



Product Overview

The SecoManager Security Controller is a unified security controller provided by Huawei for different scenarios such as DCs, campus networks, Branch. It provides security service orchestration and unified policy management, supports service-based and visualized security functions, and forms a proactive network-wide security protection system together with network devices, security devices, and Big Data intelligent analysis system for comprehensive threat detection, analysis, and response.

Product Highlights

Multi-dimensional and automatic policy orchestration, security service deployment within minutes

- Application mutual access mapping and application-based policy management: Policy management transitions from the IP addressbased perspective to the application mutual access relationshipbased perspective.
- Policy management based on service partitions: Policy management transitions from the security zone-based perspective to the service partition-based perspective.
- Management scope of devices and policies defined by protected network segments to facilitate policy orchestration: A protected network segment is a basic model of security service orchestration and can be considered as a range of user network segments protected by a firewall. It can be configured manually or through network topology learning.
- Automatic security service deployment: Diversified security services bring security assurance for enterprise operations. Technologies such as protected network segment, automatic policy orchestration, and automatic traffic diversion based on service function chains (SFCs) enable differentiated tenant security policies.

Intelligent policy O&M to reduce O&M costs by 80%

• Policy compliance check: Security policy compliance check needs

to be confirmed by the security approval owner. The average number of policy approval items that need to be processed per day ranges from several to hundreds. After a policy is submitted to the SecoManager Security Controller, the SecoManager Security Controller checks the policy based on the defined compliance check rules and reports the check result and security level to the security approval owner in a timely manner. In this way, low-risk policies can be automatically approved, and the security approval owner needs to pay attention only to non-compliant policy items, improving the approval efficiency and avoiding the issues that the approval is not timely and that a risky policy is omitted.

- Policy simulation: Based on the learning result of service mutual access relationships, the policies to be deployed are compared, and their deployment is simulated to assess the impact of the deployment, effectively reducing the risks brought by policy deployment to services.
- Policy redundancy analysis: After a policy is deployed, redundancy analysis and hit analysis are performed for policies on the entire network, and the policy tuning algorithm is used, deleting redundant policies and helping you focus on policies closely relevant to services.

Network collaboration and security association for closed-loop threat handling within minutes

- Collaboration with network for threat handling: The SecoManager Security Controller learns mappings between service policies and security policies based on the network topology, and collaborates with the data center SDN management and control system (iMaster NCE-Fabric) or to divert tenant traffic to corresponding security devices based on SFCs on demand.
- Collaboration with security: The Big Data security product HiSec Insight can effectively identify unknown threats based on network behavior analysis and correlation analysis technologies. The threat handling method, namely isolation or blocking, is determined based on the threat severity. For north-south threats, the SecoManager Security Controller delivers quintuple blocking policies to security devices. For east-west threats, isolation requests are delivered to the network SDN management and control system to control switches or routers to isolate threatened hosts.

Product Deployment

- Independent deployment: The SecoManager Security Controller is deployed on a server or VM as independent software.
- Integrated deployment: The SecoManager Security Controller and SDN controller are deployed on the same physical server and same VM.



Typical Applications

Conventional network: Centralized management of security policies on the entire network

- For organizations with a large number of branches, such as large-scale retail chains, large-scale logistics enterprises, and finance business outlets, the SecoManager Security Controller can centrally manage a large number of security NEs.
- The SecoManager Security Controller can connect to an enterprise's work order system for automated policy compliance check, policy orchestration, and policy delivery.
- The SecoManager Security Controller can analyze the reasonability of deployed policies and improve O&M efficiency through

policy compliance check, policy redundancy analysis, and policy consistency comparison.

SDN network: Unified management of network-wide security policies and multi-dimensional threat prevention.

- Collaboration with the SDN management and control system to detect network topology changes and implement tenant-based automatic security service deployment.
- North-south threat blocking, east-west threat isolation, and refined SDN network security control through SFC-based traffic diversion.
- Interworking with the cloud platform to automatically convert service policies to security policies.



Product Specifications

Major Functions		
Category	Sub-Category	Description
Basic NE management	Device management	Device discovery, device management (firewall and IPS), (three-level) device group management, virtual system management, configuration consistency check, device SSO, HSB management, customized rights- and domain-based management, system template, device monitoring, and global monitoring
	Resource pool management	Resource pool adding, deletion, modification, and query
	Object management	Address, service, time range, NAT address pool, URL category, IPS, antivirus, URL filtering, APT, application host, network partition management, and application group
	Policy management	Security policy, NAT policy, VPC policy, IPSec policy, security service, and task deployment
Policy collaboration	Big Data security collaboration	Receiving threat handling requests from the big data security analysis system and sending them to threat blocking devices
	Controller collaboration	Network topology awareness and SFC-based traffic diversion policy delivery
Policy orchestration	Automatic delivery of security policies based on network partitions, application mutual access relationships, security services, and VPCs	
Policy tuning	Policy tuning based on redundancy analysis results	
Policy simulation	Analysis of policy change impacts on application services based on simulation results before policy changes	
Operating Environment		
X86 hardware requirements	CPU: 2.4GHz, 16-core Memory: 64 GB Hard disk: 2 x 600G RAID1 Network: 6 x GE	
ARM hardware requirements	CPU: 2.6GHz, 2*32-core Memory: 128G Hard disk: 2 x 1200G RAID1 Network: 4 x GE + 4 x 10GE	
Software requirements	Operating system: • X86: Euler OS 2.0 SP5 • ARM: Euler OS 2.0 SP8 Virtualization software (If the SecoManager Security Controller is deployed on a VM, the virtualization software must be prepared.) • FusionCompute KVM 6.5 • FusionSohere 6.3	

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