Security Review
ECE 422, Winter 2018

Due Date: 11:59pm Thursday, March 18, 2018.

You are supposed to review the security capabilities, issues and mechanisms of one of the following computing software systems. Your report will be in the form of a short white paper including title, author info, abstract, introduction, main body, conclusion and references.

Title: Security Review of X (X is your assigned computing system)

Abstract: A concise digest of your report; up to 150 words.

Introduction: introduce the computing system to the reader; may include history, current trend or status, competitors, importance and the like.

Main body: Here you will report on your computing system implementation of security concepts, mechanisms and policies. For example, how the computing system realizes/uses the authentication, access control and encryption. Any history of attack on this computing system that worth noting and the way it has been addressed, if so. The overall rating of the system in terms of security compared to the peers.

Conclusion: highlight the main points, takeaways and remarks of your report.

References: enumerate the references that you leveraged for compiling this report. Mention references throughout the text similar to this document.

Format of the Report
- Arial font, size 11
- Single line spacing
- 5 to 7 US letter pages long; including references.
- 2.5 cm for all margins
- You may have pictures, algorithms, codes, commands, formulas or anything that you think make your report more useful and readable.

Which Topic is for You
Topics will be assigned to students based on the initial of their first name as follow:

1. Cassandra [1] → if your first name starts with one of these characters: [a, b]
2. HBase [2] → ... [e, f, g, h]
3. Spark [3] → ... [i, j, k, l]
4. MongoDB [4] → ... [m, n, o, p]
5. Kafka [5] → ... [q, r, s, t]
6. Tomcat [6] → ... [c, u, v, w, x]
7. NGINX [7, 8] → ... [d, y, z]

Submission

You should send your report in PDF format to the instructor (hamzeh.khazaei@ualberta.ca) with the subject of "ECE 422: Security Review" by the due date.

Grading Factors

- Comprehensiveness
- Readability (text and appropriate visualizations)
- Originality (ie, a compilation output of your understandings)
- Usefulness
- Technicality

References:

[1] Apache Cassandra, http://cassandra.apache.org
[2] Apache HBase, https://hbase.apache.org
[3] Apache Spark, https://spark.apache.org
[4] MongoDB, https://www.mongodb.com
[5] Apache Kafka, https://kafka.apache.org
[6] Apache Tomcat, http://tomcat.apache.org
[7] NGINX Open Source, https://nginx.org
[8] NGINX Commercial, https://www.nginx.com