# IFS4103 Lab 6: Using Burp Suite's Project Files & Options, Sequencer & Extender

#### **Notes:**

When working on your pen-testing project using Burp Suite Pro later, you may want to utilize Burp Suite's project files and also configure Burp Suite's project and user options. Additionally, let's wrap up our labs by covering Burp Suite's two other components, namely Burp Sequencer and Extender.

## **Objectives:**

In this lab, you want to perform the following tasks:

- 1. To use Burp Suite's project files;
- 2. To configure Burp Suite's **project and user options**;
- 3. To use Burp **Sequencer** for analyzing the randomness quality of an application's session or random tokens;
- 4. To use Burp **Extender** for loading Burp extensions.

## Task 1: Using Burp Suite's Project Files

You can better organize your work on a pen-testing project or task if you utilize Burp Suite's **projects**, which is accessible in Burp Suite Pro.

A *Burp project file* holds all of the data and configuration for a particular piece of work using Burp Suite. As explained in Burp's documentation, the data is **saved** 

incrementally into the file as you work with Burp. Hence, you don't need to specifically "save" your work when you are finished. And when you reopen an existing project, Burp automatically reloads the project's data and configuration, and you can resume working where you previously left off.

Hence, besides facilitating your work in a pen-testing, a Burp project basically also *documents all Burp's activities* that you have done in your work.

Please refer to the following YouTube video about **Burp Suite projects**:

"How to use Burp Suite projects":
<a href="https://www.youtube.com/watch?v=s3j1VvJlx9E">https://www.youtube.com/watch?v=s3j1VvJlx9E</a>

From observing the video, you should be able to **create**, **open/load**, and **save** Burp Suite's project files.

#### A Tip on Using Burp Suite's Projects:

Note that when pen-testing a particular target web application, it is quite common to have a few different user roles within the application. For instance, in a University application, you can imagine that there can be the admin user (for the application administrator), then a student user type, and also a University staff user type. Typically, these different user types have different roles and tasks to perform in the application. As such, they have correspondingly different accessible in-scope URLs, operations allowed, and test-user credentials given.

In such a situation, instead of using just a single project file for pen-testing the application, you may want to use three different project files instead: one for each user type. Such a project-file arrangement can make it easier for your pen-testing. This is since, in your pen-testing, you can specify different sets of platform-authentication credentials, web form values to submit, in-scope URLs, etc., for the different user types. The takeaway point is that you do not need to be confined to use only one project file for each web application in your pen-testing.

### Task 2: Configuring Burp Suite's Project & User Options

Burp contains a large number of suite-wide **options** that affect the behavior of all tools. The options are divided into *project-level* and *user-level* **options**.

**Project-level options** are stored within the **Burp project file** (for disk-based projects). These options are those relating to the **work being performed on a particular target**, including:

- Everything in the new "Project options" tab;
- Non UI-related options in individual Burp tools, such as Proxy and Scanner.

Meanwhile, *user-level options* are stored within the local installation of Burp, and are automatically reloaded each time Burp starts. Unlike project-level options, user-level options are those relating to the **user's Burp UI and tool environment**, including:

- Everything in the new "User options" tab, such as font settings;
- UI-related options in other tools, e.g. the selected view of the Target site map;
- Options in the Extender tool, including the list of configured extensions.

As you may see, user-level options will typically be **long-lived**, and are preserved **across different Burp's sessions**.

You can refer to the following YouTube video from PortSwigger about using **project options**:

"How to use Burp Suite project options":
<a href="https://www.youtube.com/watch?v=CdcJcdp-ObQ">https://www.youtube.com/watch?v=CdcJcdp-ObQ</a>

From observing the video, you should be able to *save* Burp Suite's project options (including Burp-wide options, and options at each individual option panel), as well as to *load* a previously saved project option file (including Burp-wide options, and options at a particular option panel).

You can additionally read the following documentation about Burp Suite options, which also **discusses as well as contrasts** the project options and user options: <a href="https://portswigger.net/burp/documentation/desktop/options">https://portswigger.net/burp/documentation/desktop/options</a>.

## Task 3: Using Burp Sequencer

Burp Sequencer is a sophisticated tool for analyzing the *quality of randomness* in an application's **session tokens** or other important data items that are intended to be unpredictable, such as **anti-CSRF tokens** and password reset tokens.

You can refer to the following YouTube video about using Burp Sequencer:

• "How to Analyze Session Token Randomness using Burp-Suite Sequencer": https://www.youtube.com/watch?v=kNSAhKiXctA

You can additionally check PortSwigger's **documentation** on Sequencer: <a href="https://portswigger.net/burp/documentation/desktop/tools/sequencer">https://portswigger.net/burp/documentation/desktop/tools/sequencer</a>.

#### Task 4: Using Burp Extender

Burp Extender allows you to load *Burp extensions* so that you can extend Burp's functionality using your own or third-party code. You can load and manage extensions, view details about installed extensions, install extensions from the BApp Store, view the current Burp Extender API, and configure options for how extensions are handled.

You can refer to the following YouTube video about using Burp Extender:

"Adding Extensions":
https://www.youtube.com/watch?v=C03EUbgRLNE

You can additionally check PortSwigger's **documentation** about Extender: <a href="https://portswigger.net/burp/documentation/desktop/extensions">https://portswigger.net/burp/documentation/desktop/extensions</a>.