

## WMS-Wireless Management System

### Challenges Facing Network Administrators

As enterprises move to capitalize on the benefits of wireless networking, the need for cost-effective WLAN management tools becomes acute. Among the daunting tasks facing administrators are -

- Planning the wireless network

- Maximizing network performance and minimizing network downtime

- Maintaining security over wireless links

- Keeping device settings “in step” throughout the wireless network despite ever-changing requirements

### Introduction to the Wireless Management System

The Wireless Management System (WMS) is a powerful toolbox for setting up, securing, monitoring, and maintaining wireless networks. Based on the industry-standard Simple Network Management Protocol (SNMP), WMS was designed with the special requirements of wireless networks - and the special advantages of wireless products – in mind.

Using WMS, network administrators can-

- Manage entire wireless networks from a single location

- Configure and manage wireless devices quickly and easily

- Secure the wireless network against unauthorized access

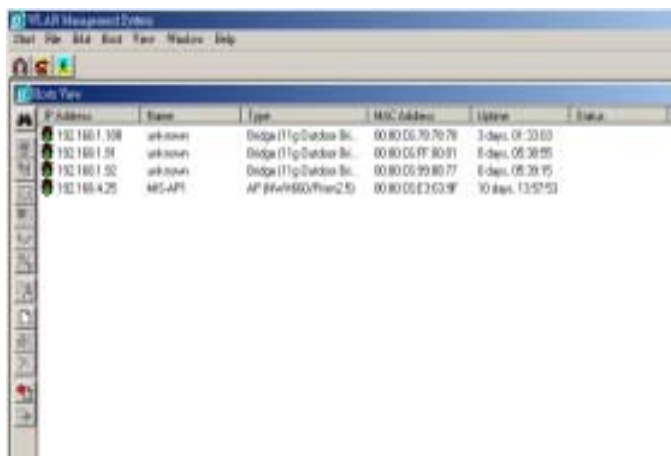
- Remotely monitor device and network status and performance

- Keep network management cost low

- Adjust, store, and retrieve device settings, and propagate them to any number of devices

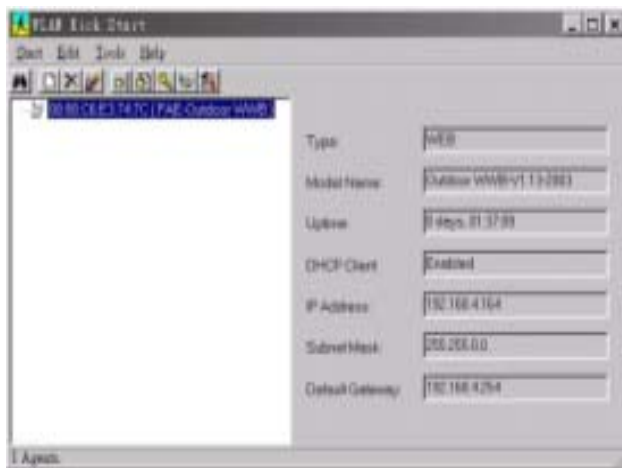
Feature	Value to Administrators
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### Automatic Discovery



Speedy location and identification of all NDC Wireless devices, and reporting of their status, at the press of a button. With a simple click on the “Auto Discovery” icon, all compatible devices on the same TCP/IP subnet as the management station will be discovered.

### Kick Start



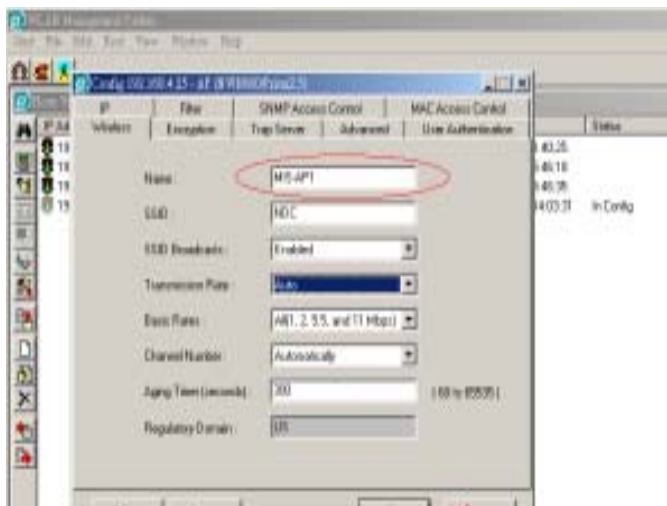
It will detect all compatible wireless devices on the same physical network as the management station regardless of their current TCP/IP settings.



## Feature

## Value to Administrators

### Host Table Administration



Provides maximum flexibility in massive deployments of Wireless devices. Relieves administrators of worries about physical constraints

### Sorting Function



Organizes device lists any way an administrator might wish. Lets the administrator zero in on the desired device or domain quickly and easily.

## Feature

## Value to Administrators

## MAC-based Authentication

Only an Ethernet device whose MAC address is pre-registered on this list is allowed to connect to an Outdoor WEC. It can prevent unauthorized wireless clients to access the network.

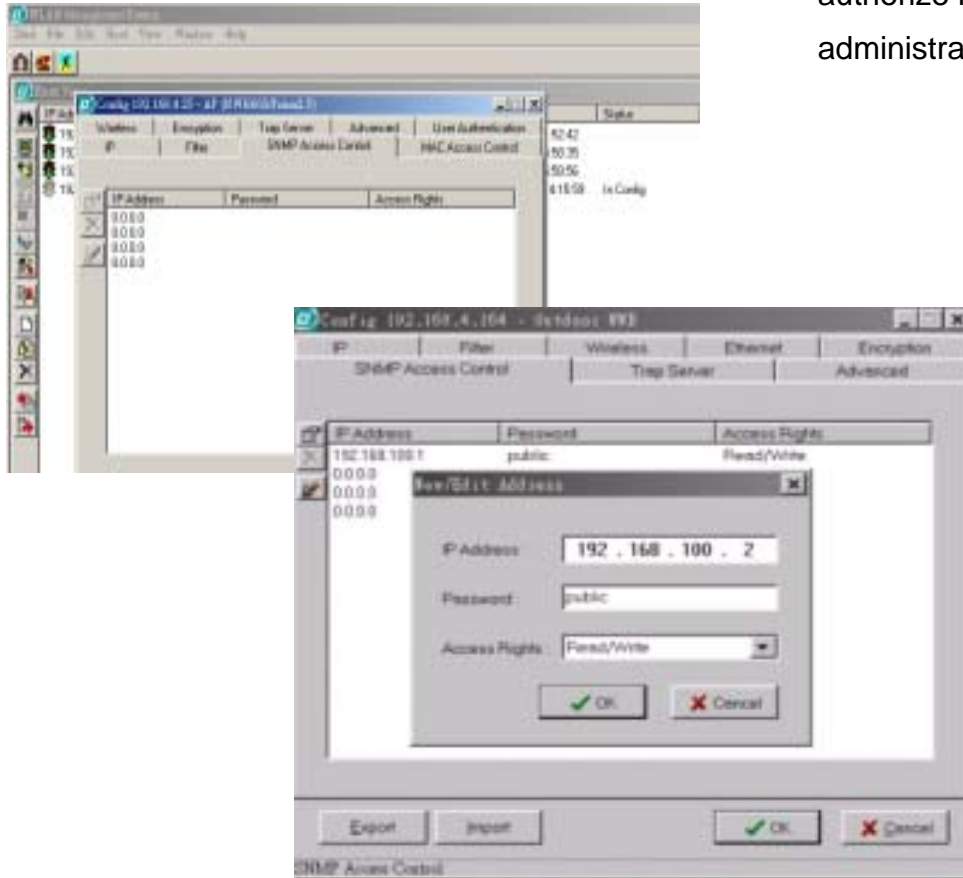


## Feature

## Value to Administrators

### SNMP Access Control

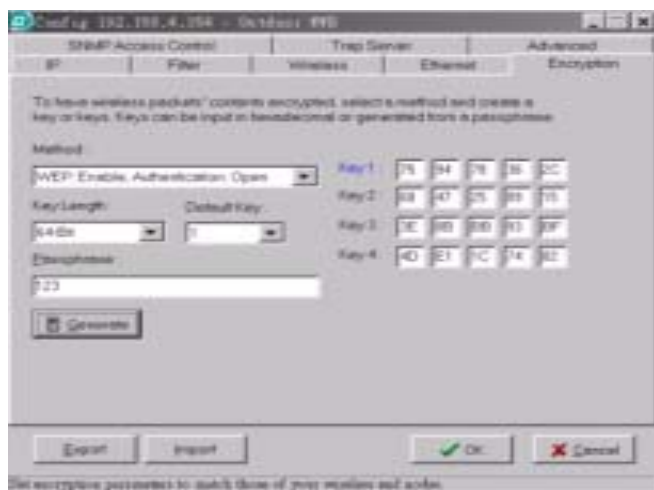
To prevent from any unauthorized personnel revise the devices setting, WMS provide a managerial tool to authorize maximum 4 PC/notebook become network administrators.



## Feature

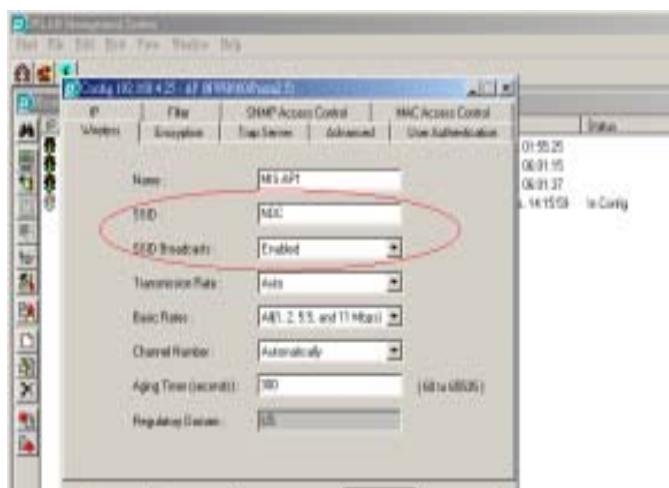
## Value to Administrators

### WEP encryption



With choices of 40-bit/128-bit WEP encryption to secure wireless LAN data stream.

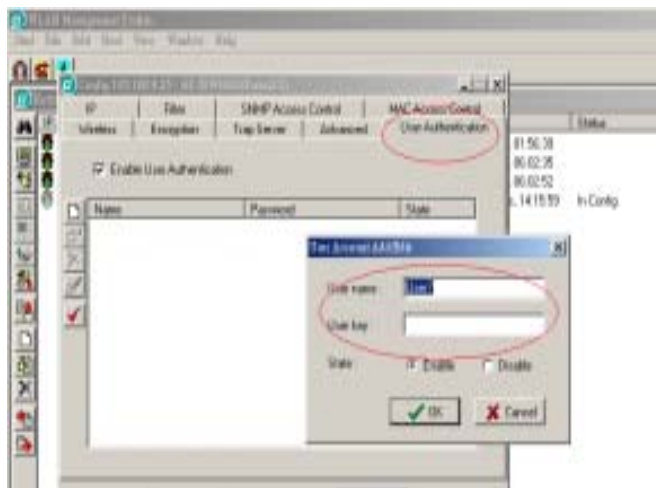
### Secure SSID



In order to effectively block unauthorized wireless client associate WMS embedded system, WMS provides users an choice to hide SSID from broadcasting list.

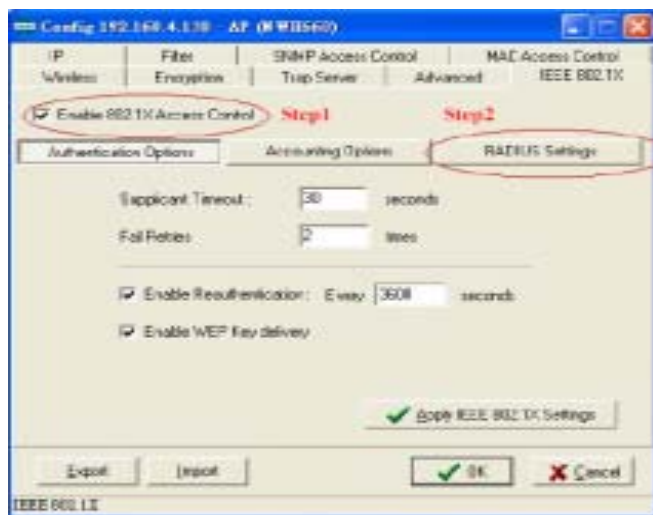
Feature	Value to Administrators
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## User Authentication



Restrict wireless access to authorized users only. With NDC proprietary technology, this feature can support the wireless LAN deployment without maintaining a authentication server.

## 802.1x Support

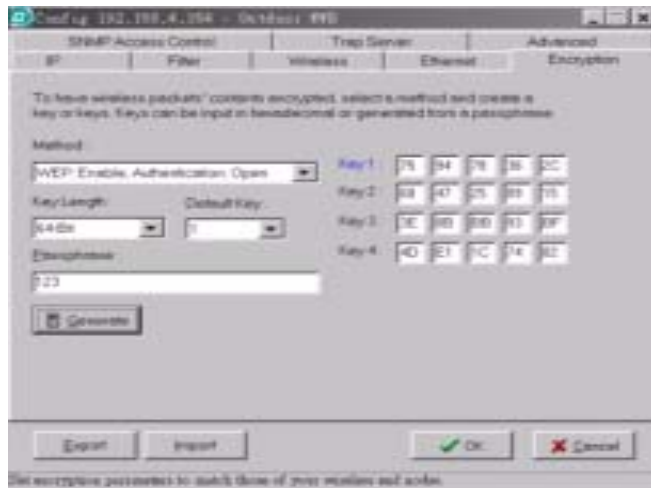


Support 802.1X Authentication.

## Feature

## Value to Administrators

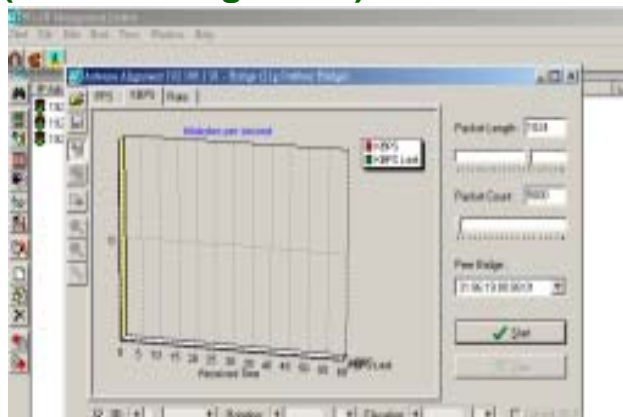
### Protocol filtering



Saves bandwidth and increases security by ensuring that specified protocols never pass from the wired network to wireless zones.

Feature	Value to Administrators
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### Video Performance Indicator (Antenna Alignment)



Makes alignment of directional antennas for building-to-building bridges quick and easy.

### Trap Server

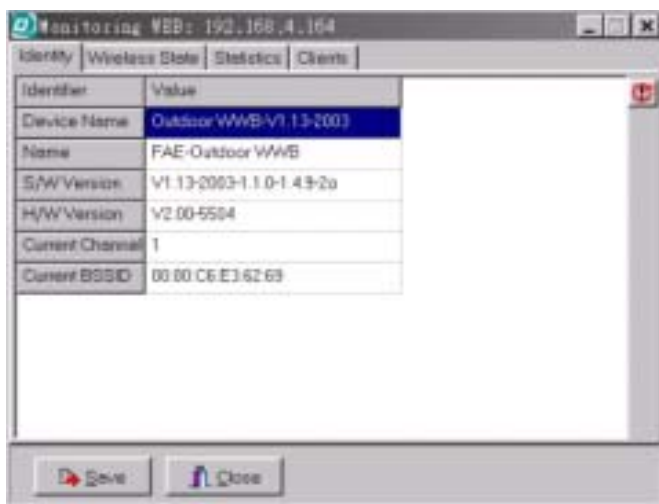
The screenshot shows a window titled "Trap Server" with a table of log entries. The table has columns for "Time", "Source", and "Event".

Time	Source	Event
2003/4/17 PM 02:02:28	192.168.4.147	Host is reinitializing (warm start)
2003/4/17 PM 02:03:15	192.168.4.117	Host is reinitializing (warm start)
2003/4/17 PM 02:04:17	192.168.4.117	Host is reinitializing (cold start)
2003/4/17 PM 04:11:46	192.168.4.147	Host is reinitializing (warm start)
2003/4/17 PM 04:25:13	192.168.4.147	Host is reinitializing (warm start)
2003/4/17 PM 05:19:14	192.168.4.170	Host is reinitializing (cold start)

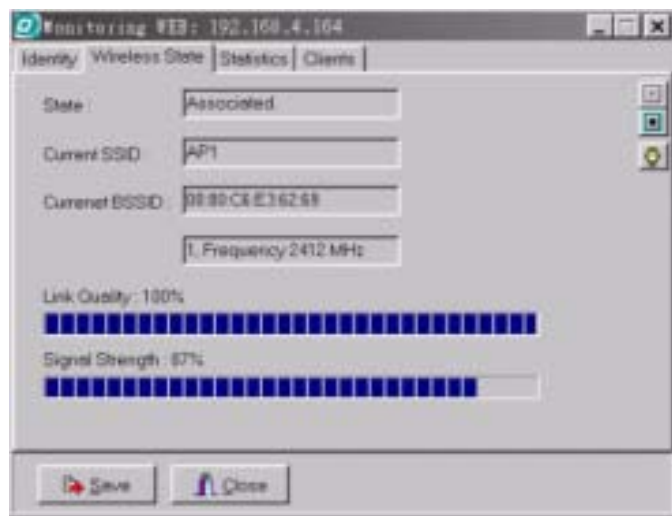
Trap Server will record any network activities for pre-defined IW devices. With constant monitoring, network administrators can easily monitor the working condition and take preventive action to increase network uptime

**Feature****Value to Administrators****Identity Information**

Identify the information of the specific device.

**Link Status**

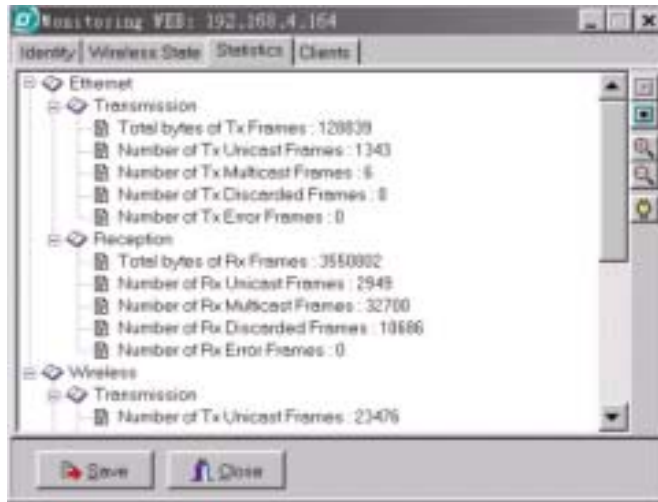
Monitor the current wireless status, including the link quality and the signal strength.



## Feature

## Value to Administrators

### Statistics Analysis



To monitor the current Ethernet and wireless packet transmission and reception status.

### Client listing

The screenshot shows the 'Clients' tab in the monitoring software. The table displays the following data:

MAC Address	Type	TTL (Seconds)
00:02:A5:EA:73:4F	Client	55
00:05:5D:05:4D:84	Client	57
00:0C:6E:97:F9:9A	Client	60
00:10:B5:A4:55:4B	Client	59
00:47:58:35:4A:01	Client	51
00:47:58:36:3A:01	Client	3
00:80:C6:86:89:96	Client	17
00:80:C6:86:8B:DE	Client	54
00:80:C6:86:8B:11	Client	53
00:80:C6:87:8E:D1	Client	54
00:80:C6:91:29:52	Client	60
00:80:C6:E3:65:4F	Client	29
00:80:C6:F1:0F:3D	Client	10

Number of clients: 15

To list all the currently connected Ethernet devices.

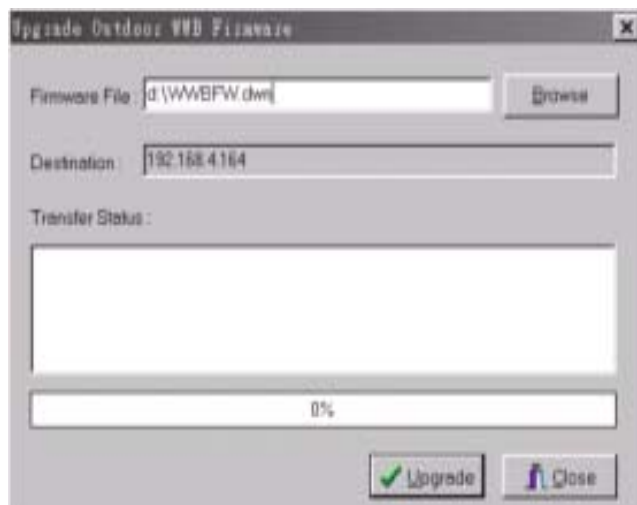
Feature	Value to Administrators
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### Configuration report



WMS will generate devices' status report in different formats. The feature can help network administrators effectively increase their productivity

### Firmware Upgrade



For new firmware upgrade easily and immediately.

## Feature

## Value to Administrators

### RTS and CTS Threshold setting

Lets you set RTS Threshold and CTS Threshold parameters in some specific application.

