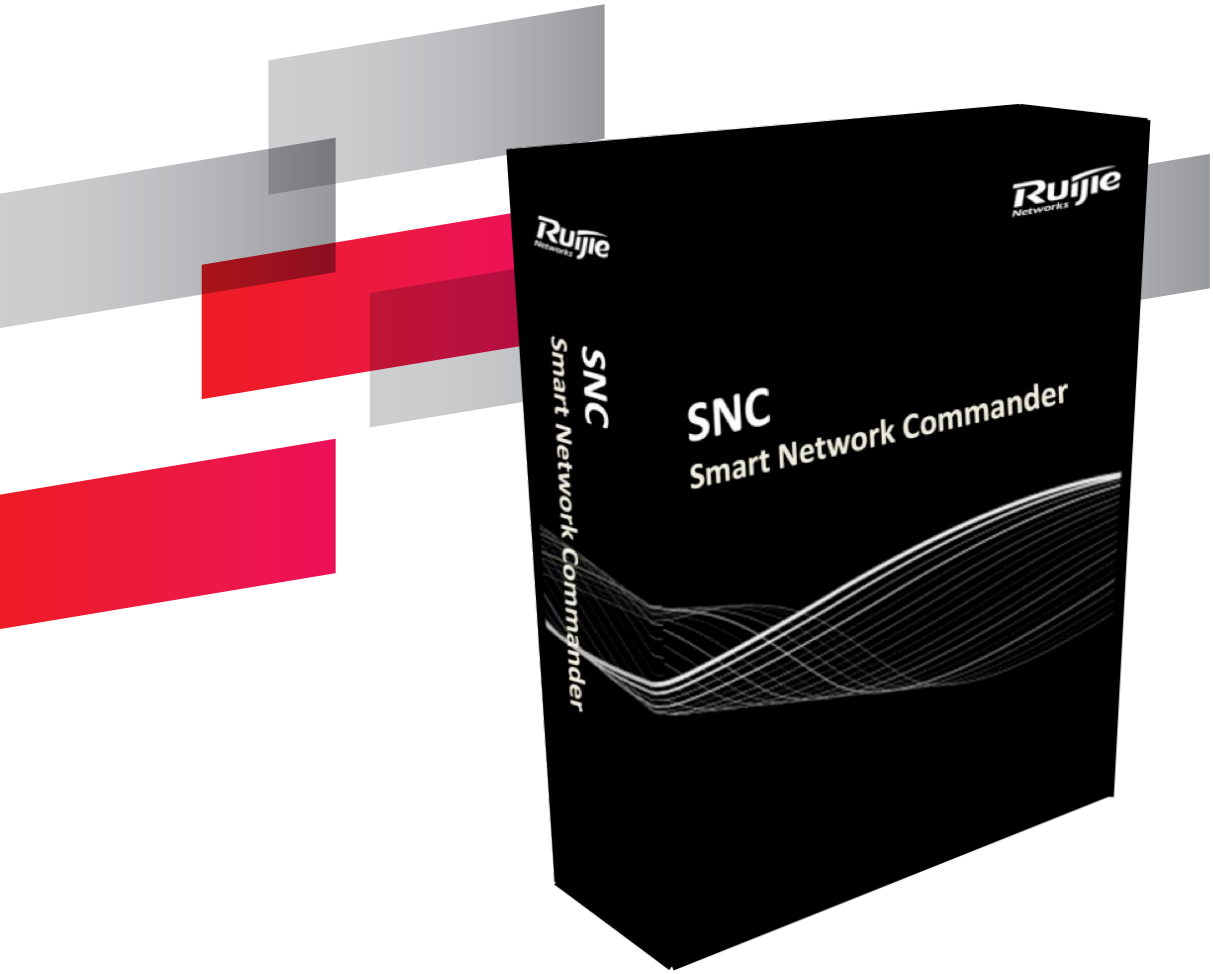


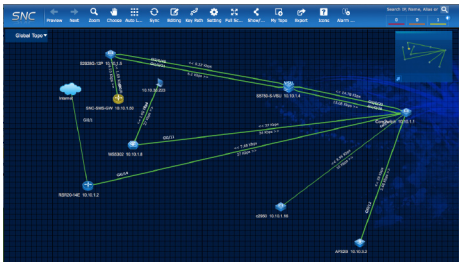
RG-SNC

Smart Network Commander Datasheet

Ruijie Networks Co.,Ltd
For further information, please visit our website http://www.ruijienetworks.com

Product Overview

Ruijie RG-SNC Package



Topology Management

Ruijie RG-SNC (Smart Network Commander) is a network management system launched by Ruijie Networks especially designed for network performance management and configuration. With a friendly browser UI, the SNC provides an extensive array of features such as network topology display, device management, performance monitoring, configuration & software management, real-time alarm and log & report management.

The SNC evolves from the traditional network management system and adopts an intelligent “agentless” mode, which is easier to deploy and maintain. It provides multiple benefits for administrators in terms of task plan customization, real-time network status monitoring, configuration backup and instant topology display of the whole network.

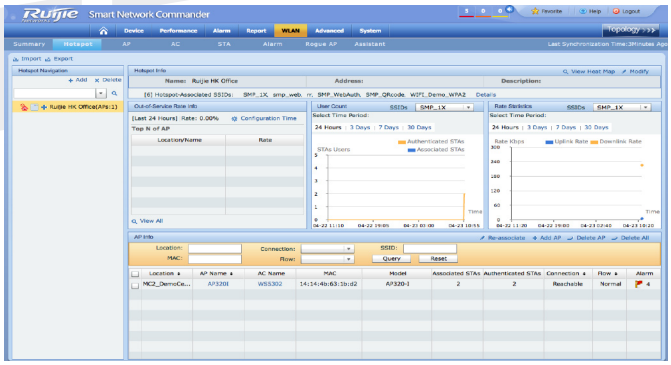
The latest SNC is an ideal match for Ruijie products and also supports fundamental management for all 3rd-party SNMP capable products. The SNC offers a broad array of management functions including wireless management, real-time network topology display, configuration backup and protection, comprehensive reports and logs, advanced MPLS VPN management, etc. The Ruijie SNC hence simplifies network management and lessens maintenance workload.

Highlights

Wireless Management

Ruijie SNC offers the latest RG-SNC-WLAN module to achieve centralized management of wireless devices.

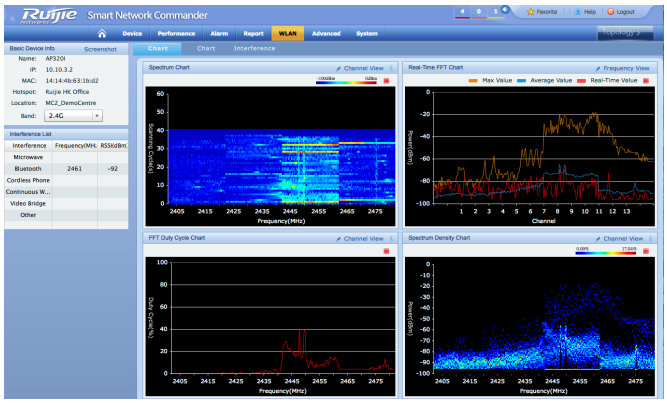
- Topology management: Real-time topology display of wireless device operation status.
- Hotspot management: Hotspot-based statistical analysis and management on APs. Hotspot diagram visualizes full details of AP distribution, signal coverage and user count, etc.



Hotspot Management Interface

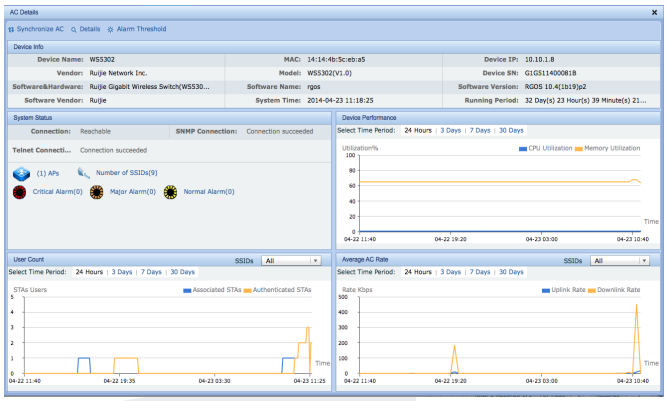
The SNC also supports real-time spectrum analysis including spectrum chart, duty cycle diagram and real-time FFT chart.

- Spectrum chart: Real-time viewing of power level and density of each frequency range in the wireless environment.
- Duty cycle diagram: Showing the effective signal ratio of a channel within a specific period of time, i.e. it indicates how busy the channel is.
- Real-time FFT: Capturing energy level of each frequency in the 802.11 channels.



Real-time FFT Graphical Display

- Wireless controller management: The wireless module centrally manages all ACs by interface configuration, performance monitoring, etc.



Wireless Controller Management

- FIT AP management: Device status and load management. The function supports regular switch on/off and implements AP overloading alerts.
- End user management: Provide details on the number of access users, rates, user online/ offline status, etc.
- Rogue AP countermeasure: Display basic info of any rogue AP once detected. The AP is located, linked to hotspot and reflected on the hotspot diagram. Warning messages can be issued to the rogue AP.
- Troubleshooting assistant: IP/MAC-based searching for end device, authentication user, AP, AC and rogue AP.

Comprehensive Network Topology Information

RG-SNC displays visual topology of the network infrastructure. And all the devices are discovered through three ways: ARP table, routing table and network segment. RG-SNC displays visual topology of the network infrastructure. And all the devices are discovered through three ways: ARP table, routing table and network segment.

Topology management allows users to work on their networks topology. Many types of topology diagram are available, such as L3 global and user-defined topology diagram. In the diagram, the joining links between the devices and PCs reflect the real physical cable links. Users can hence monitor the connectivity among devices network segments, device status and link bandwidth in real-time.

Besides, users can drag device icons freely and to add or delete links & devices manually for a better displaying purpose of the physical network topology. Key link detection is another key feature of RG-SNC. The connectivity of some sensitive links can be tested periodically to make alerts before network failure happens.

The SNC offers additional features below:

- Online user info: Topology displays full details such as user name, IP address, MAC address, linking device and its port, security status and so on. This feature can send messages to devices or force them to get offline, etc.

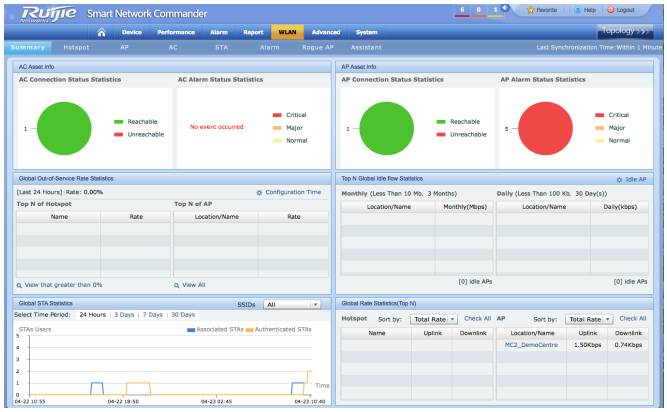
Notes: This function works in collaboration with RG-SMP (Security Management Platform)

- Network diagnosis assistant: Regular inspection on network response status to offer network administrators easy management.
- Event monitoring: Married with SNMP to achieve comprehensive device monitoring. The system also has a library of 80 Trap/Syslog alerts as default, offering a clear picture for immediate troubleshooting.
- IP/MAC/Port mapping table: The system assists users to recognize ARP attacks and analyze any IP/MAC mapping changes for early warning.

Refined Device Management

The SNC offers a wide range of advanced features to facilitate network management.

- Loop inspection: Married with other Ruijie products and via the RLDP (Rogue Location Discovery Protocol), quick troubleshooting is enabled for any loop failure.
- Key link inspection: Initiate link inspection from source device to target device (manual/regular automated inspection). Alerts once failure is found and locate failure node.
- Device configuration: Graphical configuration management. Easy to operate and minimize errors.
- Hierarchical management: Define administrators' device management rights.
- Device group management: Users can add or delete device groups manually to classify devices into different groups according to their geographical position or logical position.
- Real device panel: Displays the front panel of all Ruijie Networks devices, which allow users to make configurations and monitor the devices' status.
- Comprehensive information support: Management efficiency enhancement with detailed information available, e.g. CPU, memory, port status, routing table, MAC table, ARP table and so on. Embedded Telnet and Web configuration entries to offer multiple management modes.
- Interface batch management and configuration: Interface batch operation is supported to reduce maintenance workload.
- Wireless device management: Supports WLAN traffic monitor, WLAN user management and AC & AP configuration.



WLAN Management

- Asset management: Allows users to collect devices information including manufacturer, category, product model, and software & hardware version. This provides administrators a clear understanding of the network infrastructure.

Configuration Management

The SNC supports various configuration management functions, such as regular backup and recovery of device configuration, software management and software issue schedule management. The SNC supports various configurations managing functions including:

- Configuration snapshot: The system supports customized collection of device configuration for backup to ensure painless recovery upon failure.
- Configuration comparison: Automatically compare the latest configuration details with the previous after backup is completed. Network administrators can acquire any changes easily for risk management.
- Device configuration backup & recovery
- Software management
- Software issue schedule management
- Service configuration management

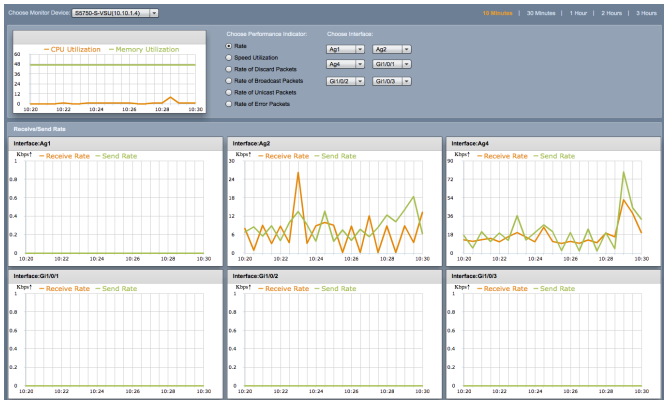
Unified Management of System Software

- Device software statistics: Provide statistics and details on device model and software version to facilitate the unification of device version.
- Device software batch upload/download: Synchronize software updates for all the devices in the network with details provided.

Performance Management

Real-time performance monitoring provides better understanding of network infrastructure, thus facilitates network management. This function includes the following features:

- Real-time performance curve display
- TOP-N performance statistic
- Performance monitoring indicator setting
- Performance threshold self-define
- Historical performance query



Device Performance Display

Alarm Management

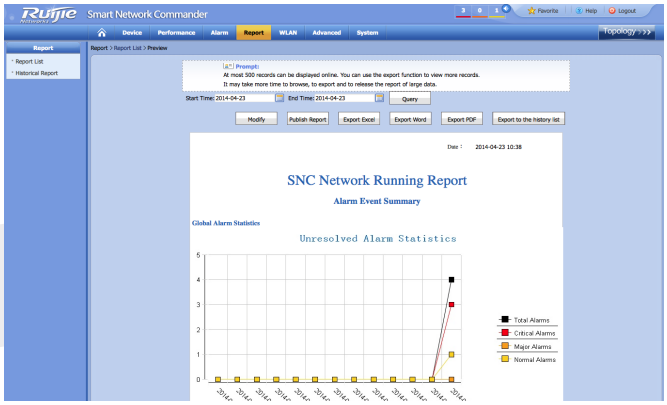
The SNC supports the following alert features during operation:

- Real-time alarm monitoring
- Self-defined alarm rule & time
- Voice/email/SMS alarm notification
- Historical alarm query
- Trap & syslog event monitoring

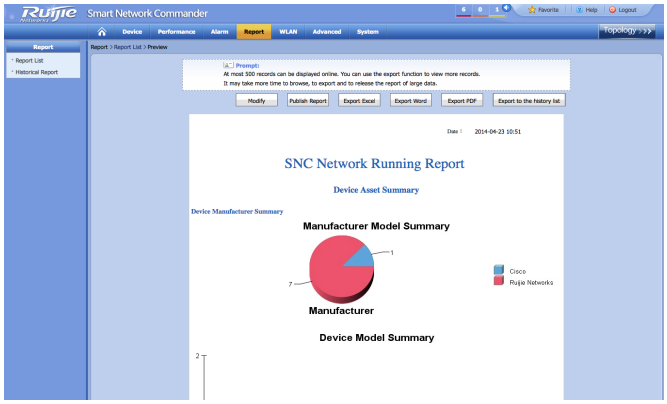
Report & Log Management

The Ruijie SNC assists administrators on network troubleshooting and problems locating to achieve desired outcome. The report & log management function includes the following features:

- Alarm report
- Assets report
- Security log
- Operation log
- Report export



Alarm Report Display



Device Asset Report

3rd Party Device Management

Ruijie RG-SNC retrieves details and monitor devices in the server using the SNMP, which the monitored devices are required to open. The function supports monitoring on the following:

- CPU operation efficiency
- Internal storage usage efficiency
- Port traffic rate
- Operation status via SNMP or PING

Easy ACL and QoS Deployment

- ACL and QoS Management: Deployment wizard will guide administrators to implement ACL or QoS on the device and relevant ports step by step.

MPLS VPN Management

The SNC offers excellent BGP/MPLS VPN, VPWS and VPLS management features, which are compatible with Ruijie products and work well with 3rd party MPLS VPN server management.

- VPN Resources Management: Centrally manage all resources in MPLS VPN and display relations between the resources such as BGP/MPLS VPN, VPWS VPN, VPLS VPN and detailed information on customer, site, domain, P, PE, CE, ASBR, VC ID pool and SC.
- Service configuration management: Setup wizard for MPLS VPN is available to establish VPN connection based on MPLS between two terminals. It includes service configuration of BGP/MPLS, VPWS, VPLS and cross-domain configuration of BGP/MPLS and VPWS.
- Performance report management: Show import and export data traffic of the VPN device and display the relation between PE device and VRF quantity in the form of VRF diagram.
- VPN topology: Display details of the whole network including P, PE, ASBR, CE and connection. Also support display topology based on VPN filtering, i.e. it only shows all the CEs which belong to the VPN, PEs which are directly related to such CEs and all core networks in the autonomous system.

System Management

The SNC enables administrators to manage the network devices according to their administrative privileges. This function includes the following features:

- Device assets management
- System parameter setting
- Email server configuration
- Configuration for software update FTP server
- SAM, SMP server configuration
- Administrator management
- Role management
- Password setting
- Concurrent login management
- Schedule operation log
- Device software report
- Software update tips
- Syslog overdue settings
- Favorites menu
- Trap forward management
- Event forwarding management

Technical Specifications

Hardware Platform

RG-SNC	
Processor	Four-core, each core clocked at 2GHz (recommended) Dual-core, each core clocked at 2GHz (minimum)
Memory	4G DDR/DDRII (recommended) 2G DDR/DDRII (minimum)
Storage	160G (recommended) 80G (minimum)
Network Interface Adapter	100M or above

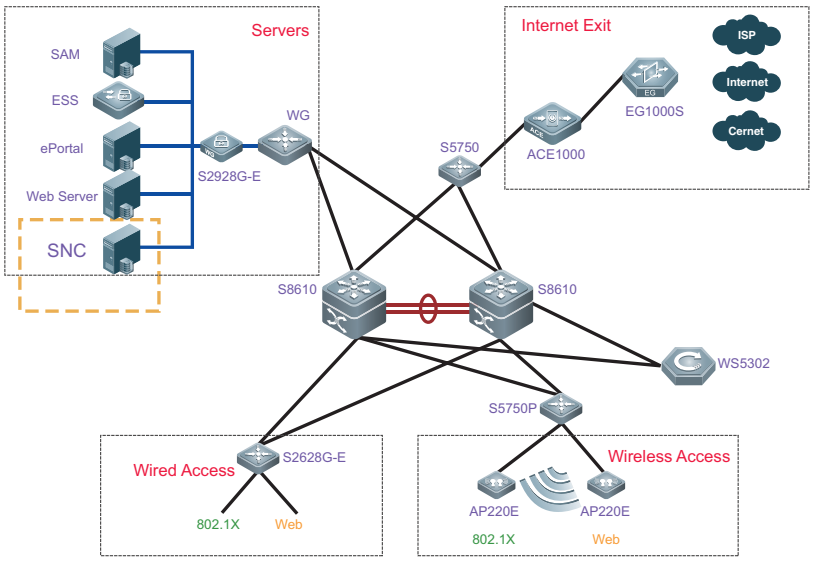
Operating System & Database

RG-SNC	
Operating System	Microsoft Windows Server 2003/2008
Database	MYSQL5.5.19-win32

Typical Application

Topology Diagram

RG-SNC is deployed without affecting existing network topology and applications. Remote management is realized through Web browser.



Typical Application Topology Diagram

Ordering Information

Model	Description	Remarks
RG-SNC-Base-EN	Basic Component of Smart Network Commander	Mandatory
RG-SNC-Topo-EN	Topology Management Component of Smart Network Commander	Optional
RG-SNC-Pro-License-15	SNC License for 15 Nodes	Optional
RG-SNC-Pro-License-25	SNC License for 25 Nodes	Optional
RG-SNC-Pro-License-50	SNC License for 50 Nodes	Optional
RG-SNC-Pro-License-100	SNC License for 100 Nodes	Optional
RG-SNC-Pro-License-200	SNC License for 200 Nodes	Optional
RG-SNC-Pro-License-500	SNC License for 500 Nodes	Optional
RG-SNC-Pro-License-1000	SNC License for 1000 Nodes	Optional
RG-SNC-MPLS	MPLS VPN Management Component of Smart Network Commander. Offer license management of 50 CE devices	Optional

Model	Description	Remarks
RG-SNC-MPLS-License-50	MPLS VPN Management License. Each license represents one CE device (License occupied by each MCE is determined by the number of VPN it generates)	Optional
RG-SNC-WLAN	Wireless Management Component of Smart Network Commander. Work with Base and Topo components. Node not included	Optional
RG-SNC-WLAN-License-50	SNC-WLAN License for 50 FIT APs	Optional
RG-SNC-WLAN-License-100	SNC-WLAN License for 100 FIT APs	Optional
RG-SNC-WLAN-License-200	SNC-WLAN License for 200 FIT APs	Optional
RG-SNC-WLAN-License-500	SNC-WLAN License for 500 FIT APs	Optional
RG-SNC-WLAN-License-1000	SNC-WLAN License for 1000 FIT APs	Optional
RG-SNC-WLAN-License-2000	SNC-WLAN License for 2000 FIT APs	Optional
RG-SNC-WLAN-License-5000	SNC-WLAN License for 5000 FIT APs	Optional

Innovation Beyond Networks

Ruijie Networks Co.,Ltd

Headquarter in Beijing

Address: Floor 11, East Wing, ZhongYiPengAo Plaza, No.29 Fuxing Road, Haiddian District, Beijing 100036,China
Email: info@ruijie.com.cn
Tel: (8610) 5171-5961
Fax: (8610) 5171-5997

Supply Chain in Fuzhou

Address: JuYuan Star-net Ruijie Technology Park, No. 618 JinShan road, Fuzhou City, 350002, China
Tel: (86591) 83057888
(86591) 83057000

Regional Office in Hong Kong

Address: Unit 09,20/F, Millennium City 2, 378 Kwun Tong Road, Kowloon,Hong Kong
Email: sales-hk@ruijienetworks.com
Tel: (852) 3620-3460
Fax: (852) 3620-3470

Regional Office in Malaysia

Address: Office Suite 19-12-3A, Level 12, UOA Center, No.19 Jalan Pinang, 50450 Kuala Lumpur
Email: sales-my@ruijienetworks.com
Tel: (603) 21811071

For further information, please visit our website http://www.ruijienetworks.com