



Secure IP Address Management Layer 2 Network Access Control Solution



SOLUTION OVERVIEW



IPScan is the only solution that provides complete control over all IP/MAC access onto the network. IPScan automatically detects and documents every ethernet and IP address that attempts the network access, and enforces centrally defined policies in real-time, with the ability to block unauthorized devices from communicating on the network.

IPScan is deployed by hundreds of large enterprises, service providers, governments and military agencies and educational institutions. IPScan consists of four components: (1) administrative console software, (2) centralized server, (3) database(MariaDB, MySQL, MS SQL, Oracle), and (4) distributed hardware; probes.

IPScan XE Features

Dynamic IP management - secure DHCP server

- Secure Brief Server
- Quarantine unauthorized DHCP client
 Network access time control for visitor
- MAC address filtering for access security
- · Static IP address control in DHCP pool
- Unknown DHCP server detection

Secure IP/MAC management

- Static IP address management
- Real-time IP/MAC status update for entire network: online/offline/unused/expired, IP change, new IP, new MAC, IP conflict, etc.
- · Unused IP reservation
- IP/MAC binding
- · Group & description

LAN access control & L2 security

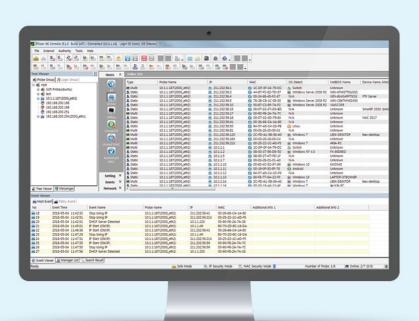
- Appliance based NAC policy enforcer (non 802.1x)
- · Improve vulnerability management process
- L2 Security: controlling access by MAC address filtering
- Manual / automatic network access control:
 IP blocking / MAC blocking
- Increase wireless network access security (AP bridge mode)

IP conflict management

• IP protection on mission critical devices

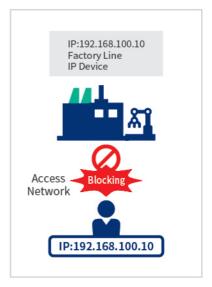
Automatic IP/MAC inventory

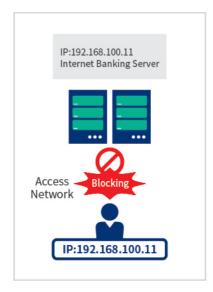
· Online, offline, unused IP/MAC address

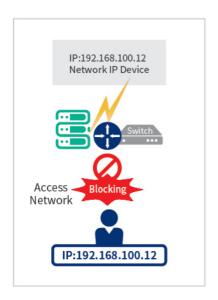


SOLUTION REVIEW

Protection from IP Conflicts



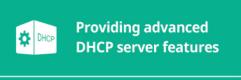




Major Functions



- No need to apply PC based agent program
- No need of network upgrade (802.1x)
- Easy control of user interface
- Supports 802.1q to manage multi-VLAN environment



- Embedded DHCP function
- Controls entire IP devices regardless of IP management environment



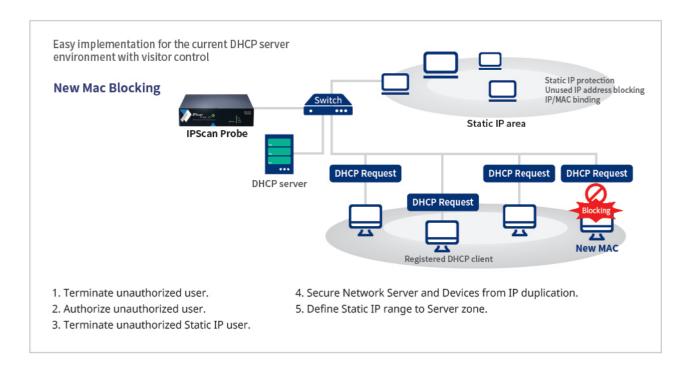
- Controls devices regardless of operating system
- Agentless control solution
- Controls network devices (Switch, Router, IPT, etc.)



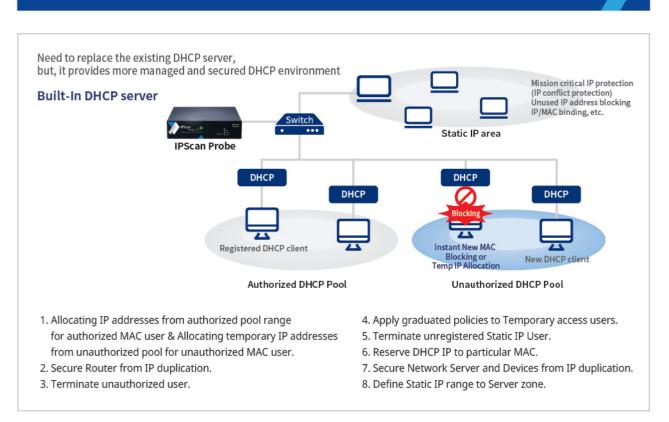
- Real-time IP/MAC inventory status
- Real-time alarming events
- Real-time blocking, authentication and IP Conflict monitoring
- Real-time OS Detection

IPSCAN XE NETWORK CONFIGURATION

IPScan with 3rd Party DHCP server



Built in Secure DHCP server



BENEFITS

If You have these kind of issues, we can make it better

IPAM



IP Address Management

- Manually update daily changed IP allocation or online status
- Difficult to manage real-time online IP/MAC status
- · Unable to prevent IP duplication
- Unable to control unauthorized IP/MAC in use
- OS Detection

DHCP server



DHCP IP Management

- IP allocation failure in rush hour
- High cost for HA or/and relay server
- Monitoring only DHCP IP pool
- Unable to manage static IP range
- Unable to manage the IPs of server or network devices
- Unknown DHCP server allocates unauthorized DHCP IPs

NAC



Network Access Control

- Difficulty of implementing
- Installing PC agent program
- IP-phone, etc.
- High deployment cost
- · Changing network devices
- Unable to control non-supported O/S such as network printer
- Not easy to control non 802.1x devices

Why IPScan XE for Your IP Managements?

LAN access security

Non-802.1x based. Agentless. No port mirroring required, Out of band control $\,$

▶ Less cost, less complexity, easy operation

Unique static IP address management

IP/MAC binding, unused IP blocking, IP change control

► IPAM with IP control, IP protection

Secure DHCP server

Non-DHCP client detection and blocking.

 ${\it Static~\&~DHCP~mixed~environment~management.~Unauthorized~DHCP~client~management}$

► Advanced DHCP server with non-DHCP client control

ARP based real-time monitoring and control

Easy-to-deploy

- ▶ IP/MAC monitoring / control for any Layer 2 environment (Just connect to any switch / hub port)
- ► Vendor independent, device independent (Unmanaged switch, managed switch, HUB, AP, PC with PC Firewall)
- ► Multi-VLAN environment supported (Using 802.1q)

High capacity

► HA support, 100,000 devices control in a Server



Agentless Network Access Control with Secure DHCP Server

IPScan is an IP/MAC resource management and network security solution that enables IT managers to automate the IP/MAC resource management process.

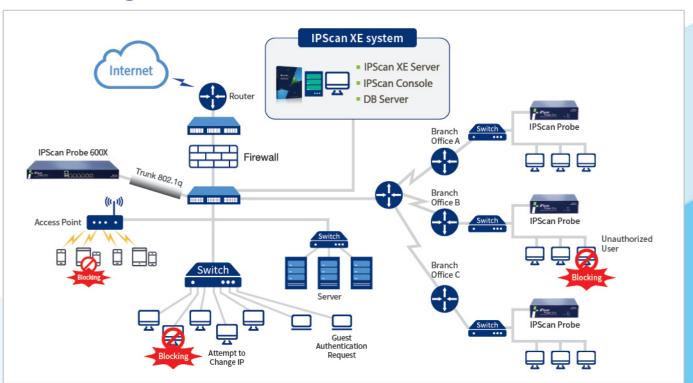
IPScan controls network access of any device that uses IP addresses.

Utilizing a powerful blocking technology, IPScan ensures that unknown and unauthorized IP/MAC addresses are prevented from accessing the network.



IP Address Management

Network Diagram









► Specification (IPScan Probe X Series)

Probe 100X		
CPU	Cortex-A9 1.4GHz (Quad Core)	
Memory	1GB	
Flash	8GB MicroSD	
Interface	1 x RJ-45 (Ethernet 10/100/1000Mbps) Port 1 x RS-232 (DB-9) Console Port	
Size(mm)	170 (W) x 44 (H) x 183 (D)	
Weight	1.0Kg	
Operation Environment	Temperature: 0°C ~ 40°C Humidity: 0% ~ 90% RH	
Power	10W	
Input Voltage	AC 100 ~ 240V, 50 ~ 60Hz	
Trunk Protocol	IEEE 802.1q	
Firmware OS	Linux Kernel 3.8.x	

Probe 200X		
CPU	Cortex-A9 1.6GHz (Quad Core)	
Memory	2GB	
Flash	8GB MicroSD	
Interface	2 x RJ-45 (Ethernet 10/100/1000Mbps) Ports 1 x RS-232 (DB-9) Console Port	
Size(mm)	170 (W) x 44 (H) x 183 (D)	
Weight	1.0Kg	
Operation Environment	Temperature : 0°C ~ 40°C Humidity : 0% ~ 90% RH	
Power	10W	
Input Voltage	AC 100 ~ 240V, 50 ~ 60Hz	
Trunk Protocol	IEEE 802.1q	
Firmware OS	Linux Kernel 3.8.x	





Probe 600X		
CPU	Intel I3-4170 3.7GHz (Dual Core)	
Memory	4GB	
HDD	1TB	
Flash	8GB CF MEMORY	
Interface	6 x RJ-45 (Ethernet 10/100/1000Mbps) Ports 1 x RJ45 (to RS-232) Console Port 2 x USB 3.0	
Size(mm)	430 (W) x 44 (H) x 330 (D)	
Weight	5.0Kg	
Operation Environment	Temperature : 0°C ~ 40°C Humidity : 10% ~ 80% RH	
Power	250W	
Input Voltage	AC 100 ~ 240V, 50 ~ 60Hz	
Trunk Protocol	IEEE 802.1q	
Firmware OS	Linux Kernel 3.19.x	

Probe 1000X		
CPU	Intel I5-4460 3.2GHz (Quad Core)	
Memory	8GB	
HDD	1TB	
Flash	8GB CF MEMORY	
Interface	6 x RJ-45 (Ethernet 10/100/1000Mbps) Ports 2 x SFP Module Slots 1 x RJ45 (to RS-232) Console Port 2 x USB 3.0	
Size(mm)	430 (W) x 44 (H) x 330 (D)	
Weight	5.0Kg	
Operation Environment	Temperature : 0°C ~ 40°C Humidity : 10% ~ 80% RH	
Power	250W	
Input Voltage	AC 100 ~ 240V, 50 ~ 60Hz	
Trunk Protocol	IEEE 802.1q	
Firmware OS	Linux Kernel 3.19.x	









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