Assignment 5
04.11.2015

SMTP Antivirus Filter

Purpose:

In this assignment, a filter will be added to the SMTP gateway from the last assignment. The purpose of this filter is to scan the incoming mails using an external antivirus.

If the outgoing message is detected to contain a virus, either the sending can be canceled, or the email's contents changed (for instance, it could say: "email contents deleted due to detected virus.").

Notes:

If you didn't finish your SMTP gateway from the last exercise, you can take a sample Java-written application available at Ilias as base project to which you can write the new filter.

Since your anti-virus program of choice may not have a library for interfacing directly with your plugin, it is a valid strategy to store the contents of the email on a file and then invoke a command-line virus checker on it and act based on the result.

References:

Available open anti-viruses
ClamAV: http://www.clamav.net/
OpenAntiVirus: http://www.openantivirus.org/index.php

In order to test the antivirus, you can find some information here (includes "infected" files):
http://www.eicar.org/anti_virus_test_file.htm

Similar, but in French, is available here:
http://securite-informatique.info/virus/eicar/

Finally, you can use the following ASCII string (it should be detected as a virus):
X5O!P%@AP[4\PZX54(P^)7CC)7}$EICAR-STANDARD-ANTIVIRUS-TEST-FILE!$H+H*

Hand-In:

A demonstration of the software. The source files and project files must be submitted to the appropriate Ilias assignment.

Deadline:

One week (11.11.2015)