

External Participation in Volkswagen Skype- / Lync-Meetings via Skype for Business Web App; IT Pre-requirements

Introduction

This set of instructions is directed at **IT departments** of customers and partners of Volkswagen. There is a separate instruction booklet available for end users at customer / partner companies.

Microsoft Skype for Business (and its predecessor Lync) have replaced Netviewer as the program of choice for exchanging content with external partners. The basis for exchange via Skype for Business is a Skype online meeting, to which the external partners can be invited by e-mail.

These instructions show customers / partners how to participate in online meetings with Volkswagen. After adjusting the appropriate settings, users should then be able, via the Microsoft Skype for Business Web App, to participate in Volkswagen Skype / Lync Meetings. Invitations to these meetings are issued, via e-mail, by the Volkswagen meeting organizers. External participants are required to install a Browser-Plug-In (this installation does not require Administrator permission).

Important: Should your organization already utilize Microsoft Skype for Business or Lync, you may be able to access Volkswagen Skype / Lync Meetings via a Federation. For further information, please contact Volkswagen IT services (realtime-communication@volkswagen.de).

Basic Settings

When participating in a Volkswagen Skype- / Lync-Meeting via Microsoft Skype for Business Web App, communication is between the Volkswagen Skype for Business EDGE Servers and the participant's Web browser.

1. Volkswagen Skype for Business Edge Server

Communication is via Skype for Business AV EDGE Server for Data, Audio and Video traffic as well as for content sharing. This uses port 443.

Accessibility of the following systems must be ensured:

Host	IP address	Port
join.vwgroup.com	194.114.33.208	443/tcp
rtc01web.vwgroup.com	194.114.33.204	443/tcp
rtc02web.vwgroup.com	194.114.33.205	443/tcp
rtc03web.vwgroup.com	194.114.33.220	443/tcp
rtc04web.vwgroup.com	194.114.33.221	443/tcp
rtc01owas.vwgroup.com	194.114.33.206	443/tcp
rtc02owas.vwgroup.com	194.114.33.207	443/tcp
rtc03owas.vwgroup.com	194.114.33.222	443/tcp
rtc04owas.vwgroup.com	194.114.33.223	443/tcp
rtc01av.vwgroup.com	194.114.126.163 194.114.126.165	443/tcp
rtc02av.vwgroup.com	194.114.126.164 194.114.126.166	443/tcp
rtc03av.vwgroup.com	194.114.126.175 194.114.126.177	443/tcp
rtc04av.vwgroup.com	194.114.126.176 194.114.126.178	443/tcp
rtc01we.vwgroup.com	194.114.126.159 194.114.126.161	443/tcp
rtc02we.vwgroup.com	194.114.126.160 194.114.126.162	443/tcp
rtc03we.vwgroup.com	194.114.126.171 194.114.126.173	443/tcp
rtc04we.vwgroup.com	194.114.126.172 194.114.126.174	443/tcp

When using proxy servers, it is important to ensure that the URLs und IP-Addresses used by Skype for Business / Lync are accessible without further User Authentication.

2. Browser settings for Ports used for Audio/Video and Sharing

Following ports / protocols must be open in the external firewalls and proxy servers:

Port 80, 443 – Protocol STUN / TCP (output) for Audio, Video und Sharing

Port 80, 443 – Protocol PSQM / TLS (output) for unhindered data access

Browser Requirements

- The following Browsers are supported: Microsoft Edge, Microsoft Internet Explorer (Version 9 or higher), Firefox (Version 12 or higher), Safari (Version 5 or higher) und Chrome (Version 18 or higher).

Operating system	Edge	32- and 64-bit Internet Explorer 11	32-bit Internet Explorer 10	64-bit Internet Explorer 10	32-bit Internet Explorer 9	64-bit Internet Explorer 9	32-bit Version of Firefox 12.X	64-bit Versions of Safari 5.X, 6.X, 7.X	32-bit Version of Chrome 18.X
Windows 10	Yes	Yes	N/A	N/A	N/A	N/A	Yes	N/A	Yes
Windows 8.1 ¹	N/A	Yes	N/A	N/A	N/A	N/A	Yes	N/A	Yes
Windows 8 (Intel based) ¹	N/A	N/A	Yes	Yes	N/A	N/A	Yes	N/A	Yes
Windows 7 with SP1 ²	N/A	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Windows Server 2008 R2 with SP1 ²	N/A	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Windows Server 2008 with SP2 ³	N/A	Yes	Yes	No	Yes	No	Yes	No	Yes
Mac OS X 10.8 and later (Intel-based) ²	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Yes	Yes

- The following link gives detailed information on supported Browsers and Operating Systems: <https://technet.microsoft.com/en-us/library/gg425820.aspx>
- Should Video communication also be considered, there may well be specific Hardware requirements. Further information on this topic can be found here: <https://technet.microsoft.com/en-us/library/jj688132.aspx>
- Here is an overview of all Lync/Skype for Business Workloads: <https://www.microsoft.com/en-us/download/details.aspx?id=39968>

Skype for Business Web App Plug-In

- Microsoft Skype for Business Web App Plug-In is required in order to access Content and A/V.
- The installation of Skype for Business Web App Plug-In does not require Administrator permission, but users should have the capability to be able to install the Microsoft Skype for Business Web App Plug-In.

For Mozilla Firefox users:

- In the default-setup the Plug-In has to be activated each time it is used
- Recommendation: Always activate the Skype for Business-Plug-in after the first installation
 - Open the Add-ons settings by entering about:addons in Mozilla Firefox
 - Select „Plugins“ and choose „Always Activate“ for the „Skype for Business Web App Plug-in“

