

Cisco Application Policy Infrastructure Controller Enterprise Module

Overview

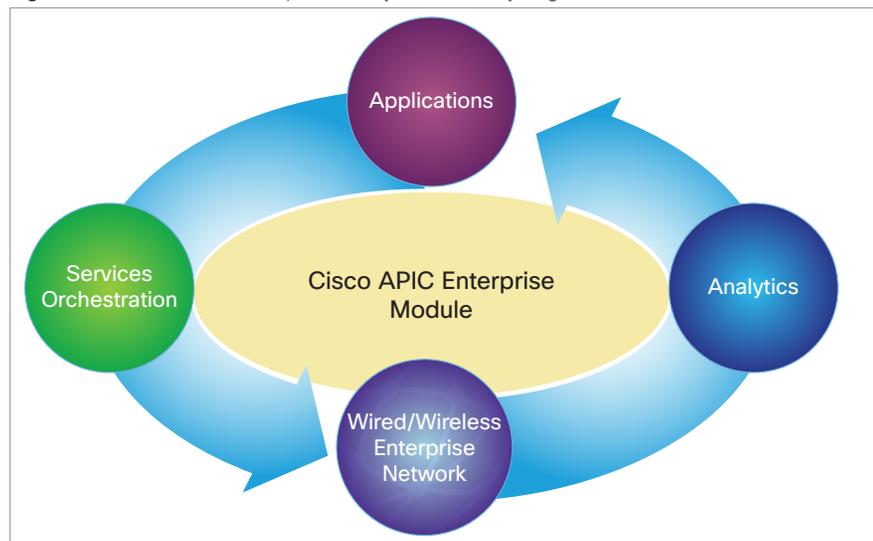


The Cisco® Application Policy Infrastructure Controller (APIC) Enterprise Module is a key component of the Cisco ONE Enterprise Networks Architecture. It's a software controller that massively simplifies enterprise networks for the next generation of IT.

The controller supports your existing network infrastructure, providing investment protection. It gives you a programmatic interface for setting policies and provisioning services across your network of Cisco Catalyst® switches, Cisco Integrated Services Routers (ISR), and Cisco Aggregation Services Routers (ASR). Use it to eliminate network complexity and simply run your physical and virtual network automatically from any x86 or virtualization-enabled computer.

To let you do that, the Cisco APIC Enterprise Module translates business policy directly into network device-level policy. It automates the deployment, compliance checking, and enforcement of network policies across your network to relieve you of the most pressing, complex, and tedious IT tasks. It uses an open and programmable approach to network-wide security, ACL change management, WAN path optimization, and quality of service (QoS). These capabilities collectively pave the way for incremental adoption of software-defined networking (SDN) in your organization.

Figure 1. Your Central Enterprise Policy and Security Engine



It's Time to Automate the Network

Complexity has become a roadblock to on-time enterprise network service delivery and quality. The need to turn up new services quickly no longer allows time for manual, box-by-box network changes and application deployments. It also doesn't allow for silos of disjointed network management and policy setting. Instead, you need to integrate your network resources and gain dynamic control over them with a global network view and policy platform. Complete network visibility and automated policy setting and enforcement are requirements for keeping pace with change in today's competitive organizations and for preventing network operational expenses from spiraling out of control.

Policy-Based, No Manual Intervention

Here's what's different: The Cisco APIC Enterprise Module provides an open and programmable approach to networking through open APIs for policy-based management and security. The approach automates what has typically been tedious manual configuration.

The controller provisions network services consistently and provides rich network information and analytics across all network resources: LAN and WAN, wired and wireless, and physical and virtual infrastructures. This visibility allows you to optimize services and support new applications and business models. The controller bridges the gap between open, programmable network elements and the applications that communicate with them, automating the provisioning of the entire end-to-end infrastructure.

How Do You Benefit?

The Cisco APIC Enterprise Module makes network operations a whole lot simpler, faster, and at a lower cost. It frees the IT department to focus on business innovation by deploying new network devices and applications rapidly. For example, you get:

- Consistency across the enterprise network keeps downtime to a minimum and lowers operational complexity and associated cost.
- Automated end-to-end provisioning and configuration enable rapid deployment of applications and services. And provisioning times drop from months to hours.
- Open and programmable network devices, policy, data, and analytics drive business innovation by providing easy access to network intelligence.
- Support for greenfield and brownfield deployments lets you implement programmability and automation with the infrastructure you already have.



Why Cisco?

Only Cisco can provide software-defined networking (SDN) capabilities needed by today's networks across your branch and campus, data center, and service provider networks. Cisco massively simplifies networks through programmability with an architectural approach and open APIs. Cisco services provide end-to-end guidance to help customers achieve maximum benefit from SDN and tie network performance directly to business priorities.

Next Steps

To learn more about the Cisco Application Policy Infrastructure Controller (APIC) Enterprise Module, go to http://www.cisco.com/go/apic_enterprise. To find out more about how Cisco ONE can ease and lower the cost of network operations, visit the Cisco ONE knowledge portal or the Cisco ONE Educational Webcast Series. All related Cisco ONE Services can be found by visiting http://www.cisco.com/web/solutions/trends/open_network_environment/professional.html