

Software-Defined Access:
Network Assurance and
Analytics with Granular Insight

Description

A SD-Access platform provides automated access control, apply the right policies and introduces the appropriate level of segmentation for users, devices and applications across a network environment. This is accomplished with a single network fabric for LANs and WLANs to create a consistent user experience, anywhere, and assuring the highest security commitment.

The target of this demo is to show examples of SD-A functionality, checking how users or devices receive granted access to the network or are rejected and how Encrypted Traffic Analytics and Stealthwatch can even detect a malicious encrypted flow when an infected element tries to gain access to our network.

Main Components

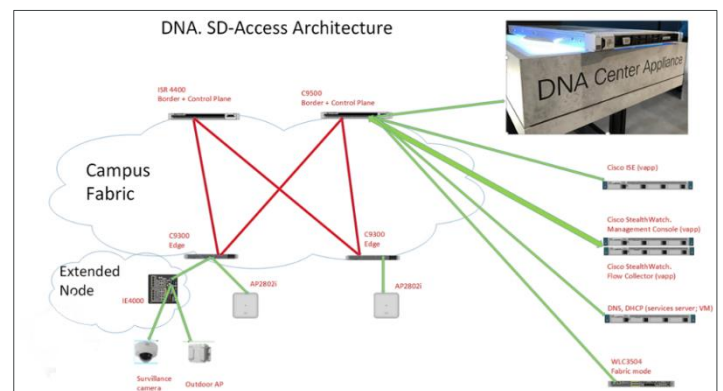
Cisco DNA Center: Central management plane for SD-Access fabric. Also provides Automation, assurance and network components analytics.

Cisco Identity Services Engine (ISE): Policy enforcement capabilities.

Encrypted Traffic Analytics (ETA) feature: Enhanced NetFlow & Stealthwatch Enterprise

Network elements or SD-A Fabric: Border nodes (ISR 4400, C9500) & Edge nodes (C9300s)

Endpoints, extended node and Wireless LAN Controller.



Benefits of the integration:

- Consistent management and automation of any network provisioning.
- Group base policy definition and network segmentation.
- Integration with third-party solutions through programmable interfaces.
- Network assurance and analytics with granular insight into who the users are, the devices they use, and the applications they access.

Use Cases: Industry examples

SD-Access provides an efficient and secure network fabric in those industry segments with the highest access control and security requirements:

- Finance: Banking and Insurance (Always demanding best of breed levels of security to protect their assets).
- Utilities, Petroleum, R&D...
- Health (Managing private and sensitive personal information. This sector has offered our first SD-Access project in Spain).
- University campuses (Multipurpose technology projects and user groups with different access privileges and frequently also coexisting with external collaboration agreements).
- IoT environments (Providing a leading-edge security protection and access policies for any new IoT sensors, cameras, outdoor access points or any other industry devices).