



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.

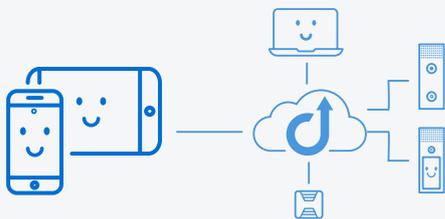
With its innovative cloud services, Symphony makes even complex solutions in demanding system environments secure and easy to manage. On-premise solutions based on VirtuoSIS find their way into the Cloud. Using Symphony Bridge, they can take full advantage of services such as the Symphony Mobile Client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

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.



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
- 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



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!

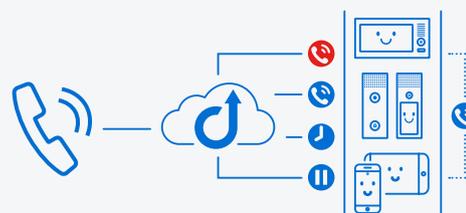
- Calls can be answered and made conveniently within the web browser
- Worldwide access using <https://commend.services>
- Bi-directional video
- Call queue and call transfer options
- Comprehensive call history including video snapshots
- Independent of the operating system used: supports Windows, macOS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



DEVICE MANAGEMENT

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

- Configure and perform firmware updates (all updates, security-critical updates or manual updates)
- Manage user roles and permissions
- Sharing of service access (e.g. between teams) and of device ownership (e.g. for new staff)
- Change device names
- Configure door openers
- Add 3rd-party camera streams to Intercom stations
- Configure outputs triggered by device states



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)
- Configure call forwarding rules for specific days, dates and time periods
- View VoIP reports of system-wide call activity (call history, caller snapshot, dial status)



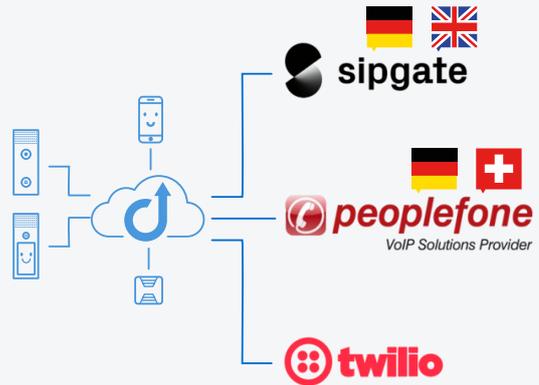
IVY VIRTUAL ASSISTANT

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)
- Natural conversation in multiple languages

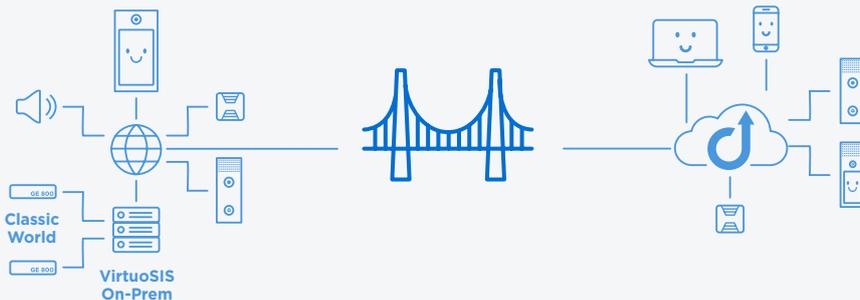
DATA INSIGHTS

- Instant call history with transcript of conversation with Ivy
- Audio playback for call validation
- Business intelligence dashboard (Ivy Dashboard) with filtering tools and statistics (call resolution rate, call duration, user drop-off rate)



INTEGRATIONS

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



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 or the Symphony Web Client for convenient call management in the web browser. 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 and Clients and answered by any recipient
- Open platform – 3rd-party SIP stations interface smoothly with VirtuoSIS to use Symphony Cloud services

TECHNICAL SPECIFICATIONS

DEVICES AND HARDWARE REVISIONS ^{1) 2)}

Symphony MX:	ID5 TD, ID5 TD CM: Rev. AD ID8 TD(-B), ID8 TD CM(-B): Rev. AA IM3, IM6: Rev. AA OD1 CM, OD1 V CM, OD5 TD CM, OD10 TD CM: Rev. AA WS 301V CM, WS 303V CM, WS 311V CM, WS 311V CM DA: Rev. AC
Symphony BF:	EF 962H, EF 962HM: Rev. AC ET 908H, ET 908H-1, ET 908HMI, ET 908HMI-1: Rev. AC ET 962H, ET 970H: Rev. AD ET 962HR, ET 970HR: Rev. AC
I/O devices:	IP Secure Connector IP-CON: Rev. AB CM1, EB1A, EB1E1A, EB2E2A, EB3E2A-AUD, EB8E8A

MOBILE DEVICES ^{1) 2)}

Android:	min. version 8.0
iOS/iPadOS:	min. version 14.0

CALLS

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

AUDIO CODECS ³⁾

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 ⁴⁾
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 ⁵⁾

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

ACCESS TO WEB PORTAL "COMMEND.SERVICES" ⁶⁾

Web browser:	latest version of Google Chrome
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NETWORK CONFIGURATION ⁷⁾

Internet connection:	for every device ⁸⁾ , mobile device and gateway
Operation:	DHCP mode

SYMPHONY BRIDGE ^{9) 10)}

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

¹⁾ Make sure that the current firmware version is installed for devices connected through Symphony Bridge. The firmware of all other devices is updated automatically during the claiming process. The update settings for claimed devices can be configured (all updates, security-critical updates, manual updates).

²⁾ 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.

³⁾ 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.

⁴⁾ Per ring group, a maximum of 32 devices can simultaneously receive incoming calls (with or without early media).

⁵⁾ If the network connection is poor, update file packets may be transmitted several times.

⁶⁾ The web portal "commend.services" is not supported by web browsers on mobile devices.

⁷⁾ 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.

⁸⁾ No Internet connection is required for devices that are behind the gateway.

⁹⁾ Further information about Symphony Bridge can be found in the product manual "Intercom Server Configuration" and in the product manual "VirtuoSIS Setup Guide".

¹⁰⁾ 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.

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	Claiming, configuration, uploading log files, downloading the device firmware, logging, call signalling, Ivy Dashboard, documentation, VoIP reports
HTTPS	TCP/TLS	Dynamic	8088	Devices, mobile devices, web portal	Logging
MQTT	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 ¹⁾	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

¹⁾ 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.

AVAILABLE SUBSCRIPTIONS

SYMPHONY CLOUD

E-CC-CTF: Symphony Cloud subscription per device or service ¹⁾

IVY VIRTUAL ASSISTANT – IVY TIER 30 ^{2) 3)}

E-CIVYTI30-CTF: max. 30,000 call minutes or max. 60,000 empty calls ⁴⁾, 1 data insights user

E-CIVYINS-CTF: 1 additional data insights user

E-CIVYKAPI-CTF: 1 knowledge API interface

IVY VIRTUAL ASSISTANT – IVY FLEX ^{2) 5)}

E-CIVYFLEX-CTF: ground fee

E-CIVY1K-CPF ⁶⁾: 1,000 call minutes or 2,000 empty calls

E-CIVY10K-CPF ⁶⁾: 10,000 call minutes or 20,000 empty calls

E-CIVYINS-CTF: 1 additional data insights user

E-CIVYKAPI-CTF: 1 knowledge API interface

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

²⁾ Billing per 30 seconds (min. 30 seconds/30-second increments).

³⁾ Beyond the included minutes and empty calls, additional fees apply.

⁴⁾ Commend guarantees that any empty call is counted as 30 seconds only (1 call minute equals 2 empty calls).

⁵⁾ "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.

⁶⁾ Single payment.

Further information can be found at:

- symphony.commend.com/en/symphony
- manuals.commend.com/symphony-cloud/online-help_en-uk
- clibrary-online.commend.com (product manuals and data sheets for devices and Intercom servers)

Services are available through

<https://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.