

Cisco Catalyst Instant Access



Cisco® Catalyst® Instant Access is a solution that allows customers to dramatically simplify campus network operations. It simplifies operation through a single point of operation and management for campus access and backbone. The solution is composed of Cisco Catalyst 6500 or Catalyst 6800 Series backbone switches and Cisco Catalyst 6800ia Series Switches (Instant Access). The Cisco Catalyst 6800ia Series Switches operate like remote line cards and are physically connected by uplinks to the Cisco Catalyst 6500 or 6800. This allows Catalyst 6500/6800 features to be extended to network access e.g. MPLS/EVN in access. This solution is optimized for wired devices with centralized wireless. The entire configuration works as a single extended switch with a single management domain.

In a traditional architecture, each device is managed separately. (See Figure 1).

In the new Instant Access architecture, all the devices are managed as one device. (See Figure 2).

Figure 1. Traditional Architecture

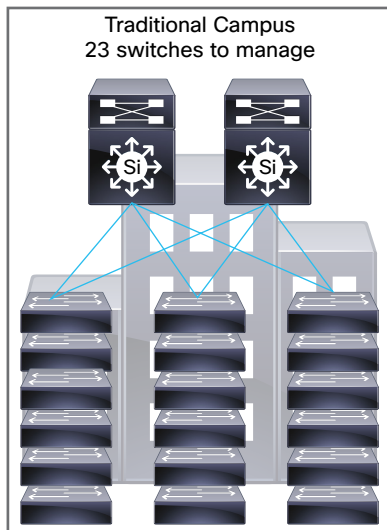
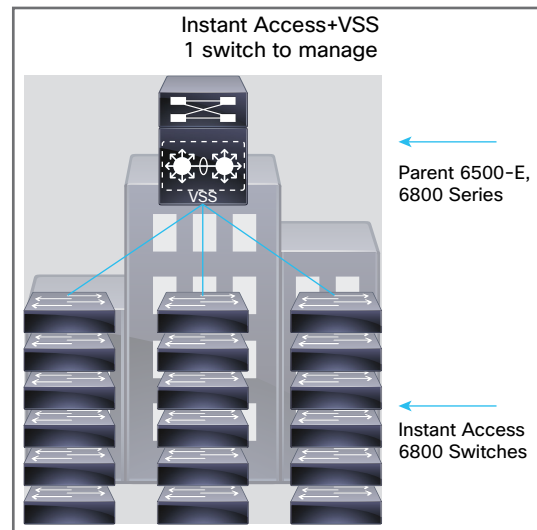


Figure 2. Instant Access Architecture



Challenges That Instant Access Solves

A typical campus network or large branch consists of several buildings with multiple floors and many access switches that connect multiple wired and wireless devices. Adding new devices or services to the network can be challenging because of the disparate network switches:

- **Individual access switch configuration:** All access switch configurations are performed individually switch by switch. This is time consuming and inefficient.
- **Inconsistent features:** The access features could be inconsistent and error prone because of multiple software revisions and different hardware models.
- **Multiple software image management:** Each access switch requires individual software image installation and upgrades. This is time consuming, and multiple software images might lead to inconsistency.
- **Slower service rollouts:** New network services take considerable time to roll out and can be error prone because of all of the preceding factors.

Benefits

- **Single point** of management, configuration, and troubleshooting.
- **Simplified network design** for VLANs, port channels, and other design considerations.
- **Standard Cisco Catalyst feature support:** Standard features such as Power over Ethernet Plus (PoE+), stacking, enabling a switch on the front panel of an access switch are all supported.
- **Single switch configuration:** With Cisco Catalyst Instant Access, all access switches are configured and managed at the distribution switch. This saves time and increases efficiency.
- **Consistent features:** Instant Access makes sure of feature consistency across the Instant Access distribution and access because access switches behave like a single extended switch. Network downtime because of access feature inconsistencies is eliminated.
- **Single consistent security policy:** Instant Access provides a single consistent security policy across the Instant Access system because the security policies are applied on the single extended switch. IT can stay compliant with regulations cost effectively.
- **Single software image management:** With Instant Access, only the extended switch needs software image installation and upgrades. This saves time and maintains software image consistency across switches.
- **Accelerated service rollouts:** Instant Access accelerates new services (IPv6, bring your own device [BYOD], video collaboration, IPTV, guest networks, and so on). The service rollout is fast and less prone to error because of single switch qualification and staging.