Name: Chase Seider

Date: 11/7/22

SCADA Systems

Supervisor control and data acquisition systems play an important role in controlling infrastructure processes like water treatment and power generation. The importance of these systems and the responsibilities they have mean that they need to be safe and secure from outside influences. Like every other piece of technology in this day and age, SCADA systems are not impenetrable and have known vulnerabilities.

Security Threats

Security is very important when you have technology that deals with power generation. Water treatment, and even traffic lights. If an intruder were to get into the system, they could cause mayhem by disrupting these critical infrastructure systems. There are many people out there that would want to get into these systems and there are plenty of ways for them to do it. Critical infrastructure systems can be infected with Malware, giving hackers or terrorists access to systems they should never get their hands on. Social Engineering and insider threats are dangerous threats because humans can make mistakes, employees can be unhappy with their working conditions and lash out, or someone can be tricked into giving someone access to the system.

Where do SCADA systems come into play?

SCADA systems are used by critical infrastructure organizations to access data and control key components without having to go to the physical location. This outside monitoring means that if someone were to get into a critical infrastructure system, the SCADA system would be able to show that something is not right and do its programmable “alert” task by sounding alarms and stopping critical machinery. This extra step in security means that even if someone were to get into something as dangerous as a critical infrastructure system, there would be more security measures in place that would not let them achieve the goal they desire.

Conclusion

In conclusion, critical infrastructure systems are needed for our day to day life and that means they need to be protected. If something were to go wrong it could not only be an inconvenience but a lot of people could potentially be hurt or killed. SCADA systems are the extra security measure that make it a lot harder for intruders to manipulate critical systems.

References

(n.d.). SCADA Systems - SCADA Systems. Retrieved November 7, 2022, from http://www.scadasystems.net/

Using SCADA to Protect Critical Infrastructure and Systems | cyberpaul. (2020, December 6). Old Dominion University WordPress. Retrieved November 7, 2022, from https://sites.wp.odu.edu/cyberpaul/2020/12/06/using-scada-to-protect-critical-infrastructure-and-systems/