

Enhancing HD Video Communications in the Microsoft OCS environment

LifeSize® Communicator™ extends the capabilities the Microsoft OCS unified communications platform by offering a HD quality, feature-rich visual communications experience for OCS users in their Microsoft environment.

Tight integration to Microsoft OCS enables high definition interoperable video calling, leveraging the OCS client and directory. Communicator also offers interoperability between PCs and standards-based video communication systems, and supports continuous presence multiparty HD video calls.

LifeSize Communicator enriches the visual communications experience for the OCS end user through three key pieces of software:

LifeSize® Communicator™ - LifeSize® Communicator™ client delivers a business-class desktop video conferencing experience, in HD. Communicator supports open standards, such as H.264, to ensure interoperability with other video infrastructure. Leveraging Microsoft's presence directory and OCS client with Communicator's standards-based video capabilities, high definition video calls are just a click away.

LifeSize® Communicator™ Traversal Server - LifeSize® Communicator™ Traversal Server is a complete firewall and NAT traversal solution that enables video calls across enterprises by securely connecting through firewalls. With SIP tunneling, the result is secure, simple-to-use HD video communications.

LifeSize® Communicator™ Multipoint Server - LifeSize® Communicator™ Multipoint Server is a software-based multipoint control unit (MCU) that supports on demand, ad hoc multiparty HD video conference calls. Tight integration with the OCS environment ensures that impromptu, multiparty video conference calls are supported easily.



LifeSize Communicator Key Features

HD video and audio	Clear 720p30 receive and transmit @1.1Mbps
Interoperable	Works with H.264 SIP-based endpoints and infrastructure
Collaborative	Single-click, continuous presence multiparty conferencing
HD Quality	Software-based MCU that supports true 720p30 HD calls
Full standards-based MCU	Up to 8 720p30 or 50+ widescreen VGA participants on software MCU
Full HD Security	Up to 500 firewall traversal calls

LifeSize Communicator enables organizations to fully realize the collaborative benefits and productivity gains of HD video calling in their unified communication environment, while delivering a high quality of experience, and broad interoperability.

Product Specifications - LifeSize® Communicator™

LifeSize® Communicator (client)

System Components

LifeSize Communicator desktop software
Webcam (not supplied)
Microphone/Headset (not supplied)

Communications

SIP, RFC 3261, RFC 3264, RFC 5168
128Kbps – 1.1Mbps
Configurable asymmetric transmit and receive
bandwidths: 128Kbps, 192Kbps, 256Kbps, 320Kbps,
384Kbps, 512Kbps, 768Kbps, 1024Kbps and
1152Kbps

Video Specifications / Video Resolutions

Up to 720p30 transmit and receive*

*Actual resolution and frame rate depends upon capability of
PC configuration, remote end, and may be impacted by the
quality of the communications channel

Video Standards

H.264, H.263+, H.263++

Video Formats

Selectable 4:3 or 16:9 aspect ratio for transmitted video

Audio Features

High Definition (HD) wideband audio
AEC Echo cancellation for echo free calls
Configurable microphone gain

Audio Standards

AAC-LC, G.722.1c (Polycom® Siren14TM), G.722, G.711

Video Features

Interoperability with OCS calling features

Seamless OCS presence

One-click, ad-hoc, point-to-point conference

One-click, ad-hoc, multipoint conference when used
with LifeSize Communicator Multipoint Server

Hold and resume

Full screen with picture in picture

Resizable video window

Call history

Contact list

DTMF keypad

Call statistics

Automatic device selection

Configurable device profiles

Configurable answer modes: identify caller, auto
answer, and block calls

Configurable ring tones

Network health and monitor utility

Recommended Peripherals

Webcams: Logitech Quickcam® Pro 9000, Quickcam®

Pro for Notebook, Quickcam® Orbit

Headsets: Logitech Headsets: ClearChat Pro USB,

Premium Notebook Headset

USB speakerphones: ClearOne CHAT™ 50, 100

System Requirements

SD up to CIF: 1.4 GHz P4, Pentium M 1.4GHz*

HD 720p receive, VGA transmit: Core Duo 2.0 GHz, Core
2 Duo 2.0 GHz*

HD 720p30 transmit and receive: Core Duo 2.8 GHz,
Core 2 Duo 2.8 GHz*

*all systems require a minimum of 1GB memory, 100MB
disk space
Operating Systems and Software: Microsoft Windows
XP (SP2, SP3), Vista (SP1) Windows 7, OCS 2007 R2

LifeSize® Communicator Multipoint Server

System Components

LifeSize Communicator Multipoint Server software

Communications

SIP, RFC 3261, RFC 3264, RFC 5168
128Kbps – 1.1Mbps

Video Specifications / Video Resolutions

Up to 720p30 transmit and receive*

*Actual resolution and frame rate depends upon capability of
PC configuration, remote end, and may be impacted by the
quality of the communications channel

Video Standards

H.264, H.263+, H.263++

Video Formats

Selectable 4:3 or 16:9 aspect ratio for transmitted video

Audio Standards

AAC-LC,G.711,G.722,G.722.1c

Layouts

Continuous presence up to 9 onscreen
Current speaker layout

Meeting establishment

Centrally managed on demand meeting rooms with
call rate and quality per meeting ID
One-click Add-hoc conference rooms

Max Participants

Any number of participants up to max MCU size*

*Dependant on capability of PC configuration

Advanced Video Processing

Full Transcoding and rate matching for each participant

Management

HTTP web management for system configuration

Logging usage and system data to Microsoft SQL

3 security levels within Windows Domain and local
system authentication

System Requirements

2.5 GHz Dual Core or higher for HD MCU. Minimum 2GB
Ram and 2GB local storage. (Capacity of the MCU varies
based on the available processor speed and number
of available cores; resource usage varies by selected
resolution.)

Example: Dual Intel Xeon X5570 @ 2.93GHz will support
any of the following

-8 (720p30) participants plus 7 at (656p30)
-52 (368p30) widescreen VGA participants
-135 (224p30) Widescreen FCIF participants
-1375 audio only participants

Operating System: Windows 2003 & R2, 2008

LifeSize® Communicator Traversal Server

System Components

LifeSize Communicator Traversal Server software
SIP Registrar
Signaling Server
Media Server

Protocols

SIP, UDP, TCP, HTTP, HTTPS, STUN, TURN, ICE

Standard SIP Compatibility

Third party devices supporting industry standard STUN,
TURN, ICE

SIP Tunnel Compatibility

LifeSize Communicator
LifeSize Desktop
LifeSize video systems version 2 or higher

Management

Secure support access to configuration via HTTPS
Event and call logging
SNMP traps / email

Embedded Registrar

Up to 500 registrations to standard SIP video systems
including 3rd party systems, and tunneled LifeSize
video system to including software based endpoints
LifeSize Communicator, LifeSize Desktop
SIP based URI addressing with DNS resolution
Naming can be Numeric; Alpha-Numeric or Alpha
names
Registrar supports private IP addresses within cor-
porate domain LAN or public IP address desired by
administrator

Firewall Traversal Performance

Standards-based STUN, TURN (STUN relay), ICE
Uses direct UDP path when possible, reverts to tun-
neled operation when necessary
HTTPS tunneled signaling and media support
Up to 500 device traversals (dependant on host server
capabilities)

Scalability

Clustering support available for additional capacity,
performance, and redundancy

System Requirements

2.0 GHz Dual processor or higher with 1GHz FSB, Mini-
mum of 2GB Ram and 40GB local storage
Operating System: Windows 2003 & R2, 2008

Licensing

Per seat packages available. One seat of Communicator
delivers 1 Communicator (client), 1 Widescreen VGA
Communicator Multipoint Server port, 1 Communicator
Traversal Server port

For additional information: www.lifesize.com.

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