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SCADA Systems

BLUF

SCADA system plays a part in my life that I did not know.

Critical infrastructure systems

Critical infrastructure systems are very important to our society as many things of our everyday life rely on these systems. They are what holds everything up, from highways, railways, transportation, clean water, and all the way to electricity. Just like everything there are some weaknesses to the systems. The majority of Critical infrastructures today are managed by controlled systems like the SCADA systems.

Vulnerabilities associated with critical infrastructure systems

“Threats to critical infrastructures can be classified into 3 categories, natural threats, human-caused, and accidental or technical” (Robles, 2020). Natural threats would be like if heavy rain and strong was to cause outages in the area. A human caused threat is just like its name says, it's basically a human's fault whether they destroyed something, forgot plans, and it could be someone trying to hack into the systems or someone leaking information. Accidental threats would be classified as threats that were not anyone's doing just a problem within the system.

Role SCADA plays

“SCADA systems are industrial control systems (ICS) that specifically provide supervisory-level control over machinery and/or industrial processes that span a wide geographical area”. They are found in all different types of settings. The SCADA systems have control room buildings which contain Human Machine Interfaces (HMIs) and the SCADA servers. This part is like the head of

things where human control comes in. “PLCs, RTUs, and other sensors connected to SCADA systems collect data that help plant supervisors make critical decisions based on real-time information”. The system uses these things to control and monitor the processes.

Conclusion

The SCADA Systems article was very informal. The diagrams help paint a picture and give you a much clearer view of understanding. Before reading I never knew anything about the SCADA systems or Critical Infrastructures in general but after reading, I see how much of a big part it plays in our society.

References

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