Evaluating Public Cloud Providers

Courtney Falk

Part of the INSuRE project, solving an unclassified problem proposed by the NSA. This work builds on work from a summer research experience for undergrads (REU) conducted at Purdue.

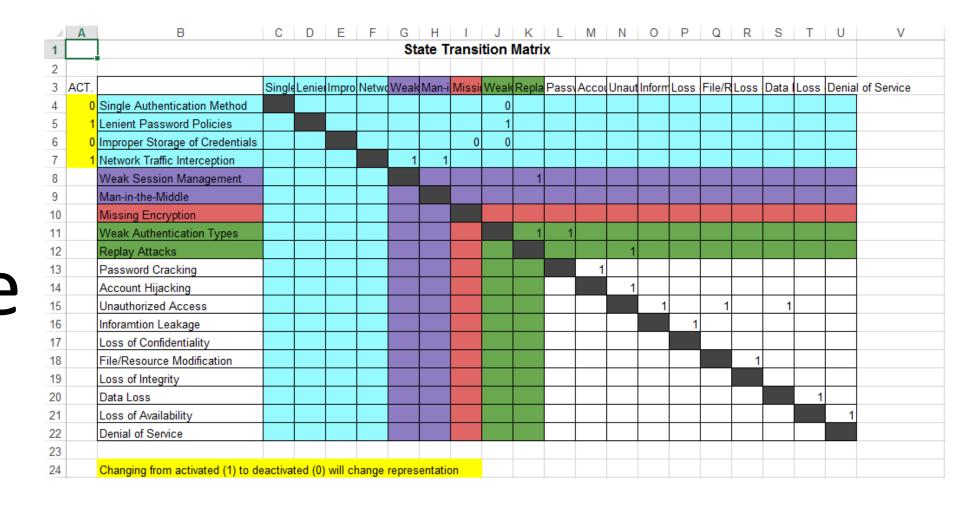
Security for public cloud providers is an ongoing concern. Programs like FedRAMP look to certify a minimum level of compliance. This project aims to build a tool to help decision makers compare different clouds solutions and weigh the risks against their own organizational needs.



The model has three classes:

- 1. Preconditions (diamonds)
- 2. Vulnerabilities (rectangles)
 - Scored using the CVSS metric
- 3. Impacts (ovals)
 - Scored using the OWASP metric

Current work began by implementing the model in spreadsheet form. The next step is writing software to automatically perform the calculations.



SURE (insurehub.org) is training students in information security research with problems provided by the National Security Agency, Pacific Northwest National Labs, and the Indiana Office of Technology.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the aforementioned.

Special thanks to: Dr. Melissa Dark, Mr. Lloyd Jones, Ms. Sarah Isaacs, and Mr. Austin Klasa.



