

## NewLync2.0 All in One

### Enterprise Smart Office Communication Platform



Telcom Reliability

200~2000 Users

SE Version

PE Pro Version

All in one Machine

Redstone's NewLync2.0 all-in-one machine heralds a new era of communication solutions for small and medium-sized enterprises. With fully upgraded software and hardware, it ensures reliability and independence. **2 Models (NewLync2.0-SE and NewLync2.0-PE)** offer fixed-line voice terminals with IAD access, enabling high-quality audio and video conferencing for mobile and hybrid offices. Equipped with collaborative messaging features, they meet the evolving communication needs of today's digital era.

### 1. Highly integrated SME converged enterprise converged communications platform

NewLync 2.0 all-in-one is an IP-based solution providing extensive communication features, including high-performance audio/video conferencing and team collaboration within a single server. It's tailored for businesses with 200 to 2000 users, offering integrated digital communication solutions.

#### High performance hardware platform

NewLync 2.0 all-in-one hardware employs customized servers for centralized management, lowering maintenance costs and streamlining enterprise operations.

#### Compatible with a wide range of terminals

NewLync 2.0 all-in-one supports the standard SIP protocol and seamlessly integrates with various SIP terminals, IP phones, and IADs. This enhances the utilization of enterprise hardware resources and optimizes investment savings.

### 2. Highly reliable for telecommunications

NewLync 2.0 all-in-one utilizes ATCA carrier-grade architecture and a dual-machine hot backup mechanism with virtual IP, ensuring exceptional software and hardware performance. It meets enterprise demands for reliability, performance, scalability, and compatibility, offering carrier-grade support for converged communication applications.

#### Communication Capability load balancing

Supports dual-machine load balancing for enhanced fault tolerance, scalability, and optimal resource utilization in enterprise communication systems.

#### Dual-machine hot standby

Communication services are backed up by a standby server, ready to take over within <5s if the main server fails. Seamless switching during maintenance and upgrades ensures continuity and stability for enterprises.

### 3. Efficient enterprise communications capabilities

As a leading expert in enterprise converged communications, NewLync 2.0 all-in-one offers a comprehensive digital office platform.

#### (1) Business Telecommunication Capacity

PBX switchboard functions, switchboard duty, automatic attendant console, automatic transfer, incoming call queue, call hold, call park, call waiting, call transfer, call restriction, outgoing call restriction, simultaneous ringing, differential ringing, voice communication functions (callback when busy, interference-free).

#### (3) Collaboration

Text/voice messages (voice change), editable video messages, read receipts, Ping reminders, brushes, emoticons, file transfer, location sharing, search, burn after reading, discussion groups, group chat, collaborative office functions.

#### (2) Audio and video conferencing capabilities

PBX switchboard functions, automatic attendant, call queue, hold, park, waiting, transfer, restriction, simultaneous and differential ringing, callback, interference-free, audio and video conferencing (desktop/mobile integration, ad hoc, scheduled, fixed, cross-organization, group).

#### (4) Enterprise Address Book

Multi-level organizational structure (level 10), LDAP support, automatic multi-terminal delivery (APP/PC/IP phone), customizable address book and favorites, intelligent search (Pinyin/Chinese), Excel batch import, caller business card.

### 4. Easy deployment and installation.

NewLync 2.0 supports factory software pre-installation for instant use. Configuration time reduced by 80% compared to integrated cloud solutions. Features webGUI background management for efficient enterprise deployment and management.

## NewLync 2.0 All-in-one machine performance indicators

Deployment architecture	All-in-one machine includes hardware, pre-installed software, and license
System specifications	NewLync 2.0 SE (200~500 Users) , NewLync 2.0 PE (500~2000 Users)

Version/Specification	NewLync 2.0 SE	NewLync 2.0 PE
Basic license	Includes 200 users, 100 concurrent channels, 32-party audio/video conferencing license	Includes 500 users, 100 concurrent channels, and 32-party audio/video conferencing license
Dual-machine HA disaster recovery function package	Function Authorization	Function Authorization
UC User License	10/group (maximum support 500 users)	10/group (maximum support 2000 users)
IP extension license	10/group (maximum support 500 extensions)	10/group (maximum support 2000 extensions)
IP extension concurrent license	Supports up to 100 concurrent channels (included in the basic package)	10/group (up to 400 concurrent channels)
Audio/Video Conferencing License	Supports up to 32-party audio/video conferencing (included in the basic package)	8/group (supports up to 64 audio/video conferences)
Number of recording extensions permitted	10 pieces/group (including NL-Recording function module)	10 pieces/group (including NL-recording function module)
NL-AddressBook	Basics include address book function	Basics include address book function
NL-Billing	Function Authorization	Function Authorization

## Hardware Configuration

<b>NewLync 2.0 SE</b>	CPU: quantity 1, main frequency 2.1GHz, physical core number 12C
	Memory: quantity 1, type DDR4 RDIMM, frequency 3200MHz, capacity 32GB
	Hard drive: quantity 1, type SSD, capacity 1.92TB
<b>NewLync 2.0 PE</b>	CPU: quantity 1, main frequency 2.2GHz, physical core number 24C
	Memory: quantity 4, type DDR4 RDIMM, frequency 3200MHz, capacity 32GB
	Hard drive: quantity 2, type SSD, capacity 1.92TB
<b>Other configurations</b>	Raid card: Quantity 1, Raid level RAID 0, RAID 1, RAID 10, RAID 5
	Fan: 2U standard fan module
	Power supply: 2 * 550W AC power supply
	Network port: 4-port Gigabit electrical interface network card

## Voice Communications (NewLync Client)

<b>One Number with more extensions</b>	Supports IP extension multi-device answering, allowing users to answer calls on various devices, including mobile phones, computers, and desktop phones.
<b>Call relay</b>	Users can seamlessly switch calls between different devices, such as moving a call from a mobile phone to a computer, ensuring uninterrupted communication.
<b>Blind call transfer/consultation transfer</b>	Allows users to transfer an ongoing call to another number in the NewLync client without prior communication or consent from the transfer target. Additionally, users can consult or communicate with the transfer target before the NewLync client transfers the call.
<b>Secondary dialing</b>	Allows users to quickly redial to the same number after a call without having to enter the full phone number again
<b>Address book dialing</b>	Supports calling internal contacts and external contacts through the address book
<b>Voice conferencing</b>	Supports calling the contact's mobile phone to invite the person to join the meeting (voice); supports the contact to dial the conference room number to join the meeting (voice)
<b>Call permission</b>	Intra-office calls, local calls, domestic long-distance calls, international long-distance calls (supports 20 levels of custom permissions)
<b>Voice parameters</b>	Supports Opus and G.711 u/a full duplex codecs with built-in voice transparent transmission, RFC2833, and SIP-info. The sound processing technology includes automatic echo cancellation (AEC), voice activity detection (VAD), comfort noise generation (CNG), and an adaptive jitter buffering algorithm (AJB). It adheres to the SIP standard protocol and supports a dual-stream protocol.

## NewLync Client

<b>Security Protocol</b>	AES-256 local database encryption TCP/IP, SRTP/TLS data transmission encryption;
<b>Installation platform and system</b>	iOS: 12.1 and later versions Android: 7.x and later Windows: Windows 10 and later MAC, including Sierra, Mojave, Catalina and later
<b>Voice</b>	Chinese /English
<b>Personal information</b>	Support custom avatar, status, etc.
<b>Terminal</b>	Supports installation and login on multiple terminals such as mobile phones, computers, and large conference screens.
<b>Organize</b>	Support joining multiple organizations

## Audio and video conferencing (NewLync client enterprise conference room)

<b>Meeting capabilities</b>	Maximum 64 parties; supports 180P/360P/720P/1080P/4k conference
<b>Conference platform</b>	Supports multiple platforms including Android, iOS, MacOS, and Windows
<b>Conference Terminal</b>	Supports the integration of multiple terminals, including mobile phones, computers, large conference screens, and desktop phones, enabling seamless participation in conferences.
<b>Conference management</b>	Support meeting host and lock meeting
<b>Meeting Appointment</b>	Enables fast video conference scheduling, inviting address book contacts, and editing/deleting meetings. Automatically sends reminders before meetings.
<b>Meeting sharing</b>	Supports sharing screens, programs, files, etc.
<b>Meeting Agreement</b>	Supports 1080P/30fps decoding and encoding with secondary streams. Offers H.264, VP8, H.265, and VP9 encoding. Utilizes WebRTC, dynamic bandwidth adjustment, and FEC for robust performance. Implements adaptive measures for audio, video, and protocol adjustments.

## Message collaboration (NewLync client)

<b>Group Chat</b>	Chat with up to 500 people
<b>Group meeting</b>	Basic 4 square meters, maximum 10 square meters
<b>Message Transmission</b>	Supports the transmission of rich text messages such as text, emoticons, voice, videos, files, etc.
<b>Collaboration whiteboard</b>	The mobile version enables multiple edits on the whiteboard.
<b>Message Notification</b>	Multiple message reminder such as ping, @, etc.
<b>Safety</b>	All data is end-to-end encrypted. Users can withdraw messages, set message duration, and enable auto-time delete.

## Address Book (NewLync Client Address Book)

<b>Enterprise architecture</b>	Up to 20 levels of organizational structure
<b>LDAP</b>	Supports LDAP docking and automatic delivery to multiple terminals (APP/PC/IP phones)
<b>Address book management</b>	Supports Excel batch import and multi-level management permissions
<b>Address book search</b>	Enables clients to swiftly locate both internal and external contacts.

protocol	
<b>Call control</b>	SIP/UDP and SIP/TCP (RFC3261), IMS platform (3GPP)
<b>Network</b>	SSH, HTTP, HTTPS, DHCP client, STUN

media	
<b>Coding</b>	G.711a/u, G.729a/b, G.722, G.722.2
<b>DTMF sent</b>	In-band voice transparent transmission, RFC2833, SIP-INFO
<b>Fax</b>	Supports G.711 transparent fax, T.38 fax, compatible with G3 fax machines, at 33.6kbps (transparent transmission).
<b>Sound quality enhancement tech.</b>	Echo cancellation (G.168-2004, tailing duration 64ms), jitter buffer automatic adjustment

voice	
<b>Intelligent switchboard/tel ephone console</b>	Supports scheduling for working/non-working hours and holidays, call queues, operator branches, multi-language/multi-level voice menus, switchboard templates, switchboard duties, customer call number binding to extension numbers, and direct lines.
<b>Outbound dialing</b>	Outbound call control (level 20 authority), line selection, abbreviated dialing, emergency calls, call black/white lists, hotlines (immediate/delayed), automatic route selection, remote mobile dialing "0."
<b>Call function</b>	Call features include hold, park, waiting, three-way calling, simultaneous ringing, differential ringing, do not disturb, barring, monitoring, secretary functions, call transfer, one number two phones, call restriction, extension groups, number display, external transfer, ring tones, incoming call screening, and busy callback.
<b>DISA</b>	Calling number authentication, additional dialing function code authentication
<b>recording</b>	Bring your own recording
<b>SIP trunk</b>	IMS, multi-platform registration/calling

Comprehensive maintenance and management	
<b>Application Interface</b>	API(XML/HTTP)
<b>Log management</b>	Manages system and call logs
<b>Data scraping</b>	Allows packet capture via network port mirroring
<b>Configuration management</b>	Supports configuration import, export, and backup.
<b>Status and Alerts</b>	Monitors equipment and system statuses, providing fault telephone alarms.
<b>Version Management</b>	Version upgrade/rollback
<b>NewLync client log submission</b>	Allows users to submit feedback on the PC/App, including bugs and usage suggestions, and supports the submission of usage logs

Safety	
<b>Port customization</b>	SIP port, HTTP/HTTPS access port, RTP port
<b>Access whitelist</b>	HTTP/HTTPS access whitelist, SSH access whitelist, SIP access whitelist (IP filtering)
<b>encryption</b>	Supports SIP signaling encryption, media stream encryption, and configuration file encryption for import/export. Also features password/PIN code encryption.
<b>IP extension</b>	Restricts external IP extensions from dialing outside lines, includes User-Agent verification, and guards against brute force attacks on IP extension passwords.
<b>Web login</b>	Prohibit external IP login and prevent brute force cracking of login passwords
<b>Voice safety</b>	Limit the total duration, single duration, number of concurrent calls, frequency, etc. of long-distance calls
<b>Prevent malicious intrusion</b>	static defense

Support docking	
<b>Networking server system</b>	Integrates call routing, number management, replacement, and networking equipment data storage to enhance networking efficiency.
<b>Attendant console system</b>	Offers operators a swift and efficient platform, supporting call queue, transfer, and extension status monitoring functionalities
<b>Billing System</b>	Used to monitor call behavior and charge management
<b>Enterprise business system</b>	CRM, ERP, HRM, OA, AI capability platform, etc.

Others	
<b>Networking</b>	Supports intra-network extension dialing, call transfer, forwarding, remote outbound calls, three-way calls, and remote switchboard.
<b>QoS</b>	DiffServ, TOS, 802.1p/Q VLAN tags
<b>Built-in storage</b>	Voice messages, historical logs, IVR voice files (uploaded by users), voice file management, configuration backup, version rollback