



# SoftwareUCM

## Unified Communication & Collaboration Software Solution

SoftwareUCM is a software-based PBX solution that provides a scalable business communication and collaboration platform with powerful features and integrations that enable teams to be more productive than ever before. This software PBX unifies all business communications onto one centralized platform that provides voice and video calling, meetings, chat, data, analytics, mobility, facility access, intercoms, video surveillance, and more. SoftwareUCM supports all SIP endpoints and the Wave app for desktop, mobile, and web, allowing teams to communicate and collaborate from anywhere on nearly any device. By providing a state-of-the-art suite of communication and collaboration features, bank-grade security, advanced customization, and a variety of scalable plan options, SoftwareUCM is the ideal PBX solution for enterprises, small-to-medium sized businesses, retail, hospitality, and residential deployments.



Comprehensive unified communication and collaboration features



Supports up to 5000 users and up to 1000 concurrent calls



Built-in audio, video, chat, and web meeting platform; supports desktop, mobile devices, and SIP endpoints



Wave app for mobile, desktop, and web allows communication from anywhere on any device



GDMS provides seamless cloud setup, management, monitoring, and provisioning



Pair with UCM RemoteConnect NAT firewall traversal service to ensure secure remote connections



Instant messaging/chat, screen sharing, whiteboard, file sharing, recording, meeting assistant, & more



Supports Customer Service platforms, WhatsApp, Telegram, etc. Built-in live chat for desktop & mobile



Zero configuration provisioning of Grandstream SIP endpoints



Supports Full-Band Opus voice codec, H.265/H.264/H.263/H.263+/VP8 video codec, jitter resilience up to 50% packet loss



API and SDK available for third-party integrations, including CRM and PMS platforms



Integrate with CRM, PMS, Microsoft Teams, Office 365, Google Drive and more



## Enterprise-Grade Communications

SoftwareUCM unifies all business communications onto one centralized platform. This software-based PBX provides businesses and resellers with complete control of their UC solution, as it is hosted on their local physical machines, virtual machines, or cloud platforms.



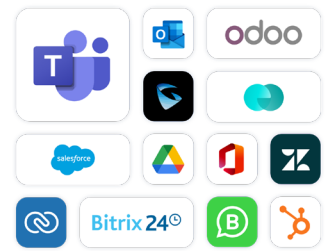
## Enterprise-Grade Security Protection

SoftwareUCM provides end-to-end data encryption, storage, and backup mechanisms. It is equipped with state-of-the-art anti-malware protection to ensure the security of all data. When multiple customers are being managed, SoftwareUCM ensures data isolation and security between software instances.



## Deployment Flexibility and Multi-Tenant

SoftwareUCM can be deployed on virtual machines, physical machines, or cloud platforms. Thanks to multi-tenant support, resellers can install and maintain multiple customers through a single installation, allocating resources flexibly to various independent software instances.



## Powerful Integrations and Expansions

Easily integrate SoftwareUCM with CRM platforms, Property Management Systems (PMS), ERP systems, customer service platforms, and similar systems to create seamless business continuity. The available API and SDK also allows for custom functionality and integrations.

# SoftwareUCM Pricing Structure

<p><b>Base Package</b></p> <p>Base package with annual fee</p> <p><b>50 users</b></p> <p><b>24 concurrent calls</b></p>	<p><b>50 Upgrade Package</b></p> <p>Upgrade package with annual fee</p> <p><b>Adds 50 users</b></p> <p><b>Adds 16 concurrent calls</b></p>	<p><b>250 Upgrade Package</b></p> <p>Upgrade package with annual fee</p> <p><b>Adds 250 users</b></p> <p><b>Adds 64 concurrent calls</b></p>
<p>*SoftwareUCM plans can be created to support up to 5000 users by combining multiple upgrades to achieve the required users and concurrent calls.</p>		

Contact Your Grandstream Distributor, Installer, or Representative for Pricing

<b>Supported UC Endpoints and Client Devices</b>	Supports all SIP endpoint access Wave app for desktop (Windows 10+, Mac OS 10+), web (Firefox, Chrome, Safari, Edge, Opera) and mobile (Android & iOS), Wave extension for Google Chrome
<b>Call Features</b>	Call park, call forward, call transfer, call waiting, caller ID, call record, call history, ringtone, IVR, music on hold, call routes, DID, DOD, DND, DISA, ring group, ring simultaneously, time schedule, PIN groups, call queue, pickup group, paging/intercom, voicemail, call wakeup, SCA, BLF, voicemail to email, fax to email, speed dial, call back, dial by name, emergency call, call follow me, blacklist/whitelist, voice conference, video conference, eventlist, feature codes, busy camp-on/ call completion, voice control, post-meeting reports, virtual fax sending/receiving, email to fax, scheduled call, announcement, announcement center, operator panel, time condition routing
<b>Customer Relationship Management (CRM)</b>	Supports integration with SugarCRM, Vtiger, Zoho, Salesforce, ACT!, and ODOO
<b>Calling with WebRTC Trunk</b>	Supports mobile and desktop web browsers: Chrome, Edge, Safari, Firefox, Opera Supports mobile application with built-in WebRTC WebView, including Whatapps, Facebook, Weixin, and more
<b>Collaboration</b>	Audio and Video Meetings/Conferences, Instant Messaging and Group Chats with End-to-End Encryption, File Sharing, Screen Sharing, In-Meeting Chat, Voice Detection, Meeting Recording, Polls, Surveys, Message status, Advance Whiteboard with Multiplayer Annotation, Meeting Assistant, Onsite Meeting Room Scheduling, and more
<b>Online Customer Service</b>	Supports integration with third-party customer service platforms, including WhatsApp and Telegram. And built-in live chat <ul style="list-style-type: none"> <li>Includes a built-in live online web chat platform to provide customer service</li> <li>Provides a web link that can be added to any web page or any browser that supports WebRTC</li> <li>Compatible with computers, mobile browsers, and mobile apps</li> </ul>
<b>Call Center</b>	Multiple configurable call queues, automatic call distribution (ACD) based on agent skills/availability/ work-load, in-queue announcement
<b>Customizable Auto Attendant</b>	Up to 5 layers of IVR (Interactive Voice Response) in multiple languages
<b>Property Management System (PMS)</b>	Supports Integration with Hmobile, Mitel, HSC, IDS, PMS API, and local PMS
<b>SoftwareUCM App store</b>	Support more than 20 customized applications, with new apps being added regularly <ul style="list-style-type: none"> <li>CRMs add-ons</li> <li>Google Drive and Office 365</li> <li>Whatapps and Telegram</li> <li>Hotdesking</li> </ul>
<b>Microsoft Integration</b>	Supports Integration with Microsoft Teams (via TeamMate), Outlook, AD Contact, and Office 365
<b>Computer Telephony Integration (CTI)</b>	CTI Mode to Control GXP, GRP, GXV, and GHP Series IP Phone
<b>Wired and Bluetooth Headsets</b>	Supports docking with different types of headphones Supported Microsoft Teams certified headsets, supports phone call control
<b>Maximum Attendees of Conference Bridges</b>	Up to 25 simultaneous video conference rooms, up to 300 simultaneous participants in all rooms combined, up to 9 video feeds in all conference rooms
<b>Firmware Upgrade and Provisioning</b>	Supported by Grandstream Device Management System (GDMS), a zero-touch cloud provisioning and management system; GDMS provides a centralized interface to provision, manage, monitor and troubleshoot Grandstream products
<b>IP Cameras, Intercom and Door Access Integration</b>	Supports Grandstream GSC Series IP Cameras and Intercom/Public Address devices, supports GDS Series Door Access Solutions; supports third party devices
<b>API and SDK</b>	Full CGI API available for third-party platform and application integration Wave add-on SDK Wave Android and iOS SDK Wave H5 Embedded for MAC/Windows applications
<b>Multi-Language Support</b>	<ul style="list-style-type: none"> <li>Web UI: English, Simplified Chinese, Traditional Chinese, Spanish, French, Portuguese, German, Russian, Italian, Polish, Czech, Turkish</li> <li>Customizable IVR/voice prompts: English, Chinese, British English, German, Spanish, Greek, French, Italian, Dutch, Polish, Portuguese (Brasileiro), Portuguese (Portugues), Russian, Swedish, Turkish, Hebrew, Arabic, Netherlands,</li> <li>Customizable language pack to support other languages</li> </ul>
<b>Security</b>	Frequency Restriction, Fail2ban, Ping Defense, Ping Of Death, SYN-Flood, Remote login interception, Multi-factor authentication, SMS login authentication, Static Firewall Defense, Web login IP allow list, Data and File Encryption
<b>Network Protocols</b>	SIP, TCP/UDP/IP, RTP/RTCP, IAX, ICMP, ARP, DNS, DDNS, DHCP, NTP, TFTP, SSH, HTTP/HTTPS, STUN, SRTP, TLS, LDAP, IPv4, OpenVPN®, SMB2, SNMP, 802.1x, Radius
<b>Internet Protocol Standards</b>	RFC 3261, RFC 3262, RFC 3263, RFC 3264, RFC 3515, RFC 3311, RFC 4028, RFC 2976, RFC 3842, RFC 3892, RFC 3428, RFC 4733, RFC 4566, RFC 2617, RFC 3856, RFC 3711, RFC 4582, RFC 4583, RFC 5245, RFC 5389, RFC 5766, RFC 6347, RFC 6455, RFC 8860, RFC 4734, RFC 3665, RFC 3323, RFC 3550, RFC6189
<b>Caller ID</b>	SIP From PAI, RPID, PPI, and head field
<b>DTMF Methods</b>	In-band audio, RFC4733 and SIP INFO
<b>Transmission Encryption</b>	SRTP, DTLS-SRTP, TLS, HTTPS, 802.1.x, SSH, ZRTP
<b>Voice-over-Packet Capabilities</b>	Comfort noise, NACK, NACK+RTX Dynamic Jitter Buffer, NetEQ, FEC 2.0, jitter resilience up to 50% audio packet loss
<b>Voice and Fax Codecs</b>	Opus, G.711 A-law/U-law, G.722, G722.1 G722.1C, G.723.1 5.3K/6.3K, G.726-32, G.729A/B, iLBC, GSM; T.38
<b>Video Codecs</b>	H265, H.264, H.263, H263+, VP8
<b>QoS</b>	Layer 3 (ToS, DiffServ, MPLS) QoS

# Specifications

<b>Maximum Extensions</b>	5000
<b>Maximum Calls</b>	1000
<b>License Activation Method</b>	Online and Offline Activation
<b>Recommended Server Environment</b>	<ul style="list-style-type: none"> <li>• X86 base hardware server or PC</li> <li>• Supports installation in Hypervisors software</li> </ul>

## Deployment Mode

SoftwareUCM supports two deployment modes:

- **Single Tenant:** After installing the SoftwareUCM ISO software, only one SoftwareUCM software instance can be created. In this mode, the resource usage of the entire machine is considered as one specification.
- **Multi-Tenant:** After installing the SoftwareUCM ISO software, you can choose to create a multi-instance mode. In this mode, each SoftwareUCM instance needs to be configured with independent CPU resources, memory, and disk space. Therefore, the server requirements must include the resources needed for multiple instances.

## System Requirements

### CPU

- x86-based CPU installs require compatibility with 64-bit architecture and can be used as “Bare Metal” or “Virtual Machine” deployments.
- Using Call Queues and group calls uses more CPU more resources than 1-on-1 calls, depending on the number of the end-points.
- The CPU resources used by each SoftwareUCM Instance are exclusive. In Multi-instance mode, the resources required by the entire machine need to be combined for calculation.

### Memory

- SoftwareUCM requires at least 2GB of memory. In addition to the specification requirements indicated in the specification list, allocating users in multiple extension groups or queues increases the need for additional RAM - adjust according to the deployment environment.

### Storage

- Allocate at least 30GB for the SoftwareUCM base system installation
- Add extra space for backup, voicemail, recordings or logging. Keep in mind:
  - Audio Recording and voicemail: 1 minute of recorded audio consumes is approximately 1MB with compression enabled
  - Video Recording: 1 hour of recorded video consumes up to 500MB
  - Logging: Verbose logs on a busy system can consume up to 300MB
- Offload (archive) unneeded recordings, voicemail, and backups to cold storage regularly to optimize free space available on your PBX

### Network

- SoftwareUCM requires at least a 1Gb LAN network connectivity, depending on the number of simultaneous calls and usage of other network applications.
- 10Gb is required for 3000+ extensions

## Virtual Machine Software Requirements

- SoftwareUCM is validated for use with the following Hypervisors:
  - VMware Workstation: 16.1.0 or later
  - Hyper-V: 10.0.19041.1 or later
  - KVM: 4.5.0 or later
  - VirtualBox: 7.0 or later

## Server Resource Requirements

Maximum Extensions	1-100	101-200	201-400	401-1000	1001-2000	2001-3000	3001-5000
<b>Maximum Calls</b>	1-20	21-40	41-80	81-160	161-320	321-450	451-1000
<b>CPU Recommended</b>	Intel i5 (Gen.8) or equivalent		Intel i7 (Gen.8) or equivalent	Intel Xeon E5 v4 or equivalent			
<b>CPU Threads/vCPUs (Frequency larger than 2.4GHz)</b>	2	3	4	8	12	16	32
<b>Memory</b>	2GB	3GB	4GB	8GB	12GB	16GB	32GB
<b>Storage (No Records)</b>	30GB	40GB	60GB	200GB	400GB	500GB	500GB
<b>Storage (With Records)</b>	Recommended: 1 TB -1GB storage space can record 1000 minutes of voice -1GB storage space can record 2 hours of video  You can configure the appropriate storage space according to your recording needs						