HUAWEI SMC2.0

Open and Interoperable Videoconferencing Service Management System

HUAWEI SMC2.0 (Service Management System 2.0) is a next-generation, open videoconferencing service management system for the unified control and management of videoconferencing assets. Its powerful management capabilities enable corporate IT managers, administrators and end users to communicate and collaborate effortlessly, improving efficiency, productivity, and decision making.

Centralized Management of Video Communication Resources

- Administrators can manage a complete portfolio of videoconferencing resources with one device, including MCUs, GK/SIP servers, recording devices, and video endpoints.
- Powerful device management functions include auto detection, batch parameter configuration, visualized network topology and management, locked parameters for consistent operation, batch software version management and upgrade, querying and handling of alerts, and parameters configuration and alerts management for mainstream endpoints.
- Flexible and easy-to-create statistical reports deliver video resource usage updates in real time for more efficient resource management and fast decision making.
- Administrators can flexibly manage large-scale videoconferencing networks by deploying MCUs and gatekeepers in geographically dispersed corporate branches as well as balance MCU cloud resource center loads with internal backup or between MCUs to improve resource utilization and conference reliability.
- Distributed videoconferencing network by deploying SMC2.0s is designed for multi-level organization in government and enterprise industry. Device management by each organization and communication between different organization including scheduling conference , conference control and so on are supported.
- The Nlog end-to-end quality-monitoring function empowers operators to monitor conference quality and analyze fault history.

Hierarchical and Role-Based Authentication for Multiple Users

- Large enterprises can categorize users according to corporate organizational structures and define or assign user roles and access rights depending on organizational architecture.
- Graphics-based tree architecture displays show usage by individual users.
- Operators can establish large-scale video operating networks to provide hierarchical and role-based virtual operation services for multiple corporations.

Communicate and Collaborate Anytime and Anywhere

- SMC2.0 provides an easy-to-use User Interface (UI) that enables users to conveniently schedule conferences, view the status of conference rooms, choose appropriate conference times and sites, and send conference notices to participants via email.
- Conference templates and conference history functions allow users to define and schedule large cascaded conferences. The SMC2.0 system also allows automatic cascading of MCUs as needed with seamless management of multisite calls.
- SMC2.0 can be integrated with Office Automation (OA) systems. For example, users can schedule conferences, cancel conferences, and view the availability of participants or conference rooms with the integrated Outlook application. Conference notifications are automatically added to participants' Outlook calendars.
- Join a conference by using the "One-Click-to-Join" button on the touchscreen or by initiating an ad-hoc conference with a unified access number.

GK/SIP Servers Offer Greater Flexibility for Network Deployment and Management

- Support for dual protocols (H.323 and SIP) provides networking flexibility for diverse videoconferencing scenarios.
- Embedded GK/Server enables integrated deployment, firewall traversal, partition management, B2B calls and call routing.
- SMC2.0 adds the ability to manage multiple standalone SwitchCenters (GK/SIP Server), which allows for networking on a large scale and large-capacity firewall traversal.

Open and Standard Interfaces Enable Interoperability with Third-Party Systems

- SMC2.0 provides APIs for integration with other vendor products and seamless integration with Microsoft® Active Directory and OA systems.
- Support for integration with existing user-authentication system in enterprises satisfies the need for unified account working in office.
- SMC2.0 seamlessly integrates with other mainstream video surveillance platforms by streaming surveillance camera video directly to video conferences.
- Integration with mainstream SMS platform is supported so that it can make it easy to use the system.

HUAWEI SMC2.0 Technical Specifications

Functions and features

User management:
- Hierarchical and role-based management of users
- Support for user logins from web interfaces

Device management:
- Unified management for all devices including MCUs, telepresence, endpoints, recording servers, and GK/SIP server:
- Telepresence system architecture can be viewed in graphics-based topology displays
- Management for multivendor endpoints
- Auto detection, device status query, device status auto routing inspection, device configuration template, batch parameter configuration and modification, locked parameters, batch software version management and upgrade, device status query, alerts processing, and operation logs viewable on the web

Conference scheduling:
- Features include MCU virtual resource, SiteCall, ad hoc conference, conference activation, and recurring conference.
- Conferences can be scheduled from the web interface or Outlook. When scheduling conferences, users can view the free or busy status of each participant or each site.
- Conference notifications can be sent via emails or SMS.

Conference cascading:
- Schedule and manage cascaded conferences automatically or manually.

Conference control:
- Add or delete participants, mute speakers, mute microphones, broadcast sites, view sites, and set continuous presence mode.

Conference quality display:
- End-to-end conference quality, such as packet loss, jitter, delay, and the number of consecutive lost packets is displayed on graphs in real time.
- The system supports threshold alarms and data export.

Billing, reports, and CDRs:
- Define conference billing codes.
- The system supports CDR text files, reporting of conference statistics and site usage, and MCU usage.

GK/SIP server functions:
- Functions include node management, blacklist /whitelist, call control, number change, bandwidth management, zone management, routing management, and SIP proxy.

Firewall Traversal
- H.460 18/19-compliant (H.323)
- Firewall ICE/STUN/TURN-compliant (SIP)
- Huawei patented SNP traversal-compliant
- Support for video firewall traversal of dual network interfaces

System backup:
- Support for 1+1 redundancy backup
- IP site for 1+1 backup in conference

Third-party integration and APIs:
- Integration with Microsoft ActiveDirectory
- Integration with Microsoft Exchange Server
- Integration with Microsoft Lync 2013™/Skype for business
- Third-party APIs

Multiple languages:
- English, French, Spanish, German, Italian, Russian, Polish, Japanese, Simplified and Traditional Chinese
- (Chinese and English online help)

Video Surveillance
- surveillance integration gateway: Support up to 65 surveillance channels (each support 2Mbps) and support standard GB/T28181 protocol
- Visual scheduling console: 4 multi-picture preview and support third-party integration

System performance

	Server version	Software version
Device Qt.	10000	100
*Max. registrations	1000	100
*Max. concurrent calls	1000	100
*Traversal traffic (Mbps)	60	60

Physical Dimensions of server

(H x Wx D): 87.3 mm x 447 mm x 760 mm; supports 19-inch rack-mount chassis

Weight: 24.0 kg

Interfaces:
- Six GE Ports (RJ-45) with TOE (TCP/IP Offload Engine) support
- One 10M/100M Ethernet port (RJ-45)
- One DB9 console port
- One DB15 VGA port

Power:
- Input Voltage: 100V to 120V AC or 200V to 240V AC
- Two hot-pluggable 460W power supplies for 1+1 backup

Environmental Data:
- Operating temperatures: 10ºC to 35ºC
- Storage temperatures: -40ºC to 65ºC
- Temperature fluctuation: < 20ºC/h

Relative Humidity:
- Operating humidity: 8% RH to 85% RH (non-condensing)Storage humidity: 5% RH to 95% RH (non-condensing)
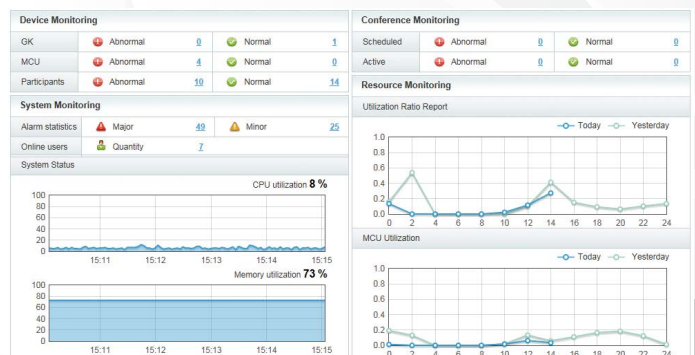- Humidity fluctuation: < 20% RH/h

Atmospheric Pressure: ≤ 3,000m(Operating temperature reduces by 1°C for every 300M above 900M)

Running Environment: Embedded with Windows Server 2008 (R2) and SQL Server 2008 R2 Database

Minimum software requirements of Software version

Server configuration: 4-core CPU (basic frequency≥2.2GHz), 8G memory, 300G hardware, single/dual 1000M network interface card, Support VMware deployment

Operating system: Microsoft Windows Server 2008 R2

"*" indicates SMC2.0 is deployed alone, without Standalone SC.