



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

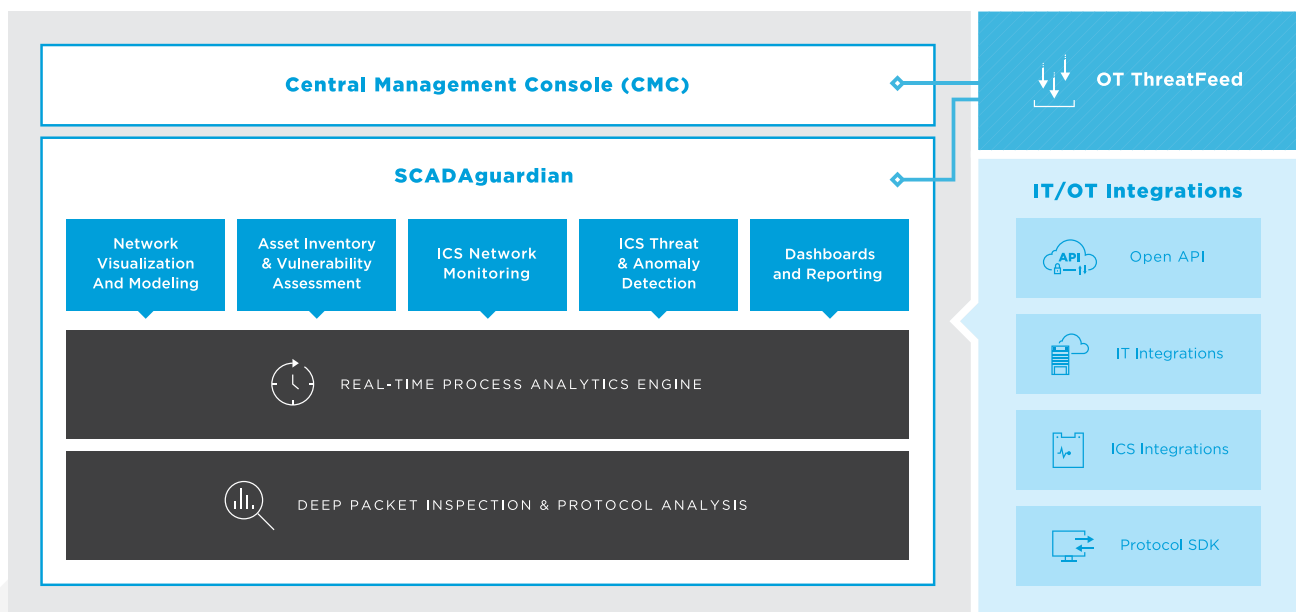


Rapidly Detect Cyber
Threats/Risks and
Process Anomalies



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.

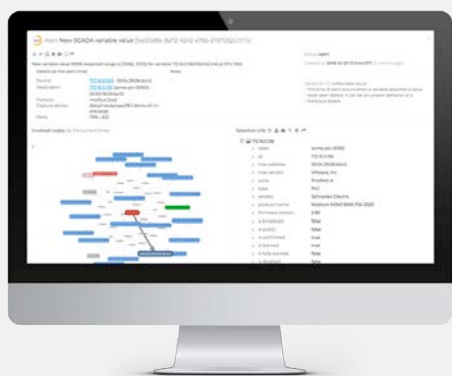
Immediately Visualize Your Industrial Network

✓ 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	Passive, 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	V100	V50	
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	A virtual appliance for very small scenarios	
Monitoring Ports	Unlimited	4	4	4	4	
Max. Protected Nodes	5,000	1,000	500	200	200	

A portable appliance, suitable for temporary scenarios, is also available. [Contact us](#) for more information.
See 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

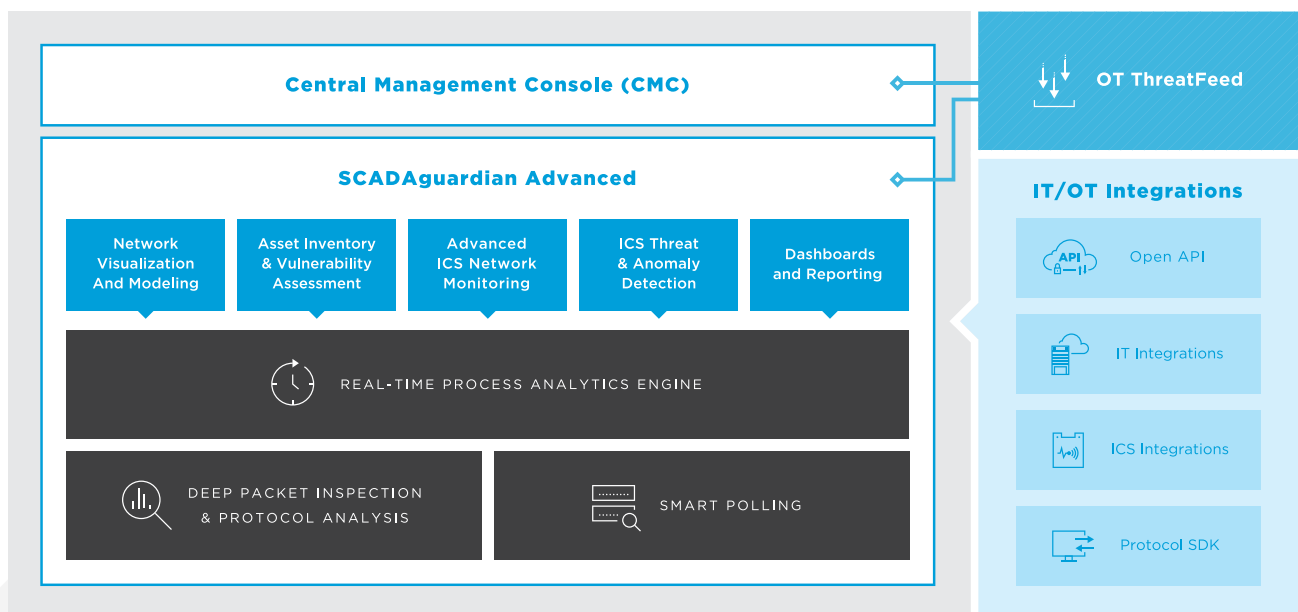


Rapidly Detect Cyber Threats/Risks and Process Anomalies



Easily Integrate and Share ICS Information with IT/OT Environments

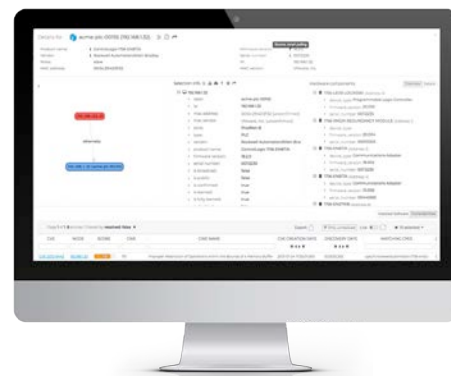
Nozomi Networks Solution Architecture - SCADAguardian Advanced Edition



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

SCADAguardian Advanced versus SCADAguardian

Functionality	Network Traffic 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	Passive, 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	V50A	
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	A virtual appliance for very small scenarios	
Monitoring Ports	Unlimited	4	4	4	4	
Max. Protected Nodes	5,000	1,000	500	200	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

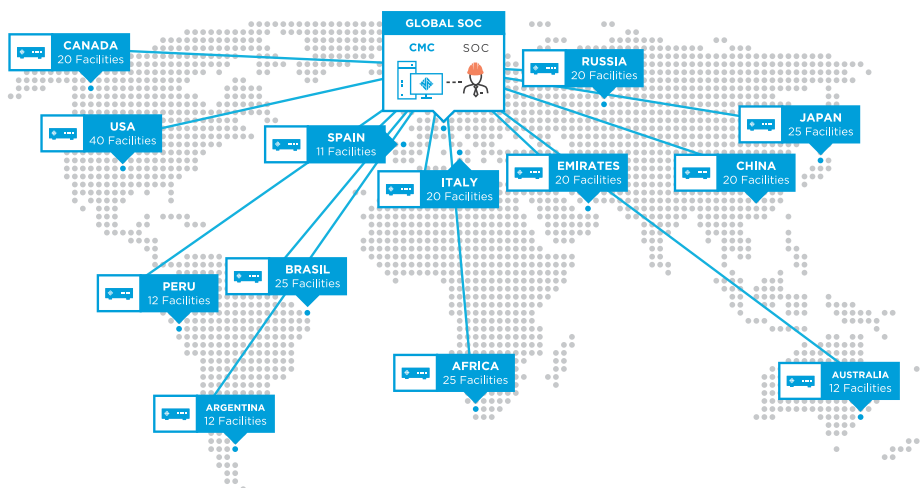
The Virtual, Multitenant CMC is Easy to Deploy and Scale

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 nozominetworks.com/techspecs for current and complete appliance details.

Sample Deployment Map: Centrally Monitor and Secure Many Facilities

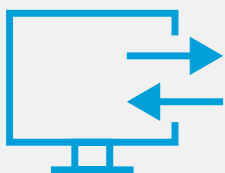


EXAMPLE GLOBAL INSTALLATIONS

500+
Hydro-generation plants on five continents

420+
Gas distribution locations

300+
Electric distribution site



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 Detection

- Detects 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



Up-to-date Threat and
Vulnerability Information



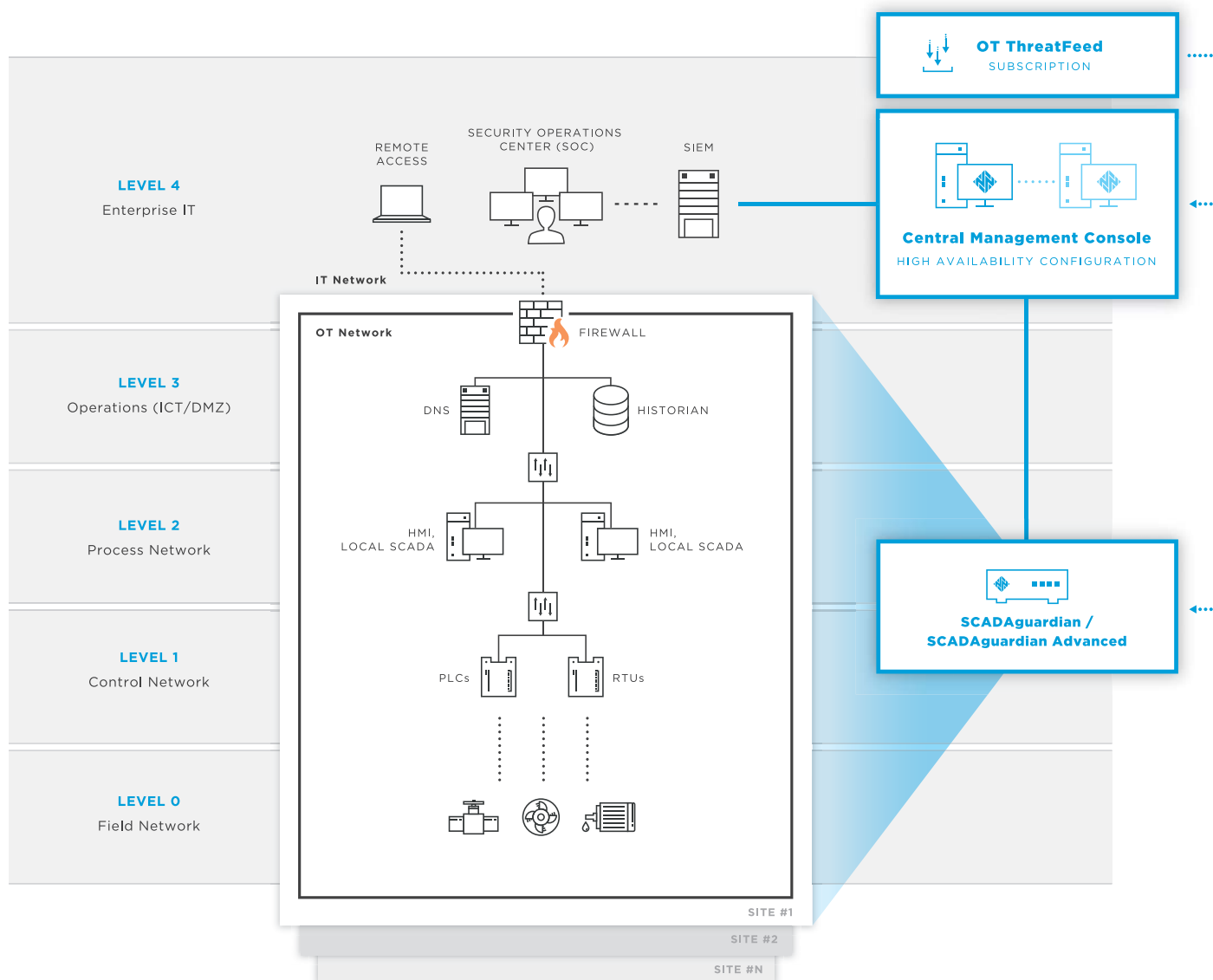
Easy, Fast Way to Review
OT Risks



Actionable Threat
Remediation 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

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



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