



# Simplifying Cybersecurity to Protect Water Treatment Facilities

Safe and clean water is essential for public health, environmental protection, and economic growth. To ensure the reliability of water purification facilities, it is critical to address the unique security constraints of Information Technology (IT), Operational Technology (OT), and distributed Internet of Things (IoT) devices.

OTORIO's Risk Assessment, Monitoring & Management platform (RAM<sup>2</sup>) is a next-generation industrial cybersecurity and digital risk management platform that is uniquely designed for converged industrial IT/OT/IoT environments comprising hundreds of multi-protocol and multi-vendor devices from different generations.

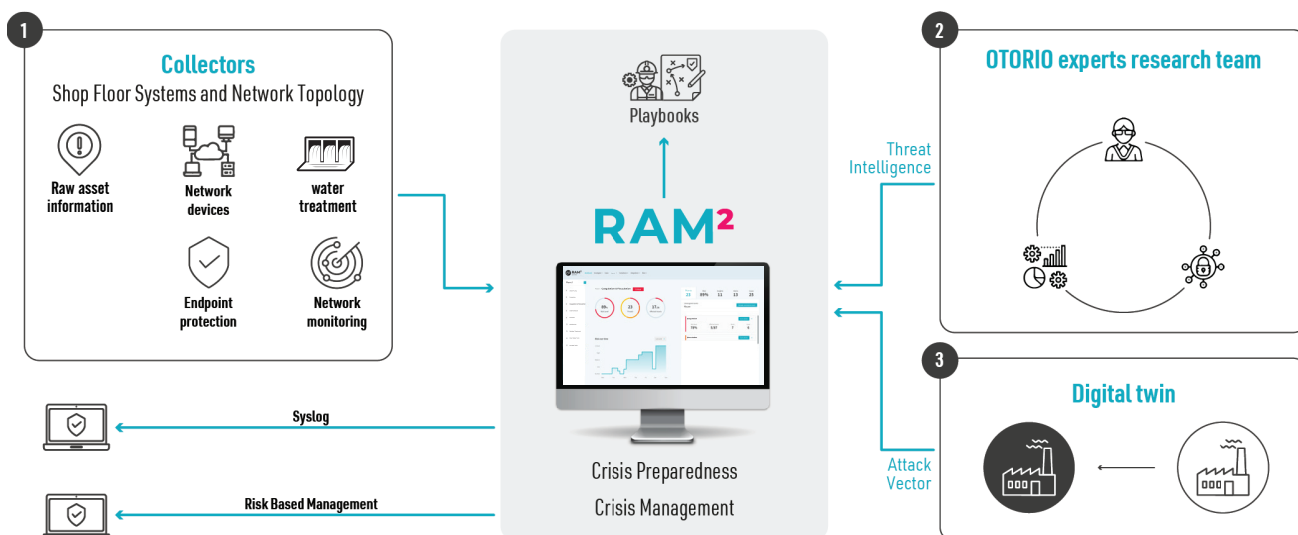
The vendor-agnostic RAM<sup>2</sup> platform collects data directly from multiple IT/OT/IoT devices, delivering a detailed asset inventory. Alerts and events from all operational and cybersecurity devices are correlated into meaningful, contextualized insights. These insights are displayed using intuitive dashboards and prioritized according to their impact on operational continuity.

Using the data it collects, RAM<sup>2</sup> creates a digital twin of the operational environment. Then, applying a non-intrusive breach and attack simulation engine, the platform allows operational and security teams to identify and proactively mitigate vulnerabilities before they become breaches. When cyber incidents require SOC intervention, RAM<sup>2</sup> facilitates seamless collaboration between operational and cyber teams, providing analysts with a tailored workbench for in-depth forensic investigation.

## OTORIO RAM<sup>2</sup> Architecture

## Benefits

- Simplifies cybersecurity processes to ensure uninterrupted operations
- Proactively identifies vulnerabilities before they become breaches
- Unique, non-intrusive breach and attack simulation
- Unmatched view of asset inventory based on location, process and impact on continuity
- Automatically-generated mitigation playbooks for multiple attack scenarios
- Simplifies compliance and auditing processes
- Tailored to environments with hundreds of multi-vendor/ multi-protocol devices
- Maximizes investments in existing IT/OT/IoT security systems
- Continuous OT security and OT compliance monitoring





## HIGH EXPOSURE

Intel collection,  
reconnaissance & initial  
access to network

Propagation and  
enumeration, gaining high  
privileges in the IT level

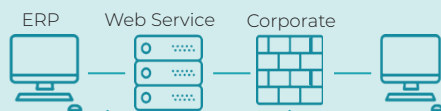
Usage of gathered  
credentials and  
footholds to reach and  
communicate with **PLCs**  
**on the operational**  
**environment**

Attackers can influence  
water treatment processes  
in any way they wish –  
**impacting operational**  
**continuity and potentially**  
**causing health hazards**

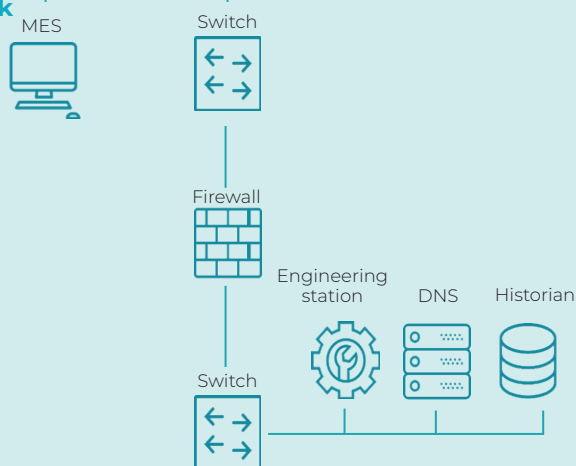
### External Internet



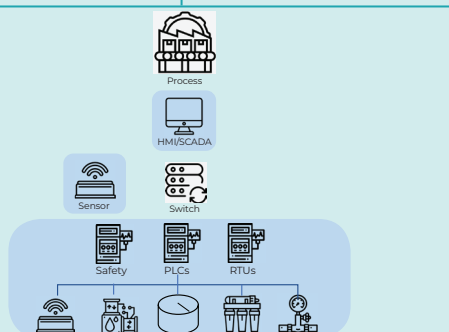
### IT Network



### OT Network



### Water Treatment Process



## SOLUTION & SERVICES

### PREVENTION



- Threat Intelligence
- Security Assessment
- Non-intrusive breach & Attack Simulation

### DETECTION



- Asset Inventory
- Detailed Insights
- Prioritized Alerts
- Analyst-in-a-box
- Compliance Gaps

### CONTAINMENT



- Automated Mitigation Playbooks
- Threat Hunting
- Incident Response

## OTORIO – Your Partner for Secure Digital Production

OTORIO, the leading OT security and digital risk management solutions provider, delivers a suite of products and services that guarantee plant safety and reliability from the network level down to the individual device.

With the OTORIO offering, every machine and connected device is monitored and controlled, ensuring that each meets the highest standards of digital safety and cybersecurity, while ensuring continuous, uninterrupted, and resilient operations that maximize digitization efficiencies.



## RAM<sup>2</sup> Key Features

### Asset Inventory and Change Management

Discovers, analyzes and monitors all assets (IT/OT/IoT) within the environment based on production process, physical location, business impact, state, and other factors for full visibility.

### Digital Twin / BAS Engine

Creates a digital twin of the IT/OT/IoT environment to conduct breach and attack simulations with zero disruption to the production environment.

### Cyber Risk Insights

Correlates alerts, asset data, and industrial context from multiple security and industrial sources to identify gaps in the security posture and early detection of attack patterns.

### Actionable Playbooks

Creates step-by-step remediation guidelines to help operational teams manage and mitigate threats efficiently.

### Case Management Tracking

Collaborates within teams, tracks progress, and communicates with external stakeholders to reduce mean time to resolution. Provides a common language for operational teams and cyber analysts, with the necessary granularity for each.

### Detailed Dashboards

Overall risk assessment

- Risk details for each operational level and process
- Risk over time
- Risk per threat category
- Prioritized insights and alerts
- Open cases
- Drill down from risk assessments to assets and alerts
- Compliance score

### Reports

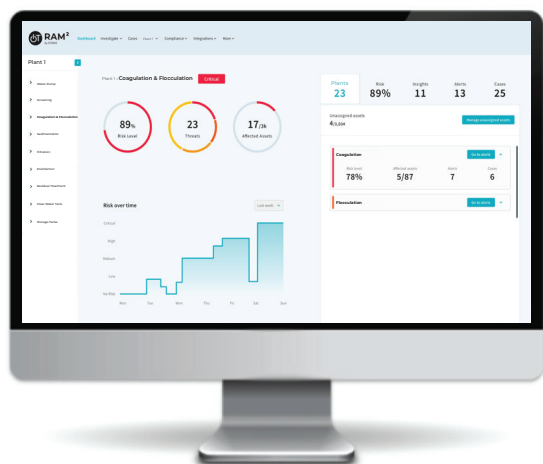
Generates and shares risk assessment, compliance, and asset inventory reports with stakeholders for transparency and cooperation.

### Integrations

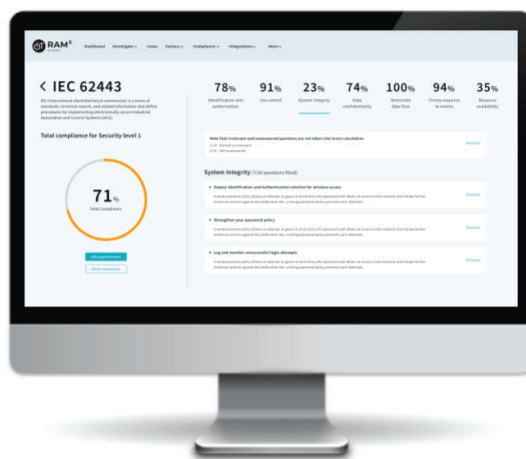
Easy sync of RAM<sup>2</sup> data with other internal security systems for a comprehensive IT/OT/IoT cybersecurity assessment. Enables collection of assets and events, and export of OTORIO insights to operations and control center for collaboration with different stakeholders.

### Compliance Tracking

Ensures that any industrial organization meets common cybersecurity best practices and standards.



RAM<sup>2</sup>



## About OTORIO

OTORIO designs and markets the next generation of OT security and digital risk management solutions. The company combines the experience of top nation-state cybersecurity experts with cutting-edge digital risk management technologies to provide the highest level of protection for the manufacturing industry. Visit our website at <https://www.otorio.com/>