



Medigate and Cisco™ Advance NACs for Healthcare

Medigate and Cisco partner to deliver a clinically-based access control solution

Why NACs Alone Aren't Enough

Clinical networks, like any other mission-critical network, require high security standards. Network Access Control (NAC) products are a central part of a comprehensive security solution, ensuring authorized access to network resources by users and devices. Like in many other industries, healthcare organizations need to manage authorization levels for users and devices, control authentication processes and manage use of network resources. NACs provide real-time information about connected endpoints, and the ability to set dedicated access policies and take action against suspicious devices and activities.

In clinical environments, a NAC requires more detailed medical device information.

First, because medical devices are not designed to be network-managed, NACs are not able to present the necessary detailed information on many connected devices, resulting in highly limited network visibility. Furthermore, for similar reasons, NACs cannot perform posture enforcement on medical devices, e.g. verifying updated software versions.

Second, setting efficient access policies for medical devices through NACs require an intimate understanding of clinical workflows, device functionality, as well as numerous vendors and proprietary protocols. Only with such understanding can administrators create the granular policies and access rules needed to protect the network.

The Solution

Organizations can now leverage their existing ISE infrastructure to incorporate Medigate's dedicated medical device security platform. Medigate powers Cisco ISE with its detailed understanding of medical devices and their protocols to create more accurate device profiles, enabling deeper visibility into all connected medical devices and more granular access policies.

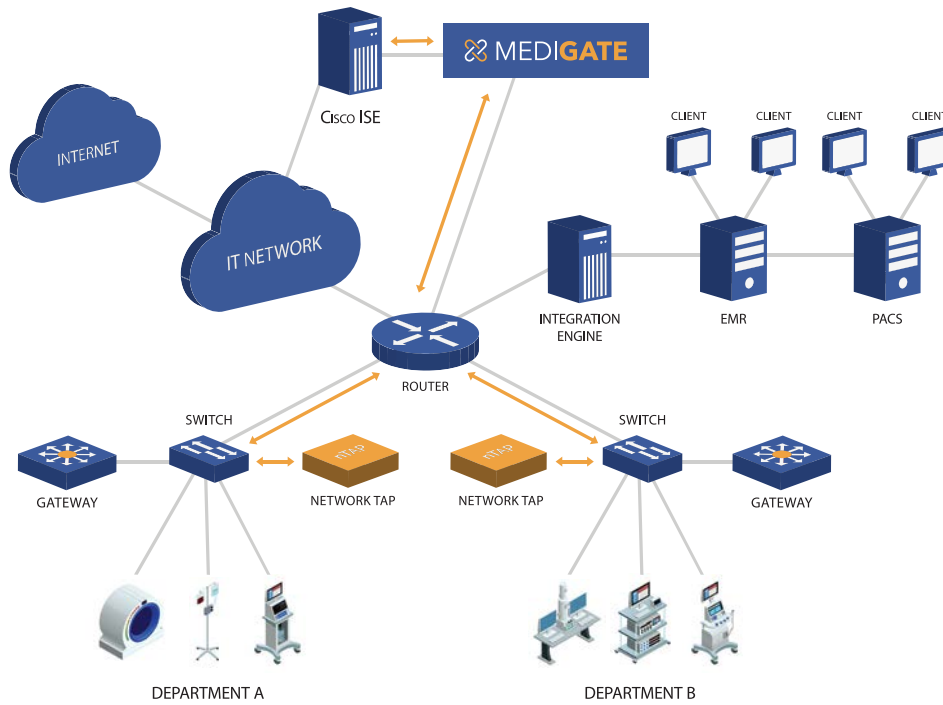
The joint solution combines the strengths of both the Cisco ISE and Medigate platforms.

Medigate fuses the knowledge and understanding of medical workflow and device identity and protocols with its networking expertise to provide full visibility of connected medical devices, analyze network traffic to detect anomalous behavior and prioritize threats based on clinical context.

Cisco ISE provides industry-leading access control capabilities, including granting network visibility of IT devices, enforcing highly customizable access policies and facilitating swift action against unsafe devices.


Additionally, the joint solution utilizes information obtained through the Cisco ISE to detect anomalous behavior and trigger alerts with clinical context that can be converted to active actions in the network, executed by Cisco ISE.

Medigate - Cisco ISE Solution Architecture Example



Device information received from Cisco ISE

Device Information



No Image Available

● N/A

N/A


▲ Risk Score: Low

[Add Description](#)

IP	172.16.21.50	MAC	00:09:fb:2d:be:05
MANUFACTURER	NOT DETECTED	DEVICE TYPE	NOT DETECTED
DEVICE MODEL	NOT DETECTED	HW VERSION	NOT DETECTED
OS	NOT DETECTED	OS VERSION	NOT DETECTED
APP VERSION	NOT DETECTED	SERIAL NUMBER	NOT DETECTED
PROTOCOLS	NOT DETECTED	VLAN	NOT DETECTED
IP ASSIGNMENT	Static	CONNECTION TYPE	Wired
ISE PROFILE	Philips-Device	AUTHENTICATION METHOD	WiredMAB
SWITCH IP	172.16.21.5	SWITCH INTERFACE	GigabitEthernet0/2

Updated device information after Medigate's analysis

Device Information



● IntelliVue MP5T

Philips

▲ Risk Score: Medium

IP	172.16.21.50	MAC	00:09:fb:2d:be:05
MANUFACTURER	Philips	DEVICE TYPE	Patient Monitor
DEVICE MODEL	IntelliVue MP5T	HW VERSION	A.00.22
OS	Proprietary	OS VERSION	Philips RTOS
APP VERSION	L.01.10	SERIAL NUMBER	DE35145267
PROTOCOLS	Philips Data Export	VLAN	8
IP ASSIGNMENT	Static	CONNECTION TYPE	Wired
ISE PROFILE	Philips-Device	AUTHENTICATION METHOD	WiredMAB
SWITCH IP	172.16.21.5	SWITCH INTERFACE	GigabitEthernet0/2

For more information about the Medigate platform, visit www.medigate.io or contact your local account representative at info@medigate.io