CSOI versus SD-WAN Solutions

Cybersecurity Operations Infrastructure (CSOI) and traditional SD-WAN's provide secure optimized networking while approaching the problem from different angles with distinct features and architectures.

What sets CSOI apart from traditional SD-WAN?

The traditional SD-WAN is designed to securely connect different networks over an unsecured intermediate network like the Internet, allowing office-to-office communications. CSOI is primarily focused on connecting specific devices, whether those devices are OT or IT and physical or virtual, in a secure manner. Traditional SD-WAN deployments focus on network layer control and access. CSOI provides device level access controls adhering to Zero Trust framework guidelines.

Traditional SD-WAN

SD-WAN optimizes connectivity for offices and data centers by using multiple links and cost-based routing to efficiently manage traffic between sites. The SD-WAN controller offers a network layer view of the traffic that shows the bandwidth consumed on the different links. The emphasis of SD-WAN is on optimizing bandwidth and the costs associated with the network traffic.

CSOI

CSOI is focused on Zero Trust connectivity of network devices, in which every device must authenticate and be authorized to participate in network communications. The primary use of CSOI is to create a Software-Defined Perimeter (SDP) to add layers of security and protect essential devices. CSOI provides granular access and visibility to the network traffic.

CSOI uses strong cryptographic identities when making connections – meaning that only the identified devices are allowed to communicate through policy defined enforcement. CSOI is designed to be a specific solution to the need of connecting different classes of devices such as compute, sensor, remote control, and monitoring. The feature set and configuration are designed to be straight forward allowing the operator to easily connect to destination systems.

Summary

While both CSOI and traditional SD-WAN's provide secure site-to-site connectivity, they do so in very different ways. CSOI is security-first, built for zero trust and micro-segmentation while being ideal for scenarios where isolating devices and securing every connection is critical. SD-WAN is performance-first, focusing on optimizing WAN traffic and improving cost-efficiency across distributed networks, with security often as an add-on after thought.

CSOI and SD-WAN can be complementary, depending on the use case. While SD-WAN solves bandwidth and performance issues, CSOI secures the endpoints and allows segmenting the network to protect critical resources per Zero Trust doctrine.

Let's Start A Conversation!

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