

Security News Presentation

CS 558: Introduction to Network Security, Spring 2014
Boston University

December 28, 2013

Students will work in **groups of three** to prepare a 7 minute presentation to the class on a news-worthy topic related to security and privacy that has recently appeared in the popular news (e.g. the New York Times, the Washington Post, the Guardian, etc), the technical press (e.g., arstechnica, slashdot, bits.blogs.nytimes.com, www.washingtonpost.com/blogs/the-switch/, etc), blogs (here is a list of some blogs <http://www.veracode.com/blog/2012/02/top-20-security-blogs/>; there are many others), or advocacy websites (e.g., the EFF, etc).

To keep the presentations exciting for the class, you are strongly encouraged to pick an topic that has received a reasonable amount of media attention. Please do not present recently published research results unless you think there is a good chance that these results will be discussed in the Washington Post (or at least one of their blogs) by the end of 2014.

Each group's research should consider the following:

1. The superficial/sensational issues presented in the press.
2. The underlying technical issues. For instance, a story about a hacker compromising a certificate authority and then issuing fake SSL certificates should also include an explanation of what an SSL certificate is, why issuing fake SSL certificates compromises web security, and details about how the certificate authority was compromised.
 - Bonus points are available if the group points out where and how a media report on the incident made a technical error. (Exact quotes or a screen shot from the relevant media are required)
3. If possible, thoughts/suggestions on how the attack could have been prevented. Where there any bad security practices the enabled the attack?
4. Discussion of incentives. (a) What motivated the attacker? (b) What harm was caused to the entity that the attack compromised? (c) What other parties were affected/harmed by the attack?
5. Any interesting legal or ethical issues raised by the incident.
6. List of references you used in your research (including news articles, wikipedia, blogs, text-books, *etc.*)

Notice that obtaining all this information will require you to dig deeper than just what was presented in the popular press.

Deliverables.

Each group should prepare the following:

1. A 7 minute presentation, accompanied by slides. One student in the group will present the group's work; the other two members of the group will answer questions from the audience. The presentation **MUST** cover items 1-3,6 above, and **MAY** cover any other interesting items from the list above.
2. A 3-page report on their topic, that is due 1 week after the group's presentation. The report should cover all of the issues enumerated above. The report **MUST** cover items 1-4,6 above, and **MAY** also cover item 5 as well, and should address any interesting issues that were discussed during the group's presentation.

Submitting your work. Your report and slides must be submitted as "Presentation (Slides and Report)" as a PDF via websubmit one week after your group's presentation.

Every submitted report MUST include the following information:

1. List of collaborators
2. List of references used (online material, course nodes, textbooks, wikipedia, etc.)

If any of this information is missing, 20% will automatically be deducted from your report and presentation.

Dates and administration.

Your group will be presenting in front of a class of 60 students, so it is important to be prepared. Groups will have signed up for the date of their presentation during the first week of class. To prepare for your presentation, you must do the following:

- At least 2 weeks before the date of your presentation: Send the instructors a private message on Piazza with the topic your presentation as well as links to relevant news articles/blog posts/etc.
- On the week prior to the week of your presentation: Come to the instructor's office hours with a draft of your presentation slides. If a holiday happens to fall during the office hours during the week prior to your presentation, you are responsible for coming to office hours with a draft of your slides one week earlier. "I was confused because of holidays" will not be any excuse.
- On the day of your presentation: Presenters should arrive early to test the projector in the classroom, and be ready to begin their presentation on time.
- One week after your presentation: Submit your slides and report as PDF via websubmit.

You are welcome to chat/ask questions/brainstorm for your presentation during any of our office hours.

Grading scheme.

This presentation and report is worth 10% of your final grade, broken down as: 3% for presentation style (clarity, ability to answer questions, slides), 2% for report style (clarity, completeness), and 5% for technical depth (judged both from presentation and report).