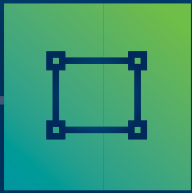


ViAscope

# iPScan<sup>®</sup> XE

Secure IP Address Management  
Layer 2 Network Access Control Solution



Integrated DHCP & IP Address Management Solution Providing Superior Layer 2 Network Access Control

# Solution Overview

**IPScan<sup>XE</sup>**

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 helps secure networks against internal breaches, prevents inadvertent network disruptions from address conflicts, mitigates the risks of non-compliance with regulatory requirements for securing and controlling customer, corporate financial and gaming operation information, and increases IT's operational efficiency in delivering information service.

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, and (4) distributed hardware; probes.

## IPScan Components

**Securing  
More with Less  
Simple &  
Cost Effective**



### 1. IPScan Console

Installed on the IT manager's PC, it connects to the IPScan Server to view, monitor and define IP/MAC policies.

### 2. IPScan Server

Installed in the main data center, it communicates with probes to receive and store collected data and forwards the IP policies defined by IT manager. It supports MS-SQL 2000~2012 Server, Oracle and MySQL.

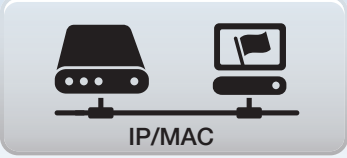


### 3. IPScan Database

Collected data and policies are stored in the RDBMS. MS-SQL 2000~2012 Server, Oracle and MySQL Server are compatible. DB Server and IPScan Server can be installed in the same hardware platform if there are fewer than 5,000 active IP's. For more than 5,000 active IP networks, a separate hardware platform is required for each.

### 4. IPScan Probe

A software-technology-embedded hardware probe designed to control small to large size network. Implements the policies defined by the IPScan Console Supports 802.1q to manage multiple VLANs from a single device. - Built-in DHCP server

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

<p><b>IPAM</b></p>  <p>IP/MAC</p>	<p><b>IP Address Management</b></p> <ul style="list-style-type: none"><li>• Manually update daily changed IP allocation or online status</li><li>• Difficult to manage real-time online IP/MAC status</li><li>• Unable to prevent IP duplication in real-time</li><li>• Unable to control unauthorized IP/MAC in use</li></ul>
<p><b>DHCP server</b></p>  <p>DHCP</p>	<p><b>DHCP IP Management</b></p> <ul style="list-style-type: none"><li>• IP allocation failure in rush hour</li><li>• High cost for HA or/and relay server</li><li>• Monitoring only DHCP IP pool</li><li>• Unable to manage static IP range</li><li>• Unable to manage the IPs of server or network devices</li><li>• Unknown DHCP server allocates unauthorized DHCP IPs</li></ul>
<p><b>NAC</b></p>  <p>NAC</p>	<p><b>Network Access Control</b></p> <ul style="list-style-type: none"><li>• Difficulty of implementing</li><li>• Installing PC agent program</li><li>• IP-phone, etc.</li><li>• High deployment cost</li><li>• Changing network devices</li><li>• Unable to control non-supported O/S such as network printer</li><li>• Not easy to control non 802.1x devices</li></ul>

## 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.

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**

**IPScan<sup>®</sup> XE**  
**Everywhere**

# Solution Review

## IPAM + Agentless NAC + DHCP server

### IPAM



- Agentless & out of band
- Non 802.1x based
- Real-time layer 2 IP/MAC control
- Unauthorized device blocking
- Time-based usage control
- User identification management by IP/MAC
- Switch port control & management

### Agentless NAC



- Authorized pool management for internal users
- Unauthorized pool management for external & temporary users
- Fixed DHCP IP allocation
- Access time control for temporary users
- Auto blocking Static IP in DHCP IP range

### DHCP server



- Static IP device control
- IP conflict protection
- IP changing protection
- Unused IP blocking
- Time-based IP usage control

## Major Functions

### Easy Implementation

- 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

### Providing advanced DHCP server features

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

### Layer 2 Access Control Solution

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

### Real-time Management

- Real-time IP/MAC inventory status
- Real-time alarming events
- Real-time blocking and authentication
- Real-time IP conflict monitoring

# IPScan XE Features

## Dynamic IP management - secure DHCP 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

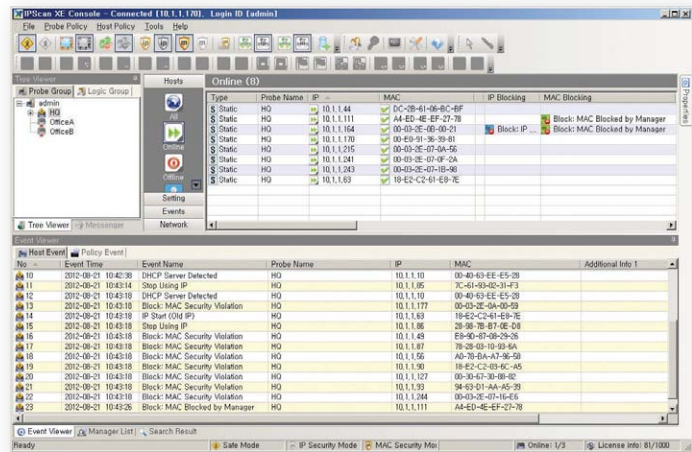
- Appliance based NAC policy enforcer (non 802.1x)
- Improve vulnerability management process
- L2 Security : controlling access by MAC address filtering
- Manual / automatic network access control : IP blocking / MAC blocking
- Increase wireless network access security (AP bridge mode)

## IP conflict management

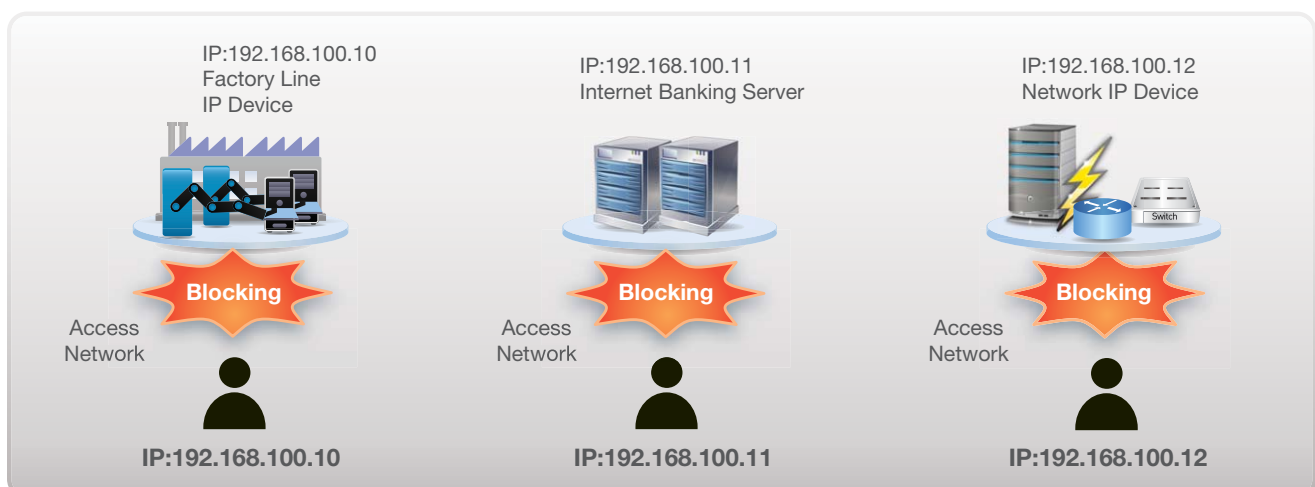
- IP protection on mission critical devices

## Automatic IP/MAC inventory

- Online, offline, unused IP/MAC address



# Protection from IP Conflicts





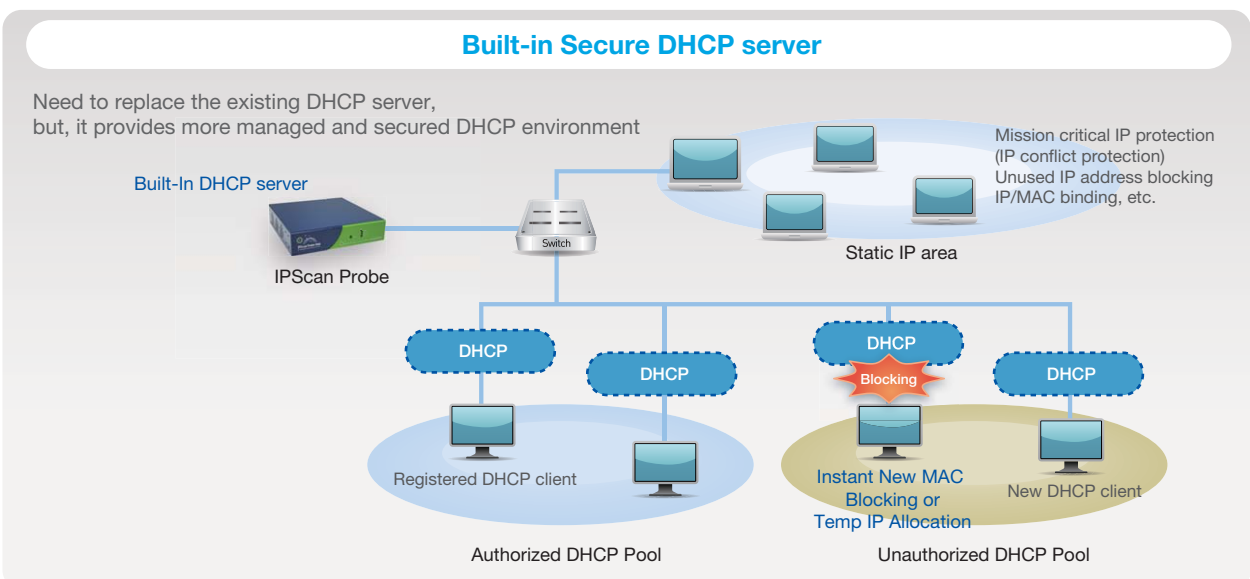
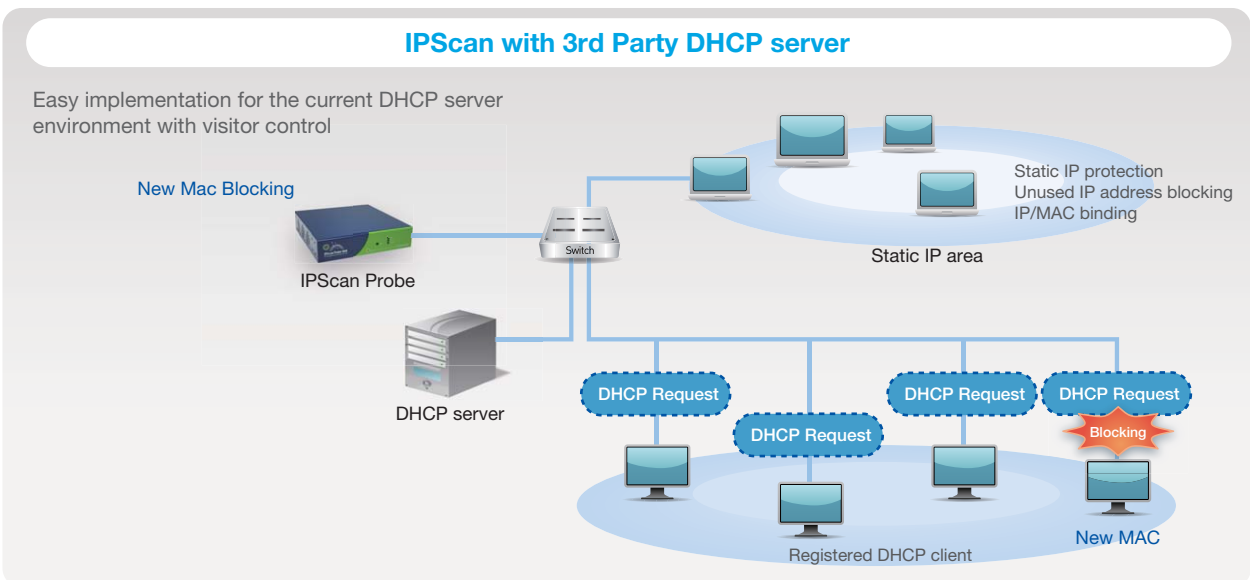
## Agentless Network Access Control with secure DHCP server

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.

By deploying IPScan into your network, you can centrally manage distributed IP/MAC address resources more safely, effectively and efficiently. IPScan provides IP-enabled organizations with valuable security, availability, compliance and operational efficiency benefits & ROI.

## Network Diagram



# Specification



## IPScan Probe 50

CPU	AU1550 MIPS Core (333 MHz)
Memory	64MB DDR RAM
Flash	2MB NOR Flash, 1GB NAND Flash
Interface	Ethernet 10/100Mbps (RJ-45) 1Port. RS-232 Console 1Port
Size (mm)	119(W) × 30(H) × 119(D)
Weight	440g
Operating Environment	Temperature 0~40℃, Humidity 0~90%
Input Voltage	AC 100~240V, 50~60Hz
Power	5W
Trunk Protocol	IEEE 802.1q supports
DHCP Server	Yes

## IPScan Probe 100A

CPU	AU1550 MIPS Core (333 MHz)
Memory	64MB DDR RAM
Flash	2MB NOR Flash, 1GB NAND Flash
Interface	Ethernet 10/100Mbps (RJ-45) 1Port. RS-232 Console 1Port
Size (mm)	200(W) × 44(H) × 196(D)
Weight	1.3Kg
Operating Environment	Temperature 0~40℃, Humidity 0~90%
Input Voltage	AC 100~240V, 50~60Hz
Power	6W
Trunk Protocol	IEEE 802.1q supports
DHCP Server	Yes

## IPScan Probe 200

CPU	AU1550 MIPS Core (500MHz)
Memory	128MB DDR RAM
Flash	2MB NOR Flash, 1GB NAND Flash
Interface	Ethernet 10/100Mbps (RJ-45) 2Port. RS-232 Console 1Port
Size (mm)	200(W) × 44(H) × 196(D)
Weight	1.3Kg
Operating Environment	Temperature 0~40℃, Humidity 0~90%
Input Voltage	AC 100~240V, 50~60Hz
Power	6W
Trunk Protocol	IEEE 802.1q supports
DHCP Server	Yes

## IPScan Probe 600R

CPU	Intel Celeron 2GHz
Memory	1GB DDR2 RAM
Flash	2GB CF Flash Module
Interface	Ethernet 10/100/1000Mbps (RJ-45) 6Port. RS-232 Console 1Port
Size (mm)	430(W) × 44(H) × 285(D)
Weight	4.4Kg
Operating Environment	Temperature 0~40℃, Humidity 0~90%
Input Voltage	AC 100~240V, 50~60Hz
Power	68W
Trunk Protocol	IEEE 802.1q supports
DHCP Server	Yes

## IPScan Probe 1000R

CPU	Intel Dual Core (1.8GHz)
Memory	1GB DDR3 RAM
Flash	2GB CF Flash Module
Interface	Fibre-optic SFP module 2 slots RJ-45 10/100/1000 Base TX 6Ports RJ-45 Console 1Port (RS-232 converter included)
Size (mm)	430(W) × 44(H) × 385(D)
Weight	5.6Kg
Operating Environment	Temperature 0~40℃, Humidity 0~90%
Input Voltage	AC 100~240V, 50~60Hz
Power	74W
Trunk Protocol	IEEE 802.1q supports
DHCP Server	Yes

\*\* The above H/W Specifications can be changed under circumstances.



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