

# Cloud PBX: Real world scenarios

Ralph Eckhard

**Experts**  Live Netherlands

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# Ralph Eckhard

IT Architect @ PeopleWare ICT  
Modern Workplace / M365

[www.365dude.nl](http://www.365dude.nl)

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# Elements of Skype for Business Online

## Skype for Business (E1,E3,E5)

- Instant messaging and presence
- VoIP voice and video (w/o phone numbers)
- Online Conferencing

## Cloud PBX feature (add-on,E5)

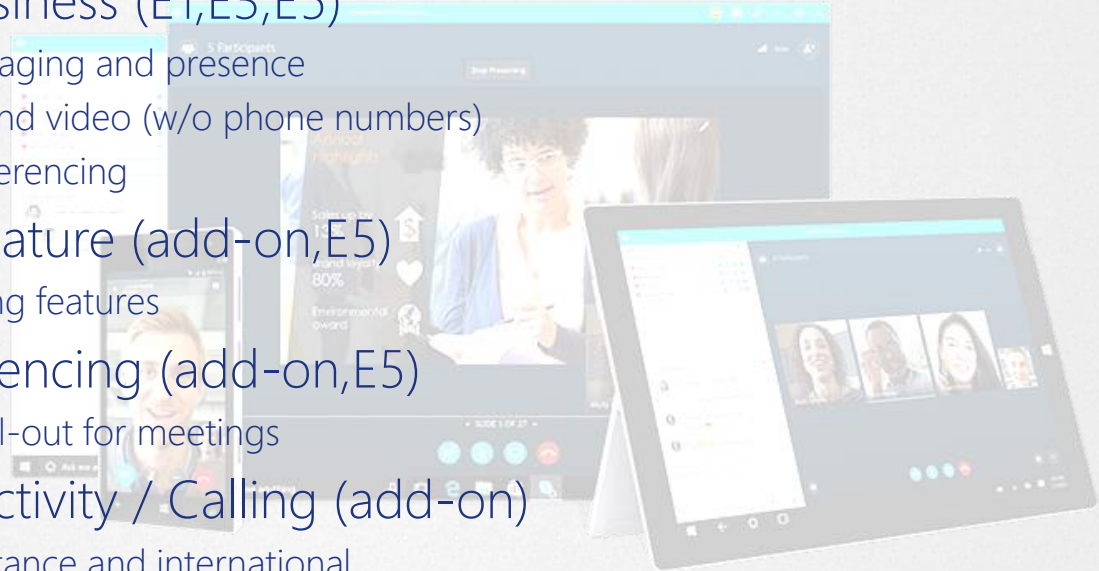
- Common calling features

## PSTN Conferencing (add-on,E5)

- Dial-in and dial-out for meetings

## PSTN Connectivity / Calling (add-on)

- Local, long distance and international



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Office 365 Enterprise suites	E1	E3	E5
Skype for Business (IM, Meetings, etc.)	■	■	■
Office Client Apps		■	■
PSTN Conferencing (dial-in phone numbers)	Add-on	Add-on	■
Cloud PBX (Phone system in the cloud)	Add-on	Add-on	■
PSTN Calling (user phone numbers)	Add-on	Add-on	Add-on
Communication credits	Add-on	Add-on	Add-on



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# Cloud PBX – Global availability

Office 365 Online meetings & broadcast Cloud PBX	Worldwide
PSTN Conferencing	Local dial-in numbers in 90+ countries
Microsoft PSTN Calling	US, UK, Puerto Rico, France, Spain, Netherlands, Ireland, Germany, Canada, Belgium. Australia in preview
Bring you own PSTN (hybrid)	Worldwide using cloud connectivity



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# PSTN Conferencing

Enable a phone to join a SfB Meeting

- Phone user can dial into a meeting
- Conference joiners can have client 'dial their regular phone' for audio
- Users in the conference can dial out to phone users
- You don't need Enterprise Voice or Cloud PBX



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# Demo: PSTN Conferencing





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# Cloud PBX





# 3 Options for connectivity

- Microsoft PSTN Calling
  - MS is your carrier
- Bring your own carrier / on-prem PSTN
  - Skype for Business server (hybrid)
  - Cloud Connector Edition (dedicated server / appliance)



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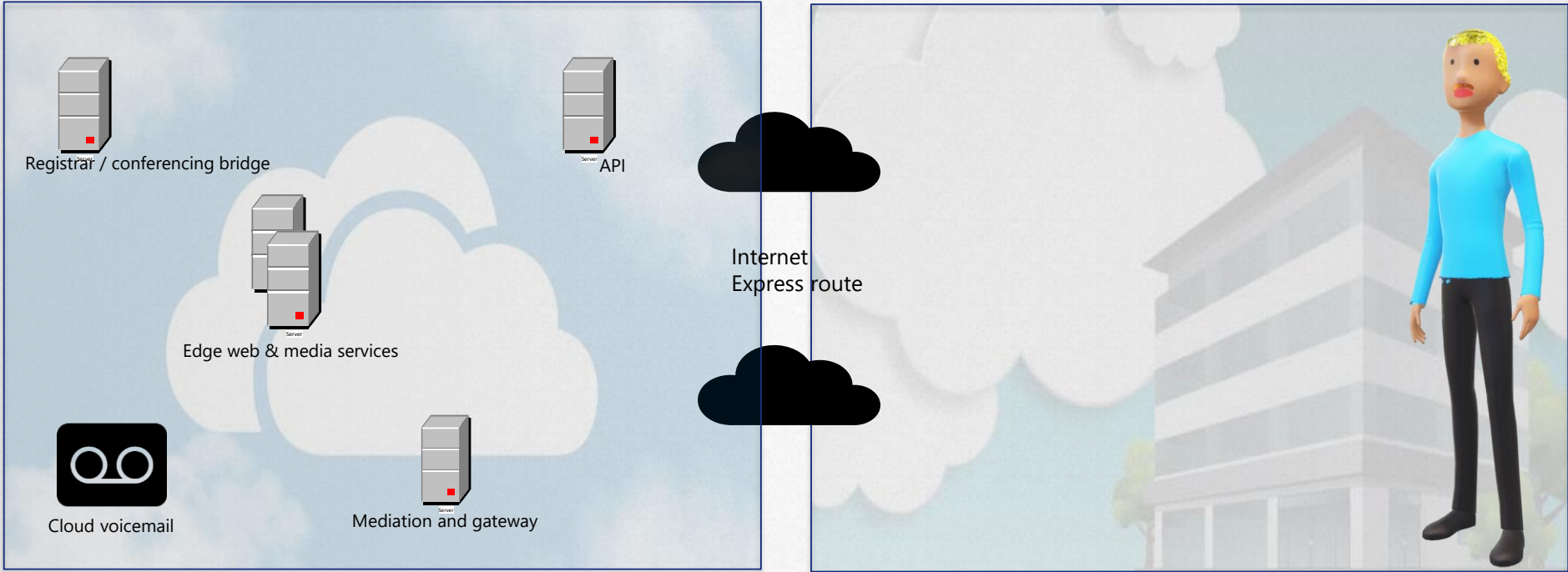
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# Deployment options



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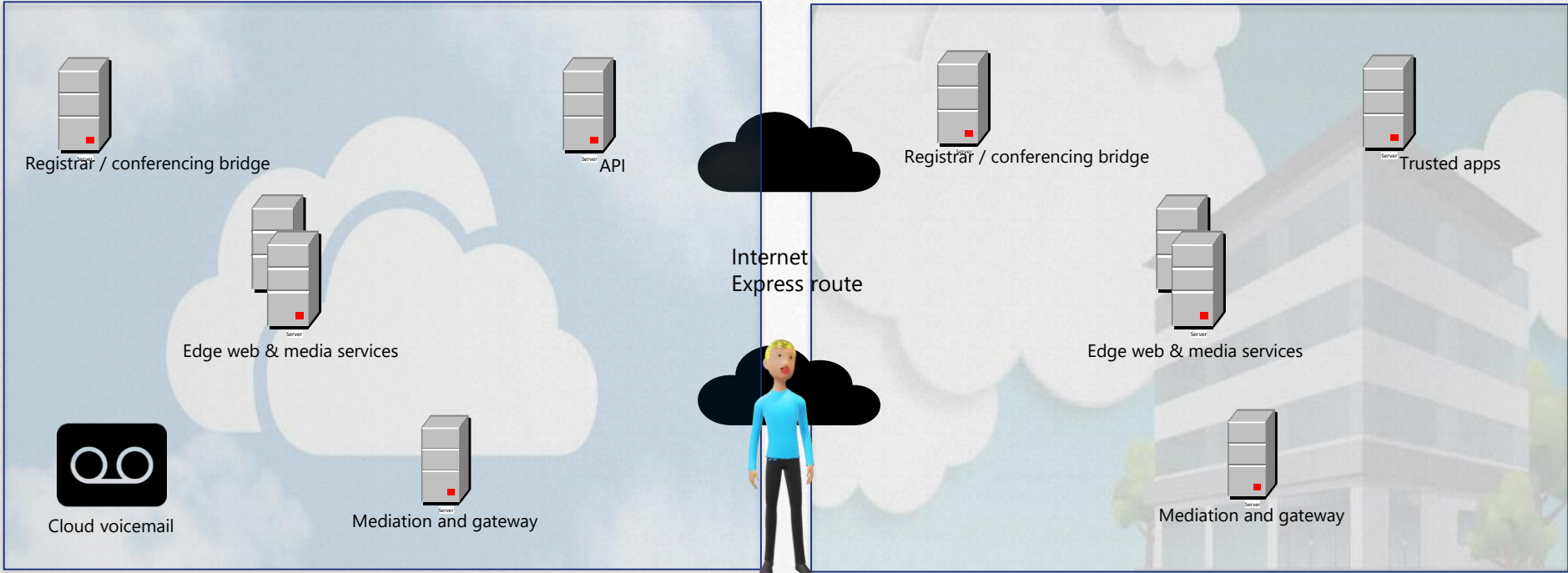
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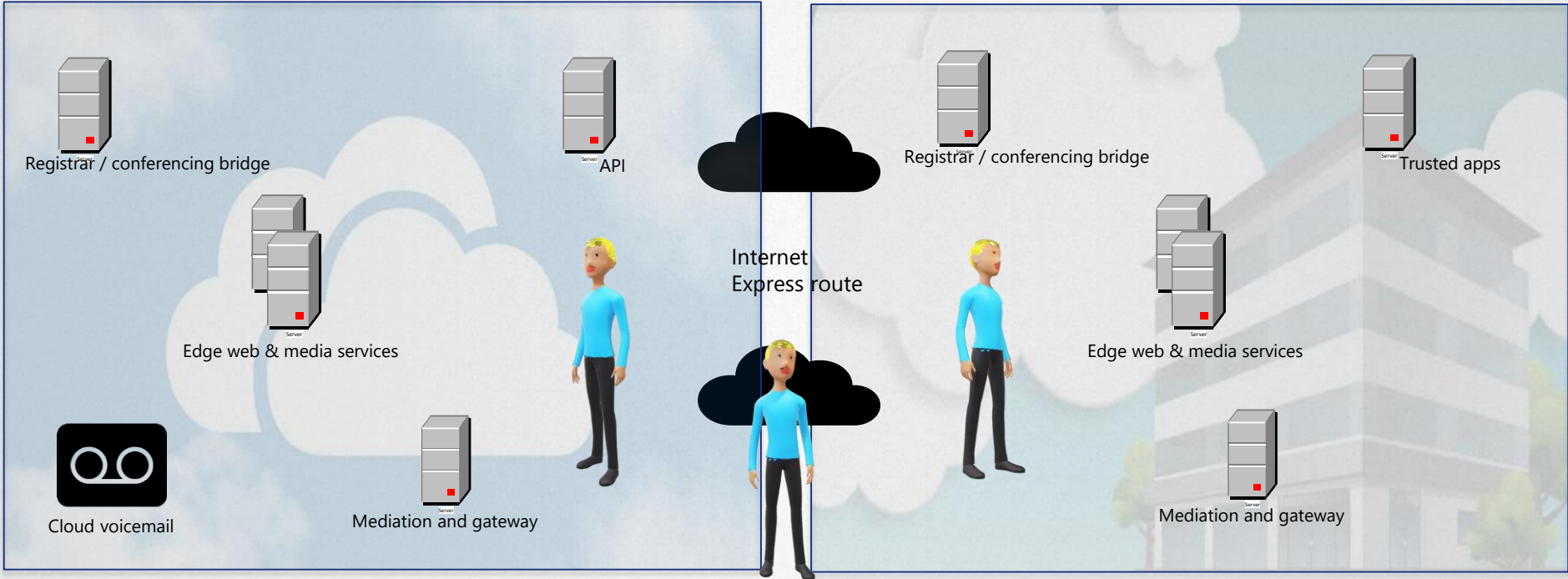
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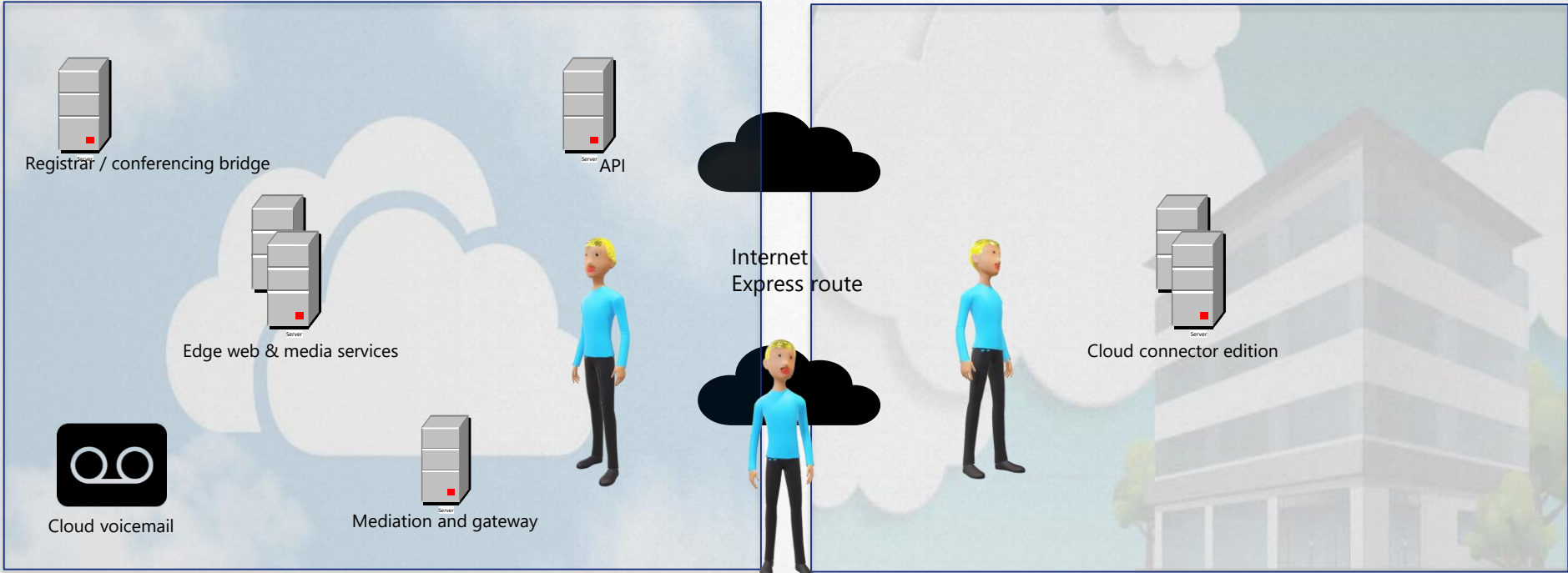
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# Cloud Connector Edition

- Hyper-V VM's on a dedicated physical server
- AD, CMS, Mediation and Edge. Lives in DMZ.
- Connect to carrier via SIP, SBC or IP PBX.
- 50 up to 500 concurrent calls
- Group up to 4 for HA in a site
- Up to 200 sites per deployment



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# SfB Hybrid

- SfB on-prem with Enterprise Voice. Globally available
- Can't combine SfB server with Cloud Connector Edition
- All 3<sup>rd</sup> party integrations
- Move user from on-prem to Cloud PBX
- More servers / licensing costs



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# PSTN Calling

- PSTN Connectivity directly by Microsoft
- Simple administration
- Legal requirements for local market met by Microsoft
- New numbers acquisition extremely simple
- Number porting to move existing numbers



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# Choose your deployment

## If you have SfB Server:

- Cloud PBX Hybrid with PSTN coming from on-prem or PSTN Calling

## If you don't have SfB Server:

- Who can you move today?
- PSTN Calling: zero infra requirement
- CCE is quicker and easier
- Features / integration needed? Go hybrid



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# PSTN Calling – per user plans

- Addition on top of Cloud PBX
- Two options:
  - Domestic – €10,10
  - Domestic and International - €20,20
- Additional: communication credits
  - 'pre paid' plan



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# Demo

## Cloud PBX features





# Call queues

- Automated call distribution
- Up to 50 agents and 200 calls
- Service number infrastructure
- Agents are distribution groups or mail enabled security groups
- Calls routed in parallel, except offline and DND users
- Disconnect or redirect to user, AA or call queue



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JUST  
GOT  
RICK  
ROLL'D**





# Auto attendant

- Automation for inbound calls
- Voice prompt or text-to-speech
- Input with DTMF or speech recognition
- Associated with a service number
- Multiple routing options: search against AD or menu options



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# Core user features

- Call answer / initiate (by user or number)
- Call hold / retrieve
- Call history
- Call delegation & call on behalf
- Call transfer
- Caller ID
- Call waiting
- Call forward & simultaneous ring
- Clients for PC, Mac & mobile
- Device switching
- Distinctive ringing
- DND routing & call blocking
- Enterprise calendar call routing
- Integrated dial pad
- Music on hold
- Qualified IP desk phones
- Team calling
- Voice mail



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Code available on Github this afternoon

[feedback.expertslive.nl](https://feedback.expertslive.nl)

Twitter: @ralpje

[www.365dude.nl](http://www.365dude.nl)



Relevant session: 14:45 – 15:45

# Network considerations for Office 365 based telephony

Steven van Houttum



Next session: 13:30 – 14:30

# How a Dutch telco got 10k+ users on Office 365

Marcel Alberts