



## Escape Rooms

# Industrial Control Systems

### ICscape Room

### Description



#### Network Discovery

The space station Asteroid Covenant has sent out a distress signal stating it has lost its critical life support control systems. The life support systems (i.e., oxygen and HVAC systems) have failed and there is only 60 minutes of air remaining before the crew's demise.

The Cybersecurity and Infrastructure Security Agency (CISA) and the Idaho National Laboratory invite you to be a part of the adventure. This escape room contains a series of traditional escape room puzzles mixed with cybersecurity elements that use passive and active network discovery tools and techniques. Can you find your way onto the systems and figure out how to restore the life support systems before time runs out?



#### Solar, Wind and Fire

Acme Energy Corporation is a victim of a cyber attack. Their attackers have shut down Acme's industrial control systems, leaving their facilities inoperable. Acme's assets include ONG / LNG, and renewables such as solar and wind farms that work alongside their more traditional components of power generation. Acme's power grid, ONG and LNG services are all offline, crippling the region. Thousands of people are without power and heat. We are determining attribution, but in the meantime, Acme has asked for your help. Can you identify and contain cyber threats while restoring functionality to Acme's industrial operations?

CISA and the Idaho National Laboratory invite you to be a part of the adventure. This escape room contains a series of traditional escape room puzzles mixed with cybersecurity elements. Participant's skills will be challenged with cybersecurity puzzles involving wireless technologies, RFID, network discovery, industrial control systems, Arduino backed puzzles, mixed reality puzzles, and more. With a mix of traditional escape room puzzles there is enough for everyone to do, regardless of cyber skills. Come have fun while learning more about ICS cybersecurity with CISA and INL.



#### Insider Threat ("What about Bob")

A disgruntled employee, Bob, has been plotting to bring down the company where he works. In retaliation for his perceived mistreatment, Bob has created an electromagnetic pulse device (EMP) to take out sensitive industrial control systems in the area. A locked EMP has been recovered and Bob has been taken into custody but isn't talking. The EMP device has been armed and the clock is ticking. CISA needs your help protecting our critical infrastructure. As a cybersecurity professional, you will work with CISA to investigate Bob's office, find clues based on what he has been doing, and disarm the EMP before it is too late.

CISA and the Idaho National Laboratory invite you to be a part of the adventure. This escape room contains a series of traditional escape room puzzles mixed with cybersecurity elements. Participant's skills will be challenged with cybersecurity puzzles involving wireless technologies, open-source intelligence, database exploitation, network discovery, industrial control systems, cryptography, Arduino backed puzzles, and more. With the mix of traditional escape room puzzles, there is enough for everyone regardless of their cyber skills. Come have fun while learning more about cybersecurity with CISA and INL.

## ICScape Room

## Description

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### Pandemonium

Employees of Acme International Incorporated found out that Crapi Plastics Inc. has made an unexpected offer to acquire their company. This is a hostile takeover, and the employees were disgruntled at the loss of employment. They have hidden the PLC equipment, scrambled the ladder logic and human-machine interface (HMI) display and shut off power to the control system as they left.

Your team has been hired to find the PLC equipment, locate and install the correct ladder logic and HMI display, turn on power to the control system, and validate production capability.

Good hunting.

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### Trapped!

Borrowing from the Jurassic Park scenario, a disgruntled employee has turned off the protective barrier keeping the dangers of the jungle (i.e., dinosaurs) outside. With little time to restore service, it becomes apparent that we can't get the protective barrier back online. We must evacuate. Then, we discover the extent of the damage, including, deleted ladder logic, misconfigured networks, missing passwords, and more. It will be difficult to reprogram the automation system that can let us out.

CISA and the Idaho National Laboratory invite you to be a part of the adventure. This escape room contains a series of traditional escape room puzzles mixed with cybersecurity elements that use passive and active discovery, network forensics, industrial control systems, ladder logic, mixed reality puzzles, and both network and firewall configuration. There is enough for everyone to do, regardless of skill level. Come learn more about the convergence of information technology and industrial control systems cybersecurity with CISA and INL.

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### Blackstart

It's the coldest and stormiest night of the year. The roads are closed. No one is around except you and your team. Then the unexpected happened. An adversary hacked into your electric utility, installed a remote access trojan and shut off the power to your customers while you watched the lights go out.

Your assignment is to regain control of your systems and turn the power back on before everything freezes.

What are you waiting for? The clock is ticking . . .

CISA and the Idaho National Laboratory invite you to be a part of the adventure. This escape room contains a series of traditional escape room puzzles mixed with industrial control systems and cybersecurity elements to challenge participants. There is enough for everyone, regardless of skill level. Come have fun while learning more about ICS cybersecurity with CISA and INL.