

# BROWAN

## S-4000

Wireless Network Management System

V1.0



The S-4000 WNMS is the ideal solution for WISPs who want the power to administer their entire wireless network infrastructure and decrease the maintenance time & cost. With its capabilities, the S-4000 WNMS can enhance the reliability of your network and devices, even detect and fix problems on local or remote network before your customers begin to complain.

S-4000 WNMS provides a complete view on the state of your wireless network by a user-friendly graphic interface. At a glance, the geographical topology map lets you comprehend the location and current state of devices and provides performance information of devices. The topology tree lets you arrange the devices into different groups or hotspots, which provides a clear hierarchy of your wireless network. The event & log view lets you informed with alarm and notifications, once problems occurred in your wireless network.

### Global Views of Entire Network

S-4000 WNMS provides the visualization of the entire wireless network on topology map and hierarchical topology tree organized by hotspots or hotzones. You can monitor the current condition of the local or remote network and devices from a single location and directly observe a device's performance, such as transfer rate (throughput), number of online users, CPU/Memory usage etc, on the topology map or the comparable performance list. All performance alerts events and other important information will be received and present to you by the WNMS timely.

### Accelerating Deployment and Configuration

S-4000 WNMS provides automated discovery functions, which lets you discover all network devices and links easily and quickly, so you can immediately deploy and run the WNMS. S-4000 WNMS also allows you inspect and modify device configuration, such as device name, location, wireless channel, SSID etc. Moreover, you can apply new configurations to multiple devices simultaneously after perform consistency check between actual configuration and planned configuration, which can reduce the damage by wrong configuration and make your staff's responsibility distinctively. To decrease the network malfunction caused by incorrect configuration, S-4000 WNMS can also backup the previous configuration into database, so you can roll back a device configuration quickly.

### Improving Network Performance

With its intuitive graphical interface, S-4000 WNMS enables visual assessment of network conditions, such as capacity, signal quality, most- or least-used equipment, number of online users etc, so you can response quickly. It also allows you set specific performance threshold that trigger alert notifications to help you find out the bottleneck of the network performance and plan the growth of your wireless network adequately. S-4000 WNMS can help you improve customer satisfaction and loyalty, which results in increased revenue.

### Improving Network Health and Decreasing Maintenance Time & Cost

S-4000 WNMS can continuously detect faults in your wireless network and raise an alarm or notification to inform your IT staff before your customers begin to complain. With the fault discovery functions, you can timely find out any problems in your remote network and reduce the time & cost for surveying devices locally. With its capability to cooperate with PoE (Power over Ethernet) switches, S-4000 WNMS can even recover faulted access point automatically which enable your wireless network always available to customers. It also provides a fault diagnostics tool which offers an easy way to isolate and troubleshoot problems.

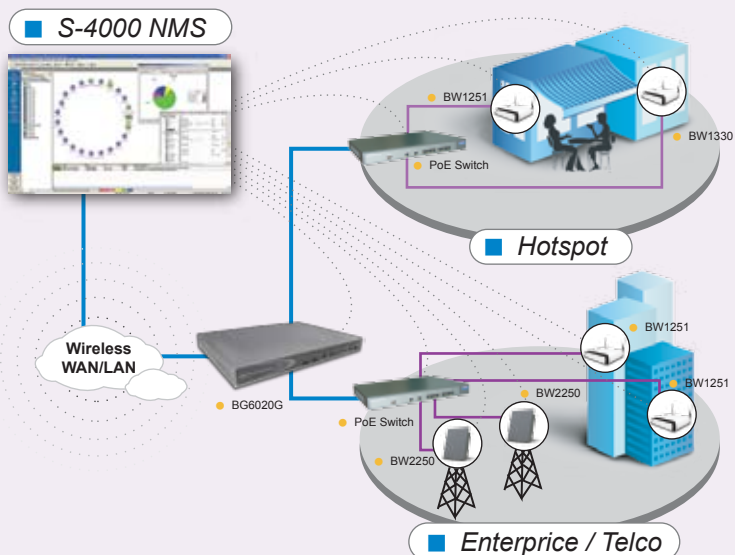
### Understanding User's Behavior for Helping Business

S-4000 WNMS can help your business by providing detail information about user's behavior on your wireless network. You can achieve valuable information and experience from the WNMS such as how many users are accessing the network, which hour users access the network most frequently, how long users remain online in average etc. By understanding these users' behavior, it is possible for you to adjust the accounting strategy to increase your revenue or outspread the WLAN service.

### Supporting Multiple Vendor's Devices and Protecting your Investment

Based on standard management information base, including MIB-II and IEEE802.11 MIB, S-4000 WNMS can configure and monitor most network devices, such as router, switch, access point etc, from other manufacture besides these produced by GSI. S-4000 WNMS provides many user-customizable settings to retrieve necessary information from private MIBs of a device. It can also show and modify information of private MIB by customized MIB plug-ins. Of course, S-4000 WNMS can work most efficiently with Gemtek Systems' product.

## Application



#### ☀ Features

- ▲ Standard Complaint : Supports Simple Network Management Protocol (SNMP) v1 and v2c; RFC1213 MIB-II, IEEE802.11 MIB and GSI private MIB;
- ▲ Automated Discovery : Automatically discover and identify all kinds of devices, such as AP, AC, POE switch etc, and organize them into hierarchical view
- ▲ Automated Recovery : Automatically recover faulted access points by reboot them remotely
- ▲ Flexible Polling Service : Support customized polling service, such as interval, protocol, which can decrease the management traffic to an acceptable level
- ▲ Alarm Correlation Analysis : Find out the root-caused alarms to filter alarm storm and give recommendation for fixing problems, which will reduce the burden of management
- ▲ Event and Log Service : Record all alarms and events into database for future analysis and statistic. Record all your staffs' operations on the WLAN for clear their responsibility
- ▲ Remote AP Upgrade : Upgrade AP's firmware remotely and in batches
- ▲ Configuration Backup/Restoration : Automatically backup devices' configuration into database or restore a previous correct configuration to hardware
- ▲ Access Right Management : Define and control what operations your IT staff can execute on your WLAN or which hotspots in network topology your IT staff can access.
- ▲ Performance Monitoring : Monitoring the performance of device and raise alerts once a pre-defined threshold has been passed, which can discover the bottleneck of your WLAN.
- ▲ Hotspot Scanning Monitoring the performance of link to each hot spot
- ▲ Reporting Tools Generate performance and fault statistics for estimating network health and improving quality of service

#### ☀ Specification

| Availability               |   |
|----------------------------|---|
| Basic Version              | Free to use with some constraints (limited performance or feature)  |
| Advanced Version           | Licensed, Full Features; 1 year free technical support  |
| Requirements               |   |
| Software                   | OS Platform : Windows 2000 Professional/Server/ Advanced Server<br>Windows XP Professional                        |
| Database Management System | Microsoft Access 2000/2002 (Basic Version)<br>Microsoft SQL Server Standard/Enterprise Edition (Advanced Version) |
| Hardware                   | CPU PIII 800Mhz or higher   |
|                            | Memory 256MB at least or 512MB  |
|                            | Hard Disk 40GB free space for installation and database   |
|                            | Monitor 1024x768 resolution support   |
| Package                    | CD-ROM with software and documentation  |
|                            | Quick Guide and specification in pamphlet   |

**Browan Communications Inc.**  
No.15-1,Zhonghua Rd.,  
Hsinchu Industrial  
Park,Hukou,Hsinchu,  
Taiwan,R.O.C. 303  
Tel: +886-3-6006899  
Fax: +886-3-5972970

**Browan Communications Inc.,China**  
4F, C Building.No.1618, Yishan Rd.,  
Shanghai, China  
Tel: +86-21-64656780  
Fax: +86-21-54222254  
ZIP:201103