

# Telephony Support for Office 365

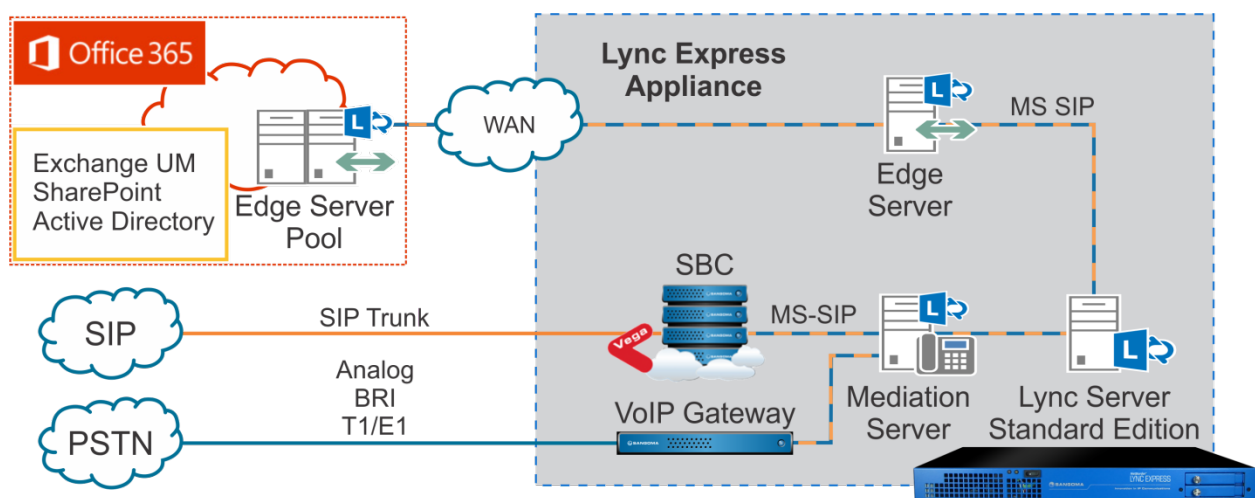
## SANGOMA USE CASE

Implementing a Microsoft Exchange environment, complete with email and Active Directory, is a daunting task for small and medium sized businesses. A highly trained and certified IT staff is required to configure and maintain this complex web of technology. The servers and software needed to run it can require a significant capital investment.

Microsoft Office 365 is a service that brings a comprehensive Microsoft solution to even the smallest operation, through a hosted system that delivers Microsoft Exchange and Office applications. This cloud-based solution eliminates the burden of investing in capital and technical staff required to deploy a full Microsoft solution on-site.

A version of Office 365 that contains Lync is also available. Lync is a complete Unified Communications (UC) solution which delivers a suite of collaboration tools including instant messaging, presence, conferencing, screen sharing, whiteboard and file transfer, as well as voice and video communication between Lync client software endpoints.

However, Lync on its own does not offer telephone connectivity outside of the Lync network. Once Lync is deployed and integrated into the work flow, it makes sense to add telephony to Lync. Without connections between Lync and the PSTN, some of the advantages of Lync are lost, including powerful call delegation features, and a single telephone number that works in the office, at a remote office, and with a mobile phone. It is even possible to replace an entire PBX with a Lync-based solution, however, special considerations need to be made for 911 access, and FXS support for legacy equipment like fax machines and door phones.



Connectivity to the Public Switched Telephone Network (PSTN) can be achieved in two ways: either with a direct connection to the PSTN through a gateway, or through a connection via a SIP trunking provider. Either choice requires equipment on the premises of the business because Microsoft does not offer direct connections to the PSTN or to standard SIP trunks, although a direct connection to Microsoft-certified SIP trunks is possible. Even when Microsoft-certified SIP trunks are used, an SBC is recommended to protect the network and prevent toll fraud. However, having on-site equipment and the trained staff required to source and deploy this gear, erodes much of the advantage to using Office 365.

To gain the advantages of Office 365 with Lync and full telephony support, the customer must engage a Microsoft partner to supply, set up, and maintain the Lync servers on the premises, alongside PSTN or SIP interface equipment. This presents a problem to the solution provider, who must source an appropriate server, test it with various Lync and related application servers, and deliver a package that they hope will be adequate, reliable, and not price them out of the market by selecting an over-powered server. They also have to source a gateway to interface to the PSTN, and an SBC to protect the network and enable interfacing to standard SIP trunks.

## Lync Express Offers a Pre-Packaged Solution

Lync Express is an appliance that supports a complete Lync solution, packaged with an SBC and interface hardware for the PSTN. The server is “right sized” to run all of the software that is installed, ensuring the hardware is not under-powered, leading to poor performance, and is not over-specified, leading to wasted capital expenditure and power consumption.

Lync Express includes a Lync server, edge server, mediation server and session border controller. It can also supply Active Directory if required.

Lync Express offers a variety of PSTN connection options, including T1/E1, BRI/ISDN and FXO analog interfaces, depending on the model. This gives corporations the choice of using SIP trunks, traditional telephone trunks, or both.

When a phased approach is preferred, to avoid the risk of disruption that may be caused by a flash cut to a new communications system, or in a multisite implementation, where some offices are using older technology and some have migrated to Lync, Lync Express can be integrated with an existing PBX/IP-PBX, maintaining the internal dial plan to support seamless interoperability with existing handsets served directly by the PBX/IP-PBX.