

**** Task group: server security ****

Context

A major attack vector on web application servers are injections, like SQL injection, LDAP injections. To understand how these injections work, we use a deliberately insecure web application called WebGoat.

Deliverables

Show in screencast that you've executed all WebGoat injection attacks

Task

Perform all injection attacks on WebGoat

Subtask 1

1. Start the BBT VM
2. Log in as `scrt/ict.se.scrt`
3. run `./startWebGoat.sh` and wait a minute
4. Check with “`netstat -ant`“ if the webGoat service are listening on port `tcp/8080` and `tcp/9090`.

Alternative: DIY

1. Download and start the latest version of WebGoat. See <https://github.com/WebGoat/WebGoat> and the OWASP site for documentation. WebGoat runs in Tomcat, a java application server.
 - You need at least version 11 of java from <http://openjdk.java.net>
 - Check with `java -version`
2. Run in a command shell `java -jar webgoat-8.0.0.MXX.jar`
3. Watch for the line *Started Webgoat in ...*
4. WebGoat listens to localhost:8080 (check with `netstat -ant`)
5. WebGoat can be stopped via `^C` (CNTRL C)

Subtask 2

1. Start Firefox and browse to: <http://localhost:8080/WebGoat> and follow the instructions
 - Register as a new user

Subtask 3

1. Execute all the “General” and “Injection flaws” labs on WebGoat
 - Use ZAP (configure the right Local Proxy port in ZAP and proxy settings in Firefox) to intercept and manipulate the HTTP traffic

Done