



# Tenable.ot for Aruba

## Business Challenge

Unlike IT networks, industrial control systems (ICS) lack visibility, security and control.

OT networks do not have security features embedded and with increased threats targeting industrial environments, they are extremely vulnerable to attacks. Additionally, most of the devices on your network don't require authentication, making it virtually impossible to prevent unauthorized access or changes to critical devices. Moreover, as the Industrial Internet of Things (IIoT) continues to gain adoption in industrial and critical infrastructure environments, new devices are constantly coming online. Without the proper security and access control, they can introduce unacceptable risk into your network.

## Solution

Tenable.ot provides full visibility of—and safety across—your industrial network.

By combining Tenable.ot's advanced threat detection, asset and vulnerability management—both at the network and device level, along with Aruba Networks ClearPass Access Control—the joint solution delivers complete visibility, security and control, across your IT and OT environments. This includes traditional Windows-based systems, Macs and mobile devices, as well as OT devices such as industrial controllers (PLCs, RTUs, DCS controllers).

ID	IP	MAC Address	Device Name	Device Category	Host
1	10.10.10.10	00:0C:29:00:00:01	Controller #11	Programmable Logic Controller	PLC1
2	10.10.10.11	00:0C:29:00:00:02	Controller #12	Programmable Logic Controller	PLC2
3	10.10.10.12	00:0C:29:00:00:03	Controller #13	Programmable Logic Controller	PLC3
4	10.10.10.13	00:0C:29:00:00:04	Controller #14	Programmable Logic Controller	PLC4
5	10.10.10.14	00:0C:29:00:00:05	Controller #15	Programmable Logic Controller	PLC5
6	10.10.10.15	00:0C:29:00:00:06	Controller #16	Programmable Logic Controller	PLC6
7	10.10.10.16	00:0C:29:00:00:07	Controller #17	Programmable Logic Controller	PLC7
8	10.10.10.17	00:0C:29:00:00:08	Controller #18	Programmable Logic Controller	PLC8
9	10.10.10.18	00:0C:29:00:00:09	Controller #19	Programmable Logic Controller	PLC9
10	10.10.10.19	00:0C:29:00:00:0A	Controller #20	Programmable Logic Controller	PLC10
11	10.10.10.20	00:0C:29:00:00:0B	Controller #21	Programmable Logic Controller	PLC11
12	10.10.10.21	00:0C:29:00:00:0C	Controller #22	Programmable Logic Controller	PLC12
13	10.10.10.22	00:0C:29:00:00:0D	Controller #23	Programmable Logic Controller	PLC13
14	10.10.10.23	00:0C:29:00:00:0E	Controller #24	Programmable Logic Controller	PLC14
15	10.10.10.24	00:0C:29:00:00:0F	Controller #25	Programmable Logic Controller	PLC15
16	10.10.10.25	00:0C:29:00:00:10	Controller #26	Programmable Logic Controller	PLC16
17	10.10.10.26	00:0C:29:00:00:11	Controller #27	Programmable Logic Controller	PLC17
18	10.10.10.27	00:0C:29:00:00:12	Controller #28	Programmable Logic Controller	PLC18
19	10.10.10.28	00:0C:29:00:00:13	Controller #29	Programmable Logic Controller	PLC19
20	10.10.10.29	00:0C:29:00:00:14	Controller #30	Programmable Logic Controller	PLC20
21	10.10.10.30	00:0C:29:00:00:15	Controller #31	Programmable Logic Controller	PLC21
22	10.10.10.31	00:0C:29:00:00:16	Controller #32	Programmable Logic Controller	PLC22
23	10.10.10.32	00:0C:29:00:00:17	Controller #33	Programmable Logic Controller	PLC23
24	10.10.10.33	00:0C:29:00:00:18	Controller #34	Programmable Logic Controller	PLC24
25	10.10.10.34	00:0C:29:00:00:19	Controller #35	Programmable Logic Controller	PLC25
26	10.10.10.35	00:0C:29:00:00:1A	Controller #36	Programmable Logic Controller	PLC26
27	10.10.10.36	00:0C:29:00:00:1B	Controller #37	Programmable Logic Controller	PLC27
28	10.10.10.37	00:0C:29:00:00:1C	Controller #38	Programmable Logic Controller	PLC28
29	10.10.10.38	00:0C:29:00:00:1D	Controller #39	Programmable Logic Controller	PLC29
30	10.10.10.39	00:0C:29:00:00:1E	Controller #40	Programmable Logic Controller	PLC30
31	10.10.10.40	00:0C:29:00:00:1F	Controller #41	Programmable Logic Controller	PLC31
32	10.10.10.41	00:0C:29:00:00:20	Controller #42	Programmable Logic Controller	PLC32
33	10.10.10.42	00:0C:29:00:00:21	Controller #43	Programmable Logic Controller	PLC33
34	10.10.10.43	00:0C:29:00:00:22	Controller #44	Programmable Logic Controller	PLC34
35	10.10.10.44	00:0C:29:00:00:23	Controller #45	Programmable Logic Controller	PLC35
36	10.10.10.45	00:0C:29:00:00:24	Controller #46	Programmable Logic Controller	PLC36
37	10.10.10.46	00:0C:29:00:00:25	Controller #47	Programmable Logic Controller	PLC37
38	10.10.10.47	00:0C:29:00:00:26	Controller #48	Programmable Logic Controller	PLC38
39	10.10.10.48	00:0C:29:00:00:27	Controller #49	Programmable Logic Controller	PLC39
40	10.10.10.49	00:0C:29:00:00:28	Controller #50	Programmable Logic Controller	PLC40

If you rely on ClearPass to provide visibility and control for your IT environments, you can now get visibility on your OT networks with the same granularity, policies and workflow. This enables you to effectively detect and mitigate threats to the safety, reliability and continuity of your IT and OT converged environment.



a Hewlett Packard Enterprise company

## Technology Components

- Tenable.ot
- Aruba Networks ClearPass

## The Challenge

- Lack of a comprehensive view across your entire industrial infrastructure
- Inability to detect and mitigate threats impacting your IT and OT environments
- No situational awareness into who accesses restricted assets or the operations they perform
- No automated OT asset discovery and inventory management

## Key Benefits

- End-to-end visibility and security for OT networks
- Automated asset discovery and management
- Continuous validation of asset configurations
- Access control and audit trail based on job role or authority
- Improved incident response and threat mitigation

## ABOUT TENABLE

Tenable®, Inc. is the Cyber Exposure company. Over 30,000 organizations around the globe rely on Tenable to understand and reduce cyber risk. As the creator of Nessus®, Tenable extended its expertise in vulnerabilities to deliver the world's first platform to see and secure any digital asset on any computing platform. Tenable customers include more than 50 percent of the Fortune 500, more than 30 percent of the Global 2000 and large government agencies. Learn more at [www.tenable.com](http://www.tenable.com).

## ABOUT ARUBA, AN HP COMPANY

Aruba, a Hewlett Packard Enterprise company, is a leading provider of secure, intelligent networks that enable customers to thrive and deliver amazing digital experiences in the mobile, IoT and cloud era. We are changing the rules of networking to make it simple for IT and organizations to bridge the physical and digital worlds at the Edge.

# Key Components

## Managing IT and OT Assets in Industrial Networks

Since industrial networks lack access controls, new unmanaged connected devices can potentially introduce threats into these sensitive environments. Lack of automated asset discovery and management is also at the root of many operational incidents resulting from contractors, integrators or employees working on the wrong assets. Such incidents can result in severe operational disruptions. In addition, an unmanaged asset inventory is harder to support and maintain since it's not always clear which assets you should upgrade or patch, or which spare parts you need.

## Detecting Threats to Operational Environments

As more and more industrial networks connect to corporate environments and cloud solutions, their risk exposure profile increases. Since OT environments are different from IT environments and use different proprietary protocols, IT security solutions like firewalls and intrusion detection solutions (IDS) are inadequate for threat detection.

NAC systems and other IT visibility tools are not effective across your OT environment because you cannot use agents on OT devices and IT scanning tools can make OT unstable. In addition, critical control devices lack event logs, so event tracing is nearly impossible.

Edit Endpoint			
Endpoint	Attributes	Fingerprints	
MAC Address	001d9cd42de9	IP Address	10.100.101.155
Description	PLC 12938	Static IP	FALSE
Status	<input checked="" type="radio"/> Known client <input type="radio"/> Unknown client <input type="radio"/> Disabled client	Hostname	Rouge
MAC Vendor	Rockwell Automation	Device Category	Programmable Logic Con
Added by	oauth2:Client:Indegy	Device OS Family	Rockwell ControlLogix55
Online Status	Not Available	Device Name	1756-L61/B LOGIX5561
Connection Type	Unknown	Added At	Apr 23, 2019 15:32:55 IDT
		Last Profiled At	May 06, 2019 16:54:40 IDT

## Validating Configurations and Managing Changes

Controller configuration settings directly impact the industrial processes they manage. Any unauthorized change to the configuration logic or firmware can result in severe disruptions and damaged equipment.

Without a backup of past configurations and proper access controls that validate the operator's identity, it is difficult to ensure authorized work and it is not possible to restore a controller to a previously known good configuration after an incident.

The Tenable.ot and Aruba ClearPass solution provides visibility, security and access control to your IT and OT devices within industrial networks thereby reducing your overall cyber exposure and mitigating unacceptable risk.

## More Information

For support please contact: [support@tenable.com](mailto:support@tenable.com)

COPYRIGHT 2020 TENABLE, INC. ALL RIGHTS RESERVED. TENABLE, TENABLE.IO, TENABLE NETWORK SECURITY, NESSUS, SECURITYCENTER, SECURITYCENTER CONTINUOUS VIEW AND LOG CORRELATION ENGINE ARE REGISTERED TRADEMARKS OF TENABLE, INC. TENABLE.SC, TENABLE.OT, LUMIN, INDEGY, ASSURE, AND THE CYBER EXPOSURE COMPANY ARE TRADEMARKS OF TENABLE, INC. ALL OTHER PRODUCTS OR SERVICES ARE TRADEMARKS OF THEIR RESPECTIVE OWNERS.