a Project ×

General

Reports and Scheduling

Advanced

Runtime

API

Emails

Reports

☒ Active

Recipients

Email addresses to receive reports of the executions

Report formats

PDF

XLSX

Join report with cookie minium project

Aggregate the report of the last execution of the "Cookie Report" project at the report of this project.

None

Scheduling

Scheduler

☐ Inactive

Save

Cancel

On the **Reports and Scheduling** tab for the Cookie Crawler projects, you can also need to fill the following fields:

Join report with cookie minium project

Set the Cookie Report project to the Cookie Crawler project to join the cookie report in a single project. The report generated will contain the result of the last execution of the Cookie Crawler project, and the result of the last execution of the Cookie Report project.

2.3.4. Advanced

Project Configurations

×

Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly

General

Browsers

Reports and Scheduling

Advanced

Runtime

API

Permissions

Name	Read	Write	Launch tests
Minium Team	☒	☒	☒

+

Append

Store execution videos

☒ Inactive

Max number of test executions passed stored

Max number of test executions failed stored

Module

Delete Project

Update

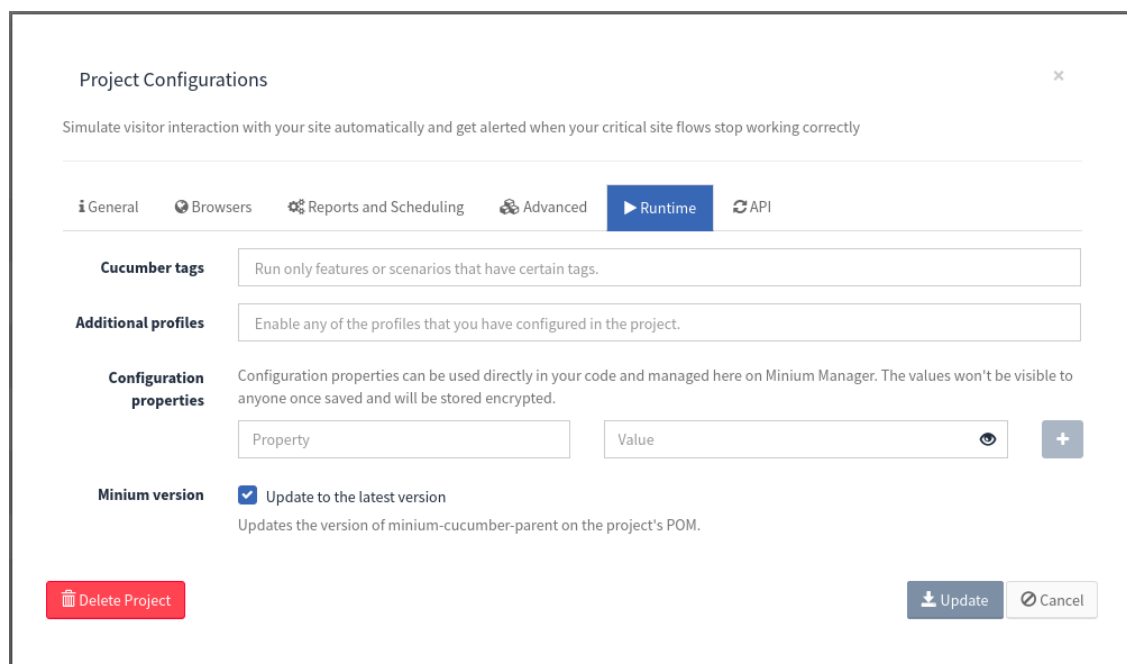
Cancel

On the **Advanced** tab, fill the following fields:

Permissions	Add and personalize the level of access that assigns to each user or group.
Store executions videos	Configuration to allow the storage of videos of the executions. When inactive, no videos will be stored, otherwise the videos will be stored. By default, the storage of videos is inactive.
Max number of test executions passed stored	Set the max number of executions passed to be stored at Minium Manager. The default value is 30.

Max number of test executions failed stored	Set the max number of executions failed to be stored at Minium Manager. The default value is 30.
URL Loading time threshold	Maximum time to load a page (in seconds) to warning the user at the executions page. Available only to Monitoring projects
Module	The path to the folder where the features are in the repository (e.g. minium-developer-e2e-tests).

2.3.5. Runtime



The screenshot shows the 'Project Configurations' dialog box with the 'Runtime' tab selected. The dialog has a title bar with a close button. Below the title bar is a subtitle: 'Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly'. There are six tabs: 'General', 'Browsers', 'Reports and Scheduling', 'Advanced', 'Runtime' (selected), and 'API'. The 'Runtime' tab contains the following sections:

- Cucumber tags:** A text input field with the placeholder text 'Run only features or scenarios that have certain tags.'
- Additional profiles:** A text input field with the placeholder text 'Enable any of the profiles that you have configured in the project.'
- Configuration properties:** A section with a description: 'Configuration properties can be used directly in your code and managed here on Minium Manager. The values won't be visible to anyone once saved and will be stored encrypted.' Below this is a table with two columns: 'Property' and 'Value'. There is an eye icon and a plus icon to the right of the 'Value' column.
- Minium version:** A section with a checked checkbox 'Update to the latest version' and a description: 'Updates the version of minium-cucumber-parent on the project's POM.'

At the bottom of the dialog, there are three buttons: 'Delete Project' (red), 'Update' (blue), and 'Cancel' (grey).

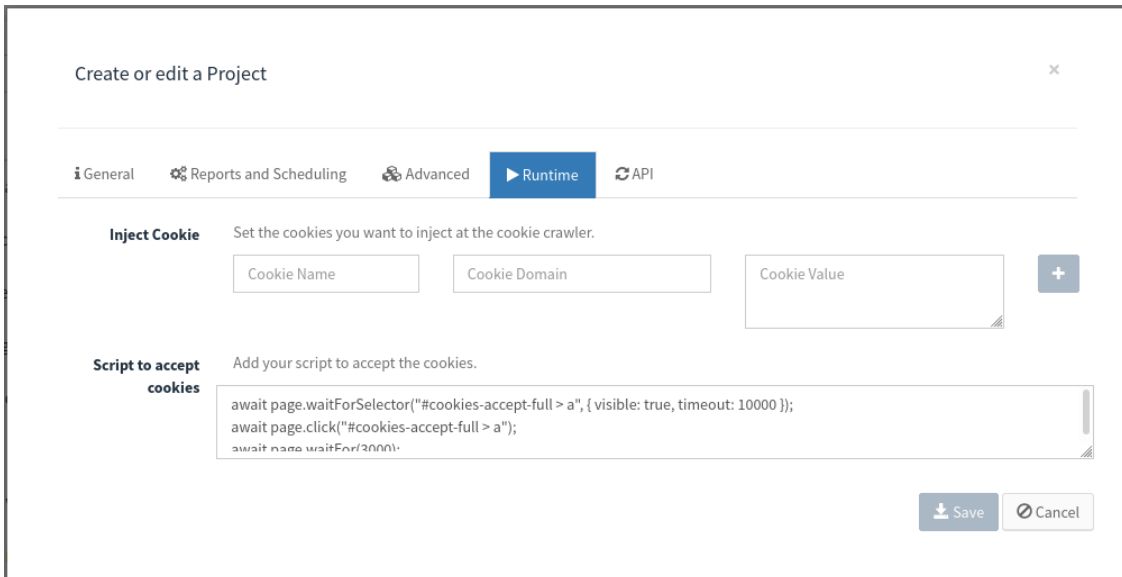
At the `Runtime` tab, fill the following fields:

Cucumber tags	Use this option to tell Minium Manager that only run features or scenarios that have certain tags.
Additional Profiles	Enable any of the profiles that are configured in the <code>./config/application.yml</code> project file. See [_configuration_profiles] for more details.

Configuration properties	This configuration properties can be used directly in your code and managed here on Minium Manager. The values won't be visible to anyone once saved and will be stored encrypted.
---------------------------------	--

Cookie Crawler

For the Cookie Crawler project the Runtime tab is different:



Create or edit a Project

General Reports and Scheduling Advanced **Runtime** API

Inject Cookie Set the cookies you want to inject at the cookie crawler.

Cookie Name Cookie Domain Cookie Value +

Script to accept cookies Add your script to accept the cookies.

```
await page.waitForSelector("#cookies-accept-full > a", { visible: true, timeout: 10000 });
await page.click("#cookies-accept-full > a");
await page.waitFor(2000);
```

Save Cancel

Inject Cookie	The cookies you want to inject at the crawl (e.g. cookie to accept the cookie warning)
Script to accept cookies	The script to accept the cookie warning (in puppeteer). This field is related to the field <code>Accept Cookies</code> at the General tab of the Cookie Crawler project. The default script accepts the cookie warning for https://www.caixabank.es .

2.3.6. API

Create or edit a Project

General

Browsers

Reports and Scheduling

Advanced

Runtime

API

Project key

c8772ee6168adb42

Renew

Delete

A project key is required to launch test executions and get test results through the REST API.

Example scripts

Python

Shell

```
import json, requests, sys, time

url = "https://bolina.vilt-group.com/api/projects/<PROJECT-ID>/test-executions"

headers = {
    'PROJECT-KEY': "c8772ee6168adb42",
    'content-type': "application/json"
}

execution_params = {
    'browsers': [
        {"browserName": "chrome"}
    ],
    # 'gitRepositoryBranch': 'new-feature',
    # 'commit': 'Commit title',
    # 'commitLink': 'https://repository/commits/121ac1b',
    'additionalConfig': {
```

Save

Cancel

On the `API` tab, fill the following fields:

Project key	Generate a project key (required to launch test executions and get test results through the REST API).
Example scripts	Once the project has an API key, the scripts will be fulfilled with the project-specific data and ready to use. The first part of the script shows how to launch a test execution.

2.4. Project permissions

Manage the access levels of the users/groups in the projects. It is also possible to add and personalize the level of access that assigns to each user or group, per-project.



Note:

Write permissions is required to update the permissions of a project.

In order to change the project permission the first step is go to the project configuration and click on tab `Permissions`.

Project Configurations

Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly

General

Browsers

Reports and Scheduling

Advanced

Runtime

API

Permissions

Name	Read	Write	Launch tests	
admin	☒	☒	☒	
minium.team	☒	☒	☒	
qa.team	☐	☐	☒	
eng.team	☒	☐	☐	

Type the name of a user or group

+ Append

Store execution videos

☒ Inactive

Max number of test executions passed stored

10

Max number of test executions failed stored

30

Module

Insert the path of the subproject that you want to test

Delete Project

Update

Cancel

Add user or groups to the permission table. Below the permission table, start typing the name of the user or group desired. Then click on the button `Append`.



Note:

It is possible to select more than one user or group.

bob

alice

+ Append

After the users or groups was appended to the permissions table, define the permission for each entry appended and click `Update` to save the project configurations.

Project Configurations

×

Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly

General Browsers Reports and Scheduling **Advanced** Runtime API

Permissions

Name	Read	Write	Launch tests	
 admin	☒	☒	☒	
 minium.team	☒	☒	☒	
 qa.team	☐	☐	☒	
 eng.team	☒	☐	☐	
 bob	☒	☐	☒	
 alice	☒	☐	☐	

Type the name of a user or group

+ Append

Store execution videos

☐ Inactive

Max number of test executions passed stored

10

Max number of test executions failed stored

30

Module

Insert the path of the subproject that you want to test

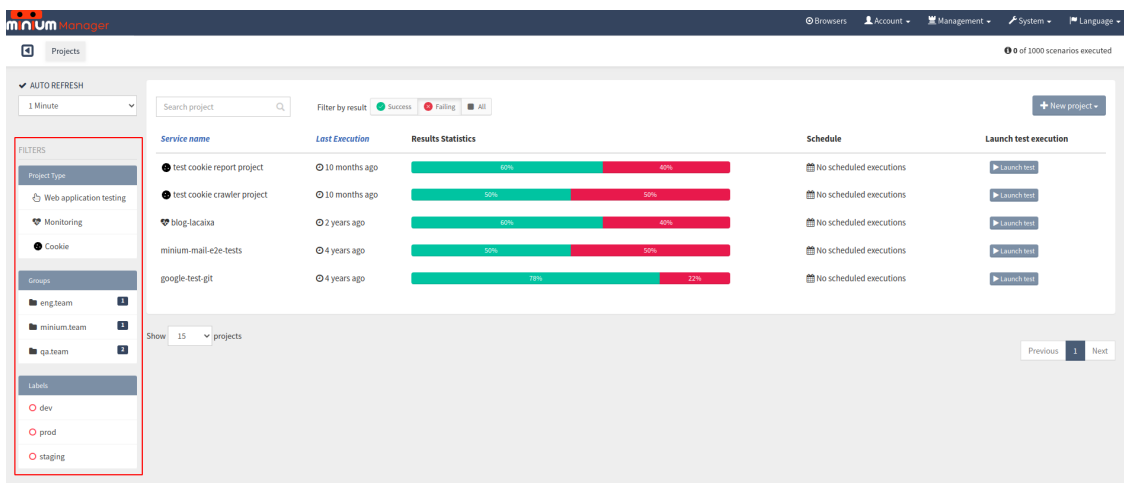
 Delete Project

 Update

 Cancel

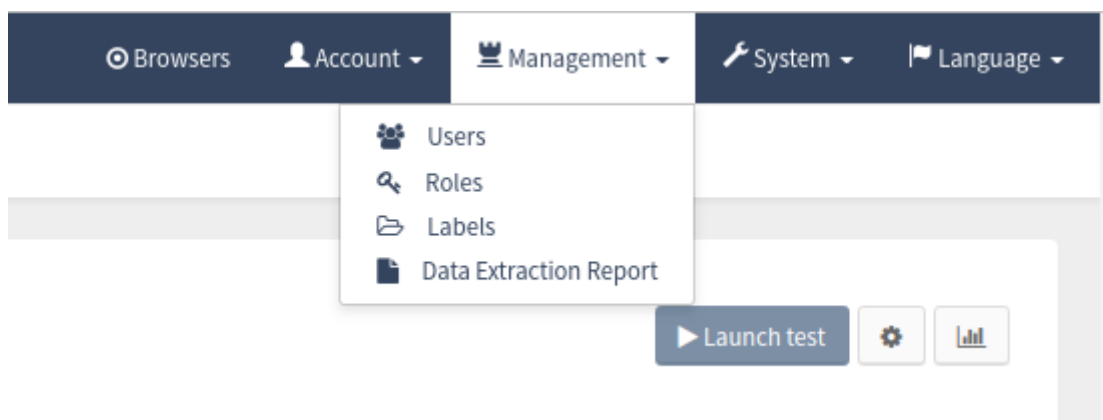
2.5. Organise projects by Labels or Groups

Labels were meant to be used only to filter projects in the Projects page providing a useful way to organize the projects.

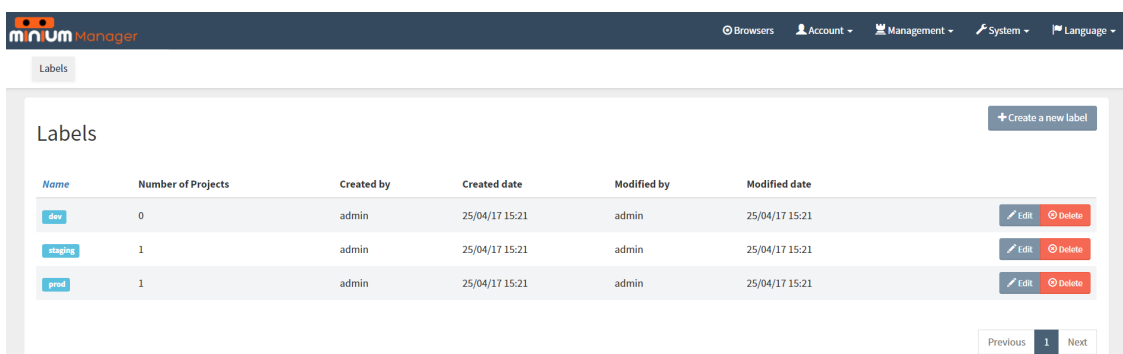


2.5.1. Manage Labels

To manage the labels, open the **Management** menu and click on **Labels**:



The Labels page is shown with all current labels. Edit, delete and create new ones if desired.



Name	Number of Projects	Created by	Created date	Modified by	Modified date
dev	0	admin	25/04/17 15:21	admin	25/04/17 15:21
staging	1	admin	25/04/17 15:21	admin	25/04/17 15:21
prod	1	admin	25/04/17 15:21	admin	25/04/17 15:21

To create a new label, click on **Create a new label**. To delete or edit an existing label, click on **Edit** or **Delete** respectively.

Create or edit a label ×

Name

Save Cancel

2.5.2. Assign labels to the projects

To assign some labels to a project, go to the project configurations:

Project Configurations ×

General Browsers Reports and Scheduling Executors Advanced Runtime API

Name* minium-mail-e2e-tests

Description Small project description

Labels prod × + Add

Repository dev
staging

Type* git Git Subversion

URL * https://github.com/viltgroup/minium-mail-e2e-tests

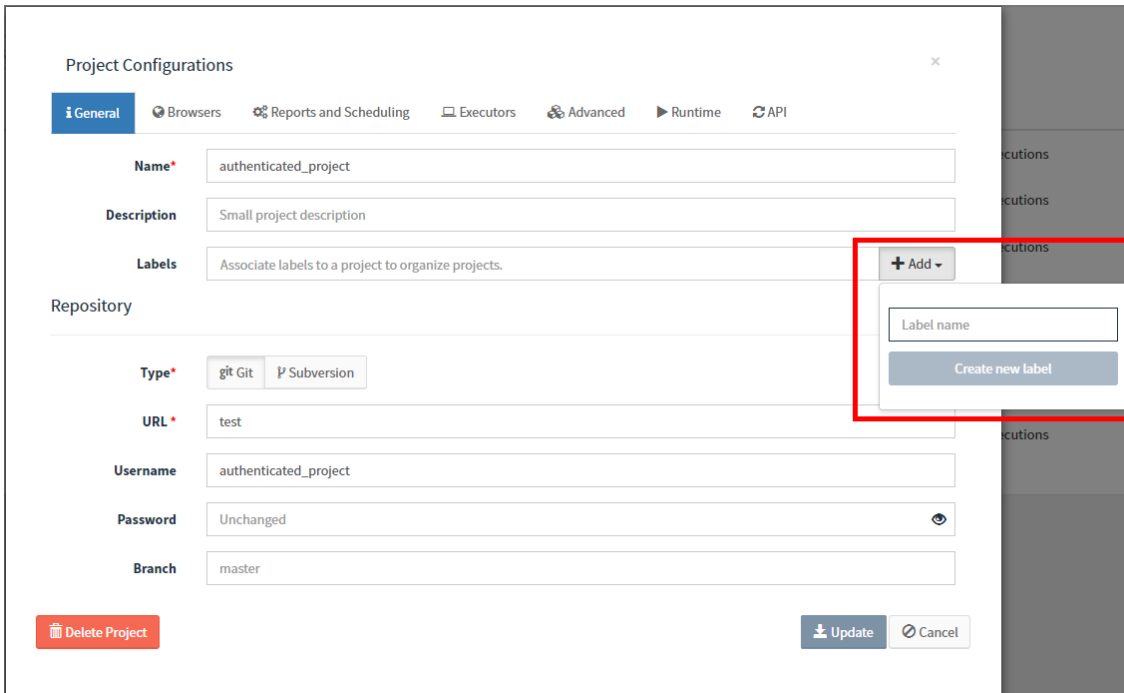
Username admin

Password Unchanged 👁

Branch master

Delete Project Update Cancel

The **Add** button can be used to create new labels if needed.



Project Configurations

General | Browsers | Reports and Scheduling | Executors | Advanced | Runtime | API

Name* authenticated_project

Description Small project description

Labels Associate labels to a project to organize projects.

Repository

Type* git Git | Subversion

URL * test

Username authenticated_project

Password Unchanged

Branch master

+ Add

Label name

Create new label

Delete Project | Update | Cancel

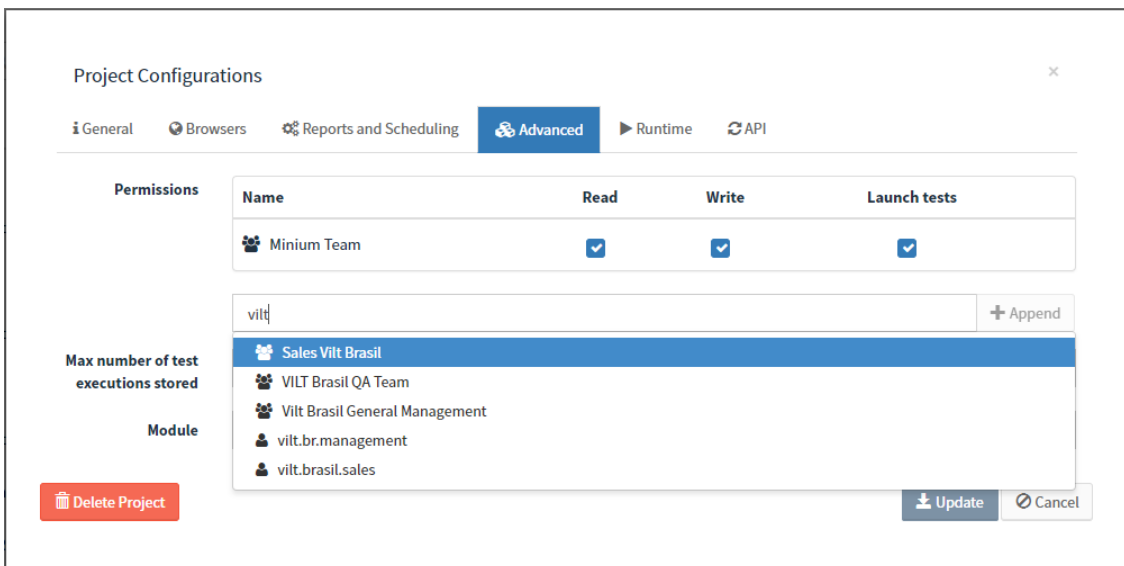
2.5.3. Manage groups

Groups are intended to organize projects at a higher level and to perform changes in several projects at a time.

Manage groups using LDAP authentication

If Minium Manager is using LDAP to manage the users, the groups are configured through the LDAP.

In the project configuration, search for groups. Below the permission table, start typing the name of the user or group. This will perform a search into the LDAP directory.



Project Configurations

General | Browsers | Reports and Scheduling | **Advanced** | Runtime | API

Permissions

Name	Read	Write	Launch tests
Minium Team	☒	☒	☒

vilt

+ Append

Max number of test executions stored

Module

Sales Vilt Brasil

VILT Brasil QA Team

Vilt Brasil General Management

vilt.br.management

vilt.brasil.sales

Delete Project | Update | Cancel

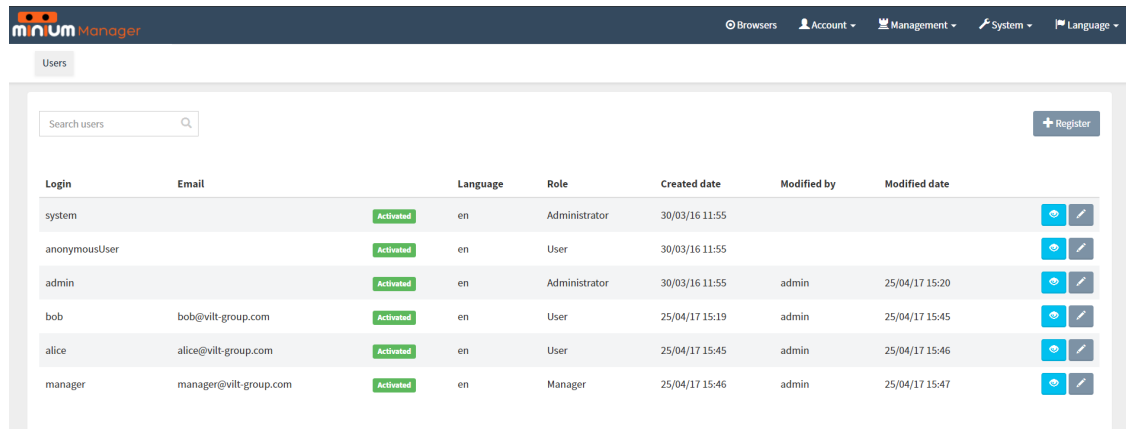
Manage groups without LDAP authentication

If Minium Manager is **not** using LDAP authentication, create new groups through the user management UI.



Note:

Only the users with `Admin` privileges are allowed to create groups.



The screenshot shows the 'Users' management page in the Minium Manager interface. It features a search bar, a '+ Register' button, and a table of users. The table columns are Login, Email, Language, Role, Created date, Modified by, and Modified date. Each row also includes an 'Activated' status indicator and edit/delete icons.

Login	Email	Language	Role	Created date	Modified by	Modified date
system		Activated	en	Administrator	30/03/16 11:55	
anonymousUser		Activated	en	User	30/03/16 11:55	
admin		Activated	en	Administrator	30/03/16 11:55	admin 25/04/17 15:20
bob	bob@vilt-group.com	Activated	en	User	25/04/17 15:19	admin 25/04/17 15:45
alice	alice@vilt-group.com	Activated	en	User	25/04/17 15:45	admin 25/04/17 15:46
manager	manager@vilt-group.com	Activated	en	Manager	25/04/17 15:46	admin 25/04/17 15:47

Create or edit a user

Login

manager

First name

Last name

Email

manager@vilt-group.com

☒ Activated

Language

en

Groups

managers.team

minium.team

eng.team

qa.team

+ Add

Cancel

new.group

Create

Login

bob

E-mail

bob@vilt-group.com

Groups

qa.team

minium.team

eng.team

+ Add

Back

Register

new.group

Create

If desired, add permissions to the group recently created in the project configuration. Below the permission table, start typing the name of the group created.

Project Configurations

General

Browsers

Reports and Scheduling

Executors

Advanced

Runtime

API

Permissions

Name	Read	Write	Launch tests
qa.team	☒	☒	☒

new

+ Append

new-group

Max number of test executions stored

Module

Insert the path of the subproject that you want to test

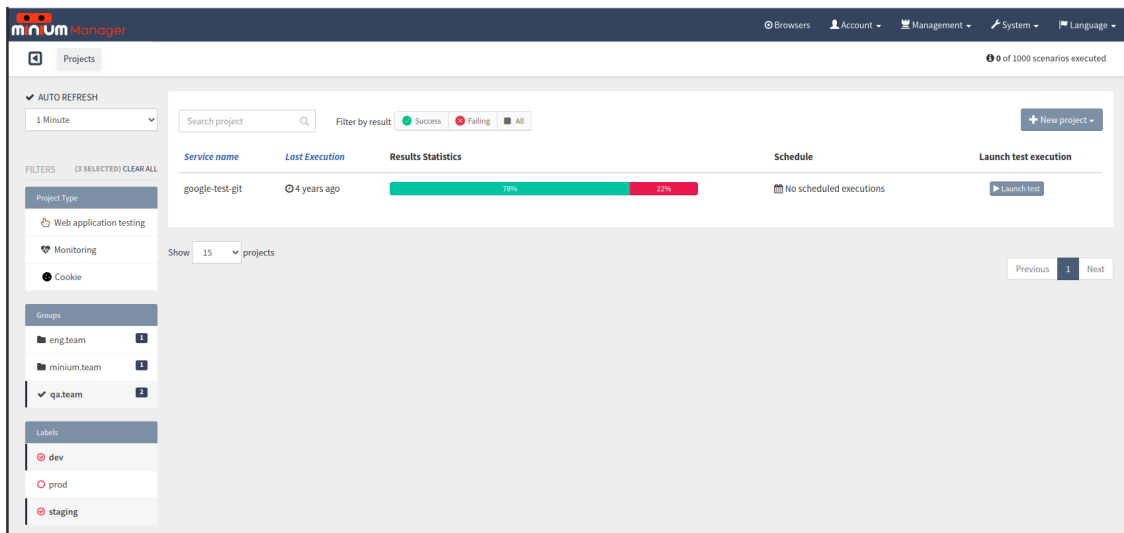
Delete Project

Update

Cancel

2.5.4. Organise Projects

Using **groups** and **labels** to organise the projects selecting a group and labels from the sidebar.



Select one **group** at a time, but select multiple **labels** and combine both.

In the case of the figure above, notice that the **group qa.team** is selected and two **labels** are also selected (**dev** and **staging**). With filters applied, exists one project shown in the project list.

This means that the one project belong to the **group qa.team** (see it in the figure below).

Project Configurations
×

General
Browsers
Reports and Scheduling
Executors
Advanced
Runtime
API

Permissions

Name	Read	Write	Launch tests
qa.team	☒	☒	☒

Type the name of a user or group
+ Append

Max number of test executions stored
10

Module
Insert the path of the subproject that you want to test

Delete Project
Update
Cancel

The project either has the **label dev** or **staging** associated with it in the project configuration (as shown in the figure below).

Project Configurations
×

General
Browsers
Reports and Scheduling
Executors
Advanced
Runtime
API

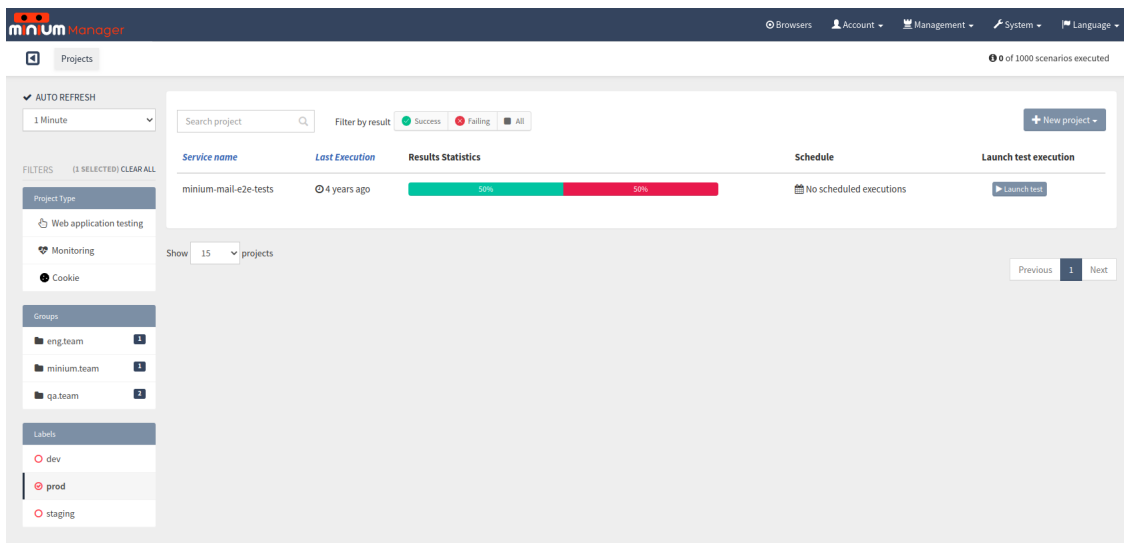
Name*
google-test-git

Description
Small project description

Labels
staging
+ Add

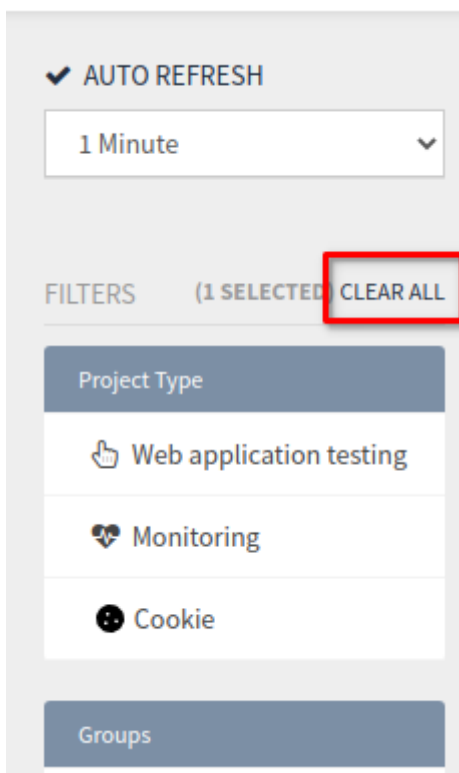
Repository

Select a **group** or **one or more label**, like shown in the figure below. In this specific case, are selected only the **label prod**, without selecting any group. It means that all the projects in the list have the **label prod** associated.



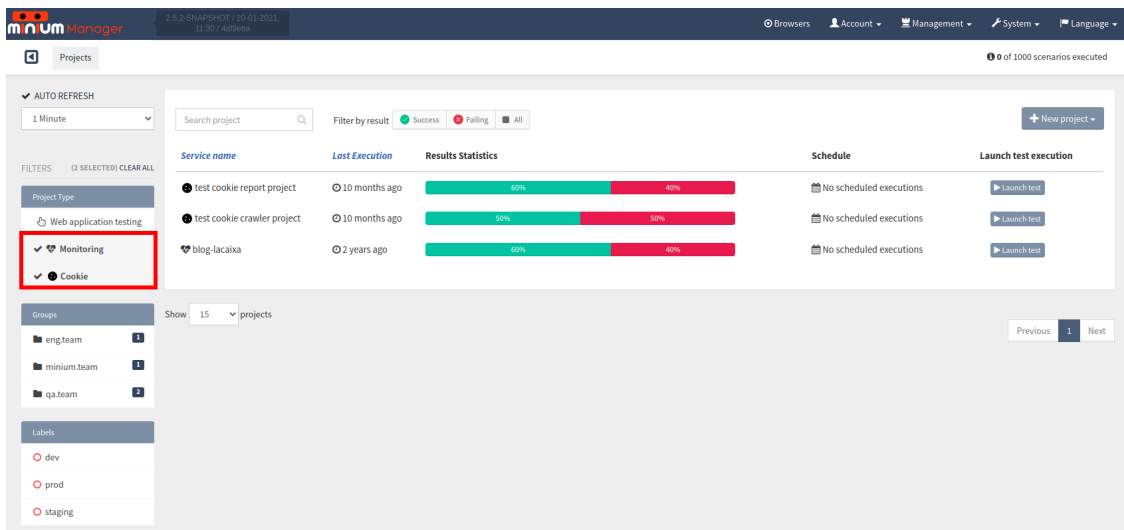
Clean project filters

By clicking on the link **CLEAR ALL**, it will remove all the selected filter.



Project Type

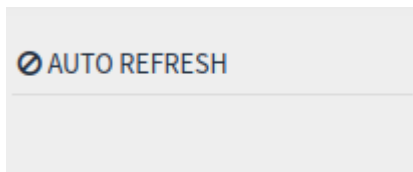
We can filter the projects by its type. Select the project type(s) to filter the project list:



Auto Refresh

By default, the project page will be refreshed every minute. Also, you can configure the project page to refresh every 5 and 10 minutes.

To disable the auto refresh, just click on the link "AUTO REFRESH":



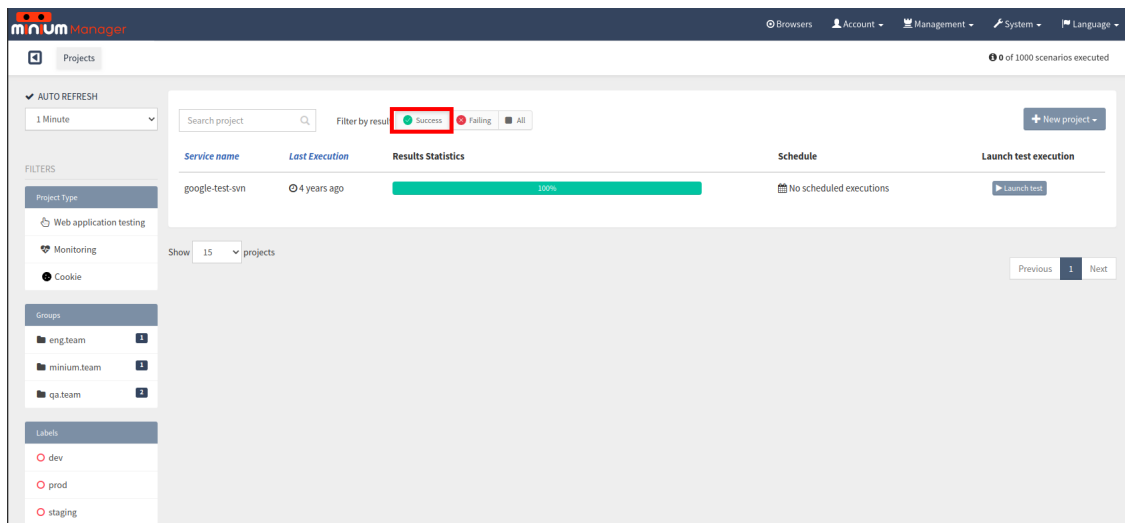
Note:



The link "AUTO REFRESH" with the ban icon, means that is disabled; The link "AUTO REFRESH" with the check icon, means that is enabled.

Filter by Results

Select the result status to filter the projects in the projects list:



2.6. Configuration profiles

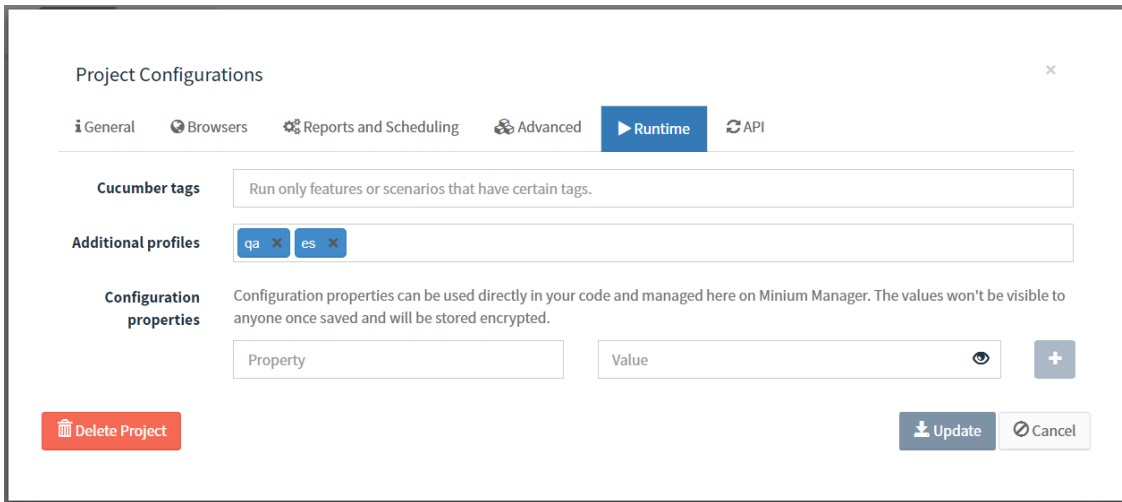
Configuration profiles can be defined on the `config/application.yml` of a project and used to load configuration properties that vary based on the environment being tested. Such a configuration could be for example the URL of the application or the language:

```
# default values
minium:
  config:
    baseUrl: http://localhost
    language: English
---
spring.profiles: qa
minium:
  config:
    baseUrl: http://staging
---
spring.profiles: es
minium:
  config:
    language: Spanish
```

These configuration properties can then be used on the step definitions like this:

```
When(/^I go to the homepage"$/, function() {
  browser.get(config.baseUrl);
  $(".dropdown").withText("Language").click();
  $(".dropdown a").withText(config.language).click();
});
```

Then to run test executions with the configuration properties of a profile, go to **Project Configurations** and add it to **Additional profiles**:



2.7. Secret configuration properties

Sensitive configuration properties that cannot be included on the repository of the tests can be safely stored on Minium Manager. They can be used just like the configuration properties defined on the `config/application.yml` file of the project. As an example, consider that some tests need to be executed against a production environment which requires a password that cannot be exposed on the code. In that case, only the password to be used on the test environment would be defined on the `config/application.yml` file:

```
minium:
  config:
    baseUrl: http://staging
    username: test
    password: minium

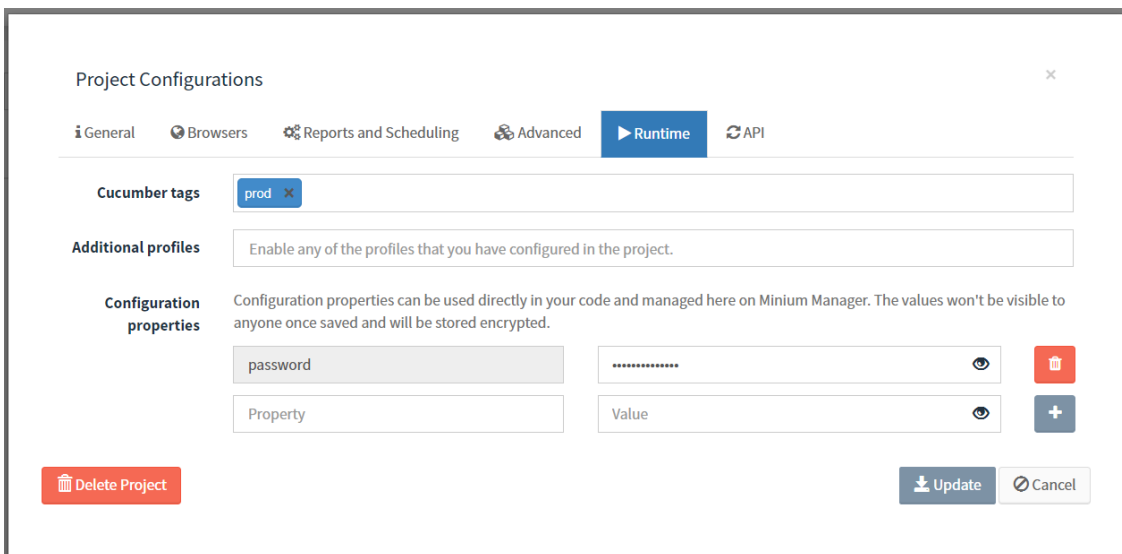
---
spring.profiles: prod

minium:
  config:
    baseUrl: https://production
    username: admin
```

Which would be accessible through the `config.password` during the tests:

```
When(/^I login"$/, function() {
  browser.get(config.baseUrl);
  $("text").fill(config.username);
  $("password").fill(config.password);
  $("submit").click();
});
```

The password to be used on the production environment would then be defined on the Project Configurations:



2.8. Add test information to Minium Manager Report (output)

We can add information of the test execution to the Minium Manager report by adding a simple minium instruction to the code of the Minium Project.

By add the minium expression `scenario.write(...)`; we are able to pass data to the Minium Manager report. E.g.:

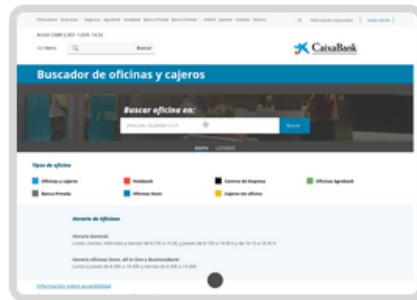
```
Given(/^I open the site "([^"]*)"$/, function(url) {  
  browser.get(url);  
  scenario.write(browser.getCurrentUrl());  
  scenario.embed(browser.screenshot().asBytes(), "image/png");  
});
```

The previous script will generate the following output in the Minium Manager console:

Steps

1 Given I open the site "https://www.caixabank.es/apl/localizador/caixamaps/index_es.html" Success

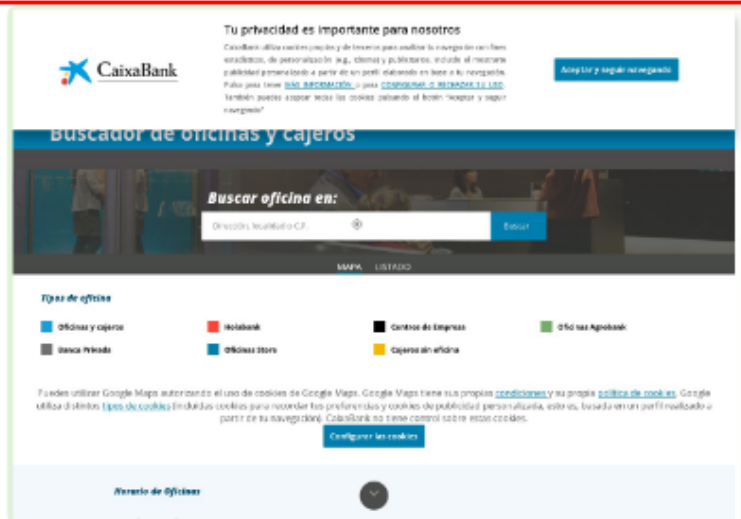
Output(s):
<https://www2.caixabank.es/apl/localizad...>



On the PDF report:

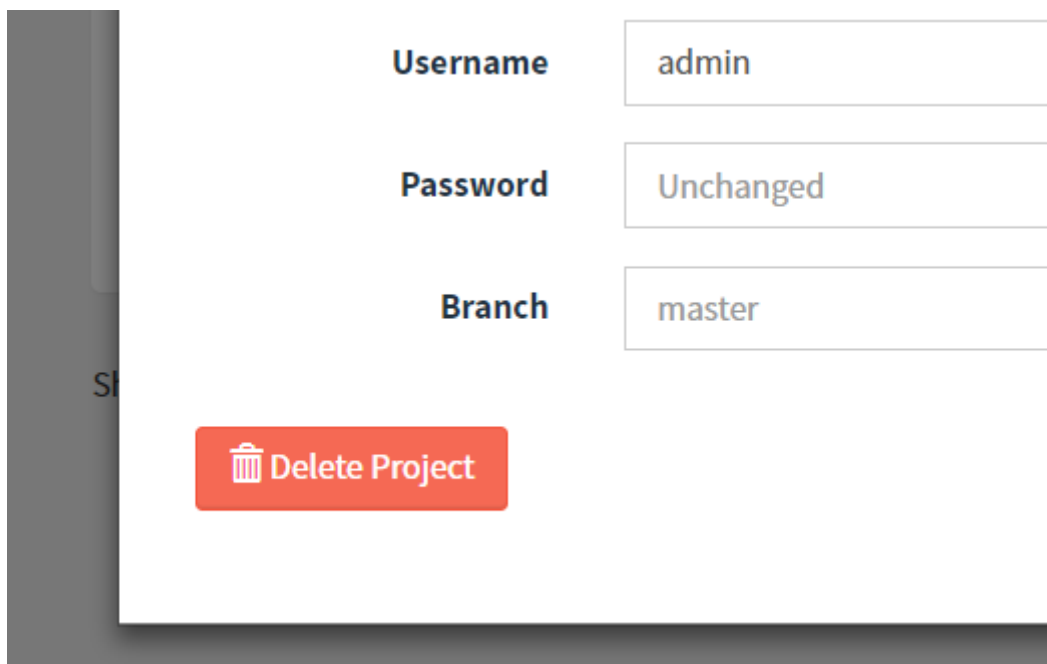
Given I open the site
"https://www.caixabank.es/apl/localizador/caixamaps/index_es.html"

Output(s):
https://www2.caixabank.es/apl/localizador/caixamaps/index_es.html



2.9. Delete a project

To delete a project, go to the project **configurations** and click on the button `Delete Project`, at the bottom-left corner:



Username: admin

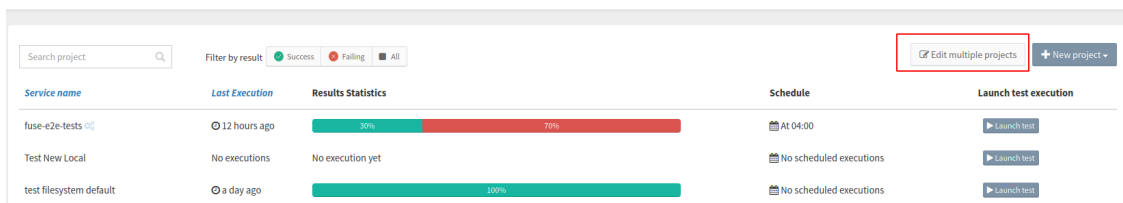
Password: Unchanged

Branch: master



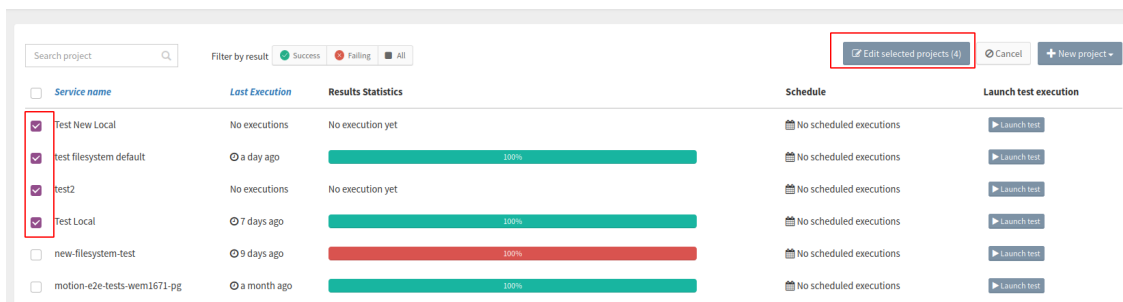
2.10. Edit projects in batch

To edit projects in batch, click on the button `Edit multiple projects`:



Service name	Last Execution	Results Statistics	Schedule	Launch test execution
fuse-e2e-tests	12 hours ago	30%	At 04:00	Launch test
Test New Local	No executions	No execution yet	No scheduled executions	Launch test
test filesystem default	a day ago	100%	No scheduled executions	Launch test

After the click, select the projects you want to edit and click on the button `Edit selected projects`:



☐ Service name	Last Execution	Results Statistics	Schedule	Launch test execution
☒ Test New Local	No executions	No execution yet	No scheduled executions	Launch test
☒ test filesystem default	a day ago	100%	No scheduled executions	Launch test
☒ test2	No executions	No execution yet	No scheduled executions	Launch test
☒ Test Local	7 days ago	100%	No scheduled executions	Launch test
☐ new-filessystem-test	9 days ago	100%	No scheduled executions	Launch test
☐ motion-e2e-tests-wem1671-pg	a month ago	100%	No scheduled executions	Launch test

After, you can edit the common properties of the projects in the modal:

Edit multiple projects - 4 projects selected

General

Reports and Scheduling

Labels

Associate labels to a project to organize projects.

+ Add

Repository

Username

Password

Unchanged

Delete 4 Projects

0 fields will be updated

Old values will be overwritten.

Update Projects

Cancel

After the changes, click `Update Projects` to save the changes ou `Cancel` to return to the projects page.

To stop the edit and deselect the projects, you can click `Cancel`:

Search project

Filter by result

Success

Failing

All

Edit selected projects (0)

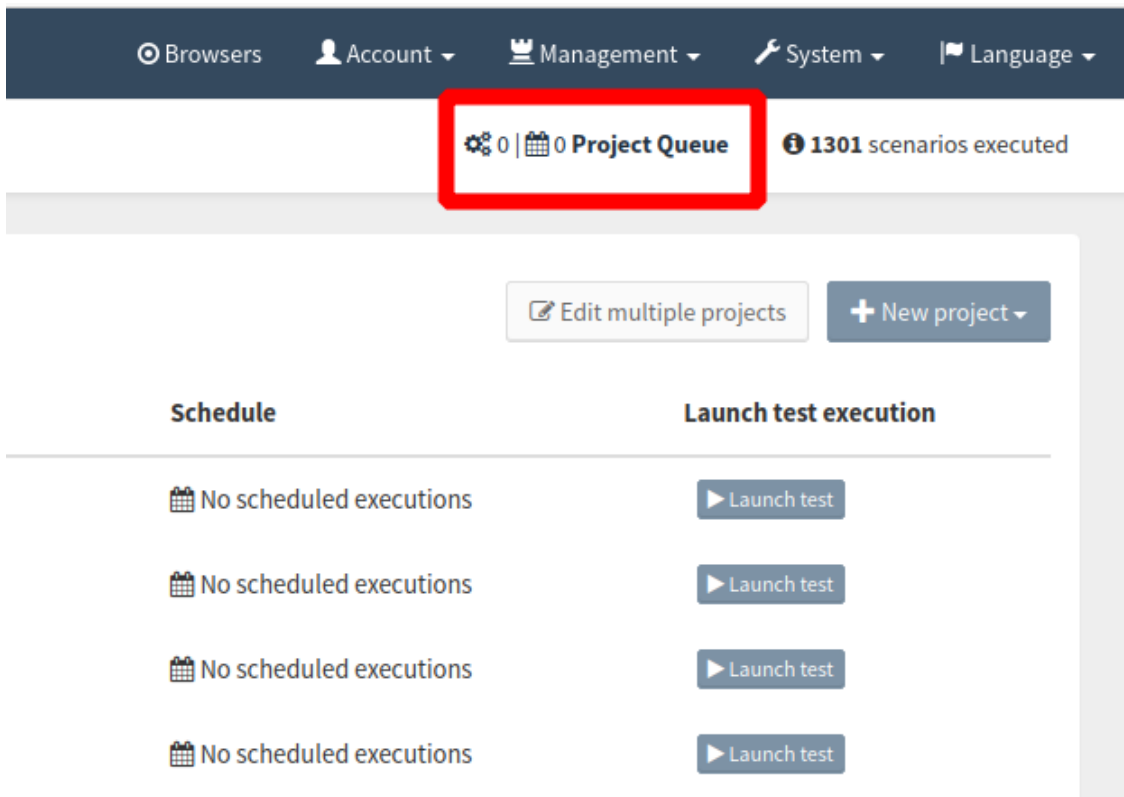
Cancel

New project

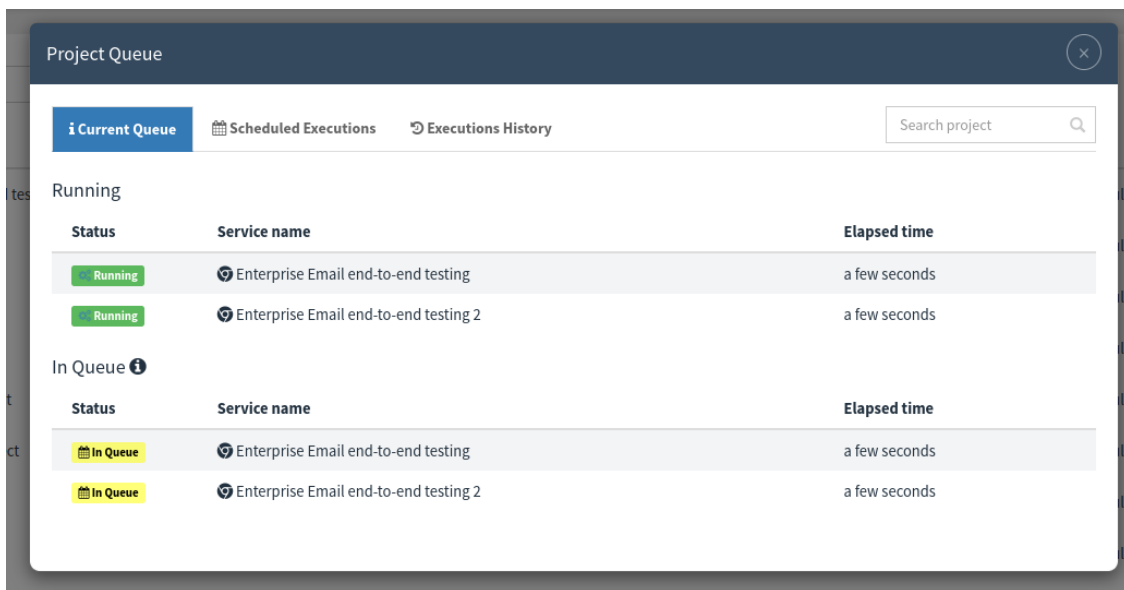
☐ Service name	Last Execution	Results Statistics	Schedule	Launch test execution
☐ fuse-e2e-tests	an hour ago	No results found	At 04:00	Launch test
☐ Test New Local	No executions	No execution yet	No scheduled executions	Launch test
☐ test filesystem default	a day ago	100%	No scheduled executions	Launch test
☐ test2	No executions	No execution yet	No scheduled executions	Launch test
☐ Test Local	7 days ago	100%	No scheduled executions	Launch test
☐ new-filessystem-test	9 days ago	100%	No scheduled executions	Launch test

2.11. View Queue

To view the current queue of executions, click on the `Project Queue` under the navbar:



After the click, you can see the modal with the queue, with the projects `Running` and `In Queue`:



At the modal, we can also see the `Scheduled Executions` that will be executed in the future:

Project Queue		
Current Queue	Scheduled Executions	Executions History
Service name	Next Execution	Frequency
	Monday at 8:00 PM (in 4 days)	At 20:00, only on Monday
	Tomorrow at 12:01 AM (in 13 hours)	Every Day
	Monday at 8:00 PM (in 4 days)	At 20:00, only on Monday
	Tomorrow at 12:00 AM (in 12 hours)	Every Day at midnight
	Tomorrow at 4:00 AM (in 16 hours)	At 04:00, every day
	Today at 11:35 AM (in 5 minutes)	At 11:35, every day

Also, the `Executions History` for the projects:

Project Queue			
Current Queue	Scheduled Executions	Executions History	
Service name	Last Execution	Total Of Executions	Frequency
	4 minutes ago	4	No scheduled executions
	4 minutes ago	5	No scheduled executions
	7 hours ago	60	At 04:00, every day
	10 hours ago	60	Every Day at midnight
	10 hours ago	30	Every Day
	a day ago	48	At 11:35, every day
	3 days ago	30	At 20:00, only on Monday
	3 days ago	30	At 20:00, only on Monday
	8 days ago	30	No scheduled executions
	21 days ago	120	No scheduled executions
Show more			

2.12. Edit project code (Projects in filesystem only)

If the project is configured with the repository type `File System`, after the upload, we can edit the code of the Minium project.

The editor can be opened through several shortcuts:

At Project Configurations by clicking at the button `Edit`:

Project Configurations for **google-test-file-system** ✕

Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly

General Browsers Reports and Scheduling Advanced Runtime API

Name*

Description

Labels + Add

Repository

Type* git Git Subversion File System

Code No file selected. Download Zip Edit

Delete Project Update Cancel

At Executions page by clicking at the button `Edit`, at the feature shortcuts (at `web application testing` project) and at the scenario and step shortcuts (at `monitoring` and `cookie report` project):

utions (Total: 1) Launch test id Edit ⌵

Results Success Failing All

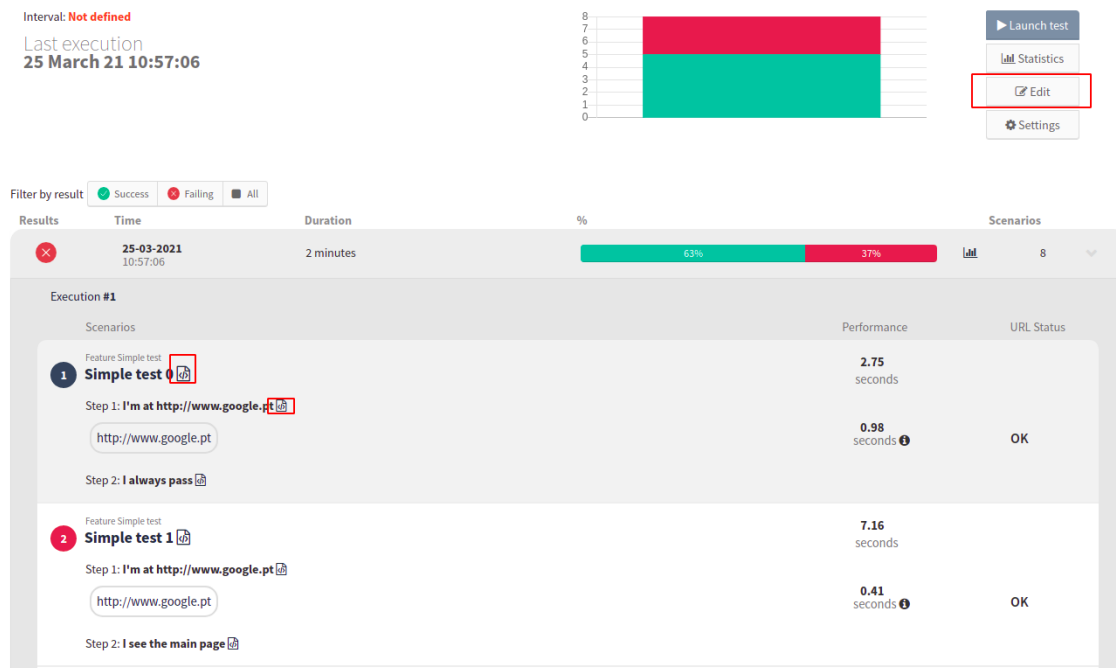
Results	Name	Duration	%	Browsers/Devices	Time
✖	google-test-file-system #1	a minute	100%	id	4 minutes ago

Execution #1

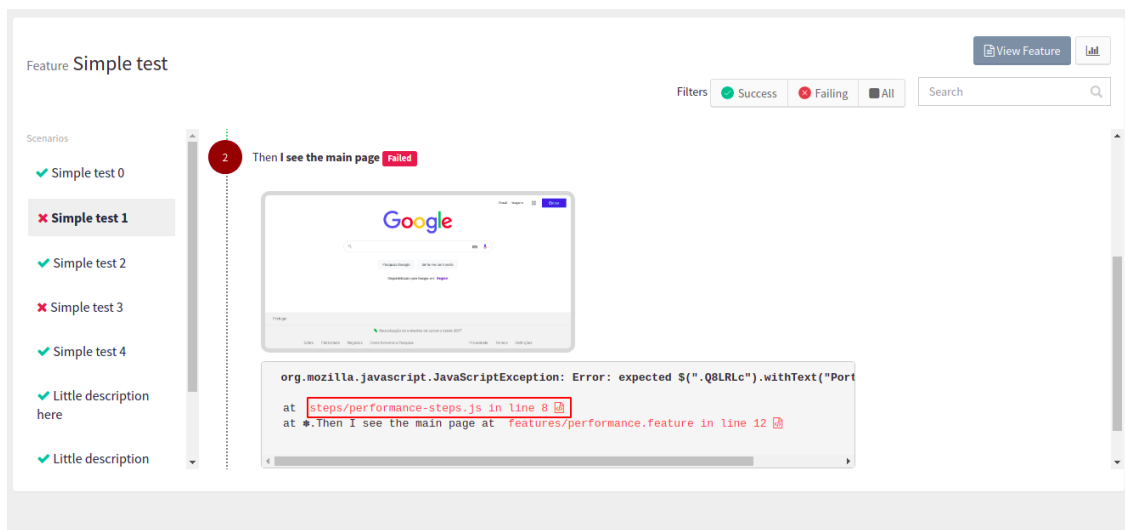
Status	Feature	Result	Passing / Failing	Duration
⌵	Links results in Google with Dynamic Data Edit	Chrome ✖	0 / 5	a few seconds
⌵	Minium Manager Edit	Chrome ✖	0 / 1	a few seconds
⌵	Search results in Google Test Edit	Chrome ✖	0 / 4	a few seconds

Download report ⌵ ⌵ ⌵ ⌵

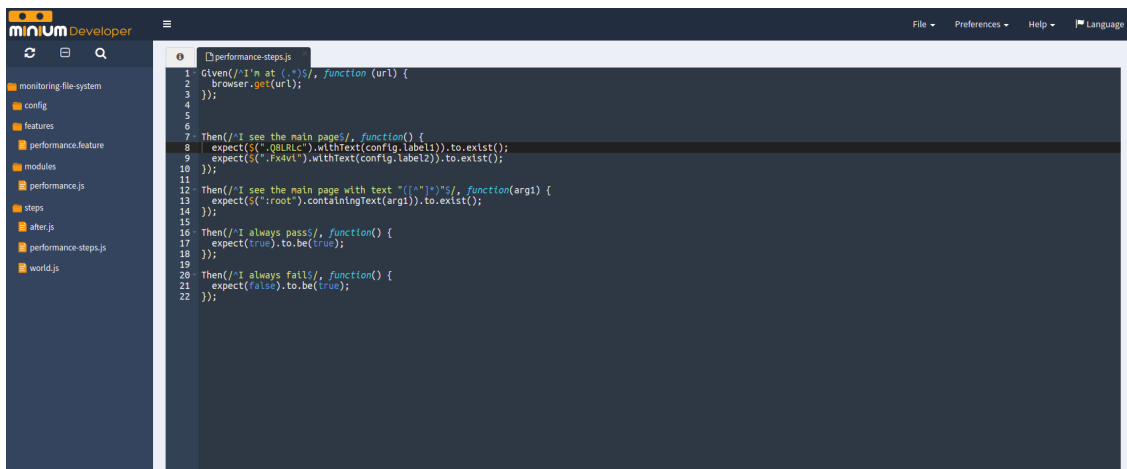
Executions Previous 1 Next



And at the Feature page, at the feature, scenario, step, and the links at the error message will have a shortcut to the editor:



After click on the button or the shortcut to the editor, a new tab will open with the code of the project.



In the editor, we can update the code of the minium project. after the changes, the editor can be closed.

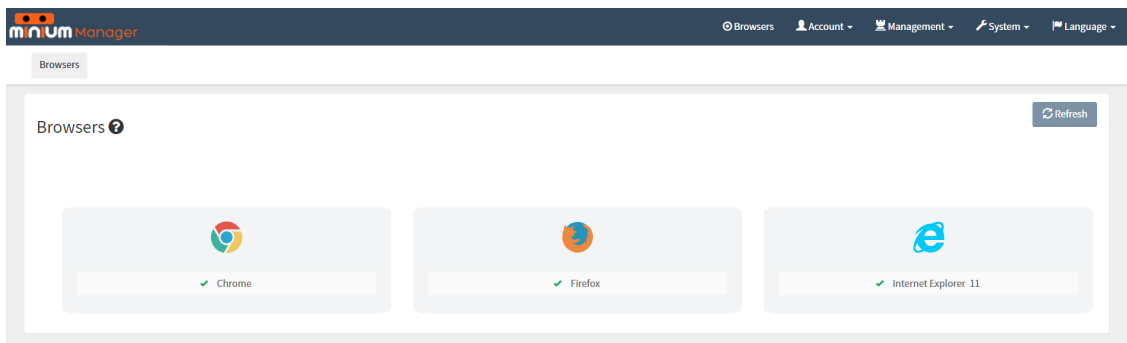


Note:

The recorded changes will be reflected in the minium manager.

2.13. Check the available browsers

To check the available browsers, click on **Browsers**, at the navigation bar.

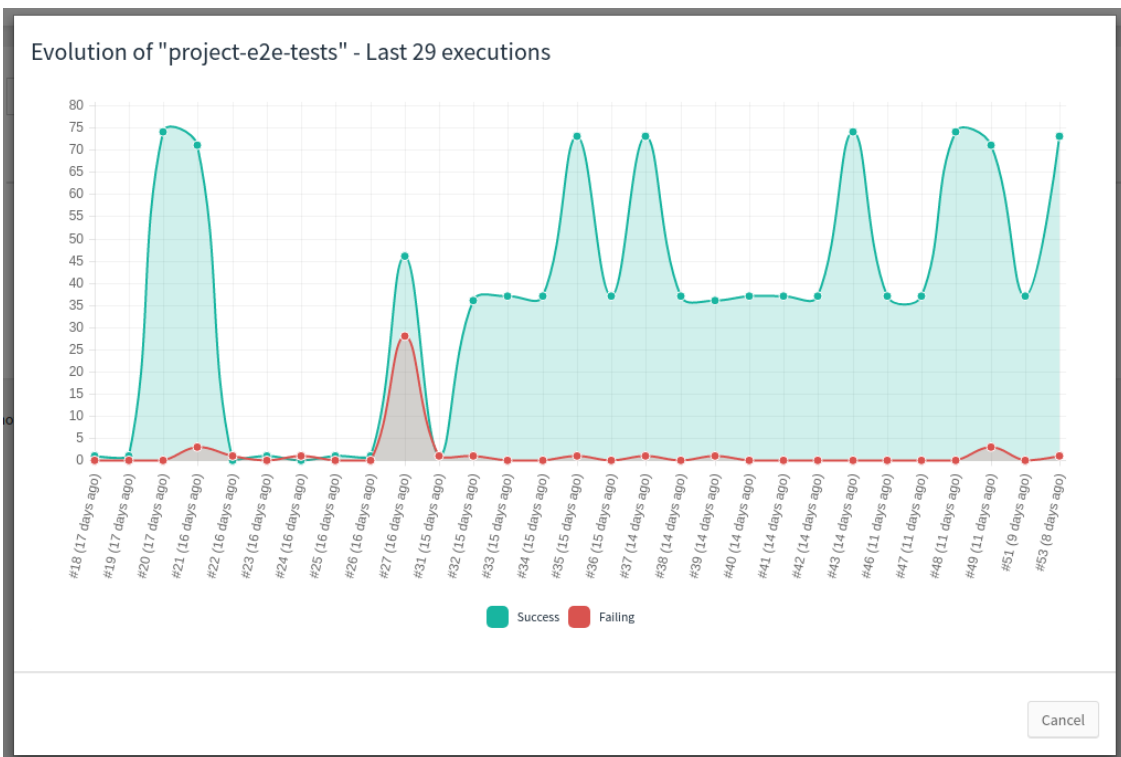


In the figure above, we only have one provider available, but we can have two or more providers configured (e.g. "BrowserStack" and/or "Selenium Grid Extras"). The provider configured has the browsers Chrome, Firefox and Internet Explorer available.

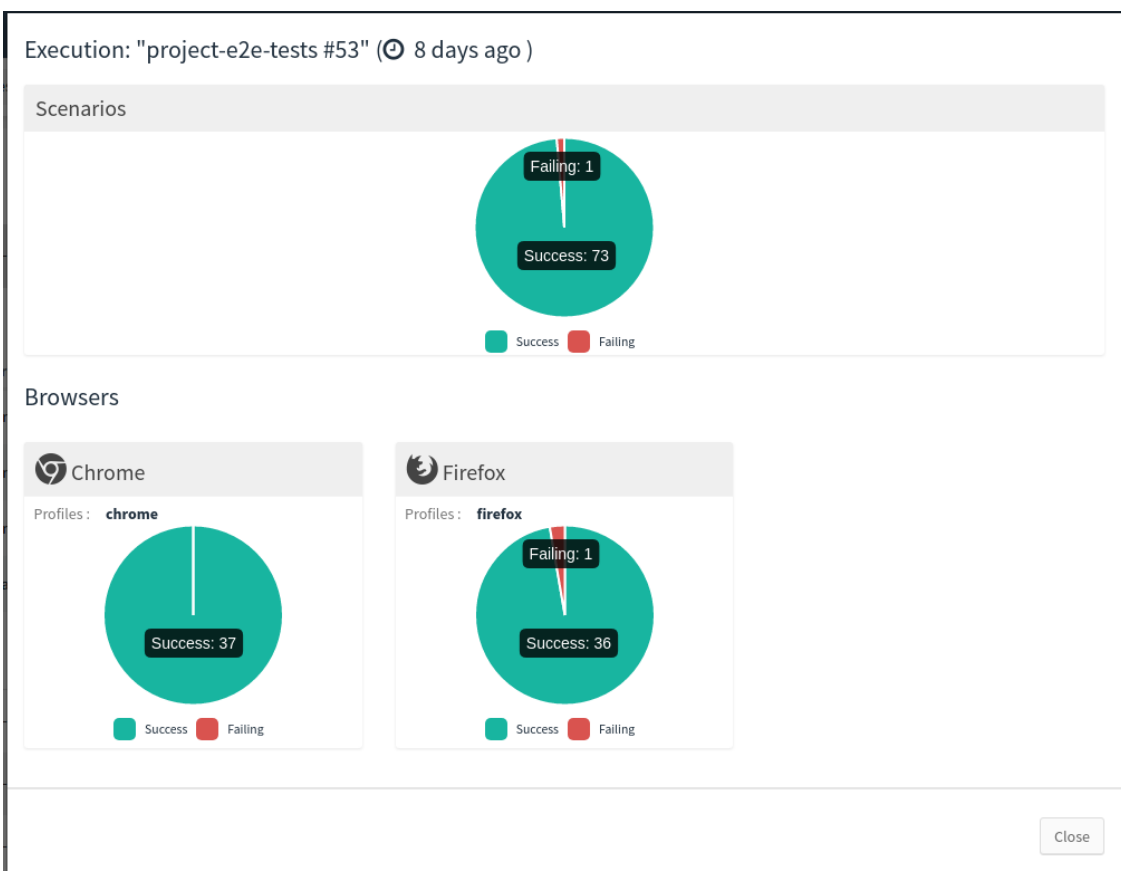
This means that with this environment is able to run the tests in Chrome, Firefox and Internet Explorer at the provider configured.

2.14. Project Statistics

Evolution chart to the test executions of a project.



Statistics for a single execution.



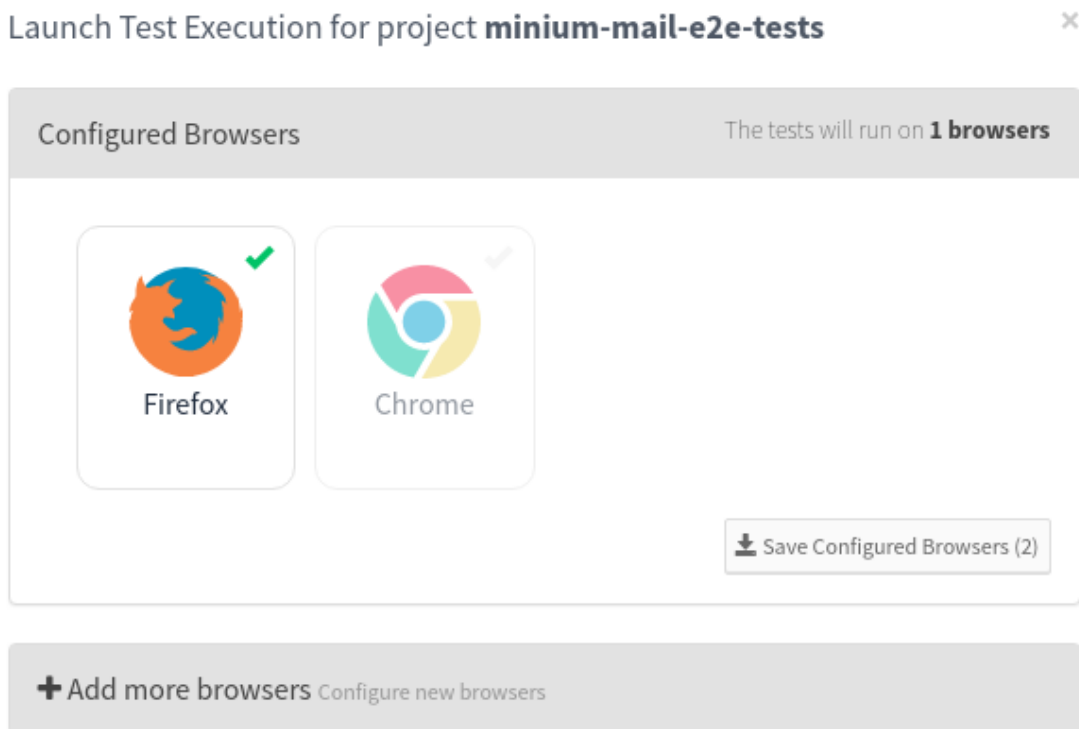
3. Test executions

3.1. Launch test executions

A test execution will execute the tests present in a project on one or more different browsers. There are alternative ways for launching test executions.

3.1.1. Launch a test execution manually

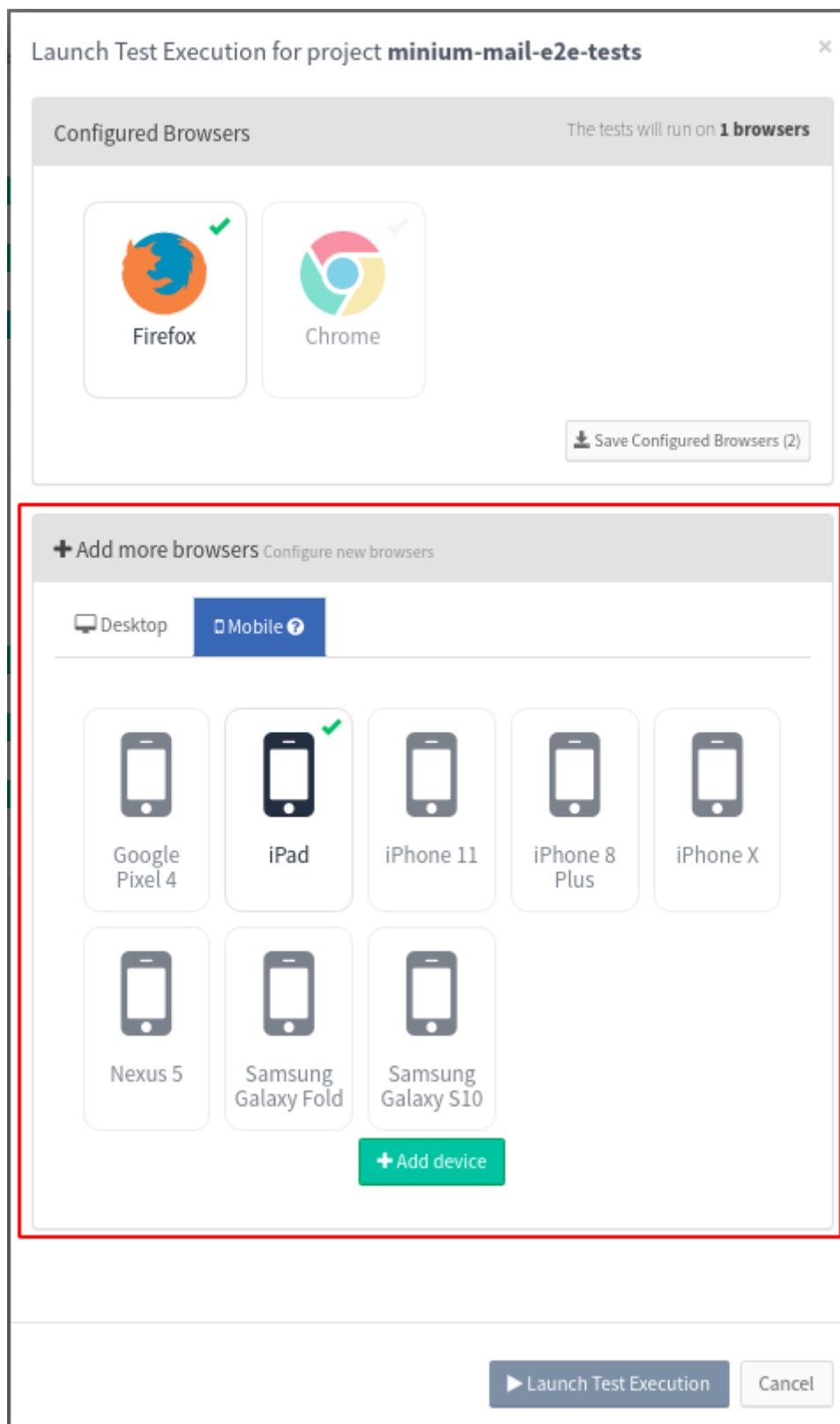
On the homepage or the page of a project, click on button `Launch test`, which opens a modal for selecting the browsers.



Select the desired browsers by clicking on them. If needed, click on `Add more browsers` to expand the available browsers and select a browser (and the properties) and/or the mobile devices (emulated via chrome).

After, click `Add browser` or `Add device` (for mobile devices).

Then, click on `Add browser`.



The new browser is now available to be selected on the `Configured Browsers`.

To save the current browser(s) configured to the project configurations, click `Save Configured`

Browsers to persist the browser configured. Next time you open the launch modal it will show the Configured Browsers saved. Also, the executions created by the scheduler, will use the configuration saved.

After selecting all the browsers, click on Launch Test Execution.

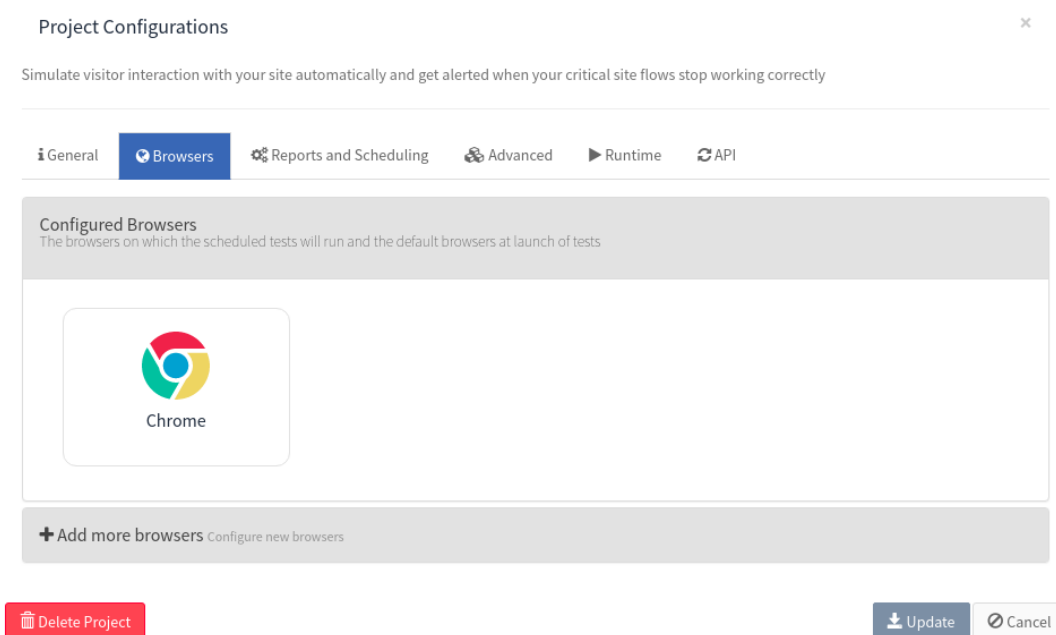


Note:

At the click on button Launch test, the Monitoring and Cookie projects don't open a modal for selecting the browsers. It launches a test immediately.

3.1.2. Schedule test executions

Go the configurations of a project and open the Browsers tab to see the currently configured browsers.



Click on Add more browsers and add more browsers if needed.

Project Configurations ×

Simulate visitor interaction with your site automatically and get alerted when your critical site flows stop working correctly

General

Browsers

Reports and Scheduling

Advanced

Runtime

API

Configured Browsers

The browsers on which the scheduled tests will run and the default browsers at launch of tests



Chrome

+ Add more browsers

Configure new browsers

Desktop

Mobile

Browser

Platform

Version



Any

Any



LINUX

81.0.1

+ Add browser

Delete Project

Update

Cancel

To schedule test executions on the configured browsers, switch to the **Reports and Scheduling** tab.

Scheduling

Scheduler

Never run

Every Day

Every Week

Every Month

Every Day at midnight

Custom

Cron Expression

Scheduler Custom Configurations

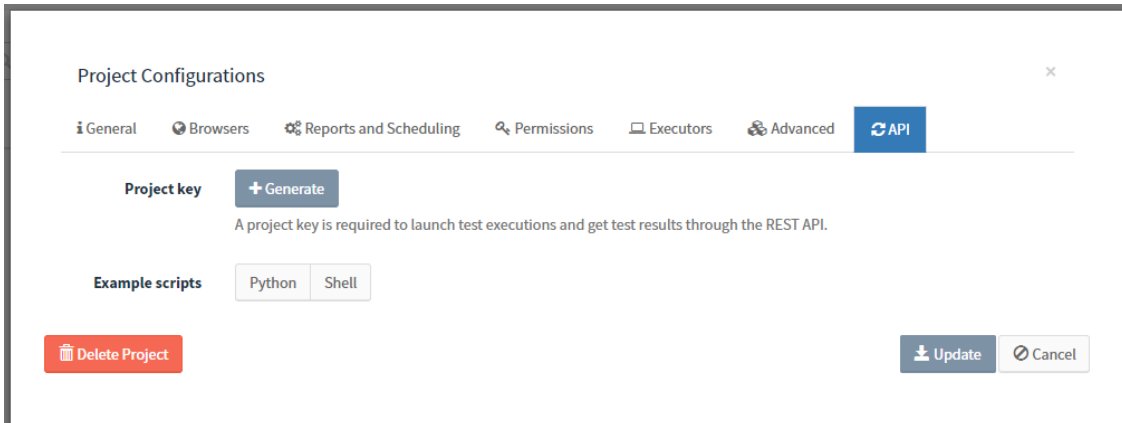
At 00:00

Every: Day at 0 : 0

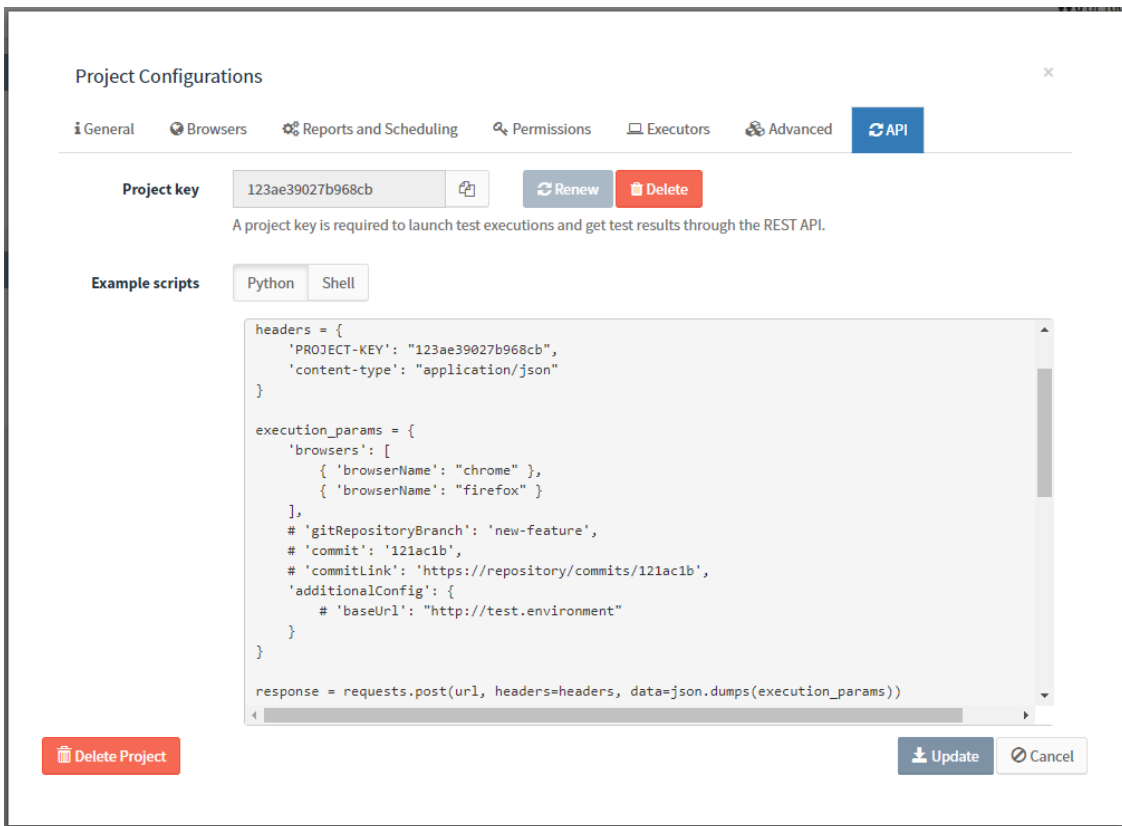
3.1.3. REST API

Minium Manager provides a REST API through which it is possible to launch test executions

and get test results. In order to use it, an API key is required. API key are specific of a project. To generate a key, go to the **API** tab on the configurations of a project and click on the **Generate** button.



Also, on the **API** tab are some example scripts. Once the project has an API key, the scripts will be fulfilled with the project-specific data and ready to use. The first part of the script shows how to launch a test execution.



A test execution can be launched by issuing a **POST** request to `api/projects/<PROJECT-ID>/test-executions` containing the **PROJECT-KEY** header set to the project key, and the **content-type** header set to `application/json`. The execution parameters are sent in JSON on the request body:

- **browsers**: list containing the capabilities of the browsers. Only the `browserName` is mandatory.
- **additionalConfig** (optional): configuration properties to be merged with the ones on the `application.yml` file of the project. Properties already defined on the `application.yml` file are overridden.
- **gitRepositoryBranch** (optional): branch of the repository of the tests.
- **commit** (optional): the corresponding commit of the system under test, to be then included on the report of the execution.
- **commitLink** (optional): link to directly access the commit from Minium Manager.

To follow the progress of the execution until it finishes, poll the URL returned on the `Location` header of the response to the `POST` request.

```
url = response.headers['location']
response = requests.get(url, headers=headers)
while response.status_code == 404:
    time.sleep(5)
    response = requests.get(url, headers=headers)
if not response.ok: sys.exit(response.text)

execution = response.json()
while execution['state'] != "FINISHED":
    time.sleep(15)
    execution = requests.get(url, headers=headers).json()
```

While the tests are running, the response will be a JSON object containing the `state` field set to `RUNNING`, the name of the current browser and the corresponding progress in percentage, number of passed/failed and last finished feature/scenario. Example:

```
{
  "state": "RUNNING",
  "browser": "chrome",
  "progressInPercentage": 18,
  "failingScenariosCount": 1,
  "passingScenariosCount": 5,
  "feature": "Login",
  "scenario": "Successful login"
}
```

Once the execution finishes, the response will have `state FINISHED`, the global results and the number of passed/failed scenarios for each browser. Example:

```
{
  "state": "FINISHED",
  "globalResults": {
    "totalScenarios": 20,
    "percentageOfPassingScenarios": 95,
    "passingScenarios": 19,
    "failingScenarios": 1
  },
  "browserResults": [
    {
      "browser": {
        "browserName": "chrome"
      },
      "passedScenarios": 10,
      "failedScenarios": 0
    },
    {
      "browser": {
        "browserName": "firefox"
      },
      "passedScenarios": 9,
      "failedScenarios": 1
    }
  ]
}
```

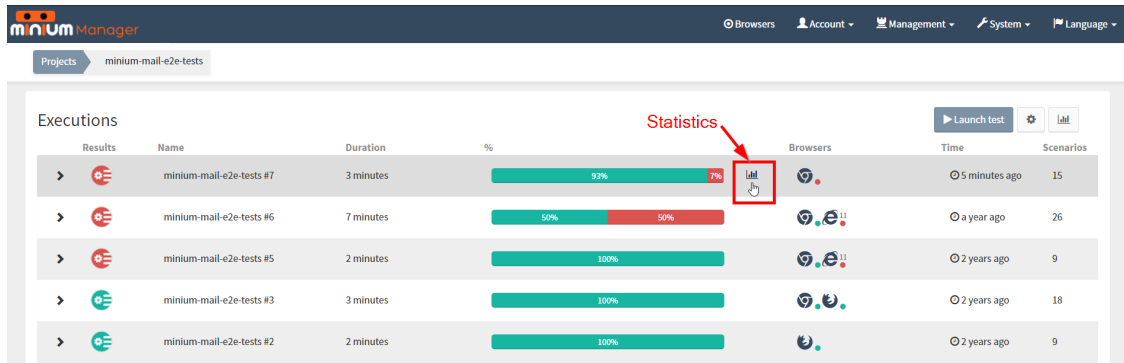
3.2. Follow the progress of a test execution

After launching a test execution, follow the progress in the project page. See the browser where the test is executing, the percentage, number of executed tests, the elapsed time and the test that is currently executing.



4. Monitor test results

In a project page, all the launched executions are showed:

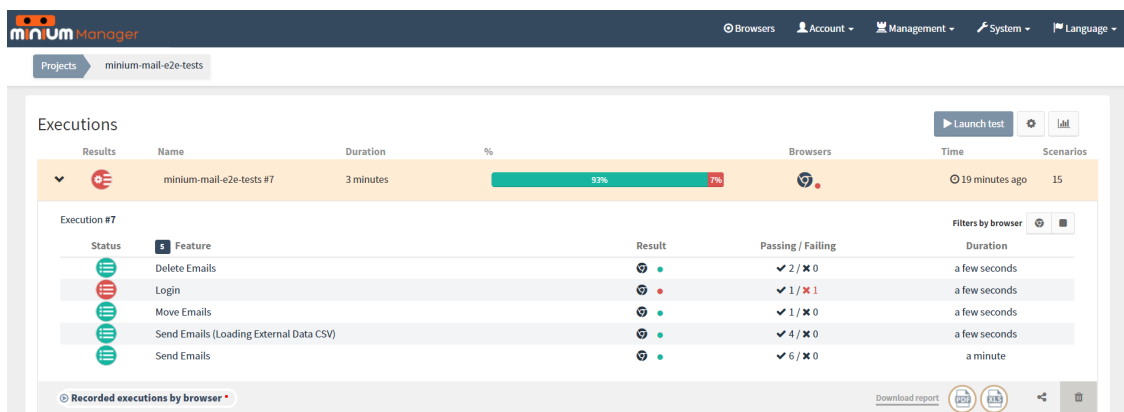


Results	Name	Duration	%	Browsers	Time	Scenarios
>	minium-mail-e2e-tests #7	3 minutes	93% 7%	🔍	🕒 5 minutes ago	15
>	minium-mail-e2e-tests #6	7 minutes	50% 50%	🔍	🕒 a year ago	26
>	minium-mail-e2e-tests #5	2 minutes	100%	🔍	🕒 2 years ago	9
>	minium-mail-e2e-tests #3	3 minutes	100%	🔍	🕒 2 years ago	18
>	minium-mail-e2e-tests #2	2 minutes	100%	🔍	🕒 2 years ago	9

For each execution it can be seen:

- result of the execution
- name
- duration of execution
- percentage of passed and failing scenarios
- statistics of the execution (shown when the mouse is over the execution)
- browser where the execution ran
- launch time
- number of scenarios of the execution

When expands a test execution a list of executed features, and their results can be seen:



Results	Name	Duration	%	Browsers	Time	Scenarios
▼	minium-mail-e2e-tests #7	3 minutes	93% 7%	🔍	🕒 19 minutes ago	15

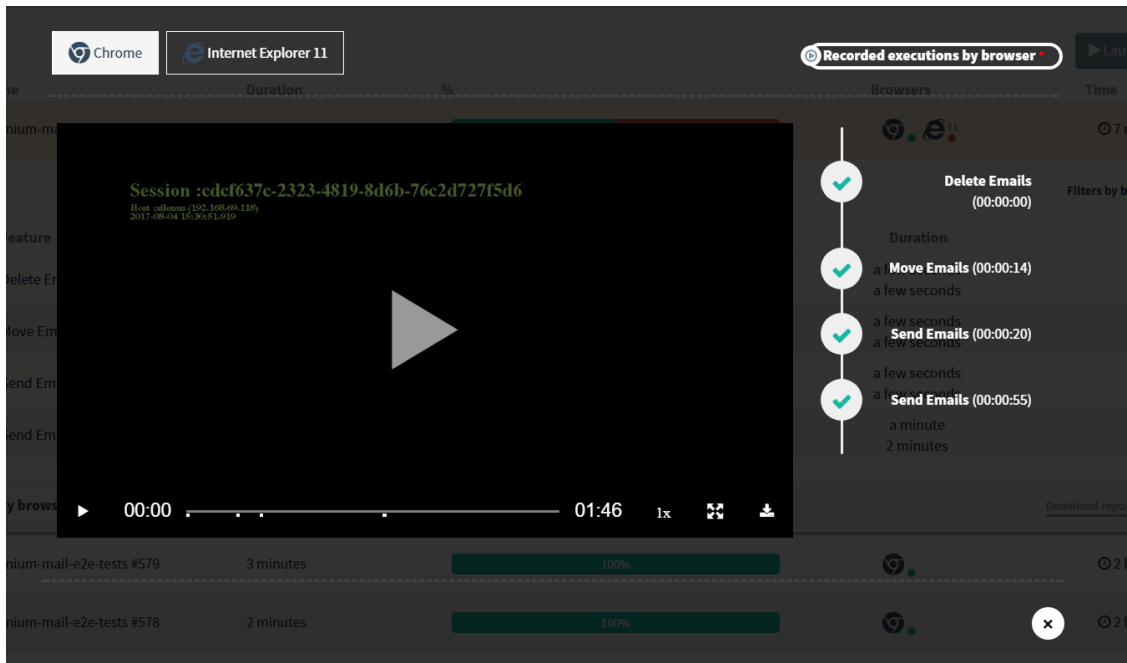
Status	Feature	Result	Passing / Failing	Duration
🟢	Delete Emails	✓	✓ 2 / ✗ 0	a few seconds
🔴	Login	✗	✓ 1 / ✗ 1	a few seconds
🟢	Move Emails	✓	✓ 1 / ✗ 0	a few seconds
🟢	Send Emails (Loading External Data CSV)	✓	✓ 4 / ✗ 0	a few seconds
🟢	Send Emails	✓	✓ 6 / ✗ 0	a minute

For the execution expanded it can be seen:

- features tested
- the results detailed for each feature (with filters)
- videos of the execution

- download the report of the executions (MS excel and PDF)
- remove execution

Click at "Recorded executions by browser" to see the videos of the recorded executions:

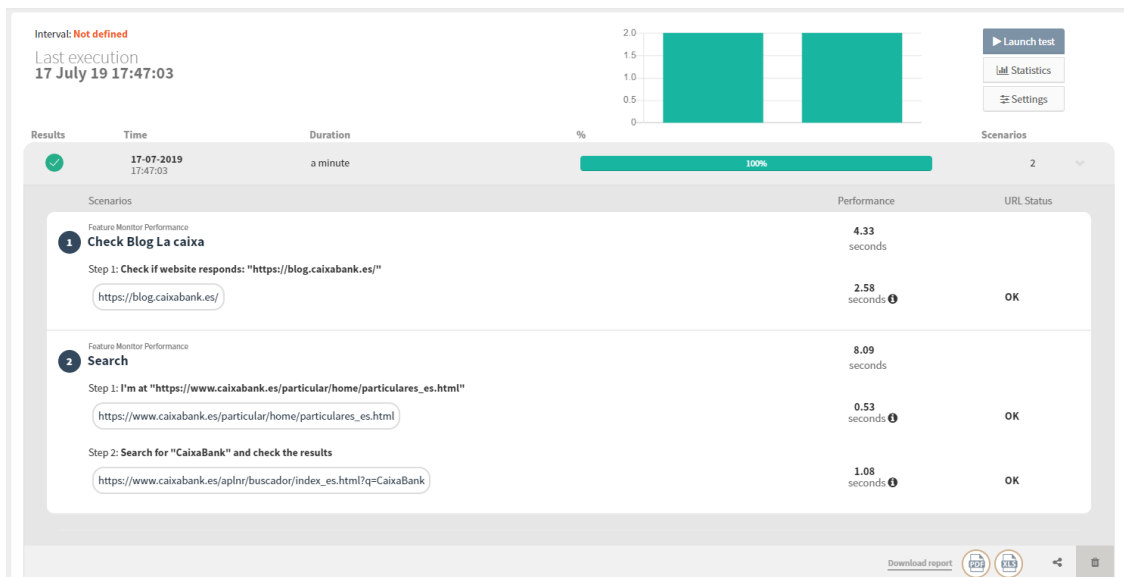


For the videos (at execution) it can be seen:

- videos for the browsers tested
- features to navigate through the video
- cue points when the feature starts on the video

Monitoring project

The result of an execution of a Monitoring project is presented at the execution page:

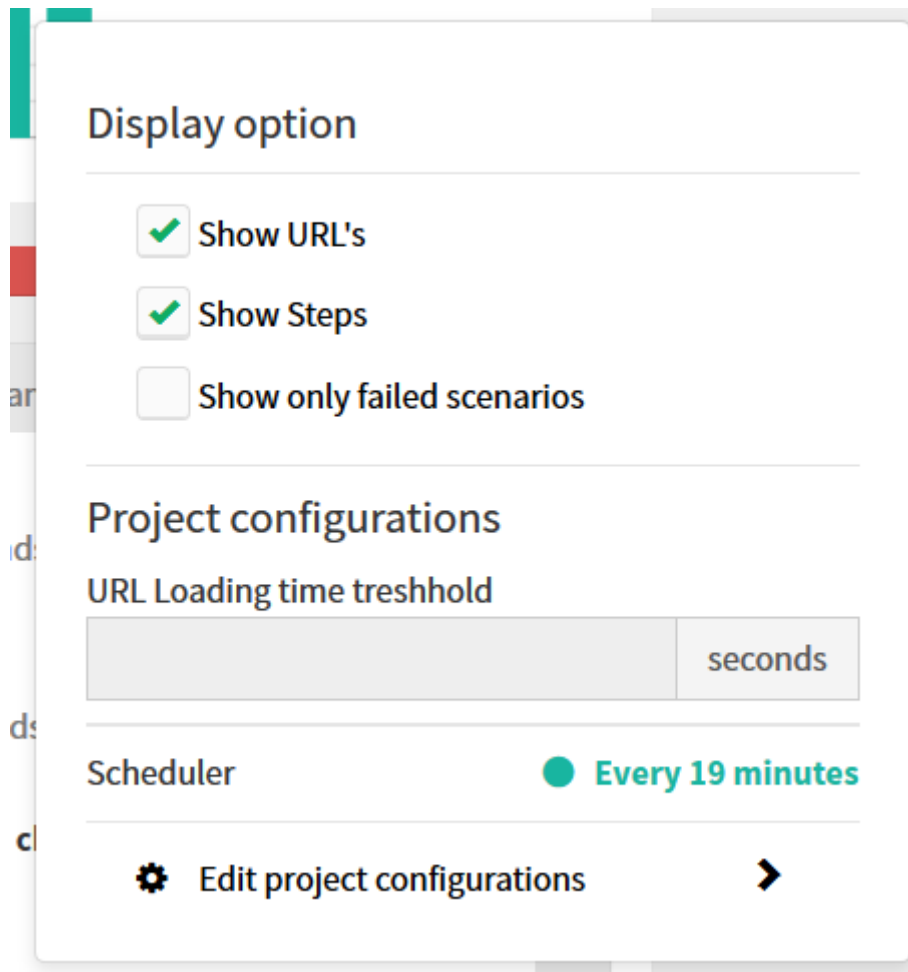


At execution page, we can see the time of each URL took to load. Also, we can see the URL status, and the time it took to execute the scenario.

Display options

The information at the execution page can be filtered to show/hide some details.

To open the `Display options` click at `Settings`:



The display options allow us to:

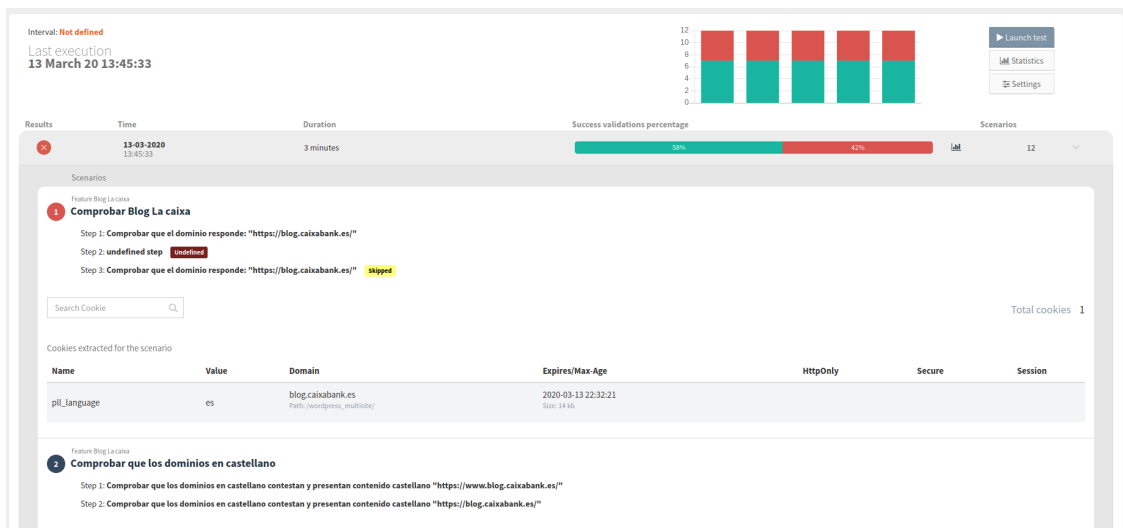
- Show/Hide the URL's
- Show/Hide the steps
- Show only the failed scenarios
- Consult the URL loading time threshold (This property is configured at the project configurations at the advanced tab and warns the user (at the execution page) when the loading time of a URL is higher than the loading time threshold)
- Consult the scheduler (The scheduled is configured at the project configurations at the reports and scheduling tab)

Cookie project

The Cookie project is divided in two projects: Cookie Report project and Cookie Crawler project.

Cookie Report project

The result of an execution of a Cookie Report project is presented at the execution page:

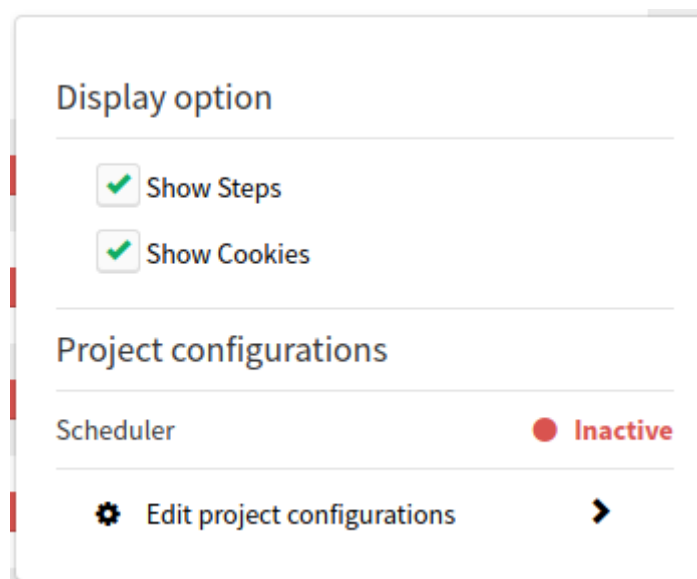


At execution page, we can see at the end of each scenario a table (with a filter) of all browser cookies at the end of a scenario.

Display options

The information at the execution page can be filtered to show/hide some details.

To open the `Display options` click at `Settings`:



The display options allow us to:

- Show/Hide the steps
- Show/Hide the cookies table
- Consult the scheduler (The scheduled is configured at the project configurations at the reports and scheduling tab)

Cookie Crawler project

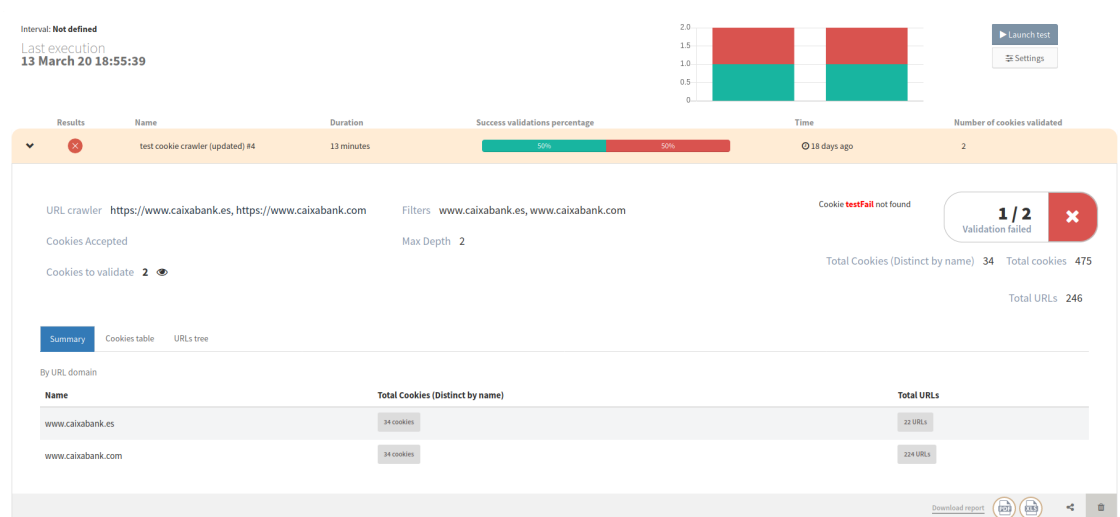
The Cookie Crawler project generates a report of the all browser cookies found during the crawl of the websites.

For each execution it can be seen:

- URL crawler - The URL(s) that was crawled
- Filters - Domains filtered
- Cookies Accepted - Tells whether the cookie warning was accepted or not
- Cookies to validate - Cookies validated during the crawl (click at the eye to see the validations in a table)
- Max Depth - Depth of the crawl
- Validation failed - The cookies not found at the report
- Total Cookies (Distinct by name) - Number of different cookies found at the report distinct by name
- Total cookies - Number of different cookies found at the report
- Total URLs - Number of different URLs crawled

There are several tabs to present execution information: Summary, Cookie table and URLs tree.

Summary:



This table presents the information By URL domain.

For the screenshot above we can see that for the domain `www.caixabank.es`, we found 34 cookies (Distinct by name) in a total of 22 URLs.

Cookie table:

Results	Name	Duration	Success validations percentage	Time	Number of cookies validated
test cookie crawler (updated) #4		13 minutes	50%	18 days ago	2

URL crawler	https://www.caixabank.es, https://www.caixabank.com	Filters	www.caixabank.es, www.caixabank.com	Cookie testFail not found	1 / 2 Validation failed
Cookies Accepted		Max Depth	2	Total Cookies (Distinct by name)	34
Cookies to validate	2			Total cookies	475
				Total URLs	246

[Summary](#)
[Cookies table](#)
[URLs tree](#)

#	Name	Value	Domain	Expires/Max-Age	HttpOnly	Secure	Session	URLs
246	AMCVS_3A3F337B54E77B700A4C98A1%40...	1	.caixabank.com	Session Size: 42 kb			✓	https://www.caixabank.es/ +245 urls...
246	everest_session_v2	XmvXUAAAkRd3-	everesttech.net	Session Size: 24 kb			✓	https://www.caixabank.es/ +245 urls...
246	AMCVS_3A3F337B54E77B700A4C98A1%40...	1	.caixabank.es	Session Size: 42 kb			✓	https://www.caixabank.es/ +245 urls...
246	mustShowFormExecuted	true	.caixabank.es	2020-03-14 18:56:17 Size: 24 kb				https://www.caixabank.es/ +245 urls...
246	dpm	47597570860354295630209158263720582578	dpm.demdex.net	2020-09-09 19:56:16 Size: 41 kb		✓		https://www.caixabank.es/ +245 urls...
246	everest_g_v2	g_surferid-XmvXUAAAkRd3-	everesttech.net	2022-03-13 18:56:16 Size: 28 kb				https://www.caixabank.es/ +245 urls...

This table presents the all the cookie's information retrieved at the crawler for the URL(s) crawled, and the URL(s) where the cookie was found.

URLs tree:

Results	Name	Duration	Success validations percentage	Time	Number of cookies validated
test cookie crawler (updated) #4		13 minutes	50%	18 days ago	2

URL crawler	https://www.caixabank.es, https://www.caixabank.com	Filters	www.caixabank.es, www.caixabank.com	Cookie testFail not found	1 / 2 Validation failed
Cookies Accepted		Max Depth	2	Total Cookies (Distinct by name)	34
Cookies to validate	2			Total cookies	475
				Total URLs	246

[Summary](#)
[Cookies table](#)
[URLs tree](#)

[https://www.caixabank.es/](#) 26 Cookies found

[https://www.caixabank.com/](#) 26 Cookies found

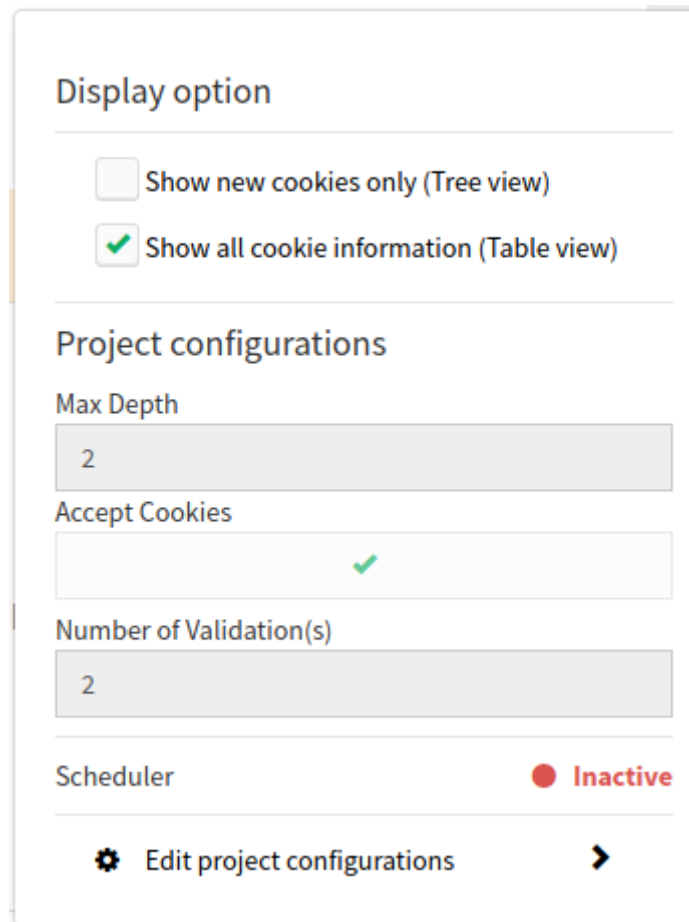
Name	Value	Domain	Expires/Max-Age	HttpOnly	Secure	Session
aam_uid	47597570860354295630209158263720582578	.caixabank.es	2020-04-12 19:56:18 Size: 46 kb			
AMCV_3A3F337B54E77B700A4C98A1%40AdobeOrg	1585540135%7CMCIDT5%7C18335%7CMCMID%7C4756573323065208308021044...	.caixabank.es	2022-03-13 18:56:19 Size: 304 kb			
AMCV_3A3F337B54E77B700A4C98A1%40AdobeOrg	-1303530583%7CMCMID%7C24087826510513242124459498862837313298%7CM...	.caixabank.com	2022-03-13 18:56:16 Size: 273 kb			
AMCVS_3A3F337B54E77B700A4C98A1%40AdobeOrg	1	.caixabank.com	Session Size: 42 kb			✓

This view shows the URLs tree generated by the crawl, with the cookies found for each URL.

Display options

The information at the execution page can be filtered to show/hide some details.

To open the `Display options` click at `Settings`:

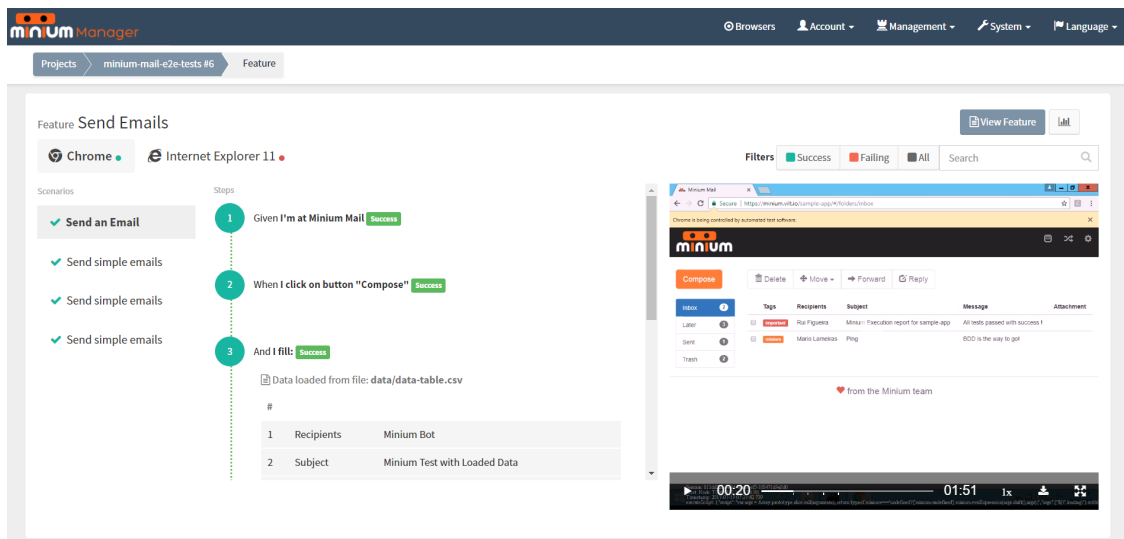


The screenshot shows a configuration window for VILT Minium Manager. It is divided into two main sections: 'Display option' and 'Project configurations'. The 'Display option' section has two radio buttons: 'Show new cookies only (Tree view)' which is unselected, and 'Show all cookie information (Table view)' which is selected with a green checkmark. The 'Project configurations' section contains three input fields: 'Max Depth' with the value '2', 'Accept Cookies' with a green checkmark, and 'Number of Validation(s)' with the value '2'. At the bottom of this section, there is a 'Scheduler' label followed by a red circle and the word 'Inactive'. Below the 'Project configurations' section is a button with a gear icon, the text 'Edit project configurations', and a right-pointing arrow.

The display options allow us to:

- Show new cookies only (Tree view) - Only shows the new cookies at the URLs tree in the child levels. The default is show every cookie (even the repeated ones).
- Show all cookie information (Table view) - Shows all the cookie information (this is the fields: domain, Expires/Max-Age, HttpOnly, Secure and Session). The default is to show the Name, Value and URLs aggregated.
- Max Depth - The Max depth configured at project configurations
- Accept Cookies - Shows if accept cookies are checked or not at project configurations
- Number of Validation(s) - Shows the number of validations configured at project configurations
- Consult the scheduler (The scheduled is configured at the project configurations at the reports and scheduling tab)

On the feature (for web application testing) view check the scenarios of this particular feature:

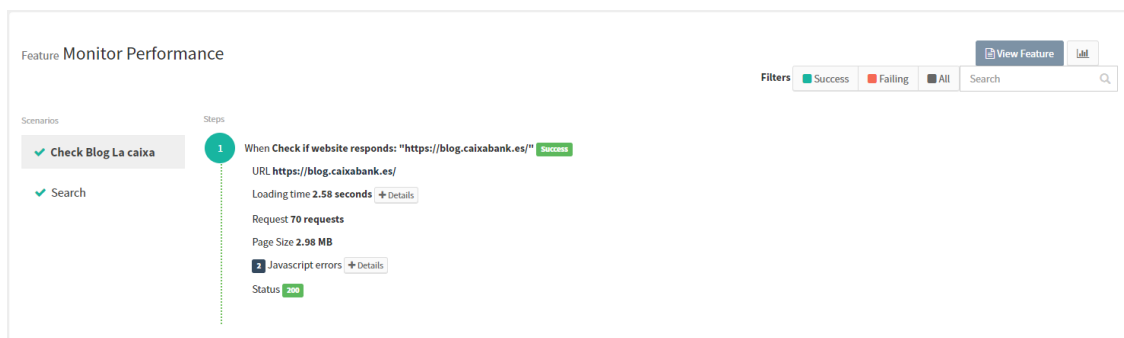


When expands a scenario see all the steps and results. Is easily switch to the results of another browser. More functionalities:

- **Screenshots** - Minium Manager provides screenshots of the application at the moment of the failure. So it is possible to see the state of the application in the moment of failure.
- **Error messages**
- **Links to the feature or step file for each step.**
- **Evolution chart for the projects**
- **Video with the cue points when the scenarios start**

Monitoring project

Feature page of a Monitoring project scenario:



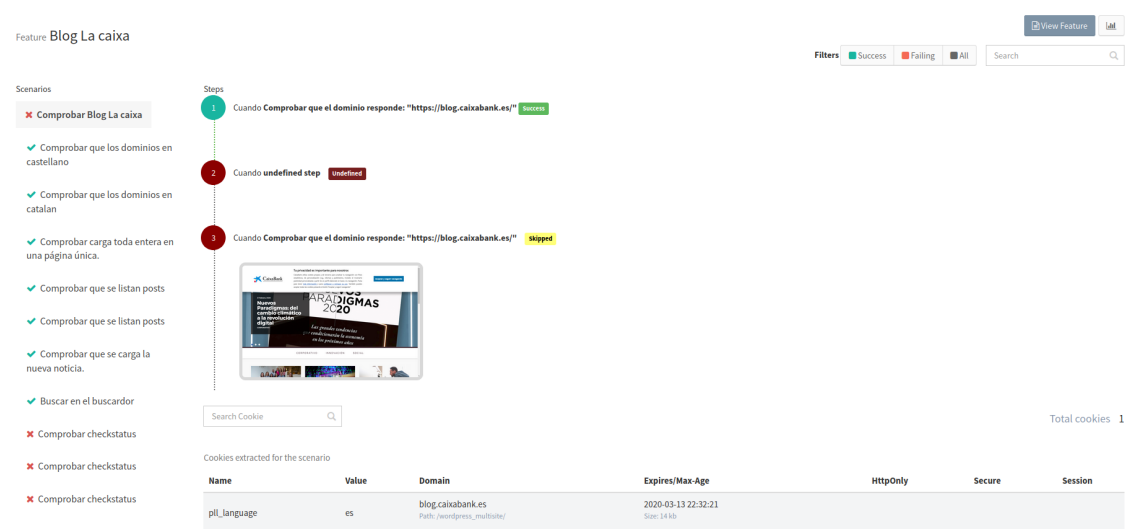
At the feature page, we can see more details about the page load performance:

- The url loaded
- The loading time with the times of the Backend Performance, Frontend Performance and DOM Content Loading
- The number of requests
- The Javascript Errors (if any)

- The URL status code

Cookie project

Feature page of a Cookie Report project scenario:



The screenshot shows the 'Feature Blog La caixa' page. On the left, there's a list of scenarios with checkboxes. The main area displays a sequence of steps: 1. 'Quando Comprobar que el dominio responde: "https://blog.caixabank.es/"' (Success), 2. 'Quando undefined step' (Undefined), and 3. 'Quando Comprobar que el dominio responde: "https://blog.caixabank.es/"' (Skipped). Below the steps, there's a preview of a webpage. At the bottom, a table titled 'Cookies extracted for the scenario' lists cookies with columns: Name, Value, Domain, Expires/Max-Age, HttpOnly, Secure, and Session.

Name	Value	Domain	Expires/Max-Age	HttpOnly	Secure	Session
pll_language	es	blog.caixabank.es Path: /wordpress_multisite/	2020-03-13 22:32:21 Size: 14 kb			

We can see at the end of each scenario a table (with a filter) of all browser cookies.

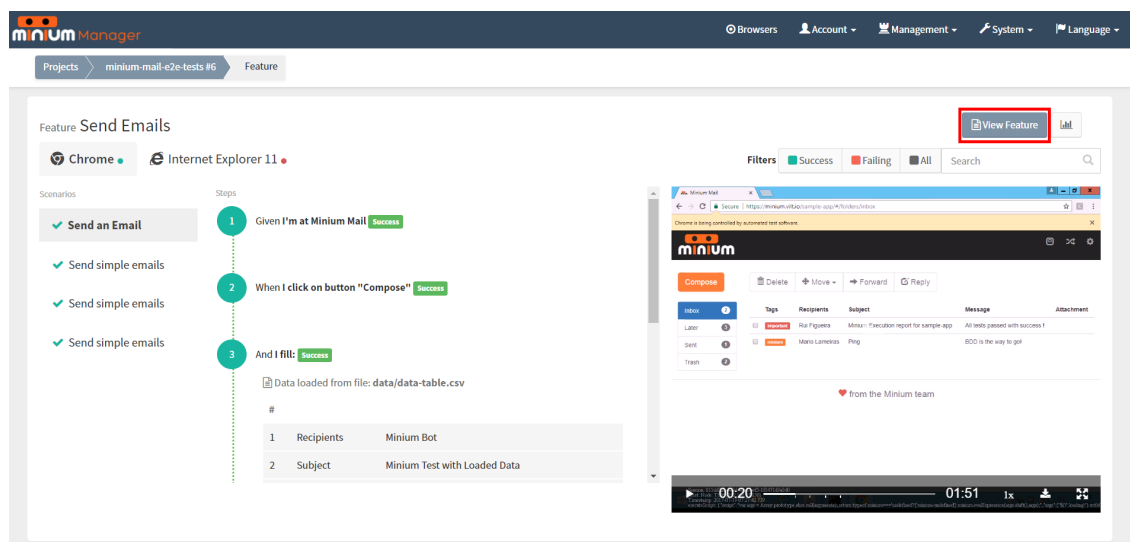


Note:

The Feature overview page is not available to the Cookie Crawler project.

4.1. Feature overview

Overview of all the features, by clicking on the button View Feature.



The screenshot shows the 'Feature Send Emails' page. On the left, there's a list of scenarios with checkboxes. The main area displays a sequence of steps: 1. 'Given I'm at Minium Mail' (Success), 2. 'When I click on button "Compose"' (Success), and 3. 'And I fill:' (Success). Below the steps, there's a table titled 'Data loaded from file: data/data-table.csv' with columns: #, Recipients, and Subject.

#	Recipients	Subject
1	Minium Bot	
2	Minium Test with Loaded Data	

View the result of each step in each browser that the feature ran.

Delete Emails

Background:

- Given I'm at Minium Mail

Scenario: Delete an email

- Given an email with Subject "Minium Can!" exists
- When I delete an email with Subject "Minium Can!"
- And I navigate to section "Trash"
- Then I should see an email with:
 - Subject Minium Can!
 - Recipients Minium Bot

Scenario: Delete an email from trash

- Given I'm at section "Trash"
- And an email with Subject "Phasellus vitae interdum nulla." exists
- When I delete an email with Subject "Phasellus vitae interdum nulla."
- Then I shouldn't see an email with:
 - Subject Minium Can!

Close

4.2. Reports

Receive the reports of each test execution, in `PDF` and/or `Excel` formats, via email. Alternatively, download them directly in Minium Manager. To choose the formats to receive via email, go to the configurations of the project and expand the advanced configurations:

Emails

Recipients

Email addresses to receive reports of the executions

☐ Send only when there are test failures

Report formats

 PDF
 XLSX

To download a report, expand the results of a test execution and click in `Download report`:

Executions

Launch test

Label

Results	Name	Duration	%	Browsers	Time	Scenarios
	minium-mail-e2e-tests #7	3 minutes	93% 7% Label		26 minutes ago	15

Execution #7

Status

Feature

Result

Passing / Failing

Duration

	Delete Emails		2 / 0	a few seconds
	Login		1 / 1	a few seconds
	Move Emails		1 / 0	a few seconds
	Send Emails (Loading External Data CSV)		4 / 0	a few seconds
	Send Emails		6 / 0	a minute

Recorded executions by browser

Download report

4.3. Daily Reports

The daily report is a custom report with your favorite projects that will be sent to your email with the status of the last completed execution in the last 24 hours.

Before being able to configure a daily report, first you need to set the email configured at [Account > Settings](#).



Note:

If Minium Manager is using LDAP, please contact your administrator to set your email at LDAP.

To create a daily report configuration, open the [Account](#) menu and click on [Daily Reports](#).

Choose the projects to be included in your custom daily report:

Projects

Choose the projects to be included in your custom daily report.

Search for projects - Filter By Group - - Filter By Label -

☐	Name ▾	Groups	Labels
☐	authenticated_project		
☐	google-test-git	qa.team	staging
☐	google-test-svn		
☐	minium-mail-e2e-tests	minium.team eng.team qa.team	prod
☐	test		
☐	test-jvm-project		
☐	unauthenticated_project		

Show Projects Previous 1 Next

Project(s) selected: Total selected: 0

None

After, schedule the time the email will be sent, with a summary of the past 24h.

Scheduling

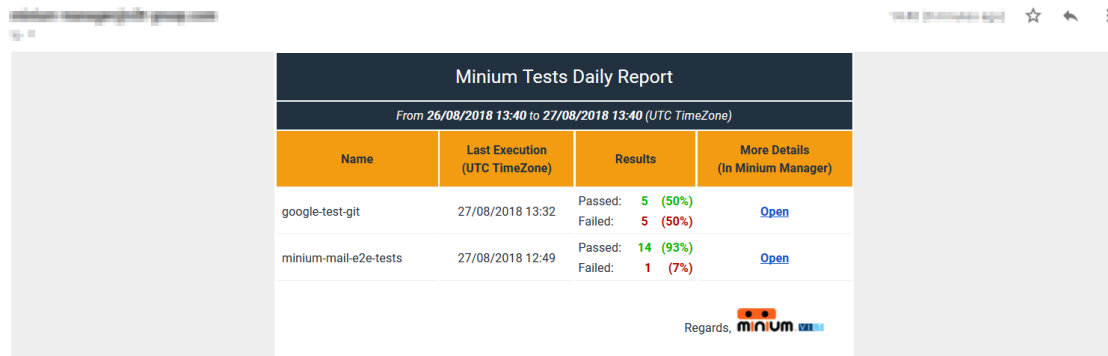
The report will be sent at the time you configure, with a summary of the past 24h.

Every: at :

Finally, click on the button "Create/Update Daily Report Configuration" to create/update the

daily reports:

Daily report of the past 24h (with errors) [Inbox x](#)



Minium Tests Daily Report			
From 26/08/2018 13:40 to 27/08/2018 13:40 (UTC TimeZone)			
Name	Last Execution (UTC TimeZone)	Results	More Details (In Minium Manager)
google-test-git	27/08/2018 13:32	Passed: 5 (50%) Failed: 5 (50%)	Open
minium-mail-e2e-tests	27/08/2018 12:49	Passed: 14 (93%) Failed: 1 (7%)	Open

Regards, 

To delete the configuration, click on the button "Delete Daily Report Configuration".

The daily report was configured to be sent at **06:00** with the status of the last completed execution in the last 24 hours for the following projects:

- authenticated_project
- google-test-git
- google-test-svn
- minium-mail-e2e-tests
- test
- test-jvm-project
- unauthenticated_project

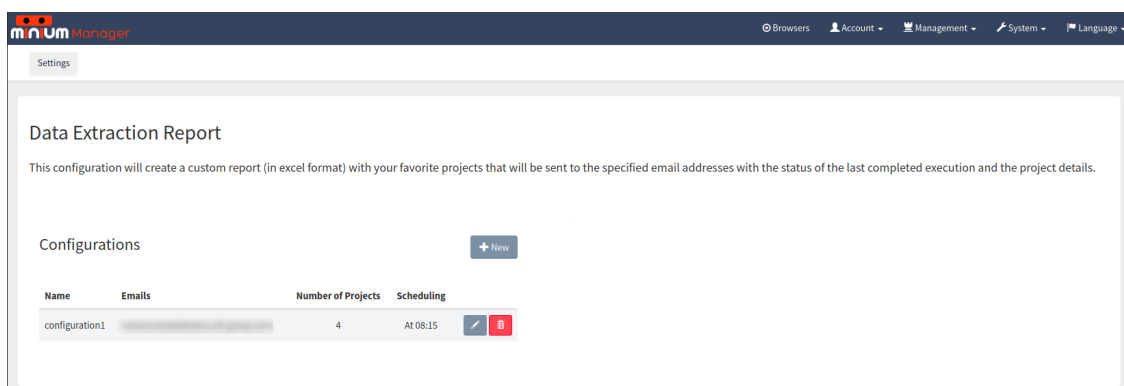
[Change Daily Report Configuration](#)

[Delete Daily Report Configuration](#)

4.4. Data Extraction Reports

The Data extraction report is a custom report (in Excel format) with your favorite projects that will be sent to the specified email addresses with the status of the last completed execution, and the project details.

To create and/or consult the data extraction reports configurations, open the [Management](#) menu and click on [Data Extraction Report](#).



Data Extraction Report

This configuration will create a custom report (in excel format) with your favorite projects that will be sent to the specified email addresses with the status of the last completed execution and the project details.

[+ New](#)

Name	Emails	Number of Projects	Scheduling
configuration1	View	4	At 08:15 Edit Delete

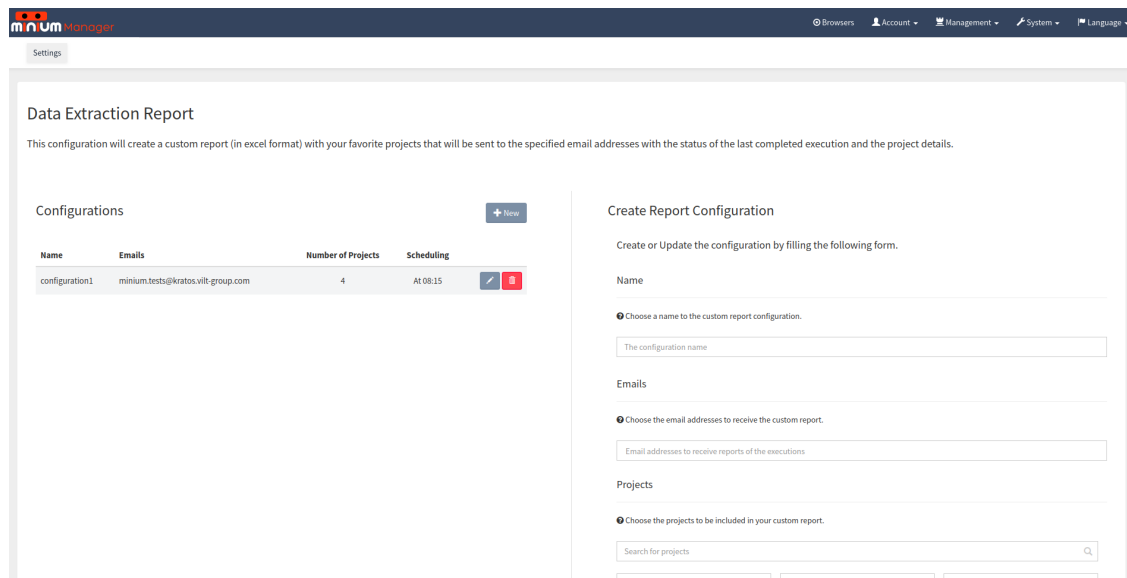
At the data extraction report page, you can see the current configurations created at the list

Configurations.

You can edit (by clicking in the **pencil** button) or delete (by clicking on the **trash** button) the configurations listed at the list **Configurations**.

Also, you can create a new configuration by clicking on the button + **New**.

When you click the button + **New**, a form will appear (similar to the edit form) on the right side of the page:



To create a new configuration, fill the form by add a new configuration name (unique value), the emails that will receive the configuration, choose the projects to be included in the report and finally, schedule the time the email will be sent, with the report.

Note:



To choose the projects, you have filters available to help. You can filter the project by name, type, group and label.

To save the configuration, click on the button + **Save**.

The email received will list a summary of the projects selected (separated by type), the statistics of the monitoring projects (How many executions since last report was sent, how many executions passed and how many executions failed), and will have the report (in Excel format) attached.

Note:



The subject of the email received is "Data Extraction Report".

4.4.1. Crawler Aggregator

The Data extraction report has an option to generate one report with only Cookie Crawler Projects.

To configure Data extraction report with the aggregation of the Cookie Crawler Projects, choose the type `Crawler Aggregate`:

that will be sent to the specified email addresses with the status of the last completed execution and the project details.

[+ New](#)

Create Report Configuration

Create or Update the configuration by filling the following form.

Type

Choose the type of the custom report configuration

Data Extraction
Crawler Aggregate

Name

Choose a name to the custom report configuration.

Emails

After configure the report as a Data extraction report.

The email received will list a summary of the projects Cookie Crawler selected, and the statistics of the projects (How many executions since last report was sent, how many executions passed and how many executions failed).

4.5. Regressions

Minium Manager identifies the scenarios and features that were passing and in the last execution failed:

Executions (Total: 4)

Launch test



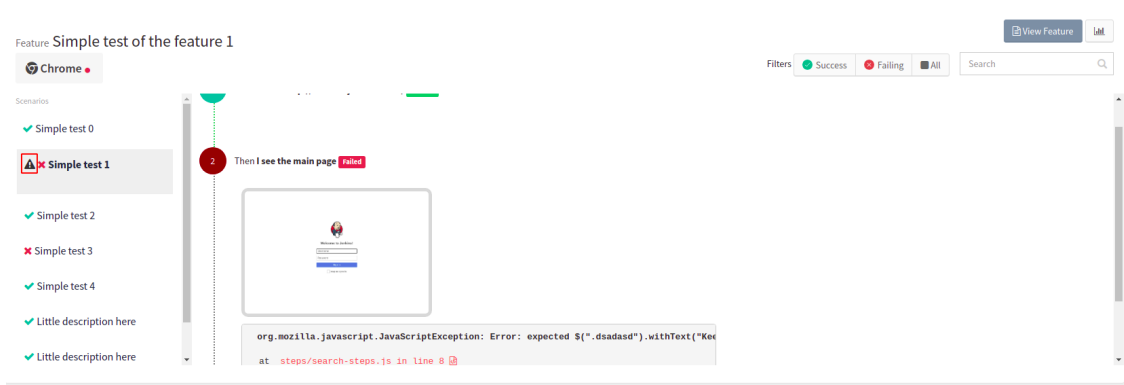
Filter by result

Success

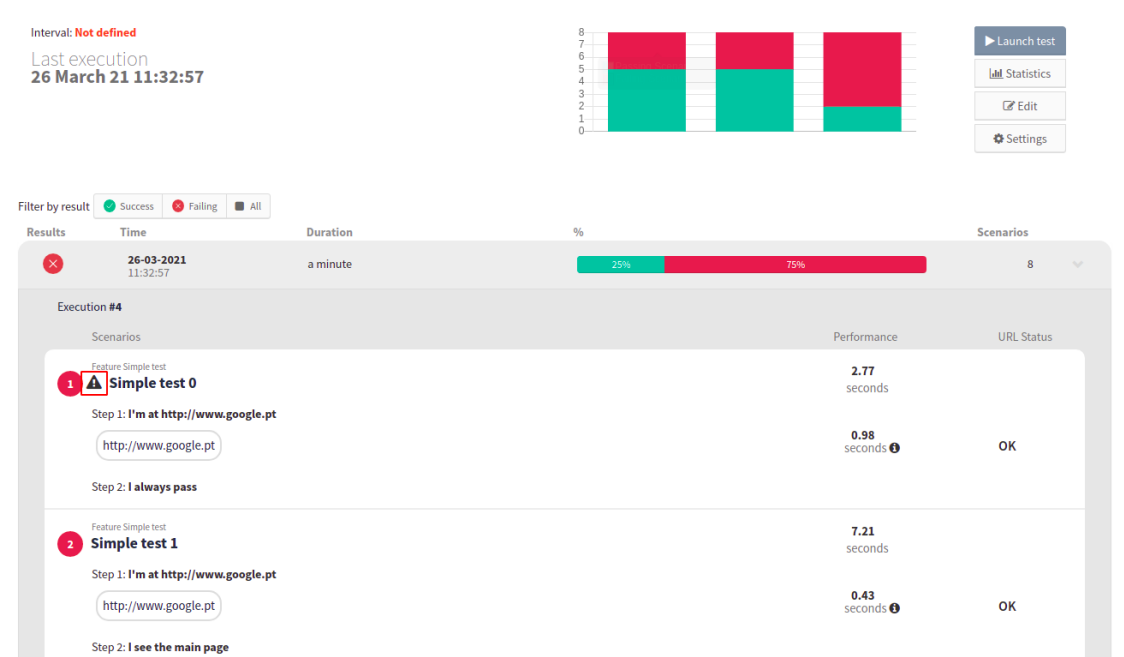
Failing

All

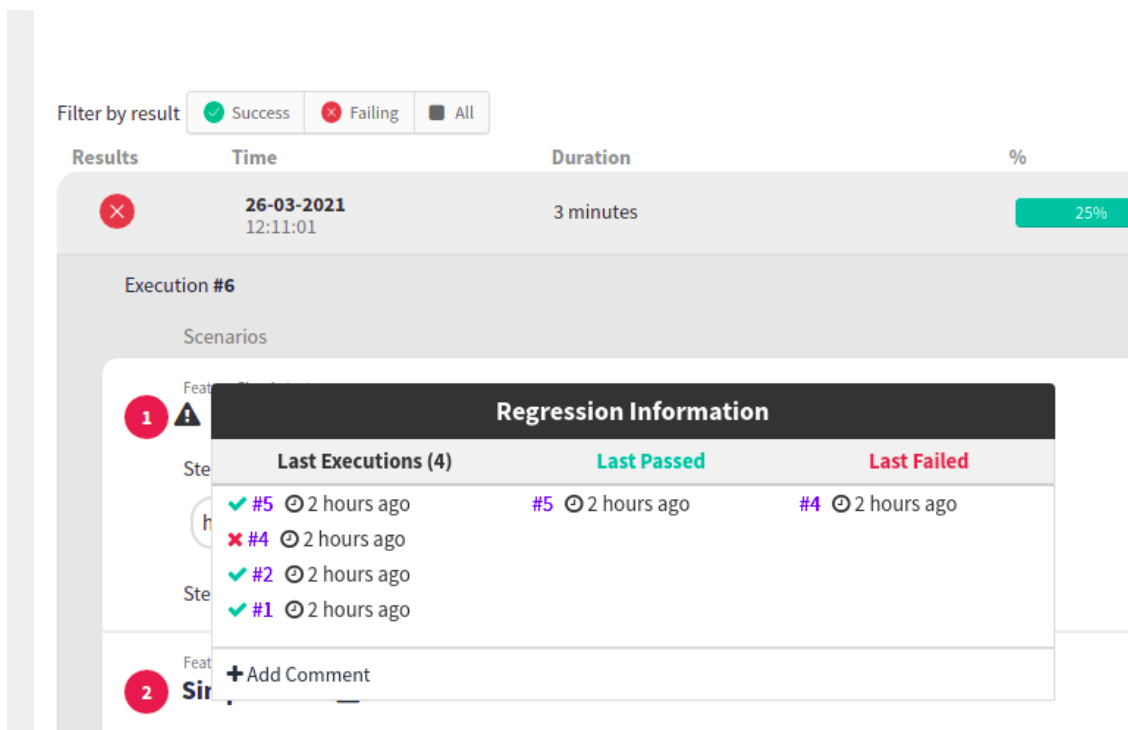
Results	Name	Duration	%	Browsers/Devices	Time
	test-regression #6	a minute	50% 44%		an hour ago
Execution #6 Status Feature Simple test feature Simple test of the feature 1 Result Chrome Chrome Passing / Failing 0 / 1 5 / 3 Duration a few seconds a few seconds					
Download report					
	test-regression #5	a few seconds	67% 33%		an hour ago
	test-regression #4	a minute	56% 44%		an hour ago
	test-regression #3	a few seconds	67% 33%		an hour ago



For monitoring projects, the executions page is:



At the mouse over in the warning icon, the regressions's widget is presented to show more information about the past executions, the last execution passed, and the last execution failed for the regression:



The screenshot shows the VILT Minium Manager interface. At the top, there's a filter by result section with buttons for Success (green checkmark), Failing (red X), and All (grey square). Below this is a table with columns: Results, Time, Duration, and %. The first row shows a failing result (red X) for the date 26-03-2021 at 12:11:01, with a duration of 3 minutes and a progress bar at 25%.

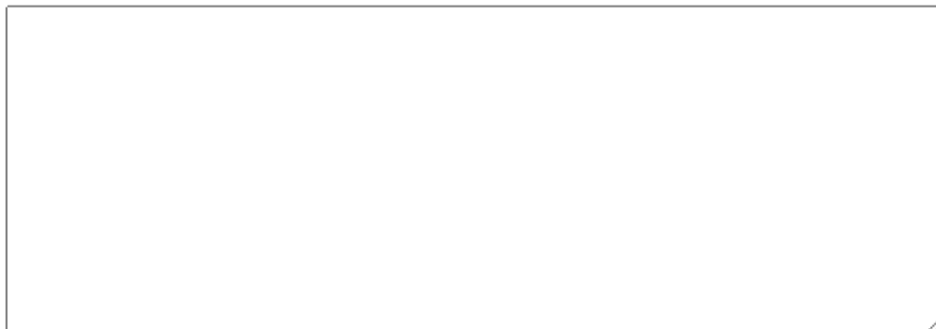
Below the table, there's a section for Execution #6, which includes a Scenarios section. A modal window titled "Regression Information" is open, showing a table of last executions. The modal has a red circle with a white '1' and a warning icon. The table has three columns: Last Executions (4), Last Passed, and Last Failed. The data is as follows:

Last Executions (4)	Last Passed	Last Failed
✓ #5 ⌚ 2 hours ago	#5 ⌚ 2 hours ago	#4 ⌚ 2 hours ago
✗ #4 ⌚ 2 hours ago		
✓ #2 ⌚ 2 hours ago		
✓ #1 ⌚ 2 hours ago		

At the bottom of the modal, there's a section for Feature #2 with a red circle with a white '2' and a plus icon, and a button labeled "+ Add Comment".

The regression widget also allow adding comments at the regression detected. To add a comment, click ad + Add Comment and fill textarea and click Save:

Regression Comment



 Save  Close

After, we can check the comments added in the previous executions by clicking on the comment's icon:



Regression Information		
Last Executions (4)	Last Passed	Last Failed
✓ #5 ⌚ 2 hours ago	#5 ⌚ 2 hours ago	#4 ⌚ 3 hours ago
✗ #4 ⌚ 3 hours ago		
#4: First fail		
✓ #2 ⌚ 3 hours ago		
✓ #1 ⌚ 3 hours ago		
+ Add Comment		

We can also edit the comment by clicking on `Edit Comment`:

Regression Information	
Last Executions (2)	Last Passed
✓ #2 ⌚ 3 hours ago	#2 ⌚ 3 hours ago
✓ #1 ⌚ 3 hours ago	
Edit Comment	
First fail	

imple test 1

Edit the text and click `Save`.

To delete the comment click `Delete`.

5. Roles

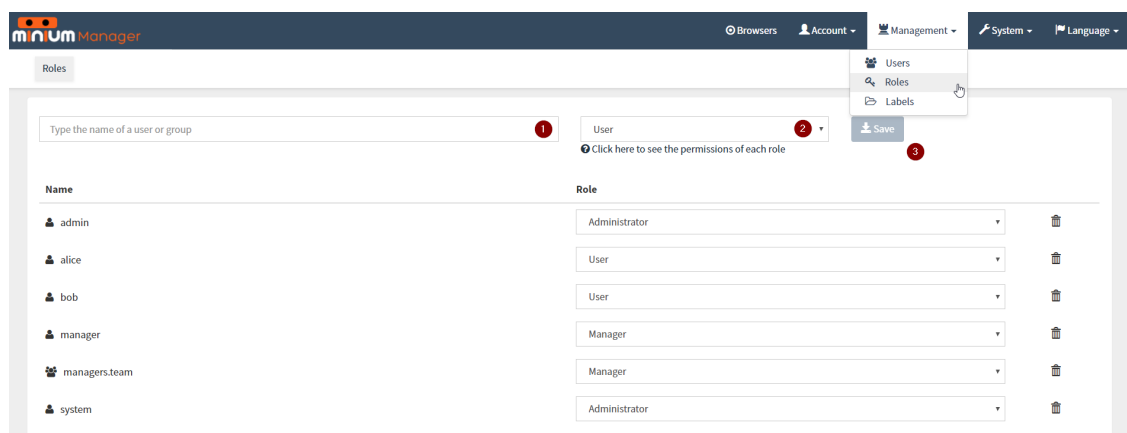
Roles allow granting different privileges to the users and the groups. The privileges associated with each role are described in the table below:

	User	Manager	Administrator
View projects	✓	✓	✓
Launch test executions	✓	✓	✓
Configure projects	✓	✓	✓
Create projects		✓	✓
Manage project labels		✓	✓
Manage users			✓
Manage roles			✓

5.1. Assign roles

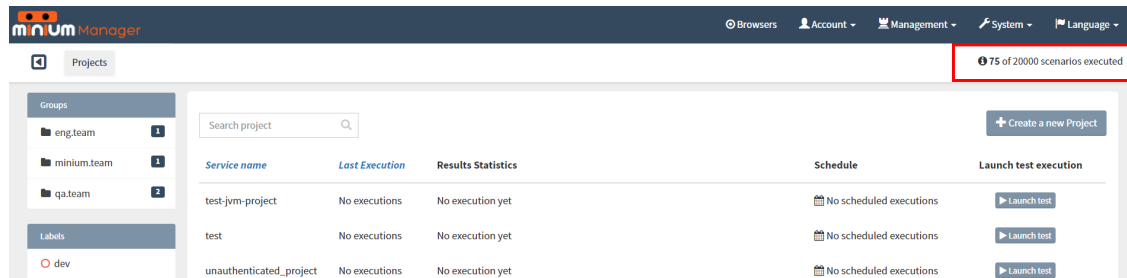
To change the role of a user or group, navigate to **Management > Roles** at the navigation bar and:

1. Introduce the name of the user or group in the search bar.
2. Select a role.
3. Click on **Save** button.

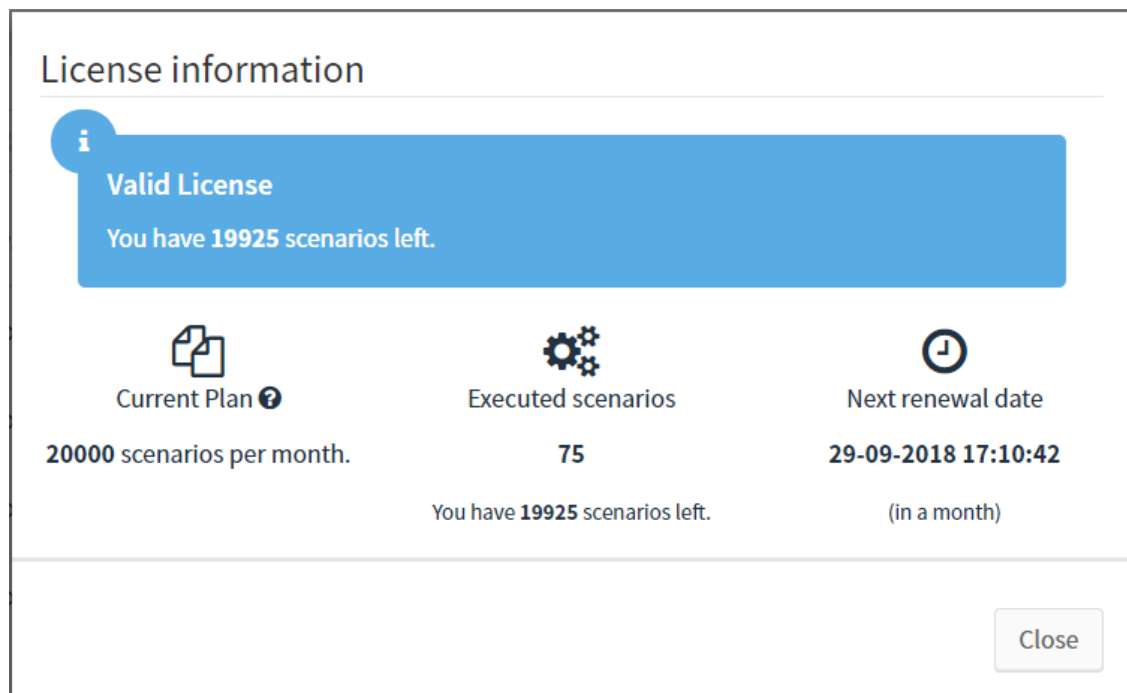


6. License information

At the top right of the project list page exists the license information label, that gives the number of executed scenarios in this month, and the total of scenarios per month that to the current license



By clicking on the license information label, it will open a modal with more detailed information about one license.



7. Minium Recorder User Guide

Minium Recorder has been developed to ease and accelerate the creation of Minium tests. With the **Minium Recorder**, is no longer needed to write all the code for the step definitions by hand. Simply tell to the **Minium Recorder** to start recording the interactions with the browser, perform the actions that correspond to the defined step and an automation script is immediately available in **Minium Developer**.

But what really makes Minium Recorder different in relation to other automation script recorders is that, for each element that interacts, Minium Recorder will not generate just one CSS selector. Instead, is possible choose among a list of alternative expressions for each element that take advantage of the great Minium filtering methods that are used like for example `withLabel`, `below`, `rightOf`, etc, to build more readable and resilient expressions.

7.1. Configure Minium Developer

Minium Recorder is already configured at **Minium Developer Prime**, but you can configure an existing **Minium Recorder**.

To configure **Minium Developer** with the **Minium Recorder** extension, first you need to download the **Minium Recorder** extension.

Navigate to the folder where **Minium Developer** is installed, create a folder named "**extensions**", copy the **Minium Recorder** extension file to the new folder and rename the file to "minium-recorder.crx".

After, edit the `config/application-{windows,linux,macos}.yaml` file in order to add the following configuration (at the chrome webdriver):

```
minium:
  developer:
    webdrivers:
      - name: chrome
      ...
    chromeOptions:
      extensions:
        - ${app.home:./}/extensions/minium-recorder.crx
      preferences:
        devtools:
          preferences:
            panel-tabOrder: "{\"chrome-extension://ggefclafoeoejognlebilidgmgdlogMiniumRecorder\":10,\"elements\":20,\"console\":30,\"sources\":40,\"network\":50,\"timeline\":60,\"heap_profiler\":70,\"resources\":80,\"security\":90,\"audits\":100}"
```

7.2. Launch Minium Recorder

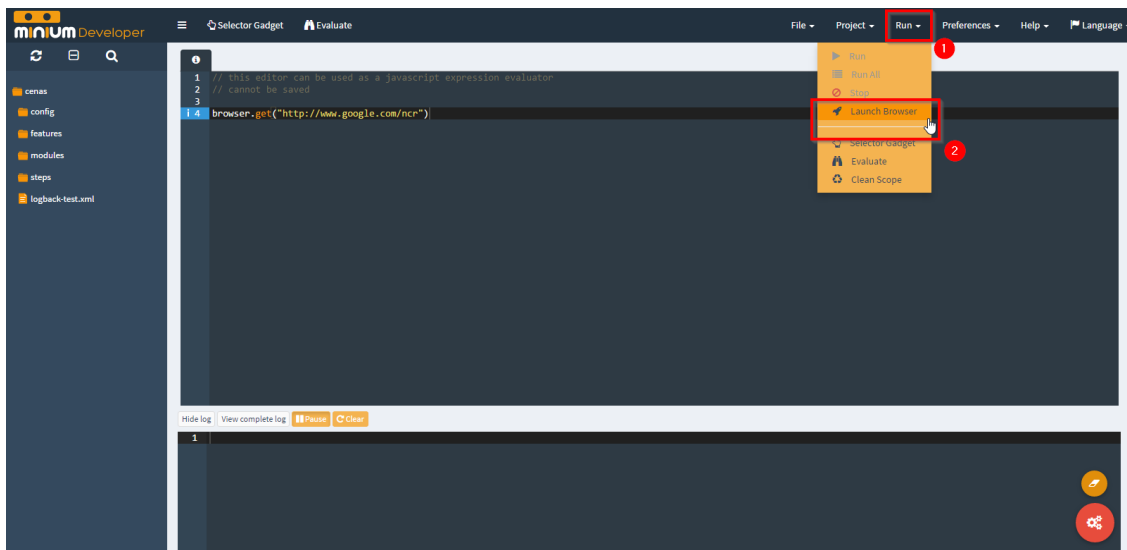
Launch **Minium Recorder** through **Minium Developer**.

Open **Minium Developer** and add the following command to the editor:

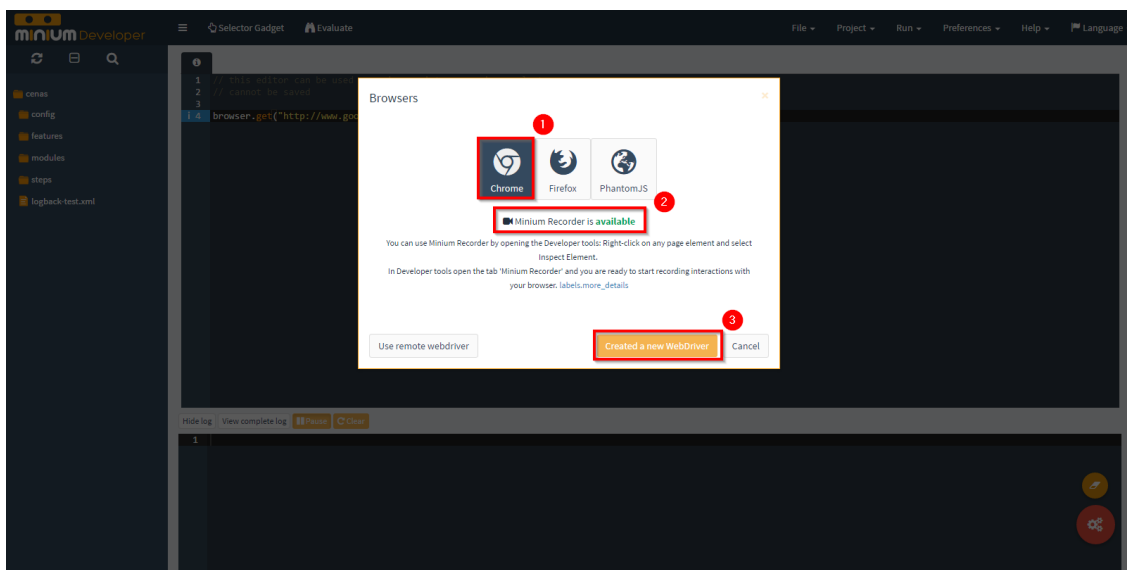
```
browser.get("&quot;http://www.google.com/ncr&quot;");
```

This will load the google search engine website, when the instance of Chrome is launched.

To launch Minium Recorder, use the (Ctrl + Enter) shortcut or select `Run > Launch Browser` (1) and (2) at the top-right menu:

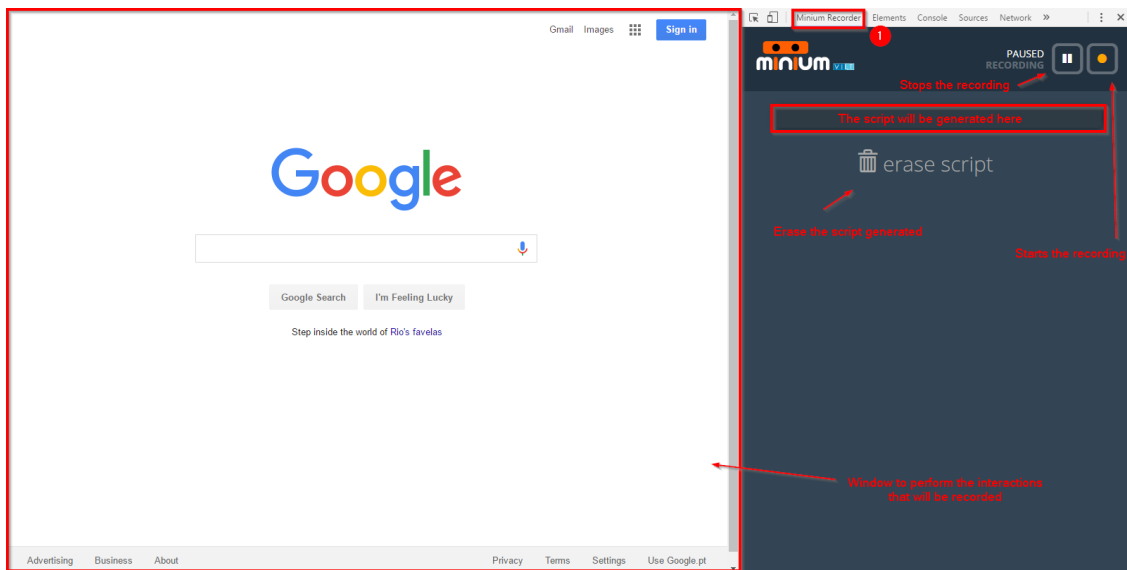


Select the `Chrome` browser (1), check if Minium Recorder is available (2) and click `Created a new WebDriver` (3):



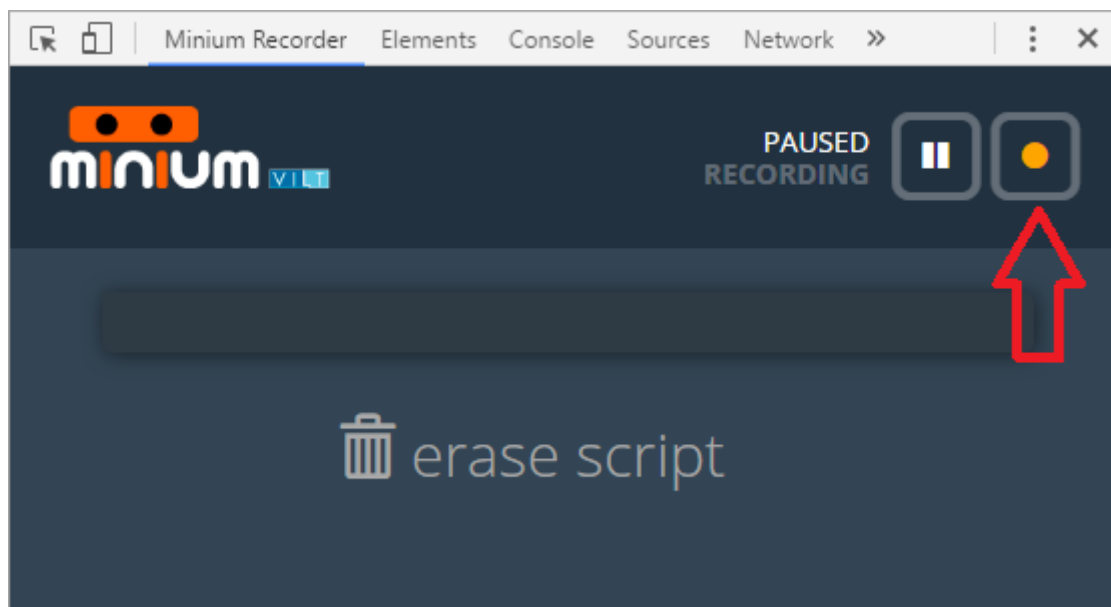
A new instance of Chrome will be launched with the Minium Recorder extension installed. In the instance of Chrome, open the `Developer tools` by using the (F12) shortcut (use another [shortcut](#)) or select `More Tools > Developer tools`.

After the `Developer tools` of the instance Chrome is opened, select the `Minium Recorder` tab (1):



7.3. Start recording

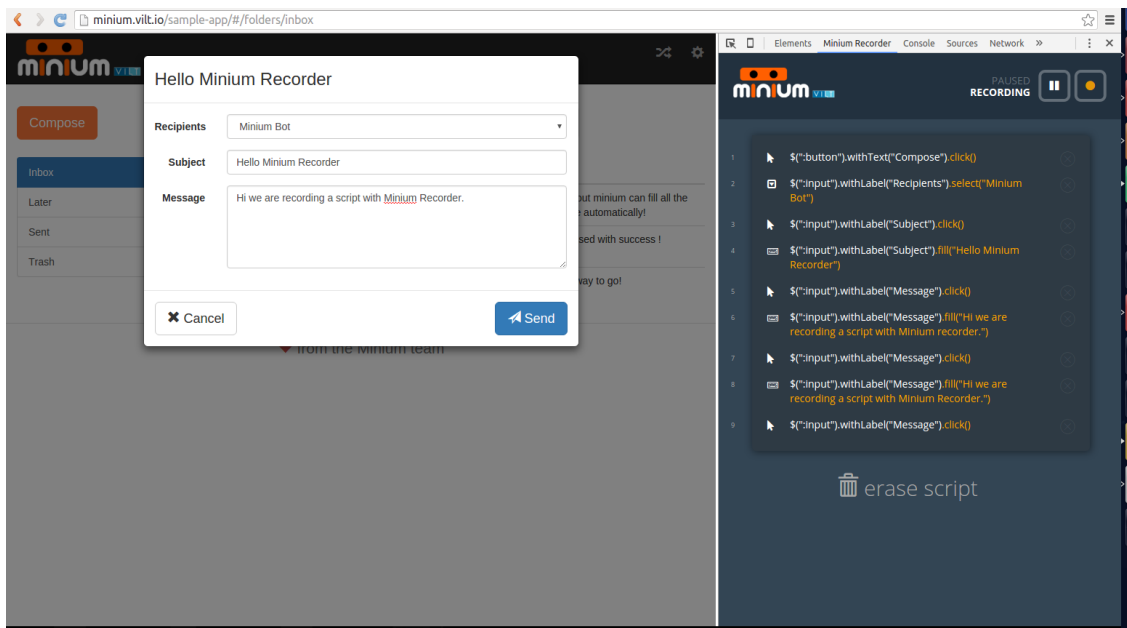
To start recording, click on the following button:



From now on, every interaction performed with the browser will be recorded.

7.4. Record interactions

For every action performed on the browser, like clicking on an element or filling a text input field, Minium Recorder will automatically generate the corresponding code. If typed an URL in the address bar, Minium Recorder will also generate the code to load that URL.



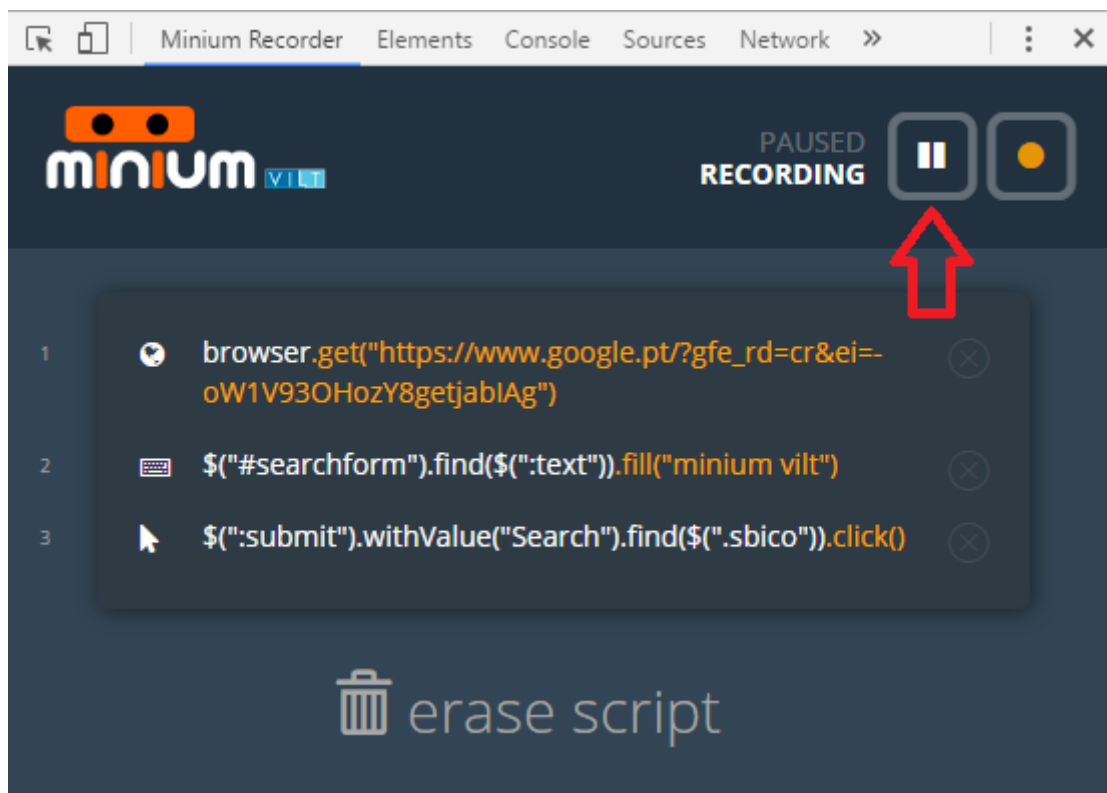
To try other expressions, click on the expression and a list of alternative expressions will be displayed:



To select an expression, just click on it.

7.5. Stop recording

Click on the pause button to stop a recording.



7.6. Import the recorded script in Minium Developer

To import a script in Minium Developer, right-click on the editor area, where is intended to put the script, and choose the option `Import recorded script`:

