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## Draft SafeAssignment 07

Dinesh Nallapareddy

on Sat, Oct 14 2017, 6:28 PM

100% highest match

Submission ID: 258a57fb-619c-4fa4-ab52-f27787b0fd25

## Attachments (1)

week7 paper.doc 100%

Word Count: 2,318 Attachment ID: 182273831

### week7 paper.doc

Running head:

**1 CYBER SECURITY IMPROVEMENT PLAN. 2 1 CYBER SECURITY  
IMPROVEMENT PLAN. 11**

**1 CYBER SECURITY IMPROVEMENT PLAN**

Dinesh Nallapareddy

Wilmington University

Introduction

**3 PURE LAND WASTEWATER IS COMPANY THAT PROVIDES SERVICES  
REGARDING TREATMENT OF WASTE WATER WITH SPECIAL EMPHASIS BEING  
ON THE CHEMICAL MANUFACTURING AND BIOLOGICAL FERMENTATION.  
HOWEVER, RECENT REVELATIONS BY THE DEPARTMENT OF HOMELAND  
SECURITY AND ITS INTERNAL AUDIT SHOWS THAT THERE ARE VARIOUS**

**LOOPHOLES FOR INSTANCES OF CYBER SECURITY TO OCCUR. THIS PAPER WILL BE A CYBER SECURITY IMPROVEMENT PLAN FOR PURELANDWASTEWATER.**

#### **4 CURRENT STATE FOR SECURITY OF THE ICS**

**3 THE CURRENT STATE OF AFFAIRS IN REGARDS TO CYBER SECURITY FOR THE COMPANY IS NOT GOOD. 5 THE NETWORK DESIGN SYSTEM FOR THE PURE LAND WASTEWATER COMPANY IS A LOCAL AREA NETWORK, AND THE MAIN WEAKNESSES WITH THIS TYPE OF INTERFACE DESIGN INCLUDE; RISK OF BEING HACKED SINCE ALL THE DEVICES ARE VISIBLE ON THE NETWORK. A SINGLE ATTACK MAY RENDER THE ENTIRE SYSTEM LESS OPERATIONAL DUE TO THE NETWORKING CONSTRAINTS ASSOCIATED WITH LAN. HOWEVER, MY SUGGESTION IS THAT THE COMPANY COULD CONSIDER STRENGTHENING THE LAN BY ENSURING THAT EACH COMPUTER HAS UP TO DATE ANTIVIRUS AND DATA ENCRYPTION FEATURES ARE UPDATED ASS WHICH WOULD HELP TO CURB THE POSSIBILITY OF HACKERS ATTACKING THE SYSTEM ESPECIALLY THE KEY COMPUTER THAT CONTROLS THE SANITIZATION OF WATER BY THE CHEMICAL (FORTE & POWER, 2017).**

**FOR INSTANCE, SOME OF THE THREATS AND VULNERABILITIES THAT ARE FACING THE INDUSTRIAL CONTROL SYSTEMS FOR PURE LAND WASTE WATER INC. include; 5 EXPOSURE TO CYBERCRIME ACTIVITIES AND THE POSSIBILITY OF THE COMPANY PLYING DIRECT ROLE IN TERRORISM.**

**3 MAJOR WEAKNESSES IN THE PHYSICAL DESIGN AND LAYOUT OF NETWORK COMPONENTS PURE LAND WASTE WATER HAS A COMPUTER NETWORK SYSTEM THAT POWERS SOME OF ITS OPERATIONS SUCH AS STORAGE OF DATA AND SUCH SIMILAR ACTIVITIES. HOWEVER, ACCORDING TO THE EVALUATION THAT IS DONE, THE COMPANY'S NETWORK SECURITY SYSTEM IS NOT THAT SECURE. THIS IS BECAUSE THE EVALUATION REPORT INDICATED THAT AT SOME POINT, THERE WERE 0% COMPLIANCE WITH THE CYBER SECURITY REGULATIONS AS PROVIDED BY THE DEPARTMENT OF HOMELAND SECURITY AND OTHER**

**RELEVANT SECURITY AGENCIES. THIS MEANS THAT THE COMPUTER NETWORK SYSTEM IS WEAK AND PRONE SECURITY BREACHES.**

## **6 THREATS AND VULNERABILITIES FACING THE ICS**

**3 ONE OF THE THREATS FACING THE ICS IS THAT OF HACKING. THE COMPUTER NETWORK SECURITY OF THE COMPANY HAS BASIC SECURITY MECHANISMS THAT EXPOSE IT TO UNAUTHORIZED ACCESS THROUGH ACTIVITIES SUCH AS HACKING. ANOTHER THREAT IS STEALING OF CONFIDENTIAL INFORMATION BY THE EMPLOYEES WHO HAVE ACCESS TO THE DATABASE THROUGH GIVING THEIR PASSWORDS TO UNAUTHORIZED PEOPLE. ANOTHER THREAT IS THAT OF THEFT AS WAS IDENTIFIED BY THE DEPARTMENT OF HOMELAND SECURITY.**

## **7 DESIRED FUTURE STATE**

**3 THE DESIRED FUTURE STATE OF THE CYBER SECURITY FOR THE COMPANY IS ONE WHERE ALL THE POSSIBLE COMMON SECURITY THREATS ARE TAKEN CARE OF. THIS IS TO ENSURE THE COMPANY COMPUTER NETWORK SYSTEM IS SECURE FROM CERTAIN COMMON SECURITY BREACHES SUCH AS UNAUTHORIZED ACCESS. THE COMPANY ALSO DESIRED TO HAVE AN INCIDENCE RESPONSE PLAN, IN CASE THE COMPANY IS FACED WITH INCIDENCE OF SECURITY BREACHES, THEY HAVE A FORMULA OF HANDLING TO THE SITUATION TO AVOID THE INCREASE DAMAGE OR IMPACT THAT SUCH INCIDENCES CAN CAUSE TO THE COMPANY.**

## **8 PROCESSES OF PLANNING AND INDUSTRIAL INCIDENT MANAGEMENT**

Response Planning

**8 ONE CYBER INCIDENT RESPONSE PLANNING CONSIST OF SEVERAL BUILDING BLOCKS THAT INCLUDE RESPONSE TEAM, NEXT NEEDS AND ORGANIZATION PROCEDURES, REPORTING AND COMMUNICATIONS WITHIN THE TEAM TO VERIFY THAT THE PLAN WORKS S WELL. THERE SHOULD ALSO BE A STATE OF**

**REPORTING TO SUPPORT THE TEAM AND EXAMINE IF THE EVENT WILL OCCUR (ESCHELBECK, 2005).**

Team organization

**8 TEAMS MIGHT CONSIST OF ORGANIZED INDIVIDUALS CALLED CSIRT. THIS UNIT IS MADE UP OF INDIVIDUALS WHO ARE DEDICATED TO THE EFFORT OF CYBER WARFARE WHILE OTHERS WILL HAVE PART-TIME STAFF WITH OTHER RESPONSIBILITIES IN THE ORGANIZATION. TEAM RESPONSIBILITIES INCLUDE THE FOLLOWING;**

**• ACTING AS THE MAIN INCIDENT RESPONSE FOR THREATS AND RESPONSIBILITIES.**

**• THE TEAM WILL BE THE CLEARING HOUSE FOR ALL PREVENTION, ANALYSIS AND PROVIDING INFORMATION RELEVANT TO THE INCIDENTS.**

- Developing organized policies and other procedures in the incident response
- Gathering the forensic information to support the analysis and any other legal actions
- Remediating the ICS after the incident

Setting Up Policies and Procedures While having the procedures is very necessary during the cyber attack response, some of these procedures are costly (Forte & Power, 2007). **8 MANY TYPES OF THE PROCEDURE POLICIES ARE VERY VALUABLE FOR THE IT AND CONTROL SYSTEMS. THEREFORE THE DETAILED OPERATING OPERATION PROCEDURES HAVE TO BE DEVELOPED AND IMPLEMENTED USING THE RESPONSE POLICY. THE INFORMATION SYSTEMS RELY ON THE ACCURACY, EMERGENCY, ACCURACY AND TIMELINESS OF THE POLICIES. SAMPLE POLICIES SHOULD BE AS FOLLOWS;**

**• Human Resource: 8 POLICIES SHOULD BE MADE TO INCLUDE TO THE ADDRESS THE IMMEDIATE ACTIONS TO BE TAKEN ON THE EMPLOYEES AND THEIR**

## **ACTIONS.**

• Information Disclosure: 8 **THE POLICIES MUST BE DESIGNED TO ALLOW THE ORGANIZATION ADDRESS THE DISCLOSURE AND THE ACTIONS THAT SHOULD BE TAKEN IN CASE OF INFORMATION BREACH. SUCH POLICIES INCLUDE ACCEPTABLE USE, BACKUPS, PASSWORDS, GUEST ACCESS, ENCRYPTION AND DATA CLASSIFICATION.**

9 **ADVANCED PERSISTENCE THREAT IMPACT AN ADVANCED PERSISTENT THREAT (APT) IS REFERRED TO AS A NETWORK ATTACK WHEREBY A HACKER GAINS ACCESSIBILITY OF A PARTICULAR NETWORK AND REMAIN THERE FOR A LONG TIME WITHOUT THE BEING IDENTIFIED BY THE SECURITY (COLE, 2012). THE ATTACK IS MAINLY CARRIED OUT FOR THE PURPOSE OF STEALING ORGANIZATION'S DATA. IN THIS CASE, THE AIM OF THE HACKER IS NOT TO DESTROY ANYTHING WITHIN THE NETWORK.**

**ACCORDING TO THE DEFINITION, APT IS CONSIDERED AS SYSTEM INTRUSION BY THE PEOPLE USING A COMPLEX PROCESS THROUGH THE CREATION OF E-MAILS OR MALICIOUS SOFTWARE TO ALLOW THEM TO HAVE ACCESS TO A GIVEN NETWORK BY APPLYING INDUSTRIAL CONTROL SYSTEM (MATTIOLI & MOULINOS, 2015). PROGRAMS WHICH ARE CODED IN A GOOD MANNER MAY BRING ABOUT A DISRUPTION OF A CONTROL SYSTEM WITHIN AN ORGANIZATION AND ENDS UP TRIGGERING CYBER WAR AS A RESULT OF ITS MASSIVE DESTRUCTION. STUXNET IS AN EXAMPLE OF A VERY EXCELLENT AND POWERFUL APT, AND THE DESIGNATION OF THE WORM WAS DONE BY IRAN (COLE, 2012). THIS WAS WITH THE INTENTION OF CAUSING DESTRUCTION TO SYSTEMS SUCH AS SCADA, ICS, AND PLC WHICH WERE ESPECIALLY USED BY EUROPE AND JAPAN. APT CAN ALSO BE TERMED AS A CYBER-PHYSICAL ATTACK USING SOFTWARE THAT BRINGS ABOUT DAMAGE TO PHYSICAL INFRASTRUCTURE AND HENCE THE ECONOMY IS NEGATIVELY AFFECTED (MATTIOLI & MOULINOS, 2015).**

**ONE SITUATION THAT TRIES TO ILLUSTRATE APT ATTACK WHICH HAS BEEN RECORDED RECENTLY, IS WHERE THE GERMAN STEEL MANUFACTURING INDUSTRY WAS INVADED. THE APT DESTROYED THE CONTROL SYSTEM OF THE PLANT INTERFERING WITH THE FIRMS' ACTIVITIES (COLE, 2012). A REPORT BY MATTIOLI & MOULINOS (2015) REVEALED THAT A COMPLEX IDEA WAS DEVELOPED BY AN INTRUDER WHICH CONTAINED A STRUCTURE SPEAR PHISHING EMAIL. BASICALLY, AN INTRODUCTION OF THE EMAIL WAS FOR THE HACKER TO EASILY OBTAIN ACCESS TO THE SYSTEM (MATTIOLI & MOULINOS, 2015). THE HIGH STANDARD POSSESSED BY THE CODE ENABLED IT TO OVERRUN THE EXISTING CODE HENCE INTERFERING WITH THE FULL FUNCTIONING OF THE SYSTEM.**

When and how the event correlation process is used.

The event correlation process is used when a failure happens in the network central node. Event correlation processes are used to determine immediately the root cause of the operational problems/problems of failures that may reflect in the business of the company. It is also used to identify and parameterize the effect of failures. It also allows companies to take a practical instead of reactive attitude. It makes it easy to differentiate the most common alerts from those that may really have some considerable effect n the businesses. Lastly, it is used to allow the development of graphical rules in a drag-and-drop interface to the events and the conditions for the generation of alarms (Langill & Knapp, 2011).

Important Elements of Successful Monitoring Security Zones TCP-RST- When this feature is enabled, the system sends a TCP segment with the RESET flag set when traffic arrives that does not match an existing session and does not have the SYNchronize flag set (Langill & Knapp, 2011).

Interfaces- This is a list of interfaces in the zone.

Policies- Active security policies that enforce rules for the transit traffic, in terms of what traffic can pass through the firewall, and the actions that need to take place on the traffic as it passes through the firewall.

Screens- A Juniper Networks stateful firewall secures a network by inspecting, and then allowing or denying, all connection attempts that require passage from one security zone to another (Langill & Knapp, 2011).

Address books- IP addresses and address sets that make up an address book to identify its members so that you can apply policies to them.

**10 WHY THE INDUSTRIAL NETWORK PROTOCOLS BECOME COMMON  
INDUSTRIAL TARGETS INDUSTRIAL CONTROL SYSTEMS (ICS) ARE DISCOVERED  
EVERYWHERE FROM MECHANIZED MACHINES THAT FABRICATE PRODUCTS TO  
AN OFFICE BUILDING'S COOLING FRAMEWORK. BEFOREHAND, IT WAS  
STANDARD THAT ICS DEPENDED ON PARTICULAR OS AND PARTICULAR  
CORRESPONDENCE PROTOCOL. NOTWITHSTANDING, AS OF LATE, FRAMEWORK  
ADVANCEMENT COSTS HAVE BEEN LESSEned AND PROFITABILITY HAS BEEN  
ENHANCED BY ACTUALIZING SYSTEM ASSOCIATION IN LIGHT OF BROADLY  
USEFUL OS AND STANDARD COMMUNICATION PROTOCOL (KNAPP, 2011).**

**TO CONTEND IN THE PRESENT MARKET-DRIVEN ECONOMY, ORGANIZATIONS  
AND ASSOCIATIONS SELECT PRODUCTIVE CONTROL FRAMEWORKS THAT CAN  
CONSEQUENTLY OVERSEE FORMS. ICS CAN BE FOUND IN ASSEMBLING,  
HANDLING OFFICES, AND EVEN POWER PLANTS, WHICH ASSUME A  
FUNDAMENTAL PART OF RUNNING A NATION. THEN AGAIN, THE EXPANDED  
EFFECTIVENESS THAT ICS PRESENT LIKEWISE INTRODUCES NEW ISSUES ON  
SECURITY. IN ALL ACTUALITY, DANGER PERFORMERS HAVE MUCH TO PICK UP  
WHEN THEY ASSAULT SUCH ORGANIZATIONS. AN EFFECTIVE ASSAULT ON ICS  
HAS A GENUINE EFFECT ON ANY ASSOCIATION. SOME OF THESE IMPACTS  
INCORPORATE OPERATIONAL SHUTDOWNS, HARMED HARDWARE, MONEY  
RELATED MISFORTUNE, PROTECTED INNOVATION ROBBERY, AND GENEROUS  
HEALTH AND DANGERS.**

**WEAPONIZED INDUSTRIAL NETWORK PROTOCOLS CYBER THREATS AND  
THEIR POTENTIAL IMPACT ON INDUSTRIAL NETWORK PROTOCOLS SECURING A  
MODERN SYSTEM AND THE ADVANTAGES ASSOCIATED WITH IT, ALBEIT**

**COMPARATIVE FROM MULTIPLE POINTS OF VIEW TO STANDARD VENTURE DATA FRAMEWORK SECURITY, DISPLAY A FEW SPECIAL DIFFICULTIES. WHILE THE FRAMEWORKS AND SYSTEMS USED AS A PART OF INDUSTRIAL CONTROL SYSTEM (ICSS) ARE PROFOUNDLY SPECIFIC, THEY ARE PROGRESSIVELY BASED UPON NORMAL FIGURING STAGES USING BUSINESS WORKING FRAMEWORKS. IN THE MEANTIME, THESE FRAMEWORKS ARE WORKED FOR DEPENDABILITY, PERFORMANCE, AND LIFESPAN. A COMMON COORDINATED ICS MIGHT BE RELIED UPON TO WORK IMMEDIATELY FOR A CONSIDERABLE LENGTH OF TIME OR EVEN YEARS, AND THE GENERAL FUTURE MIGHT BE MEASURED IN DECADES (BODUNGEN, SINGER, SHBEEB, HILT, & WILHOIT, 2017).**

**ASSAILANTS, DESPITE WHAT MIGHT BE EXPECTED, HAVE SIMPLE ACCESS TO NEW ENDEAVORS AND CAN UTILIZE THEM WHENEVER. IN AN AVERAGE VENTURE ARRANGE, FRAMEWORKS ARE PERSISTENTLY OVERSEEN TRYING TO REMAIN IN FRONT OF THIS QUICKLY ADVANCING DANGER, YET THESE STRATEGIES FREQUENTLY STRIFE WITH A MECHANICAL SYSTEM'S CENTER NECESSITIES OF UNWAVERING QUALITY AND ACCESSIBILITY. DOING NOTHING IS IMPOSSIBLE. ON ACCOUNT OF THE SIGNIFICANCE OF MODERN SYSTEMS AND THE CONCEIVABLY DESTROYING RESULTS OF AN ASSAULT, NEW SECURITY STRATEGIES SHOULD BE RECEIVED. MECHANICAL SYSTEMS ARE BEING FOCUSED AS CAN BE FOUND, IN ACTUALITY, CASES OF MODERN DIGITAL DAMAGE.**

**ALL IN ALL, THEY ARE THE OBJECTIVES OF ANOTHER DANGER PROFILE THAT USES MORE MODERN AND FOCUSED ON ASSAULTS THAN ANY TIME IN RECENT MEMORY. A SIMILARLY IRRITATING PATTERN IS THE ASCENT IN UNPLANNED OCCASIONS THAT HAVE PROMPTED HUGE RESULTS CAUSED WHEN AN APPROVED FRAMEWORK CLIENT UNWITTINGLY BRINGS DANGERS INTO THE SYSTEM AMID THEIR ORDINARY AND ROUTINE ASSOCIATE PARTICLE. THIS CONNECTION MIGHT BE TYPICAL NEIGHBORHOOD FRAMEWORK ORGANIZATION OR BY MEANS OF REMOTE FRAMEWORK OPERATION**

The Future State of Security of ICS The following are proposed changes that must be made to the PureLand Water waste ICS:

1. **5 ALL CHEMICALS AND SUBSTANCES THAT ARE LABELED CFATS SHOULD NOT BE USED IN THE INDUSTRIAL CONTROL SYSTEM OF THE COMPANY.**
2. **5 THE COMPANY SHOULD ENSURE THAT THE NETWORK DESIGN THAT CONTROLS THE EXCHANGE OF DATA IN THE ICS IS SECURED AND THERE ARE NO POSSIBILITIES OF HAVING ADVANCED PERSISTENCE THREATS THAT CAN LEAD TO LOSS OF SENSITIVE DATA.**
3. **5 THE INDUSTRIAL CONTROL SYSTEM SHOULD BE SUBJECTED TO CONSISTED ASSESSMENT AND AUDITING TO ENSURE THAT ALL SAFETY STANDARDS ARE UPHELD, AND THERE IS NO VIOLATION OF CFATS REGULATIONS.**
4. **5 THE COMPANY SHOULD CONSIDER IMPLEMENTING ITS DATA BACKUP MECHANISM IN THE ICS TO MAKE SURE THAT THERE IS A COPY OF SENSITIVE DATA THAT CAN BE RELIED UPON WHEN CYBERCRIME INCIDENT STRIKES.**
5. **5 ALL COMPANY NETWORK SYSTEMS ESPECIALLY THE ONES FOR THE ICY SHOULD CONTAIN PASSWORD AND ENCRYPTION FEATURES THAT CAN HELP TO SAFEGUARD DATA FROM BEING STOLEN.**

Conclusion

**5 IN CONCLUSION, DESPITE THE FACT THAT PURELAND WASTEWATER PROVIDES COMMENDABLE SERVICES, THE ISSUES REMAIN WHETHER THE COMPANY IS OBSERVING THE REGULATIONS PROVIDED WITH CFATS OR NOT. IT IS ESSENTIAL THAT REGARDLESS HOW WANTING THE SITUATION OF SANITIZATION OF WASTEWATER SHOULD BE, THE IMPACT OF THE OPERATION ON THE LIFE OF HUMAN BEING SHOULD BE PRIORITIZED. THIS CAN BE DONE BY ENSURING THAT NO POISONOUS CHEMICAL IS USED IN ANY ICS, AND FOR THE COMPANY, ITS SYSTEMS ARE WELL SECURED TO COUNTER CYBERCRIME**

## **WHICH CAN LEAD TO SABOTAGE AND CLOSURE OF THE ENTERPRISE (BEN ET AL, 2013) REFERENCES**

Martin, J. (2013). **3 BUSINESS AND TECHNOLOGY. NEW YORK CITY: McGraw Hill.**

Knapp, E. **11 D., & LANGILL, J. T. (2014). 10 INDUSTRIAL NETWORK SECURITY: SECURING CRITICAL INFRASTRUCTURE NETWORKS FOR SMART GRID, SCADA, AND OTHER INDUSTRIAL CONTROL SYSTEMS.** Syngress.

**5 BEN MAHMOUD, M., LARRIEU, N., &PIROVANO, A. (2013). 5 RISK PROPAGATION ASSESSMENT FOR NETWORK SECURITY. HOBOKEN, N.J. ISTE LTD/JOHN WILEY AND SONS INC.**

Eschelbeck, G. (2005). **5 THE LAWS OF VULNERABILITIES: 8 WHICH SECURITY VULNERABILITIES REALLY MATTER? 5 INFORMATION SECURITY TECHNICAL REPORT, 10(4), 213-219. HTTP://DX.DOI.ORG/10.1016/J.ISTR.2005.09.005**

Forte, D., & Power, R. (2007). **8 PHYSICAL SECURITY, OVERLOOK IT AT YOUR OWN PERIL. COMPUTER FRAUD & SECURITY, 2007(8), 16-20. HTTP://DX.DOI.ORG/10.1016/S1361-3723(07)70105-7**

Cole, E. (2012). **9 ADVANCED PERSISTENT THREAT: UNDERSTANDING THE DANGER AND HOW TO PROTECT YOUR ORGANIZATION.** New York: Prentice Hall.

**9 MATTIOLI, R.,& MOULINOS, K. (2015). 9 ANALYSIS OF ICS-SCADA CYBER SECURITY MATURITY LEVELS IN**

critical sectors. Heraklion: ENISA

## Citations (11/11)

1 Another student's paper

2 Another student's paper

3 Another student's paper

- 4 Another student's paper
- 5 Another student's paper
- 6 Another student's paper
- 7 Another student's paper
- 8 Another student's paper
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- 10 Another student's paper
- 11 Another student's paper

## Matched Text

Suspected Entry: **86% match**

<b>Uploaded</b> - week7 paper.doc	<b>Source</b> - Another student's paper
<b>CYBER SECURITY IMPROVEMENT PLAN</b>	CYBER SECURITY IMPROVEMENT PLAN '

Suspected Entry: **86% match**

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<b>CYBER SECURITY IMPROVEMENT PLAN</b>	CYBER SECURITY IMPROVEMENT PLAN '

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<b>1 CYBER SECURITY IMPROVEMENT PLAN</b>	CYBER SECURITY IMPROVEMENT PLAN 1

Suspected Entry: **91% match**

<b>Uploaded</b> - week7 paper.doc	<b>Source</b> - Another student's paper
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**PURE LAND WASTEWATER IS COMPANY THAT PROVIDES SERVICES REGARDING TREATMENT OF WASTE WATER WITH SPECIAL EMPHASIS BEING ON THE CHEMICAL MANUFACTURING AND BIOLOGICAL FERMENTATION**

PureLand Wastewater is company that provides services regarding treatment of waste water with special emphasis being on the chemical manufacturing and biological fermentation

Suspected Entry: **100% match**

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**HOWEVER, RECENT REVELATIONS BY THE DEPARTMENT OF HOMELAND SECURITY AND ITS INTERNAL AUDIT SHOWS THAT THERE ARE VARIOUS LOOPHOLES FOR INSTANCES OF CYBER SECURITY TO OCCUR**

**Source** - Another student's paper

However, recent revelations by the Department of Homeland Security and its internal audit shows that there are various loopholes for instances of cyber security to occur

Suspected Entry: **80% match**

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**THIS PAPER WILL BE A CYBER SECURITY IMPROVEMENT PLAN FOR PURELANDWASTEWATER**

**Source** - Another student's paper

This paper will be a Cyber Security Improvement Plan for PureLand Wastewater

Suspected Entry: **86% match**

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**THE CURRENT STATE OF AFFAIRS IN REGARDS TO CYBER SECURITY FOR THE COMPANY IS NOT GOOD**

**Source** - Another student's paper

Description of the Current State The current state of affairs in regards to cyber security for the company is not good

Suspected Entry: **73% match**

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**MAJOR WEAKNESSES IN THE PHYSICAL DESIGN AND LAYOUT OF NETWORK COMPONENTS PURE LAND WASTE WATER HAS A COMPUTER NETWORK SYSTEM THAT POWERS SOME OF ITS OPERATIONS SUCH AS STORAGE OF DATA AND SUCH SIMILAR ACTIVITIES**

**Source** - Another student's paper

Overview of Network Weaknesses PureLand Wastewater has a computer network system that powers some of its operations such as storage of data and such similar activities

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**HOWEVER, ACCORDING TO THE EVALUATION THAT IS DONE, THE COMPANY'S NETWORK SECURITY SYSTEM IS NOT THAT SECURE**

**Source** - Another student's paper

However, according to the evaluation that is done, the company's network security system is not that secure

Suspected Entry: **96% match**

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**THIS IS BECAUSE THE EVALUATION REPORT INDICATED THAT AT SOME POINT, THERE WERE 0% COMPLIANCE WITH THE CYBER SECURITY REGULATIONS AS PROVIDED BY THE DEPARTMENT OF HOMELAND SECURITY AND OTHER RELEVANT SECURITY AGENCIES**

**Source** - Another student's paper

This is because the evaluation report indicated that at some point, there were 0% compliance with the cyber security regulations as provided by the Department of Homeland Security and other relevant security agencies

Suspected Entry: **99% match**

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**THIS MEANS THAT THE COMPUTER NETWORK SYSTEM IS WEAK AND PRONE SECURITY BREACHES**

**Source** - Another student's paper

This means that the computer network system is weak and prone security breaches

Suspected Entry: **75% match**

**Uploaded** - week7 paper.doc

**ONE OF THE THREATS FACING THE ICS IS THAT OF HACKING**

**Source** - Another student's paper

One of the threats is that of hacking

Suspected Entry: **92% match**

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**THE COMPUTER NETWORK SECURITY OF THE COMPANY HAS BASIC SECURITY MECHANISMS**

**Source** - Another student's paper

The computer network security of the company has basic security mechanisms that exposes it to unauthorized

**THAT EXPOSE IT TO UNAUTHORIZED ACCESS THROUGH ACTIVITIES SUCH AS HACKING**

access through activities such as hacking

Suspected Entry: **99% match**

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**ANOTHER THREAT IS STEALING OF CONFIDENTIAL INFORMATION BY THE EMPLOYEES WHO HAVE ACCESS TO THE DATABASE THROUGH GIVING THEIR PASSWORDS TO UNAUTHORIZED PEOPLE**

**Source** - Another student's paper

Another threat is stealing of confidential information by the employees who have access to the database through giving their passwords to unauthorized people

Suspected Entry: **100% match**

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**ANOTHER THREAT IS THAT OF THEFT AS WAS IDENTIFIED BY THE DEPARTMENT OF HOMELAND SECURITY**

**Source** - Another student's paper

Another threat is that of theft as was identified by the Department of Homeland Security

Suspected Entry: **91% match**

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**THE DESIRED FUTURE STATE OF THE CYBER SECURITY FOR THE COMPANY IS ONE WHERE ALL THE POSSIBLE COMMON SECURITY THREATS ARE TAKEN CARE OF**

**Source** - Another student's paper

Desired future state The desired future state of the cyber security for the company is one where all the possible common security threats are taken care of

Suspected Entry: **96% match**

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**THIS IS TO ENSURE THE COMPANY COMPUTER NETWORK SYSTEM IS SECURE FROM CERTAIN COMMON SECURITY BREACHES SUCH AS UNAUTHORIZED ACCESS**

**Source** - Another student's paper

This is to ensure the company computer network system is secure for certain common security breaches such as unauthorized access

Suspected Entry: **99% match**

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**THE COMPANY ALSO DESIRED TO HAVE AN INCIDENCE RESPONSE PLAN, IN CASE THE COMPANY IS FACED WITH INCIDENCE OF SECURITY BREACHES, THEY HAVE A FORMULA OF HANDLING TO THE SITUATION TO AVOID THE INCREASE DAMAGE OR IMPACT THAT SUCH INCIDENCES CAN CAUSE TO THE COMPANY**

**Source** - Another student's paper

The company also desired to have an incidence response plan, in case the company is faced with incidence of security breaches, they have a formula of handling to the situation to avoid the increase damage or impact that such incidences can cause to the company

Suspected Entry: **100% match**

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**BUSINESS AND TECHNOLOGY**

**Source** - Another student's paper

Business and Technology

Suspected Entry: **100% match**

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**NEW YORK CITY**

**Source** - Another student's paper

New York City

Suspected Entry: **100% match**

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**CURRENT STATE FOR SECURITY OF THE ICS**

**Source** - Another student's paper

Current state for Security of the ICS

Suspected Entry: **97% match**

**Uploaded** - week7 paper.doc

**THE NETWORK DESIGN SYSTEM FOR THE PURE LAND WASTEWATER COMPANY IS A LOCAL AREA NETWORK, AND THE MAIN WEAKNESSES WITH THIS TYPE OF INTERFACE DESIGN INCLUDE**

**Source** - Another student's paper

Network design The system design for the Pure land wastewater company is a Local Area Network, and the main weaknesses with this type of interface design include

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**Source** - Another student's paper

**RISK OF BEING HACKED SINCE ALL THE DEVICES ARE VISIBLE ON THE NETWORK**

risk of being hacked since all the devices are visible on the network

Suspected Entry: **100% match**

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**A SINGLE ATTACK MAY RENDER THE ENTIRE SYSTEM LESS OPERATIONAL DUE TO THE NETWORKING CONSTRAINTS ASSOCIATED WITH LAN**

**Source** - Another student's paper

A single attack may render the entire system less operational due to the networking constraints associated with LAN

Suspected Entry: **99% match**

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**HOWEVER, MY SUGGESTION IS THAT THE COMPANY COULD CONSIDER STRENGTHENING THE LAN BY ENSURING THAT EACH COMPUTER HAS UP TO DATE ANTIVIRUS AND DATA ENCRYPTION FEATURES ARE UPDATED ASS WHICH WOULD HELP TO CURB THE POSSIBILITY OF HACKERS ATTACKING THE SYSTEM ESPECIALLY THE KEY COMPUTER THAT CONTROLS THE SANITIZATION OF WATER BY THE CHEMICAL (FORTE & POWER, 2017)**

**Source** - Another student's paper

However, my suggestion is that the company could consider strengthening the LAN by ensuring that each computer has up to date antivirus and data encryption features are updated ass which would help to curb the possibility of hackers attacking the system especially the key computer that controls the sanitization of water by the chemical (Forte & Power, 2017)

Suspected Entry: **100% match**

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**FOR INSTANCE, SOME OF THE THREATS AND VULNERABILITIES THAT ARE FACING THE INDUSTRIAL CONTROL SYSTEMS FOR PURE LAND WASTE WATER INC**

**Source** - Another student's paper

For instance, some of the threats and vulnerabilities that are facing the industrial control systems for pure land waste water Inc

Suspected Entry: **100% match**

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**EXPOSURE TO CYBERCRIME ACTIVITIES AND THE POSSIBILITY OF THE COMPANY PLYING DIRECT**

**Source** - Another student's paper

exposure to cybercrime activities and the possibility of the company plying direct role in terrorism

**ROLE IN TERRORISM**

Suspected Entry: **90% match**

**Uploaded** - week7 paper.doc

**ALL CHEMICALS AND SUBSTANCES THAT ARE LABELED CFATS SHOULD NOT BE USED IN THE INDUSTRIAL CONTROL SYSTEM OF THE COMPANY**

**Source** - Another student's paper

· All chemicals and substances that are labelled CFATS should not be used in the Industrial control system of the company

Suspected Entry: **100% match**

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**THE COMPANY SHOULD ENSURE THAT THE NETWORK DESIGN THAT CONTROLS THE EXCHANGE OF DATA IN THE ICS IS SECURED AND THERE ARE NO POSSIBILITIES OF HAVING ADVANCED PERSISTENCE THREATS THAT CAN LEAD TO LOSS OF SENSITIVE DATA**

**Source** - Another student's paper

· The company should ensure that the network design that controls the exchange of data in the ICS is secured and there are no possibilities of having Advanced Persistence Threats that can lead to loss of sensitive data

Suspected Entry: **98% match**

**Uploaded** - week7 paper.doc

**THE INDUSTRIAL CONTROL SYSTEM SHOULD BE SUBJECTED TO CONSISTED ASSESSMENT AND AUDITING TO ENSURE THAT ALL SAFETY STANDARDS ARE UPHELD, AND THERE IS NO VIOLATION OF CFATS REGULATIONS**

**Source** - Another student's paper

· The industrial control system should be subjected to consisted t assessment and auditing to ensure that all safety standards are upheld, and there is no violation of CFATS regulations

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**THE COMPANY SHOULD CONSIDER IMPLEMENTING ITS DATA BACKUP MECHANISM IN THE ICS TO MAKE SURE THAT THERE IS A COPY OF SENSITIVE DATA THAT CAN BE RELIED UPON WHEN CYBERCRIME INCIDENT STRIKES**

**Source** - Another student's paper

· The company should consider implementing its data backup mechanism in the ICS to make sure that there is a copy of sensitive data that can be relied upon when cybercrime incident strikes

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**ALL COMPANY NETWORK SYSTEMS ESPECIALLY THE ONES FOR THE ICY SHOULD CONTAIN PASSWORD AND ENCRYPTION FEATURES THAT CAN HELP TO SAFEGUARD DATA FROM BEING STOLEN**

**Source** - Another student's paper

· All company network systems especially the ones for the ICY should contain password and encryption features that can help to safeguard data from being stolen

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**IN CONCLUSION, DESPITE THE FACT THAT PURELAND WASTEWATER PROVIDES COMMENDABLE SERVICES, THE ISSUES REMAIN WHETHER THE COMPANY IS OBSERVING THE REGULATIONS PROVIDED WITH CFATS OR NOT**

**Source** - Another student's paper

In conclusion, despite the fact that Pureland wastewater provides commendable services, the issues remain whether the company is observing the regulations provided with CFATS or not

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**IT IS ESSENTIAL THAT REGARDLESS HOW WANTING THE SITUATION OF SANITIZATION OF WASTEWATER SHOULD BE, THE IMPACT OF THE OPERATION ON THE LIFE OF HUMAN BEING SHOULD BE PRIORITIZED**

**Source** - Another student's paper

It is essential that regardless how wanting the situation of sanitization of wastewater should be, the impact of the operation on the life of human being should be prioritized

Suspected Entry: **98% match**

**Uploaded** - week7 paper.doc

**THIS CAN BE DONE BY ENSURING THAT NO POISONOUS CHEMICAL IS USED IN ANY ICS, AND FOR THE COMPANY, ITS SYSTEMS ARE WELL SECURED TO COUNTER CYBERCRIME WHICH CAN LEAD TO SABOTAGE AND CLOSURE OF THE ENTERPRISE (BEN ET AL, 2013) REFERENCES**

**Source** - Another student's paper

This can be done by ensuring that no poisonous chemical is used in any ICS, and for the company, its systems are well secured to counter cybercrime which can lead to sabotage and closure of the enterprise (Ben et al, 2013)

Suspected Entry: **92% match**

**Uploaded** - week7 paper.doc

**BEN MAHMOUD, M., LARRIEU, N., &PIROVANO, A**

**Source** - Another student's paper

Reference Ben Mahmoud, M., Larrieu, N., & Pirovano, A

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**RISK PROPAGATION ASSESSMENT FOR NETWORK SECURITY**

**Source** - Another student's paper

Risk propagation assessment for network security

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**HOBOKEN, N.J**

**Source** - Another student's paper

Hoboken, N.J

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**ISTE LTD/JOHN WILEY AND SONS INC**

**Source** - Another student's paper

ISTE Ltd/John Wiley and Sons Inc

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**THE LAWS OF VULNERABILITIES**

**Source** - Another student's paper

The Laws of Vulnerabilities

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**INFORMATION SECURITY TECHNICAL REPORT, 10(4), 213-219**

**Source** - Another student's paper

Information Security Technical Report, 10(4), 213-219

Suspected Entry: **86% match**

**Uploaded** - week7 paper.doc

**HTTP://DX.DOI.ORG/10.1016/J.ISTR.2005.09.005**

**Source** - Another student's paper

http://dx.doi.org/10.1016/j.istr.2005.09.005 Forte, D., & Power, R

Suspected Entry: **88% match**

**Uploaded** - week7 paper.doc

**THREATS AND VULNERABILITIES FACING THE ICS**

**Source** - Another student's paper

5 Threats and vulnerabilities facing the ICS

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**DESIRED FUTURE STATE**

**Source** - Another student's paper

Desired Future State

Suspected Entry: **84% match**

**Uploaded** - week7 paper.doc

**PROCESSES OF PLANNING AND INDUSTRIAL INCIDENT MANAGEMENT**

**Source** - Another student's paper

The following shows the processes of planning and industrial incident management

Suspected Entry: **96% match**

**Uploaded** - week7 paper.doc

**ONE CYBER INCIDENT RESPONSE PLANNING CONSIST OF SEVERAL BUILDING BLOCKS THAT INCLUDE RESPONSE TEAM, NEXT NEEDS AND ORGANIZATION PROCEDURES, REPORTING AND COMMUNICATIONS WITHIN THE TEAM TO VERIFY THAT THE PLAN WORKS S WELL**

**Source** - Another student's paper

Response Planning One cyber incident response planning consist of several building blocks that include response team, next needs and organization procedures, reporting and communications within the team to verify that the plan works s well

Suspected Entry: **82% match**

**Uploaded** - week7 paper.doc

**Source** - Another student's paper

**THERE SHOULD ALSO BE A STATE OF REPORTING TO SUPPORT THE TEAM AND EXAMINE IF THE EVENT WILL OCCUR (ESCHELBECK, 2005)**

There should also be a state of reporting to support the team and examine if the event will occur

Suspected Entry: **87% match**

Uploaded - week7 paper.doc

**TEAMS MIGHT CONSIST OF ORGANIZED INDIVIDUALS CALLED CSIRT**

Source - Another student's paper

Team organization Teams might consist of organized individuals called CSIRT

Suspected Entry: **90% match**

Uploaded - week7 paper.doc

**THIS UNIT IS MADE UP OF INDIVIDUALS WHO ARE DEDICATED TO THE EFFORT OF CYBER WARFARE WHILE OTHERS WILL HAVE PART-TIME STAFF WITH OTHER RESPONSIBILITIES IN THE ORGANIZATION**

Source - Another student's paper

This unit is made up of individuals who are dedicated to the effort of cyberwarfare while others will have part-time staff with other responsibilities in the organization

Suspected Entry: **99% match**

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**TEAM RESPONSIBILITIES INCLUDE THE FOLLOWING**

Source - Another student's paper

Team responsibilities include the following

Suspected Entry: **100% match**

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**• ACTING AS THE MAIN INCIDENT RESPONSE FOR THREATS AND RESPONSIBILITIES**

Source - Another student's paper

· Acting as the main incident response for threats and responsibilities

Suspected Entry: **100% match**

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**• THE TEAM WILL BE THE CLEARING HOUSE FOR ALL PREVENTION, ANALYSIS AND PROVIDING**

Source - Another student's paper

· The team will be the clearing house for all prevention, analysis and providing information relevant to the

**INFORMATION RELEVANT TO THE INCIDENTS**

incidents

Suspected Entry: **100% match**

Uploaded - week7 paper.doc

**MANY TYPES OF THE PROCEDURE POLICIES ARE VERY VALUABLE FOR THE IT AND CONTROL SYSTEMS****Source** - Another student's paper

Many types of the procedure policies are very valuable for the IT and Control systems

Suspected Entry: **97% match**

Uploaded - week7 paper.doc

**THEREFORE THE DETAILED OPERATING OPERATION PROCEDURES HAVE TO BE DEVELOPED AND IMPLEMENTED USING THE RESPONSE POLICY****Source** - Another student's paper

This therefore the detailed operating operation procedures have to be developed and implemented using the response policy

Suspected Entry: **72% match**

Uploaded - week7 paper.doc

**THE INFORMATION SYSTEMS RELY ON THE ACCURACY, EMERGENCY, ACCURACY AND TIMELINESS OF THE POLICIES****Source** - Another student's paper

Therefore the Information systems rely mainly on the accuracy, emergency, accuracy and timeliness of the when the adjustments can be made

Suspected Entry: **99% match**

Uploaded - week7 paper.doc

**SAMPLE POLICIES SHOULD BE AS FOLLOWS****Source** - Another student's paper

Sample policies should be as follows

Suspected Entry: **100% match**

Uploaded - week7 paper.doc

**POLICIES SHOULD BE MADE TO INCLUDE TO THE ADDRESS THE IMMEDIATE ACTIONS TO BE TAKEN ON THE EMPLOYEES AND THEIR ACTIONS****Source** - Another student's paper

Policies should be made to include to the address the immediate actions to be taken on the employees and their actions

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**THE POLICIES MUST BE DESIGNED TO ALLOW THE ORGANIZATION ADDRESS THE DISCLOSURE AND THE ACTIONS THAT SHOULD BE TAKEN IN CASE OF INFORMATION BREACH**

**Source** - Another student's paper

The policies must be designed to allow the organization address the disclosure and the actions that should be taken in case of information breach

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**SUCH POLICIES INCLUDE ACCEPTABLE USE, BACKUPS, PASSWORDS, GUEST ACCESS, ENCRYPTION AND DATA CLASSIFICATION**

**Source** - Another student's paper

Such policies include acceptable use, backups, passwords, guest access, encryption and data classification

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**WHICH SECURITY VULNERABILITIES REALLY MATTER**

**Source** - Another student's paper

Which security vulnerabilities really matter

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**PHYSICAL SECURITY, OVERLOOK IT AT YOUR OWN PERIL**

**Source** - Another student's paper

Physical security, overlook it at your own peril

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**COMPUTER FRAUD & SECURITY, 2007(8), 16-20**

**Source** - Another student's paper

Computer Fraud & Security, 2007(8), 16-20

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**HTTP://DX.DOI.ORG/10.1016/S1361-3723(07)70105-7**

**Source** - Another student's paper

**http://dx.doi.org/10.1016/s1361-3723(07)70105-7**

Suspected Entry: **93% match**

**Uploaded** - week7 paper.doc

**ADVANCED PERSISTENCE THREAT IMPACT AN  
ADVANCED PERSISTENT THREAT (APT) IS  
REFERRED TO AS A NETWORK ATTACK WHEREBY  
A HACKER GAINS ACCESSIBILITY OF A  
PARTICULAR NETWORK AND REMAIN THERE FOR  
A LONG TIME WITHOUT THE BEING IDENTIFIED BY  
THE SECURITY (COLE, 2012)**

**Source** - Another student's paper

An advanced persistent threat (APT) is referred to as a network attack whereby a hacker gains accessibility of a particular network and remain there for a long time without the being identified by the security (Cole, 2012)

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**THE ATTACK IS MAINLY CARRIED OUT FOR THE  
PURPOSE OF STEALING ORGANIZATION'S DATA**

**Source** - Another student's paper

The attack is mainly carried out for the purpose of stealing organization's data

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**IN THIS CASE, THE AIM OF THE HACKER IS NOT TO  
DESTROY ANYTHING WITHIN THE NETWORK**

**Source** - Another student's paper

In this case, the aim of the hacker is not to destroy anything within the network

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**ACCORDING TO THE DEFINITION, APT IS  
CONSIDERED AS SYSTEM INTRUSION BY THE  
PEOPLE USING A COMPLEX PROCESS THROUGH  
THE CREATION OF E-MAILS OR MALICIOUS  
SOFTWARE TO ALLOW THEM TO HAVE ACCESS TO**

**Source** - Another student's paper

According to the definition, APT is considered as system intrusion by the people using a complex process through the creation of e-mails or malicious software to allow them to have access to a given network by applying industrial control system (Mattioli & Moulinos, 2015)

**A GIVEN NETWORK BY APPLYING INDUSTRIAL CONTROL SYSTEM (MATTIOLI & MOULINOS, 2015)**

Suspected Entry: **93% match**

**Uploaded** - week7 paper.doc

**PROGRAMS WHICH ARE CODED IN A GOOD MANNER MAY BRING ABOUT A DISRUPTION OF A CONTROL SYSTEM WITHIN AN ORGANIZATION AND ENDS UP TRIGGERING CYBER WAR AS A RESULT OF ITS MASSIVE DESTRUCTION**

**Source** - Another student's paper

Programs which are coded in a good manner may bring about a disruption of a control system within an organization and ends up triggering cyberwar as a result of its massive destruction

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**STUXNET IS AN EXAMPLE OF A VERY EXCELLENT AND POWERFUL APT, AND THE DESIGNATION OF THE WORM WAS DONE BY IRAN (COLE, 2012)**

**Source** - Another student's paper

Stuxnet is an example of a very excellent and powerful APT, and the designation of the worm was done by Iran (Cole, 2012)

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**THIS WAS WITH THE INTENTION OF CAUSING DESTRUCTION TO SYSTEMS SUCH AS SCADA, ICS, AND PLC WHICH WERE ESPECIALLY USED BY EUROPE AND JAPAN**

**Source** - Another student's paper

This was with the intention of causing destruction to systems such as SCADA, ICS, and PLC which were especially used by Europe and Japan

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**APT CAN ALSO BE TERMED AS A CYBER-PHYSICAL ATTACK USING SOFTWARE THAT BRINGS ABOUT DAMAGE TO PHYSICAL INFRASTRUCTURE AND HENCE THE ECONOMY IS NEGATIVELY AFFECTED (MATTIOLI & MOULINOS, 2015)**

**Source** - Another student's paper

APT can also be termed as a cyber-physical attack using software that brings about damage to physical infrastructure and hence the economy is negatively affected (Mattioli & Moulinos, 2015)

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**ONE SITUATION THAT TRIES TO ILLUSTRATE APT ATTACK WHICH HAS BEEN RECORDED RECENTLY, IS WHERE THE GERMAN STEEL MANUFACTURING INDUSTRY WAS INVADED**

**Source** - Another student's paper

One situation that tries to illustrate APT attack which has been recorded recently, is where the German steel manufacturing industry was invaded

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**THE APT DESTROYED THE CONTROL SYSTEM OF THE PLANT INTERFERING WITH THE FIRMS&APOS**

**Source** - Another student's paper

The APT destroyed the control system of the plant interfering with the firms&apos

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**ACTIVITIES (COLE, 2012)**

**Source** - Another student's paper

activities (Cole, 2012)

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**A REPORT BY MATTIOLI & MOULINOS (2015) REVEALED THAT A COMPLEX IDEA WAS DEVELOPED BY AN INTRUDER WHICH CONTAINED A STRUCTURE SPEAR PHISHING EMAIL**

**Source** - Another student's paper

A report by Mattioli & Moulinos (2015) revealed that a complex idea was developed by an intruder which contained a structure spear phishing email

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**BASICALLY, AN INTRODUCTION OF THE EMAIL WAS FOR THE HACKER TO EASILY OBTAIN ACCESS TO THE SYSTEM (MATTIOLI & MOULINOS, 2015)**

**Source** - Another student's paper

Basically, an introduction of the email was for the hacker to easily obtain access to the system (Mattioli & Moulinos, 2015)

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**THE HIGH STANDARD POSSESSED BY THE CODE  
ENABLED IT TO OVERRUN THE EXISTING CODE  
HENCE INTERFERING WITH THE FULL  
FUNCTIONING OF THE SYSTEM**

**Source** - Another student's paper

The high standard possessed by the code enabled it to overrun the existing code hence interfering with the full functioning of the system

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**ADVANCED PERSISTENT THREAT**

**Source** - Another student's paper

Advanced persistent threat

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**UNDERSTANDING THE DANGER AND HOW TO  
PROTECT YOUR ORGANIZATION**

**Source** - Another student's paper

understanding the danger and how to protect your organization

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**MATTIOLI, R., & MOULINOS, K**

**Source** - Another student's paper

Mattioli, R., & Moulinos, K

Suspected Entry: **87% match**

**Uploaded** - week7 paper.doc

**ANALYSIS OF ICS-SCADA CYBER SECURITY  
MATURITY LEVELS IN**

**Source** - Another student's paper

Analysis of ICS-SCADA cyber security maturity levels in critical sectors

Suspected Entry: **82% match**

**Uploaded** - week7 paper.doc

**Source** - Another student's paper

**WHY THE INDUSTRIAL NETWORK PROTOCOLS BECOME COMMON INDUSTRIAL TARGETS INDUSTRIAL CONTROL SYSTEMS (ICS) ARE DISCOVERED EVERYWHERE FROM MECHANIZED MACHINES THAT FABRICATE PRODUCTS TO AN OFFICE BUILDING'S COOLING FRAMEWORK**

Industrial Control Systems (ICS) are discovered everywhere from mechanized machines that fabricate products to an office building's cooling framework

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**BEFOREHAND, IT WAS STANDARD THAT ICS DEPENDED ON PARTICULAR OS AND PARTICULAR CORRESPONDENCE PROTOCOL**

**Source** - Another student's paper

Beforehand, it was standard that ICS depended on particular OS and particular correspondence protocol

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**NOTWITHSTANDING, AS OF LATE, FRAMEWORK ADVANCEMENT COSTS HAVE BEEN LESSENERED AND PROFITABILITY HAS BEEN ENHANCED BY ACTUALIZING SYSTEM ASSOCIATION IN LIGHT OF BROADLY USEFUL OS AND STANDARD COMMUNICATION PROTOCOL (KNAPP, 2011)**

**Source** - Another student's paper

Notwithstanding, as of late, framework advancement costs have been lessened and profitability has been enhanced by actualizing system association in light of broadly useful OS and standard communication protocol (Knapp, 2011)

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**TO CONTEND IN THE PRESENT MARKET-DRIVEN ECONOMY, ORGANIZATIONS AND ASSOCIATIONS SELECT PRODUCTIVE CONTROL FRAMEWORKS THAT CAN CONSEQUENTLY OVERSEE FORMS**

**Source** - Another student's paper

To contend in the present market-driven economy, organizations and associations select productive control frameworks that can consequently oversee forms

Suspected Entry: **93% match**

**Uploaded** - week7 paper.doc

**ICS CAN BE FOUND IN ASSEMBLING, HANDLING OFFICES, AND EVEN POWER PLANTS, WHICH**

**Source** - Another student's paper

ICS can be found in assembling, handling offices, and even power plants, which assumes a fundamental part of running a nation

**ASSUME A FUNDAMENTAL PART OF RUNNING A NATION**Suspected Entry: **100% match**

Uploaded - week7 paper.doc

**THEN AGAIN, THE EXPANDED EFFECTIVENESS THAT ICS PRESENT LIKewise INTRODUCES NEW ISSUES ON SECURITY**

Source - Another student's paper

Then again, the expanded effectiveness that ICS present likewise introduces new issues on security

Suspected Entry: **100% match**

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**IN ALL ACTUALITY, DANGER PERFORMERS HAVE MUCH TO PICK UP WHEN THEY ASSAULT SUCH ORGANIZATIONS**

Source - Another student's paper

In all actuality, danger performers have much to pick up when they assault such organizations

Suspected Entry: **100% match**

Uploaded - week7 paper.doc

**AN EFFECTIVE ASSAULT ON ICS HAS A GENUINE EFFECT ON ANY ASSOCIATION**

Source - Another student's paper

An effective assault on ICS has a genuine effect on any association

Suspected Entry: **99% match**

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**SOME OF THESE IMPACTS INCORPORATE OPERATIONAL SHUTDOWNS, HARMED HARDWARE, MONEY RELATED MISFORTUNE, PROTECTED INNOVATION ROBBERY, AND GENEROUS HEALTH AND DANGERS**

Source - Another student's paper

Some of these impacts incorporate operational shutdowns, harmed hardware, money related misfortune, protected innovation robbery, and generous health and dangers

Suspected Entry: **100% match**

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Source - Another student's paper

**WEAPONIZED INDUSTRIAL NETWORK PROTOCOLS  
CYBER THREATS AND THEIR POTENTIAL IMPACT  
ON INDUSTRIAL NETWORK PROTOCOLS SECURING  
A MODERN SYSTEM AND THE ADVANTAGES  
ASSOCIATED WITH IT, ALBEIT COMPARATIVE FROM  
MULTIPLE POINTS OF VIEW TO STANDARD  
VENTURE DATA FRAMEWORK SECURITY, DISPLAY  
A FEW SPECIAL DIFFICULTIES**

Weaponized industrial network protocols cyber threats and their potential impact on Industrial network protocols Securing a modern system and the advantages associated with it, albeit comparative from multiple points of view to standard venture data framework security, display a few special difficulties

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**WHILE THE FRAMEWORKS AND SYSTEMS USED AS  
A PART OF INDUSTRIAL CONTROL SYSTEM (ICSS)  
ARE PROFOUNDLY SPECIFIC, THEY ARE  
PROGRESSIVELY BASED UPON NORMAL FIGURING  
STAGES USING BUSINESS WORKING  
FRAMEWORKS**

**Source** - Another student's paper

While the frameworks and systems used as a part of industrial control system (ICSS) are profoundly specific, they are progressively based upon normal figuring stages using business working frameworks

Suspected Entry: **99% match**

**Uploaded** - week7 paper.doc

**IN THE MEANTIME, THESE FRAMEWORKS ARE  
WORKED FOR DEPENDABILITY, PERFORMANCE,  
AND LIFESPAN**

**Source** - Another student's paper

In the meantime, these frameworks are worked for dependability, performance, and lifespan

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**A COMMON COORDINATED ICS MIGHT BE RELIED  
UPON TO WORK IMMEDIATELY FOR A  
CONSIDERABLE LENGTH OF TIME OR EVEN  
YEARS, AND THE GENERAL FUTURE MIGHT BE  
MEASURED IN DECADES (BODUNGEN, SINGER,  
SHBEEB, HILT, & WILHOIT, 2017)**

**Source** - Another student's paper

A common coordinated ICS might be relied upon to work immediately for a considerable length of time or even years, and the general future might be measured in decades (Bodungen, Singer, Shbeeb, Hilt, & Wilhoit, 2017)

Suspected Entry: **99% match**

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**ASSAILANTS, DESPITE WHAT MIGHT BE EXPECTED, HAVE SIMPLE ACCESS TO NEW ENDEAVORS AND CAN UTILIZE THEM WHENEVER**

Source - Another student's paper

Assailants, despite what might be expected, have simple access to new endeavors and can utilize them whenever

Suspected Entry: **100% match**

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**IN AN AVERAGE VENTURE ARRANGE, FRAMEWORKS ARE PERSISTENTLY OVERSEEN TRYING TO REMAIN IN FRONT OF THIS QUICKLY ADVANCING DANGER, YET THESE STRATEGIES FREQUENTLY STRIFE WITH A MECHANICAL SYSTEM'S CENTER NECESSITIES OF UNWAVERING QUALITY AND ACCESSIBILITY**

Source - Another student's paper

In an average venture arrange, frameworks are persistently overseen trying to remain in front of this quickly advancing danger, yet these strategies frequently strife with a mechanical system's center necessities of unwavering quality and accessibility

Suspected Entry: **100% match**

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**DOING NOTHING IS IMPOSSIBLE**

Source - Another student's paper

Doing nothing is impossible

Suspected Entry: **99% match**

Uploaded - week7 paper.doc

**ON ACCOUNT OF THE SIGNIFICANCE OF MODERN SYSTEMS AND THE CONCEIVABLY DESTROYING RESULTS OF AN ASSAULT, NEW SECURITY STRATEGIES SHOULD BE RECEIVED**

Source - Another student's paper

On account of the significance of modern systems and the conceivably destroying results of an assault, new security strategies should be received

Suspected Entry: **99% match**

Uploaded - week7 paper.doc

**MECHANICAL SYSTEMS ARE BEING FOCUSED AS CAN BE FOUND, IN ACTUALITY, CASES OF MODERN DIGITAL DAMAGE**

Source - Another student's paper

Mechanical systems are being focused as can be found, in actuality, cases of modern digital damage

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**ALL IN ALL, THEY ARE THE OBJECTIVES OF ANOTHER DANGER PROFILE THAT USES MORE MODERN AND FOCUSED ON ASSAULTS THAN ANY TIME IN RECENT MEMORY**

**Source** - Another student's paper

All in all, they are the objectives of another danger profile that uses more modern and focused on assaults than any time in recent memory

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**A SIMILARLY IRRITATING PATTERN IS THE ASCENT IN UNPLANNED OCCASIONS THAT HAVE PROMPTED HUGE RESULTS CAUSED WHEN AN APPROVED FRAMEWORK CLIENT UNWITTINGLY BRINGS DANGERS INTO THE SYSTEM AMID THEIR ORDINARY AND ROUTINE ASSOCIATE PARTICLE**

**Source** - Another student's paper

A similarly irritating pattern is the ascent in unplanned occasions that have prompted huge results caused when an approved framework client unwittingly brings dangers into the system amid their ordinary and routine associate particle

Suspected Entry: **96% match**

**Uploaded** - week7 paper.doc

**THIS CONNECTION MIGHT BE TYPICAL NEIGHBORHOOD FRAMEWORK ORGANIZATION OR BY MEANS OF REMOTE FRAMEWORK OPERATION**

**Source** - Another student's paper

This connection might be typical neighborhood framework organization or by means of remote framework operation References

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**INDUSTRIAL NETWORK SECURITY**

**Source** - Another student's paper

Industrial network security

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**SECURING CRITICAL INFRASTRUCTURE NETWORKS FOR SMART GRID, SCADA, AND OTHER INDUSTRIAL CONTROL SYSTEMS**

**Source** - Another student's paper

Securing critical infrastructure networks for Smart Grid, SCADA, and other industrial control systems

Suspected Entry: **100% match**

**Uploaded** - week7 paper.doc

**D., & LANGILL, J**

**Source** - Another student's paper

D., & Langill, J