

Introduction to the Classic Papers

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The only certainty is that nothing is certain.

– *Pliny the Elder, Ancient Historian*

Pliny the Elder, 23 to 79 CE, is best known for writing a thirty-seven volume series called the *Historia Naturalis*. Had Pliny the Elder written a thirty seven volume survey of computer security there is no law of the physical universe that prevents us from benefiting from his insights. Physical laws aside the very real laws of human nature tend to render the past as a fuzzy and indistinct blur.

Which brings us to this collection of three papers. The Internet has fostered a new surge in computer security practitioners. In a mature field of study many of the classic contributions are well known, and have been summarized and restated countless times. Computer security is a relatively new field that spans a wide range of topics. The question arises “How do new practitioners sort through computer security history to find the data they need, when they are swamped with just the data published in the past year?”

Our answer is to dust off papers that influenced computer security thought and print them again. Today we have one benefit that was not available when the papers were originally published: hindsight. Rather than simply republishing the original papers, the authors have updated them, placing the papers in historical perspective. The authors also let us know what happened to the work after publication.

After our initial excitement about including classic papers with a modern perspective died down we were faced with a tough dilemma. How do we choose? The thoughts that have shaped the computer security field are

spread throughout hundreds of papers, and technical reports.

Would classic papers be measured by the number of references in other papers? The degree of influence the paper had? The degree of innovation? Or the amount of additional funding? We quickly realized there would be no way to quantify all the papers and rank them by contribution. Thus we came up with a simple approach

1. Create an unordered list of high impact papers that were more than ten years old
2. Start asking the original authors if they could commit to writing a historical perspective for the paper

Based on this approach we are grateful to have received three papers dealing with some the basic components of computer security

- Information flow
- System composition
- Application specific security policies

The classic papers retrospectives represent a great deal of work by the original authors and we wish to thank Carl Landwehr, John Dobson and John McHugh for their commitment.

The classic papers are an experiment for this year’s conference. We hope to not only revisit the concepts presented in the paper, but also appreciate how the concepts and approaches impacted the field in general. What assumptions were made then and should they be rethought in today’s context? We welcome comments on the classic paper session so we can shape and revise the session for future conferences.

Hopefully you will find these papers useful tools in creating future classic papers.