

Which Ports are used by SwyxWare 14

Regarding SwyxWare the central units inside the network are the SwyxServer and the ConfigDataStore. The main task of the SwyxServer is the call control, means delivery of calls to the correct destination. Additionally, it takes care about status signalling, scripting and a lot of other things.

The main purpose of the ConfigDataStore is to store all configuration items of SwyxWare, but it's also used to store phonebooks, caller lists etc.

Taking this into account we can divide the network communication of SwyxWare into 3 major parts:

1. Loading and saving configuration items
2. Connect and disconnect of calls via CallControl
3. Transmission of voice/audio and fax data

The ConfigDataStore is implemented as a Webservice which means, that all clients access the service via a well-known TCP port. The ConfigDataStore listens at TCP port 9094, it never initiates network connections by itself. With SwyxWare SDC port 9095 is used additionally.

Since SwyxWare 2011 only SIP is used as CallControl protocol.

Transmission of audio- and fax data is always done via UDP. The audio frames are encapsulated into RTP (Realtime Protocol) packets and the fax data is transmitted via the T.38 protocol. Both protocols (RTP and T.38) are using UDP for transmission.

Please keep in mind, that the CallControl is always done via the SwyxServer itself, but the audio- and fax data is send directly between the two connected clients.

The attached file show for all SwyxWare components the used ports and type of transport for CallControl and audio-/fax data. In case it's possible to configure them, this will be mentioned.

This article is updated with each release of a Swyx 14 version and is valid for this version.

Outbound

The service is the source of an action.

TCP: The service acts as a TCP client and establishes a connection to a remote TCP server.

UDP: Packets send from this service to a remote destination.

Inbound

The service is the target of an action.

TCP: The service acts as a TCP server and accepts connections from remote TCP clients.

UDP: Packets send from a remote party to this service.

SwyxWare Server

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|-------------------|----------|------|---------------|---|---|-------------------|
| Configuration | CDS | TCP | Any | 9094 / for SDC 9095 | | |
| Client REST API | HTTPS | TCP | Any | 9100 | | |
| Mail | IMAP | TCP | Any | Any IP:Any Port | | WAN access |
| Mail | SMTP | TCP | Any | Any IP:Any Port | | WAN access |
| CallControl | SIP | TCP | Any | Any IP:Any Port | | |
| CallControl | SIP | UDP | 5060 | Any IP:Any Port | | |
| Audio | RTP | UDP | 51000 - 51499 | Any IP:Any Port | Registry: RTPFirstPort, RTPLastPort | |
| PhoneWhitelist | HTTPS | TCP | Any | https://cpe.swyx.com/whitelist/PhoneWhitelist.dat | | WAN access |
| IntersitePresence | WCF | TCP | Any | Any IP:9093 | | WAN access |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|-------------------|----------|------|-----------------|---------------|-------------------------------------|-------------------|
| CallControl | SIP | TCP | Any IP:Any Port | 5060 | | |
| CallControl | SIP | UDP | Any IP:Any Port | 5060 | | |
| Audio | RTP | UDP | Any IP:Any Port | 51000 - 51499 | Registry: RTPFirstPort, RTPLastPort | |
| IntersitePresence | WCF | TCP | Any IP:Any Port | 9093 | | WAN access |

CDS

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|----------------|----------|------|---------------|------------------------------|---|-------------------|
| Licensing | HTTPS | TCP | Any | https://license.swyx.com:443 | SwyxFlex, SwyxPerpetual, Instant Messaging, SwyxMeeting | WAN access |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|---|----------|------|-----------------|------------------------|------------------|-------------------|
| CDS API (configuration) | WCF | TCP | Any IP:Any Port | 9094 / for SDC 9095 | | |
| Client REST API (full) | HTTPS | TCP | Any IP:Any Port | 9100 | | |
| Client REST API (authentication service only) | HTTPS | TCP | Any IP:Any Port | 9101 | | WAN access |
| Provisioning | HTTP | TCP | Any IP:Any Port | 9200 | | |

SwyxGate

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|---------------------------------|--|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | |
| Audio/Fax | RTP/T.38 | UDP | 52000 - 52499 | Any IP:Any Port | Registry: RtpPortRangeStart, RtpPortRangeEnd |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|----------------------|---------------|--|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5064 | Registry: LowerBoundSipPort, UpperBoundSipPort |
| Audio/Fax | RTP/T.38 | UDP | Any IP:Any Port | 52000 - 52499 | Registry: RtpPortRangeStart, RtpPortRangeEnd |

LinkManager

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|----------------------------|-----------------|---------|------------------|---------------------------------------|---|-----------------------|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | | |
| CallControl (local EP) | SIP | TCP | Any | IpPbxSrv IP:5060 | | |
| CallControl (local EP) | SIP | UDP | 65001 | IpPbxSrv IP:5060 | Registry: TcpPortOfLocalSipEndpoint | |
| CallControl (remote EP) | SIP | TCP/TLS | Any | Any IP:Any Port | | WAN access |
| CallControl (remote EP) | SIP | UDP | 65002 | Any IP:Any Port | Registry: TcpPortOfRemoteSipEndpoint | WAN access |
| CallControl (remote EP) | STUN Message | UDP | 65002 | Any IP:3478 | Registry: TcpPortOfRemoteSipEndpoint | WAN access |
| Audio/Fax | RTP/T.38 | UDP | 55000 – 56000 | Any IP:Any Port | Registry: LowerBoundMediaPortUdp, UpperBoundMediaPortUdp | WAN access |
| Audio/Fax | STUN Message | UDP | 55000 – 56000 | Any IP:3478 | Registry: LowerBoundMediaPortUdp, UpperBoundMediaPortUdp | WAN access |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|-------------------------|--------------|------|-------------------------|---------------|--|-------------------|
| CallControl (local EP) | SIP | TCP | IpPbxSrv IP:Any Port | 65001 | Registry: TcpPortOfLocalSipEndpoint | |
| CallControl (local EP) | SIP | UDP | IpPbxSrv IP:5060 | 65001 | Registry: TcpPortOfLocalSipEndpoint | |
| CallControl (remote EP) | SIP | TCP | Any IP:Any Port | 65002 | Registry: TcpPortOfRemoteSipEndpoint | WAN access |
| CallControl (remote EP) | SIP | UDP | Any IP:Any Port | 65002 | Registry: TcpPortOfRemoteSipEndpoint | WAN access |
| CallControl (remote EP) | STUN Message | UDP | Any IP:Any Port | 65002 | Registry: TcpPortOfRemoteSipEndpoint | WAN access |
| Audio/Fax | RTP/T.38 | UDP | Any IP:Any Port | 55000 – 56000 | Registry: LowerBoundMediaPortUdp, UpperBoundMediaPortUdp | WAN access |
| Audio/Fax | STUN Message | UDP | Any IP:Any Port | 55000 – 56000 | Registry: LowerBoundMediaPortUdp, UpperBoundMediaPortUdp | WAN access |

Conference Manager

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|---------------------------------|--|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | |
| Audio | RTP | UDP | 56000 - 57000 | Any IP:Any Port | Registry: LowerBoundMediaPortUdp, UpperBoundMediaPortUdp |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|----------------------|---------------|--|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5062 | Registry: LowerBoundSipPort, UpperBoundSipPort |
| Audio | RTP | UDP | Any IP:Any Port | 56000 - 57000 | Registry: LowerBoundMediaPortUdp, UpperBoundMediaPortUdp |

Phone Manager

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|---------------------------------|------------------|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | |
| Configuration | DLS/HTTP | TCP | Any | Any IP:8085 | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | used in Version |
|----------------|-----------|----------|----------------------|------------------|-----------------------------------|-----------------|
| CallControl | CorNet TC | TCP, TLS | Any IP:Any Port | 4060, 4061 | | |
| CallControl | H.323 | TCP, TLS | Any IP:Any Port | 1300, 1720, 1721 | | < 12.0 |
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 65007 | Registry: SipCallSignalingPort | |
| Configuration | DLS | TCP | Any IP:Any Port | 18443 | | |

FaxServer

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|-----------------|----------|------|---------------|------------------------------------|---|------------|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | | |
| Client REST API | HTTPS | TCP | Any | IpPbxSrv IP:9100 | | |
| Mail | SMTP | TCP | Any | Any IP:Any Port | | WAN access |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | | |
| Fax | RTP/T.38 | UDP | 2000 - 8000 | Any IP:Any Port | Registry: T38PortRangeStart, T38PortRangeEnd | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|----------------------|---------------|---|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 61000 | Registry: LowerBoundSipPort, UpperBoundSipPort |
| Fax | RTP/T.38 | UDP | Any IP:Any Port | 2000 - 8000 | Registry: T38PortRangeStart, T38PortRangeEnd |

FaxServer Printer Gateway

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|---------------------------------|------------------|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | |

PushNotificationService

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | used with Version | Comment |
|----------------------------------|----------|------|---------------|--|--------------------|-------------------|------------|
| Push Notification Gateway Apple | HTTPS | TCP | Any | api.push.apple.com:443 | | | WAN access |
| Push Notification Gateway Google | HTTPS | TCP | Any | fcm.googleapis.com:443 | | | WAN access |
| Authentication Gateway Google | HTTPS | TCP | Any | oauth2.googleapis.com:443 | | >= PNS 2.1.0.0 | WAN access |
| CallControl | SIP | TCP | Any | Any IP:Any Port (IpPbxSrv, RemoteConnector, Clients) | | | |
| CallControl | SIP | UDP | 5096 | Any IP:Any Port (IpPbxSrv, RemoteConnector, Clients) | Registry: BindPort | | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|--|---------------|-----------------------|
| CallControl | SIP | TCP | Any IP:Any Port (IpPbxSrv, RemoteConnector, Clients) | 5096 | Registry: BindPort |
| CallControl | SIP | UDP | Any IP:Any Port (IpPbxSrv, RemoteConnector, Clients) | 5096 | Registry: BindPort |

Remote Connector

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|------|---|---|---|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 / IpPbxSrv IP:5096 | |
| CallControl | SIP | UDP | 10000 - 15000 | IpPbxSrv IP:5060 / IpPbxSrv IP:5096 | |
| Audio | RTP | UDP | 15000 - max (Typical number of connections * 2) | Any IP:Any Port | |
| "TCP Forwarding" | | TCP | Until 12.20: 712,9100 Since 12.20: 712,9100,9980 80 Any Any Any | IpPbxSrv IP:712 IpPbxSrv IP:9100 IpPbxSrv IP:80 | Until 12.20: Registry: TcpForwardingPorts Since 12.20: Registry: TcpForwarding |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|-----------------|----------|------|--|---|-----------------------------------|-------------------|
| Tunnel (WAN EP) | TLS | TCP | Any IP:Any Port | 16203, 57203 | Registry: TunnelListeningPorts | WAN access |
| CallControl | SIP | TCP | IpPbxSrv IP:Any | 10000 - 15000 | | |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 / IpPbxSrv IP:5096 | 10000 - 15000 | | |
| Audio | RTP | UDP | Any IP:Any Port | 15000 - max (Typical number of connections * 2) | | |

SwyxCTI+

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|------------------|------------------------------------|---|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | |
| CallControl | SIP | UDP | 65009 | IpPbxSrv IP:5060 | Registry: SipCallSignalingPort |
| Audio | RTP | UDP | 60000 – 60100 | | Registry: PortrangeBegin, PortrangeEnd |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|----------------------|---------------|--|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 65009 | Registry: SipCallSignalingPort |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 65009 | Registry: SipCallSignalingPort |
| Audio | RTP | UDP | 60000 – 60100 | | Registry: PortrangeBegin, PortrangeEnd |

Swyx uaCSTA

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|---------------------------------|------------------|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | |
| CallControl | SIP | TCP | Any | Any IP:Any Port | |
| CallControl | SIP | UDP | 65012 | Any IP:Any Port | Registry: Port |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|-----------------|---------------|------------------|
| CallControl | SIP | TCP | Any IP:Any Port | 65012 | Registry: Port |
| CallControl | SIP | UDP | Any IP:Any Port | 65012 | Registry: Port |

SwyxIt! / FaxClient

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|---------------------------|------------|-----------|---------------|---------------------------------|--|-------------------|
| REST API (Authentication) | HTTPS | TCP | Any | Any IP:9101 | Swyx Configuration URL | WAN access |
| REST API | HTTPS | TCP | Any | IpPbxSrv IP:9100 | | |
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | | |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | | |
| CallControl | SIP | UDP | 5070 - 5170 | IpPbxSrv IP:5060 | Registry: SIPListenerPort | |
| Audio/Video | RTP | UDP | 50000 - 50999 | Any IP:Any Port | Registry: PortrangeBegin, PortrangeEnd | |
| VisualContacts | LDAP | TCP + UDP | Any | Any IP:712 | | |
| Tunnel | TLS | TCP | Any | Any IP:16203,57203 | | WAN access |
| SwyxIt! Web Extension | HTTP/HTTPS | TCP | Any | Any IP:Any Port | Skin | WAN access |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|---------------|------------------|
|----------------|----------|------|---------------|---------------|------------------|

| | | | | | |
|----------------|------|-----|----------------------|---------------|--|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5070 - 5170 | Registry: SIPListenerPort |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 5070 - 5170 | Registry: SIPListenerPort |
| Audio/Video | RTP | UDP | Any IP:Any Port | 50000 - 50999 | Registry: PortrangeBegin, PortrangeEnd |
| VisualContacts | LDAP | UDP | Any IP:Any Port | Any | |

Swyx Messenger (part of SwyxIt!)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|--|----------|------|---------------|---|------------------|-------------------|
| REST API to SwyxWare | HTTPS | TCP | Any | 9100 | | |
| REST API to Coligo Stepping Stone Service (acquiring Coligo token) | HTTPS | TCP | Any | https://swyx-im-security.k8s.ispworks.nl:443 | | WAN access |
| Communication with Coligo Backend - Chat | WSS | TCP | Any | wss://iam.voipoperator.eu/socket:443 | | WAN access |
| Communication with Coligo Backend - File Upload and Download | HTTPS | TCP | Any | https://iamfile.voipoperator.eu:4006 | | WAN access |
| Communication with SwyxIt! (localhost - 127.0.0.1) | SignalR | TCP | Any | 12042 (default) Alternative ports if default is blocked: 17042, 22042, 27042, 32042, 37042, 42042 | | |
| Communication with SwyxIt! (localhost - 127.0.0.1) in Microsoft | SignalR | TCP | Any | random port | | |

| | | | | | | |
|-------------------------------------|--|--|--|--|--|--|
| Remote Desktop Services environment | | | | | | |
|-------------------------------------|--|--|--|--|--|--|

Swyx Connector for MS Teams (needs SwyxIt!)

Outbound

| Classification | Protocol | Type | Port (source) | Target Host | Port (target) | Comment |
|--|----------|------|---------------|------------------------------|---|------------|
| Download of the Swyx MS Teams Web App | HTTPS | TCP | Any | https://msteams-app.swyx.com | 443 | WAN access |
| Communication with SwyxIt! (localhost - 127.0.0.1) | SignalR | TCP | Any | Localhost | 12042 (default) Alternative ports if default is blocked: 17042, 22042, 27042, 32042, 37042, 42042 | |
| Communication with SwyxIt! (localhost - 127.0.0.1) in Microsoft Remote Desktop Services environment | SignalR | TCP | Any | Localhost | random port - redirected via SwyxIt! Discovery Service (see below) | |

Swyxl! Discovery Service

Inbound

| Classification | Protocol | Type | Port (source) | Target Host | Port (target) |
|--|----------|------|---------------|-------------|--|
| Redirection of Swyx Connector for MS Teams requests in Microsoft Remote Desktop Services environment | SignalR | TCP | Any | Localhost | 12042 (default) Alternative ports if default is blocked: 17042, 22042, 27042, 32042, 37042, 42042 |

SwyxWare Administration

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|----------------|----------|------|---------------|---------------------------------|------------------|-------------------|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 / for SDC 9095 | | |
| Firmware | FTP | TCP | Any | ftp.swyx.com:23 | Administration | WAN access |

Swyx Connectivity Setup Tool (SCST)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|----------------------------------|----------|------|---------------|--|------------------|-------------------|
| Configuration | CDS | TCP | Any | IpPbxSrv IP:9094 | | |
| Certificate request and download | HTTPS | TCP | Any | https://acme-v02.api.letsencrypt.org:443 | | WAN access |

Swyx Trace Tool

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|----------------|----------|------|---------------|---------------------------|------------------|-------------------|
| Trace Upload | HTTPS | TCP | Any | https://bits.swyx.com:443 | | WAN access |

SwyxPhone L4xx; L5xx; L6xx; L6x

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | used in Version | Comment |
|----------------|-------------|-------------|------------------------------------|-----------------------|--|-----------------------|
| CallControl | CorNet | TCP, TLS | Any | 4060, 4061 | | |
| CallControl | H.323/H.225 | TCP, TLS | Any | 1300, 1720, 1721 | L6x: not L6xx,L5xx,L4xx: <=V2 R1.5.0 | |
| Audio | RTP | UDP | 5000 - 5020 (mostly 5012, 5013) | Any | | |
| FW-Update | FTP | TCP | Any | Any to 21 | | WAN access |
| Network Time | NTP | UDP | Any | unspecified to 123 | | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) |
|---------------------------|----------|------|---------------|---------------------------------|
| Configuration/PhoneSearch | HTTP | TCP | Any | 8085 |
| local web interface | HTTPS | TLS | Any | 443 |
| Audio | RTP | UDP | Any | 5000 - 5020 (mostly 5012, 5013) |

DCF phone Yealink T4xS, T5x

Outbound

| Classification | Protocol | Type | Port(source) | Port (target) | used with Version | Comment |
|------------------------|----------|---------|---------------|-----------------|--------------------|-------------------------------|
| Audio | RTP | UDP | 11780 - 12780 | Any IP:Any Port | | configurable via WebInterface |
| PhoneBook | LDAP | TCP | Any | 389 | < SwyxWare v12.30 | |
| PhoneBook | LDAPS | TLS | Any | 636 | >= SwyxWare v12.30 | |
| Provisioning | HTTP | TCP | Any | 9200 | | |
| VoIP | SIP | UDP/TCP | 5060/Any | 5060 | | |
| uaCSTA | SIP | UDP/TCP | 5060/Any | 65012 | | |
| RPS, Firmware download | HTTP | TCP | Any | any to 80 | | WAN access |
| RPS, Firmware download | HTTPS | TLS | Any | any to 443 | | WAN access |

Inbound

| Classification | Protocol | Type | Port(source) | Port (target) | Comment |
|---------------------|----------|---------|-----------------|---------------|-------------------------------|
| local SIP stack | SIP | UDP/TCP | 5060/Any | 5060 | |
| local web interface | HTTPS | TLS | Any | 443 | |
| Audio | RTP | UDP | Any IP:Any Port | 11780 - 12780 | configurable via WebInterface |

Swyx RemoteConnector for Yealink for SwyxON

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | used with Version | Comment |
|---------------------------|----------|------|---------------|---|---------------------------|-------------------|
| Yealink RPS | HTTPS | TCP | Any | https://rps.yealink.com:443 https://rpscloud.yealink.com:443 Controlled by Yealink Firmware | | WAN access |
| Yealink Firmware download | HTTPS | TCP | Any | Any IP : 443 Controlled by Yealink RPS | | WAN access |
| Swyx RPS | HTTPS | TCP | Any | https://phone.swyx.com:443 | >= SwyxWare v13.30 SwyxON | WAN access |
| Remote Endpoint | OpenVPN | UDP | Any | Address is shown in the SCC: Home / General settings / System settings / Provisioning remote01.swyxon.com : Any Port ... remote10.swyxon.com : Any Port | >= SwyxWare v13.30 SwyxON | WAN access |

SwyxMobile (Android)

Internal mode (without RemoteConnector)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|---------------------------|-----------|------|---------------|------------------|------------------|------------|
| REST API (Authentication) | HTTPS | TCP | Any | IpPbxSrv IP:9101 | | |
| REST API | HTTPS | TCP | Any | IpPbxSrv IP:9100 | | |
| IM | Websocket | TCP | Any | Any IP:443 | | WAN access |
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | | |
| CallControl | SIP | UDP | 5070 | IpPbxSrv IP:5060 | | |
| Audio | RTP | UDP | 50000- 50999 | Any IP:Any Port | | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|----------------------|---------------|------------------|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5070 | |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 5070 | |
| Audio | RTP | UDP | Any IP:Any Port | 50000- 50999 | |

External mode (with RemoteConnector)
Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|---------------------------|-----------|------|---------------|----------------------------|---|-------------------|
| REST API (Authentication) | HTTPS | TCP | Any | Any IP:9101 | | WAN access |
| RemoteConnector | TLS | TCP | Any | Any IP:16203, 57203 or 443 | all three ports are tried at the same time and the first successful connect wins. | WAN access |
| IM | Websocket | TCP | Any | Any IP:443 | | WAN access |

SwyxMobile iOS/Swyx Desktop macOS

Internal mode (without RemoteConnector)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|---------------------------|-----------|-----------|---------------|------------------|------------------|-------------------|
| REST API (Authentication) | HTTPS | TCP | Any | IpPbxSrv IP:9101 | | |
| REST API | HTTPS | TCP | Any | IpPbxSrv IP:9100 | | |
| IM | Websocket | TCP | Any | Any IP:443 | | WAN access |
| CallControl | SIP | UDP + TCP | Any | IpPbxSrv IP:5060 | | |
| Audio | RTP | UDP | 50000-50999 | Any IP:Any Port | | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|----------------------|---------------|------------------|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | Any | |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | Any | |
| Audio | RTP | UDP | Any IP:Any Port | 50000- 50999 | |

External mode (with RemoteConnector)
Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|---------------------------|-----------|------|---------------|----------------------------|---|-------------------|
| REST API (Authentication) | HTTPS | TCP | Any | Any IP:9101 | | WAN access |
| RemoteConnector | TLS | TCP | Any | Any IP:16203, 57203 or 443 | all three ports are tried at the same time and the first successful connect wins. | WAN access |
| IM | Websocket | TCP | Any | Any IP:443 | | WAN access |

Swyx DECT 500

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|------------------|------------------|
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | |
| CallControl | SIP | UDP | 5060 | IpPbxSrv IP:5060 | WebInterface |
| Audio | RTP | UDP | 50004 - 50258 | Any IP:Any Port | WebInterface |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|----------------------|---------------|------------------|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5060 | WebInterface |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 5060 | WebInterface |
| Audio | RTP | UDP | Any IP:Any Port | 50004 - 50258 | WebInterface |

Swyx DECT 800 (DCF)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | |
|-------------------|----------|---------|---------------|-----------------|--------------------|-------------------|
| Audio | RTP | UDP | 16384 - 32767 | Any IP:Any Port | WebInterface | |
| PhoneBook | LDAP | TCP | Any | 389 | < SwyxWare v12.30 | |
| PhoneBook | LDAPS | TLS | Any | 636 | >= SwyxWare v12.30 | |
| Provisioning | HTTP | TCP | Any | 9200 | | |
| CallControl | SIP | UDP/TCP | 5060/Any | 5060 | | |
| Firmware download | HTTP | TCP | | any to 80 | | WAN access |
| Firmware download | HTTPS | TLS | | any to 443 | | WAN access |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | |
|---------------------|----------|------|----------------------|---------------|------------------|--|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 2048 - 65535 | WebInterface | |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 2048 - 65535 | WebInterface | |
| Audio | RTP | UDP | Any IP:Any Port | 16384 - 32767 | WebInterface | |
| local web interface | HTTPS | TLS | Any | 443 | | |

Mutual (between base stations)

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|-----------------------|-----------------|-------------|----------------------|----------------------|-------------------------|
| CallControl | H323 | TCP | Any Port | 726-1727 | WebInterface |
| CallControl | H225 | UDP | Any Port | 1718-1719 | WebInterface |
| Audio | RTP | UDP | Any IP:Any Port | 16384 - 65535 | WebInterface |
| Unite | HTTP | TCP | Any | 8080 | |

Swyx DECT 800 (traditional deployment)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|---------------|------------------|------------------|
| CallControl | SIP | TCP | Any | IpPbxSrv IP:5060 | |
| CallControl | SIP | UDP | Any | IpPbxSrv IP:5060 | WebInterface |
| Audio | RTP | UDP | 16384 - 32767 | Any IP:Any Port | WebInterface |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|------|----------------------|---------------|------------------|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 2048 - 65535 | WebInterface |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 2048 - 65535 | WebInterface |
| Audio | RTP | UDP | Any IP:Any Port | 16384 - 32767 | WebInterface |
| local web interface | HTTPS | TLS | Any | 443 | |

Swyx Connect (172x)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|-----------|-----------------|------------------|------------------|
| CallControl | SIP | TCP | 5060 ? | IpPbxSrv IP:5060 | |
| CallControl | SIP | UDP | 5060 | IpPbxSrv IP:5060 | |
| Audio/Fax/Allgemein | RTP/T.38 | UDP | 32768 - 49151 | Any IP:Any Port | |
| Allgemein | | TCP | 3072 - 19455 ? | ? | |
| Maskierung | | UDP + TCP | 53248 - 57343 ? | ? | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|-----------|----------------------|-----------------|------------------|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5060 | |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 5060 | |
| Audio/Fax/Allgemein | RTP/T.38 | UDP | Any IP:Any Port | 32768 - 49151 | |
| Allgemein | | TCP | ? | 3072 - 19455 ? | |
| Maskierung | | UDP + TCP | ? | 53248 - 57343 ? | |

Swyx Connect (6xxx/8xxx)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|------|-----------------------------|------------------|------------------|
| CallControl | SIP | TCP | 5061, 5081 ? | IpPbxSrv IP:5060 | |
| CallControl | SIP | UDP | 5060, 5080 | IpPbxSrv IP:5060 | |
| Audio/Fax/Allgemein | RTP/T.38 | UDP | 6000 – (6000+(channels*10)) | Any IP:Any Port | |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|------|----------------------|-----------------------------|------------------|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5061, 5081 ? | |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 5060, 5080 | |
| Audio/Fax/Allgemein | RTP/T.38 | UDP | Any IP:Any Port | 6000 – (6000+(channels*10)) | |

MediaPack (MP-1xy)

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|------|------------------------------------|------------------|------------------|
| CallControl | SIP | TCP | 5061 ? | IpPbxSrv IP:5060 | |
| CallControl | SIP | UDP | 5060 | IpPbxSrv IP:5060 | LocalSIPPort |
| Audio/Fax/Allgemein | RTP/T.38 | UDP | 6000 - (6000+10*(device channels)) | Any IP:Any Port | BaseUDPPort |

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|---------------------|----------|------|----------------------|------------------------------------|------------------|
| CallControl | SIP | TCP | IpPbxSrv IP:Any Port | 5061 ? | LocalSIPPort |
| CallControl | SIP | UDP | IpPbxSrv IP:5060 | 5060 | LocalSIPPort |
| Audio/Fax/Allgemein | RTP/T.38 | UDP | Any IP:Any Port | 6000 - (6000+10*(device channels)) | BaseUDPPort |

SwyxPlus VisualGroups

Inbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via |
|----------------|----------|------|-----------------|---------------|------------------|
| Information | HTTP | TCP | Any IP:Any Port | 80 | |

Swyx Control Center

Inbound

| Classification | Protocol | Type | Port | Configurable via |
|---------------------------|----------|------|------|---------------------|
| Administration Web-Portal | HTTPS | TCP | 9443 | SCC Installer / IIS |

Outbound

| Classification | Protocol | Type | Port | Configurable via |
|-------------------------|----------|------|------|------------------|
| Swyx Management Service | HTTPS | TCP | 9201 | config-file |

Swyx Management Service

Inbound

| Classification | Protocol | Type | Port | Configurable via |
|--|----------|------|------|------------------|
| Swyx Management Service (REST Api Interface) | HTTPS | TCP | 9201 | config-file |

Outbound

| Classification | Protocol | Type | Port | Configurable via |
|---|----------|------|------|------------------|
| CDS Client REST API (full) | HTTPS | TCP | 9100 | |
| CDS Client REST API (authentication service only) | HTTPS | TCP | 9101 | |

SwyxWare HealthMonitor

Outbound

The ports health monitor connects to are configured in Health Monitor's `appSettings.json`. The following list reflects the defaults only. Actual ports depend on the configuration the customer sets up.

| Classification | Protocol | Type | Port (Source) | Port (Target) | Configurable via |
|-------------------------------------|----------|------------|---------------|-------------------------------|------------------|
| Health Probing of SwyxWare Services | HTTP | TCP | Any | 9100 | appSettings.json |
| Health Probing of SwyxWare Services | SIP | TCP or UDP | Any | (see SwyxWare services above) | appSettings.json |

Inbound

| Classification | Protocol | Type | Port (Target) | Configurable via |
|---|----------|------|---------------|---|
| Prometheus Metrics Exporter to provide health probing results | HTTP | TCP | 5000 | During installation via <code>install-service.ps1</code> script parameter. Note that the IP the service is listening depends on configuration, e.g. parameter of the <code>install-service.ps1</code> script. If listening is configured using an URL like <code>http://*:5000</code> the service listens on any IP. If a specific IP is specified in the url the service listens only on that one. |

If the customer additionally installs Prometheus or Grafana, these components are also listening on TCP ports. Refer to the documentation (<https://grafana.com> and <https://prometheus.io>) for details.

MS Teams PresenceSync

Outbound

| Classification | Protocol | Type | Port (source) | Port (target) | Configurable via | Comment |
|-----------------|----------|------|---------------|--|------------------|------------|
| | HTTPS | TCP | Any | graph.microsoft.com :443 | | WAN access |
| | HTTPS | TCP | Any | login.microsoftonline.com :443 | | WAN access |
| Client REST API | HTTPS | TCP | Any | IpPbxSrv IP:9100 | | |