BUFFER OVERFLOW SCAVENGER HUNT

Susan Gerhart, gerharts@erau.edu Embry-Riddle Aeronautical University • Prescott, Arizona • USA

This Document was Funded by the National Science Foundation Federal Cyber Service Scholarship For Service Program: Grant No. 0113627

©2002, Susan Gerhart, Jedidiah R. Crandall, Jan G. Hogle. http://nsfsecurity.pr.erau.edu. Distributed July 2002.

Find:

- The name and author of a book published by Microsoft press that refers to the buffer overfow problem as "Public Enemy #1" (Easy)
- 2. A major software vendor that has not released a single buffer overflow (Difficult)
- A major operating system for which fewer than 10 buffer overflow security alerts were released within a full year (Difficult)
- 4. A software engineering, programming languages, operating systems, or C programming college textbook that gives a good explanation of buffer overflows and how to prevent them (Difficult)
- 5. A software engineering, programming languages, operating systems, or C programming college textbook with a stupid cartoon in it (Easy)
- 6. A network security book that does not have buffer overflow in its index (Easy)
- A buffer overflow security alert currently posted on a security news website (Easy)
- 8. An instance where a buffer overflow led to a cost not associated with the cost of fixing and cleaning up after the buffer overflow (Who knows?)
- 9. A checklist (other than ours) for programmers and testers that is intended to prevent buffer overflows (Difficult)
- 10. A paper published in 1996 that dramatically increased the number of buffer overflow attacks the their sophistication. (Moderate)

- 11. The year in which security alerts will exceed 50,000 at the current annual rate of growth. (Easy)
- 12. A script that uses a buffer overflow exploit to gain root access on your favorite flavor of UNIX (Easy)
- 13. A statement by a software vendor that they will not release any more buffer overflows (Easy)
- 14. A statement by a software vendor that they will not release any more buffer overflows that was not proven false by the discovery of a buffer overflow in their newest software soon after (Difficult)
- 15. A statement by a well-known politician that gives some indication that they knew what the Y2K problem was (Easy)
- 16. A statement by a well-known politician that gives some indication that they know what a buffer overflow is (Difficult)
- 17. A statement from a book publisher about a book that refers to buffer overflows as "the most wicked of attacks" (Easy)
- 18. A definition of Trustworthy Computing in Microsoft-speak.
- 19. Other definitions of Trustworthy and Trusted Computing.
- 20. An explanation of why Microsoft refers to "buffer overruns" when the rest of the world says "buffer overflows". (Who knows?)

This document is part of a larger package of materials on buffer overflow vulnerabilities, defenses, and software practices. For more information, go to: <u>http://nsfsecurity.pr.erau.edu</u>

Also available are:

- Demonstrations of how buffer overflows occur (Java applets)
- PowerPoint lecture-style presentations on an introduction to buffer overflows, preventing buffer overflows (for C programmers), and a case study of Code Red
- Checklists and Points to Remember for C Programmers
- An interactive module and quiz set with alternative paths for journalists/analysts and IT managers as well as programmers and testers
- A scavenger hunt on implications of the buffer overflow vulnerability

Please complete a feedback form at <u>http://nsfsecurity.pr.erau.edu/feedback.html</u> to tell us how you used this material and to offer suggestions for improvements.