

### **Exercise 3. Information gathering & SQL-injections**

The Internet is full of organisations and companies. All of them reveal information about themselves intentionally and unintentionally. For criminals this information is valuable for gaining unauthorized access to computer systems.

In this laboratory we will continue scanning activities.

For this laboratory we will need Burp Suite reconnaissance tool. You can download it from Internet.

Burp Suite is tool for intercepting HTTP traffic. So all communications between web-browser and web-server can be intercepted. HTTP messages can be modified or stored for later inspection.

To get Burp Suite working:

1. Launch the Burp Suite.
2. Change your web-browsers proxy settings to localhost and port should be 8080
3. Start browsing

In figure 1. you can see the Burp proxy.

Figure 1. Burp Proxy Suite

**Intercept** on/off is used when there is need to intercept and modify HTTP messages. It is not needed when logging responses from website.

**Spider** is automated website scanner, which tries to follow every link in page. The usage of this feature is considered a dangerous operation since it will access every page. For example if admin interface is accidentally accessible, the spider could access pages like delete\_user or delete\_page. **Using spider against unknown website is really dangerous.** You could end up breaking the site.

**Repeater** is a nice tool for repeating messages to server. For example if you need to research a vulnerability in certain page, the repeater can be used to send a message or series of messages to get the vulnerable webpage break (or act in certain way). F.e. SQL-injections can be researched using repeater.

**Decoder** is for decoding encrypted messages in webpages.

**Comparer** is very important tool for comparing responses to certain HTTP requests. Minor differences in responses can reveal many things like: access-control vulnerabilities and blind SQL-injections.

## **SQL injections**

SQL injection is very common vulnerability in Internet. In this laboratory you learn basics of SQL-injections.

### **Do following steps to start your laboratory:**

1. Download a special xampp from <http://users.metropolia.fi/~kimmosa/xampp-attack.zip>
2. Extract and go to directory xampp
3. Run setup\_xampp.bat (this will take care of right path for the software)
4. Run xampp\_start.exe
5. Open Firefox and browse to <http://localhost/lab-1-SQL>
6. Open the first lab1

Read through the exercise and get the information that you are supposed to.

Remember to use Burp proxy to investigate the exercises.