What role do engineers have in managing cyber risks?

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Details

Engineers play a very pertinent role in the realm of cyber security; these engineers work tirelessly to help mitigate potential risks. Cybrary.it defines a cyber security engineers as someone who, “analyzes computer networks, [and] ensures they’re running securely, and tries to foresee possible security issues that may arise in the future” (cybrary.it).

Vulnerabilities exist within every device or object that is connected through the internet or interconnected through a network. The individual, or team, in charge of mitigation and protection will assess the value of their infrastructure and determine the cost of their mitigation techniques. The regular flow of operations and high alert events are incorporated into the development of their protection methods. Although it is not feasible to expect one-hundred percent accuracy to prevent and protect against all attacks, it is in best practice to determine where an organization should be paying the most attention.

A great way to regulate where efforts should be focused, is by conducting a threat assessment; this will help the organization determine which assets require more attention and to generate, or improve upon, their mitigation practices. To appropriately determine how to manage risks, “assessments of both dependencies and interdependencies are… critical” (energy.gov). The threats that engineers are facing include, but are not limited to: hacking, malicious code, phishing, and denial of service attacks.

The constant demand for effective security standards is met by cyber security engineers; continuous research is required to strengthen and protect their organization’s assets. Although protection and mitigation are should be focused on for the prevention of an attack, a team’s response and recovery is just as important; cyber security engineers are tasked with the responsibility of risk management from beginning to end.

References

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