

Cybersecurity in Manufacturing

Background

According to an article by security intelligence The number of ransomware incidents involving the manufacturing sector increased 156% between the first quarters of 2019 and 2020. Later in 2020, ransomware actors demanded \$17 million from a laptop maker and \$34 million from a Taiwanese electronics contract company.

Ransomware isn't the only threat to manufacturing cybersecurity. Where there's ransomware, there's almost always phishing. One campaign that targeted manufacturers, among others, was part of a larger effort to target the COVID-19 vaccine cold chain.

The issue with both ransomware and phishing is digital attackers can use these threats to steal their victims' data. Malicious actors could compromise a manufacturer's customer database and leverage those details to conduct follow-up attacks, such as manufacturing data breaches. Or, they could establish a foothold within the network and use that access to scout it out. They could then choose to sell that opening to a competing group, criminal enterprise or nation-state actor. They also could use it to conduct an attack of their own that could compromise business processes.

Project description (in swedish direct word from supervisor)

Den andra (cybersecurity) handlar om att hotet av intrång från omvärlden har ökat markant senare år + att mer och mer utrustning blir uppkopplad. Trenden är också att mycket uppkopplad utrustning installeras integrerade i tex nya maskiner vilket försvårar kontroll av vilken utrustning vi har uppkopplad i vår miljö. Uppdraget skulle bestå i att kartlägga vilken risk/hotbild vi möjligtvis har och att med hjälp av teori och studier i verksamheten föreslå en strategi och vilka övergripande aktiviteter som bör/skulle kunna vidtas.

Suggested reading material

[Cybersecurity & threats \(gärna aktuella artiklar, white papers etc\) in production environments](#)

Target group

D, DV, IT, (E to some extent)

Prerequisites

Recommended to read EDA263/DIT641 Computer Security in parallel.

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