Industrial Cybersecurity: Opportunities and challenges in Digital Transformation

Ruslan Stefanov
20.09.2018

KICS*HICS=TESTED & SECURED

Collaboration with Kaspersky Lab in Russia and Customs Union

Honeywell

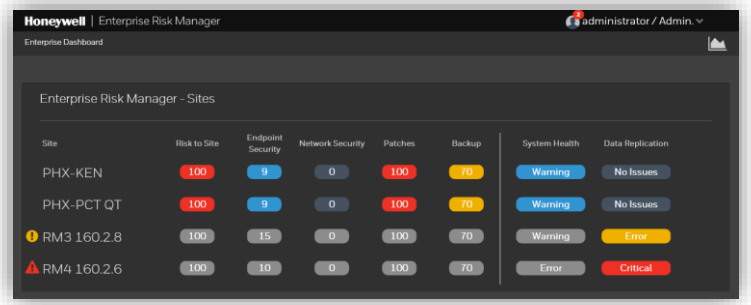
THE POWER OF CONNECTED

Honeywell ICS (HICS) 2018 News

- ControlEdge™ - the first in the world, certified for ISASecure® Embedded Device Security Assurance (EDSA) Level 2
  - ControlEdge™ Remote Terminal Unit (UOC)
  - ControlEdge™ Remote Terminal Unit (RTU)
  - ControlEdge™ Remote Terminal Unit (PLC)

  http://www.isasecure.org/en-US/End-Users/ISASecure-Certified-Devices

- Cyber security solutions portfolio renewal
  - New version Risk Manager R170
  - New version ICS Shield
  - Cyber Vantage Managed Security Services (MSS)



Honeywell
THE POWER OF CONNECTED

Honeywell in Russia and Customs Union

Presence in Russia

- 1974 – office in Moscow was opened
- All business lines and functions (engineers, sales, marketing, logistics, service, etc.)
- Local production in Moscow, Arzamas and Lipetsk.
- Honeywell Process Automation Systems and UOP technologies are deployed at major Russian refineries.
- Honeywell equipment is deployed at Olympic in Sochi, CPC, IKEA, MEGA, Hermitage, Bolshoi Theater.
- Honeywell Air & Space products are installed on aircrafts (SSJ100, MC21) and helicopters produced in Russia.

More than **1000** employees

25 offices in Russia, Belarus, Kazakhstan, Uzbekistan, Armenia

Cyber Security approach in Russian Federation

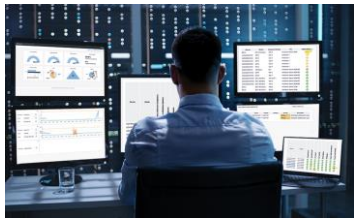
- FSTEC licenses
- Knowledge of legislation and requirements
- Collaboration with strong local security vendors and integrators
- Solutions portfolio based on leading local security products

Honeywell
THE POWER OF CONNECTED

Solutions portfolio

Honeywell's Industrial Cyber Security Solutions

- Multi-site, defense-in-depth approach
- Multi-vendor security management
- Single provider convenience & trust



CyberVantage™ Managed Security Services

Monitoring, Analytics, Patching, Threat Identification & more

(OT Security Operations Center)

Sentience and/or third party/OEM cloud & analytics providers

Customer HQ/ Security Operations Center (SOC)

Enterprise Secure Cloud

Industrial Cyber Security Software

ICS Shield, Enterprise Risk Manager, Secure Media Exchange (SMX), Threat Intelligence Exchange (ATIX)

Integrated security technologies (whitelisting, IDS, SIEM, AV & more)

ICS Shield Secure Data Pipe

Security Consulting Services

Architect & Design, Assess & Audit, Network & Endpoint Security, Situational Awareness, Response & Recovery

Site-Wide Cyber Security

Plant A

Blowers Compressors Motors Pumps Process People

Plant B

Plant C

Plant D

Honeywell

THE POWER OF CONNECTED

Benefits and specifics of collaborative approach

Honeywell
THE POWER OF CONNECTED

KASPERSKY lab

- Individual protection of DCS based on ESID – Experion System ID
- Unified solution for overall DCS computers protection
- Maintenance cost optimization for the site/plant security system
- Tested cyber security solution
- Tested updates and trusted distribution infrastructure

What is done in 2018

FAT in Lipetsk

FAT in Sofia (Bulgaria)

Compatibility Tests at refinery

First direct shipment (oil&gas)

May | June | August | September

Honeywell
THE POWER OF CONNECTED

What is proposed

- KICS for Nodes annual maintenance:
  - For each Experion PKS identified by ESID
  - After compatibility approval for ESID

- KICS for Nodes annual maintenance includes:
  - Correct KICS for Nodes configuration profile
  - Tested updates
  - Updates and profiles distribution

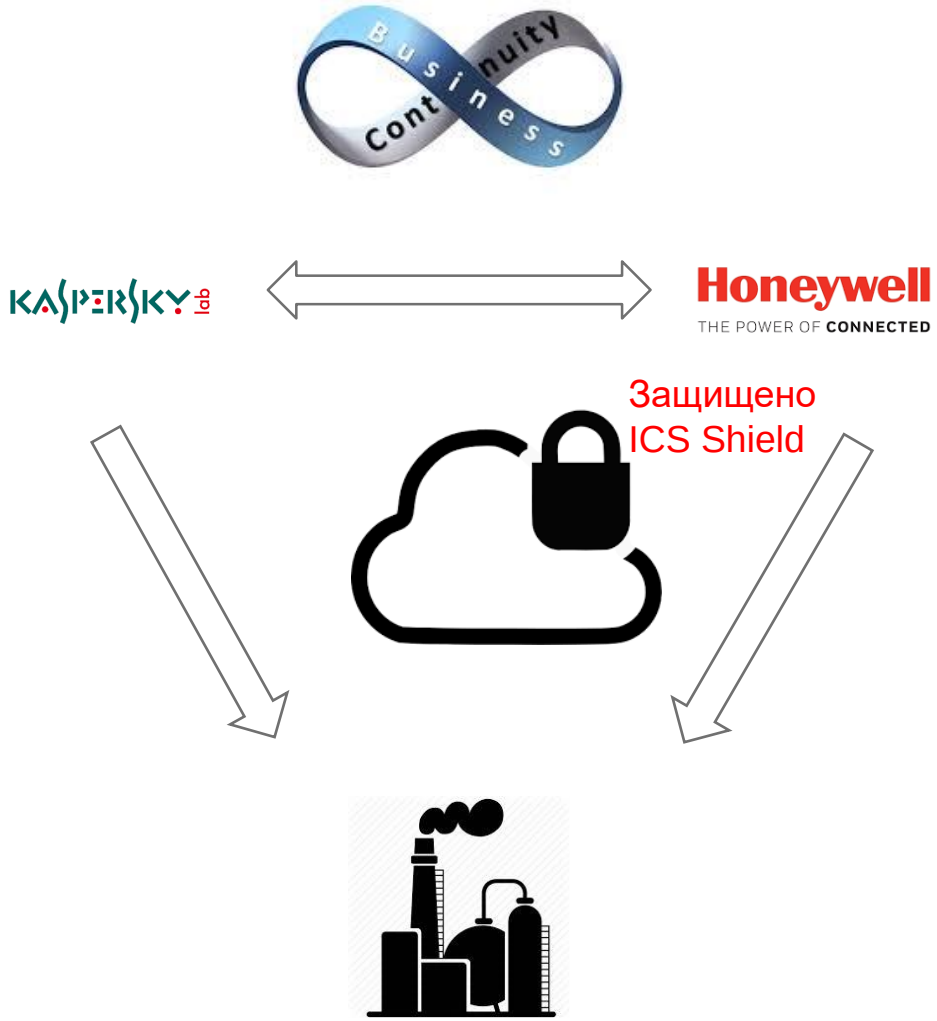
Compatibility test/check

- Why?
  - About 20 Experion PKS versions
  - New versions are issued both for Experion PKS and KICS for Nodes
  - DCS productivity, continuity and security
  - Compliance with security requirements
  - Correct KICS for Nodes configuration profile
  - DCS executables “white” lists
  - Compatibility approval
- When and Where?
  - Factory acceptance tests (FAT)
  - Site acceptance tests (SAT)
  - Maintenance time-off on Customer’s site
  - Non-critical Experion PKS components at Customer’s site

Kaspersky®
Industrial
CyberSecurity

Updates testing and distribution

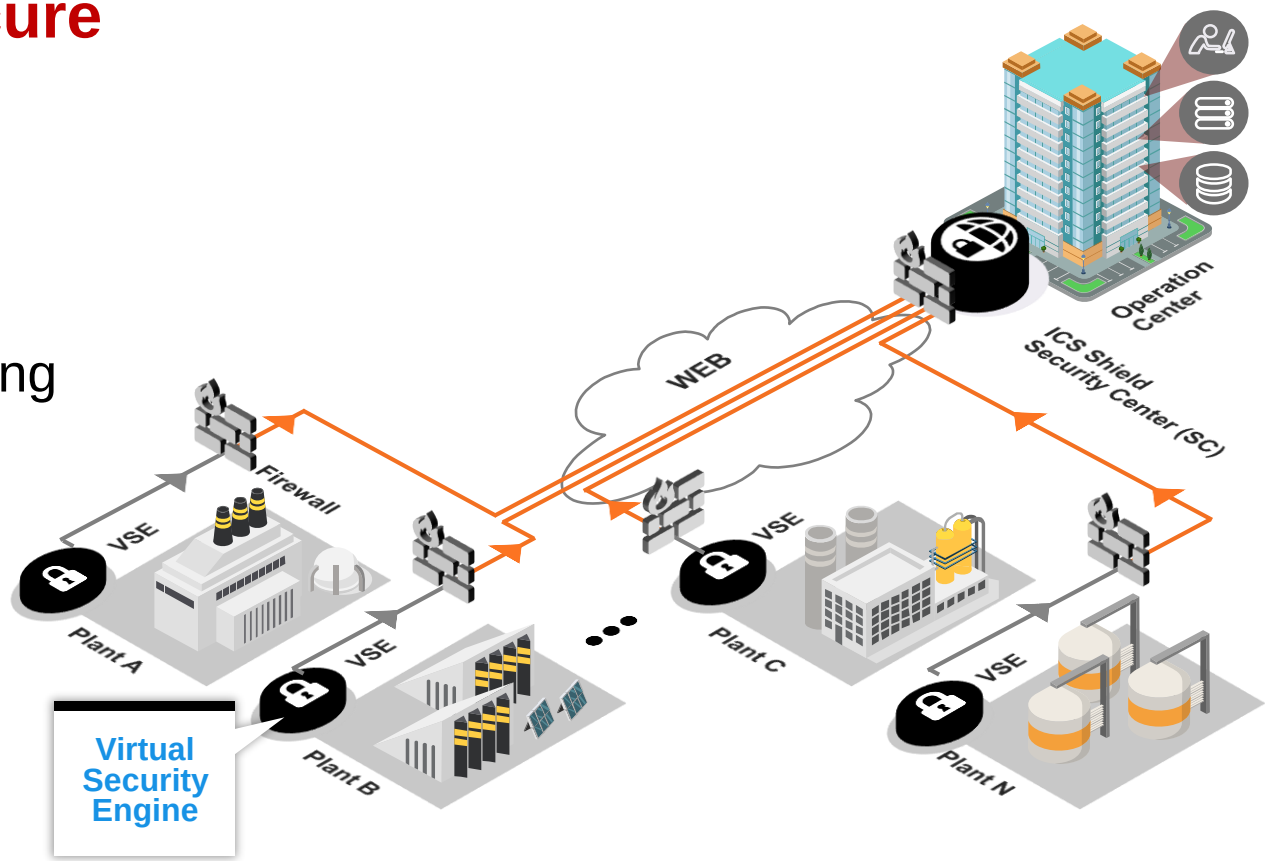
- Why?
  - Operational assurance
  - Reduce downtime risk
- When and Where?
  - As new updates are published
  - Virtual Lab Datacenter-based tests
- How to distribute?
  - Manually
  - Automatically via ICS Shield infrastructure



ICS Shield Infrastructure

Distributed architecture and secure tunnel from plants to center

- Install SC at the data center
- Install VSEs at each plant
- Establish a secure tunnel, outbound, using port 443, TLS encrypted
- One FW rule to manage all remote connections



Honeywell
THE POWER OF CONNECTED

Links and resources

HICS

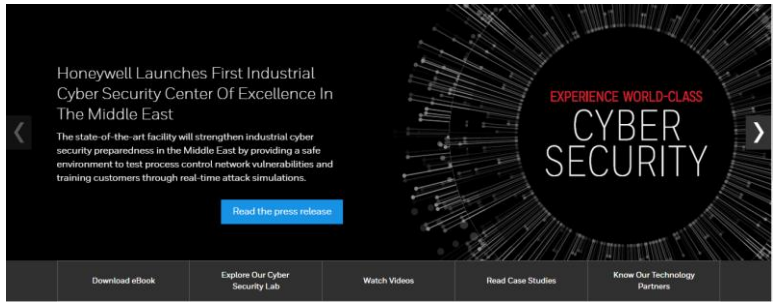
www.becybersecure.com

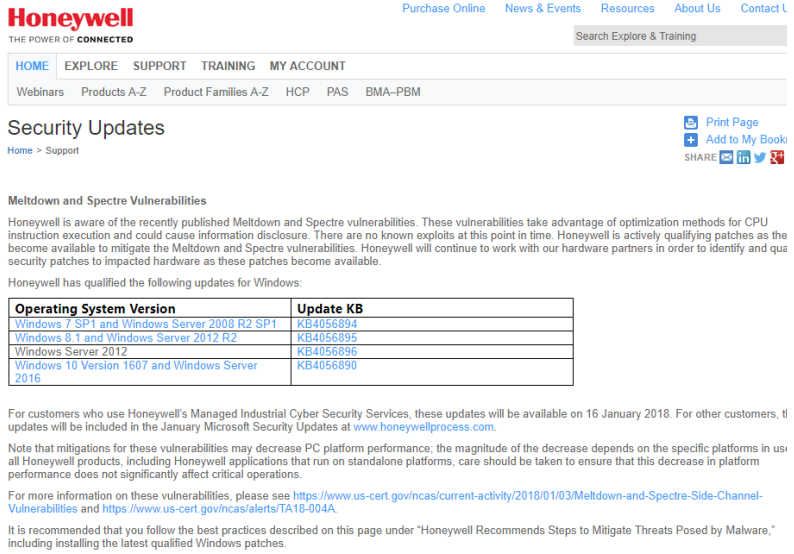
Security updates

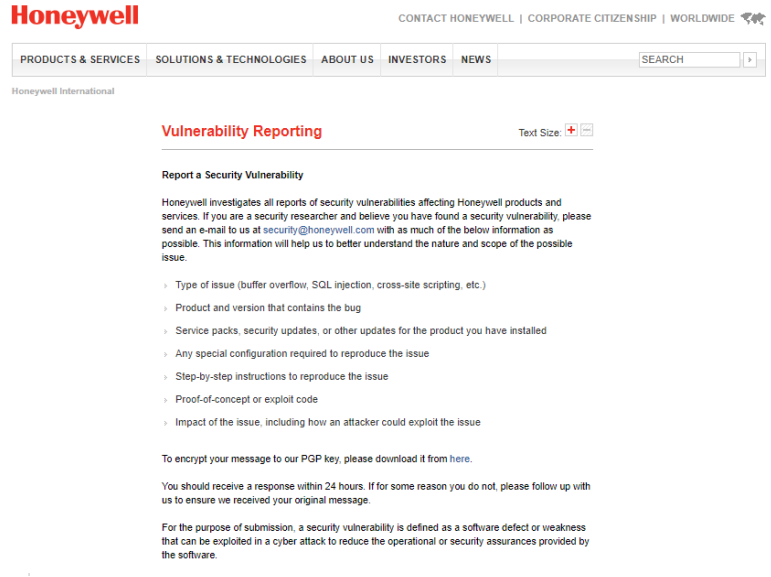
https://www.honeywellprocess.com/en-US/support/Pages/security-updates.aspx

Vulnerability report

https://honeywell.com/pages/vulnerabilityreporting.aspx







Thank you

www.becybersecure.com

Honeywell
THE POWER OF **CONNECTED**