# Cyber Vision

https://cs.co/1page

Cisco **Cyber Vision** identifies your Operational Technology (OT) assets, their characteristics, and their communication patterns by passively capturing and decoding industrial application flows. This ultra-safe approach can be enhanced with active discovery that sends requests in the semantics of the specific ICS protocol at play.

## Benefits:

**Gain OT visibility at scale:** Easily identify all industrial devices and their communication patterns. Cyber Vision is embedded in your industrial network.

**Understand your OT security posture:** Reduce the attack surface. Cyber Vision highlights devices that need immediate attention and suggests solutions.

**Improve operational efficiency.** Reduce downtime and improve efficiency. Cyber Vision monitors OT events, identifies network problems, and helps you troubleshoot issues faster.

**Extend IT security to OT:** Converge your security practice. Cyber Vision feeds your IT security tools with rich details on OT devices and events.

**Vulnerability Detection:** Identify known asset vulnerabilities so you can patch them before they are exploited.

**Risk Scoring:** Asset risk scoring based on impact and likelihood to help you improve compliance.

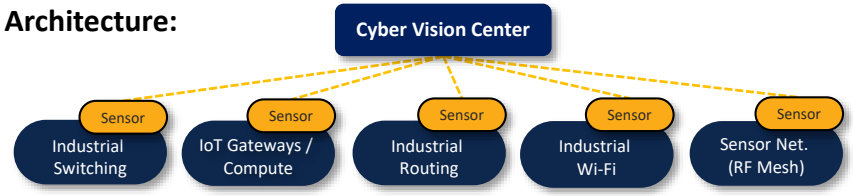
**Anomaly Detection:** Detect attempts to modify OT assets with behavioral analytics, create baselines to detect deviations.

**Intrusion Detection:** Detect intrusions with snort IDS and Talos intelligence.

## Conversation Starters:

- How do you know your IDMZ is effectively protecting your OT domain?
- Do subcontractors have unauthorized remote access to your assets?
- Do you know if you are missing critical security patches?
- Are there decommissioned assets still connected to your network?
- Can you track unwanted asset modifications such as variable changes or program uploads?
- Can you identify which industrial machines use outdated software and are you able to detect malware and other threats to these machines?

## Architecture:




## Solutions:

### Cyber Vision Center options:

- **Hardware Appliance:** USC based server with hardware RAID
- **Software Appliance** (virtual): VMWare ESXi & Hyper-V VHD
- **Cloud Appliance** (virtual): Amazon Web Services (AWS) & Microsoft Azure

### Cyber Vision Sensor options:

- **Network Sensors:** Embedded in networking for simple highly scalable deployment
  - Cat IE3300, IE3400, IR1101, IR8300, Cat IE9300, Cat 9300/9400 & Stratix 5800
- **Hardware Sensor:** Capturing traffic on any switch with a single hop SPAN
  - IC3000 Industrial Compute (DPI via SPAN to support brownfield), Docker sensor (3rd party)
- **On-Center Sensor:** Existing SPAN infrastructures or collect traffic within datacenter

### Licenses: (CV-LICENSE)

**Essentials:**

**Inventory:**
- Device inventory
- Identify communication patterns
- Generate inventory reports

**Vulnerability:**
- Identify device vulnerabilities
- Generate vulnerability reports

**Activities:**
- Track control system events
- Generate device activity reports

**Restful API:**
- REST API interface

### Advantage: *(Essentials package + the following)*

**Security Posture:**
- Device Risk Scoring

**Intrusion Detection (IDS):**
- Snort IDS on supported sensors
- Talos community signatures

**Behavior Monitoring:**
- User-created baselines for asset behaviors
- Alerts on deviations

**Advanced integration:**
- pxGrid integration with ISE
- Firewall Mgmt (FMC) Host Attribute integration
- SIEM Integration – Splunk, QRadar
- ServiceNow OT Management integration

## IT vs OT:

| | | |
|---|---|---|
| IT Security = Cybersecurity | → | OT Security = Safety |
| IT networks are segmented | → | OT networks are flat |
| IT devices are modern and controlled | → | OT devices can be 10-20+ years old |
| IT attacks can be well identified (virus, DoS…) | → | OT attacks look like legitimate data to ICS |
| IT cares about Confidentiality and Availability | → | OT cares most about Throughput and Uptime |

## Resources:

| | | | | |
|---|---|---|---|---|
| SalesResources | User Guides | At-a-Glance | Selling Guide | Guided Demo |
| Ordering Guide | Data Sheets | PoV Guide | Protocols support | IoT Security |
| | | | Overview/Demo | Public page |

Example SKU: ***CV-E-xxxx / CV-A-xxxx***