



# **SYMPHONY CLOUD**

## **THE INTERCOM CLOUD PLATFORM POWERED BY “PRIVACY AND SECURITY BY DESIGN”**

Symphony Cloud – the world’s first cloud-based intercom platform built around the principle of “Privacy and Security by Design” – marks the beginning of a new era in security communication.

With its innovative cloud services, Symphony makes even complex solutions in demanding system environments secure and easy to manage. On-premise solutions based on Virtuosis find their way into the Cloud. Using Symphony Bridge, they can take full advantage of services such as the Symphony Mobile Client for smartphones and tablets, the browser-based Symphony Web Client as well as our conversational AI Ivy Virtual Assistant.

Future cloud-based Symphony services will further raise the bar in terms of security and efficiency, especially by intelligently networking different sub-systems and functions such as video surveillance, sensors, emergency communication, access control and visitor management.

At the core of the system, Symphony conducts and coordinates digitally networked cloud services to make your solution smarter and more secure, both in everyday situations and in an emergency.

## SYMPHONY CLOUD SERVICES

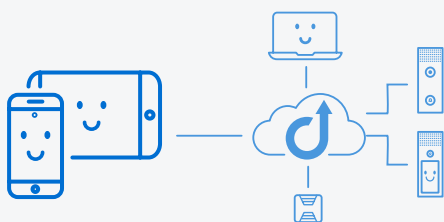
Symphony Cloud is our cloud-based solution platform built on highly scalable hardware, powerful software and extensive features, with the clear aim of harnessing the power of current and future cloud services. Symphony Cloud offers the right service for every size and requirement. Simply sign up through <https://commend.services> to explore all possibilities.



### PRIVACY AND SECURITY BY DESIGN

At Commend, cyber security as a core competence has always been given a very high priority. From the initial product idea through implementation and operational support, privacy and security by designs (PSBD) is the uncompromising target and promise to our customers against which product features and functions must be measured.

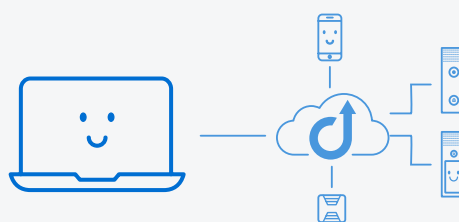
- Enhanced privacy and security
- GDPR-compliant
- IEC/ISO-27001-certified and IEC-62443-4-1-certified development process
- Cyber Security Board for ensuring handling and transparent communication of security vulnerabilities as well as the strategic hardening of Commend systems
- Commend is a member of the Center for Internet Security (CIS)
- JSON Web Tokens
- Device certificates
- Encrypted connections
- Encrypted signaling streams and media streams (SIPS and SRTP)
- Centralised firmware management, including security patches and improvements
- Protecting access to the local network in sensitive areas and protection from manipulation attempts (optional IP Secure Connector)
- Single sign-on (SSO) using SAML
- 24/7 failsafe setup
- Page "Service Status" for a transparent overview of the current state and health of the Symphony Cloud systems and services
- Symphony Mesh as a fallback option



### SYMPHONY MOBILE CLIENT

The Symphony Mobile Client is the Symphony Cloud service for answering door calls and unlocking doors conveniently via smartphone or tablet.

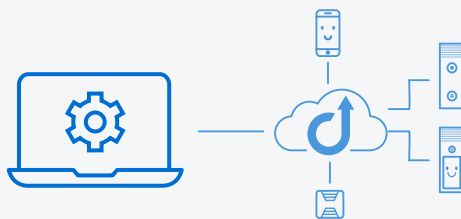
- Convenient answering of door calls using smartphones and door opening
- Bidirectional video
- Direct access to preferred contacts using favourites on the home screen
- Quick access to functions, either directly in the push notification or using widget functions
- Security features such as PIN lock, Touch ID or Face ID to protect door openers
- Customisable do-not-disturb function
- Activity list incl. optional caller snapshots



### SYMPHONY WEB CLIENT

The Symphony Web Client is probably the world's most flexible, most easy-to-use intercom station – and it does not even need any extra software!

- Calls can be answered and made conveniently within the web browser
- Worldwide access using <https://webclient.commend.services>
- Bidirectional video
- Call queue, call transfer and pause options
- Comprehensive call history including caller snapshots
- Independent of the operating system used: supports Windows, macOS and Linux
- Easy operation of e.g. door openers, gates and barriers



### CALL SERVICE FOR COMMEND DEVICES AND BASIC DEVICE MANAGEMENT

Take full control or let the Symphony Cloud service do the work. With basic device management, as many or as few devices and services can be configured as needed for Symphony Cloud devices.

#### SYMPHONY CLOUD DEVICES

Claimed Commend devices operated and centrally managed in Symphony Cloud.

- Calls
  - Calls with and without video, including video preview on receiving stations
  - Add 3rd-party camera to devices
  - Open doors, gates and barriers
- Passive device status monitoring
- Perform manual firmware updates
- Change device names

- Configure display and audio settings such as Clean Voice from Noise
- Configure door openers
- Configure outputs triggered by device states
- Configure contacts with images and company logos
- Configure call buttons
- Reboot devices remotely



### ACTIVE DEVICE MANAGEMENT

A Symphony Cloud service for centralised and remote device maintenance. Active Device Management makes the maintenance of Commend devices easier, more comfortable and safer.

#### SYMPHONY CLOUD DEVICES

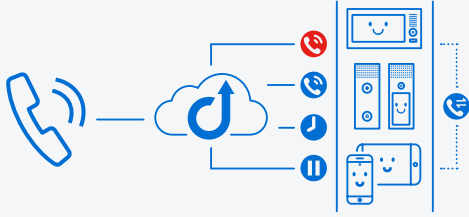
Claimed Commend devices operated and centrally managed in Symphony Cloud.

- Everything from “Call service for Commend devices and basic device management”
- Device status monitoring, including notifications about offline devices and gateways in the web portal and through email
- Configure and perform firmware updates (all updates, security-critical updates or manual updates)

### ON-PREM/MESH DEVICES MANAGED IN SYMPHONY CLOUD

Claimed Symphony MX devices and Symphony BF devices of a Symphony On-Prem/Symphony Mesh system operated on premise and centrally managed in Symphony Cloud.

- System management
- Company Dashboard with device status monitoring
- User management
- Configure and perform firmware updates (all updates, security-critical updates or manual updates)
- Reboot devices remotely



### CALL MANAGEMENT

With Symphony Cloud, you can easily keep an overview of call handling across the entire system.

- Configure ring groups (contact lists for multiple scenarios) and connect them to contacts and call buttons
- Configure call forwarding rules for specific days, dates and time periods
- View VoIP reports of call activity (call history, caller snapshot, dial status)



### USER MANAGEMENT

The various roles and permissions in our empowering user management allow preciser control and transparency over who has access to what and better traceability.

- Manage user roles and permissions
- Distinction between roles with configuration and viewing permissions
- Company-wide, project-wide or site-wide sharing of permissions for collaborative configuration of systems (e.g. building management team)
- User management for e.g. Web-Client-only user
- Temporary assignment of permissions to access systems for maintenance and support
- Possibility to limit access to restricted information for higher level of data security



### SYSTEM MANAGEMENT

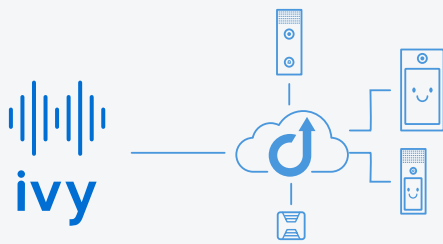
Offers a more intuitive and user-friendly experience, ensuring that operators at all levels can navigate and use the platform with ease.

- System structures, hierarchies and folders (company, project, site for e.g. regions, locations, buildings)
- Account management for comprehensive overview of projects for system integrators and administrators
- Create and reassign intercom systems and projects to other companies or users (e.g. from system integrator to owner or when changing property managers)
- Automatic detection of devices in the local network using the Symphony Mobile Client
- Securely add cloud devices and on-prem/mesh devices using claiming codes and configure the system before it is installed on site
- Integrate mobile devices easily and securely into the system infrastructure via QR code scan or links

- Automatic assignment of device properties for multiple call scenarios
- Centrally manage Symphony Mobile Clients and Symphony Web Clients
- Support of different time zones within one system

### COMPANY DASHBOARD

- Centralised hub for monitoring and managing user, device and project activities
- Real-time overview of critical information
- Device status monitoring for facilitating audits, compliance and troubleshooting
- Monitoring of device firmware status
- User overview
- Subscriptions overview
- Call statistics



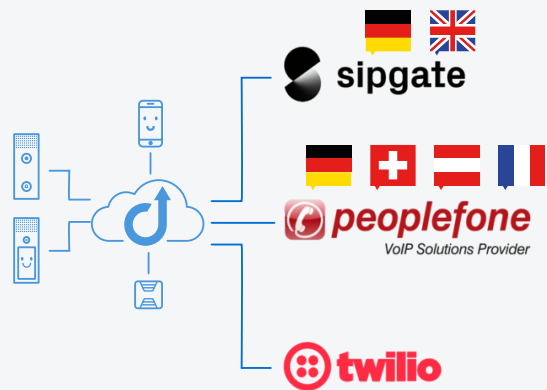
#### IVY VIRTUAL ASSISTANT

Our Conversational AI was developed with one goal in mind: to relieve staff in call centres and control rooms so that they can concentrate on the important issues and incidents.

- Instant call pickup
- Smart city solutions and answering of FAQs
- Automating common use cases (e.g. empty call handling, wayfinding, parking assistance)
- Conversation flows with customisable responses for high flexibility and more relevant actions and answers
- Natural conversation in multiple languages

#### DATA INSIGHTS

- Instant call history with transcript of conversation with Ivy
- Audio playback for call validation
- Business intelligence dashboard (Ivy Dashboard) with advanced filtering tools and statistics (call resolution rate, call duration, user drop-off rate)
- Full call history export as Ivy report in Excel format



#### INTEGRATIONS

Better together – connecting Symphony Cloud with other systems from leading manufacturers. One of the first integrations are connections to external devices on the public mobile and fixed networks using SIP trunks.

- Peoplefone
- Sipgate
- Sip.us
- Twilio



#### SYMPHONY BRIDGE

This bridge gives the on-premise solution world access to the services of Symphony Cloud, such as the Symphony Mobile Client for iOS/iPadOS and Android, the Symphony Web Client for convenient call management in the web browser or our Conversational AI Ivy. This way, completely new solutions are possible that combine the best of both worlds. Even large existing systems that have been providing proven services for many years can thus be expanded with new functions. With a Symphony On-Prem solution and Symphony Bridge, all these new possibilities are just a click away.

- Intercom stations in VirtuoSIS solutions can establish calls to the Symphony Mobile Client
- Calls can be forwarded simultaneously to multiple intercom stations operated with VirtuoSIS and Clients and answered by any recipient
- Open platform – 3rd-party SIP stations interface smoothly with VirtuoSIS to use Symphony Cloud services
- Devices in VirtuoSIS solutions can be assigned to projects and sites for a better overview of the entire intercom system

## TECHNICAL SPECIFICATIONS

### CALLS

Conversation duration:	max. 10 min
Call forwarding rules:	max. 20 per user

### AUDIO CODECS <sup>1)</sup>

Symphony MX devices, Symphony Mobile Client, Symphony Web Client:	Opus (up to 20 kHz)
Symphony BF devices, devices connected through Symphony Bridge:	G.722 (7 kHz)
Landline telephones connected through VoIP trunks:	G.711 a-law (3.5 kHz), G.711 u-law (3.5 kHz)

### BANDWIDTH PER DEVICE

Upstream:	min. 1 Mbps
Downstream:	min. 1 Mbps for every device in the ring group <sup>2)</sup>
3rd-party video streams:	number depends on the specifications of the 3rd-party camera and the available local bandwidth between camera and receiving station

### FIRMWARE UPDATE FILE SIZES PER DEVICE <sup>3)</sup>

Symphony MX:	250 MB to 400 MB
Symphony BF:	7 MB

### ACCESS TO WEB PORTAL "COMMEND.SERVICES" <sup>4)</sup>

Web browser:	latest version of Google Chrome
--------------	---------------------------------

### NETWORK CONFIGURATION <sup>5)</sup>

Internet connection:	for every device <sup>6)</sup> , mobile device and gateway
Operation:	DHCP mode

### SYMPHONY BRIDGE <sup>7)</sup> <sup>8)</sup> <sup>9)</sup>

Gateway (connected to Symphony Cloud)

Servers:	VirtuoSIS, S6 or S3
Licences:	L-SYM-BRIDGE and L-SIS-11 or L-SIS32-11
Software:	min. VirtuoSIS version 11.1.6

On-Prem intercom server (networked with gateway)

Servers:	VirtuoSIS, S6, S3, GE 800, GE 300, G8-IP-32, IS 300 and/or GE 700U
Firmware:	min. PRO 800 6.4 Build 3
Connection between gateway and On-Prem intercom server:	NET, LAN, GEV, CNET-W, CNET-E1 and/or SO

### IVY VIRTUAL ASSISTANT

Concurrent calls:	max. 5 per Ivy Virtual Assistant
Initial response time:	typical 1 sec, max. 3.5 sec
Ivy models:	Ivy Demo (showcases the abilities of Ivy Virtual Assistant)  Ivy Start (filters out empty calls, provides data insights about conversations and operator performance)
Languages:	English, Dutch, French, German, Italian, Spanish

<sup>1)</sup> In mixed scenarios, the audio codec with the highest audio bandwidth supported by both communicating entities is used for a call. E.g. in a call between a Symphony Mobile Client and a landline telephone connected through a VoIP trunk, an audio bandwidth of 3.5 kHz is used.

<sup>2)</sup> Per ring group, a maximum of 32 devices can simultaneously receive incoming calls (with or without early media).

<sup>3)</sup> If the network connection is poor, update file packets may be transmitted several times.

<sup>4)</sup> The web portal "commend.services" is not supported by web browsers on mobile devices.

<sup>5)</sup> A DHCP server must provide the network configuration such as IP address, subnet mask, standard gateway and DNS server for every device. Exception: Devices connected through Symphony Bridge do not require a direct route to the Internet.

<sup>6)</sup> No Internet connection is required for devices that are behind the gateway.

<sup>7)</sup> Further information about Symphony Bridge can be found in the product manual "Intercom Server Configuration" and in the product manual "VirtuoSIS Setup Guide".

<sup>8)</sup> All SYM-BRIDGE cards must be selected in the same VirtuoSIS instance. A maximum of 14 cards can be used. The call number of a SYM-BRIDGE channel can only be assigned to one call target or ring group.

<sup>9)</sup> Make sure that the current firmware version is installed for devices connected through Symphony Bridge.

## TECHNICAL SPECIFICATIONS

The following devices and hardware revisions are compatible with Symphony Cloud.

Symphony MX device	Min. revision	Can be claimed as Symphony Cloud device <sup>1) 2)</sup>	Can be claimed as device managed in Symphony Cloud <sup>1) 3)</sup>
ID5 TD, ID5 TD CM	AD	✓	✓
ID5 TD-B	AJ	✓	✓
ID5 TD CM-B	AL	✓	✓
ID8 TD(-B), ID8 TD CM(-B)	AA	✓	✓
IM3, IM6	AA	✓	✓
OD1 CM, OD1 V CM, OD5 TD CM, OD10 TD CM	AA	✓	✓
OD1 CM-B	AB	✓	✓
OD5 TD CM-B, OD10 TD CM-B	AF	✓	✓
WS 301V CM, WS 303V CM, WS 311V CM, WS 311V CM DA	AC	✓	✓

Symphony BF device	Min. revision	Can be claimed as Symphony Cloud device <sup>1) 2)</sup>	Can be claimed as device managed in Symphony Cloud <sup>1) 3)</sup>
AF 20H, AF 50H, AF 125H, AF 250H, AF 500H	AA		✓
AFLS 10H CW, AFLS 10H PW	AD	✓	✓
AFLS 10H HG	AE	✓	✓
AFLS 10H SC W	AA	✓	✓
EF 962H, EF 962HM	AC	✓	✓
ES 962H, ES 962HM	AC	✓	✓
ET 908H, ET 908H-1, ET 908HMI, ET 908HMI-1	AC	✓	✓
ET 962H, ET 970H	AD	✓	✓
ET 962HR, ET 970HR	AC	✓	✓
SIP-WS 201P, SIP-WS 203P, SIP-WS 201V, SIP-WS 203V	AC	✓	✓
SIP-WS 201V CA	AG		✓
SIP-WS 211V, SIP-WS 212V	AC		✓
SIP-WS 211V DA	AE		✓
SIP-WS 800F, SIP-WS 800P	AD		✓
SIP-WS 800F MD	AC		✓
SIP-WS 800V	AE		✓

### I/O devices

IP Secure Connector IP-CON: Rev. AB  
CM1, EB1A, EB1E1A, EB2E2A, EB3E2A-AUD, EB8E8A

## SYSTEM REQUIREMENTS

Symphony MX devices: <sup>1)</sup> min. firmware version 03.02.01.65 <sup>2)</sup>  
min. firmware version 03.08.01.14 <sup>3)</sup>

Symphony BF devices: <sup>1)</sup> min. firmware version 05.00.02.11 <sup>2)</sup>  
min. firmware version 05.01.01.02 <sup>3)</sup>

Mobile devices: <sup>1)</sup> Android: min. version 8.0  
iOS/iPadOS: min. version 15.6

<sup>1)</sup> To be able to use the devices and mobile devices with Symphony Cloud, these have to be claimed through the web portal or in the Symphony Mobile Client.

<sup>2)</sup> For devices that should be operated and managed in Symphony Cloud, the minimum firmware version is required for claiming.

<sup>3)</sup> For devices that should be operated on premise and managed in Symphony Cloud, the minimum firmware version is required for claiming.

## FIREWALL CONFIGURATION

All network traffic is bidirectional. If the outgoing network traffic is blocked by default, the firewall must be configured as follows to be able to use devices with Symphony Cloud.

Service	Protocol	Port number (local)	Port number (Symphony Cloud)	Host (local)	Description
DNS	TCP/UDP	Dynamic	53	Symphony MX devices	DNS name lookup
HTTP	TCP	Dynamic	80	VirtuoSIS (hostname or IP address), devices, mobile devices, web portal	Certificate revocation list
HTTPS	TCP/TLS	Dynamic	443	VirtuoSIS (hostname or IP address), devices, mobile devices, computers with Symphony Web Client, web portal, Ivy Dashboard, page "Service Status"	Claiming, configuration, uploading log files, downloading the device firmware, logging, call signalling, Ivy Dashboard, documentation, VoIP reports, state of Symphony Cloud services
HTTPS	TCP/TLS	Dynamic	8088	Devices, mobile devices, web portal	Logging
MQTTS	TCP/TLS	Dynamic	8883	VirtuoSIS (hostname or IP address), devices, mobile devices	Claiming, configuration
NTP	UDP	Dynamic	123	Devices	System clock synchronisation
SIPS	TCP/TLS	Dynamic	5061	VirtuoSIS (hostname or IP address), devices, mobile devices	Call signalling
SRTP	UDP	10000 to 50000 <sup>1)</sup>	10000 to 50000	VirtuoSIS (hostname or IP address), devices, mobile devices, computers with Symphony Web Client	Media transmission (only active during calls)
STUN	UDP	Dynamic	3478	Computers with Symphony Web Client	Gathering ICE (Interactive Connectivity Establishment) candidates in SDP (Session Description Protocol) for media signalling

<sup>1)</sup> In VirtuoSIS, the range of port numbers can be configured.

The devices, the mobile devices, the computers with Symphony Web Client and VirtuoSIS must have the current system time.

If the connection to Symphony Cloud is interrupted, Symphony Mesh calls can still be initiated between devices in the local network using the link-local IPv6 addresses.

The hosts of Symphony Cloud may change through the upscaling of the infrastructure or through the implementation of new features. An overly restrictive firewall configuration for the hosts may affect the functionality of future features.

Further information can be found at <https://clibrary.commend.com/en/cloud/firewall-configuration> on cLibrary.



# AVAILABLE SUBSCRIPTIONS

## SYMPHONY CLOUD

E-CC-CTF:	Yearly subscription for 1 Symphony Cloud connection, per device or Symphony Mobile Client or 1 Symphony Web Client user <sup>1) 2)</sup>
E-CC-ADM-CTF:	Yearly subscription for 1 Symphony Cloud Active Device Management connection, per device <sup>3)</sup>
E-CC-SSO-STN	Yearly subscription for single sign-on (SSO) to Symphony Cloud per customer system incl. 1 identity server <sup>4)</sup>

## IVY VIRTUAL ASSISTANT – IVY TIER 30 <sup>5) 6)</sup>

E-CIVYT130-CTF:	Yearly max. 30,000 call minutes or max. 60,000 empty calls <sup>7)</sup> , 1 data insights user
-----------------	-------------------------------------------------------------------------------------------------

## IVY VIRTUAL ASSISTANT – IVY FLEX <sup>5) 8)</sup>

E-CIVYFLEX-CTF:	Yearly ground fee
E-CIVY1K-CPF <sup>9)</sup> :	1,000 call minutes or 2,000 empty calls
E-CIVY10K-CPF <sup>9)</sup> :	10,000 call minutes or 20,000 empty calls

## IVY VIRTUAL ASSISTANT – PER DEVICE

E-CIVY365-CTF:	Yearly max. 365 call minutes per calling device, incl. + 20% fair use
E-CIVY6K-CTF:	Yearly max. 6,000 call minutes per calling device, incl. + 20% fair use

## IVY VIRTUAL ASSISTANT – ADD-ONS

E-CIVYINS-CTF:	Yearly 1 additional data insights user
E-CIVYKAPI-CTF:	Yearly 1 knowledge API interface

<sup>1)</sup> The subscription includes Symphony Cloud devices claimed to be operated and managed in Symphony Cloud, gateways, Symphony Mobile Clients, Symphony Web Clients and external devices connected through SIP trunks.

<sup>2)</sup> If the same Symphony Web Client is provided to multiple users, every user needs 1 Symphony Cloud subscription.

<sup>3)</sup> The subscription includes Symphony Cloud devices claimed to be operated and managed in Symphony Cloud and on-prem/mesh devices managed in Symphony Cloud claimed to be operated on premise and managed in Symphony Cloud.

<sup>4)</sup> The subscription includes an unlimited number of users using SSO and an unlimited number of email domains.

<sup>5)</sup> Billing per 30 seconds (min. 30 seconds/30-second increments).

<sup>6)</sup> Beyond the included minutes and empty calls, additional fees apply.

<sup>7)</sup> Commend guarantees that any empty call is counted as 30 seconds only (1 call minute equals 2 empty calls).

<sup>8)</sup> "Ivy Virtual Assistant – Ivy Flex" is limited to max. 30,000 call minutes or max. 60,000 empty calls per year. For higher volumes, contact your local Commend sales organisation.

<sup>9)</sup> Single payment.

Further information can be found at:

- <https://www.commend.com/en/products/intercom-cloud>
- [https://manuals.commend.com/symphony-cloud/online-help\\_en-uk](https://manuals.commend.com/symphony-cloud/online-help_en-uk)
- [library.commend.com](https://library.commend.com) (product manuals and data sheets for devices and intercom servers)

Services are available through

<https://commend.services>

<https://webclient.commend.services>

Service status is available through

<https://status.commend.services>

Commend products are developed and manufactured by Commend International in Salzburg, Austria. Development and manufacturing processes are **certified** in accordance with **EN ISO 9001:2015** and **EN ISO 27001:2013**. Security by Design on all levels.

The design and/or specifications of products may be subject to change for improvement without prior notice. Errors excepted.