

SCADA Write Up

Supervisory Control and Data Acquisition also known as SCADA systems, is used for monitoring and controlling industrial systems. Some things that SCADA controls are water treatment, wastewater treatment, gas pipelines, and wind farms, to name a few. This monitoring system is controlled by remote terminal units or programmable logic controllers, and is also where data acquisition starts. What is a SCADA system? The article stated that before SCADA, industrial plants had to rely on manual control and monitoring using push buttons and analog equipment.

Some vulnerabilities with SCADA are that it was thought to be more secure because it wasn't directly connected to the internet, which is true, but it doesn't take into account unauthorized access to software through either human access or virus/malware. Another threat is packet access to the network that hosts SCADA devices. The packets are a bigger vulnerability because anyone who sends a packet can possibly gain access to control the SCADA devices it's sent to.

When these vulnerabilities are detected, SCADA systems kick in and send out alarms. SCADA vendors are also developing VPN's and firewalls for TCP and IP networks. Another solution created is whitelisting, because it can prevent unauthorized changes in applications. With these measures in place, it prevents failures/breaches in the systems.

Cited source:

<https://www.facebook.com/electrical4u>. "SCADA: What Is It? (Supervisory Control and Data Acquisition) | Electrical4U." *Electrical4U*, 13 July 2019, www.electrical4u.com/scada-system/.

SCADA systems article