Matthew Trembley

11/6/2022

Southern New Hampshire University

CS-405

Journal 2-1: Defense in Depth

Defense in Depth is when a network uses multiple security layers to protect valuable data and information. DiD in theory can not be “too deep”, but when a developer relies on one or two layers of defense. This can lead to a false confidence of the software, which ultimately will contain vulnerabilities. The more layers or security measures employed to help defend against malicious actors, the better off a program will be. This is what is important about being up to date on coding best practices and keeping security at the forefront of the mind. A developer must be diligent that they do not assume their program is safe. If a developer uses multiple protection layers for one potential security flaw, the program already has a head-start in being a secure program. Although it may cost more time and money to consider these practices, it will be better off for the company in the long run knowing that they invested in security.

The basic layers of DiD to a consumer are basic updates and patches, anti-virus software, firewall, and an IPS (Intrusion Protection System). From a consumer standpoint, there are many considerations when it comes to time, money, reputation, and operation. The first layer of updates for a computer system will catch the system up to speed with current known security flaws and help fight off obvious bad actors. The second layer, anti-virus software, is where the money and reputation may step in. There are a lot of software out there. Most cost money for a “premium” protection plan (with some added bonus features usually). But there are many free versions that will help protect a computer system. The reputation of each of these anti-virus software will only help a consumer choose one based off their needs or off recommendations. Each of these aspects make DiD unique for each situation by allowing the defensive systems to work even if one may have failed. There are multiple lines of defense, that can stop malicious software.