HUAWEI SMC

Video Conferencing Service Management System

Overview

Huawei Service Management Center (SMC) is a next-generation video conferencing management system. It supports easy-to-use conference management and control, visualized O&M, and unified scheduling and management of video conference devices and media resources on the entire network. Its service-oriented architecture features high performance, large capacity, and elastic scaling, meeting the needs of video conferences at different scales.



HUAWEI SMC



Relaxed experience with professional and convenient conference control



Unified management of network-wide devices and resources



Homegrown core technologies, secure and trustworthy



Relaxed experience with professional and convenient conference control

- · Personalized, custom conference control functions such as one-click roll call and broadcast, enabling quick conference control for enterprises and individuals.
- · Efficient conference control: quickly locating a conference by organization in a cascaded system, quick participant operations, and clear conference and participant status.
- · Professional Visualized Dispatching Center (VDC): audio and video pre-monitoring, presentation preview, custom combined conference controls, as well as pushing live videos to the video wall.
- · Quickly initiating a large cascaded conference: one-click scheduling using a conference template or historical conference, auto MCU cascading and management.
- · Working with enterprise's OA system: schedule or cancel a conference via email client, view the free or busy status of participants and conference rooms, and automatically add conference notification emails to users' schedules.

Unified management of network-wide devices and resources, one-stop O&M

- · Unified device management: centrally manage enterprise assets, including MCUs, recording and streaming devices, GK/SIP servers, corporate directories, telepresence systems, and endpoints.
- · Unified resource management: MCU resource pooling for intra-pool or inter-pool load balancing and backup, improving resource utilization and ensuring conference continuity.
- · Unified management and configuration: auto-configuration delivery, software management, status and performance management, and remote device diagnostics.
- · Easy O&M, real-time device status monitoring: batch parameter configuration and modification, software version management and batch upgrade, alarm query and handling, fault information export, remote device heath check and report generation.
- · Flexible, simplified statistical reports for you to learn about video asset usage in a timely manner, helping you adjust deployment and make decisions.

Homegrown core technologies, secure and trustworthy

- · Key core technologies and proprietary intellectual property rights, including conference management, conference control, device management, and resource management.
- Device access authentication, encrypted service data transmission, data access control, and security assurance on open interfaces to ensure conference information security.



Hierarchical and role-based management, refined permission control

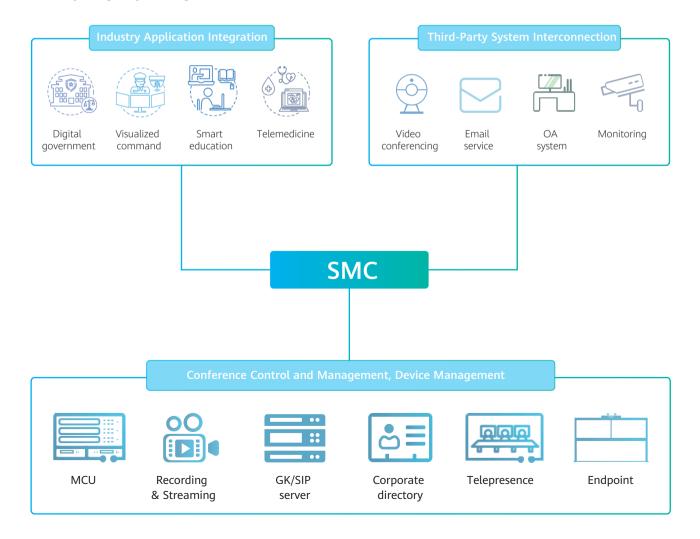
- · Hierarchical and role-based user management based on enterprise organizations, enabling flexible level definition and permission control.
- · Multi-role management: system administrators, conference administrators, and common users, offering device management, conference management, and conference scheduling by individual.

Flexible, scalable service-oriented architecture

- · Scenarios with less than 10,000 users: allow the management platform to be deployed on a device, with built-in registration and call control, corporate directories, centralized deployment and management at the HQ, as well as MCU resource pool management supported.
- · A single device supports 1000 concurrent calls.
- Scenarios with less than 200,000 users: allow the management platform to be independently deployed on a large-capacity network, with distributed deployment and centralized management of MCUs for multi-level administrative conferences and enterprises with multiple branches supported. A single device supports 20,000 concurrent calls.
- · RESTful APIs for conference management and control, as well as recording management, meeting the needs for integrating OA systems and industry applications.
- · Connecting to mainstream monitoring platforms through VDC: enable you to view monitored images and control cameras during a conference, meeting industry application demand.

Typical Scenarios

The SMC centrally manages and controls video conferencing devices and resources on the entire network, and offers a variety of conference scheduling modes. With flexible and comprehensive third-party APIs, the SMC easily integrates industry applications and interconnects with third-party systems, effectively improving communication and decision-making efficiency and greatly reducing O&M costs.



Features

Service Features	
User management	 Hierarchical and role-based management based on enterprise organizations. Multiple roles, including individuals, conference administrators, and system administrators.
Device management and maintenance	 Unified management of network-wide devices, including MCUs, recording and streaming devices, GK/SIP servers, corporate directories, telepresence systems, and endpoints. Unified management and configuration, including auto-configuration delivery, software management, as well as status and performance management. Device health check and report generation. Fault info export, alarm viewing and handling, log viewing and export. Batch parameter configuration and modification, software upgrade, data backup, one-click information collection, and health check.
Conference scheduling	 Instant, scheduled, recurring, permanent, and cascaded conferences. Scheduling a conference via web page, third-party API, or email client, or by a terminal through SiteCall. Predefining parameters of the site list and conference capability in a conference template, and scheduling common and cascaded conferences. One-click conference initiation using a conference template and conference history. Voice, video, recording, and data conferences, as well as video surveillance convergence. Nearest access based on the access gateway address. Querying the free/busy status of a conference room. Conference notification via email or calendar, and pushing the conference info to the terminal.
Participant/Conference control	 Participant control (button/right-click shortcut operations supported): adding or deleting a participant, calling or disconnecting a participant, muting or unmuting a speaker or microphone, locking or unlocking a video source, setting a video source, adjusting the remote camera, and sharing the remote desktop. Conference control (custom common functions supported): muting or unmuting all speakers or microphones, requesting or releasing chair control rights, selecting a video, locking a presentation, viewing participant status, setting or broadcasting the continuous presence, polling mode, setting banners and captions, giving the floor, controlling the recording and live broadcast, extending a conference, ending a conference, free discussion, and voice activation.
Conference cascading	Scheduling and controlling automatic cascaded conferences.Elastic channel cascading.
Al	· Working with the intelligent conference server and Huawei's next-generation CloudLink video conferencing endpoints to support on-screen name tags and conference sign-in.
Reliability	MCU resource pooling and service area backup.Auto reconnection upon abnormal communication link or offline.
Security	 Cross-site script attack prevention, principle of least privilege, session permission control, brute-force password cracking defense, software package integrity check, anti-tamper. Comprehensive log recording and event audit. OS and database hardening in accordance with the Center for Internet Security (CIS) standards.

Technical Specifications

Protocols and Standards		
Multimedia framework protocols	ITU-T H.323, IETF SIP	
Other standards and protocols	IH.225, H.245, Q.931, H.235, SDP, TLS/SRTP, H.239, and BFCP H.460, ICE, STUN, TURN, SNP (Huawei patented technology), and SIP TRUNK TCP/IP, HTTP, HTTPS, SSH, LDAP/H350, TR-069, SNMP, RTP, RTCP, and DDNS	
System Capacity		
Maximum concurrent conference ports	20,000	
Maximum provisioned users and participants	200,000	
Language		
	English and Chinese	

Ordering Information

Category	Description	Remarks
Main unit (select one of the two)	Huawei Kunpeng-powered platform: · Management platform on a device (< 10,000 users) · Management platform on a large-capacity main unit (< 200,000 users)	-
Software license	 Number of managed device Number of registered H.323/SIP hardware devices (including MCUs, recording devices, and hard endpoints) Number of registered soft clients Public-private network traversal traffic Number of MCU concurrent ports Number of concurrent accesses over APIs (from VDC clients or other clients) Number of recorded video Number of live video 	Including the floating licenses of managed devices
Warranty service	During the warranty period, Huawei offers a faster response to requests for services such as troubleshooting and spare parts delivery and provides additional services including Hi-Care original manufacturer service, media retention service, and Co-Care joint service. For more information, visit: https://support.huawei.com/enterprise/en/service-support	-

Warranty Information 5

The SMC has a 1-year warranty for hardware and 90-day online technical support for software.

Learn More>>>



Huawei Video Conferencing Solution



CloudLink Collaborative Telepresence Products

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