

NATURAL GAS CYBERSECURITY

WHAT WE SEE

MARCIN TOCZYDLOWSKI @ PROCESS IQ COMPANY

- Process IQ Company
- Cloud Based Automation for Natural Gas Actualizations
- Technology consulting

Few rules for this talk

- We won't talk about legal policy and regulatory oversight
- We will talk about real examples
- Yogi Berra: "In theory, there is no difference between practice and theory. In practice, there is."

All of your files are encrypted!

Find README.5de Ia6d8.TXT and Follow Instructions!



Colonial Pipeline faces class-action lawsuit over fuel shortages







Hacked Florida water plant reused passwords and had aging Windows installations

By Brian Fung and Alex Marquardt, CNN

① Updated 11:01 AM ET, Thu February 11, 2021



July 3, 202

US Crime + Justice Energy + Environment Extreme Weather Space + Science

'Turn off your heart': Kaseya VSA ransomware hits MSPs in a vital organ

Joe Uchill

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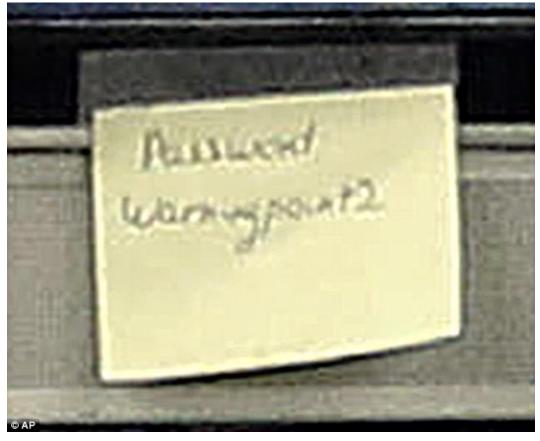
FAKE NEWS CHANNEL

Breaking News

Widespread natural gas disruptions in winter after pipeline hit by ransomware







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Selected cybersecurity standards, initiatives and frameworks

- PCI Pipeline Cybersecurity Initiative from CISA, DHS, TSA
- API STD 1164 SCADA security
- SOC 2 Trust Services Criteria Oversight of the organization, Vendor management programs, Internal corporate governance and risk management processes, Regulatory oversight
- ISO/IEC 27001 international standard on how to manage information security
- NIST Cybersecurity Framework Version 1.1
- CISA's Cyber Hygiene Services free cybersecurity assessment (if you qualify)

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What doesn't work?

- Policy only security
- Audit can tell you anything: ISO 27001 certification can be bought for \$500 in offshore tech-centers
- Colonial Pipeline: offboarding procedure most likely not followed

What works?

- Security is a process
- Policies must be enforced
- Internal security teams asking for hard data

Question: How can you trust your offshore contractors?

What doesn't work?

- Password only authentication is bad and will get you hacked
- Most of EBBs are only password based!
- Colonial Pipeline remote access was protected by password only

What works?

- Multi Factor Authentication
- Very easy to set up in the cloud
- On-premises systems might require a lot of work when it comes to MFA

Process IQ can help here!

What doesn't work?

- One large secure corporate network
- Hey programmers, here's few hundred pages how to write secure applications
- Lack of investments
 Large pipeline: using software no-longer
 maintained for past 20 years

What works?

- Network segmentation
- Each service enforcing zero trust
- Code reviews and secure programming training
- Vulnerability scanning by internal security teams
- Test your backups!

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Keywords

- Multi Factor Authentication
- Security perimeter at each server
- Network segmentation
- Code Review
- Install Russian Keyboard



THANK YOU

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