



**NOZOMI**  
NETWORKS



SOLUTION BRIEF

**Real-time Cyber Security  
and Visibility for Industrial  
Control Networks**

# See and Secure Your Industrial Networks



## Superior Operational Visibility

Accurately visualize your industrial networks and improve resilience with real-time asset inventory and network monitoring.



## Best-in-Class ICS Threat Detection

Rapidly manage cyber threats and process risks with a solution that correlates multiple, advanced detection techniques.



## Most Global Installations

Centrally monitor hundreds of facilities with a solution proven to scale across continents and integrate with IT/OT systems.

Nozomi Networks is the leader of industrial cyber security, delivering the best solution for real-time visibility to manage cyber risk and improve resilience.

**With one solution, our customers gain:**

- Advanced cyber security
- Improved operational reliability
- Easy IT/OT integration

Through the innovative use of artificial intelligence (AI), we help the largest industrial facilities around the world See and Secure™ their critical control networks.

Today Nozomi Networks supports over a quarter of a million devices in sectors such as:



Critical Infrastructure



Manufacturing



Transportation



Energy



Mining



Utilities

Let our advanced solution automate the hard work of inventorying, visualizing and monitoring your industrial control networks.

You benefit from the real-time visibility and threat detection needed to ensure high cyber resiliency and reliability.

### DEPLOYMENTS INCLUDE



**500+**

Hydro-generation Plants



**420+**

Gas Distribution Locations



**300+**

Electric Distribution Sites

#thosewhoknowpicknozomi

# Leverage Our **Global Expertise**



**1,000+**

Installations Across 5 Continents



**300,000+**

Devices Supported



**40+**

System Integrators and VARs



**100+**

Trained and Certified Partners

## OUR OFFICES



**Expert Staff**  
Around the World



## FORTUNE 500 CUSTOMERS

**#1** Global Electric Utility

**Top 3** Energy Companies

**Major** Multinational Deployments

**FORTUNE  
500**



## STRATEGIC PARTNERS

**accenture**

**Atos**

**cisco**



GE Power



IBM Security

**...and more**

# SCADAguardian

Real-time Cyber Security and Visibility  
for Industrial Control Networks



**SCADAguardian™** protects your control networks from cyber attacks and operational disruptions.

It provides superior operational visibility and rapid detection of cyber threats plus process risks through passive network traffic analysis.



Immediately  
Visualize and Explore  
Industrial Networks



Automatically Track  
Industrial Assets and Know  
Their Cyber Security Risks



Continuously Monitor  
ICS Networks and  
Processes



Quickly Identify  
and Address  
Vulnerabilities

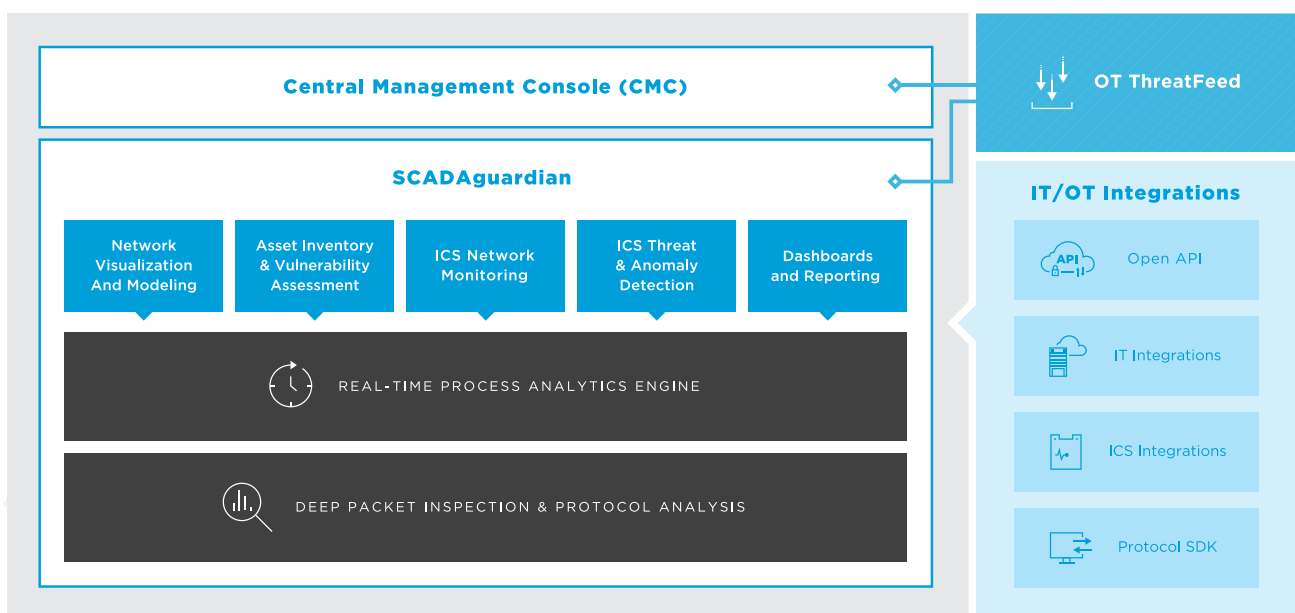


Rapidly Detect Cyber  
Threats/Risks and  
Process Anomalies



Easily Integrate and Share  
ICS Information with  
IT/OT Environments

## Nozomi Networks Solution Architecture - SCADAguardian Edition



The award winning Nozomi Networks solution improves cyber resiliency and reliability via a modular, extensible and scalable architecture.

## Immediately Visualize Your Industrial Network



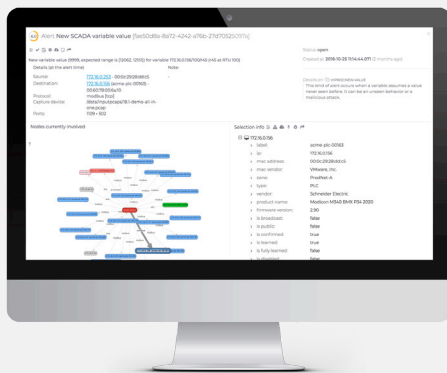
### Real-time Network Visualization

- Improves system awareness and understanding of network structure and activity
- Displays key information such as traffic throughput and TCP connections



### Flexible Navigation and Filtering

- Shows macro views + detailed information on endpoints and connections
- Filters by subnets and network segments, or presents topologies



## Quickly Detect Threats to Your ICS or SCADA System



### Up-to-the-Minute Threat Detection

- Identifies cyber security and process reliability threats at all times
- Detects attacks in process, early stage advanced threats and cyber risks



### Best-in-Class ICS Threat Detection

- Uses multiple, hybrid techniques for comprehensive risk detection
- Ensures current monitoring when integrated with optional OT ThreatFeed™

## Multiple Appliance Formats for Every Type of Deployment

Physical Appliances						
Series	NSG-M		NSG-L		NSG-R	
Model	1000	750	250	100	150	50
Description	Rack-mounted appliances for large scenarios		Rack-mounted appliances for medium scenarios		Ruggedized appliances for medium or small scenarios	
Monitoring Ports	7 RJ45 + 4 SFP	7 RJ45 + 4 SFP	5 RJ45	5 RJ45	7 RJ45	4 RJ45
Max. Protected Nodes	10,000	2,500	750	300	500	200
Virtual Appliances						
Model	V1000		V750		V250	
Description	A powerful appliance for very large, demanding scenarios		A virtual appliance for large scenarios		A virtual appliance for medium scenarios	
Monitoring Ports	Unlimited		4		4	
Max. Protected Nodes	5,000		1,000		500	
					200	

A portable appliance, suitable for temporary scenarios, is also available. [Contact us](#) for more information.  
See [nozominetworks.com/techspecs](https://nozominetworks.com/techspecs) for current and complete appliance details.



# SCADAguardian Advanced

Comprehensive Real-time Cyber Security and  
Visibility for Industrial Control Networks



**SCADAguardian Advanced™** extends the significant value obtained with SCADAguardian, with the use of Smart Polling™.

This precise, low volume, active technique provides a full asset inventory, exact vulnerability assessment and advanced ICS network monitoring.



Immediately  
Visualize and Explore  
Industrial Networks



Automatically Track All  
Industrial Assets and Know  
Their Cyber Security Risks



Continuously Monitor  
Networks and Processes  
Using Full ICS Data



Quickly Confirm  
and Address  
Vulnerabilities

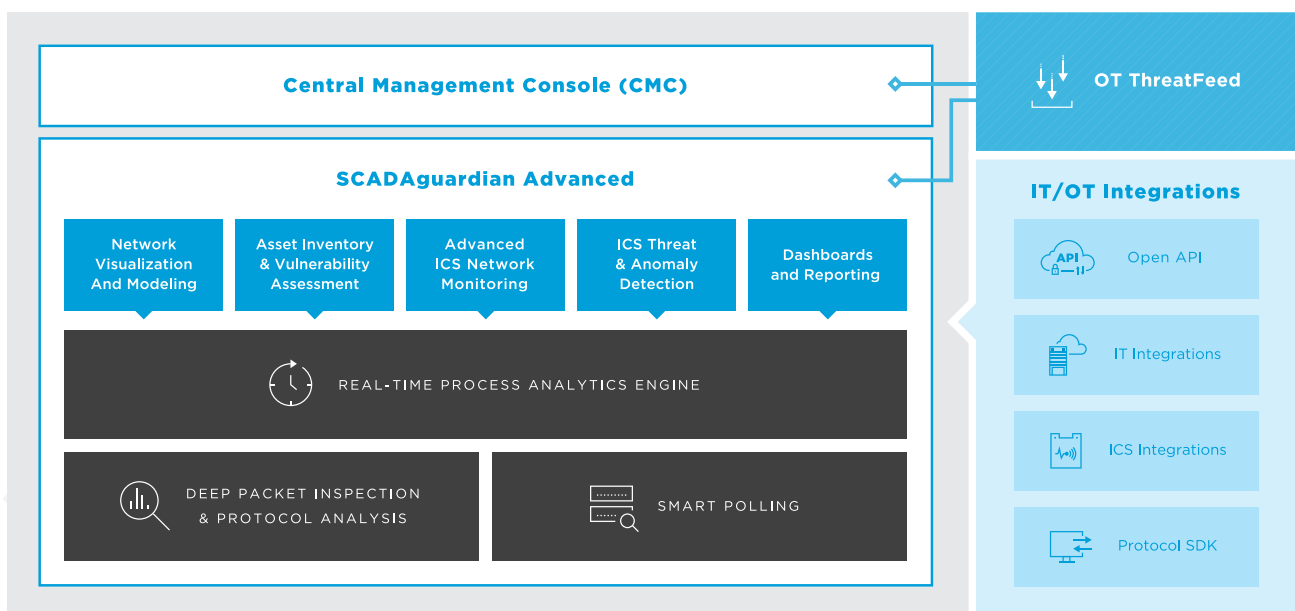


Rapidly Detect Cyber  
Threats/Risks and  
Process Anomalies



Easily Integrate and Share  
ICS Information with  
IT/OT Environments

## Nozomi Networks Solution Architecture - SCADAguardian Advanced Edition



Smart Polling safely identifies a full set of ICS data, improving asset inventory, vulnerability assessment and network monitoring.

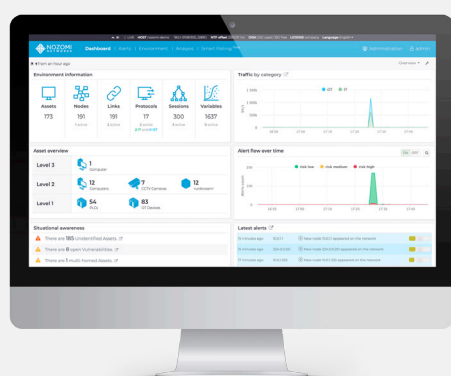
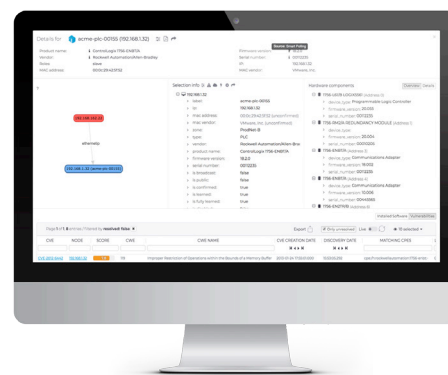
## Automatically Track Your Industrial Assets and Know Your Vulnerability Risks

### ✓ Full Asset Inventory

- Provides a full set of asset inventory providing accurate deep details
- Identifies firmware versions and their patch levels

### ✓ Automated Vulnerability Assessment

- Identifies and confirms which vendors devices are vulnerable
- Optimizes workflows with informative dashboards and drilldowns



## Continuously Monitor Your Network and ICS

### ✓ Real-time Network Visualization

- Improves situational awareness and speeds troubleshooting
- Shows macro views of the network plus detailed information

### ✓ Advanced ICS Network Monitoring

- Monitors assets and network behavior for cyber security and reliability risks
- Uses full ICS data to monitor for threats and anomalies

## Compare SCADAguardian Advanced to SCADAguardian

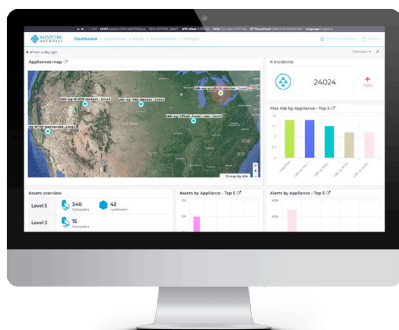
Functionality	Network Analysis	Asset Inventory	Vulnerability Assessment	Network Monitoring & Threat Detection	Deployment
SCADAguardian Advanced	Passive + Active Smart Polling	Identifies All Assets	Confirms Vulnerabilities	for All Assets & ICS Data	Requires Routable IP Address · Installed on Activated SPAN or Mirror Ports · Routing for Selected IPs Enabled
SCADAguardian	Passive	Identifies Communicating Assets	Identifies Vulnerabilities	for Communicating Assets & ICS Data	No Network Changes · Installed on Inactive SPAN or Mirror Ports · No Routing Required

## Multiple Appliance Formats for Every Type of Deployment

Physical Appliances						
Series	NSG-M		NSG-L		NSG-R	
Model	1000A	750A	250A	100A	150A	50A
Description	Rack-mounted appliances for large scenarios		Rack-mounted appliances for medium scenarios		Ruggedized appliances for medium or small scenarios	
Monitoring Ports	7 RJ45 + 4 SFP	7 RJ45 + 4 SFP	5 RJ45	5 RJ45	7 RJ45	4 RJ45
Max. Protected Nodes	10,000	2,500	750	300	500	200
Virtual Appliances						
Model	V1000A		V750	V250A	V100A	
Description	A powerful appliance for very large, demanding scenarios		A virtual appliance for large scenarios	A virtual appliance for medium scenarios	A virtual appliance for small scenarios	
Monitoring Ports	Unlimited		4	4	4	
Max. Protected Nodes	5,000		1,000	500	200	
SCADAguardian Advanced Container Edition						
Description	Embedded container application for switches, routers and other security infrastructure. Fast, flexible deployment option that leverages hardware units.					

# Central Management Console

Consolidated OT Cyber Security and Visibility  
Across Distributed Industrial Sites



Easily manage cyber security for hundreds of distributed industrial installations with the **Central Management Console™ (CMC)**.

It provides consolidated and remote access to your ICS data from SCADAguardian and SCADAguardian Advanced appliances.



Centrally Monitor and Secure Distributed Industrial Facilities



Immediately Visualize and Explore Industrial Networks



Quickly Identify OT Threats and Vulnerabilities



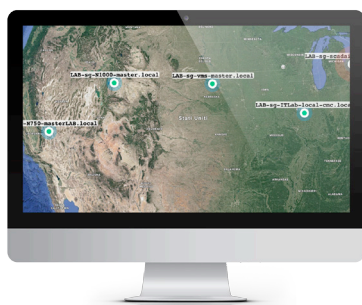
Easily Integrate and Share ICS Information with IT/OT Environments



Significantly Reduce Troubleshooting and Forensic Efforts



Reliably Monitor Hundreds of Facilities, Thousands of Devices



## Centralized Monitoring of Distributed Industrial Facilities



### Aggregated Summaries / Details by Remote Site

- Shows a geographic map of your SCADAguardian and SCADAguardian Advanced appliances, including risk level by site
- Enables a fast understanding of key metrics, such as alerts, incidents, vulnerabilities and more
- Supports drilldown on visual indicators for detailed information
- Displays dashboards, charts and queries relevant to your organization

## The Virtual, Multitenant CMC is Easy to Deploy and Scale

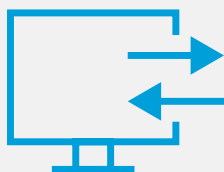
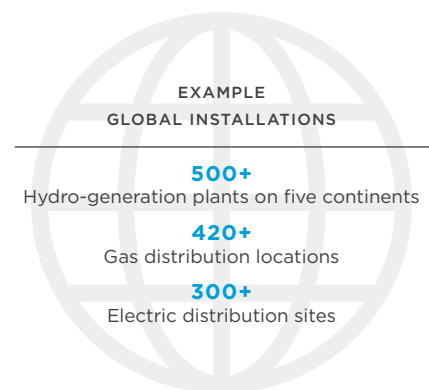
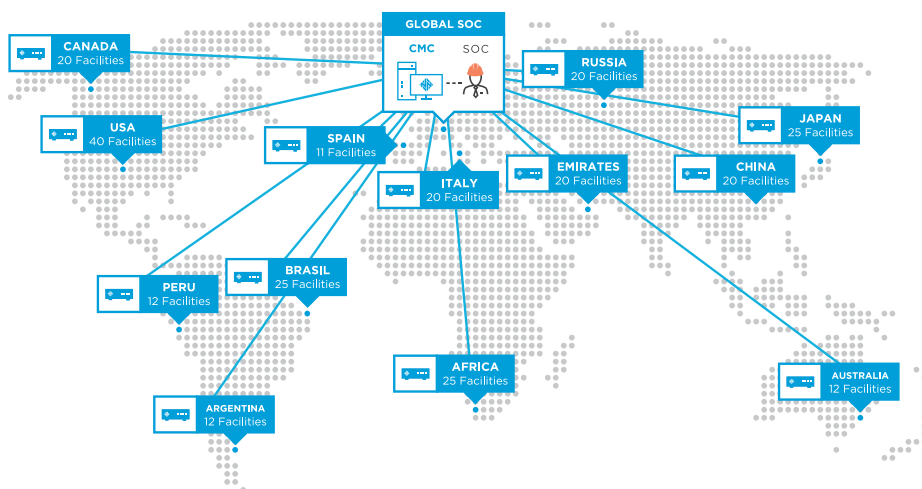
Summary	Consolidated and remote ICS cyber security and visibility for distributed industrial sites.
Installation Specs	Amazon AWS AMI, Hyper-V 2012+, KVM 1.2+, VMware ESX 5.x+, XEN 4.4+
Max. Managed Appliances	Unlimited (*)

(\*) Based on infrastructure.

See [nozometworks.com/techspecs](https://nozometworks.com/techspecs) for current and complete appliance details.



## Sample Deployment Map: Centrally Monitor and Secure Many Facilities



### Easily Integrate / Share Information with IT/OT Environments

- Includes built-in integrations for asset management systems, firewalls, identity management systems, SIEMs and more
- Supports dozens of IT/OT protocols
- Extends further with Open API and Protocol SDK
- See website for current details

Central Management Console

## OT ThreatFeed

**OT ThreatFeed** is an **optional subscription** that delivers threat updates, making it easy for IT/OT teams to stay on top of current ICS risks.

### Convenient OT ThreatFeed Service



#### Timely Threat Updates

- Provides indicators of known and emerging threats and vulnerabilities
- Curates, tests and adapts ICS threat information from multiple sources, including threats and vulnerabilities discovered by Nozomi Networks



#### Actionable Threat Remediation Insights

- Decreases response time with Smart Incident™, which correlates alerts, provides operational context and delivers automatic packet captures



Regularly Receive OT Threat and Vulnerability Updates



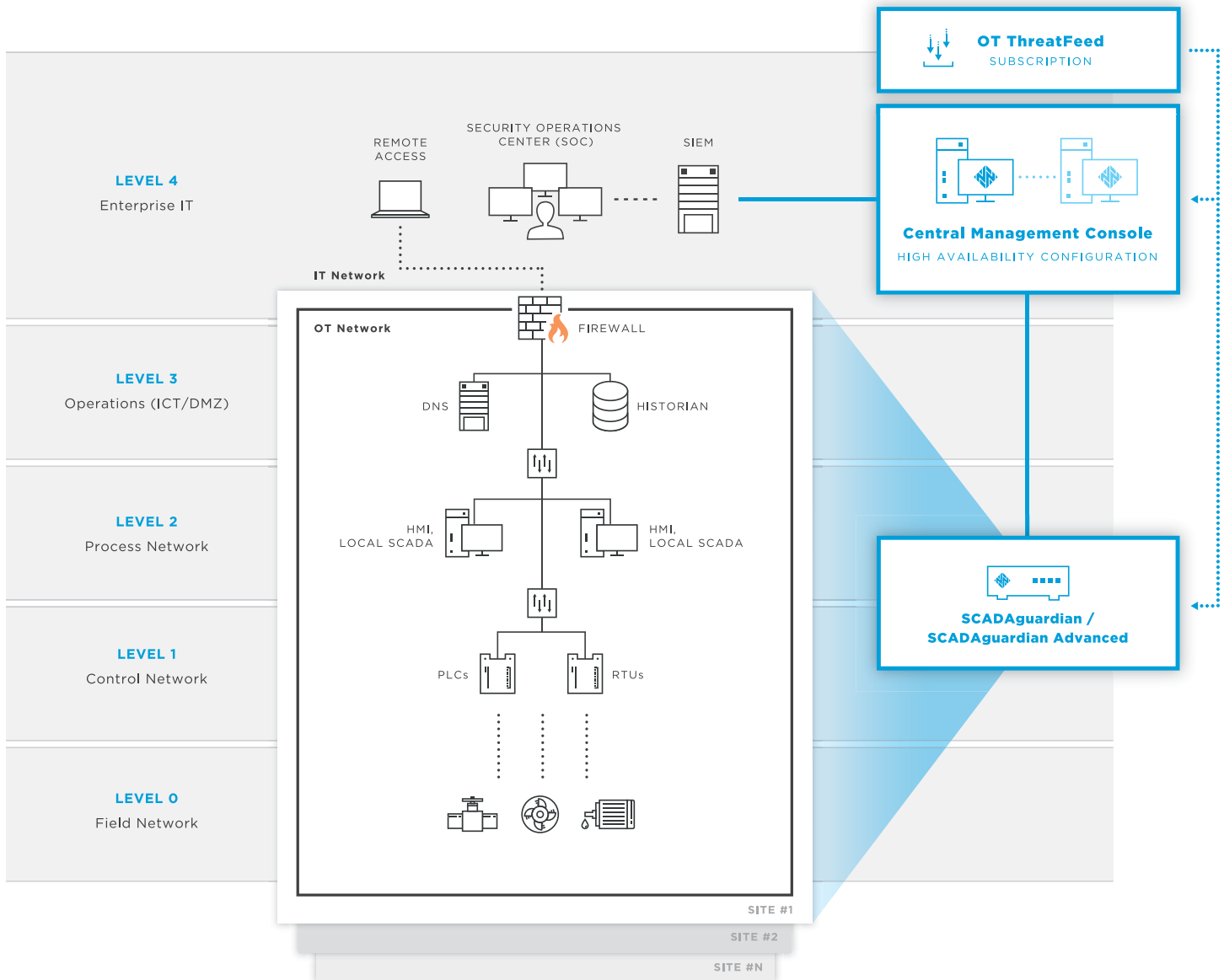
Quickly Identify New Risks to Your Industrial Systems



Rapidly Respond with Actionable Insights

# Nozomi Networks Solution

## Sample Deployment Architecture



Shown above is a general example of how the Nozomi Networks solution can be deployed. A wide variety of appliances, a flexible architecture, and integrations with other systems allow us to provide a solution tailored to meet the needs of your organization.

# What to Look for in a Real-time ICS Visibility and Cyber Security Solution

While increasing cyber threats dominate the news, there is reason to be optimistic.

New technology, such as the **Nozomi Networks solution**, is easy and safe to deploy, dramatically improves OT cyber security and integrates seamlessly with IT infrastructure.

When considering such a solution, make sure it has the advantages shown here.

- ✓ **Accurate OT Operational Visibility**
- ✓ **Advanced ICS Threat Detection**
- ✓ **Proven, Large-Scale Global Installations**
- ✓ **Swift Deployment Across Many Sites**
- ✓ **Global Partner Ecosystem**
- ✓ **Easy IT/OT Integration**
- ✓ **Extraordinary Customer Care**



## See the Nozomi Networks Solution in Action

If you would like to see our solution in action, and experience how easy it is to work with Nozomi Networks, please contact us at [nozominetworks.com/contact](https://nozominetworks.com/contact)

## Want to Know More?



DATA SHEET

**SCADAguardian**

[DOWNLOAD](#)



DATA SHEET

**SCADAguardian Advanced**

[DOWNLOAD](#)



DATA SHEET

**Central Management Console**

[DOWNLOAD](#)

For detailed information about our products, visit

[www.nozominetworks.com](https://www.nozominetworks.com)



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