SCADA Systems

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SCADA stands for supervisory control and data acquisition. "SCADA refers to ICS (industrial control systems) used to control infrastructure processes (water treatment, wastewater treatment, gas pipelines, wind farms, etc), facility-based processes (airports, space stations, ships, etc,) or industrial processes (production, manufacturing, refining, power generation, etc)" (SCADA systems). The SCADA system has been used for the past couple of decades. The first generation of the SCADA systems was called the "monolithic" where the SCADA was not connected to other systems and remained independent. The next generation was called "distributed" and this is when people were unsure of how secure the SCADA installation actually was. The third generation was then called "networked" and that is the same SCADA system we used today.

The article, "SCADA Sytems" talks about the SCADA security issues. "Security of SCADA-based systems is being questioned, as they are potential targets to cyberterrorism/cyberwarfare attacks" (SCADA Systems). The first major threat is unauthorized access to software. The second threat is with the packet access because there is no security on the packet control. Along with these vulnerabilities associated with critical infrastructure systems and the role that SCADA applications play in mitigating these risks something that comes along with it is cyber attacks. If these were to happen they would be able to steal information from systems. Also because the technology isn't up to modern speed, it can make the systems in general more vulnerable.

The role that SCADA plays in mitigating these risks is being able to alert the operators and keep them up to date which can help take care of issues quickly which then reduces the chances of cyber attacks. It also helps with making sure that not anyone can get into the systems

because of the authorization it provides. There are more ways that the SCADA system can play

roles in protecting security, but there are still issues with security in their own system.

References

SCADA Systems, 25 July 2018, www.scadasystems.net/.