



# Skype for Business

## Skype for Business GEO-EDGE

**Thomas Poett - Skype4b MVP**

Business Unit Leader Skype for Business – Westcon UCC Germany

# Introduction



Work with



SfB Unit Leader



@thomaspoett



Sip:thomas.poett@  
westcongroup.com



MVP since 2012

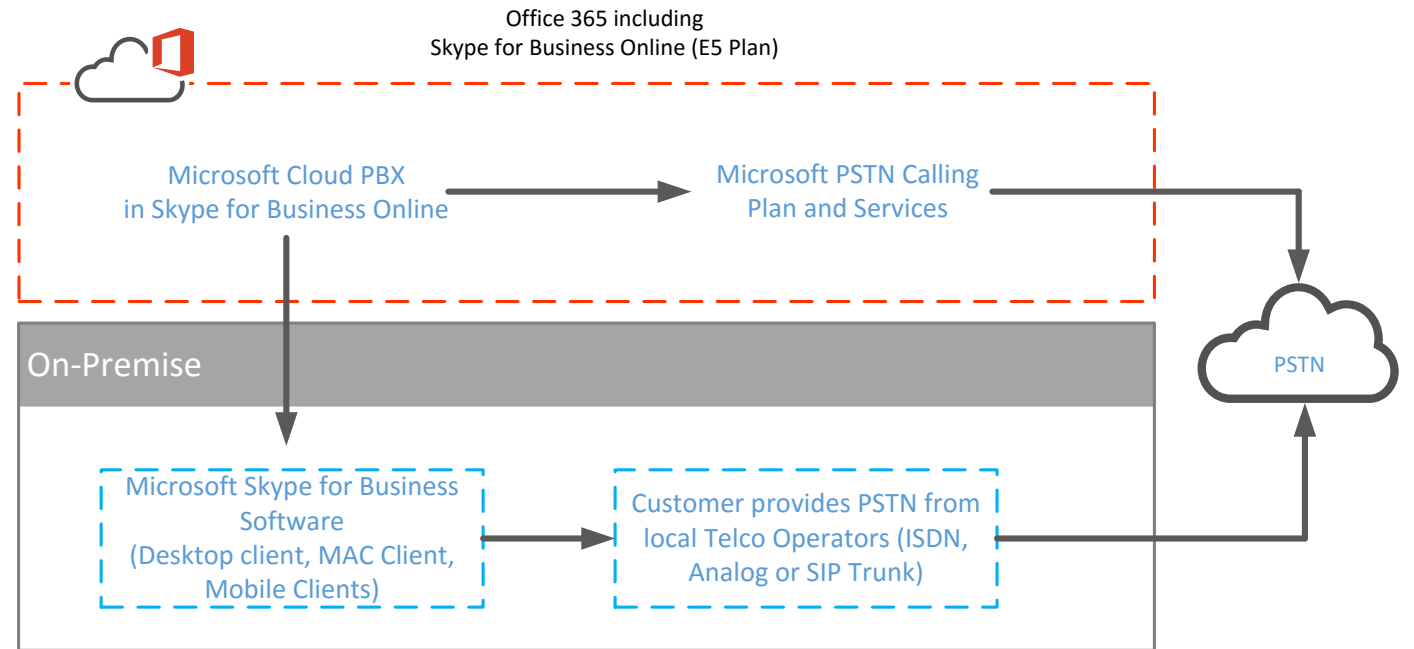
# Topics

- Generic Terms of Office 365 PSTN connectivity
- Mixed CloudPBX Scenario
- Multi Tenant Support
- Outbound Call Flow
- Inbound Call Flow
- Multi-Site Deployment
- CCE Voice Routing with multi-site  
(generic configuration and gateway based routing)
- PBX to CloudPBX migration

# Generic terms of Office 365 PSTN connectivity

CloudPBX, incl. in E5 Office 365 Plan

Additional with E1+E3 as CloudPBX package



# Mixed CloudPBX Scenario

This is the only mixed scenario, where local PSTN breakouts with your ***On-Premise Skype for Business enabled users and the other users enabled on Office 365*** are combined. (which **MUST use PSTN Calling Service or the local PSTN breakouts**)

It is not possible for Online user to be mixed for PSTN Calling Service and PSTN local breakout on-premise. This is technical limitation due to Voice Routes in the Office 365 environment.

**Note:**

A PSTN Calling Service is subject to the regional availability in the country where you required PSTN Calling.

USER LOCATION	PSTN breakout
Users enabled with SfB On-Premise	MUST be On-Premise with local PSTN Gateway
Users enabled with SfB Online in Office 365 (either or option)	PSTN Calling Service in Office 365 -> Calling Plan

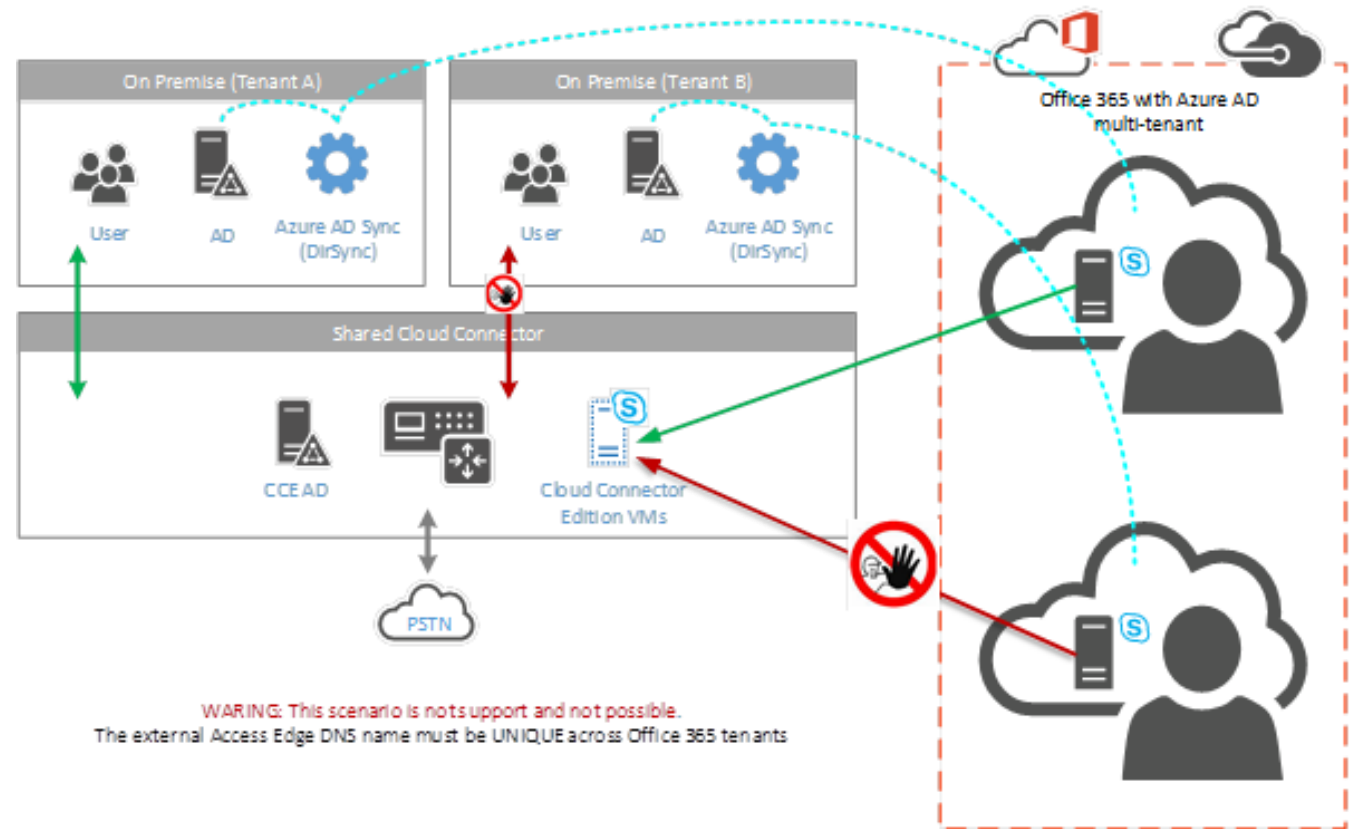
Due to incomplete TechNet documentation and verification issues with the SfB PG, we are in discussion: if an online user can also be assigned with CloudPBX/On-Premise gateway

# Multi Tenant (not supported)

Take away:

Single Tenant in Office 365 is required

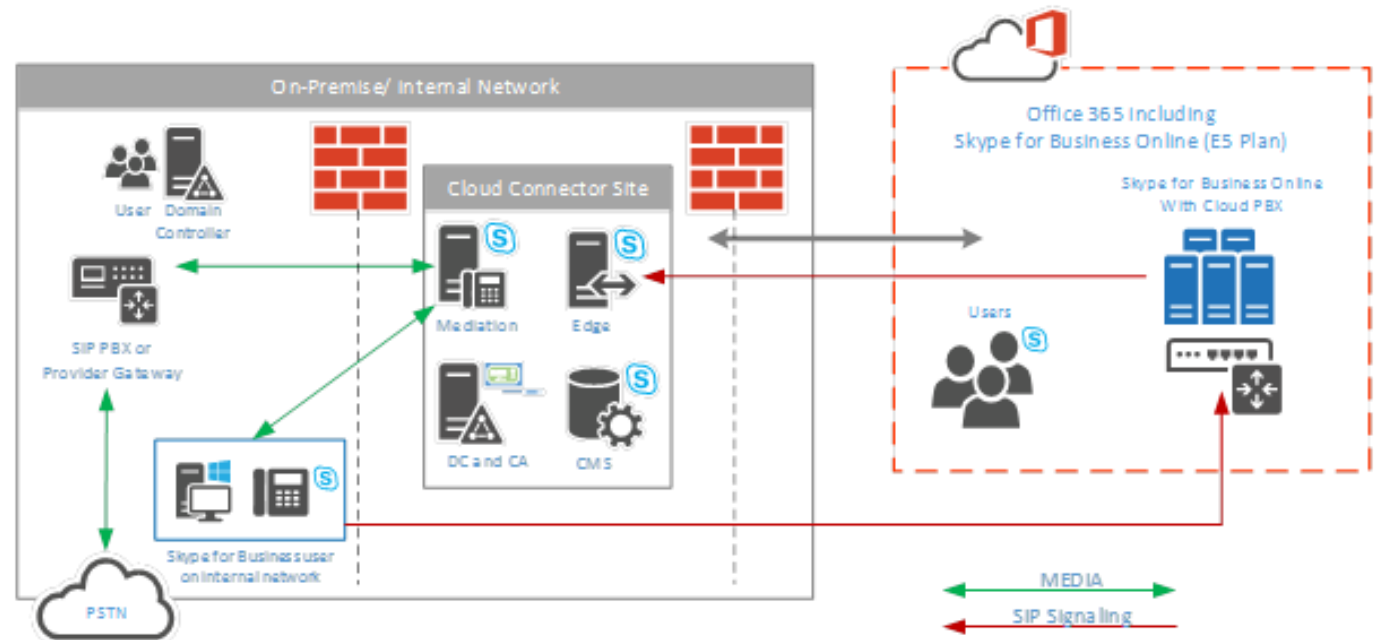
Multi SIP Domain is possible



# Outbound Call Flow

At point of writing this guide, the **Media Bypass** feature is not available with the CCE, but might be in later updates implemented. (This is different with the on-premise deployment).

The Media (AV) runs from internal client directly to the Mediation Server and for external clients to the Edge AV -> Mediation Server -> PSTN Gateway.

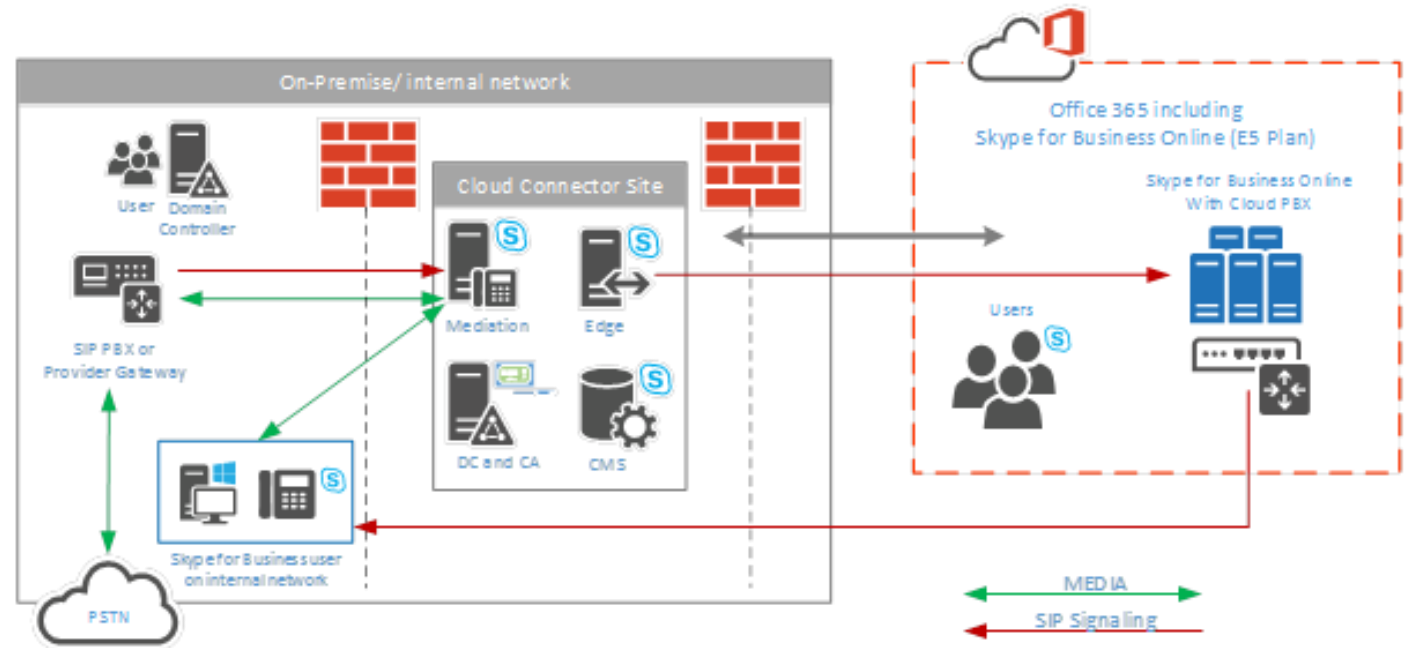


# Inbound Call Flow

Note:

This is a simplified scenario, where only a single CCE site is configured.

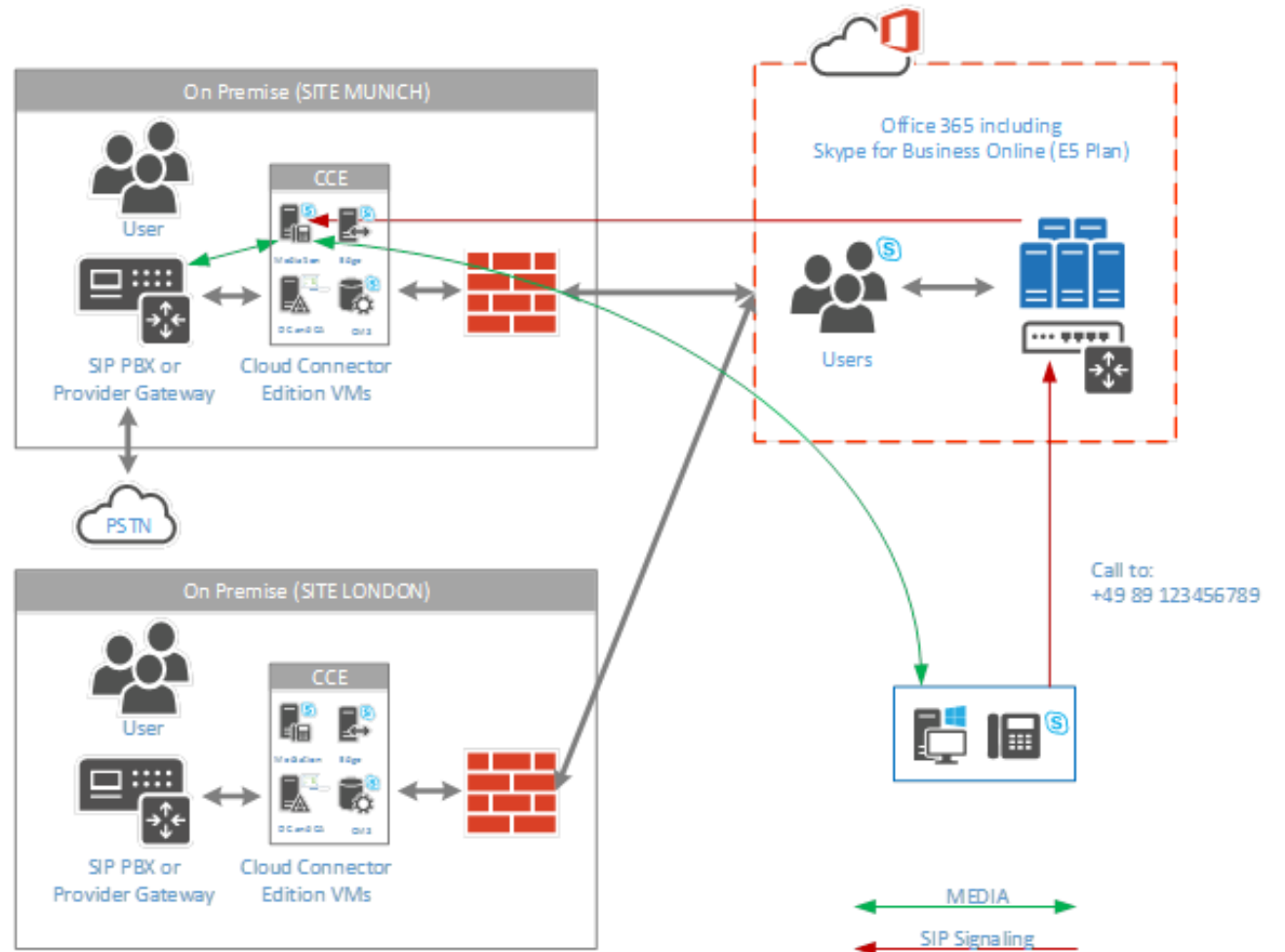
The configuration for a single site CCE doesn't require any specialized configuration and is working with the default settings in Office 365.





# Multi-Site Deployment (Site A)

Call flow for Client – PSTN if client is registered with PSTN Hybrid Site A

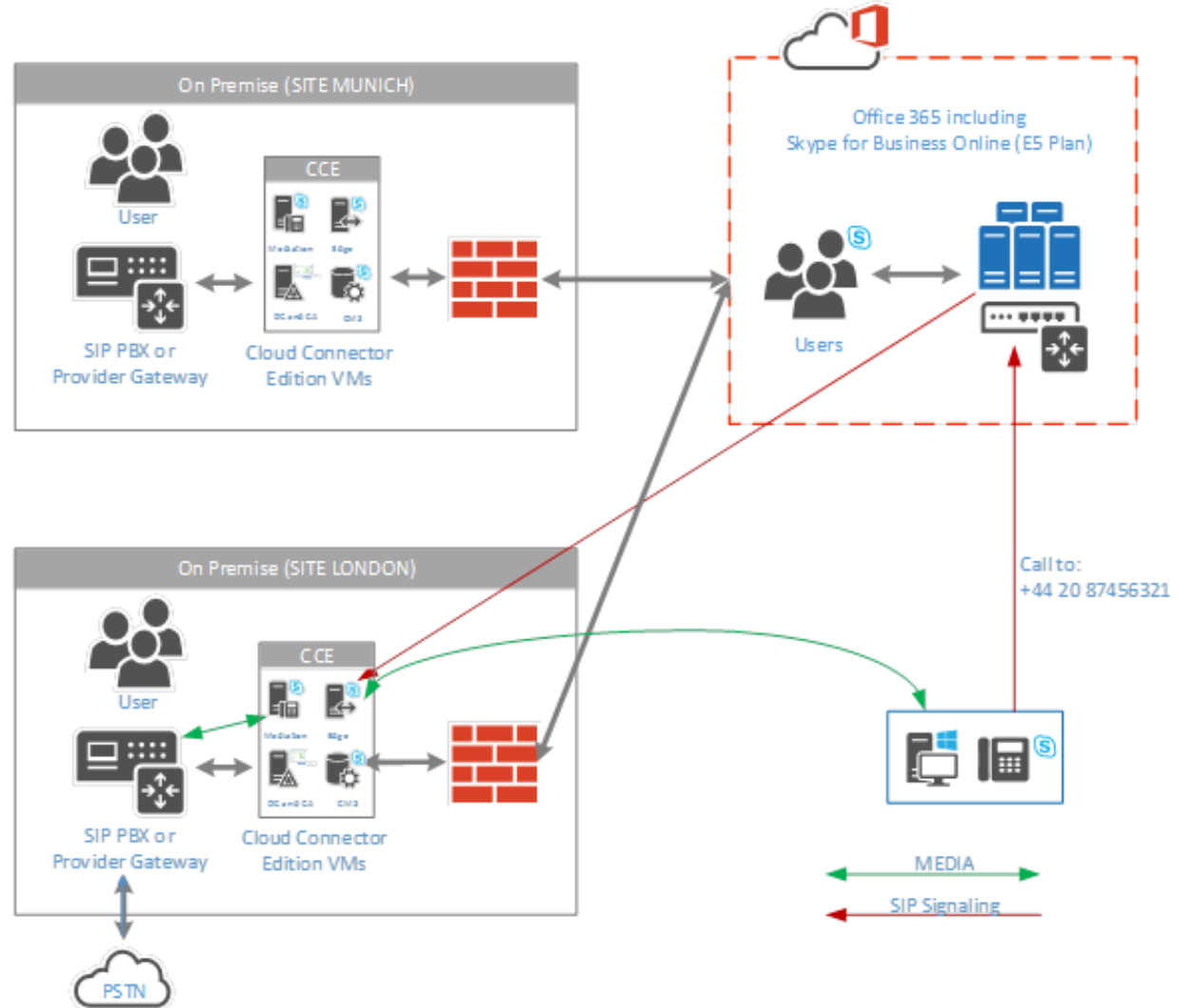


# Multi-Site Deployment (Site B)

Call flow for Client – PSTN if client is registered with PSTN Hybrid Site B

Take away:

Least cost routing is not possible.



# CCE Voice Routing with multi-site (generic configuration)

Assuming we have two users, User A and User B.

User A is associated with MUNICH

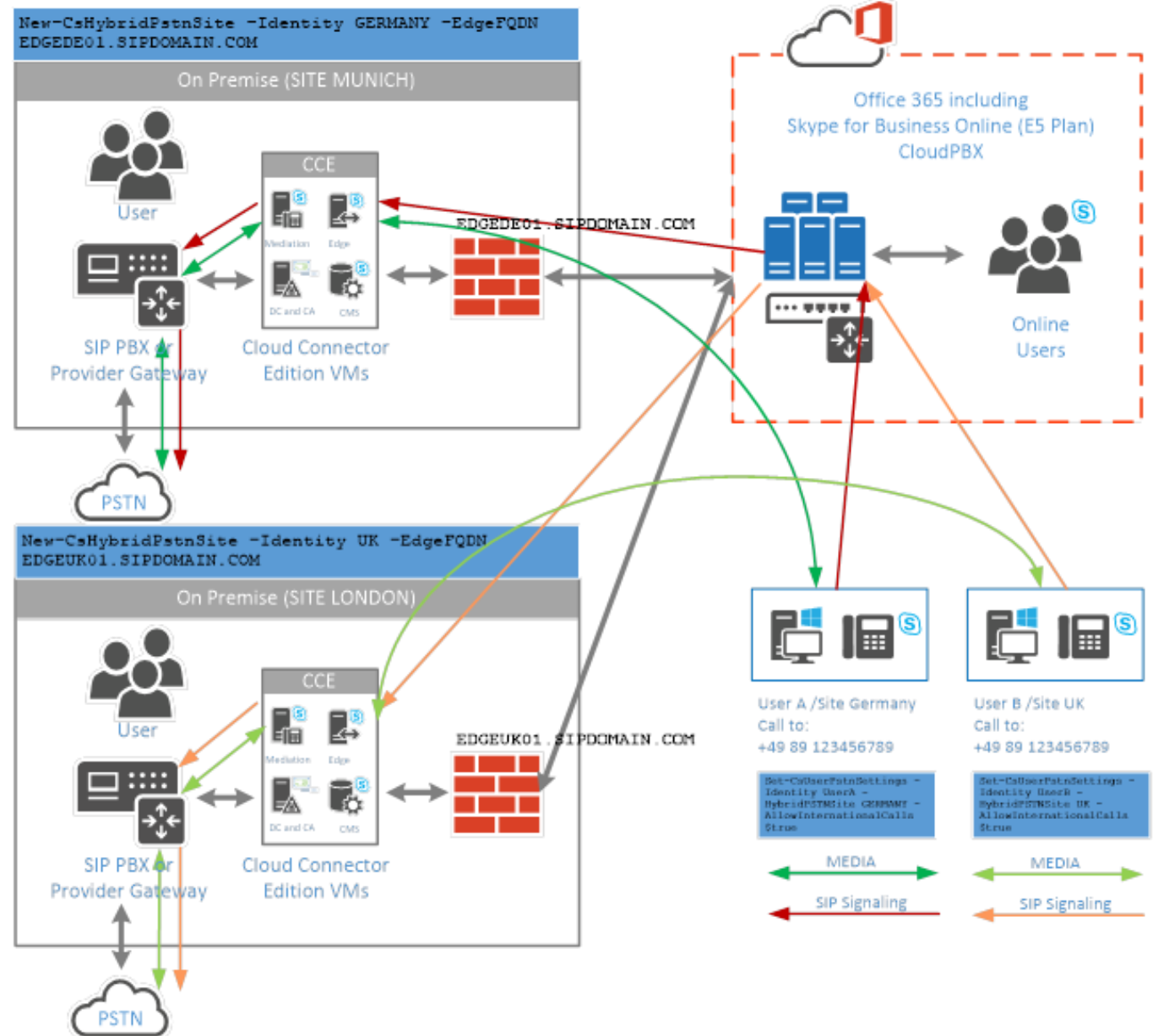
User B is associated with LONDON

First CCE Site is called GERMANY

Second CCE Site is called UK

## Note:

At point of writing, the TechNet documentation was incomplete and partially incorrect



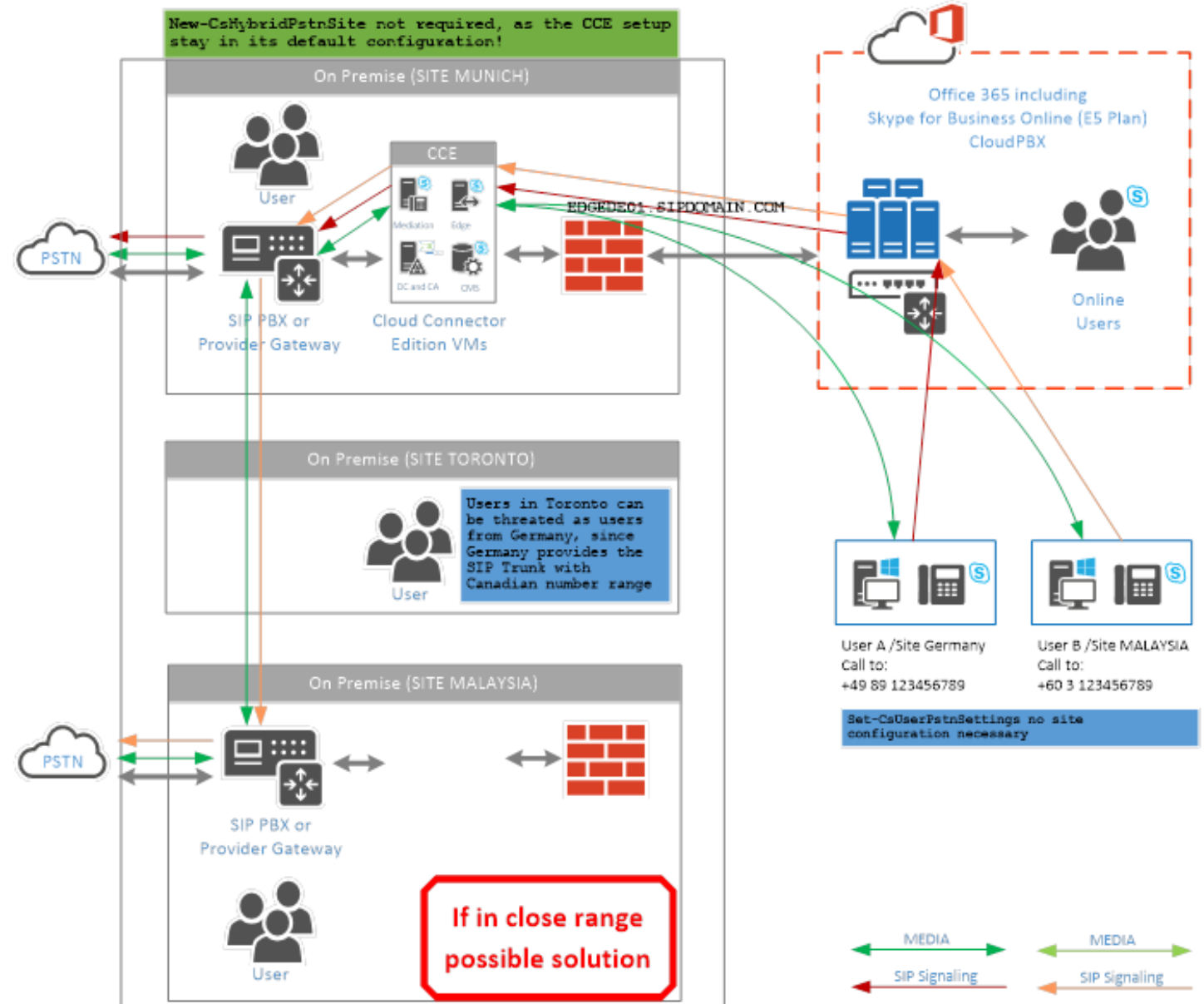
# Multi-Site with Gateway Routing (not supported yet)

I discussed personally with the CCE vendors a solution which might be suitable in some special scenarios.

Please note, that this setup is technical correct and working, but not yet agreed with Microsoft, nor yet supported for Non-CCE-Sites

Take away:

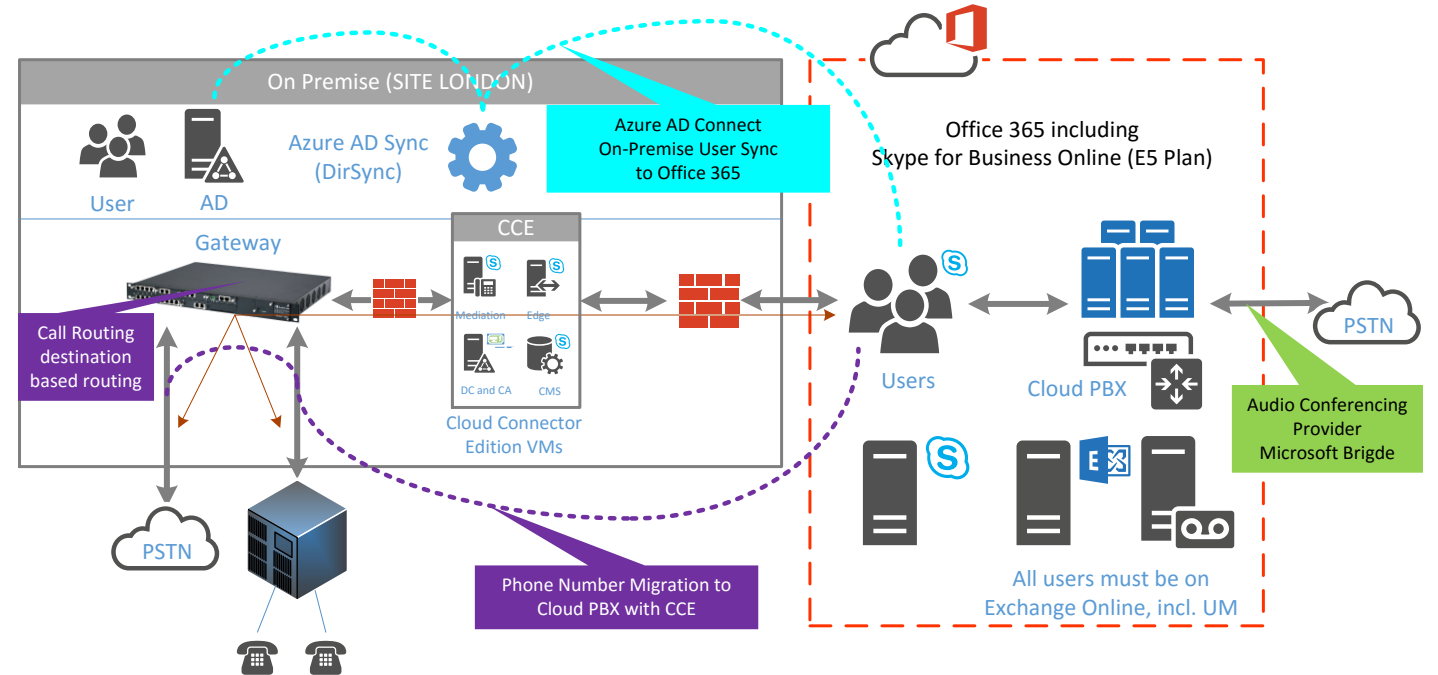
Plan, assess the network and align with possible client locations, ensure a round trip not higher than approx. 150ms



# PBX to CloudPBX migration

## Note:

Some PBX are having head number reservation configuration. Meaning, a dedicated number range is reserved by the PBX and call within this range can't be routed outside the PBX. If this is the case, contact your vendor and find a workaround, e.g. shrinking the head number, or define face numbers in the PBX, which are then masked on the gateway.



Thank you