

Troubleshooting Automated UI Tests

Problems with running the Automated UI Tests?

Running the C# tests can be tricky, so this is a guide to help you out if you run into a common error. NOTE: These solutions will only work if you can at least build Utopia. If you cannot build Utopia, try reaching out to Dev via Royce or Quinn, and they will schedule time between you and one of the Devs to resolve the issue. You could also try reviewing the videos about setting up Utopia. In them, several common build errors are discussed and resolved.

First, verify that your `testSettings.json` (found in the AutomatedUITests Project) is pointing to the proper build.

Screenshot 2022-01-13 093157.png

Check the section titled `// endpoint variables` and make sure the correct variables are active (not commented out). It will be pointing to staging by default (i.e. after you pull from main).

Screenshot 2022-03-17 103955.png

- **Local:**

```
"targetUrl": "https://localhost:44334/",  
"storageType": 0,
```

- **Staging:**

```
"targetUrl": "https://account-staging.efilecabinet.net/",  
"storageType": 1,
```

NOTE: Testing against any other environment will follow the same pattern

Running against local

Many common issues happen when running against local. However, they are usually simple to fix.

1. Verify that Azure Storage Emulator is running. To do so, type in the search box on your machine's taskbar `Azure Storage Emulator`.

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Open the Microsoft Azure Storage Emulator app that comes up. You should see a command prompt window come up saying it's starting the Azure Storage Emulator (or that it was already running).

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2. Verify that you have the latest Utopia code and UtopiaAutomation code pulled from master. To do this, you need to open Git Changes in Visual Studio, and then you need to fetch and pull. To fetch, click the dotted down arrow. To pull, click the solid down arrow with a horizontal line below it. Fetching will grab the latest commits from Azure DevOps, and pulling will actually merge those commits into your local copy of the master branch. Also, make sure that you're for sure on the master branch by verifying the branch dropdown selector says master. Do this on both the Utopia solution and the UtopiaAutomation solution.

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If you're working on your own branch, then a good idea would be to switch to master, fetch and pull, and then switch back to your branch and merge the newly updated master into your branch. If you find you're in this scenario, please feel free to reach out to Dev with any questions.

3. Verify that you have Utopia running via a separate Visual Studio window (you should see Rubex pop up in a Chrome window with the url of `https://localhost:44334/`).
4. Verify that your database is up to date. To do this, go to the Visual Studio window where you have the Utopia solution open. Find the DbMigratorEF project and right click on it. Select the option to "Set As Startup Project"

Screenshot 2022-01-13 094935.png

Once you have done this press the green play button at the top. This should bring up a window like this:

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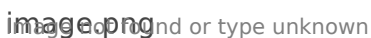
Go ahead and press enter. This will apply any database migrations that have happened since you updated last. It will print out the latest DB update state whether it needed to update or not, then you can close the window. If you run into errors with this, read on to the section below.

NOTE: Remember to set the startup project back to Utopia when you want to run it again.

Fixing Your Database

Sometimes your database gets into an unexpected state, or it was never configured properly to begin with. Here are the steps to flush it out.


First, let's double check you don't have any Rubex Private Cloud services interfering with your local environment. Open up the Task Manager. Go to the Services tab, and scroll down to anything that says eFileCabinet (the results are alphabetized by default). If you've ever run the Rubex Private Cloud installer on your machine, you'll see the following services:

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Please make sure they're all set to stopped. If you've never tested Rubex Private Cloud, it still may be a good idea to double check these services either don't exist or are set to stopped.

One more thing to check dealing with Rubex Private Cloud is the `C:/ProgramData/EFC/Configuration` folder. If that folder exists, please delete it (or move it to a different location if you want to save its contents for later testing). Okay, now on to double check out database itself.

Open up pgAdmin, and open Databases.


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As you see in the image above, I have only one database, and its name is `postgres`. That is the database we use locally.

We used to use `UtopiaDB` as the name of the database. If you have `UtopiaDB` please right click it and click delete/drop.

If you have errors deleting/dropping `UtopiaDB`, first make sure all query tabs accessing it are closed. If that doesn't work, then sadly you will need to restart your computer and try again.

Once you've verified that you only have `postgres`, open it up and you'll see `Schemas`, which should contain both `public` and `workflow`.

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If you don't have a workflow schema, then your database isn't yet configured and we will need to run the DbMigratorEF. If inside of your `public` schema under `Tables` you don't have any tables, you'll also need to run the DbMigratorEF. Refer to Step 4 under "Running Against Local" above for instructions on how to do this.

Go back to pgAdmin and open the `DbInstanceSettings` table in the `public` schema of the `postgres` database. On that table right click, hover over View/Edit Data and click All Rows. If there is nothing there, please run this script: [Initial Instance Settings.txt](#).

Then run the `DB Instance Settings Local Config` script from the root of the Utopia source code directory. If you open the table and the first two rows have settings types 2 and 9, then you haven't run the second script. So please run `DB Instance Settings Local Config`.

Other Errors

OneTimeSetup: System Exception: An error occurred while creating accounts

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This error can mean a myriad of things. If you have checked all of the above, then the issue will likely need to be addressed with the Dev team, as it is probably an error in how the UtopiaAutomation code is hooking up to the Utopia code, and not anything to do with the tests themselves.

System.UnauthorizedAccessException : Access to the path '`1.7GBvid.mp4`' is denied

This error is because you don't have admin permissions on the Windows directory where you cloned the source code. It is **strongly** recommended that you clone the source code into the following directory: `C:/src/Utopia`. Possible solutions to this error:

1. If your source code is not cloned to `C:/src/Utopia`, please promptly move it there and try again.
2. Make sure your windows user has admin permissions to `C:/ProgramData/EFC`. ProgramData is a hidden folder, so if you don't see it on the C drive in File Explorer, make sure you have hidden items marked as visible.

Unable to connect to web server "IIS Express"

I encountered this after updating Visual Studio. I went into

`...\source\repos\Utopia\Utopia\.vs\Utopia\config\` and deleted the `applicationhost.config` file and restarted Visual Studio.

I got this fix from this Stack Overflow post, so if the fix doesn't work for you, there may be more detail here: <https://stackoverflow.com/questions/35675747/asp-net-5-mvc-unable-to-connect-to-web-server-iis-express>

Chromedriver / NuGet

If you get an error regarding Chromedriver, such as:

```
OneTimeSetUp: System.AggregateException : One or more errors occurred. (session not created: This version of
ChromeDriver only supports Chrome version 96
Current browser version is 98.0.4758.82 with binary path C:\Program
Files\Google\Chrome\Application\chrome.exe (SessionNotCreated))
----> System.InvalidOperationException : session not created: This version of ChromeDriver only supports
Chrome version 96
Current browser version is 98.0.4758.82 with binary path C:\Program
Files\Google\Chrome\Application\chrome.exe (SessionNotCreated)
```

or:

```
Chromedriver.exe is being used by another process
```

Then what you need to do is kill any currently running Chromedriver processes, and in the case of the first error, then update the Chromedriver.

To kill Chromedriver, in a Linux-like terminal such as Git Bash, run `taskkill -im chromedriver.exe -f`, or in Command Prompt run `taskkill /F /IM chromedriver.exe`, or find Chromedriver in your Task Manager and end the task that way.

To update Chromedriver, in Visual Studio go to Project > Manage NuGet Packages. Go to the Update tab, find the Selenium Chromedriver and update it. This should solve the error.

A Living Document

Please add new errors as they come up along with your discovered resolutions. The goal of this document is to avoid having to remember a long list of remedies.

Revision #4

Created 18 July 2022 22:25:27 by Bryce Holloway

Updated 20 July 2022 13:54:29 by Bryce Holloway