SK-VIEW

Intelligent Wi-Fi operation management platform

Product Description

SK-View is a comprehensive Wi-Fi operation management platform, providing comprehensive and professional Wi-Fi network and application management for enterprises and operators. SK-View uses SNMP protocol, the private network management protocol and the latest image interface technology. Its powerful functions, simple operation and strong security can effectively manage WLAN devices and mobile terminals. Compatible with third-party wireless AP management, SK-View greatly reduces the workload and complexity of Wi-Fi network operation and management. SK-View can easily and smoothly let the user view the Wi-Fi network management from disorder to the transition of active control, exponentially improve work efficiency, and let users really use the Internet to create greater economic benefits.

SKV4000 Hardware

SKV-View software

Highlights

- **Flexible Management UI**

  SK-View network management platform adopts B/S architecture, simplifying the complex network management work through the visual, instrumented, report formed, intelligent and personalized network navigation management model.

- **Impeccable Wireless Network Monitoring and Management**

  Through the configuration of wireless network discovery rules, SK-View can flexibly according to user needs do real-time statistics on entire network wireless devices and mobile terminal operation states, the network flow, bandwidth, performance, alarm, and the Trap, and present to the user in graphical or report way.

Device Detail	Note
	10.10.13.30

IP address	10.10.13.30	MAC Address	048B4220A0C2
Model	WIA3200-20E	Type	AP
Device Status	Online	Online Time	49:42:15
AC Belonged	192.168.40.101	Hot Point	Default

Tool

Cable Interface				
Interface Name	Receive(Mbps)	Send(Mbps)	Bandwidth(Mbps)	Packet Loss Rate
WAN	0.00456000	0.00199200	1024	99

History							Export All Delete All Items Per Page 25
NAME	SOURCE		LEVEL	THE FIRST TIME OCCURRED	THE LAST TIME OCCURRED	TIMES	STATUS
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 11:56:10	2015-10-10 11:56:10	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 10:26:12	2015-10-10 10:26:12	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 10:16:12	2015-10-10 10:16:12	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 09:16:13	2015-10-10 09:16:13	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 06:26:17	2015-10-10 06:26:17	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 05:41:16	2015-10-10 05:41:16	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 05:06:19	2015-10-10 05:06:19	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 04:21:19	2015-10-10 04:21:19	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 02:36:27	2015-10-10 02:36:27	1	Cleared
CPU usage is too high	router(192.168.40.101)		crit	2015-10-10 01:56:28	2015-10-10 01:56:28	1	Cleared

SI-SPRUCE

SK-View supports the centralized remote configuration and management of AC and AP.

Wireless Device Management

AC / AP TEMPLATE / AP	IP	TYPE	MODEL	ONLINE STATUS	ONLINE TIME	LOCATION	ASSET NUMBER	COMMENT	OPERATE
router	192.168.40.101	AC	SAC700A	Online	49:45:29				Configuration Configuration
91mai									Configuration
default									
fh									Configuration
tj									Configuration

« Wireless Device List

Edit SSID Profile [a]   ✕

SSID Profile Settings

Name
1111
123456
91mai
a
cf
cf-1
cf-2
d
default
default1
default2
default3
default4
default5
fh
tj
tj-test

AP Management
AP Database
AP Template & Profiles
AP Template
RE AP Template
AP Basic Profile
Station Mode Profile
Location Monitor Profi
AP Lte Profile
Virtual AP Profile
AP Mac Acl Profile
SSID Profile
Raido 802.11a Profile
Raido 802.11ac Profil
Raido 802.11g Profile
Raido 802.11n Profile
Time Range Profile
IDS DOS Profile
AP Regulatory Domai
WMM Map Profile
AP Classification Prof

SSID Profile Name: a
SSID Enable: ☑
Wireless Distribution System Enable: ☐
Special SSID: ☐
ESSID: dee   ☐ Hide SSID
Encryption: ○WPA/WPA2 ○WEP ○Wapi Cert ○Wapi Psk ●None
Interval Between Sending DTIMs: 1 (1-255 beacon periods)
802.11a Supported Rates: 6,12,24
802.11a Transmit Rates: 6,9,12,18,24,36,48,54
802.11g Supported Rates: 6,9
802.11g Transmit Rates: 6,9,12,18,24,36,48,54
RTS Threshold: 2333 (0-2346 bytes)
Maximum Frame Retransmission: 4 (1-15 bytes)
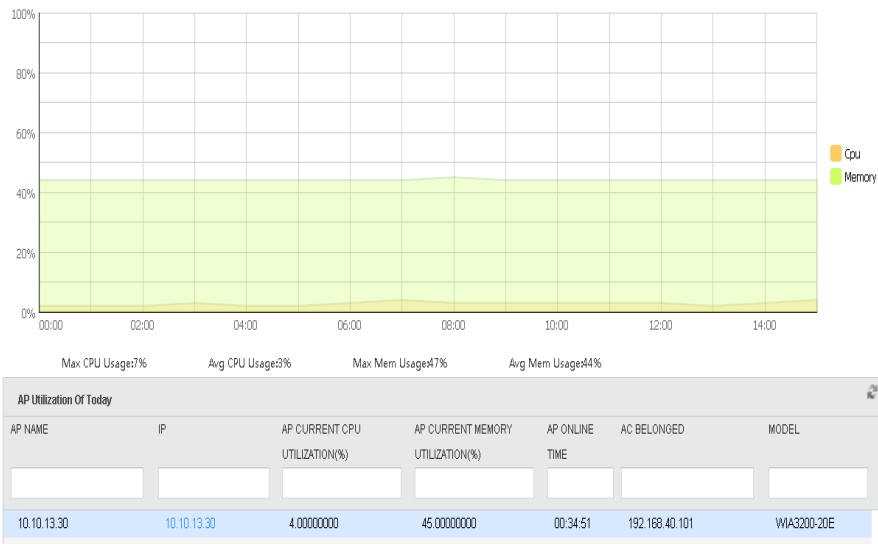Frame Fragmentation Threshold: 2346 (256-2346 bytes)
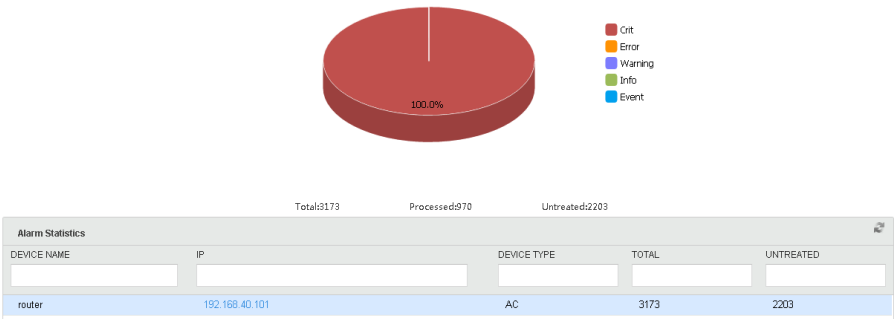Max Wireless Clients: 64 (1-128)
SNR Threshold: 0 (0-100 dB)

• **Comprehensive Network KPI Performance Indicators Display**

SK-View regularly collects device related performance data, gives data analysis and processing, and real time displays to the user through the ways such as graphical presentation. Through the system default KPI display items, users can real-time understand resources utilization of entire network devices.
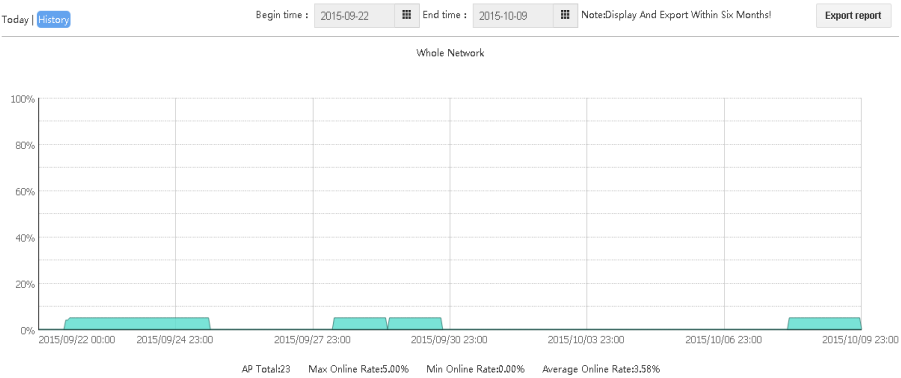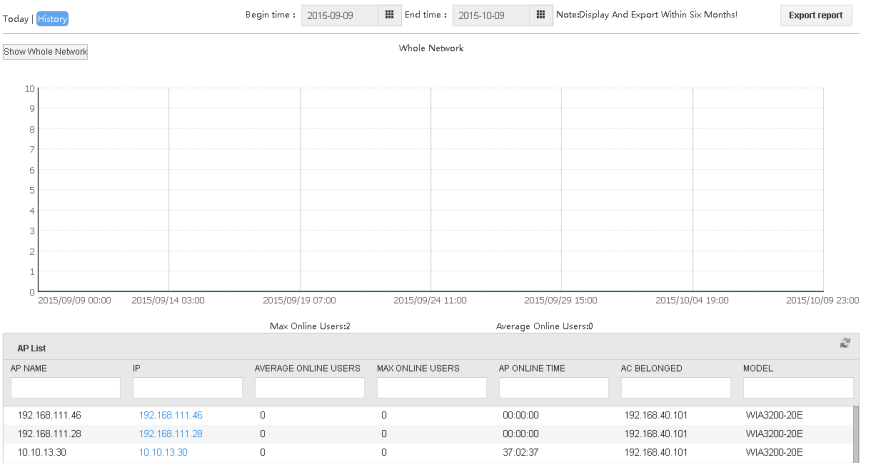
- Statistics on device utilization

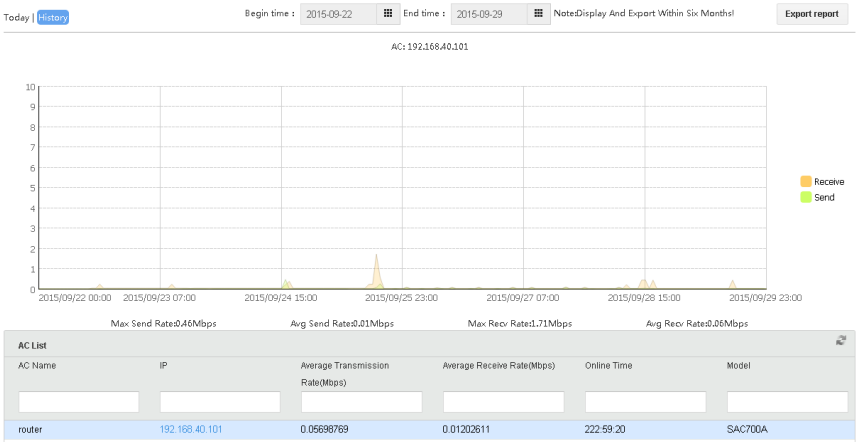Max CPU Usage:7%   Avg CPU Usage:3%   Max Mem Usage:47%   Avg Mem Usage:44%

Cpu
Memory

AP Utilization Of Today

AP NAME	IP	AP CURRENT CPU UTILIZATION(%)	AP CURRENT MEMORY UTILIZATION(%)	AP ONLINE TIME	AC BELONGED	MODEL
10.10.13.30	10.10.13.30	4.00000000	45.00000000	00:34:51	192.168.40.101	WIA3200-20E

- Statistics on alarms

	Crit
	Error
	Warning
	Info
	Event

100.0%

Total:3173   Processed:970   Untreated:2203

Alarm Statistics

DEVICE NAME	IP	DEVICE TYPE	TOTAL	UNTREATED
router	192.168.40.101	AC	3173	2203

- Statistics on AP online tendency

Today | History   Begin time : 2015-09-22   End time : 2015-10-09   Note:Display And Export Within Six Months!   Export report

Whole Network

100%

80%

60%

40%

20%

0%
2015/09/22 00:00   2015/09/24 23:00   2015/09/27 23:00   2015/09/30 23:00   2015/10/03 23:00   2015/10/06 23:00   2015/10/09 23:00

AP Total:23   Max Online Rate:5.00%   Min Online Rate:0.00%   Average Online Rate:3.58%

- Statistics on user online tendency

Today | History   Begin time : 2015-09-09   End time : 2015-10-09   Note:Display And Export Within Six Months!   Export report

Show Whole Network   Whole Network

10
9
8
7
6
5
4
3
2
1
0
2015/09/09 00:00   2015/09/14 03:00   2015/09/19 07:00   2015/09/24 11:00   2015/09/29 15:00   2015/10/04 19:00   2015/10/09 23:00

Max Online Users:2   Average Online Users:0

AP List

AP NAME	IP	AVERAGE ONLINE USERS	MAX ONLINE USERS	AP ONLINE TIME	AC BELONGED	MODEL
192.168.111.46	192.168.111.46	0	0	00:00:00	192.168.40.101	WIA3200-20E
192.168.111.28	192.168.111.28	0	0	00:00:00	192.168.40.101	WIA3200-20E
10.10.13.30	10.10.13.30	0	0	37:02:37	192.168.40.101	WIA3200-20E

- Statistics on device throughput

Today | History   Begin time : 2015-09-22   End time : 2015-09-29   Note:Display And Export Within Six Months!   Export report

AC: 192.168.40.101

10
9
8
7
6
5
4
3
2
1
0
2015/09/22 00:00   2015/09/23 07:00   2015/09/24 15:00   2015/09/25 23:00   2015/09/27 07:00   2015/09/28 15:00   2015/09/29 23:00

| | Receive |
| | Send |

Max Send Rate:0.46Mbps   Avg Send Rate:0.01Mbps   Max Recv Rate:1.71Mbps   Avg Recv Rate:0.06Mbps

AC List

| AC Name	IP	Average Transmission Rate(Mbps)	Average Receive Rate(Mbps)	Online Time	Model
router	192.168.40.101	0.05698769	0.01202611	222:59:20	SAC700A

- **Multi-user Grading, Separation of Powers, and Domain Management**

  Adopting the module design, SK-View software platform support multiple user classification, separation of powers and the domain management mode; system administrators can assign different system management authorities and the manageable terminals for users in different levels ; login SK-View, users can manage or view only within the scope of his authority AC or AP in the specified range.
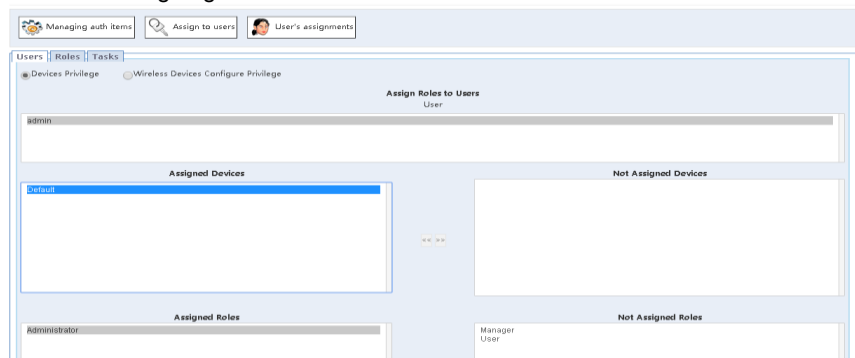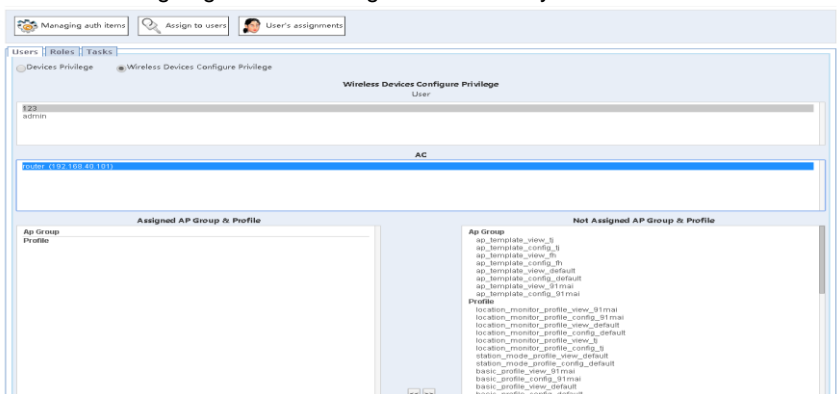
  - Task management
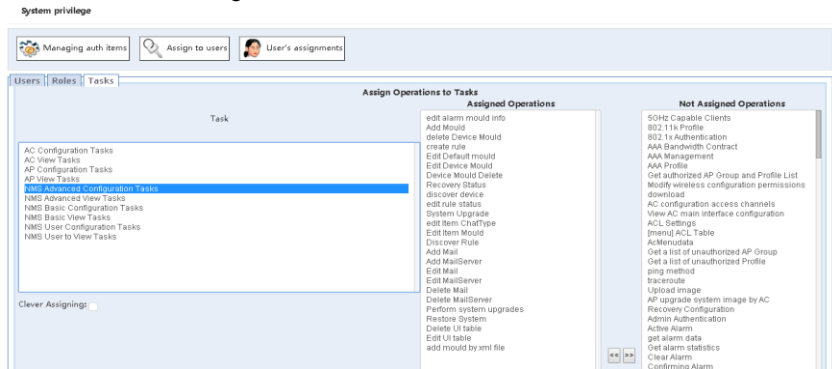
  - Role management
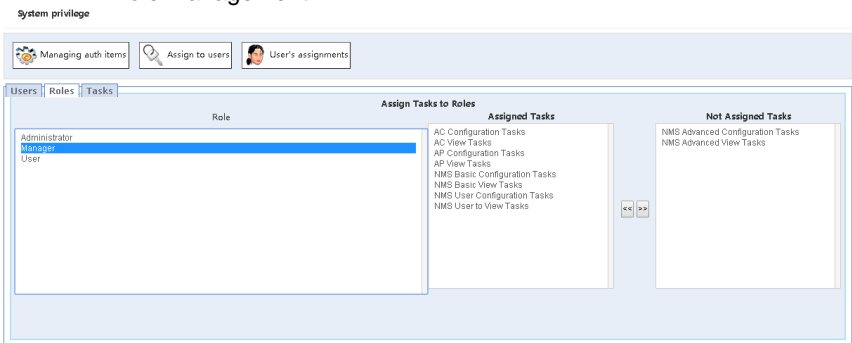
  - Assigning user role

  - Assigning wireless configuration authority

- **Wireless operation report**

  SK-View supports to create daily, weekly, monthly and yearly report based on AC or single AP and SSID. Administrators can master wireless network operation status through report, providing useful data for the network optimization and construction.

  - AC operation report includes access users, average traffic per client, DHCP request/assignment success ratio, authentication success ratio, average session duration and so on.

ACReport		Begin time :		⊗ ⊞	End time :		⊗ ⊞	Data source : AC ▼		⊞ Export report		
ID	UNIQUE CLIENTS	AVG TRAFFIC PER CLIENT(MB)	AVG TRAFFIC PER SESSION(MB	DHCP IP ADDRESS ASSIGNMENT SUCCESS RATIO(%)	AUTHENTICA SUCCESS RATIO(%)	AVG SESSION DURATION(M	ONLINE USER ABNORMAL CALL DROP RATIO(%)	RATIO OF OVERBUSY APS(%)	RATIO OF OVERIDLE APS(%)	DHCP REQUEST SUCCESSFL RATE(%)	DHCP ADDRESS POOL UTILIZATION	AP ASSOCIATION CONGESTION RATE(%)
192.168.40.101(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-23)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-24)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-25)	1	512.13	256.06	0.00	0.00	2.13	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-26)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-27)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-28)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-29)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-09-30)	1	176.09	11.74	0.00	0.00	12.21	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-10-08)	1	640.62	26.69	0.00	0.00	20.40	0.00	0.00	100.00	0.00	0.00	0.00
192.168.40.101(2015-10-09)	1	856.67	71.39	0.00	0.00	102.34	0.00	0.00	100.00	0.00	0.00	0.00

  - AP operation report includes AP access users, average upload/download traffic of single user, managing terminal abnormal drop rate, managing success rate, average session duration, AP out of service rate and so on.

| APReport		Begin time :		⊗ ⊞	End time :		⊗ ⊞	Data source : AP ▼		⊞ Export report		
ID	UNIQUE CLIENTS	UL THROUGHP OF AVG SINGLE USER(KBPS	DL THROUGHP OF AVG SINGLE USER(KBPS	SINGLE USER DOWNLOAD THROUGHP	ASSOCIATIC TERMINAL ABNORMAL DROP RATE(%)	AVG TRAFFIC PER CLIENT(MB)	AVG TRAFFIC PER SESSION(M	UL THROUGHP OF AP WIRELESS(	DL THROUGHP OF AP WIRELESS(	ASSOCIATIC SUCCESS RATIO(%)	AVG SESSION DURATION(	UL WIRELESS PACKET ERROR RATIO(%)	AP OUT OF SERVICE RATE(%)
04:8b:42:20:00:50(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:00:6e(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:00:fa(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:07:0d(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:07:86(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:0a:d7(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:65:80(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:a0:72(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:a0:c2(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	4.27	16.72	0.00	0.00	0.00	0.00
04:8b:42:20:a0:fe(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:a1:21(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:a1:49(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:a3:3d(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:a3:6a(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
04:8b:42:20:a4:41(2015-09-22)	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

  1 2 3 4 5 →   1-20 / 224

  - SSID operation report includes access users, average traffic per client, average traffic per session and average session duration.

SSIDReport	Begin time : ⊗ ⊞	End time : ⊗ ⊞	Data source : SSID ▼	⊞ Export report
ID	UNIQUE CLIENTS	AVG TRAFFIC PER CLIENT(MB)	AVG TRAFFIC PER SESSION(MB)	AVG SESSION DURATION(MIN)
6b733f9f313233(2015-09-29)	0	0.00	0.00	0.00
ccd2b5(2015-09-29)	0	0.00	0.00	0.00
4a2d5445535431(2015-09-30)	0	0.00	0.00	0.00
4a2d5445535432(2015-09-30)	0	0.00	0.00	0.00
4a2d5445535435(2015-09-30)	0	0.00	0.00	0.00
6a2d6470692d74657374(2015-0	0	0.00	1.73	0.00
6a2d6470692d74657374(2015-1	0	0.00	2.98	0.00
6a2d6470692d74657374(2015-1	0	0.00	2.93	0.00

- **Convenient and fast system deployment**

  Skspruce intelligent Wi-Fi operation management platform adopts software and hardware integrated solution; user needn't to buy extra servers. Administrators can discover, manage and monitor entire network wireless device by adding AC IP address in the system.

SK-VIEW intelligent Wi-Fi operation management platform

Application scenarios

SK-View system deploys network using bypass mode, keeping the original network structure, and fast completing system deployment and application.
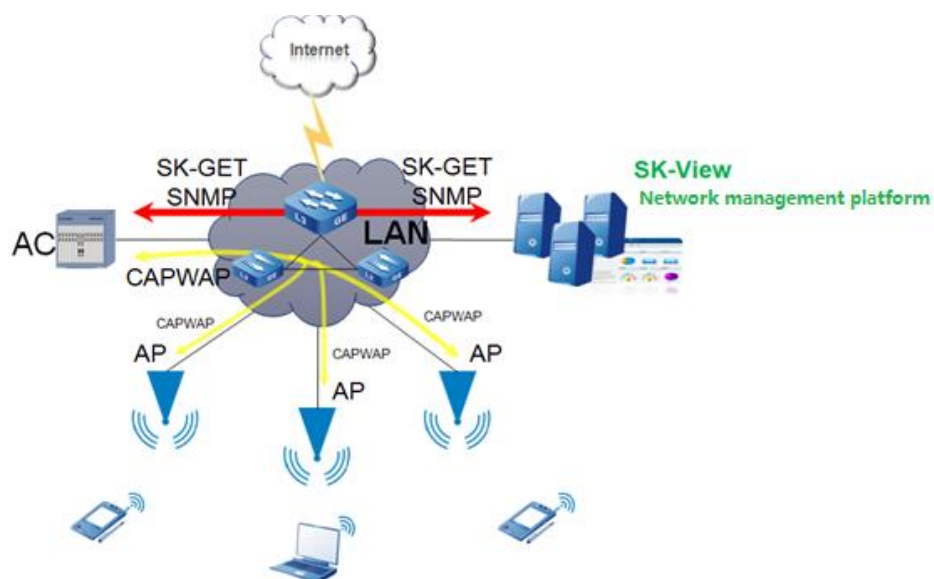
Hardware specifications

Host SKV4000

System	IOS	Linux
Hardware parameter	CPU	2 x 1 x Intel E5-2660 (10Core/2.2 GHz)
	RAM	8 x 16GB DDR3
	HD	System disk: 2 x 500 GB
		Data disk: 8*600G
	Console	1 x RJ45
	MGMT	1 x RJ45(10/100/1000)
	DATA	1 x RJ45(10/100/1000)
	Power	2 x AC (100 V to 240 V@ 50 Hz -60 Hz, 650 W)
	Dimensions (H x W x D)	89 mm x 433mm x 655mm x 89mm (W x L x H)
	Weight	≤ 25 kg
Working environment	Working temperature	0℃ to 40℃
	Working humidity	5% to 85%@40℃
	Storage temperature	-20℃ to +75℃
	Storage humidity	5% to 95%
Reliability	MTBF	≥ 200000 hours

Software specifications

Category	Item
Network management	Network overview
	Device list
	Device details
	Device configuration management
	Wire interface management
	Wireless interface management
	Other wire device management
Performance management	UE resource
	AC utilization
	AP utilization
	AC bandwidth tendency
	AP bandwidth tendency
	Alarm statistics
	User online tendency
	AP online tendency
	AP out of service rate
Report management	AC/AP/SSID performance report
	Daily report
	Weekly report
	Monthly report
Alarm management	Active alarm
	History alarm
	Event alarm
	Alarm shield
Trap management	New Trap
	History Trap
User management	Authority task management
	Role management
	User role and authority management
System management	System status management
	Log management
	System network configuration
	System upgrading

Software specifications

Product	Description
SKV4000	SK-View Hardware platform, SK-View basic software included (node excluded), one year basic hardware maintenance and software remote technical support service included
SK-View-LIC-50	SK-View software license, support 50 AP nodes
SK-View-LIC-200	SK-View software license，support 200 AP nodes
SK-View-LIC-500	SK-View software license，support 500 AP nodes
SK-View-LIC-1000	SK-View software license，support 1000 AP nodes
SK-View-LIC-5000	SK-View software license，support 5000 AP nodes

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the

 receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.