

Microsoft Teams User Group # 29

Tenant to Tenant Telefonie Migration ~~und Apps for Admins~~

<https://www.skype4b-ug.de>



@TeamsUG_DE

Die Teams UG stellt sich vor



Adrian Ritter

Cloud Architect

 @adrianritter

<https://cloudkumpel.de>

Michael Plettner

Co-Founder & CEO

 @plemich



Martin Gudel

Senior Consultant

 @AtholyMardies

<https://themigrationwizard.com/>

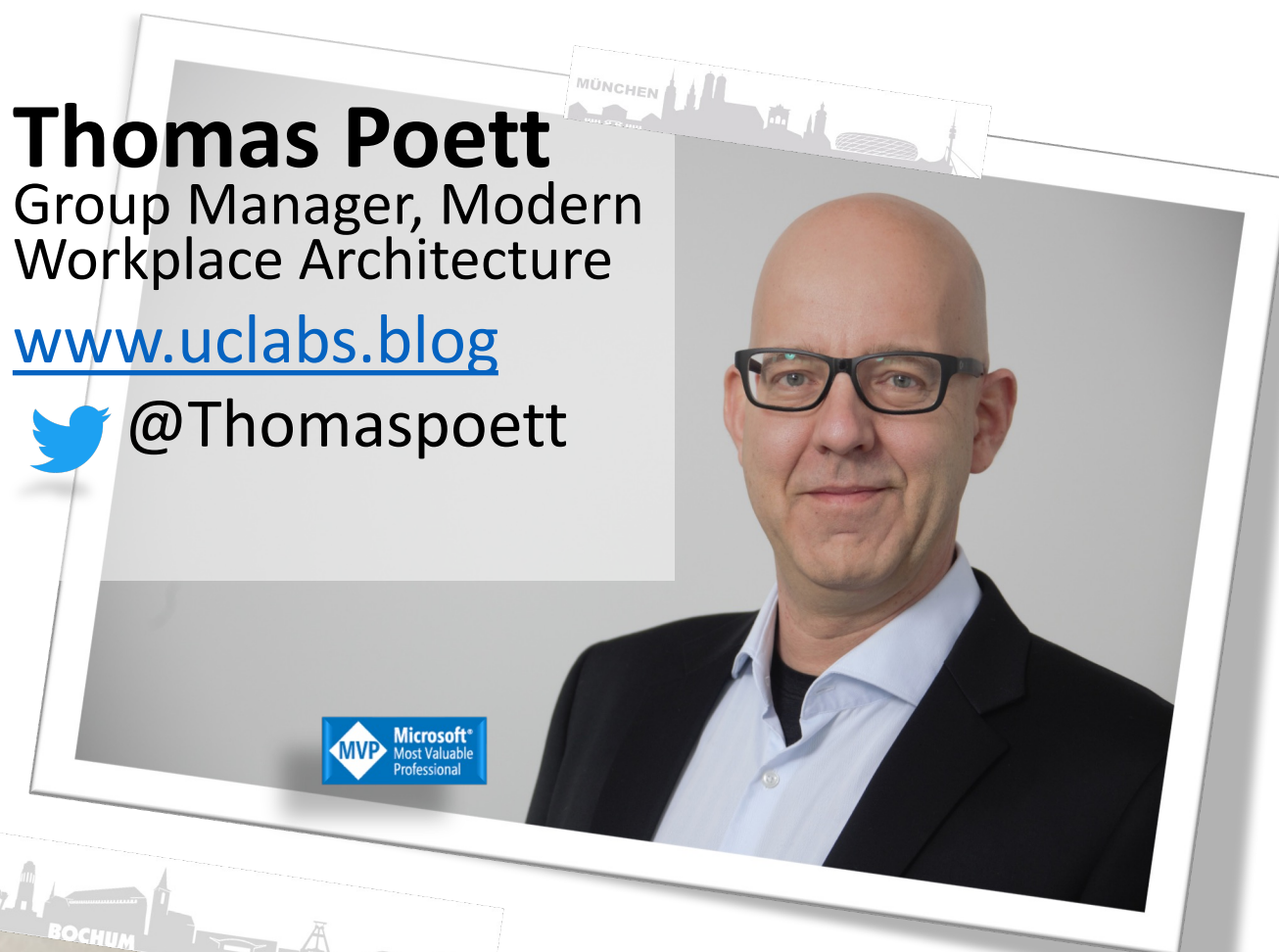


Thomas Poett

Group Manager, Modern Workplace Architecture

www.uclabs.blog

 @Thomaspoett



Thorsten Pickhan

Microsoft UC Consultant

 @tpickhan

<https://office365.thorpick.de>



<https://talkm365.net>

 @talkm365

Agenda-Übersicht

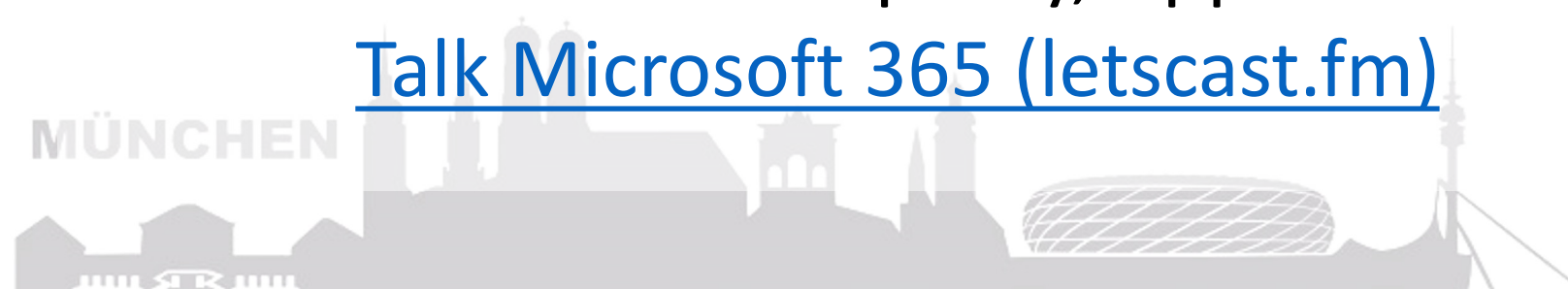
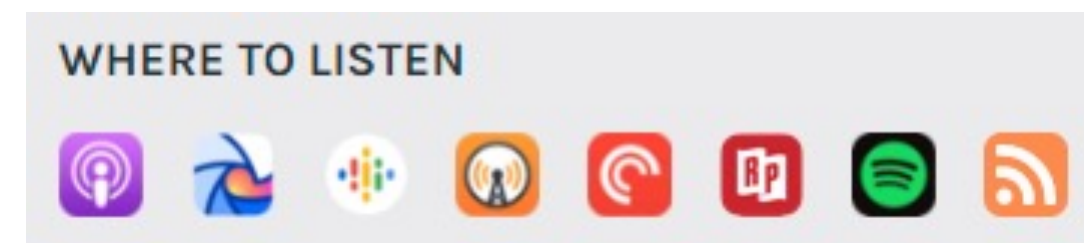
Zeit	Agendapunkt
18:15	Welcome
18:20	Office 365 - What's New (Adrian Ritter)
18:35	Voice Migration – Tenant SBC Dual Forking (Thomas Poett)
19:15	<i>Pause</i>
19:20	Microsoft Teams Apps selbst erstellen (Beispiel als custom messaging extension) (Martin Gudel)
19:45	Offene Runde



WERBUNG in eigener Sache: Talk Microsoft 365

- <https://talkm365.net> |  @talkm365
- Talk Format von Thorsten und mir
- Themen rund um Microsoft 365
- Specials zu besonderen Themen / Events
- Verfügbar als Videos, Podcasts und Stream
 - <https://youtube.talkm365.net>
 - Podcast z.B. via Spotify, Apple Podcasts, etc.

[Talk Microsoft 365 \(letslisten.fm\)](https://letslisten.fm/talkm365)



WERBUNG: Nächste Events

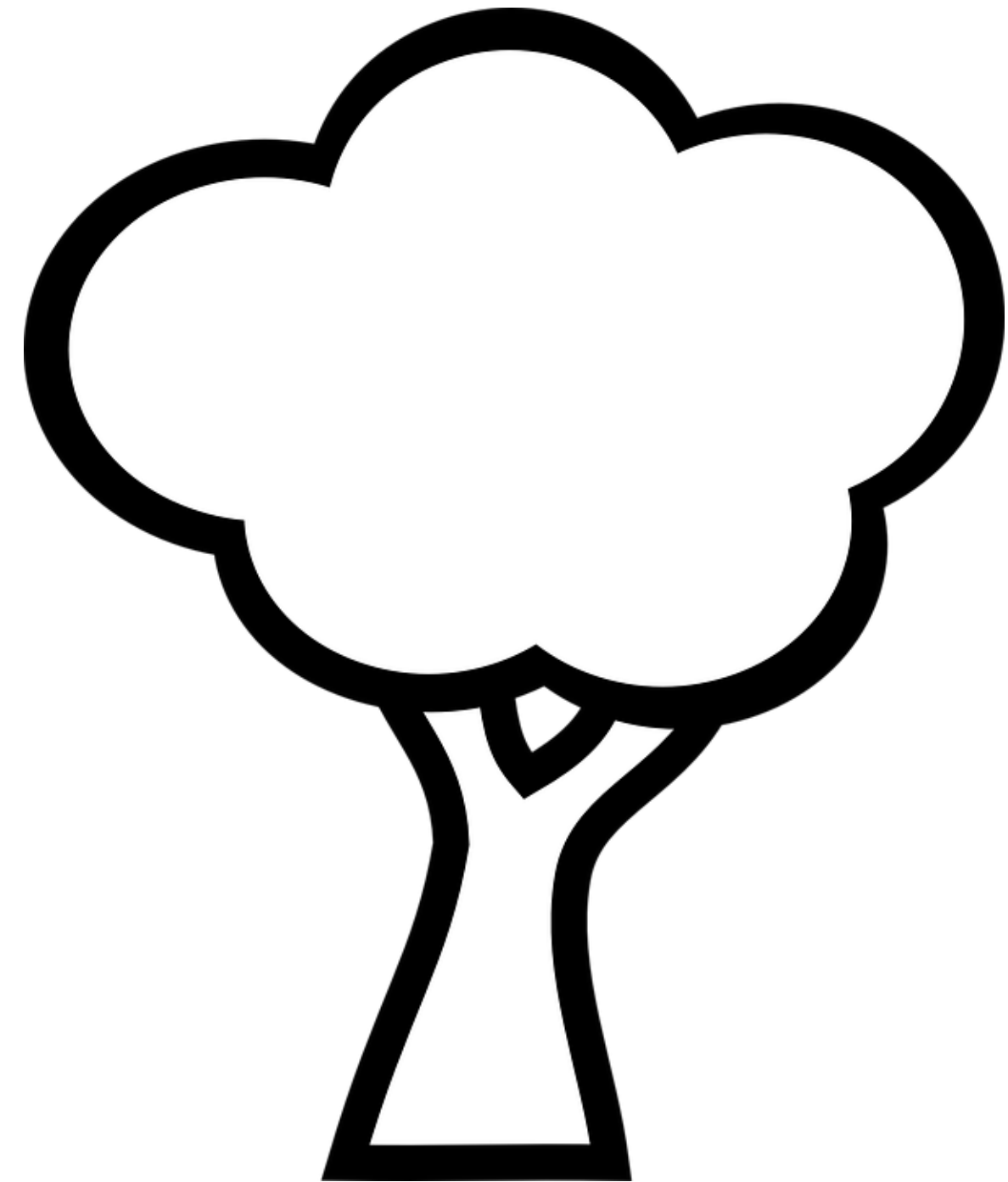
- Adoption und Change Forum – 05.12. ([LINK](#))
 - Kann man Change Readiness messen? (Rainer Bartl)
 - Change kommt von Machen. Und Machen kann man messen. (Eike Wagner)
- Teams UG Berlin – 08.12. ([LINK](#))
 - Microsoft Loop – das nächste große Ding der Zusammenarbeit? (Christoph Twiehaus)
- Teams UG Nürnberg – 13.12. ([LINK](#))
 - Teams as a Platform – Arbeiten in Teams! (Anja Schröder)
 - Visio als intelligente Diagrammplatform mit Datenverbindung (MVP Šenaj Lelic)
- Teams UG – What's New in Teams - 14.12. ([LINK](#))
- Teams Community Day 2023 (Save the Date – [LINK](#))
 - CfS open – [LINK](#)
 - 26.01. / 27.01. / 28.01. – je nach Location
- Wöchentlich: Power Atelier ([LINK](#))



Feedback gewünscht und benötigt



#Communities4Future



@Communities4F
[Communities4Future \(Hamburg, Deutschland\) | Meetup](#)

WER?

Gründungsmütter und /-Väter



Gabriella
Kornberger

develop<HER> Meetup - Programmieren mit Kindern



Dr. Ludwig
Reinhardt

Microsoft Dynamics Meetup Deutschland

<https://www.meetup.com/de-DE/Microsoft-Dynamics-Meetup-of-Berlin/>



Tomislav
Karafilov

Power Platform User Group Hannover

<https://www.meetup.com/de-DE/Power-Apps-Power-Automate-UserGroup-Hannover/>



Stefan Riedel

#msccch

<https://www.meetup.com/de-DE/MS-Cloud-Collaboration-Community-Hannover-MSCCCH/>



WAS?

CO2 Offsetting der Meetups

FRAGE1: WIE MISST MAN DIE CO2 EMISSIONEN DER ONLINE MEETINGS?

ANTWORT: GENAUE STUDIEN FEHLEN, VIELZAHL AN EINFLUSSFAKTOREN

REFERENZ: [HTTPS://WWW.BMU.DE/PRESSEMITTEILUNG/VIDEO-STREAMING-ART-DER-DATENUEBERTRAGUNG-ENTSCHEIDEND-FUER-KLIMABILANZ/](https://www.bmu.de/pressemitteilung/video-streaming-art-der-datenuebertragung-entscheidend-fuer-klimabilanz/)

FRAGE 2: WAS MACHEN WIR?

ANTWORT: WORST CASE BERECHNUNG VON CO2-EQUIVALENTEN

Co2	Durchschnitt	Durchschnitt	Meetups
Emissionen	liche Dauer:	tliche	pro Jahr: 18
in g pro	2,5 Stunden	Teilnehmer:	
Stunde		40	
Videostream			

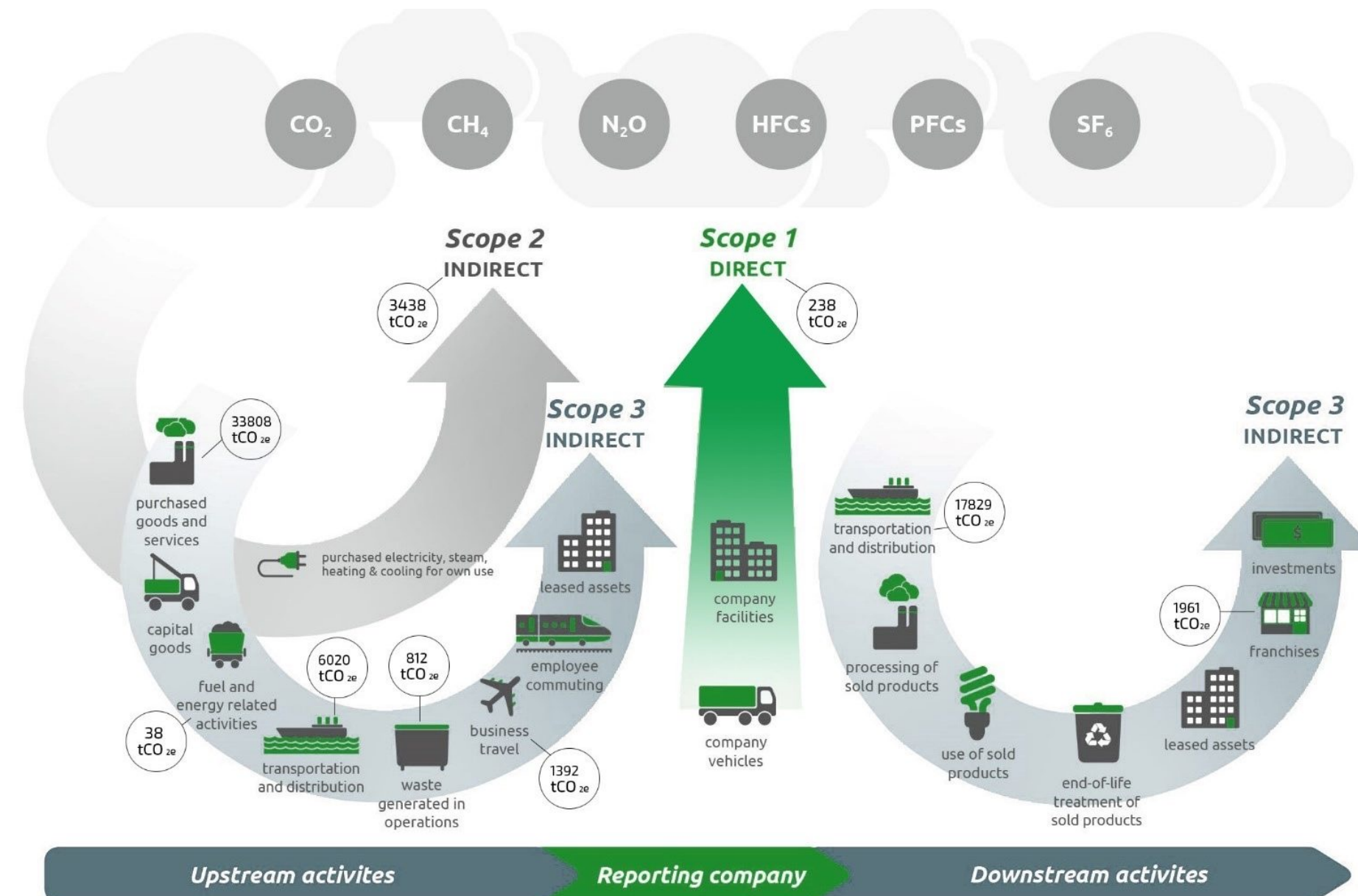


WAS?

CO2 Offsetting der Meetups

FRAGE 3: IST DIE BERECHNUNG KORREKT?

ANTWORT: NEIN, WEIL WIR NUR DIE SCOPE-2 EMISSIONEN BETRACHTEN UND SCOPE-1 UND SCOPE-3 EMISSIONEN AUSSER ACHT LASSEN



WAS?

CO2 Offsetting der Meetups

FRAGE 4: WAS MACHEN WIR?

ANTWORT: WIR VERDREIFACHEN EINFACH DIE EMISSIONEN

Scope	Gesamt pro Jahr
Scope 2	162.000 g
Scope 1 + Scope 3	324.000 g
Total Gramm	486.000 g
In Tonnen	0.486 to / Jahr



WIE?

CO2 Kompensationsanbieter

FRAGE 5: WIE FUNKTIONIERT DAS MIT DEN CO2 KOMPENSATIONEN?

ANTWORT: DAS ERZEUGTE CO2 WIRD DURCH KLIMASCHUTZPROJEKTE AUSGEGLICHEN,
ÜBER DEN KAUF VON ZERFITIKATEN

*(BÄUME PFLANZEN, ENERGIEEFFIZIENTE KOCHSTELLEN IN ENTWICKLUNGSLÄNDERN,
UMWELTBILDUNG, ETC.)*

FRAGE 6: UNSER BEITRAG VON TEAMS USER GROUP

ANTWORT: EIN BAUM / EVENT BEI PLANT-MY-TREE.DE

1 BAUM KOMPENSIERT CA. 1 T CO2 ÜBER 80 JAHRE = 2 JAHRE EVENTS



WIE?

CO2 Kompensationsanbieter

 PLANT-MY-TREE®
IHRE BAUM-URKUNDE

Teams User Group Deutschland
Michael, Thorsten, Adrian, Thomas, Dennis

Sie sind nun stolzer Baum-Pate für:
1 Baum
Baum-Nummer:
1007-216608

Ihre Pflanzung leistet einen wichtigen Beitrag zum Klimaschutz durch CO₂-Kompensierung.

Die Pflanzung erfolgt hier:
25582 Hohenaspe
Koordinaten der Fläche:
53°58'15.9"N 9°32'44.5"E

Mülheim, 14.07.2021

25582 Hohenaspe

Geplante Pflanzung: 115.000 Bäume

Im Frühjahr 2020 gepflanzt: 8.000 Bäume

2.000 Stieleichen, 2.000 Flatterulmen, 3.000 Douglasien, 500 Winderlinden, 500 Bergahorn

Geplante Pflanzung im Herbst 2020: ca. 70.625 Bäume

5.000 Roteichen, 50.000 Stieleichen, 6.000 Küstentannen, 5.250 Douglasien, 1.000 Linden, 1.000 Ulmen, 200 Bornmüllertannen, 150 Tulpenbäume, 150 Eßkastanien, 150 Schwarznuss, 150 Hickory, 200 Orientalische Buchen, 200 Sumpfcypressen, 150 Sequoia Dendron, 1.000 Bergahorn, 25 Hybridnuss

Geplante Pflanzung im Frühjahr 2020: 36.375 Bäume

Sorten folgen

(Bild zeigt einen Teil der Aufforstungsfläche)

Der Restbestand an Überhältern sorgt für eine Erziehung der Setzlinge durch Licht und Schatten und schützt insbesondere vor Frost.



WIESO?

Das 1,5 Grad-Ziel nicht erreichbar

Aktuell: 2.7 Grad Pfad in Europa

<https://www.cdp.net/en/articles/media/running-hot-cdp-europe-report-release>

Ippc Weltklimarat Bericht

http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf

kommen:

RCP 1.9

(nicht
mal hier

		2046–2065		2081–2100	
	Scenario	Mean	Likely range ^c	Mean	Likely range ^c
Global Mean Surface Temperature Change (°C) ^a	RCP2.6	1.0	0.4 to 1.6	1.0	0.3 to 1.7
	RCP4.5	1.4	0.9 to 2.0	1.8	1.1 to 2.6
	RCP6.0	1.3	0.8 to 1.8	2.2	1.4 to 3.1
	RCP8.5	2.0	1.4 to 2.6	3.7	2.6 to 4.8
	Scenario	Mean	Likely range ^d	Mean	Likely range ^d
Global Mean Sea Level Rise (m) ^b	RCP2.6	0.24	0.17 to 0.32	0.40	0.26 to 0.55
	RCP4.5	0.26	0.19 to 0.33	0.47	0.32 to 0.63
	RCP6.0	0.25	0.18 to 0.32	0.48	0.33 to 0.63
	RCP8.5	0.30	0.22 to 0.38	0.63	0.45 to 0.82

IST

IST

RCP: Representative Concentration Pathways

UND NUN?



Weitersagen!

#Communities4Future



Feedback gewünscht und benötigt



Office 365 - What's New



Office 365 - What's New

- Forms bekommt „Image Choice“

Music post-class homework

Take a post-class quiz to check your progress and help your teacher know which topics to focus on more. ...

* Required

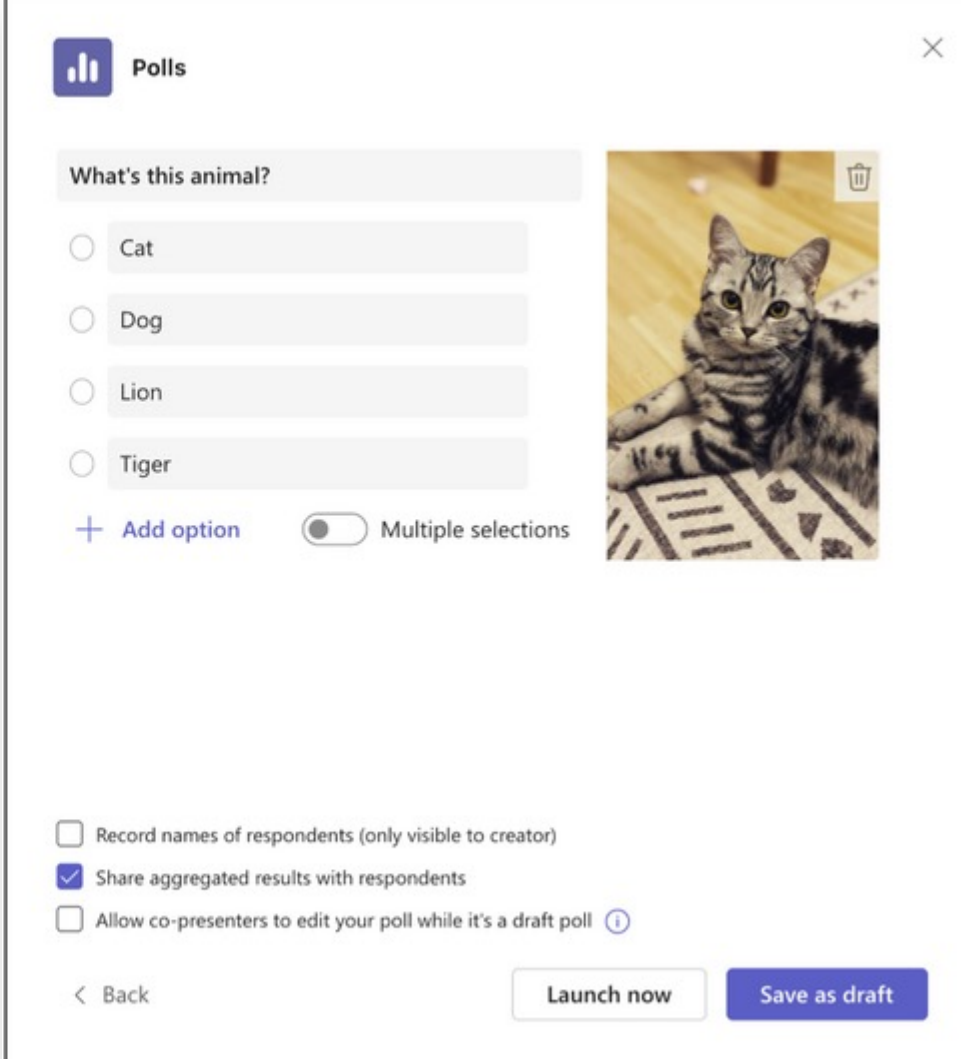
1 Which of the following instrument belongs to strings section? * (5 Points)

		
☐ Guitar	☐ Saxophone	☐ Trombone



Office 365 - What's New

- Forms bekommt „Image Choice“
- In Polls könne Bilder hinzugefügt werden.

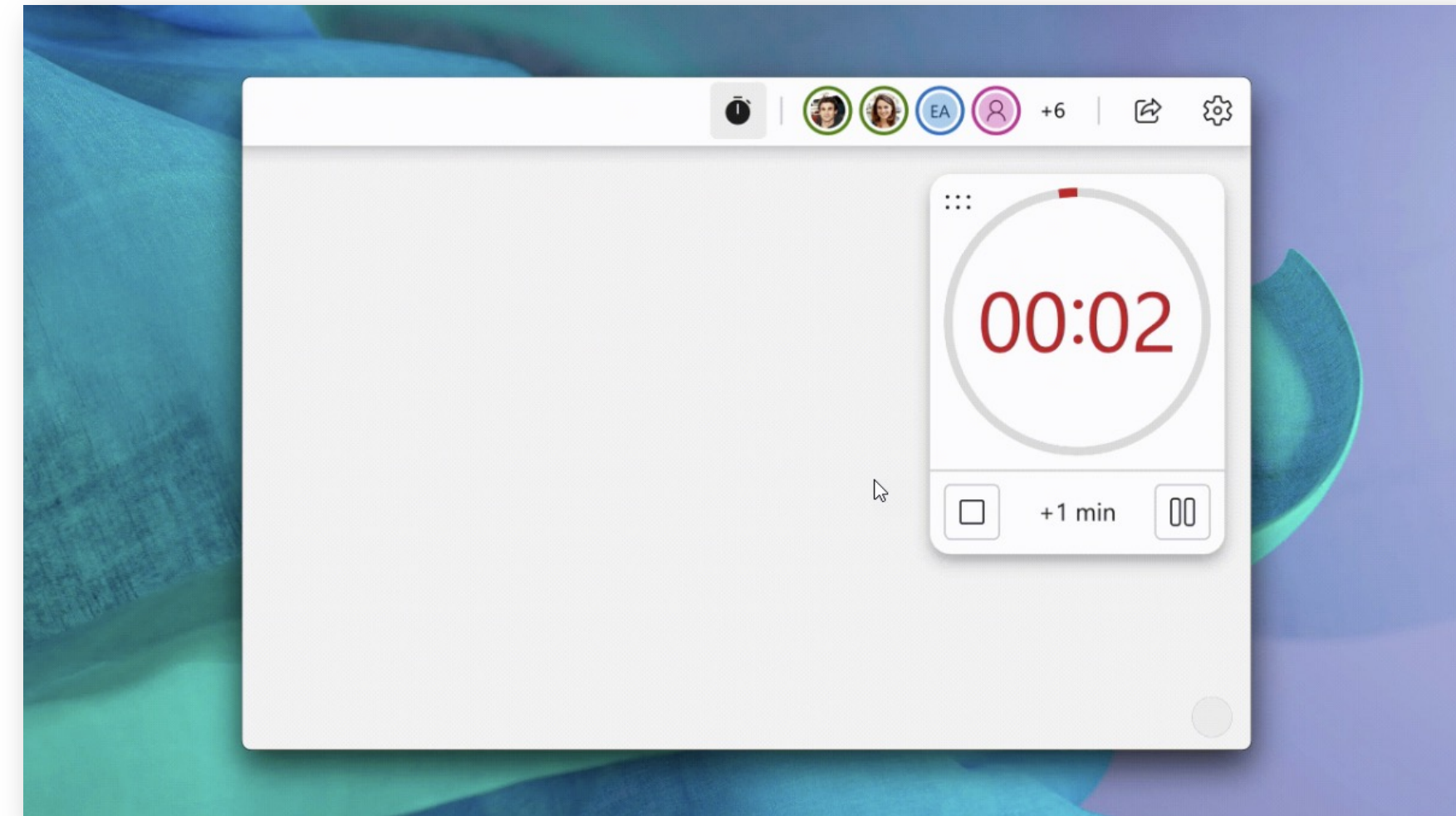


The screenshot shows the 'Polls' interface in Microsoft Teams. The poll title is 'What's this animal?'. The options are 'Cat', 'Dog', 'Lion', and 'Tiger', each with a radio button. To the right of the options is a photo of a cat. Below the options, there is a '+ Add option' button and a 'Multiple selections' toggle switch. At the bottom, there are three checkboxes: 'Record names of respondents (only visible to creator)' (unchecked), 'Share aggregated results with respondents' (checked), and 'Allow co-presenters to edit your poll while it's a draft poll' (unchecked). At the bottom right, there are two buttons: 'Launch now' and 'Save as draft'.



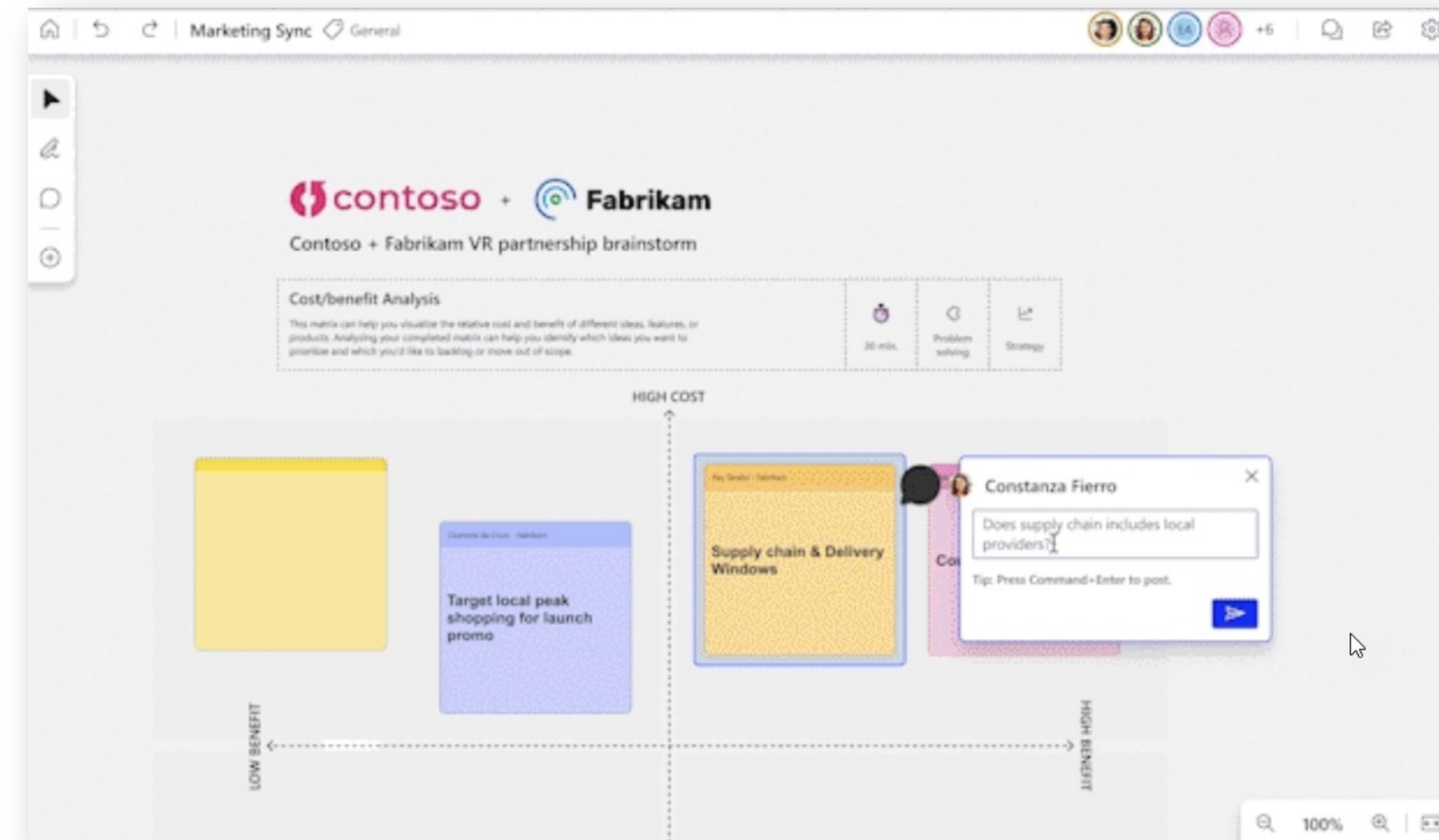
Office 365 - What's New

- Forms bekommt „Image Choice“
- In Polls könne Bilder hinzugefügt werden.
- Whiteboard Meeting Timer



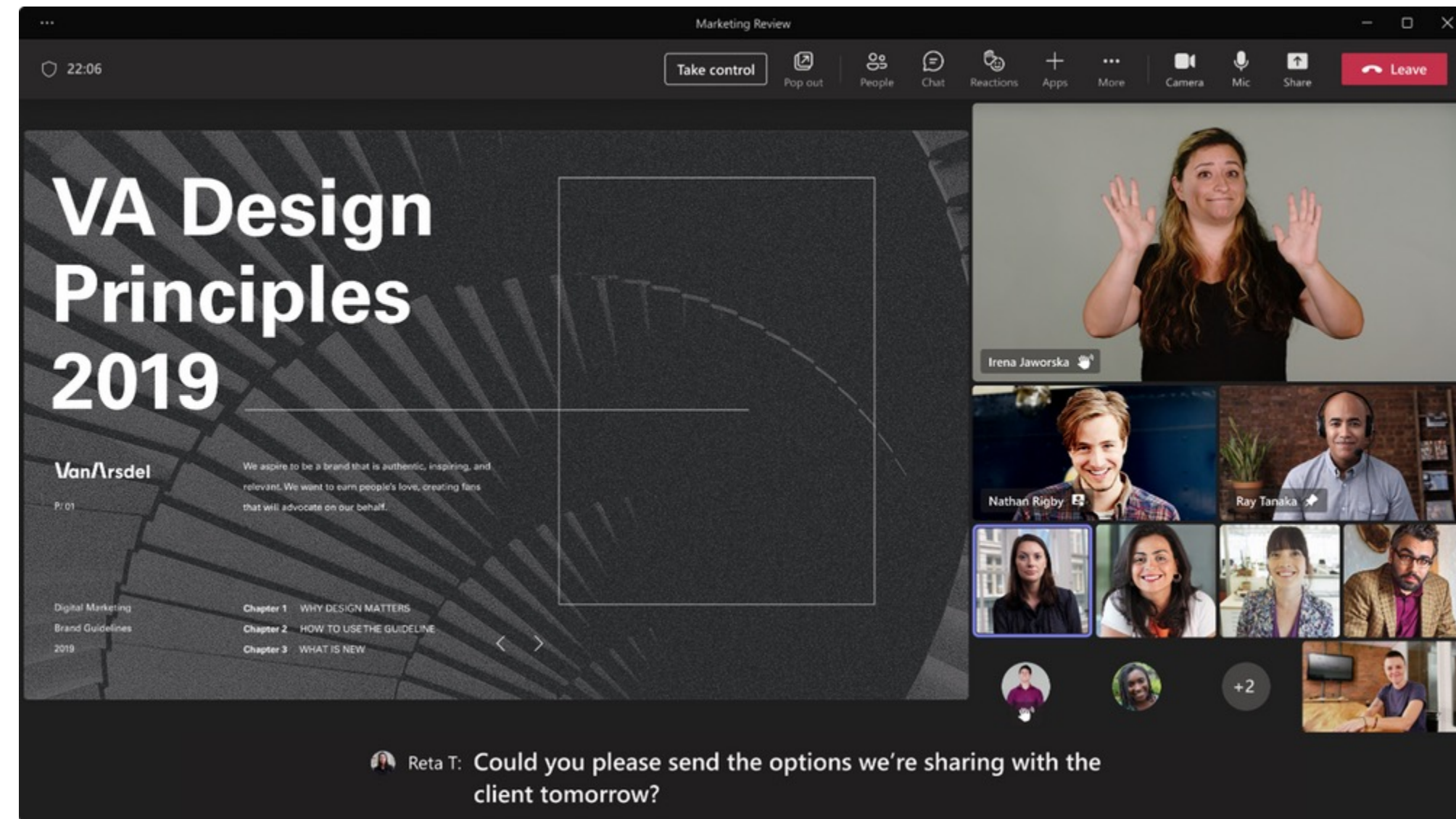
Office 365 - What's New

- Forms bekommt „Image Choice“
- In Polls könne Bilder hinzugefügt werden.
- Whiteboard Meeting Timer
- Whiteboard Comments



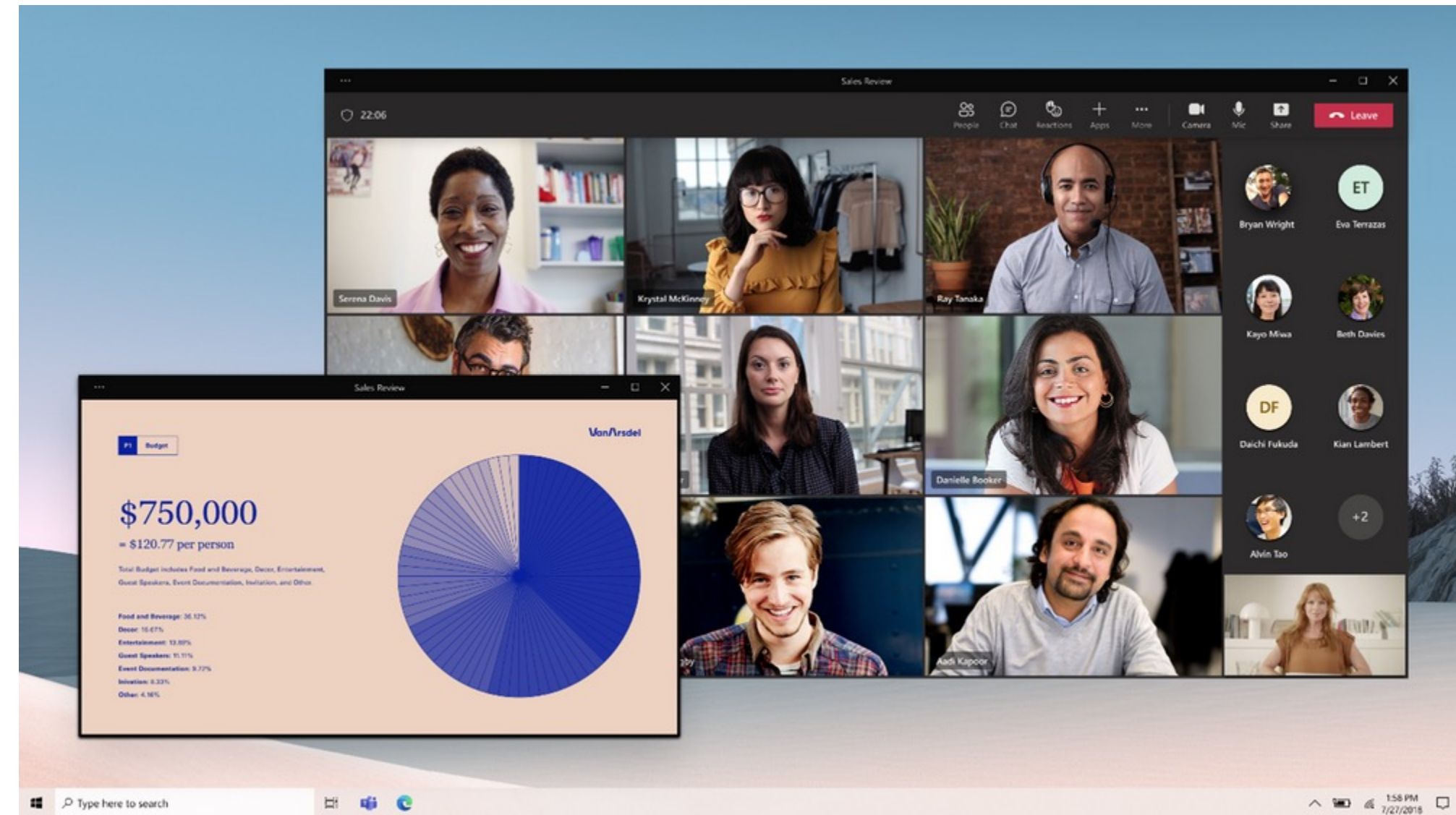
Office 365 - What's New

- Gebärdensprach in Teams



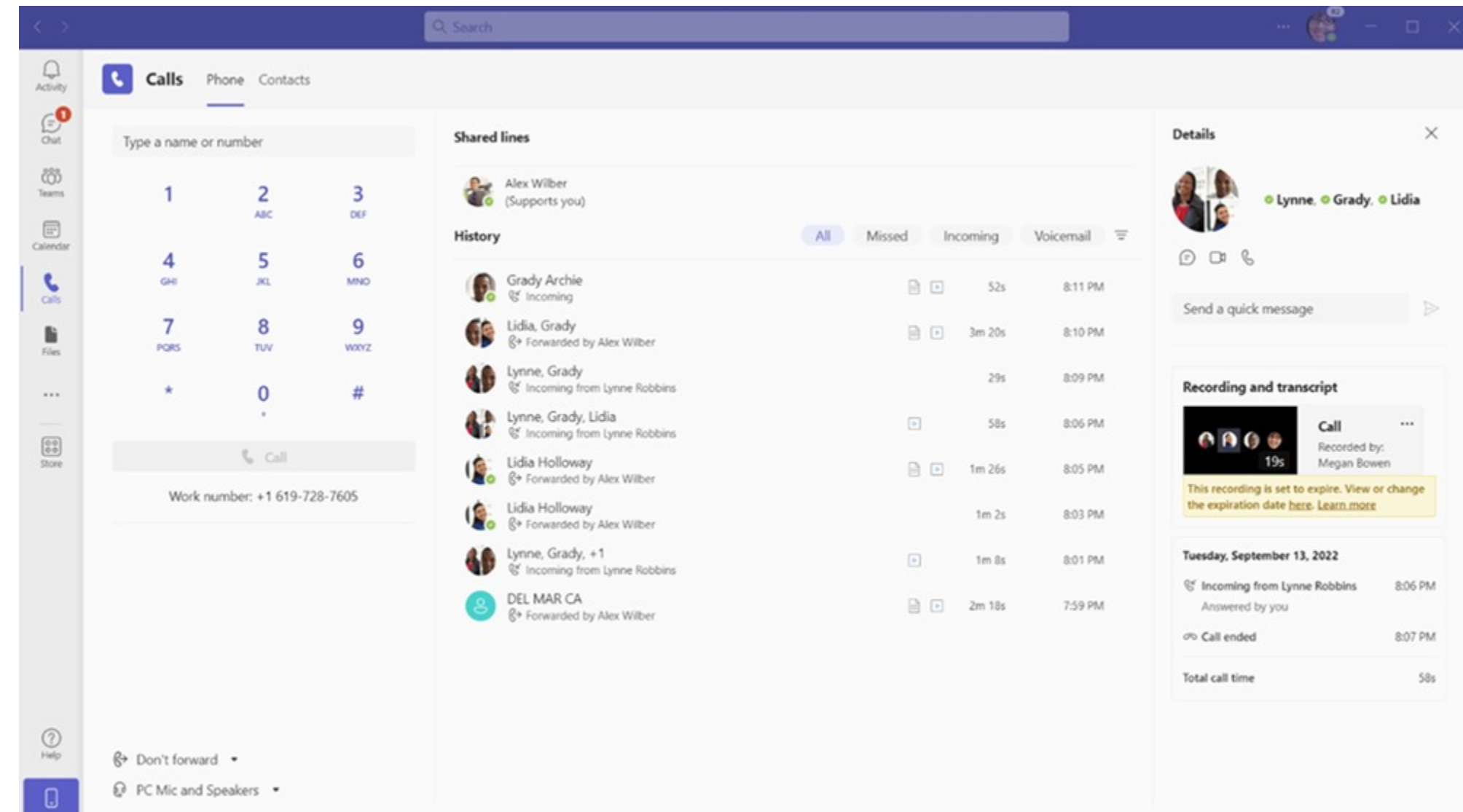
Office 365 - What's New

- Gebärdensprach in Teams
- Präsentationsinhalt in eigenem Fenster



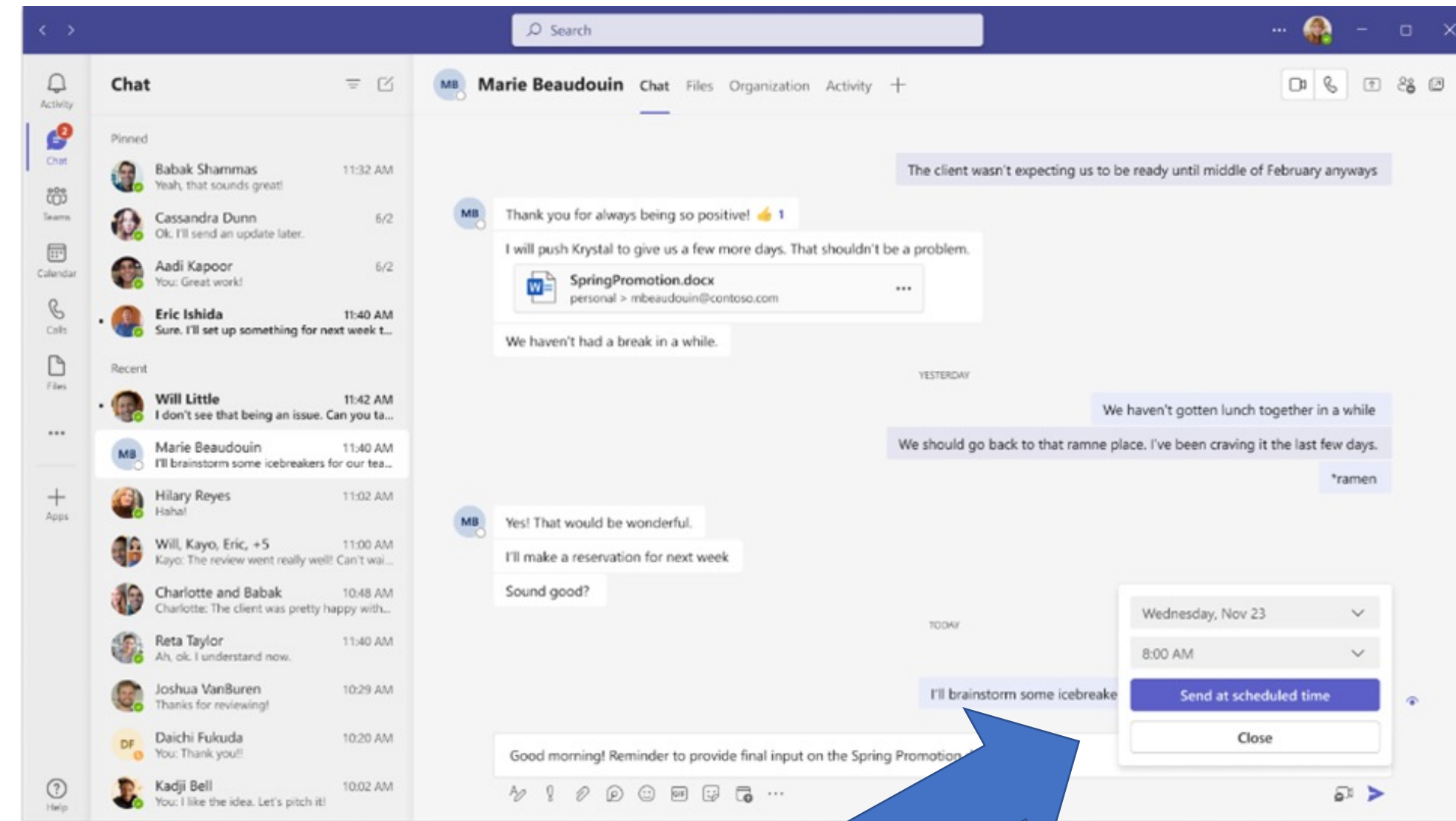
Office 365 - What's New

- Gebärdensprach in Teams
- Präsentationsinhalt in eigenem Fenster
- Detaillierte Anruflhistorie



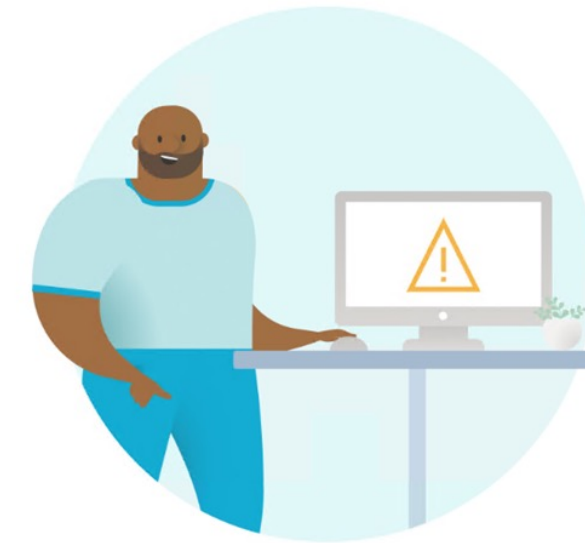
Office 365 - What's New

- Gebärdensprach in Teams
- Präsentationsinhalt in eigenem Fenster
- Detaillierte Anrufhistorie
- Verzögertes Senden



Office 365 - What's New

- Hard-Block IE11 ab Mitte Januar



It's time to upgrade your browser

SharePoint and OneDrive use new browser technology and work best in the latest browsers.

[Upgrade browser](#)



Office 365 - What's New

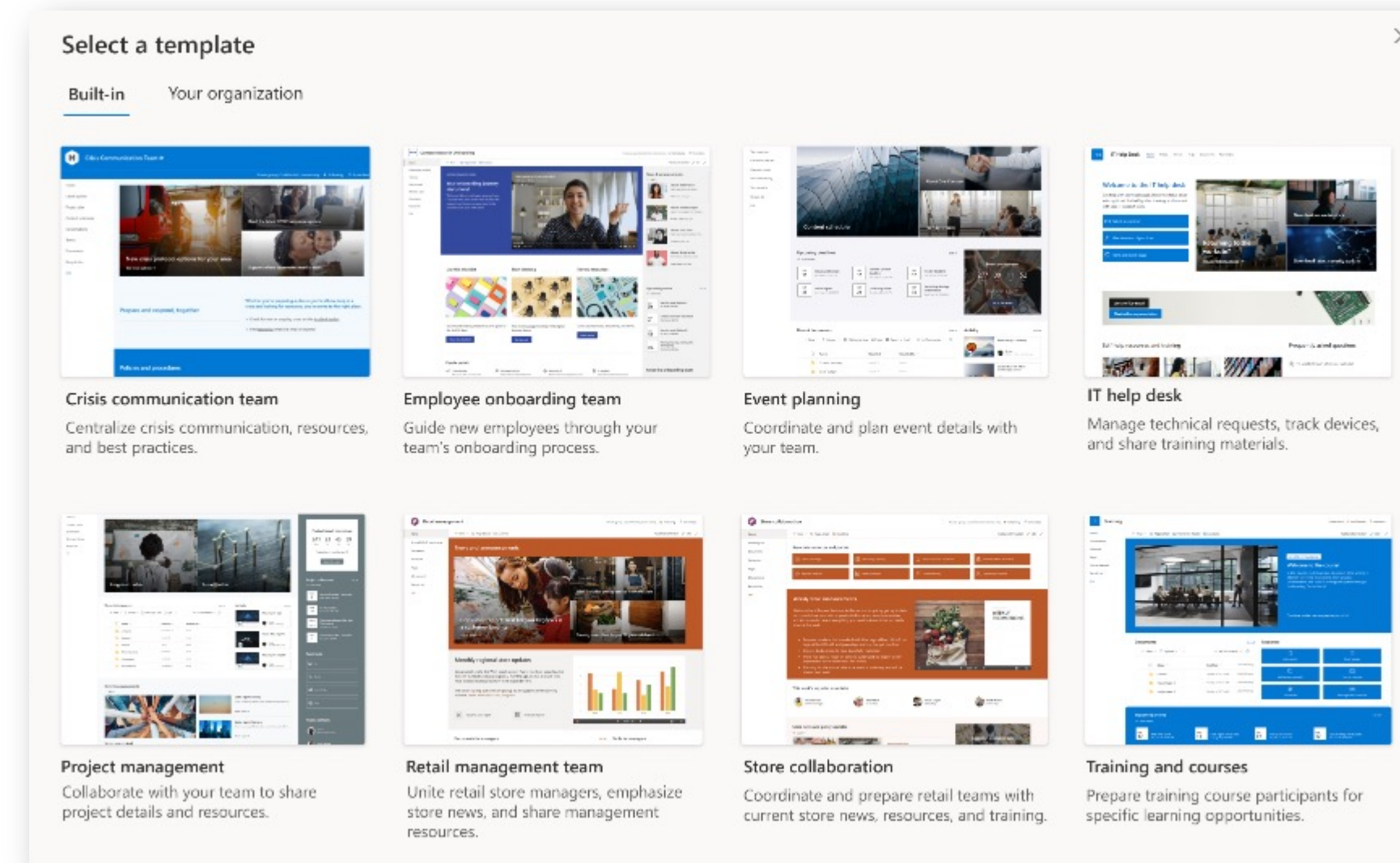
- Hard-Block IE11 ab Mitte Januar
- SharePoint Tenant Rename GA (<10000 Sites)

~~fabrikam.sharepoint.com~~
contoso.sharepoint.com



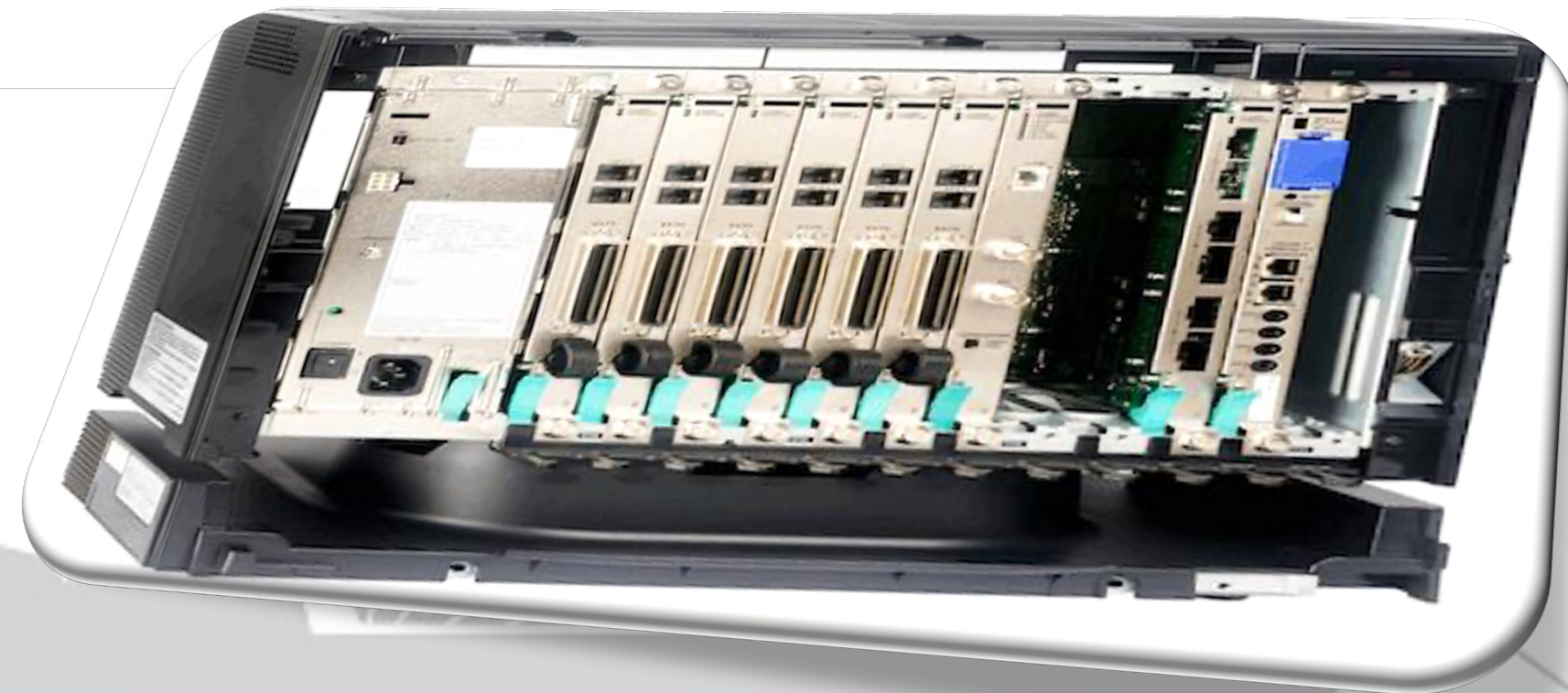
Office 365 - What's New

- Hard-Block IE11 ab Mitte Januar
- SharePoint Tenant Rename GA
- Neue SharePoint Site Templates
 - HR
 - Event
 - Contract Management



Tenant 2 Tenant/ Cross-Tenant Teams Voice Migration

How to migrate Teams Enterprise Voice



Some statements upfront

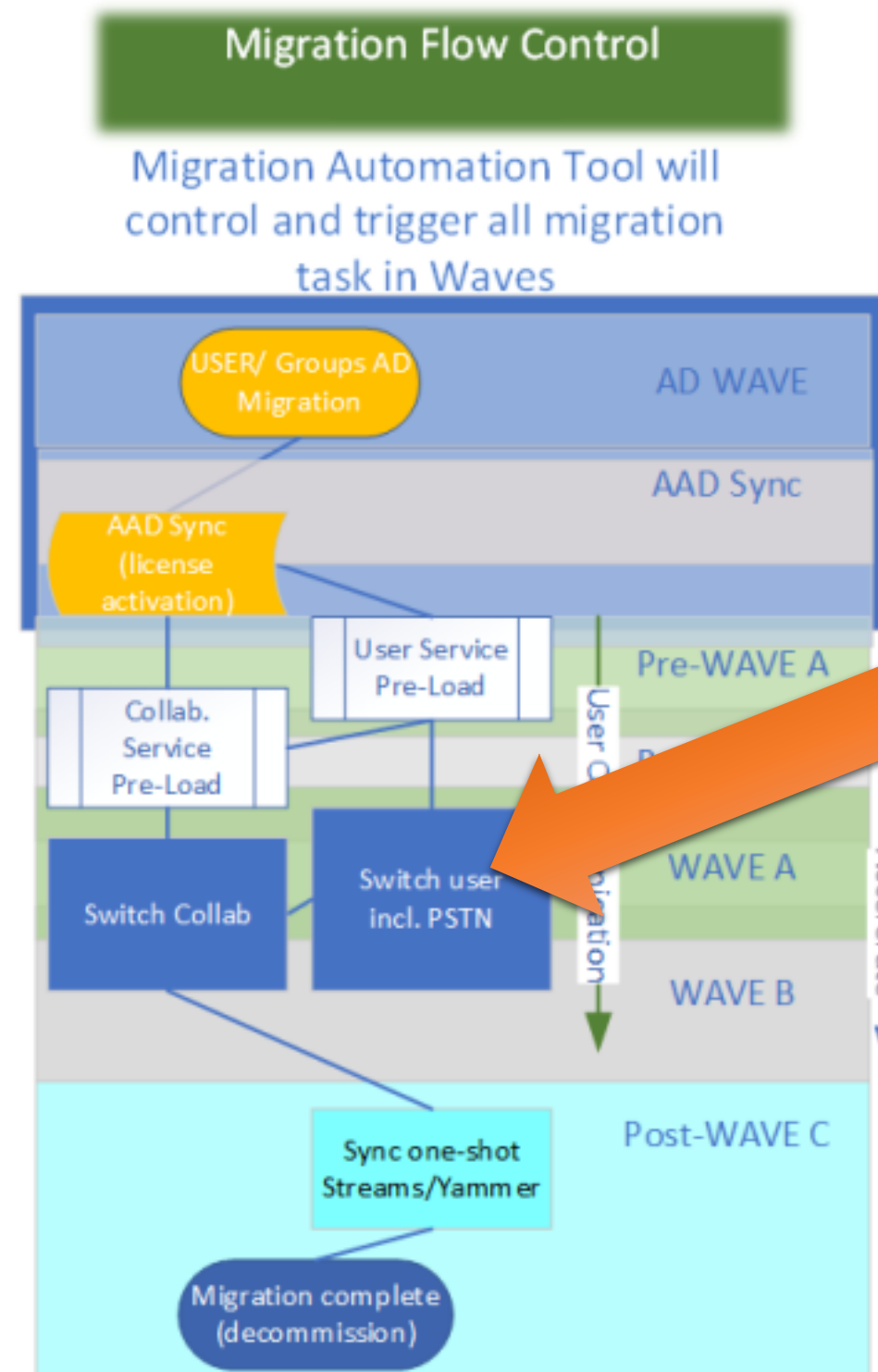
- **A tenant to tenant (T2T) migration** also named sometime **cross-tenant migration** can be introduced during merger and acquisitions of companies. Hereby a tenant, local or geo-tenant will be integrated / migrated into the corporate target tenant.
- **T2T migrations are very complex and time consuming.** Complexity can even further increase if the migration tenant is in a hybrid configuration. Time consuming, especially due to strict performance limitations in reading from and writing into a tenant.

This MUST not be underestimated !



Migration Flow

- User cut-over



User Experience – what changes imply for users

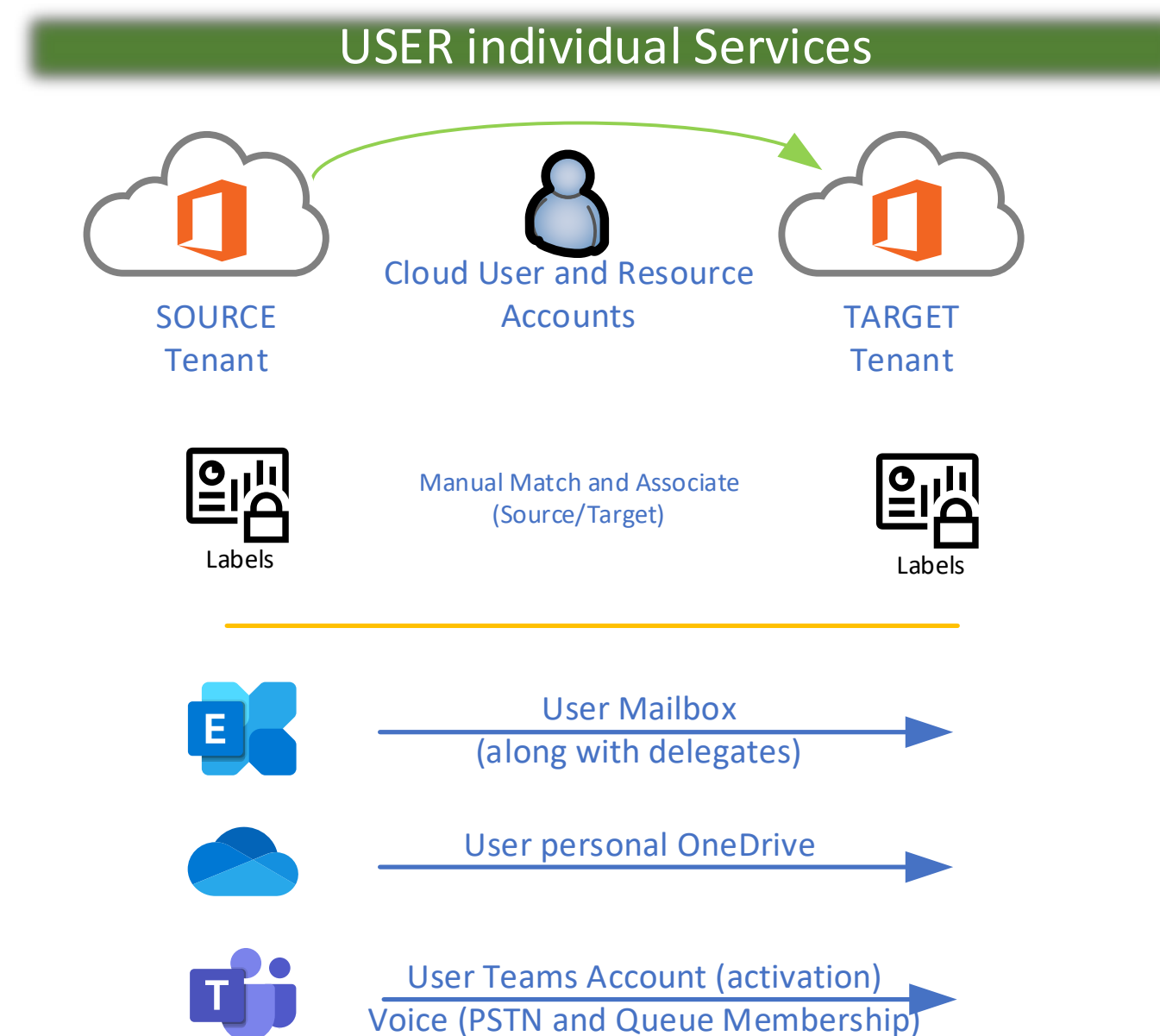
- Migrating user experience from source to target is completely depending on the possibilities and feature sets in the target environment. As an experience isn't technical, rather than it is behavioral.
- Work and human culture in the target environment might also differ from source. Only a holistic approach will make users feel comfortable after the migration.
- Compare the technical feature set per service and list the difference between source and target



Teams Migration for Tenant to Tenant

The Microsoft Teams Tenant to Tenant Migration Guide I have separated into the several chapters.

- Enterprise Voice
- Team/Channel Migration
- Personal Chat Migration



Enterprise Voice Teams Migration for Tenant to Tenant

With Team Enterprise Voice you have three choices of PSTN connectivity.

1. **Direct Routing** – your own SBC with a PSTN Provider
 2. **Operators Connect** – hosted and managed SBC booked via M365
 3. **Calling Plan** – Microsoft operates your PSTN
4. Other challenges (I might describe in a dedicated blog) are Call Queues, Auto Attendants and more Teams Phones, Conferencing Systems and Surface Hubs



Calling Plans

- If you currently have a phone service provider or carrier and already have phone numbers for your users or services, you need to create a "*port order*" to transfer those phone number or blocks to your new carrier. It can be Microsoft for Calling Plans. When the numbers are ported over, you can assign those phone numbers to your users and services such as audio conferencing (for conference bridges), auto attendants, and call queues.
- The time for porting towards Microsoft can take between 1-30 days. This depends on your carrier and location/ country.

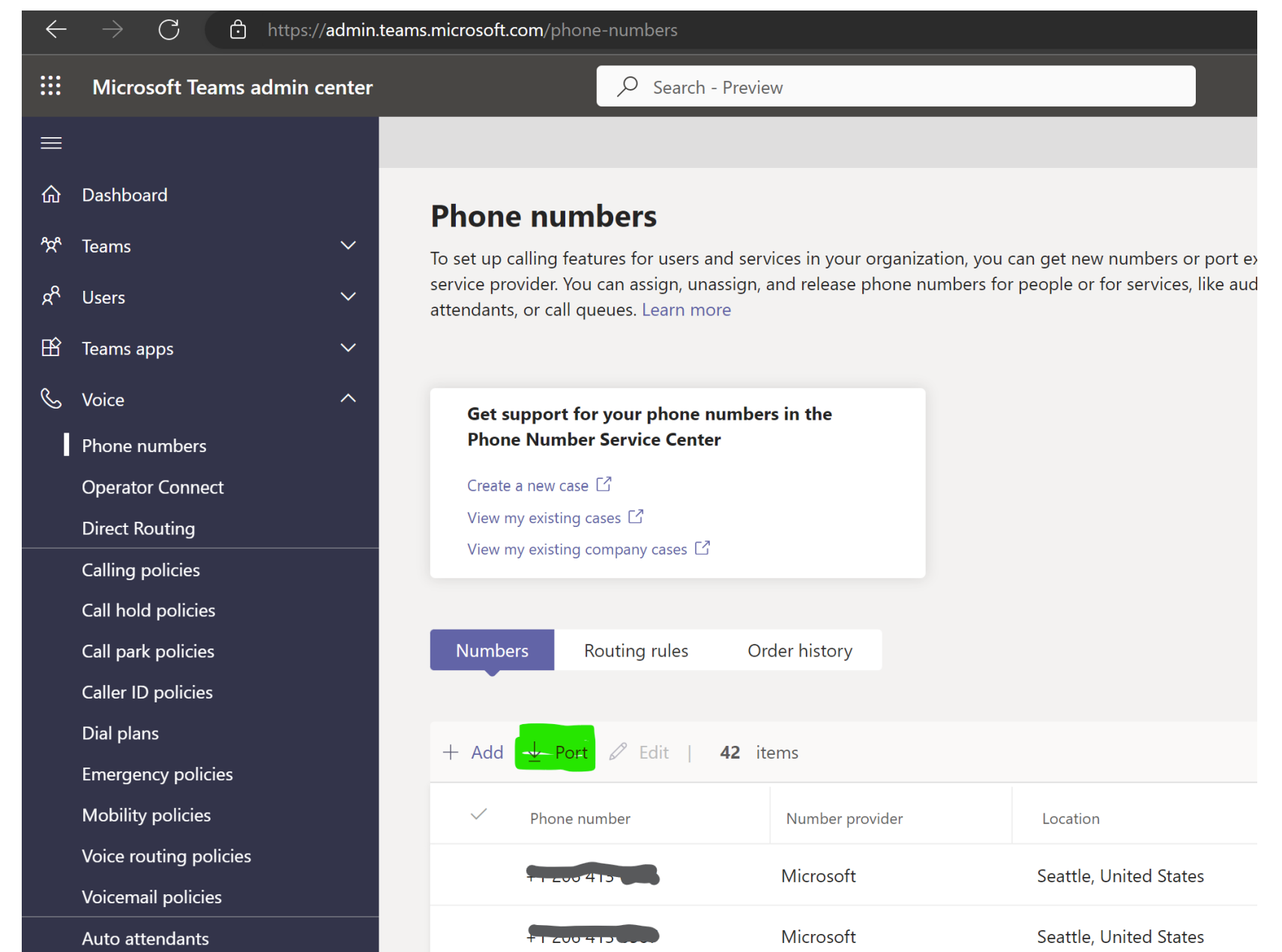


Calling Plan – Microsoft operates your PSTN

- Porting within Microsoft takes usually 1-7 hours. This also depends on a phone number ownership. In T2T, it could be a merger with different company names. Make sure you involved Microsoft Porting Team early and making your process transparent.

The LOAs (Letters of Authorization) can be found here:

[Manage phone numbers for Calling Plan - Microsoft Teams](#)



Microsoft Teams admin center

Search - Preview

Phone numbers

To set up calling features for users and services in your organization, you can get new numbers or port existing numbers from a service provider. You can assign, unassign, and release phone numbers for people or for services, like audiotapes, or call queues. [Learn more](#)

Get support for your phone numbers in the Phone Number Service Center

[Create a new case](#)

[View my existing cases](#)

[View my existing company cases](#)

Numbers Routing rules Order history

+ Add **Port** Edit | 42 items

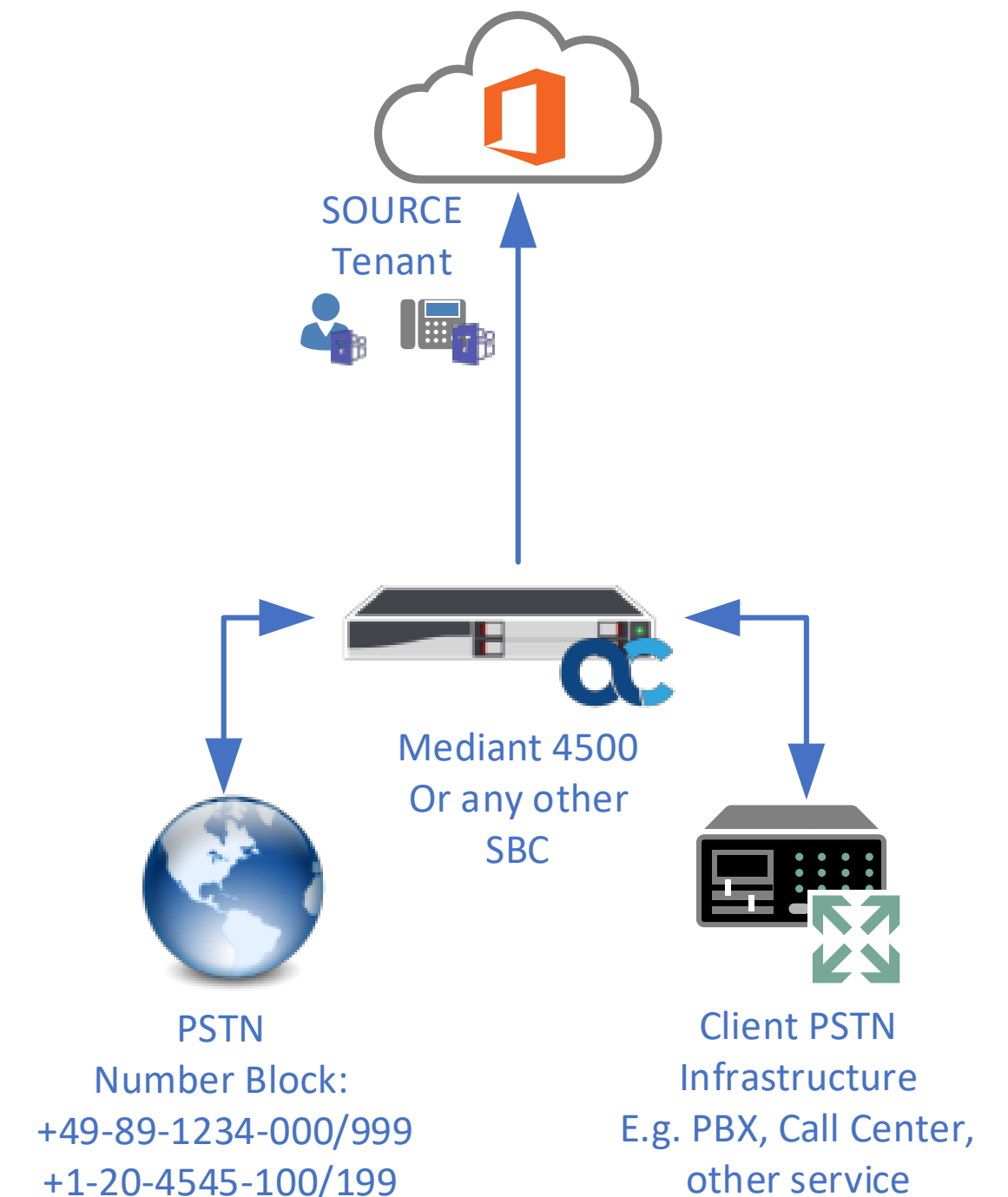
✓	Phone number	Number provider	Location
	+1 206 415 0000	Microsoft	Seattle, United States
	+1 206 415 0000	Microsoft	Seattle, United States



Direct Routing – your own SBC with a PSTN Provider

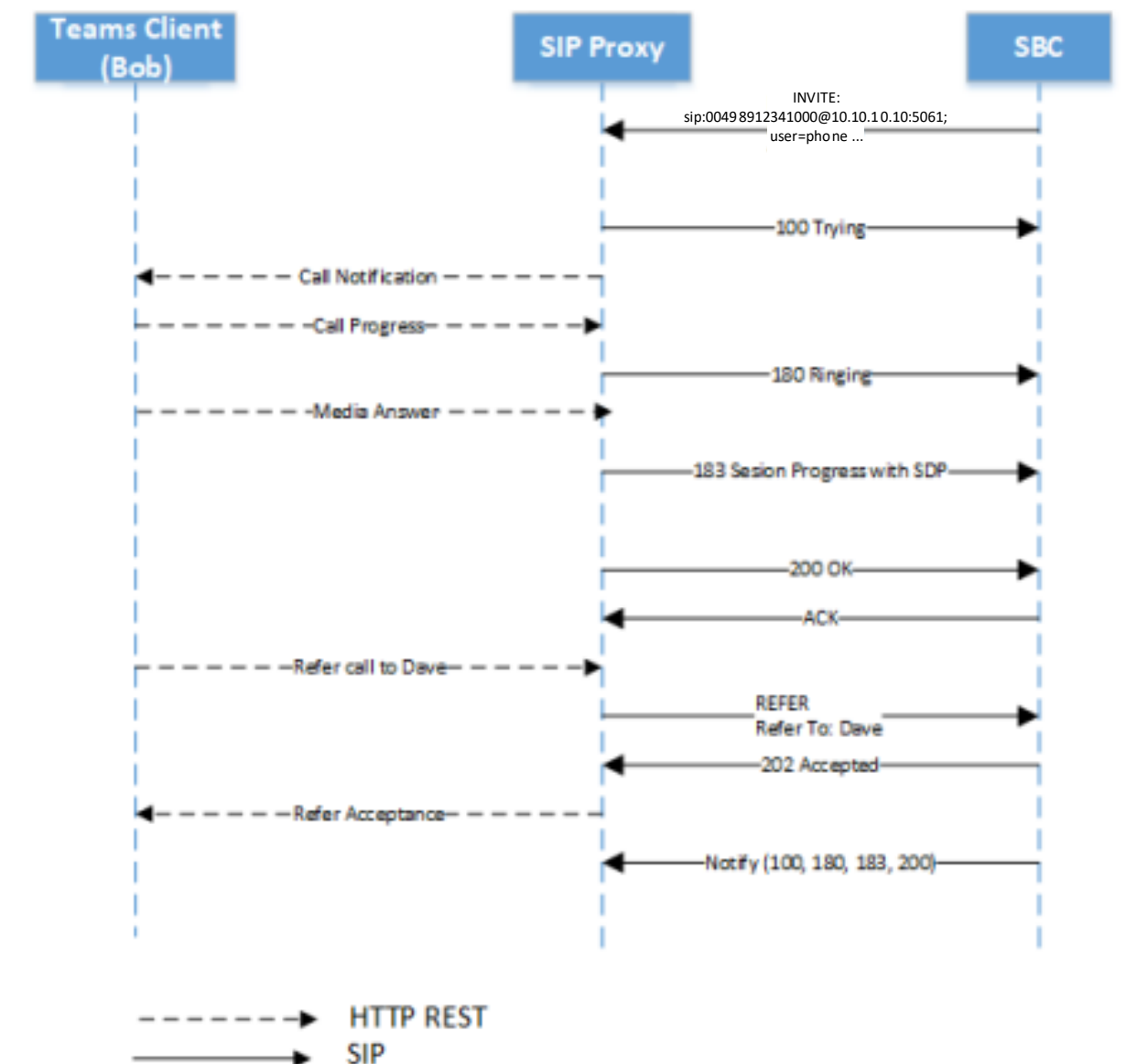
- During migration, there might be other services using PSTN, like a PBX or even a Call Center. This is not part of this migration consideration, but with the described migration approach, it is separated from the Teams migration. This will provide you with more flexibility than the other PSTN interaction possible in Teams.
- In general, with any PSTN provider it is difficult or even impossible splitting PSTN number block along with your migration of users. Therefore, another approach must be implemented.

The idea and used method is called **DUAL FORKING**.



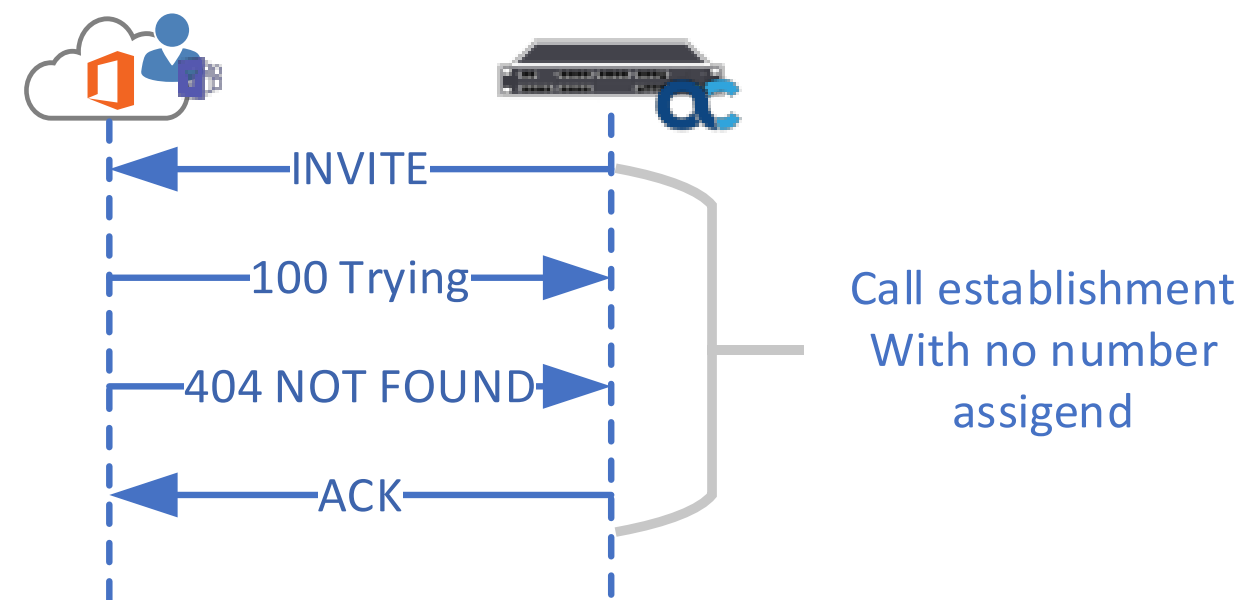
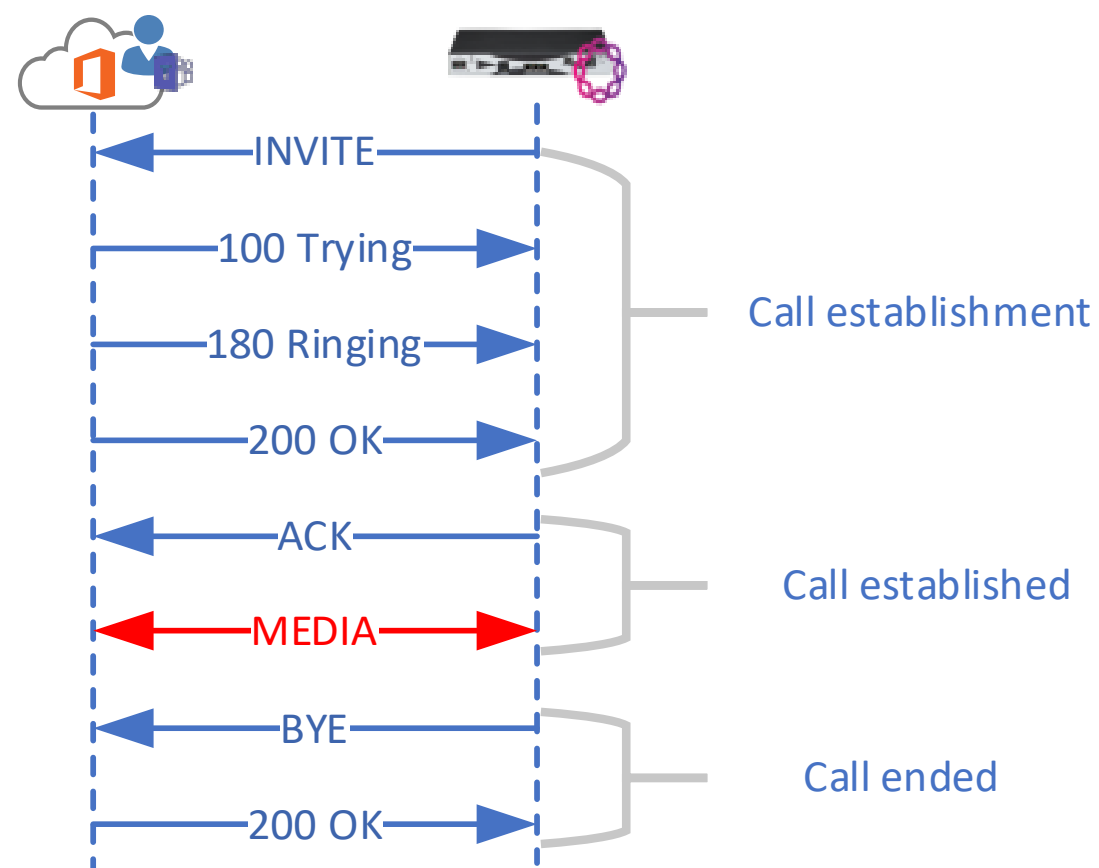
Direct Routing – SIP

- **INVITE:** Call is send from the SBC to the M365 SIP Proxy, where the phone number is identified for the called user.
- **100 TRYING:** while M365 tries calling the users Teams Client
- **180 RINGING:** if the user was found and the call is signaled to the respective client, the phone ringing is initiated
- **200 OK:** The client will take the call
- **ACK:** Taking the call is acknowledged
- **MEDIA:** The media, talking takes place
- **BYE:** here the caller ends the call
- **200 OK:** The client/ M365 acknowledges the call ending



Direct Routing – SIP

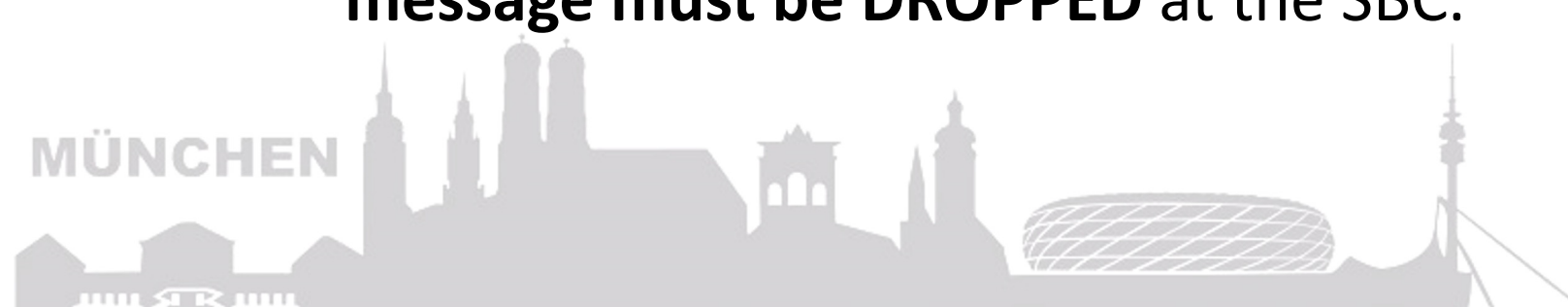
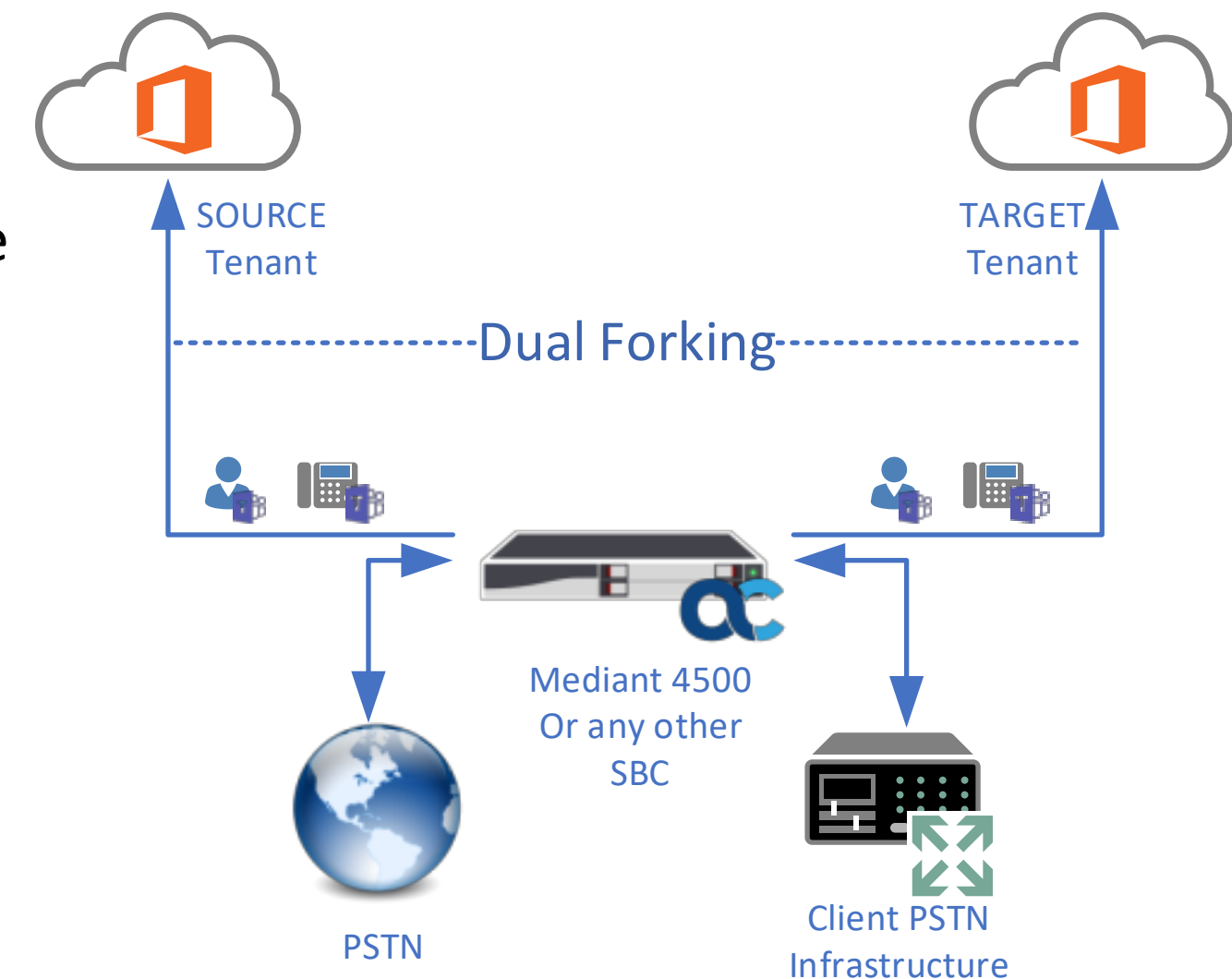
We assume now a user has been migrated, but the phone number is present in the number block assignment. Therefore, the callee cannot be reached. Microsoft Teams will drop the call with a **404**. This SIP 404 Not Found is the message send back to the SBC and the PSTN call will be dropped.



Direct Routing – SIP Dual Forking

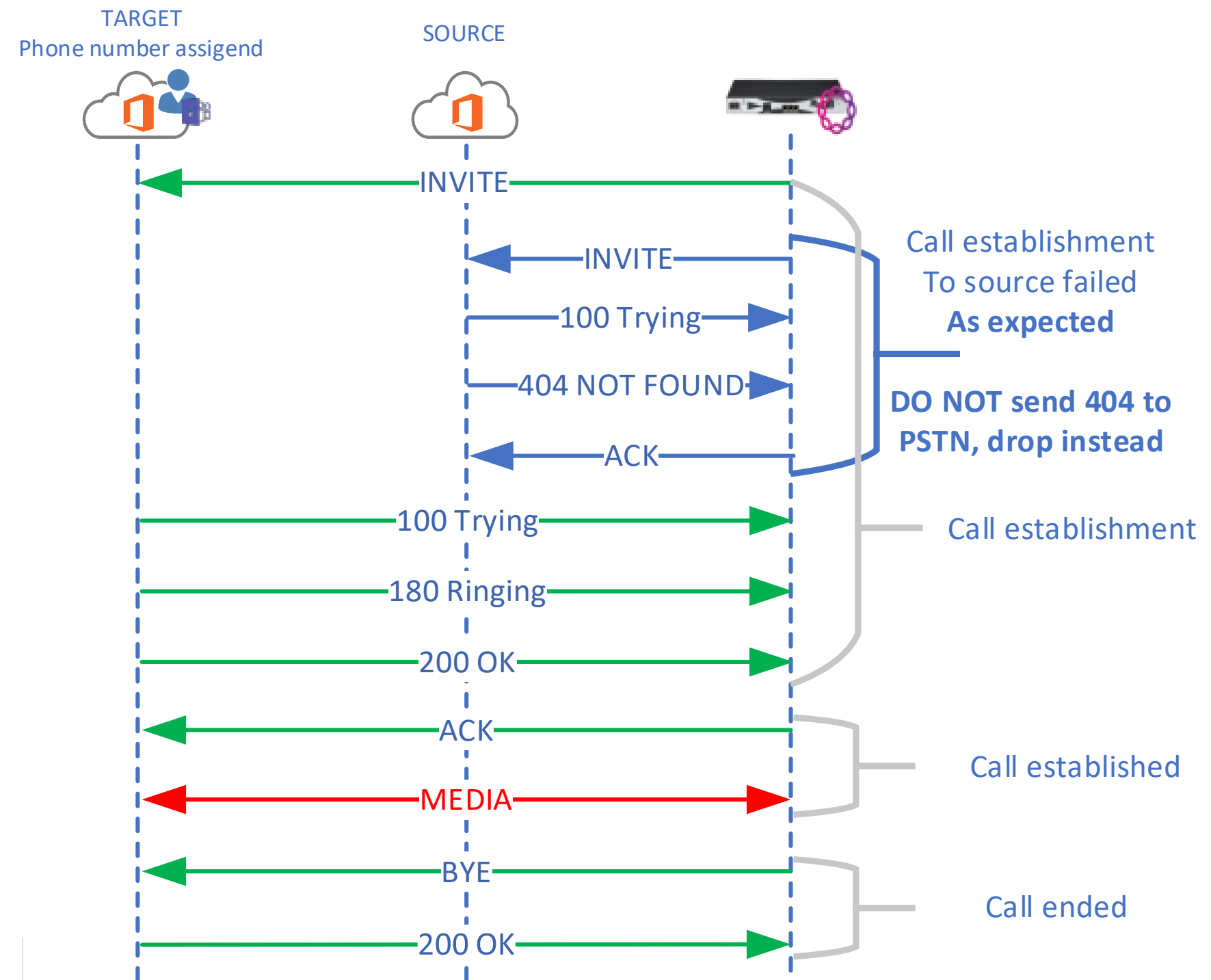
Some requirements are necessary here:

1. **Setup to INTERNET facing SIP Interfaces with different IP's**
This is a must, because Microsoft Teams SIP Proxy, cannot differentiate a call from a single IP for different tenants.
 2. **Use if possible two different Certificates**
(Note:
SAN entries will still work, but you will later decommission the source tenant, best keep the new certificate for the target tenant as it is)
- **If you do not follow this advice, the Dual Forking will FAIL !**
 - In this configuration, it is absolutely required that any **404 Not Found message must be DROPPED** at the SBC.



Direct Routing – SIP Dual Forking how it works

Now you understand how simple a Teams Enterprise Voice migration from the user perspective can be.



Topic to be covered next

- **Teams personal Chat migration**
- **Teams Channel migration incl. Chat (Posts)**
- **Considerations and dependencies of M365 Group Service**
- **User/ Collaboration Rollout**
- **Impact on licensing**



Feedback gewünscht und benötigt



Nächstes Event

26. – 28. Januar 2023

<https://www.skype4b-ug.de>



@TeamsUG_DE